Palmyra Cemetery Development
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

ENVIRONMENTAL DOCUMENT NO. 1880-21

Prepared for:

The City of Orange
Community Development Department • Planning Division
300 East Chapman Avenue
Orange, CA 92866-1591
(714) 744 7220
www.cityoforange.org

Contact: Vidal F. Marquez, Assistant Planner

Applicant :

Kornerstone Park, LLC
2500 E. Ball Road
Suite 260
Anaheim, CA 92806

Prepared By:

SAGECREST
PLANNING + ENVIRONMENTAL

27128 Paseo Espada, Suite 1524
San Juan Capistrano, CA 92675
714-488-1529
Contact: Christine Saunders, Director of Environmental Services

June 2022

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ACRONYMS & ABBREVIATIONS

Acronyms/Abbreviation	Definition
ADT	average daily traffic
afy	acre feet per year
Applicant	Kornerstone Park, LLC
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
ASTs	above ground storage tanks
BMPs	Best Management Practices
CAAQS	California Ambient Air Quality Standards
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
cfs	cubic feet per second
CGS	California Geologic Survey
CHSC	California Health and Safety Code
City	City of Orange
CMP	Congestion Management Program
CNEL	Community Noise Equivalent Value
CO	carbon monoxide
County	Orange County
CRPR	California Rare Plant Rank
CWA	Clean Water Act
dB	Decibel
dBA	A-weighted decibels
DTSC	CA Department of Toxic Substances Control
EDR	Environmental Data Resources, Inc.
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
FEMA	Federal Emergency Management Agency
FTIP	Federal Transportation Improvement Program
GHG	greenhouse gas
GPA	General Plan Amendment
gpd	gallons per day
HCM	Highway Capacity Manual
ICU	Intersection Capacity Utilization
IS	Initial Study
LEA	Local Enforcement Agency
Leq	Equivalent sound level
LBP	lead-based paint
LOS	level of service

Acronyms/Abbreviation	Definition
MBTA	Migratory Bird Treaty Act
mgd	million gallons per day
MLD	most likely descendent
MND	Mitigated Negative Declaration
MS4	Municipal Separate Storm Sewer System
MSL	mean sea level
$MTCO_2e$	million metric tons of carbon dioxide equivalent
MWD	Metropolitan Water District
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	Natural Communities Conservation Plan
NO_2	nitrogen dioxide
NPDES	National Pollution Discharge Elimination System
OCHCA	Orange County Health Care Agency
OCSD	Orange County Sanitation District
OCTA	Orange County Transportation Authority
OCWD	Orange County Water District
OFD	Orange Fire Department
OMC	Orange Municipal Code
OPD	Orange Police Department
OSHA	Occupational Safety and Health Administration
OUSD	Orange Unified School District
$PM_{2.5}$	fine particulate matter
PM_{10}	Respirable particulate matter
ppm	parts per million
PPV	peak particle velocity
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SLF	Sacred Lands File
SO_2	sulfur dioxide
SR-55	State Route 55
SR-91	State Route 91
SWCRB	State Water Resources Control Board
SWPPP	Storm Water Pollution Prevention Plan
TAC	toxic air contaminant
TMDLs	total maximum daily loads
TWC	Time Warner Cable
USTs	underground storage tanks

Acronyms/Abbreviation	Definition
UWMP	Urban Water Management Plan
V/C	volume-to-capacity
VOC	volatile organic compound
WoUS	Waters of the United States

1 INTRODUCTION

Kornerstone Park, LLC (Applicant) proposes to demolish existing site improvements, including a parking lot, and construct a 3,339-gravesite cemetery, 51-stall parking lot, 800 square foot (sf) storage shed, and reconstruct the 5,262-sf building that previously existed onsite (Proposed Project). In September, October, and November 2021, a series of fires destroyed the previously existing building. The Applicant would reconstruct the building consistent with the architectural plans that the City's Design Review Committee considered in Fall 2021, prior to the fires. The architectural plans included demolition of 124 square feet of the previously existing building and minor remodeling and modifications, resulting in a building area of 5,138 sf. The Proposed Project is located on 5.99-gross acres of land consisting of two parcels, Assessor's Parcel Numbers (APNs) 392-071-07 and 392-052-240 located at 290 South Yorba Street and 2205 East Palmyra Avenue, directly south of East Chapman Avenue, directly west of South Yorba Street, north of East La Veta Avenue, and east of State Route (SR) 55 and the Santiago Creek in the City of Orange (Project Site). The Santiago Creek and multi-purpose Santiago Creek Trail intersect the northwest portion of the Project Site and account for 1.71-acres of the 5.99-gross acre site leaving 4.28 net acres available for the Proposed Project. The Applicant is requesting the following entitlements:

- A General Plan Amendment (No. 2021-002) to re-designate a portion of the Project Site from Low Density Residential (LDR) to Open Space-Park (OS-P);
- A Tentative Parcel Map (2020-177) to consolidate the Project Site into one lot;
- A Conditional Use Permit (CUP No. 3130-20) to allow cemetery use;
- A Major Site Plan Review (MJSP No. 1023-20) for modifications to the existing site layout;
- Design Review (DRC No. 5018-20) for modifications to the previously existing building and new landscaping onsite;
- A Variance (VAR No. 2254-21) to allow for above height walls/fences within the front yard setback.
- Tree Removal Permit for removal of 104 existing trees onsite.

The Proposed Project would implement the City's Agricultural and Open Space Districts standards pursuant to Chapter 17.22 of the Orange Zoning Ordinance and standards set forth by the Yorba South Commercial Overlay, with a variance request to exceed allowable wall/fence heights within the front yard setback. The Proposed Project would entail a 20-year phased approach to buildout of the crypt gravesites. Initial project implementation would feature new trash enclosure and ancillary utility shed, fences and walls surrounding the cemetery use, gated entry to the site, an outdoor patio area, and new landscaping. Parking for the Proposed Project's would include 51 surface parking lot spaces accessible from Palmyra Avenue and South Tracy Lane.

The Proposed Project is a project under the California Environmental Quality Act (Public Resource Code § 21000 et seq.: "CEQA"). The primary purpose of CEQA is to inform the public and decision makers as to the potential impacts of a project and to allow an opportunity for public input to ensure informed decision-making. CEQA requires all state and local government agencies to

consider the environmental effects of projects over which they have discretionary authority. CEQA also requires each public agency to mitigate or avoid any significant environmental impacts resulting from the implementation of projects subject to CEQA.

Pursuant to Section 15367 of the State CEQA Guidelines, the City of Orange (the City) is the lead agency for the Proposed Project. The lead agency is the public agency that has the principal responsibility for carrying out or approving a project. The City, as the lead agency for the Proposed Project, is responsible for preparing environmental documentation in accordance with CEQA to determine if approval of the discretionary actions requested and subsequent development of the Proposed Project would have a significant impact on the environment.

1.1 California Environmental Quality Act Compliance

A Lead Agency may prepare Mitigated Negative Declaration for a project that is subject to CEQA when an Initial Study has identified potentially significant effects on the environment, but (1) revisions in the project plans or proposals made by, or agreed to by, the applicant before the proposed Negative Declaration and Initial Study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effect on the environment would occur, and (2) there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment (Public Resources Code Section 21064.5).

This IS/MND has been prepared for the Proposed Project, in conformance with Section 15070(b) of the State CEQA Guidelines. The purpose of the IS/MND is to identify any potentially significant impacts associated with the Proposed Project and incorporate mitigation measures into the Proposed Project as necessary to eliminate the potentially significant effects of the Proposed Project or to reduce the effects to a level of less than significant.

1.2 Content and Format of a Mitigated Negative Declaration

The IS/MND is an informational document intended to disclose to agencies and to the public the environmental consequences of approving and implementing the Proposed Project. This IS/MND includes the following:

Section 1: Introduction: This section introduces the Proposed Project, including project background, CEQA compliance, and public review process.

Section 2: Project Description: This section provides a detailed description of the Proposed Project, including the Proposed Project location, geographic and environmental setting, project characteristics, and discretionary actions related to the Proposed Project.

Section 3: Initial Study Checklist: This section provides the findings that the Proposed Project would not have a significant effect on the environment and the support for this finding.

Section 4: Environmental Impact Analysis: This section provides an analysis of the Proposed Project against the standards outlined in the environmental issue categories in the Initial Study checklist. The Initial Study analyzes environmental issues and concerns surrounding the Proposed Project, determines the level of significance of the Proposed Project's environmental effects, and identifies corresponding mitigation measures to lessen potentially significant impacts to a less than significant level.

Section 5: List of Preparers: This section provides a list of professionals who contributed to the preparation of the IS/MND.

Section 6: References: This section provides a list of references used to prepare the IS/MND.

1.3 Public Review Process

Pursuant to State CEQA Guidelines Section 15105(b), the IS/MND will be available for a 30-day public review and comment period from June 30, 2022, to August 1, 2022, on the City of Orange's website at https://www.cityoforange.org/our-city/departments/community-development/planning-division/current-projects.

If a paper copy of the Initial Study/Mitigated Negative Declaration is needed, please contact Vidal Marquez at the email address or phone number listed below.

In reviewing the IS/MND, affected public agencies and the interested members of the public should focus on the sufficiency of the document in identifying and analyzing the possible impacts on the environment, as well as ways in which the significant effects of the Proposed Project would be avoided or mitigated.

Comments may be made on the IS/MND in writing before the end of the comment period. Following the close of the public comment period, the City will consider this IS/MND and comments thereto in determining whether to approve the Proposed Project. Written comments on the IS/MND should be sent to the following address by August 1, 2022:

City of Orange
Attn: Vidal F. Marquez, Assistant Planner
300 East Chapman Avenue
Orange, CA 92866
714-744-7214
vmarquez@cityoforange.com

2 PROJECT DESCRIPTION

2.1 Project Location

The Proposed Project is located at 290 South Yorba Street and 2205 East Palmyra Avenue (APNs 392-052-24 and 392-071-07) in the City of Orange (City), in the northwestern portion of Orange County, California (Project Site). The Project Site is within the U.S. Geological Survey (USGS) "Orange, California" 7.5-minute quadrangle and located in the southern portion of the City, south of East Chapman Avenue, east of State Route 55 (SR-55), north of East La Veta Avenue, and west of South Yorba Street. Freeway access to the Project Site is provided via SR-55 (**Figure 1** - *Regional Vicinity Map*).

2.2 Existing Project Site Conditions Setting

The Project Site is 5.99 gross acres consisting of two parcels (six lots), located south of East Chapman Avenue, west of South Yorba Street, north of East La Veta Avenue, and east of SR-55 in the City of Orange (**Figure 2** – *Project Vicinity Map* and **Figure 3** – *Tentative Map*). The Project Site contained multipurpose and recreation facilities that included a former YMCA building that was destroyed by fire in the central portion, parking lot in the east-central portion, a former bicycle motocross (BMX) track in the northern portion, and former sports field in the southern portion. In late 2021, the former YMCA building was destroyed in a series of fires. Santiago Creek and multi-purpose Santiago Creek Trail intersect the northwest portion of the Project Site and account for 1.71-acres of the 5.99-gross acre site. The County of Orange operated the Project Site as a municipal solid waste disposal site between 1946 to 1956. Landfill operations belonged to a large former landfill known as the "La Veta Refuse Disposal Station" which concluded waste disposal in 1956. The landfill contained solid wastes consisting of green waste, construction debris, and municipal solid waste. The project-specific Post Closure Land Use Plan (Appendix G) provides an estimate of several hundred thousand yards accepted during operation of the landfill. In 1972, the building used as a YMCA was constructed, with waste in the immediate area of the building excavated and installation of a passive methane venting system. The Project Site also contains five (5) existing compliance landfill gas (LFG) probes, two non-compliance LFG probes, and one (1) existing ground water monitoring well.

Topography on the Project Site is flat. The Santiago Creek flows northeast to southwest through the northwest corner of the Project Site. Existing site drainage occurs in two sections: (1) at the area south of the former building toward the existing parking lot and to Palmyra Avenue; (2) at the area north of the former building. However, the area north of the former building does not have definitive drainage directions, as the existing Santiago Trail acts as a ridge. This results in the area west of the trail draining directly into Santiago Creek and the area east of the trail draining in arbitrary directions and eventually, draining to the existing parking lot and to Palmyra Avenue. Vehicular access to the Project Site is currently provided via one driveway access points at the knuckle of Palmyra Avenue and South Tracy Lane. The Project Site contains 131 existing trees onsite of various types. The majority of the existing trees onsite consist of a mature windrow of Red Gum with a majority in unhealthy or substandard conditions, and Coast Live Oak with most of the oaks considered healthy. Additional trees onsite include sycamores (declining health), jacarandas (healthy), rubber trees and laurels (healthy), pine trees (fair to poor health),

and pepper trees (fair to good health). **Table 1** - *Project Site Information* summarizes key information related to the Project Site.

Table 1 – Project Site Information

Address	290 S. Yorba Street and 2205 E. Palmyra Avenue
APNs	392-052-24 and 392-071-07
Size	5.99 acres (gross)
Existing General Plan Designation	Open Space-Park (OS-P), Open Space (OS), Low Density Residential (LDR), and Yorba South Commercial Overlay (YSCO)
Existing Zoning	Recreational Open Space (RO)
Existing Use	Multi-purpose activity center (building destroyed by fire), paved parking lot, former bicycle motocross track, former sports fields, portions of Santiago Creek and multi-purpose Santiago Creek Trail.
Surrounding Uses and Zoning	North General Plan Designation: Open Space-Park and Yorba South Commercial Overlay Zoning: Recreational Open Space Uses: Orange Dog Park, SR-55, Santiago Trail, and Multi-purpose Santiago Creek Trail South: General Plan Designation: Low Density Residential Zoning: Single-Family Residential (R1-7) Uses: Single-Family Residences East General Plan Designation: Public Facilities/Institutions Zoning: Recreational Open Space and Single-Family Residential (R1-7) Uses: OUSD Child Development Center and Single-Family Residences West General Plan Designation: Low Medium Residential Zoning: Multiple-Family Residential – Single Story (R-3(A)) Uses: Santiago Creek Trail and Multi-purpose Santiago Creek Trail, SR-55, Single-Family Residences (beyond)

General Plan Amendment

The Project Site is currently designated as Open Space-Park (OS-P), Open Space (OS), and Low Density Residential (LDR), with the entire Project Site located within the Yorba South Commercial Overlay, in the Land Use Element of the Orange General Plan and would require a General Plan Amendment (GPA) to re-designate the LDR portion of the Project Site to OS-P.

The existing land use designation of Low Density Residential includes conventional single-family residential development characterized by individual single-family homes constructed in subdivisions, or by custom units built on individual lots, which is consistent with the residential uses to the south of the Project Site. The portion of the Project Site designated as LDR is currently vacant. However, Table LU-3 of the City's General Plan Land Use Element shows that the Low-Density Residential designation is not consistent with the existing zoning of Recreational Open Space. As stated above, the LDR land use designation includes single family residential uses, as outlined in Table LU-1 – *Land Use Designations.* The proposed cemetery use is not consistent with the LDR designation.

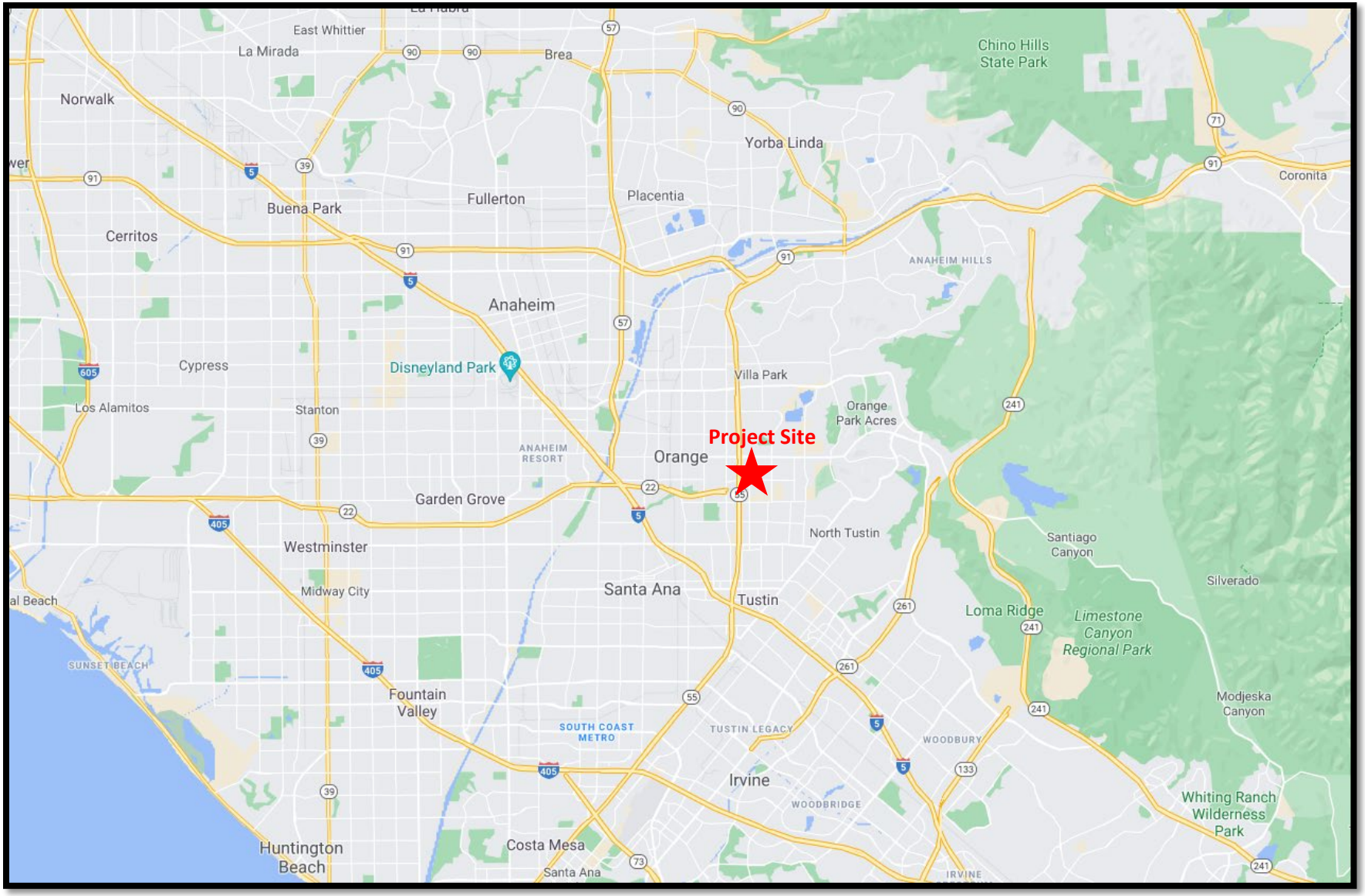


Figure 1: Regional Location Map

Source: Google Maps

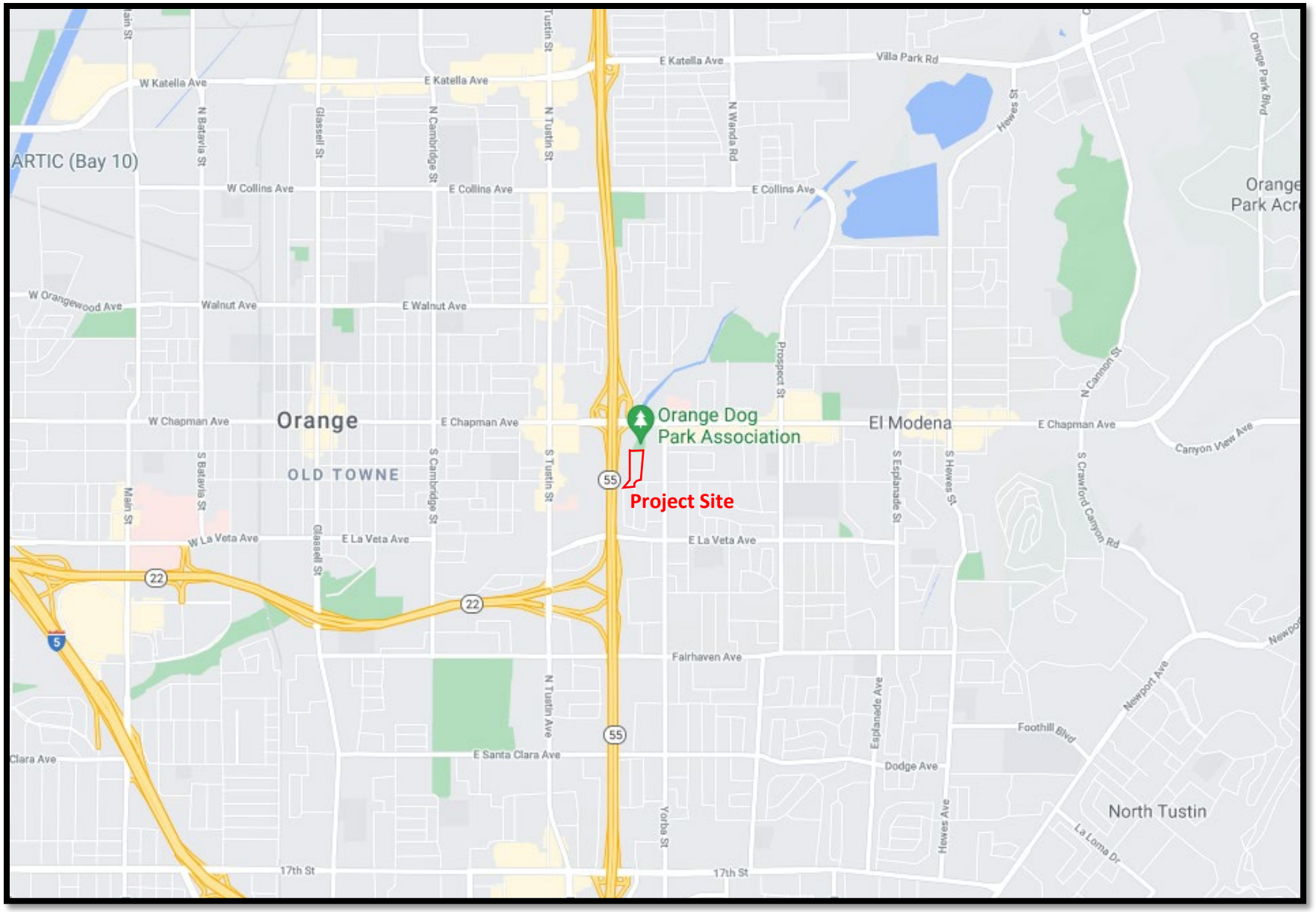


Figure 2: Project Vicinity Map

Source: Google Maps

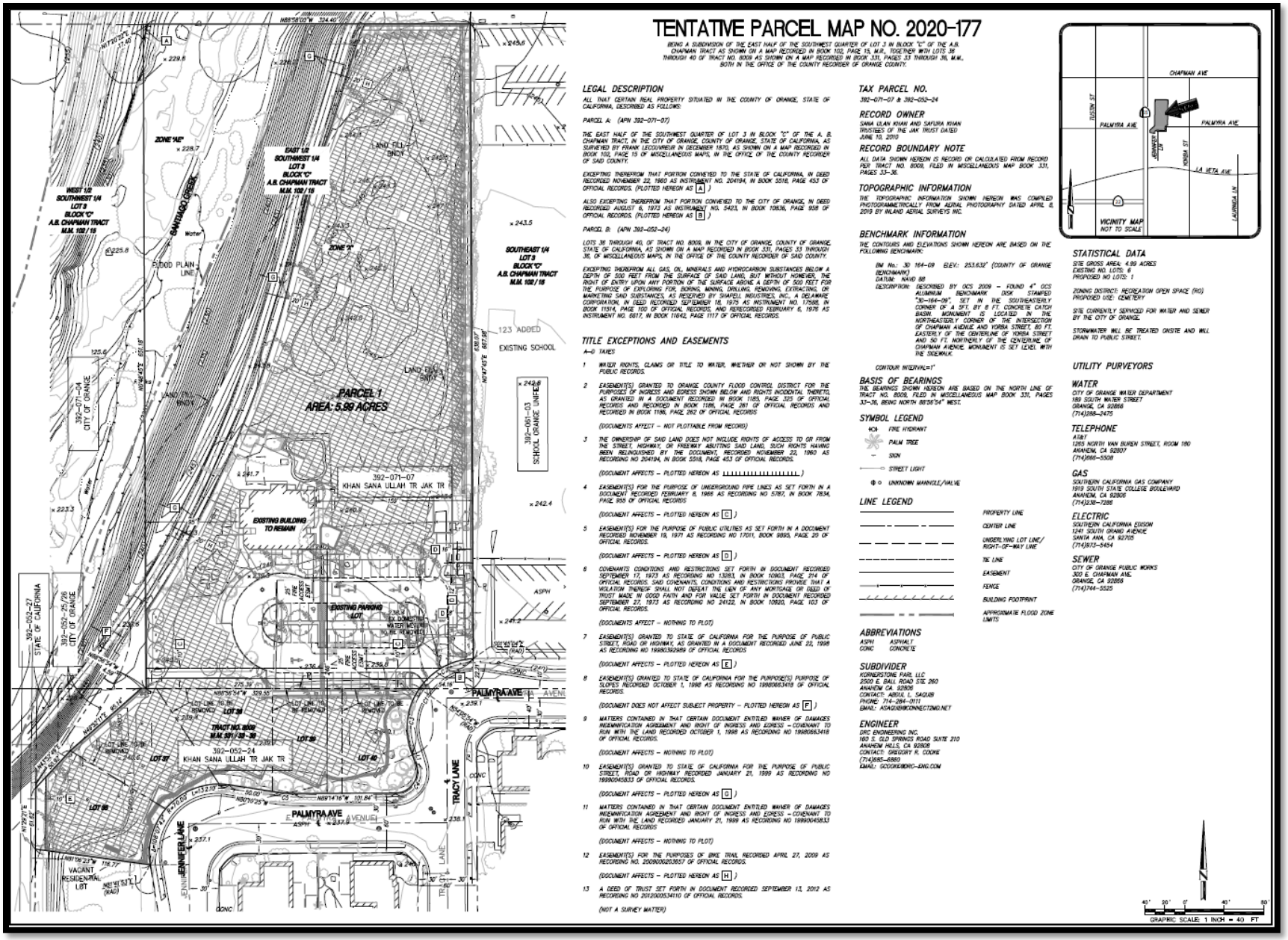


Figure 3: Tentative Map

Source: DRC Engineering, Inc.

2.3 Surrounding Land Uses

The Project Site is located within an area with mixed zoning, including a predominant amount of Single-Family Residential, Public Institution, Limited Business, and Recreation Open Space zoned lots. The surrounding area includes the Orange Dog Park to the north, the Orange Unified School District Child Development Center to the east, SR-55, and Santiago Creek to the west, and single family residential to the south/southeast. Beyond the adjacent uses to the Project Site are the OUSD Community Day School and single-family residential development.

2.4 Project Description

The Proposed Project involves the construction of a 3,339-gravesite cemetery and construction of a 5,138-sf building. A 5,262 square foot, two-story building previously existed onsite prior to being destroyed in a series of fires in late 2021. The Applicant would reconstruct the building consistent with the architectural plans that the City's Design Review Committee considered in Fall 2021, prior to the fires. The architectural plans included demolition of 124 square feet of the previously existing building and minor remodeling and modifications, resulting in a building area of 5,138 sf. The reconstructed building would support activities associated with funeral burial practices. The Proposed Project also includes ancillary administrative office space accommodating funeral burial practices, a kitchen to support off-site catering, construction of a one-story, 800 sf storage shed with outdoor storage yard, trash enclosure, and utility shed, as well as the demolition and construction of a 51-space surface parking lot. The Proposed Project would provide exterior landscaping and fencing/gating throughout the Project Site. No portion of the improvements associated with the Proposed Project would occur within the Santiago Creek or existing multi-purpose Santiago Creek Trail area.

Statement of Objective and Purpose

The Proposed Project would provide a 3,339-gravesite cemetery specifically for the Muslim community in southern California. The proposed development would include design features required by the Islamic tradition.

Project Characteristics

The primary entry to the site would access off of the corner of Palmyra Avenue and South Tracy Lane and include a one-way entrance and one-way exit. The proposed access way would include precast concrete pavers and gates at the entrance and exit. Upon accessing the site, vehicles would enter upon the proposed parking lot, with a drop-off and loading area located in front of the proposed building. Upon passing through the drop-off area, additional parking spaces would be provided and beyond the spaces an exit gate. A pedestrian walkway connecting both sides of the parking lot would provide access to the primary building and entrance to the gravesites. The west-facing Palmyra Avenue/South Tracy Lane street frontage would entail retention of the existing sidewalk, curb, and gutter except at the curb cut, where it would be repaired and replaced pursuant to City standards. The south-facing Palmyra Avenue street frontage would also retain existing sidewalk, curb, and gutter. A retaining wall with fence and gutter would surround a majority of the Project Site. The front entry gates would include decorative metal fencing, with a double swing entry gate and sliding exit gate. A pedestrian gate would be located at the southeastern edge of the proposed parking area and provide gated access from the public

sidewalk to the proposed building. Landscaped areas on the Palmyra Avenue/South Tracy Lane street frontage would flank both sides of the entry driveway.

The majority of the Project Site would be utilized for gravesite purposes. Full buildout of the gravesite space would occur through a 20-year phased plan. A prepared grave consists of a four-sided bottomless pre-cast concrete grave liner (crypt) measuring approximately three-feet by six-feet. During the batching of crypts for each phase, the operator would dig the planned gravesites, place the crypt liner, and refill the gravesite with the soil from initial digging. Due to religious constraints that prevent excavation equipment from traversing occupied crypts, the sequence of batches would commence in the most remote areas of the cemetery and proceed towards the main building. Phased construction of the gravesites would occur in batches of 100-120 crypts. Once a precast crypt houses interred remains, the gravesite would be covered by pebbles, include installation of a gravestone and concrete border to surround each gravesite.

Design/Architecture

The previously existing building, designed by Leason Pomeroy III, in 1970-71, was a composition of "late modern" sculptural block-like form. The proposed modifications to the previously existing building would have retained the original building massing and roof forms, including the clerestory-window skylights. A small portion of the building (124-sf) and wood patio trellis that was located in the north-east corner of the building would have been removed from the architectural plans for the reconstructed building, resulting in a building area of 5,138 sf. Exterior remodeling to the building would have included a change to the exterior wall materials (siding, vertical and horizontal joints) and new roofing. The proposed roof changes would have included new standing seam metal panels with rake edge trims. The Proposed Project would have provided installation of new steel canopies over the entrance door on the north and south of the building. The proposed building remodeling would also have included changes to the windows that were located on the south side of the building, which would have been infilled. Installation of several new windows would have occurred, including one at the south elevation stairwell, one at the southeast elevation, and one at the north elevation. The Proposed Project would also have included new skylights over the proposed prayer hall and two new entry doors at the south elevation.

An 800-sf storage shed would be constructed at the southeastern edge of the site, north of the proposed gated entryway to the site. The structure would include a standing seam metal roof to match the primary building's proposed roof and include partial metal side panels for screening. The shed would be open from the top of the side panels to the roof. A rollup door on the south elevation and a side door on the east elevation would provide access into the structure. The proposed maximum height of the storage shed is 15-feet.

Landscaping and Lighting

Per Section 17.12.040, of the Orange Municipal Code (OMC), landscaping is required in all setbacks abutting a public right-of-way, with exception of walkways and driveways. The Proposed Project would provide landscaping along all street frontages. The Proposed Project would result in removal of 104 trees onsite, with retention of 27 of the existing trees. According to the project-specific Tree Evaluation Report (Appendix C), the existing conditions of a majority of the trees onsite include pest infestation, lack of maintenance, and crowding.

The Proposed Project would include a total of 101 new trees onsite. Planter areas consisting of ground cover, shrubs, and ornamental grasses would adorn the site. Landscaped areas around the primary building would include a focal water feature and outdoor patio at the rear. The outdoor patio would include precast concrete pavers with outdoor seating areas and decorative screen panels. The proposed parking lot would contain a planted center median, with the entrance/exit and drop-off areas accentuated with precast concrete pavers.

Pedestrian paths would provide connectivity throughout the Project Site, with pathways provided around the building and connecting to the proposed parking lot. The exterior pathway would connect to the rear outdoor patio area, and then connect to a processional path that runs parallel to the gravesites and connects to the southern end of the parking lot. No modifications to the existing multi-purpose Santiago Creek Trail located adjacent the Santiago Creek would occur. Landscaping would buffer the proposed solid waste receptacle and storage shed.

Proposed lighting would include recessed cans integrated into the canopy of the proposed building for ingress/egress purposes. A vertically oriented light would be placed at each of the four primary vertical edges of the building. Additional site light would include up lighting of select trees located within the center of the gravesite area, bollard lighting of pedestrian pathways, eight (8) parking lot lights, and sign lighting on the exterior west wall facing South Tracy Lane/Palmyra Avenue.

Parking and Circulation

The proposed cemetery development requires 1 space per 30 square feet of gross assembly area per the City of Orange's Zoning Ordinance. The Proposed Project includes 51 parking spaces within the surface parking lot. The Proposed Project would allocate three (3) parking stalls for accessible spaces. Approximately 300 sf of motorcycle parking would be included within the parking lot area, located immediately upon entry, directly to the east of the front entry gate.

Entry to the Project Site would occur at the corner of Palmyra Avenue and South Tracy Lane. Entering vehicles would maneuver to the right upon entering the site where decorative metal gating would secure the entrance to the parking lot. One-way only circulation would require vehicles to drive through the parking lot to exit. Vehicles would exit through a second gate opening onto the driveway space. The Palmyra Avenue/South Tracy Lane driveway is the only proposed access point for the Project Site and would consist of two-way traffic ingress and egress. The proposed parking lot would include a drop-off and loading zone located in front of the building.

Waste Management/Loading and Delivery

The Proposed Project would provide a solid waste receptacle at the southeastern edge of the Project Site and include planting screen. Solid waste produced as a part of the Proposed Project would include routine maintenance activities, such as disposing of flowers, flower-holders, leaved, and landscape trimmings, as well as catering-related waste. The Proposed Project would include weekly trash service, which would enter the site through the entry gate and circulate through the parking lot, exiting through the exit gate. No turnaround by a solid waste vehicle would occur on site. Deliveries would also enter and exit through the entrance and exit gates and stage at the proposed loading zone located adjacent to the building.

Security

The Project Site would be inaccessible by the general public via secured fences/walls and gates. The proposed access driveway located at the southern property line of the Project Site would be secured via separate entrance and exit gates. No other access points are proposed. The proposed retaining wall and gates would vary in height from 42-inches at the Jennifer Lane and E. Palmyra Avenue frontages to seven (7) feet throughout the Project Site, which would require the Property Owner/Developer obtain a variance for above height fences/walls and/or gates. The Project Site would be secure at all times, including during business hours. Visitors would require an appointment or personalized access code to access the site, which would allow for documentation of all visitations occurring onsite. Patrons visiting a gravesite would only maintain exterior access to the site and would not be allowed within the building. The southern, eastern, and portions of the northern and western property line would include a retaining wall of varying height along with landscaping.

Signage

For identification purposes, a wall sign would be located on the Palmyra Avenue/South Tracy Lane frontage adjacent the exit gate. Directional signage for entering the site's parking area would be placed in between the entry and exit gates.

Operational Characteristics

The Proposed Project would operate as a Muslim cemetery, open seven (7) days per week, from 8:00 a.m. to 5:00 p.m. with limited operations from 5:00 p.m. to 7:00 p.m. Daily activities would vary during normal business hours and would typically consist of meetings with family members seeking to funeral arrangements (by appointment only), visitations to gravesites, scheduled funeral services, pre- and post-burial family visitations (by appointment only), gravesite preparation for burial, and delivery of the remains of the deceased. Projected employees include a maximum of three (3) office personnel and three (3) grounds keeping and maintenance employees during typical daily operations. On burial service days, the grounds keeping and maintenance staff count would increase to a maximum of four (4). Total employees onsite would range from a maximum of six (6) to seven (7) for operation of the cemetery.

Certain activities, arranged only by appointment, would occur after 5:00 p.m. but conclude prior to 7:00 p.m. These limited (by appointment) activities would include the preparation of the body for burial, pre-burial family visitations, and gravesite visitations. Funeral services, processions, and post-burial memorial services only occur between 8:00 a.m. to 5:00 p.m.

For approximately 50-percent of scheduled burials, the remains of the deceased would be delivered after normal hours of operation, sometime during the hours of 5:00 p.m. to 8:00 a.m. The driver conveying the deceased would access the gated site and building, place the remains in refrigerated storage (located in the Ghusl Room), then secure the premises and depart. This process from access to departure would take approximately one-hour.

All site and landscape maintenance would occur during normal business hours, between 8:00 a.m. to 5:00 p.m. The proposed use would not entail any grounds-keeping, related maintenance activities or gravesite preparation/excavation before 8:00 a.m. or after 5:00 p.m. Equipment required for the gravesite excavation would include a small excavator, a utility tractor, and other

various small tools and equipment for ground maintenance. All equipment required for gravesite preparation and construction would be stored onsite within the proposed 800 sf storage shed. Additional materials stored onsite would include short-term storage of supplies such as concrete crypts, pebbles, and headstones. Long term stockpiling of these materials would not occur as a part of the project's operations.

Islamic Funeral & Burial Practices

The Proposed Project entails a Muslim cemetery, which requires the timely burial of the deceased, usually within 24-48 hours after death. The body of the deceased would be interred directly in-ground with no casket. The Islamic funeral process does not permit embalming or cremation, so none would occur as a part of the Proposed Project. At graveside, the body would be lowered into the prepared grave which consists of a four-sided bottomless pre-cast concrete grave liner (crypt) measuring approximately three-feet by six-feet, and any voids inside the crypt would be filled with soil from the gravesite. The grave liner lid would be placed over the liner and covered with an additional layer of soil. Islamic burial practice does not permit the growing of plants on the grave so all gravesites would be covered with a layer of white pebbles. Construction of concrete gravesite borders would occur and placement of the headstone.

The Proposed Project would entail 20-25 funeral services per month, which would occur one at a time between 8:00 a.m. to 5:00 p.m.--services would not overlap. A typical funeral service would take place over an approximate four-to-five-hour period. Following the burial, guests would reconvene to the Prayer Hall and socialize. Post-burial memorial gatherings would occur over approximately a two-to-three-hours period, with the option to include indoor gathering in the Prayer Hall or outdoor gathering on the north outdoor patio. A meal or light refreshments would be served; however, all beverages would be non-alcoholic. Food preparation would not occur onsite. Instead, a third-party caterer would prepare and provide all food and beverage and would use the Cater Room for food plating and food service. Catering-related trash would be deposited in the onsite solid waste enclosure. Guests would be seated at tables and chairs during the reception which would be stored in the Storage Room when not in use.

Gravesite Visitations

Typically, post-burial visitations to a grave site would occur during 8:00 a.m. to 5:00 p.m., any day of the week. The Proposed Project would permit for visitors to request special access for a gravesite visitation after 5:00 p.m., but no visitations would be permitted after 7:00 p.m. The proposed operation would entail the highest rate of gravesite visitations on Fridays and during special times of the year such as the month of Ramadan. As the cemetery fills and builds out, post-burial visitations would increase.

Tentative Parcel Map

A tentative parcel map would consolidate the existing parcels into one lot.

Soil Management Plan/Post Closure Land Use Plan

The Project Site was formerly a landfill, which was closed in 1956 and subsequently redeveloped in 1972 with the YMCA building, parking lot, bicycle motocross track, sports fields, and a portion of the Santiago Greek and multi-purpose Santiago Creek Trail. Section 4.9 – *Hazards and*

Hazardous Materials and **MM HAZ-1** and **MM HAZ-2** address implementation of regulatory requirements related to the reuse of a former landfill.

The *Soil Management Plan Former La Veta Refuse Disposal Station,* Ardent Environmental Group, Inc., October 2020 (Appendix H) was prepared to provide the criteria and procedures to properly manage the known and unknown environmental issues that may be encountered during redevelopment activities. Unknown environmental concerns are defined as regulated features (e.g., USTs, clarifier, etc.) or unregulated features (e.g., stained or odorous soil, or soil containing elevated VOCs as measured by a photoionization detector) that are discovered during redevelopment (i.e., "unanticipated discoveries").

The *Post Closure Land Use Plan Former La Veta Refuse Disposal Station*, Ardent Environmental Group, Inc., October 2020 (Appendix G), was prepared to describe the proposed post-closure improvements and land use for the Project Site as the previous landfill use left waste in place, and the relevant information required by Title 22 and Title 27 Sections 21090, 21180, and 21190 of the California Code of Regulations (CCR), in order to demonstrate that the Proposed Project would not increase the potential threat to human health or the environment.

In accordance with **MM HAZ-1** and **MM HAZ-2**, the Property Owner/Developer would be required to obtain regulatory approvals prior to and during site preparation, grading, construction, and operation of the Proposed Project. The project schedule assumes expedient regulatory approvals, but it is speculative to estimate a specific timeline that these approvals would be obtained. As discussed in Section 4.3 – *Air Quality*, Section 4.6 – *Energy*, and Section 4.8 – *Greenhouse Gas Emissions*, the construction schedule has been delayed due to the series of fires in Fall 2021. Similarly, should the Property Owner/Developer experience delays associated with obtaining regulatory approvals and construction was to occur any time after the respective dates in the Air Quality, Energy, and Greenhouse Gas analyses, the analysis represents "worst-case" since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.

Demolition/Site Preparation

The Project Site previously contained a 5,262-sf building that was destroyed by fire in Fall 2021, ancillary paved parking area, a former bicycle motocross track, former sports fields, and portion of the Santiago Creek and multi-purpose Santiago Creek Trail. The Proposed Project would result in the reconstruction of the destroyed building that the City's Design Review Committee considered in Fall 2021, prior to the fires. The architectural plans included demolition of 124 square feet of the previously existing building and minor remodeling and modifications. resulting in a building area of 5,138 sf.; site preparation of approximately 1.1 acres to remove existing trees and an existing 0.5-acre asphalt parking lot. Expected onsite equipment utilized during the demolition and site preparation phases include one excavator, and one rubber-tired dozer. The demolition and site preparation activities would also generate 15 and 18 automobile trips per day for the workers, respectively.

Proposed Construction

Grading

Earthwork quantities for grading include 110 cubic yards of cut and 11,720 cubic yards of fill, which would require approximately 11,610 cubic yards of dirt to be imported to the Project Site over the course of 20 days. Import trucks would access the Project Site from Chapman Avenue to South Yorba Street. Expected onsite equipment utilized during the grading phase include one excavator, one grader, one rubber-tired dozer, and three of either tractors, loaders, or backhoes. The grading activities would also generate 15 automobile trips per day for the workers.

Upon completion of rough grading and installation of subterranean utilities (i.e., site connections, storm drains), the burial crypts would be installed ("pre-set") on a section-by-section basis in batches of 100-120. With an anticipated burial rate of 20-25 burials per month, a batch of 100-120 crypts would occur every four to five months. The Project Site's gravesite area would undergo sequential development in various stages over a multi-year period.

A minimum seven-foot landfill cover (five (5) feet for graves, and a two-foot buffer above the landfill) would be constructed in the areas of the proposed gravesites for drainage improvements. To achieve the seven-foot landfill cover thickness, clean soil would be imported in areas where the landfill cover is less than seven (7) feet. Little to none of the existing landfill cover would be altered to reach the final design grades. The existing LFG monitoring probes and groundwater monitoring well would be protected during site grading activities to prevent damage. The Proposed Project would divide the Project Site into three (3) drainage areas under the proposed condition:

(1) The area west of the Santiago Creek Trail would remain the same as the existing condition and would continue to drain into Santiago Creek;

(2) The area south of the retaining/screen walls along Palmyra Avenue would drain into Palmyra Avenue;

(3) The stormwater from the proposed construction area would be collected by the proposed inlets. The inlets would drain into the proposed storm drain systems and to the proposed underground detention system. A proposed vortex separator unit would be the pre-treatment for the stormwater in the storm drains before the water enters the detention system. The underground detention system would outlet to a pipe connected to a proposed diversion utility access hole.

The grading design would allow for stormwater to drain away from the landfill portion of the site and discharged into the City's stormwater system.

The Project Site is currently served by existing utilities, including water, sewer, gas, and electricity. An area proposed at the southeastern edge of the site would house utility devices, such as back flow preventer and would be screened by a 7-foot-high metal louver screen painted to match the site design. A new fire service water connection would occur as a result of the project and connect to the existing 8-inch water main in Palmyra Avenue. The Project Site is served by an existing public sewer system. A stormwater runoff system would be included as a part of the Proposed Project, and route flows to the City's existing stormwater system. A 72-inch

underground storage pipe would be installed at the site's central eastern edge. A storm drain line would connect at the northern end of the pipe and terminate at the northeast corner of the Project Site. A second storm drain line would connect at the southern end of the pipe. This southern line would fork at a proposed utility access hole, routing south along the border of the site and connecting to a modular wetland system located in the southeastern corner of the site, and routing west across the site slightly north of the existing building and forking once again north and south along the proposed processional path.

Construction

Upon completion of grading, the Property Owner/Developer would construct the 5,138-sf building, 800 sf storage shed, parking lot, on site landscaping, outdoor patio, and pedestrian pathways (**Figure 4** – Conceptual Site Plan and **Figure 5** – Enlarged Conceptual Site Plan). All site entrances, both vehicular and pedestrian would be gated and secured via the proposed walls/fences and gates (**Figure 6** – Conceptual Wall and Fence Plan). The building construction phase would occur over the course of 3 months and generate 109 worker trips and 43 vendor trips per day. Expected onsite equipment would consist of the simultaneous operation of one crane, two forklifts, one generator, one welder, and two of either tractors, loaders, or backhoes.

The Proposed Project would consist of one primary building, comprised of 3,783 SF of funerary area and 1,355 SF of office area for a total building area of 5,138 SF (**Figure 7** – Conceptual Building Elevations). The first floor of the proposed building would consist of primarily funerary space, comprising the Ghusl, viewing room, family gathering room, Qibla, women's and men's vestibules, foyer, and catering space. A total of 231 SF of business office space would be located on the first floor, as well (**Figure 8** – Conceptual First Floor Plan). The second floor of the proposed building would consist of 1,124 SF of office space for the administration activities to support the operation of the proposed use (**Figure 9** – Conceptual Second Floor Plan). Mechanical equipment would be roof mounted and screened from view (**Figure 10** – Conceptual Roof Plan). Proposed materials for the exterior of the project include, but are not limited to, stucco finishing, fiber cement siding, aluminum window framing, opaque azure windows, gabion walls, decorative metal fencing, and metal roofing (**Figure 11** – Conceptual Colored Building Elevations). An 800 SF storage shed would be constructed near the southwestern property line, outside of side yard setbacks (**Figure 12** – Conceptual Storage Shed Elevations and **Figure 13** – Conceptual Storage Shed Floor and Roof Plan). A refuse receptable would be located within the proposed parking lot, with landscape planting for screening of the structure (**Figure 14** – Conceptual Trash Enclosure Plan).

The Project Site would be fully enclosed by fencing and/or walls ranging in height from as low as 42-inches to up to seven (7) feet (**Figure 15** – Conceptual Site Wall Elevations). A retaining wall would be constructed around the western edge of the proposed cemetery area, separating the portion of the Santiago Creek and multi-purpose Santiago Creek Trail on the Project Site from the proposed use. The setback on the Project Site side of the east and south property lines would include landscaping, trees, and the proposed combination wall (**Figure 16** – Conceptual Overall Site Landscape Plan). Adjacent to the north of the proposed building would be an outdoor gathering space, consisting of an outdoor patio with decorative screen panels, furniture groupings, and cantilevered umbrellas **(Figure 17** – Preliminary Landscape Plan - North). Adjacent

to the south of the proposed building would be a raised focal feature, pedestrian walkways to the building, the drop-off area, and drive circulation and parking area for the site (**Figure 18** - Preliminary Landscape Plan – South and **Figure 19** – Preliminary Landscape Enlargement). Planting for the Proposed Project would include a variety of drought tolerant plant species with irrigation system (**Figure 20** – Preliminary Irrigation Plan). Additional site improvements include landscaping, enhanced decorative paving, pedestrian connectivity from the parking area to the primary building and processional path. Of the 131 trees onsite, removal of 104 trees would occur, due to poor health and infection, as a part of the Proposed Project (**Figure 21** – Existing Tree Disposition Plan). Lighting for the Project Site would entail bollard pathway lighting, sign and tree up lighting, and parking area light poles (**Figure 22** – Conceptual Site Lighting Plan). Proposed lighting for the building would include recessed downlighting, and exterior wall luminaires. Signage would be mounted to the entry front wall and lighted (**Figure 23** – Conceptual Wall Sections). A total of 110 cubic yards (cy) of cut and 11,720 cy of fill, which would require 11,610 cy of dirt to be imported, would be performed as a part of the Proposed Project (**Figure 24** – Conceptual Grading Plan, **Figure 25** – Conceptual Grading Details, and **Figure 26** – Conceptual Earthwork Plan). On-site drainage would be collected and conveyed via multiple storm drain inlets throughout the project area that lead to the proposed 72-inch storage pipe and modular wetland, discharging into the existing storm drain infrastructure located onsite. The proposed biofiltration system would treat stormwater runoff from the Proposed Project prior to entering the public storm drain system.

