

# **ORCHARD VIEW GARDENS SENIOR APARTMENT HOMES**

## **Initial Study and Mitigated Negative Declaration (IS/MND)**



*CEQA Analysis Prepared for:*

**City of Buena Park Planning Division**  
6650 Beach Blvd.  
Buena Park, CA 90621

*Prepared by:*



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## **September 2020**

Project No. 7037

**PROJECT INFORMATION SHEET**

- |  |   |
|--|---|
| <b>1. Project Title</b>                            | Orchard View Gardens Senior Apartment Homes   |
| <b>2. CEQA Lead Agency</b>                         | <b>City of Buena Park</b><br>6650 Beach Boulevard<br>Buena Park, CA 90621   |
| <b>3. Contact and Phone Number</b>                 | Swati Meshram, PhD, AICP<br>Planning Manager<br>Community Development Department<br>(714) 562-3620 smeshram@buenapark.com   |
| <b>4. Project Applicant</b>                        | Sarah Walker<br><b>National Community Renaissance of California</b><br>9421 Haven Avenue<br>Rancho Cucamonga, CA 91730  |
| <b>5. Project Location</b>                         | 8300 Valley View Street<br>Buena Park, CA 90620   |
| <b>6. Assessor's Parcel Number</b>                 | 069-283-25  |
| <b>7. Project Site General Plan Designation(s)</b> | Low Density Residential   |
| <b>8. Project Site Zoning Designation(s)</b>       | Residential - Single Family 6 (RS-6)  |
| <b>9. Surrounding Land Uses and Setting</b>        | Surrounding land uses include detached single-family homes to the east, south, and west across Valley View Street. The Ban Suk Methodist Church and detached single-family houses are located north of the project site.  |
| <b>10. Description of Project</b>                  | <p>The project is proposed on an approximately 3.2-acre site located at 8300 Valley View Street in Buena Park, California. The site is currently developed with the St. Joseph's Episcopal Church.</p> <p>The Project proposes to subdivide the existing parcel (APN 039-283-25) into two new parcels. The southern parcel (Parcel 1) would maintain St. Joseph's Episcopal Church and surface parking on 1.44 acres. The newly created 1.76-acre parcel occupying the eastern and northern portion of the site (Parcel 2) would be developed with a primary residential apartment building and 9 single story casitas accommodating 66 residential units and a 3,000 square foot community center.</p> |

On Parcel 2, 66 residential apartment homes for seniors aged 62+, including 62 one-bedroom units and 4 two-bedroom units, are proposed in one larger and three smaller buildings.

Building 1 would be divided into two groupings connected by a breezeway. Building 1 West, facing Valley View Street, would be a two-story building transitioning to a linear three-story double-loaded corridor toward the interior of the site. Building 1 East would be a three-story double-loaded bar building located interior to the site with a two-story element at the northern end of the proposed building transitioning toward the single-family neighborhood along the northern property line. Along the northern property line nine attached single-story casitas are proposed in three clusters.

The project proposes 66 residential apartment homes for seniors aged 62 and up. The project would provide 65 units affordable to households earning less than 60 percent of the Area Median Income (AMI) along with one manager's unit, for a total of 66 units. Eight of the units will be for permanent supportive housing to house formerly homeless seniors.

To accommodate residents, visitors and staff, a total of forty-eight (48) parking stalls are proposed for a total ratio of 0.71 spaces per unit.

The Applicant is seeking a General Plan Amendment to High Density Residential, and a Zone Change to Medium-Density Multifamily Residential (RM-20) is required to accommodate the Proposed Project. The Project will also necessitate a Tentative Parcel Map to divide the one parcel into two.

The project applicant is requesting the following discretionary actions, which are discussed in detail in **Section 3.0** of this document:

- General Plan Amendment
- Zone Change
- Development Agreement
- Tentative Parcel Map
- Modification to Use Permit
- Site Plan approval and issuance of building permits

**11. Selected Agencies whose Approval is Required**

- City of Buena Park

**12. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code § 21080.3.1? If so, has consultation begun?**

Letters were sent by the City of Buena Park (the Lead Agency), to local Native American tribes asking if they wished to participate in AB 52 consultation concerning the Orchard View Gardens Senior Apartment Homes development in the City of Buena Park.

Tribes have up to 30 days in which to respond to this notification. For the proposed project, those tribes that the City of Buena Park receives a request for consultation from will be contacted per Public Resources Code § 21074, and the AB 52 consultation process will begin. See **Section 4.18** of this document.

**13. Other Public Agencies whose Approval is Required**

Agencies that will review the proposed project include the following:

- California Regional Water Quality Control Board – Santa Ana
- South Coast Air Quality Management District



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**ACRONYMS AND ABBREVIATIONS**

Acronym/Abbreviation	Term
AAQS	ambient air quality standards
AB 32	California Global Warming Solutions Act of 2006 (Assembly Bill 32)
AB 52	Assembly Bill 52
AB 939	California Integrated Waste Management Act of 1989
ACM(s)	Asbestos-Containing Material(s)
ADT	Average Daily Trips
ARB	California Air Resources Board
afy	acre-feet per year
APE	Area of Potential Effect
APN	Assessor's Parcel Number
AR4	Fourth Assessment Report
ARB	California Air Resources Board
AMI	Area Median Income
amsl	above mean sea level
AQMP	Air Quality Management Plan
BAU	business as usual
BMPs	Best Management Practices
BPPD	Buena Park Police Department
BPSD	Buena Park School District
BSA	Biological Study Area
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
Cal/EPA	California Environmental Protection Agency
CALGreen	California Green Building Standards
CAPCOA	California Air Pollution Control Officers Association
CBC	California Building Code
CGS	California Geological Survey
CAL FIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CAT	Climate Action Team
CBC	California Building Code
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFCs	chlorofluorocarbons
CGS	California Geological Survey
CH <sub>4</sub>	methane
CHRIS	California Historic Resources Inventory System
City	City of Buena Park
CMP	Congestion Management Program
CMU	concrete masonry unit
CMPHS	CMP Highway System

❖ ACRONYMS AND ABBREVIATIONS ❖

Acronym/Abbreviation	Term
CNDDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CO <sub>2</sub> e	carbon dioxide equivalent
CRC	California Residential Code
CRPR	California Rare Plant Rank
CSDLAC	County Sanitation Districts of Los Angeles County
CWA	Clean Water Act
DAMP	Drainage Area Management Plan
dB	decibel
dBA	A-weighted decibel scale
°F	degrees Fahrenheit
DMA	drainage management areas
DOC	California Department of Conservation
DTSC	Department of Toxic Substances Control
du/ac	dwelling units per acre
EIR	Environmental Impact Report
EO	Executive Order
ESA	Environmental Site Assessment
ESRL	Earth System Research Laboratory
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FHSZ	Fire Hazard Severity Zones
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
GHG	greenhouse gases
GIS	Geographic Information System
GMI	Greenhouse Gas Management Institute
GPD	gallons per day
gpm	gallons per minute
GWP	global warming potential
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HERS	Home Energy Rating System
HFCs	hydrofluorocarbons
HHWE	Household Hazardous Waste Element
HRI	Historic Resources Inventory
HVAC	heating, ventilation and air conditioning
IPaC	Information, Planning and Conservation
ICU	Intersection Capacity Utilization
INF-3	bioretention without underdrains
IND	Industrial Service Supply water designation
IPCC	Intergovernmental Panel on Climate Change
IS/MND	Initial Study/Mitigated Negative Declaration

❖ ACRONYMS AND ABBREVIATIONS ❖

Acronym/Abbreviation	Term
ITE	Institute of Transportation Engineers
L <sub>90</sub>	noise level that is exceeded 90% of the time
L <sub>eq</sub>	equivalent noise level
LBP	Lead-Based Paint
LED	light-emitting diode
LEED	Leadership in Energy and Environmental Design
LID	Low Impact Development
L <sub>max</sub>	root mean square maximum noise level
LOS	Level of Service
LRA	Local Responsibility Area
LSTs	Localized Significance Thresholds
LUST	Leaking Underground Storage Tank
MBTA	Migratory Bird Treaty Act
mgd	million gallons per day
MLD	Most Likely Descendant
MM(s)	mitigation measure(s)
MMRP	Mitigation Monitoring and Reporting Program
MMTCO <sub>2e</sub>	million metric tons of CO <sub>2e</sub>
MND	Mitigated Negative Declaration
MPAH	Master Plan of Arterial Highways
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer permit
MT	Metric tons
MUN	Municipal and Domestic Water Supply designation
MWD	Metropolitan Water District
N <sub>2</sub> O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NASA	National Aeronautics and Space Administration
NCCP	Natural Communities Conservation Plan
ND	Negative Declaration
NO	nitric oxide
NO <sub>x</sub>	nitrogen oxides
NO <sub>2</sub>	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
O <sub>3</sub>	Ozone
OCFA	Orange County fire Authority
OCFCD	Orange County Flood Control District
OCSD	Orange County Sanitation District
OCTA	Orange County Transportation Agency
OCWD	Orange County Water District
OPR	Governor's Office of Planning and Research
OSHA	Occupational Safety and Health Administration

❖ ACRONYMS AND ABBREVIATIONS ❖

Acronym/Abbreviation	Term
Pb	lead
PCB	polychlorinated biphenyl
PFCs	perfluorocarbons
PM	particulate matter
PM <sub>10</sub>	respirable particulate matter
PM <sub>2.5</sub>	fine particulate matter
ppm	Parts per million
PPV	peak particle velocity
PROC	Industrial Process Supply water designation
RARE	waters that support habitats
RM-20	Medium Density Multifamily Residential zoning designation
RMS	root mean square
ROG	Reactive organic gases
ROW	Right-of-way
RPS	Renewables Portfolio Standard
RS-6	Residential Single Family 6 zoning designation
RWQCB	Regional Water Quality Control Board
§	section
SARWQCB	Santa Ana Regional Water Quality Control Board
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison Company
SF <sub>6</sub>	sulfur hexafluoride
SLF	Sacred Lands File
SMARA	Surface Mining and Reclamation Act
SO <sub>2</sub>	sulfur dioxide
SoCalGas	Southern California Gas Company
SR	State Route
SR-57	State Route 57
SR-91	State Route 91
SRRE	Source Reduction and Recycling Element
SRA	State Responsibility Area
SRAs	source receptor areas
STIP	Statewide Transportation Improvement Program
SUSMP	Standard Urban Stormwater Mitigation Plan
SWITRS	Statewide Integrated Traffic Records System
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TCRs	Tribal Cultural Resources
TIS	Traffic Impact Study
TMP	Traffic Management Plan
U.S.	United States
USDA	United States Department of Agriculture



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❖ ACRONYMS AND ABBREVIATIONS ❖

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Acronym/Abbreviation	Term
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UWMP	Urban Water Management Plan
VdB	vibration decibels
VCP	vittrified clay pipe
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
VOC	volatile organic compound
WARM	warm freshwater habitat
WEG	Wind erodibility groups
WILD	waters that support wildlife habitat
WOS	Waters of State
WOUS	Waters of United States
WQMP	Water Quality Management Plan

## **1.0 INTRODUCTION**

### **1.1 Proposed Project**

The City of Buena (City) is processing a request to construct and operate the Orchard View Gardens Senior Apartment Homes project (hereafter referred to as the “proposed project” or “project”). The project site is located at 8300 Valley View Street in the City of Buena Park. The project site is one contiguous, irregular-shaped parcel, with the southern portion of the site currently occupied by St. Joseph’s Episcopal Church. The church is housed in a single building and surrounded by surface parking. The northern portion of the site is currently vacant. The project proposes to subdivide the existing parcel (APN 039-283-25) into two new parcels. The southern parcel (Parcel 1) would maintain St. Joseph’s Episcopal Church and surface parking on 1.44 acres. The newly created 1.76-acre parcel occupying the eastern and northern portion of the site (Parcel 2) would be developed with a primary residential apartment building and nine single-story casitas accommodating 66 residential units and a 3,000-square-foot community center.

A General Plan Amendment to High Density Residential and Zone Change to Medium-Density Multifamily Residential (RM-20) is required to accommodate the proposed project. The project would also necessitate a Tentative Parcel Map to divide the one parcel into two.

#### **1.1.1 Project Components**

The proposed project would consist of:

- One residential apartment building and nine single-story casitas accommodating 66 residential units.
- A parking lot.
- A 3,000-square-foot community center.
- Landscaped open space areas.
- Outdoor amenities for residents (bench seating, lawn games, fire pit, and lounge seating).

### **1.2 Lead Agencies – Environmental Review Implementation**

The City of Buena Park is the Lead Agency for the proposed project. Pursuant to the California Environmental Quality Act (CEQA) and its implementing regulations,<sup>1</sup> the Lead Agency has the principal responsibility for implementing and approving a project that may have a significant effect on the environment.

## **1.3 CEQA Overview**

### **1.3.1 Purpose of CEQA**

All discretionary projects within California are required to undergo environmental review under CEQA. A Project is defined in CEQA Guidelines § 15378 as the whole of the action having the potential

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<sup>1</sup> Public Resources Code §§ 21000 - 21177 and California Code of Regulations Title 14, Division 6, Chapter 3.

to result in a direct physical change or a reasonably foreseeable indirect change to the environment and is any of the following:

- An activity directly undertaken by any public agency including but not limited to public works construction and related activities, clearing or grading of land, improvements to existing public structures, enactment and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements.
- An activity undertaken by a person which is supported in whole or in part through public agency contracts, grants, subsidies, loans, or other forms of assistance from one or more public agencies.
- An activity involving the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies.

CEQA Guidelines § 15002 lists the basic purposes of CEQA as follows:

- Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities.
- Identify the ways that environmental damage can be avoided or significantly reduced.
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures (MMs) when the governmental agency finds the changes to be feasible.
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

### **1.3.2 Authority to Mitigate under CEQA**

CEQA establishes a duty for public agencies to avoid or minimize environmental damage where feasible. Under CEQA Guidelines § 15041 a Lead Agency for a project has authority to require feasible changes in any or all activities involved in the project in order to substantially lessen or avoid significant effects on the environment, consistent with applicable constitutional requirements such as the “nexus”<sup>2</sup> and “rough proportionality”<sup>3</sup> standards.

CEQA allows a Lead Agency to approve a project even though the project would cause a significant effect on the environment if the agency makes a fully informed and publicly disclosed decision that there is no feasible way to lessen or avoid the significant effect. In such cases, the Lead Agency must specifically identify expected benefits and other overriding considerations from the project that outweigh the policy of reducing or avoiding significant environmental impacts of the project.

## **1.4 Purpose of Initial Study**

The CEQA process begins with a public agency making a determination as to whether the project is subject to CEQA at all. If the project is exempt, the process does not need to proceed any farther. If the project is not exempt, the Lead Agency takes the second step and conducts an Initial Study to determine whether the project may have a significant effect on the environment.

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2 A nexus (i.e., connection) must be established between the mitigation measure and a legitimate governmental interest.

3 The mitigation measure must be “roughly proportional” to the impacts of the Project.

The purposes of an Initial Study as listed in § 15063(c) of the CEQA Guidelines are to:

- Provide the Lead Agency with information necessary to decide if an Environmental Impact Report (EIR), Negative Declaration (ND), or Mitigated Negative Declaration (MND) should be prepared.
- Enable a Lead Agency to modify a project to mitigate adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a ND or MND.
- Assist in the preparation of an EIR, if required, by focusing the EIR on adverse effects determined to be significant, identifying the adverse effects determined not to be significant, explaining the reasons for determining that potentially significant adverse effects would not be significant, and identifying whether a program EIR, or other process, can be used to analyze adverse environmental effects of the project.
- Facilitate an environmental assessment early during project design.
- Provide documentation in the ND or MND that a project would not have a significant effect on the environment.
- Eliminate unnecessary EIRs.
- Determine if a previously prepared EIR could be used for the Project.

In cases where no potentially significant impacts are identified, the Lead Agency may issue a ND, and no MMs would be needed. Where potentially significant impacts are identified, the Lead Agency may determine that MMs would adequately reduce these impacts to less than significant levels. The Lead Agency would then prepare an MND for the proposed project. If the Lead Agency determines that individual or cumulative effects of the proposed project would cause a significant adverse environmental effect that cannot be mitigated to less than significant levels, then the Lead Agency would require an EIR to further analyze these impacts.

## **1.5 Review and Comment by Other Agencies**

Other public agencies are provided the opportunity to review and comment on the IS/MND. Each of these agencies is described briefly below.

- A Responsible Agency (14 CCR § 15381) is a public agency, other than the Lead Agency, that has discretionary approval power over the Project, such as permit issuance or plan approval authority.
- A Trustee Agency<sup>4</sup> (14 CCR § 15386) is a state agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the State of California.
- Agencies with Jurisdiction by Law (14 CCR § 15366) are any public agencies who have authority (1) to grant a permit or other entitlement for use; (2) to provide funding for the project in question; or (3) to exercise authority over resources which may be affected by the project. Furthermore, a city or county will have jurisdiction by law with respect to a project when the city or county having primary jurisdiction over the area involved is: (1) the site of the project; (2) the area in which the major environmental effects will occur; and/or (3) the area in which reside those citizens most directly concerned by any such environmental effects.

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<sup>4</sup> The four Trustee Agencies in California listed in CEQA Guidelines § 15386 are California Department of Fish and Wildlife, State Lands Commission, State Department of Parks and Recreation, and University of California.

## 1.6 Impact Terminology

The following terminology is used to describe the level of significance of potential impacts:

- A finding of ***no impact*** is appropriate if the analysis concludes that the project would not affect the particular environmental threshold in any way.
- An impact is considered ***less than significant*** if the analysis concludes that the project would cause no substantial adverse change to the environment and requires no mitigation.
- An impact is considered ***less than significant with mitigation incorporated*** if the analysis concludes that the project would cause no substantial adverse change to the environment with the inclusion of environmental commitments, or other enforceable measures, that would be adopted by the lead agency.
- An impact is considered ***potentially significant*** if the analysis concludes that the project could have a substantial adverse effect on the environment.

An EIR is required if an impact is identified as ***potentially significant***.

## 1.7 Organization of Initial Study

This document is organized to satisfy CEQA Guidelines § 15063(d), and includes the following sections:

- **Section 1.0 - Introduction**, which identifies the purpose and scope of the IS/MND.
- **Section 2.0 - Environmental Setting**, which describes location, existing site conditions, land uses, zoning designations, topography, and vegetation associated with the project site and surroundings.
- **Section 3.0 - Project Description**, which provides an overview of the project, a description of the proposed development, project phasing during construction, and discretionary actions necessary for project approval.
- **Section 4.0 - Environmental Checklist**, which presents checklist responses for each resource topic to identify and assess impacts associated with the proposed project, and proposes MMs, as needed, to reduce potential environmental impacts to less than significant.
- **Section 5.0 - References**, which includes a list of documents cited in the IS/MND.
- **Section 6.0 - List of Preparers**, which identifies the primary authors and technical experts that prepared the IS/MND.
- **Section 7.0 - Mitigation Monitoring and Reporting Program (MMRP)**, which provides a table showing all of the recommended mitigation measures for the project.

Technical studies and other documents, which include supporting information or analyses used to prepare this IS/MND, are included in the following appendices:

- Appendix A Project Plans
- Appendix B1 CalEEMod Input and Results for Air Quality Analysis
- Appendix B2 CalEEMod Input and Results for Greenhouse Gas Emissions Analysis
- Appendix C1 Phase I Cultural Resources Inventory
- Appendix C2 Paleontological Records Search
- Appendix D Preliminary Geotechnical Investigation
- Appendix E Phase I Environmental Site Assessment
- Appendix F Preliminary Water Quality Management Plan

- Appendix G Ambient Noise Measurement Data
- Appendix H Traffic Assessment Memo
- Appendix I Information Request Letters

## **1.8 Findings from the Initial Study**

### **1.8.1 No Impact or Impacts Considered Less than Significant**

Based on IS findings, the project would have no impact or a less than significant impact on the following environmental categories listed from Appendix G of the CEQA Guidelines.

- Agriculture and Forestry Resources
- Air Quality
- Energy
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Utilities and Service Systems
- Wildfire

### **1.8.2 Impacts Considered Less than Significant with Mitigation Measures**

Based on IS findings, the project would have a less than significant impact on the following environmental categories listed in Appendix G of the CEQA Guidelines when proposed mitigation measures are implemented.

- Aesthetics
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Noise
- Transportation
- Tribal Cultural Resources
- Mandatory Findings of Significance

## 2.0 ENVIRONMENTAL SETTING

### 2.1 Project Location

The proposed project would be located at 8300 Valley View Street, on the eastern frontage of Valley View Street between Los Molinos Drive and Crescent Avenue in Buena Park, California. The project site is approximately 3.2 acres and is currently occupied by St. Joseph's Episcopal Church. Refer to **Figure 2.1-1** which shows the project's location in a regional context. The project site is located in a portion of the City that is predominately residential. See **Figure 2.1-2**, which shows the project boundaries and current conditions onsite and in the immediate vicinity.

### 2.2 Project Setting

The project site is comprised of one parcel, APN 069-283-25. The project site is developed with the St. Joseph's Episcopal Church, in a developed and urbanized area in the City of Buena Park. The project site is surrounded by development, including residential land uses to the north, south, and east and Valley View Street, beyond which are homes to the west.

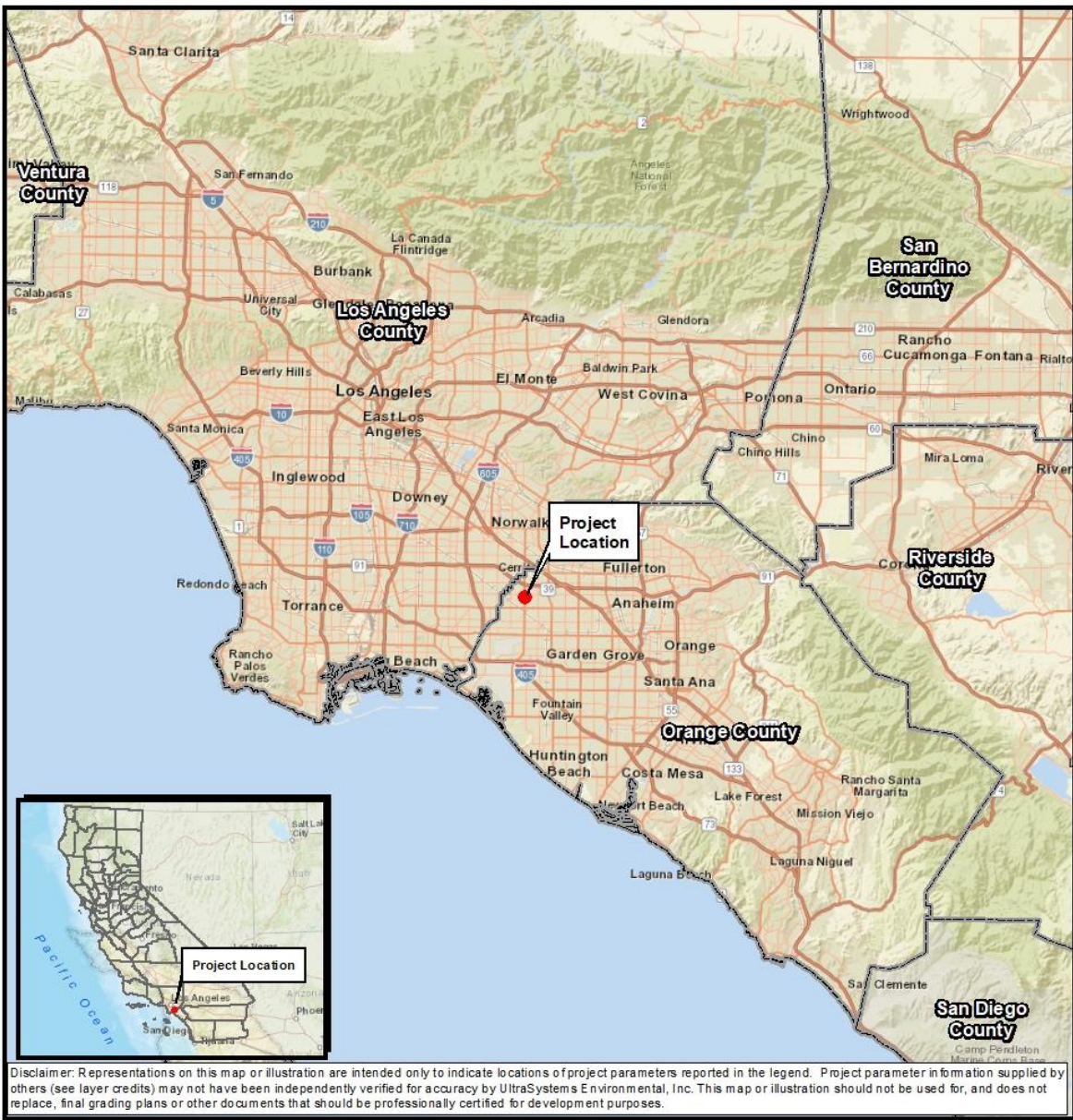
The project site is located on United States Geological Survey, 7.5-Minute Series, Topographic Map, Los Alamitos Quadrangle, California. **Figure 2.2-1** depicts the topography of the site and the area within a half-mile radius of the project site. Topography within the project site is relatively flat. The elevation of the site ranges from approximately 45 to 48 feet (Google Earth Pro, 2020). Photographs depicting the project site are provided in **Figures 2.2-2 to 2.2-4**.

#### 2.2.1 Land Use and Zoning

The land use designation and zoning of the project site and its immediate vicinity are listed in **Table 2.2-1**. The General Plan designation for the project site and all adjacent properties is Low Density Residential. The project site and adjacent properties are zoned as One-Family Residential (RS-6).



**Figure 2.1-1**  
**REGIONAL LOCATION**





Path: \\gis\vrg\Projects\7037\_NCR\_Affordable\_Housing\_Buena\_Park\_IS\_MIND\MXD\7037\_NCR\_Buena\_Park\_Fig2\_0\_Regional\_Location\_2020\_01\_07.mxd  
January 08, 2020  
Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (The), NGCC, OpenStreetMap contributors, and the GIS User Community; Ultra Systems Environmental, Inc., 2020

Scale: 1:633,600



### Legend

-  Project Location  
 County Boundary

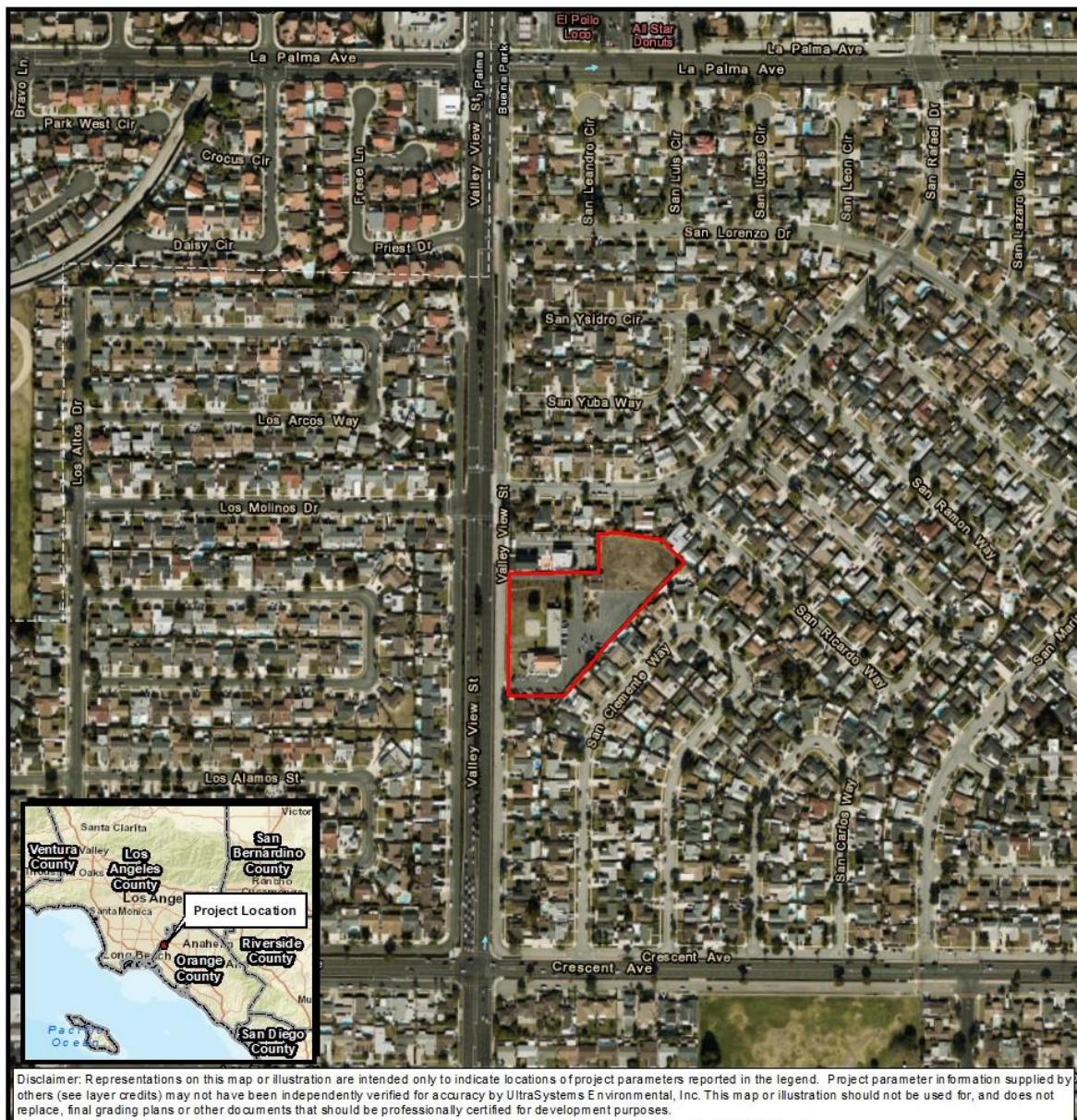
**Orchard View Gardens  
Senior Apartment Homes**

Regional Location



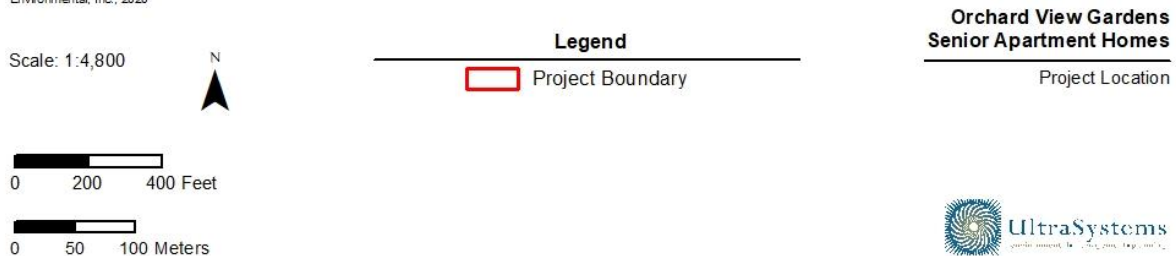


**Figure 2.1-2  
PROJECT LOCATION**



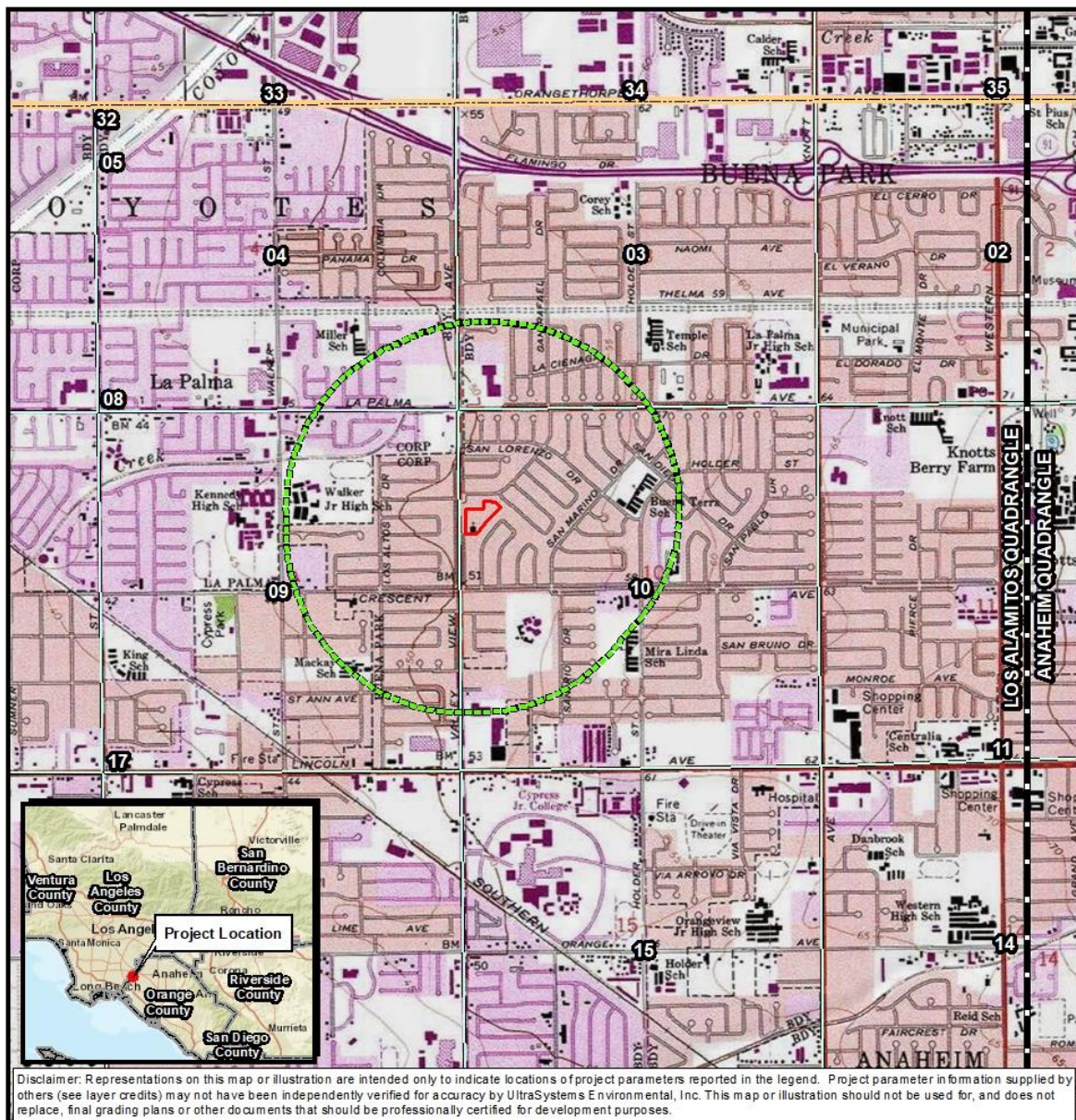
Path: \\GIS\vrge\Projects\7037\_NCR\_Affordable\_Housing\_Buena Park\_IS\MND\MNDs\7037\_NCR\_Buena Park\_Fig3.0\_Project\_Location\_2020\_01\_07.mxd  
 Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community; UltraSystems Environmental, Inc., 2020

January 08, 2020





**Figure 2.2-1  
TOPOGRAPHIC MAP**



Scale: 1:24,000



0 1,000 2,000 Feet

0 250 500 Meters

**Legend**

- Project Boundary
- Half Mile Radius
- Township Boundary
- Quadrangle Boundary
- Section Boundary

**Orchard View Gardens  
Senior Apartment Homes**

Topographic Map  
 USGS Quadrangle: Los Alamitos  
 Township: 04S Range: 11W  
 Section 10



UltraSystems  
 4000 West 10th Street, Suite 100, Los Angeles, CA 90024



**Figure 2.2-2**  
**PROJECT SITE PHOTOGRAPHS**



**Photo 1:** View of church on project site from the Valley View St. eastern frontage road.



**Photo 2:** View of church parking lot on project site from Valley View St. eastern frontage road.



**Photo 3:** View looking north onto the project site from the southwest corner of the project site.



**Photo 4:** View looking south onto the project site from the northwest corner of the project site.

**Figure 2.2-3**  
**PROJECT SITE PHOTOGRAPHS**



**Photo 5:** View of northeastern portion of the project site from the south.



**Photo 6:** View of northeastern portion of the project site from the center of the project site.



**Photo 7:** View looking northwest onto the project site from the southeast.



**Photo 8:** View looking west onto the project site from the southeast .

**Figure 2.2-4**  
**PROJECT SITE PHOTOGRAPHS**



**Photo 9:** View looking southeast onto project site from the northwest corner of the project site.



**Photo 10:** View looking south onto project site from the northwest corner of the project site.



**Photo 11:** View looking south from the western boundary of the project site.



**Photo 12:** View looking north from the western boundary of the project site.



**Table 2.2-1**  
**SUMMARY OF EXISTING LAND USE AND ZONING DESIGNATIONS**

Location	General Plan	Zoning	Existing Use
Project Site	Low Density Residential	One-Family Residential (RS-6)	Developed with church buildings and a large surface parking lot
<b>Surrounding Areas</b>			
North	Low Density Residential	One-Family Residential (RS-6)	Single family homes
East	Low Density Residential	One-Family Residential (RS-6)	Single family homes
West	Low Density Residential	One-Family Residential (RS-6)	Single family homes
South	Low Density Residential	One-Family Residential (RS-6)	Single family homes

## 2.3 Existing Characteristics of the Site

### 2.3.1 Climate and Air Quality

The project site is located within the South Coast Air Basin (SCAB), a 6,600-square-mile area encompassing all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. A persistent high-pressure area that commonly resides over the eastern Pacific Ocean largely dominates regional meteorology. The distinctive climate of this area is determined primarily by its terrain and geographic location. Local climate is characterized by warm summers, mild winters, infrequent rainfall, moderate daytime onshore breezes, and moderate humidity. Ozone (O<sub>3</sub>) and pollutant concentrations tend to be lower along the coast, where the constant onshore breeze disperses pollutants toward the inland valley of the SCAB and adjacent deserts. However, as a whole, the SCAB fails to meet National Ambient Air Quality Standards (NAAQS) for O<sub>3</sub> and fine particulate matter (PM<sub>2.5</sub>), and is classified as a “nonattainment area” for those pollutants.

### 2.3.2 Geology and Soils

Soil materials encountered at the subject site consisted of alluvial soils to the maximum depth explored, 51.5 feet below ground surface. Although not encountered, localized artificial fill materials could be present within the site. The alluvial soils encountered are comprised of a grayish-brown to brown silty sand overlying a light gray sand that is slightly moist to moist and loose to medium dense. Deeper portions of the alluvium consist of interlayers of grayish-brown to gray clay with variable amounts of sand and grayish-brown sand. These materials were typically wet and medium dense to dense and very moist and stiff to very stiff (Albus-Keefe & Associates, Inc., 2020 p. 4). The nearest Alquist-Priolo Earthquake Fault Zones are located south of the proposed project and include the Reservoir Hill Fault, Northeast Flank Fault, and Cherry Hill Fault (which cumulatively comprise part of the south Los Angeles Basin section of the Newport-Inglewood Fault Zone).

### 2.3.3 Hydrology

The City relies on two major water supply sources, which include imported water from the Metropolitan Water District (MWD) and local groundwater from the Orange County Groundwater Basin, managed by the Orange County Water District (OCWD) (RBF Consulting, 2010b, p. 5.8-1).

The project site is currently occupied by an existing building, a surface parking lot, and an undeveloped area. Under existing conditions drainage sheet flows from the parking lot in a westerly direction toward the Valley View Street frontage road. Drainage flows out of the existing driveway into the curb and gutter on Valley View Street. Eventually, runoff enters the municipal storm drain system through a curb inlet at the intersection of Valley View Street and Crescent Avenue. Some runoff from the building flows overland in a westerly direction toward Raymond Way where it enters the municipal storm drain system through an inlet near the easterly corner of the Raymond Way and Packer Place intersection. Ultimately, runoff flows from the municipal storm drain system to the Coyote Creek, San Gabriel River Estuary, and San Pedro Bay (Walker, 2020)

#### **2.3.4 Biology**

The project site is developed with a church, a classroom building, a storage building, a parking lot, and also has undeveloped land. The project site is surrounded by development on all sides and contains ornamental vegetation. The vegetation within the project area is characterized as urban ornamental.

#### **2.3.5 Public Services**

The City is served by a full range of public services and utilities. Fire and emergency medical services for the City of Buena Park are provided by Orange County Fire Authority (OCFA). The nearest station to the project site is OCFA Fire Station 63, located about 0.9 mile southeast of the site at 9120 Holder Street. Other OCFA fire stations in Buena Park include Station 62 at 7780 Artesia Boulevard (1.4 miles northeast from the site) and Station 61 at 7440 La Palma Avenue (2.8 miles northeast from the site) (Google Earth Pro, 2019).

The Buena Park Police Department (BPPD) provides police services in the City of Buena Park and would provide law enforcement services to the project site (City of Buena Park, 2019c).

The project is located within the boundaries of the Buena Park School District (BPSD), which serves 4,700 students at six elementary schools and one junior high school in the City of Buena Park (Buena Park School District, 2019). The closest public school to the project site is Arthur F. Corey Elementary School, located approximately one mile to the northeast. The Fullerton Joint Union High School District (FJUHS) serves grades 9-12. Six four-year comprehensive high schools are operated by the District, including Buena Park, Fullerton, La Habra, Sonora, Sunny Hills, and Troy (FJUHS, 2020). Buena Park High School is a public high school located at 8833 Academy Drive in Buena Park.

#### **2.3.6 Utilities**

City of Buena Park water supplies consist primarily of imported water from the Metropolitan Water District (MWD) and local groundwater from the Orange County Groundwater Basin, managed by the Orange County Water District (OCWD) (RBF Consulting, 2010b, p. 5.11-16).

The City of Buena Park Public Works Department provides sewer services within the City through a network of local sewer mains. The City's local sewer system connects to regional trunk sewer systems for the Orange County Sanitation District (OCSD), with a small portion going to Los Angeles County Sanitation Districts of (LACSD) for conveyance, treatment and disposal by these agencies. The entire Buena Park collection system is comprised of approximately 165 miles of sewer lines ranging in size from six to 21 inches in diameter. All sewage flow from Revenue Area 3 goes to OCSD Treatment Plant No. 2 in Huntington Beach. This facility has a total primary treatment capacity of 168 million

gallons daily (mgd), with an average daily treatment of approximately 127 mgd, indicating approximately 41 mgd of excess treatment capacity. Plant No. 2 also has 90 mgd of secondary treatment capacity (RBF Consulting, 2010b, p. 5.12-1 and 5.12-9).

The City of Buena Park storm drain system is comprised of the Orange County Flood Control District (OCFCD) regional channels and pipelines, and the city's local drainage facilities that connect to the OCFCD facilities. Under current conditions, stormwater sheet flows from the project site into Valley View Street into City storm drains.

The City contracts with Park Disposal (EDCO) for collection and disposal of the City's solid waste. Electric power for the City of Buena Park is provided by Southern California Edison (SCE). Natural gas is provided by Southern California Gas Company (SoCalGas), which maintains a local system of transmission lines, distribution lines and supply regulation stations (City of Buena Park, 2019a).



## **3.0 PROJECT DESCRIPTION**

### **3.1 Project Background**

The City of Buena Park (City) is processing a request to implement a series of discretionary actions that would ultimately allow for the development of a senior affordable housing project (project) located at 8300 Valley View Street in the City of Buena Park.

The proposed project would develop 65 affordable units for senior citizens and one exempt (i.e., market-rate) manager's unit. The City is the Lead Agency for the purposes of CEQA.

The approximately 3.2-acre project site is developed with the St. Joseph's Episcopal Church, which was constructed circa 1965 in what is now a residential neighborhood but originally was open dairy farm land. The City's General Plan Land Use Map designates the project site as Low Density Residential (RBF, 2010a). The project site is zoned One-Family Residential (RS-6) (City of Buena Park, 2013).

### **3.2 Project Overview**

The project site is one contiguous, irregular-shaped parcel with the southern portion of the site currently occupied by St. Joseph's Church. The church is housed in a single building and surrounded by surface parking. The northern portion of the site is currently vacant. The project proposes to subdivide the existing parcel (APN 039-283-25) into two new parcels. The southern parcel (Parcel 1) would maintain St. Joseph's Episcopal Church and surface parking on 1.44 acres. The newly created 1.76-acre parcel occupying the eastern and northern portion of the site (Parcel 2) would be developed with a primary residential apartment building with a 3,000-square-foot community center and nine single-story casitas that would be located within three single-story buildings, accommodating 66 residential units in total.

On Parcel 2, 66 residential apartment homes are proposed for seniors aged 62+, including 62 one-bedroom units and four two-bedroom units, in one larger and three smaller buildings; one of the units is for a manager. The maximum building height would be 35 feet. In total, the project proposes 25,308 square feet of building area, 23,627 square feet of paved parking and driveways, and 26,021 square feet of open space/landscaped area. The overall lot coverage for the development is 35%. Refer to Section 3.3 below for details.

The Buena Park Municipal Code Section 19.536.040, Parking Spaces Required requires a Church use a parking requirement of one space per three fixed seats (or 4.5 feet of bench) plus one space per 40 square feet of other net assembly area in the one largest assembly room. To comply with the City Municipal Code, an estimated 80 parking spaces are required for the Church. With the development of the Orchard View Gardens Senior Housing Community, a portion of the Church's existing parking area in the northeast corner will be demolished to accommodate the proposed residential units. The onsite parking available for the Church would be reduced from 121 spaces to 80 spaces. The proposed amount of parking for the Church is sufficient to accommodate the Church operations and meets the City's Code requirement. Furthermore, based on the currently utilization rates reported above, if the number of spaces is reduced to 80, even at its peak occupancy, the utilization rate is still only 55%.

Based on the demographic of the residents living on site, the high percentage of one bedroom units, parking utilization rates for similar senior rental projects within the region, and the availability of

public transportation options at the site, the project applicant believes that the proposed parking ratio is appropriate for an income-restricted senior rental project. With the development of the proposed project, the existing church and proposed residential facility would share a total of 123 parking spaces. The existing church currently contains 110 parking spaces and plans to reduce their parking lot to 80 spaces with the development of the project. The project proposes the development of 48 parking spaces to accommodate residents, visitors, and staff (Fehr and Peers, 2020, p. 6). The project applicant has conducted multiple community meetings and has undergone a preliminary review with City Staff to inform the design of the project.

The General Plan land use designation for the project site is Low Density Residential (refer to **Figure 4.11-1**). The project is zoned One-Family Residential (RS-6), allowing a base density of up to 7.26 dwelling units per acre (du/ac).

A General Plan Amendment to High Density Residential and Zone Change to Medium-Density Multifamily Residential (RM-20) is required to accommodate the proposed project. The project would also necessitate a Tentative Parcel Map to divide the single parcel into two parcels. The project would consist of: (1) utilities improvements; (2) construction of three new residential buildings; (3) construction of a parking lot; (4) construction of a 3,000-square-foot community center (on the first floor of Building 1); (5) construction of a green lawn and hardscape game area; and (6) project site amenities and landscaping. **Table 3.2-1** summarizes the proposed project features. **Figure 3.2-1** shows the site plan for the proposed project.

**Table 3.2-1  
PROJECT SUMMARY**

New Construction	Proposed Uses/Features	Square Feet	No. of Stories	Building Height
Building 1 (this building is divided into two groupings connected by a breezeway)	62 one-bedroom units and four two-bedroom units	54,201 <sup>1</sup>	2-3	35 feet maximum
Casitas	Nine one-bedroom single-story casitas	6,093	1	13 feet, 1 inch maximum
Community Center	Senior-oriented community center for use by residents and guests (located in Building 1)	3,000	N/A <sup>3</sup>	N/A <sup>2</sup>
<b>Total Building Area</b>	<b>N/A</b>	<b>60,294</b>	<b>N/A</b>	<b>N/A</b>
Paved parking and Driveways	48 Parking Spaces <sup>2</sup>	23,627	N/A	N/A
Open Area	Recreational uses (bench seating, lawn games, decomposed granite path, decomposed granite courtyard with fire pit and lounge seating)	23,236	N/A	N/A
<b>Demolition</b>				
Demolition of "The Barn" Building	"The Barn" building will be demolished to accommodate the proposed development on site.	Unknown, estimated to be approximately 2,000 square feet	1	Unknown, estimated to be approximately 15-20 feet

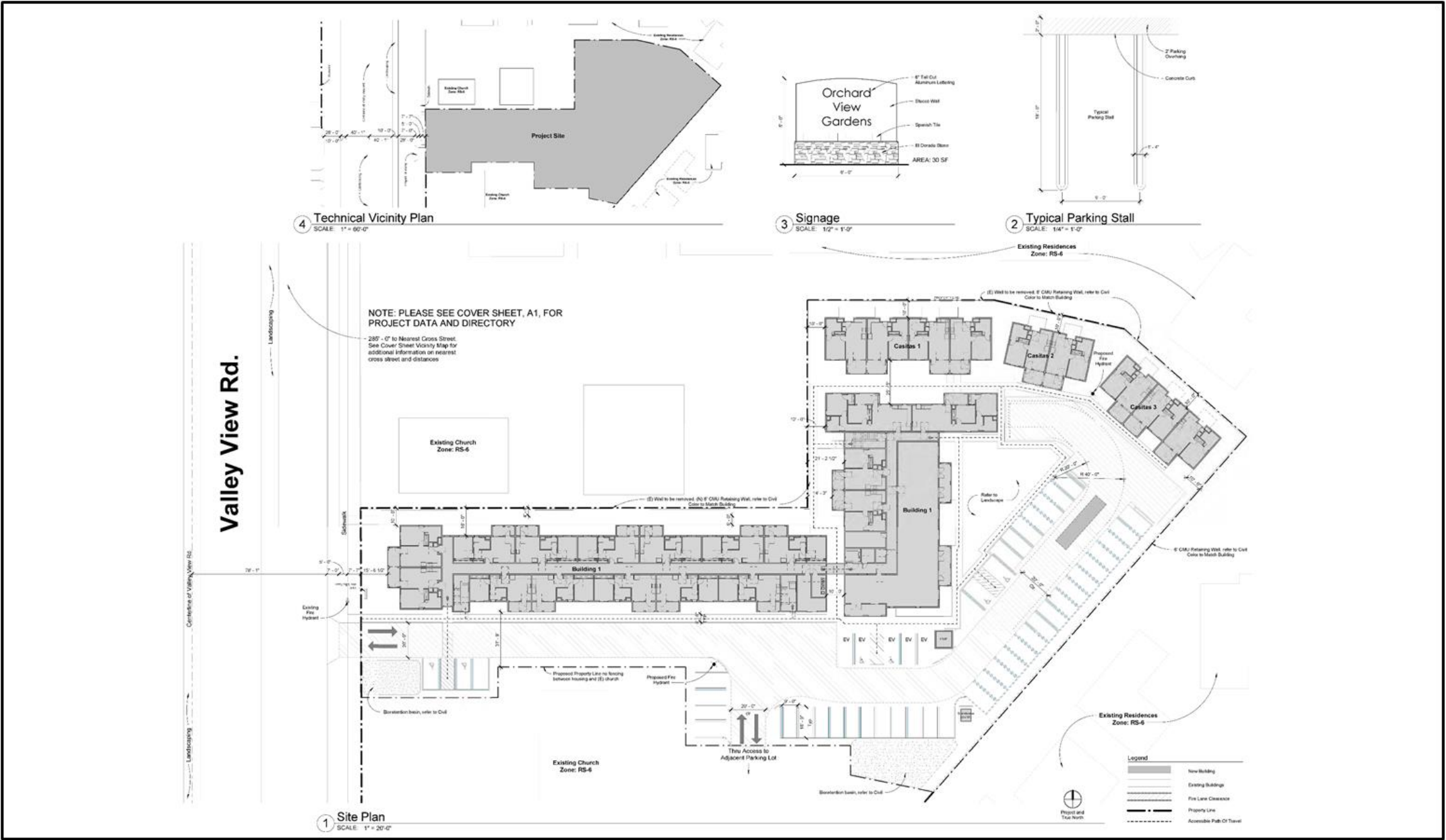
<sup>1</sup> The 3,000 square foot community center is included in the total square footage of 54,201 for Building 1.

<sup>2</sup> The project is requesting a reduction in parking based on the demographic of residents being seniors living alone or non-car owning households, access to existing bus routes, and the provision of alternative strategies to reduce vehicle trips including car sharing and van pooling.

<sup>3</sup> The community center is located within Building 1.

**Source:** Project Applicant Project Description dated March 13, 2020 and RRM Design Group, Entitlement Plan Set dated March 13, 2020.

**Figure 3.2-1**  
**SITE PLAN**



Disclaimer: Illustration provided by RRM Design Group, who has indicated that the information is true and correct. No other warranties are expressed or implied.

Source: RRM Design Group, March 30, 2020.



**Orchard View Gardens**  
**Senior Apartment Homes**  
Site Plan

Table 3.2-2 below provides project statistics compared to the requirements of the RM-20 zone:

**Table 3.2-2**  
**PROJECT STATISTICS**

Project Characteristic	Required	Provided
Density <sup>1</sup>	Maximum: 24 dwelling units per acre	37.5 dwelling units per acre
Front Setback from Valley View Street	Required: 15 feet	Provided: 6.5-15 feet
Side Setbacks		
Internal (north)	Required: 10 feet	Provided: 10 feet
Internal (south)	Required: 10 feet	Provided: 10 feet
Rear Setback from single-family homes	Required: 10 feet	Provided: 10 feet
Parking	Required: 134 spaces	Provided: 48 spaces <sup>5</sup>
Height/Stories	Maximum: 35 feet	Provided: 35 feet or less
Lot Coverage	Maximum: 40%	Proposed: 34%
Open Space	Required: 40%	Proposed: 35%

**Source:** Project Applicant Project Description dated March 13, 2020

<sup>1</sup>Based on RM-20 zoning

Table 3.2-3 below shows the anticipated range in population for the proposed project.

**Table 3.2-3**  
**ESTIMATED RANGE IN PROJECT POPULATION**

Unit Size	Number of Units	Range of Persons based on unit size	Estimated Population
One-bedroom	62	1-3 people	62-186 persons
Two-bedroom	4	2-5 people	8-20 persons
<b>Total</b>	<b>66</b>	<b>--</b>	<b>70-206 persons</b>

**Source:** Email correspondence between Sarah Walker of National Community Core and Margaret Partridge of UltraSystems on January 2, 2020.

### 3.3 Proposed Project Features

#### 3.3.1 New Residential Buildings

Careful consideration of the character and scale of surrounding properties was made to ensure that the project architecture and massing blends in with the existing surrounding uses.

The maximum building height of the proposed project is 35 feet for the buildings at the interior of the site. The proposed project would provide 65 units affordable to households earning less than 60 percent of the AMI, along with one manager's unit, for a total of 66 units. Eight of the units would be for permanent supportive housing to house formerly homeless seniors.

5 With the development of the proposed project, the existing church and proposed residential facility will share a total of 123 parking spaces (Walker, 2020).

Parcel 2 will be developed at an overall density of 37.5 units per acre and will provide a total of 62 one-bedroom units that average 566 gross square feet in size and four two-bedroom units that average 896 gross square feet in size<sup>6</sup>. In total, in terms of lot coverage, the project proposes 25,308 square feet of building area, 23,627 square feet of paved parking and driveways, and 26,021 square feet of open space/landscaped area. The overall lot coverage for the development is 35 percent.

Parcel 2 would be developed with a primary residential apartment building and nine single-story casitas accommodating 66 residential units (including a manager's unit) and a 3,000-square-foot community center. The 66 apartment homes would include 62 one-bedroom units and four two--bedroom units, in one larger and three smaller buildings.

Building 1 would be divided into two groupings connected by a breezeway, as described below:

**Building 1 West:** Building 1West, facing Valley View Street, would be a two-story building transitioning to a linear three-story double-loaded corridor toward the interior of the site. Building 1 West is proposed to include 37 one--bedroom units.

**Building 1 East:** Building 1 East would be a three-story double-loaded bar building located in the interior of site with a two-story element at the northern end of the building transitioning toward the single-family neighborhood along the northern property line. Building 1 East would include 16 one--bedroom and four two-bedroom units. **Figure 3.3-1** shows the elevations of Building 1.

**Casitas:** In addition, nine attached single-story one-bedroom casitas in three buildings are proposed along the northern property line. **Figure 3.3-2** shows the elevations of the casitas.

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<sup>6</sup> These unit sizes are smaller than permitted by the Zoning Code.



**Figure 3.3-1**  
**BUILDING 1 ELEVATIONS**



Disclaimer: Illustration provided by RRM Design Group, who has indicated that the information is true and correct. No other warranties are expressed or implied.

Source: RRM Design Group, March 30, 2020.



**Orchard View Gardens**  
**Senior Apartment Homes**  
Building 1 Elevations



**Figure 3.3-2**  
**CASITAS ELEVATIONS**



Disclaimer: Illustration provided by RRM Design Group, who has indicated that the information is true and correct. No other warranties are expressed or implied.

Source: RRM Design Group, March 30, 2020.



**Orchard View Gardens**  
**Senior Apartment Homes**  
Casitas Elevations



### **3.3.2 New Community Center**

A 3,000-square-foot senior-oriented community center is proposed for use by project residents/visitors exclusively. The community center would be located on the first floor of Building 1.

### **3.3.3 Demolition of “The Barn” Building**

“The Barn” is a stand-alone structure abutting the north property line wall with garden on the west and south sides. As detailed in the Phase I Environmental Site Assessment prepared for the proposed project, “The Property appeared to be in agricultural use, and was developed with a possible barn building as early as 1938. By 1947, the building currently located along the northern Property boundary was constructed and the barn structure remained on the Property. By 1959, the barn structure had been razed, the existing church building had been constructed, and the Property was no longer developed for agricultural use” (Converse, 2019. p. 14).

This building was constructed approximately forty years ago to replace a possible actual dairy barn that had been in the same location and was used as the parish hall; the name was kept in memory of the original structure (Rev. Lucinda Voien, personal communication, 2019). This structure would be demolished and removed as part of the proposed project.

### **3.3.4 Solar Panels**

The proposed project would include onsite photovoltaic energy system solar panels to comply with Title 24, which reduces the building’s overall dependence on the energy grid and reduces the likelihood of power interruptions during heat waves (Walker, 2020).

### **3.3.5 Site Access, Circulation and Parking**

Primary vehicular access to the project site would be provided via a 20-foot-wide driveway off Valley View Street near the northwest corner of the project site, south of Building 1. In addition, a fire truck turnaround has been incorporated into the onsite circulation system at the northwest corner of the project site. The project proposes 23,627 square feet of paved parking and driveways.

To accommodate residents, visitors and staff, a total of 48 parking stalls are proposed for a total ratio of 0.71 spaces per unit. Multifamily residential projects in the City are required to provide 2.0 parking spaces for one-bedroom units, and 2.5 parking spaces for two-bedroom units. This translates into a parking requirement of 134 parking spaces for the 66-unit project.

The project is requesting a reduction in parking requirements based on the demographic of residents being seniors living alone or in non-car owning households, access to existing bus routes, and the provision of alternative strategies to reduce vehicle trips including car sharing and van pooling. With the development of the proposed project, the existing church and proposed residential facility will share a total of 123 parking spaces. The existing church parking lot currently contains 110 parking spaces and would reduce the parking lot to 75 spaces with the development of the project. The project would create 48 new parking spaces to accommodate residents, visitors, and staff (Walker, 2020).

### 3.3.6 Architecture

The project proposes a California Mission architectural style to be complementary with the church and the surrounding neighborhoods. The project includes both wall and roof plane articulation and carries the design elements to each elevation, including the inner portions of the site and all detached structures such as trash enclosures. The maximum building height proposed is 35 feet.

### 3.3.7 Landscaping

The layout of the buildings creates several unique landscaped areas that include both passive and active spaces - raised planters, green lawn/turf areas, drought-tolerant and native ground covers, decomposed granite walkways for residents to access community spaces and an outdoor lounge area with a fireplace and planter beds at the northeast corner of the site. **Figure 3.3-3** depicts the landscaping plan for the proposed project. Total open area on site would be approximately 26,000 square feet (i.e., 35% of the total lot area).

### 3.3.8 Exterior Lighting

The project proposes new lighting on the project site, including various styles and types of luminaires. The project proposes light-emitting diode (LED) lighting throughout the project site as well as occupancy sensors in common areas, parking areas and corridors to reduce energy use. (Refer to sheets E1 and E2 of **Appendix A** which provide additional details regarding lighting on site.) As depicted on sheet E1 of **Appendix A**, the project proposes exterior area lights, exterior bollards, and exterior wall-mounted luminaires. Lighting for the project would comply with the requirements of the City's Municipal Code. Specifically, the project would be required to comply with City of Buena Park Municipal Code § 19.444.030, Lighting, which states, "lighting on any premises shall be directed, controlled, screened, or shaded in such a manner as not to shine directly on surrounding premises." (City of Buena Park Municipal Code, 2020)

### 3.3.9 Perimeter Fencing and Exterior Walls

The project would construct a six-foot high concrete masonry unit (CMU) retaining wall along the northern and southeast boundary of the project site. The color of the wall would match the proposed buildings on site. No fencing would be placed between the proposed housing and the existing church.

### 3.3.10 Utilities

As described below, the proposed project will require sewer, domestic water, fire water, irrigation and dry utilities connections to existing utility infrastructure in Valley View Boulevard.

**Sanitary Sewer** – The site is served by an existing sanitary sewer network. New sewer laterals connections to existing sewer mains located near the project site would be installed. These improvements would require trenching and exposing sewer lines for connections to existing mainlines and manholes. The proposed project would connect to the existing 10-inch vitrified clay pipe (VCP) sewer main line in Valley View Boulevard.

Figure 3.3-3  
LANDSCAPE PLAN



Disclaimer: Illustration provided by RRM Design Group, who has indicated that the information is true and correct. No other warranties are expressed or implied.

Source: RRM Design Group, March, 2020.



Orchard View Gardens  
Senior Apartment Homes  
Landscape Plan



**Domestic Water** – New domestic water meters would be installed as required to meet the demands calculated by the plumber for the project and in compliance with the requirements of the City’s Public Works Department. Water would be provided by the Metropolitan Water District and the City of Buena Park (City of Buena Park, 2019a). The proposed project would connect to the existing six-inch water main in Valley View Boulevard.

**Fire Water** – A water connection is required to provide water to the proposed fire hydrants on the project site (to be located between Casitas 2 and 3 and south of Building 1, near the existing church). The fire water line would be connected to the new hydrants from the existing six-inch water line in Valley View Boulevard.

**Irrigation Line** – A new line would be connected from the existing six-inch water line in Valley View boulevard to the project site to provide irrigation to the proposed project.

**Dry Utilities** – A new natural gas connection is proposed to serve the project site. The project would install a new two-inch gas line from the project site to an existing gas line in Valley View Boulevard. Natural gas service would be provided to the project site by the Southern California Gas Company (SoCalGas). Southern California Edison Company (SCE) would provide electricity to the project site (City of Buena Park, 2019a). The project proposes an eight-foot by 10-foot SCE transformer pad at the southeast corner of the project site.

**Stormwater** – The proposed development would maintain existing drainage patterns and discharge locations. Stormwater runoff would be collected via bioretention areas, as described in detail in the hydrology section of this document. The project includes three proposed bioretention basins on site. The project proposes a 830-square-foot bioretention basin along the western boundary of the project site, along the project site’s frontage with Valley View Street. A second 2,275-square-foot bioretention basin is proposed adjacent to the existing church parking lot, south of Building 1 as well as an adjacent 1,600-square-foot gravel storage area. A third 800-square-foot bioretention basin is proposed adjacent to the northern project boundary, north of Building 1. Refer to **Figure 3.3-4** below, which shows the proposed hydrology for the project.

**Trash Service** – Trash service would be provided by Park Disposal (EDCO) (City of Buena Park, 2019a).

**Cable Television** – New cable television connections would be needed to serve the project. Spectrum (formerly Time Warner) provides television service to the project site (City of Buena Park, 2019a). Alternatively, connections to AT&T U-verse could be established via a tie-in for SCE, Charter, and AT&T at the northeast corner of the project site or there may be the potential need to relocate the existing pole to meet overhead clearance from the proposed buildings onsite.

### **3.4 Off-Site Improvements**

#### **3.4.1 Utility Improvements**

For domestic, water, fire water, irrigation, and natural gas, connections would be required to existing water mains, water line, and gas lines in Valley View Boulevard. Therefore, construction would need to occur in Valley View Boulevard to connect the utility lines for the proposed project to the existing main lines in Valley view Boulevard.



### 3.4.2 Intersection Treatments

The irregularly designed intersection of San Rafael Drive and Valley View Street presents some challenges for drivers maneuvering through it. Fehr & Peers developed four intersection treatment options that can improve circulation. Implementation of each treatment depends on available funding sources and the City's discretion (Fehr & Peers, 2020, p. 9). The four treatment options are described below (Fehr & Peers, 2020, pp. 9-15). Refer to **Section 4.17** of this document and **Appendix H** (Traffic Assessment Memo) for additional details.

#### **Treatment Option 1 - Convert Frontage Roads to One-Way Streets:**

This option includes converting the frontage roads on either side of Valley View Street to one-way streets and diverting the flow of traffic along the frontage roads away from the signalized intersection. The frontage roads would only provide ingress access from San Rafael Drive, making the stop signs unnecessary as traffic would not be permitted towards San Rafael Drive. This would result in the rerouting of project traffic and existing neighborhood traffic. However, the project is anticipated to generate a low number of trips per day and the traffic generated by the existing houses and churches affected by the rerouting is also minimal. The rerouted traffic should not result in any traffic operation impacts to the surrounding network.

This treatment would improve traffic flow, reduce conflict areas, and eliminate difficult turning maneuvers. Vehicles making a northbound right U-turn onto the frontage road will have the area necessary to complete the turn, reducing the conflict observed on the frontage road. One drawback to this recommendation is that it cannot be implemented along the Los Molinos Drive southbound frontage road. This roadway terminates in a cul-de-sac without any additional access for vehicles. However, the implementation of this treatment along Valley View Street could benefit the project and improve circulation near the site. Treatment option 1 (one-way treatment) precludes the need to restrict U-turn movements.

#### **Treatment Option 2 - Restrict U-Turn Movements:**

Vehicles making a northbound right U-turn onto Valley View frontage road require both lanes to complete the turn which could result in a head-on collision. Vehicles stopped along the frontage road were observed entering the middle of an intersection to avoid conflicts with traffic attempting to make a right U-turn. This option is split into Option 2a and 2b, as follows:

**Treatment Option 2a:** If Treatment Option 1 is not selected, Treatment Option 2a could be implemented restricting right U-turn movements from Valley View Street onto the frontage roads. Installation of this improvement would require adding no U-turn signs on Valley View Street.

**Treatment Option 2b:** As an extra measure to discourage right U-turn movements, Fehr & Peers also propose this treatment option, which includes extending the median on the frontage road to make the turning movement difficult for vehicles to complete. Treatment Option 2b can be implemented along with Treatment Option 2a, but it should not be implemented by itself. Restricting right U-turns would not be necessary if the frontage road was converted to one-way ingress only. These treatment options would reduce conflicts for vehicles stopped along the frontage road and vehicles blocking the intersection. Drivers who were forecast to make the northbound right U-turn on the Valley View frontage road would still be provided access to the project site via intersections along Crescent Avenue. Similar to Option 2a, the number of trips affected by the rerouting is also minimal and would likely not

result in any traffic operation impacts to the surrounding network. Restricting right U-turns would not be necessary if the frontage road was converted to one-way ingress only.

**Treatment Option 3- Modify Existing Median to include a Right-Turn Lane:**

This option provides another solution to help alleviate the difficult northbound right U-turn at the intersection of San Rafael Drive and Valley View Street, similar to Treatment Option 2. This option includes modifying the existing median to accommodate a right-turn lane that would provide access to the Valley View frontage road near the project site. The right-turn lane would align with the project's southern driveway. Drivers would only be allowed to make a left-turn onto the frontage road or proceed straight into the project from the turning lane.

Implementation of this treatment would require narrowing lane widths along Valley View Street or the Valley View frontage road. A "Do Not Enter" sign should be installed to discourage drivers from entering the turn lane from the Valley View frontage road. A stop sign would be required at the right-turn lane to encourage drivers to yield to traffic along the frontage road. Right-turns would be restricted for drivers utilizing the right-turn lane. The skewed intersection could create visibility challenges for drivers.

The rightmost northbound through lane along Valley View Street could be reduced from 14 feet to 12 feet to accommodate the right-turn lane. This reduction may require that the entire median between San Rafael Drive and Crescent Avenue be widened to 10 feet for a consistent right edge line for through traffic along Valley View Street. Lane widths along the Valley View frontage road could be reduced to accommodate 10-foot travel lanes. On-street parking along the frontage road may need to be restricted near the right-turn lane to accommodate this improvement.

Implementation of this treatment option would reduce right U-turns at the signalized intersection. Treatment Option 2 could be implemented along with Treatment Option 3. This improvement helps improve circulation and provides direct access to the project driveway.

**Treatment Option 4- Traffic Signal Split Phasing on Minor Legs:**

Current traffic signal phasing at the intersection is permissive east-west and allows both minor legs to proceed through the intersection simultaneously. Due to the offset and irregular configuration of the intersection, it is difficult to predict the opposing vehicles' path of travel (a vehicle making a left-turn could be accessing Valley View Street or the frontage road). A driver exiting from San Rafael Drive has three options for completing a left-turn: the driver could turn onto the Valley View frontage road, Valley View Street, or Los Molinos frontage road.

Treatment Option 4 includes modifying the signal phasing to provide split phasing for the eastbound and westbound legs of the intersection. With this recommendation, the minor leg movements would enter the intersection separately. This can reduce conflict movements created by the offset and irregular intersection configuration. Implementation of this treatment would require replacing four of the existing signal heads along the minor legs and updating the signal timing at the intersection. However, this signal modification could retain the existing traffic signal poles and mast arms. One drawback to this recommendation is that it would affect signal timing coordination along the Valley View corridor because it requires more green time for the minor legs. This would require timing changes throughout the coordinated corridor. Pedestrian traffic along the intersection can also increase delay at an intersection.

**Table 3.4-2** summarizes the intersection treatments. Treatment Option 1 (One-way street conversion) and Treatment Option 2 (Restrict right U-turn movements) are not recommended to be implemented together as the installation of Treatment Option 1 precludes the need for Treatment Option 2. The other treatment options could be implemented by themselves or implemented together as complementary treatment options. Implementation and possible phasing of these treatments depend on available funding (Fehr & Peers, 2020, p. 18),

**Table 3.4-2**  
**INTERSECTION TREATMENTS SUMMARY**

Improvements	Descriptions	Issue Addressed	Drawbacks
<b>1. Convert Frontage Road to One Way Streets</b>	<ul style="list-style-type: none"> <li>• Restricts two-way movement along frontage streets</li> <li>• Add one-way streets signs</li> <li>• Requires additional infrastructure/treatments throughout one-way street for compliance</li> </ul>	<ul style="list-style-type: none"> <li>• Improves traffic flow</li> <li>• Reduces conflict areas</li> <li>• Eliminates difficult turn movements</li> </ul>	<ul style="list-style-type: none"> <li>• Improvement cannot be installed along both sides of Los Molinos Frontage Road</li> </ul>
<b>2a. Restrict U-turn Movements with Signage Only</b>	<ul style="list-style-type: none"> <li>• Restrict right U-turn movement</li> <li>• Add No U-turn signs</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce conflicting movements</li> </ul>	<ul style="list-style-type: none"> <li>• Concerns with eastbound and westbound traffic not addressed</li> </ul>
<b>2b. Restrict U-Turn Movements with Signage and Median Extension</b>	<ul style="list-style-type: none"> <li>• Restrict right U-turn movement</li> <li>• Add No U-turn signs</li> <li>• Extend frontage road median to discourage U-turns</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce conflicting movements</li> </ul>	<ul style="list-style-type: none"> <li>• Concerns with eastbound and westbound traffic not addressed</li> </ul>
<b>3. Modify Existing Median to include a Right-Turn Lane</b>	<ul style="list-style-type: none"> <li>• Add 10-foot right-turn lane to existing median on Valley View that aligns with the project driveway</li> <li>• Reduce the rightmost northbound through lane from 14 feet to 12 feet or reduce lane widths along Valley View frontage Road</li> </ul>	<ul style="list-style-type: none"> <li>• Eliminates difficult turn movement</li> </ul>	<ul style="list-style-type: none"> <li>• Concerns with eastbound and westbound traffic not addressed</li> </ul>
<b>4. Split Phasing on the Minor Legs (Los Molinos Dr and San Rafael Dr)</b>	<ul style="list-style-type: none"> <li>• Updates Signal timing at intersections</li> <li>• Add signal heads to minor legs</li> </ul>	<ul style="list-style-type: none"> <li>• Addresses concerns with EB and WB traffic</li> <li>• Reduces conflict areas</li> </ul>	<ul style="list-style-type: none"> <li>• Signal coordination along the corridor may need to be adjusted</li> </ul>

Source: Fehr & Peers, 2020, Table 9.

### 3.5 Construction Activities

For safety reasons, the project may erect barricades for safety and security prior to construction activities, and will maintain safe access for construction workers throughout construction.

Construction activities may include the following:

- Site grading-during grading, there would be a raw cut of 85 cubic yards and a raw fill (import of soil) of 6,035 cubic yards.
- New construction, as described below.

After site preparation is completed, infrastructure such as sewer and drainage lines would be installed and connected to existing facilities. The building foundations would be poured with concrete, and framing of the buildings would begin. The final stage of construction would involve interior furnishings, detail work, and completion of common areas and outside landscaping. The only offsite improvements would be street improvements where the point of utility connections would occur. The general contractor would utilize heavy equipment during grading. The types and number of pieces of equipment and length of use are shown below in **Table 3.5-1**.

Construction staging would be limited to the project site; no offsite areas would be used. Project construction workers would park their vehicles on the project site. Employees will be able to park onsite during the construction/demolition phase in the existing paved parking areas; once the new parking lots are constructed employees would use this area to park. The project applicant would strongly encourage/incentivize construction employees to carpool and take public transit to the project site (Walker, 2020). Below is the anticipated number of construction employees by construction phase:

- Demolition: 10-12 employees
- Grading: 10-12 employees
- Site work: 5-10 employees
- Vertical construction: 75 employees

### **3.5.1 Construction Schedule and Equipment**

Construction would occur in one phase but is broken down into different parts, as detailed in **Table 3.5-1** below. Project construction is anticipated to begin in January 2022 and would last approximately 16 months, ending in April 2023. It is anticipated that residents would move in by the 2nd quarter of 2023. The total construction schedule would be 16 months long starting in winter (January) 2022 (Walker, 2020).

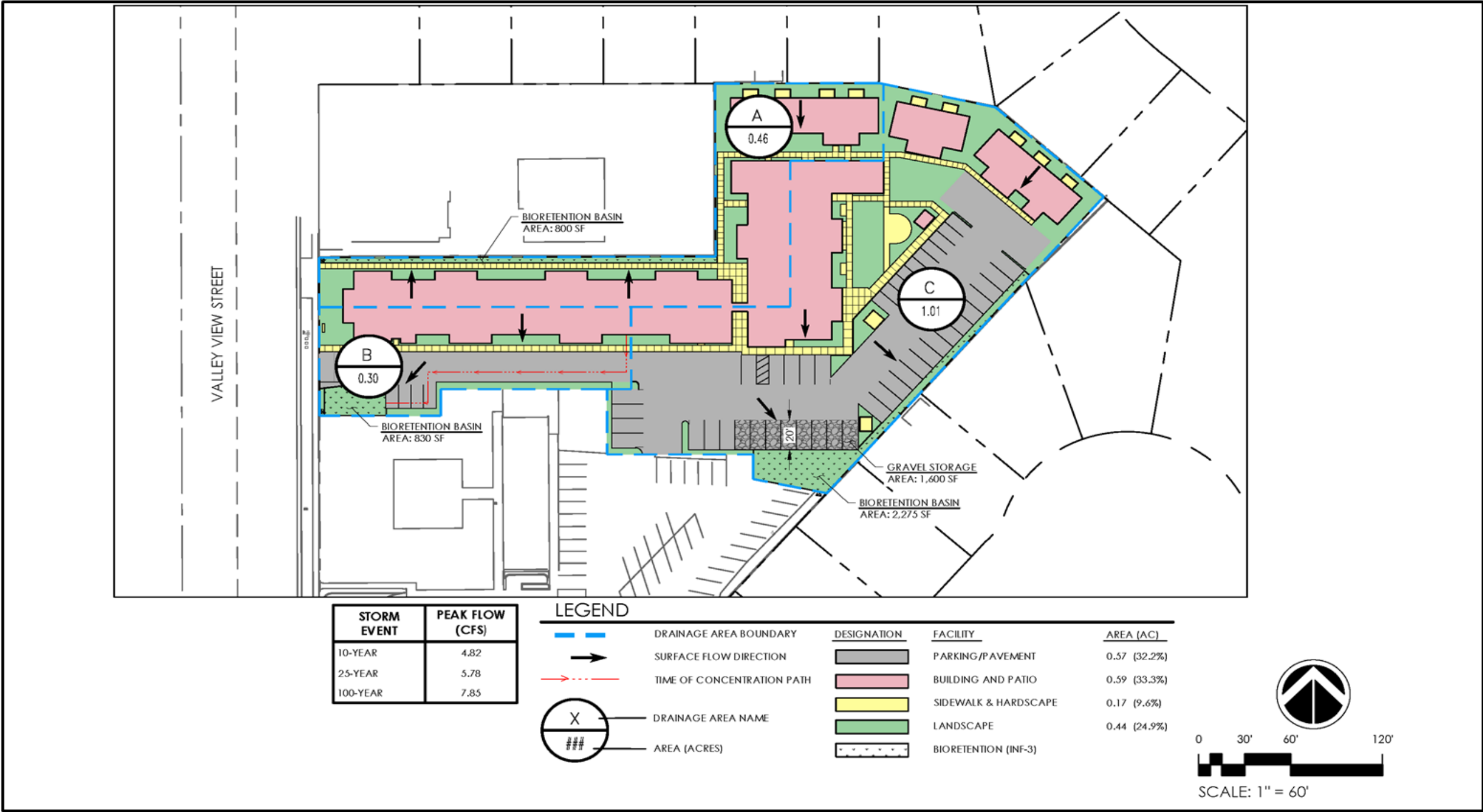


**Table 3.5-1**  
**CONSTRUCTION PHASING AND EQUIPMENT DETAILS**

Phase/Months	Number of pieces of equipment	Equipment	Number of working days
<b>Demo Phase: 1 month</b>	2	Large Excavators	10 working days
	2	Standard Backhoes	10 working days
	1	Asphalt Grinder	2 working days
	1	Large Loader	15 working days
<b>Grading Phase: 1 month</b>	2	Standard Scrapers	20 working days
	1	Larger Loader	15 working days
	1	Standard Blade	15 working days
	1	Standard Skiploader	20 working days
<b>Site Work Phase: 2 Months</b>	1	Large Excavator	20 working days
	3	Standard Backhoes	70 working days
	2	Standard Skiploaders	4 working days
	1	Paving Machine	4 working days
<b>Vertical Phase: 12 Months</b>	1	Large Pettibone (forklift)	75 working days
	1	Bobcat (Skid-steer)	40 working days
	1	Standard Skiploader	20 working days

**Source:** Sarah Walker of National Community Core, email correspondence on May 11, 2020.

Figure 3.3-4  
PROPOSED HYDROLOGY MAP



Disclaimer: Illustration provided by RRM Design Group, who has indicated that the information is true and correct. No other warranties are expressed or implied.

Source: RRM Design Group, August 5, 2020.



**Orchard View Gardens  
Senior Apartment Homes**  
Proposed Hydrology Map

### 3.6 Discretionary Actions

**General Plan Amendment.** As currently proposed, the project site would be developed at an overall density of 37.5 dwelling units per acre (66 dwelling units/1.76 acres). For the proposed project, under low density residential, the base development density standard is up to 7.2 du/ac. Densities up to 14.4 du/ac are allowed with an Affordable Senior Housing Bonus. Therefore, to develop the project site, the applicant is requesting approval of a General Plan Amendment from Low Density Residential to High Density Residential.

**Zone Change.** The project requires a Zone Change from Residential Single Family 6 (RS-6) to Medium-Density Multifamily Residential (RM-20) to accommodate the density (including the Affordable Senior Housing Bonus) of the proposed project.

**Development Agreement.** The Development Agreement would set unique development standards for the project which differ from the underlying zoning developments standards, including density, unit sizes, and open space area.

**Tentative Parcel Map.** The project requires a Tentative Parcel Map to divide one parcel into two.

**Modification to Use Permit.** The project proposes modification to Use Permit U-272 to reflect the updated property lines and parking spaces required to accommodate the proposed project.

#### Other Permits and Approvals

Following the Lead Agency's approval of the Initial Study/Mitigated Negative Declaration, the following permits and approvals would be required prior to construction, as shown in **Table 3.6-1** below.

**Table 3.6-1**  
**PERMITS AND APPROVALS**

Agency	Permit or Approval
City of Buena Park Building & Safety Division	Site Plan review and approval and issuance of Building Permits
City of Buena Park Planning Division	General Plan Amendment Zone Change Development Agreement Tentative Parcel Map Modification to Use Permit
Orange County Fire Authority	Building plan check and approval. Review for compliance with the current California Fire Code, current California Building Code, California Health & Safety Code and City of Buena Park Municipal Code. Plans for fire detection and alarm systems, and automatic sprinklers.
Metropolitan Water District and the City of Buena Park	Letter of authorization/consent for proposed improvements to provide water supply connection to new development.
Southern California Gas Company	Letter of authorization/consent for proposed improvements to provide natural gas connection to new development.
Southern California Edison Company	Letter of authorization/consent for proposed improvements to provide electrical connection to new development.



**4.0 ENVIRONMENTAL CHECKLIST****Environmental Factors Potentially Affected**

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or as a "Potentially Significant Unless Mitigation Incorporated," as indicated by the checklist on the following pages.

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

**Determination (To Be Completed by the Lead Agency)**

On the basis of this initial evaluation:

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

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

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

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

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

Signature

Date

Printed Name

City of Buena Park

## 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 into account the whole action involved, including offsite as well as onsite, 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 less than significant level.
- (5) Earlier analyses may be use where, pursuant to the tiering, Program EIR, or other CEQA process, an affect has been adequately analyzed in an earlier EIR or negative declaration. (See Section 15063(c)(3)(D) of the CEQA Guidelines. In this case, a brief discussion should identify the following:
  - (a) Earlier Analyses Used. Identify and state where the earlier analysis 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 that 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

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❖ SECTION 4.0 – ENVIRONMENTAL CHECKLIST ❖

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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.
- (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:
  - (a) The significance criteria or threshold, if any, used to evaluate each question; and
  - (b) The mitigation measure identified, if any, to reduce the impact to less than significant.

## 4.1 Aesthetics

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

A “visual environment” includes the built environment (development patterns, buildings, parking areas, and circulation elements) and natural environment (such as hills, vegetation, rock outcroppings, drainage pathways, and soils) features. Visual quality, viewer groups and sensitivity, duration, and visual resources characterize views. Visual quality refers to the general aesthetic quality of a view, such as vividness, intactness, and unity. Viewer groups identify who is most likely to experience the view. High-sensitivity land uses include residences, schools, playgrounds, religious institutions, and passive outdoor spaces such as parks, playgrounds, and recreation areas. Duration of a view is the amount of time that a particular view can be seen by a specific viewer group. Visual resources refer to unique views, and views identified in local plans, from scenic highways, or of specific unique structures or landscape features.

### a) Would the project have a substantial adverse effect on a scenic vista?

#### **No Impact**

Scenic vistas generally include extensive panoramic views of natural features, unusual terrain, or unique urban or historic features, for which the field of view can be wide and extend into the distance, and focal views that focus on a particular object, scene or feature of interest. The City of Buena Park’s General Plan does not include discussion of any scenic vistas or other important visual resources that are important to the City (RBF Consulting, 2010a). Additionally, the city’s General Plan EIR states: “Because the City’s topography is relatively flat and the City is densely developed, distant views are obstructed by existing development. Buildings (including existing residences) and the adjacent

roadways are essentially the dominant visual elements in the City’s environment” (RBF Consulting, 2010b, p. 5.3-1).

The project area is characterized by flat topography and urban development. There are no significant scenic views from public thoroughfares and open spaces in the vicinity of the project. Views of and within the project area are generally limited to immediately adjacent uses/structures. Views to the north, south and consist of adjacent developed uses of varying scale, including residential and institutional (church) uses. Views to the west consists of views of residential developments across Valley View Street. Therefore, the project would have no impact on a scenic vista.

- b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?**

**No Impact**

The California Department of Transportation (Caltrans) provides information regarding officially designated or eligible state scenic highways, designated as part of the California Scenic Highway Program. According to Caltrans, there are no officially designated scenic highways within or adjacent to the project area, and no roadways near the project site are currently eligible for scenic highway designation (Caltrans, 2014). As shown in **Figure 4.1-1**, the closest officially designated state scenic highway is State Route 91 (SR-91), which is located more than 10 miles east from the project site. Due to the large distance between the project site and SR-91, construction and implementation of the project will have no impacts on state scenic highways. The nearest eligible highway is a portion of State Route 57 (SR-57), approximately 10 miles northeast of the project site; although this portion is eligible to become an official state scenic highway, it is not currently classified as such and is not considered in this analysis. Therefore, the project would have no impacts on trees, rock outcroppings and historic buildings within a state scenic highway.

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

**Less than Significant Impact**

The project site is located in an urban setting characterized by a mix of single-family residential buildings and a church abutting the north side of the project. Views of the existing streetscape are characterized by single-story buildings, utilities infrastructure (including utility lines, poles and street lights) and minimal landscaping. Refer to **Table 4.11**, which describes the existing visual character in the vicinity of the project site. **Figure 4.12** includes photographs of development in the vicinity of the project site.



**Figure 4.1-1**  
**STATE SCENIC HIGHWAYS AND NATIONAL BYWAYS**



Path: \\10.0.0.137\gis\Projects\7037\_NCR\_Affordable\_Housing\_Buena Park\_IS\_MND\MapDocs\7037\_NCR\_Buena\_Park\_Fig4\_1\_Scenic\_Hwy\_2020\_01\_08.mxd  
 Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC,  
 (c) OpenStreetMap contributors, and the GIS User Community; Caltrans, 2014; UltraSystems Environmental, Inc., 2020

January 15, 2020

Scale: 1:633,600



0 5 10 Miles

0 5 10 Kilometers

#### Legend

- Project Location
- Officially Designated State Scenic Highway
- Eligible State Scenic Highway
- County Boundary

#### Orchard View Gardens Senior Apartment Homes

Scenic Highways



**Table 4.1-1**  
**EXISTING VISUAL CHARACTER AND LAND USES IN THE PROJECT AREA**

Location	General Characteristics	Existing Lighting	Building Height and Design	Landscaping
Project Site	Developed with two church buildings, a large surface parking lot, and an open field.	Exterior lighting associated with the church buildings, parking lot lighting, street lighting.	One- to two-story buildings with a tiled sloping roof, a flat roof, and white plastered exterior walls.	Mature trees and ornamental shrubs and grasses.
<b>Surrounding Areas</b>				
North	A church and single-family homes.	Exterior lighting associated with the church buildings, parking lot lighting, residential developments and street lighting.	The church has tall one-story buildings, a tiled sloping roof, a flat roof and white and tan exterior walls. Residents have one-story to two-story buildings with no specific architectural design.	Ornamental trees, shrubs and grasses.
East	Single-family homes.	Exterior lighting associated with the residential developments and street lighting.	Residents have one-story to two-story buildings with no specific architectural design.	Ornamental trees, shrubs and grasses.
West	Single-family homes across Valley View Street.	Exterior lighting associated with the residential developments and street lighting.	Residents have one-story buildings with no specific architectural design.	Ornamental trees, shrubs and grasses.
South	Single-family homes.	Exterior lighting associated with the residential developments and street lighting.	Residents have one-story to two-story buildings with no specific architectural design.	Ornamental trees, shrubs and grasses.

**Source:** UltraSystems, 2020 and Google Earth Pro, 2019.

**Figure 4.1-2**  
**EXISTING VISUAL CHARACTER IN THE VICINITY OF THE PROJECT SITE**



PHOTO 1: View of one-story and two-story homes located north of the project site.



PHOTO 2: View of one-story and two-story homes located south of the project site.



PHOTO 3: View of one-story and two-story homes located east of the project site.



PHOTO 4: View of one-story homes located to the west, across Valley View Street from the project site.



## **Construction**

During project construction, there would be certain elements on the project site that are not compatible with the project vicinity. These may include construction equipment (e.g., small cranes, pickup trucks), stockpiled materials, and construction-area barriers and fencing. While these elements would be removed following construction, they would nonetheless result in a temporary impact. However, during project construction, work areas would be screened from public view by temporary barriers/fencing. Therefore, short-term visual impacts during the construction phase would be less than significant.

## **Operation**

The project site is one contiguous, irregular-shaped parcel with the southern portion of the site currently occupied by Saint Joseph's Church. The church is housed in a single building and surrounded by surface parking. The northern portion of the site is currently vacant. The project proposes to subdivide the existing parcel (APN 039-283-25) into two new parcels. The southern parcel (Parcel 1) would maintain St. Joseph's Episcopal Church and surface parking on 1.44 acres. The newly created 1.76-acre parcel occupying the eastern and northern portion of the site (Parcel 2) would be developed with a primary residential apartment building and nine single-story casitas accommodating 66 residential units and a 3,000-square-foot community center.

The City of Buena Park does not have General Plan or Municipal Code policies that regulate scenic quality that would be applicable to the proposed project. As a result, the project would have less than significant impacts in relation to consistency with local land use plans, policies, or regulations.

Implementation of the project would not degrade the existing visual character of the site. Under the proposed project, new buildings would be consistent with the general character of existing buildings in the surrounding neighborhood, in terms of architectural style, density, height, bulk, and setback.

On Parcel 2, 66 residential apartment homes (65 for seniors aged 62+ and one manager's unit), including 62 one-bedroom units and four two-bedroom units, are proposed in four buildings - one larger and three smaller. Building 1 is divided into two groupings connected by a breezeway. Building 1 West, facing Valley View Street, is a two-story building transitioning to a linear three-story double-loaded corridor toward the interior of the site. Building 1 East is a three-story double-loaded bar building located in the interior of the site with a two-story element at the northern end of the building transitioning toward the single-family neighborhood along the northern property line. Along the northern property line, there are nine attached single-story casitas in three clusters. Careful consideration of the character and scale of surrounding properties was made to ensure that the project architecture and massing blends in with the existing surrounding uses. The maximum building height of the proposed project is 35 feet for the buildings at the interior of the site. The buildings would have tilted roof tiles, wood paneled patio railings, white stucco for exterior walls, and utilize accent shutters. The project applicant conducted multiple community meetings and has undergone a preliminary review with City of Buena Park staff to inform the design of the project.

The project proposes a California Mission architectural style to be complementary with the church and the surrounding neighborhoods. The project includes both wall and roof plane articulation and carries the design elements to each elevation, including the inner portions of the site and all detached structures such as trash enclosures. The layout of the buildings creates several unique landscaped areas that includes both passive and active spaces – raised planters, green lawn/turf areas, drought-tolerant and native ground covers, decomposed granite walkways for residents to access



community spaces and an outdoor lounge area with a fireplace and planter beds at the northeast corner of the site. The proposed project also includes a 3,000-square-foot community center. The project would increase the density, scale, and height of development on the project site compared to existing conditions. However, as discussed above, the project would not be out of character with the surrounding area, which contains a mix of land uses, primarily single-family residential, at various scales of development, as detailed in **Table 4.1-1** above. Refer to **Figure 4.1-3** through **Figure 4.1-6**, which provide conceptual renderings of what the proposed project would look like.

The project would improve an existing underutilized piece of land with well-designed buildings, commercial street frontage and landscaping, thereby resulting in a beneficial change to existing site conditions and would not represent an adverse impact or degradation in the existing visual character of the site and its surroundings.

- d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

**Less than Significant Impact with Mitigation Incorporated**

**Construction**

The project would not operate construction equipment outside of the permitted hours set forth in Section 8.28. 040 of the City of Buena Park Noise Ordinance. The Noise Ordinance prohibits noise generated by construction activities between the hours of 8:00 PM and 7:00 AM Monday through Saturday, and at any time on Sundays (City of Buena Park, 202, p. 8-6). During project construction there would be additional sources of light that would be used to provide security lighting for the construction staging area(s) on the project site. Construction equipment used onsite may produce glare. To ensure that construction lighting and glare do not have a significant impact on surrounding residences, mitigation measure **MM AES-1** is recommended to reduce potential temporary construction lighting and glare impacts to a less than significant level.

**Mitigation Measure**

- MM AES-1** During project construction the project applicant shall place construction staging areas as far away as possible from adjacent residences so as to minimize, to the maximum extent possible, any potential lighting and/or glare impacts to nearby residences. The lighting used during project construction shall consist of the minimum amount of light necessary for safety and security on the project site.

**Level of Significance After Mitigation**

With implementation of **MM AES-1** and given that project construction would be temporary, the proposed project would have a less than significant impact regarding temporary construction lighting and glare.

**Figure 4.1-3**  
**BUILDING 1 ELEVATIONS**



Disclaimer: Illustration provided by RRM Design Group, who has indicated that the information is true and correct. No other warranties are expressed or implied.

Source: RRM Design Group, March, 2020.



**Orchard View Gardens**  
**Senior Apartment Homes**  
Building 1 Elevations



**Figure 4.1-4**  
**CASITAS ELEVATIONS**



Disclaimer: Illustration provided by RRM Design Group, who has indicated that the information is true and correct. No other warranties are expressed or implied.

Source: RRM Design Group, March, 2020.



**Orchard View Gardens**  
**Senior Apartment Homes**  
Casitas Elevations



**Figure 4.1-5**  
**PROJECT PERSPECTIVES**



Perspective from Valley View St.



Perspective at Entry from Valley View St.

Disclaimer: Illustration provided by RRM Design Group, who has indicated that the information is true and correct. No other warranties are expressed or implied.

Source: RRM Design Group, March, 2020



**Orchard View Gardens**  
**Senior Apartment Homes**  
Project Perspectives

**Figure 4.1-6**  
**PROJECT COLOR AND MATERIAL BOARD**



Disclaimer: Illustration provided by RRM Design Group, who has indicated that the information is true and correct. No other warranties are expressed or implied.

Source: RRM Design Group, March, 2020.



**Orchard View Gardens**  
**Senior Apartment Homes**  
Project Color and Materials Board



## Operation

The project proposes new exterior lighting throughout the site. Installation of exterior lighting would be necessary for safety and nighttime visibility throughout the proposed residential development. The new project lighting would be visible from the surrounding area. Therefore, the project's proposed exterior lighting is expected to contribute to ambient nighttime illumination in the project vicinity.

The project site is located in an urban area, which is characterized by low to medium nighttime ambient light levels. Street lights, traffic on local streets, and exterior lighting in surrounding developments are the primary sources of light that contribute to the ambient light levels in the project area. Light-sensitive uses in the project vicinity are limited to residences.

According to the Institution of Lighting Engineers (ILE, 2005), now called the Institution of Lighting Professionals, and the Electric Power Research Institute (EPRI, 2000), light trespass<sup>7</sup> varies according to surrounding environmental characteristics. Areas that are more rural in character, and therefore have few existing artificial sources of light, are more susceptible to impacts resulting from the installation of new artificial lighting sources. In contrast, urbanized areas are characterized by a large number of existing artificial lighting sources and are thus less susceptible to adverse effects associated with new artificial lighting sources.

To determine appropriate lighting standards that represent the existing lighting conditions, land uses are typically categorized into one of four environmental zones, as depicted in **Table 4.1-2** below. The project site and surrounding area can be characterized as an area of medium ambient brightness (E3 environmental zone).

**Table 4.1-2**  
**ENVIRONMENTAL ZONES**

Zone	Surrounding	Lighting Environment	Examples
<b>E0</b>	Protected	Dark	UNESCO Starlight Reserves, IDA Dark Sky Parks
<b>E1</b>	Natural	Intrinsically dark	National Parks, Areas of Outstanding Natural Beauty etc.
<b>E2</b>	Rural	Low district brightness	Village or relatively dark outer suburban locations
<b>E3</b>	Suburban	Medium district brightness	Small town centres or suburban locations
<b>E4</b>	Urban	High district brightness	Town/city centres with high levels of nighttime activity

Source: Table 1- Environmental Zones (ILE, 2005)

Based on these environmental zones, the ILE and EPRI have established recommendations for limiting light trespass onto adjacent properties. The recommendations established by the ILE are summarized in **Table 4.1-3** below.

<sup>7</sup> Light trespass (also known as obtrusive light or spill light) is the condition where poorly shielded or poorly aimed light fixtures cast light onto areas where it is unwanted or not needed

**Table 4.1-3**  
**OBTRUSIVE LIGHT LIMITATIONS FOR EXTERIOR LIGHTING INSTALLATIONS**

Environmental Zone	Light Trespass Illuminance			
	Pre-Curfew (Dusk – 11:00 p.m.)		Post Curfew (11:00 p.m. – 7:00 a.m.)	
ILE				
E1	2 lx	0.2 fc	1 lx	0.1 fc
E2	5 lx	0.5 fc	1 lx	0.1 fc
E3	10 lx	0.9 fc	2 lx	0.2 fc
E4	25 lx	2.3 fc	5 lx	0.5 fc
EPRI				
E1	1 lx	0.1 fc	1 lx	0.1 fc
E2	3 lx	0.3 fc	1 lx	0.1 fc
E3	9 lx	0.8 fc	3 lx	0.3 fc
E4	16 lx	1.5 fc	7 lx	0.6 fc

lx = lux

fc = foot-candles

Source: Adopted from ILE (2003) and EPRI (2000)

Curfew hours listed in the table are from the Institution of Lighting Engineers, Guidance Notes for the Reduction of Obtrusive Light, 2005 (ILE, 2005, p. 5), which states, “Curfew = the time after which stricter requirements (for the control of obtrusive light) will apply; often a condition of use of lighting applied by the local planning authority. If not otherwise stated - 23.00 hrs [11:00 p.m.] is suggested.”

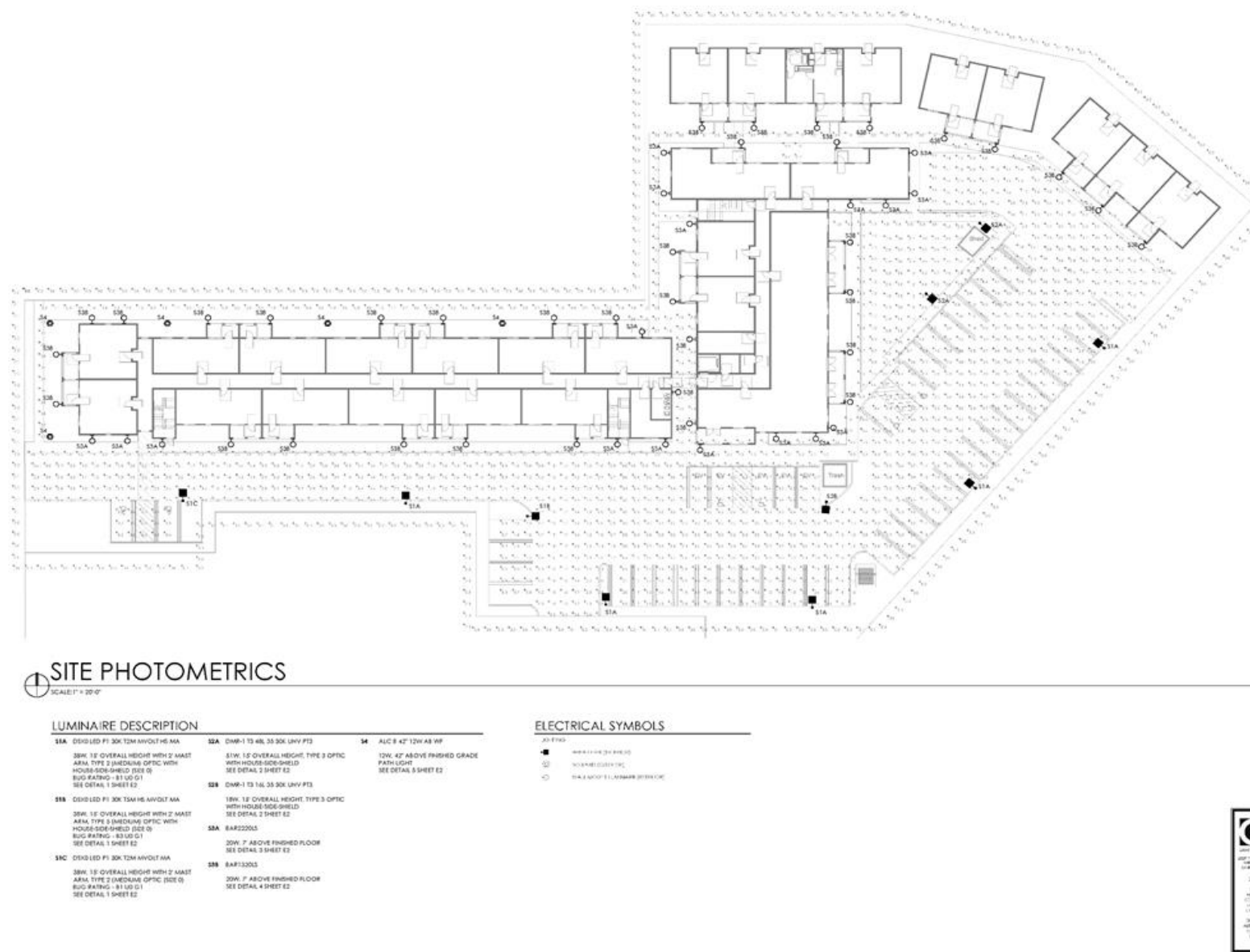
In the project area, light trespass impacts would be considered potentially significant if illuminance<sup>8</sup> produced by the project would impact sensitive receptors with lighting levels that exceed 0.8 foot-candles during pre-curfew hours (dusk to 11:00 p.m.) and 0.2 foot-candles during the post curfew hours (11:00 p.m. to 7:00 a.m.), as measured on the vertical and horizontal planes.<sup>9</sup>

The project proposes light-emitting diode (LED) lighting throughout the project site as well as occupancy sensors in common areas, parking areas and corridors to reduce energy use. Refer to **Figure 4.1-7**, which provides additional details regarding lighting onsite. As shown in the figure below, the project proposes exterior area lights, exterior bollards, and exterior wall-mounted luminaires. Exterior area lights are proposed throughout the project site. Exterior bollards are proposed along the western and northern boundary of Building 1. Exterior wall-mounted luminaires are proposed on the exterior of Building 1 on all sides and on the exterior of the casitas facing Building 1 and the proposed parking lot.

<sup>8</sup> Measured in foot-candles, illuminance is the intensity of light falling on a surface.

<sup>9</sup> A full moonlit night in rural areas with negligible ambient light would equal approximately 0.02-0.03 foot-candle, while a typical 30-foot tall streetlamp would have an illumination of 1.3 foot-candles at a distance of 10 feet (NLPPI, 2007).

**Figure 4.1-7**  
**SITE PHOTOMETRICS**



Disclaimer: Illustration provided by RRM Design Group, who has indicated that the information is true and correct. No other warranties are expressed or implied.

Source: RRM Design Group, March, 2020.



**Orchard View Gardens**  
**Senior Apartment Homes**  
Site Photometrics

## Light Trespass

As depicted in **Figure 4.1-7** (as well as sheet E1 in **Appendix A**), the project would result in minimal light leaving the project site. Light levels onsite would range from 0.0 lumens to 4.5 lumens at wall-mounted luminaire S3A. The project would emit 0.2 lumens along the western boundary of the project site, adjacent to the Valley View Street and along the southern edge of the project site. The project would emit 0.0 lumens along the southeast and northeast edges of the project site, adjacent to the existing residential land uses. Given the urban and built up nature of the project's surroundings and that the project is located in an area with existing night time lighting, the proposed project would have a less than significant impact regarding new sources of light and glare.

## Sky Glow<sup>10</sup>

The project site is located approximately 24 miles southeast of the closest observatory (Griffith Observatory in Los Angeles), in an urbanized area in the City of Buena Park, and would therefore have less potential to impact operations at the observatory than more closely-situated properties. The proposed project would result in the construction of a two- to three-story apartment building with a maximum height of 35 feet and with exterior lighting. The proposed lighting onsite would comply with the requirements of the City's Municipal Code, including Chapter 19.444.030, Lighting, which states that lighting on any premises shall be directed, controlled, screened, or shaded in such a manner as not to shine directly on surrounding premises. Based on the physical characteristics of the area surrounding the project site and the design of the proposed light fixtures, implementation of the project would result in no significant impact associated with sky glow.

## Glare<sup>11</sup>

The proposed project would introduce new outdoor artificial lighting elements, which have the potential to result in glare if the main beams of proposed lighting elements (i.e., the portion of the lamp with the greatest illuminance) are visible from offsite locations, resulting in excessive, uncontrolled brightness. However, the project would comply with the requirements of the City's Municipal Code, including Chapter 19.444.030, Lighting, which states that lighting on any premises shall be directed, controlled, screened, or shaded in such a manner as not to shine directly on surrounding premises. This section of the municipal code further states that lighting on any premises shall be controlled so as to prevent glare on driveways, walkways, and public thoroughfares (City of Buena Park, Municipal Code, 2020). Adherence to applicable city municipal codes would ensure that new sources of light or glare would not adversely affect day or nighttime views in the area. Additionally, as detailed in **Figure 4.1-4**, the project would utilize light-colored building materials such as eggshell colored stucco and no highly reflective materials. Therefore, impacts from a new source of substantial light or glare would be less than significant.

## Shade/Shadow

Shadow-sensitive uses include all residential uses and routinely usable outdoor spaces associated with recreational or institutional uses, commercial uses such as pedestrian-oriented outdoor spaces or restaurants with outdoor eating areas, nurseries, and existing solar collectors. These uses are

10 Sky Glow is the brightening of the sky that occurs as a result of outdoor lighting fixtures emitting a portion of their light directly into the sky. Sky glow is of particular concern near observatories and in rural areas where there is low ambient light.

11 Glare is the objectionable brightness caused by over-illumination, as well as poorly shielded or poorly aimed light fixtures.

considered sensitive because sunlight is important to function, physical comfort, or commerce. Shade-sensitive uses in the project vicinity include the residences surrounding the project site to the north, south and east.

Although shade-sensitive uses are located to the north, south, and east, the project applicant consulted with the neighbors and surrounding residents about the proposed building heights and setbacks. The closest buildings to the adjacent residences to the north and northeast would be the Casitas, to be located with a ten-foot distance between the buildings and the property line. Through consultation, the applicant modified the project site plan to move the proposed new buildings away from the adjacent homes to the north, south, and east. The applicant modified the site plan to increase the setbacks between the proposed buildings. The proposed project design proposes two-story buildings that transition to three-story buildings as the building extends further into the interior of the project site, away from existing residences. Therefore, due to the distance from sensitive shade receptors and the modified building design, impacts regarding shade and shadow would be less than significant.



## 4.2 Agriculture and Forestry Resources

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code § 12220(g)), timberland (as defined by Public Resources Codes § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

- a) **Would the project 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 California Department of Conservation (DOC) established the Farmland Mapping and Monitoring Program (FMMP) in 1982 to identify critical agricultural lands and track the conversion of these lands to other uses. The FMMP is a non-regulatory program and provides a consistent and impartial analysis of agricultural land use and land use changes throughout California. The project site and surrounding uses are designated by the FMMP as “Urban and Built-Up Land,” which means that no agricultural uses occupy the site (DOC, 2016). The project is located within an urbanized area. Therefore, no farmland would be converted to non-agricultural use and no impacts would occur.