The Proposed Project entails batch installation of crypts within the prepared gravesites, which would occur in known phases, with the most outer bounds of the site developed with gravesites first, and subsequent gravesites constructed inward toward the building onsite (**Figure 27** – Conceptual Phasing Plan). For each batch, the ground would be excavated to proper depth, crypts set in place, earth covering would then be placed over the top of the crypt, and the surface area of the batch would be covered with a temporary water-wise ground cover--irrigated appropriately, until such time as individual crypts are unearthed and filled. The proposed batch construction process would require approximately three (3) weeks to complete depending on the precise size of the batch. During installation of a batch, crypts would be brought to the site as needed for installation and any excess crypts would be stored within the proposed storage shed until placement. As burials occur, each crypt would be unearthed and prepared to receive the deceased. After burial, a gravestone would be placed, the surface area above the crypt would be bounded with a concrete border and covered with decorative pebbles as described above (**Figure 24**).

The Proposed Project would maintain and continue to be served by the existing water and sewer connections that are serviced by the City. Existing water and sewer mains are located within Palmyra Avenue and Tracy Lane. The Proposed Project would connect to the 8-inch water main in Palmyra Avenue, located just east of the Project Site's driveway access, for fire service (**Figure 28** – Fire Master Plan). The Proposed Project would entail a new storm drain system to convey stormwater runoff to an underground detention system with pretreatment unit for water quality treatment purposes. Best Management Practices (BMP) pertaining to stormwater would be adhered to as part of the Proposed Project. The Project Site has three drainage areas, one encompasses that of the Proposed Project area (area of disturbance), a second is the area that

drains directly into the Santiago Creek (area of no disturbance), and third, a narrow strip along the southern property boundary that would be landscaped and act as a self-treatment area.

Off-Site Improvements

Improvements within the public right-of-way would occur, including removal and replacement of new sidewalk, curb, and gutter per City standard at the South Tracy Lane/Palmyra Avenue access driveway. Any associated stormwater quality BMPs would also be included in this work, or an impact fee to address this requirement could be paid, provided an existing improvement to accommodate this requirement is already in place and operational.