- b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?**

**No Impact**

The project site is developed with urban uses and there are no current agricultural operations existing on or in the vicinity of the project site. Therefore, the project would not conflict with existing zoning for agricultural use or a Williamson Act contract and no impact would occur.

- c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code § 12220(g)), timberland (as defined by Public Resources Codes § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104(g))?**

**No Impact**

The project site is located in a highly-urbanized setting. The site is zoned One-Family Residential (RS-6) does not support the definitions provided by PRC § 42526 for timberland, PRC § 12220(g) for forestland, or California Government Code § 51104(g) for timberland zoned for production. PRC § 12220(g) defines forest land 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.” Since the project site is located in an urban setting, and is developed with a church, project-related changes would not conflict with zoning for forest land or timberland, and no impact would occur.

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

**No Impact**

The project site and surrounding land uses do not contain forest land. Therefore, project implementation would not result in the loss of forest land or conversion of forest land to non-forest use, and no impact would occur.

- e) Would the project 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**

The project site is a developed property located within a highly-urbanized setting. No existing farmland or forest land is located in the vicinity of the project. Therefore, implementation of the project would not result in changes to the environment, due to its location or nature which could result in the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. No impact would occur.

### 4.3 Air Quality

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

#### 4.3.1 Pollutants of Concern

Criteria pollutants are air pollutants for which acceptable levels of exposure can be determined and an ambient air quality standard has been established by the U.S. Environmental Protection Agency (USEPA) and/or the California Air Resources Board (ARB). The criteria air pollutants of concern are nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), sulfur dioxide (SO<sub>2</sub>), lead (Pb), and ozone, and their precursors. Since the Orchard View Gardens project would not generate appreciable SO<sub>2</sub><sup>12</sup> or Pb emissions, it is not necessary for the analysis to include those two pollutants. Presented below is a description of the air pollutants of concern and their known health effects.

The Orchard View Gardens project is in the Orange County portion of the South Coast Air Basin (SCAB), for which air pollution control the South Coast Air Quality Management District (SCAQMD) is substantially responsible. **Table 4.3-1** shows the attainment status of the SCAB for each criteria pollutant for both the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS). Presented below is a description of the air pollutants of concern and their known health effects.

<sup>12</sup> Sulfur dioxide emissions will be below 0.07 pound per day during construction and operations.

**Table 4.3-1**  
**FEDERAL AND STATE ATTAINMENT STATUS**

Pollutants	Federal Classification	State Classification
Ozone (O <sub>3</sub> )	Nonattainment (Extreme)	Nonattainment
Particulate Matter (PM <sub>10</sub> )	Maintenance (Serious)	Nonattainment
Fine Particulate Matter (PM <sub>2.5</sub> )	Nonattainment (Moderate)	Nonattainment
Carbon Monoxide (CO)	Maintenance (Serious)	Attainment
Nitrogen Dioxide (NO <sub>2</sub> )	Maintenance	Attainment
Sulfur Dioxide (SO <sub>2</sub> )	Attainment	Attainment
Sulfates	No Federal Standards	Attainment
Lead (Pb)		Attainment
Hydrogen Sulfide (H <sub>2</sub> S)		Attainment
Visibility Reducing Particles		Unclassified

**Sources:** USEPA, 2020a; USEPA, 2020b; USEPA, 2020c; USEPA, 2020d; USEPA, 2020e; ARB, 2019.

**Nitrogen oxides** (NO<sub>x</sub>) serve as integral participants in the process of photochemical smog production and are precursors for certain particulate compounds that are formed in the atmosphere and for ozone. A precursor is a directly emitted air contaminant that, when released into the atmosphere, forms, causes to be formed, or contributes to the formation of a secondary air contaminant for which an ambient air quality standard (AAQS) has been adopted, or whose presence in the atmosphere will contribute to the violation of one or more AAQs. When NO<sub>x</sub> and reactive organic gases (ROG) are released in the atmosphere, they can chemically react with one another in the presence of sunlight to form ozone. The two major forms of NO<sub>x</sub> are nitric oxide (NO) and NO<sub>2</sub>. NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. NO<sub>2</sub> is a reddish-brown pungent gas formed by the combination of NO and oxygen. NO<sub>2</sub> acts as an acute respiratory irritant and eye irritant and increases susceptibility to respiratory pathogens.

**Carbon monoxide** (CO) is a colorless, odorless non-reactive pollutant produced by incomplete combustion of fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, such as the project location, automobile exhaust accounts for most CO emissions. CO is a non-reactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions; primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, a typical situation at dusk in urban areas between November and February. The highest levels of CO typically occur during the colder months of the year when inversion conditions are more frequent. In terms of health, CO competes with oxygen, often replacing it in the blood, thus reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can be dizziness, fatigue, and impairment of central nervous system functions.

**Particulate matter** (PM) consists of finely divided solids or liquids, such as soot, dust, aerosols, fumes and mists. Primary PM is emitted directly into the atmosphere from activities such as agricultural operations, industrial processes, construction and demolition activities, and entrainment of road dust into the air. Secondary PM is formed in the atmosphere from predominantly gaseous combustion byproduct precursors, such as sulfur oxides, NO<sub>x</sub>, and ROG.

Particle size is a critical characteristic of PM that primarily determines the location of PM deposition along the respiratory system (and associated health effects) as well as the degradation of visibility through light scattering. In the United States, federal and state agencies have focused on two types of PM. PM<sub>10</sub> corresponds to the fraction of PM no greater than 10 micrometers in aerodynamic diameter and is commonly called respirable particulate matter, while PM<sub>2.5</sub> refers to the subset of PM<sub>10</sub> of aerodynamic diameter smaller than 2.5 micrometers, which is commonly called fine particulate matter.

PM<sub>10</sub> and PM<sub>2.5</sub> deposition in the lungs results in irritation that triggers a range of inflammation responses, such as mucus secretion and bronchoconstriction, and exacerbates pulmonary dysfunctions, such as asthma, emphysema, and chronic bronchitis. Sufficiently small particles may penetrate the bloodstream and impact functions such as blood coagulation, cardiac autonomic control, and mobilization of inflammatory cells from the bone marrow. Individuals susceptible to higher health risks from exposure to PM<sub>10</sub> airborne pollution include children, the elderly, smokers, and people of all ages with low pulmonary/cardiovascular function. For these individuals, adverse health effects of PM<sub>10</sub> pollution include coughing, wheezing, shortness of breath, phlegm, bronchitis, and aggravation of lung or heart disease, leading, for example, to increased risks of hospitalization and mortality from asthma attacks and heart attacks.

**Reactive organic gases** (ROG) are defined as any compound of carbon, excluding CO, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions. It should be noted that there are no state or national ambient air quality standards for ROG because ROG are not classified as criteria pollutants. They are regulated, however, because a reduction in ROG emissions reduces certain chemical reactions that contribute to the formation of ozone. ROG are also transformed into organic aerosols in the atmosphere, which contribute to higher PM<sub>10</sub> and lower visibility. The term “ROG” is used by the ARB for this air quality analysis and is defined the same as the federal term “volatile organic compound” (VOC).

**Ozone** is a secondary pollutant produced through a series of photochemical reactions involving ROG and NO<sub>x</sub>. Ozone creation requires ROG and NO<sub>x</sub> to be available for approximately three hours in a stable atmosphere with strong sunlight. Because of the long reaction time, peak ozone concentrations frequently occur downwind of the sites where the precursor pollutants are emitted. Thus, ozone is considered a regional, rather than a local, pollutant. The health effects of ozone include eye and respiratory irritation, reduction of resistance to lung infection and possible aggravation of pulmonary conditions in persons with lung disease. Ozone is also damaging to vegetation and untreated rubber.

#### 4.3.2 Climate/Meteorology

Air quality is affected by both the rate and location of pollutant emissions, and by meteorological conditions that influence movement and dispersal of pollutants. Atmospheric conditions such as wind speed, wind direction, and air temperature gradients, along with local topography, provide the link between air pollutant emissions and air quality.



The Orchard View Gardens project site is located wholly within the SCAB, which includes all of Orange County, as well as the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The distinctive climate of the SCAB is determined by its terrain and geographical location. The SCAB is in a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean in the southwest quadrant with high mountains forming the remainder of the perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. Thus, the climate is mild, tempered by cool sea breezes. This usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds.

The annual average temperature varies little throughout the 6,600-square mile SCAB, ranging from the low 60s to the high 80s. However, with a less pronounced oceanic influence, the inland portion shows greater variability in the annual minimum and maximum temperatures. The mean annual maximum and minimum temperatures in the project area—as determined from the nearest weather station in the City of Anaheim (WRCC, 2020), which has a period of record from 1989 to 2016—are 77.4 degrees Fahrenheit (°F) and 55.4°F, respectively. The hottest month is August with an average maximum temperature of 87.1°F and the coldest month is December with an average minimum temperature of 46.9°F.

During the period of record, the average annual rainfall measured 14.09 inches, which occurs mostly during the winter and relatively infrequently during the summer. Monthly precipitation averages approximately 2.94 inches during the winter (December, January, and February), approximately 1.07 inches during the spring (March, April, and May), approximately 0.60 inch during the fall (September, October, and November), and approximately 0.08 inch during the summer (June, July, and August).

#### **4.3.3 Local Air Quality**

The SCAQMD has divided the SCAB into source receptor areas (SRAs), based on similar meteorological and topographical features. The project site is in SCAQMD's North Orange County air monitoring area (SRA 16), which is served by Anaheim/Pampas, 5.5 miles southwest on Pampas Lane in Anaheim, monitoring ozone, PM<sub>10</sub>, PM<sub>2.5</sub>, and NO<sub>2</sub>. All stations in the SCAB ceased monitoring CO in 2012. The ambient air quality data in the project vicinity as recorded from 2016 through 2018 and applicable standards are shown in **Table 4.3-2**.

**Table 4.3-2**  
**AMBIENT AIR QUALITY MONITORING DATA**

<b>Air Pollutant</b>	<b>Standard/Exceedance</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Ozone – Anaheim/ Pampas	Max. 1-hour Concentration (ppm)	<b>0.103</b>	0.090	<b>0.112</b>
	Max. 8-hour Concentration (ppm)	<b>0.074</b>	<b>0.076</b>	<b>0.071</b>
	# Days > Federal 8-hour Std. of 0.070 ppm	4	4	1
	# Days > California 1-hour Std. of 0.09 ppm	2	0	1
	# Days > California 8-hour Std. of 0.070 ppm	4	4	1
PM <sub>10</sub> - Anaheim/ Pampas	Max. 24-hour Concentration (µg/m <sup>3</sup> )	74.0	95.7	94.6
	Est. # Days > Fed. 24-hour Std. of 150 µg/m <sup>3</sup>	0	0	0
	State Annual Average (20 µg/m <sup>3</sup> )	<b>27.5</b>	<b>26.9</b>	<b>27.9</b>
PM <sub>2.5</sub> - Anaheim/ Pampas	Max. 24-hour Concentration (µg/m <sup>3</sup> )	<b>44.4</b>	<b>53.9</b>	<b>63.1</b>
	# Days > Fed. 24-hour Std. of 35 µg/m <sup>3</sup>	1	7	7
	State Annual Average (12 µg/m <sup>3</sup> )	9.4	ND	11.4
NO <sub>2</sub> – Anaheim/ Pampas	Max. 1-hour Concentration (ppm)	0.064	0.081	0.066
	State Annual Average (0.030 ppm)	0.014	0.014	0.013
	# Days > California 1-hour Std. of 0.18 ppm	0	0	0

**Source:** ARB, 2020.

ND - There was insufficient (or no) data available to determine the value.

**Bold** - exceedance

#### 4.3.4 Air Quality Management Plan (AQMP)

The SCAQMD is required to produce plans to show how air quality would be improved in the region. The California Clean Air Act (CCAA) requires that these plans be updated triennially to incorporate the most recent available technical information.<sup>13</sup> A multi-level partnership of governmental agencies at the federal, state, regional, and local levels implement the programs contained in these plans. Agencies involved include the EPA, ARB, local governments, Southern California Association of Governments (SCAG), and SCAQMD. The SCAQMD and the SCAG are responsible for formulating and implementing the Air Quality Management Plan (AQMP) for the SCAB. The SCAQMD updates its AQMP every three years.

The 2016 AQMP (SCAQMD, 2017) was adopted by the SCAQMD Board on March 3, 2017, submitted to the ARB and on March 10, 2017 was made part of the State Implementation Plan (SIP), which was submitted to the USEPA (ARB, 2017). It focuses largely on reducing NO<sub>x</sub> emissions as a means of attaining the 1979 1-hour ozone standard by 2022, the 1997 8-hour ozone standard by 2023, and the 2008 8-hour standard by 2031. The AQMP prescribes a variety of current and proposed new control measures, including a request to the USEPA for increased regulation of mobile source emissions. The NO<sub>x</sub> control measures would also help the Basin attain the 24-hour standard for PM<sub>2.5</sub>.

#### 4.3.5 Sensitive Receptors

Some people, such as individuals with respiratory illnesses or impaired lung function because of other illnesses, persons over 65 years of age, and children under 14, are particularly sensitive to certain pollutants. Facilities and structures where these sensitive people live or spend considerable

<sup>13</sup> CCAA of 1988.

amounts of time are known as sensitive receptors. For the purposes of a CEQA analysis, the SCAQMD considers a sensitive receptor to be a receptor such as a residence, hospital, or convalescent facility where it is possible that an individual could remain for 24 hours. Commercial and industrial facilities are not included in the definition of sensitive receptor, because employees typically are present for shorter periods of time, such as eight hours. Therefore, applying a 24-hour standard for PM<sub>10</sub> is appropriate not only because the averaging period for the state standard is 24 hours, but because the sensitive receptor would be present at the location for the full 24 hours.

The project site, at 8300 Valley View Street, is an irregularly shaped parcel comprising approximately 3.2 acres and is currently developed with St. Joseph's Episcopal Church. Surrounding land uses include the Ban Suk Methodist Church and detached single-family homes to the immediate north, and detached single-family residences to the east and south, and across Valley View Street to the west.

The nearest sensitive receptors to the Orchard View Gardens project site are single-family residences adjacent to the project site to the north and southeast. Additionally, three schools are 0.5 mile or closer to the Orchard View Gardens project site, as seen in **Table 4.3-3**.

**Table 4.3-3**  
**SCHOOLS WITHIN 0.5 MILE OF ORCHARD VIEW GARDENS PROJECT SITE**

School	Address	Distance (miles)
Buena Terra Elementary School	8299 Holder Street, Buena Park	0.3
San Marino Elementary School	6215 San Rolando Way, Buena Park	0.5
Walker Junior High School	8132 Walker Street, La Palma	0.5

#### **4.3.6 South Coast Air Quality Management District Fugitive Dust Rule (Rule 403)**

During construction, the project would be subject to SCAQMD Rule 403 (fugitive dust). SCAQMD Rule 403 does not require a permit for construction activities; rather, it sets forth general and specific requirements for all construction sites (as well as other fugitive dust sources) in the SCAB. The general requirement prohibits a person from causing or allowing emissions of fugitive dust from construction (or other fugitive dust source) such that the presence of such dust remains visible in the atmosphere beyond the property line of the emissions source. SCAQMD Rule 403 also prohibits construction activity from causing an incremental PM<sub>10</sub> concentration impact, measured as the difference between upwind and downwind samples at the property line of more than 50 micrograms per cubic meter as determined through PM<sub>10</sub> high-volume sampling. The concentration standard and associated PM<sub>10</sub> sampling do not apply if specific measures identified in the rules are implemented and appropriately documented.

Other requirements of Rule 403 include not causing or allowing emissions of fugitive dust that would remain visible beyond the property line; no track-out extending 25 feet or more in cumulative length and all track-out to be removed at conclusion of each workday; and must use the applicable best available control measures included in Table 1 of Rule 403.

#### 4.3.7 Impact Analysis

- a) **Would the project conflict with or obstruct implementation of the applicable air quality plan?**

##### **Less than Significant Impact**

The South Coast 2016 AQMP, discussed above, incorporates land use assumptions from local General Plans (GP) and regional growth projections developed by the SCAG to estimate stationary and mobile air emissions associated with projected population and planned land uses. If the proposed land use is consistent with the local GP, then the impact of the project is presumed to have been accounted for in the AQMP. This is because the land use and transportation control sections of the AQMP are based on the SCAG regional growth forecasts, which incorporates projections from local GPs. The proposed project will not change the GP designation; therefore, the land use will continue to be consistent with the local GP and the impacts of the project are still accounted for in the AQMP.

Another measurement tool in evaluating consistency with the AQMP is to determine whether a project would generate population and employment growth and, if so, whether that growth would exceed the growth rates forecasted in the AQMP and how the project would accommodate the expected increase in population or employment. The Orchard View Gardens project would create minimal increase in population and overall VMT, which would be included in the growth rates forecasted in the AQMP.

Additionally, to assist the implementation of the AQMP, projects must not create regionally significant emissions of regulated pollutants from either short-term construction or long-term operations. Refer to **Table 4.3-4** below which shows the SCQAMD thresholds of significance for various pollutants.

**Table 4.3-4**  
**SCAQMD THRESHOLDS OF SIGNIFICANCE**

<b>Pollutant</b>	<b>Construction Thresholds (lbs/day)</b>	<b>Operational Thresholds (lbs/day)</b>
Volatile Organic Compounds (VOC)	75	55
Nitrogen Oxides (NO <sub>x</sub> )	100	55
Carbon Monoxide (CO)	550	550
Sulfur Oxides (SO <sub>x</sub> )	150	150
Particulate Matter (PM <sub>10</sub> )	150	150
Fine Particulate Matter (PM <sub>2.5</sub> )	55	55

**Note:** lbs = pounds.

**Source:** SCAQMD, 2018.

### Regional Construction Emissions

For the purpose of this analysis, construction activities for the Orchard View Gardens project are anticipated to last 16 months and would begin in early January 2022 and end in late April 2023. There would be four construction phases:

- Demolition.
- Offsite Improvements (Options 1 & 3).<sup>14</sup>
- Grading.
- Site Preparation.<sup>15</sup>
- Building Construction.

Options 1 (or 2b) and option 3 would overlap with the demolition phase. There would be no overlap of construction activities among the other phases. **Table 4.3-5** shows the Orchard View Gardens project schedule used for the air quality, GHG emissions and noise analyses.

**Table 4.3-5**  
**CONSTRUCTION SCHEDULE**

Construction Phase	Start	End
Demolition	January 1, 2022	January 31, 2022
Offsite Improvements Option 1 <sup>16</sup>	January 1, 2022	January 14, 2022
Offsite Improvements Option 3	January 15, 2022	January 31, 2022
Grading	February 1, 2022	February 28, 2022
Site Preparation	March 1, 2022	April 29, 2022
Building Construction	May 12, 2022	April 28, 2023

These construction activities would temporarily create emissions of dusts, fumes, equipment exhaust, and other air contaminants. Mobile sources (such as diesel-fueled equipment onsite and traveling to and from the project site) would primarily generate NO<sub>x</sub> emissions. The amount of emissions generated daily would vary, depending on the amount and types of construction activities occurring at the same time.

Estimated criteria pollutant emissions from the Orchard View Gardens project's onsite and offsite project construction activities were calculated using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2 (CAPCOA, 2017). CalEEMod is a planning tool for estimating emissions related to land use projects. Model-predicted Orchard View Gardens project emissions are compared with applicable thresholds to assess regional air quality impacts. CalEEMod defaults were used for offroad construction equipment and onroad construction trips and direct and indirect operational emissions.

<sup>14</sup> Offsite improvement options are described in **Section 3.4.2**.

<sup>15</sup> "Site preparation" for this project was assumed to consist of installation of utilities and construction of concrete sidewalks, curbs and gutters.

<sup>16</sup> The Option 2b and 3 combination was also analyzed using the same schedule, but the Option 1 and 3 combination was determined to have higher emissions and therefore, for conservative purposes, is being presented here and in Tables 4.3-6 and 4.3-8.



As shown in **Table 4.3-6**, construction emissions would not exceed SCAQMD regional thresholds. Therefore, the Orchard View Gardens project's short-term regional air quality impacts would be less than significant. Refer to **Appendix B1** of this document for air quality calculations.

**Table 4.3-6**  
**MAXIMUM DAILY REGIONAL CONSTRUCTION EMISSIONS**

Construction Activity	Maximum Emissions (pounds/day)				
	ROG	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
Maximum Emissions, 2022	3.2	42.7	26.9	3.0	1.5
Maximum Emissions, 2023	0.49	3.7	5.9	0.74	0.30
<i>SCAQMD Significance Thresholds</i>	75	100	550	150	55
<b>Significant? (Yes or No)</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

**Source:** Calculated by UltraSystems with CalEEMod (Version 2016.3.2).

### Regional Operational Emissions

The Orchard View Gardens project comprises 65 residential units affordable to senior citizens, one exempt manager's unit, and a 3,000-square-foot community center. Since the community center would be exclusively for the use of project residents and their visitors, no traffic generation was specifically assigned to the community center. Operational emissions generated by area sources, motor vehicles and energy demand would result from normal day-to-day activities of the project. CalEEMod 2016.3.2 was used to estimate these emissions. Trip rates were adjusted to match data supplied by the traffic analysis (Fehr & Peers, 2020). The results of these calculations are presented in **Table 4.3-7**. As seen in the table, for each criteria pollutant, operational emissions would be below the pollutant's SCAQMD significance threshold. Therefore, operational criteria pollutant emissions would be less than significant.

**Table 4.3-7**  
**MAXIMUM DAILY PROJECT OPERATIONAL EMISSIONS**

Emission Source	Pollutant (pounds/day)				
	ROG	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
Area Source Emissions	1.58	0.06	5.4	0.03	0.03
Energy Source Emissions	0.02	0.21	0.09	0.02	0.02
Mobile Source Emissions	0.32	1.16	4.37	1.78	0.48
Total Operational Emissions	<b>1.9</b>	<b>1.4</b>	<b>9.9</b>	<b>1.8</b>	<b>0.5</b>
<i>SCAQMD Significance Thresholds</i>	55	55	550	150	55
<b>Significant? (Yes or No)</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

**Source:** Calculated by UltraSystems with CalEEMod (Version 2016.3.2).

- b) **Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?**

**Less Than Significant Impact**

Because the SCAB is currently in nonattainment for ozone and PM<sub>2.5</sub>, related projects may exceed an air quality standard or contribute to an existing or projected air quality exceedance. The SCAQMD neither recommends quantified analyses of construction and/or operational emissions from multiple development projects nor does it provide methodologies or thresholds of significance to be used to assess the cumulative emissions generated by multiple cumulative projects. Instead, SCAQMD recommends that a project's potential contribution to cumulative impacts be assessed by utilizing the same significance criteria as those for project-specific impacts. Furthermore, the SCAQMD states that if an individual development project generates less-than-significant construction or operational emissions impacts, then the development project would not contribute to a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment.

As discussed above, the mass daily construction and operational emissions generated by the Orchard View Gardens project would not exceed any of the SCAQMD's significance thresholds. Also, as discussed below, localized emissions generated by the project would not exceed the SCAQMD's Localized Significance Thresholds (LSTs). Therefore, the project would not contribute a cumulatively considerable increase in emissions for the pollutants which the SCAB is in nonattainment. Thus, cumulative air quality impacts associated with the proposed project would be less than significant.

- c) **Would the project expose sensitive receptors to substantial pollutant concentrations?**

**Less than Significant Impact**

Construction of the Orchard View Gardens project would generate short-term and intermittent emissions. Following SCAQMD guidance (SCAQMD, 2008), only onsite construction emissions were considered in the localized significance analysis. The residences immediately north, northeast, and southeast of the Orchard View Gardens project site are the nearest sensitive receptors (less than five meters away).<sup>17</sup> LSTs for projects in Source Receptor Area 16 (North Orange County) were obtained from tables in Appendix C of the SCAQMD's *Final Localized Significance Threshold Methodology* (Chico and Koizumi, 2003). **Table 4.3-8** shows the results of the localized significance analysis for the Orchard View Gardens project. As shown in the table below, localized short-term air quality impacts from construction of the Orchard View Gardens project would be less than significant.

<sup>17</sup> According to SCAQMD guidance, a receptor closer than 25 meters to the source may be assumed to be 25 meters away (Chico and Koizumi, 2003, p. 3-3).

**Table 4.3-8**  
**RESULTS OF LOCALIZED SIGNIFICANCE ANALYSIS**

Nearest Sensitive Receptor	Maximum Onsite Emissions (pounds/day)			
	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
Maximum daily emissions	29.17	22.13	1.78	1.14
SCAQMD LST for 2 acres @ 25 meters	147	762	6	4
<b>Significant (Yes or No)</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

- d) **Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?**

**Less than Significant Impact**

A project-related significant adverse effect could occur if construction or operation of the proposed project would result in generation of odors that would be perceptible in adjacent sensitive areas. According to the SCAQMD *CEQA Air Quality Handbook*, land uses and industrial operations that are associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. Potential sources that may emit odors during construction activities include equipment exhaust. Odors from these sources would be localized and generally confined to the immediate area surrounding the Orchard View Gardens project. The Orchard View Gardens project would use typical construction techniques, and the odors would be typical of most construction sites and temporary in nature. Localized odor impacts from construction of the Orchard View Gardens project would be less than significant.

## 4.4 Biological Resources

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

### 4.4.1 Methodology

UltraSystems biologist Matthew Sutton researched readily available information, including relevant literature, databases, agency web sites, various previously completed reports and management plans, GIS data, maps, aerial imagery from public domain sources, and in-house records to identify

the following: 1) habitats, special-status plant and wildlife species, jurisdictional waters, critical habitats, and wildlife corridors that may occur in and near the project site; and 2) local or regional plans, policies, and regulations that may apply to the project. Plant and wildlife species protected by federal agencies, state agencies, and nonprofit resource organizations, such as the California Native Plant Society (CNPS), are collectively referred to as “special-status species”.<sup>18</sup> Some of these plant and wildlife species are afforded special legal or management protection because they are limited in population size, and typically have a limited geographic range and/or habitat. The following data sources were accessed by UltraSystems for synthesis of data within this report.

- United States Geological Survey (USGS) 7.5-Minute Topographic Map Quadrangle (USGS, 2020) and current aerial imagery (Google Earth, 2020).
- The Web Soil Survey, provided by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS, 2019).
- California Natural Diversity Database (CNDDB), provided by the California Department of Fish and Wildlife (CDFW, 2020).
- Information, Planning and Conservation (IPaC), provided by the USFWS (USFWS, 2020a).
- Inventory of Rare and Endangered Plants of California, 8<sup>th</sup> Edition, provided by the California Native Plant Society (CNPS, 2020).
- National Wetlands Inventory (NWI), provided by the USFWS (USFWS, 2020e).
- National Hydrography Dataset, provided by the USGS (USGS, 2020).
- Critical Habitat Portal, provided by the USFWS (USFWS, 2020b).
- eBird online database of bird distribution and abundance, provided by Cornell Lab of Ornithology (eBird, 2017).
- Sawyer, J.O., T. Keeler-Wolf, J.M. Evens, 2009. *A Manual of California Vegetation, Second Edition*, provided by California Native Plant Society Press.
- EPA Waters GeoViewer, provided by USEPA (USEPA, 2020).

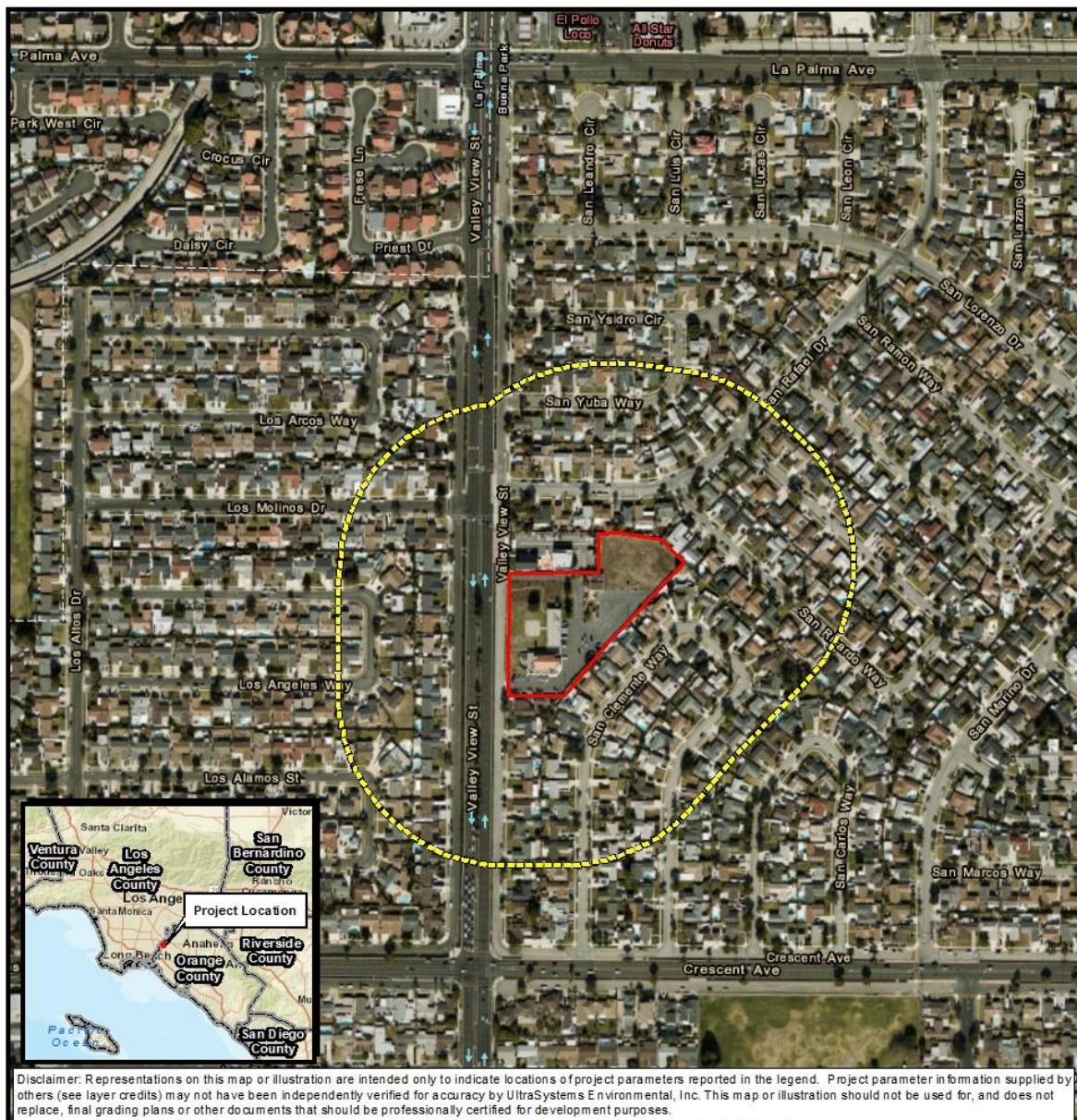
Aerial imagery from the above-mentioned sources was overlaid with geospatial data by utilizing Geographic Information System (GIS) software (ArcGIS 10.1) to identify documented observations of the following biological or environmental components within the project vicinity: 1) Previously recorded observations within the project vicinity and geographic range of special-status species and potentially suitable habitats; 2) special-status vegetation communities; 3) protected management lands; 4) proposed and final critical habitats; 5) wetlands, waters of the State (WOS), and waters of the United States (WOUS); and, 5) wildlife corridors. An analysis was then made to plan either the avoidance of or to minimize project impacts to any of those biological resources. A Biological Study Area (BSA) was defined for the project and includes the church site and a 500-foot buffer zone around the perimeter of the church property (refer to **Figure 4.4-1**).

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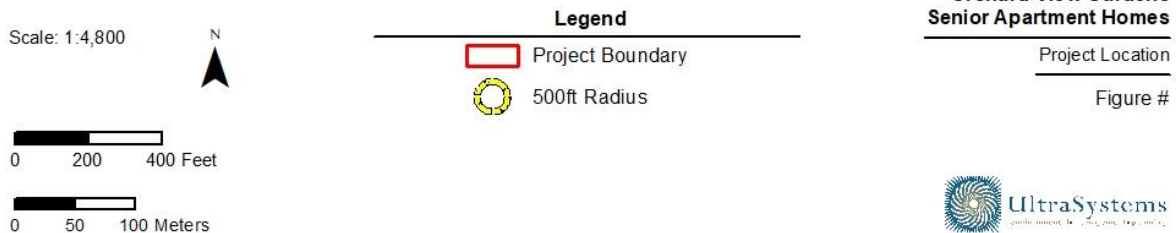
<sup>18</sup> Avian species protected by the Migratory Bird Treaty Act (MBTA) are not considered “special-status species.”



**Figure 4.4-1**  
**BIOLOGICAL STUDY AREA**



January 15, 2020



In addition, Mr. Sutton conducted a field evaluation for existing biological resources of the BSA on February 10 and 12, 2020. In this survey the biologist documented habitat types, potential threats to ecosystem health and plant and wildlife species in the BSA.

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

**Less Than Significant with Mitigation Incorporated**

The proposed project would disturb soils and vegetation within the project site. Similarly, the project would generate noise and dust that could impact areas with the BSA. Considering that the project is located in a highly urbanized area with developed and landscaped substrates, optimal habitat for special-status plant and wildlife species is lacking. The project site is located in a highly-urbanized area, which provides low habitat value for special-status plant and wildlife species. The project site is bordered by residential homes to the north, east and south and fronts on a heavily trafficked city street to the west. The BSA contains structures, sidewalks, and multiple impervious, paved surfaces, and lacks suitable soils, biological resources, and physical features to support a healthy ecosystem with a diversity of plant and wildlife species. Thus, with the implementation of mitigation measure **MM BIO-1** below (to protect nesting bird species from noise and dust disturbances) this project would have less than significant impacts on special-status species.

An existing church, parish hall, small storage facility and accompanying parking lot are located on the project site. The project site contains several landscaped areas around the buildings and parking lot. There is an ornamental lawn along the frontage road bordered with rose bushes on the street side and other ornamental shrubs and decorative flowering plants along the walkways and church building perimeters. There is also an area of fruit tree saplings with a serpentine walking path adjacent to the exit driveway on the northwest section of the property. Other landscaping includes four large ornamental trees, a few smaller trees in the landscaped areas around the buildings and a garden consisting of succulents, cactus and other drought-tolerant plants by the storage facility building. There is a weedy fallow area in the northeast corner. There is no critical habitat in the BSA. No special-status plants were observed within the project site. Due to the lack of suitable habitat to support special-status plant species, project activities will have no direct or indirect impacts on these species.

Plants

Based on a literature review and query from publicly available databases for reported occurrences, within a 10-mile radius of the project site, a total of 25 special-status species resulted from the query. Of these, five special-status plant species have recorded observations within two miles of the project site; however, there is not suitable habitat present within the BSA for any of those species (refer to **Figure 4.4-2, CNDDB Species Map**). Therefore, the 25 special-status plant species were determined not to have a potential to occur within the project BSA because the BSA lacks suitable habitat for the establishment of those species, or the BSA does not lie within the species' reported distribution or elevation range, or a combination of all of those factors. All federal, state and other agencies special-status species designations for plants and animals are represented in **Table 4.4-1**.

Upon completing a habitat assessment survey on February 10 and 12, 2020, Mr. Sutton concluded that all of the BSA consists of developed and landscaped areas. Many non-native ornamental trees

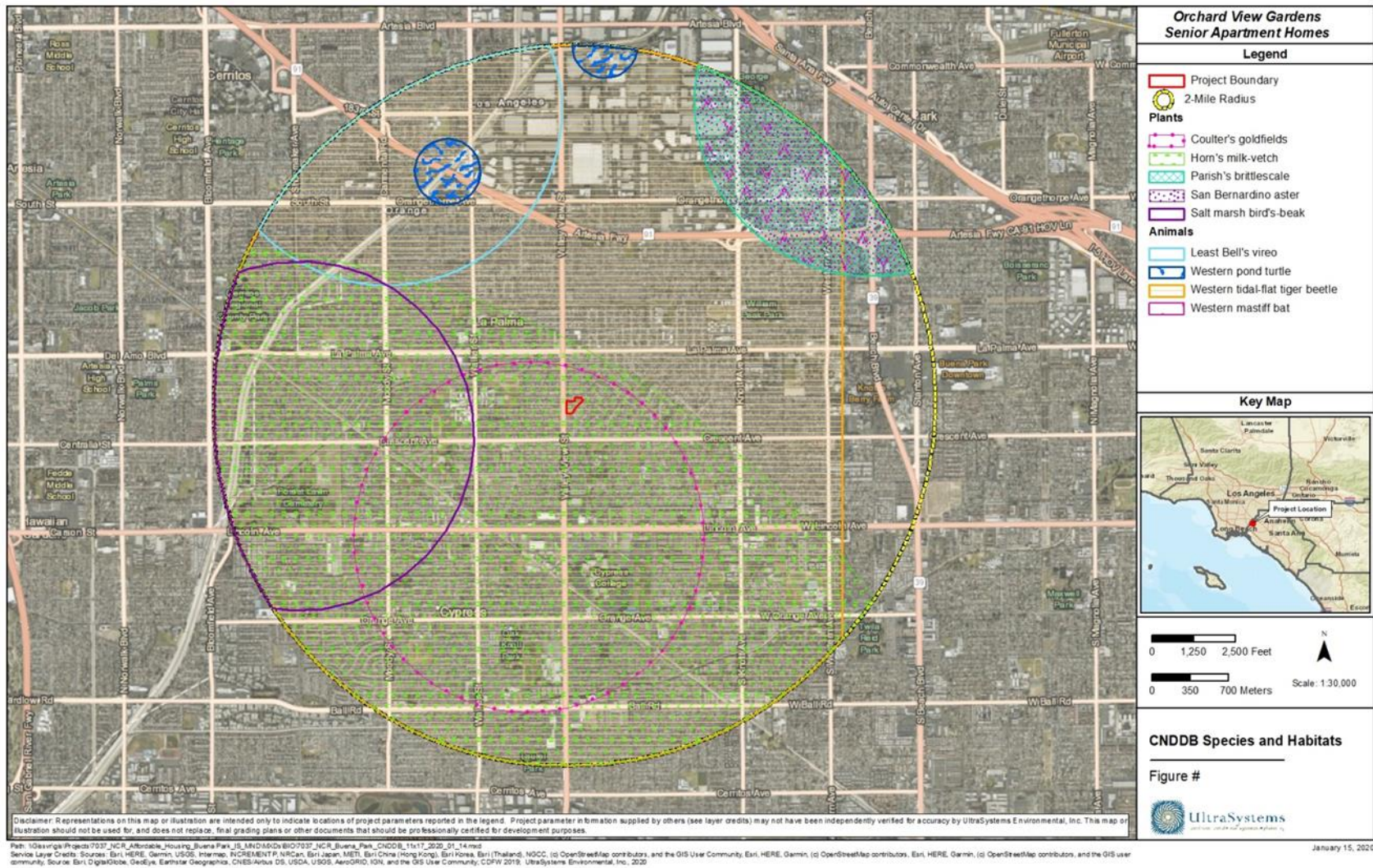


were documented in the project area such as Canary Island date palm (*Phoenix canariensis*), Scots pine (*Pinus sylvestris*), totara (*Podocarpus totara*), crape myrtle (*Lagerstroemia indica*), olive (*Olea europaea*), palo verde (*Parkinsonia aculeata*), Brazilian pepper (*Schinus terebinthifolia*), and saplings of fruit trees including citrus, fig and cherry varieties (Jepson, 2020). In addition, the biologist observed several decorative plants in the landscaped areas such as rose (*Rosa* spp.), rosemary (*Salvia rosmarinus*), jade (*Crassula* spp.), agave (*Agave* spp.), sea lavender (*Limonium perezii*), candelabra aloe (*Aloe arborescens*), and red yucca (*Hesperaloe parviflora*). There is also a weedy area in the northeast section consisting of ruderal species such as non-native annual grasses, mustard and other weedy forb species.

Due to several biological and physical disturbances within the BSA (which are listed below), it was determined that all 25 of the special-status plant species identified in the 10-mile radius database query do not have the potential to occur in the BSA. First, there is a high level of soil compaction due to development and foot traffic. Many species cannot establish in compacted soils. Second, there is high cover of non-native ornamental landscaping species that outcompete and thus preclude the establishment of plant species that need contiguous native habitat to establish. Third, habitat fragmentation from development reduces the size of habitat patches containing contiguous stands of native vegetation. Fourth, the hydrology of the region has been altered from its historical pattern and it no longer operates as a floodplain. Some of the special-status species in this list require periodic flooding events in order for their germination and establishment to occur. For all of the abovementioned reasons, all 25 special-status plant species were determined not to have the potential to occur within the BSA and will not be discussed further.

There are several special-status plant and wildlife species that occur in the vicinity of the project site. Their statuses as determined by various state, federal, regional and local regulatory agencies and the ranking notations from the most relevant agencies are listed below in **Table 4.4-1**, which follows **Figure 4.4-2**.

**Figure 4.4-2  
CNDDb SPECIES MAP**



**Table 4.4-1**  
**SPECIAL-STATUS PLANT AND WILDLIFE SPECIES RANKING NOTATIONS**

<b><u>California Endangered Species Act Listing Codes</u></b>		<b><u>Federal Endangered Species Act Listing Codes</u></b>	
SE	State listed as Endangered	FE	Federal listed as Endangered
ST	State listed as Threatened	FT	Federal listed as Threatened
SCE	State candidate for listing as Endangered	FPE	Federal candidate for listing as Endangered
SCT	State candidate for listing as Threatened	FPT	Federal candidate for listing as Threatened
		FC	Federal candidate species (former Category 1 species)
<b><u>USFWS Designations</u></b> <b>BCC = bird of conservation concern:</b> a bird of conservation concern is listed in the USFWS' 2008 Birds of Conservation Concern report. The report identifies species, subspecies and populations of all migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that, without additional conservation actions are likely to become candidates for listing under the Endangered Species Act (ESA). While all of the bird species included in the report are prioritized for conservation action, the list makes no finding with regard to whether they warrant consideration for ESA listing.			
<b><u>CDFW Designations</u></b> <b>SSC = species of special concern:</b> a species of special concern is a species, subspecies, or distinct population of an animal (fish, amphibian, reptile, bird and mammal) native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria: is extirpated from the state or, in the case of birds, in its primary seasonal or breeding role; is listed as federally-, but not state-, threatened or endangered; meets the state definition of threatened or endangered, but has not formally been listed; is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for state threatened or endangered status; has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for state threatened or endangered status. <b>FP = fully protected:</b> this animal species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock. Lists were created for fish (Fish and Game Code § 5515), amphibians and reptiles (Fish and Game Code § 5050), birds (Fish and Game Code § 3511) and mammals (Fish and Game Code § 4700). <b>WL = watch list:</b> this list includes birds identified in the <i>California Bird Species of Special Concern</i> (Shuford and Gardali, 2008) report and are not on the current CDFW species of special concern list, but were on previous lists and they have not been state-listed under CESA; were previously state or federally listed and now are on neither list; or are on the list of fully protected species.			
<b><u>NatureServe Element Ranking: Global Ranking</u></b>		<b><u>NatureServe Element Ranking: State Ranking</u></b>	
G1 Critically Imperiled – At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.		S1 Critically Imperiled – Critically imperiled in the state because of extreme rarity (often 5 or fewer populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the state.	
G2 Imperiled – At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.		S2 Imperiled – Imperiled in the state because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the state.	
G3 Vulnerable – At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.		S3 Vulnerable – Vulnerable in the state due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation from the state.	
G4 Apparently Secure – Uncommon but not rare; some cause for long-term concern due to declines or other factors.			
G5 Secure – Common; widespread and abundant.			



<p>Subspecies Level – Taxa which are subspecies or varieties receive a taxon rank (T-rank) attached to their G-rank.</p>	<p>S4 Apparently Secure – Uncommon but not rare in the state; some cause for long-term concern due to declines or other factors.</p> <p>S5 Secure – Common, widespread, and abundant in the state.</p>
<p><b><u>California Rare Plant Ranks (Based on ranking system developed by the California Native Plant Society [CNPS])</u></b></p> <p><b>CRPR: 1A – California Rare Plant Rank 1A - plants presumed extirpated in California and either rare or extinct elsewhere:</b> the plants with a CRPA of 1A are presumed extirpated because they have not been seen or collected in the wild in California for many years. This rank includes plants that are both presumed extinct as well as those plants which are presumed extirpated in California. All of the plants constituting CRPR 1A meet the definitions of § 2062 and § 2067 (CESA) of the Fish and Game Code, and are eligible for state listing. Should these taxa be rediscovered, it is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.</p> <p><b>CRPR: 1B – California Rare Plant Rank 1B - plants rare, threatened, or endangered in California and elsewhere:</b> plants with a CRPR of 1B are rare throughout their range with the majority of them endemic to California. Most of the plants that are ranked 1B have declined significantly over the last century. All of the plants constituting CRPR 1B meet the definitions of § 2062 and § 2067 (CESA) of the Fish and Game Code, and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.</p> <p><b>CRPR: 2A – California Rare Plant Rank 2A - plants presumed extirpated in California, but more common elsewhere:</b> the plant taxa of CRPR 2A are presumed extirpated because they have not been observed or documented in California for many years. This list includes only those plant taxa that are presumed extirpated in California, but more common elsewhere in their range. All of the plants on List 2A meet the definitions of § 2062 and § 2067 (CESA) of the Fish and Game Code, and are eligible for state listing. Should these taxa be rediscovered, it is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.</p> <p><b>CRPR: 2B – California Rare Plant Rank 2B - plants rare, threatened, or endangered in California, but more common elsewhere:</b> except for being common beyond the boundaries of California, plants with a CRPR of 2B would have been ranked 1B. From the federal perspective, plants common in other states or countries are not eligible for consideration under the provisions of the ESA. All of the plants constituting CRPR 2B meet the definitions of § 2062 and § 2067 (CESA) of the Fish and Game Code, and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.</p> <p><b>CRPR: 3 – California Rare Plant Rank 3 - plants about which more information is needed - a review list:</b> the plants that comprise CRPR 3 are united by one common theme – CNPS and CDFW lack the necessary information to assign them to one of the other ranks or to reject them. Nearly all of the plants constituting CRPR 3 are taxonomically problematic. Some of the plants constituting CRPR 3 meet the definitions of § 2062 and § 2067 (CESA) of the Fish and Game Code, and are eligible for state listing. CNPS strongly recommends that CRPR 3 plants be evaluated for consideration during preparation of environmental documents relating to CEQA.</p> <p><b>CRPR: 4 – California Rare Plant Rank 4 - plants of limited distribution - a watch list:</b> the plants in this category are of limited distribution or infrequent throughout a broader area in California. While CNPS and CDFW cannot call these plants "rare" from a statewide perspective, they are uncommon enough that their status should be monitored regularly. Should the degree of endangerment or rarity of a CRPR 4 plant change, CNPS and CDFW will transfer it to a more appropriate rank. Some of the plants constituting CRPR 4 meet the definitions of § 2062 and § 2067 (CESA) of the Fish and Game Code, and few, if any, are eligible for state listing. Nevertheless, many of them are significant locally, and CNPS strongly recommends that CRPR 4 plants be evaluated for consideration during preparation of environmental documents relating to CEQA.</p> <p><b>CNPS Threat Ranks</b> – The CNPS Threat Rank is an extension added onto the California Rare Plant Rank (CRPR) (as a decimal code) and designates the level of threats by a 1 to 3 ranking with 1 being the most threatened and 3 being the least threatened. A Threat Rank is present for all CRPR 1B's, 2B's, 4's, and the majority of CRPR 3's. CRPR 4 plants are seldom assigned a Threat Rank of .1, as they generally have large enough populations to not have significant threats to their continued existence in California; however, certain conditions exist to make the plant a species of concern and hence be assigned a CRPR. In addition, all CRPR</p>	

1A and 2A (presumed extirpated in California), and some CRPR 3 (need more information) plants, which lack threat information, do not have a Threat Rank extension.

.1 – seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2 – moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

.3 – not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

Below is a list of 25 special-status plant species that occur in the project vicinity (CDFW, 2019a; CDFW, 2019b; CNPS, 2020; USFWS, 2020a; USFWS, 2020b; USFWS, 2020c) but lack the potential to occur in the BSA due to lack of suitable habitat conditions:

- Braunton's milk-vetch (*Astragalus brauntonii* FE, 1B.1)
- Horn's milk-vetch (*Astragalus hornii* var. *hornii* 1B.1)
- Ventura marsh milk-vetch (*Astragalus pycnostachyus* var. *lanosissimus* FE, SE, 1B.1)
- Parish's brittlescale (*Atriplex parishii* 1B.1)
- Davidson's saltscale (*Atriplex serenana* var. *davidsonii* 1B.1)
- Nevin's barberry (*Berberis nevinii* FE, SE, 1B.1)
- Plummer's mariposa lily (*Calochortus plummerae* 4.2)
- intermediate mariposa lily (*Calochortus weedii* var. *intermedius* 1B.2)
- lucky morning-glory (*Calystegia felix* 3.1)
- southern tarplant (*Centromadia parryi* ssp. *australis* 1B.1)
- salt marsh bird's-beak (*Chloropyron maritimum* ssp. *maritimum* FE, SE, 1B.1)
- San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina* FE, SE, 1B.1)
- slender-horned spineflower (*Dodecahema leptoceras* FE, SE, 1B.1)
- many-stemmed dudleya (*Dudleya multicaulis* 1B.2)
- Santa Ana River woollystar (*Eriastrum densifolium* ssp. *sanctorum* FE, SE, 1B.1)
- Los Angeles sunflower (*Helianthus nuttallii* ssp. *parishii* 1A)
- Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri* 1B.1)
- mud nama (*Nama stenocarpa* 2B.2)
- Gambel's water cress (*Nasturtium gambelii* FE, ST, 1B.1)
- prostrate vernal pool navarretia (*Navarretia prostrata* 1B.1)
- coast woolly-heads (*Nemacaulis denudata* var. *denudata* 1B.2)
- Brand's star phacelia (*Phacelia stellaris* FC, 1B.1)
- salt spring checkerbloom (*Sidalcea neomexicana* 2B.2)
- estuary seablite (*Suaeda esteroa* 1B.2)
- San Bernardino aster (*Symphyotrichum defoliatum* 1B.2)

### Wildlife

A literature review and site habitat assessment were conducted by UltraSystems biologist Matthew Sutton. He concluded that the project site does not support habitat that is suitable to a diverse community of wildlife species. Thus, very few special-status wildlife species have the potential to occur in the BSA.

Based on a literature review and query from publicly available databases for reported occurrences within a ten-mile radius of the project site, 28 special-status wildlife species were reported as recent occurrences ( $\leq 20$  years), or had historical observations within two miles of the BSA, or are recognized as occurring based on previous surveys or knowledge of the area. Of those 28 species, four were determined to have a potential to occur within the project BSA as represented in **Table 4.4-2, Wildlife Literature Review Results – Potential to Occur** (refer to **Figure 4.4-2**), and they are discussed further below in more detail than the other special-status species generated from this query.

The 24 reported special-status wildlife species (including mammals, birds, insects and reptiles) identified in the search that were determined to have no potential to occur within the project BSA are discussed briefly below because the BSA lacks suitable habitat for foraging, nesting or breeding, or the BSA does not lie within the species reported distribution or elevation range, or a combination of all of those factors (CDFW, 2019a; CDFW, 2019b; Cornell, 2015; eBird, 2017; Google Earth, 2020; Nafis, 2020; NRCS, 2019; Soil Survey Staff, 2019; USDA, 2006; USEPA, 2020; USFWS, 2020a; USFWS, 2020b; USFWS, 2020c; USFWS, 2020d; USFWS, 2020e). These 24 species comprised the following classes of wildlife species with number of species represented in parenthesis; birds (14), mammals (3), reptiles and amphibians (5), and insect (2).

**Table 4.4-2**  
**WILDLIFE LITERATURE REVIEW RESULTS – POTENTIAL TO OCCUR**

Scientific Name	Common Name	Status	General Habitat	Suitable Habitat Present?	Potential for Occurrence in the BSA
<b>Special-Status Wildlife:</b> <b>These animals have either official status under the ESA and/or the CESA or they are designated as sensitive or locally important by federal agencies, state agencies, and/or local conservation agencies and organizations.</b>					
<i>Accipiter cooperii</i>	Cooper's hawk	WL	In woodland openings and edges of deciduous, conifer and mixed woodland habitats and urban settings with forested areas.	Yes	Low
<i>Calypte costae</i>	Costa's hummingbird	BCC, G5, S4	Desert wash, desert riparian, valley foothill riparian, coastal scrub, desert scrub, desert succulent shrub, chaparral, palm oasis.	Yes	Low
<i>Selasphorus rufus</i>	rufous hummingbird	BCC, G5, S1S2	Riparian, open woodlands, chaparral, gardens, orchards.	Yes	Low
<i>Selasphorus sasin</i>	Allen's hummingbird	BCC	Sparse to dense scrub habitats. Sparse to open woodlands. Nest on twig or fork of tree or shrub.	Yes	Low
<b>*Notes</b> <ul style="list-style-type: none"> <li>The BSA contains approximate elevations of 45 to 48 feet above mean sea level (amsl).</li> <li>The BSA comprises landscaped/developed land types with a small patch of ruderal habitat and a few ornamental trees.</li> <li><b>Yes</b> = the BSA is located within the plant species' known distribution, elevation range, and/or the BSA contains suitable habitats and/or soils to support the plant species. The plant species has a potential to occur within the BSA. Further evaluation is needed.</li> <li><b>Low</b> = the BSA contains suitable habitat and is within the species' distribution; however, there is a low probability of occurrence due to lack of optimal foraging and/or nesting habitat.</li> <li>See Table 4.4-1 for explanation of listing statuses.</li> </ul>					



Due to several biological and physical disturbances within the BSA, it was determined that there is a lack of suitable habitat conditions to support the following 24 special-status wildlife species identified in the 10-mile radius database query (CDFW, 2019a; CDFW, 2019b; Nafis, 2020; USFWS, 2020a; USFWS, 2020d USFWS, 2020e):

- northern western pond turtle (*Actinemys marmorata* SSC, G3G4, S3)
- tricolored blackbird (*Agelaius tricolor* ST, SSC, BCC, G2G3, S1S2)
- southern California legless lizard (*Anniella stebbinsi* SSC, G3, S3)
- San Diegan whiptail (*Aspidoscelis tigris stejnegeri* SSC, G5T5, S3)
- Swainson's hawk (*Buteo swainsoni* ST, BCC, G5, S3)
- coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis* SSC, BCC, G5T3Q, S3)
- wrentit (*Chamaea fasciata* BCC)
- western snowy plover (*Charadrius alexandrinus nivosus* FT, SSC, BCC, G3T3, S2S3)
- western tidal-flat tiger beetle (*Cicindela gabbii* G2G4, S1)
- monarch butterfly (*Danaus plexippus*)
- western mastiff bat (*Eumops perotis californicus* SSC, G5T4, S3S4)
- American peregrine falcon (*Falco peregrinus anatum* FP, BCC, G4T4, S3S4)
- yellow-breasted chat (*Icteria virens* SSC, G5, S3)
- long-billed curlew (*Numenius americanus* BCC, G5, S2)
- whimbrel (*Numenius phaeopus* BCC)
- Belding's savannah sparrow (*Passerculus sandwichensis beldingi* SE, G5T3, S3)
- Pacific pocket mouse (*Perognathus longimembris pacificus* FE, SSC, G5T1, S1)
- Blainville's horned lizard (*Phrynosoma blainvillii* SSC, G3G4, S3S4)
- coastal California gnatcatcher (*Polioptila californica californica* FT, SSC, G4G5T2Q, S2)
- light-footed rail (*Rallus obsoletus levipes* FE, SE, FP, G5T1T2, S1)
- western spadefoot (*Spea hammondi* SSC, G3, S3)
- California least tern (*Sternula antillarum browni* FE, SE, FP, G4T2T3Q, S2)
- American badger (*Taxidea taxus* G5, S3)
- least Bell's vireo (*Vireo bellii pusillus* FE, SE, G5T2, S2)

### Birds

During the survey, common urban-adapted bird species such as American crow (*Corvus brachyrhynchos*), house finch (*Haemorrhous mexicanus*), and black phoebe (*Sayornis nigricans*) were observed on the site. Several bird species are protected by the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code, which render it unlawful to take native breeding birds, and their nests, eggs, and young. Indirect impacts on breeding birds could occur from increased noise, vibration, and dust during construction, which could adversely affect the breeding behavior of some birds, and lead to the loss (take) of eggs and chicks, or nest abandonment. Migratory avian species that may use portions of the area for nesting during the breeding season are protected under the MBTA. Construction-related activities that may include, but are not necessarily limited to, building demolition and/or relocation, grading, materials laydown, access and infrastructure improvements, and building construction, could result in the disturbance of nesting migratory species covered under the MBTA.

The project site contains ornamental vegetation and building structures that could potentially provide cover and nesting habitat for bird species that have adapted to urban areas, such as rock pigeons (*Columba livia*) and mourning doves (*Zenaida macroura*) (Cornell, 2015; USFWS, 2020e). Native bird species such as mourning doves are protected by the MBTA and the California Fish and

Game Code (Sections 3503, 3503.5, and 3513), which render it unlawful to take native breeding birds, their nests, eggs, and young. Indirect impacts on breeding birds could occur from increased noise, vibration and dust during construction, which could adversely affect the breeding behavior of some birds, and lead to the loss (take) of eggs and chicks, or nest abandonment. Therefore, the project has the potential to impact migratory non-game breeding birds and their nests, young and eggs.

### Special-Status Bird Species

In total, there were four special-status bird species—three hummingbirds and one raptor, determined to have a low potential to occur in the BSA. Those species are Allen's hummingbird (*Selasphorus sasin* BCC), Costa's hummingbird (*Calypste costae* BCC), rufous hummingbird *Selasphorus sasin* BCC), and Cooper's hawk (*Accipiter cooperii*).

Since all of the hummingbirds occupy similar habitats and have similar foraging and nesting behaviors, they will all be discussed together. Individuals of all three species have been reported recently within 1.5 miles of the project site (eBird, 2017). These species occupy scrub and woodland habitats: rufous prefer more mesic forested habitats; Costa's prefer more arid habitats such as desert scrub; and Allen's, the likeliest to occur in the BSA, prefer scrub and chaparral habitats near the coast (Cornell, 2015). Hummingbirds are dependent on an abundant insect and nectar supply. Considering that several flowering ornamental plants such as palm, cactus and agave species are located on the project site and within the BSA, there is a low potential for these species to occur in the BSA. Allen's and Costa's breed between January and July and Rufous does not breed in this region. No nests were observed in the BSA during the survey.

Another special-status bird species that was determined to have a potential to occur in the BSA is Cooper's hawk (*Accipiter cooperii*). This determination was based on common professional knowledge that Cooper's hawks occur in urbanized habitats such as this where there are numerous larger trees available for perching and abundant prey sources such as rodents and smaller birds. However, they prefer more densely wooded areas than occur in the BSA, such as woodland openings and edges of riparian and oak habitats (Cornell, 2015). Furthermore, they prefer to nest where there is a grove of six or more contiguous trees providing dense canopy cover, and no such grove occurs in the BSA. Thus, there is a low potential for Cooper's hawks to occur in the BSA.

Several special-status bird species could use the project site for foraging and may be adversely impacted by construction activities. With the implementation of mitigation measure **MM BIO-1**, the project would have less than significant impacts to native bird species protected under the MBTA and the California Fish and Game Code.

### Mitigation Measure

**MM BIO-1 Nesting Bird Protection.** If feasible during project construction, the project applicant shall ensure that vegetation removal shall be restricted to the period between February 1 to August 15, to avoid the breeding season of any migratory species that could be using the area, and to discourage nesting in the vicinity of an upcoming construction area.

If it is not feasible to remove trees outside this window, then, prior to the beginning of vegetation removal and/or earthmoving activities during the period between February 1 and August 15, all vegetation within 100 feet of any grading or earthmoving activity shall be surveyed for active nests by a qualified biologist no

more than 30 days prior to disturbance. If active nests are found, and the site is within 100 feet of potential construction activity, a temporary fence shall be erected, where appropriate, around the vegetated nest site at a distance of 100 feet, or as deemed appropriate by a qualified biologist based on the species, from the edge of the canopy, to prevent construction disturbance and intrusions on the nest area.

No construction vehicles shall be permitted within restricted areas (i.e., protection zones), unless directly related to the management or protection of the legally protected species.

If a legally protected species nest is located in vegetation designated for removal, the removal shall be deferred until after August 15, or until the avian biologist can determine that the young have fledged or the nest has become inactive.

#### **Level of Significance After Mitigation**

With implementation of mitigation measure **MM BIO-1**, the proposed project would not have substantial adverse effects, either directly or through habitat modifications, to habitat, plant and wildlife species and less than significant impacts would occur.

- b) **Would the project have a substantial adverse impact 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**

The project site is vegetated with mostly non-native grasses and ornamental trees, decorative succulents, and cacti. Both the literature review and results of the reconnaissance-level field survey indicate that riparian habitat or other sensitive natural communities do not exist on or adjacent to the project site. The BSA is either developed or disturbed and contains no riparian habitat. Therefore, no direct or indirect impacts to riparian habitat or other sensitive natural communities would occur.

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

#### **No Impact**

Based on the lack of wetlands and/or wetland conditions observed during the site visit by a staff biologist and the results of a literature query showing a lack of recorded historic wetlands, no wetlands occur within the BSA. Therefore, no direct or indirect impacts to federally-protected wetlands as defined by Section 404 of the Clean Water Act would occur. The project would have no impact in this regard.

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

**No Impact**

The project site and surrounding areas do not support resident or migratory fish species or wildlife nursery sites. No established resident or migratory wildlife corridors occur on the project site or in the surrounding areas. As a result, the project would not interfere substantially with or impede: 1) the movement of any resident or migratory fish or wildlife species; 2) established resident or migratory wildlife corridors; or 3) the use of wildlife nursery sites. Therefore, the project would have no impact in this regard.

- e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

**No Impact**

The City of Buena Park recognizes that it is located in an urban setting, and has tailored the goals of its Conservation Element (City of Buena Park, 2010), Water Efficient Landscape Ordinance (City of Buena Park, 2020a) and Urban Forest Management Plan (City of Buena Park, 2020b) accordingly. To obtain its overall conservation goals with respect to development, the City has established objectives that focus on protecting biological resources. One way in which the City encourages conservation of resources is through its Water Efficient Landscape Ordinance. This ordinance promotes the design, installation, and maintenance of landscaping in a manner that conserves regional water resources by ensuring that landscaping projects are not unduly water-needy and that irrigation systems are appropriately designed and installed to minimize water waste.

Another way in which the City encourages protection of biological resources is through its Urban Forest Management Plan (City of Buena Park, 2020b). This plan promotes selecting and installing trees in public areas such as along streets that enhance the aesthetics and ecosystem health of the city. This ordinance is specific to street trees and does not enforce private homeowners' selection of trees. However, the City advocates the use of water-efficient and attractive landscaping on private property to be consistent with its overall conservation goals.

As there are no street trees in the existing landscaping of the project site, the City ordinances relating to street tree removal (City of Buena Park, 2020c) do not apply to any of the tree removals scheduled for this project. Due to the fact that no street trees will be affected by this project, the project would not conflict with any local policies or ordinances protecting biological resources.

- f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

**No Impact**

The project site is not located in a Habitat Conservation Plan (HCP), Natural Communities Conservation Plan (NCCP), or other approved HCP area. For this reason, the project would not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP. Therefore, the project would have no impact in this regard.



## 4.5 Cultural Resources

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?		X		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		

Information from the *Cultural Resources Inventory Report* dated January 17, 2020 (see **Appendix C1**), prepared by UltraSystems for the Orchard View Gardens Senior Apartment Homes project has been included within this section.

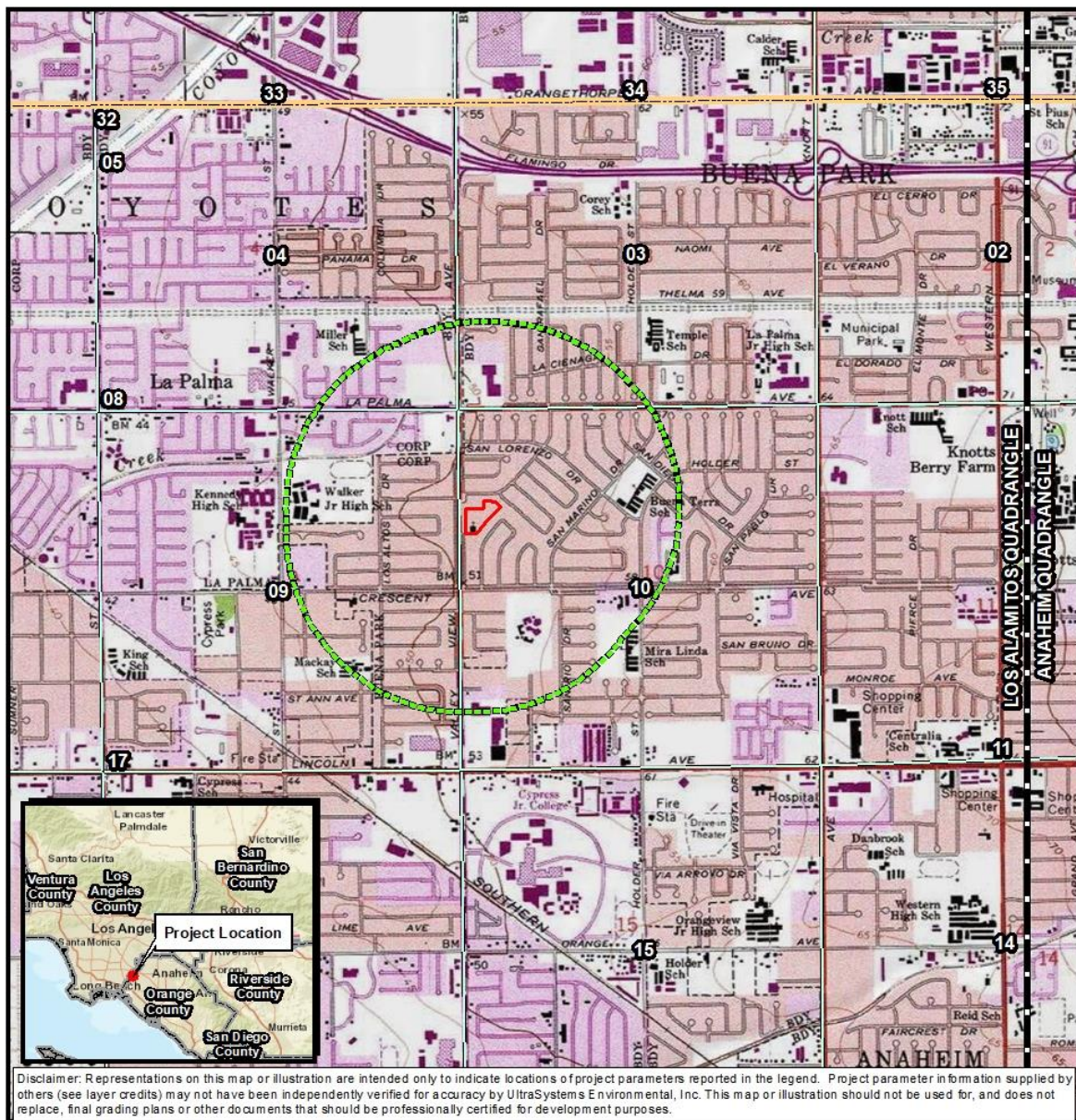
### 4.5.1 Methodology

A cultural resources inventory was conducted for the Orchard View project site (**Figure 4.5-1**) that included a California Historic Resources Inventory System (CHRIS) records and literature search at the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton. Additionally, a request was made to the Native American Heritage Commission (NAHC) to conduct a search of their Sacred Lands File (SLF) for potential traditional cultural properties as well as to provide a list of local Native American tribes and tribal representatives to contact. Finally, a pedestrian survey of the project site was completed. The SCCIC records search was conducted on November 13, 2019. The NAHC request was made on November 8, 2019, and a reply was received on November 26, 2019; letters were sent to the listed tribes on December 18, 2019 and follow-up telephone calls were conducted following conclusion of the 30-day response period on January 20, 2020. The pedestrian field survey was conducted on December 19, 2019.

### 4.5.2 Existing Conditions

Based on the cultural resources records search, it was determined that one cultural resource has been previously recorded within the project site boundary: the St. Joseph's Episcopal Church, designated 30-177528. Within the half-mile buffer zone around the project site, there are two previously recorded historical cultural resources, and no prehistoric resources. **Table 4.11** in **Appendix C1** of this document summarizes these resources.

**Figure 4.5-1  
TOPOGRAPHIC MAP**



Scale: 1:24,000

0 1,000 2,000 Feet

0 250 500 Meters



The primary historic feature in the vicinity of the project site is the St. Joseph's Episcopal Church, built circa 1965, which is located on the project site (see Sections 2.2.3 and 4.1.1 in **Appendix C1**).

Saint Joseph's Episcopal Church, 30-177528, is located at 8300 Valley View Street, in the city of Buena Park, in Orange County, California. It was constructed circa 1965 in what is now a residential neighborhood but originally was open dairy farm land. It was built in the Spanish Eclectic style in an asymmetrical, irregular shape. It has a concrete foundation, stucco exterior and a front gable roof with Spanish tile; wings on each side of the church contain shed roofs also with Spanish tile. It has a square bell tower with a Spanish tiled gable roof situated in the northwest front corner. The church building was evaluated for inclusion in the National Register of Historic Places (NRHP) and determined not to meet the criteria to qualify; it was not assessed for eligibility under the California Register of Historical Resources or the local Buena Park Register.

There are two additional resources in the project area recorded with the Office of Historic Preservation Directory of Properties in the Historic Properties Data File Historic Resources Inventory (HRI). These are a 1955 residence at 7890 La Casa Way (HRI # 184420) and another 1955 residence at 5948 Lois Ranchos Drive (HRI # 155453). Neither of these properties was filed with the SCCIC (Table 4.1-2 in **Appendix C1**). Both properties are single-family residences and have been determined ineligible for the NRHP by consensus through the National Historic Preservation Act Section 106 process.<sup>19</sup>

#### **4.5.3 Impact Analysis**

- a) **Would the project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?**

##### **Less Than Significant Impact with Mitigation Incorporated**

A historical resource is defined in § 15064.5(a)(3) of the *CEQA Guidelines* as any object, building, structure, site, area, place, record, or manuscript determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Historical resources are further defined as being associated with significant events, important persons, or distinctive characteristics of a type, period or method of construction; representing the work of an important creative individual; or possessing high artistic values. Resources listed in or determined eligible for the California Register, included in a local register, or identified as significant in a historic resource survey are also considered as historical resources under CEQA.

Similarly, the National Register criteria (contained in 36 CFR 60.4) are used to evaluate resources when complying with Section 106 of the National Historic Preservation Act. Specifically, the National Register criteria state that eligible resources comprise districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that (a) are associated with events that have made a significant contribution to the broad patterns of our history; or (b) that are associated with the lives of persons significant in our past; or (c) that embody the distinctive characteristics of a type, period, or method of construction, or that possess high artistic values, or that represent a significant distinguishable entity whose

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<sup>19</sup> United States Code Title 16 Section 470

components may lack individual distinction; or (d) that have yielded or may be likely to yield, information important to history or prehistory.

A substantial adverse change in the significance of a historical resource, as a result of a project or development, is considered a significant impact on the environment. Substantial adverse change is defined as physical demolition, relocation, or alteration of a resource or its immediate surroundings such that the significance of the historical resource would be materially impaired. Direct impacts are those that cause substantial adverse physical change to a historic property. Indirect impacts are those that cause substantial adverse change to the immediate surroundings of a historic property, such that the significance of a historical resource would be materially impaired.

Crawford (2014:3) evaluated the St. Joseph's Episcopal Church for the NRHP and determined that it did not meet the criteria to qualify under any of the four categories. In terms of architectural, engineering, or aesthetic qualities, the building is not known to be an important example of any architectural style, property type, period, region, or method of construction, nor is it known to embody the work of architects, designers, or builders who have achieved historic distinction in their field. Crawford did not assess the church for eligibility under the California Register of Historical Resources or the local Buena Park Register. The proposed project would not directly affect the church or the parish hall on the project site. However, grading activities associated with development of the project would cause new subsurface disturbance and could result in the unanticipated discovery of unique historic archeological resources. Implementation of mitigation measure **CUL-1** will be available should there be such an unanticipated discovery.

#### **Mitigation Measure**

**MM CUL-1** In the event of an unexpected discovery of an historical resource as defined by CEQA Guidelines § 15064.5, during any project-related earth-disturbing activities, all earth-disturbing activities within 30 feet of the find shall be halted and the City of Buena Park shall be notified. The project applicant shall retain an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology to assess the significance of the find. Impacts on any significant resources shall be mitigated to a less-than-significant level through data recovery or other methods determined adequate by the archaeologist and that are consistent with the Secretary of the Interior's Standards for Archaeological Documentation. Any identified cultural resources shall be recorded on the appropriate DPR 523 (A-L) form and filed with the SCCIC. Construction activities may continue on other parts of the project site while evaluation and treatment of historic archaeological resources takes place.

#### **Level of Significance After Mitigation**

With the implementation of mitigation measure **MM CUL-1** above, potential project impacts on historical resources would be less than significant.

**b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?**



**Less than Significant Impact with Mitigation Incorporated**

An archaeological resource is defined in § 15064.5(c) of the CEQA Guidelines as a site, area or place determined to be historically significant as defined in § 15064(a) of the CEQA Guidelines, or as a unique archaeological resource defined in § 21083.2 of the Public Resources Code as an artifact, object, or site that contains information needed to answer important scientific research questions of public interest or that has a special and particular quality such as being the oldest or best example of its type, or that is directly associated with a scientifically-recognized important prehistoric or historic event or person. The past agricultural use on the project site and level elevation relative to adjacent roads suggests that ground here has been minimally disturbed, with the native surface soil remaining. It is unlikely that undisturbed unique archeological resources exist on the project site as determined by the cultural resources investigation conducted by UltraSystems, which included a CHRIS records search of the project site and buffer zone, a search of the SLF by the NAHC, and pedestrian field survey.

The cultural resources records search conducted at the SCCIC determined that there are no prehistoric cultural resource sites or isolates recorded within the half-mile radius buffer area around the project footprint and areas of direct and indirect impacts. The result of the pedestrian survey was negative for both prehistoric and historic sites and isolates on the project site.

According to records at the SCCIC, there has been one previous cultural resource survey that included a portion of the project area, with two further surveys within or intersecting the half-mile radius project buffer but not within the project footprint and areas of direct and indirect impacts (refer to **Table 4.5-2 in Appendix C1**). As noted above, the surveys at the St. Joseph's Episcopal Church did record the church itself. There were no other prehistoric or historic cultural resources recorded within the project boundary.

A NAHC SLF search was conducted on and within a half-mile buffer around the project site. The NAHC letter of November 26, 2019 indicated that no records exist documenting the presence of traditional cultural properties within this area. Twenty-two representatives of 16 Native American tribes were contacted requesting a reply if they have knowledge of cultural resources in the area that they wished to share and asking if they had any questions or concerns regarding the project. These tribes included:

- Agua Caliente Band of Cahuilla Indians
- Gabrieleno Band of Mission Indians – Kizh Nation
- Gabrieleno/Tongva San Gabriel Band of Mission Indians
- Gabrielino/Tongva Nation
- Gabrielino Tongva Indians of California Tribal Council
- Gabrielino-Tongva Tribe
- Juaneño Band of Mission Indians (Johnson)
- Juaneño Band of Mission Indians – Acjachemen Nation (Belardes)
- Juaneño Band of Mission Indians – Acjachemen Nation (Romero)
- La Jolla Band of Luiseño Indians
- Pals Band of Mission Indians
- Pauma Band of Luiseño Indians
- Pechanga Band of Luiseño Indians
- Rincon Band of Luiseño Indians
- San Luis Rey Band of Mission Indians
- Soboba Band of Luiseño Indians

On December 18<sup>th</sup> and 30<sup>th</sup> of 2019, Arysa Gonzales Romero, Historic Preservation Technician for the Agua Caliente Band of Cahuilla Indians, replied by email stating that the project site is not located

within the Tribe's Traditional Use Area and therefore they defer to other tribes closer to the area. The Administrative Specialist for the Gabrieleño Band of Mission Indians – Kizh Nation, replied for Chairperson Andrew Salas by email on December 18, 2019 stating that they wished to have AB 52 consultation on the project; UltraSystems replied explaining that such consultation would be between the tribe and the project's Lead Agency, the City of Buena Park's Planning Department. On January 9, 2020, Deneen Pelton, Administrative Assistant representing the Rincon Band of Luiseño Indians responded that the project area is not within the Tribe's Traditional Use Area and that they defer to other tribes in the area. On January 14, 2020, Joyce Perry representing the Juaneño Band of Mission Indians (Belardes), replied by email asking if any buildings on the site will be demolished and if our survey would include test excavations. UltraSystems responded we would not be conducting testing, that one of the buildings will be demolished, and we don't believe that any monitoring had been conducted on the site. Ms. Perry responded asking about past monitoring and how deep excavations are expected to go; UltraSystems responded that due to the buildings' ages we did not believe that past monitoring took place and that we do not at present have current plans to suggest how deep excavations will go.

During the telephone calls of January 21, 2020, Chairperson Anthony Morales with the Gabrielino/Tongva San Gabriel Band of Mission Indians requested that cultural and tribal monitors to be notified if any cultural material is found; he also stated that he would like to be notified if any cultural material is found. Chairperson Robert Dorame of the Gabrielino Tongva Indians of California Tribal Council indicated that human remains were found to the north of the project area and that UltraSystems contact the City about this and then notify him with the information that is learned. The San Luis Rey Band of Mission Indians' receptionist stated that cultural resources questions be directed to "Cami" and provided Cami's telephone number, but there was no answer and a message was left. She called back on January 22, 2020 and indicated that the project area is outside of the Tribe's Traditional Use Area and that they defer to other tribes in the area. The Cultural Resources Coordinator for the Pechanga Band of Luiseño Indians, Paul Macarro indicated that the project is outside of the tribe's area and that they would defer response to closer tribes. There have been no further responses from these tribes to date (see **Attachment C** in **Appendix C1**).

The result of the pedestrian survey was negative for both prehistoric and historic sites and isolates on the project site. Based on the results of the records search and the onsite field survey, it is unlikely that cultural resources or tribal resources would be adversely affected by construction of the project. However, grading activities associated with development of the project would cause new subsurface disturbance and may result in the unanticipated discovery of unique historic and/or prehistoric archeological resources. In the event of an unanticipated discovery, implementation of **MM CUL-1** described above would ensure that impacts on archeological resources would be less than significant.

#### **Level of Significance After Mitigation**

With implementation of **MM CUL-1** above, the proposed project would result in less than significant impacts to archeological resources.

- c) Would the project disturb any human remains, including those interred outside of formal cemeteries?**

#### **Less than Significant Impact with Mitigation Incorporated**

As discussed in Section 4.5 b) above, the project would be built on relatively undisturbed land, with existing buildings that likely caused only minor disturbance to flat land that had previously been in

agricultural use that had not been previously graded. No human remains have been previously identified or recorded onsite. Therefore, it is unlikely that undiscovered human remains exist on the project site.

The project proposes grading activities for the construction of infrastructure that includes water, sewer, and utility lines. Grading activities associated with development of the project would cause new subsurface disturbance and could result in the unanticipated discovery of unknown human remains, including those interred outside of formal cemeteries. In the unlikely event of an unexpected discovery, implementation of **MM CUL-2** would ensure that impacts related to the accidental discovery of human remains would be less than significant.

#### **Mitigation Measure**

**MM CUL-2** If human remains are encountered during excavations associated with this project, all work will stop within a 30-foot radius of the discovery and the Orange County Coroner will be notified (§ 5097.98 of the Public Resources Code). The Coroner will determine whether the remains are recent human origin or older Native American ancestry. If the coroner, with the aid of the supervising archaeologist, determines that the remains are prehistoric, they will contact the NAHC. The NAHC will be responsible for designating the Most Likely Descendant (MLD). The MLD (either an individual or sometimes a committee) will be responsible for the ultimate disposition of the remains, as required by § 7050.5 of the California Health and Safety Code. The MLD will make recommendations within 24 hours of their notification by the NAHC. These recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials (§ 7050.5 of the Health and Safety Code).

#### **Level of Significance After Mitigation**

With implementation of **MM CUL-2** above, the proposed project would result in less than significant impacts to human remains.

## 4.6 Energy

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

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

and

b) **Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

### Less than Significant Impact

According to the CEQA Guidelines, “uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement that provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.” Therefore, the purpose of this analysis is to identify any significant irreversible environmental effects of project implementation that cannot be avoided.

Both construction and operation of the project would lead to the consumption of limited, slowly renewable, and non-renewable resources, committing such resources to uses that future generations would be unable to reverse. The proposed project would require the commitment of resources that include (1) building materials, (2) fuel and operational materials and/or resources and (3) the transportation of goods and people to and from the project.

During project construction, energy would be consumed in the form of electricity associated with the conveyance of water used for dust control and, on a limited basis, powering lights, electronic equipment, or other construction activities necessitating electrical power. Construction activities, including the construction of the proposed buildings, typically do not involve the consumption of natural gas. Project construction would also consume energy in the form of petroleum-based fuels associated with the use of off-road construction vehicles and equipment on the project site, construction worker travel to and from the project site, and delivery and haul truck trips hauling solid waste from and delivering building materials to the project site.



During project operation, energy would be consumed for multiple purposes, including heating, air conditioning, appliances, and use of electronics. Energy would also be consumed during project operations related to water usage, solid waste disposal, and vehicle trips. The existing site is served by an 800A, 208V 3-phase electrical service located on the northwest end of the site and one 1200A, 208V, 3-phase service located on the southeast corner of the site. These services will be consolidated and replaced with a 1600A 480V 3-phase service to be located on the southeast corner of the site. The total average monthly electrical consumption is 18,000 kilowatt hours (kWh) for non-summer months, and 22,000 kWh for the summer months. It is expected that the new project would provide for energy efficient lighting and, HVAC to result in overall reduction of energy usage.

Estimated project operational energy usage, which was estimated by CalEEMod as part of the greenhouse gas emissions analysis,<sup>20</sup> is shown in **Table 4.6-1**. Vehicle miles traveled (VMT) were used as a surrogate for energy from consumption of transportation fuels. While a variety of factors govern the relationship between VMT and fuel energy, in general, an increase in VMT results from an increase in motor vehicle energy use. Note that the table does not include energy use by existing buildings and activities; to obtain a conservative estimate of energy use impact, existing use was assumed to be zero. **Table 4.6-1 also shows** per-capita energy use, assuming 70 occupants, the minimum estimated for the project; using the minimum yields the highest per-capita value.<sup>21</sup>

The project would comply with the 2020 California Green Building Code and has been designed to address energy use in the following ways (Walker, 2020):

- Implement the California Energy Commission's Quality Insulation Installation standards, Third-Party Home Energy Rating System (HERS) Rater validated, to ensure that installed insulation meets both thermal and air tightness performance goals.
- Implement blower door testing during construction to ensure that the constructed building envelope meets and exceeds identified goals for leakage.
- Utilize cool roof materials, minimizing attic temperatures, and reducing cooling loads.
- Utilize energy-efficient heat pump water heaters to reduce the required solar offset required for the project and energy use generally.
- Install HERS-verified HVAC ducted mini splits with seasonal energy efficiency ratio (SEER) ratings between 19 and 21 at residential units (up to 40% more efficient than the code minimum). The HVAC systems will be sized to match the calculated building envelope loads, using Air Conditioning Contractors of America (ACCA) Manuals J, S, and D methodologies, as prescribed by Energy Star Homes.
- Install LED-lighting throughout the project and occupancy sensors in common areas, parking areas and corridors, to reduce energy use.
- Configure rooftops to meet the City's aesthetic requirements, while carefully creating flat, unshaded roof space suitable for renewable energy systems, while using the backs of parapets to mount condensers for mini-split air conditioning systems.

<sup>20</sup> See Section 4.2 (Air Quality), Section 4.8 (Greenhouse Gas Emissions), and **Appendix B2**.

<sup>21</sup> See Section 4.14.

- Deploy an onsite photovoltaic energy system, to comply with Title 24, which reduces the building's overall dependence on the energy grid and reduces the likelihood of power interruptions during heat waves.
- Investigate the use of onsite battery storage to help create resiliency, provide power to the community center (in the event of a power outage), and to help minimize peak demand charges associated with Time of Use Energy rates.

The proposed buildings would be designed and built in compliance with the California Green Building Standards (CALGreen) Code (California Code of Regulations, Title 24, Part 11), which includes mandatory measures for residential site development, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality (CBSC, 2017, p. 2). Additionally, the project would comply with all applicable regulations and codes which require achievement of various levels of energy efficiency in building construction, design and operation.

The commitment of resources required for the construction and operation of the project would limit the availability of such resources for future generations or for other uses during the life of the project. However, the use of such resources would be reduced when compared to what they would be in the absence of complying with the CALGreen Code. Therefore, energy consumption would not result in a substantial increase in energy production for energy providers and the energy demand associated with the project would be less than significant.

**Table 4.6-1**  
**ESTIMATED PROJECT OPERATIONAL ENERGY USE**

Energy Type	Units	Value	Maximum Per Capita
Onroad Motor Vehicle Travel	Vehicle Miles Traveled per Year	800,798	11,400
Natural Gas Use	1,000 BTU per year	842,133	12,030
Electricity Use	Kilowatt-hours per year	92,169.6	1,317

**4.7 Geology and Soils**

<b>Would the project:</b>	<b>Potentially Significant Impact</b>	<b>Less than Significant Impact with Mitigation Incorporated</b>	<b>Less than Significant Impact</b>	<b>No Impact</b>
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				<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 direct or indirect 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>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?		<b>X</b>		

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

### **No Impact**

The Alquist-Priolo Zones Special Studies Act defines active faults as those that have experienced surface displacement or movement during the last 11,000 years (CGS, 2019). The project site is not located within a designated Alquist-Priolo Earthquake Fault Zone. As shown in **Figure 4.7-1**, the nearest Alquist-Priolo Earthquake Fault Zones south of the proposed project are the Reservoir Hill Fault, Northeast Flank Fault, and Cherry Hill Fault (which cumulatively comprise part of the south Los Angeles Basin section of the Newport-Inglewood Fault Zone; Bryant 1985, p. 3; 1985b, Dolan et.al. 2001, p. 28, CGS 1986a, 1986b, Treiman and Lundberg 1999), located between seven to nine miles southwest of the proposed project site. The Newport-Inglewood fault zone is a deep-seated, northwesterly trending zone of folds and faults, accompanied by dome-shaped hills and low mesas, which are the only surface expressions of geologic deformations since the mid-Tertiary (20–30 million years before present [ybp]; Trifunac 2003, p. 550). Due to these characteristics, the fault zone is extremely unlikely to produce a surface rupture that would pose a hazard to the proposed project.

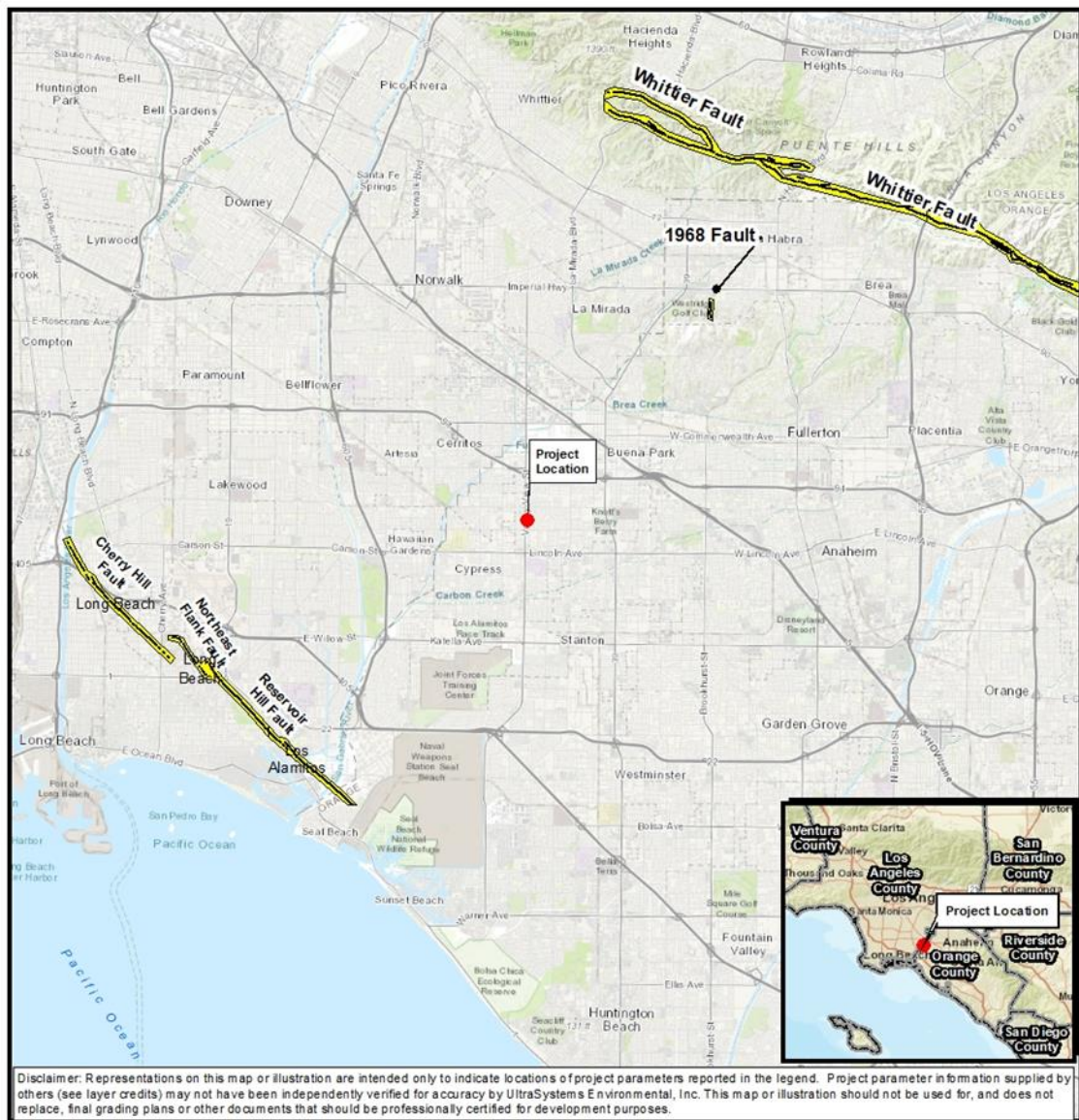
A small Alquist-Priolo Earthquake Fault Zone is located approximately six miles northeast of the project site. This fault zone, designated “1968” (the year in which the surface rupture occurred) is approximately 985 feet in length, generally parallels South Idaho Street from West Risner Way on the south to Sandalwood Avenue in the city of La Habra. This rupture occurred in October 1968 along the bottom of a north-trending canyon, largely occupying the stream bottom of the canyon. Formation of the fault and surface rupture is believed to have been caused by high-pressure water injection being conducted in an oil field that was then south of the rupture. Although this fault satisfies the criteria for zoning under the Alquist-Priolo Act (Smith 1977, p. 10), no activity along this fault has been recorded since the rupture appeared in October 1968, and it is not anticipated that rupture of the fault 1968 would pose a hazard to the proposed project.

The fault nearest to the project site is the Coyote Hills section of the Puente Hills Blind Thrust System (USGS, 2017; see **Figure 4.7-2**), located approximately 2.8 miles north of the project site. The Coyote Hills section generally parallels the south-facing bases of the West and East Coyote Hills; the only known surface expression of this section was a fault scarp at a site on Trojan Way (Shaw et.al. 2002, p. 2,950). The area where Trojan Way crosses the Coyote Hills section is now a completely developed industrial and general commercial district (City of La Mirada, 2012), and geomorphic evidence of the fault is no longer visible (Google Earth, 2018). Due to the location and path of this fault, is not anticipated that rupture of the Coyote Hills section of the Puente Hills Blind Thrust System would pose a hazard to the proposed project.

The Los Alamitos fault is located approximately 4.5 miles southwest of the project site. Limited data about this fault was available other than the Los Alamitos fault may be part of a larger fault system; specifically, the Compton-Los Alamitos fault. The type and age of this fault are uncertain, although the most recent surface rupture of the Los Alamitos fault has been determined to have been during the Late Quaternary (up to 700,000 ybp; SCEDC, 2020). As with the other faults in the project area



**Figure 4.7-1**  
**ALQUIST-PRIOLO EARTHQUAKE FAULT ZONES**



Path: \\10.0.0.137\gis\Projects\7037\_NCR\_Affordable\_Housing\_Buena Park\_IS\_MND\MDs\7037\_NCR\_Buena\_Park\_4\_8\_Alquist\_Priolo\_2020\_01\_17.mxd  
 Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community. Sources: Esri, HERE, Garmin, Intermap, InCREMENT P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community; CA Dept. of Conservation, 2019; UltraSystems Environmental, Inc., 2020

January 17, 2020

Scale: 1:190,080



0 1.5 3 Miles

0 1.5 3 Kilometers

**Legend**

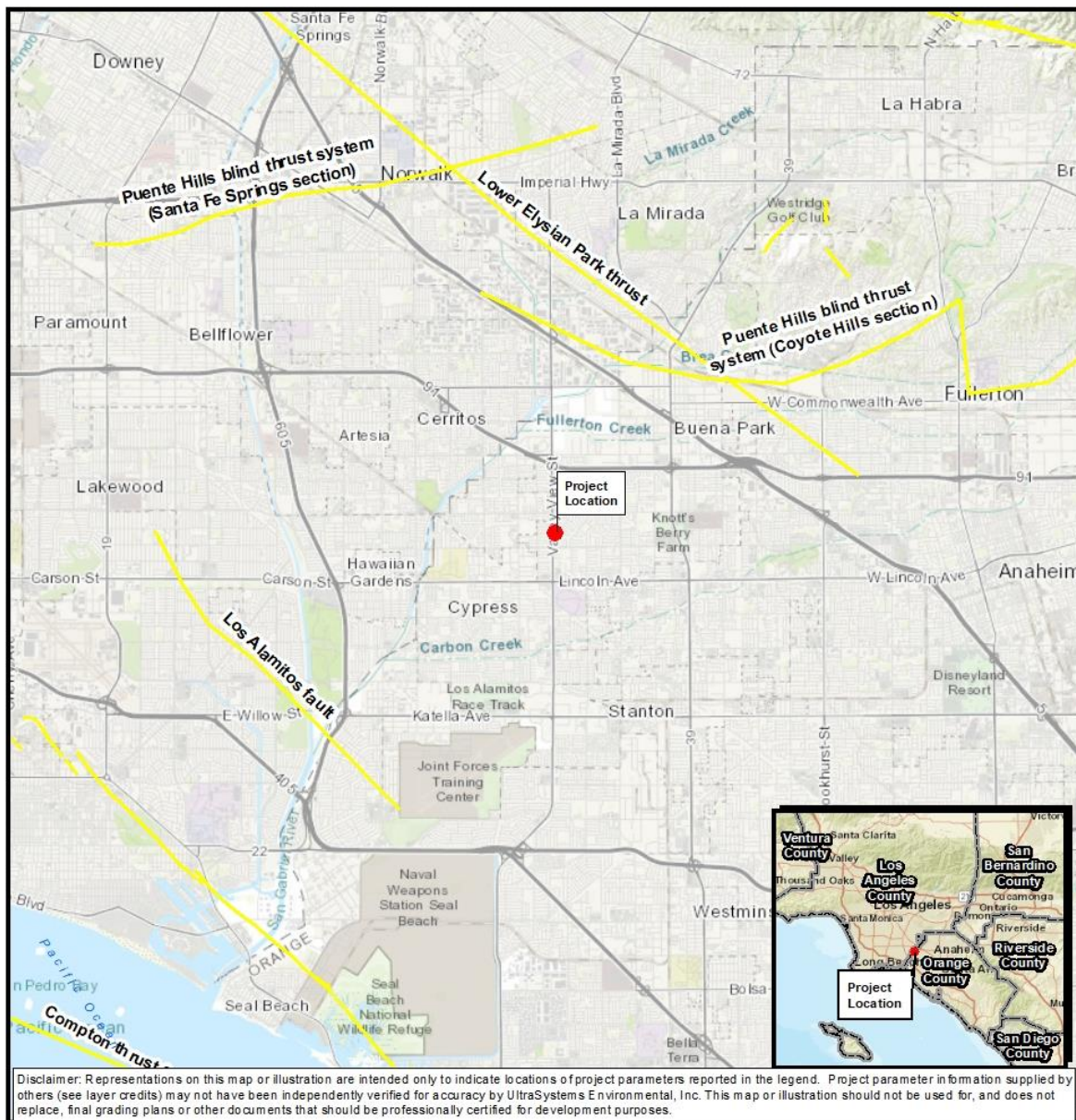
- Project Location
- Fault Trace
- Alquist-Priolo Earthquake Fault Zone

**Orchard View Gardens  
Senior Apartment Homes**

Alquist Priolo Earthquake  
Fault Zones



**Figure 4.7-2**  
**REGIONALLY ACTIVE FAULTS**



Path: \\10.0.0.137\gis\Projects\7037\_NCR\_Affordable\_Housing\_Buena\_Park\_IS\_MND\MXD\7037\_NCR\_Buena\_Park\_4\_6\_Active\_Faults\_2020\_01\_10.mxd  
Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community; USGS 2018, UltraSystems Environmental, Inc., 2020

January 15, 2020

Scale: 1:126,720



0 1 2 Miles

0 1.1 2.2 Kilometers

#### Legend

- Project Location
- Quaternary Fault

#### Orchard View Gardens Senior Apartment Homes

Regionally Active Faults





the location and trend of this fault make it extremely unlikely to produce a surface rupture that would pose a hazard to the proposed project.

As shown in **Figure 4.7-1**, the proposed project would not be located within an Alquist-Priolo Earthquake Fault Zone, and as seen in **Figure 4.7-2**, no active faults are known to traverse the project site. For these reasons, the project site will not expose people or structures to potentially substantial adverse effects from rupture of a known earthquake fault, including faults that are delineated on an Alquist-Priolo Earthquake Fault Zoning Map, and no impact would occur.

**ii) Strong seismic ground shaking?**

**Less than Significant Impact**

The project is located within a seismically active region of Southern California, and is susceptible to collapse of structures, buckling of walls, and damage to foundations from strong seismic ground shaking. The closest Alquist-Priolo Fault Zones are portions of the Newport-Inglewood Fault Zone located between seven and nine miles southwest of the project site (see **Figure 4.7-1**).

Soil bores obtained at the proposed project site encountered alluvial soils to 51.1 feet, the maximum depth explored (Albus-Keefe & Associates 2020, p. 3), and the bore samples were used to perform general analyses of the soil on the proposed project site.

The site is located in a seismically active area that has historically been affected by moderate to occasionally high levels of ground motion. The site lies in relatively close proximity to several active faults (see **Figure 4.7-2**); therefore, during the life of the proposed development, the property will probably experience moderate to occasionally high ground shaking from these fault zones, as well as some shaking from other seismically active areas of the southern California region. Design of proposed structures in accordance with the current California Building Code (CBC) is anticipated to adequately mitigate concerns with ground shaking.

The project would be constructed in accordance with the applicable CBC standards (California Code of Regulations, 2019). In addition, the CBC is included in the City's Municipal Code (City of Buena Park Municipal Code, 2019) and provides minimum standards to protect property and for public welfare by regulating the design and construction of excavations, foundations, building frames, retaining walls, and other building elements to mitigate the effects of seismic activities and adverse soil conditions. 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.

Although the project site is susceptible to occasional very strong to severe ground shaking from seismically active fault zones in the Southern California region, design and construction in accordance with the CBC would reduce impacts related to potential seismic ground shaking at the site. For these reasons, impacts from strong seismic ground shaking would be less than significant. Mitigation is not proposed.

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

**Less than Significant Impact with Mitigation Incorporated**

General types of ground failures that might occur as a consequence of severe ground shaking typically include landslides, ground subsidence, ground lurching and shallow ground rupture. The probability of occurrence of each type of ground failure depends on the severity of the earthquake, distance from the faults, topography, subsoils and relatively shallow groundwater tables (approximately 50 feet or less below ground surface), in addition to other factors.

Liquefaction typically occurs when saturated or partially saturated soils behave like a liquid, as a result of losses in strength and stiffness in response to an applied stress caused by earthquake shaking or other sudden change in stress conditions. As presented in the Preliminary Geotechnical Report for the project, groundwater was encountered at 10 feet below existing ground surface within all of the borings made during the subsurface exploration. Moreover, the highest historical groundwater depth for the project area is mapped at 10 feet below ground surface (Albus-Keefe & Associates, Inc. 2020, p. 4). Additionally, as shown in **Figure 4.7-3**, the project site is located within a liquefaction hazard zone delineated by the California Geological Survey (CGS; 1986a).

Analysis of soil borings taken on the proposed project site indicated that liquefaction could lead to a total seismic settlement (saturated and dry) of the ground surface of up to approximately 4.2 inches due to seismic consolidation during liquefaction. The differential settlement due to seismic settlement would likely be on the order of half of the total seismic settlement or approximately 2.1 inches over 30 feet (Albus-Keefe & Associates, Inc. 2020, p. 8).

The CBC (2019) provides construction and building design standards, such as the use of well-reinforced foundations, such as post-tensioned slabs, grade beams with structural slabs, or mat foundations, which have been demonstrated to provide adequate basal support for structures during comparable liquefaction events. The project would be constructed in accordance with the applicable CBC adopted by the legislature and used throughout the state (California Code of Regulations, 2019) as well as in the City's Municipal Code (City of Buena Park Municipal Code, 2019). The CBC provides minimum standards to protect property and public welfare by regulating the design and construction of excavations, foundations, building frames, retaining walls, and other building elements to mitigate the effects of seismic shaking and adverse soil conditions. The CBC contains provisions for earthquake safety based on multiple factors including liquefaction potential on the proposed project site.

Compliance with recommendations of the geotechnical survey report (Albus-Keefe & Associates, Inc., 2020, pp. 10-22), and with state and local regulations would minimize the potential risk from liquification. Mitigation measure **GEO-1** below is proposed to ensure that the project complies with the recommendations of the geotechnical report prepared for the project and to reduce potential impacts from the project's location in a liquefaction hazard zone delineated by the California Geological Survey.

**Mitigation Measure**

**MM GEO-1** During grading and construction of the proposed project, the project applicant shall follow all recommendations in Section 6.0, Recommendations, on pages 10-22 of the geotechnical report prepared for the project (Albus-Keefe & Associates, Inc.,

*Preliminary Geotechnical Investigation, Proposed Senior Housing Development, 8300 Valley View Street, Buena Park, California, dated January 20, 2020).*

### **Level of Significance After Mitigation**

Potential impacts from seismic-related ground failure, including liquefaction would be reduced to a less than significant level with implementation of **MM GEO-1** above.

#### **iv) Landslides?**

### **No Impact**

Landslides occur when a slope becomes unstable. A change in the stability of a slope can be caused by a number of factors, acting together or alone. Natural causes of landslides include groundwater (pore water) pressure acting to destabilize the slope, loss of vegetative structure, erosion of the toe of a slope by rivers or ocean waves, weakening of a slope through saturation by snow melt or heavy rains, earthquakes adding loads to barely stable slope, earthquake-caused liquefaction destabilizing slopes, and volcanic eruptions.

Topography within the project site is relatively flat (Google Earth Pro, 2019). According to **Figure 4.7-3**, the project site is not located within or adjacent to a zone of required investigation for earthquake-induced landslides. Additionally, the project site is located in a flat, developed urban area that does not contain steep slopes or hills. Therefore, the probability of slope stability hazards affecting the site is considered very low and no impacts are anticipated.

#### **b) Would the project result in substantial soil erosion or the loss of topsoil?**

### **Less Than Significant Impact**

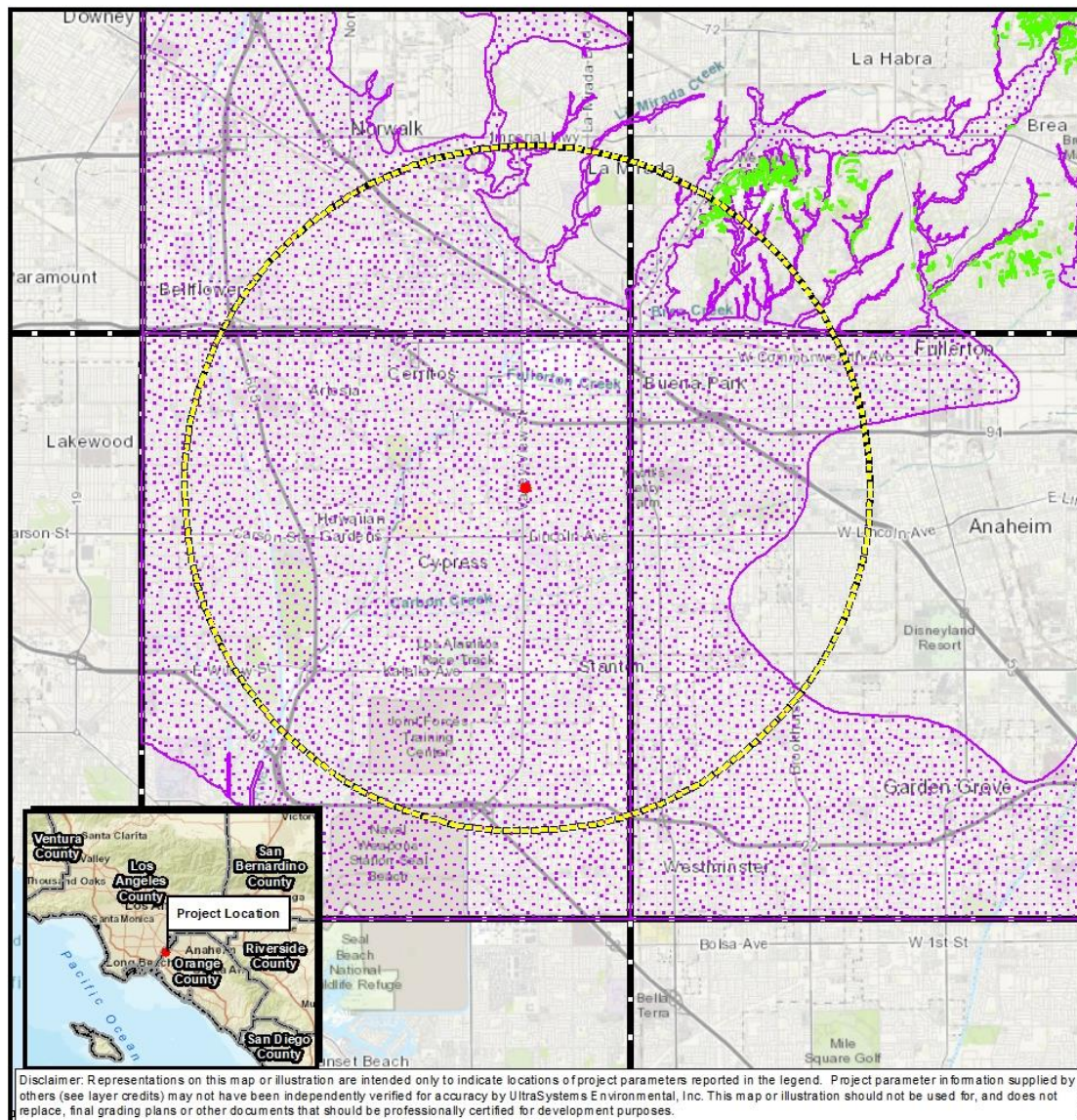
Under current conditions approximately 27 percent of the 1.7-acre project site is covered by impervious surfaces including paved areas and buildings (RRM Design Group, 2020, p. 5). The remainder of the project site (approximately 73 percent) is comprised of small areas of landscaping including: palm tree, scotch pine trees, crape myrtle tree, palo verde tree, podocarpus trees, olive tree, citrus and cherry saplings, rose and rosemary bushes and various shrubs and cacti species. There is also a non-landscaped area comprising non-native annual grasses and other ruderal species.