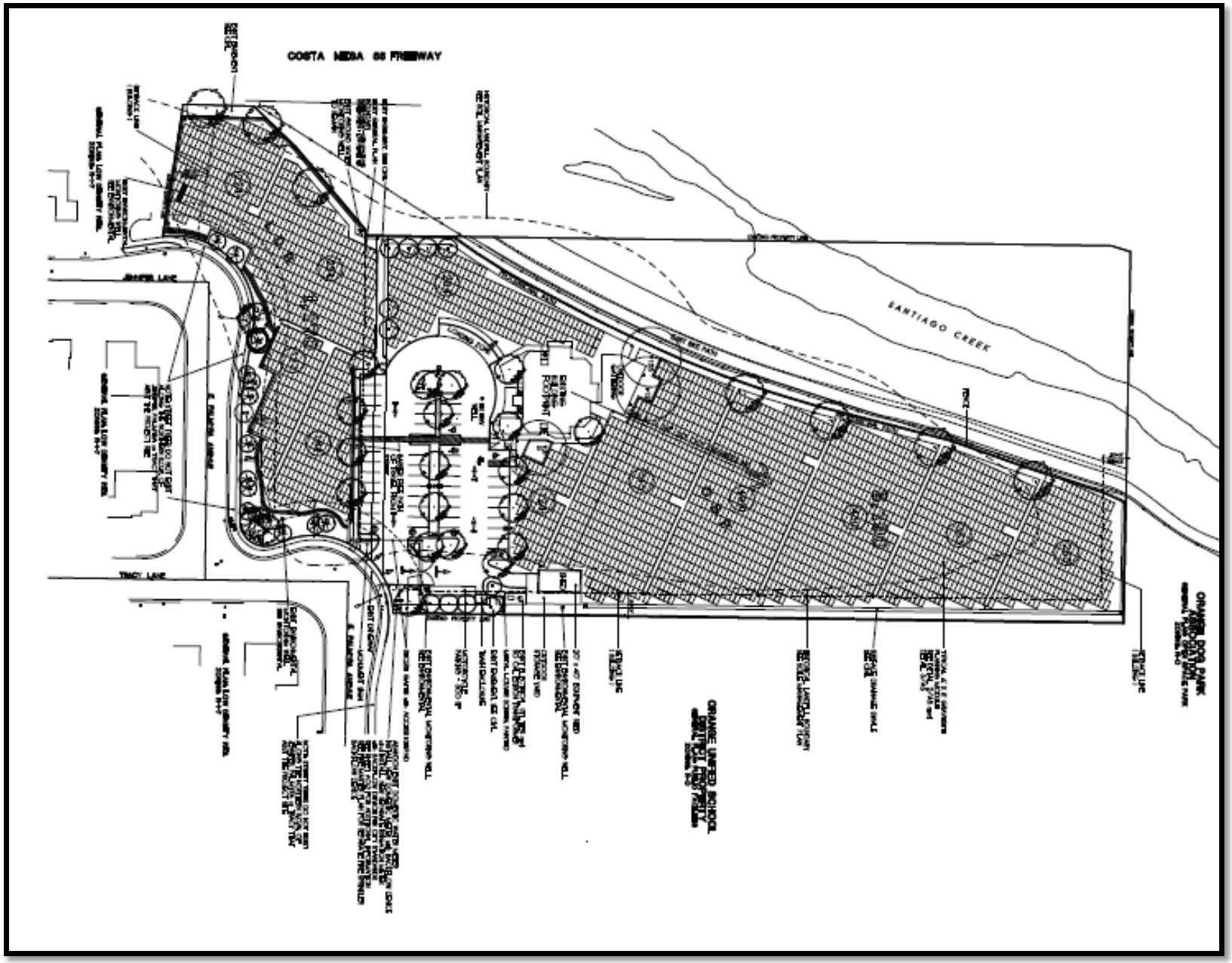


Figure 4: Conceptual Site Plan

Source: Stratos Form

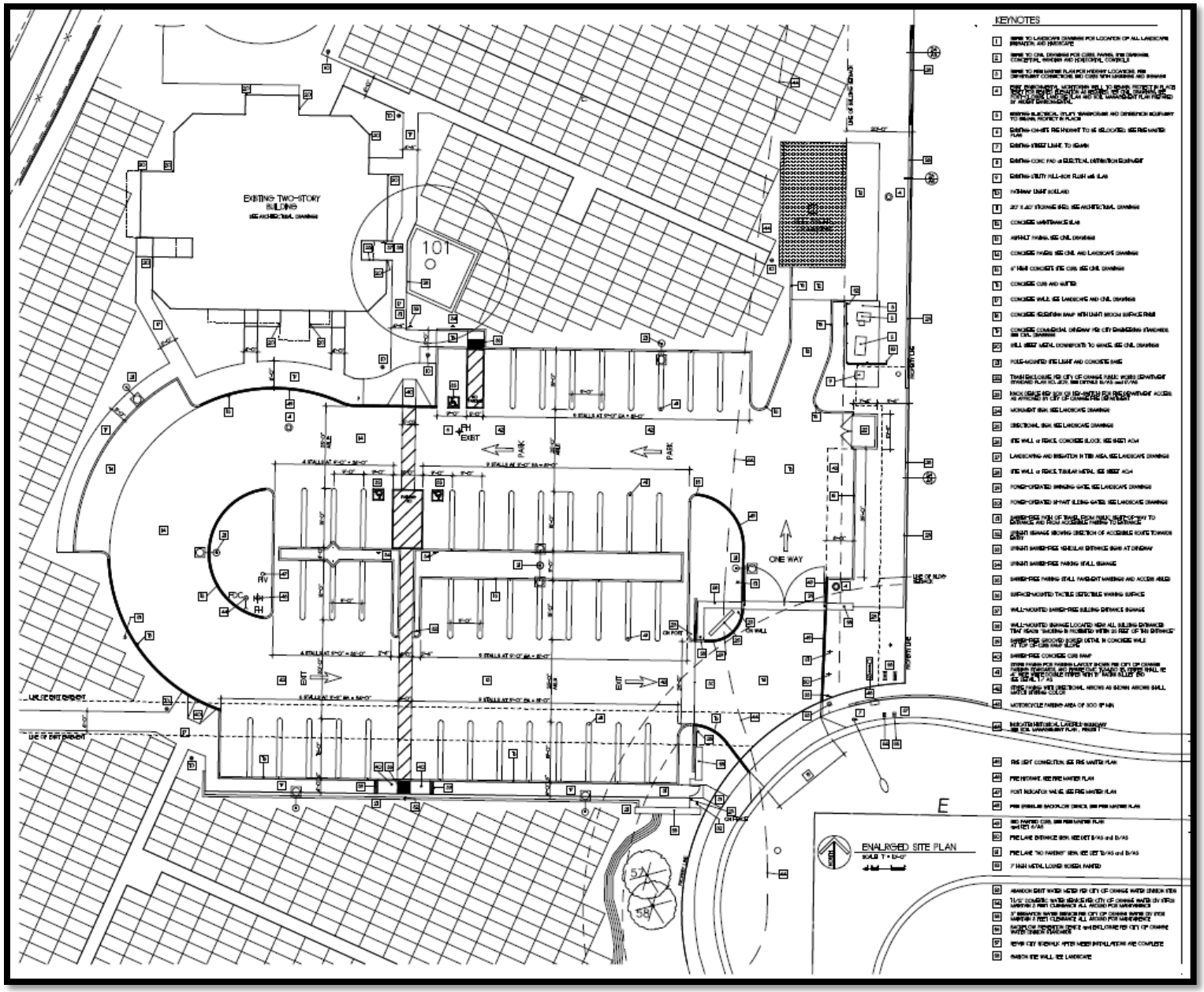


Figure 5: Enlarged Conceptual Site Plan

Source: Stratos Form

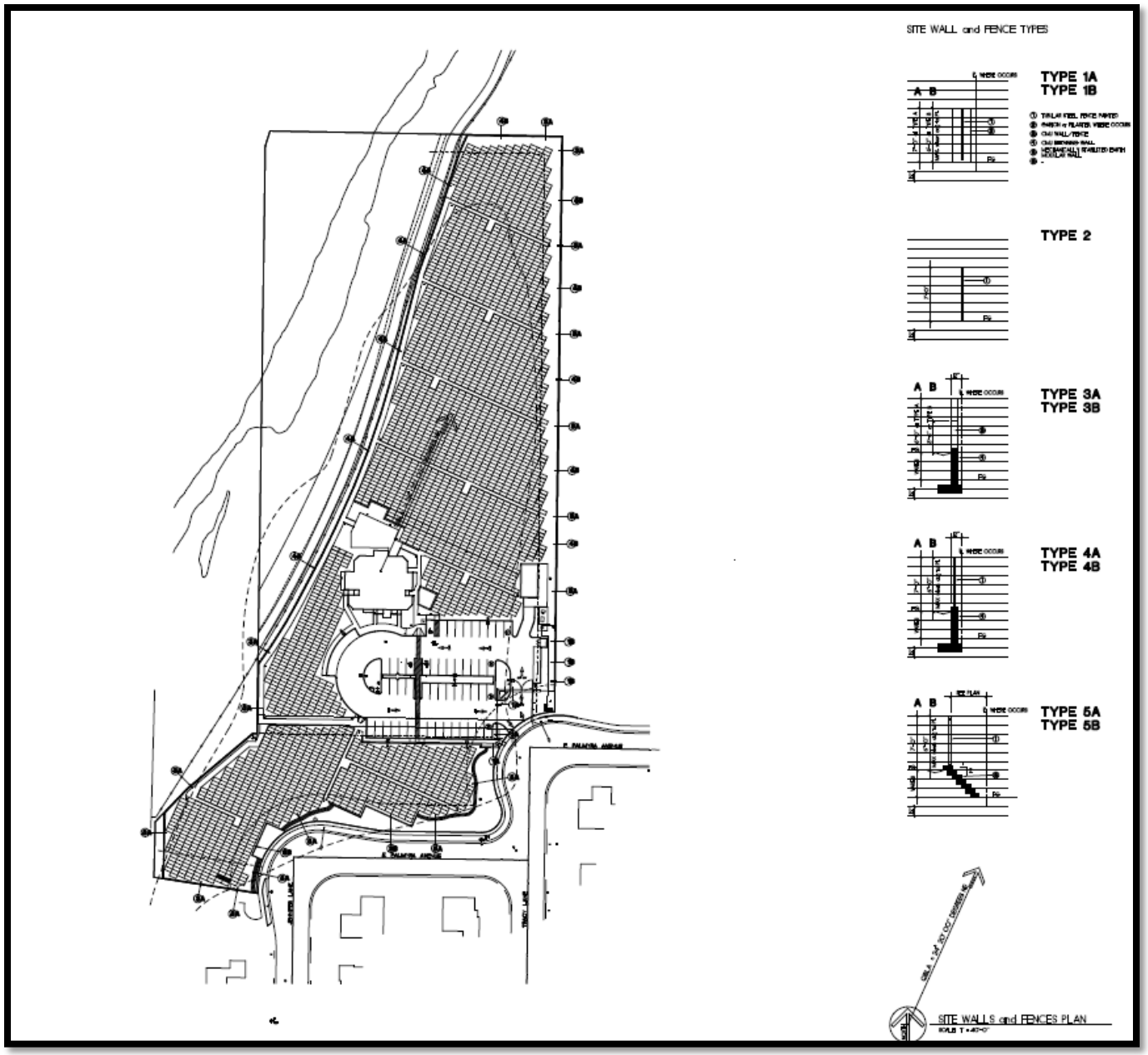


Figure 6: Conceptual Wall and Fence Plan

Source: Stratos Form

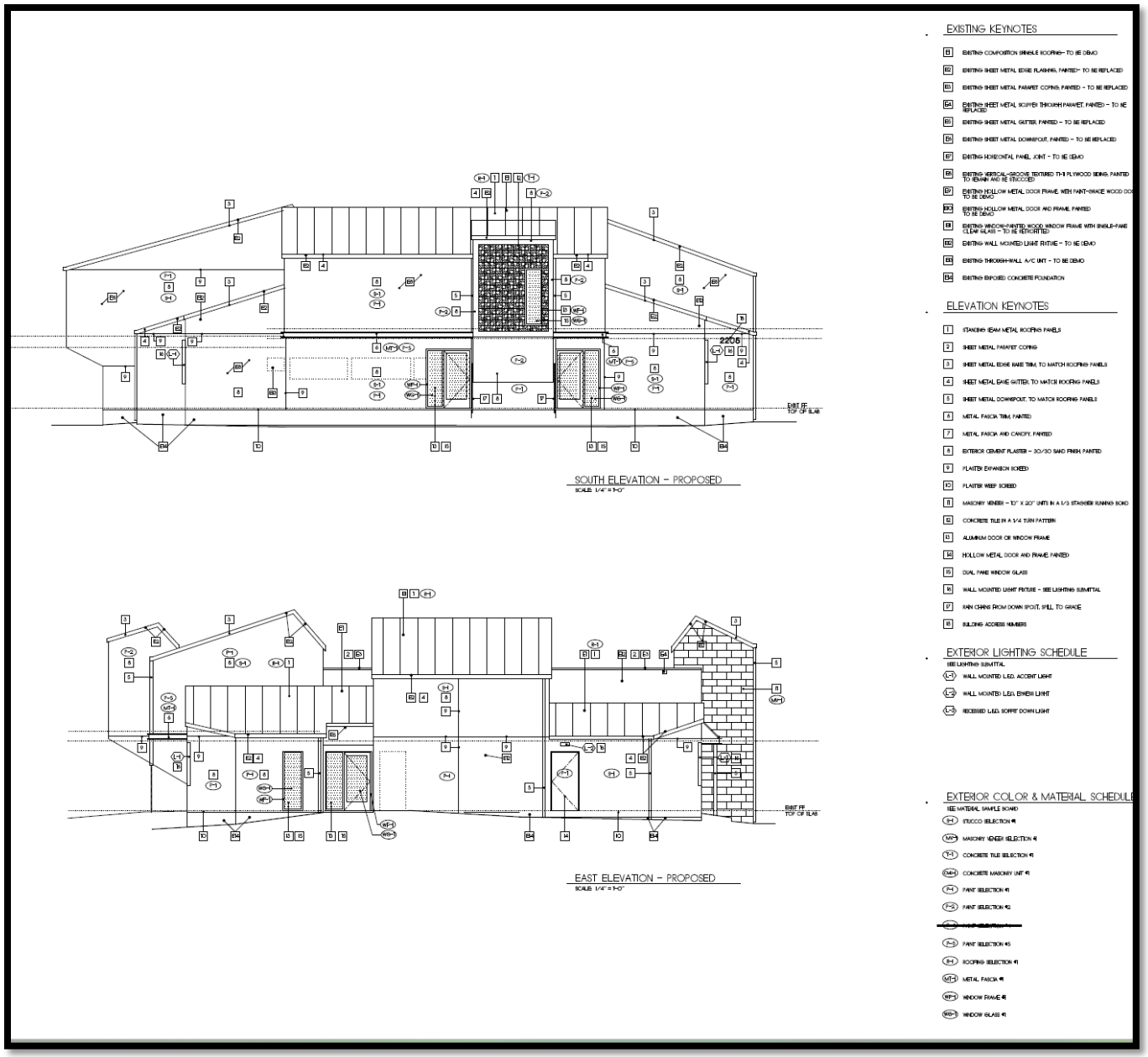


Figure 7: Conceptual Building Elevations

Source: Stratos Form

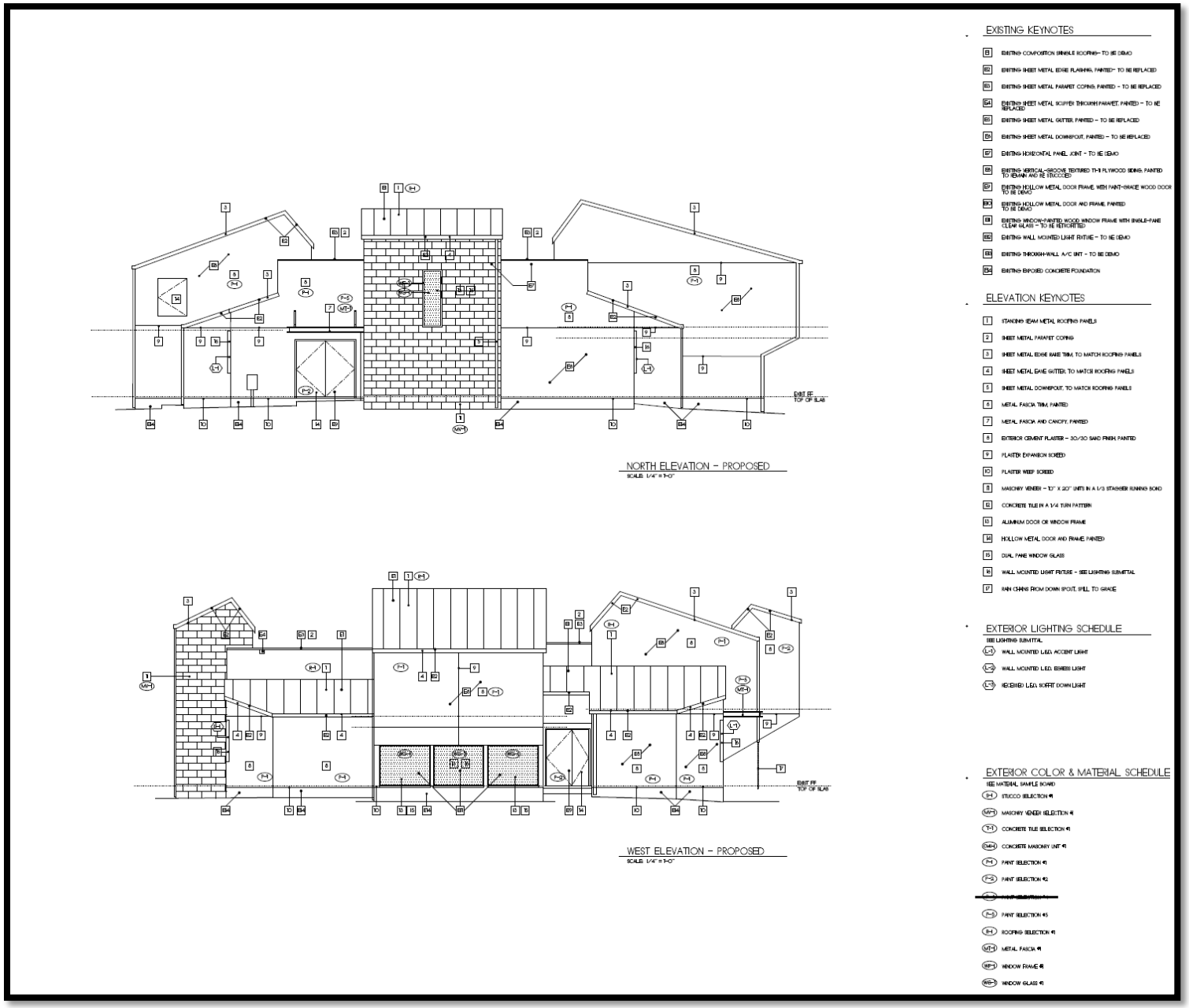


Figure 7: Conceptual Building Elevations

Source: Stratos Form

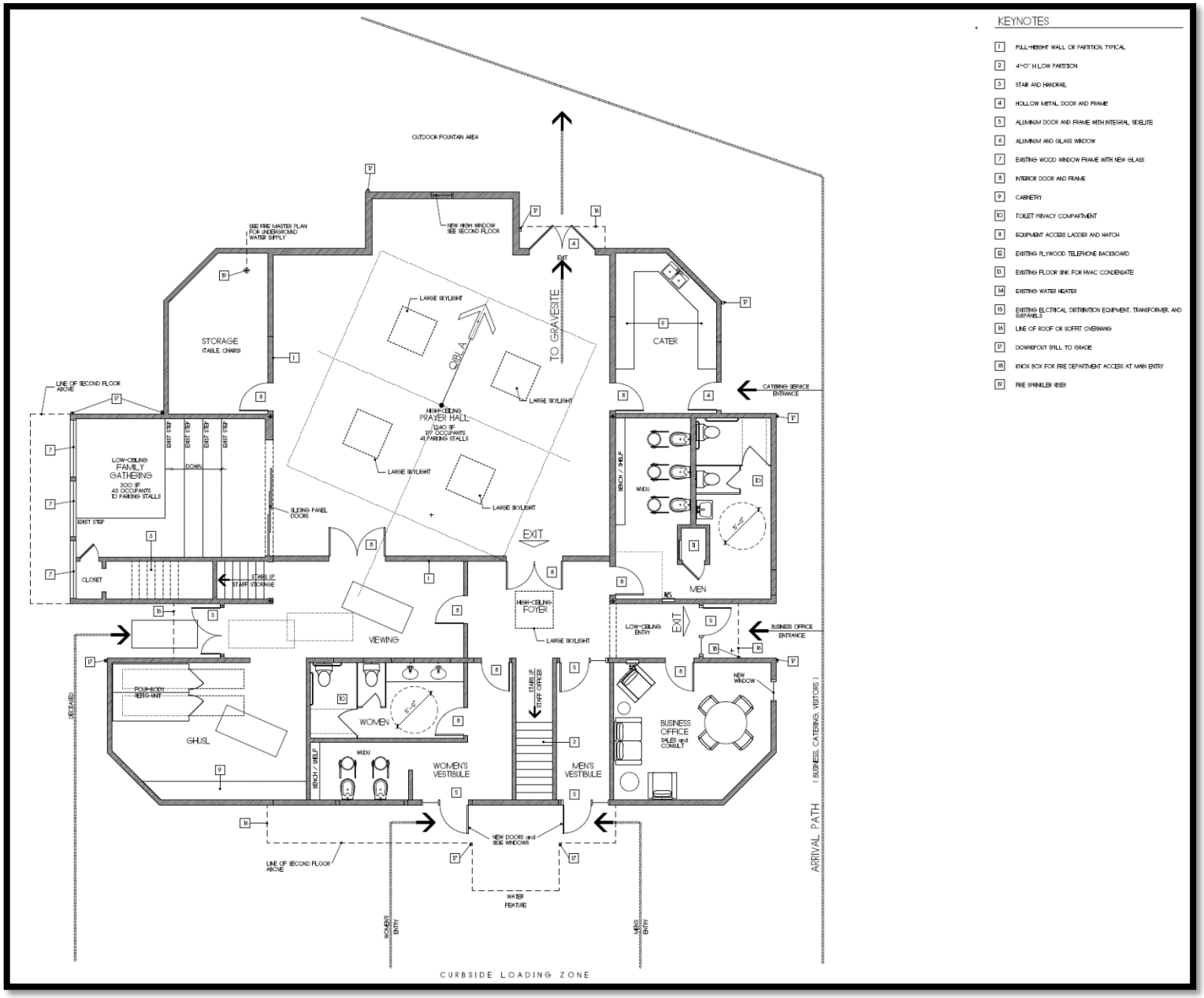


Figure 8: Conceptual First Floor Plan

Source: Stratos Form

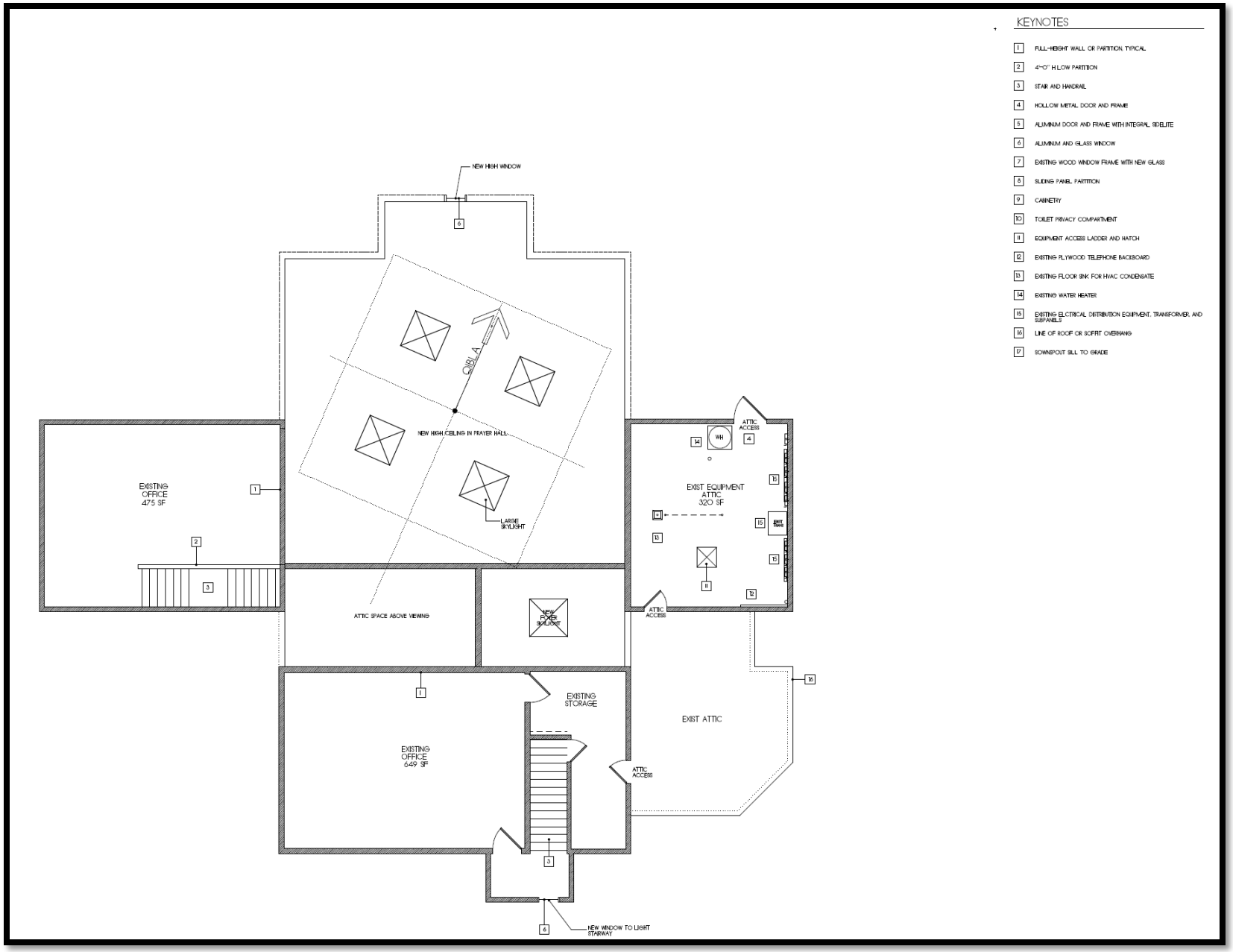


Figure 9: Conceptual Second Floor Plan

Source: Stratos Form

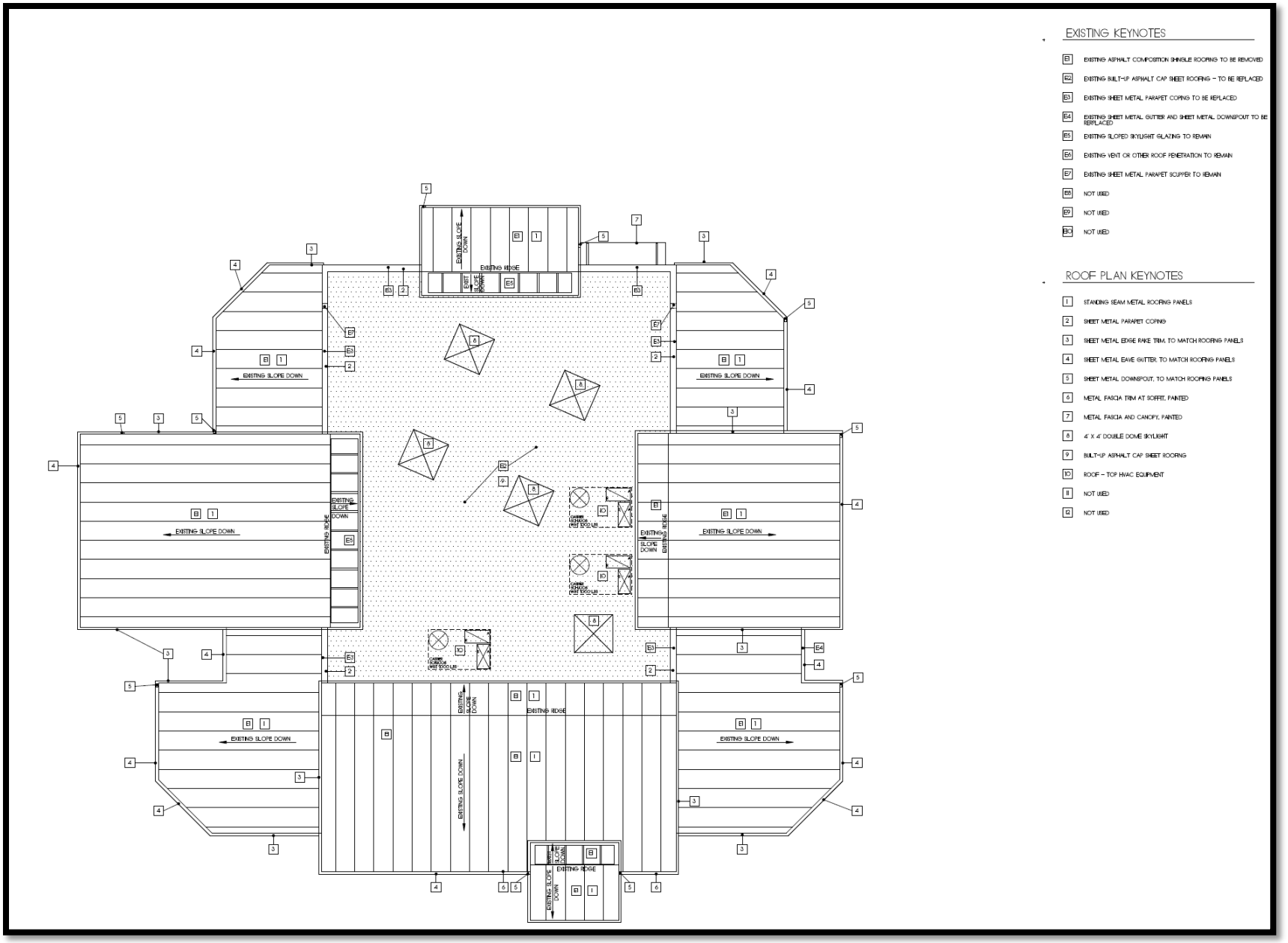


Figure 10: Conceptual Roof Plan

Source: Stratos Form

Figure 11: Conceptual Colored Building Elevations

Source: Stratos Form

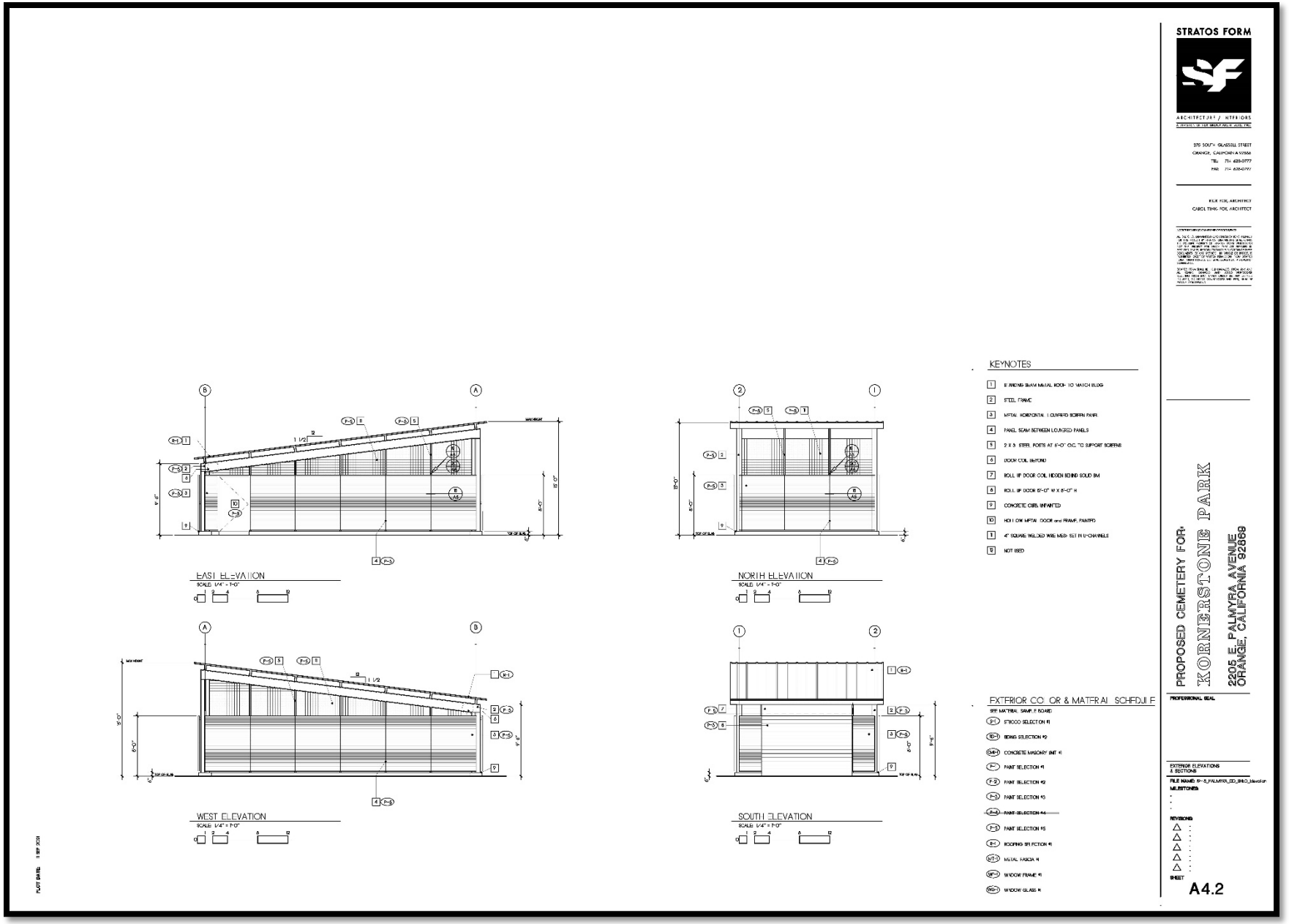


Figure 12: Conceptual Storage Shed Elevations

Source: Stratos Form

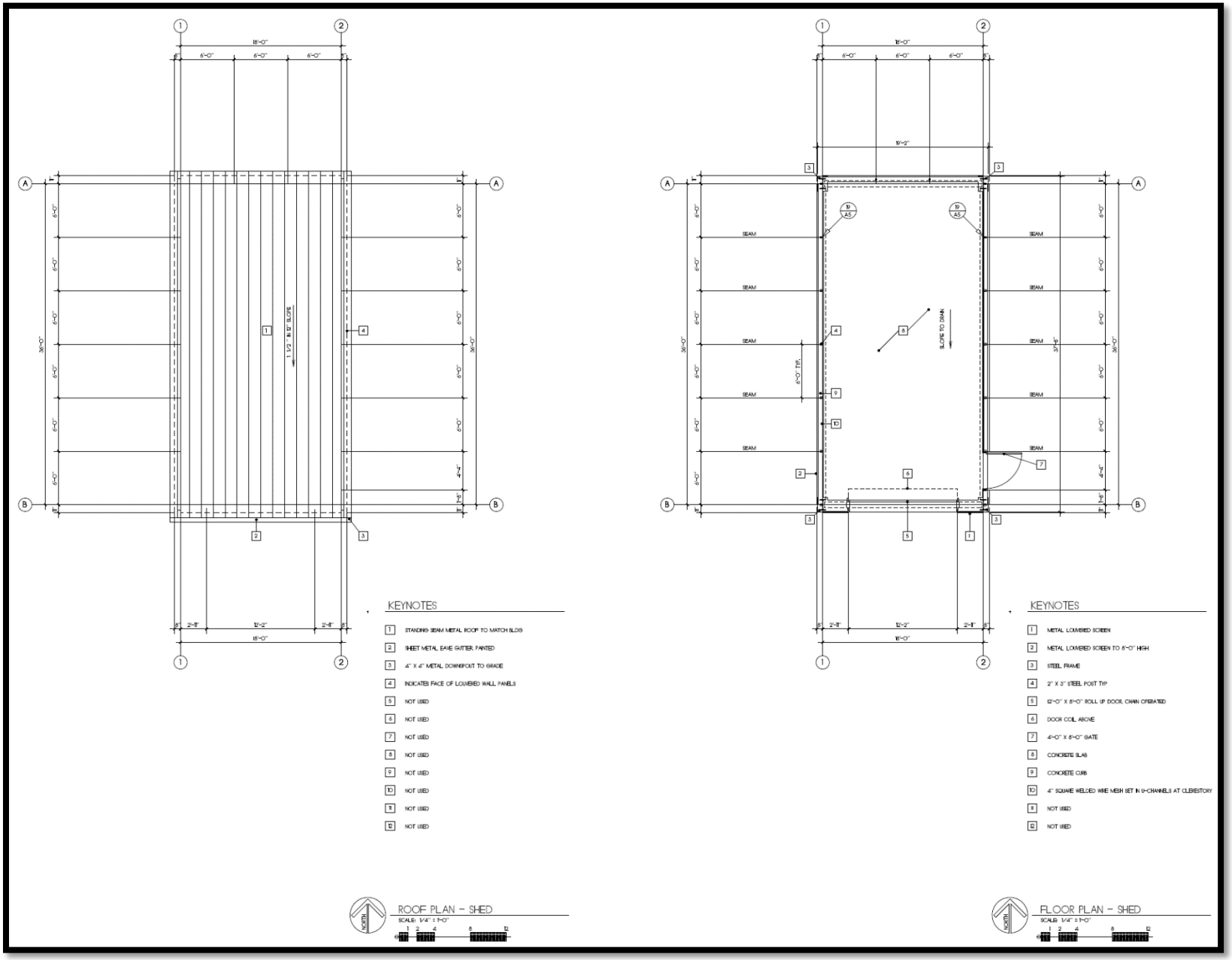


Figure 13: Conceptual Storage Shed Floor Plan and Roof Plan

Source: Stratos Form

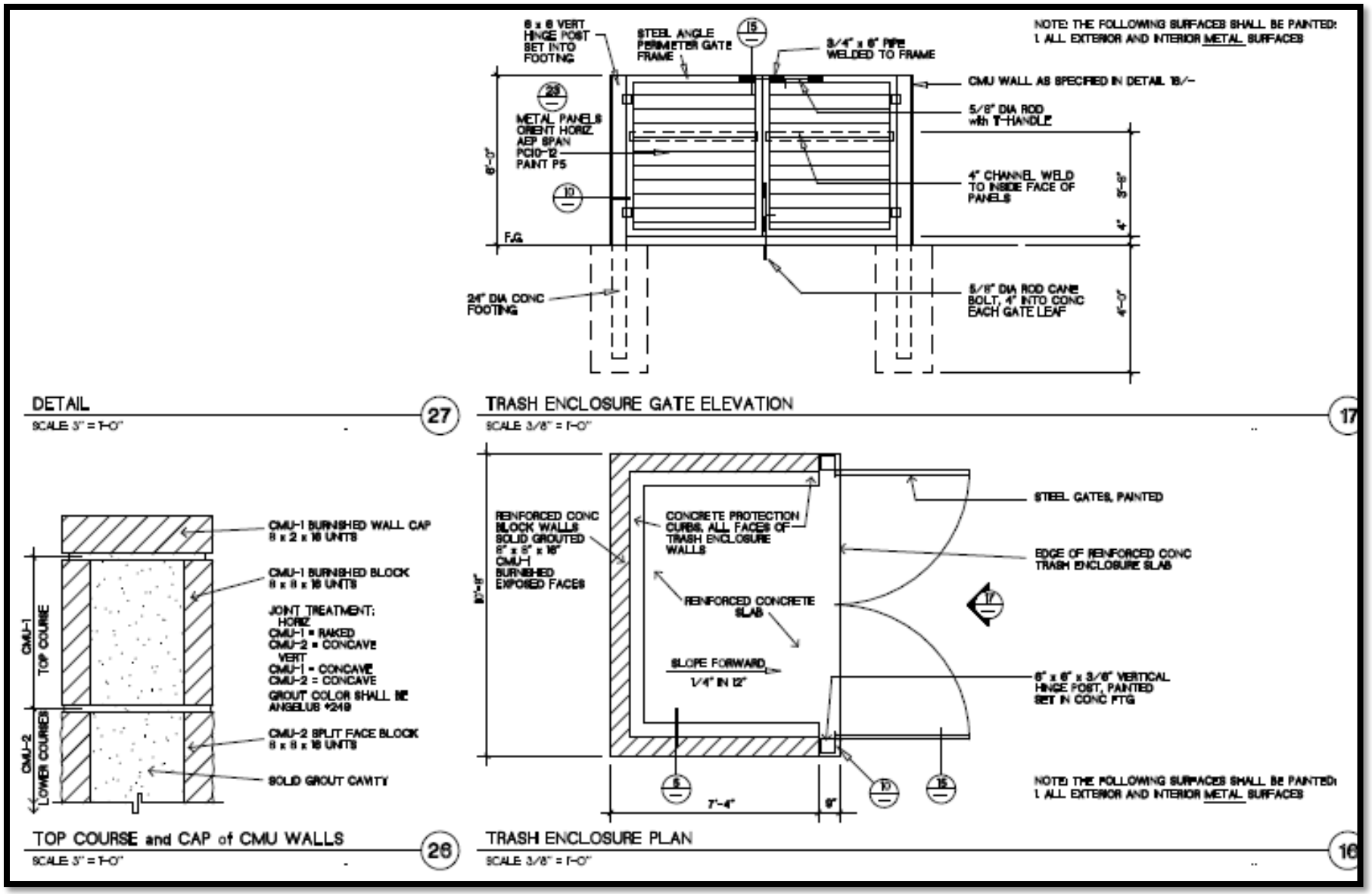


Figure 14: Conceptual Trash Enclosure Plan

Source: Stratos Form

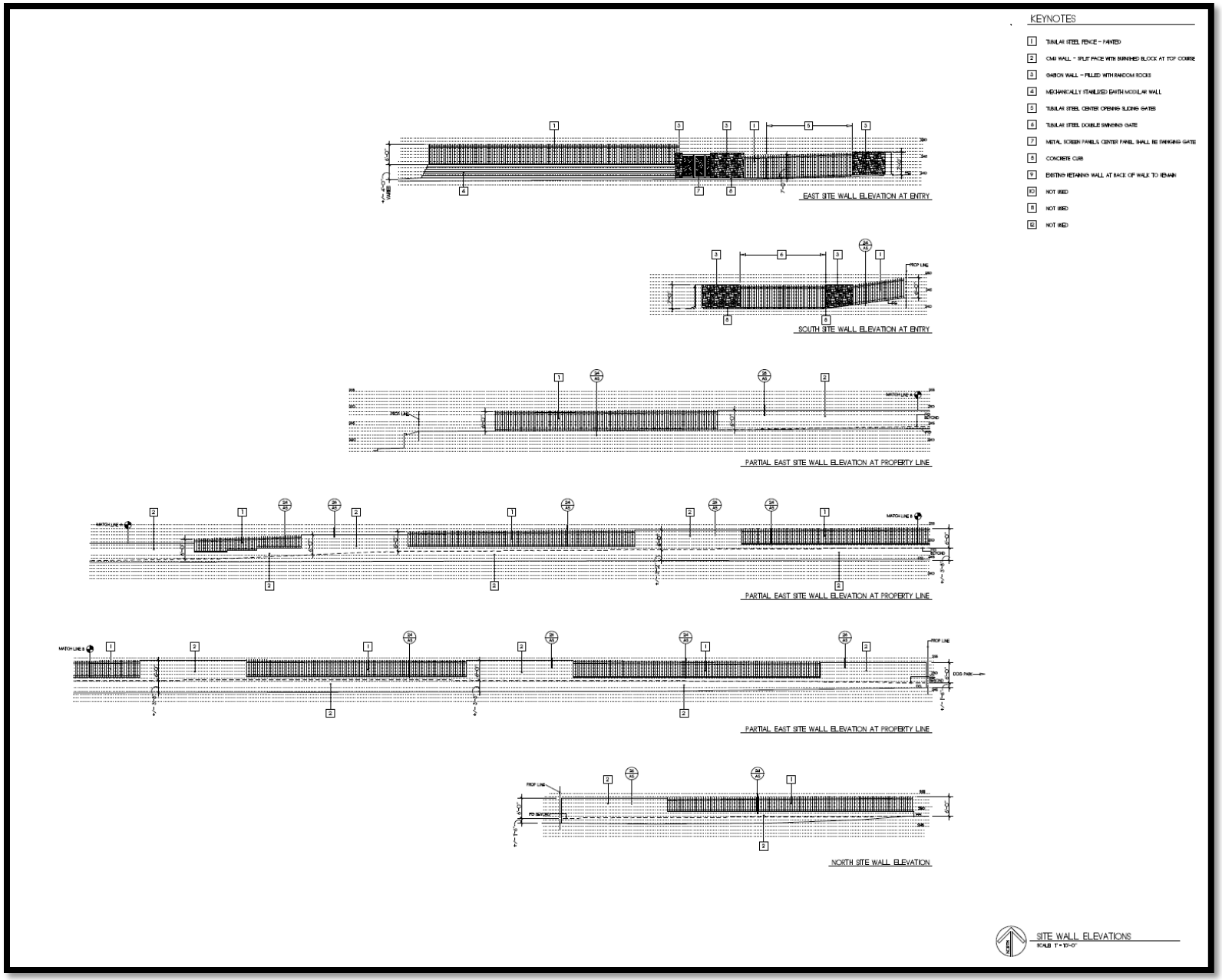


Figure 15: Conceptual Site Wall Elevations

Source: Stratos Form

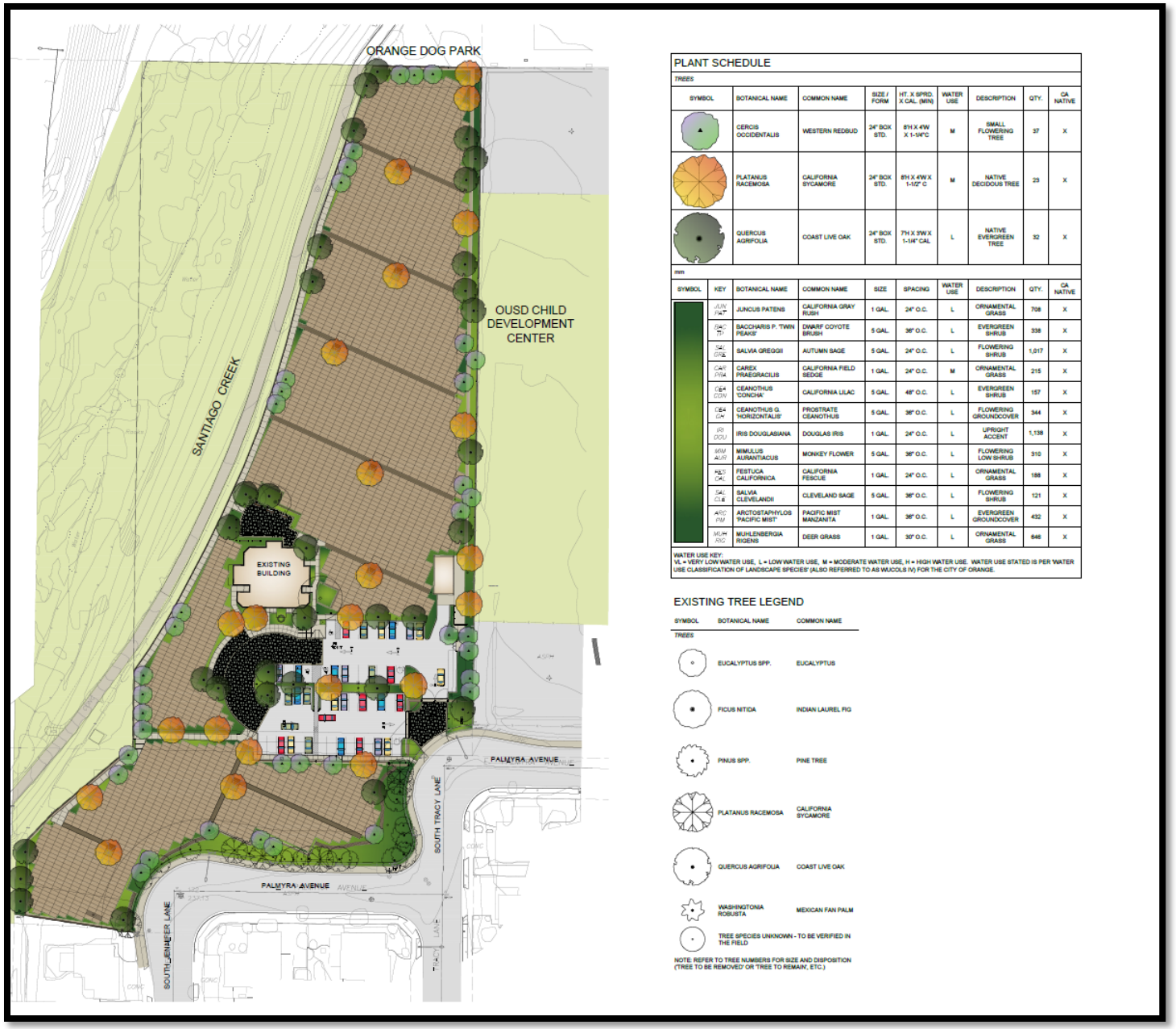


Figure 16: Conceptual Overall Site Landscape Plan

Source: RLA

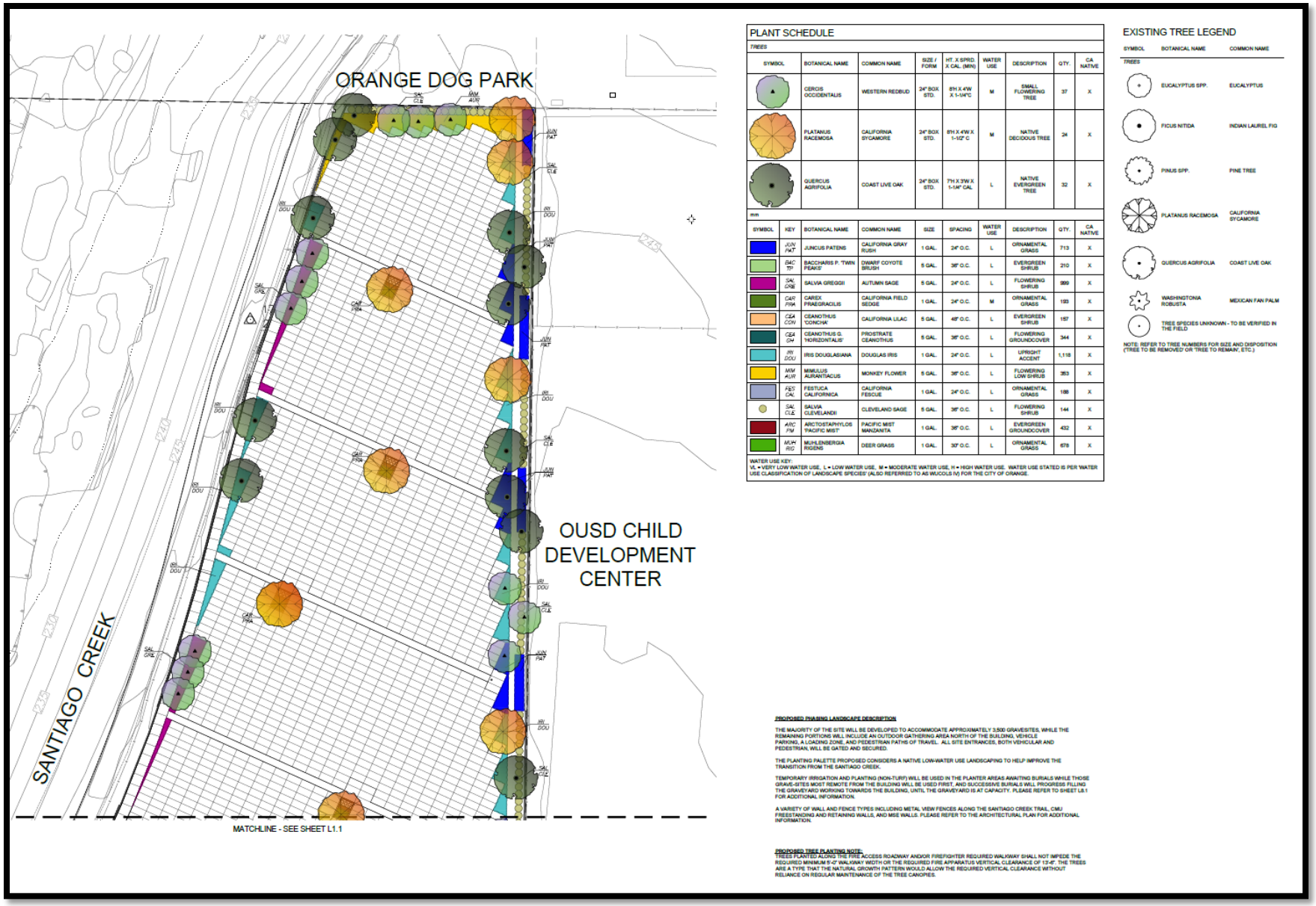


Figure 17: Preliminary Landscape Plan - North

Source: RLA

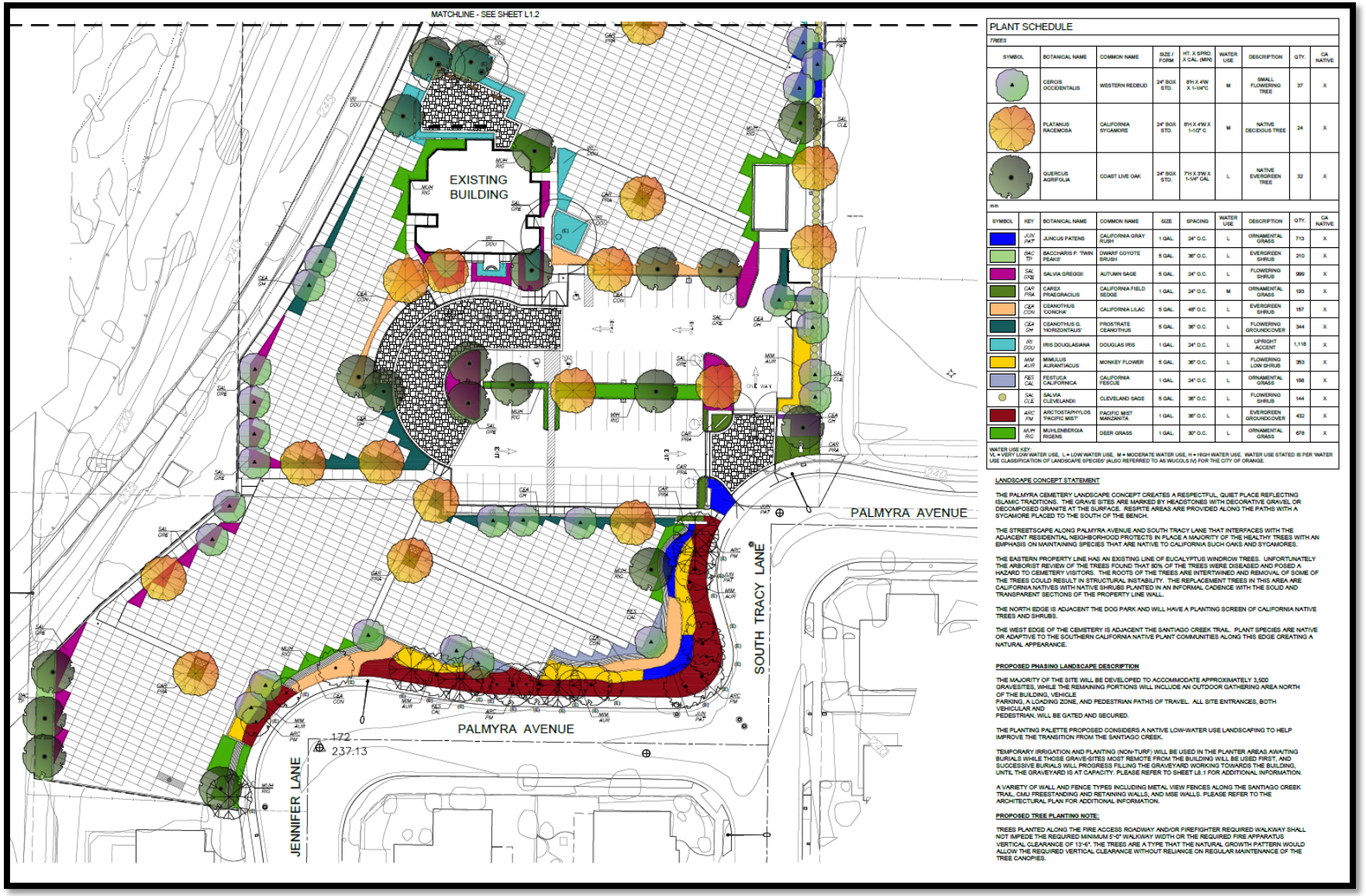


Figure 18: Preliminary Landscape Plan - South

Source: RLA

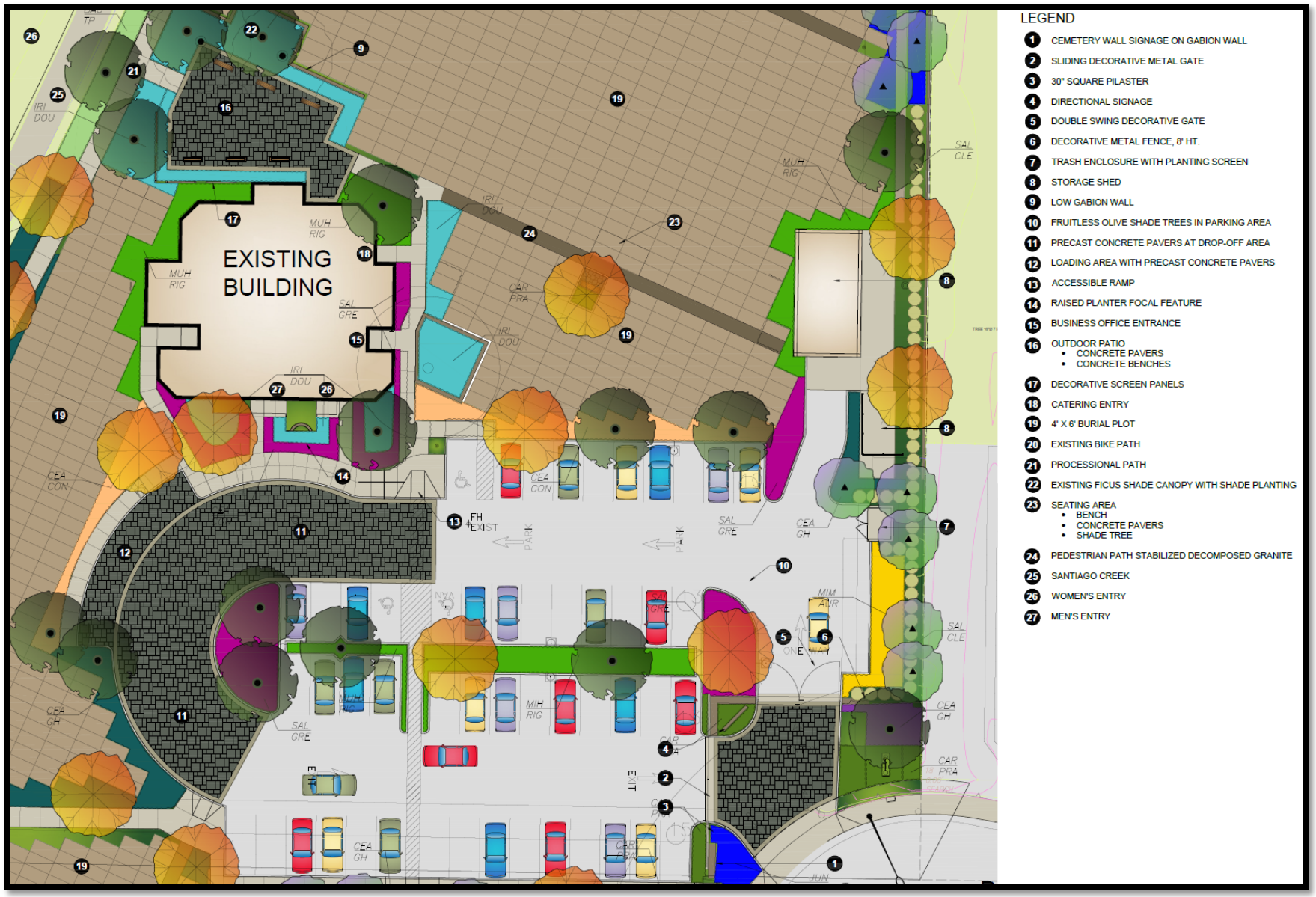


Figure 19: Preliminary Landscape Enlargement

Source: RLA

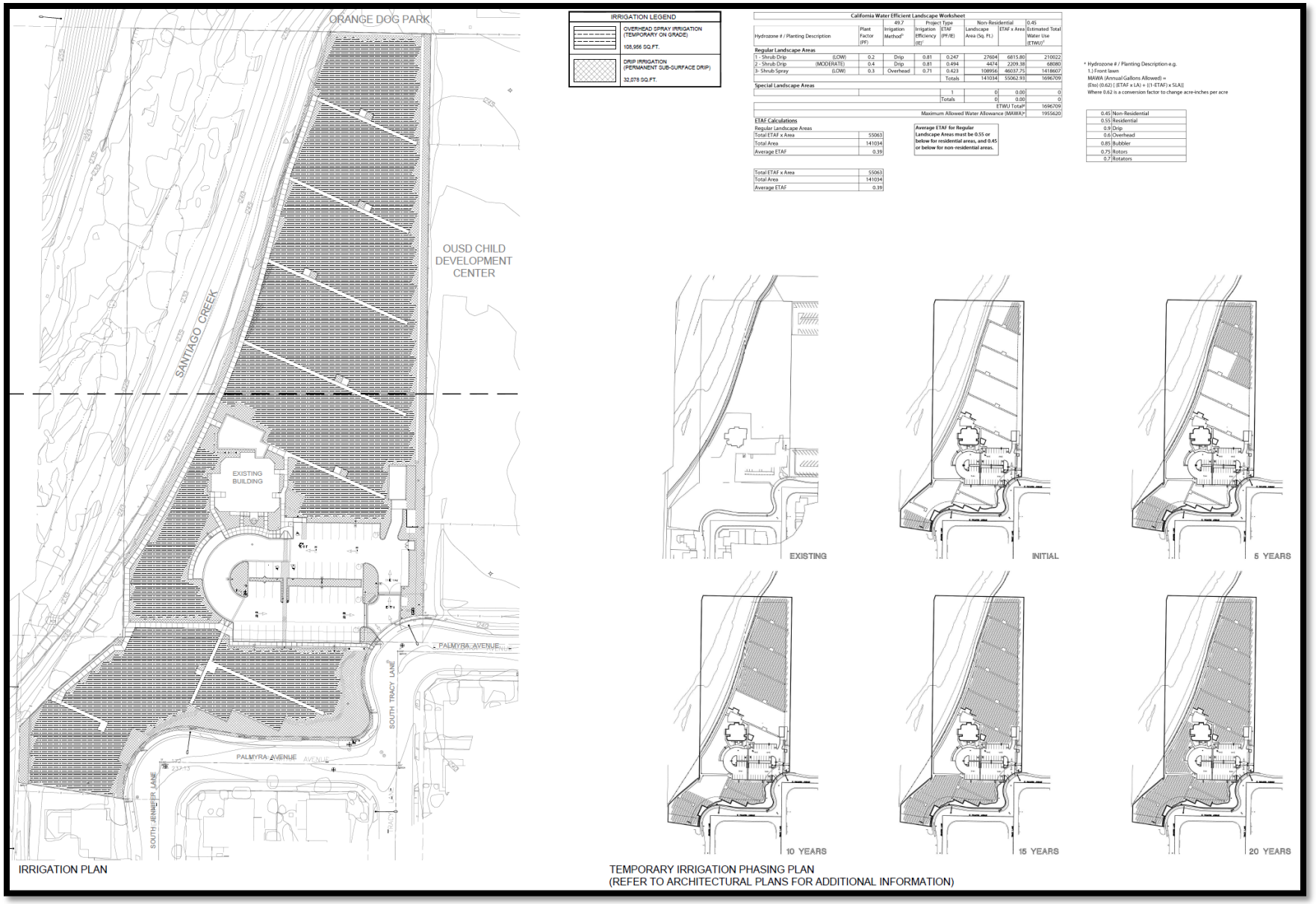


Figure 20: Preliminary Irrigation Plan

Source: RLA

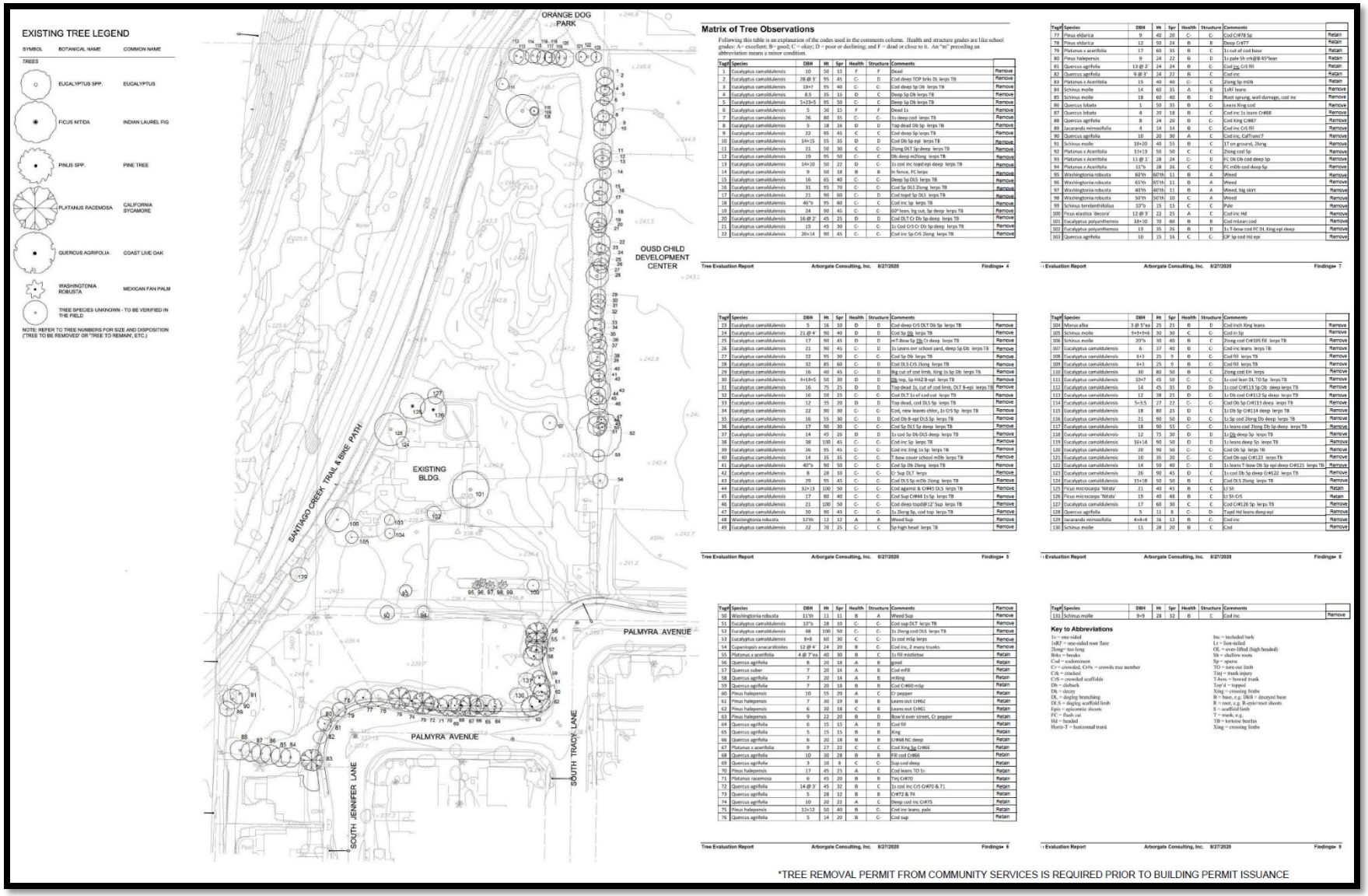


Figure 21: Existing Tree Disposition Plan

Source: RLA/Stratos Form

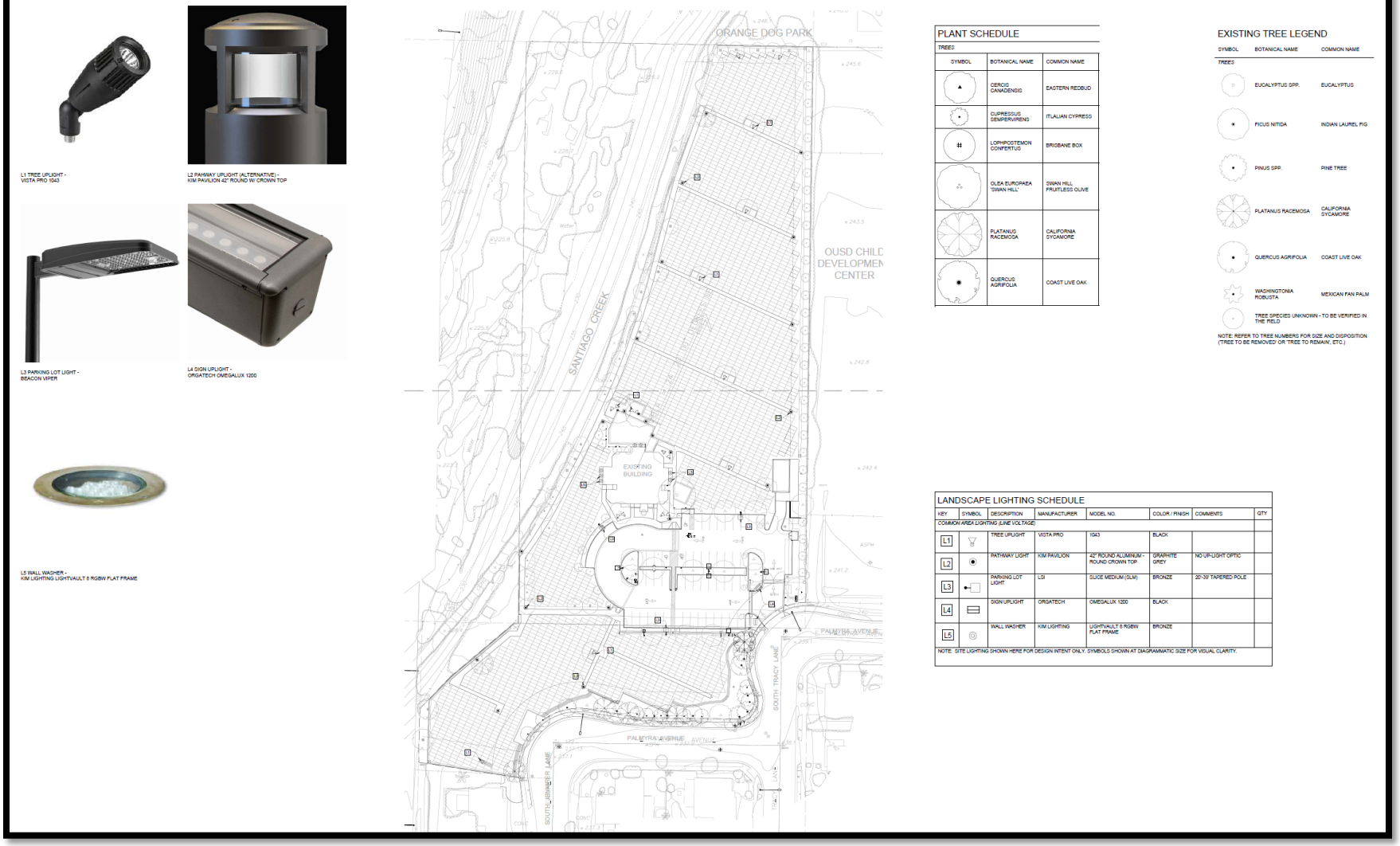


Figure 22: Conceptual Site Lighting Plan

Source: RLA/Stratos Form

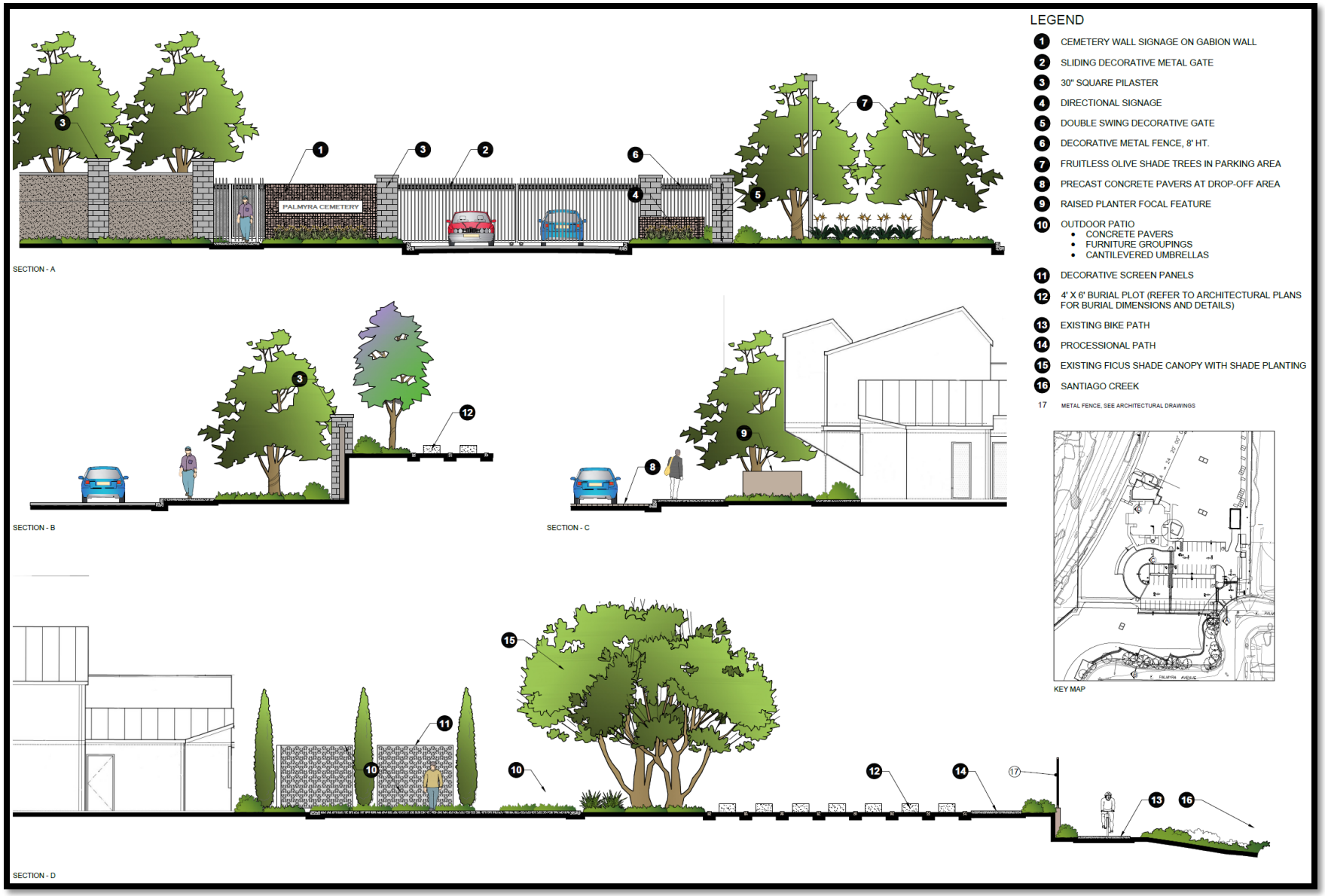
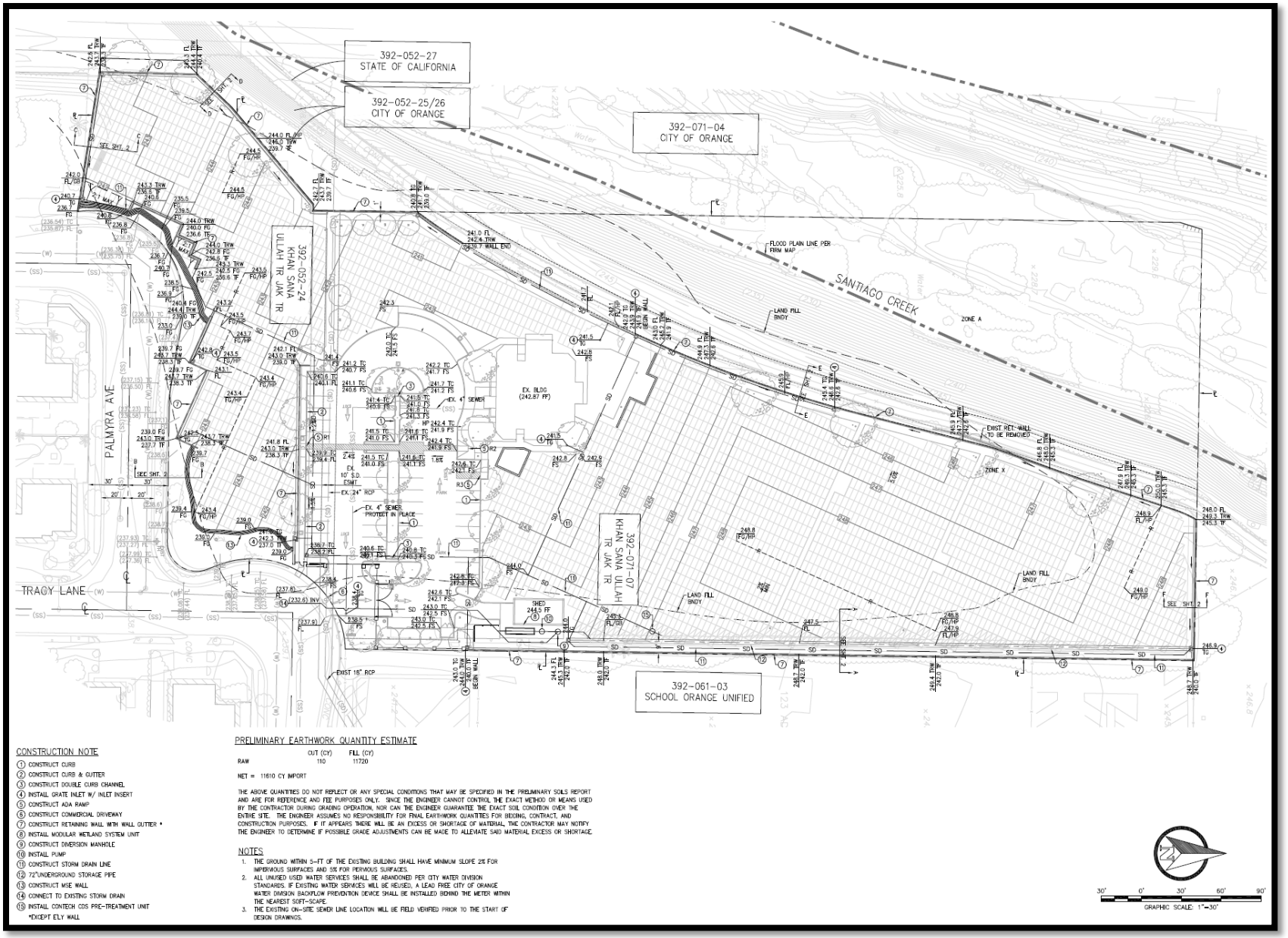


Figure 23: Conceptual Wall and Sections Plan

Source: Stratos Form



CONSTRUCTION NOTE

1. CONSTRUCT CURB
2. CONSTRUCT CURB & GUTTER
3. CONSTRUCT DOUBLE CURB CHANNEL
4. INSTALL GRATE INLET W/ INLET INSERT
5. CONSTRUCT ADA RAMP
6. CONSTRUCT COMMERCIAL DRIVEWAY
7. CONSTRUCT RETAINING WALL WITH WALL CUTTER *
8. INSTALL MODULAR WETLAND SYSTEM UNIT
9. CONSTRUCT DIVERSION MANHOLE
10. INSTALL PUMP
11. CONSTRUCT STORM DRAIN LINE
12. 72"UNDERGROUND STORAGE PIPE
13. CONSTRUCT MSE WALL
14. CONNECT TO EXISTING STORM DRAIN
15. INSTALL CONTECH CDS PRE-TREATMENT UNIT

*EXCEPT ELY WALL

PRELIMINARY EARTHWORK QUANTITY ESTIMATE

	CUT (CY)	FILL (CY)
RAW	110	11720

NET = 11610 CY IMPORT

THE ABOVE QUANTITIES DO NOT REFLECT OR ANY SPECIAL CONDITIONS THAT MAY BE SPECIFIED IN THE PRELIMINARY SOILS REPORT AND ARE FOR REFERENCE AND FEE PURPOSES ONLY. SINCE THE ENGINEER CANNOT CONTROL THE EXACT METHOD OR MEANS USED BY THE CONTRACTOR DURING GRADING OPERATION, NOR CAN THE ENGINEER GUARANTEE THE EXACT SOIL CONDITION OVER THE ENTIRE SITE. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR FINAL EARTHWORK QUANTITIES FOR BIDDING, CONTRACT, AND CONSTRUCTION PURPOSES. IF IT APPEARS THERE WILL BE AN EXCESS OR SHORTAGE OF MATERIAL, THE CONTRACTOR MAY NOTIFY THE ENGINEER TO DETERMINE IF POSSIBLE GRADE ADJUSTMENTS CAN BE MADE TO ALLEVIATE SAID MATERIAL EXCESS OR SHORTAGE.

NOTES

1. THE GROUND WITHIN 5-FT OF THE EXISTING BUILDING SHALL HAVE MINIMUM SLOPE 2% FOR IMPERVIOUS SURFACES AND 5% FOR PERVIOUS SURFACES.
2. ALL UNUSED USED WATER SERVICES SHALL BE ABANDONED PER CITY WATER DIVISION STANDARDS. IF EXISTING WATER SERVICES WILL BE REUSED, A LEAD FREE CITY OF ORANGE WATER DIVISION BACKFLOW PREVENTION DEVICE SHALL BE INSTALLED BEHIND THE METER WITHIN THE NEAREST SOFT-SCAPE.
3. THE EXISTING ON-SITE SEWER LINE LOCATION WILL BE FIELD VERIFIED PRIOR TO THE START OF DESIGN DRAWINGS.

Figure 24: Conceptual Grading Plans

Source: DRC Engineering, Inc.

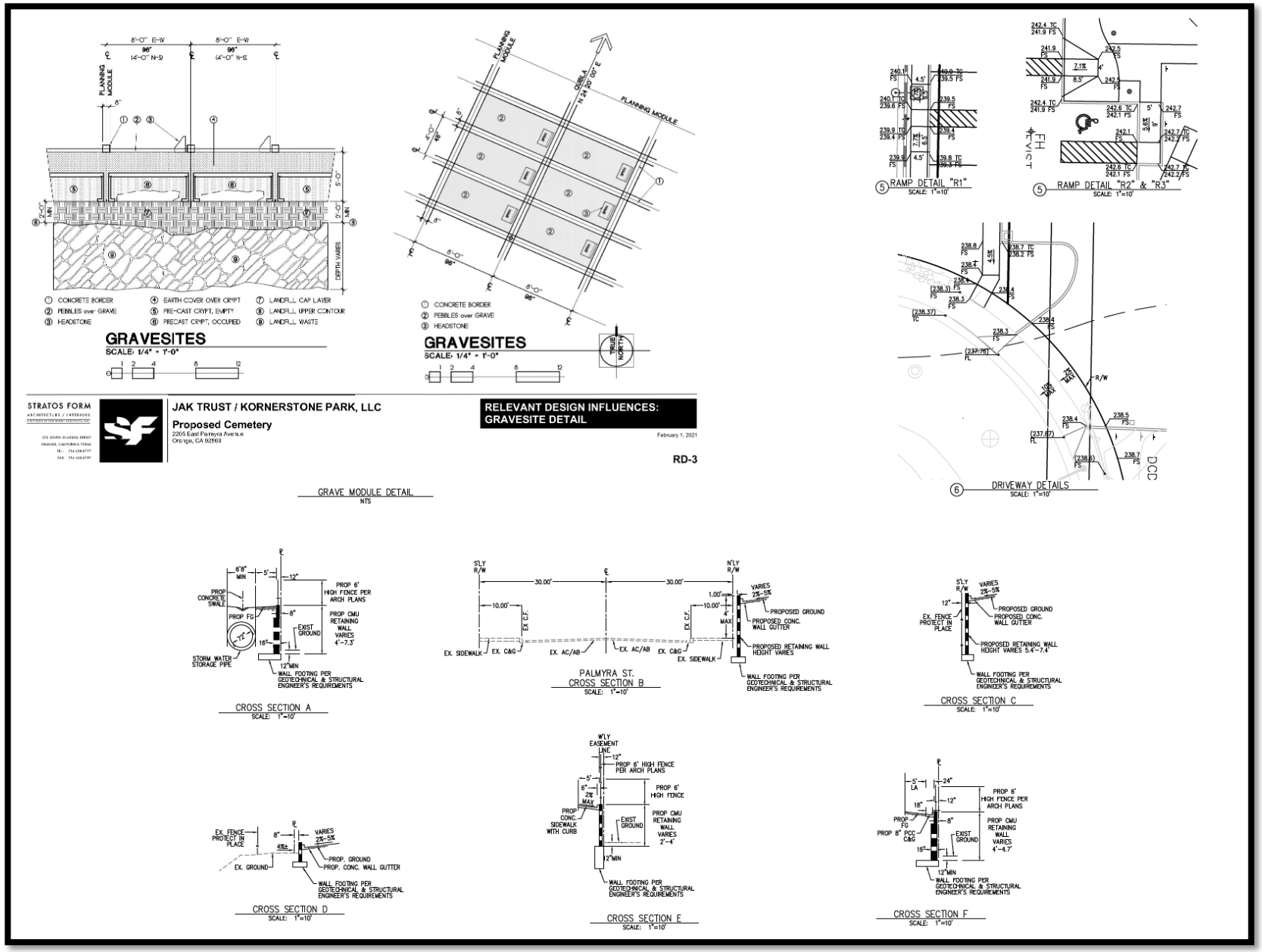


Figure 25: Conceptual Grading Details

Source: DRC Engineering, Inc.

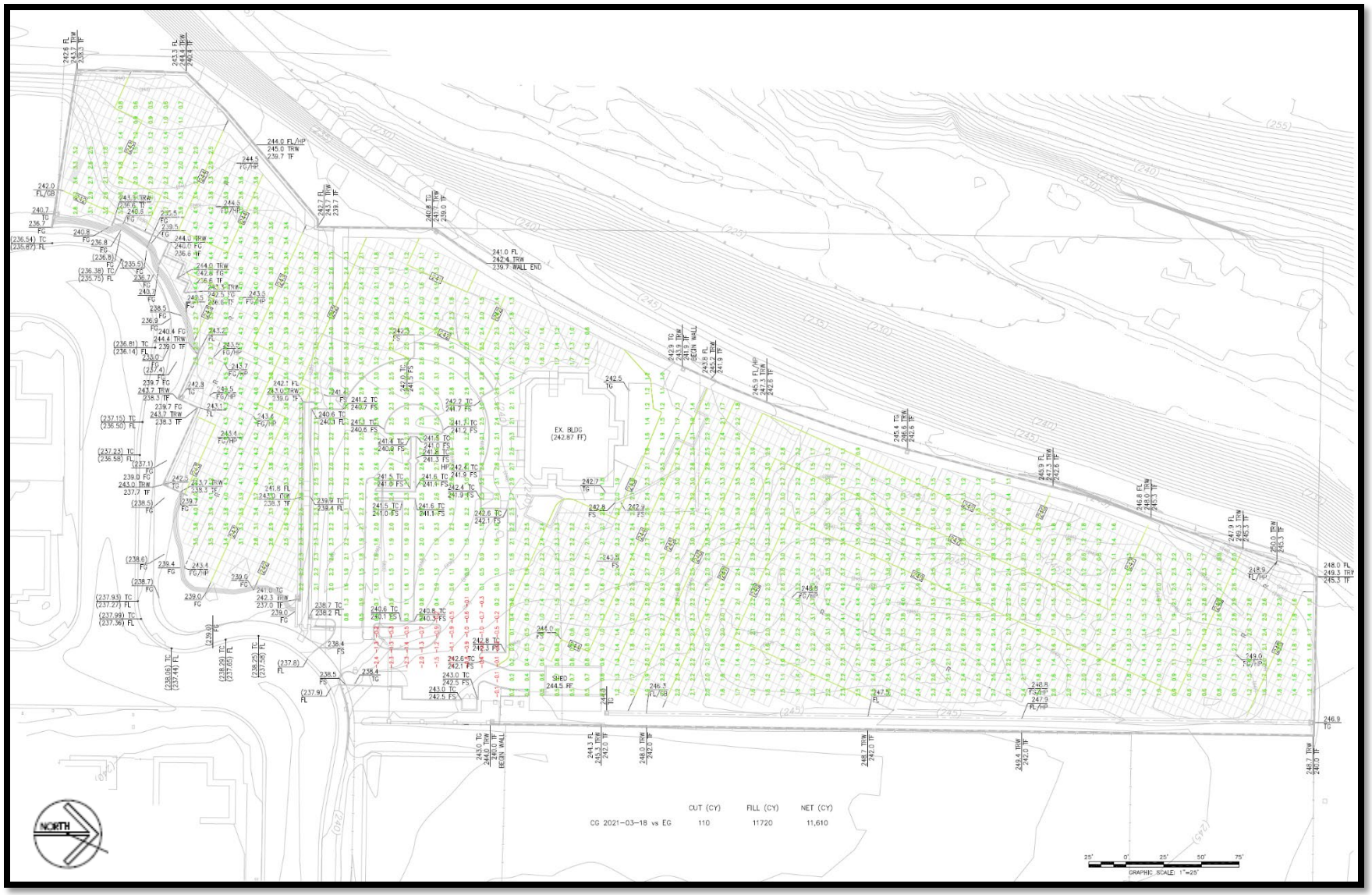


Figure 26: Conceptual Earthwork Plan

Source:

Figure 27: Conceptual Phasing Plan

Source: Stratos Form

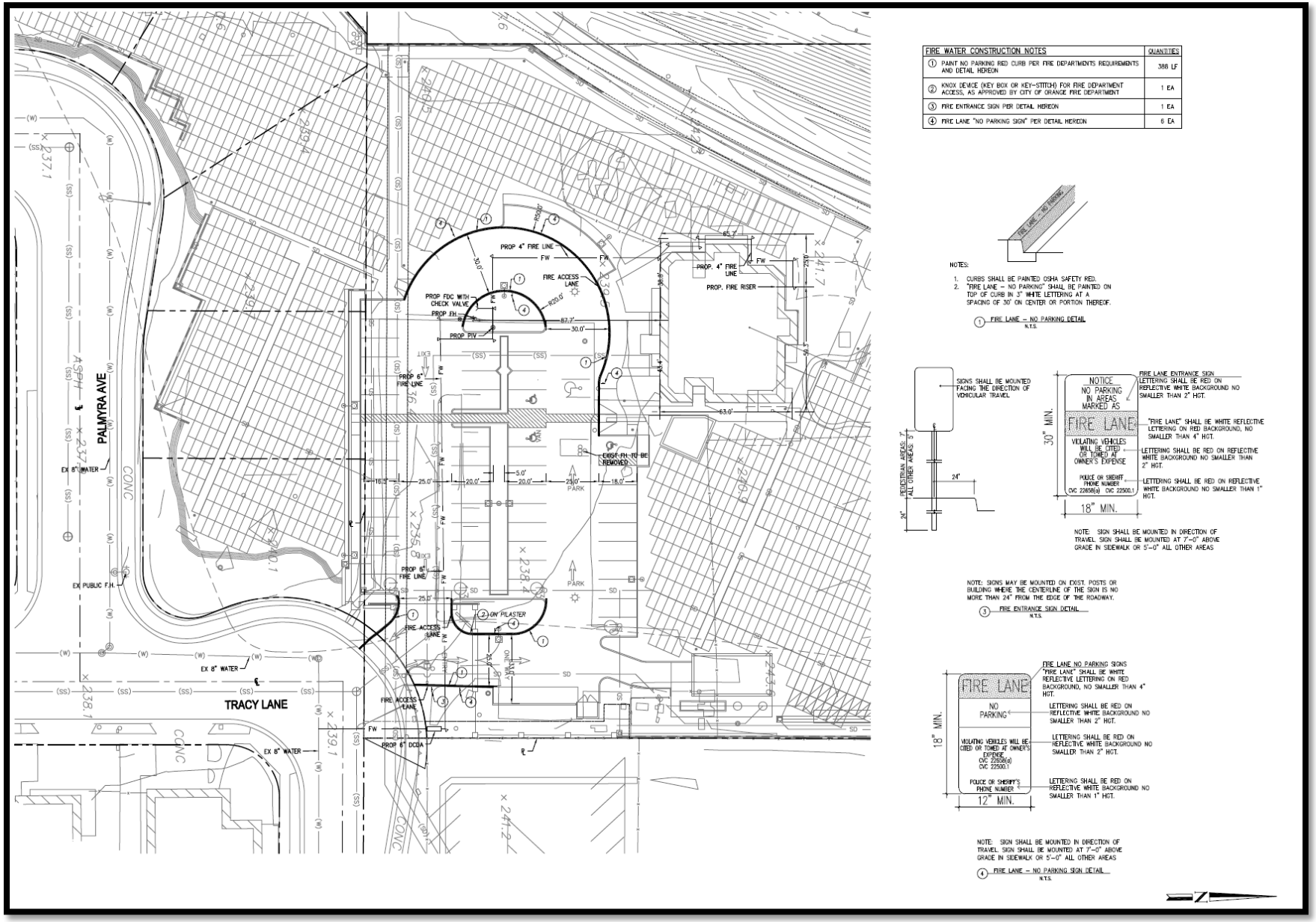


Figure 28: Fire Master Plan

Source: Stratos Form

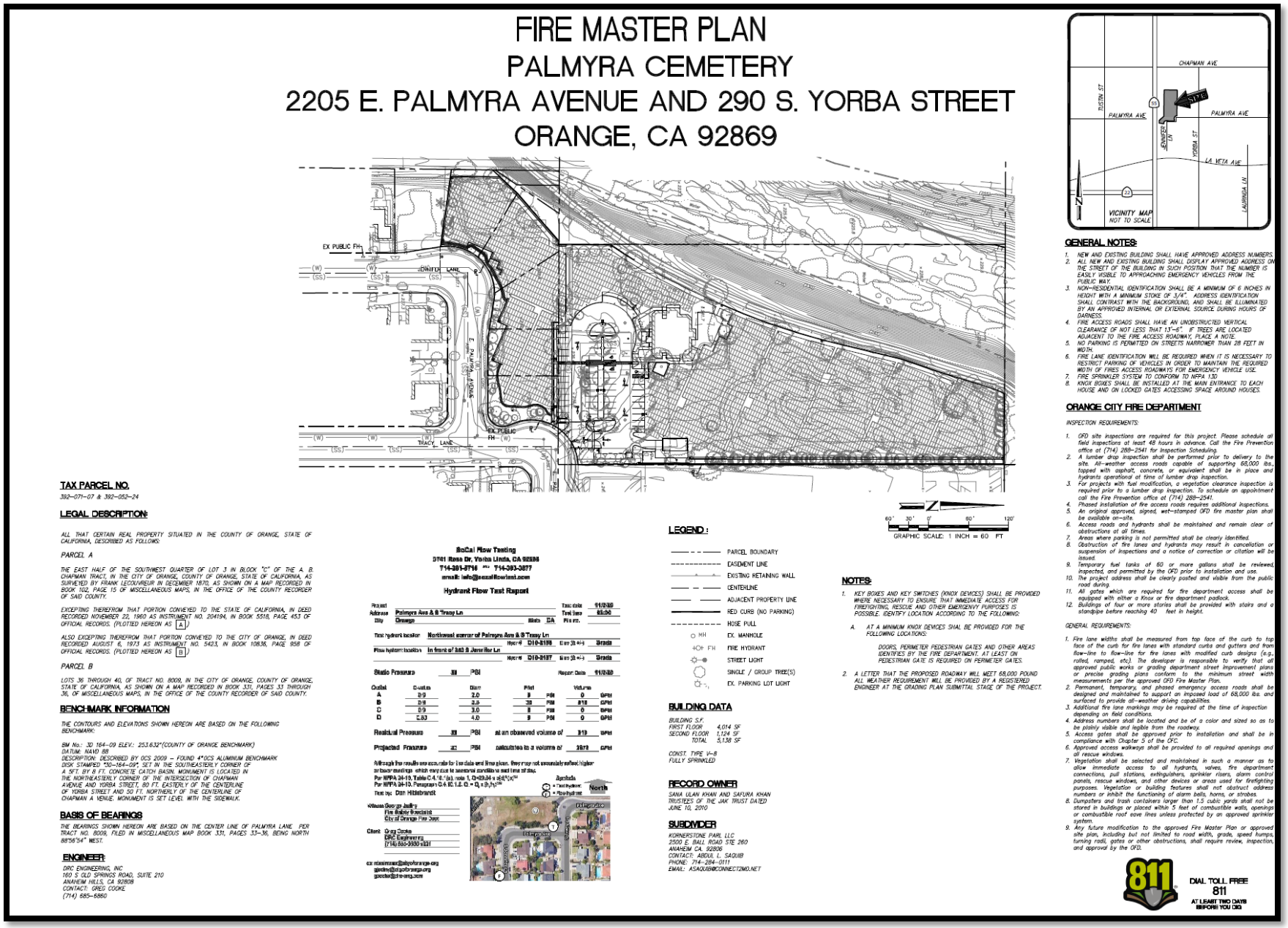


Figure 28: Fire Master Plan

Source: Stratos Form

2.5 Construction Schedule

The full buildout of gravesite space is expected to occur through a 20-year period In order to show a worst-case, conservative analysis, the Air Quality, Greenhouse Gas, and Energy analysis assumes project construction as being built out in one phase, with construction of the entire Project Site anticipated to start no sooner than March 2022 with completion by mid-September 2022.