The project would develop approximately 76 percent (58,497 square feet) with impervious surfaces and approximately 24 percent (18,454 square feet) with pervious surfaces. Ways to measure soil erosion include wind erodibility groups and erosion factors, both of which are discussed below.

- **Wind erodibility groups (WEG)** consist of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. Soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The soils mapped on the proposed project site, Metz loamy sand, has a WEG rating of 2, indicating that this soil is highly susceptible to erosion by wind (Soil Survey Staff 2019, pp. 34-38).

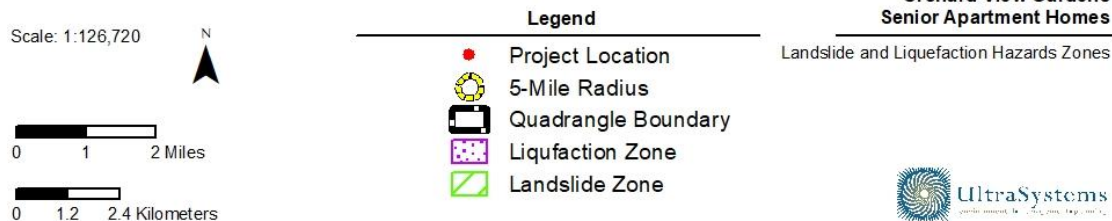


**Figure 4.7-3**  
**LANDSLIDE AND LIQUEFACTION HAZARDS ZONES**



Path: \\10.0.0.137\gis\Projects\7037\_NCR\_Affordable\_Housing\_Buena Park\_IS\_MND\MDs\7037\_NCR\_Buena\_Park\_4\_6\_Landslides\_Liquefaction\_2020\_01\_10.mxd  
 Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Sources: Esri, HERE, Garmin, Intermap, INCREMENT P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community, CA Dept. of Conservation, 2019, UltraSystems Environmental, Inc., 2020

January 16, 2020



- **Erosion factor K** indicates the susceptibility of a soil to sheet and rill erosion by water. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity. Values of K range from 0.02 to 0.69 (median  $[a] = 0.355$ ). Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water. *Erosion factor Kw* indicates the erodibility of the whole soil: the value of Kw is modified by the presence of rock fragments. The soil mapped on the project site, Metz loamy sand, has an erosion factor Kw of 0.28, indicating that soil on the project site has a moderate potential for sheet and rill erosion by water (Soil Survey Staff 2020, pp. 34-38).

Because the proposed project would disturb an area greater than one acre of soil, the project would be required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order 2009-0009-DWQ (Construction General Permit). Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. Dischargers whose projects disturb one or more acre of soil are required to obtain coverage under this permit through the California State Water Resources Control Board (SWRCB); in addition, the Construction General Permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP; SWRCB, 2020)). The SWPPP would mandate site-specific construction best management practices (BMPs) that would minimize or avoid soil erosion through stormwater or wind. These BMPs would be implemented prior to ground-disturbing activities and would remain in place until construction is complete.

As detailed in the grading plan, the proposed project would disturb approximately 1.7 acres of land. During grading, there would be a raw cut of 85 cubic yards and a raw fill of 6,035 cubic yards (Walker, 2020). As part of project design, the project proposes the development of grass and landscaped areas, including landscaping along the site boundary, thus reducing the potential for post-construction soil erosion. Moreover, the project would adopt construction BMPs in accordance with the County of Orange Drainage Management Plan (DAMP). The DAMP requires construction site to implement control practices that address soil erosion/sedimentation to avoid and minimize the transport of soil or contaminants offsite (DAMP 2003, Section 8.0). For these reasons, the project would have less than significant impacts related to soil erosion or loss of topsoil, and mitigation is not proposed.

- c) **Would the project 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 with Mitigation Incorporated**

Impacts related to liquefaction and landslides are discussed above in **Section 4.7.a** above. The site is underlain by soil strata that are susceptible to liquefaction. Mitigation measure **GEO-1** is recommended to address the potential for liquefaction associated with the project site.

Lateral spreading is the downslope movement of surface sediment due to liquefaction in a subsurface layer. The downslope movement is due to gravity and earthquake shaking combined. Lateral spreading of the ground surface during a seismic activity usually occurs along the weak shear zones within a liquefiable soil layer and has been observed to generally take place toward a free face (i.e., retaining wall, slope, or channel) and to lesser extent on ground surfaces with a very gentle slope. The geotechnical report for the project states that the potential for lateral spreading is very low,

because the general gradient of the proposed project site is nearly level with that of the general vicinity (0.2 degrees and 0.3 degrees, respectively) (Albus-Keefe & Associates, Inc. 2020, p. 7).

The project would be constructed in accordance with the requirements of the City of Buena Park, CBC, which are designed to assure safe construction and include building foundation requirements appropriate to site conditions.

Subsidence due to reprocessing of removal bottoms is anticipated to be approximately 0.1 feet. The estimates of shrinkage and subsidence are intended as an aid for project engineers in determining earthwork quantities. However, these estimates should be used with some caution since they are not absolute values. Contingencies should be made for balancing earthwork quantities based on actual shrinkage and subsidence that occurs during the grading process (Albus-Keefe & Associates, 2020, p. 9). Selected samples of representative earth materials from borings were tested in a laboratory. Tests consisted of soils classification, in-situ moisture content and dry density, maximum dry density and optimum moisture content, consolidation/collapse, direct shear strength (Albus-Keefe & Associates 2020, p. 4). Collapsible soils were not identified as an issue for the proposed project.

#### **Mitigation Measure**

Refer to mitigation measure **MM GEO-1** above.

#### **Level of Significance After Mitigation**

With implementation of **MM GEO-1** above (i.e. compliance with the recommendations of the geotechnical survey report for the proposed project), as well as compliance with local, state, and federal building and construction regulations, potential impacts regarding on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse would be less than significant.

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

#### **Less than Significant Impact with Mitigation Incorporated**

The soil on the project site is designated Metz loamy sand (Soil Survey Staff, 2019). Metz loamy sands are formed on alluvial fans from alluvium derived from mixed sources. Geotechnical borings onsite determined that soils encountered at the site consisted of alluvial soils to the maximum depth explored, 51.5 feet below ground surface, and that the onsite alluvial soils generally possess a very low expansion potential. Although not encountered, localized artificial fill materials could be present within the site, and the geotechnical report recommends that additional testing for expansive soils be conducted subsequent to rough grading and prior to construction of foundations and other concrete flatwork (Albus-Keefe & Associates, Inc., 2020, p. 9). With implementation of Mitigation measure **GEO-1** above, to follow the recommendations of the project's geotechnical report, there would be less than significant impacts regarding expansive soil.

Expansive soils shrink and swell with changes in soil moisture. Soil moisture may change from landscape irrigation, rainfall, and utility leakage. Soil in one of the borehole samples collected during the geotechnical investigation was tested for expansion potential and plastic index: from the surface to five feet the expansion potential was determined to be negligible; from 15 to 25 feet the expansion potential was low, and at 30 feet the expansion potential was medium (Albus-Keefe & Associates



2020, Appendix B, Table B; Day 2000, p. 12.6). Additional testing for soil expansion is required per recommendations of the geotechnical investigation report during grading and prior to foundation work for confirmation of the conditions (Albus-Keefe & Associates, Inc, 2018, Appendix B, Table B). With implementation of **MM GEO-1** above, to follow the recommendations of the project's geotechnical report, there would be less than significant impacts regarding expansive soil.

#### **Mitigation Measure**

Refer to mitigation measure **MM GEO-1** above.

#### **Level of Significance After Mitigation**

With implementation of mitigation measure **GEO-1** above (i.e. compliance with the recommendations of the geotechnical survey report for the proposed project), as well as compliance with local, state, and federal building and construction regulations, potential impacts resulting from expansive soils would be less than significant.

- e) **Would the project 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 project site is currently connected to the City of Buena Park's sewer system, and the project would also connect to existing sewers. Therefore, the project would not use septic tanks or alternative wastewater disposal systems. For this reason, no impacts associated with septic tanks or alternative waste water disposal systems would occur.

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

#### **Less than Significant Impact with Mitigation Incorporated**

The project site is entirely encompassed by a single geological deposit (Saucedo et al., 2016). The project site is underlain by early Holocene Young Alluvium Deposits, Unit 2 (Qya2). This deposit consists of unconsolidated deposits of gravel, sand, and silt with some instances of boulders and dates to the early Holocene (12,000 to 7,000 ybp) (Saucedo et al., 2016).

The soil at the project site is also described as "younger Quaternary Alluvium, with older Quaternary sediments occurring at various depths, as part of the floodplain deposits from Coyote Creek that currently flows just to the west and from Carbon Creek that currently flows to the south." (McLeod 2019:1). Deposits of younger Quaternary Alluvium "... typically do not contain significant vertebrate fossils, at least in the uppermost layers..." (McLeod 2019:1). Excavations or grading that extend into the uppermost layers of soil and younger Quaternary Sediments in the proposed project area are unlikely to encounter significant fossil vertebrate remains.

Grading and excavation activities associated with development of the project would cause new subsurface disturbance and could result in the unanticipated discovery of paleontological resources. Mitigation measure **GEO-2** is required to ensure the project would have a less than significant impact regarding paleontological resources.



**Mitigation Measure**

**MM GEO-2:** If paleontological resources are uncovered during construction activities, the contractor shall halt construction activities in the immediate area and notify the City of Buena Park. The on-call paleontologist shall be notified and afforded the necessary time and funds to recover, analyze, and curate the find(s). Subsequently, the monitor shall remain onsite for the duration of the ground disturbance to ensure the protection of any other resources that may be in the area.

**Level of Significance After Mitigation**

With implementation of **MM GEO-2**, potential impacts to paleontological resources would be reduced to a less than significant level.

## 4.8 Greenhouse Gas Emissions

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

### 4.8.1 Background Information on Greenhouse Gas Emissions

Life on earth depends on energy coming from the sun. About half the light reaching Earth's atmosphere passes through the air and clouds to the surface, where it is absorbed and then radiated upward in the form of infrared heat. About 90% of this heat is then absorbed by carbon dioxide (CO<sub>2</sub>) and other greenhouse gases (GHG) and radiated back toward the surface, which is warmed to a life-supporting average of 59 degrees Fahrenheit (°F) (NASA, 2018).

Human activities are changing the natural greenhouse. Over the last century, the burning of fossil fuels such as coal and oil has increased the concentration of atmospheric CO<sub>2</sub>. This happens because the coal or oil burning process combines carbon in the fuel with oxygen in the air to make CO<sub>2</sub>. To a lesser extent, the clearing of land for agriculture, industry, and other human activities has increased concentrations of GHGs (NASA, 2018).

GHGs are defined under the California Global Warming Solutions Act of 2006 (AB 32) as CO<sub>2</sub>, methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF<sub>6</sub>). Associated with each GHG species is a “global warming potential” (GWP), which is a value used to compare the abilities of different GHGs to trap heat in the atmosphere. GWPs are based on the heat-absorbing ability of each gas relative to that of CO<sub>2</sub>, as well as the decay rate of each gas (the amount removed from the atmosphere over a given number of years). The GWPs of CH<sub>4</sub> and N<sub>2</sub>O are 25 and 298, respectively (GMI, 2018). “Carbon dioxide equivalent” (CO<sub>2</sub>e) emissions are calculated by weighting each GHG compound’s emissions by its GWP and then summing the products. HFCs, PFCs, and SF<sub>6</sub> are not emitted in significant amounts by Orchard View Gardens project sources, so they are not discussed further.

**Carbon Dioxide (CO<sub>2</sub>)** is a colorless, odorless gas consisting of molecules made up of two oxygen atoms and one carbon atom. CO<sub>2</sub> is produced when an organic carbon compound (such as wood) or fossilized organic matter (such as coal, oil, or natural gas) is burned in the presence of oxygen. Since the industrial revolution began in the mid-1700s, industrial activities have increased in scale and distribution. Prior to the industrial revolution, CO<sub>2</sub> concentrations were stable at a range of 275 to 285 parts per million (ppm) (IPCC, 2007a). The National Oceanic and Atmospheric Administration (NOAA’s) Earth System Research Laboratory (ESRL) indicates that global concentration of CO<sub>2</sub> was

409.09 ppm in October 2019. (ESRL, 2020). These concentrations of CO<sub>2</sub> exceed by far the natural range over the last 650,000 years (180 to 300 ppm) as determined from ice cores.

**Methane (CH<sub>4</sub>)** is a colorless, odorless non-toxic gas consisting of molecules made up of four hydrogen atoms and one carbon atom. CH<sub>4</sub> is combustible, and is the main constituent of natural gas, a fossil fuel. CH<sub>4</sub> is released when organic matter decomposes in low-oxygen environments. Natural sources include wetlands, swamps and marshes, termites, and oceans. Anthropogenic sources include the mining of fossil fuels and transportation of natural gas, digestive processes in ruminant animals such as cattle, rice paddies, and the buried waste in landfills. Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of CH<sub>4</sub>. Other anthropogenic sources include fossil-fuel combustion and biomass burning.

**Nitrous Oxide (N<sub>2</sub>O)** is a colorless, non-flammable gas with a sweetish odor, commonly known as "laughing gas," and sometimes used as an anesthetic. N<sub>2</sub>O is naturally produced in the oceans and in rainforests. Manmade sources of N<sub>2</sub>O include the use of fertilizers in agriculture, nylon and nitric acid production, cars with catalytic converters and the burning of organic matter. Concentrations of N<sub>2</sub>O also began to rise at the beginning of the industrial revolution.

**Chlorofluorocarbons (CFCs)** are gases formed synthetically by replacing all hydrogen atoms in CH<sub>4</sub> or ethane with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically un-reactive in the troposphere (the level of air at the Earth's surface). CFCs have no natural source but were first synthesized in 1928. They were used for refrigerants, aerosol propellants, and cleaning solvents. Because of the discovery that they can destroy stratospheric ozone, an ongoing global effort to halt their production was undertaken and has been extremely successful, so much so that levels of the major CFCs are now remaining steady or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years. The project is not expected to emit any CFCs.

**Hydrofluorocarbons (HFCs)** are synthesized chemicals that are used as a substitute for CFCs. Out of all the GHGs, HFCs are one of three groups with the highest GWP. HFCs are synthesized for applications such as automobile air conditioners and refrigerants. The project is not expected to emit any HFCs.

**Perfluorocarbons (PFCs)** have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above Earth's surface can destroy the compounds. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. The two main sources of PFCs are primary aluminum production and semiconductor manufacture. The project is not expected to emit any PFCs.

**Sulfur Hexafluoride (SF<sub>6</sub>)** is an extremely potent greenhouse gas. SF<sub>6</sub> is very persistent, with an atmospheric lifetime of more than a thousand years. Thus, a relatively small amount of SF<sub>6</sub> can have a significant long-term impact on global climate change. SF<sub>6</sub> is human-made, and the primary user of SF<sub>6</sub> is the electric power industry. Because of its inertness and dielectric properties, it is the industry's preferred gas for electrical insulation, current interruption, and arc quenching (to prevent fires) in the transmission and distribution of electricity. SF<sub>6</sub> is used extensively in high voltage circuit breakers and switchgear, and in the magnesium metal casting industry. The project is not expected to emit SF<sub>6</sub>.

## **4.8.2 Regulatory Setting**

GHGs are regulated at the national, state, and air basin level; each agency has a different degree of control. The United States Environmental Protection Agency (USEPA) regulates at the national level; the California Air Resources Board (ARB) regulates at the state level; and the South Coast Air Quality Management District (SCAQMD) regulates at the air basin level in the Orchard View Gardens project area.

### **4.8.2.1 Federal Regulations**

The USEPA collects several types of GHG emissions data. These data help policy makers, businesses, and the USEPA track GHG emissions trends and identify opportunities for reducing emissions and increasing efficiency. The USEPA has been maintaining a national inventory of GHG emissions since 1990 and in 2009 established mandatory reporting of GHG emissions from large GHG emissions sources.

Previous USEPA efforts documented through historical website material reflecting the USEPA website as it existed on January 19, 2017 (USEPA, 2017a) include regulatory initiatives such as mobile source GHG emission standards and the Clean Power Plan; partnering with the private sector through voluntary energy and climate programs; and reducing USEPA's carbon footprint with the federal GHG requirements and USEPA's Strategic Sustainability Performance Plan. The current administration has a different strategy in relation to climate change and is taking the USEPA in a new direction (USEPA, 2017b). Executive Order (EO) on Energy Independence (White House, 2017) specifically addresses revisions in the Clean Power Plan and standards of performance for GHGs for new stationary sources; CH<sub>4</sub> standards for the oil and gas sector; and light-duty vehicle GHG standards.

### **4.8.2.2 State Regulations**

#### **Executive Order S 3-05**

On June 1, 2005, the governor issued EO S 3-05, which set the following GHG emission reduction targets:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels;
- By 2050, reduce GHG emissions to 80% below 1990 levels.

To meet these targets, the Climate Action Team (CAT)<sup>22</sup> prepared a report to the Governor in 2006 that contains recommendations and strategies to help ensure that the targets in EO S-3-05 are met.

#### **Assembly Bill 32 (AB 32)**

In 2006, the California State Legislature enacted the California Global Warming Solutions Act of 2006, also known as AB 32. AB 32 focuses on reducing GHG emissions in California. GHGs, as defined under

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<sup>22</sup> The Climate Action Team (CAT) members are state agency secretaries and the heads of agencies, boards, and departments, led by the Secretary of the California Environmental Protection Agency (Cal/EPA). They coordinate statewide efforts to implement global warming emission reduction programs and the state's Climate Adaptation Strategy.



AB 32, include CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, and SF<sub>6</sub>. AB 32 requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. The ARB is the state agency charged with monitoring and regulating sources of emissions of GHGs that cause global warming. AB 32 also requires that by January 1, 2008, the ARB must determine what the statewide GHG emissions level was in 1990, and it must approve a statewide GHG emissions limit, so it may be applied to the 2020 benchmark. The ARB approved a 1990 GHG emissions level of 427 million metric tons of CO<sub>2</sub>e (MMTCO<sub>2</sub>e), on December 6, 2007 in its Staff Report. Therefore, in 2020, emissions in California are required to be at or below 427 MMTCO<sub>2</sub>e.

Under the “business as usual or (BAU)” scenario established in 2008, statewide emissions were increasing at a rate of approximately one percent per year as noted below. It was estimated that the 2020 estimated BAU of 596 MMTCO<sub>2</sub>e would have required a 28% reduction to reach the 1990 level of 427 MMTCO<sub>2</sub>e.

### **Climate Change Scoping Plan**

The Scoping Plan released by the ARB in 2008 (ARB, 2008) outlined the state’s strategy to achieve the AB 32 goals. This Scoping Plan, developed by ARB in coordination with the CAT, proposed a comprehensive set of actions designed to reduce overall GHG emissions in California, improve the environment, reduce dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health. It was adopted by ARB at its December 2008 meeting. According to the Scoping Plan, the 2020 target of 427 MMTCO<sub>2</sub>e requires the reduction of 169 MMTCO<sub>2</sub>e, or approximately 28.3%, from the state’s projected 2020 BAU emissions level of 596 MMTCO<sub>2</sub>e.

In August 2011, the Scoping Plan was re-approved by the Board and includes the Final Supplement to the Scoping Plan Functional Equivalent Document (ARB, 2011). This document includes expanded analysis of project alternatives and updates the 2020 emission projections by considering updated economic forecasts. The updated 2020 BAU estimate of 507 MMTCO<sub>2</sub>e yielded that only a 16% reduction below the estimated new BAU levels would be necessary to return to 1990 levels by 2020. The 2011 Scoping Plan expands the list of nine Early Action Measures into a list of 39 Recommended Actions contained in Appendices C and E of the Plan.

In May 2014, ARB developed, in collaboration with the CAT, the First Update to California’s Climate Change Scoping Plan (Update) (ARB, 2014), which shows that California is on track to meet the near-term 2020 GHG limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32. In accordance with the United Nations Framework Convention on Climate Change, ARB has mostly transitioned to the use of the Intergovernmental Panel on Climate Change’s (IPCC’s) Fourth Assessment Report (AR4)’s 100-year GWP (IPCC, 2007b) in its climate change programs. ARB recalculated the 1990 GHG emissions level with the AR4 GWPs to be 431 MMTCO<sub>2</sub>e; therefore the 2020 GHG emissions limit established in response to AB 32 is now slightly higher than the 427 MMTCO<sub>2</sub>e in the initial Scoping Plan.

In November 2017, ARB published the 2017 Scoping Plan (ARB, 2017) which builds upon the former Scoping Plan and Update by outlining priorities and recommendations for the state to achieve its target of a 40% reduction in GHGs by 2030, compared to 1990 levels. The major elements of the framework proposed are enhancement of the Renewables Portfolio Standard (RPS) and the Low Carbon Fuel Standard; a Mobile Source Strategy, Sustainable Freight Action Plan, Short-Lived Climate Pollutant Reduction Strategy, Sustainable Communities Strategies, and a Post-2020 Cap-and-Trade Program; a 20% reduction in GHG emissions from the refinery sector; and an Integrated Natural and Working Lands Action Plan.

### **Renewables Portfolio Standard (Scoping Action E-3)**

The California Energy Commission estimates that in 2000 about 12% of California’s retail electric load was met with renewable resources. Renewable energy includes (but is not limited to) wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas. California’s current RPS is intended to increase that share to 33% by 2020. Increased use of renewables will decrease California’s reliance on fossil fuels, thus reducing emissions of GHGs from the electricity sector. Most recently, former Governor Brown signed into legislation Senate Bill (SB) 350 in October 2015, which requires retail sellers and publicly-owned utilities to procure 50% of their electricity from eligible renewable energy resources by 2030.

### **Senate Bill 375 (SB 375)**

SB 375 was signed by the governor on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions and is responsible for over 40% of the GHG emissions in California, with automobiles and light trucks alone contributing almost 30%. SB 375 indicates that GHGs from automobiles and light trucks can be reduced by new vehicle technology. However, significant reductions from changed land use patterns and improved transportation also are necessary. SB 375 states, “Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32.” SB 375 does the following: (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

### **Executive Order B-30-15**

On April 29, 2015, the governor issued EO B-30-15, which added an interim target of GHG emissions reductions to help ensure that the state meets its 80% reduction by 2050, as set in EO S-3-05. The interim target is reducing GHG emissions by 40% by 2030. It also directs state agencies to update the Scoping Plan, update the Adaptation Strategy every three years, and take climate change into account in agency planning and investment strategies. Additionally, it requires the state’s Five-Year Infrastructure Plan to take current and future climate change impacts into account in all infrastructure projects.

#### **4.8.2.3 Local Regulations**

The City of Buena Park’s latest General Plan (City of Buena Park, 2010) addresses climate change primarily in the Conservation and Sustainability Element, which “provides direction regarding conservation, development, and utilization of manmade and natural resources, as well as sustainability including green building, source reduction, and air quality.” This Element also sets forth several programs to reduce current pollutant emissions and requires “new development include measures to comply with . . . new air quality requirements related to GHG emissions.” General Plan goals and policies related to climate change and GHG emissions reduction are:

- **Goal CS-6:** Integration of green building requirements into the building permit process.
  - Policy CS-6.1: Consider incentives to encourage new nonresidential development and remodels to utilize the U.S. Green Building Council's LEED rating system.

- **Goal CS-7:** Use of green techniques in new buildings, new building sites, and building remodels and retrofits.
  - Policy CS-7.1: Consider incentives such as expedited permitting process or reduced fees for new development or redevelopment projects that incorporate green building practices, Build it Green, and Leadership in Energy and Environmental Design (LEED) certified buildings.
- **Goal CS-8:** Use of environmentally preferable products for new and existing developments.
  - Policy CS-8.1: Encourage green building efforts in single-family homes as well as in municipal, commercial, mixed-use, or multifamily residential projects.
  - Policy CS-8.2: Consider advertising and/or providing incentives for green building techniques in existing building retrofits as well as new buildings.
- **Goal CS-10:** Reduction in total waste diverted to treatment or disposal at the waste source and through re-use and recycling.
  - Policy CS-10.1: Ensure the Source Reduction and Recycling Element (SRRE) is updated as necessary to serve as an effective tool in the reduction of solid waste diverted to landfills.
  - Policy CS-10.2: Continue to implement and improve the Construction and Demolition Waste Recovery Ordinance, requiring building projects to recycle or reuse a minimum of 50 percent of unused or leftover building materials.
  - Policy CS-10.3: Encourage business material reuse through waste exchange.
  - Policy CS-10.4: Encourage the use of materials with minimal impacts to the environment for new development or redevelopment projects in the City.
  - Policy CS-10.5: Encourage materials recycling during renovation or demolition of old buildings.
  - Policy CS-10.6: Encourage the use of recycled or rapidly renewable materials, and building reuse and renovation over new construction, where feasible.
- **Goal CS-11:** Maximum public participation in source reduction, recycling, and composting activities.
  - Policy CS-11.1: Encourage professional services contracts to incorporate reused and recycled contents into new development and re-use of raw materials.
  - Policy CS-11.2: Encourage the use of recycled mulch and soil products in City parks and landscaping projects whenever practicable and include the same direction in City landscaping contracts.

- Policy CS-11.3: Continue to operate and expand all public information and education programs to complement source reduction, recycling and composting efforts, and participation.
- **Goal CS-12:** Reduction of the volume of solid waste generated and raw materials used by the City.
  - Policy CS-12.1: Use recycled-content materials for building, streetscaping, and roadway construction, whenever feasible.
  - Policy CS-12.2: Purchase and use recycled-content for City office products, where practicable and to the extent feasible.
  - Policy CS-12.3: Include environmentally preferable purchasing requirements in janitorial contracts and direct City custodians to purchase and use environmentally preferable products to be consistent with the City goal to provide a safe work environment and minimize environmental damage.
  - Policy CS-12.4: Use recycled content playground equipment, park landscape surfacing, and other park and recreational equipment, whenever feasible.
- **Goal CS-13:** Reduction of per-capita nonrenewable energy usage and citywide peak electricity demand through energy efficiency and conservation.
  - Policy CS-13.1: Consider adopting renewable energy building standards. The standards would incorporate technically and financially feasible renewable energy requirements into development and building standards.
  - Policy CS-13.2: Explore methods to facilitate renewable technologies through streamlined planning and development rules, codes, processing, and other incentives.
  - Policy CS-13.3: Explore and, if appropriate, adopt energy efficiency standards for existing residential and commercial buildings upon substantial remodel. Consider requiring energy efficiency inspections, disclosure, and retrofits at change of ownership based on cost-effective and commercially available energy efficiency measures.
  - Policy CS-13.4: Encourage new developments, redevelopments, and retro-fit buildings to have solar energy panels, co-generation energy systems, and/or other energy efficient systems installed to reduce the unnecessary consumption of energy.
  - Policy CS-13.5: Encourage the installation of energy efficient appliances in new development and redevelopment projects.
  - Policy CS-13.6: Encourage new developments and redevelopments to layout or organize buildings to maximize the potential for passive solar panels.
  - Policy CS-13.7: Encourage residents and business owners to upgrade insulation in older or energy inefficient homes to reduce the need to operate heating, ventilating, and air conditioning (HVAC) systems.



- Policy CS-13.8: Encourage the use of natural daylight instead of artificial lighting in the design of buildings to minimize electricity use.
- Policy CS-13.9: Encourage the use of roof materials that reflect sun light rather than absorb sun light in order to reduce the need for using mechanical air conditioning systems.
- Policy CS-13.10: Encourage the use of shading devices and awnings on window fronts in order to reduce the need for mechanical air conditioning systems.
- Policy CS-13.11: Encourage the use of operable windows and skylights for commercial and retail uses in order to reduce the need for mechanical air conditioning systems.
- Policy CS-13.12: Encourage use of low or no Volatile Organic Compounds (VOC) paints in interior spaces of new development and redevelopment projects.

#### **4.8.3 Impact Thresholds**

The following thresholds of significance are based on criteria in Appendix G of the State CEQA Guidelines. A project has the potential to create a significant environmental impact if it would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing emissions of GHG.

#### **4.8.4 Impact Analysis**

- a) **Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?**

##### **Less than Significant Impact**

California has enacted several pieces of legislation that relate to GHG emissions and climate change, much of which set aggressive goals for GHG reductions within the state. Per Senate Bill 97, the California Natural Resources Agency adopted amendments to the CEQA Guidelines, which address the specific obligations of public agencies when analyzing GHG emissions under CEQA to determine a project's effects on the environment. However, neither a threshold of significance nor any specific mitigations are included or provided in these CEQA Guideline amendments.

##### **GHG Significance Threshold**

Neither the City of Buena Park, the SCAQMD, nor the State CEQA Guidelines Amendments has adopted quantitative thresholds of significance for addressing a project's GHG emissions. Nonetheless, § 15064.4 of the CEQA Guidelines serves to assist lead agencies in determining the significance of the impacts of GHGs. As required in § 15064.4 of the CEQA Guidelines, this analysis includes an impact determination based on the following: (1) an estimate of the amount of GHG emissions resulting from the Orchard View Gardens project; (2) a qualitative analysis or performance based standards; (3) a

quantification of the extent to which the Orchard View Gardens project increases GHG emissions as compared to the existing environmental setting; and (4) the extent to which the Orchard View Gardens project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

SCAQMD's guidance uses a tiered approach rather than a single numerical emissions threshold. If a project's GHG emissions "fail" the non-significance of a given tier, then one goes to the next one.

The threshold selected for this analysis is Tier 3, which establishes a screening significance threshold level to determine significance using a 90% emission capture rate. For Tier 3, the SCAQMD estimated that at a threshold of approximately 3,000 metric tons CO<sub>2</sub>e per year emissions would capture 90% of the GHG emissions from new residential or commercial projects. Thus, this analysis uses 3,000 MTCO<sub>2</sub>e per year as the significance threshold under the first impact criterion in Section 4.8.3.

### Construction GHG Emissions

Construction is an episodic, temporary source of GHG emissions. Emissions are generally associated with the operation of construction equipment and the disposal of construction waste. To be consistent with the guidance from the SCAQMD for calculating criteria pollutants from construction activities, only GHG emissions from onsite construction activities and offsite hauling and construction worker commuting are considered as project-generated. As explained by the California Air Pollution Control Officers Association (CAPCOA) in its 2008 white paper (CAPCOA, 2008), the information needed to characterize GHG emissions from manufacture, transport, and end-of-life of construction materials would be speculative at the CEQA analysis level. CEQA does not require an evaluation of speculative impacts (*CEQA Guidelines* § 15145). Therefore, the construction analysis does not consider such GHG emissions, but does consider non-speculative onsite construction activities, and offsite hauling and construction worker trips. All GHG emissions are identified on an annual basis.

Estimated criteria pollutant emissions from the Orchard View Gardens project's onsite and offsite project construction activities were calculated using CalEEMod, Version 2016.3.2, which was described in Section 4.3.7. The results of this analysis are presented in **Table 4.8-1**. The greatest annual increase in GHG emissions from Orchard View Gardens project construction activities would be 203 metric tons in 2022 and 2 metric tons in 2023 for total construction GHG emissions of 275 metric tons. Consistent with SCAQMD recommendations and to ensure that construction emissions are assessed in a quantitative sense, construction GHG emissions have been amortized over a 30-year period. The amortized value, **6.8 MTCO<sub>2</sub>e**, has been added to the Orchard View Gardens project's annual operational GHG emissions. (See below.) Modeling results are in **Appendix B2**.

**Table 4.8-1**  
**PROJECT CONSTRUCTION-RELATED GHG EMISSIONS**

Year	Annual Emissions (MT)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
2022	202.2 <sup>23</sup>	0.0401	0	203.3
2023	1.69	0.0034	0	1.70
<b>Total</b>	<b>204</b>	<b>0.043</b>	<b>0</b>	<b>206</b>

### Operational GHG Emissions

For a reasonable maximum emissions case, it was assumed that GHG emissions from the Orchard View Gardens project site are currently zero. Operational GHG emissions calculated by CalEEMod are shown in **Table 4.8-2**. Total annual unmitigated emissions from the Orchard View Gardens project would be 416 MTCO<sub>2</sub>e per year. Energy production and mobile sources account for about 86% of these emissions.<sup>24</sup>

**Table 4.8-2**  
**PROJECT OPERATIONAL GHG EMISSIONS**

Emissions Source	Estimated Project Generated CO <sub>2</sub> e Emissions (Metric Tons per Year)
Area Sources	1.14
Energy Demand (Electricity & Natural Gas)	74.68
Mobile (Motor Vehicles)	282.46
Solid Waste Generation	15.27
Water Demand	33.39
Construction Emissions <sup>a</sup>	9.17
<b>Total</b>	<b>416.1</b>

<sup>a</sup> Total construction GHG emissions were amortized over 30 years and added to those resulting from the operation of the project.

Therefore, under the first significance criterion, GHG emissions would be less than significant, and no mitigation is necessary.

23 The Option 2b and 3 combination was also analyzed, but the Option 1 and 3 combination was determined to have more emissions impact and therefore, for conservative purposes, is being presented.

24 Calculations are provided in **Appendix B2**.

- b) **Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHG?**

**Less than Significant Impact**

Since the City of Buena Park does not have a Climate Action Plan to specifically address GHG reductions, this analysis uses another approach to identifying potential conflict with GHG reduction plans, policies, or regulations by examining General Plan provisions that prescribe or enable GHG emissions control. The Current Buena Park General Plan lists policies that reduce GHG emissions. The policies prescribe actions to be taken by the City, and not measures to be implemented by an Orchard View Gardens project proponent.



## 4.9 Hazards and Hazardous Materials

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

The analysis in this section is based in part upon the Phase I Environmental Site Assessment (Phase I ESA) prepared by Converse Consultants (herein referred to as Converse) dated December 12, 2019 (Refer to **Appendix E**). The Phase I ESA presents information conducted from a site reconnaissance

of the project area, historical developments of the project site, and a comprehensive database search to determine if the project site contains Recognized Environmental Conditions (RECs).<sup>25</sup>

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

**Less than Significant Impact with Mitigation Incorporated**

The Phase I determined that there are no RECs on the project site (Converse, 2019, p. 27). Although the project site was used for agricultural purposes in the past, it should not be of concern based on passage of time since the last possible agricultural application (Converse, 2019, p. 28). The Phase I ESA concluded that the project site was not listed in any regulatory database as a hazardous site (Converse, 2019, p. 26).

**Construction**

The proposed project would include the transport, storage, and use of chemical agents, solvents, paints, and other hazardous materials commonly associated with construction activities. Chemical transport, storage, and use would comply with Resource Conservation and Recovery Act (RCRA); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); California Hazardous Waste Control Law<sup>26</sup>; Occupational Safety and Health Administration (OSHA), and City of Buena Park Fire Department requirements.

During construction, there would be a limited risk of spills and/or accidental release of hazardous materials that are used for the operation and maintenance of construction equipment. The onsite temporary handling, storage, and usage of these materials would be subject to applicable local, state, and/or federal regulations, including Best Management Practices (BMPs) required by the City of Buena Park. Compliance with state and local construction requirements would reduce the risk of any damage or injury from any potential spill hazards to a less than significant level.

A structure called “The Barn” is located on the northern part of the project site and is a small stand-alone building, located northeast of the existing church and administration buildings on site. “The Barn” would be demolished as part of the proposed project. Based on aerial photographs “The Barn” was present sometime after 1994 and prior to 2002. Therefore, it is unlikely but unconfirmed as to whether or not “The Barn” was constructed with Asbestos Containing Materials (ACMs) and Lead-Based Paint (LBP) that can cause adverse health effects when airborne. Mitigation measure **HAZ-1** below is recommended to reduce potential impacts from ACM and LBP.

**Mitigation Measure**

- MM HAZ-1** Prior to demolition, the existing structure called “The Barn” shall be assessed for the presence of asbestos-containing materials (ACMs) and lead-based paint (LBP). If ACMs and/or LBP are found, the resulting construction debris shall be removed and disposed of at a landfill that can accept hazardous materials, including asbestos and

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25 The term Recognized Environmental Conditions is defined in Section 1.1.1 of the American Society of Testing and Materials (ASTM) Standard Practice as the presence or likely presence of any hazardous substances or petroleum products in, at or on a property due to any release to the environment; under conditions indicative of a release to the environment; under conditions that pose a material threat of a future release to the environment (Converse Consultants, 2019, p. 1).

26 Codified in California Health and Safety Code, Division 20, Chapter 6.5, Hazardous Waste Control.

lead-based paint. All ACMs and LBP shall be removed prior to demolition, as required, and in accordance with all applicable laws, including guidelines of the Occupational Safety and Health Administration (OSHA).

#### **Level of Significance After Mitigation**

With removal of ACMs and LBP prior to demolition, as required, and in accordance with all applicable laws, impacts from ACMs and LBP would be less than significant. After the implementation of Mitigation Measure **HAZ-1** above, the project would have a less than significant impact regarding the creation of a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials.

#### **Operation**

The project would require the transport, storage, use, and disposal of certain chemicals typically used for cleaning and landscaping supplies, such as commercial cleansers, paints, and lubricants for maintenance and upkeep of the proposed buildings and landscaping. These materials would be stored, handled, and disposed of in accordance with applicable regulations. The proposed project would not involve the routine transport, use, or disposal of quantities of hazardous materials that may create a significant hazard to the public or environment. Therefore, impacts regarding hazardous operations would be less than significant.

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

#### **Less than Significant Impact**

#### **Construction**

As discussed in threshold 4.9 a) above, during construction, the project would entail the use and handling of limited volumes of commonly used hazardous materials. Project personnel would ensure that all hazardous materials during construction would adhere to any applicable local, state, and/or federal regulations including BMPs required by the city including, but not limited to, a Storm Water Prevention Program (SWPPP). Compliance with applicable pollution regulations during project construction would reduce potential impacts in this regard to less than significant levels.

#### **Operation**

The project would result in the handling and storage of materials such as commercial cleansers, solvents and other janitorial or industrial-use materials, paints, and landscape fertilizers/pesticides during project operations. However, these materials would be stored, handled, and disposed of in accordance with applicable regulations and would not be stored in amounts that would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions. The project would have a less than significant impact in this regard.

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

### **Less than Significant Impact with Mitigation Incorporated**

#### **Construction**

San Marino Elementary School is located approximately 0.2 mile southeast of the project site. As discussed in thresholds 4.9 a) and 4.9 b) above, during construction, the project would entail the use and handling of limited volumes of commonly used hazardous materials. Project personnel would ensure that all hazardous materials during construction would adhere to any applicable local, state, and/or federal regulations including BMPs required by the City of Buena park. Due to the potential presence of ACMs and LBP, as described in threshold 4.9 a) above, mitigation measure **HAZ-1** is recommended to reduce potential impacts.

#### **Mitigation Measure**

Refer to **MM HAZ-1** above.

### **Level of Significance After Mitigation**

With the implementation of Mitigation Measure **HAZ-1** above, the project would have a less than significant impact regarding emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within one quarter mile of an existing or proposed school.

#### **Operation**

During project operations, the project would result in the handling and storage of materials such as commercial cleansers, solvents and other janitorial or industrial-use materials, paints, and landscape fertilizers/pesticides during project operations. However, these materials would be stored, handled, and disposed of in accordance with applicable regulations and would not be stored in amounts that would pose a hazard to existing or proposed schools in the project vicinity. The project would have less than significant impacts in this regard.

- d) **Would the project 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?**

### **No Impact**

Government Code § 65962.5 requires the Department of Toxic Substances Control (DTSC) to compile and update, at least annually, lists of the following:

- Hazardous waste and substances sites from the DTSC EnviroStor database.
- Leaking Underground Storage Tank (LUST) sites by county and fiscal year in the State Water Resources Control Board (SWRCB) GeoTracker database.
- Solid waste disposal sites identified by SWRCB with waste constituents above hazardous waste levels outside waste management units.
- SWRCB Cease and Desist Orders (CDOs), and Cleanup and Abatement Orders (CAOs).
- Hazardous waste facilities subject to corrective action pursuant to § 25187.5 of the Health and Safety Code, identified by DTSC.

These lists are collectively referred to as the “Cortese List.” (EPA, 2019b).

As detailed in the Phase I report prepared for the project, the project site is not located on the Cortese List. The nearest active site to the project site, Tosco – 76 #5398, is located at 5014 Orangethorpe Avenue in La Palma, California, approximately 1.5 miles northwest of the project site. Thus, because the project site is not located on or near a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5, the project would have no impact in this regard.

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

**No Impact**

The nearest airport is the Joint Forces Training Base (JFTB) Los Alamitos, located approximately 2.8 miles southwest of the project site. As shown in **Figure 4.9-1**, the project is located within JFTB's Notification Area. However, the project site is not within JFTB's Height Restriction or Impact Zones. Although the project site is within JFTB's influence area, the project applicant needs only to notify the airport about project construction and operation. Therefore, with compliance to notifying JFTB and the project's distance from the nearest active airports, the project would not expose people to safety hazards due to proximity to a public airport, and no impacts would occur.

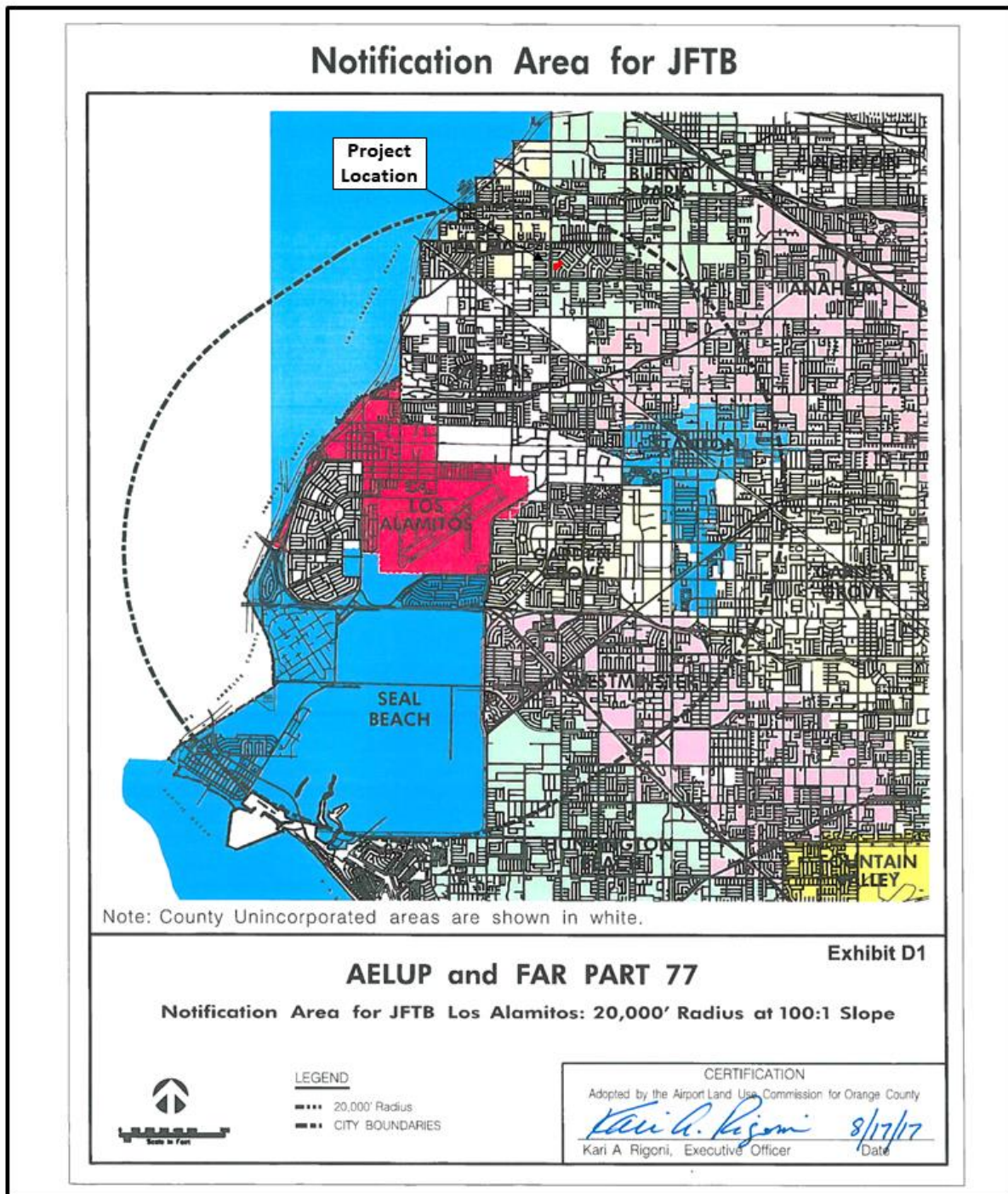
- f) **Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

**Less than Significant Impact**

The City of Buena Park does not have an adopted emergency response plan or emergency evacuation plan. However, the project could temporarily impact street traffic adjacent to the project site during the construction phase due to construction activities encroaching into the right-of-way (ROW). Project construction could reduce the number of lanes or temporarily close a portion of Valley View Street. The city requires preparation and implementation of a Traffic Management Plan (TMP) for all projects that require construction in the public ROW. The TMP must be reviewed and approved by the city's Traffic Engineer prior to the start of construction activity in the public ROW. The typical TMP requires such things as the installation of K-Rail between the construction area and open traffic lanes, the use of flagmen and directional signage to direct traffic where only one travel lane is available or when equipment movement creates temporary hazards, and the installation of steel plates to cover trenches under construction. Emergency access must be maintained. Compliance with City requirements for traffic management during construction in the public ROW would ensure that the project would have a less than significant impact in this regard.



**Figure 4.9-1**  
**AIRPORT INFLUENCE AREA MAP FOR THE JOINT FORCES TRAINING BASE**



Disclaimer: Illustration provided by Orange County Airport Land Use Commission, who has indicated that the information is true and correct. No other warranties are expressed or implied.

Source: Orange County Airport Land Use Commission, 2017



**Orchard View Gardens  
Senior Apartment Homes**  
Joint Forces Training Base, Los Alamitos  
Airport Notification Area

- g) **Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?**

**No Impact**

The California Department of Forestry and Fire Protection (CAL FIRE) developed Fire Hazard Severity Zones (FHSZ) for State Responsibility Areas (SRA) and Local Responsibility Areas (LRA). The project site is not in a SRA (CAL FIRE SRA, 2018). (see **Figure 4.9-2**). As shown in **Figure 4.9-3**, the project site is located in a LRA area but is outside a Very High Fire Hazard area. The City of Buena Park would provide fire services to the project site.

Very High Fire Hazard designation refers to either:

a) wildland areas supporting high-to-extreme fire behavior resulting from climax fuels typified by well-developed surface fuel profiles (e.g., mature chaparral) or forested systems where crown fire is likely. Additional site elements include steep and mixed topography and climate/fire weather patterns that include seasonal extreme weather conditions of strong winds and dry fuel moistures. Burn frequency is typically high, and should be evidenced by numerous historical large fires in the area. Firebrands from both short- (<200 yards) and long-range sources are often abundant.

OR

b) developed/urban areas typically with high vegetation density (>70% cover) and associated high fuel continuity, allowing for frontal flame spread over much of the area to progress impeded by only isolated non-burnable fractions. Often where tree cover is abundant, these areas look very similar to adjacent wildland areas. Developed areas may have less vegetation cover and still be in this class when in the immediate vicinity (0.25 mile) of wildland areas zoned as Very High.

The project site is not located in a Very High Fire Hazard in either LRA or SRA and is not located in an area with an urban/wildland interface. The project would include required fire suppression design features (i.e., fire-resistant building materials, where appropriate, smoke detection and fire alarm systems, automatic sprinkler systems, portable fire extinguishers, emergency signage in all buildings, and fuel modification/brush clearance) identified in the latest edition of the California Building Code. Therefore, the project would have no impact regarding exposure of people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.



**Figure 4.9-2**  
**FIRE HAZARD SEVERITY ZONES – STATE RESPONSIBILITY AREA**



Path: \\10.0.0.137\gis\Projects\7037\_NCR\_Affordable\_Housing\_Buena Park\_IS\_MND\MXDs\7037\_NCR\_Buena\_Park\_4.9\_Fire\_Hazards\_SRA\_2020\_01\_09.mxd  
 Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NR Can, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC,  
 (c) OpenStreetMap contributors, and the GIS User Community; Cal Fire, 2007; UltraSystems Environmental, Inc., 2019

Scale: 1:253,440



0 2 4 Miles

0 2.5 5 Kilometers

**Legend**

- Project Location
- 10-Mile Radius
- County Boundary

**Fire Hazard Severity Zones in SRA (CAL FIRE A dopted November 2007):**

- High
- Moderate
- Very High

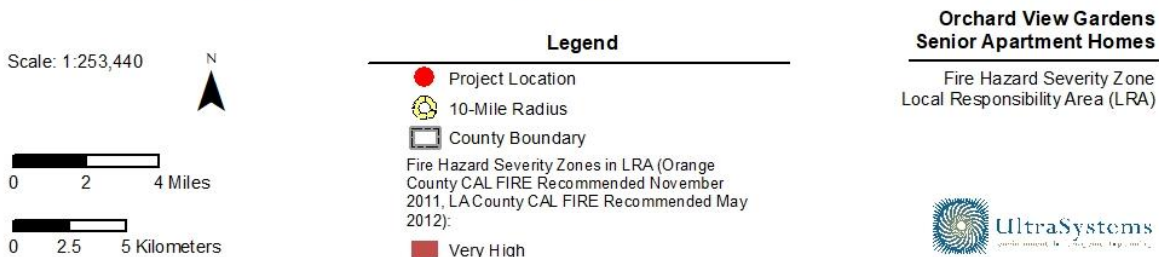
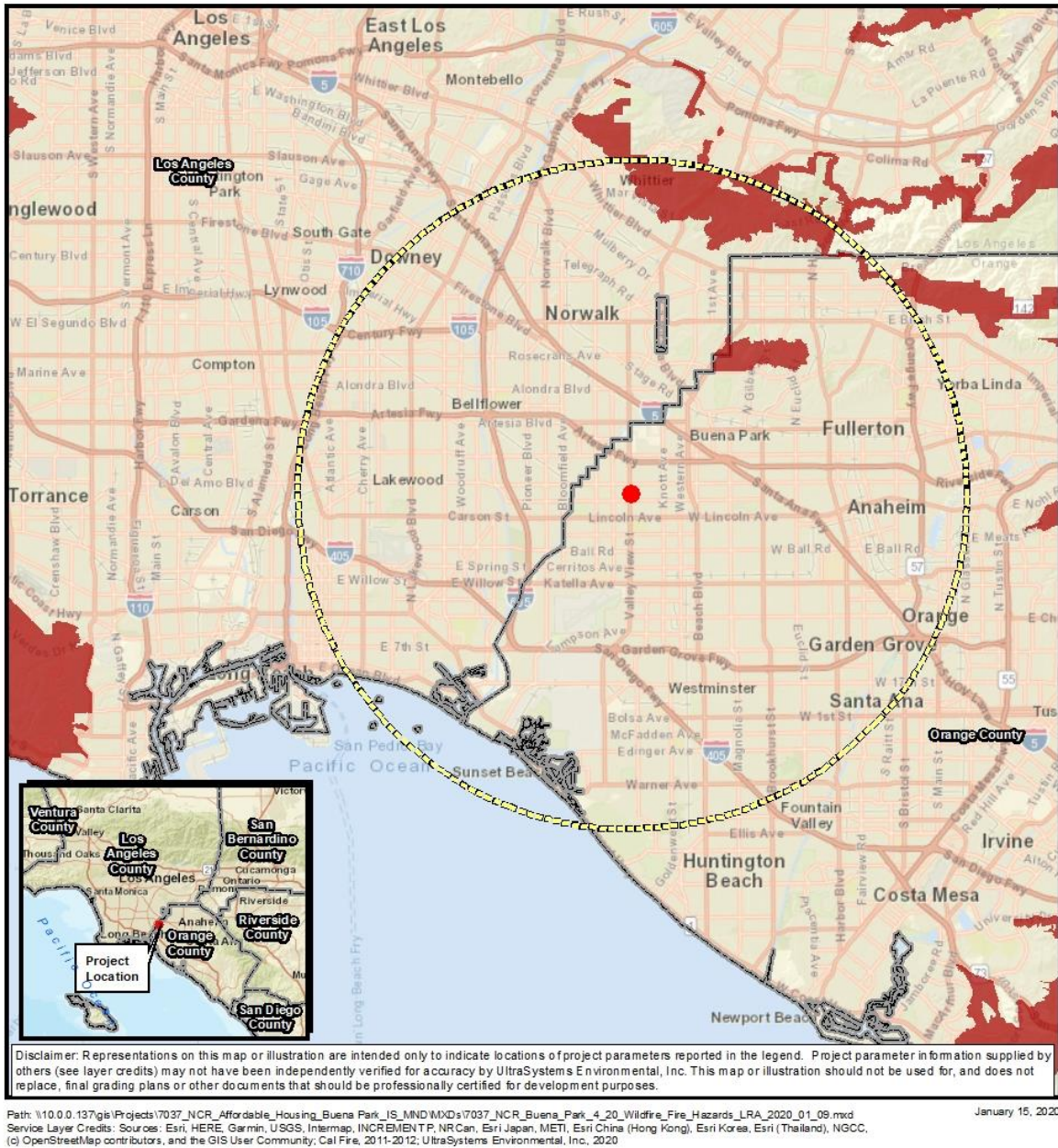
**Orchard View Gardens Senior Apartment Homes**

Fire Hazard Severity Zone State Responsibility Area (SRA)





**Figure 4.9-3**  
**FIRE HAZARD SEVERITY ZONES – LOCAL RESPONSIBILITY AREA**



**4.10 Hydrology and Water Quality**

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

- a) **Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?**

**Less than Significant Impact**

The project site is currently developed with a mixture of asphalt pavement, landscape vegetation, structures, and approximately 0.75 acre of disturbed/bare ground (Google Earth Pro, 2019). Under existing conditions, stormwater runoff generated on the proposed project site is discharged as sheet



flow west of the site into the gutter on the east side of Valley View Street, flowing south and entering the storm drain system via a curb inlet north of the intersection of Valley View Street and Crescent Avenue. Water entering this curb inlet flows west beneath Crescent Avenue for approximately one mile and discharges into an existing Orange County Flood Control Department rectangular concrete flood control channel which, in turn, discharges into Moody Creek. Moody Creek is a tributary of Coyote Creek; Coyote Creek discharges into the San Gabriel River, which empties into the Pacific Ocean (OCFD, 2012), making these tributaries waters of the U.S. and State of California.