Demolition: Would take approximately 20 days to complete. Demolition would consist of removing the surface asphalt paving and demolishing any remnants of the existing structure on-site.

Site Preparation: Would take approximately 10 days to complete. Site preparation activities would consist of removal of rocks and tree stumps.

Grading: The grading phase would occur after completion of the demolition and site preparation phases and is anticipated to take place over approximately 20 days. Consists of 110 cubic yards of cut and 11,720 cubic yards of fill, which would require approximately 11,610 cubic yards of dirt to be imported to the Project Site.

Building Construction: The building construction would occur after the completion of the grading phase and is anticipated to take place over approximately three (3) months.

Paving: The paving of the interior drive aisles would occur after the completion of the building construction phase and is anticipated to take place over approximately 20 days.

Application of Architectural Coatings: The application of architectural coatings would occur after the completion of the building construction phase and is anticipated to take place over approximately 20 days.

Although the paving and architectural coating phases are projected to occur consecutively after the completion of the building construction phase, it is possible that all three phases may occur concurrently.

2.6 Discretionary Actions

The Applicant is requesting approval of the following entitlements for the Proposed Project:

- A General Plan Amendment (No. 2021-002) to re-designate a portion of the Project Site from Low Density Residential (LDR) to Open Space-Park (OS-P);
- A Tentative Parcel Map (2020-177) to consolidate the Project Site into one lot;
- A Conditional Use Permit (CUP No. 3130-20) to allow cemetery use;
- A Major Site Plan Review (MJSP No. 1023-20) for modifications to the existing site layout; and,
- Design Review (DRC No. 5018-20) for modifications to the previously existing building and new landscaping onsite;

- A Variance (VAR No. 2254-21) to allow for above height walls/fences within the front yard setback.
- Tree Removal Permit for removal of 104 existing trees onsite.

3 INITIAL STUDY CHECKLIST

Project Title:
Orange Palmyra Cemetery

Reference Application Numbers:
General Plan Amendment No. 2021-002, Mitigated Negative Declaration No. 1880-21, Tentative Map No. 2020-177, Conditional Use Permit No. 3130-20, Major Site Plan No. 1023-20, Design Review No. 5018-20, Variance No. 2254-21, and Tree Removal Permit

Lead Agency:
City of Orange
Community Development Department
Planning Division
300 East Chapman Avenue
Orange, CA 92866-1591

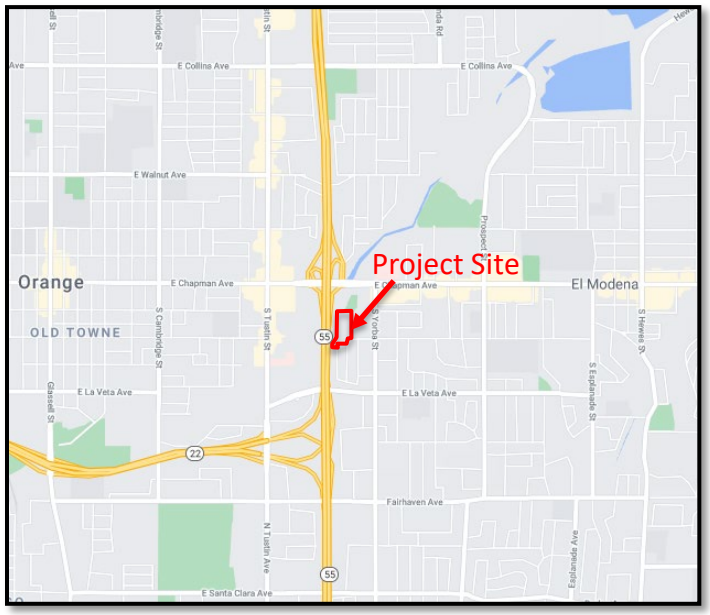
Contact Person and Telephone No.:
Vidal F. Márquez, Assistant Planner, 714-744-7214

Project Proponent and Address:
Kornerstone Park, LLC
2500 E. Ball Road
Suite 260
Anaheim, CA 92806

Contact Person and Telephone No.:
Abdul L. Saquib
310-948-6885

Project Location:

The Proposed Project is located at 290 South Yorba Street and 2205 East Palmyra Avenue (APNs 392-052-24 and 392-071-07) in the City of Orange (City), in the northwestern portion of Orange County, California (Project Site). The Project Site is within the U.S. Geological Survey (USGS) "Orange, California" 7.5-minute quadrangle and located in the southern portion of the City, south of East Chapman Avenue, east of State Route 55 (SR-55), north of East La Veta Avenue, and west of South Yorba Street. Freeway access to the Project Site is provided via SR-55.



Existing General Plan Designation:
Open Space-Park (OS-P)
Open Space (OS)
Low Density Residential (LDR)
Yorba South Commercial Overlay

Existing Zoning Classification:
Recreational Open Space (RO)

The Project Site is currently designated as Open Space-Park, Open Space, and Low Density Residential, and is within the Yorba South Commercial Overlay, pursuant to the Land Use Element of the Orange General Plan and would require a General Plan Amendment (2021-002) to re-designate the Low-Density Residential portion of the Project Site to Open Space-Park.

EXISTING SETTING

Regional Setting:

The Project Site is located in the City of Orange, California (**Figures 1** and **2**). Regional access to the Project Site is provided by SR-55 to the east via the Chapman Avenue East exit located approximately 0.1 miles to the north.

Existing transit lines in the project vicinity include Orange County Transit Authority (OCTA) bus lines 54 and 71[1]. The closest bus stops for lines 54 and 71 to the Project Site are located approximately 0.1 to the north on East Chapman Avenue and 0.4 miles to the northwest at the intersection of East Chapman Avenue and South Tustin Street, respectively.

Existing Site Conditions:

The Project Site is 5.99 gross acres consisting of two parcels (five lots), located south of East Chapman Avenue, west of South Yorba Street, north of East La Veta Avenue, and east of SR-55 in the City of Orange (**Figure 2**). The Project Site contains multipurpose and recreation facilities that include a former YMCA building that was destroyed by fire in the central portion, parking lot in the east-central portion, a former BMX track in the northern portion, and former sports field in the southern portion. The Santiago Creek and multi-purpose Santiago Creek Trail intersect the northwest portion of the Project Site and account for 1.71-acres of the 5.99-gross acre site leaving 4.28 acres available for cemetery improvements. The County of Orange operated the Project Site as a municipal solid waste disposal site between 1946 to 1956. Landfill operations belonged to a large former landfill known as the "La Veta Refuse Disposal Station" which concluded waste disposal in 1956. The landfill contained solid wastes consisting of green waste, construction debris, and municipal solid waste. Appendix G provides an estimate of several hundred thousand yards accepted during operation of the landfill. In 1972, the former building used as a YMCA was constructed, with waste in the immediate area of the building excavated and installation of a passive methane venting system. The Project Site also contains five (5) existing compliance landfill gas (LFG) probes, two non-compliance LFG probes, and one (1) existing ground water monitoring well.

Topography on the Project Site is flat. Existing site drainage occurs in two sections: (1) at the area south of the proposed building toward the existing parking lot and to Palmyra Avenue; (2) at the area north of the proposed building. However, the area north of the proposed building does not have definitive drainage directions, as the existing Santiago Creek Trail acts as a ridge. This results in the area west of the trail draining directly into Santiago Creek and the area east of the trail draining in arbitrary directions and eventually, draining to the existing parking lot and to Palmyra Avenue. Vehicular access to the Project Site is currently provided via one driveway access points at the knuckle of Palmyra Avenue and South Tracy Lane. The Project Site contains 131 existing trees of various types. The majority of the existing trees onsite consist of a mature windrow of

[1] Orange County Transit Authority (OCTA), 2021. *System Map* (North County) [PDF]. Retrieved from: https://www.octa.net/ebusbook/routePdf/NorthCounty.pdf Accessed March 8, 2021.

Red Gum with a majority in unhealthy or substandard conditions, and Coast Live Oak with most of the oaks considered healthy. Additional trees onsite include sycamores (declining health), jacarandas (healthy), rubber trees and laurels (healthy), pine trees (fair to poor health), and pepper trees (fair to good health).

Surrounding Land Uses:

The Project Site is located within an area with mixed zoning, including a predominant amount of Single-Family Residential, Public Institution, Limited Business, and Recreation Open Space zoned lots. The surrounding area includes the Orange Dog Park to the north, the Orange Unified School District (OUSD) Child Development Center to the east, SR-55, and Santiago Creek to the west, and single family residential to the south/southeast. Beyond the adjacent uses to the Project Site are the OUSD Community Day School and single-family residential development.

PROJECT DESCRIPTION

Kornerstone Park, LLC (Applicant) proposes to demolish existing site improvements, including a parking lot, and construct a 3,339-gravesite cemetery, 51-stall parking lot, 800 square foot (sf) storage shed, and reconstruct the 5,262-sf building that previously existed onsite (Proposed Project). In September, October, and November 2021, a series of fires destroyed the existing building and Applicant removed the remnants of the building, leaving only the concrete foundation. The Applicant would reconstruct the building consistent with the architectural plans that the City's Design Review Committee considered in Fall 2021, prior to the fires. The architectural plans included demolition of 124 square feet of the previously existing building and minor remodeling and modifications, resulting in a building area of 5,138 sf. The Proposed Project is located on 5.99-acres of land consisting of two parcels, Assessor's Parcel Numbers (APNs) 392-071-07 and 392-052-240 located at 290 South Yorba Street and 2205 East Palmyra Avenue, directly south of East Chapman Avenue, directly west of South Yorba Street, north of East La Veta Avenue, and east of SR-55 and the Santiago Creek in the City of Orange (Project Site).

The Proposed Project would implement the City's Agricultural and Open Space Districts standards pursuant to Chapter 17.22 of the Orange Zoning Ordinance and standards set forth by the Yorba South Commercial Overlay. The Proposed Project would entail a 20-year phased approach to buildout of the crypt gravesites. Initial project implementation would feature new a trash enclosure and ancillary utility shed, fences and walls surrounding the cemetery, gated entry to the site, an outdoor patio area, and new landscaping. Parking for the Proposed Project would include 51 surface parking lot spaces accessible from Palmyra Avenue and South Tracy Lane.

Other Public Agencies Whose Approval is Required (Responsible or Trustee Agencies):

- Department of Toxic Substances Control
- Orange County Health Care Agency – Environmental Health Division
- Department of Resources Recycling and Recovery
- Orange County Water District
- South Coast Air Quality Management District
- California Regional Water Quality Control Board, Santa Ana Region

Public Review Process

Pursuant to State CEQA Guidelines Section 15105(b), the IS/MND will be available for a 30-day public review and comment period from June 30, 2022, to August 1, 2022, on the City of Orange's website at https://www.cityoforange.org/our-city/departments/community-development/planning-division/current-projects.

If a paper copy of the Initial Study/Mitigated Negative Declaration is needed, please contact Vidal Marquez at the email address or phone number listed below.

In reviewing the IS/MND, affected public agencies and the interested members of the public should focus on the sufficiency of the document in identifying and analyzing the possible impacts on the environment, as well as ways in which the significant effects of the Proposed Project would be avoided or mitigated.

Comments may be made on the IS/MND in writing before the end of the comment period. Following the close of the public comment period, the City will consider this IS/MND and comments thereto in determining whether to approve the Proposed Project. Written comments on the IS/MND should be sent to the following address by August 1, 2022:

City of Orange
Attn: Vidal F. Marquez, Assistant Planner
300 East Chapman Avenue
Orange, CA 92866
714-744-7214
vmarquez@cityoforange.com

3.1 Environmental Factors Potentially Affected:

The environmental factors checked below would be potentially affected by the Proposed Project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages. None of the environmental factors were checked because the Proposed Project would not result in any potential significant impacts after the implementation of the recommended mitigation measures.

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

3.2 Determination:

Based on 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

June 30, 2022
Date

Vidal Marquez, Assistant Planner
Printed Name/Title

714-744-7214
Phone

4 ENVIRONMENTAL IMPACT ANALYSIS

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

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

4.1 Aesthetics

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

Environmental Analysis

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

Less Than Significant Impact: A scenic vista is a viewpoint that provides expansive views of a highly valued landscape for the benefit of the public. According to the General Plan EIR (April 2010), portions of Orange are characterized by scenic vistas including undeveloped hillsides, ridgelines, and open space areas that provide a unifying visual backdrop to the urban environment. An abundance of scenic vistas occurs in the largely undeveloped Santiago Hills II and East Orange portions of the City of Orange planning area including Irvine Lake, grassy valleys, rugged hillsides, and winding canyons. The Natural Resources Element of the City's General Plan outlines visual and aesthetic resource goals and objectives, which include protection of significant view corridors, ridgelines, and open space (Goal 7.0). Figure NR-4 of the Natural Resources Element does not identify the Project Site as a viewscape corridor. The nearest identified viewscape corridor is located approximately 2.25 miles east/southeast of the Project Site, with intervening topography and urban development located between the Project Site and designated areas. The Proposed Project would not have visual impacts on the designated scenic vistas. However, the Project Site is adjacent to existing open space—the Yorba Dog Park and Santiago Creek. The Proposed Project would entail redevelopment of the site which would include installation of gravesites, new landscaping, paved parking area, walls/fences, and reconstruction of the former building that was destroyed by fire. The Proposed Project would not negatively impact the aesthetics of the existing park and creek/multi-purpose Santiago Creek Trail as it would not result in construction of structures that would impede views of the park from the public right-of-way, nor would the project modify the elevation of the site in such a way as to impede lines of sight. The Proposed Project would not modify the Santiago Creek or multi-purpose Santiago Creek Trail as a part of development. Project design features include landscaping that contributes to a native plant palette along the Project Site's interface with the creek corridor. The Proposed Project would not have visual impacts on open space areas.

Therefore, potential impacts associated with a scenic vista would be less than significant and no mitigation would be required.

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

Less Than Significant Impact: The Project Site is currently occupied by multipurpose and recreation facilities that include a former YMCA building that was destroyed by fire in the central portion, parking lot in the east-central portion, a former BMX track in the northern portion, and former sports field in the southern portion. The northeastern portion of the Project Site consists of the Santiago Creek and multi-purpose Santiago Creek Trail (**Figure 3**). The City General Plan's Natural Resource Element identifies Santiago Canyon Road, east of Jamboree Road, as a potential City Scenic Highway. The California Department of Transportation (CalTrans) designates a portion of the SR-91 and SR-55 as a state scenic highway, with an additional portion of the SR-91 eligible for designation as a scenic highway[2]. The city and state scenic highways are each approximately 4-miles east and north, respectively, of the Project Site with intervening urban development. The Project Site includes a portion of the Santiago Creek and multi-purpose Santiago Creek Trail but would not include any development or modifications within the creek or multi-purpose Santiago Creek Trail areas. The extent of disturbance would be limited to the areas of the Project Site that are already disturbed from existing development. No scenic resources, rock outcroppings, or historic buildings within a state scenic highway would be impacted as a part of the Proposed Project. Therefore, impacts associated with scenic resources within a state scenic highway would be less than significant and no mitigation would be required.

c) Would the project substantially degrade the existing visual character or quality of the site and its surroundings? 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 currently occupied by multipurpose and recreation facilities that include a former YMCA building that was destroyed by fire in the central portion, parking lot in the east-central portion, a former BMX track in the northern portion, and former sports field in the southern portion. The northeastern portion of the Project Site consists of Santiago Creek and multi-purpose Santiago Creek Trail (**Figure 3**). The surrounding uses include single-family residential buildings, school/educational and institutional buildings, park, open space and recreation areas, and the SR-55. The Proposed Project would involve the reconstruction of the former YMCA building that was destroyed by fire and minor ancillary structures, including an 800 SF storage shed, trash enclosure, and gates/fencing—all of which would include visually pleasing elements such as landscaping and elevated architectural design lessen the visual impact of the development.

[2] https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways Accessed March 29, 2021

The Proposed Project would require a General Plan Amendment in order to bring the southern portion of the Project Site designated Low Density Residential into conformance with the existing Open Space zoning. The application of the Open Space-Park designation would result in the Proposed Project being consistent with applied zoning of Recreation Open Space. The Proposed Project would not result in significant changes to the existing visual character or quality of the site and its surroundings as the project would reconstruct the former building onsite that was destroyed by fire, not encroach, or modify Santiago Creek and multi-purpose Santiago Creek Trail area and retain a majority of the site as open area for funerary purposes. Therefore, potential impacts associated with the visual character or quality of the site and its surroundings would be less than significant and no mitigation would be required.

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: The Proposed Project is a 3,339-gravesite cemetery, a 5,138-sf two-story building to support activities associated with funeral burial practices, accessory parking, and landscaping. The Proposed Project includes ancillary administrative office space for the funeral burial practices, construction of a one-story, 800 SF storage shed, trash enclosure, and utility shed, as well as the demolition and construction of a 51-space surface parking lot. The Project Site is located adjacent to existing school/educational and institutional buildings, park, open space and recreation areas, and single-family homes. Normal operating hours for the proposed use would occur between 8:00 AM and 5:00 PM, seven days a week. Certain activities, arranged by appointment only, would occur after 5:00 PM but conclude prior to 7:00 PM, which could include: the preparation of the body for burial; pre-burial family visitations, and gravesite visitations. Funeral services, processions, and post-burial memorial services only occur during normal hours of operation. In some instances, the remains of the deceased would be delivered after normal hours of operation, between the hours of 5:00 PM to 8:00 AM. The driver would access the secured property, place the remains in refrigerated storage (**Figure 3**), secure the premises and depart, all of which would take approximately one hour.

Construction of the development would primarily emit nighttime lighting from exterior security lighting. Operation of the development would primarily emit nighttime lighting from exterior security lighting, parking lot lighting, tree and sign up lighting, and interior lights (**Figure 20** – *Conceptual Site Lighting Plan*). Existing sources of light on the Project Site include parking lot lighting and exterior security lighting. Existing sources of light surrounding the Project Site include light emissions from the existing single-family residences located to the south, and nonresidential lighting associated with the SR-55 freeway to the west, OUSD center directly to the east, and Yorba Park to the north. The amount of lighting generated by the Proposed Project would be like that used in the surrounding school and park areas and be subject to Section 17.12.030 - Lighting of the City's Zoning Ordinance. Proposed lighting would be required to not shine directly on surrounding premises, and be directed, controlled, screened, or shaded to ensure compliance. The Proposed Project, subject to the lighting restrictions outlined in Section 17.12.030, would result in less than significant increases in nighttime light or glare as the Proposed Project is replacing an existing multipurpose and recreation use in an urbanized neighborhood, which utilizes light posts and building lighting onsite.

The Proposed Project would use typical construction materials such as stone veneer, stucco, and glass, and would not use reflective materials that would result in glare for the surrounding uses. Proposed fencing materials at the site's perimeter would be a combination of wrought iron, CMU and gabion walls and would not produce significant amounts of glare. Prior to the issuance of a building permit, the Proposed Project would be subject to building code requirements that include an assessment of exterior lighting plans to ensure lighting fixtures are shielded to prevent light spill. With the layout of the Proposed Project, which includes maintaining the proposed building and constructing the parking lot in the same area as the existing parking area, plus the approval of lighting plans, there would be no new or increase in significant impacts related to lighting and glare. Therefore, potential impacts associated with light and glare would be less than significant and no mitigation would be required.

Mitigation Measures

No mitigation measures associated with impacts to Aesthetics apply to the Proposed Project.

Conclusion

Potential impacts of the Proposed Project associated with Aesthetics would be less than significant and no mitigation would be required.

4.2 Agriculture and Forestry Resources

(In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland.) In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.) **Would the project:**	**Potentially Significant Impact**	**Less Than Significant 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?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Environmental Analysis

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: According to the California Department of Conservation Important Farmland Finder map[3], the Proposed Project is designated as Urban and Built-Up Land, as are all surrounding land uses. The Project Site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Therefore, no impacts associated with farmland would occur and no mitigation would be required.

[3] https://maps.conservation.ca.gov/DLRP/CIFF/ Accessed April 8, 2021

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

No Impact: The Proposed Project is zoned Recreational Open Space (RO) and not located on parcels zoned for agricultural use. There are no existing agricultural uses on the Project Site. According to the California Department of Conservation's Important Farmland Finder map, the Project Site is not located on or adjacent to lands under a Williamson Act contract. Therefore, no impacts associated with agricultural uses, or a Williamson Act contract would occur, and no mitigation would be required.

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

No Impact: Public Resources Code 12220 (g) defines forestland as that which "can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits." California Government Code 51104(g) identifies a timberland production zone as "an area which has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses." The Project Site is located within an urbanized area, and is not located near or adjacent to forestland, timberland, or timberland zoned Timberland Production. Therefore, no impacts associated with forest land or timberland would occur and no mitigation would be required.

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 is developed with an existing multipurpose building, former sports fields, parking lot, and former BMX facilities. The Project Site and surrounding properties do not contain any forestland, as the Project Site and the surrounding properties are categorized as urban and built out according to the California Department of Conservation Farmland Mapping and Monitoring Program Important Farmland map database. Therefore, no impacts associated with forest land would occur and no mitigation would be required.

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 developed with an existing multipurpose building, former sports fields, parking lot, and former BMX facilities. The Project Site does not contain any farmland or forestland. The construction of the Proposed Project would not result in the conversion of farmland to non-agricultural use or the conversation of forestland to non-forest use. Therefore, no impacts associated with forest land or timberland would occur and no mitigation would be required.

Mitigation Measures

No mitigation measures associated with impacts to Agriculture and Forestry Services apply to the Proposed Project.

Conclusion

There would be no impacts of the Proposed Project associated with Agriculture and Forestry Services and no mitigation would be required.

4.3 Air Quality

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

An Air Quality, Global Climate Change, and Energy Impact Analysis was completed to determine potential impacts to air quality associated with the development of the Proposed Project (**Appendix A** - *Air Quality, Global Climate Change, and Energy Impact Analysis*, Ganddini Group, May 2021, Revised February 8, 2022). The results of the analysis are based on CalEEMod version 2020.4.0.

The Project Site is located within the central part of Orange County in the City of Orange, in Air Monitoring Area 17 of the South Coast Air Basin (SCAB) that includes all of Orange County, as well as the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The Environmental Protection Agency (EPA) has designated the Basin as a federal non-attainment area for ozone, fine particulate matter ($PM_{2.5}$). Currently, the Basin is in attainment with the National Ambient Air Quality (NAAQS) standards for carbon monoxide (CO), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), and respirable particulate matter (PM_{10}). The California Air Resources Board (CARB) has designated the Basin as a non-attainment area for Ozone, PM_{10}, and $PM_{2.5}$. Currently, the SCAB is in attainment with the ambient air quality standards for CO, NO_2, SO_2, lead, and sulfates and is unclassified for visibility reducing particles and Hydrogen Sulfide. South Coast Air Quality Management District (SCAQMD) is the agency responsible for comprehensive air pollution control within the Basin. SCAQMD works directly with the Southern California Association of Governments (SCAG), county transportation commissions, and local governments and cooperates actively with all federal and state agencies.

Many air quality impacts that derive from dispersed mobile sources, which are the dominate pollution generators in the Air Basin, often occurs hours later and miles away after photochemical processes have converted primary exhaust pollutants into secondary contaminants such as ozone. The incremental regional air quality impact of an individual project is generally very small and difficult to measure. Therefore, SCAQMD has developed significance thresholds based on the volume of pollution emitted rather than on actual ambient air quality because the direct air quality impact of a project is not quantifiable on a regional scale. The SCAQMD CEQA Handbook states that any project in the SCAB with daily emissions that exceed any of the identified significance thresholds should be considered as having an individually and cumulatively significant air quality impact. For the purposes to this air quality impact analysis, a regional air

quality impact would be considered significant if emissions exceed the SCAQMD significance thresholds identified in Table 2 - *SCAQMD Regional Criteria Pollutant Emission Thresholds of Significance.*

Table 2 – SCAQMD Regional Criteria Pollutant Emission Thresholds of Significance

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

Source : http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2

Project-related construction air emissions may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Air Basin. In order to assess local air quality impacts the SCAQMD has developed Localized Significant Thresholds (LSTs) to assess the project-related air emissions in the project vicinity. SCAQMD has also provided *Final Localized Significance Threshold Methodology* (LST Methodology)*,* July 2008, which details the methodology to analyze local air emission impacts. The LST Methodology found that the primary emissions of concern are NO_2, CO, PM10, and PM2.5.

Appendix A analyzed the local air quality emissions from construction using the SCAQMD's Mass Rate Localized Significant Threshold Look-up Tables and the methodology described in *Localized Significance Threshold Methodology* prepared by SCAQMD (revised July 2008). The SCAQMD developed the Look-up Tables in order to readily determine if the daily emissions of CO, NOx, PM10, and PM2.5 from a project could result in a significant impact to the local air quality. Appendix A's calculations for emission thresholds are based on the Central Orange County source receptor area (SRA) 17 and a disturbance value of two acre per day, to be conservative. The nearest sensitive receptors to the Project Site include the existing school uses located adjacent to the east and north, and the single-family residential uses located approximately 55 feet (~17 meters) adjacent to the south of the Project Site. According to LST Methodology, any receptor located closer than 25 meters (82 feet) shall be based on the 25-meter thresholds. According to SCAQMD LST methodology, LSTs would apply to the operational phase of a project, if a project includes stationary sources, or attracts mobile sources (such as heavy-duty trucks) that may spend long periods queuing and idling at the site; such as industrial warehouse/transfer facilities. Table 3 – *Local Construction Emissions at the Nearest Sensitive Receptors* shows the LSTs for NO2, PM10 and PM2.5 for construction activities.

Table 3 – SCAQMD Local Air Quality Thresholds of Significance

Activity	**Allowable Emissions (pounds/day)[1]**			
	NOx	**CO**	**PM10**	**PM2.5**
Construction	115	715	6	4

Notes:
[1] The nearest offsite sensitive receptors include the existing school uses located adjacent to the east and the existing single-family residential uses located adjacent and approximately 55 feet (~17 meters) to the south and southeast of the Project Site. According to SCAQMD methodology, all receptors closer than 25 meters are based on the 25-meter threshold.
Source: Calculated from CalEEMod and SCAQMD's Mass Rate Look-up Tables for 2 acres, to be conservative, at a distance of 25 meters in SRA 17 Central Orange County.

Environmental Analysis

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

Less Than Significant Impact: The Proposed Project would not conflict with or obstruct implementation of the SCAQMD Air Quality Management Plan (AQMP).

SCAQMD Air Quality Management Plan

The California Environmental Quality Act (CEQA) requires a discussion of any inconsistencies between a Proposed Project and applicable General Plans and regional plans (CEQA Guidelines Section 15125). The regional plan that applies to the Proposed Project includes the SCAQMD AQMP. Therefore, this section discusses any potential inconsistencies of the Proposed Project with the AQMP. If the decision-makers determine that the Proposed Project is inconsistent, the lead agency may consider project modifications or inclusion of mitigation to eliminate the inconsistency.

The SCAQMD CEQA Handbook states that "New or amended GP Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP." Strict consistency with all aspects of the plan is usually not required. A Proposed Project would be consistent with the AQMP if it furthers one or more policies and does not obstruct other policies. The SCAQMD CEQA Handbook identifies two key indicators of consistency:

(1) Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

(2) Whether the project will exceed the forecasted growth assumptions incorporated within the AQMP or increments based on the year of project buildout and phase.

Criterion 1 - Increase in the Frequency or Severity of Violations?

Short-term regional construction air emissions would not result in significant impacts based on SCAQMD regional thresholds of significance shown in Tables 2 and 3. Therefore, potential short-term impacts associated with the Proposed Project would be less than significant. Air pollutant emissions resulting from the ongoing operation of the Proposed Project would be inconsequential on a regional basis and would not result in significant impacts, because the Proposed Project would not involve stationary sources or attract mobile sources (i.e., heavy duty trucks) that may spend long period queuing and idling. Therefore, long-term impacts associated with the Proposed Project would be less than significant and no mitigation would be required.

The Proposed Project would be consistent with Criterion 1.

Criterion 2 - Exceed Assumptions in the AQMP?

Consistency with the AQMP assumptions is determined by performing an analysis of the Proposed Project with the assumptions in the AQMP. The emphasis of this criterion is to ensure the analyses conducted for the Proposed Project are based on the same forecasts as the AQMP. The AQMP is developed through use of the planning forecasts provided in the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and the Federal Transportation

Improvement Program (FTIP). The RTP/SCS is a major planning document for the regional transportation and land use network within Southern California. The RTP/SCS is a long-range plan that is required by federal and state requirements placed on SCAG and is updated every four years. The FTIP provides long-range planning for future transportation improvement projects that are constructed with state and/or federal funds within Southern California. Local governments are required to use these plans as the basis of their plans for the purpose of consistency with applicable regional plans under CEQA. For the Proposed Project, the City of Orange General Plan's Land Use Plan defines the assumptions that are represented in AQMP.

The Project Site is currently designated as Public Facilities and Institutions with a Yorba South Commercial Overlay in the General Plan. As indicated in the City's General Plan, the Public Facilities and Institutions designation refers to public, quasi-public, and institutional land uses, including schools, colleges and universities, City and County government facilities, hospitals, and major utility easements and properties, while the Yorba South Commercial Overlay provides for a wide range of potential retail and service commercial uses, in conjunction with on-site parkland improvements, off-site parkland, and/or park improvements. Furthermore, cemeteries at 0.05 FAR are included in the civic uses allowed under the Public Facilities and Institutions designation. The Proposed Project would require a General Plan Amendment to re-designate the LDR portion of the Project Site to OS-P to bring the southern portion of the site into consistency with the existing zoning of Recreational Open Space. Therefore, due to the Proposed Project's consistency with the General Plan and the proposed General Plan Amendment, the Proposed Project would not result in an inconsistency with the current land use designations with respect to the regional forecasts utilized by the AQMPs. The Proposed Project is not anticipated to exceed the AQMP assumptions for the Project Site. Therefore, the Proposed Project would be consistent with Criterion 2.

Therefore, potential impacts associated with the conflict with or obstruction of implementation of the applicable air quality plan would be less than significant and no mitigation would be required.

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: The Proposed Project would not 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 with implementation of mitigation measures.

Construction Emissions

Full buildout of the gravesite space would occur over a 20-year phased plan; however, in order to show a conservative analysis, construction of the entire Project Site was modeled as starting no sooner than March 2022 and being completed by mid-September 2022, anticipated operation occurring in 2022. The construction schedule has been delayed due to the series of fires in Fall 2021, however, even if construction were to occur any time after the respective dates, the analysis represents "worst-case" since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.

Construction activities would include construction of the 5,138-sf building, an 800 square foot accessory/shed structure; paving of a parking lot with 51 parking spaces; and application of architectural coatings. Site preparation of approximately 1.1 acres to remove existing trees and an existing 0.5-acre asphalt parking lot would occur. Grading would include approximately 11,610 cubic yards of import. The construction emissions are analyzed for both regional and local air quality impacts.

Short-Term Construction Related Regional Impacts

The CalEEMod model utilized to calculate the construction-related regional emissions from the Proposed Project and the input parameters utilized in this analysis are detailed in Appendix A. The worst-case summer or winter daily construction-related criteria pollutant emissions from the Proposed Project for each phase of construction activities are shown in Table 4 - *Construction-Related Regional Pollutant Emissions* and the CalEEMod daily printouts are in Appendix A.

Table 4 – Construction-Related Regional Pollutant Emissions

Activity	Pollutant Emissions (pounds/day)					
	VOC	NOx	CO	SO_2	PM10	PM2.5
Demolition						
Onsite[1]	2.64	25.72	20.59	0.04	1.34	1.17
Offsite[2]	0.05	0.23	0.55	0.00	0.19	0.05
Subtotal	**2.69**	**25.95**	**21.14**	**0.04**	**1.53**	**1.22**
Site Preparation						
On-Site[1]	1.00	10.47	5.82	0.01	2.90	1.76
Off-Site[2]	0.02	0.04	0.17	0.00	0.06	0.02
Subtotal	**1.02**	**10.51**	**5.99**	**0.01**	**2.96**	**1.78**
Grading						
On-Site[1]	1.95	20.86	15.27	0.03	3.70	2.20
Off-Site[2]	0.28	9.32	3.01	0.04	1.24	0.38
Subtotal	**2.23**	**30.18**	**18.28**	**0.07**	**4.94**	**2.59**
Building Construction						
On-Site[1]	1.71	15.62	16.36	0.03	0.81	0.76
Off-Site[2]	0.43	2.25	4.27	0.02	1.52	0.43
Subtotal	**2.13**	**17.86**	**20.64**	**0.05**	**2.33**	**1.19**
Paving						
On-Site[1]	1.16	11.12	14.58	0.02	0.57	0.52
Off-Site[2]	0.05	0.03	0.49	0.00	0.17	0.05
Subtotal	1.21	11.16	15.07	0.02	0.74	0.57
Architectural Coating						
On-Site[1]	6.50	1.41	1.81	0.00	0.08	0.08
Off-Site[2]	0.07	0.05	0.72	0.00	0.25	0.07
Subtotal	**6.57**	**1.46**	**2.54**	**0.01**	**0.33**	**0.15**
Total for overlapping phases[3]	9.92	30.48	38.25	0.08	3.39	1.90
SCQAMD Thresholds	75	100	550	150	150	55
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
Source: CalEEMod Version 2020.4.0
(1) On-site emissions from equipment operated on-site that is not operated on public roads. On-site grading PM-10 and PM-2.5 emissions show mitigated values for fugitive dust for compliance with SCAQMD Rule 403.
(2) Off-site emissions from equipment operated on public roads.
(3) Construction, painting, and paving phases may overlap.

Table 4 shows the combined building construction, paving and architectural coatings activities for the Proposed Project would not exceed the SCAQMD's regional significance thresholds for emissions. Therefore, the Proposed Project's construction related impacts to regional air quality would be less than significant and no mitigation would be required.

Short-Term Construction Related Local Impacts

Construction-related air emissions may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Air Basin.

The local air quality emissions from construction were analyzed through utilization of the methodology described in *Localized Significance Threshold Methodology* (LST Methodology), prepared by SCAQMD, revised July 2008. The LST Methodology found the primary criteria pollutant emissions of concern are NO_x, CO, PM10, and PM2.5. In order to determine if any of these pollutants require a detailed analysis of the local air quality impacts, each phase of construction was screened using the SCAQMD's Mass Rate LST Look-up Tables. The Look-up Tables were developed by the SCAQMD in order to readily determine if the daily onsite emissions of CO, NO_x, PM10, and PM2.5 from the Proposed Project could result in a significant impact to the local air quality.

Table 5 - *Local Construction Emissions at the Nearest Receptors* shows the onsite emissions from the CalEEMod model for the different construction phases and the calculated localized emissions thresholds (Appendix A).

Table 5 – Local Construction Emissions at the Nearest Receptors

Phase	Pollutant Emissions (pounds/day)			
	NOx	**CO**	**PM10**	**PM2.5**
Demolition	25.72	20.59	1.34	1.17
Site Preparation	10.47	5.82	2.90	1.76
Grading	20.86	15.27	3.70	2.20
Building Construction	15.62	16.36	0.81	0.76
Paving	11.12	14.58	0.57	0.52
Architectural Coating	1.41	1.81	0.08	0.08
SCAQMD Local Construction Thresholds[1]	**115**	**715**	**6**	**4**
Exceeds Threshold?	No	No	No	No

Notes:
Source: Source: Calculated from CalEEMod and SCAQMD's Mass Rate Look-up Tables for 2 acres, to be conservative, at a distance of 25 meters in SRA 17 Central Orange County.
(1)The nearest sensitive receptors to the project include the existing school uses located adjacent to the east and the existing single-family residential uses located adjacent and approximately 55 feet (~17 meters) to the south and southeast of the Project Site; therefore, the 25 meter threshold was used.
Note: The project will disturb up to a maximum of 2.5 acres a day during grading

Table 5 shows that none of the analyzed criteria pollutants would exceed the local emissions thresholds during any phases of construction. Additionally, it is mandatory for all construction projects in the SCAB to comply with SCAQMD Rule 403 for Fugitive Dust. Specific Rule 403 control requirements include, but are not limited to, applying water in sufficient quantities to prevent the generation of visible dust plumes, applying soil binders to uncovered areas, re-establishing ground cover as quickly as possible, and maintaining effective cover over exposed areas. Vehicle and equipment speeds would be limited to 15 miles per hour to prevent dust suspension. Compliance with Rule 403 is included as Project Design Feature **PDF AQ-1** and would reduce PM2.5 and PM10 emissions associated with construction activities by approximately 61 percent. Therefore, potential impacts to local air quality impact would be less than significant from construction of the Proposed Project.

Operational Emissions

The on-going operation of the Proposed Project would result in a long-term increase in air quality emissions. This increase would be due to emissions from the project-generated vehicle trips, emissions from energy usage, and onsite area source emissions created from the on-going use of the Proposed Project. The following section provides an analysis of potential long-term air quality impacts due to regional air quality and local air quality impacts with the on-going operations of the Proposed Project.

Operations Related Regional Criteria Pollutant Analysis

The operations-related regional criteria air quality impacts created by the Proposed Project were analyzed through use of the CalEEMod model and the input parameters utilized in Appendix A. The worst-case summer or winter VOC, NO_x, CO, SO_2, PM10, and PM2.5 daily emissions created from the Proposed Project's long-term operations were calculated and are summarized in Table 6 - *Regional Operational Pollutant Emissions* and the CalEEMod daily emissions printouts are shown in Appendix A.

Table 6 – Regional Operational Pollutant Emissions

Activity	Pollutant Emissions (pounds/day)					
	ROG	NOx	CO	SO_2	PM10	PM2.5
Area Sources[1]	0.24	0.00	0.01	0.00	0.00	0.00
Energy Usage[2]	0.00	0.03	0.03	0.00	0.00	0.00
Mobile Sources[3]	0.20	0.20	1.71	0.00	0.38	0.10
Total Emissions	0.44	0.24	1.74	0.00	0.38	0.10
SCQAMD Operational Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds Threshold?	No	No	No	No	No	No

Notes:
Source: CalEEMod Version 2020.4.0; the higher of either summer or winter emissions.
(1) Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.
(2) Energy usage consists of emissions from generation of electricity and on-site natural gas usage.
(3) Mobile sources consist of emissions from vehicles and road dust.

Table 6 shows that none of the analyzed criteria pollutants created from operation of the Proposed Project would exceed SCAQMD's regional emissions thresholds. Therefore, potential impacts to regional air quality impact would be less than significant from operation of the Proposed Project.

Therefore, potential impacts to regional air quality would be less than significant.

Operations Related Local Air Quality Impacts

Project-related air emissions may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Air Basin. The Proposed Project has been analyzed for the potential local CO emission impacts from the project-generated vehicular trips and from the potential local air quality impacts from on-site operations. The following analyzes the vehicular CO emissions and local impacts from on-site operations.

Local CO Hotspot Impacts from Project-Generated Vehicular Trips

CO is the pollutant of major concern along roadways because the most notable source of CO is motor vehicles. For this reason, CO concentrations are usually indicative of the local air quality generated by a roadway network and are used as an indicator of potential local air quality impacts. Local air quality impacts can be assessed by comparing future without and with project CO levels to the State and Federal CO standards of 20 ppm over one hour or 9 ppm over eight hours.

To determine if the Proposed Project could cause emission levels in excess of the CO standards, a sensitivity analysis is typically conducted to determine the potential for CO "hot spots" at a number of intersections in the general project vicinity. Because of reduced speeds and vehicle queuing, "hot spots" potentially can occur at high traffic volume intersections with a Level of Service E or worse.

The analysis prepared for CO attainment in the South Coast Air Basin by the SCAQMD can be used to assist in evaluating the potential for CO exceedances in the South Coast Air Basin. CO attainment was thoroughly analyzed as part of the SCAQMD's 2003 Air Quality Management Plan (2003 AQMP) and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan). As discussed in the 1992 CO Plan, peak carbon monoxide concentrations in the South Coast Air Basin are due to unusual meteorological and topographical conditions, and not due to the impact of particular intersections. Considering the region's unique meteorological conditions and the increasingly stringent CO emissions standards, CO modeling was performed as part of 1992 CO Plan and subsequent plan updates and air quality management plans. In the 1992 CO Plan, a CO hot spot analysis was conducted for four busy intersections in Los Angeles at the peak morning and afternoon time periods. The intersections evaluated included: South Long Beach Boulevard and Imperial Highway (Lynwood); Wilshire Boulevard and Veteran Avenue (Westwood); Sunset Boulevard and Highland Avenue (Hollywood); and La Cienega Boulevard and Century Boulevard (Inglewood). These analyses did not predict a violation of CO standards. The busiest intersection evaluated was that at Wilshire Boulevard and Veteran Avenue, which has a daily traffic volume of approximately 100,000 vehicles per day. The Los Angeles County Metropolitan Transportation Authority evaluated the Level of Service in the vicinity of the Wilshire Boulevard/Veteran Avenue intersection and found it to be Level of Service E during the morning peak hour and Level of Service F during the afternoon peak hour.

The Proposed Project's Trip Generation and VMT Screening Analysis (Appendix M) shows that the Proposed Project would generate approximately 36 daily trips on a typical weekday, including 1 trip during the AM peak hour and 3 trips during the PM peak hour, and 83 daily trips on a typical Sunday, including 16 trips during the peak hour of the site. Per City guidelines, the Proposed Project does not generate enough traffic to warrant either a Level of Service Analysis or a VMT analysis. The 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan) showed that an intersection which has a daily traffic volume of approximately 100,000 vehicles per day would not violate the CO standard. As the Proposed Project includes only up to 83 vehicle trips per day and will add only a negligible number of vehicles to roadways in the vicinity during peak hours, the intersection volumes would fall far short of 100,000 vehicles per day, and no CO "hot spot"

modeling was performed. Therefore, potential impacts associated with mobile sources to local, long-term air quality with the on-going use of the Proposed Project would be less than significant.

Local Criteria Pollutant Impacts from Onsite Operations

Project-related air emissions from on-site sources such as architectural coatings, landscaping equipment, onsite usage of natural gas appliances as well as the operation of vehicles on-site may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Air Basin. The nearest sensitive receptors that may be impacted by the Proposed Project are the existing school uses located adjacent to the east and north, and the single-family residential uses located adjacent and approximately 55 feet (~17 meters) to the south of the Project Site.

According to SCAQMD LST methodology, LSTs would apply to the operational phase of a project, if the project includes stationary sources, or attracts mobile sources (such as heavy-duty trucks) that may spend long periods queuing and idling at the site; such as industrial warehouse/transfer facilities. The Proposed Project would include the development of the Project Site with a cemetery use and does not include such uses. Due to the Proposed Project's lack of stationary source emissions, no long-term localized significance threshold analysis is warranted. Therefore, potential impacts associated with onsite operations to local, long-term air quality with the on-going use of the Proposed Project would be less than significant.

Therefore, potential impacts associated with cumulatively considerable net increase of any criteria pollutant would be less than significant and no mitigation would be required.

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

Less Than Significant Impact: The Proposed Project would not expose sensitive receptors to substantial pollutant concentrations. The local concentrations of criteria pollutant emissions produced in the nearby vicinity of the Proposed Project, which may expose sensitive receptors to substantial concentrations, have been calculated in Section 4.3.1(b) for both construction and operations. The discussion below also includes an analysis of the potential impacts from toxic air contaminant emissions. The nearest sensitive receptors to the Project Site are the existing school uses located adjacent to the east and north, and the single-family residential uses located adjacent and approximately 55 feet (~17 meters) to the south of the Project Site.

Construction Related Sensitive Receptor Impacts

The construction activities for the Proposed Project would include construction of a 5,132-sf building, 800 square foot accessory/shed structure; paving of a parking lot with 51 parking spaces; and application of architectural coatings. Site preparation of approximately 1.1 acres to remove existing trees and an existing 0.5-acre asphalt parking lot would occur. Grading would include approximately 11,610 cubic yards of import. These construction activities may expose sensitive receptors to substantial pollutant concentrations of localized criteria pollutant concentrations and from toxic air contaminant emissions created from onsite construction equipment.

Local Criteria Pollutant Impacts from Construction

Regarding health effects related to criteria pollutant emissions, the applicable significance thresholds are established for regional compliance with the state and federal ambient air quality standards, which are intended to protect public health from both acute and long-term health impacts, depending on the potential effects of the pollutant. Because regional and local emissions of criteria pollutants during construction of the project would be below the applicable thresholds, it would not contribute to long-term health impacts related to nonattainment of the ambient air quality standards. Therefore, significant adverse acute health impacts as a result of project construction are not anticipated. Therefore, construction-related impacts to local air quality would be less than significant.

Toxic Air Contaminants (TACs) Impacts from Construction

The greatest potential for toxic air contaminant emissions would be related to diesel particulate matter (DPM) emissions associated with heavy equipment operations during construction of the Proposed Project. Health risks from TACs are twofold. First, TACs are carcinogens according to the State of California. Second, short-term acute and long-term chronic exposure to TACs can cause health effects to the respiratory system. According to the Office of Environmental Health Hazard Assessment (OEHHA) and the SCAQMD Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis (August 2003), health effects from TACs are described in terms of individual cancer risk based on a lifetime (i.e., 30-year) resident exposure duration.

Appendix A modeled the Proposed Project over a timeframe of approximately 6.5 months to provide a conservative analysis; however, full buildout of the gravesite space is estimated over a 20-year plan. Although construction may last for up to 20 years, the gravesite construction is being done in batches of 100 to 120 crypts and any emissions during each batch would be minimal. Given the temporary and short-term construction schedule, the Proposed Project would not result in a long-term (i.e., lifetime or 30-year) exposure as a result of construction. Construction-based particulate matter (PM) emissions (including diesel exhaust emissions) do not exceed any local or regional thresholds, as shown in Table 5.

The project would comply with the CARB Air Toxics Control Measure that limits diesel powered equipment and vehicle idling to no more than 5 minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation. Compliance with these would minimize emissions of TACs during project construction. The Proposed Project would also comply with the requirements of SCAQMD Rule 1403 if asbestos is found during the renovation and construction activities. Therefore, potential impacts from TACs during construction would be less than significant.

Therefore, potential impacts exposing sensitive receptors to substantial pollutant concentrations from construction of the Proposed Project would be less than significant and no mitigation would be required.

Operations-Related Sensitive Receptor Impacts

The on-going operations of the Proposed Project may expose sensitive receptors to substantial pollutant concentrations of local CO emission impacts from the project-generated vehicular trips and from the potential local air quality impacts from onsite operations. The following analyzes

the vehicular CO emissions. Local criteria pollutant impacts from onsite operations, and toxic air contaminant impacts.

Local CO Hotspot Impacts from Project-Generated Vehicle Trips

CO is the pollutant of major concern along roadways because the most notable source of CO is motor vehicles. For this reason, CO concentrations are usually indicative of the local air quality generated by a roadway network and are used as an indicator of potential impacts to sensitive receptors. The discussion in Section 4.3(b) and analysis in Appendix A shows that no local CO Hotspots are anticipated to be created at any nearby intersections from the vehicle traffic generated by the Proposed Project. Therefore, potential impacts exposing offsite sensitive receptors to substantial pollutant concentrations from operation of the Proposed Project would be less than significant.

Local Criteria Pollutant Impacts from Onsite Operations

The local air quality impacts from the operation of the Proposed Project would occur from onsite sources such as architectural coatings, landscaping equipment, natural gas only fireplaces, and onsite usage of natural gas appliances. Due to the Proposed Project's lack of stationary source emissions, no long-term localized significance threshold analysis is warranted. Additionally, because regional and local emissions of criteria pollutants during operation of the Proposed Project would be below the applicable thresholds, it would not contribute to long-term health impacts related to nonattainment of the ambient air quality standards. Therefore, potential impacts from the on-going operations of the Proposed Project to local air quality due to on-site emissions would be less than significant.

Therefore, potential impacts exposing sensitive receptors to substantial pollutant concentrations from operation of the Proposed Project would be less than significant and no mitigation would be required.

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

Less Than Significant Impact: The Proposed Project would not create objectionable odors affecting a substantial number of people. Individual responses to odors are highly variable and can result in a variety of effects. The impact of an odor results from a variety of factors such as frequency, duration, offensiveness, location, and sensory perception. The frequency is a measure of how often an individual is exposed to an odor in the ambient environment. The intensity refers to an individual's or group's perception of the odor strength or concentration. The duration of an odor refers to the elapsed time over which an odor is experienced. The offensiveness of the odor is the subjective rating of the pleasantness or unpleasantness of an odor. The location accounts for the type of area in which a potentially affected person lives, works, or visits; the type of activity in which he or she is engaged; and the sensitivity of the impacted receptor.

Sensory perception has four major components: detectability, intensity, character, and hedonic tone. The detection (or threshold) of an odor is based on a panel of responses to the odor. There are two types of thresholds: the odor detection threshold and the recognition threshold. The detection threshold is the lowest concentration of an odor that will elicit a response in a percentage of the people that live and work in the immediate vicinity of the Project Site and is

typically presented as the mean (or 50 percent of the population). The recognition threshold is the minimum concentration that is recognized as having a characteristic odor quality, this is typically represented by recognition by 50 percent of the population. The intensity refers to the perceived strength of the odor. The odor character is what the substance smells like. The hedonic tone is a judgment of the pleasantness or unpleasantness of the odor. The hedonic tone varies in subjective experience, frequency, odor character, odor intensity, and duration. Potential odor impacts have been analyzed separately for construction and operations.

Construction-Related Odor Impacts

Potential sources that may emit odors during construction activities include the application of materials such as asphalt pavement. The objectionable odors that may be produced during the construction process are of short-term in nature and the odor emissions are expected to cease upon the drying or hardening of the odor producing materials. Due to the short-term nature and limited amounts of odor producing materials being utilized, no significant impact related to odors would occur during construction of the Proposed Project. Diesel exhaust and VOCs would be emitted during construction of the Proposed Project, which are objectionable to some. However, emissions would disperse rapidly from the Project Site and therefore would not reach an objectionable level at the nearest sensitive receptors. Due to the transitory nature of construction odors, adverse impacts associated with construction related odors would be less than significant.

Operations-Related Odor Impacts

Potential sources that may emit odors during the on-going operations of the Proposed Project would include odor emissions from the intermittent diesel delivery truck emissions and trash storage areas. Due to the distance of the nearest receptors from the Project Site and through compliance with SCAQMD's Rule 402 no significant impact related to odors would occur during the on-going operations of the Proposed Project. Therefore, adverse impacts associated with operation related odors would be less than significant and no mitigation would be required.

Project Design Features

PDF AQ-1: Prior to the issuance of a grading permit and building permit, the Property Owner/Developer shall include a note on the grading and building plans, respectively, that the Contractor shall adhere to the requirements of SCAQMD Rule 403 to reduce emissions resulting from fugitive dust.

Mitigation Measures

No mitigation measures associated with impacts to Air Quality would apply to the Proposed Project.

Conclusion

Potential impacts of the Proposed Project associated with Air Quality would be less than significant and no mitigation would be required.

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 Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☒	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

A Biological Technical Report was completed to determine potential impacts to biological resources associated with the development of the Proposed Project (**Appendix B** – *Orange Palmyra Cemetery Project Biological Technical Report*, Noreas, February 2021). In January 2021, a biological field survey was conducted at the Project Site as a part of the methods for Appendix B.

A Tree Evaluation Report was completed to determine potential impacts to existing trees onsite as a part of the Proposed Project (**Appendix C** – *Tree Evaluation Report for: Proposed Palmyra Cemetery Site*, Arborgate Consulting, Inc., August 2020). In August 2020, a field visit was conducted at the Project Site as a part of the methods for Appendix C.

The Project Site is an approximate 5.99-acre area. Santiago Creek and multi-purpose Santiago Creek Trail intersect the northwest portion of the Project Site and account for 1.71-acres of the 5.99-gross acre site (**Figure 22** – *Conceptual Grading Plan*). However, no ground disturbing activities, vegetation removal, or demolition/construction would occur within the Santiago Creek and multi-purpose Santiago Creek Trail area. Appendix B, Figure 2 – *Site Vicinity* illustrate the

area proposed for all project activities (Proposed Project area) (i.e., ground disturbing, vegetation removal, construction, etc.).

Prior to beginning field surveys for Appendix B, resource specialists were consulted and available information from resource management plans and relevant documents were reviewed to determine the locations and types of biological resources that have the potential to exist within - and adjacent to the study area. Resources were evaluated within several miles of the Project (Appendix B, Figures 4, 5 and 6). The materials reviewed included, but were not limited to, the following:

- USFWS Critical Habitat Mapper and File Data (USFWS 2021a);
- USFWS Carlsbad Field Office Species List for Orange County (USFWS 2021b);
- USFWS National Wetlands Inventory database (USFWS 2021c);
- California Natural Diversity Database maintained by the California Department of Fish and Wildlife (CDFW 2021);
- California Native Plant Society (CNPS) Electronic Inventory (CNPS 2021);
- Proposed Palmyra Cemetery Site Tree Evaluation Report, Arborgate Consulting, Inc. 2020;
- Regional South Coast Missing Linkages Project Report (South Coast Wildlands 2008); and
- Aerial Photographs (Microsoft Corporation 2021).

Pedestrian-based field surveys were performed in January 2021 to assess land cover, general and dominant vegetation communities, habitat types, and species present within communities. Community descriptions were based on observed dominant vegetation composition and derived from the criteria and definitions of widely accepted vegetation classification systems (Holland 1986 and Sawyer et al. 2009). Plants were identified to the lowest taxonomic level sufficient to determine whether the species observed were non-native, native, or special status. Plants of uncertain identity were subsequently identified from taxonomic keys (Baldwin et al. 2012). Scientific and common species names were recorded according to Baldwin et al. (2012).

The presence of a wildlife species was based on direct observation and wildlife sign (e.g., tracks, burrows, nests, scat, or vocalization). Field data compiled for wildlife species included scientific name, and common name. Wildlife of uncertain identity was documented and subsequently identified from specialized field guides and other related literature (Burt and Grossenheider 1980; Halfpenny 2000; Sibley 2000; Elbroch 2003 and Stebbins 2003).

Environmental Analysis

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

Less Than Significant Impact with Mitigation Incorporated: The Project Site is an approximate 5.99-acre site in an urbanized area of Orange that is surrounded by residential, open space and institutional development, including Santiago Creek and multi-purpose Santiago Creek Trail directly west of the Proposed Project area. The Proposed Project would disturb only a portion of the Project Site (**Figure 3**) and would avoid the portions of the Santiago Creek and multi-purpose Santiago Creek Trail located onsite. No ground disturbing activities, vegetation removal, or demolition/construction would occur within the Santiago Creek. The Proposed Project involves the construction of a 3,339-gravesite cemetery, a 5,138 sf , two-story building to support activities associated with funeral burial practices, accessory parking, and landscaping.

Vegetation Communities

The following four vegetation communities/land cover types were observed within the study area: Coastal Sage Scrub, Eucalyptus Woodland, Non-Native Grassland and Developed/Disturbed. However, the Proposed Project would only involve ground disturbance to a specific portion of the site, which is limited to Eucalyptus Woodland, Non-Native Grassland and Developed/Disturbed lands. More than 99 percent of the proposed area of disturbance consists of developed, disturbed, and non-native land cover types. No Coastal Sage Scrub is located within the area of proposed disturbance (Figure 3, Appendix B, p. 10). All plant species observed within the study area are listed in Appendix B. Developed and disturbed lands within the study area include locales that have been paved, cleared, graded, or otherwise altered by human activities (e.g., roads, highways, buildings, playgrounds, parking areas, dog park, sports fields, bleachers, disked lands, former BMX track, trash/debris piles, etc.). This cover type includes non-native ruderal and weedy species, interposed with exposed mineral soils. Appendix B notes that the developed/disturbed land cover type includes Santiago Creek, which is a modified flood control channel that receives storm water flows from seasonal precipitation events, as well as from surface water runoff. In addition to the vegetation communities identified in Appendix B, a tree evaluation report identified the presence of 130 trees of reportable size onsite. Appendix C identified the following trees onsite: 73 eucalyptus, 21 oaks, nine (9) pines, eight (8) sycamores, eight (8) pepper trees, and the remaining are a mix of palms, Ficus, or jacarandas.

Special Status Plants

No special-status plants were observed during the field surveys in 2021. Special-status plants known to occur within 10 miles of the Project Site, and their potential for occurrence, are detailed within Appendix B (Figure 4, p. 11). The study area also does not include USFWS-critical habitat for plants, as the nearest location is critical habitat for the Coastal California Gnatcatcher located approximately 1.75 miles east of the Project Site (Figure 5, Appendix B, p. 12). Therefore, potential impacts associated with substantial adverse effects, either directly or through habitat modifications, on any vegetation 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 would be less than significant.

Wildlife Communities

Wildlife species observed within the study area consisted of commonly occurring species - including, but not limited to, white crowned sparrow (Zonotrichia leucophrys), Common Raven (Corvus corax), House Finch (Carpodacus mexicanus), Say's Phoebe (Sayornis saya), and Side-blotched Lizard (Uta stansburiana). Wildlife detected during the surveys is identified in Appendix B. The Project Site is lacking in both numbers and variety of species and does not support a robust population of native wildlife. The small quantity of habitat loss associated with the Proposed Project would be considered an insignificant effect, as a consequence of the amount of similar and higher-value vegetation communities and land cover types within the region that are already held in conservation and/or managed as open space in Orange County. However, removal of existing mature trees onsite could have the potential to impact migratory birds. Mitigation measure **MM BIO-1** would be implemented as a part of the Proposed Project, which would require compliance with Section 10 of the Migratory Bird Treaty Act and relevant sections of the California Fish and Game Code. Any vegetation clearing within the Project Site would take place outside of the typical avian nesting season (e.g., March 15th until September 1st) to the maximum extent practical. If work needs to take place between March 15th and September 1st, a pre-construction survey for nesting passerines and raptors would be completed prior to the onset of Proposed Project activities. To the maximum extent practicable, a buffer zone from occupied nests should be maintained during physical ground-disturbing activities. Once nesting has ended, the buffer would be removed.

Special Status Wildlife

No special-status wildlife species were detected during the field surveys in 2021. Special-status wildlife known to occur within 10 miles of the Project Site, and their potential for occurrence, are detailed within Appendix B (Figure 4, p. 11). The study area also includes no USFWS-critical habitat for wildlife, as the nearest location is critical habitat for the Coastal California Gnatcatcher located approximately 1.75 miles east of the Project Site (Figure 5, Appendix B, p. 12). Therefore, potential impacts associated with substantial adverse effects, either directly or through habitat modifications, on any wildlife 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 would be less than significant.

Therefore, with implementation of **MM BIO-1**, potential impacts associated with special status species of plants or wildlife would be less than significant.

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

Less Than Significant Impact: The Proposed Project would disturb only a portion of the Project Site (**Figure 22**) and would avoid the portions of the Santiago Creek and multi-purpose Santiago Creek Trail located onsite. No ground disturbing activities, vegetation removal, or demolition/construction would occur within the Santiago Creek.

Literature review and the January 2021 field survey data determine it is appropriate to characterize the Project Site as an upland, as no riparian habitats or obvious indicators of well-defined water conveyance bed, bank or channel were observed within the area proposed for disturbance. The topography of the Project Site, field assessment, and literature review information denote the Proposed Project area lacks waters which are typically subject to Clean Water Act, or Fish and Game Code Section 1600 jurisdiction. The National Wetland Inventory has no records of special aquatic resources within the project area (Appendix B, Figure 6, p. 13). Therefore, potential impacts associated with a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service would be less than significant, and no mitigation would be required.

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?*

Less Than Significant Impact: Wetlands and "waters of the U.S." (WoUS), are protected under Section 404 of the Clean Water Act (CWA) and are under the jurisdiction of the U.S. Army Corps of Engineers (USACE). WoUS include navigable coastal and inland waters; lakes, rivers, streams, and their tributaries; interstate waters and their tributaries; wetlands adjacent to such waters; intermittent streams; and other waters that could affect interstate commerce. The Project Site is an approximate 5.99-acre site in an urbanized area of Orange that is surrounded by residential, open space and institutional development, including Santiago Creek and multi-purpose Santiago Creek Trail directly west of the Proposed Project area. The Proposed Project would disturb only a portion of the Project Site (**Figure 22**) and would avoid the portions of the Santiago Creek and multi-purpose Santiago Creek Trail located onsite. No ground disturbing activities, vegetation removal, or demolition/construction would occur within the Santiago Creek. As stated above in Section 4.4(b), the Project Site is characterized as an upland, as no riparian habitats or indicators of well-defined water conveyance bed, bank or channel were observed in the Proposed Project area. Therefore, potential impacts associated with federally protected wetlands would be less than significant, and no mitigation would be required.

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

Less Than Significant Impact: The Project Site does not directly impact any known wildlife movement or migration corridors; nor does it support State or Federally listed flora and fauna. The Project Site is surrounded by SR-55, Palmyra Boulevard, Tracy Lane, residential and commercial developments (e.g., buildings, playground equipment, parking areas, sports fields, bleachers, disked lands, Dog Park, school, trash/debris piles, etc.). All of these are a significant barrier which impede and block wildlife movement throughout the region. The Project Site's location reduces its value as a migration corridor, and overland dispersal habitat for wildlife, because these lands are severely movement constrained (e.g., surrounding land uses, topography, lack of appropriate cover, exposure to predation and/or desiccation, etc.). The more factors that constrain common and special-status species habitats, dispersal and movement

corridors/linkages, the less likely individual species are to occur, or continue to occur within that specific locale.

Eucalyptus woodland, non-native grassland, and developed and disturbed were the only land cover types detected within the Proposed Project area during pedestrian surveys in January 2021. More than 99 percent of the proposed area of disturbance consists of developed, disturbed, and non-native land cover types and no Coastal Sage Scrub is located within the area of proposed disturbance. The Proposed Project area is not collocated with any United States Fish and Wildlife Service designated critical habitat, nor were any special status species detected within the study area during the January 2021 field survey events. No nesting birds or remnant raptor nests were detected within the Proposed Project area.

Nonetheless, Santiago Creek can allow wildlife movement to persist throughout the region; and the creek (i.e., its associated flood plain and alluvial fan habitat areas) has higher species diversity and value for local and migratory wildlife than the adjacent Proposed Project area. However, the Proposed Project would not adversely affect Santiago Creek – it would completely avoid the resource deliberately to maintain local existing wildlife movement and dispersal connectivity. The Proposed Project would not encroach onto or past the existing multi-purpose Santiago Creek Trail and would maintain distance from Santiago Creek. The distance from Santiago Creek would ensure the Proposed Project completely avoids the water conveyance feature's bed, bank, channel, and riparian vegetation to safeguard the resource.

However, in order to comply with Section 10 of the Migratory Bird Treaty Act and relevant sections of the California Fish and Game Code, the Proposed Project includes **PDF-BIO-1**. Therefore, potential impacts associated with the substantial interference with the movement of any native resident or migratory fish or wildlife species or with an established native resident or migratory wildlife corridor, or the use of native wildlife nursery sites would be less than significant, and no mitigation would be required.

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

Less Than Significant Impact: The Project Site is 5.99-acres and located in an urbanized area of Orange that is surrounded by residential, open space, and institutional development, including Santiago Creek and multi-purpose Santiago Creek Trail directly west of the Proposed Project area. Eucalyptus woodland, non-native grassland, and developed and disturbed were the only land cover types detected within the Proposed Project area during pedestrian surveys in January 2021. The Proposed Project would result in removal of 104 trees onsite, with retention of 27 of the existing trees. According to Appendix C the existing conditions of a majority of the trees onsite include pest infestation, lack of maintenance, and crowding. The City of Orange maintains policies related to tree removal for trees located within a portion of a public right-of-way (OMC Chapter 12.28 – Street Trees) and for trees located on undeveloped and public interest property (OMC Chapter 12.32 – Tree Preservation). All trees proposed for removal would be located fully on the Project Site, specifically within the Proposed Project area (**Figure 19** – *Existing Tree Disposition Plan*) and would not require a permit as outlined in Chapter 12.28. The Proposed Project would be subject to Chapter 12.32 and would need to obtain a tree removal permit through the Community Services Department as a part of the development process. Section 12.32.070 –

Criteria for Permits states the condition of the tree with respect to disease, general health, proximity to existing or proposed structures, interference with utility service, and number of trees existing in the neighborhood are criteria when determining permit issuance. Appendix C evaluated all existing trees onsite and concluded a majority of the trees exhibited symptoms of disease, pests, and/or crowding which has led to poor tree structure, and therefore are proposed for removal consistent with Chapter 12.32.

As stated in Section 4.4(a)-(c), no biologically sensitive habitat or special status species would be significantly impacted as a result of the Proposed Project. Therefore, through adherence to Chapter 12.32 of the OMC, potential impacts associated with biological resources resulting from conflicts with any local policies or ordinances protecting biological resources or the City's tree preservation policy would be less than significant, and no mitigation would be required.

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

No Impact: According to the City's General Plan Natural Resources Element, a portion of the City falls within the Orange County Central-Coast Sub-regional Natural Communities Conservation Plan (NCCP). However, the Project Site is not within the NCCP area[4]. Therefore, no impacts associated with an adopted Habitat Conservation Plan nor a Natural Community Conservation Plan, or any other approved conservation plan would occur, and no mitigation would be required.

Mitigation Measures

MM BIO-1: Prior to issuance of a grading permit, in order to comply with Section 10 of the Migratory Bird Treaty Act and relevant sections of the California Fish and Game Code, any vegetation clearing shall take place outside of the typical avian nesting season (e.g., March 15th until September 1st).

- If work needs to take place between March 15th and September 1st, a pre – activity clearance survey for nesting passerines and raptors shall be completed prior to the onset of project activities.
- An activity exclusion buffer zone around occupied nests established by the activity clearance survey shall be maintained during physical ground disturbing undertakings. Once nesting has ended, the buffer may be removed.

Conclusion

With implementation of **MM BIO-1**, potential impacts of the Proposed Project associated with Biological Resources would be less than significant.

[4] General Plan Natural Resources Element, Figure NR-3: *Habitat Reserve Area* (2015).

4.5 Cultural Resources

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

A Cultural and Paleontological Resources Assessment was completed to determine potential impacts to cultural resources associated with the development of the Proposed Project (**Appendix D** – *Cultural and Paleontological Resources Assessment for the Palmyra Cemetery Project, City of Orange, Orange County, California*, Cogstone, April 2021, Revised December 2021).

Appendix D consists of cultural and paleontological resources records searches, and assessment of the existing historic age building on the Project Site. Tribal consultation is required under AB52 because the Proposed Project qualifies as a CEQA project. More detailed information pertaining to AB52 is in Section 4.18 – *Tribal Cultural Resources*.

An intensive archaeological and paleontological resources survey of the Project Site was conducted of the entire 5.9-acre Project Site on February 4, 2021.

California Register Of Historical Resources

The California Register of Historical Resources (CRHR) is a listing of all properties considered to be significant historical resources in the state. The California Register includes all properties listed or determined eligible for listing on the National Register, including properties evaluated under Section 106, and State Historical Landmarks No. 770 and above. The California Register statute specifically provides that historical resources listed, determined eligible for listing on the California Register by the State Historical Resources Commission, or resources that meet the California Register criteria are resources which must be given consideration under CEQA. Other resources, such as resources listed on local registers of historic resources or in local surveys, may be listed if they are determined by the State Historic Resources Commission to be significant in accordance with criteria and procedures to be adopted by the Commission and are nominated; their listing in the California Register is not automatic.

Resources eligible for listing include buildings, sites, structures, objects, or historic districts that retain historical integrity and are historically significant at the local, state, or national level under one or more of the following four criteria:

1) It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;

2) It is associated with the lives of persons important to local, California, or national history;

3) It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or

4) It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition to having significance, resources must have integrity for the period of significance. The period of significance is the date or span of time within which significant events transpired, or significant individuals made their important contributions. Integrity is the authenticity of a historical resource's physical identity as evidenced by the survival of characteristics or historic fabric that existed during the resource's period of significance.

Alterations to a resource or changes in its use over time may have historical, cultural, or architectural significance. Simply, resources must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the California Register, if, under Criterion 4, it maintains the potential to yield significant scientific or historical information or specific data.

Ethnography

The proximity to the Santiago Creek corridor created an environment for Native American and early settler presence. A segment of the Santiago Creek flow north/south through the western portion of the Project Site. The Project Site is located within the traditional territory of the Gabrielino (Tongva) who were semi-sedentary hunters and gatherers. According to Appendix D, the Gabrielino consisted of more than 5,000 people living in various settlements throughout the area, with villages housing up to 150 people. The Gabrielino are considered to have been one of the wealthiest tribes and to have influenced tribes they traded with (Appendix D). The closest known major ethnohistoric village to the Project Site is Pasbenga located approximately 4.4 miles to the southwest (McCawley 1996). However, smaller villages and seasonal camps may have been present closer to the Project Site.

Gabrielino culture was heavily affected by colonial Spanish missionary efforts long before systematic ethnographic studies could be conducted, indeed before there was such a discipline as ethnography. Disease and forced participation in the mission system disrupted most traditional cultural ways of life and resulted in a catastrophic reduction of the native population. Information about their material culture and lifeways is very limited and derived from historical sources, such as the diaries and records of early missionaries, soldiers, and explorers. While traveling through the area in 1769, Father Juan Crespi, a missionary, noted the presence of a large village, Hotuuknga, upstream from present day Olive on the north side of the Santa Ana River. Crespi wrote that 52 Native Americans came to greet them and accepted blankets, beads, and other goods. When he returned two years later, the group was hostile, and the Spaniards quickly continued on their way. As late as the 1870s, a small "Indian camp" was visible on the north side of Santiago Creek just west of the Glassell Street crossing.

Historic Setting

The first landowner in the Orange area was Juan Pablo Grijalva, a retired Spanish soldier. His land extended from the Santa Ana River and the foothills above Villa Park to the ocean at Newport

Beach. Along with his son-in-law, Jose Antonio Yorba, he began a cattle ranch and built the first irrigation ditches to carry water from the Santa Ana River. After Grijalva's death, Yorba and his nephew, Juan Pablo Peralta, received title to the Rancho Santiago de Santa Ana land grant with a total of 78,941 acres.

Very little above-ground evidence remains from this early period of colonization of the Orange area, although any locations identified as related to the colonization period may yield archaeological evidence. A total of 33 adobes are thought to have been present on three ranchos within the City. Today, the northwest corner of the intersection of Lincoln Avenue and Orange-Olive Road in Olive is known as the site of the Rancho Santiago de Santa Ana headquarters. Past excavations in this area revealed the remains of two adobes, including wall remnants, tile floors and associated artifacts. The Grijalva Adobe site at the corner of Hewes Avenue and Santiago Canyon Road is marked by a plaque. This site included at least one adobe and some associated outbuildings. Francisco Rodriquez's property, bound by present day Main Street, Walnut Street, the Atchison Topeka Railroad and Collins Avenue, also contained adobes and is associated with this early period.

Environmental 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: The Project Site is currently developed with multipurpose and recreation facilities that include a historic age building in the central portion of the Project Site, as well as parking lot in the east-central portion, a former BMX track in the northern portion, and former sports field in the southern portion. Santiago Creek and multi-purpose Santiago Creek Trail intersect the northwest portion of the Project Site.

The modern-style, irregularly shaped YMCA building formerly located on the Project Site dates to 1974 and was designed by Leason Pomeroy Inc. (LPA). LPA was founded in 1964 in the City of Orange by Leason Pomeroy, a native of the City's Old Towne neighborhood. LPA is now one of California's largest architectural firms. Pomeroy managed the design of the YMCA building and many other projects inside and outside Orange County including the Thomas F. Riley Terminal at John Wayne Airport, Orange County.

Built in 1974, this one-story, Modern-style building had an irregular footprint and roof style. The building was set on a concrete foundation raised one to two feet above ground level (depending on elevation). The core of the building was rectangular with a flat roof; shed roofs of varying sizes, covered in composition shingles, project from all four elevations. The exterior of the building was clad in vertically oriented compressed wood board siding. All of the fenestration openings were boarded up by plywood. The main entrance was located at the east façade and was accessible via an ADA compliant concrete and wood plank ramp. A long rectangular concession opening covered with a plywood fold-out door was located at the northern half of the east façade. This area was covered by a wood frame pergola supported by four steel poles. A small rectangular-shaped cinderblock shed was attached to the north elevation of the pergola. A pedestrian door (boarded up behind plywood) was in a recessed area at the southern half of the west elevation. At the center of this elevation were three fixed rectangular windows. At the south elevation, under the low hanging eaves of the projecting shed roof, were three rectangular windows (all

covered by plywood). The cinderblock shed's roof was slightly sloped with exposed wood eaves (the roofing material could not be determined at time of survey (Appendix D)). The shed's only fenestration opening was a large steel roll-up door which occupied the majority of the south façade.

This building did not appear to be associated with events that have made a significant contribution to the broad patterns of National, State, or local history, therefore, this building was recommended not eligible for listing under CRHR Criterion 1 or NRHP Criterion A. This building did not appear to be associated with the lives of persons significant in our past, therefore, this building is recommended not eligible for listing under CRHR Criterion 2 or NRHP Criterion B. This building was associated with renowned local architect Leason Pomeroy who was responsible for the design of this building; however, this building was not an exemplary representation of his work. Therefore, this building was recommended not eligible for listing under CRHR Criterion 3 or NRHP Criterion C. This building was not, nor was likely to yield information important in history or prehistory and, therefore, this building was recommended not eligible for listing under CRHR Criterion 4 or NRHP Criterion D.

This building retains its integrity of Location, Design, Feeling, and Association. There was notable alteration to the building's integrity of Setting due to surrounding development such as residential development to the south/southeast and the construction of educational facilities immediately to the east. There was also loss of integrity of Materials and Workmanship with the installation of the compressed wood board siding. However, at the time of the Appendix D survey, it was not clear if the original exterior wall materials were covered over by the replacement material or were completely removed.

Appendix D includes a built environment survey of the historic age building, which includes preparation of Department of Parks and Recreation (DPR) 523 forms. Appendix D examined the historic age building and concluded that due to a lack of significance and notable architectural alterations, this building was recommended not eligible for listing at the local, state, or national level and the proposed demolition and renovations of the existing structure would not require any mitigation due to the building's lack of significance. Following the documentation and evaluation of the YMCA building, it was destroyed in a series of fires in Fall 2021.

Therefore, substantial adverse impacts associated with a historical resource would be less than significant and no mitigation would be required.

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: Appendix D includes a California Historic Resources Information System (CHRIS) from the South-Central Coastal Information Center (SCCIC) conducted on January 8, 2021, that includes the entire Project Site as well as a one-half mile radius. The SCCIC completed the request on January 28, 2021. Results of the record search indicate that three previous studies have been completed within the Project Site and an additional 12 studies have been completed within the one-half mile search radius. The records search also determined that eight cultural resources are located within the one-half mile search radius; however, none are located within the Project Site. A pedestrian survey conducted on February 4, 2021, observed no archaeological or paleontological resources onsite. Based on the

results of the pedestrian survey and the cultural records search, the Project Site has low sensitivity for prehistoric cultural resources. Appendix D included analysis of data sources and historical United States Geological Survey (USGS) aerial photographs, which indicate that the Project Site also has low sensitivity for buried historical archaeological features such as foundations or trash pits. The Proposed Project would include fill placed within the Project Site within the previous landfill footprint so that excavation would not extend deeper than two feet above the landfill to ensure these landfill deposits would not be disturbed. Additionally, the Project Site is highly disturbed by previous landfill activity and grading and movement of dirt associated with the former BMX use. Due to the Proposed Project's scope of ground disturbance, potential impacts to archaeological resources would be less than significant.

However, the Proposed Project includes the incorporation of **MM CUL-1** outlined within Appendix D, as a measure for reducing potential impacts should an unanticipated discovery occur during any part of the Proposed Project's construction. **MM CUL-1** would require all work to cease with 50-feet of the find until a qualified archaeologist evaluates it. Therefore, with incorporation of **MM CUL-1,** potential impacts associated with archaeological resources would be less than significant.

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

Less Than Significant Impact with Mitigation Incorporated: Due to the level of past disturbance in the project area, it is not anticipated that human remains, including those interred outside of formal cemeteries, would be encountered during earth removal or disturbance activities.

However, the Proposed Project includes the incorporation of **MM CUL-1** outlined within Appendix D in the unexpected event human remains are found, as those remains would require proper treatment, in accordance with applicable laws. **MM CUL-1** is consistent with the procedures of conduct following the discovery of human remains, and the Proposed Project would be subject to the regulations surrounding discovery of human remains on non-federal lands as mandated by California Health and Safety Code (CHSC) §7050.5, PRC §5097.98 and the California Code of Regulations (CCR) §15064.5(e). According to the provisions in CEQA, should human remains be encountered, all work in the immediate vicinity of the burial must cease, and any necessary steps to ensure the integrity of the immediate area must be taken. The Construction Contractor shall notify the County Coroner of the find immediately and no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98 (State of California 2006). If human remains are found during grading, all work in the immediate area (a radius of at least 100 feet) shall stop, and all parties shall follow all applicable state laws regarding human remains. If the remains are Native American, the coroner is responsible for contacting the NAHC within 24 hours. The NAHC, pursuant to Section 5097.98, shall immediately notify those persons it believes to be the Most Likely Descendant (MLD). The MLD shall complete the inspection of the Project Site within 48 hours of being allowed access to the Project Site and shall recommend preservation in place, reburial, or the scientific removal and nondestructive analysis of human remains and items associated with Native American burials. **MM CUL-1** details a specific distance of 50-feet for

ceasing operations, as denoted in Appendix D. Therefore, with incorporation of **MM CUL-1,** potential impacts associated with human remains would be less than significant.

Mitigation Measures

MM CUL-1 Ongoing during ground disturbance/construction, in the event of an unanticipated discovery, the Contractor shall ensure all work be suspended within 50 feet of the find until a qualified archaeologist evaluates it. In the unlikely event that human remains are encountered during project development, all work shall cease near the find immediately.

In accordance with California Health and Safety Code Section 7050.5, the County Coroner must be notified if potentially human bone is discovered. The Coroner will then determine within two working days of being notified if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) by phone within 24 hours, in accordance with Public Resources Code Section 5097.98. The NAHC will then designate a Most Likely Descendant (MLD) with respect to the human remains. The MLD then has the opportunity to recommend to the property owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and associated grave goods. Work may not resume in the vicinity of the find until all requirements of the health and safety code have been met.

Conclusion

With implementation of project measure **MM CUL-1**, potential impacts of the Proposed Project associated with Cultural Resources would be less than significant.

4.6 Energy

Would the project:	Potentially Significant Impact	Less Than Significant 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?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

An Air Quality, Global Climate Change, and Energy Impact Analysis was completed to determine potential impacts to air quality associated with the development of the Proposed Project (**Appendix A** - *Air Quality, Global Climate Change, and Energy Impact Analysis*, Ganddini Group, May 2021, Revised February 8, 2022). The results of the analysis are based on CalEEMod version 2020.4.0.

The Proposed Project would impact energy resources during construction and operation. Energy resources that would be potentially impacted include electricity, natural gas, and petroleum-based fuel supplies and distribution systems. This analysis includes a discussion of the potential energy impacts of the Proposed Project, with emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. A general definition of each of these energy resources are provided below.

Electricity, a consumptive utility, is a manufactured resource. The production of electricity requires the consumption or conversion of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into energy. The delivery of electricity involves several system components, including substations and transformers that lower transmission line power (voltage) to a level appropriate for on-site distribution and use. The electricity generated is distributed through a network of transmission and distribution lines commonly called a power grid. Conveyance of electricity through transmission lines is typically responsive to market demands.

Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas consumed in California is obtained from naturally occurring reservoirs, mainly located outside the State, and delivered through high-pressure transmission pipelines. The natural gas transportation system is a nationwide network and, therefore, resource availability is typically not an issue. Natural gas satisfies almost one-third of the State's total energy requirements and is used in electricity generation, space heating, cooking, water heating, industrial processes, and as a transportation fuel. Natural gas is measured in terms of cubic feet.

Petroleum-based fuels currently account for a majority of the California's transportation energy sources and primarily consist of diesel and gasoline types of fuels. However, the state has been working on developing strategies to reduce petroleum use. Over the last decade California has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and GHG emissions from the

transportation sector, and reduce vehicle miles traveled (VMT). Accordingly, petroleum-based fuel consumption in California has declined.

Environmental Analysis

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

Less Than Significant Impact: The following section calculates the potential energy consumption associated with the construction and operations of the Proposed Project and provides a determination if any energy utilized by the Proposed Project is wasteful, inefficient, or unnecessary consumption of energy resources.

Construction Energy

Full buildout of the gravesite space would occur over a 20-year phased plan; however, to provide a conservative analysis, construction was modeled as occurring no sooner than the beginning of March 2022 and lasting through mid-September 2022; being completed in one phase. Staging of construction vehicles and equipment would occur on-site. The 6.5-month schedule is short, and the Project Site is approximately 5.9 acres. The construction activities for the Proposed Project would include construction of a 5,138-sf building, an 800 square foot accessory/shed structure; paving of a parking lot with 51 parking spaces; and application of architectural coatings. Site preparation of approximately 1.1 acres to remove existing trees and an existing 0.5-acre asphalt parking lot would occur. Grading would include approximately 11,610 cubic yards of import. The Proposed Project would consume energy resources during construction in three (3) general forms:

i. Petroleum-based fuels used to power off-road construction vehicles and equipment on the Project Site, construction worker travel to and from the Project Site, as well as delivery and haul truck trips (e.g., hauling of demolition material to off-site reuse and disposal facilities);
ii. Electricity associated with the conveyance of water that would be used during Project construction for dust control (supply and conveyance) and electricity to power any necessary lighting during construction, electronic equipment, or other construction activities necessitating electrical power; and,
iii. Energy used in the production of construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

<u>Construction-Related Electricity</u>

During construction, the Proposed Project would consume electricity to construct the new structures and infrastructure. Electricity would be supplied to the Project Site by Southern California Edison (SCE) and would be obtained from the existing electrical lines in the vicinity of the Project Site. The use of electricity from existing power lines rather than temporary diesel or gasoline powered generators would minimize impacts on energy use. Electricity consumed during project construction would vary throughout the construction period based on the construction activities being performed. Various construction activities include electricity associated with the conveyance of water that would be used during project construction for dust control (supply and conveyance) and electricity to power any necessary lighting during

construction, electronic equipment, or other construction activities necessitating electrical power. Such electricity demand would be temporary, nominal, and would cease upon the completion of construction. Overall, construction activities associated with the Proposed Project would require limited electricity consumption that would not be expected to have an adverse impact on available electricity supplies and infrastructure. Appendix A calculates the typical power cost per 1,000 square feet of building construction per month as estimated to be $2.32. The proposed 5,138 square foot building and 800 square foot accessory structure/shed would result in 5,938 sf of building size. Based on Appendix A, the total power cost of the on-site electricity usage during the construction of the Proposed Project would be estimated to be $89.55. Therefore, the use of electricity during project construction would not be wasteful, inefficient, or unnecessary.

Since the Project Site already has electrical service, it is anticipated that only nominal improvements would be required SCE distribution lines and equipment with development of the Proposed Project. Where feasible, the new service installations and connections would be scheduled and implemented in a manner that would not result in electrical service interruptions to other properties. Compliance with City's guidelines and requirements would ensure that the Proposed Project fulfills its responsibilities relative to infrastructure installation, coordinates any electrical infrastructure removals or relocations, and limits any impacts associated with demolition, grading, construction, and development. Construction of the Proposed Project's electrical infrastructure is not anticipated to adversely affect the electrical infrastructure serving the surrounding uses or utility system capacity.

Construction-Related Natural Gas

Construction of the Proposed Project typically would not involve the consumption of natural gas. Natural gas would not be supplied to support construction activities, thus there would be no demand generated by construction. Since the Project Site is currently developed, construction of the Proposed Project would be limited to installation of new natural gas connections within the Project Site. Development of the Proposed Project would not require extensive infrastructure improvements to serve the Project Site. Construction-related energy usage impacts associated with the installation of natural gas connections are expected to be confined to trenching in order to place the lines below surface. In addition, prior to ground disturbance, the Proposed Project would notify and coordinate with SoCalGas to identify the locations and depth of all existing gas lines and avoid disruption of gas service. Therefore, construction-related impacts to natural gas supply and infrastructure would be less than significant.

Construction-Related Petroleum Fuel Use

Petroleum-based fuel usage represents the highest amount of transportation energy potentially consumed during construction, which would utilize by both off-road equipment operating on the Project Site and on-road automobiles transporting workers to and from the Project Site and on-road trucks transporting equipment and supplies to the Project Site.

The off-road construction equipment fuel usage was calculated through use of the off-road equipment assumptions and fuel use assumptions detailed in Appendix A, which found that the off-road equipment utilized during construction of the Proposed Project would consume 16,788 gallons of fuel. The on-road construction trips fuel usage was calculated through use of the

construction vehicle trip assumptions and fuel use assumptions shown in Appendix A, which found that the on-road trips generated from construction of the Proposed Project would consume 5,320 gallons of fuel from worker trips, 2,824 gallons of fuel from construction vendors, and 4,463 gallons of fuel from construction hauling. The combined fuel used from off-road construction equipment and on-road construction trips for the Proposed Project would result in the consumption of 29,395 gallons of petroleum fuel. The construction-related petroleum use would be nominal, when compared to current petroleum usage rates.

Construction equipment used over the 6.5-month construction phase would conform to CARB regulations and California emissions standards and is evidence of related fuel efficiencies. There are no unusual project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed in construction of the Proposed Project would therefore not result in inefficient wasteful, or unnecessary consumption of fuel. The Proposed Project would utilize construction contractors which practice compliance with applicable CARB regulation regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. Additionally, CARB has adopted the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other Toxic Air Contaminants. Compliance with these measures would result in a more efficient use of construction-related energy and would minimize or eliminate wasteful or unnecessary consumption of energy. Idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption. As required by California Code of Regulations Title 13, Motor Vehicles, section 2449(d)(3) Idling, the construction of the Proposed Project would be subject to limits on idling times of construction vehicles to no more than five minutes, thereby minimizing or eliminating unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Enforcement of idling limitations is realized through periodic site inspections conducted by City building officials, and/or in response to citizen complaints.

Construction activities for the Proposed Project would not result in the wasteful, inefficient, and unnecessary consumption of energy resources. Impacts regarding transportation energy would be less than significant. Development of the Project would not result in the need to manufacture construction materials or create new building material facilities specifically to supply the Proposed Project. It is difficult to measure the energy used in the production of construction materials such as asphalt, steel, and concrete, it is reasonable to assume that the production of building materials such as concrete, steel, etc., would employ all reasonable energy conservation practices in the interest of minimizing the cost of doing business. Therefore, construction-related impacts associated with petroleum fuel use would be less than significant.

Operational Energy

would require the use of energy resources for multiple purposes including, but not limited to, gas pumps, heating/ventilating/air conditioning (HVAC), refrigeration, lighting, appliances, and electronics. Energy would also be consumed during operations related to water usage, solid waste disposal, landscape equipment and vehicle trips.

Operations-Related Electricity

Operation of the Proposed Project would result in consumption of electricity at the Project Site. As detailed in Appendix A, the Proposed Project would consume 57,316 kilowatt-hours per year of electricity. In 2019, the non-residential sector of the County of Orange consumed approximately 12,708 million kWh of electricity. Therefore, the increase in electricity demand from the Proposed Project would be nominal compared to the County's 2019 non-residential sector demand.

The Proposed Project would comply with all Federal, State, and City requirements related to the consumption of electricity, which includes CCR Title 24, Part 6 Building Energy Efficiency Standards and CCR Title 24, Part 11: California Green Building Standards. The CCR Title 24, Part 6 and Part 11 standards require numerous energy efficiency measures to be incorporated into the proposed buildings, including use of energy efficient lighting and appliances as well as requiring a variety of other energy-efficiency measures to be incorporated into all of the proposed structures. Therefore, it is anticipated the Proposed Project would be designed and built to minimize electricity use and that existing and planned electricity capacity and electricity supplies would be enough to support the Proposed Project's electricity demand. Therefore, potential impacts associated with electrical supply and infrastructure capacity would be less than significant.

Operations-Related Natural Gas

Operation of the Proposed Project would result in increased consumption of natural gas at the Project Site. As detailed in Appendix A, the Proposed Project's estimated natural gas consumption is approximately 124,104 kBTU per year. In 2019, the non-residential sector of the County of Orange consumed approximately 241 million therms of gas. Therefore, the increase in natural gas demand from the Proposed Project would be nominal compared to the County's 2019 non-residential sector demand.

The Proposed Project would comply with all Federal, State, and City requirements related to the consumption of natural gas, which includes CCR Title 24, Part 6 Building Energy Efficiency Standards and CCR Title 24, Part 11: California Green Building Standards. The CCR Title 24, Part 6 and Part 11 standards require numerous energy efficiency measures to be incorporated into the proposed structures, including use of efficient natural gas appliances and HVAC units. Therefore, it is anticipated the Proposed Project would be designed and built to minimize natural gas use and that existing and planned natural gas capacity and natural gas supplies would be enough to support the Proposed Project's natural gas demand. Therefore, potential impacts associated with natural gas supply and infrastructure capacity would be less than significant.

Operations-Related Vehicular Petroleum Fuel Usage

Operation of the Proposed Project would result in increased consumption of petroleum-based fuels related to vehicular travel to and from the Project Site. As detailed in Appendix A, the Proposed Project would consume 19,543 gallons of petroleum fuel per year from the Proposed Project's operations. The operations-related petroleum use would be nominal, when compared to current petroleum usage rates.

The Proposed Project would comply with all Federal, State, and City requirements related to the consumption of transportation energy that includes California Code of Regulations Title 24, Part 11 California Green Building Standards. Therefore, it is anticipated the Proposed Project would be designed and built to minimize transportation energy and it is anticipated that existing and planned capacity and supplies of transportation fuels would be sufficient to support the Proposed Project's demand. Therefore, potential impacts with regard transportation energy supply and infrastructure capacity would be less than significant.

The Proposed Project would comply with regulatory compliance measures outlined by the State and City related to Air Quality, Greenhouse Gas Emissions (GHG), Transportation/Circulation, and Water Supply. The Proposed Project would be constructed in accordance with all applicable City Building and Fire Codes. The Proposed Project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. Therefore, potential impacts associated with wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation would be less than significant and no mitigation would be required.

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

Less Than Significant Impact: The Proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The Project Site is located in an already developed area. Access to/from the Project Site is from existing roads. These roads are already in place so the Proposed Project would not interfere with, nor otherwise obstruct intermodal transportation plans or projects that may be proposed pursuant to the ISTEA because SCAG is not planning for intermodal facilities in the project area.

Regarding the State's Energy Plan and compliance with Title 24 CCR energy efficiency standards, the applicant is required to comply with the California Green Building Standard Code requirements for energy efficient buildings and appliances as well as utility energy efficiency programs implemented by Southern California Edison and Southern California Gas Company.

Regarding Pavley (AB 1493) regulations, an individual project does not have the ability to comply or conflict with these regulations because they are intended for agencies and their adoption of procedures and protocols for reporting and certifying GHG emission reductions from mobile sources.

Regarding the State's Renewable Energy Portfolio Standards, the Proposed Project would be required to meet or exceed the energy standards established in the California Green Building Standards Code, Title 24, Part 11 (CALGreen). CALGreen Standards require that new buildings reduce water consumption, employ building commissioning to increase building system

efficiencies, divert construction waste from landfills, and install low pollutant-emitting finish materials.

As detailed in Appendix A, the Proposed Project would be consistent with the goals of the CARB Scoping Plan.

The local applicable energy plan for the Proposed Project is the City of Orange's General Plan Natural Resources Element (2015). The Proposed Project's consistency with the energy conservation policies from the General Plan are shown in Table 7 - *Proposed Project Compliance with the General Plan Energy Conservation Policies*.

Table 7 – Proposed Project Compliance with the General Plan Energy Conservation Policies

General Plan Policy	Proposed Project Implementation Actions
Educate City residents and businesses on the effects of urban runoff, and water and energy conservation strategies.	**Not Applicable.** The policy is only applicable to City operations.
Coordinate with energy suppliers to ensure adequate energy supplies to meet community needs, and to promote energy conservation and public education programs for that purpose.	**Not Applicable.** The policy is only applicable to City operations.
Promote City operations as a model for energy efficiency and green building.	**Not Applicable.** The policy is only applicable to City operations.

Source: City of Anaheim, 2004.

As shown in Table 7, the Proposed Project would not interfere or be inconsistent with the City's General Plan energy conservation policies. The Proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, potential impacts associated with conflicts of a plan for renewable or energy efficient would be less than significant and no mitigation would be required.

Mitigation Measures

No mitigation measures associated with impacts to Energy Resources apply to the Proposed Project.

Conclusion

Potential impacts of the Proposed Project associated with Energy Resources would be less than significant and no mitigation would be required.

4.7 Geology and Soils

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☒	☐	☐
d) Be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code (2016), creating substantial risks to life or property?	☐	☒	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

A Cultural and Paleontological Resources Assessment was completed to determine potential impacts to paleontological resources associated with the development of the Proposed Project (**Appendix D** – *Cultural and Paleontological Resources Assessment for the Palmyra Cemetery Project, City of Orange, Orange County, California*, Cogstone, April 2021).

A Geotechnical Feasibility Assessment was completed to determine potential impacts associated with geology and soils (**Appendix E** – *Geotechnical Feasibility Assessment, Proposed Palmyra Cemetery, 2205 E. Palmyra Avenue and 290 South Yorba Street, Orange, California*, Hamilton and Associates, July 2021).

A Preliminary Water Quality Management Plan was completed to determine potential impacts associated with water quality (PWQMP) (**Appendix F** – *Preliminary Priority Water Quality Management Plan (WQMP) Kornerstone Muslim Cemetery*, DRC Engineering, Inc., April 2021).

Environmental Analysis

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?

Less Than Significant Impact: No known active faults are known to project through the Project Site nor does the Project Site lie within the boundaries of an "Earthquake Fault Zone" as defined by the State of California in the Alquist-Priolo Earthquake Fault Zoning Act. According to Appendix E, the faults of most influence to the Project Site are the Elsinore Fault, Whittier Fault, Chino Hills Fault, and Peralta Hills Fault, located 14 miles, 8.8 miles, 10 miles, and 3.8 miles from the Project Site, respectively. At this time, the California Geologic Survey delineate only the Elsinore and Chino Hills faults as active according to the Alquist-Priolo Earthquake Fault Zones Act. Therefore, the potential for ground rupture due to an earthquake beneath the Project Site is considered low.

Although the Project Site is not within an Earthquake Fault Zone, it is in a seismically active area of Southern California[5]. The type and magnitude of seismic hazards that may affect the Project Site are dependent on both the distance to causative faults and the intensity and duration of the seismic event. Although the probability of primary surface rupture is considered low, ground shaking hazards caused by earthquakes along regional active faults do exist and are accounted for in the design and construction of the proposed structures. The proposed reconstruction of the building that was destroyed by fire and ancillary structures for the Project Site would be constructed to the standards prescribed by the California Building Code (CBC), as amended by the City, which would reduce risks associated with seismic activity. Therefore, potential impacts associated with people or structures from a surface rupture would be less than significant and no mitigation would be required.

ii. Strong seismic ground shaking?

Less Than Significant Impact: As discussed in Section 4.6.1(a)(i), the Project Site is in a seismically active area of Southern California that has been affected by moderate to occasionally high levels of ground motion. Although the probability of primary surface rupture is considered low, ground shaking hazards caused by earthquakes along regional active faults are accounted for in the design and construction of the proposed structures. The Project Site lies within relative proximity to several active faults and would experience similar moderate to occasionally high levels of shaking from these faults as well as some background shaking from other seismically active parts of the Southern California region. The Proposed Project would be designed and constructed in accordance with CBC requirements, as amended by the City, which would reduce risks associated

[5] https://maps.conservation.ca.gov/cgs/EQZApp/app/ Accessed June 10, 2021

with seismic activity. Therefore, potential impacts to people or structures from seismic ground shaking would be less than significant and no mitigation would be required.

iii. Seismic-related ground failure, including liquefaction?

Less Than Significant Impact: The City of Orange faces geologic and seismic hazards, specifically earthquakes, earthquake-induced landslides, and liquefaction. The City encompasses two general types of terrain: an alluvial plain that underlies the central and western parts of the City, and a series of low hills (foothills of the Santa Ana Mountains) characteristic of the east side of the City and the Sphere of Influence. The alluvial plain is underlain by many thousand feet of fluvial and floodplain sediments, and certain areas of the plain adjacent to major watercourses (the Santa Ana River and Santiago Creek) are susceptible to flooding and seismically induced liquefaction. However, the potential for landslides is low due to the limited relief of the alluvial plain and soil composition described in Appendix E. Conversely, the hilly section is underlain by bedrock (mostly late Tertiary marine and non-marine sediments); this area is less susceptible to liquefaction, but certain areas may be prone to earthquake-induced landslides, depending upon the character of the underlying bedrock. Liquefaction occurs when moisture-saturated soils lose stability during seismic conditions. Structures built on such soils may collapse and result in damage and loss.