Section 303(d) of the federal Clean Water Act (33 U.S.C. § 1313) defines water quality standards as consisting of the uses of the surface (navigable) waters involved, the water quality criteria which are applied to protect those uses, and an antidegradation policy. Under the Porter-Cologne Water Quality Control Act (California Water Code, Division 7, Chapter 2 § 13050) the uses of waters and water quality criteria are separately considered as beneficial uses and water quality objectives. Beneficial uses and water quality objectives are to be established for all waters of the state, both surface and groundwater (SARWQCB, 1995, p. 3-1). The listing of waters within a basin attempts to include all significant surface streams and bodies of water, as well as receiving waters. Specific waters which are not listed have the same beneficial uses as the streams, lakes or reservoirs to which they are tributary or the groundwater basins or subbasin to which they are tributary or overlie (SARWQCB, 1995, p. 3-23). For example, Moody Creek is not listed within the Basin Plan as having designated beneficial uses; however, because Moody Creek is tributary to Coyote Creek, Moody Creek shares the beneficial uses designated for Coyote Creek.

Coyote Creek meanders across the boundary of two RWQCBs: The Santa Ana RWQCB (SARWQCB) and the Los Angeles RWQCB (LARWQCB). Within the boundary of the SARWQCB, Coyote Creek (and by extension, Moody Creek) has the designated existing beneficial uses of:

- **Municipal and Domestic Supply (MUN)** - waters which are used for community, military, municipal or individual water supply systems. These uses may include, but are not limited to, drinking water supply.
- **Water Contact Recreation (REC1: Primary Contact Recreation)** - waters which are used for recreational activities involving body contact with water where ingestion of water is reasonably possible. These uses may include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, whitewater activities, fishing, and use of natural hot springs.
- **Non-contact Water Recreation (REC2: Secondary Contact Recreation)** - waters which are used for recreational activities involving proximity to water, but not normally involving body contact with water where ingestion of water would be reasonably possible. These uses may include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing and aesthetic enjoyment in conjunction with the above activities.
- **Warm Freshwater Habitat (WARM)** - waters which support warmwater ecosystems that may include, but are not limited to, preservation and enhancement of aquatic habitats, vegetation, fish and wildlife, including invertebrates.

- **Wildlife Habitat (WILD)** - waters which support wildlife habitats that may include, but are not limited to, the preservation and enhancement of vegetation and prey species used by waterfowl and other wildlife.
- **Rare, Threatened or Endangered Species (RARE)** - waters which support the habitats necessary for the survival and successful maintenance of plant or animal species designated under state or federal law as rare, threatened or endangered (SARWQCB, 1995, pp. 3-3 and 3-4).

Within the boundary of the LARWQCB, Coyote Creek has the designated existing beneficial use of RARE, and the designated potential beneficial uses of MUN, WARM, WILD (LARWQCB, 1994, p. 2-14). The LARWQCB has also designated the following potential beneficial uses for Coyote Creek within their boundary:

- **Industrial Service Supply (IND)** includes uses of water for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well re-pressurization.
- **Industrial Process Supply (PROC)** includes uses of water for industrial activities that depend primarily on water quality (LARWQCB, 1994, pp. 2.-4 and 2-14).

Development of the project has the potential to result in two types of water quality impacts: (1) short-term impacts due to construction-related discharges; and (2) long-term impacts from operation. Soil disturbance would temporarily occur during project construction, due to earth-moving activities such as excavation and trenching for foundations and utilities, soil compaction and moving, cut and fill activities, and grading. Disturbed soils are susceptible to high rates of erosion from wind and rain, resulting in sediment transport via stormwater runoff from the project area. Erosion and sedimentation affect water quality through interference with photosynthesis, oxygen exchange and respiration, growth, and reproduction of aquatic species.

Runoff from construction sites may include sediments and contaminants such as oils, fuels, paints, solvents, suspended solids, sediments, nutrients, heavy metals, pathogens, and trash and debris. Pollutants such as nutrients, trace metals, hydrocarbons, and bacteria can attach to sediment and be carried by stormwater into local storm drains which ultimately discharge into the Pacific Ocean.

### **Construction Pollutants Control**

Temporary impacts to water quality, such as those described above, could occur during construction of the project. Project construction would require ground-disturbing activities and clearing of existing vegetation and paving (see **Section 3.0, Project Description**), and grading for construction of building foundations. Disturbed soils accelerate erosion and increase sediment in stormwater runoff to receiving waters, causing increased turbidity and sedimentation. Additionally, fuel, oil, and other fluids used in construction vehicles, equipment, and heavy machinery could leave the site, enter the storm drain system and create or add to contaminant loads in Coyote Creek and the San Gabriel River.

The project proposes to subdivide the existing parcel (APN 039-283-25) into two new parcels. The southern parcel (Parcel 1) would maintain St. Joseph's Episcopal Church and surface parking on 1.44 acres. The newly created 1.76-acre parcel occupying the eastern and northern portion of the site (Parcel 2) would be developed with the proposed project. Dischargers whose projects disturb one (1) or more acres of soil are required to obtain coverage under the General Permit for Discharges of

Storm Water Associated with Construction Activity, Construction General Permit Order 2009-0009-DWQ (as amended; Construction General Permit). Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility (SWRCB, 2020).

The Construction General Permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer (QSD). The SWPPP would site-specific construction stormwater BMPs which would be implemented as part of project design, and maintained or replaced as necessary. These BMPs would minimize or avoid erosion through wind or stormwater, and would also minimize or avoid sediment- or pollutant-laden stormwater from leaving the construction site and entering receiving waters (e.g., Moody Creek, Coyote Creek). For these reasons, potential violations of water quality standards or waste discharge requirements during construction would be less than significant.

### **Operational Pollutant Controls**

In 2009 the SARWQCB issued Order No. R8-2009-0030/NPDES No. CAS618030 (as amended by Order No. R8-2010-0062), Waste Discharge Requirements for the County of Orange, Orange County Flood Control District, and the Incorporated Cities of Orange County within the Santa Ana Region Areawide Urban Storm Water Runoff for Orange County (MS4); the City of Buena Park is a signatory to this MS4. The MS4 regulates the discharge of pollutants in urban storm water runoff from anthropogenic (generated from human activities) sources and/or activities within the jurisdiction and control of the permittees own and operate storm drains, including flood control facilities (SARWQCB, 2009, p. 3).

Pursuant to the MS4, MS4 requires new development and significant redevelopment projects to develop a Water Quality Management Plan (WQMP) that incorporates post-construction low-impact development (LID) BMPs to reduce the quantity of rainfall runoff and improve the quality of water that leaves a site. LID is a leading stormwater management strategy that seeks to mitigate the impacts of runoff and stormwater pollution as close to its source as possible. LID comprises a set of site design approaches and structural BMPs that are designed to address runoff and pollution at the source. Structural LID BMPs can effectively remove nutrients, bacteria, and metals while reducing the volume and intensity of stormwater flows.

The Preliminary WQMP (RRM Design Group, 2020; see **Appendix F**) describes non-structural LID BMPs (e.g., common area litter control and landscape management; education for property owners, tenants, and occupants) and structural LID BMPs (e.g., trash/waste storage areas which reduce introduction of pollution, use of efficient irrigation systems, water conservation) for the proposed project (RRM Design Group, 2020, p. 14)

The project would consist of three drainage management areas (DMAs): DMA-A drains the north and west portions of the project (a drainage area of 0.46 acre), DMA-B drains the southwest section of the project (drainage area of 0.30 acre) and DMA-C drains the south-central section of the project (drainage area of 0.48 acre) (RRM Design Group, 2020, Attachment C). Bioretention without underdrains have been chosen for the site due to the shallow groundwater depth and lack of nearby storm drain connections. Runoff from each DMA would flow overland and drain into their respective BMP (refer to Attachment C of the Preliminary WQMP, located in **Appendix F** of this document).

*Bioretention* stormwater treatment facilities are landscaped shallow depressions that capture and filter stormwater runoff. These facilities function as a soil and plant-based filtration device that removes pollutants through a variety of physical, biological, and chemical treatment processes. The facilities normally consist of a ponding area, mulch layer, planting soils, and plants. As stormwater passes down through the planting soil, pollutants are filtered, adsorbed, and biodegraded by the soil and plants (RRM Design Group, 2020, Attachment B). Due to the limited available area and shallow groundwater depth at the site, the proposed bioretention facilities do not provide sufficient capture volume. Supplemental gravel storage has been designed to meet the required Design Capture Volume for the entire site (RRM Design Group, 2020, p. 19).

- Runoff from DMA 'A' will flow into a bio-retention area (INF-3) for treatment. Overflow from the basin will outlet through the curb on Valley View Street and enter the municipal storm drain system through inlets located at the intersection of Valley View Street and Crescent Avenue.
- Runoff from DMA 'B' will flow south-west into a bioretention area (INF-3) for treatment. Overflow from the basin will flow out through the curb on Valley View Street and enter the municipal storm drain system through inlets located at the intersection of Valley View Street and Crescent Avenue.
- Runoff from DMA 'C' will flow south-east into a bioretention area (INF-3) for treatment. Overflow from the basin will flow onto the adjacent parking lot to the south and enter the curb and gutter along Valley View Street as it did historically. Eventually runoff will enter the municipal storm drain system through inlets located at the intersection of Valley View Street and Crescent Avenue.

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

### **Less than Significant Impact**

#### **Construction**

Construction of the proposed project would use only a minimal amount of water, for purposes such as dust control, from readily available public sources. This water use would be temporary and would not require the substantial use of groundwater. Once construction is completed, the project would be connected to municipal water lines. Project construction would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge. Therefore, impacts would be less than significant.

#### **Operation**

The City's main source of water supply is groundwater from the Coastal Plain of Orange County Groundwater Basin (Basin 8-001). As of 2015, the city relies on approximately 73 percent groundwater and 27 percent imported water (Arcadis, 2016, p. 3-14) for drinking water supply. The City's projected water supply from 2020 through 2040 is provided in **Table 4.19-1**, in the Utilities and Service Systems section of this document. The City's 2015 Urban Water Management Plan (UWMP) states that the City of Buena Park will be able to have adequate water supplies for all users, including multi-family residences, through the year 2040 (Arcadis, 2016, p. 2-8). In addition, the LID



BMPs described in Section 4.10 (a) would retain most stormwater runoff generated onsite and allow it to percolate through the soil and add to the volume of the aquifer. Therefore, impacts would be less than significant.

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

i) **Result in substantial erosion or siltation on or offsite;**

**Less Than Significant Impact**

**Construction**

During project construction the drainage pattern of the site would be altered; however, due to the location and nature of the proposed project, this alteration would be temporary. The project would be required to obtain coverage under the Statewide General Construction Permit through preparation and implementation of a SWPPP specifying construction stormwater BMPs to be implemented to control erosion and protect the quality of surface water runoff from the project site. The SWPPP must be prepared before the project owner receives a grading or building permit and must be implemented year-round throughout construction. Project compliance with regulatory requirements would reduce potential erosion/siltation impacts during the construction phase. Construction of the project would not result in substantial erosion or siltation, and potential impacts would be less than significant.

**Operation**

Operation of the proposed project would increase the amount of impervious surface, which would reduce the amount of erosion or siltation on and off the project site. Additionally, the proposed LID BMPs [refer to Section 4.10 a)] would capture sediment-laden stormwater and filter sediment before the stormwater enters the municipal storm water system.

With implementation of site-specific stormwater BMPs described in the required SWPPP and installation of LID BMPs as described in the WQMP (see **Appendix F**), potential impacts resulting in substantial erosion or siltation on or offsite would be less than significant and mitigation is not required.

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

**and**

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

**Less Than Significant Impact**

The proposed project would increase the area of impervious surfaces compared to existing conditions. As described in the WQMP (see **Appendix F**), 27.1 percent of the project site is comprised

of impervious areas under existing conditions. With implementation of the proposed project, the impervious area would increase to 75 percent of the site (RRM Design Group 2020, p. 5).

The project design would include structural LID BMPs that would capture and retain stormwater generated on the project site; only precipitation events that exceed the 85<sup>th</sup> percentile event would overflow the retention and infiltration systems and directly enter the municipal storm drain system. The structural LID BMPs have been designed to capture stormwater generated by the 24-hour storm event (0.9 inches) for the project area (refer to the Preliminary WQMP in **Appendix F**).

Installation and maintenance of the structural LID BMPs described in the WQMP would reduce the volume of stormwater runoff leaving the project site. Therefore, the potential for the proposed project to create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff is less than significant and mitigation is not required.

**iv) Impede or redirect flood flows?**

**Less than Significant Impact**

The project site is located in Zone X, *Areas determined to be outside the 0.2% annual chance [500-year] floodplain*, as shown on the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM) Map Number 06059C0109J (FEMA, 2009; see **Figure 4.10-1**). The 500-year Flood Zone describes a flood event that has a 0.2 percent chance of occurring in any year. The proposed project would not impede or redirect flood flows because the project site is not adjacent to any open bodies of water. The nearest body of water is Moody Creek, approximately 0.35-mile northwest of the project site. The potential for the project to impede or redirect flood flows is less than significant and mitigation is not required.

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

**No Impact**

**Flood Hazard**

As discussed above, the project site is outside of the 500-year flood zone and is not anticipated to become inundated due to flood. Additionally, the project site is not adjacent to an open body of water. Therefore, there would be no impact in this regard.

**Tsunami**

A tsunami is a sea wave (or series of waves) of local or distant origin that results from large-scale seafloor displacements associated with large earthquakes, major submarine slides, or exploding volcanic islands (California Seismic Safety Commission, 2020). The project is not located within a tsunami inundation zone (CGS, 2020). The closest tsunami inundation zone is in Long Beach, approximately 7.75 miles to the southwest. Therefore, there would be no impact in this regard.

### **Seiche Zones**

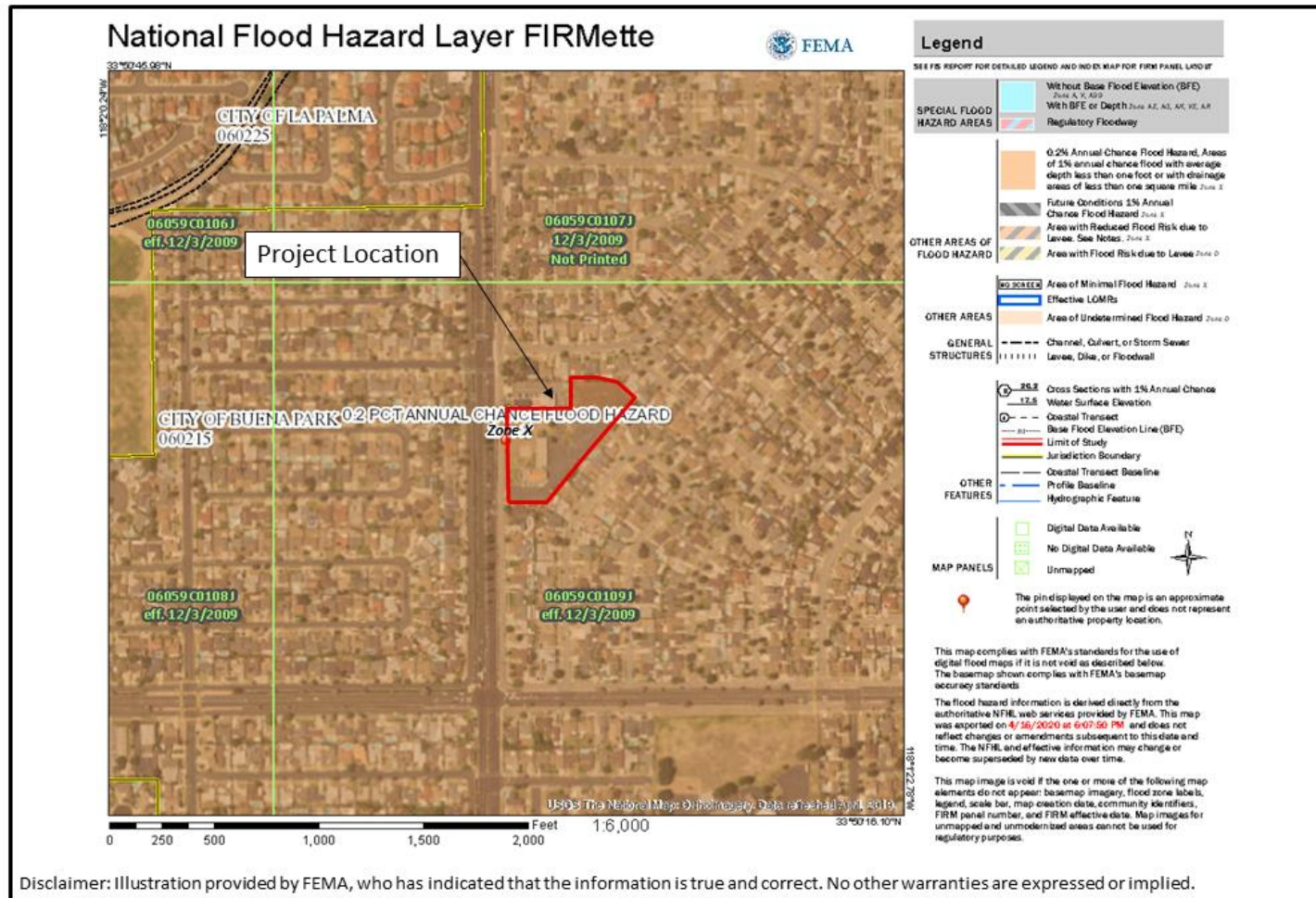
A seiche is an oscillating wave caused by wind, tidal forces, earthquakes, landslides and other phenomena in a closed or partially closed water body such as a river, lake, reservoir, pond, and other large inland water body. As mentioned above, the closest open body of water would be Moody Creek, approximately 0.35-mile northwest of the project site. Therefore, there would be no impact in this regard.

- e) **Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

### **Less than Significant Impact**

The California Porter-Cologne Water Quality Control Act (Porter-Cologne) defines water quality objectives as the “allowable limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area”. Thus, water quality objectives are intended to protect the public health and welfare, and to maintain or enhance water quality in relation to the existing and/or potential beneficial uses of the water. Water quality objectives apply to both waters of the United States and waters of the State.

**Figure 4.10-1  
FEMA FLOOD INSURANCE RATE MAP**



**Orchard View Gardens  
Senior Apartment Homes**

FEMA FIRM Map



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## ❖ SECTION 4.10 – HYDROLOGY AND WATER QUALITY ❖

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As required by Porter-Cologne, the State Water Resources Control Board (SWRCB) requires individual Regional Water Quality Control Boards (RWQCBs) to develop Water Quality Control Plans (Basin Plans), which are “designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. Specifically, the Basin Plan[s] (i) designates beneficial uses for surface and ground waters, (ii) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's antidegradation policy, and (iii) describes implementation programs to protect all waters in the Region[s]. In addition, the Basin Plan incorporates (by reference) all applicable State and Regional Board plans and policies and other pertinent water quality policies and regulations” (LARWQCB, 2019).

The proposed project is under the jurisdiction of the Basin Plan of the SARWQCB. As discussed in Sections 4.10 a) and 4.10 b), the proposed project would not conflict with or obstruct implementation of the water quality control plans or sustainable groundwater management plans of the SARWQCB. Impacts would be less than significant, and mitigation is not required.

**4.11 Land Use and Planning**

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			X	

**a) Would the project physically divide an established community?****No Impact**

The project site is one contiguous, irregular shaped parcel with the southern portion of the site currently occupied by St. Joseph's Episcopal Church. The church is housed in a single building and surrounded by surface parking. The northern portion of the site is currently vacant. The project proposes to subdivide the existing parcel (APN 039-283-25) into two new parcels. The southern parcel (Parcel 1) would maintain St. Joseph's Episcopal Church and surface parking on 1.44 acres. The newly-created 1.76-acre parcel occupying the eastern and northern portion of the site (Parcel 2) would be developed with a primary residential apartment building and nine single story casitas accommodating 66 residential units and a 3,000 square foot community center. The project constitutes infill development on land currently developed with St. Joseph's Episcopal Church.

As a result of careful planning, the residential project would not be out of character with the surrounding area, which is comprised primarily of single-family residences. Development of the project site with residential buildings would be compatible with the established land use patterns in the area and would not physically divide an established community. The site currently has a wall along the northern, southern and eastern property lines and thus is not used for travel between surrounding areas.

The proposed development would not divide existing public spaces in the vicinity of the site or extend beyond the project site's boundaries. Furthermore, no streets or sidewalks would be permanently closed. The project would utilize existing roadways; thus, there would be no change in roadway patterns. No separation of uses or disruption of access between land use types would occur as a result of the project. Therefore, the project would not physically divide an established community and no impact would occur.

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

**Less than Significant Impact**

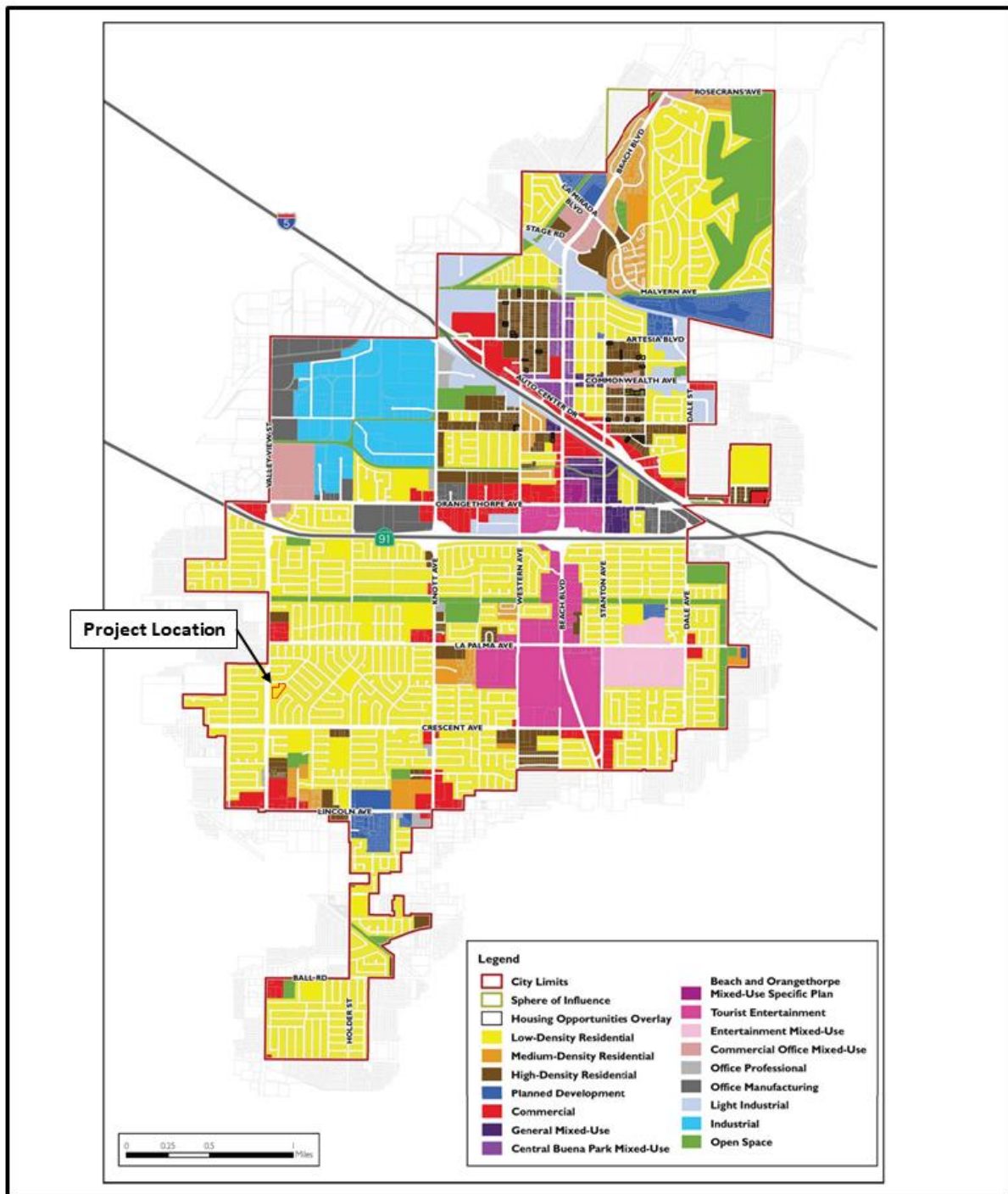
The General Plan land use designation for the project site is Low Density Residential (refer to **Figure 4.11-1**). The project is zoned Residential Single Family 6 (RS-6), allowing a base density of up to 7.26 dwelling units per acre (refer to **Figure 4.11-2**).

Based on the demographic of the residents that would live on site, the high percentage of one-bedroom units, parking utilization rates for similar senior rental projects within the region, and the availability of public transportation options at the site, the project applicant believes that the proposed parking ratio is appropriate for an income-restricted senior rental project.

The General Plan land use designation for the project site is Low Density Residential (refer to **Figure 4.11-1**). The project is zoned Residential Single Family 6 (RS-6), allowing a base density of up to 7.26 dwelling units per acre (refer to **Figure 4.11-2**). A General Plan amendment to High Density Residential and Zone change to Medium-Density Multifamily Residential (RM-20) is required to accommodate the proposed project. The project would also necessitate a Tentative Parcel Map to divide the one parcel into two. The project proposes modification to Use Permit U-272 to reflect the updated property lines and parking spaces required to accommodate the proposed project.

The project would be developed in compliance with the development standards and provisions under the proposed RM-20 zone. As a result, the project would have less than significant impacts in relation to consistency with local land use plans, policies, or regulations.

**Figure 4.11-1**  
**PROJECT SITE CURRENT GENERAL PLAN LAND USE DESIGNATIONS**



Disclaimer: Illustration provided by City of Buena Park, who has indicated that the information is true and correct. No other warranties are expressed or implied.

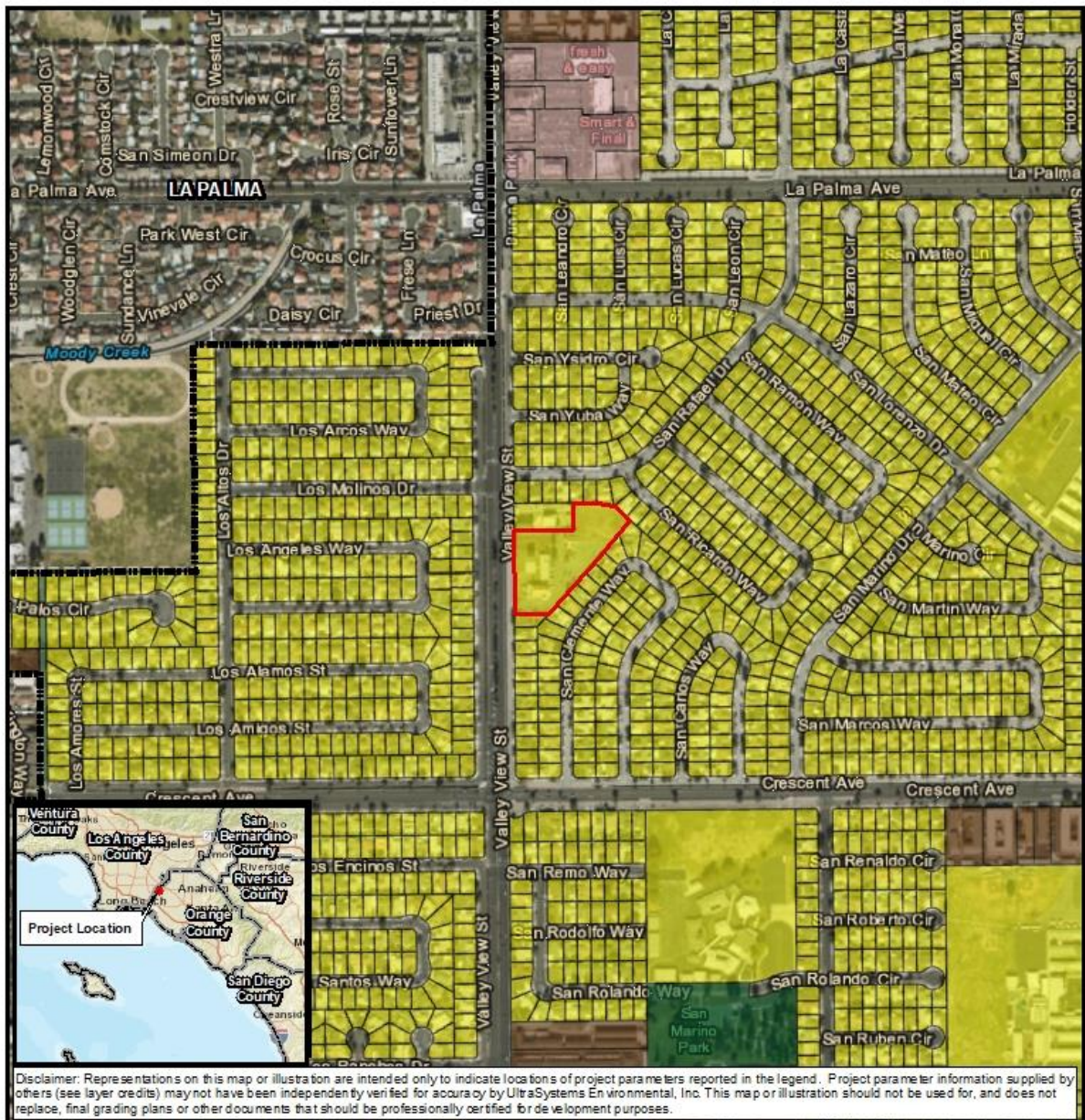
Source: City of Buena Park, 2010.



**Orchard View Gardens**  
**Senior Apartment Homes**  
 General Plan Land Use Designation



**Figure 4.11-2**  
**PROJECT SITE ZONING DESIGNATION**



Path: \\gis\env\GIS\Projects\7037\_NCR\_Affordable\_Housing\_Buena\_Park\_IS\_MND\MXDs\7037\_NCR\_Buena\_Park\_2\_0\_Zoning\_2020\_02\_18.mxd  
 February 25, 2020  
 Service Layer Credits: Buena Park, Norm Wray, Brady Woods, Swati Meshram, Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS User Community, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community; City of Buena Park, June 2019; UltraSystems Environmental, Inc., 2020

Scale: 1:7,200



0 300 600 Feet

0 70 140 Meters

#### Legend



Project Boundary

City Boundary

City of Buena Park Zoning Designation



CS: Community Shopping

RM 20: Medium Density Multifamily Residential

RS-6: One Family Residential

OR: Recreational Space

**Orchard View Gardens  
Senior Apartment Homes**

Zoning Designation



**4.12 Mineral Resources**

<b>Would the project:</b>	<b>Potentially Significant Impact</b>	<b>Less than Significant Impact with Mitigation Incorporated</b>	<b>Less than Significant Impact</b>	<b>No Impact</b>
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				<b>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>

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

b) **Would the project 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**

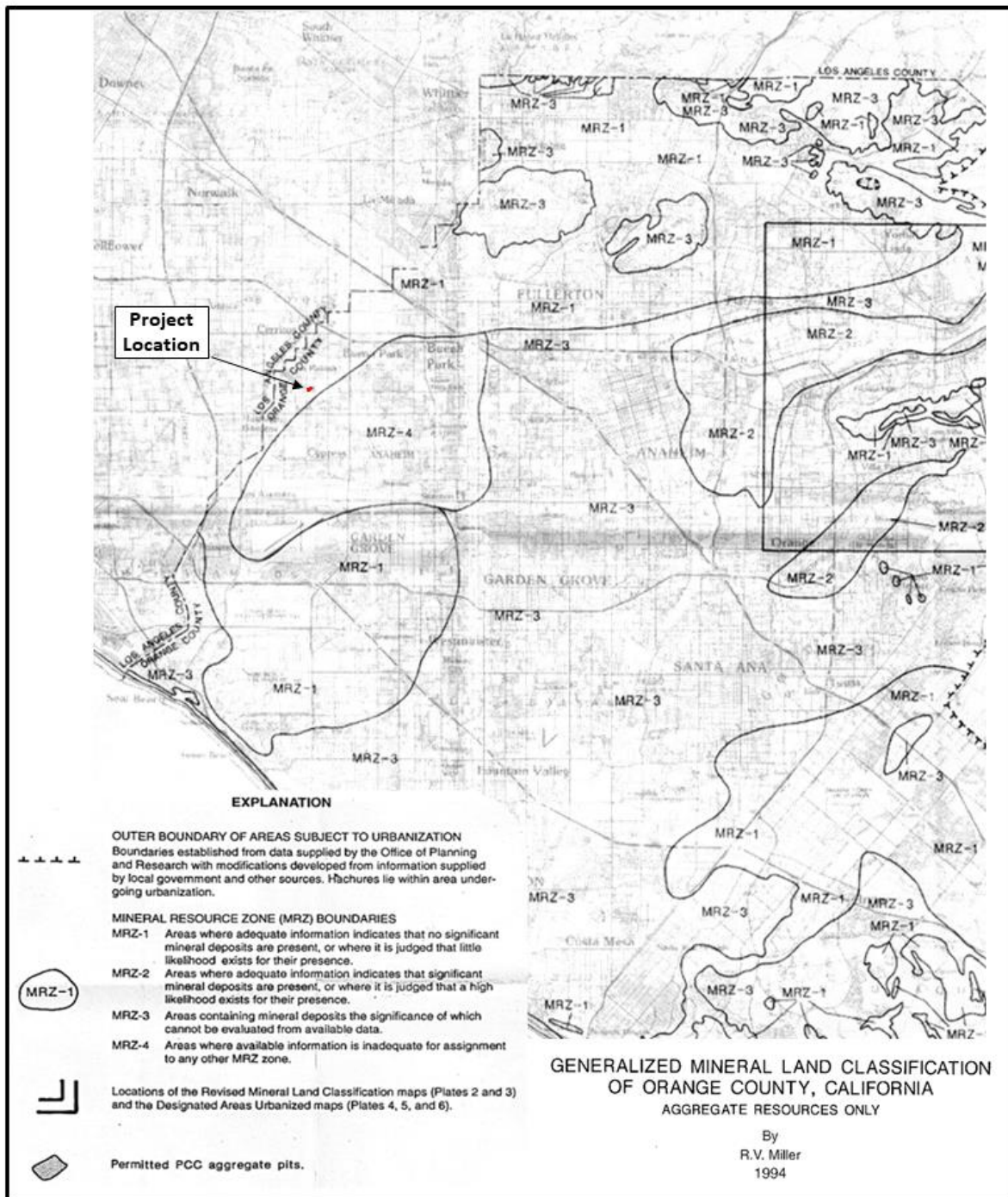
Assessment of mineral resources is based on the State of California's Mineral Land Classification/Designation Program established after the adoption of the Surface Mining and Reclamation Act (SMARA) in 1975. The primary objectives of SMARA are the assurance of adequate supplies of mineral resources important to California's economy and the reclamation of mined lands. These objectives are implemented through land use planning and regulatory programs administered by local government with the assistance of the Department of Conservation's California Geological Survey (CGS). Information on the location of important mineral deposits is developed by the CGS through a land use planning process termed mineral land classification.

As detailed on the SMARA Mineral Land Classification of the Greater Los Angeles Area: Classification of Sand and Gravel Resource Areas, Orange County-Temescal Valley Production-Consumption Region (DOC, 1995), the project site is classified within SMARA-designated Mineral Resource Zone-1. MRZ-1 is defined as area where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence. (Refer to **Figure 4.12-1**.) According the Buena Park General Plan EIR, there are no significant mineral resources in the City (RBF Consulting, 2010b). Moreover, according to the Department of Conservation Division of Oil, Gas, & Geothermal Resources Well Finder (DOC, 2019), the only oil and gas well within one mile of the project site is a plugged well approximately 0.6 mile to the southwest (Refer to **Figure 4.12-2**). No oil or gas wells were identified on the project site.

For these reasons the project would have no impact on: (1) the availability of known mineral resources of value to the region or state residents; or (2) a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.



**Figure 4.12-1  
MINERAL RESOURCES**



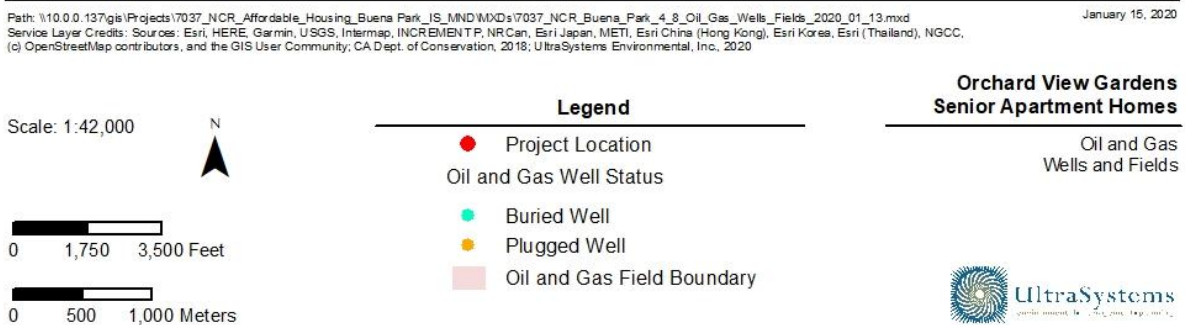
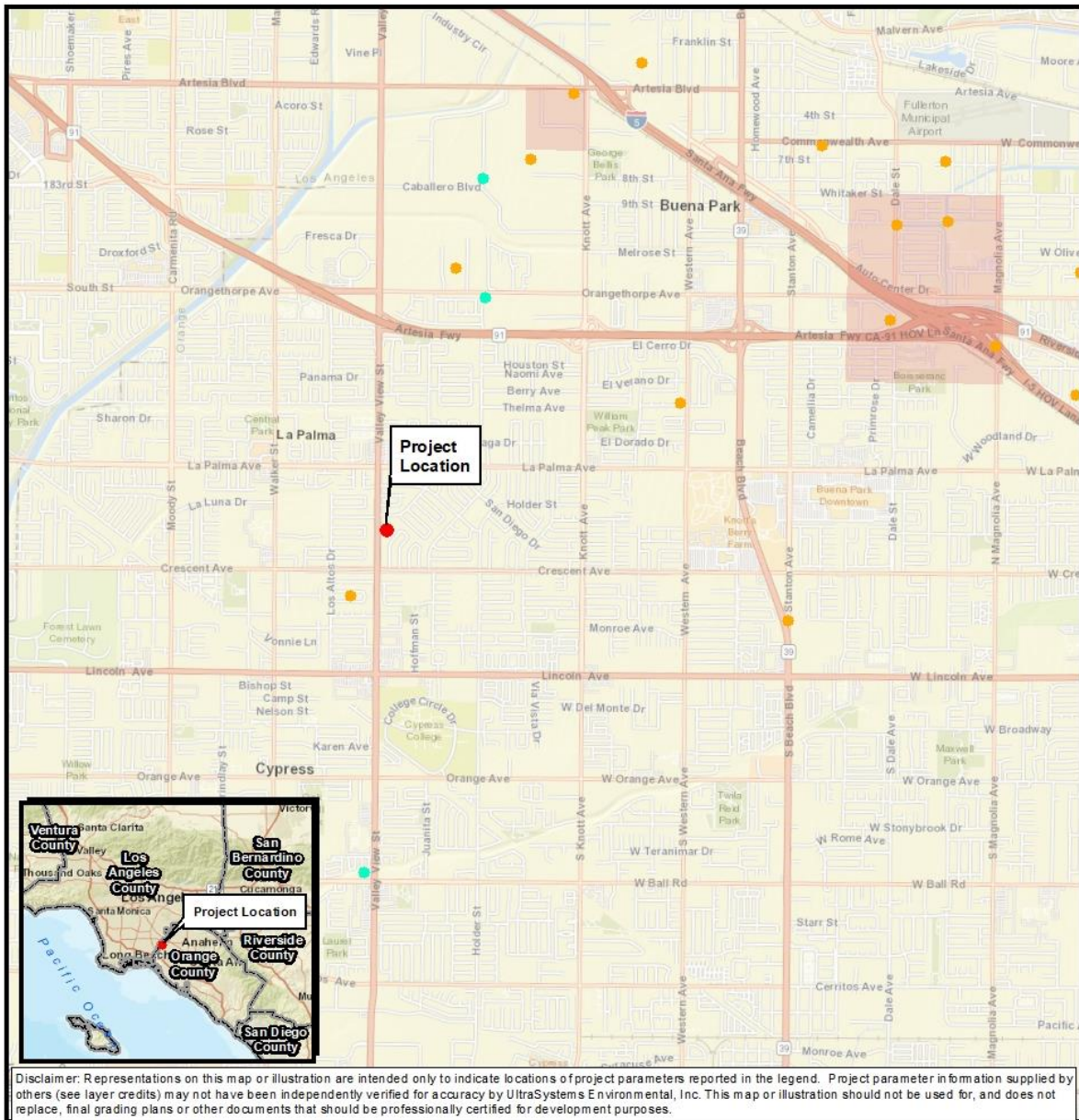
Disclaimer: Illustration provided by the California Department of Conservation, who has indicated that the information is true and correct. No other warranties are expressed or implied.

Source: Miller, Russell V. 1994.



**Orchard View Gardens  
Senior Apartment Homes**  
Mineral Land Classification

**Figure 4.12-2**  
**OIL AND GAS WELLS**





## 4.13 Noise

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

### 4.13.1 Characteristics of Sound

Sound is a pressure wave transmitted through the air. It is described in terms of loudness or amplitude (measured in decibels), frequency or pitch (measured in hertz or cycles per second), and duration (measured in seconds or minutes). The decibel (dB) scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Because the human ear is not equally sensitive to all frequencies, a special frequency-dependent rating scale is used to relate noise to human sensitivity. The A-weighted decibel scale (dBA) provides this compensation by discriminating against upper and lower frequencies in a manner approximating the sensitivity of the human ear. The scale is based on a reference pressure level of 20 micropascals (zero dBA). The scale ranges from zero (for the average least perceptible sound) to about 130 (for the average human pain level).

### 4.13.2 Noise Measurement Scales

Several rating scales have been developed to analyze adverse effects of community noise on people. Since environmental noise fluctuates over time, these scales consider that the effect of noise on people depends largely upon the total acoustical energy content of the noise, as well as the time of day when the noise occurs. Those that are applicable to this analysis are as follows:

- $L_{eq}$ , the equivalent noise level, is an average of sound level over a defined time period (such as 1 minute, 15 minutes, 1 hour or 24 hours). Thus, the  $L_{eq}$  of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure.

- $L_{90}$  is a noise level that is exceeded 90 percent of the time at a given location; it is often used as a measure of “background” noise.
- $L_{max}$  is the root mean square (RMS) maximum noise level during the measurement interval. This measurement is calculated by taking the RMS of all peak noise levels within the sampling interval.  $L_{max}$  is distinct from the peak noise level, which only includes the single highest measurement within a measurement interval.
- CNEL, the Community Noise Equivalent Level, is a 24-hour average  $L_{eq}$  with a 4.77-dBA “penalty” added to noise during the hours of 7:00 p.m. to 10:00 p.m., and a 10-dBA penalty added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime (Caltrans, 2013). The logarithmic effect of these additions is that a 60-dBA 24-hour  $L_{eq}$  would result in a calculation of 66.7 dBA CNEL.
- $L_{dn}$ , the day-night average noise, is a 24-hour average  $L_{eq}$  with an additional 10-dBA “penalty” added to noise that occurs between 10:00 p.m. and 7:00 a.m. The  $L_{dn}$  metric yields values within 1 dBA of the CNEL metric. As a matter of practice,  $L_{dn}$  and CNEL values are considered to be equivalent and are treated as such in this assessment.

#### 4.13.3 Existing Noise

The City of Buena Park’s General Plan lists sensitive receptors as locations where human populations (especially children, senior citizens, and sick persons) are present, and where there is a reasonable expectation of continuous human exposure to noise such as schools, playgrounds, athletic facilities, hospitals, rest homes, rehabilitation centers, long-term care, and mental care facilities, day care centers, single-family dwellings, mobile home parks, churches, and libraries (RBF Consulting, 2010a, p. 8-27). Additionally, the City’s Municipal Code has noise controls that are applicable to the proposed project, which require residential acoustical designs to not exceed significant noise exposure. The nearest sensitive receivers to the project are St. Joseph’s Episcopal Church on the project site; the single-family residences that surround the project site to the north, south, east, and west; and the Ban Suk Methodist Church to the north of the project site. In most places where residential properties abut the project site there is an intervening 5.25- to 5.75-foot-high concrete block wall. Sensitive receivers are shown in **Figure 4.13-1**. **Table 4.13-1** summarizes information about them.

**Figure 4.13-1**  
**SENSITIVE RECEIVERS AND AMBIENT NOISE MONITORING LOCATIONS**



Path: \\10.0.0.137\gis\Projects\7037\_NCR\_Affordable\_Housing\_Buena Park\_IS\_MND\MXD\7037\_NCR\_Buena\_Park\_Noise\_Sampling\_2020\_05\_20.mxd  
 Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community; UltraSystems Environmental, Inc., 2020

May 20, 2020

Scale: 1:1,600



0 60 120 Feet

0 10 20 Meters

#### Legend

- Project Boundary
- Sensitive Receiver (Residences)
- Ambient Noise Measurement Location
- Sensitive Receiver

#### Orchard View Gardens Senior Apartment Homes

Sensitive Receivers &  
Ambient Noise Measurement Locations



**Table 4.13-1**  
**SENSITIVE RECEIVERS IN PROJECT AREA**

Description	Location	Distance From Site Boundary (feet)	Nearest Ambient Sampling Point <sup>a</sup>	ID for Noise Impact Analysis <sup>b</sup>
St. Joseph's Episcopal Church	8300 Valley View Street	0	4	
Ban Suk Methodist Church	8246 Valley View Street	20	8	<b>A</b>
Single-family Residence (North)	6002 San Rafael Drive	125	8	<b>B</b>
Single-family Residence (North)	6042 San Rafael Drive	0	7	<b>C</b>
Single-family Residence (South)	8382 Valley View Street	20	4	
Single-family Residence (East)	8427 San Clemente Way	0	6	<b>D</b>
Single-family Residence (West)	8317 Valley View Street	200	8	
San Marino Elementary	6215 San Rolando Way	1,050	N/A	
San Marino Park	8700 Hoffman Street	1,800	N/A	
Assisted Living	6351 San Ruben Circle	2,360	N/A	

<sup>a</sup>See **Figure 4.13-1** for locations of ambient noise sampling points.

<sup>b</sup>See **Table 4.13-8**.

The predominant source of noise in the project area is traffic on local surface streets. The City's General Plan Noise Element reports results of traffic noise modeling of 24-hour average noise levels (as dBA CNEL) at 100 feet from the centerlines of roadway segments throughout the city in 2010 and in the buildout year of 2035. The project is along the modeled road segment of Valley View Street, between Crescent Avenue and La Palma Avenue. Modeled noise levels are shown in **Table 4.13-2**.

**Table 4.13-2**  
**MODELED 24-HOUR AVERAGE NOISE LEVELS IN PROJECT AREA**

Year	Valley View Street from Crescent Avenue to La Palma Avenue				
	ADT	dBA @100 Feet from Roadway Center	Distance from Roadway Centerline to: (Feet)		
			60 dBA CNEL Noise Contour	65 dBA CNEL Noise Contour	70 dBA CNEL Noise Contour
2010	40,000	70.2	1,245	394	125
2035	52,408	71.4	1,630	515	163

ADT= average daily trips; dBA= A-weighted decibels; CNEL= community noise equivalent level.

**Source:** RBF Consulting 2010a, City of Buena Park Noise Element, Table N-4, p. 8-10 and Table N-5, p. 8-15.

On January 24, 2020, 15-minute ambient noise level samples were obtained at 11 locations in the general area of the project, which are also shown in **Figure 4.131**. (See **Appendix G**.) Measurements were made between 8:58 a.m. and 2:56 p.m. As shown in **Table 4.13-3**, average short-term ambient noise levels ( $L_{eq}$ ) ranged from 44.7 to 64.6 dBA  $L_{eq}$ . The highest average noise level (64.6 dBA) was along San Clemente Way, a residential thoroughfare. All monitored noise levels were within the range considered typical for the nearby land uses.



**Table 4.13-3  
AMBIENT NOISE MEASUREMENT RESULTS**

Point	Data Set	Sampling Time	Address	Sound Level (dBA)			Notes
				L <sub>eq</sub>	L <sub>max</sub>	L <sub>90</sub>	
1	S137	0859-0914	6062 San Rafael Drive	53.9	69.4	43.5	In front of single-family residence north of project site.
2	S138	0921-0936	8427 San Clemente Way	48.8	65.4	41.2	In front of single-family residence southeast of project site.
3	S139	0941-0956	8443 San Clemente Way	64.6	85.1	41.7	In front of single-family residence southeast of project site.
4	S140	1047-1102	8300 Valley View Street	55.9	72.6	45.0	Inside project boundary along south side project site.
5	S141	1109-1124	8300 Valley View Street	49.6	59.1	43.4	Inside project boundary, behind single-family residence southeast of project site.
6	S142	1133-1148	8300 Valley View Street	44.7	52.5	40.4	Inside project boundary, behind single-family residence southeast of project site.
7	S143	1152-1207	8300 Valley View Street	46.5	58.1	41.8	Inside project boundary, behind single-family residence north of project site.
8	S144	1213-1228	8246 Valley View Street	60.5	76.7	50.0	Inside project boundary, adjacent to Ban Suk Church north of project site.
9	S145	1403-1418	6062 San Rafael Drive	54.9	66.4	47.6	In front of single-family residence north of project site.
10	S146	1425-1440	8427 San Clemente Way	49.1	60.4	43.0	In front of single-family residence southeast of project site.
11	S147	1442-1457	8443 San Clemente Way	50.3	64.7	45.3	In front of single-family residence southeast of project site.

#### 4.13.4 Regulatory Setting

##### State of California

The California Department of Health Services (DHS) Office of Noise Control has studied the correlation of noise levels with effects on various land uses. (The Office of Noise Control no longer exists). The most current guidelines prepared by the state noise officer are contained in the “General Plan Guidelines” issued by the Governor’s Office of Planning and Research in 2003 and reissued in

2017 (Governor’s Office of Planning and Research, 2017). These guidelines establish four categories for judging the severity of noise intrusion on specified land uses:

- **Normally Acceptable:** Is generally acceptable, with no mitigation necessary.
- **Conditionally Acceptable:** May require some mitigation, as established through a noise study.
- **Normally Unacceptable:** Requires substantial mitigation.
- **Clearly Unacceptable:** Probably cannot be mitigated to a less-than-significant level.

The types of land uses addressed by the state standards, and the acceptable noise categories for each, are presented in **Table 4.13-4**. There is some overlap between categories, which indicates that some judgment is required in determining the applicability of the numbers in a given situation.

Title 24 of the California Code of Regulations requires performing acoustical studies before constructing dwelling units in areas that exceed 60 dBA  $L_{dn}$ . Given the General Plan modeling results shown in **Table 4.13-2**, the entire project site is within a 60 dBA CNEL contour. Most of the site is already within the 65 dBA CNEL, and all will be by 2035. In addition, the California Noise Insulation Standards identify an interior noise standard of 45 dBA CNEL for new multi-family residential units. Local governments frequently extend this requirement to single-family housing.

**Table 4.13-4**  
**CALIFORNIA LAND USE COMPATIBILITY FOR COMMUNITY NOISE SOURCES**

Land Use Category	Noise Exposure (dBA, CNEL)					
	55	60	65	70	75	80
Residential – Low-Density Single-Family, Duplex, Mobile Homes						
Residential – Multiple Family						
Transient Lodging – Motel, Hotels						
Schools, Libraries, Churches, Hospitals, Nursing Homes						
Auditoriums, Concert Halls, Amphitheaters						
Sports Arena, Outdoor Spectator Sports						
Playgrounds, Neighborhood Parks						
Golf Courses, Riding Stables, Water Recreation, Cemeteries						
Office Buildings, Business Commercial and Professional						
Industrial, Manufacturing, Utilities, Agriculture						
	<b>Normally Acceptable:</b> Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.					
	<b>Conditionally Acceptable:</b> New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply system or air conditioning will normally suffice.					
	<b>Normally Unacceptable:</b> New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.					
	<b>Clearly Unacceptable:</b> New construction or development should generally not be undertaken.					

**Source:** Governor's Office of Planning and Research, 2017.

## City of Buena Park

### General Plan Noise Element

The Noise Element of the City of Buena Park General Plan (RBF Consulting, 2010a) identifies sources of noise in the City and provides objectives and policies that ensure that noise from various sources would not create an unacceptable noise environment. **Table 4.13-5** shows the City's guidelines for interior and exterior noise exposure, by land use.

**Table 4.13-5**  
**CITY OF BUENA PARK GENERAL PLAN INTERIOR AND EXTERIOR NOISE STANDARDS**

Land Use	Noise Level (dBA) at Property Line	Time Period
<b>Exterior Noise Limits</b>		
Residential	55	7:00 a.m. – 10:00 p.m.
	50	10:00 p.m. – 7:00 a.m.
<b>Interior Noise Limits</b>		
Residential	50	7:00 a.m. – 10:00 p.m.
	45	10:00 p.m. – 7:00 a.m.

Source: RBF Consulting, 2010a, p. 8-7.

For a multi-family housing development such as the proposed project, exterior noise levels of 65 dBA CNEL or less are desirable. As mentioned in the General Plan, the City sets forth requirements for the insulation of multiple-family residential dwelling units from excessive and potentially harmful noise. Whenever multiple-family residential dwelling units are proposed in areas with excessive noise exposure, the developer must incorporate construction features into the building's design that reduce interior noise levels to 45 dBA CNEL (RBF Consulting 2010a, p. 8-5).

The General Plan Noise Element has the following applicable goals and associated policies for addressing noise issues in the community (RBF Consulting, 2010a, p. 8-29):

***Goal N-1: Appropriate Federal, State, and City Standards, guidelines, and ordinances for noise control implemented and enforced throughout the City.***

- Policy N-1.3 Adhere to the City's Municipal Code Standards and planning guidelines that include noise control for the interior space of residential developments.
- Policy N-1.6 Conform to the noise attenuation standards sets forth in the Airport Environs Land Use Plan (AELUP) for residential, commercial, and industrial development within the Fullerton Municipal Airport and Los Alamitos Joint Forces Training Center planning areas.

***Goal N-2: Minimized noise levels from construction and maintenance equipment, vehicles, and activities.***

- Policy N-2.1: Regulate construction activities to ensure all noise associated with construction activities [complies] with the City's Noise Ordinance.
- Policy N-2.2: Employ construction noise reduction methods to the maximum extent feasible. These measures may include, but [are] not limited to, shutting off idling equipment, installing temporary acoustic barriers around stationary construction noise sources,



maximizing the distance between construction equipment staging areas and occupied sensitive receptor areas, and use of electric air compressors and similar power tools, rather than diesel equipment.

Policy N-2.3: Require municipal vehicles and noise-generating mechanical equipment purchased or used by the City to comply with noise standards specified in the City's Municipal Code, or other applicable codes.

Policy N-2.5: Ensure acceptable noise levels are maintained near schools, hospitals, convalescent homes, churches, and other noise sensitive areas.

***Goal N-3: Consideration of noise [effects] in the land use planning process.***

Policy N-3.1: Fully integrate noise considerations into land use planning decisions to prevent new noise/land use conflicts.

Policy N-3.2: Consider the compatibility of proposed land uses with the noise environment when preparing, revising, or reviewing development proposals.

Policy N-3.3: Adhere to the City's Municipal Code Standards and planning guidelines that include noise control for the interior space of new residential developments within noise impacted areas (noise control practices include installing thick glass windows, restricting the hours of construction, double glazing, façade treatment, installing and maintaining mufflers, erecting noise barriers, etc.).

Policy N-3.4: Permit only those new development or redevelopment projects that have incorporated appropriate mitigation measures, so that standards contained in the Noise Element or adopted ordinance are met.

Policy N-3.5: Encourage proper site planning and architecture to reduce noise impacts.

Policy N-3.6: Discourage the development of sensitive uses in areas in excess of 65 dBA CNEL without appropriate mitigation.

Policy N-3.7: Require all residential units be attenuated to comply with the City's Noise Ordinance.

Policy N-3.9: Incorporate noise reduction features for items such as but not limited to parking and loading areas, ingress/egress point, HVAC units, and refuse collection areas, during site planning to mitigate anticipated noise impacts on affected noise sensitive land uses.

Policy N-3.14: Conform to the noise attenuation standards set forth in the Airport Environs Land Use Plan (AELUP) for residential, commercial, and industrial development, within the Orange County Airport Land Use Commission's planning area boundaries for the Fullerton Municipal Airport and Los Alamitos Joint Forces Training Base.

***Goal N-4: Ambient noise conditions in sensitive land use are maintained and/or improved.***

Policy N-4.1: Identify and reduce or eliminate unnecessary noise near noise sensitive areas (such as parks, residential areas, hospitals, libraries, convalescent homes, etc.) to meet established regulations outlined in the City's Municipal Code.

Policy N-4.2: Encourage the use of noise absorbing materials in existing and new development to reduce interior noise impacts to sensitive land uses.

To the extent that the foregoing applies to the proposed project, the project design and operational characteristics are compatible with the Noise Element's goal, objectives and policies.

### **City of Buena Park Municipal Code**

The City of Buena Park's regulations with respect to noise are included in Municipal Code Chapter 8.28 (Noise) and 19.444 (Development Standards-Environmental Effect), Article X (Noise Control).<sup>27</sup> The regulations include regulations for noise levels within multi-family residential places as shown below.

Chapter 8.28 of the Municipal Code states the following:

- A. It is unlawful for any person to make or continue to make, or cause to be made or continued, within the city, any loud or unnecessary noise or any noise which may reasonably be anticipated to annoy, disturb, injure or endanger the comfort, repose, peace, health or safety of others, whether due to volume or duration, or both.
- B. Without limitation as to the types of noise-producing acts which are in violation of this section, noise produced by the following acts are declared to be loud, disturbing and unnecessary noise in violation of this section:<sup>28</sup>
  - 1. Radios and Other Amplified Music. Use or operation of, or permitting the use or operation of, any radio, CD player, television set, musical instrument, phonograph or other machine or device designed or intended to reproduce sound in such manner as to disturb the peace, quiet and comfort of residential inhabitants or at any time with louder volume than is necessary for convenient hearing by the person or persons who are in the room, vehicle, or chamber in which such machine or device is operating and who are voluntary listeners thereto. The operating of any such machine or device between the hours of ten p.m. and six a.m. in such a manner as to be plainly audible at a distance of fifty feet from the residential property line, or vehicle, in which it is located shall be prima facie evidence of a violation of this section;
  - 2. Loudspeakers and/or Amplifiers Upon Public Streets. Use or operation of, or permitting the use or operation of, any radio, CD player, television set, musical instrument, phonograph, loudspeaker, sound amplifier or other machine or device designed or intended to produce or reproduce sound which is audible upon the public streets for the purpose of commercial advertising or attracting the attention of the public to any thing or activity, or to any building or structure;
  - 3. Yelling, Shouting, Etc. Yelling, shouting, whistling or singing on the public streets between the hours of ten p.m. and six a.m., or at any time or place so as to annoy or disturb the quiet, comfort or repose of persons in any office or in any dwelling or residence, or of any persons in the vicinity;
  - 4a. Construction or Repair Activities. The performance of any construction or repair work of any kind upon, or excavating for, any building or structure, where any such work entails the use of any air compressor, jackhammer, power-driven drill, riveting machine, excavator, hand hammer on steel or iron, or any other machine, tool, device or equipment which makes loud noises to the disturbance of persons occupying sleeping quarters in a

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<sup>27</sup> <http://qcode.us/codes/buenapark/>

<sup>28</sup> Buena Park Municipal Code § 8.28.040.

dwelling, hotel, or apartment or other place of residence. The above use of machinery or equipment that produces such unnecessary noise shall be prohibited on any Sunday or any other day between the hours of eight p.m. and seven a.m. The provisions of this section do not apply to any person who performs any construction, repair or excavation pursuant to the express written permission of the city engineer. Upon receipt of an application in writing therefor, stating the reasons for the request and the facts upon which such reasons are based, the city engineer may grant such permission if the activity is not otherwise prohibited by this code and he or she finds that:

- a. The work proposed to be done is in the public interest, or
  - b. Hardship, or injustice or unreasonable delay would result from the interruption thereof during the hours and days specified above, or
  - c. The building or structure involved is devoted or intended to be devoted to a use immediately incidental to the public defense. Any person dissatisfied with the decision of the city engineer may forthwith appeal to the city manager by filing a written request for a hearing within seven calendar days of the city engineer's decision;
- 4b. The provisions of this subsection do not apply to the construction, repair, or excavation during prohibited hours as may be necessary for the preservation of life or property when such necessity arises during such hours as the offices of the city are closed or where such necessity requires immediate action prior to the time at which it would be possible to obtain required permits; provided, that the persons doing such construction, repair or excavation obtain a permit therefor within one day after the office of the city engineer is first opened subsequent to the undertaking of such construction, repair or excavation;
- 4c. The provisions of this subsection do not apply to construction, repair, or excavation by a public utility which is subject to the jurisdiction of the public utilities commission, provided such work is necessary for the immediate preservation of the public health, safety or welfare and where such necessity makes it necessary to construct, repair or excavate during the prohibited hours.
- 4d. The provisions of this subsection do not apply in any area of the city which is classified by the city's zoning ordinance as a manufacturing zone and which is not less than five hundred feet from any residential zone.
5. Rubbish Collection. The performance of any rubbish collection utilizing any mechanical equipment in any residential zone or within five hundred feet of any residential zone between the hours of eight p.m. and six a.m.;
6. Use of weedblowers, powered lawnmowers and/or other powered landscape maintenance equipment between the hours of eight p.m. to eight a.m. on any day.
- C. The provisions of this section are intended to supplement all other provisions of this chapter. Nothing in Section 8.28.010, 8.28.020 or 8.28.030 shall be deemed to preempt or preclude application of any of the provisions of this section. (Ord. 1369, 1998)

Chapter 19.444 of the Municipal Code states the following:

In addition to the requirements of Title 8,<sup>29</sup> the following noise standards shall be met where applicable:

A. Residential Acoustical Design

1. For all dwelling and group quarters, the development shall be designed to achieve:
  - a. Within each main building, a community noise equivalent level (CNEL) not exceeding 45 decibels;
  - b. In outdoor areas, a community noise equivalent level (CNEL) not exceeding 65 decibels, except that where it is not reasonably possible to achieve this objective, the development shall be designed to provide the lowest noise level reasonably possible within private open areas and/or common usable open areas of at least one hundred square feet per unit, with access to such area available to the residents of each unit.
2. Acoustical design and analysis shall be based upon the projected noise contours as shown in the noise element of the General Plan. For all new residential developments, an acoustical analysis shall be submitted to the City as follows:
  - a. For any residential development within a 60-dBA CNEL contour, an analysis by a professional architect, engineer, or building designer shall demonstrate that the required noise levels will be achieved.
  - b. For any residential development within a 65-dBA CNEL contour, or within either the moderate noise impact area or the significant noise impact area of the Fullerton Municipal Airport as shown in the noise element of the Buena Park General Plan, an analysis by a professional mechanical or acoustical engineer shall demonstrate that the required noise levels will be achieved. Prior to issuing a certificate of occupancy, the Building Official may require tests by a qualified acoustical technician to confirm that the noise reduction achieved is sufficient to meet the requirements of this section.

- B. Air Conditioning Equipment. Exterior air conditioning equipment, other than self-contained window-mounted units in single-family dwellings, shall have a sound rating number (SRN) no greater than 8.2 decibels, in accordance with ARI (Air Conditioning and Refrigeration Institute) Standard 270, or the equivalent.

#### 4.13.5 Significance Thresholds

This analysis incorporated is based upon the noise thresholds prescribed in Appendix G of the CEQA Guidelines, as amended (AEP, 2018), and shown as checklist questions a) through c) at the beginning of this section. There are normally two criteria for judging noise impacts. First, noise levels generated by the proposed project must comply with all relevant federal, state and local standards and regulations. The second measure of impact used in this analysis is the significant increase in noise levels above existing ambient noise levels as a result of the introduction of a new noise source. An increase in noise level due to a new noise source has a potential to adversely impact people.

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<sup>29</sup> Title 8 (Health, Safety and Welfare) of the City of Buena Park Municipal Code.



Based on the applicable noise regulations stated above, the proposed project would have a significant noise impact if it would:

- Conflict with applicable noise restrictions or standards imposed by regulatory agencies. Note that the City of Buena Park Municipal Code does not include specific noise level limits for construction activities.
- Cause the **permanent** ambient noise level at the property line of an affected land use to increase by 5 dBA CNEL or more.
- Contribute to a significant cumulative noise impact.

#### 4.13.6 Impact Analysis

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

#### Less than Significant Impact with Mitigation Incorporated

Noise impacts associated with housing projects include short-term and long-term impacts. Construction activities, especially heavy equipment operation, would create noise effects on and adjacent to the construction site. Long-term noise impacts include project-generated onsite and offsite operational noise sources. Onsite (stationary) noise sources from the apartment homes would include operation of mechanical equipment such as air conditioners, landscape and building maintenance. Offsite noise would be attributable to project-induced traffic, which would cause an incremental increase in noise levels within and near the project vicinity.

#### **Short-Term Construction Noise**

The construction of the proposed project may generate temporary increases in ambient noise levels that exceed the thresholds of significance for this analysis. Noise impacts from construction activities are a function of the noise generated by the operation of construction equipment and onroad delivery and worker commuter vehicles, the location of equipment, and the timing and duration of the noise-generating activities.

For the purpose of this analysis, it was estimated that the proposed project would be built in six phases,<sup>30</sup> which are listed in **Table 4.13-6**. Construction is anticipated to run from early January 2022 to early January 2023.

The types and numbers of pieces of equipment to be deployed during each construction phase were determined as part of the air quality and greenhouse gas emissions analyses for this project.<sup>31</sup> For each equipment type, the table shows an average noise emission level (in dB at 50 feet, unless otherwise specified) and a “usage factor,” which is an estimated fraction of operating time that the

30 A seventh phase, indoor painting, was not included in the noise analysis because of its low probability of adverse noise impact.

31 See Section 4.3 and Section 4.8.

equipment would be producing noise at the stated level. Equipment characteristics for the six phases are shown in **Table 4.13.6**.

**Table 4.13-6**  
**CONSTRUCTION EQUIPMENT CHARACTERISTICS**

Construction Phase	Equipment Type	Horse-power	No. of Pieces	Usage Factor	dBA @ 50 Feet
1 - Demolition	Excavators	158	2	0.4	80
	Other Construction Equipment <sup>a</sup>	172	1	0.4	90
	Rubber-Tired Loaders	255	1	0.4	79
	Tractor/Loader/Backhoe	97	2	0.37	85
2 – Offsite Improvements, Option 1	Cement and Mortar Mixers	9	1	0.4	85
	Pavers	130	1	0.5	77
	Rollers	80	1	0.1	74
	Tractor/Loader/Backhoe	97	1	0.37	85
3 – Offsite Improvements, Option 3	Cement and Mortar Mixers	9	1	0.4	85
	Cranes	231	1	0.08	83
	Pavers	130	1	0.5	77
	Rollers	80	1	0.1	74
	Tractor/Loader/Backhoe	97	1	0.37	85
4- Site Preparation	Excavators	158	1	0.4	80
	Paving Equipment	132	1	0.5	85
	Rubber-Tired Loaders	255	2	0.4	79
	Tractor/Loader/Backhoe	97	3	0.37	85
5 - Grading	Graders	187	1	0.41	85
	Rubber-Tired Loaders	255	1	0.4	79
	Scrapers	367	2	0.14	88
	Tractor/Loader/Backhoe	97	3	0.37	85
6 – Building Construction	Forklifts	89	1	0.3	67
	Skid Steer Loaders	65	1	0.4	80
	Tractor/Loader/Backhoe	97	1	0.37	85

**Sources:**

Knauer et al., 2006 unless otherwise noted.

Crane, cement and mortar mixer, and roller noise emissions data from County of Ventura, 2010.

Usage factors for cranes, cement and mortar mixers, pavers, and rollers from County of Ventura, 2010.

Forklift data and trencher usage factor from Port of Long Beach, 2009.

Skid steer loader noise data from Nugent, 2015.

<sup>a</sup>Assumed to be asphalt grinder; data from Devcon Construction, 2018.

Using calculation methods published by the Federal Transit Administration (FTA, 2018), UltraSystems estimated the average hourly exposures at four sensitive receivers: a church and three single-family houses. The distances used for the calculation were measured from the receivers to the approximate center of activity of each construction phase, since that would be the average location of construction equipment most of the time. **Table 4.13-7** shows the relationships between the receivers, the noise sources, and the nearest ambient measurement points.

**Table 4.13-7**  
**NOISE ANALYTICAL FRAMEWORK**

Receiver	Description	Construction Phase(s) <sup>a</sup>	Nearest Ambient Sampling Point(s)
A	Single-family residence	Offsite Option 1, Offsite Option 2B	8
B	Single-family residence	Building Construction-2	7
C	Ban Suk Methodist Church	Demolition, Offsite Option 3, Grading-1, Building Construction-1	7, 8
D	Single-family residence	Site Preparation, Grading-2	6

<sup>a</sup>See **Table 4.13-6**. The suffix “-1” or “-2” indicates that the construction activity in the stated phase occurs in two widely separated portions of the project site.

A 5.25-foot to 5.75-foot-high concrete wall runs along several portions of the site’s boundary. For all the construction phases except for the offsite improvements, this wall lies between construction equipment and the nearest sensitive receivers. The Fresnel number method (Foss, 1978) was used to estimate the walls’ noise attenuation. The Fresnel number ( $N_o$ ) is a dimensionless parameter calculated from the following formula:

$$N_o = \pm 2f\delta_o/c$$

where

$f$  = Frequency of the sound radiated by the source (hertz).

$\delta_o$  = Path length difference determined from site geometry (feet).

$c$  = Speed of sound (feet/second).

$N_o$  is positive when the line of sight between the source and receiver is lower than the top of the barrier. It was assumed that  $f = 1,000$  hertz (representative of heavy construction equipment)<sup>32</sup> and that  $c = 1115.49$  feet per second. Using a graph<sup>33</sup> of attenuation as a function of  $N_o$ , it was determined that the existing walls would provide between 8 and 15 dB of attenuation, depending on site geometry. Noise exposures due to construction equipment in all the phases except site improvements were reduced by the attenuation values calculated for each combination of noise source and receiver.

**Table 4.13-8** summarizes the estimated construction-related short-term noise exposures at the nearest sensitive receiver for each construction phase. Short-term noise exposures due to construction activities would be about 63 to 81 dBA - $L_{eq}$ . These relatively high values are due mainly to the fact that the sensitive receivers are quite close to the construction activity.<sup>34</sup>

32 Noise frequency spectra for typical bulldozers and front-end loaders are presented in Vardhan et al., 2005.

33 Propagation of Outdoor Sound - Partial Barriers. Available at [https://www.engineeringtoolbox.com/outdoor-sound-partial-barriers-d\\_65.html](https://www.engineeringtoolbox.com/outdoor-sound-partial-barriers-d_65.html). Verified June 13, 2019.

34 Both offsite improvement options analyzed here would occur during the demolition phase. The combined exposures from demolition and offsite improvements would be higher than the values reported here. Combined emissions were not analyzed in detail because it is already evident that the increase threshold of 70 dBA would be exceeded.

**Table 4.13-8**  
**ESTIMATED ONE-HOUR CONSTRUCTION NOISE EXPOSURES AT NEAREST SENSITIVE RECEIVERS**

Phase	Receiver	Distance (feet)	Ambient (dBA Leq)	Construction (dBA Leq) <sup>a</sup>	New Total (dBA Leq)	Increase (dBA Leq)
Demolition	C	85	57.7	75.1	75.2	17.5
Offsite Improvements, Option 1	A	85	60.5	79.7	79.8	19.3
Offsite Improvements, Option 3	C	72	57.7	81.4	81.4	23.7
Site Preparation	D	118	44.7	68.4	58.4	23.7
Grading-1	C	77	57.7	76.6	76.7	19
Grading-2	D	61	44.7	74.7	74.7	30
Building Construction-1	C	32	57.7	73.9	74.0	16.3
Building Construction-2	B	81	46.5	62.8	62.9	16.4

<sup>a</sup>Walls taken into account for all phases except for offsite improvements.

As noted in Section 4.13.5, the City has no noise exposure limits for construction. In addition, construction outside of 8:00 p.m. to 7:00 a.m. is not subject to Municipal Code §8.28.44. However, the unmitigated noise increase due to construction would exceed 5 dBA in all construction phases, for all sensitive receivers analyzed. This increase would not be permanent, but nevertheless would be significant if unmitigated. Construction noises would be less than significant after implementation of the following mitigation measures, which are based upon the EIR for the City of Buena Park (RBF Consulting, 2010b, pp. 5.6-26 and 5.6-27):

**MM N-1** Project applicants shall require by contract specifications that the following construction best management practices (BMPs) be implemented by contractors to reduce construction noise levels:

- Ensure that construction equipment is properly muffled according to industry standards and be in good working condition.
- Place noise-generating construction equipment and locate construction staging areas away from sensitive uses, where feasible.
- Schedule high noise-producing activities between the hours of 8:00 AM and 7:00 PM to minimize disruption on sensitive uses.
- Implement noise attenuation measures which may include, but are not limited to, temporary noise barriers or noise blankets around stationary construction noise sources.
- Use electric air compressors and similar power tools rather than diesel equipment, where feasible.



- Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 30 minutes.
- Construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow for surrounding owners and residents to contact the job superintendent. If the City or the job superintendent receives a complaint, the superintendent shall investigate, take appropriate corrective action, and report the action taken to the reporting party. Contract specifications shall be included in the proposed project construction documents, which shall be reviewed by the City prior to issuance of a grading permit.

**MM N-2** Project applicants shall require by contract specifications that heavily loaded trucks used during construction would be routed away from residential streets to the extent feasible. Contract specifications shall be included in the proposed project construction documents, which shall be reviewed by the City prior to issuance of a grading permit.

#### **Level of Significance After Mitigation**

With implementation of **MM N-1** and **MM N-2** above, the proposed project would result in less than significant impacts to sensitive receivers.

#### **Operational Noise**

##### **Mobile Sources**

As detailed in the City's General Plan EIR, existing and future noise levels have been calculated for various roadway segments within the City of Buena Park. Twenty-five of the roadway segments modeled (along Valley View Street, Knott Avenue, Western Avenue, Beach Boulevard, Crescent Avenue, La Palma Avenue, Orangethorpe Avenue, and La Mirada Boulevard) would generate noise levels above 70 dBA CNEL at 100 feet from centerline. This includes the street that the project site is located, on Valley View Street between its intersections of Crescent Avenue and La Palma Avenue. Given current traffic conditions, a small portion of the proposed housing would be exposed to more than 70 dBA CNEL. (See **Table 4.13-2.**) With implementation of the proposed General Plan Update, a relatively small number of additional housing units on the project site would experience noise levels that would exceed the City's Noise and Land Use Criteria Compatibility Criteria due to the increase in roadway noise. With adherence to the provisions of Municipal Code § 19.444, the effects of roadway noise on the project would be less than significant, and no mitigation would be needed.

According to the traffic impact memorandum prepared for this project (Fehr & Peers, 2020; see **Appendix H**), the project would generate a maximum of 244 new trips per day in the operational phase. The current average daily traffic on Valley View Street is about 40,000 vehicles per day. The increase due to the project would be about 0.6%. Given the logarithmic nature of the decibel, traffic volume needs to be doubled in order for the noise level to increase by 3 dBA (ICF Jones & Stokes, 2009), the minimum level perceived by the average human ear. A doubling is equivalent to a 100% increase. Because the maximum increase in traffic in any road segment would be far below 100%, the increase in roadway noise experienced at sensitive receivers would not be perceptible to the human ear. Therefore, roadway noise associated with project operation would not expose a land use

to noise levels that are considered incompatible with or in excess of adopted standards, and impacts would be less than significant.

### **Onsite**

Onsite noise sources from the proposed housing project would include operation of mechanical equipment such as air conditioners, lawnmowers, leaf blowers, and building maintenance equipment; and motor vehicles accessing, driving on, and exiting the parking lot. Noise levels associated with operation of the project are expected to be comparable to those of nearby residential areas. Noise from onsite sources would be less than significant.

### **b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?**

#### **Less than Significant Impact**

Vibration is sound radiated through the ground. Vibration can result from a source (e.g., subway operations, vehicles, machinery equipment, etc.) causing the adjacent ground to move, thereby creating vibration waves that propagate through the soil to the foundations of nearby buildings. This effect is referred to as groundborne vibration. The peak particle velocity (PPV) or the RMS velocity is usually used to describe vibration levels. PPV is defined as the maximum instantaneous peak of the vibration level, while RMS is defined as the square root of the average of the squared amplitude of the level. PPV is typically used for evaluating potential building damage, while RMS velocity in dB is typically more suitable for evaluating human response.

The background vibration velocity level in residential areas is usually around 50 vibration decibels (VdB). The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for most people. Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration from traffic is rarely perceptible. The range of interest is from approximately 50 VdB to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

### **Construction Vibration**

Construction activities for the project have the potential to generate low levels of groundborne vibration. The operation of construction equipment generates vibrations that propagate through the ground and diminish in intensity with distance from the source. Vibration impacts can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage of buildings at the highest levels. The construction activities associated with the project could have an adverse impact on both sensitive structures (i.e., building damage) and populations (i.e., annoyance).

Pile drivers or other major vibration sources will not be used for construction of the Orchard View Gardens Senior Apartment Homes project. The question is whether the equipment that will be deployed will have significant vibration impacts. The FTA (2018) has published standard vibration levels for construction equipment operations, at a distance of 25 feet. The construction-related vibration levels for the nearest sensitive receivers for major construction phases are shown in

**Table 4.13-9.** These calculations were based on the distances from the construction activity to the closest sensitive receivers.

**Table 4.13-9**  
**VIBRATION LEVELS OF TYPICAL CONSTRUCTION EQUIPMENT**

Equipment	Demolition (85 feet)		Offsite Improvements (60 feet)		Site Preparation (118 feet)		Grading-2 (61 feet)	
	RMS (in/sec)	VdB	RMS (in/sec)	VdB	RMS (in/sec)	VdB	RMS (in/sec)	VdB
Loaded trucks	0.0121	70.1	0.0204	74.6	0.0074	65.8	0.0199	74.4
Jackhammer	0.0056	63.1	0.0094	67.6	0.0034	58.8	0.0092	67.4
Small bulldozer	0.0005	42.1	0.0008	46.6	0.0003	37.8	0.0008	46.4
Large bulldozer	0.0142	71.1	0.0239	75.6	0.0087	66.8	0.0234	75.4

As shown in **Table 4.13-7**, the PPV of construction equipment at the nearest sensitive receiver (61 feet) is at most 0.0199 inch per second, which is less than the FTA damage threshold of 0.12 inch per second PPV for fragile historic buildings. The maximum VdB are 75.4 VdB, which are below the FTA threshold for human annoyance of 80 VdB. Unmitigated vibration impacts would therefore be less than significant.

### Operational Vibration

The project involves the operation of residential uses and would not involve the use of stationary equipment that would result in high vibration levels, which are more typical for large manufacturing and industrial projects. Groundborne vibrations at the project site and immediate vicinity currently result from heavy-duty vehicular travel (e.g., refuse trucks and transit buses) on the nearby local roadways, and the project would not result in a substantive increase of these heavy-duty vehicles on the public roadways. Therefore, vibration impacts associated with operation of the project would be less than significant.

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

### No Impact

The nearest active public airport is the Joint Forces Training Base (JFTB) Los Alamitos, located approximately 3.0 miles southwest of the project site and Fullerton Municipal Airport, the only municipal airport in Orange County, located approximately 3.0 miles northeast of the project. Further, the project is located outside of the 60 dBA CNEL noise contour for Joint Forces Training Base. Thus, no impact related to the exposure of people residing or working in the proposed project area to excessive airport-related noise levels is anticipated.

**4.14 Population and Housing**

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

- a) **Would the project induce substantial unplanned population growth in an area either directly (for example, by proposing new homes and business) or indirectly (for example, through extension of roads or other infrastructure)?**

**Less than Significant Impact**

The project proposes the construction of a development consisting of 66 residential units (65 for senior residents and one manager's unit), including a 3,000-square-foot community center. The Project proposes to subdivide the existing parcel (APN 039-283-25) into two new parcels. The southern parcel (Parcel 1) would maintain St. Joseph's Episcopal Church and surface parking on 1.44 acres. The newly-created 1.76-acre parcel occupying the eastern and northern portion of the site (Parcel 2) would be developed with a primary residential apartment building and nine single story casitas accommodating 66 residential units and a 3,000 square foot community center. The proposed project would provide 65 units affordable to households earning less than 60 percent of the Area Median Income (AMI), along with one manager's unit, for a total of 66 units. Eight of the units would be for permanent supportive housing to house formerly homeless seniors.

A General Plan amendment to High Density Residential and Zone change to Medium-Density Multifamily Residential (RM-20) is required to accommodate the proposed project. The project would also necessitate a Tentative Parcel Map to divide the one parcel into two.

The proposed project would construct 66 residential developments consisting of 62 one-bedroom apartments and four two-bedroom apartments. The project applicant estimates that the one-bedroom apartments would have between one and three residents and the two-bedroom apartments would have between two and five residents. Therefore, the estimated population increase from the project would be between 70 to 206 residents.<sup>35</sup> As of January 1, 2019, the City had an estimated population of 83,384 residents (DOF, 2019). The projected 2040 population for the

35 Minimum Residents= (62 one-bedroom apartments x 1 resident) + 4 two-bedroom apartments x (2) residents) = 70 residents  
Maximum Residents= (62 one-bedroom apartments x 3 residents) + (4 two-bedroom apartments x 5 residents) = 206 residents



City is 92,500 people (SCAG, 2016), a net increase of approximately 9,116 or approximately 11 percent. The proposed project would account for approximately 0.76 percent to 2.3 percent of the forecast net increase in population between 2019 and 2040.

Implementation of the project is consistent with the overall intent of the City's goals to provide adequate housing opportunities to meet its fair share of projected housing needs and accommodate the projected growth increases. Additionally, the estimated increase in population caused by the project has been anticipated by the City and the region. Therefore, a less than significant impact would occur.

The increased population and housing resulting from the project would not necessarily cause direct adverse physical environmental effects; however, indirect physical environmental effects such as population-driven traffic or air quality impacts could occur. These indirect physical environmental effects associated with population increases are analyzed in **Section 4.2, *Air Quality***, and **Section 4.16, *Transportation***, of this IS/MND. The project would constitute infill development. Therefore, no indirect impacts associated with the extension of roads and other infrastructure would occur.

- b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

**No Impact**

The project site is currently developed with existing church buildings and a large surface parking lot. No housing exists onsite and no persons currently reside on the project site. Therefore, the project would not displace any housing or people and the project would not necessitate the construction of replacement housing. No impact would occur.

**4.15 Public Services**

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
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?			X	
b) Police protection?			X	
c) Schools?				X
d) Parks?			X	
e) Other public facilities?			X	

**a) Fire protection?****Less than Significant Impact**

Fire Services for the City of Buena Park are provided by Orange County Fire Authority (OCFA) through an agreement with the city, including primary response for fire suppression and emergency medical services (City of Buena Park, 2019b). Buena Park is in OCFA Operations Division 7, which also includes the cities of Cypress, La Palma and Stanton (OCFA, Operations Division 7, 2019). The nearest station to the project site is OCFA Fire Station 63, located about 0.9 mile southeast of the project site at 9120 Holder Street. Other OCFA fire stations in Buena Park include Station 62 at 7780 Artesia Boulevard, approximately 1.4 miles northeast of the site, and Station 61 at 744 La Palma Avenue, approximately 2.8 miles northeast of the site (Google Earth Pro, 2019).

The proposed project would not adversely affect demand for fire services as described below. An information request letter was sent to the Orange County Fire Authority asking about the potential impacts of the project to fire service (refer to **Appendix I**). OCFA Management Assistant William Blumberg stated that the project site would be served by OCFA Fire Stations 13 and 63 (Blumberg, 2020). Mr. Blumberg stated that the proposed project should not require construction of new fire department facilities and that the project should have a less than significant impact on OCFA's level of service and/or response times. However, to reduce impacts on fire service, the OCFA recommends the following (Blumberg, 2020):

- 1) Ensure that proposed project meets California Fire Code, OCFA Fire Master Plans for Commercial & Residential Development (B-09) Guideline, and OCFA Architectural Review (E-04) Guideline (For example, access on the proposed plan may not meet current requirements),
- 2) Participate with the City of Buena Park through developer agreements for future fire facility mitigation.

Based on the response from the OCFA, the proposed project would not require the construction of new fire department facilities and the project should have a less than significant impact on OCFA's level of service and/or response times. Therefore, the project would have a less than significant impact to OCFA facilities and services and no mitigation is required.

**b) Police protection?**

**Less than Significant Impact**

The Buena Park Police Department (BPPD) provides police protection to the City of Buena Park; its headquarters is located next to Buena Park City Hall at 6650 Beach Boulevard, about 2.3 miles northwest of the project site. The BPPD is organized into three divisions: Administration; Operations; and Support Services (City of Buena Park, 2019c).

The proposed project would not adversely affect demand for law enforcement services as described below. An information request letter was sent to the Buena Park Police Department asking about the potential impacts of the project to law enforcement services (refer to **Appendix I** of this document). As detailed in the response from BPPD Operations Captain Gary Worrall, the proposed project is under the jurisdiction of the Buena Park Police Department, which would respond to calls for service from the project site (Worrall, 2020). Captain Worrall stated that the proposed project would not require construction of new law enforcement facilities to meet existing law enforcement demands or project demands. Additionally, the Police Department does not anticipate any potential environmental impacts from the proposed project related to providing police services to the project site and the proposed project would likely not have potentially significant impacts on the Police Department's level of service and/or response times (Worrall, 2020). Therefore, the project would have a less than significant impact in this regard and no mitigation is required.

**c) Schools?**

**No Impact**

The project is located within the boundaries of the Buena Park School District, which serves 4,700 students at six elementary schools and one junior high school in the City of Buena Park (Buena Park School District, 2019). The closest public school to the project site is San Marino Elementary School, located about 0.2 mile southeast of the project site. As the project would be age restricted and limited to senior-age residents (62 years and older), it is anticipated that the proposed project would generate no new students at the project site. Thus, the project would have no impact on schools and no mitigation is needed.

**d) Parks?**

**Less than Significant Impact**

The Community Services Department of the City of Buena Park operates one Mini Park and 10 city parks, located throughout the city (City of Buena Park, 2019d). San Marino Park, located at 6200 San Roland Circle, is the closest park to the project site and is located approximately 0.4 mile to the southeast. Facilities at San Marino Park include basketball courts, picnic area with barbecue, handball courts, children's play area and restrooms.

The addition of between 70 to 206 persons from the proposed project could marginally increase the use of existing neighborhood and regional parks, however the project would have a de minimus impact in this regard. Any increased use of city park facilities would be partially offset by the proposed open space on the project site, which would include green lawn/turf areas, community spaces, green lawn game area, and a hardscape game area. Therefore, with the provision of onsite open space and recreational uses, project-related impacts on parks would be less than significant and no mitigation is required.

**e) Other Public Facilities?**

**Less than Significant Impact**

The Buena Park Public Library is operated by the Buena Park Library District, an independent special district organized in 1919. The library is located at 7150 La Palma Avenue, about 1.1 miles northeast of the project site (Buena Park Library District, 2019). The City of Buena Park has a current population of 84,241. The increase of between 70 to 206 residents is well under one percent of the city's existing population; therefore, the increase in residents associated with the project would have a negligible effect on the demand for library services. As a result, impacts from the proposed project on libraries would be less than significant and no mitigation is required.

The closest hospital to the project site is the La Palma Intercommunity Hospital, located approximately 0.65-mile northwest of the project site at 7901 Walker Street. The La Palma Intercommunity Hospital is a 141-bed, not for profit, acute-care community hospital that provides medical, emergency and community services (La Palma Intercommunity Hospital, 2020). As detailed in **Section 4.14**, Population and Housing, the proposed project would increase the city's population by between 70 to 206 residents. It is unlikely that the entire project's population would need medical assistance at the same time, but in the case that La Palma Intercommunity Hospital reaches its patient capacity, other medical services are available in the city. The construction of the proposed project would adhere to fire codes to ensure that emergency vehicle, personnel and levels of service will be adequately met. Therefore, there would be less than significant impacts in regard to hospitals and no mitigation is needed.



**4.16 Recreation**

<b>Would the project:</b>	<b>Potentially Significant Impact</b>	<b>Less than Significant Impact with Mitigation Incorporated</b>	<b>Less than Significant Impact</b>	<b>No Impact</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>	

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

**Less than Significant Impact**

The project involves the construction of a total of 66 residential units and a 3,000 square foot senior-oriented community center, for the use of project residents, on the ground floor of Building 1. The project proposes bench seating, a lawn area with lawn games, a decomposed granite path, and a decomposed granite courtyard with fire pit and lounge seating. The project proposes 26,021 square feet of open space/landscaped area. The layout of the buildings on the site would create several unique landscaped areas that include both passive and active spaces – raised planters, green lawn/turf areas, drought-tolerant and native ground covers, decomposed granite walkways for residents to access community spaces and an outdoor lounge area with a fireplace and planter beds at the northeast corner of the site.

The City of Buena Park has approximately 96.1 acres of public park and recreation facilities (RBF Consulting, 2010a, p. 6-2). The city has a standard of three acres of open space per 1,000 residents (RBF Consulting, 2010a, p. 6-7). As detailed in the General Plan, the city requires 50 more acres of parks to meet this standard. The project is estimated to have a population between 70 persons and 206 persons.<sup>36</sup> Based on the City's standard three acres of open space per 1,000 residents, the project's estimated population would need to provide 9,148 to 26,920 square feet (0.21 to 0.618 acres) of open space; 26,021 square feet is provided in project plans.

The nearest park, San Marino Park, is approximately 0.4 mile from the project site and San Antonio Park is approximately 0.8 mile from the project site. The addition of 70 to 206 persons to the City is expected to marginally increase the use of existing neighborhood and regional parks, but this increased use would be partially offset by the proposed open space on the project site as described

<sup>36</sup> Refer to Section 4.14, Population and Housing, of this document for details on how the project's population was estimated.

above. The project's proposed 3,000-square-foot community center would also offset demand on existing city recreational facilities. **Figure 4.16-1** shows the landscape plan for the project. The provision of open space and amenities onsite would reduce impacts to existing recreational facilities. Therefore, the project would have a less than significant impact on parks or other recreational facilities.

- 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?**

**Less Than Significant Impact**

As described above, the project includes recreational facilities for residents. Furthermore, the project would not require the construction or expansion of recreational facilities outside the limits of the project site. Therefore, there would be no significant adverse physical effect on the environment, and less than significant impacts would occur with project implementation.

Figure 4.16-1  
LANDSCAPE PLAN



Disclaimer: Illustration provided by RRM Design Group, who has indicated that the information is true and correct. No other warranties are expressed or implied.

Source: RRM Design Group, March 30, 2020.



Orchard View Gardens  
Senior Apartment Homes  
Landscape Plan

**4.17 Transportation**

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

The following analysis is based upon the Transportation Assessment Memo prepared by Fehr and Peers dated July 23, 2020 for the proposed project (Fehr and Peers, 2020), included as **Appendix H** to this document. Residents in areas surrounding the project site expressed concerns regarding existing circulation. The City of Buena Park requested a focused traffic study to review circulation, specifically at the intersection of Valley View Street and San Rafael Drive, and the effects of project traffic in the study area. The purpose of the transportation assessment is to summarize an evaluation of the proposed project's potential transportation impacts, parking demand, and circulation within the area. Intersection treatments are proposed at the end of the memorandum to improve circulation and safety. (Fehr & Peers, 2020, p. 1).

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

**Less than Significant Impact****Applicable Plans, Ordinances, and Policies****Statewide Transportation Improvement Program (STIP)**

The Statewide Transportation Improvement Program (STIP) is a multi-year capital improvement program of transportation projects on and off the State Highway System, funded with revenues from the State Highway Account and other funding sources. The proposed project development is not a transportation project and would not conflict with the STIP.



### **Orange County Congestion Management Plan**

The Congestion Management Plan (CMP) requires that a traffic impact analysis be conducted for any project generating 2,400 or more daily trips, or 1,600 or more daily trips for projects that directly access the CMP Highway System (CMPHS). The CMPHS includes specific roadways, which include State Highways and Super Streets, which are now known as Smart Streets, and CMP arterial monitoring locations/intersections). As discussed below, the proposed project would generate approximately 244 daily trips, which is far fewer than the 2,400 daily trips and fewer than 1,600 daily trips that directly access the CMPHS. Furthermore, none of the study intersections are part of the 2019 Orange County Congestion Management Program (OCTA, 2019a, p. 37).

### **The Orange County Master Plan of Arterial Highways (MPAH)**

The Orange County Master Plan of Arterial Highways (MPAH) establishes a countywide surface roadway network intended to provide a guideline for the development of an inter-community arterial highway system to effectively serve existing and future land uses in the County. The MPAH provides a tool for coordination of the transportation and land use planning and implementation processes engaged in by the various cities, the County, and adjacent jurisdictions. Consistency with the MPAH ensures that each city and the County implement the same base transportation network using similar standards and assumptions. The proposed project would not permanently alter or affect arterial highway systems. Therefore, there would not conflict with the OC MPAH (OCTA, 2019b).

### **Measure M/OC Go**

Measure M, approved by Orange County voters in November 1990, and re approved in 2006, authorizes a sales tax to fund a variety of transportation projects in the County. The measure, which is now called OC Go, would create transportation improvement projects in regard to freeways, streets and roads, transit, and environmental programs (OCTA, 2020). The proposed project would not impede any OC Go projects and would not conflict with OC Go.

### **City of Buena Park General Plan— Mobility Element**

The General Plan Mobility Element (RBF Consulting, 2010a, pp. 3-51 through 3-58) contains goals and policies that are applicable to the proposed Orchard View Gardens Senior Apartment Homes project. Applicable goals and policies are summarized below:

***Goal M-3    A balance between development of the Land Use Plan and completion of the circulation network.***

**Policy 3.2**    Ensure the timely provision of adequate transportation infrastructure and standards consistent with the location, intensity and timing of new development as defined in the Land Use Element.

**Project Compliance:** The proposed project would not conflict with Policy 3.2 because as described in the analysis in this section, the project would have minimal and less than significant traffic impacts. Additionally, as described in **Section 3.0** of this document, the project would implement one or more intersection treatment(s) to alleviate existing traffic issues in the project area.



**Goal M-5**      *A circulation system that supports existing, approved, and planned land uses throughout the City, while maintaining a desired level of service.*

**Policy 5.4**      Require that new development mitigate its impact on City streets in order to maintain an adequate level of service.

Project Compliance: the proposed project would not conflict with Policy 5.4 because, as detailed in this section, the project would have less than significant traffic impacts.

**Goal M-9**      *Minimized conflict points among automobile traffic, pedestrians, and bicycle traffic.*

**Policy 6.1**      Contribute to the safety of bicyclists and pedestrians by adhering to national standards and uniform practices, including but not limited to, Caltrans and City-wide standards.

Project Compliance: The proposed project would not conflict with Policy 6.1 because the project would comply with all applicable Caltrans and City-wide standards, which would contribute to the safety of bicyclists and pedestrians.

#### **City of Buena Park Municipal Code**

The city's municipal code does not contain any transportation-related provisions that apply to the proposed project.

#### **Parking**

With the development of the proposed project, the existing church and proposed residential facility will share a total of 128 parking spaces. The existing church currently contains 121 parking spaces and plans to reduce their parking lot to 80 spaces with the development of the project. The project proposes the development of 48 parking spaces to accommodate residents, visitors, and staff. Fehr & Peers conducted a survey of the existing church site to establish the existing parking demand. A 24-hour parking survey was conducted on Sunday, December 15, 2019 to account for the peak business day for the church. The maximum demand for the site was 53 vehicles at 11 AM (Fehr and Peers, 2020, p.6).

ITE Parking Generation Manual 5th Edition (2017) parking generation rates for senior affordable housing (ITE Code 232) were used to estimate the future parking demand for the project. At peak parking demand, the proposed project is expected to utilize 25 parking spaces on a weekday and 28 spaces on a Sunday. Based on these estimates, approximately 30% of the project's parking supply will still be available if the project provides 48 parking stalls. Based on this estimate, the project site can efficiently serve the proposed project's parking demand with the proposed parking supply (Fehr and Peers, 2020, p.6).

To estimate future parking demand and utilization for the project site and church, to be conservative, the analysis assumed that project's estimated demand would remain the same between 8 AM and 5 PM. The project's estimated demand was added to existing parking demand for the church to estimate the future parking demand for the site. At peak demand on Sunday, it is estimated that approximately 37% of the total parking supply is still available. Based on this analysis, it is estimated

that the parking demand for the entire site can be accommodated with the proposed parking supply (Fehr and Peers, 2020, p. 7).

St. Joseph's offers church services on Sundays from 9:00-10:30am and Thursdays 10:30am-12:00pm. St. Joseph's also rents space to the Calvary Chapel "La Palma" who hold church services on Sundays from 11:00am to 12:30pm, Thursdays from 6:00-7:30pm, and Fridays from 6:00-7:30pm. The average attendance for weekly services pre-COVID-19 was typically around 35 individuals per service. The maximum allowed number of attendees is limited to 75 individuals. The Church offices operate from 9:00am to 1:00pm Monday through Thursday and 8:00-11:00am on Fridays. There are three employees/staff members that are employed by the Church.

The Buena Park Municipal Code Section 19.536.040, Parking Spaces Required requires for a Church use a parking requirement of 1 space per 3 fixed seats (or 4.5 feet of bench) plus 1 space per 40 square feet of other net assembly area in the one largest assembly room. St. Joseph's campus is currently comprised of a 2,312 square foot Sanctuary Hall with 21 pews that are 11'8" in length and 1 wheelchair accessible pew that is 11'0" in length. There is also a Classroom/Office building that is roughly 2,500 square feet in size. The largest assembly space in the Classroom/Office building, known as the Parish Hall, is approximately 928 square feet. Based on the bench space in the Sanctuary Hall approximately 57 parking spaces are required. Based on the square footage of the Parish Hall approximately 23 parking spaces are required. To comply with the City Municipal Code an estimated 80 parking spaces are required.

To better understand the need for parking based on the current Church operations, a parking count was completed by St. Joseph's Staff on August 18, 2019 at 10:30am and 12:00pm and August 25, 2019 at 12:15pm. These counts were taken pre-COVID and reflect the typical parking utilization during Sunday services, which is considered to be a peak usage time for the Church. For the August 18th counts, there were 25 cars at 10:30am and 44 cars at 12:00pm. For the August 25th count there were a reported 42 cars. This is an average of 37 cars. Based on a total number of 121 parking spaces this is an average utilization of 30%. Utilizing the highest count of 44 cars on August 18th the utilization rises to 36%. During the weekdays the Church maintains a count around 12 cars during the day and roughly 8 cars on a given night dependent on whether there is a group meeting (i.e. book club, etc.) This count suggests that there is an abundance of parking to need the needs of the Church.

With the development of the Orchard View Gardens Senior Housing Community, a portion of the Church's existing parking area in the northeast corner will be demolished to accommodate the proposed residential units. The onsite parking available for the Church would be reduced from 121 spaces to 80 spaces. As discussed previously, the proposed amount of parking for the Church is sufficient to accommodate the Church operations and meets the City's Code requirement. Furthermore, based on the currently utilization rates reported above, if the number of spaces is reduced to 80, even at its peak occupancy, the utilization rate is still only 55%. Therefore, the proposed project would provide adequate parking for the project site and would not conflict with any city parking regulations.

In conclusion, the Orchard View Gardens Senior Apartment Homes project would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system. The project would generate approximately 244 daily trips, which would result in less than significant traffic impact and the project would provide adequate parking to serve the needs of its residents. Impacts regarding conflict with a program plan, ordinance or policy addressing circulation system, would be less than significant.

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

**Less than Significant Impact**

The project is not within 0.5 mile of a major transit corridor or along an existing high-quality transit corridor, so impacts cannot be presumed to be less than significant under CEQA Guidelines §15064.3(b)(1). Projects that decrease vehicle miles traveled (VMT) in the project area compared to existing conditions, on the other hand, are considered to have a less than significant transportation impact. As noted in **Table 4.17-1** below, the project is expected to generate approximately 244 daily trips on a weekday, including approximately 13 trips (5 inbound/8 outbound) during the AM peak hour, and approximately 17 trips (9 inbound/8 outbound) during the PM peak hour. To provide a conservative scenario, no trip credits were applied to the trip generation estimates. The project is anticipated to generate approximately 207 daily trips on Sundays, including approximately 24 trips (15 inbound/9 outbound) during the Sunday peak hour. ITE does not include a trip generation rate for weekday midday peak hours for Senior Adult Housing so this analysis conservatively assumes the PM peak hour trip generation estimates for the midday peak hour.

**Table 4.17-1**  
**PROJECT TRIP GENERATION ESTIMATES**

Land Use	Quantity	Weekday							Sunday Peak Hour			
		Daily	AM Peak Hour			PM Peak Hour			Daily	In	Out	Total
			In	Out	Total	In	Out	Total				
Senior Adult Housing <sup>1</sup>	66 dwelling units	244	5	8	13	9	8	17	207	15	9	24

Source: Fehr and Peers, 2020, p. Table 2

<sup>1</sup> Trip Generation, 10th Edition (Institute of Transportation Engineers [ITE], 2017), ITE Code 252 for Senior Housing

The trips from the proposed project would contribute less than 50 peak-hour (two way) trips after full development (refer to **Appendix H**). Therefore, the project would have a less than significant impact regarding conflict or inconsistency with CEQA Guidelines section 15064.3.

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

**Less Than Significant Impact with Mitigation Incorporated**

**Construction**

The project site is located within an existing church property. The proposed activities include demolition of an existing onsite structure, and construction of new residential buildings and a community center. During the construction phase, the project could temporarily impact street traffic adjacent to the project due to construction activities in the right-of-way (ROW). Project construction could reduce the number of lanes or temporarily close a portion of Valley View Street at San Rafael Drive and the frontage roads along Valley View Street. Mitigation measure **TRANS-1** is recommended to address potential hazards impacts during the construction phase.

### **Mitigation Measure**

**MM TRANS-1** Prior to the start of construction activity in the public right-of-way, the General Contractor shall submit a detailed Construction Management Plan to be reviewed and approved by the City of Buena Park Traffic Engineer. The Construction Management Plan shall specify that the Construction Manager will schedule truck traffic and employee shifts to avoid creating trips during the peak traffic periods, as is feasible for construction operations. All measures including identified truck routes and designated employee parking areas shall be included in the Construction Management Plan. The Plan shall include but is not limited to the following provisions:

- a) Identification of permitted hours for construction related deliveries and removal of heavy equipment and material;
- b) Identification of where construction workers would park their personal vehicles during project construction with a requirement that at no time shall construction worker vehicles block any driveways. If complaints are received by the project applicant or City of Buena Park regarding issues with construction worker vehicle parking, the project applicant shall identify alternative parking options for construction workers so as not to interfere with adjacent parking availability;
- c) Identification of how emergency access to and around the project site will be maintained during project construction;
- d) Identification of haul routes for delivery or removal of heavy and/or oversized equipment or material loads. Where feasible, delivery or removal of oversized equipment or material loads shall be conducted during off-peak hour traffic periods;
- e) Maintain pedestrian and bicycle connections around the project site and safe crossing locations shall be considered for all pedestrian and bicyclist detours; and
- f) Maintain the security of the project site by erecting temporary fencing during the construction phase of the project. Any onsite night lighting used during the construction phase of the project shall be in compliance with City of Buena Park lighting requirements.

### **Level of Significance After Mitigation**

After implementation of mitigation measure **TRANS-1** above, the project would have less than significant construction-phase impacts regarding a substantial increase in hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses.

### **Operation**

#### **Trip Distribution**

The geographic distribution of trips generated by the proposed project is dependent on characteristics of the street system serving the project site and the level of accessibility of routes to

and from the project site. Based on the likely origins and destinations of project traffic, which includes residents, visitors and employees, the majority of project traffic is anticipated to utilize the intersection of Valley View Street and San Rafael Drive to access the project site. Other routes have limited access or connectivity to the surrounding street network (Fehr & Peers, 2020, p. 3). The forecasted traffic to be generated by the proposed Project was assigned to the street network using the distribution pattern depicted in **Figure 4.17-1**.

#### **Intersection Analysis -Study Area**

Three intersections were selected for intersection analysis based on the project trip assignment, knowledge of the study area, and input from staff at the City of Buena Park. Weekday traffic counts were collected on Tuesday, December 17, 2019 during the AM peak (7:00-9:00 AM), PM school afternoon peak (1:30-3:30PM), and PM peak (4:00-6:00PM). Weekend counts were collected on Sunday, December 15, 2019 during the church ingress and egress (10:00AM-2:00PM). The following three intersections, as shown on **Figure 4.17-2**, were analyzed in this transportation assessment:

1. Valley View Street & San Rafael Drive/Los Molinos Road (signalized)
2. Valley View Frontage Street & Project Driveway 1 (unsignalized)
3. Valley View Frontage Street & Project Driveway 2 (unsignalized)



**Figure 4.17-1**  
**TRIP DISTRIBUTION**



Sources: Fehr & Peers, July 23, 2020.



## Orchard View Gardens Senior Apartment Homes

### Trip Distribution

**Figure 4.17-2**  
**STUDY AREA**



Sources: Fehr & Peers, July 23, 2020.



**Orchard View Gardens**  
**Senior Apartment Homes**

Study Area

## Analysis Scenarios

The following two scenarios were analyzed (Fehr & Peers, p. 4):

- **Existing (2019) Conditions:** Existing traffic volumes and lane geometries were used to evaluate Existing (2019) Conditions.
- **Existing (2019) Plus Project Conditions:** Project traffic generated by the proposed project was added to existing traffic volumes to evaluate Existing (2019) Plus Project Conditions.

## Level of Service Analysis-Existing Conditions

**Table 4.17-2** summarizes the intersection operations for the Existing Conditions, which currently operate acceptably at level of service (LOS) A.