According to the City's General Plan Public Safety Element, Figure PS-1: *Environmental and Natural Hazard Policy Map*, the Project Site is located within a liquefaction hazard area. However, according to Appendix E, Boring MW-3 (Earthtech, 1991) located in the gravel parking lot southeast of the former YMCA building that was destroyed by fire indicates that the upper 50+ feet of the subsurface consists of dense sands, gravels, clayey sands, and a stiff sandy clay layer. Material type and sample blow counts indicate low potential for liquefaction at the at the Project Site. Additionally, groundwater beneath the Project Site is approximately 200 feet below ground surface (bgs) and would not be encountered during redevelopment or cemetery operation activities, reducing potential liquefaction risks. The Proposed Project would be subject to the issuance of a grading permit and building permit by the City. Prior to issuance of these permits, the Property Owner/Developer Proposed Project would be required to submit grading and foundation plans to the City for review to demonstrate compliance with the City's grading requirements (OMC Chapter 16.40 and Title 15). The Proposed Project would be designed and constructed in accordance with CBC requirements, as amended by the City, which would reduce risks associated with liquefaction. Therefore, potential impacts to people or structures from liquefaction shaking would be less than significant and no mitigation would be required.

iv. Landslides?

Less Than Significant Impact: Landslides can occur when strong ground movement such as an earthquake shakes loose soil and causes land and debris to lose stability and slide. According to Figure PS-1 in the City's General Plan Public Safety Element, the Project Site is not located in landslide hazard area. As described in Section 4.7(a)(iv), the general type of terrain the Project Site is located within alluvial plain, which has low potential for landslides due to the limited relief of the alluvial plain. There are no significant slopes located on or near the Project Site, and no significant slopes are proposed as part of the project design. Therefore, potential impacts to

people or structures from landslides would be less than significant and no mitigation would be required.

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

Less Than Significant Impact: The Project Site contains multipurpose and recreation facilities that include a former YMCA building that was destroyed by fire in the central portion, parking lot in the east-central portion, a former BMX track in the northern portion, and former sports field in the southern portion. Santiago Creek and multi-purpose Santiago Creek Trail intersect the northwest portion of the Project Site. Construction activity associated with Proposed Project's development may result in wind driven soil erosion and loss of topsoil due to grading activities. However, all construction and grading activities would comply with City's grading ordinance (OMC Chapter 16.40) which requires adherence to the City's Manual of Grading (2012). The City's Manual of Grading requires the Proposed Project submit an erosion and sediment control plan as part of the grading permit review, which must be approved prior to issuance of any grading permit (p. 42). The Proposed Project would also be required to comply with the manual's Section 13 requirements for erosion and sediment control and landscaping, which requires the use of BMPs. The Proposed Project would be subject to the requirements of the State of CA Construction General Permit. The Property Owner/Developer would be required to prepare a Stormwater Pollution Prevention Program (SWPPP) and include BMPs to ensure soil erosion and sediment control will occur throughout the life of the Proposed Project. Appendix F identifies project specific BMPs which would apply to the Proposed Project, such as street sweeping and inlet drainage control measures (e.g., stenciling, signage). The Proposed Project would implement BMPs to control project runoff and protect water quality, which would limit operational impacts from the Proposed Project. The Proposed Project would be designed in accordance with the BMPs outlined in Appendix F and those required pursuant to the City's Manual of Grading. Upon project completion, the Project Site would be developed with paved surfaces, and landscaping, which would prevent substantial erosion from occurring. The Proposed Project would also be subject to erosion and sediment control maintenance during the operational lifetime of the cemetery use. Therefore, potential impacts associated with soil erosion would be less than significant and no mitigation would be required.

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: Seismically induced lateral spreading involves primarily lateral movement of earth materials due to ground shaking. For lateral spreading to occur, the liquefiable zone must be continuous, unconstrained laterally, and free to move along gently sloping ground toward an unconfined area. Lateral spreading results in near-vertical cracks with horizontal movement of the soil mass involved. A gentle slope in the ground face or the presence of a slope face nearby can cause the ground to slide or spread on layers of liquefied soil. The Project Site does include a portion of Santiago Creek and multi-purpose Santiago Creek Trail in the northwest corner of the site. The Santiago Creek bed is disturbed land cover that consists of artificial fill silty sands to approximate depths of 15 to 17.5 feet, from the SR-55 construction. Boring tests summarized in Appendix E yielded a small layer of burned

material at a depth of 13 feet below grade surface (bgs). The Proposed Project does not include modification or disturbance to this portion of the Project Site. The area of the disturbance on the Project Site is flat, with no substantial slopes.

As discussed in Section 4.7.(a)(i-iv), the Project Site is not located in an area of landslide potential, as shown in City's General Plan Public Safety Element, Figure PS-1 and maintains a composition of soil and groundwater depth not conducive to liquefaction. **Figure 24** – *Conceptual Earthwork Map* details that a total of 11,610 cubic yards of import would be used for the Proposed Project, specifically in the areas of the Project Site that would be used for interment. The Property Owner/Developer would be required to adhere to the City's Manual of Grading and the CBC.

The Manual of Grading requires a geotechnical report prior to the issuance of grading permits. Appendix E provides a geotechnical feasibility report for the purposes of the entitlement process, which analyzes the Project Site's geotechnical feasibility and provides recommendations that would be required for the Proposed Project as a part of the City's conditions of approval. The geotechnical report at the time of grading would be required to include information and data regarding the nature, distribution, and the physical and chemical properties of existing soils; conclusions as to adequacy of the site for the proposed grading and structures; recommendations for general and corrective grading procedures; foundation and pavement design criteria; and shall provide other recommendations, as necessary, commensurate with the project grading and development, further extrapolating on the findings of Appendix E.

Appendix E discusses the site and subsurface conditions, including materials, groundwater, geological hazards analysis, and conclusions and recommendations for the Proposed Project. This includes but is not limited to specifications on remedial grading, compaction rates, backfill requirements, and foundation design. Under **MM GEO-1**, the Proposed Project would be required to comply with the recommendations in Appendix E. Therefore, with incorporation of **MM GEO-1**, potential impacts associated with unstable soils, lateral spreading, liquefaction, and collapse would be less than significant and no mitigation would be required.

d) Would the project be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code (2016), creating substantial risks to life or property?

Less Than Significant Impact with Mitigation Incorporated: Expansive soils are soils that have a potential to swell or shrink based on the introduction or removal of water from the soil. Expansion occurs due to clay particles in the soil with some particular clays such as montmorillonite and bentonite having significant shrink and swelling capacity. Over time wet and dry season can cause clays to expand and shrink which can cause damage to structure, foundations, and hardscapes if proper construction and preventative measures are not taken.

Appendix E details that the fill and native soils on the Project Site are classified as silty sand or sand with gravel, which are considered to have low soil expansion potential. Appendix E provides recommendations on imported soils, utility trenches, and retaining walls, all of which would require the use on non-expansive soils. Recommendations from Appendix E would be required for the Proposed Project as detailed in **MM GEO-1**. The Proposed Project would result in 11,610 cubic yards of import and would be required to be nonexpansive soils. Additional testing for soil expansion may be required after rough grading and prior to construction of foundations and other concrete work to confirm these conditions. The Proposed Project would be constructed to

the recommendations in Appendix E and to the standards prescribed by the CBC, as amended by the City. Therefore, with incorporation of **MM GEO-1** potential impacts associated with expansive and corrosive soils would be less than significant.

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

No Impact: The Project Site is served by a public sewer system. The Proposed Project would connect to the existing onsite 4-inch sewer line, as shown in **Figure 22** – *Conceptual Grading Plan*. The existing onsite 4-inch sewer line is connected to the existing 8-inch public sewer line located within South Tracy Lane. The Proposed Project would not include the use of septic tanks or alternative wastewater disposal systems. Therefore, no impacts associated with soils incapable of disposing wastewater would occur and no mitigation would be required.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact with Mitigation Incorporated: Appendix D includes a California Historic Resources Information System (CHRIS) from the South-Central Coastal Information Center (SCCIC) conducted on January 8, 2021, that includes the entire Project Site as well as a one-half mile radius. The SCCIC completed the request on January 28, 2021. A pedestrian survey conducted on February 4, 2021, observed no archaeological or paleontological resources onsite. Based on the results of the pedestrian survey and the cultural records search, as well as the high level of disturbance from the previous landfill and BMX track uses, the Project Site has low sensitivity for prehistoric cultural resources.

The project surface is mapped as late Pleistocene to Holocene (less than 126,000 years old) young alluvial fan deposits. The record search revealed no fossil localities from within the Project Site or the immediate vicinity; however, localities are recorded near the Project Site from sediments similar to those found within the study area. There are 13 localities recorded within 10 miles of the Project Site. Extinct megafauna identified from these sites include Harlan's ground sloth (*Paramylodon harlani*), Columbian mammoth (*Mammuthus columbi*), saber-toothed cat (*Smilodon fatalis*), western horse (*Equus occidentalis*), California tapir (*Tapirus californicus*), yesterday's camel (*Camelops hesternus*), and bison (*Bison antiquus*).

Late Pleistocene to Holocene young alluvial fan sediments less than eight feet below the modern surface are assigned a low potential for fossils (PFYC 2) due to the lack of fossils in these deposits. More than eight feet below the modern surface these sediments are assigned a moderate potential for fossils (PFYC 3) due to similar deposits producing fossils at that depth near to the study area. At present, due to the previous development of the project study area, grading impacts to the late Pleistocene sediments would be low to very low. Because there is a low potential for impacts to the late Pleistocene sediments, Appendix D concludes no mitigation measures would be required.

However, the Proposed Project includes the incorporation of **MM GEO-2** as a measure for reducing potential impacts should an unanticipated discovery occur during any part of the Proposed Project's construction. **MM GEO-2** would require all work to cease with 25-feet of the

discovery until a qualified paleontologist evaluates it. Therefore, with incorporation of **MM GEO-2**, potential impacts associated with paleontological resources would be less than significant.

Mitigation Measures

MM GEO-1: Prior to issuance of grading and building permits, the Property Owner/Developer shall incorporate into the project plans and specifications all recommendations detailed within the project-specific geotechnical report (Appendix E, Geotechnical Feasibility Assessment, Hamilton and Associates, July 2021), as listed out below. Without these report recommendations, the project plans and specifications would not be approved, and the Proposed Project would not be allowed to advance into the final design stage or ultimately into construction.

- Discussion, Conclusions and Recommendations
  - Site Preparation and Grading
    - Existing Construction Debris, Disturbed Soils
    - Remedial Grading
    - New Fills
    - Backfilling and Compaction Requirements
    - Imported Soils
    - Observation and Testing During Construction
  - Foundation Design
    - Foundation Capacity
    - Lateral Resistance
    - Foundation Settlements/Displacements
  - Seismic Design Parameters
  - Retaining Walls
  - Placement, Paths, Slab-On-Grade
  - Asphalt Pavement
  - Site Drainage
  - Utility Trenches
  - Plan Review, Observation and Testing

MM GEO 2 Ongoing during ground disturbance/construction, in the event of an unanticipated paleontological discovery, the Contractor shall ensure all work be suspended within 25 feet of the find until a qualified paleontologist evaluates it.

Conclusion

With implementation of **MM GEO-1** and M**M GEO-2**, potential impacts of the Proposed Project associated with Geology and Soils would be less than significant.

4.8 Greenhouse Gas Emissions

Would the project:	Potentially Significant Impact	Less Than Significant 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?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

An Air Quality, Global Climate Change, and Energy Impact Analysis was completed to determine potential impacts to air quality associated with the development of the Proposed Project (**Appendix A** - *Air Quality, Global Climate Change, and Energy Impact Analysis*, Ganddini Group, May 2021, Revised February 8, 2022). The results of the analysis are based on CalEEMod version 2020.4.0.

Environmental Analysis

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

Less Than Significant Impact: The Proposed Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. The Proposed Project would require a General Plan Amendment to re-designate the LDR portion of the Project Site to OS-P to bring the southern portion of the site into consistency with the existing zoning of Recreational Open Space. The Proposed Project also involves the construction of a 3,339-gravesite cemetery, a 5,138 sf , two-story building to support activities associated with funeral burial practices, accessory parking, and landscaping. The project also includes ancillary administrative office space for the funeral burial practices, construction of a one-story, 800 SF storage shed with outdoor storage yard, trash enclosure, and utility shed, as well as the demolition and construction of a 51-space surface parking lot. The Proposed Project would provide exterior landscaping and fencing/gating throughout the Project Site. No portion of the Proposed Project would occur within Santiago Creek or existing multi-purpose Santiago Creek Trail area. The Proposed Project would generate GHG emissions from area sources, energy usage, mobile sources, waste disposal, water usage, and construction equipment.

To determine whether the Proposed Project's GHG emissions are significant, this analysis uses the SCAQMD screening threshold of 3,000 MTCO2e per year for all land uses.

The Proposed Project's GHG emissions are shown in Table 8 - *Project Related Greenhouse Gas Emissions* and have been provided for informational purposes only.

Table 8 – Project Related Greenhouse Gas Emissions

Category	Greenhouse Gas Emissions (Metric Tons per Year)					
	Bio-CO_2	NonBio-CO_2	CO_2	CH_4	N_2O	CO_2e
Area Sources[1]	0.00	0.00	0.00	0.00	0.00	0.00
Energy Usage[2]	0.00	16.55	16.55	0.00	0.00	16.64
Mobile Sources[3]	0.00	31.10	31.10	0.00	0.00	31.59
Waste[4]	6.87	0.00	6.87	0.41	0.00	17.03
Water[5]	0.06	1.00	1.06	0.01	0.00	1.26
Construction[6]	0.00	10.09	10.09	0.00	0.00	10.26
Total Emissions	**6.93**	**58.75**	**65.68**	**0.42**	**0.00**	**76.78**
SCAQMD Draft Threshold of Significance						**3,000**
Exceeds Threshold?						**No**

Notes:
Source: CalEEMod Version 2020.4.0 for Opening Year 2022.
(1) Area sources consist of GHG emissions from consumer products, architectural coatings, and landscape equipment.
(2) Energy usage consist of GHG emissions from electricity and natural gas usage.
(3) Mobile sources consist of GHG emissions from vehicles.
(4) Solid waste includes the CO2 and CH4 emissions created from the solid waste placed in landfills.
(5) Water includes GHG emissions from electricity used for transport of water and processing of wastewater.
(6) Construction GHG emissions CO2e based on a 30-year amortization rate.

Table 8 shows that the Proposed Project would create 90.47 MTCO2e per year, which is below SCAQMD's draft threshold of 3,000 MTCO2e. As detailed in Section 4.8.1(b), the Proposed Project would be consistent with the applicable measures in the City's GHG Reduction Plan.

Although the Proposed Project is expected to emit GHGs, the emission of GHGs by a single project into the atmosphere is not itself necessarily an adverse environmental effect. Rather, it is the increased accumulation of GHG from more than one project and many sources in the atmosphere that may result in global climate change. In the case of global climate change, the proximity of the Project Site to other GHG emission generating activities is not directly relevant to the determination of a cumulative impact because climate change is a global condition. According to CAPCOA, "GHG impacts are exclusively cumulative impacts; there are no noncumulative GHG emission impacts from a climate change perspective." The resultant consequences of that climate change can cause adverse environmental effects. A project's GHG emissions typically would be very small in comparison to state or global GHG emissions and, consequently, they would, in isolation, have no significant direct impact on climate change.

Therefore, potential impacts associated the generation of greenhouse gas emissions would be less than significant and no mitigation would be required.

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

Less Than Significant Impact: The Proposed Project could have the potential to conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. The City of Orange has not adopted a Climate Action Plan. Therefore, Appendix A compares the Proposed Project's emissions to the goals of the CARB Scoping Plan.

Consistency with the CARB Scoping Plan

Emission reductions in California alone would not be able to stabilize the concentration of greenhouse gases in the earth's atmosphere. However, California's actions set an example and drive progress towards a reduction in greenhouse gases elsewhere. If other states and countries were to follow California's emission reduction targets, this could avoid medium or higher ranges of global temperature increases. Thus, severe consequences of climate change could also be avoided.

The ARB Board approved a Climate Change Scoping Plan in December 2008. The Scoping Plan outlines the State's strategy to achieve the 2020 greenhouse gas emissions limit. The Scoping Plan "proposes a comprehensive set of actions designed to reduce overall greenhouse gas emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health" (California Air Resources Board 2008). The measures in the Scoping Plan have been in place since 2012.

This Scoping Plan calls for an "ambitious but achievable" reduction in California's greenhouse gas emissions, cutting approximately 30 percent from business-as-usual emission levels projected for 2020, or about 10 percent from today's levels. On a per-capita basis, which means reducing annual emissions of 14 tons of carbon dioxide for every man, woman, and child in California down to about 10 tons per person by 2020.

In May 2014, CARB released its First Update to the Climate Change Scoping Plan (CARB 2014). This Update identifies the next steps for California's leadership on climate change. While California continues on its path to meet the near-term 2020 greenhouse gas limit, it must also set a clear path toward long-term, deep GHG emission reductions. This report highlights California's success to date in reducing its GHG emissions and lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050.

In November 2017, CARB release the 2017 Scoping Plan. This Scoping Plan incorporates, coordinates, and leverages many existing and ongoing efforts and identifies new policies and actions to accomplish the State's climate goals, and includes a description of a suite of specific actions to meet the State's 2030 GHG limit. Chapter 4 provides a broader description of the many actions and proposals being explored across the sectors, including the natural resources sector, to achieve the State's mid and long-term climate goals.

Guided by legislative direction, the actions identified in the 2017 Scoping Plan reduce overall GHG emissions in California and deliver policy signals that will continue to drive investment and certainty in a low carbon economy. The 2017 Scoping Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while identifying new, technologically feasible, and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities. The Plan includes policies to require direct GHG reductions at some of the State's largest stationary sources and mobile sources. These policies include the use of lower GHG fuels, efficiency regulations, and the Cap-and Trade Program, which constrains and reduces emissions at covered sources.

As the latest, the 2017 Scoping Plan builds upon previous versions. The Proposed Project's consistency with applicable strategies of both the 2008 and 2017 Plan are assessed in Table 9 - *Proposed Project Consistency with CARB Scoping Plan Policies and Measures*. As shown in Table 9, the project is consistent with the applicable strategies and would also comply with applicable Green Building Standards and City of Orange's policies regarding sustainability (as dictated by the City's General Plan). Therefore, potential impacts associated with conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases would be less than significant and no mitigation would be required.

Table 9 – Proposed Project Consistency with CARB Scoping Plan Policies and Measures

2008 Scoping Plan Measures to Reduce Greenhouse Gas Emissions	Project Compliance with Measure
California Light-Duty Vehicle Greenhouse Gas Standards – Implement adopted standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel, and vehicle technology programs with long-term climate change goals.	Consistent. These are CARB enforced standards; vehicles that access the project (that are required to comply with the standards) will comply with the strategy.
Energy Efficiency – Maximize energy efficiency building and appliance standards; pursue additional efficiency including new technologies, policy, and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California.	Consistent. The project will be compliant with the current Title 24 standards.
Low Carbon Fuel Standard – Develop and adopt the Low Carbon Fuel Standard.	Consistent. These are CARB enforced standards; vehicles that access the project (that are required to comply with the standards) will comply with the strategy.
Vehicle Efficiency Measures – Implement light-duty vehicle efficiency measures.	Consistent. These are CARB enforced standards; vehicles that access the project (that are required to comply with the standards) will comply with the strategy.
Medium/Heavy-Duty Vehicles – Adopt medium and heavy-duty vehicle efficiency measures.	Consistent. These are CARB enforced standards; vehicles that access the project (that are required to comply with the standards) will comply with the strategy.
Green Building Strategy – Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.	Consistent. The California Green Building Standards Code (proposed Part 11, Title 24) was adopted as part of the California Building Standards Code in the CCR. Part 11 establishes voluntary standards, which are mandatory in the 2019 edition of the Code, on planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The project will be subject to these mandatory standards.
High Global Warming Potential Gases – Adopt measures to reduce high global warming potential gases.	Consistent. CARB identified five measures that reduce HFC emissions from vehicular and commercial refrigeration systems; vehicles that access the project that are required to comply with the measures will comply with the strategy.

Recycling and Waste – Reduce methane emissions at landfills. Increase waste diversion, composting, and commercial recycling. Move toward zero-waste.	Consistent. The state is currently developing a regulation to reduce methane emissions from municipal solid waste landfills. The project will be required to comply with City programs, such as City's recycling and waste reduction program, which complies with the 75 percent reduction required by 2020 per AB 341.
Water – Continue efficiency programs and use cleaner energy sources to move and treat water.	Consistent. The project will comply with all applicable City ordinances and CAL Green requirements.

2017 Scoping Plan Recommended Actions to Reduce Greenhouse Gas Emissions	Project Compliance with Recommended Action
Implement Mobile Source Strategy: Further increase GHG stringency on all light- duty vehicles beyond existing Advanced Clean Car regulations.	Consistent. These are CARB enforced standards; vehicles that access the project (that are required to comply with the standards) will comply with the strategy.
Implement Mobile Source Strategy: At least 1.5 million zero emission and plug-in hybrid light-duty electric vehicles by 2025 and at least 4.2 million zero emission and plug-in hybrid light-duty electric vehicles by 2030.	Consistent. These are CARB enforced standards; vehicles that access the project (that are required to comply with the standards) will comply with the strategy.
Implement Mobile Source Strategy: Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean transit options. Assumed 20 percent of new urban buses purchased beginning in 2018 will be zero emission buses with the penetration of zero-emission technology ramped up to 100 percent of new sales in2030. Also, new natural gas buses, starting in 2018, and diesel buses, starting in 2020, meet the optional heavy-duty low-NOX standard.	Consistent. These are CARB enforced standards; vehicles that access the project (that are required to comply with the standards) will comply with the strategy.
Implement Mobile Source Strategy: Last Mile Delivery: New regulation that wouldresult in the use of low NOX or cleaner engines and the deployment of increasing numbers of zero-emission trucks primarily for class 3-7 last mile delivery trucks in California. This measure assumes ZEVs comprise 2.5 percent of new Class 3–7 truck sales in local fleets starting in 2020, increasing to 10 percent in 2025 and remaining flat through 2030.	Consistent. These are CARB enforced standards; vehicles that access the project (that are required to comply with the standards) will comply with the strategy.
Implement SB 350 by 2030: Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030.	Consistent. The project will be compliant with the current Title 24 standards.
By 2019, develop regulations and programs to support organic waste landfillreduction goals in the SLCP and SB 1383.	Consistent. The project will be required to comply with City programs, such as City's recycling and waste reduction program, which complies with the 75 percent reduction required by 2020 per AB 341.

Mitigation Measures

No mitigation measures associated with impacts to Greenhouse Gas Emissions apply to the Proposed Project.

Conclusion

Potential impacts of the Proposed Project associated with Greenhouse Gas Emissions would be less than significant and no mitigation would be required.

4.9 Hazards and Hazardous Materials

Would the project:	Potentially Significant Impact	Less Than Significant 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?	☐	☒	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☒	☐	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e) For a project located within an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

A Preliminary Water Quality Management Plan was completed to determine potential impacts associated with water quality (PWQMP) (**Appendix F** – *Preliminary Priority Water Quality Management Plan (WQMP) Kornerstone Muslim Cemetery*, DRC Engineering, Inc., April 2021).

A Post Closure Land Use Plan (PCLUP) was completed to determine potential impacts to hazards and hazardous materials associated with the development of the Project Site. (**Appendix G** – *Post Closure Land Use Plan Former La Veta Refuse Disposal Station*, Ardent Environmental Group, Inc., October 2020).

A Soil Management Plan (SMP) was completed to determine potential impacts to hazards and hazardous materials associated with the development of the Project Site. (**Appendix H** – *Soil Management Plan Former La Veta Refuse Disposal Station,* Ardent Environmental Group, Inc., October 2020).

Background

The California Department of Toxic Substance Control (DTSC) details that when a hazardous waste management unit (i.e., landfills, land treatment units, surface impoundments, etc.) stops

receiving waste and the owner has determined it is at the end of its active life, it must be closed in accordance with federal and state closure requirements. The Postclosure Rule applies to facilities that intend to leave or already have left hazardous waste in place and so are required to conduct postclosure care. Typically, the Postclosure Rule pertains to closed hazardous waste landfills that contain waste and therefore are required to monitor the site and surrounding area for potential contaminant releases in accordance with California Code of Regulations, title 22, Division 4.5, Chapters 14, 15, or 20 (DTSC, 2021).

Closure can occur as a "clean closure" or with "waste left in place." Clean closure means the owners remove all wastes from the unit and decontaminate or remove equipment, structures, and contaminated soil. These activities avert the risk of future chemical exposures to human health and the environment. Units can also undergo closure that leaves waste in place. However, owners of these units must conduct postclosure activities such as inspecting, monitoring, and maintaining systems that contain the waste and protect the surrounding environment and community from hazardous waste releases (DTSC, 2021). The purpose of the Post Closure Land Use Plan (Appendix G) is to describe the proposed post-closure improvements and land use for the Project Site as the previous landfill use left waste in place, and the relevant information required by Title 22 and Title 27 Sections 21090, 21180, and 21190 of the California Code of Regulations (CCR), in order to demonstrate that the Proposed Project would not increase the potential threat to human health or the environment.

The County of Orange operated the Project Site as a municipal solid waste disposal site between 1946 to 1956. Landfill operations belonged to a large former landfill known as the "La Veta Refuse Disposal Station" which concluded waste disposal in 1956. The landfill contained solid wastes consisting of green waste, construction debris, and municipal solid waste. The project-specific Post Closure Land Use Plan (Appendix G) provides an estimate of several hundred thousand yards accepted during operation of the landfill. In 1972, the former building used as a YMCA was constructed, with waste in the immediate area of the building excavated and installation of a passive methane venting system. The Project Site also contains five (5) existing compliance landfill gas (LFG) probes, two non-compliance LFG probes, and one (1) existing ground water monitoring well. A "non-compliance probe" would be considered a probe that is not considered to be in the regulator approved perimeter monitoring network and is not subject to corrective action requirements if methane is detected in the well. The two (2) probes considered non-compliance are those located directly in waste.

As a result of the landfill, methane and groundwater monitoring are being completed at the Project Site and would continue following development of the Proposed Project. Methane and groundwater monitoring would continue through the entire post-closure period of the Project Site, at a minimum. During redevelopment activities, existing landfill gas monitoring probes and a groundwater monitoring well would be preserved. Additionally, environmental investigations have been completed under the oversight of the DTSC.

A Soil Management Plan (Appendix H) has been prepared to provide the criteria and procedures to properly manage the known and unknown environmental issues that may be encountered during redevelopment activities. Unknown environmental concerns are defined as regulated features (e.g., USTs, clarifier, etc.) or unregulated features (e.g., stained or odorous soil, or soil

containing elevated VOCs as measured by a photoionization detector) that are discovered during redevelopment (i.e., "unanticipated discoveries"). Appendix H also presents the protocol and analytical program for the sampling of import soil. Appendix H would be implemented as a mitigation measure to guide environmental issues that may be encountered during redevelopment, grave-digging, or soil disturbance activities. Below are the investigations conducted as a part of Appendix H.

Soil Investigations

Due to the historical site use as a landfill, environmental investigations have been completed under the oversight of the California Department of Toxic Substances Control (DTSC). The findings of these investigations indicated that the chemical concentrations in the landfill cover would not pose a significant health risk to future site occupants based on an industrial/commercial land use scenario; however, elevated concentrations of select chemicals have been detected sporadically in the deeper landfill waste. Indoor and subsurface methane gas monitoring is being completed at the site under the oversight of the Orange County Health Care Agency (Local Enforcement Agency; LEA) and will continue following redevelopment.

In 2010, Geosyntec Consultants ("Geosyntec") conducted soil sampling and completed a health risk assessment. The chemical concentrations in the landfill cover were found to be acceptable for the employees and children attending the YMCA (Appendix G).

Soil analytical results outlined in Appendix H indicated no detectable to low concentrations of volatile organic compounds (VOCs), semi-VOCs (SVOCs), polychlorinated biphenyls (PCBs), pesticides, and dioxin toxicity equivalency (dioxin-TEQ), below regulatory screening levels for industrial/commercial land use. Concentrations of polynuclear aromatic hydrocarbons (PAHs) were considered representative of background concentrations in Southern California. Metal concentrations were within background concentrations or below industrial/commercial regulatory screening levels for the protection of human health, except for arsenic and lead.

Elevated arsenic, detected at 14 to 23 milligrams per kilogram (mg/kg), and exceeding the DTSC background arsenic concentration at Southern California school sites of 12 mg/kg (referred to herein as the "DTSC arsenic screening level"), was detected in three samples. Two of these exceedances were detected in samples collected from borings SS-14 and SS-16 within the landfill waste at 7 and 9.5 feet below the ground surface (bgs), respectively, as shown in **Figure 29** – *Test Locations*. One additional arsenic exceedance was detected at 0.5 feet bgs from boring SS-16 located within the asphalt-paved multi-purpose Santiago Creek Trail along Santiago Creek (**Figure 29**). Elevated lead, detected at 630 mg/kg, and exceeding the DTSC soil screening level for industrial/commercial land use (DTSC-SLi) of 320 mg/kg was detected in one sample collected from boring SS-9 within the landfill waste at 10 feet bgs (**Figure 29**). However, based on the location and/or depths of these samples, there is a low likelihood that elevated arsenic or lead would be encountered during construction activities and grave digging activities associated with the Proposed Project.

Landfill Cover Thickness Investigation

In January 2020, an extensive subsurface investigation consisting of the excavation 54 test pits, designated TP1 through TP54, to assess the landfill cover thickness was conducted for Appendix

H (**Figure 29**). During the investigation, the soil was monitored in general accordance with South Coast Air Quality Management District (SCAQMD) Rule 1166. Elevated readings, exceeding limits defined in SCAQMD Rule 1166, were not encountered.

Test pits TP1 through TP22 were excavated in the northern portion of the Project Site in the area of the former BMX track (**Figure 29**). Due to the presence of possible subsurface utility lines, the test pits were not extended south of TP11. As shown in cross-sections A-A', BB', and C-C', the depth to the thickness of the landfill cover ranged from approximately 5.5 to 9 feet (Appendix H, Figures 5 and 6). Shallow zones of construction debris were also noted from 3 to 9 feet bgs in select areas. The zones of construction debris were not consistent and was mostly soil with an intermittent mix of small to large pieces of concrete, brick, and rebar. The landfill waste consisted of municipal waste and was observed as a more consistent layer.

Test pits TP23 through TP51 were excavated in the southern portion of the site in the area of the former sports field. As shown in cross-sections D-D' through G-G', the thickness of the landfill cover was 6 to 9 feet, with a few shallower zones observed in TP29, TP42, TP52, and TP53 (Appendix H, Figures 7 and 8). A limited area of stained and odorous soil was also noted in TP29 and TP30, starting at approximately 3 feet bgs (Appendix H, Figure 8). No photoionization detector readings were noted in this soil. Shallow construction debris, from 1 to 6 feet bgs, was also observed at sporadic locations throughout the southern portion of the site. The landfill waste consisted of materials similar to those noted in the northern portion of the site. In general, the thickness of the landfill cover was found to be 6 to 9 feet throughout the site.

Ardent's investigation in 2020 indicates that the landfill cover is acceptable for industrial/commercial land use (Appendix G). However, as a result of investigations conducted for the Project Site, the DTSC recommends an approximate 7-foot landfill cover (five feet for graves, and a 2-foot buffer above the landfill) to minimize the potential of encountering the landfill waste when excavating gravesites. To meet DTSC recommendations, soil would be imported to the Project Site to meet the DTSC recommended cover depths.

Continued Methane and Groundwater Monitoring

Ardent is currently performing quarterly methane monitoring of seven landfill gas monitoring probes located at the Project Site, which would continue through the post closure period, at a minimum (Appendix H, Figure 9). Four landfill gas monitoring probes, designated MP-1, MP-2, MP-3, OVP-3, and LFG-2 are located along the perimeter of the Project Site. One landfill gas monitoring probe, designated LFG-1, is located on-site and within the landfill waste. One landfill gas monitoring probe, designated OVP-5, is located off-site within a street. The monitoring activities are being completed under the oversight of the Orange County Health Care Agency (OCHCA). An existing groundwater monitoring well, designated SCS-6 is located on-site and monitored by the Orange County Water District (OCWD) (Appendix H, Figure 9). In the event the monitors show methane concentrations above regulatory limits, corrective action would be taken, such as implementation of gas extraction wells and potentially increased monitoring. While methane migration is possible, there is no data from the monitoring that shows migration is occurring at the Project Site or will occur. The on-site landfill gas monitoring probes and groundwater monitoring well are planned to be protected and preserved during redevelopment, which would include they remain accessible with the proposed infill.

Appendix H identifies the program participants for the SMP. Program participants include Ardent representatives who would conduct further testing, oversight, and management for the SMP, the Project Proponent/Owner, the General Contractor, and Agency Participants. The Ardent representatives would consist of a SMP Field Coordinator, SMP Program Manager, and Alternative SMP Program Manager. The General Contractor would consist of the General Contractor's Program Manager and Project Site Superintendent.

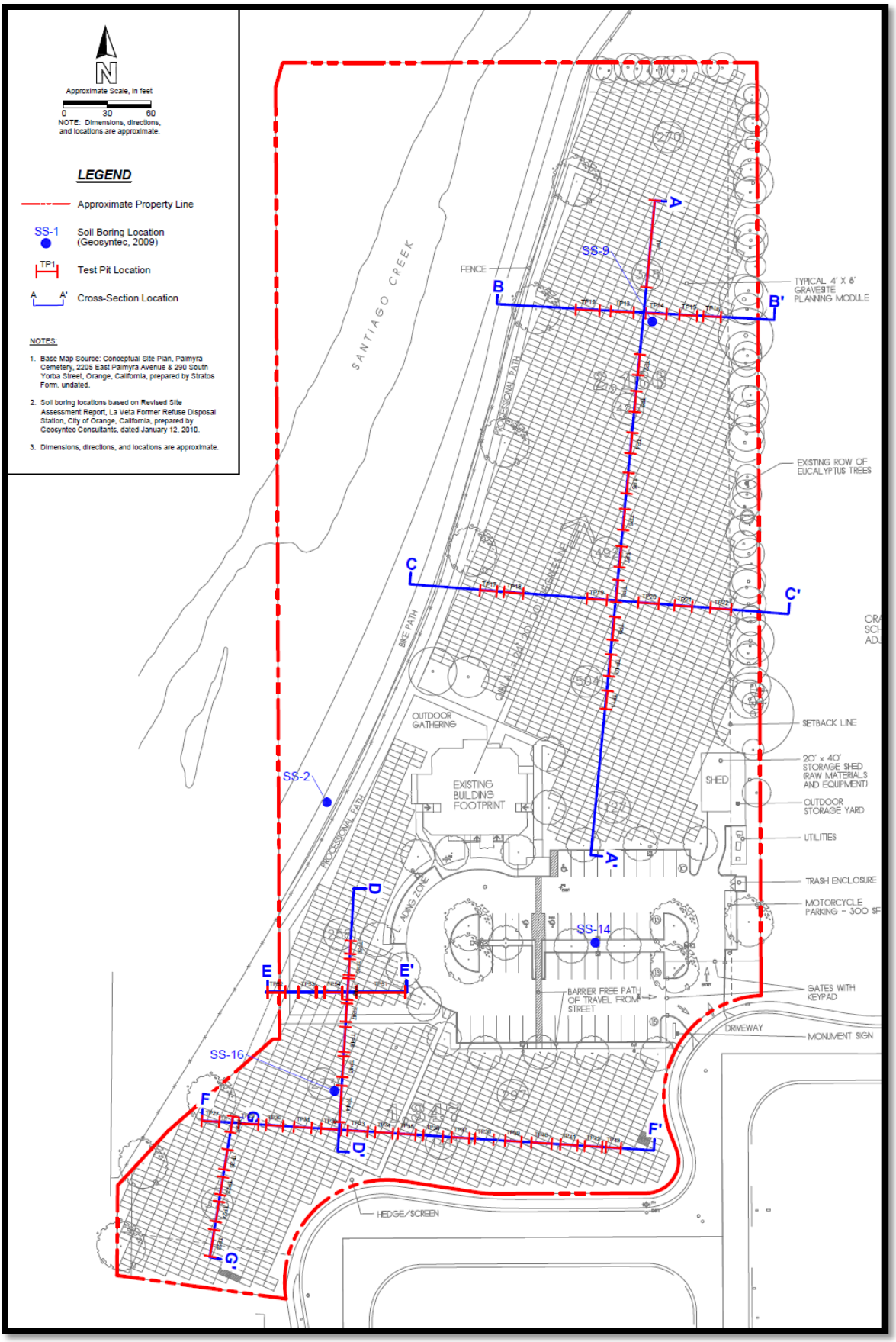


Figure 29: Test Locations

Source: Ardent

Environmental Analysis

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:

Background

The Project Site contains multipurpose and recreation facilities that include a former YMCA building that was destroyed by fire in the central portion, parking lot in the east-central portion, a former BMX track in the northern portion, and former sports field in the southern portion. Santiago Creek and multi-purpose Santiago Creek Trail intersect the northwest portion of the Project Site. The County of Orange operated the Project Site as a municipal solid waste disposal site between 1946 to 1956. Landfill operations belonged to a large former landfill known as the "La Veta Refuse Disposal Station" which concluded waste disposal operations in 1956. The landfill contained solid wastes consisting of green waste, construction debris, and municipal solid waste. Appendix G provides an estimate of several hundred thousand yards accepted during operation of the landfill. In 1972, the former building used as a YMCA was constructed, with waste in the immediate area of the building excavated and installation of a passive methane venting system. The Project Site also contains five existing compliance landfill gas (LFG) probes, two non-compliance LFG probes, and one existing ground water monitoring well.

Proposed Project

The Proposed Project would require a General Plan Amendment to re-designate the LDR portion of the Project Site to OS-P to bring the southern portion of the site into consistency with the existing zoning of Recreational Open Space. The Proposed Project also involves the construction of a 3,339-gravesite cemetery, a 5,138 SF, two-story building to support activities associated with funeral burial practices, accessory parking, and landscaping. The project also includes ancillary administrative office space for the funeral burial practices, construction of a one-story, 800 SF storage shed with outdoor storage yard, trash enclosure, and utility shed, as well as the demolition and construction of a 51-space surface parking lot. The Proposed Project would provide exterior landscaping and fencing/gating throughout the Project Site. No portion of the Proposed Project would occur within Santiago Creek or existing multi-purpose Santiago Creek Trail area.

To minimize the potential for encountering the landfill waste, a minimum seven-foot-thick landfill cover five feet for graves, and a two-foot buffer above the landfill) would be constructed in the areas of the proposed gravesites. To achieve the approximate seven-foot landfill cover, clean soil would be imported and placed in areas where the landfill cover is less than seven feet. Little to none of the existing landfill cover would be altered to reach the final design grades. Groundwater beneath the site is approximately 200 feet below the grade surface (bgs) and would not be encountered during redevelopment or cemetery operation activities. As part of the proposed building renovation, a new indoor air monitoring system, manufactured by GDS Corporation, would be installed. The new monitoring system would consist of four wireless methane sensors connected to a data logger/controller. The sensors, designated S-1 through S-4, would be placed on the first floor of the site building. The sensors would continuously monitor the indoor air

methane concentrations, and data would be logged on an hourly basis. The sensors would routinely be calibrated per manufacturer's specifications, and the data would be downloaded on a monthly basis. The indoor air monitoring results, along with the landfill gas monitoring results would be provided to the Orange County Health Care Agency on a reoccurring basis. A one-time collection of indoor and outdoor air sampling would occur following the Proposed Project's building renovations, to ensure intrusion does not occur. These results would also be sent to the Orange County Health Care Agency.

Soil Management Plan (Appendix H)

The findings of the Soil Management Plan (SMP) (Appendix H) investigations indicated that the chemical concentrations in the landfill cover would not pose a significant health risk to future site occupants based on an industrial/commercial land use scenario; however, elevated concentrations of select chemicals have been detected sporadically in the deeper landfill waste. Based on the results of the investigations, it is unlikely that elevated levels of VOCs would be observed in excess of 2,000 cubic yards (the maximum volume allowed by the Various Sites Permit). In the unlikely event that elevated photoionization detector (PID) readings are detected which result in excess of 2,000 cubic yards of VOC-contaminated soils, a Site-Specific Soil Mitigation Plan would be required from the SCAQMD.

As a result of the findings outlined in Appendix H, mitigation measure **MM HAZ-1** would require the Property Owner/Developer and Contractor to implement the environmental activities in the Soil Management Plan Section 6 – *Environmental Activities for Site Redevelopment*, summarized below, in compliance with all applicable agencies, including but not limited to the City of Orange, Orange County Health Care Agency, South Coast Air Quality Management District, and California Department of Toxic Substances Control:

- 6.1 Pre-Grading Activities:
    - 6.1.1) Health and Safety Plan
    - 6.1.2) Pre-Grading Meeting
    - 6.1.3) South Coast Air Quality Management District, Various Sites Permit
- 6.2 During Excavation and Grading Activities:
    - 6.2.1) Dust and Odor Control
    - 6.2.2) Notification and Identification of Unknown Environmental Concerns
    - 6.2.3) Cleanup Standards
- 6.3 Site-Specific Soil Management Protocols:
    - 6.3.1) Stained and/or Odorous Soil or Other Unregulated Feature
    - 6.3.2) Unburied Landfill Waste
    - 6.3.3) Regulated Features
    - 6.3.4) Sampling Export Soils
    - 6.3.5) Sampling Imported Soil
    - 6.3.5.1) Sampling Criteria
    - 6.3.5.2) Acceptable Levels
- 6.4 Final Reporting

The SMP shall be implemented during site grading, construction, and project operations, inclusive of all agencies' reporting requirements and timing.

Required Activities

Appendix H outlines steps required during pre-grading activities and during excavation and grading activities. The pre-grading activities would require a Health and Safety Plan (HASP) that would be used to protect workers and subcontractors from chemicals that may be encountered as a result of the Proposed Project. A HASP has been prepared as a part of Appendix H. Additional pre-grading activities required would include responsible individuals and agencies attend a Pre-Grading meeting that presents an overview of the historical land use, environmental investigations, potential chemicals of concern, worker safety requirements, dust control measures and that the Project Proponent/Owner adhere to SCAQMD Rule 1166, requiring soil monitoring. This would include requirement to prepare a site-specific soil mitigation plan in the event elevated PID readings are detected which result in excess of 2,000 cubic yards of VOC-contaminated soils.

The excavation and grading activities outlined in Appendix H would require the Project Proponent/Owner adhere to SCAQMD Rule 402 and 403 for fugitive odors and dust. Appendix H would also require excavated impacted soils stockpiled at the Project Site to be placed on and covered with Visqueen plastic; wheel shakers would be installed at all exits from the Project Site to ensure soil would be removed from the tires of existing vehicles, and; any track-outs from the Project Site would be cleaned from the surrounding streets on a daily or as-needed basis.

The SMP Field Coordinator would provide notification and identification of unknown environmental concerns as detailed in Appendix H. If field observations (i.e., odors, staining, and/or elevated PID readings) indicate the possible presences of impacted soils (i.e., greater than 50 ppm as measured with a PID calibrated to hexane), additional characterization/sampling may be necessary. Adherence to mitigation measure **MM HAZ-1** ensures that soils would be characterized and mitigated to the levels stipulated within Appendix H or to concentrations determined to not present a human health risk or threat to groundwater. If a regulated feature is discovered, the DTSC and/or other appropriate agency would be notified and the appropriate permits, if necessary, would be obtained prior to the removal of the feature.

Appendix H would require impacted soils be mitigated to current human health-based regulatory guidelines, such as EPA Regional Screening Levels for industrial/commercials soils (EPA-RSLi) and the DTSC-SLi for the protection of groundwater, as outlined in Appendix H, Section 6.3 - *Site-Specific Soil Management Protocols*. If impacted soil exceeding these cleanup standards would be left in place, the material would be evaluated on an environmental and health risk basis (i.e., the preparation of a risk-based analysis based on industrial/commercial land use criteria) or by using engineering controls.

Site Specific Soil Management Protocols

The SMP Field Coordinator would be required to monitor soils throughout the site on an as-needed basis, as discussed in Appendix H. The soils would be monitored during grading activities for visual fugitive dust, staining, odors, and/or elevated PID readings. These monitoring activities would be conducted using visual, olfactory, and PID meter calibrated daily to hexane. The monitoring activities would then be documented on Daily Field Logs. If impacted soil or unknown environmental concerns are encountered during redevelopment activities, the soil and/or features would be managed in accordance with Appendix H.

As outlined in Appendix H, if during the Proposed Project's development stained or odorous soil is encountered with low or elevated PID readings of VOCs, the SMP Field Coordinator would notify the SMP Program Manager, who would then notify the owner's Project Director. Either the SMP Program Manager or Owner's Project Director would notify the DTSC of the finding. If stained or odorous soils have low PID readings (below 50 ppm of VOCs as measured with a PID), the soil would be sampled for profiling purposes. If laboratory results indicate concentrations exceeding the State and Federal guidelines for the protection of human health or the environment, the extent of impacted materials would be defined, and the soils would be excavated and disposed of appropriately. Confirmation soil samples would be collected to verify that the extent has been reached. If the initial laboratory results indicated low concentrations of residual chemicals, below the State and Federal guidelines for the protection of the environment or human health, the materials would be left on the Project Site. Appendix H details that if stained or odorous soils have elevated PID readings (exceeding 50 ppm of VOCs), the soil would be sampled for profiling purposes, and if laboratory results indicated concentrations exceeding the State or Federal guidelines for the protection of human health or the environment, the extent of impacted materials would be defined, and the soils will be excavated and disposed of appropriately. Prior to excavation, the SCAQMD would be notified, and excavation activities would be completed in general accordance with the Various Site Permit. Confirmation soil samples would then be collected to verify that the extent has been reached.

In the case of unburied landfill waste encountered during redevelopment, grave-digging, or soil-disturbing activities, these materials would be removed, and the presence of the landfill cover beneath the found landfill waste would be verified. The landfill waste would be containerized in 55-gallon drums or stockpiled on and covered with Visqueen plastic, and subsequently profiled and disposed of accordingly. In the event it is determined that the landfill cover is less than the prescribed thickness, import soil would be sampled and verified "clean." To assure that soil imported to the site is "clean," Ardent would sample the soil prior to transport to the Project Site. Currently, regulatory agencies have not established standards that address environmental requirements for acceptance of clean imported fill materials at commercial properties. The DTSC, however, has issued an advisory entitled "*Information Advisory Clean Imported Fill Material*" dated October 2001. This guideline was prepared for school sites and is very conservative, and therefore, would be used as a general guideline, depending on the amount of soil to be imported and source location. A copy of this document is provided in Appendix H. Ardent may use additional information such as knowledge of the property or known land use history to determine actual sampling criteria.

In the event a regulated feature such as a UST or clarifier is encountered, Ardent would be responsible to obtain the appropriate permits to remove the feature and would follow the regulatory guidelines set forth by the appropriate regulatory agency. This would include adherence to the County of Orange Health Care Agency Environmental Health Division, which coordinates the County's programs for regulating hazardous materials and wastes. The Orange City Fire Department is the administering agency for the Hazardous Materials Business Emergency Plan (HMBEP) and Underground Storage Tank (UST) requirement of the California Health and Safety Code (Chapters 6.95 and 6.7 respectively).

Post Closure Land Use Plan (Appendix G)

In addition to the Soils Management Plan (Appendix H), a Post Closure Land Use Plan (Appendix G) was prepared. Appendix G includes a post-closure maintenance plan, which involves dedicated programs to inspect and maintain the portion of the former La Veta Landfill cover system location on the Project Site for the duration of the post-closure period. Appendix G was prepared in accordance with Title 27 of the California Code of Regulations, Sections 21090, 21180, and 21190, which outline the specific regulatory requirements for the closure and post-closure maintenance for landfills. Mitigation measure **MM HAZ-2** would require the Property Owner/Developer and Contractor implement the programs to inspect and maintain the portion of the former La Veta Landfill cover system located at the site, as cited in the Post Closure Land Use Plan (PCLUP) Section 5 – *Post Closure Maintenance Plan*, summarized below, in compliance with all applicable agencies, including but not limited to the City of Orange, Orange County Health Care Agency, South Coast Air Quality Management District, and California Department of Toxic Substances Control:

- 5.1 Landfill Cover Inspections and Maintenance
- 5.2 Drainage Structures
- 5.3 Continues Landfill Gas Monitoring:
    - 5.3.1) Indoor Air Monitoring
    - 5.3.2) Landfill Gas Monitoring Probes
    - 5.3.3) Indoor Air Sampling
- 5.4 Continued Groundwater Monitoring

The PCLUP shall be implemented during site grading, construction, and project operations, inclusive of all agencies' reporting requirements and timing.

Required Programs

Specific programs outlined in Appendix G include site inspections on a quarterly basis for changes in its condition, an annual drainage system inspection for blockages, ponding, overflowing, collapse or structural failures, and continued monitoring of landfill gases and groundwater. In the event site inspections and/or monitoring discovered adverse changing conditions with regard to the site, drainage system, landfill gases, and/or groundwater, action steps outlined within Appendix G would be taken. Proper notifications to the Orange County Health Care Agency would occur, and the Property Owner would be responsible for rectifying the issue.