**Table 4.17-2**  
**EXISTING CONDITIONS INTERSECTION ANALYSIS**

Intersection	Weekday						Weekend	
	AM Peak		Midday Peak		PM Peak		Midday Peak	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. Valley View Street/ San Rafael Drive/Los Molinos Road	0.386	A	0.383	A	0.332	A	0.341	A
2. Valley View Frontage Road/ Project Driveway North	<3.0	A	8.4	A	8.4	A	8.7	A
3. Valley View Frontage Road/ Project Driveway South	<3.0	A	8.8	A	8.7	A	9.2	A

Notes:

1. ICU methodology was used for the signalized intersection.
2. HCM 6<sup>th</sup> Edition methodology was used for unsignalized intersections.

Source: Fehr & Peers, 2020, Table 3.

## Level of Service- Existing Plus Project Conditions

**Table 4.17-3** below summarizes the Existing Plus Project conditions intersection LOS. As shown below, all intersections operate acceptably at LOS A. This analysis indicates that there is capacity available to accommodate additional traffic generated by the project site and implementation of the Project will not degrade traffic operations to an unacceptable LOS.

**Table 4.17-3**  
**EXISTING PLUS PROJECT CONDITIONS INTERSECTION ANALYSIS**

Intersection	Weekday						Weekend	
	AM Peak		Noon Peak		PM Peak		Noon Peak	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. Valley View St/San Rafael Drive/Los Molinos Road	0.389	A	0.335	A	0.383	A	0.354	A
2. Valley View Frontage Road/Project Driveway North	8.5	A	8.7	A	8.4	A	8.8	A
3. Valley View Frontage Road/Project Driveway South	8.8	A	8.8	A	8.7	A	9.2	A

Notes:

1. ICU methodology was used for the signalized intersection.
2. HCM 6<sup>th</sup> Edition methodology was used for unsignalized intersections.

Source: Fehr & Peers, 2020, Table 4

### Vehicle Miles Traveled (VMT) Analysis

Senate Bill (SB )743, signed by the Governor in 2013, changed the way transportation impacts are identified. Specifically, the legislation has directed the Office of Planning and Research (OPR) to look at different metrics for identifying transportation as a CEQA impact. The Final OPR guidelines, released in November 2017, identify vehicle miles of travel (VMT) as the preferred metric for traffic impact analysis moving forward. The City of Buena Park adopted Traffic Impact Study (TIS) guidelines in June 2020 that address VMT impact criteria and analysis methodology. These guidelines were applied to project's transportation assessment (Fehr & Peers, 2020, p. 7).

Projects are evaluated under a screening process as the first step of VMT assessment. The screening process determines if full VMT analysis is required for a project. Specific project types, such as affordable housing projects, are presumed to have a less-than-significant impact and can be screened from VMT analysis. Based on the City's guidelines, the proposed project can be screened out from a full VMT assessment as it is assumed to result in a less-than-significant transportation impact (Fehr & Peers, 2020, p. 7).

### Collision Summary

Collision data was reviewed for the intersection of San Rafael Drive and Valley View Street. California law enforcement updates the Statewide Integrated Traffic Records System (SWITRS) records with collision data. The latest SWITRS data between January 1, 2015 and December 31, 2019 was used to analyze collisions within the area. Seven traffic collision have occurred near the intersection within the last five years. The primary collision type in the study area is broadside collision (43%), followed by vehicle/pedestrian collisions (29%) (Fehr & Peers, p. 8).

### Intersection Treatment Options

The City of Buena Park received comments from the community regarding existing circulation at the intersection of Valley View Street at San Rafael Drive and the frontage roads along Valley View Street.

Most concerns centered around the intersection's operation and safety issues, especially during peak hours (typical commute hours, school let out, and church service on weekends). Though the proposed project would not result in a significant traffic impact during the project's operational phase, the City requested evaluation of circulation within the project area and options to address existing community concerns. Fehr & Peers has observed the circulation at the intersection and collision data was reviewed for the intersection of San Rafael Drive and Valley View Street. At the request of the City of Buena Park, recommendations were developed to improve circulation within the area (Fehr & Peers, 2020, pp. 7-8).

It should be noted that the proposed project would have less than significant operational traffic impacts because, as shown in **Table 4.17-3** above, the project would not increase the level of service during existing plus project conditions. The treatment options presented in the traffic analysis for the proposed project would be provided by the project applicant as part of the project's conditions of approval by the City of Buena Park. The treatment options are described in detail in the project description section of this document and they are briefly described in **Table 4.17-4** below.

**Table 4.17-4**  
**SUMMARY OF TREATMENT OPTIONS**

<b>Treatment Option</b>	<b>Description</b>	<b>Issue Addressed</b>
<b>1. Convert Frontage Road to One-Way Streets</b>	<ul style="list-style-type: none"> <li>• Restricts two-way movement along frontage streets</li> <li>• Add one-way street signs</li> <li>• Requires additional infrastructure/treatments throughout one-way street for compliance</li> </ul>	<ul style="list-style-type: none"> <li>• Improves traffic flow</li> <li>• Reduces conflict areas</li> <li>• Eliminates difficult turn movements</li> </ul>
<b>2a. Restrict U-turn Movements with Signage Only</b>	<ul style="list-style-type: none"> <li>• Restrict right U-turn movement</li> <li>• Add No U-turn signs</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce conflicting movements</li> </ul>
<b>2b. Restrict U-Turn Movements with Signage and Median Extension</b>	<ul style="list-style-type: none"> <li>• Restrict right U-turn movement</li> <li>• Add No U-turn signs</li> <li>• Extend frontage road median to discourage U-turns</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce conflicting movements</li> </ul>
<b>3. Modify Existing Median to include a Right-Turn Lane</b>	<ul style="list-style-type: none"> <li>• Add 10-foot right-turn lane to existing median on Valley View that aligns with the project driveway</li> <li>• Reduce the rightmost northbound through lane from 14 feet to 12 feet or reduce lane widths along Valley View frontage Road</li> </ul>	<ul style="list-style-type: none"> <li>• Eliminates difficult turn movement</li> </ul>
<b>4. Split Phasing on the Minor Legs (Los Molinos Drive and San Rafael Drive)</b>	<ul style="list-style-type: none"> <li>• Updates Signal timing at intersections</li> <li>• Add signal heads to minor legs</li> </ul>	<ul style="list-style-type: none"> <li>• Addresses concerns with EB and WB traffic</li> <li>• Reduces conflict areas</li> </ul>

Source: Fehr & Peers, 2020, Table 9.

Each treatment option has various construction requirements associated with the development of that project feature. The City of Buena Park will have the final decision as to which treatment options will be implemented following the completion of environmental documentation. Reconfiguration of



the intersection of Valley View Road and San Rafael Drive and the surrounding roadways could require the following construction activity (Fehr & Peers, 2020, p. 18):

- **Treatment Option 1 (Convert frontage road to one-way street)**
  - Convert frontage road to one-way street by constructing median extensions
  - Assumes excavation of 800 square-foot area and construction of 800 square-foot area
- **Treatment Option 2b (Restrict U-Turn Movements with Signage and Median Extension)**
  - Extension of existing median to discourage northbound right U-turns
  - Assumes excavation of 480 square-foot area and construction of 480 square-foot area
- **Treatment Option 3 (Modify Existing Median to include a Right-Turn Lane)**
  - Excavation and removal of existing median; relocation of the existing lighting pole; and concrete and asphalt installation of right-turn lane into frontage road
  - Assumes excavation of 1,920 cubic-foot volume and construction of 3,120 cubic foot volume

The worst-case design alternatives were identified for the CEQA analysis based on construction activity and the highest anticipated truck traffic. The combination of treatment options 1 and 3 or treatment options 2b and 3 represent the worst-case design alternatives at the intersection of Valley View Road and San Rafael Drive and the surrounding roadways. Note that the proposed options presented in the Transportation Assessment Memo are conceptual in nature and specific design of these elements has not been completed. The construction activities noted above represent worst-case (maximum) construction scenario for environmental documentation purposes. Option 2a and Option 4 would require negligible construction activity that is similar to standard maintenance. These treatment options, as described above, could be paired with the worst-case scenario with no assumed additional construction related activity (Fehr & Peers, 2020, pp. 18-19).

The project's circulation system, including driveways and parking areas, would be designed to meet the development standards of the city and would not result in uses or design features that would create traffic hazards. Additionally, as described above, the project applicant would construction treatment options which would improve the traffic circulation in the project area, compared to existing conditions. Therefore, impacts regarding increases in hazards due to geometric design features or incompatible uses during project operations would be less than significant.

**d) Would the project result in inadequate emergency access?**

**Less Than Significant Impact with Mitigation Incorporated**

**Construction**

Project construction could temporarily close sidewalks and street lane(s) along Valley View Street, San Rafael Drive, and the frontage roads along Valley View Street, which could temporarily impact

emergency access. Mitigation measure **TRANS-1** is recommended to reduce potential project impacts regarding emergency access during the construction phase of the proposed project.

#### **Mitigation Measure**

Refer to Mitigation Measure **TRANS-1** above.

#### **Level of Significance after Mitigation**

Mitigation measure **TRANS-1** would reduce potential impacts regarding emergency access to a less than significant level because this mitigation measure requires identification of how emergency access to and around the project site will be maintained during project construction. After implementation of mitigation measure **TRANS-1**, potential impact to emergency access during project construction would be reduced to a less than significant level.

#### **Operation**

The project would comply with applicable city regulations, such as the requirement to comply with the city's fire code to provide adequate emergency access, as well as the California Building Standards Code. Prior to the issuance of building permits, the City of Buena Park would review project site plans, including location of all buildings, fences, access driveways and other features that may affect emergency access. The site design includes access and fire lanes that would accommodate emergency ingress and egress by fire trucks, police units, and ambulance/paramedic vehicles. All onsite access and sight distance requirements would be in accordance with all applicable design requirements. The city's review process and compliance with applicable regulations and standards would ensure that adequate emergency access would be provided. Therefore, the project would not result in inadequate emergency access and there would be less than significant impacts.

**4.18 Tribal Cultural Resources**

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a tribal cultural resource that is 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 § 5020.1(k)?				<b>X</b>
b) Cause a substantial adverse change in the significance of a tribal cultural resource that is determined to be a significant resource to a California Native American tribe pursuant to the criteria set forth in subdivision (c) of Public Resource Code § 5024.1(c)?			<b>X</b>	

Information from the Phase I Cultural Resources Inventory Report, dated January 17, 2020 (see **Appendix C1**), prepared by UltraSystems for the Orchard View Gardens Senior Apartment Homes project has been included in this section.

- a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource that is 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 § 5020.1(k)?**

**No Impact**

No Tribal Cultural Resource (TCR) sites were documented in the Native American Heritage Commission's Sacred Lands File (SLF) search (refer to **Attachment C: "Native American Heritage Commission Records Search and Native American Contacts"** in **Appendix C1** to this IS/MND). No resources as defined by Public Resources Code § 21074 have been identified. Additionally, the project site has not been recommended for historic designation for prehistoric and TCRs. No specific tribal resources were identified during outreach to local tribal organizations.

No prehistoric or historic archaeological resources were observed during the field survey. The previous cultural resources surveys within the half-mile buffer zone resulted in no archaeological sites or isolates being recorded. The cultural resource study findings at the South Central Coastal Information Center indicate that there is a low potential for finding tribal resources.

None of the contacted tribes have noted the presence of TCRs at or near the project site. There is no substantial evidence that TCRs are present on the project site. No potential TCR sites within the project area are listed on the SLF.

- b) **Would the project cause a substantial adverse change in the significance of a tribal cultural resource that is determined to be a significant resource to a California Native American tribe pursuant to the criteria set forth in subdivision (c) of Public Resource Code § 5024.1(c)?**

**Less than Significant Impact with Mitigation Incorporated**

Assembly Bill 52 (AB 52) requires meaningful consultation with California Native American Tribes on potential impacts on tribal cultural resources (TCRs), as defined in Public Resources Code § 21074. TCRs 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, 2007).

As part of the AB 52 process, Native American tribes must submit a written request to the lead agency to be notified of projects within their traditionally and culturally affiliated area. The lead agency must provide written, formal notification to those tribes within 14 days of deciding to undertake a project. The tribe must respond to the lead agency within 30 days of receiving this notification if they want to engage in consultation on the project, and the lead agency must begin the consultation process within 30 days of receiving the tribe's request. Consultation concludes when either (1) the parties agree to mitigation measures to avoid a significant effect on a tribal cultural resource, or (2) one of the parties, acting in good faith and after reasonable effort, concludes mutual agreement cannot be reached.

The City of Buena Park (the lead agency) has initiated AB 52 outreach to local tribes for the Orchard View Gardens Senior Apartment Homes Project. The City prepared letters to the six tribes on their list for AB 52 contact, informing them of the project. The letters were sent by Swati Meshram, Acting Planner Manager, City of Buena Park, on June 22 2020. The letters were sent via certified mail to: Tribal Manager, Joyce Perry, Juaneño Band of Mission Indians – Acjachemen Nation (Belardes); Chairperson Sonia Johnston, Juaneño Band of Mission Indians – Acjachemen Nation; Chairperson Anthony Morales, Gabrielino/Tongva San Gabriel Band of Mission Indians; Sam Dunlap, Cultural Resources Director, Gabrielino-Tongva Tribe; Chairperson Sandonne Goad, Gabrielino-Tongva Tribe; and Joseph Ontiveros, Cultural Resources Director, Soboba Band of Luiseño Indians. The letters conveyed that the recipient had 30 days from the receipt of the letter to request AB 52 consultation regarding the project.

On July 1, 2020, Ms. Perry replied to the City by email for the Juaneño Band of Mission Indians requesting consultation and asking for information on the St. Joseph's Church's date of construction and for results of any Native American Heritage Commission's SLF records search and a CHRIS records search. Mr. Meshram respond to Ms. Perry July 8, 2020 a negative SLF search had been conducted, and that three historic structures had been recorded within a half-mile buffer zone all dating to the 1950s. Ms. Perry replied July 9 stating that AB 52 consultation was concluded (Swati Meshram, personal communication July 1 and July 9, 2020).

On July 1, 2020 Brandy Salas of the Gabrielino-Kizh Nation replied to the City by email requesting to conduct consultation on the project. On July 14, 2020 the Gabrielino-Kizh Nation proposed a consultation meeting on September 9, 2020, which the City confirmed (Swati Meshram, personal communication July 14 and July 29, 2020). This meeting was subsequently rescheduled to September 10, 2020. There have been no responses from the remaining four tribes.

Representatives of the City and the Gabrielino-Kizh Nation (Andrew Salas and Matthew Tumamait) conducted consultation for the project on September 10, 2020. The project was described to the tribe, particularly details of the soils present, and planned construction methods. The tribe recommended the presence of a Native American monitor representing the AB 52 consulting tribe to be present during subsurface excavation of the construction site. The City agreed to this recommendation – see **MM TCR-1** below.

No sites were documented in the Native American Heritage Commission’s SLF search. No resources as defined by Public Resources Code § 21074 have been identified (refer to **Attachment C**: “Native American Heritage Commission Records Search and Native American Contacts” in **Appendix C1** to this IS/MND). Additionally, the project site has not been recommended for historic designation for prehistoric and TCRs. No specific tribal resources were identified during outreach to local tribal organizations.

No prehistoric or historic archaeological resources were observed during the field survey. The previous cultural resources surveys within the half-mile buffer zone resulted in no archaeological sites or isolates being recorded. The cultural resource study findings at the South Central Coastal Information Center indicate that there is a low potential for finding tribal resources.

A mitigation measure for minimizing impacts on potential TCRs was recommended by the Gabrielino-Kizh Nation. Also, it is applicable to the project site because the land at the site remained relatively undisturbed due to use for orchard farming into the mid-20<sup>th</sup> century, and the immediate area has been urban with residential and commercial buildings since the 1960s. Therefore, while the potential for subsurface prehistoric cultural deposits is considered to be low, most construction work on the church campus was completed prior to implementation of CEQA guidelines.

Mitigation measure **TCR-1** described below requires consultation of a local Native American representative and a qualified archaeologist, if unanticipated discoveries are made during construction activities. With implementation of **MM TCR-1**, potential project impacts on TCRs would be less than significant.

### **Mitigation Measures**

**MM TCR-1:** Prior to the commencement of any ground-disturbing activity at the project site, the project applicant shall retain a Native American Monitor approved by the Gabrieleño Band of Mission Indians-Kizh Nation – the tribe that consulted on this project pursuant to Assembly Bill 52 (the “Tribe” or the “Consulting Tribe”). A copy of the executed contract shall be submitted to the City of Buena Park Planning Department prior to the issuance of any permit necessary to commence a ground-disturbing activity. The Tribal Monitor will only be present onsite during the construction phases that involve ground-disturbing activities. Ground-disturbing activities are defined by the Tribe as activities that may include, but are not limited to, pavement removal, potholing or auguring, tree removals, boring, grading, excavation, drilling, and trenching, within the project area. The Tribal Monitor will complete daily monitoring logs that will provide descriptions of the day’s activities, including construction activities, locations, soil, and any cultural materials identified. The onsite monitoring shall end when all ground-disturbing activities on the project site are completed, or when the Tribal Representatives and Tribal Monitor have indicated that all upcoming ground-disturbing activities at the project site have little to no potential for impacting Tribal Cultural Resources. Upon discovery of any Tribal



Cultural Resources, construction activities shall cease in the immediate vicinity of the find (not less than the surrounding 100 feet) until the find can be assessed. All Tribal Cultural Resources unearthed by project activities shall be evaluated by the qualified archaeologist and Tribal monitor approved by the Consulting Tribe. If the resources are Native American in origin, following excavation, analysis and reporting by the consulting archaeologist, the Consulting Tribe may retain it/them in the form and/or manner the Tribe deems appropriate, for educational, cultural and/or historic purposes.

- MM TCR-2** If human remains and/or grave goods are discovered or recognized at the project site, all ground disturbance shall immediately cease, and the Orange County Coroner shall be notified per Public Resources Code Section 5097.98, and Health & Safety Code Section 7050.5. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2). Work may continue on other parts of the project site while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section 15064.5[f]). If the coroner, with the aid of the supervising archaeologist, determines that the remains are prehistoric, they will contact the NAHC. The NAHC will be responsible for designating the Most Likely Descendant (MLD). The MLD (either an individual or sometimes a committee) will be responsible for the ultimate disposition of the remains, as required by § 7050.5 of the California Health and Safety Code. The MLD will make recommendations within 24 hours of their notification by the NAHC. If a non-Native American resource is determined by the qualified archaeologist to constitute a “historical resource” or “unique archaeological resource,” time and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be available. The treatment plan prepared by the consulting archaeologist established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and PRC Sections 21083.2(b) for unique archaeological resources. Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. Any historic archaeological material that is not Native American in origin shall be curated at a public, non-profit institution with a research interest in the materials, such as the Cooper Center (OC Parks) or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it shall be offered to a local school or historical society in the area for educational purposes.

#### **Level of Significance After Mitigation**

Mitigation measure **TCR-1** requires consultation of the local Native American representative and a qualified archaeologist if unanticipated discoveries are made during construction activities. With implementation of **MM TCR-1**, potential project impacts on potential TCRs would be less than significant.

Mitigation measure **TCR-2** requires that human remains be examined by the Orange County Coroner and that human remains and associated grave goods be properly handled. With implementation of **MM TCR-1**, potential project impacts on potential TCRs would be less than significant.

#### ❖ SECTION 4.18 – TRIBAL CULTURAL RESOURCES ❖

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There is no substantial evidence that TCRs are present on the project site, including no sites listed with the SLF. Therefore, at this time the project is determined to have less than significant impacts related to TCRs, with implementation of **MMs TCR-1** and **TCR-2**.

## 4.19 Utilities and Service Systems

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

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

### Less than Significant Impact

As discussed in **Section 3.0** the proposed project would require offsite improvements including sewer, domestic water, fire water, irrigation and dry utilities connection to existing utility infrastructure in Valley View Boulevard.

**Sanitary Sewer** –The proposed project would connect to the existing ten-inch vitrified clay pipe sewer main line in Valley View Boulevard. As detailed in the city's General Plan EIR, the Buena Park Public Works Department provides sewer services within the city through a network of local sewer mains. The city's local sewer system connects to regional trunk sewer systems for the Orange County

Sanitation District (OCSD), with a small portion going to County Sanitation Districts of Los Angeles County for conveyance, treatment and disposal by these agencies. The entire Buena Park collection system is comprised of approximately 165 miles of sewer lines ranging in size from six to 21 inches in diameter. All sewage flow from Buena Park to the OCSD Treatment Plant No. 2 in the City of Huntington Beach. This facility has a total primary treatment capacity of 168 million gallons per day (mgd), with an average daily treatment of approximately 127 mgd. Therefore, the plant has an additional treatment capacity of approximately 41 mgd. Treatment Plant No. 2 also has 90 mgd of secondary treatment capacity<sup>37</sup> (RBF Consulting, 2010b, pp. 5.12-1 and 5.12-9).

The project proposes 66 residential units. As shown in **Table 4.19-1**, the proposed project would generate an estimated 8,080 gallons per day (gpd) of wastewater. The amount of wastewater estimated to be generated by the project would constitute a small fraction of the treatment plant's remaining primary treatment capacity of 41 mgd. Therefore, there would be sufficient capacity available at Treatment Plant No. 2 to meet the needs of the project.

**Table 4.19-1**  
**ESTIMATED PROJECT WASTEWATER GENERATION**

Unit Size	Wastewater Generation Rate (GPD)*	Number of Units	Wastewater Generated (GPD)
One Bedroom	120	62	7,440
Two Bedroom	160	4	640
<b>PROJECT TOTAL</b>		<b>66</b>	<b>8,080</b>

\*City of Los Angeles, LA CEQA Threshold Guide 2006, Exhibit M 2-24, Sewage Generation Factors.

The site is served by an existing sanitary sewer network. New connections to the existing sewer main in Valley View Boulevard would be installed. All sewer line sizes and connections are subject to review by the city. No new treatment facilities or expanded entitlements would be required. Therefore, the project would have a less than significant impact on existing wastewater treatment facilities.

**Domestic Water** –The City relies on two major water supply sources, including imported water from the Metropolitan Water District (MWD) and local groundwater from the Orange County Groundwater Basin, managed by the Orange County Water District (OCWD). As of 2015, the city relies on approximately 73 percent groundwater and 27 percent imported water (Arcadis, 2016, p. 3-14) for drinking water supply. The City's projected water supply from 2020 through 2040 is provided in **Table 4.19-1**.

37 Secondary treatment capacity refers to the amount of waste water that can be treated during the secondary process that consists of aeration and a filter to remove solids within the wastewater.

**Table 4.19-1**  
**CITY OF BUENA PARK PROJECTED WATER SUPPLY AND DEMAND ASSESSMENT**

	2020	2025	2030	2035	2040
Supply Totals (afy)	13,770	14,782	14,883	14,879	14,900
Demand Totals (afy)	13,770	14,782	14,883	14,879	14,900
Difference	0	0	0	0	0

**Source:** City of Buena Park Urban Water Management Plan 2015 (Arcadis 2016, p. 3.21)  
 afy: acre-feet per year

The City's 2015 Urban Water Management Plan (UWMP) states that the City of Buena Park will be able to have adequate water supplies for all users, including multi-family residences, through the year 2040 (Arcadis, 2016, p. 2-8). The proposed project would connect to the existing six-inch water main in Valley View Boulevard. As analyzed in threshold 4.19 b), the project would result in a nominal increase in water demand compared to existing conditions.

**Fire Water** – Water connections are required to provide water to the proposed fire hydrants on the project site (to be located between Casitas 2 and 3 and south of Building 1, near the existing church). The fire water line would be connected to the new hydrants from the existing six-inch water line in Valley View Boulevard.

**Irrigation Line** – A new line would be connected from the existing six-inch water line in Valley View Boulevard to the project site to provide irrigation to the proposed project.

**Stormwater** - The proposed development would maintain existing drainage patterns and discharge locations. The project includes three proposed bioretention basins on site. The project proposes a 830-square-foot bioretention basin along the western boundary of the project site, along the project site's frontage with Valley View Street. A second 2,275-square-foot bioretention basin is proposed adjacent to the existing church parking lot, south of Building 1 as well as an adjacent 1,600-square-foot gravel storage area. A third 800-square-foot bioretention basin is proposed adjacent to the northern project boundary, north of Building 1. Therefore, impacts regarding stormwater would be less than significant. Refer to **Section 4.10** of this document for a discussion of the proposed project impacts regarding hydrology and water quality.

**Electric Power:** Electric power for the City of Buena Park is provided by SCE (City of Buena Park, 2019d). The proposed project is located in a developed area, and infrastructure for providing electric power to the area is well established. SCE typically utilizes existing utility corridors to reduce environmental impacts, and has energy-efficiency programs to reduce energy usage and maintain reliable service throughout the year (Southern California Edison, 2018, p. 45). The project would be constructed in accordance with all applicable California Building Standards Code (California Code of Regulations, Title 24), and would not necessitate the construction or relocation of electric power facilities. Therefore, a less than significant impact would occur.

**Natural Gas:** SoCalGas is the primary distributor of retail and wholesale natural gas across Southern California, including the City of Buena Park. SoCalGas provides services to residential, commercial, and industrial consumers, and also provides gas for electric generation customers.



In its 2018 California Gas Report, SoCalGas analyzed an 18-year demand period, from 2018-2035, to determine its ability to meet projected demand (California Gas and Electric Utilities, 2018, p. 63). SoCalGas expects total gas demand to decline 0.74 percent annually from 2018 to 2035 as a result of energy-efficiency standards and programs, renewable electricity goals, modest economic growth in its service region, and advanced metering infrastructure (California Gas and Electric Utilities, 2018, p. 66). Moreover, SoCalGas plans on implementing aggressive energy-efficiency programs that will result in natural gas savings across all sectors that will ensure longevity of its natural gas supplies and adequate generation rates (California Gas and Electric Utilities, 2018, p. 78). Therefore, anticipated natural gas supply is adequate to meet demand in the SoCalGas region, and the proposed project is not expected to impact this determination. Thus, no natural gas facilities would have to be constructed or relocated, and a less than significant impact would occur.

**Telecommunications Facilities:** Cable services, including internet, phone, and television, are provided in the city of Buena Park by Spectrum Cable and AT&T U-Verse (City of Buena Park, 2019a). The proposed project would not interfere with operation of Spectrum or AT&T's facilities, and a less than significant impact would occur.

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

**Less than Significant Impact**

As detailed in threshold 4.19 a) above, the city relies on imported water and local groundwater. The project would result in the construction of 66 residential units. **Table 4.19-2** shows the estimated water demand for the project.

**Table 4.19-2**  
**ESTIMATED RANGE IN PROJECT WATER DEMAND**

Unit Water Demand Factor Gallons Per Day (GPD)/per person <sup>1</sup>	Total Project Estimated Water Demand (gallons per year) <sup>2</sup>	Total Project Estimated Water Demand (acre-feet per year)
198	5,058,900-14,887,620	15.53-45.69
<sup>1</sup> City of Buena Park baseline water use is 198 gallons per capita per day (i.e. per person) (Arcadis, 2015 City of Buena Park Urban Water Management Plan, p. 2-11) <sup>2</sup> Based on estimated project population of 70 to 206, 198 gallons per day water demand per person, and 365 days per year.		

Although an increase in the demand for domestic water would occur as a result of the project, the increase would not be significant because adequate water supplies and facilities are available to serve the project. The project's estimated water demand of between approximately 5,058,900-14,887,620 gallons per year (13,860 to 40,788 gallons per day) would be less than 0.01 percent of the city's current (2020) water supply, which is approximately 13,770 acre feet per year or 12,293,062 gallons per day. Therefore, less than significant impacts would occur.

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

### **Less than Significant Impact**

As detailed under threshold 4.19a) above, the volume of wastewater anticipated to be generated by the proposed project would comprise a fraction of the existing capacity of OCS D Treatment Plant No. 2. Therefore, the project's wastewater generation would be within the existing capacity of the wastewater treatment provider and less than significant impacts would occur.

- d) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?**

### **Less than Significant Impact**

The city contracts with Park Disposal for collection and disposal of the city's solid waste. The waste stream generated by the City of Buena Park is processed and sorted at the CR&R, Inc. Materials Recovery Facility located at 11292 Western Avenue in the City of Stanton. (RBF Consulting, 2010b, p. 5.17-2). The majority of the city's solid waste is disposed at one of Orange County's three active landfills: Frank R. Bowerman Landfill in Irvine; Olinda Alpha Landfill in Brea; Prima Deshecha Landfill in San Juan Capistrano (RBF Consulting, 2010b, p. 5.17-1).

The Frank R. Bowerman landfill is 725 acres, with a maximum permitted capacity of 11,500 tons per day (CalRecycle, 2019a). This landfill expected to close in December 2053. Olinda Alpha has 420 acres dedicated for disposal use with a maximum permitted capacity of 8,000 tons per day and it is expected to close in December 2021 (CalRecycle, 2019b). Prima Deshecha has 697 acres dedicated for waste disposal with a maximum permitted capacity of 4,000 tons per day and is expected to close at the year end of 2102 (CalRecycle, 2019c).

### **Construction**

Project construction would generate solid waste requiring disposal at local landfills. Materials generated during construction of the project would include paper, cardboard, metal, plastics, glass, concrete, lumber scraps and other materials. During construction, bulk solid waste, excess building material, fill, etc., would be disposed of in a manner consistent with State of California Integrated Waste Management Act of 1989.

### **Operation**

The City of Buena Park Source Reduction and Recycling Element (SRRE) regulates recycling during project operation. Pursuant to the California Integrated Waste Management Act (AB 939), which was passed in 1989, the California Integrated Waste Management Board required all cities and counties within the State to prepare integrated waste management plans to attain solid waste reduction of 50 percent by the end of year 2000. In May 1995, the City of Buena Park adopted a SRRE and a Household Hazardous Waste Element (HHWE), in compliance with the requirements of AB 939. The SRRE describes policies and programs that will be implemented by the city to achieve the State's mandate of 50 percent waste disposal reductions by the year 2000. The HHWE is required to be prepared by every city, county and regional agency. This document must specify how the jurisdiction will safely collect and dispose of household hazardous wastes generated by its residents. (RBF Consulting, 2010b, p. 5.17-4). As shown in **Table 4.19-3**, occupancy of the 66 residential units would generate an estimated 147.31 tons of waste annually. This estimate does not account for diversion from landfills.

**Table 4.19-3**  
**ESTIMATED PROJECT-GENERATED SOLID WASTE**

Land Use	Generation Rate*	Approximate Waste (pounds/year)	Approximate Waste (tons/year)
Residential	12.23 pounds per dwelling unit per day	294,621	147.31

\*(RBF Consulting, 2010b, p. 5.17-6)

As discussed above, the current permitted solid waste disposal includes 11,500 tons per day at the Frank R. Bowerman Landfill, 8,000 tons per day at Olinda Alpha Landfill and 4,000 tons per day at the Prima Deshecha Landfill. The project's estimated generation of approximately 12.23 pounds per dwelling unit per day (or a total of approximately 808 pounds per day) during project operation represents a fraction of the total daily capacity at the three landfills. Since sufficient permitted landfill capacity exists to support the project, no adverse impact on either solid waste collection service or the landfill disposal system would occur. Therefore, project impacts on existing solid waste disposal facilities would be less than significant.

- e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

**Less than Significant Impact**

In 1989, the California Legislature enacted the California Integrated Waste Management Act (AB 939), in an effort to address solid waste problems and capacities in a comprehensive manner. The law required each city and county to divert 50 percent of its waste from landfills by the year 2000.

OC Waste and Recycling outlines the goals, policies, and programs the county and its cities would implement to create an integrated and cost-effective waste management system that complies with the provisions of AB 939 and its diversion mandates. As a result, the city has developed a SRRE, started in 1992, that aims at recycling, composting, special waste disposal, and education and public information programs. This program's objective was to divert 50 percent of the solid waste generated by the city by the year 2000. The most recent California Integrated Waste Management Board (CIWMB) approved solid waste diversion rate available for the City of Buena Park was 53 percent in 2006 (RBF Consulting, 2010b, p. 5.17-4).

The project would comply with the City's SRRE program for waste reduction procedures and other applicable local, state, and federal solid waste disposal standards, thereby ensuring that the solid waste stream to regional landfills is reduced in accordance with existing regulations. Therefore, less than significant impacts are anticipated.

**4.20 Wildfire**

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

As depicted in **Figure 4.9-3** and **Figure 4.9-4** in **Section 4.9, Hazards and Hazardous Materials**, the project site is not located in a Very High Fire Hazard Severity Zone (VHFHSZ) for either Local Responsibility Area (LRA) or State Responsibility Area (SRA), respectively. The nearest VHFHSZ is located in the City of Fullerton, California, over 4.5 miles northeast of the project site.

- a) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?**

**No Impact**

As noted above, the project site is not located in or near an area classified as Very High Fire Hazard Severity Zones. The city's 2010 General Plan Update EIR states, "There are currently no wilderness areas within Buena Park or in the surrounding areas. Thus, the risk of wildland fires within the city is not present. Buena Park and surrounding jurisdictions are predominately urbanized. Therefore, fire hazards within the city are primarily related to structural fires" (RBF Consulting, 2010b, p. 5.13-3). The city's Emergency Operations Plan anticipates that all major streets within the City would serve as evacuation routes. However, because the project site is not located in or near an area classified as Very High Fire Hazard Severity Zones, the project would have no impact in this regard.

- b) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other**

**factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?**

**No Impact**

The project site is not located in a VHFHSZ in either LRA or SRA. No slopes are located on the project site which could exacerbate wildfire risks. The project would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Therefore, the project would have no impact in this regard.

- c) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?**

**No Impact**

The project site is not located in a VHFHSZ in either a LRA or SRA. The project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk. Neither construction nor operation of the project would result in significant temporary or ongoing impacts to the environment. The project would be constructed in compliance with applicable building and fire codes. Therefore, the project would have no impact in this regard.

- d) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?**

**No Impact**

The project site is not located in a VHFHSZ in either a LRA or SRA. The proposed project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. The project site is flat, is not located in an area with high slopes or unstable ground conditions, and is not within a landslide hazard zone (RBF Consulting, 2010a, Exhibit SAF-2). Therefore, the proposed project would have no impact in this regard.



## 4.21 Mandatory Findings of Significance

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

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

### **Less Than Significant Impact with Mitigation Incorporated**

Considering that the project is located in a highly urbanized area with developed and landscaped substrates, optimal habitat for special-status plant and wildlife species is lacking. Thus, with the implementation of mitigation measure **BIO-1** (to protect nesting bird species from noise and dust disturbances) the proposed project would have less than significant impacts on species. As detailed in **Section 4.5**, grading activities associated with development of the project would cause new subsurface disturbance and could result in the unanticipated discovery of unique archeological resources. With the implementation of mitigation measure **CUL-1**, potential project impacts on historical resources would be less than significant.

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

**Less than Significant Impact with Mitigation Incorporated**

Regarding cumulative projects, the City of Buena Park website does not list any current or upcoming projects for 2020 (City of Buena Park Current Construction, 2020); therefore, it is not anticipated that any significant cumulative impacts would occur with construction of the proposed project. The proposed project includes mitigation, as warranted to reduce potentially significant environmental impacts. Therefore, a less than significant impact is anticipated regarding cumulatively considerable impacts.

The project would generate new short-term construction jobs in the project area. Due to the relatively small size of this project, and its location within an existing urban area, the project is not expected to induce substantial growth in the region. The project would utilize existing infrastructure for its operation. Therefore, indirect population growth resulting solely from the project would be less than significant.

Because the project would not increase environmental impacts after mitigation measures are incorporated, any incremental contribution to cumulative impacts would be negligible and would be less than significant.

The proposed project would be consistent with regional plans and programs that address environmental factors such as air quality, water quality, and other applicable regulations that have been adopted by public agencies with jurisdiction over the project for the purpose of avoiding or mitigating environmental effects.

**Sections 4.3** and **4.13** of this document address potential impacts related to Air Quality and Noise, respectively. The proposed project would have less than significant air quality and greenhouse gas impacts. With the incorporation of mitigation, project impacts associated with noise levels during project construction would be reduced to less than significant levels. As detailed in **Section 4.3**, construction and operational air quality impacts would be less than significant and do not warrant mitigation. As detailed in **Section 4.13**, operational noises associated with the project site were found to be less than significant and do not warrant mitigation.

The project would generate new short-term construction jobs in the project area. Due to the relatively small size of this project, and its location within an existing urban area, the project would not induce substantial population growth in the region. The project would utilize existing infrastructure for its operation and it has been specifically designed to house seniors. Therefore, indirect population growth resulting solely from the project is expected to be less than significant.

Because the project would not increase environmental impacts after mitigation measures are incorporated, the incremental contribution to cumulative impacts is anticipated to be less than significant with mitigation incorporated.

- c) **Would 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**

A structure called “The Barn” is located on the northern part of the project site and is a small stand-alone building, located northeast of the existing church and administration buildings onsite. “The Barn” would be demolished as part of the proposed project. Based on aerial photographs “The Barn” was present sometime after 1994 and prior to 2002. Therefore, it is unlikely but unconfirmed as to whether or not “The Barn” was constructed with Asbestos-Containing Materials (ACMs) and Lead-Based Paint (LBP) that can cause adverse health effects when airborne. Mitigation measure **HAZ-1** is recommended to reduce potential impacts from ACM and LBP. With implementation of **MM HAZ-1** the project would have less than significant impacts regarding create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials and regarding handling hazardous or acutely hazardous materials, substances, or waste within one quarter mile of a school.

Regarding Noise, as detailed in **Section 4.13**, with implementation of mitigation measures **N-1** and **N-2**, the proposed project would result in less than significant construction noise impacts to sensitive receivers. Roadway noise associated with project operation would not expose a land use to noise levels that are considered incompatible with or in excess of adopted standards, and impacts would be less than significant. Noise levels associated with operation of the project are expected to be comparable to those of nearby residential areas. Noise from onsite sources would be less than significant.

Regarding emergency services such a police and fire, based on the response from the OCFA, the proposed project would not require the construction of new fire department facilities and the project should have a less than significant impact on OCFA’s level of service and/or response times. The Police Department does not anticipate any potential environmental impacts from the proposed project related to providing police services to the project site and the proposed project would likely not have potentially significant impacts on the Police Department’s level of service and/or response times (Worrall, 2020). Therefore, the project would have a less than significant impact on police services and no mitigation is required.

During the construction phase, the project could temporarily impact street traffic adjacent to the project due to construction activities in the right-of-way (ROW). Project construction could reduce the number of lanes or temporarily close a portion of Valley View Street at San Rafael Drive and the frontage roads along Valley View Street. Mitigation measure **TRANS-1** is recommended to address potential hazards impacts during the construction phase. With implementation of mitigation measure **TRANS-1**, the project would have less than significant construction-phase impacts regarding a substantial increase in hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses and a less than significant impact regarding emergency access during the project construction phase.

As discussed in **Sections 4.1** through **4.20** of this document, after the implementation of mitigation measures, potential adverse environmental effects were found to be less than significant on human beings, either directly or indirectly. Therefore, less than significant impacts would occur.

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## 5.0 REFERENCES

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## 7.0 MITIGATION MONITORING AND REPORTING PROGRAM

The Mitigation Monitoring and Reporting Program (MMRP) has been prepared in conformance with § 21081.6 of the Public Resources Code and § 15097 of the CEQA Guidelines, which requires all state and local agencies to establish monitoring or reporting programs whenever approval of a project relies upon a MND or an EIR. The MMRP ensures implementation of the measures being imposed to mitigate or avoid the significant adverse environmental impacts identified through the use of monitoring and reporting. Monitoring is generally an ongoing or periodic process of project oversight; reporting generally consists of a written compliance review that is presented to the decision-making body or authorized staff person.

It is the intent of the MMRP to: (1) provide a framework for document implementation of the required mitigation; (2) identify monitoring/reporting responsibility; (3) provide a record of the monitoring/reporting; and (4) ensure compliance with those MM that are within the responsibility of the City and/or Applicant to implement.

The following table lists impacts, mitigation measures adopted by the City of Buena Park in connection with approval of the proposed project, level of significance after mitigation, responsible and monitoring parties, and the project phase in which the measures are to be implemented.

Only those environmental topics for which mitigation is required are listed in this Mitigation Monitoring and Reporting Program.



**Table 7.0-1**  
**MITIGATION MONITORING AND REPORTING PROGRAM**

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
<b>4.1 Aesthetics</b>				
<b>Threshold 4.1d)</b> Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<b>MM AES-1:</b> During project construction the project applicant shall place construction staging areas as far as possible away from adjacent residences so as to minimize to the maximum extent possible any potential lighting and/or glare impacts to nearby residences. The lighting used during project construction shall consist of the minimum amount of light necessary for safety and security on the project site.	Project Applicant	Construction Staging	1. City of Buena Park 2. City of Buena Park 3. During Project Construction
<b>4.4 Biological Resources</b>				
<b>Threshold 4.2a)</b> Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<b>MM BIO-1:</b> Nesting Bird Protection. If feasible during project construction, the project applicant shall ensure that vegetation removal shall be restricted to the period between February 1 to September 31, to avoid the breeding season of any migratory species that could be using the area, and to discourage nesting in the vicinity of an upcoming construction area. <ul style="list-style-type: none"> <li>If it is not feasible to remove trees outside this window, then, prior to the beginning of vegetation removal and/or earthmoving activities during the period between February 1 and September 31, all vegetation within 250 feet of any grading or earthmoving activity shall be surveyed for active nests by a qualified biologist no more than 30 days prior to disturbance. If active nests are found, and the site is within 250 feet of potential construction activity, a temporary fence shall be erected, where appropriate, around the vegetated nest site at a distance of up to 250 feet, depending on the species, from the edge of the canopy, to prevent construction disturbance and intrusions on the nest area.</li> <li>No construction vehicles shall be permitted within restricted areas (i.e., protection zones), unless directly related to the management or protection of the legally protected species.</li> <li>If a legally protected species nest is located in vegetation designated for removal, the removal shall be deferred until after September 31, or until the avian biologist can determine that the young have fledged or the nest has become inactive.</li> </ul>	Project Applicant	Field Verification	1. City of Buena Park 2. City of Buena Park 3. During construction

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	This mitigation measure will also protect nesting birds from noise and dust impacts potentially caused by project operations.			
<b>4.5 Cultural Resources</b>				
<b>Threshold 4.2a)</b> Would the project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	<b>MM CUL 1:</b> In the event of an unexpected discovery of an historical resource as defined by CEQA Guidelines § 15064.5, during any project related earth disturbing activities, all earth disturbing activities within 30 feet of the find shall be halted and the City of Buena Park shall be notified. The project applicant shall retain an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology to assess the significance of the find. Impacts on any significant resources shall be mitigated to a less than significant level through data recovery or other methods determined adequate by the archaeologist and that are consistent with the Secretary of the Interior's Standards for Archaeological Documentation. Any identified cultural resources shall be recorded on the appropriate DPR 523 (A L) form and filed with the SCCIC. Construction activities may continue on other parts of the project site while evaluation and treatment of historic archaeological resources takes place.	Project Applicant	Field Verification	1. City of Buena Park 2. City of Buena Park 3. During construction
<b>Threshold 4.2b)</b> Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	Refer to <b>MM CUL-1</b> above.	Project Applicant	Field Verification	1. City of Buena Park 2. City of Buena Park 3. During construction

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TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
<b>Threshold 4.2c)</b> Would the project disturb any human remains, including those interred outside of formal cemeteries?	<b>MM CUL 2:</b> If human remains are encountered during excavations associated with this project, all work will stop within a 30 foot radius of the discovery and the Orange County Coroner will be notified (§ 5097.98 of the Public Resources Code). The Coroner will determine whether the remains are recent human origin or older Native American ancestry. If the coroner, with the aid of the supervising archaeologist, determines that the remains are prehistoric, they will contact the NAHC. The NAHC will be responsible for designating the Most Likely Descendant (MLD). The MLD (either an individual or sometimes a committee) will be responsible for the ultimate disposition of the remains, as required by § 7050.5 of the California Health and Safety Code. The MLD will make recommendations within 24 hours of their notification by the NAHC. These recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials (§ 7050.5 of the Health and Safety Code).	Project Applicant	Field Verification	1. City of Buena Park 2. City of Buena Park 3. During construction
<b>4.7 Geology and Soils</b>				
<b>Threshold 4.7a)</b> Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: seismic-related ground failure, including liquefaction?	<b>MM GEO-1:</b> During grading and construction of the proposed project, the project applicant shall follow all recommendations in Section 6.0, Recommendations, on pages 10-22 of the geotechnical report prepared for the project (Albus-Keefe & Associates, Inc., Preliminary Geotechnical Investigation, Proposed Senior Housing Development, 8300 Valley View Street, Buena Park, California, dated January 20, 2020).	Project Applicant	Follow Geotechnical Report Recommendations	1. City of Buena Park 2. City of Buena Park 3. During construction

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TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY  2. MONITORING AGENCY  3. MONITORING PHASE
<b>Threshold 4.7c)</b> 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?	Refer to <b>MM GEO-1</b> above.	Project Applicant	Follow Geotechnical Report Recommendations	1. City of Buena Park 2. City of Buena Park 3. During construction
<b>Threshold 4.7d)</b> Be located on expansive soil, as defined in Table 18-1 B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Refer to <b>MM GEO-1</b> above.	Project Applicant	Follow Geotechnical Report Recommendations	1. City of Buena Park 2. City of Buena Park 3. During construction
<b>Threshold 4.7f)</b> Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	<b>MM GEO-2:</b> If paleontological resources are uncovered during construction activities, the contractor shall halt construction activities in the immediate area and notify the City of Buena Park. The on-call paleontologist shall be notified and afforded the necessary time and funds to recover, analyze, and curate the find(s). Subsequently, the monitor shall remain onsite for the duration of the ground disturbance to ensure the protection of any other resources that may be in the area.	Project Contractor	Field Verification	1. City of Buena Park 2. City of Buena Park 3. During construction

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TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY  2. MONITORING AGENCY  3. MONITORING PHASE
<b>4.9 Hazards and Hazardous Materials</b>				
<b>Threshold 4.9a)</b> Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<b>MM HAZ-1:</b> Prior to demolition, the existing structure called "The Barn" shall be assessed for the presence of asbestos-containing materials (ACMs) and lead-based paint (LBP). If ACMs and/or LBP are found, the resulting construction debris shall be removed and disposed of at a landfill that can accept hazardous materials, including asbestos and lead-based paint. All ACMs and LBP shall be removed prior to demolition, as required, and in accordance with all applicable laws, including guidelines of the Occupational Safety and Health Administration (OSHA).	Project Applicant	Field Verification	1. City of Buena Park 2. City of Buena Park 3. Prior to demolition
<b>Threshold 4.9c)</b> Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Refer to <b>MM HAZ-1</b> above.	Project Applicant	Field Verification	1. City of Buena Park 2. City of Buena Park 3. Prior to demolition
<b>4.12 Noise</b>				
<b>Threshold 4.12 a):</b> Exposure of persons to or generation of noise level in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	<b>MM N-1:</b> Project applicants shall require by contract specifications that the following construction best management practices (BMPs) be implemented by contractors to reduce construction noise levels: <ul style="list-style-type: none"> <li>• Ensure that construction equipment is properly muffled according to industry standards and be in good working condition.</li> <li>• Place noise-generating construction equipment and locate construction staging areas away from sensitive uses, where feasible.</li> <li>• Schedule high noise-producing activities between the hours of 8:00 AM and 7:00 PM to minimize disruption on sensitive uses.</li> <li>• Implement noise attenuation measures, which may include, but are not limited to, temporary noise barriers or noise blankets around stationary construction noise sources.</li> <li>• Use electric air compressors and similar power tools rather than diesel equipment, where feasible.</li> <li>• Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 30 minutes.</li> </ul>	Project Applicant	Field Verification	1. City of Buena Park 2. City of Buena Park 3. During construction



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TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	<ul style="list-style-type: none"> <li>Construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow for surrounding owners and residents to contact the job superintendent. If the City or the job superintendent receives a complaint, the superintendent shall investigate, take appropriate corrective action, and report the action taken to the reporting party. Contract specifications shall be included in the proposed project construction documents, which shall be reviewed by the City prior to issuance of a grading permit.</li> </ul>			
<b>Threshold 4.12 a):</b> Exposure of persons to or generation of noise level in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	<b>MM N-2:</b> Project applicants shall require by contract specifications that heavily loaded trucks used during construction would be routed away from residential streets to the extent feasible. Contract specifications shall be included in the proposed project construction documents, which shall be reviewed by the City prior to issuance of a grading permit.	Project Applicant	Field Verification	1. City of Buena Park 2. City of Buena Park 3. Prior to demolition
<b>4.17 Transportation</b>				
<b>Threshold 4.17c)</b> Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or	<b>MM TRANS-1:</b> Prior to the start of construction activity in the public right-of-way, the General Contractor shall submit a detailed Construction Management Plan to be reviewed and approved by the City of Buena Park Traffic Engineer. The Construction Management Plan shall specify that the Construction Manager will schedule truck traffic and employee shifts to avoid creating trips during the peak traffic periods, as is feasible for construction operations. All measures including identified truck routes and designated employee parking areas shall be included in the Construction Management Plan. The Plan shall include but is not limited to the following provisions: a) Identification of permitted hours for construction related deliveries and removal of heavy equipment and material; b) Identification of where construction workers would park their personal vehicles during project construction with a requirement that at no time shall construction worker vehicles block any driveways. If complaints are received by the project applicant or City of Buena Park regarding issues with construction worker vehicle	Project Applicant	Field Verification	1. City of Buena Park 2. City of Buena Park 3. During construction

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TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY  2. MONITORING AGENCY  3. MONITORING PHASE
endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	parking, the project applicant shall identify alternative parking options for construction workers so as not to interfere with adjacent parking availability; c) Identification of how emergency access to and around the project site will be maintained during project construction; d) Identification of haul routes for delivery or removal of heavy and/or oversized equipment or material loads. Where feasible, delivery or removal of oversized equipment or material loads shall be conducted during off-peak hour traffic periods; e) Maintain pedestrian and bicycle connections around the project site and safe crossing locations shall be considered for all pedestrian and bicyclist detours; and f) Maintain the security of the project site by erecting temporary fencing during the construction phase of the project. Any onsite night lighting used during the construction phase of the project shall be in compliance with City of Buena Park lighting requirements.			
<b>Threshold 4.17d)</b> Would the project result in inadequate emergency access.	Refer to <b>MM TRANS-1</b> above.	Project Applicant	Field Verification	1. City of Buena Park 2. City of Buena Park 3. During construction

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TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY  2. MONITORING AGENCY  3. MONITORING PHASE
<b>4.18 Tribal Cultural Resources</b>				
<b>Threshold 4.18 b)</b> Would the project cause a substantial adverse change in the significance of a tribal cultural resource that is determined to be a significant resource to a California Native American tribe pursuant to the criteria set forth in subdivision (c) of Public Resource Code § 5024.1(c)?	<b>MM TCR 1:</b> Prior to the commencement of any ground-disturbing activity at the project site, the project applicant shall retain a Native American Monitor approved by the Gabrieleño Band of Mission Indians-Kizh Nation – the tribe that consulted on this project pursuant to Assembly Bill 52 (the “Tribe” or the “Consulting Tribe”). A copy of the executed contract shall be submitted to the City of Buena Park Planning Department prior to the issuance of any permit necessary to commence a ground disturbing activity. The Tribal Monitor will only be present onsite during the construction phases that involve ground-disturbing activities. Ground-disturbing activities are defined by the Tribe as activities that may include, but are not limited to, pavement removal, potholing or auguring, tree removals, boring, grading, excavation, drilling, and trenching, within the project area. The Tribal Monitor will complete daily monitoring logs that will provide descriptions of the day’s activities, including construction activities, locations, soil, and any cultural materials identified. The onsite monitoring shall end when all ground-disturbing activities on the project site are completed, or when the Tribal Representatives and Tribal Monitor have indicated that all upcoming ground-disturbing activities at the project site have little to no potential for impacting Tribal Cultural Resources. Upon discovery of any Tribal Cultural Resources, construction activities shall cease in the immediate vicinity of the find (not less than the surrounding 100 feet) until the find can be assessed. All Tribal Cultural Resources unearthed by project activities shall be evaluated by the qualified archaeologist and Tribal monitor approved by the Consulting Tribe. If the resources are Native American in origin, following excavation, analysis and reporting by the consulting archaeologist, the Consulting Tribe may retain it/them in the form and/or manner the Tribe deems appropriate, for educational, cultural and/or historic purposes.	Project Applicant	Field Verification	1. City of Buena Park 2. City of Buena Park 3. Prior to commencement of any ground disturbing activity

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TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY  2. MONITORING AGENCY  3. MONITORING PHASE
Threshold 4.18 b) Would the project cause a substantial adverse change in the significance of a tribal cultural resource that is determined to be a significant resource to a California Native American tribe pursuant to the criteria set forth in subdivision (c) of Public Resource Code § 5024.1(c)?	<b>MM TCR-2:</b> If human remains and/or grave goods are discovered or recognized at the project site, all ground disturbance shall immediately cease, and the Orange County Coroner shall be notified per Public Resources Code Section 5097.98, and Health & Safety Code Section 7050.5. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2). Work may continue on other parts of the project site while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section 15064.5[f]). If the coroner, with the aid of the supervising archaeologist, determines that the remains are prehistoric, they will contact the NAHC. The NAHC will be responsible for designating the Most Likely Descendant (MLD). The MLD (either an individual or sometimes a committee) will be responsible for the ultimate disposition of the remains, as required by § 7050.5 of the California Health and Safety Code. The MLD will make recommendations within 24 hours of their notification by the NAHC. If a non-Native American resource is determined by the qualified archaeologist to constitute a “historical resource” or “unique archaeological resource,” time and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be available. The treatment plan prepared by the consulting archaeologist established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and PRC Sections 21083.2(b) for unique archaeological resources. Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. Any historic archaeological material that is not Native American in origin shall be curated at a public, non-profit institution with a research interest in the materials, such as the Cooper Center (OC Parks) or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it shall be offered to a local school or historical society in the area for educational purposes.	Project Applicant	Field Verification	1. City of Buena Park 2. City of Buena Park 3. During project construction