In the event of a problem identified during quarterly site inspections, the Orange County Health Care Agency would be notified of any problems identified and would establish priority for maintenance (emergency, immediate, or routine). The Property Owner would be responsible for cover surface maintenance items identified during the landfill cover inspections. The Project Site would be secured by permanent fencing that is a part of the Proposed Project. The permanent fencing would provide adequate security to the public in the unlikely event of a leachate seep or exposed refuse. The Orange County Health Care Agency would be notified in the event that any leachate seep or exposed refuse is encountered. Repairs would be made as soon as possible to any areas affected by leachate seeps or exposed refuse. The effect of any damages on the integrity of the cover system would be evaluated, and repair of such areas would be done in

accordance with the SMP by the owner or through use of contracted personnel and equipment. Methods of repair would be consistent with final cover construction and post-closure uses. If necessary, temporary berms, ditches, and straw wattles would be used to prevent damage or ponding until permanent repairs can be implemented. Minor erosion and surface cracks would be repaired using a hand shovel for limited areas or the appropriate construction equipment for larger areas. The surface would be graded to drain, and re-compacted using rubber tired or other appropriate construction equipment. Disturbed areas would be graded to conform to the immediate surrounding area. If necessary, general fill or vegetative soil would be placed in these areas. Areas affected by settlement or where ponding water is observed would be repaired by removing vegetation in the affected area and placing soil to a grade that would provide proper runoff of precipitation. The fill soil would be free of deleterious material, placed in 12-inch or thinner lifts, and wheel rolled by rubber-tired equipment, grader, or other construction equipment as appropriate. The finished surface would blend into the surrounding cover and would be free of tire ruts and depressions.

Further, during the demolition and construction phases of the Proposed Project, the transport of demolition and construction waste for disposal could result in accidental release of hazardous materials. Mitigation measure **MM HAZ-3** would require the Property Owner/Developer obtain and comply with a project specific Traffic Control Plan through the City of Orange's Public Works Department, to ensure safe and continuous passage for pedestrian and vehicular traffic during project demolition and construction. The Property Owner/Developer would be required to comply with all applicable federal, state, and local laws and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous waste to reduce the likelihood and severity of accidents during transit. The disposal of all demolition waste would be conducted in accordance with current regulations.

State-level agencies, in conjunction with the EPA and OSHA, regulate removal, abatement, and transport procedures for asbestos containing materials. Releases of asbestos from industrial, demolition, or construction activities are prohibited by these regulations, and medical evaluation and monitoring are required for employees performing activities that could expose them to asbestos. Additionally, the regulations include warnings and practices to reduce risks of asbestos emissions and exposure. Finally, federal, state, and local agencies must be notified prior to the onset of demolition or construction activities with the potential to release asbestos. Similar regulations are also required for lead-based paint during demolition and renovations activities. These regulations include the California Code of Regulations (Title 8, Section 1529); California Occupational Safety and Health Administration regulations (California Code of Regulations, Title 8, Section 1529 [Asbestos] and Section 1532.1 [Lead]); Code of Federal Regulations (Title 40, Part 61 [asbestos], Title 40, Part 763 [asbestos] and Title 29, Part 1926 [asbestos and lead]); California Health and Safety Code (Section 39650 et seq.); and South Coast Air Quality Management District Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities). As discussed in Appendix H, elevated lead and arsenic levels exceeding the DTSC soil screening level for industrial/commercial land uses was detected in one (lead) and three (arsenic) samples collected from within the landfill waste, respectively. However, based on the locations and/or depths of the samples, elevated lead or arsenic levels would have a low likelihood of being encountered during development of the Proposed Project.

The use of hazardous materials on the Project Site post-construction would consist of those required for the preparation of bodies and in commercial setting for routine maintenance and cleaning. Proper handling of the use and disposal of hazardous materials would reduce the potential for exposure. Therefore, with implementation of mitigation measures **MM HAZ-1**, **MM HAZ-2**, and **MM HAZ-3**, as well as adherence to local, state, and federal laws, potential impacts to the public or the environment through the routine transport, use, or disposal of hazardous materials 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 with Mitigation Incorporated. As discussed in Section 4.9.1(a), the Property Owner/Developer would be required to comply with all applicable federal, state, and local laws and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous waste during the construction phase to reduce the likelihood and severity of accidents during transit. Mitigation measure **MM HAZ-3** would require the Property Owner/Developer obtain and comply with a project specific Traffic Control Plan through the City of Orange's Public Works Department, to ensure safe and continuous passage for pedestrian and vehicular traffic during project demolition and construction. Additionally, removal of any unknown USTs from the Project Site would be subject to all applicable federal, state, and local laws and regulations pertaining to their removal, including those of the City's Fire Department and Orange County Health Care Agency. In addition to these regulations, the Proposed Project would be subject to mitigation measure **MM HAZ-1** and **MM HAZ-2**, which would require the Property Owner/Developer and Contractor to adhere to all the requirements, recommendations and procedures outlined in Appendices G and H, which includes performance standards in the event of a discovery of unknown environmental concerns during construction and operation of the Proposed Project.

Proper handling of the use and disposal of hazardous materials associated with commercial uses would reduce the potential for exposure. Operation of the Proposed Project would not involve the transport, use, or disposal of large quantities of hazardous materials. The use of hazardous materials on the Project Site post-construction would consist of those required for the preparation of bodies and in commercial setting for routine maintenance and cleaning. Proper handling of the use and disposal of hazardous materials would reduce the potential for exposure. Therefore, with implementation of mitigation measures **MM HAZ-1**, **MM HAZ-2**, and **MM HAZ-3**, as well as adherence to local, state, and federal laws, potential impacts to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would be less than significant.

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. The OUSD Child Development Center and Community Day School located easterly adjacent to the Project Site are located within a quarter mile of the Proposed Project. The nearest designated play area (one basketball court) is approximately 200 feet east of the Project Site and the nearest school structure is 185 feet to the

east of the Project Site. As stated in Section 4.9.1(a) and (b), the Proposed Project would be subject to mitigation measure **MM HAZ-1** and **MM HAZ-2**, which would require the Property Owner/Developer and Contractor to adhere to all the requirements, recommendations and procedures outlined in Appendices G and H, which includes performance standards in the event of a discovery of unknown environmental concerns during construction and operation of the Proposed Project.

Appendix G includes a post-closure maintenance plan, which involves dedicated programs to inspect and maintain the portion of the former La Veta Landfill cover system location on the Project Site for the duration of the post-closure period. Appendix G was prepared in accordance with Title 27 of the California Code of Regulations, Sections 21090, 21180, and 21190, which outline the specific regulatory requirements for the closure and post-closure maintenance for landfills. Specific programs outlined in Appendix G include site inspections on a quarterly basis for changes in its condition, an annual drainage system inspection for blockages, ponding, overflowing, collapse or structural failures, and continued monitoring of landfill gases and groundwater. In the event site inspections and/or monitoring discovered adverse changing conditions with regard to the site, drainage system, landfill gases, and/or groundwater, action steps outlined within Appendix H would be taken. Proper notifications to the Orange County Health Care Agency would occur, and the Property Owner would be responsible for rectifying the issue. The Property Owner/Developer would be required to comply with all applicable federal, state, and local laws and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous waste during the construction phase to reduce the likelihood and severity of accidents during transit, including obtaining the required ACM survey from SCAQMD. This required standard would be subject to review and regulation by the SCAQMD.

Further, mitigation measure **MM HAZ-3** would require the Property Owner/Developer obtain and comply with a project specific Traffic Control Plan through the City of Orange's Public Works Department, to ensure safe and continuous passage for pedestrian and vehicular traffic during project demolition and construction. Proper handling of the use and disposal of hazardous materials associated with commercial uses would reduce the potential for exposure of any school in proximity to the Project Site to hazardous materials. Therefore, with implementation of mitigation measures **MM HAZ-1**, **MM HAZ-2**, and **MM HAZ-3,** as well as adherence to local, state, and federal laws, potential impacts associated with an existing or proposed school within one-quarter mile of the Project Site through emission of hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste would be less than significant.

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

Less Than Significant Impact: Based on the California Department of Toxic Substances Control, EnviroStor Site/Facility Search[6], the Project Site is not included on a list of hazardous materials

[6] https://calepa.ca.gov/SiteCleanup/CorteseList/ Accessed June 9, 2021

sites pursuant to Government Code Section 65962.5. However, the County of Orange operated the Project Site as a municipal solid waste disposal site between 1946 to 1956. Landfill operations belonged to a large former landfill known as the "La Veta Refuse Disposal Station" which concluded waste disposal in 1956. The landfill contained solid wastes consisting of green waste, construction debris, and municipal solid waste. Appendix G provides an estimate of several hundred thousand yards accepted during operation of the landfill. In 1972, the former building used as a YMCA was constructed, with waste in the immediate area of the building excavated and installation of a passive methane venting system. The Project Site also contains five (5) existing compliance landfill gas (LFG) probes, two non-compliance LFG probes, and one (1) existing ground water monitoring well. As noted, the Project Site is not located on any lists identified pursuant to Government Code Section 65962.5. Therefore, potential impacts associated with a project being 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 create a significant hazard to the public or the environment, would be less than significant and no mitigation would be required.

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

No Impact: The Proposed Project is not located within an airport land use plan or within two miles of a public airport or public use airport[7]. The nearest airport is the John Wayne Airport which is located as near as seven miles southwest of the Project Site. The Proposed Project would not result in a safety hazard for people residing or working in the project area because of its proximity to a public airport. Therefore, no impacts associated with public use airports would occur and no mitigation would be required.

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 Proposed Project would not change the way emergency access is provided to the Project Site via Palmyra Avenue and South Tracy Lane. The closest emergency services facility Fire Station No. 1 located approximately 1.2 miles northwest of the Project Site at the corner of South Grand Street and East Almond Avenue, just west of SR-55. The Project Site would retain its current access point located at the knuckle of East Palmyra Avenue and South Tracy Lane. The Project Site would be accessible to emergency responders during construction and operation of the Proposed Project. Because the Proposed Project would comply with all applicable local requirements related to emergency vehicle access and circulation, the Proposed Project would not impair or interfere emergency access, such as via an emergency evacuation plan. The proposed on-site accessways meet the turning radii and street width requirements of the Orange City Fire Department OCFD as shown on **Figure 26** – *Fire Master Plan*. The Proposed

[7] https://files.ocair.com/media/2021-02/airportlu_20200604.pdf?VersionId=cMd6uGpbgOWGd3jMOS6TPJF3y5nMyA7F Accessed June 9, 2021

Project includes design features such as red curbing at the portion of interior circulation that fronts the proposed building. Adherence to City standards would ensure adequate access within the Project Site for emergency response or evacuation. In addition, as part of the plan check process, the Project Site plan would undergo review by the OCFD to ensure adequate infrastructure for emergency response and access. Therefore, potential impacts associated with an adopted emergency response plan or emergency evacuation plan would be less than significant and no mitigation would be required.

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

Less Than Significant Impact: The Project Site is in a highly urbanized area and is not located in a Wildland High or Very High Fire Hazard Severity Zone according to Figure PS-1: *Environmental and Natural Hazard Policy Map* in the City's General Plan Public Safety Element. As part of the plan check process, the Project Site plan would undergo review by the OCFD and would be required to comply with all fire regulations applicable to the project area. Therefore, potential impacts associated with wildland fires would be less than significant and no mitigation would be required.

Mitigation Measures

MM HAZ-1: Prior to issuance of a grading permit and ongoing during ground disturbance, construction, and operation, the Property Owner/Developer and Contractor shall implement the environmental activities in the Soil Management Plan Section 6 – *Environmental Activities for Site Redevelopment*, summarized below, in compliance with all applicable agencies, including but not limited to the City of Orange, Orange County Health Care Agency, South Coast Air Quality Management District, and California Department of Toxic Substances Control:

- 6.1 Pre-Grading Activities:
  - 6.1.1) Health and Safety Plan
  - 6.1.2) Pre-Grading Meeting
  - 6.1.3) South Coast Air Quality Management District, Various Sites Permit
- 6.2 During Excavation and Grading Activities:
  - 6.2.1) Dust and Odor Control
  - 6.2.2) Notification and Identification of Unknown Environmental Concerns
  - 6.2.3) Cleanup Standards
- 6.3 Site-Specific Soil Management Protocols:
  - 6.3.1) Stained and/or Odorous Soil or Other Unregulated Feature
  - 6.3.2) Unburied Landfill Waste
  - 6.3.3) Regulated Features
  - 6.3.4) Sampling Export Soils
  - 6.3.5) Sampling Imported Soil
  - 6.3.5.1) Sampling Criteria
  - 6.3.5.2) Acceptable Levels

- 6.4 Final Reporting

The SMP shall be implemented during site grading, construction, and project operations, inclusive of all agencies' reporting requirements and timing.

MM HAZ-2: Prior to issuance of a grading permit and ongoing during ground disturbance, construction, and operation, the Property Owner/Developer and Contractor shall implement the programs to inspect and maintain the portion of the former La Veta Landfill cover system located at the site, as cited in the Post Closure Land Use Plan (PCLUP) Section 5 – *post Closure Maintenance Plan*, summarized below, in compliance with all applicable agencies, including but not limited to the City of Orange, Orange County Health Care Agency, South Coast Air Quality Management District, and California Department of Toxic Substances Control:

- 5.1 Landfill Cover Inspections and Maintenance
- 5.2 Drainage Structures
- 5.3 Continues Landfill Gas Monitoring:
  - 5.3.1) Indoor Air Monitoring
  - 5.3.2) Landfill Gas Monitoring Probes
  - 5.3.3) Indoor Air Sampling
- 5.4 Continued Groundwater Monitoring

The PCLUP shall be implemented during site grading, construction, and project operations, inclusive of all agencies' reporting requirements and timing.

MM HAZ-3: Prior to issuance of a grading permit, the Property Owner/Developer shall obtain approval of a project specific Traffic Control Plan through the City of Orange's Public Works Department for all works on arterial streets. A California Licensed Traffic Engineer shall prepare the Traffic Control Plan.

Conclusion

With implementation of **MM HAZ-1**, **MM HAZ-2**, **and MM HAZ-3**, potential impacts of the Proposed Project associated with Hazards and Hazardous Materials would be less than significant.

4.10 Hydrology and Water Quality

Would the project:	Potentially Significant Impact	Less Than Significant 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 groundwater quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii. increase the rate or amount of surface runoff in a manner which would result in flooding on or offsite;	☐	☐	☒	☐
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of runoff; or	☐	☐	☒	☐
iv. Impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☒	☐	☐
f) Result in the potential for discharge of stormwater to affect the beneficial uses of the receiving waters from construction activities or post-construction activities?	☐	☐	☒	☐
g) Result in a potential for discharge of stormwater pollutants from areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas, loading docks or other outdoor work areas?	☐	☐	☐	☒
h) Create the potential for significant changes in the flow velocity or volume of stormwater runoff to cause environmental harm?	☐	☐	☒	☐

A Preliminary Water Quality Management Plan was completed to determine potential impacts associated with water quality (PWQMP) (**Appendix F** – *Preliminary Priority Water Quality Management Plan (WQMP) Kornerstone Muslim Cemetery*, DRC Engineering, Inc., April 2021).

A Post Closure Land Use Plan (PCLUP) was completed to determine potential impacts to hazards and hazardous materials associated with the development of the Project Site. (**Appendix G** – *Post*

Closure Land Use Plan Former La Veta Refuse Disposal Station, Ardent Environmental Group, Inc., October 2020).

A Soil Management Plan was completed to determine potential impacts to hazards and hazardous materials associated with the development of the Project Site. (**Appendix H** – *Soil Management Plan Former La Veta Refuse Disposal Station,* Ardent Environmental Group, Inc., October 2020).

A Conceptual Hydrology Study was completed to determine potential impacts associated with hydrology (**Appendix I** – *Conceptual Hydrology Study for Kornerstone Muslim Cemetery*, DRC Engineering, Inc., May 2021).

A Hydrology CEQA Memo was completed to clarify potential impacts to hydrology associated with the development of the Proposed Project (**Appendix J** – *Palmyra Cemetery – CEQA Questions*, DRC Engineering, Inc., May 2021).

Environmental Analysis

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

Less Than Significant Impact: Construction of the Proposed Project would include grading, excavation, and other earthmoving activities that have the potential to cause erosion that would subsequently degrade water quality and/or violate water quality standards. As required by the Clean Water Act, the Property Owner/Developer must comply with the Santa Ana Municipal Separate Storm Sewer (MS4) National Pollution Discharge Elimination System (NPDES) Permit. The NPDES MS4 Permit Program, which is administered in the project area by the City of Orange and County of Orange and is issued by the Santa Ana Regional Water Quality Control Board (RWQCB), regulates storm water and urban runoff discharges from developments to natural and constructed storm drain systems in the City of Orange. Since the Proposed Project would disturb one or more acres of soil, the Property Owner/Developer 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 activities subject to the Construction General Permit include clearing, grading, and disturbances such as stockpiling or excavation. The Construction General Permit requires implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would contain a site map showing the construction perimeter, proposed buildings, storm water collection and discharge points, general pre- and post-construction topography, drainage patterns across the Project Site, and adjacent roadways. Section A of the Construction General Permit describes the elements that must be contained in the SWPPP.

The SWPPP must also include BMPs designed to protect against storm water runoff; a visual monitoring program; a chemical monitoring program for “non-visible” pollutants should the BMPs fail; and a sediment monitoring plan, should the Project Site discharge directly into a water body listed on the 303(d) list for sediment. The Project Site is within the Santa Ana River Watershed, which covers 2,700 square miles, which is one of the three watersheds located within Orange’s corporate boundaries. The Santiago Creek flows northeast to southwest through the northwest corner of the Project Site. The area south of the proposed building drains toward the

existing parking lot and to Palmyra Avenue. However, the area north of the proposed building does not have definitive drainage directions with the existing Santiago Trail acting as a ridge. This results in the area west of the trail draining directly into Santiago Creek and the area east of the trail draining in arbitrary directions and eventually, draining to the existing parking lot and to Palmyra Avenue. There is no existing storm drain inlet in the vicinity of the Project Site for Palmyra Avenue to drain into. According to the Orange County Flood Control District, Base Map of Drainage Facilities (Appendix I, p. 13), the closest inlet is located at the intersection of Tracy Lane and Debora Lane. There is an existing 24-inch reinforced concrete pipe (RCP) storm drain under the Project Site, from Palmyra Avenue to Santiago Creek. The upstream of the 24-inch RCP is connected to an 18-inch storm drain from the adjacent OUSD Child Development Center (Appendix I).

Under the Proposed Project, the Project Site would be divided into three (3) drainage areas:

(1) The area west of the Santiago Creek Trail would remain the same as the existing condition and would continue to drain into Santiago Creek;

(2) The area south of the retaining/screen walls along Palmyra Avenue would drain into Palmyra Avenue;

In the area south of the retaining/screen walls along Palmyra Avenue, it would be infeasible to collect and convey the stormwater from this area to the proposed detention system.

(3) The area of proposed construction would collect stormwater through the proposed inlets.

The inlets would drain into the proposed storm drain systems and to the proposed underground detention system. A proposed vortex separator unit would be the pre-treatment for the stormwater in the storm drains before the water enters the detention system. The underground detention system would outlet to a pipe connected to a proposed diversion utility access hole. The diversion utility access hole would serve two functions: to discharge low flows to a proposed pump, where a Modular Wetland unit would then treat the flow, and to control the high flows so that the proposed sum of discharge from the Project Site would not exceed the flow rate from the existing condition. Both the low flow and the high flow would confluence on the south side of the Modular Wetland unit and the pipe with the combined flow would be connected to the existing 24-inch RCP.

The County of Orange operated the Project Site as a municipal solid waste disposal site between 1946 to 1956. Landfill operations belonged to a large former landfill known as the “La Veta Refuse Disposal Station” which concluded waste disposal in 1956. The landfill contained solid wastes consisting of green waste, construction debris, and municipal solid waste. Due to the concern for potential contamination, the Proposed Project would not utilize infiltration for storm water treatment purposes (Appendix J). The Proposed Project’s underground detention system would be solid wall 72-inch corrugated metal pipes.

Therefore, with incorporation of the local and state policies and requirements, potential impacts associated with water quality standards or waste discharge requirements would be less than significant and no mitigation would be required.

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: Between 60-80 percent of the water supply to the City is drawn from municipal wells drilled into the Santa Ana River Aquifer from the Lower Santa Ana River groundwater basin managed by the Orange County Water District (OCWD). The City is a member of this District, which manages the Orange County Groundwater Basin, monitors, and maintains ground water quality in the region. Other water sources include surface water runoff into Irvine Lake purchased from the Serrano Water District. The Lower Santa Ana River basin, which extends from San Bernardino County southwest to the Pacific Ocean, underlies the entire western portion of the planning area. The Santa Ana Mountains and foothills form the basin's eastern boundary. The ground water supply is supplemented by imported water purchased through the Metropolitan Water District of Orange County (MWDOC).

To promote water conservation, the City utilizes water conservation measures in accordance with the City's Municipal Code, and sustainability in Project Site planning and building design. The Proposed Project would be subject to such regulations, which include OMC Chapter 7.02 – *Water Conservation and Water Supply Shortage*, which would require the use of recycled water. The Proposed Project would use native and drought-tolerant plants for landscaping and would use recycled water for irrigating landscape. Using recycled water instead of expensive and increasingly scarce potable water helps to ensure the long-term availability of drinking water to Orange residents.

The City's General Plan Natural Resources Element, Figure NR-2: *Drainage Areas and Water Recharge Facilities* shows that the Project Site is not an identified groundwater recharge facility. Development of the Proposed Project would not interfere with groundwater recharge through the development of impervious areas on the Project Site. Development of the Proposed Project would maintain the existing amount of pervious and impervious surface area onsite, at 10-percent impervious and 90-percent pervious. Groundwater beneath the Project Site is approximately 200 feet below the ground (bgs) and would not be encountered during redevelopment or cemetery operation activities (Appendix H). OCWD is currently completing groundwater monitoring at the Project Site and would continue to do so following construction of the Proposed Project. The groundwater monitoring well would be preserved during the Proposed Project's activities. Therefore, potential impacts associated with groundwater supplies or groundwater recharge would be less than significant and no mitigation would be required.

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 off-site?

Less Than Significant Impact: Grading activities during construction of the Proposed Project may result in wind driven soil erosion and loss of topsoil. However, all construction and grading activities would comply with City's grading ordinance (OMC Chapter 16.40) which requires adherence to the City's Manual of Grading (2012). The City's Manual of Grading requires the Proposed Project submit an erosion and sediment control plan as part of the grading permit review, which must be approved prior to issuance of any grading permit (p. 42). The Proposed Project would also be required to comply with the manual's Section 13 requirements for erosion and sediment control and landscaping, which requires the use of BMPs. Appendix F identifies project specific BMPs which would apply to the Proposed Project, such as street sweeping and inlet drainage control measures (e.g., stenciling, signage). The Proposed Project would implement BMPs to control project runoff and protect water quality, which would limit operational impacts from the Proposed Project. A SWPPP would be prepared for the construction phase of the Proposed Project, which would protect against storm water runoff. Upon project completion, the Project Site would be developed with a cemetery use, with proposed building, and new paved surfaces, and landscaping, which would prevent substantial erosion from occurring. Therefore, potential impacts from erosion would be less than significant and no mitigation would be required.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Less Than Significant Impact: The Proposed Project would not involve an alteration of the course of a stream or river. The Proposed Project would increase the amount of runoff for the 2-year, 24-hour storm event. The Proposed Project would result in an increase in runoff of more than 5-percent from the existing condition to the proposed condition and the time of concentration would decrease more than 5-percent from the existing condition to the proposed condition. The proposed underground detention system would account for the increase of runoff volume and the decrease of time of concentration. The post-construction drainage of the remainder of the Project Site would include inlets which would drain into the proposed storm drain systems and to the proposed underground detention system. A proposed vortex separator unit would be the pre-treatment for the stormwater in the storm drains before the water enters the detention system. The underground detention system would outlet to a pipe connected to a proposed diversion utility access hole. The diversion utility access hole would serve two functions: to discharge low flows to a proposed pump, where a Modular Wetland unit would then treat the flow, and to control the high flows so that the proposed sum of discharge from the Project Site would not exceed the flow rate from the existing condition. Flows greater than the required treatment rate would discharge through control device in the diversion utility access hole so that the peak discharge rates would not exceed the allowable rates. Both the low flow and the high flow would confluence on the south side of the Modular Wetland unit and the pipe with the combined flow would be connected to the existing 24-inch RCP. The area south of the

retaining/screen walls along Palmyra Avenue would drain into Palmyra Avenue, as it would be infeasible to collect and convey the stormwater from this area to the proposed detention system. The drainage pattern would remain the same for the area west of the Santiago Creek and multi-purpose Santiago Creek Trail, as no part of the Proposed Project would occur in that area of the Project Site (Appendix I). Therefore, potential impacts associated with on or off-site flooding due to an altered drainage pattern would be less than significant and no mitigation would be required.

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

Less Than Significant Impact: As discussed in Section 4.10(c)(ii), the Proposed Project would increase the amount of runoff for the 2-year, 24-hour storm event. The Proposed Project would result in an increase in runoff of more than 5-percent from the existing condition to the proposed condition and the time of concentration would decrease more than 5-percent from the existing condition to the proposed condition. The proposed underground detention system would account for the increase of runoff volume and the decrease of time of concentration. The post-construction drainage of the remainder of the Project Site would include inlets which would drain into the proposed storm drain systems and to the proposed underground detention system. A proposed vortex separator unit would be the pre-treatment for the stormwater in the storm drains before the water enters the detention system. The underground detention system would outlet to a pipe connected to a proposed diversion utility access hole. The diversion utility access hole would serve two functions: to discharge low flows to a proposed pump, where a Modular Wetland unit would then treat the flow, and to control the high flows so that the proposed sum of discharge from the Project Site would not exceed the flow rate from the existing condition. Flows greater than the required treatment rate would discharge through control device in the diversion utility access hole so that the peak discharge rates would not exceed the allowable rates. Both the low flow and the high flow would confluence on the south side of the Modular Wetland unit and the pipe with the combined flow would be connected to the existing 24-inch RCP. The area south of the retaining/screen walls along Palmyra Avenue would drain into Palmyra Avenue, as it would be infeasible to collect and convey the stormwater from this area to the proposed detention system. The drainage pattern would remain the same for the area west of the Santiago Creek multi-purpose Santiago Creek Trail, as no part of the Proposed Project would occur in that area of the Project Site (Appendix I). Non-structural BMPs such as street sweeping, and common area landscape maintenance and litter control would also contribute towards runoff control and water quality protection. In addition, the Property Owner/Developer would be required to comply with the NPDES permit requirements to reduce any potential water quality impacts.

While discharge of runoff would increase as a result of the Proposed Project, the project design would ensure Project Site post-development flows would not exceed allowable rates. Therefore, potential impacts from runoff that would exceed the capacity of the drainage systems or provide additional sources of polluted runoff would be less than significant and no mitigation would be required.

iv) Impede or redirect flood flows?

Less Than Significant Impact: As discussed in Section 4.10(c)(ii), the Proposed Project would result in an increase in runoff of more than 5-percent from the existing condition to the proposed condition and the time of concentration would decrease more than 5-percent from the existing condition to the proposed condition. However, the proposed underground detention system would account for the increase of runoff volume and the decrease of time of concentration. Both the low flow and the high flow would confluence on the south side of the Modular Wetland unit and the pipe with the combined flow would be connected to the existing 24-inch RCP. While the Proposed Project would occur on a Project Site that contains a portion of the Santiago Creek, no portion of the Proposed Project would occur within the Santiago Creek or existing multi-purpose Santiago Creek Trail area. The drainage pattern would remain the same for the area west of the Santiago Creek multi-purpose Santiago Creek Trail, as no part of the Proposed Project would occur in that area of the Project Site. Therefore, potential impacts associated with flood flows would be less than significant and no mitigation would be required.

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

No Impact: Seismic seiches are standing waves set up on rivers, reservoirs, ponds, and lakes when seismic waves from an earthquake pass through the area. They are in direct contrast to tsunamis which are giant sea waves created by the sudden uplift of the sea floor. The Project Site is surrounded by a flat and urbanized area; however, the Project Site is adjacent the Santiago Creek. The Project Site is located within flood zone X as designated by the FEMA Flood Maps and would be separated from the Santiago Creek and multi-purpose Santiago Creek Trail by a variable height retaining wall and up to six (6) foot wrought iron fence. Further, the Project Site is located approximately 13 miles from the Pacific Ocean and would not likely be impacted by a tsunami. The surrounding topography of the Project Site is flat and would not be subject to inundation by mudflow. Therefore, no impacts related to seiche, tsunami, or mudflow would occur, and no mitigation would be required.

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

Less Than Significant Impact with Mitigation Incorporated: As discussed in Section 4.10(a), construction of the Proposed Project would include grading, excavation, and other earthmoving activities that have the potential to cause erosion that would subsequently degrade water quality and/or violate water quality standards. As required by the Clean Water Act, the Property Owner/Developer must comply with the National Pollution Discharge Elimination System (NPDES) Permit. The NPDES Permit Program, which is administered in the project area by the City of Orange and County of Orange and is issued by the Santa Ana Regional Water Quality Control Board (RWQCB), regulates storm water and urban runoff discharges from developments to natural and constructed storm drain systems in the City of Orange. Since the Proposed Project would disturb one or more acres of soil, the Property Owner/Developer 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 activities subject to the Construction General Permit include clearing, grading, and disturbances such as stockpiling or excavation. The Construction General Permit requires implementation of a

Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would contain a site map showing the construction perimeter, proposed buildings, storm water collection and discharge points, minimum best management practices, general pre- and post-construction topography, drainage patterns across the Project Site, and adjacent roadways. Section A of the Construction General Permit describes the elements that must be contained in the SWPPP.

The SWPPP must include minimum BMPs and project specific BMPs designed to protect against storm water runoff; a visual monitoring program; a chemical monitoring program for "non-visible" pollutants should the BMPs fail; and a sediment monitoring plan, should the Project Site discharge directly into a water body listed on the 303(d) list for sediment. The Project Site is within the Santa Ana River Watershed, which covers 2,700 square miles, which is one of the three watersheds located within Orange's corporate boundaries. Santiago Creek flows northeast to southwest through the northwest corner of the Project Site. The area south of the proposed building drains toward the existing parking lot and to Palmyra Avenue. However, the area north of the proposed building does not have definitive drainage directions with the existing Santiago Trail acting as a ridge. This results in the area west of the trail draining directly into Santiago Creek and the area east of the trail draining in arbitrary directions and eventually, draining to the existing parking lot and to Palmyra Avenue. There is no existing storm drain inlet in the vicinity of the Project Site for Palmyra Avenue to drain into. According to the Orange County Flood Control District, Base Map of Drainage Facilities (Appendix I, p. 13), the closet inlet is located at the intersection of Tracy Lane and Debora Lane. There is an existing 24-inch reinforced concrete pipe (RCP) storm drain under the Project Site, from Palmyra Avenue to Santiago Creek. The upstream of the 24-inch RCP is connected to an 18-inch storm drain from the adjacent OUSD Child Development Center (Appendix I).

Under the Proposed Project, the Project Site would be divided into three (3) drainage areas:

(1) The area west of the Santiago Creek Trail would remain the same as the existing condition and would continue to drain into Santiago Creek;

(2) The area south of the retaining/screen walls along Palmyra Avenue would drain into Palmyra Avenue;

In the area south of the retaining/screen walls along Palmyra Avenue, it would be infeasible to collect and convey the stormwater from this area to the proposed detention system.

(3) The area of proposed construction would collect stormwater through the proposed inlets.

The inlets would drain into the proposed storm drain systems and to the proposed underground detention system. A proposed vortex separator unit would be the pre-treatment for the stormwater in the storm drains before the water enters the detention system. The underground detention system would outlet to a pipe connected to a proposed diversion utility access hole. The diversion utility access hole would serve two functions: to discharge low flows to a proposed pump, where a Modular Wetland unit would then treat the flow, and to control the high flows so that the proposed sum of discharge from the Project Site would not exceed the flow rate from the existing condition. Both the low flow and the high flow would confluence on the south side of the Modular Wetland unit and the pipe with the combined flow would be connected to the existing 24-inch RCP.

Due to the concern for potential contamination, the Proposed Project would not utilize infiltration for storm drain purposes (Appendix J). The Proposed Project's underground detention system would be solid wall 72-inch corrugated metal pipes. The Project Site is not an identified groundwater recharge facility. Development of the Proposed Project would not interfere with groundwater recharge through the development of impervious areas on the Project Site. Development of the Proposed Project would maintain the existing amount of pervious and impervious surface area onsite, at 90-percent impervious and 10-percent pervious. Development of the Proposed Project would not alter the course of a stream or river. Implementation of the NPDES permit requirements would reduce potential impacts from erosion and siltation during the Project Site's preparation and earthmoving phases to less.

As discussed in Section 4.10(b), groundwater beneath the Project Site is approximately 200 feet below the ground (bgs) and would not be encountered during redevelopment or cemetery operation activities (Appendix H). OCWD is currently completing groundwater monitoring at the Project Site and would continue to do so following construction of the Proposed Project. The groundwater monitoring well would be preserved during the Proposed Project's activities. As discussed in Section 4.9 – *Hazards and Hazardous Materials*, application of mitigation measure **MM HAZ-1** would ensure existing soils concentrations onsite do not present a human health risk or threat to groundwater. Therefore, with implementation of **MM HAZ-1**, potential impacts associated with conflict with, or obstruction of implementation of a water quality control plan or sustainable groundwater management plan would be less than significant.

f) Result in the potential for discharge of stormwater to affect the beneficial uses of the receiving waters from construction activities or post-construction activities?

Less Than Significant Impact: As discussed in Section 4.10(a), construction of the Proposed Project would include grading, excavation, and other earthmoving activities that have the potential to cause erosion that would subsequently degrade water quality and/or violate water quality standards. As required by the Clean Water Act, the Property Owner/Developer must comply with the National Pollution Discharge Elimination System (NPDES) Permit. The NPDES Permit Program, which is administered in the project area by the City of Orange and County of Orange and is issued by the Santa Ana Regional Water Quality Control Board (RWQCB), regulates storm water and urban runoff discharges from developments to natural and constructed storm drain systems in the City of Orange. Since the Proposed Project would disturb one or more acres of soil, the Property Owner/Developer 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 activities subject to the Construction General Permit include clearing, grading, and disturbances such as stockpiling or excavation. The Construction General Permit requires implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would contain a site map showing the construction perimeter, proposed buildings, storm water collection and discharge points, minimum best management practices, general pre- and post-construction topography, drainage patterns across the Project Site, and adjacent roadways. Section A of the Construction General Permit describes the elements that must be contained in the SWPPP.

Under the Proposed Project, the Project Site would be divided into three (3) drainage areas. The portion of the Project Site that includes the Santiago Creek and multi-purpose Santiago Creek Trail would undisturbed and maintain existing drainage patters. All other portions of the Project Site would entail new drainage systems that collect and covey stormwater discharge to the proposed onsite treatment system, with exception of the narrow strip of land along the south Project Site boundary. This area would be outside of the proposed retaining wall and would be infeasible to collect the storm water from this area to discharge into the proposed on-site storm drain. Since this area would be landscaped, it is a self-treat area. BMPs would be maintained to ensure proper operation and daily function as applicable for the Proposed Project, including activity restrictions, common area landscape management, street sweeping, and the modular wetland system. Therefore, potential impacts associated with discharge of stormwater to affect the beneficial uses of the receiving waters from construction activities or post-construction activities would be less than significant and no mitigation would be required.

g) *Result in a potential for discharge of stormwater pollutants from areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas, loading docks or other outdoor work areas?*

No Impact: The Proposed Project involves the construction of a 3,339-gravesite cemetery, a 5,138 SF, two-story building to support activities associated with funeral burial practices, accessory parking, and landscaping. The project also includes ancillary administrative office space for the funeral burial practices, construction of a one-story, 800 SF storage shed with outdoor storage yard, trash enclosure, and utility shed, as well as the demolition and construction of a 51-space surface parking lot. The Proposed Project would provide exterior landscaping and fencing/gating throughout the Project Site. No portion of the Proposed Project would occur within Santiago Creek or existing multi-purpose Santiago Creek Trail area. Activities associated with equipment or vehicle maintenance and repair, washing, or cleaning are not permitted under local and state regulations. The Proposed Project does not include outdoor material storage or outdoor food preparation areas. Waste generated from operation of the Proposed Project would be stored onsite and contained in designated trash enclosure and trash receptacles constructed to City Standard Plan 409 – *Trash Storage Areas*. Proper handling of the use and disposal of hazardous materials associated with commercial uses would reduce the potential for exposure. Operation of the Proposed Project would not involve the transport, use, or disposal of large quantities of hazardous materials. The use of hazardous materials on the Project Site post-construction would consist of those required for the preparation of bodies and in commercial setting for routine maintenance and cleaning. Proper handling of the use and disposal of hazardous materials would reduce the potential for exposure. Therefore, no impacts associated with discharge of stormwater pollutants from area of material storage, vehicle or equipment fueling, maintenance, waste handling, delivery areas, loading docks or other outdoor work areas would occur and no mitigation it required.

h) Create the potential for significant changes in the flow velocity or volume of stormwater runoff to cause environmental harm?

Less Than Significant Impact: As discussed in Section 4.10(c), the Proposed Project would increase the amount of runoff for the 2-year, 24-hour storm event. The Proposed Project would result in an increase in runoff of more than 5-percent from the existing condition to the proposed condition and the time of concentration would decrease more than 5-percent from the existing condition to the proposed condition. The proposed underground detention system would account for the increase of runoff volume and the decrease of time of concentration. The post-construction drainage of the remainder of the Project Site would include inlets which would drain into the proposed storm drain systems and to the proposed underground detention system. A proposed vortex separator unit would be the pre-treatment for the stormwater in the storm drains before the water enters the detention system. The underground detention system would outlet to a pipe connected to a proposed diversion utility access hole. The diversion utility access hole would serve two functions: to discharge low flows to a proposed pump, where a Modular Wetland unit would then treat the flow, and to control the high flows so that the proposed sum of discharge from the Project Site would not exceed the flow rate from the existing condition. Flows greater than the required treatment rate would discharge through control device in the diversion utility access hole so that the peak discharge rates would not exceed the allowable rates. Both the low flow and the high flow would confluence on the south side of the Modular Wetland unit and the pipe with the combined flow would be connected to the existing 24-inch RCP. The area south of the retaining/screen walls along Palmyra Avenue would drain into Palmyra Avenue, as it would be infeasible to collect and convey the stormwater from this area to the proposed detention system. The drainage pattern would remain the same for the area west of the Santiago Creek and multi-purpose Santiago Creek Trail, as no part of the Proposed Project would occur in that area of the Project Site (Appendix I). Therefore, potential impacts associated with changes in flow velocity or volume of storm water runoff would be less than significant and no mitigation would be required.

Mitigation Measures

MM HAZ-1: Prior to issuance of any ground disturbing permits, and during the course of all Proposed Project activities including construction and operation, the Property Owner/Developer shall adhere to the requirements, recommendations, and procedures outlined within Appendix H (*Soil Management Plan Former La Veta Refuse Disposal Station,* Ardent Environmental Group, Inc., October 2020).

Conclusion

With implementation of **MM HAZ-1**, potential impacts of the Proposed Project associated with Hydrology and Water Quality would be less than significant.

4.11 Land Use and Planning

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

Environmental Analysis

a) Would the project physically divide an established community?

Less Than Significant Impact: The Proposed Project would entail construction of a 3,339-gravesite cemetery, a 5,138 SF, two-story building to support activities associated with funeral burial practices, accessory parking, and landscaping. The Proposed Project would not involve grading or ground disturbing activities within the Santiago Creek or adjacent multi-purpose Santiago Creek Trail. The Project Site's General Plan land use designated is Open Space-Park (OS-P), Open Space (OS), and Low Density Residential (LDR), with the entire Project Site located within the Yorba South Commercial Overlay. The Proposed Project would require a General Plan Amendment (GPA) to re-designate the undeveloped LDR portion of the Project Site to OS-P to bring the southern portion of the site into consistency with the existing zoning of Recreational-Open Space.

This site is located in an already urbanized area, which is adjacent to existing single-family residential development, other open space, and institutional uses. The Project Site is located adjacent the Yorba Dog Park, OUSD Child Development Center and Community Day School, sits at the northern edge of a residentially zoned area, and is adjacent to the SR-55 freeway which bisects the City. The northwestern portion of the Project Site includes the Santiago Creek and multi-purpose Santiago Creek Trail; however, no portion of the Proposed Project would be located in the creek and multi-purpose Santiago Creek Trail area. The Project Site is located within an area that is established and would redevelop a site currently developed. While the project would include a general plan amendment to change the southern portion of the site from LDR to OS-P, this would not result in the division of an established community. The proposed portion is a remnant from the original single-family subdivision adjacent to the south, across Palmyra Avenue, and is a contiguous part of the Project Site. Therefore, the Proposed Project would not physically divide an established community and impacts associated with physically dividing an established community would be less than significant and no mitigation would be required.

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 Applicant proposes to amend the General Plan to change a portion of the land use designation of the Project Site from Low Density Residential to Open Space-Park in order to bring the General Plan land use designation into consistency with the existing zoning designation of the entire site, which is Recreational Open Space.

The Proposed Project supports the following policies of the City's General Plan Land Use Element:

Goal 1.0: Meet the present and future needs of all residential and business sectors with a diverse and balanced mix of land uses:

Policy 1.2. Balance economic gains from new development while preserving the character and densities of residential neighborhoods.

Policy 1.4. Ensure that new development reflects existing design standards, qualities, and features that are in context with nearby development.

Policy 1.6: Minimize effects of new development on the privacy and character of surrounding neighborhoods.

Goal 6.0: Advance development activity that is mutually beneficial to both the environment and the community:

Policy 6.1. Ensure that new development is compatible with the style and design of established structures and the surrounding environment.

Policy 6.3: Establish and maintain greenways, and pedestrian and bicycle connections that complement the residential, commercial, and open space areas they connect.

Policy 6.4: Create and maintain open space resources that provide recreational opportunities, protect hillside vistas and ridgelines, and conserve natural resources.

The Proposed Project would reconstruct a previously existing building that was destroyed by fire and construct a cemetery, paved parking lot, and landscaping. The Project Site maintains a zoning designation of Recreational Open Space (RO) and General Plan Land Use designations of Open Space-Park (OS-P), Open Space (OS), and Low Density Residential (LDR). Development of the Proposed Project would require a General Plan Amendment for the southern parcel, which maintains the Low-Density Residential designation--a holdover from its initial creation as a part of the southern adjacent residential subdivision. This portion of the Project Site would be amended from Low Density Residential to Open Space-Park. The intent for the Open Space-Park designation is to function as passive and active recreation. Since the Project Site was formally used as the La Veta Landfill between 1946 to 1956, the proposed Open Space-Park land use designation would provide a more appropriate designation than Low Density Residential, as the Project Site maintains complex conditions that would not be conducive to future residential development. Upon the approval of the proposed General Plan Amendment, the Proposed Project's land use designation would be consistent with the existing zoning of the southern parcel (RO) and remaining portions of the Project Site. The Open Space land use designation would be compatible with the adjacent residential and institutional land uses, and with the development pattern of the surrounding area. Therefore, potential impacts associated with compliance with

the General Plan Land Use Element and Zoning requirements would be less than significant and no mitigation would be required.

Mitigation Measures

No mitigation measures associated with impacts to Land Use and Planning apply to the Proposed Project.

Conclusion

Potential impacts of the Proposed Project associated with Land Use and Planning would be less than significant and no mitigation would be required.

4.12 Mineral Resources

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

Environmental Analysis

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?

No Impact: Historically, Orange contributed to the gravel industry, but the City's mineral resources have been mostly exhausted. Over the years, Orange has been characterized by numerous state-designated Mineral Resource Zones (MRZs), which identify the locations of regionally significant aggregate deposits. The MRZs have since been declassified, either as a result of completed mining activity, or as a result of urban development. The Resource Area land use designation allows for only aggregate extraction or recreation uses. Although the Open Space designation does not permit mining, it will protect areas from urbanization, making it possible to mine the areas at some future date if necessary. According to the City of Orange General Plan Land Use Element[8] the Project Site is not designated as Resource Area. Therefore, no impacts associated with any known mineral resource that would be of value to the region and the residents of the state would occur and no mitigation would be required.

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: As discussed in Section 4.11(a), the Project Site is not located within a Resource Area as designated with the City's General Plan Land Use Element. Therefore, no impacts associated with the availability of any locally important mineral resource recovery sites would occur and no mitigation would be required.

Mitigation Measures

No mitigation measures associated with impacts to Mineral Resources apply to the Proposed Project.

Conclusion

There would be no impacts of the Proposed Project associated with Mineral Resources and no mitigation would be required.

[8] Figure LU-5, City of Orange General Plan Land Use Policy Map, 2015.

4.13 Noise

Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan (Los Alamitos Armed Forces Reserve Center or Fullerton Municipal Airport) 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?	☐	☐	☒	☐

A Noise Impact Analysis was completed to determine potential impacts to noise associated with the development of the Proposed Project (**Appendix K** – *Orange Palmyra Cemetery Noise Impact Analysis, City of Orange*, Ganddini Group Inc., May 2021, Revised February 2022).

A Focused Vibration Analysis was completed to determine potential impacts associated with vibration from the development of the Proposed Project (**Appendix L** - *Orange Palmyra Cemetery Focused Vibration Analysis*, Ganddini Group Inc., June 2021, Revised February 2022).

On September 1, 2020, the City of Orange issued a building permit (No. 2008-192) for the demolition of the single-family residence and pool located immediately adjacent to the south of the Project Site, identified as 334 S. Jennifer Lane (APN 392-052-06). The applicant of record for the building permit is the County of Orange. Subsequently, on October 9, 2020, the City finalized the building permit, and the Jennifer Lane property is vacant. In correspondence with the County of Orange[9], the Jennifer Lane property was acquired and subsequently demolished due to migration from the La Veta landfill. As a result of this demolition, the nearest single-family residential sensitive receptors to the Project Site are those located 60-feet south/southeast of the Project Site's southern property line.

Appendices K and L identify the nearest sensitive receptors to the Project Site, including the prior single-family residence located at 334 Jennifer Lane. Due to the acquisition and demolition of the residence, the nearest sensitive receptor to the southwest of the Project Site is the single-family residence located 70-feet from the Project Site's southern property line. Appendix L identified potentially significant vibration impacts to the sensitive receptor at 334 S. Jennifer Lane, as the prior residence was located within 15-feet of the Project Site's southwestern property line.

[9] County of Orange, John Powers – Project Manager. Phone Call. August 19, 2021.

However, with the demolition of the Jennifer Lane property, there are no significant impacts to any remaining identified sensitive receptors within Appendix L. Therefore, potential impacts to existing sensitive receptors associated with the Proposed Project are discussed below.

The Proposed Project will be required to comply with the following regulatory conditions from the City of Orange and State of California (State).

OMC Section 8.24.040 Exterior Standards

OMC Section 8.24.040 restricts noise levels to an hourly average (Leq) of 55 dBA from 7:00 AM to 10:00 PM and 50 dBA from 10:00 PM to 7:00 AM and a maximum level of 70 dBA from 7:00 AM to 10:00 PM and 65 dBA from 10:00 PM to 7:00 AM. It is unlawful for any person at any location within the City to create any noise, or to allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, which causes the noise level when measured on any other residential property to exceed the noise standards identified in Section 8.24.040(A). In the event the ambient noise level exceeds the noise standards identified in Section 8.24.040 the "adjusted ambient noise level" shall be applied as the noise standard. In cases where the noise standard is adjusted due to a high ambient noise level, the noise standard shall not exceed the "adjusted ambient noise level", or 70 dB (A), whichever is less. In cases where the ambient noise level is already greater than 70 dB (A), the ambient noise level shall be applied as the noise standard. Each of the noise limits specified in Section 8.24.040 shall be reduced by 5 dB(A) for impact or simple tone noises, recurring impulsive noises, or for noises consisting of speech or music.

OMC Section 8.24.050 Exemption from Chapter Provisions

OMC Section 8.24.050 exempts the following activities from provisions of Section 8.24.040: noise sources associated with construction, repair, remodeling, or grading of any real property, provided said activities take place between the hours of 7:00 AM and 8:00 PM on any day except for Sunday or a Federal holiday, or between the hours of 9:00 AM and 8:00 PM on Sunday or a Federal holiday. Noise sources associated with the maintenance of real property, provided such activities take place between the hours of 7:00 AM and 8:00 PM on any day except Sunday or a Federal holiday, or between the hours of 9:00 AM and 8:00 PM on Sunday or a Federal holiday. Industrial or commercial noise affecting residential units, when the residential unit is associated with said industrial or commercial use, and mobile noise sources including but not limited to operational noise from trains, or automobiles or trucks traveling on roadways.

City of Orange General Plan

Applicable policies and standards governing environmental noise in the City are set forth in the General Plan Noise Element. The applicable goals and policies are presented below:

Goal 1.0: Promote a pattern of land uses compatible with current and future noise levels.

Policy 1.1: Consider potential excessive noise levels when making land use planning decisions.

Policy 1.2: Encourage new development projects to provide sufficient spatial buffers to separate excessive noise generating land uses and noise-sensitive land uses.

Policy 1.4: Ensure that acceptable noise levels are maintained near noise-sensitive uses.

Policy 1.5: Reduce impacts of high-noise activity centers located near residential areas.

Policy 1.6: Require an acoustical study for proposed developments in areas where the existing and projected noise level exceeds or would exceed the maximum allowable levels identified in Table 3. The acoustical study shall be performed in accordance with the requirements set forth within this Noise Element.

Goal 2.0: Minimize vehicular traffic noise in residential areas and near noise-sensitive land uses.

Policy 2.1: Encourage noise-compatible land uses along existing and future roadways, highways, and freeways.

Policy 2.2: Encourage coordinated site planning and traffic control measures that minimize traffic noise in noise-sensitive land use areas.

Goal 7.0: Minimize construction, maintenance vehicle, and nuisance noise in residential areas and near noise-sensitive land uses.

Policy 7.2: Require developers and contractors to employ noise minimizing techniques during construction and maintenance operations.

Policy 7.3: Limit the hours of construction and maintenance operations located adjacent to noise sensitive land uses.

Policy 7.4: Encourage limitations on the hours of operations and deliveries for commercial, mixed-use, and industrial uses abutting residential zones.

California Department of Health Services Office of Noise Control

Established in 1973, the California Department of Health Services Office of Noise Control (ONC) was instrumental in developing regularity tools to control and abate noise for use by local agencies. One significant model is the "Land Use Compatibility for Community Noise Environments Matrix," which allows the local jurisdiction to clearly delineate compatibility of sensitive uses with various incremental levels of noise.

Government Code Section 65302

Government Code Section 65302 mandates that the legislative body of each county and city in California adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines published by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable.

State of California General Plan Guidelines 2017

Though not adopted by law, the State of California General Plan Guidelines 2017, published by the California Governor's Office of Planning and Research (OPR) (OPR Guidelines), provides guidance for the compatibility of projects within areas of specific noise exposure. The OPR Guidelines identify the suitability of various types of construction relative to a range of outdoor noise levels and provide each local community some flexibility in setting local noise standards that allow for the variability in community preferences. Findings presented in the Levels of Environmental Noise Document (EPA 1974) influenced the recommendations of the OPR Guidelines, most importantly in the choice of noise exposure metrics (i.e., Ldn or CNEL) and in the upper limits for the normally acceptable outdoor exposure of noise-sensitive uses.

The OPR Guidelines include a Noise and Land Use Compatibility Matrix which identifies acceptable and unacceptable community noise exposure limits for various land use categories. Where the "normally acceptable" range is used, it is defined as the highest noise level that should be considered for the construction of the buildings which do not incorporate any special acoustical treatment or noise mitigation. The "conditionally acceptable" or "normally unacceptable" ranges include conditions calling for detailed acoustical study prior to the construction or operation of the Proposed Project. The City of Orange has adopted their own land use/noise compatibility guidelines, as detailed in Appendix K.

Environmental Analysis

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

Less Than Significant Impact with Mitigation Incorporated: The Proposed Project would not generate 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, with mitigation incorporated. The following section

calculates the potential noise emissions associated with the temporary construction activities and long-term operations of the Proposed Project and compares the noise levels to the City standards.

For off-site project generated noise, the City of Orange General Plan Noise Element states that, in addition to the maximum allowable noise level standards (Tables 2 and 3), an increase in ambient noise levels is assumed to be a significant noise impact if a project causes ambient noise levels to exceed the following:

- Where the existing ambient noise level is less than 65 dBA, a project related permanent increase in ambient noise levels of 5 dBA CNEL or greater.

- Where the existing ambient noise level is greater than 65 dBA, a project related permanent increase in ambient noise levels of 3 dBA CNEL or greater.

However, the City of Orange does not have interior or exterior noise standards from transportation noise sources for cemetery uses.

Construction Related Noise

Construction activities for the Proposed Project are anticipated to include demolition of the onsite paving and remnants of the former building, site preparation, grading, building construction of the replacement 5,138 sf building, ancillary structures, paving of the proposed parking lot and pathways, and architectural coating of the reconstructed building. A summary of noise level data for a variety of construction equipment compiled by the U.S. Department of Transportation is presented in Table 6 of Appendix K (pp. 24-25). Noise impacts from construction activities associated with the Proposed Project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities. Typical operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. The nearest sensitive receptors to the Project Site are single-family homes located as near as 50 feet to the south and southeast side of the Project Site, Santiago Creek Trail and Multi-purpose Santiago Creek Trail and Yorba dog park, both located immediately west and north of the Project Site--respectively, and the OUSD Child Development Center and Community Day School located easterly adjacent to the Project Site, where the nearest designated play area (one basketball court) is approximately 200 feet east of the Project Site and nearest school structure is 185 feet east of the Project Site.

The existing school uses located to the east, park uses located to the north, and the existing residential uses located to the south, southeast, and west of the Project Site may be affected by short-term noise impacts associated with construction noise. Construction noise will vary depending on the construction process, type of equipment involved, location of the construction site with respect to sensitive receptors, the schedule proposed to carry out each task (e.g., hours and days of the week) and the duration of the construction work. A comparison of existing noise levels and project construction noise levels at the closest receptor locations are presented in Table 10 – *Construction Noise Levels*. NM1 represents noise levels at the property lines of the

single-family residential uses to the south and west. NM2 represents noise levels at the property lines of the single-family residential uses to the southeast and school property line to the east. NM3 represents noise levels at the property lines of the park uses to the north of the Project Site.

Table 10 – Construction Noise Levels

Phase	Receptor Location	Existing Ambient Noise Levels (dBA Leq)[2]	Construction Noise Levels (dBA Leq)[2]	Combined Noise Levels (dBA Leq)	Increase (dB)
Demolition	East (School) (NM2)	58.9	77.6	77.7	18.8
	North (Park) NM3	65.8	69.3	70.9	5.1
	Southeast (Residential) (NM2	58.9	73.5	73.6	14.7
	South (Residential) (NM1)	62.8	72.4	72.9	10.1
	West (Residential) (NM1)	62.8	69.8	70.6	7.8
Site Preparation	East (School) (NM2)	58.9	76.2	76.3	17.4
	North (Park) NM3	65.8	65.8	68.8	3.0
	Southeast (Residential) (NM2	58.9	66.8	67.5	8.6
	South (Residential) (NM1)	62.8	64.6	66.8	4.0
	West (Residential) (NM1)	62.8	62.7	65.8	3.0
Grading	East (School) (NM2)	58.9	81.0	81.0	22.1
	North (Park) NM3	65.8	70.6	71.8	6.0
	Southeast (Residential) (NM2	58.9	71.6	71.8	12.9
	South (Residential) (NM1)	62.8	69.4	70.3	7.5
	West (Residential) (NM1)	62.8	67.5	68.8	6.0
Building Construction	East (School) (NM2)	58.9	78.8	78.8	19.9
	North (Park) NM3	65.8	68.3	70.2	4.4
	Southeast (Residential) (NM2	58.9	69.3	69.7	10.8
	South (Residential) (NM1)	62.8	67.2	68.5	5.7
	West (Residential) (NM1)	62.8	65.2	67.2	4.4
Paving	East (School) (NM2)	58.9	76.0	76.1	17.2
	North (Park) NM3	65.8	65.6	68.7	2.9
	Southeast (Residential) (NM2	58.9	66.6	67.3	8.4
	South (Residential) (NM1)	62.8	64.4	66.7	3.9
	West (Residential) (NM1)	62.8	62.5	65.7	2.9
Architectural Coating	East (School) (NM2)	58.9	68.7	69.1	10.2
	North (Park) NM3	65.8	58.2	66.5	0.7
	Southeast (Residential) (NM2	58.9	59.2	62.1	3.2
	South (Residential) (NM1)	62.8	57.1	63.8	1.0
	West (Residential) (NM1)	62.8	55.2	63.5	0.7

Notes:
(1) Construction noise worksheets are provided in Appendix K.
(2) Per measured existing ambient noise levels. NM1 was chosen to represent noise levels at the property lines of the single-family residential uses to the south and west, NM2 was chosen to represent noise levels at the property lines of the single-family residential uses to the southeast and the school property line to the east, and NM3 was chosen to represent noise levels at the property line of the park uses to the north of the Project Site.

Modeled unmitigated construction noise levels when combined with existing ambient noise levels reached up to 81 dBA Leq at the nearest school property line to the east, 71.8 dBA Leq at the nearest park property line to the north, 71.8 dBA Leq at the nearest residential property line to the southeast, 70.6 dBA Leq at the nearest residential property line to the south, and 68.8 dBA Leq at the nearest residential property line to the west of the Project Site. However, Section 8.24.050 of the City of Orange's Municipal Code regulates construction noise sources, prohibiting construction activities other than between the hours of 7:00 AM to 8:00 PM on any day except for Sunday or a Federal holiday, or between the hours of 9:00 AM and 8:00 PM on Sunday or a Federal holiday. Noise generated outside of these hours specified are subject to the noise standards identified in Section 8.24.040(A). In addition to the City's Municipal Code, **MM NOI-1** would ensure potential impacts associated with construction noise would be reduced to less than significant levels. **MM NOI-1** incorporates requirements for placement and shielding of construction equipment away from sensitive receptors, prohibits idling, limits truck hauling, and prohibits music during construction. Therefore, with implementation of **MM NOI-1** and construction time restrictions detailed in Section 8.24.050 of the OMC, potential impacts associated with construction noise would be less than significant.

Operational Related Noise

The Proposed Project involves the construction of a 3,339-gravesite cemetery, a 5,138 SF, two-story building to support activities associated with funeral burial practices, accessory parking, and landscaping. The project also includes ancillary administrative office space for the funeral burial practices, construction of a one-story, 800 SF storage shed with outdoor storage yard, trash enclosure, and utility shed, as well as the demolition and construction of a 51-space surface parking lot. The Proposed Project would provide exterior landscaping and fencing/gating throughout the Project Site. No portion of the Proposed Project would occur within the Santiago Creek or existing multi-purpose Santiago Creek Trail area. Potential noise impacts associated with the operations of the Proposed Project would be from project-generated vehicular traffic on the nearby roadways and from onsite noise sources to the adjacent school and residential properties.

<u>Project Generated Roadway Vehicular Noise Impacts to Offsite Sensitive Receptors</u>

Vehicle noise is a combination of the noise produced by the engine, exhaust, and tires. The level of traffic noise depends on three primary factors (1) the volume of traffic, (2) the speed of traffic, and (3) the number of trucks in the flow of traffic. The Proposed Project does not propose any uses that would require a substantial number of truck trips and the Proposed Project would not alter the speed limit on any existing roadway. The Proposed Project's potential offsite noise impacts have been focused on the noise impacts associated with the change of volume of traffic that would occur with development of the Proposed Project.

During operation, the Proposed Project would generate approximately 36 average daily weekday trips, with 1 trip during the AM peak-hour and 3 trips during the PM peak-hour, and 83 average daily Sunday trips, with 16 trips during the peak-hour. Typically, a doubling of traffic volumes is required to result in an increase of 3 dBA, which is considered to be a barely audible change. At a maximum of 83 average daily trips per day, project generated trips would not result in a doubling of traffic volumes along any affected road segment. Therefore, potential impacts

associated with project generated roadway vehicular noise to offsite receptors would be less than significant.

Project Generated Onsite Noise Impacts to Offsite Sensitive Receptors

The operation of the Proposed Project may create an increase in onsite noise levels. The City of Orange General Plan Noise Element maximum allowable noise exposures for stationary sources (see Table 3 of Appendix K) as well as the City's Municipal Code Section 8.24.040(A) identify maximum allowable noise exposure standards from stationary noise sources as 55 dBA Leq during the daytime (7:00 AM to 10:00 PM) and 45 dBA Leq during the nighttime (10:00 PM to 7:00 AM). The standards include maximum levels of 70 dBA Lmax during the daytime and 65 dBA Lmax during the nighttime. **Figure 30** – *Operational Noise Levels* and **Figure 31** – *Operational Noise Level Contours* show daytime operational noise levels generated by Proposed Project would reach up to 54 dBA Leq at the Santiago Creek Trail & multi-purpose Santiago Creek Trail, immediately west of the Project Site and 54 dBA Leq south of the Project Site at the nearest residential receptor. Project operational noise at other sensitive receptors, including the single-family homes to the southeast, the park uses to the north, and the school uses to east, would range between 29-37 dBA Leq. Analysis in Appendix K shows that operational noise levels would not exceed the City's daytime standards, and the Proposed Project would not operate between the hours of 10:00 PM and 7:00 AM. Therefore, potential impacts to off-site sensitive receptors associated with noise from onsite operations would be less than significant.

Therefore, with implementation of **MM NOI-1**, potential significant impacts associated with a substantial temporary or permanent increase in ambient noise levels in excess of standards would be less than significant.

Figure 30: Operational Noise Levels

Source: Ganddini Group

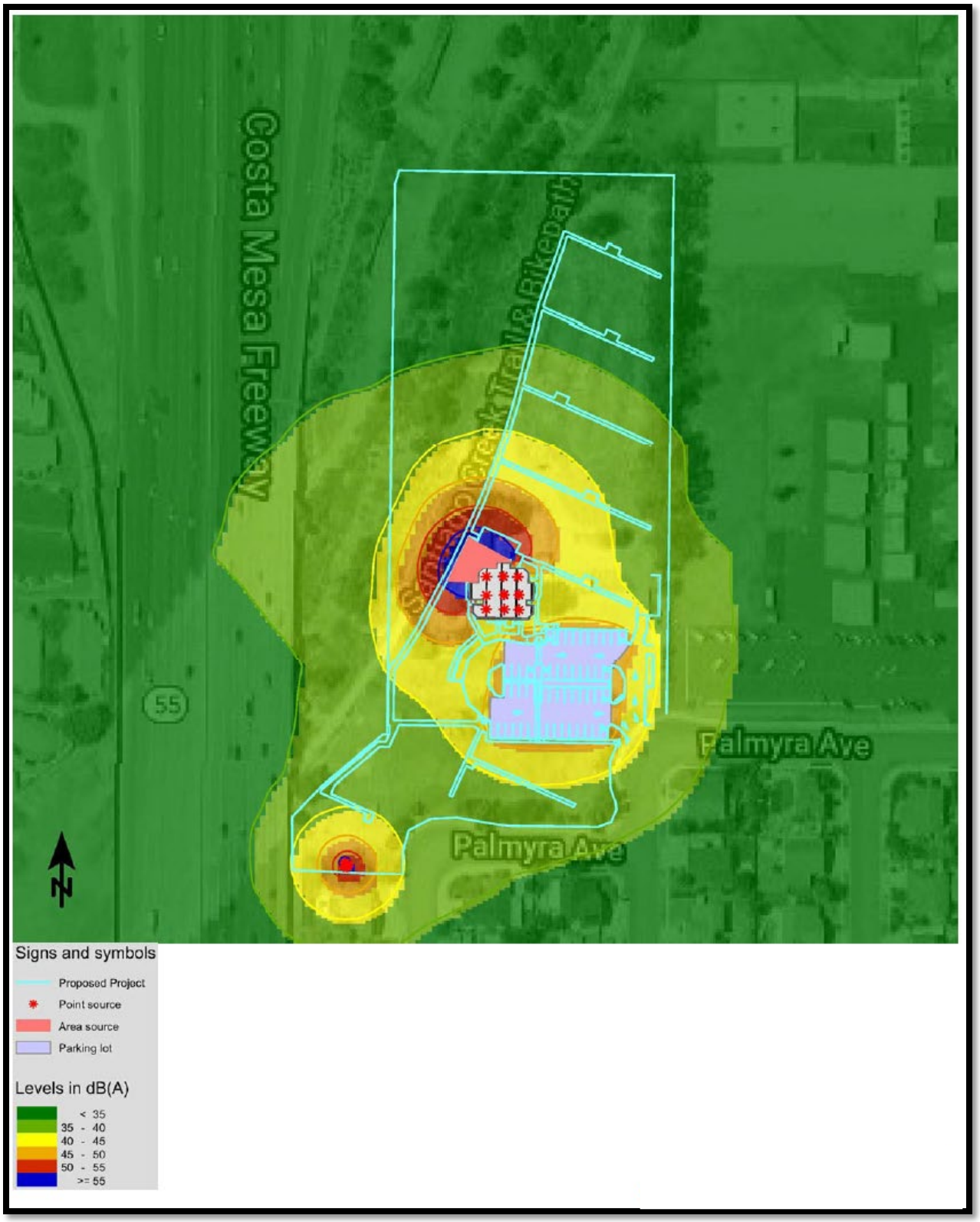


Figure 31: Operational Noise Level Contours

Source: Ganddini Group

b) Would the project result in the generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact: The Proposed Project would not expose persons to or generation of excessive groundborne vibration or groundborne noise levels. The following section analyzes the potential vibration impacts associated with the construction and operations of the Proposed Project.

As noted in Section 4.13, the County of Orange processed a building permit (No. 2008-192) through the City of Orange for demolition of the single-family residence and pool located at 334 S. Jennifer Lane. The City of Orange issued and subsequently finalized the building permit in October 2020, producing a vacant parcel at the Jennifer Lane property. The County of Orange acquired the Jennifer Lane property due to subsidence issues onsite which led to the demolition of the residential structures (i.e., house and pool). As a result of the single-family residence's demolition, the nearest sensitive receptors to the Project Site identified within Appendix L are the single-family residential dwelling units located 60-feet to the south/southeast of the Project Site's southern property line.

The nearest sensitive receptors to the Project Site are single-family homes located as near as 50 feet to the south and southeast side of the Project Site, Santiago Creek Trail and Multi-purpose Santiago Creek Trail and Yorba dog park, both located immediately west and north of the Project Site--respectively, and the OUSD Child Development Center and Community Day School located easterly adjacent to the Project Site, where the nearest designated play area (one basketball court) is approximately 200 feet east of the Project Site and nearest school structure is 185 feet east of the Project Site.

The City currently does not have any adopted standards, guidelines, or thresholds relative to ground-borne vibration. Ground-borne noise refers to the noise generated by ground-borne vibration. Ground-borne noise that accompanies the building vibration is usually perceptible only inside buildings and typically is only an issue at locations with subway or tunnel operations where there is no airborne noise path or for buildings with substantial sound insulation such as a recording studio. Appendix L utilizes available guidelines from the California Department of Transportation (Caltrans) to assess impacts due to ground-borne vibration.

Caltrans has adopted vibration standards that are used to evaluate potential building damage impacts related to construction activities. As shown in Appendix L, Table 2 (p. 7), the threshold at which there is a risk to "architectural" damage to historic and some older buildings is a peak particle velocity (PPV) of 0.25 in/sec, at older residential structures a PPV of 0.3 in/sec, and at new residential structures and modern commercial/industrial buildings a PPV of 0.5 in/sec. In addition, Caltrans has adopted standards associated with human annoyance for groundborne vibration impacts. As shown in Appendix K, Table 5 (p. 19), vibration is considered to be strongly perceptible at a PPV of 0.1 in/sec. Therefore, impacts would be significant if construction activities result in groundborne vibration of 0.3 PPV or higher at residential structures and/or a PPV of 0.5 or higher at commercial structures. The threshold of perception for human response is approximately 65 VdB; however, human response to vibration is not usually substantial unless the vibration exceeds 70 VdB.

Construction-Related Vibration Impacts

Vibration impacts from construction activities associated with the Proposed Project would typically be created from the operation of heavy off-road equipment. There are several types of construction equipment that can cause vibration levels high enough to annoy persons in the vicinity and/or result in architectural or structural damage to nearby structures and improvements. For example, a vibratory roller could generate up to 0.21 PPV inches per second (in/sec) at a distance of 25 feet, and operation of a large bulldozer (0.089 PPV in/sec) at a distance of 25 feet (two of the most vibratory pieces of construction equipment) (Appendix L, Table 3, p. 8). Groundborne vibration at sensitive receptors associated with this equipment would drop off as the equipment moves away. For example, as the vibratory roller moves further than 100 feet from the sensitive receptors, the vibration associated with it would drop below 0.0026 PPV in/sec. It should be noted that these vibration levels are reference levels and may vary slightly depending upon soil type and specific usage of each piece of equipment.

Architectural Damage

Vibration generated by construction activity has the potential to damage structures. This damage could be structural damage, such as cracking of floor slabs, foundations, columns, beams, or wells, or cosmetic architectural damage, such as cracked plaster, stucco, or tile (California Department of Transportation, 2020). Appendix L identifies a PPV level of 0.3 in/sec as the threshold at which there is a risk to "architectural" damage to older residential structures. As shown in Table 11 – *Construction Vibration Levels at Nearest Receptors*, and the analysis for annoyance below (vibration worksheets are provided in Appendix L), temporary vibration levels associated with the Proposed Project's construction would not exceed the architectural damage threshold at any existing residential receptors to the south.

Table 11 – Construction Vibration Levels at the Nearest Receptors

Receptor Location	Distance from property line to nearest structure (feet)	Equipment	Vibration Level (PPV in/sec)	Damage Threshold Exceeded?[1]	Annoyance Threshold Exceeded?[1]	Damage Threshold Exceeded?[1]	Annoyance Threshold Exceeded?[1]
Residential to the Southwest	72	Vibratory Roller	0.043	No	No	No	No
	72	Large Bulldozer	0.018	No	No	No	No
Residential to South	60	Vibratory Roller	0.056	No	No	No	No
	60	Large Bulldozer	0.024	No	No	No	No
Residential to Southeast	78	Vibratory Roller	0.038	No	No	No	No
	78	Large Bulldozer	0.016	No	No	No	No
School to East	114	Vibratory Roller	0.022	No	No	No	No
	114	Large Bulldozer	0.009	No	No	No	No

Annoyance to Persons

The primary effect of perceptible vibration is often a concern. However, secondary effects, such as the rattling of a China cabinet, can also occur, even when vibration levels are well below perception. Any effect (primary perceptible vibration, secondary effects, or a combination of the two) can lead to annoyance. The degree to which a person is annoyed depends on the activity in which they are participating at the time of the disturbance. For example, someone sleeping or reading will be more sensitive than someone who is running on a treadmill. Reoccurring primary and secondary vibration effects often lead people to believe that the vibration is damaging their home, although vibration levels are well below minimum thresholds for damage potential (California Department of Transportation, 2020).

The closest off-site buildings are the single-family residential dwelling units located approximately 60 feet south of the Project Site's southern property line. As shown in Table 11, at 60 feet, the use of a vibratory roller would be expected to generate a PPV of 0.056 in/sec and a bulldozer would be expected to generate a PPV of 0.024 in/sec. Therefore, use of vibratory equipment would not result in architectural damage or annoyance to persons at the receptors to the south. At 78 feet, which is the distance to the next closest off-site buildings to the southeast of the Project Site (the single-family residential dwelling units), use of a vibratory roller would generate a PPV of 0.038 in/sec and a bulldozer would generate a PPV of 0.016 in/sec (Table 11). Therefore, use of vibratory equipment would not result in architectural damage or annoyance to persons at the receptors to the southeast. The school use located adjacent to the east of the Project Site contains structures (i.e., sheds) located as close as approximately 114 feet from the Project Site's eastern property line. As shown in Table 11, at 114 feet, use of a vibratory roller would generate a PPV of 0.022 in/sec and a bulldozer would generate a PPV of 0.009 in/sec. Therefore, use of vibratory equipment would not result in architectural damage or annoyance to persons at the receptors to the east. Annoyance is expected to be short-term, occurring only during site grading and preparation. Therefore, potentially significant impacts associated with construction related vibration would be less than significant and no mitigation would be required.

Operations-Related Vibration Impacts

The Proposed Project involves the construction of a 3,339-gravesite cemetery, a 5,138 SF, two-story building to support activities associated with funeral burial practices, accessory parking, and landscaping. The project also includes ancillary administrative office space for the funeral burial practices, construction of a one-story, 800 SF storage shed with outdoor storage yard, trash enclosure, and utility shed, as well as the demolition and construction of a 51-space surface parking lot. The Proposed Project would provide exterior landscaping and fencing/gating throughout the Project Site. No portion of the Proposed Project would occur within the Santiago Creek or existing multi-purpose Santiago Creek Trail area. The on-going operation of the Proposed Project would not include the operation of any known vibration sources other than typical onsite vehicle operations for a cemetery use. The Proposed Project entails batch installation of crypts, which would occur in known phases, with the most outer bounds of the site developed with gravesites first, and subsequent gravesites constructed inward toward the building onsite (**Figure 24** – Conceptual Phasing Plan). The buildout design ensures the creation of the crypts occur farther from the property lines with each subsequent phase, reducing effects.

For each batch, the ground would be excavated to proper depth, crypts set in place, earth covering would then be placed over the top of the crypt, and the surface area of the batch would be covered with a temporary water-wise ground cover--irrigated appropriately, until such time as individual crypts are unearthed and filled. The proposed batch construction process would require approximately three (3) weeks to complete depending on the precise size of the batch. During installation of a batch, crypts would be brought to the site as needed for installation. A small excavator and utility tractor would be used for future buildout, which would progressively move away from the Project Site's property lines inward toward the center of the Project Site thereby limiting potential vibration effects. Therefore, potentially significant impacts associated with operation related vibration would be less than significant. Therefore, potential significant impacts associated with the generation of excessive groundborne vibration or groundborne noise level would be less than significant and no mitigation would be required.

c) *For a project located within the vicinity of a private airstrip or an airport land use plan (Los Alamitos Armed Forces Reserve Center or Fullerton Municipal Airport) or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

Less Than Significant Impact: Although no airports or airfields are located in Orange, the Proposed Project may expose people residing or working in the project area to some noise levels from aircraft operations associated with John Wayne Airport, Long Beach Airport, and even Los Alamitos Army Airfield, which use the airspace above the City in arrival and departure operations. However, the Project Site is not located within the John Wayne, Long Beach, or Los Alamitos Army Airfield influence areas. The nearest airport is the John Wayne Airport which is located as near as seven (7) miles southwest of the Project Site; however, the Project Site is located outside of the 60 dBA CNEL noise contours of this airport[10]. The Proposed Project would not be exposed to excessive aircraft noise. Therefore, potential impacts associated with the exposure of people residing or working in the project area to excessive noise levels from aircraft would be less than significant and no mitigation would be required.

Mitigation Measures

MM NOI-1 The Property Owner/Developer and Contract shall ensure the following measures are implemented as part of the Proposed Project's during all project site excavation, ground disturbance, and construction.

A. During all project site excavation and grading on-site, construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturer standards.

[10] https://ocair.netlify.app/about/administration/airport-governance/commissions/airport-land-use-commission/ Accessed June 9, 2021

B. The contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the Project Site.
C. Equipment shall be shut off and not left to idle when not in use.
D. The contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise/vibration sources and sensitive receptors nearest the Project Site during all project construction.
E. Jackhammers, pneumatic equipment, and all other portable stationary noise sources shall be shielded, and noise shall be directed away from sensitive receptors.
F. The project proponent shall mandate that the construction contractor prohibit the use of music or sound amplification on the Project Site during construction.
G. The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment.

Conclusion

With implementation of **MM NOI-1** potential impacts of the Proposed Project associated with noise and vibration would be less than significant

4.14 Population and Housing

Would the project:	Potentially Significant Impact	Less Than Significant 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)?	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Environmental Analysis

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

Less Than Significant Impact: The Proposed Project would involve construction of a 3,339-gravesite cemetery, a 5,138 SF, two-story building to support activities associated with funeral burial practices, accessory parking, and landscaping. The Proposed Project would not involve grading or ground disturbing activities within the Santiago Creek and Multi-purpose Santiago Creek Trail. The Project Site's General Plan land use designation is Open Space-Park (OS-P), Open Space (OS), and Low Density Residential (LDR), with the entire Project Site located within the Yorba South Commercial Overlay. The Proposed Project would require a General Plan Amendment (GPA) to re-designate the LDR portion of the Project Site to OS-P to bring the southern portion of the site into consistency with the existing zoning of Recreational-Open Space.

The Project Site was formally used as the La Veta Landfill between 1946 to 1956. In correspondence with the County of Orange[11], an adjacent property fronting Jennifer lane, located to the south of the Project Site, was acquired and subsequently demolished due to migration from the La Veta landfill. The proposed Open Space-Park land use designation would provide a more appropriate designation than Low Density Residential, as the Project Site maintains complex conditions that would not be conducive to future residential development. The Proposed Project does not include any residential dwelling units and would include between six to seven employees onsite during operations. The Project Site is a geographically constrained site, with two street frontages and development surrounding it on two interior property lines, and the Santiago Creek and multi-purpose Santiago Creek Trail on the remaining property line. Therefore, potential impacts associated with population growth would be less than significant and no mitigation would be required.

[11] County of Orange, John Powers – Project Manager. Phone Call. August 19, 2021.

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 multipurpose and recreation facilities that include a former YMCA building that was destroyed by fire in the central portion, parking lot in the east-central portion, a former BMX track in the northern portion, and former sports field in the southern portion. The Santiago Creek and multi-purpose Santiago Creek Trail intersect the northwest portion of the Project Site and account for 1.71-acres of the 5.99-gross acre site. There are no existing residential uses or structures on the Project Site. Therefore, no impacts associated with housing displacement would occur and no mitigation would be required.

Mitigation Measures

No mitigation measures associated with impacts to Population and Housing apply to the Proposed Project.

Conclusion

Potential impacts of the Proposed Project associated with Population and Housing would be less than significant and no mitigation would be required.

4.15 Public Services

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

Environmental Analysis

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

i. Fire protection?

Less Than Significant Impact: Fire protection services for the Project Site are provided by the Orange City Fire Department (OCFD), which operates eight fire stations and maintains a staff of 136, including 124 sworn firefighting personnel, and provides fire paramedic and ambulance service with an integrated paramedic/transportation system. According to the City General Plan Safety Element, paramedic teams are located at eight stations, three of which also provide ambulance service with an average response time of 4 minutes, 47 seconds, and average transport unit response times of 5 minutes, 29 seconds. The OFD has automatic aid agreements with the Cities of Anaheim, Santa Ana, and Garden Grove, and with the Orange County Fire Authority. The OFD operates on a "boundary drop" basis, whereby the closest available fire units respond to a call regardless of the jurisdiction from which the call originated. The closest fire station to the site is Fire Station no. 1 located approximately 1.2 miles northwest of the Project Site at the corner of South Grand Street and East Almond avenue, just west of SR-55. Based on the proximity of the Project Site to existing OCFD facilities, and since the Project Site is located in a developed portion of the City that is within the service area of OCFD, the Proposed Project would be served by OCFD. The Proposed Project would require a General Plan Amendment to re-designate the LDR portion of the Project Site to OS-P to bring the southern portion of the site into consistency with the existing zoning of Recreational Open Space. The Proposed Project would also entail construction of a 3,339-gravesite cemetery, a 5,138 sf , two-story building to

support activities associated with funeral burial practices, accessory parking, and landscaping, which would result in an increase in demand for fire protection services. A maximum of seven (7) employees would be onsite at one time, and visitors to the cemetery use would be based on appointments and 20 to 25 scheduled services per month. The Property Owner/Developer would be required to submit building plans that comply with Title 15 – *Building and Construction* of the OMC, which includes Section 15.32 – *City of Orange Fire Code*, to ensure the Proposed Project is developed in compliance with all applicable Building and Fire safety requirement, as well as pay the appropriate impact fees, such as the Fire Facility Fee (Chapter 15.38 of the OMC) in effect at the time building permits are issued to offset any potential impact to fire facilities. Development of the Project Site would include fire suppression systems such as fire sprinklers and require payment of impact fees to offset the nominal incremental increase in demand on fire protection services. The Proposed Project would not result in the need for new or physically altered fire protection facilities. Therefore, potential impacts associated with fire protection would be less than significant and no mitigation would be required.

ii. Police protection?

Less Than Significant Impact: The City of Orange Police Department (OPD) provides law enforcement and crime prevention services in Orange through three primary divisions. The Support Services Division provides personnel, training, fiscal affairs, crime prevention, and facility maintenance. The Investigative Services Division investigates and prepares cases for prosecution by the Orange County District Attorney's Office, with each unit focusing on specific types of crimes. Finally, there is the Field Services Division consisting of uniformed personnel who are primary responders for calls for service and includes several specialized units, such as the Bike Team, Canine Unit, Homeless Engagement Assistance and Resource Team (HEART), SWAT Team, and Traffic Bureau. The OPD has a mutual aid agreement with all law enforcement agencies in Orange County in the event that supplementary assistance is needed. According to the Police Department, OPD has 250 employees that serve approximately 139,000 residents with a jurisdiction that covers 27 square miles[12]. OPD operates out of one location at the corner of North Batavia Street and West Struck Avenue, approximately 2.5 miles to the northwest of the Project Site. Based on the proximity of the Project Site to the OPD station and since the Project Site is in a developed portion of the City that is within the service area of the OPD, the Proposed Project would be served by OPD. The construction of a 3,339-gravesite cemetery, a 5,138-sf two-story building to support activities associated with funeral burial practices, accessory parking, and landscaping could potentially increase demand for police protection services. To ensure adequate services are provided and to minimize the demands on police services, security and design measures which employ defensible space concepts shall be utilized throughout the formation of development and construction plans. These measures incorporate the concepts of Crime Prevention through Environmental Design (CPTED), which involves the placement, and orientation of structures, access and visibility of common areas, placement of doors, windows,

[12] https://www.cityoforange.org/592/Police Accessed June 10, 2021

addressing, lighting, and landscaping. CPTED promotes public safety, physical security and allows citizens the ability to monitor activity. In addition, the project shall comply with the requirements established in Chapter 15.52 of the Orange Municipal Code (Building Security Ordinance #6-18). Conditions related to CPTED, and the Orange Building Security Standards would be included on the project. The project design shall incorporate see through/open type perimeter fencing, pedestrian, and vehicle gates. The Property Owner/Developer would also be required to pay development impact fees, such as the Police Facility Fee (Chapter 3.13 of the OMC) at the time building permits are issued to offset any potential impact to police facilities. Development of the Project Site would not result in the need for new or physically altered police protection facilities. Therefore, potential impacts associated with police protection would be less than significant and no mitigation would be required.

iii. Schools?

Less Than Significant Impact: The Project Site is located within the Orange Unified School District (OUSD). Schools in the vicinity of the Project Site includes OUSD's Community Day School, located adjacent to the east, La Veta Elementary School located 0.3 miles to the southeast, McPherson Magnet School located 0.6 miles to the east, Palmyra Elementary School located 0.5 miles to the west, and a private school--Spectrum Center Rossier Elementary located 0.3 miles to the southwest of the site[13]. The Proposed Project does not include additional residences that would increase the local population and necessitate new schools. The Proposed Project would involve the construction of a 3,339-gravesite cemetery, a 5,138 sf , two-story building to support activities associated with funeral burial practices, accessory parking, and landscaping, as well as a GPA to change a portion of the site from LDR to OS-P, consistent with the remainder of the site's open space designation, all of which would not generate additional students within the OUSD. The Proposed Project would also be subject to Senate Bill 50 (SB 50), which requires the payment of mandatory impact fees to offset any impact to school facilities. The Property Owner/Developer would be required to pay its fair share of school fees in accordance with SB 50 to offset the potential impact to school services. Therefore, potential impacts associated with schools would be less than significant and no mitigation would be required.

iv. Parks?

Less Than Significant Impact: The City of Orange owns and has developed 24 parks, which consist of about 251 acres of parkland. The nearest park to the Project Site is the Yorba Dog Park, located directly adjacent to the north of the site. Other park spaces in the vicinity of the Project Site include Grijalva Park located approximately 0.5 miles to the northeast, La Veta Park, located approximately 0.9 miles to southeast, and Pitcher Park, located approximately 0.8 miles to the west. Yorba Dog Park is a park area specifically designated for use by patrons and their dogs. Grijalva Park offers a gym/sports center, community building, aquatic center, skate park,

13 https://resources.finalsite.net/images/v1531760134/orangeusdorg/sdrcctx9t1tjtmzhpvsg/OUSD_MapOfSchools.pdf Accessed April 14, 2021

amphitheater, tot lot, and picnic area. La Veta Park includes barbecues, picnic pavilion, picnic tables, tot lots, and volleyball court. Pitcher Park provides picnic tables, historical exhibit, gazebo, reservable green space, and honey house. The Proposed Project would involve the construction of a 3,339-gravesite cemetery, a 5,138 sf , two-story building to support activities associated with funeral burial practices, accessory parking, and landscaping, as well as a GPA to change a portion of the site from LDR to OS-P, consistent with the remainder of the site's open space designation and existing zoning of Recreational Open Space. Development may be subject to the Quimby Act and OMC Section 3.40, which requires development projects to set aside land, donate conservation easements, or pay in-lieu fees for park improvements. Pursuant to the Quimby Act, the Property Owner/Developer would pay its fair share of in-lieu fees based on the number and type of dwelling units. However, the Proposed Project would not include any residential dwelling units. Pursuant to OMC Section 3.40.040(B), the Proposed Project may be conditioned to pay park impact fees. Therefore, potential impacts associated with park facilities would be less than significant and no mitigation would be required.

v. Other public facilities?

Less Than Significant Impact: The Orange Public Library (OPL) system serves more than 140,000 residents through a variety of traditional services including print materials, DVDs, music, and entertaining/educational programs for all ages. The OPL provides on-trend services such as internet access, Wi-Fi for mobile devices, digital content, and e-services for the residents of the City. The City maintains three library facilities: The Orange Public Library and History Center (Main Library), the El Modena Branch Library, and the Taft Branch Library[14]. The nearest libraries to the Project Site include the Main Library, located approximately 1.1 mile to the northwest and the El Modena Branch Library, located approximately 1.3 miles to the southeast. According to OMC Section 3.50, the Property Owner/Developer would pay all applicable impact fees designed to mitigate impacts due to new developments and would allow the City to adapt to its growing population. OMC Section 3.50.040(A) states all nonresidential development is subject to payment of the Library Facility Fee prior to issuance of a building permit. While no physical impacts associated with the provision of, or the need for, new or physically/altered governmental facilities would occur, the City would condition the Proposed Project to require payment of such fee. Therefore, potential impacts associated with libraries and other public facilities would be less than significant and no mitigation would be required.

Mitigation Measures

No mitigation measures associated with impacts to Public Services apply to the Proposed Project.

Conclusion

Potential impacts of the Proposed Project associated with Public Services would be less than significant and no mitigation would be required.

[14] https://cityoforange.org/1280/Facilities Accessed April 21, 2021

4.16 Recreation

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) 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) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

Environmental Analysis

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 nearest recreational facility is Yorba Dog Park located directly adjacent to the north of the Project Site. Local recreation facilities in the Orange community include a myriad of parks and special facilities. The nearest special facility is the forthcoming Cultural Resources Center proposed near Irvine Park, located approximately 3.25 miles east of the Project Site. According to the General Plan's Natural Resources Element, Figure NR-5: *Parks Master Plan*, the Project Site is located within a park service area of ¼ mile or less, consistent with the adjacent park space to the north.

The Proposed Project would not 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 because the Proposed Project would not generate any new residential dwelling units. Additionally, impacts from employees would be less than significant because the Proposed Project is a cemetery use with ancillary office, where people associated with the use would be expected to work at the Project Site and have access to a large green area of open space. Probable use associated with the Proposed Project would be limited in time to employee break periods, such as lunch. Therefore, potential impacts associated with existing recreational facilities would be less than significant and no mitigation would be required.

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

Less Than Significant Impact: The Proposed Project involves the construction of a 3,339-gravesite cemetery, a 5,138 sf , two-story building to support activities associated with funeral burial practices, accessory parking, and landscaping. The Proposed Project would include facilities that serve the proposed use, including an outdoor gathering space consisting of an outdoor patio with decorative screen panels, furniture groupings, and cantilevered umbrellas. Adjacent to the south of the proposed building would be a raised focal feature and pedestrian walkways which connect to the parking lot and to a processional path which provides access to the gravesites throughout the cemetery. The Project Site includes a portion of the Santiago Creek and multi-purpose

Santiago Creek Trail, which transects the northwestern corner of the site; however, no changes or disturbance is proposed to this portion of the Project Site. Any potential environmental impacts related to the construction and operation of these on-site recreational amenities are accounted for in this IS/MND as part of the impact assessment conducted for the entirety of the Proposed Project. No adverse physical impacts beyond those already disclosed in this document would occur because of implementation of the Proposed Project's on-site recreational facilities. Further, no construction or expansion of existing facilities off-site would occur as a result of the Proposed Project and these amenities would only be used for cemetery and funerary purposes. Therefore, potential impacts associated with the construction or expansion of recreational facilities would be less than significant and no mitigation would be required.

Mitigation Measures

No mitigation measures associated with impacts to Recreation apply to the Proposed Project.

Conclusion

Potential impacts of the Proposed Project associated with Recreation would be less than significant and no mitigation would be required.

4.17 Transportation

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

A Project Trip and VMT Screening Analysis was completed to determine potential impacts to traffic associated with the development of the Proposed Project (**Appendix M** – *Orange Palmyra Cemetery Project Trip Generation & Vehicle Miles Traveled Screening Analysis*, Ganddini Group, March 2021).

Trip Generation

Table 12 – *Project Trip Generation Summary* shows the project trip generation based upon rates obtained from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (10th Edition, 2017). Based on review of the Proposed Project operational characteristics and the ITE land use definition, ITE Land Use Code 566 – Cemetery was determined to represent proposed activities. The number of trips generated is determined by multiplying the land use quantity by the trip generation rates for the respective time periods.

Since a typical cemetery generates more trips on weekends, the greater of the Saturday or Sunday trip generation is also included (in this case Sunday) for assessment of the potential trips that can be expected with the Proposed Project since funeral services are more likely to occur on any given day of the week. No trip generation credit has been applied for existing/previous uses to provide a conservative analysis.

As shown in Table 12, the Proposed Project is forecast to generate approximately 36 daily trips on a typical weekday, including 1 trip during the AM peak hour and 3 trips during the PM peak hour, and 83 daily trips on a typical Sunday, including 16 trips during the peak hour of the site.

Table 12 – Project Trip Generation Summary

Trip Generation Rates													
Land Use	Source[1]	Unit[2]	Weekday							Sunday			
			AM Peak Hour			PM Peak Hour			Daily Rate	Peak Hour			Daily Rate
			%In	*%Out*	*Rate*	*%In*	*%Out*	*Rate*		*%In*	*%Out*	*Rate*	
Cemetery	ITE 566	AC	80%	20%	0.17	31%	69%	0.46	6.02	31%	69%	2.63	13.94
Trips Generated													
Land Use	Source[1]	Unit[2]	Weekday							Sunday			
			AM Peak Hour			PM Peak Hour			Daily	Peak Hour			Daily
			In	*Out*	*Total*	*In*	*Out*	*Total*		*In*	*Out*	*Rate*	
Cemetery	ITE 566	AC	1	0	1	1	2	3	3	5	11	16	83

Notes:

[1] Source: ITE = Institute of Transportation Engineers, Trip Generation Manual (10th Edition, 2017); ### = Land Use Code
[2] AC = Acres

The City of Orange established guidelines for assessing Level of Service (LOS) impacts for purposes of General Plan compliance. As specified in the City of Orange *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment* (July 2020), the requirement to prepare a transportation impact study with Level of Service analysis should be based on the following criteria:

- When either the AM or PM peak hour project trip generation exceeds 100 vehicle trips.
- Projects that generate 1,600 or more average daily trips (ADT) on the Arterial Highway System.
- Projects that generate 51 or more vehicle trips during either the AM or PM peak hour to any intersection.

Vehicle Miles Traveled (VMT)

The City of Orange established guidelines for Vehicle Miles Traveled (VMT) impacts for CEQA compliance. Appendix M was prepared in accordance with methodology established in City of Orange TIA Guidelines, which identify screening criteria for certain types of projects that typically reduce VMT and may be presumed to result in a less than significant VMT impact, which are as follows:

- Projects Transit Priority Area (TPA) Screening: Projects located within a Transit Priority Area (TPA) as determined by review of the NOCC+ VMT Project Screening spreadsheet tool developed for screening of North County Cities.
- Projects Low VMT Area Screening: Projects located within a low VMT generating area as determined by the analyst (e.g., development in efficient areas of the County will reduce VMT per person/employee and is beneficial to the region)
- Project Type Screening:
    - K-12 schools
    - Local parks
    - Day care centers
    - Local-serving retail less than 50,000 square feet including:

        - Gas stations
        - Banks
        - Restaurants, bars, cocktail lounges
        - Shopping center
    - Local-serving hotels (e.g., non-destination hotels)
    - Student housing projects on or adjacent to college campuses
    - Local-serving assembly uses (places of worship, community organizations)
    - Community institutions (public libraries, fire stations, local government)
    - Affordable, supportive, or transitional housing
    - Assisted living facilities
    - Senior housing (as defined by HUD)
    - Projects generating less than 110 daily vehicle trips
        - This corresponds to the following "typical" development potentials:
            - 11 single family housing units
            - 16 multi-family, condominiums, or townhouse housing units
            - 10,000 square feet of office
            - 15,000 square feet of light industrial
            - 63,000 square feet of warehousing
            - 79,000 square feet of high cube transload and short-term storage warehouse
    - Redevelopment projects exemption for existing facilities, including additions to existing structures of up to 10,000 square feet, so long as the project is in an area where public infrastructure is available to allow for maximum planned development and the project is not in an environmentally sensitive area.

Environmental Analysis

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

Less Than Significant Impact: The Proposed Project would generate approximately 36 daily trips on a typical weekday, including 1 trip during the AM peak hour and 3 trips during the PM peak hour, and 83 daily trips on a typical Sunday, including 16 trips during the peak hour of the site. The Proposed Project is forecast to generate fewer than 50 trips during the weekday AM and PM peak hours, even if weekday trip generation is similar to the peak weekend trip generation of a typical cemetery. A Level of Service analysis is not warranted based on the City's Traffic Impact Analysis Guidelines thresholds listed. As described in Appendix M, the Proposed Project would not:

- result in AM or PM peak hour trip generation exceeding 100 vehicle trips from the proposed development; or,
- generate 1,600 Average Daily Trips and be located on the Arterial Highway System; or,
- add 51 or more trips during wither the AM or PM peak hours to any intersection; or,
- vary from the standards and guidelines outlined in the TIA Guidelines.

The Proposed Project would not conflict with an applicable plan, ordinance, or policy that establishes measures of effectiveness for the performance of the circulation system. Therefore, potential impacts associated with the circulation system would be less than significant and no mitigation would be required.

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

Less Than Significant Impact: On December 28, 2018, updates to the CEQA Guidelines were approved by the Office of Administrative Law (OAL). As part of the updates to the CEQA Guidelines, thresholds of significance for evaluation of impacts to transportation have changed. The CEQA Guidelines update eliminated the threshold of significance for evaluating impacts due to changes to air traffic patterns and consolidated the evaluation of impacts due to a conflict with adopted policies, plans, or programs into an analysis of impacts due to a conflict with programs, plans, ordinances, or policies addressing the circulation system (i.e., new Threshold a.). However, new Threshold b. of the CEQA Guidelines for Transportation and Traffic requires an evaluation of impacts due to Vehicle Miles Travelled (VMTs), instead of evaluating impacts based on Level of Service (LOS) criteria, as required by California Senate Bill (SB) 743. LOS has been used as the basis for determining the significance of traffic impacts as standard practice in CEQA documents for decades. In 2013, SB 743 was passed, which is intended to balance the need for LOS for traffic planning with the need to build infill housing and mixed-use commercial developments within walking distance of mass transit facilities, downtowns, and town centers and to provide greater flexibility to local governments to balance these sometimes-competing needs. At full implementation of SB 743, the California Governor's Office of Planning and Research (OPR) is expected to replace LOS as the metric against which traffic impacts are evaluated, with a metric based on VMTs. As a component of OPR's revisions to the CEQA Guidelines in December 2018, lead agencies will be required to adopt VMT thresholds of significance by July 2020.

In late 2019, the 3rd District Court of Appeals ruled on Citizens for Positive Growth v. City of Sacramento regarding the use of delay and capacity-based metrics for transportation impacts. The ruling stated that under Section 21099, Subdivision (b)(2), existing law is that "automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment" under CEQA, except for roadway capacity projects. The court ruling states that agencies can no longer use delay or capacity metric to determine transportation impacts under CEQA. While the Proposed Project does not create a significant impact through LOS or delay per the City's guidelines, for the purposes of this recent court decision, the Proposed Project was also screened for VMT analysis to be consistent with the recent court ruling.

For the VMT screening analysis, the Proposed Project was analyzed using the City's *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment* (July 2020). The Proposed Project consists of redevelopment of a former recreational facility with less than 10,000 square feet of structures, no additional square footage proposed to be added to the formerly existing structure, and daily trip generation of less than 110 daily trips. The Proposed Project consists of a quasi-public land use with VMT characteristics comparable to those of a public park. Due to the need for timely funeral services, the Proposed Project is anticipated to reduce VMT

by serving the local community's needs that would otherwise generate greater trip lengths to find a suitable similar facility. The City's TIA Guidelines state, "[s]ome project types have been identified as having the presumption of a less than significant impact" which includes projects generating less than 110 daily trips (City of Orange, 2020, p. 14). The Proposed Project satisfies the City-established screening criteria Project Type Screening. Therefore, potential impacts associated with conflict or inconsistency with CEQA Guidelines section 15064.3(b) would be less than significant and no mitigation would be required.

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)?

No Impact: The Property Owner/Developer would be responsible for various on-site circulation improvements (parking lot, driveways, drive aisles), as well as improvements to the public right-of-way to City standards. These on-site and adjacent improvements would be designed in accordance with all applicable design standards set forth by the City, which were established to ensure safe and efficient vehicular circulation on City roadway facilities. The City reviews all site plans to ensure that adequate line-of-sight is provided at all driveways, making sure that no structures or landscaping block the views of vehicles entering and exiting a site. As such, no sharp curves, dangerous intersections, or incompatible uses would be introduced by the Proposed Project.

The Project Site would retain its current access point located at the knuckle of East Palmyra Avenue and South Tracy Lane. This entry points would bifurcate into a gated one-way entry and one-way exit drive aisle. The entry drive aisle would be located north of the exit drive aisle and circulate vehicles into the proposed parking lot. Circulation would maintain one-way direction and loop around a center aisle of parking stalls and onto the exit drive aisle. The Proposed Project provides drive aisles, turning radius, and parking stalls compliant with City requirements (**Figure 26** – *Fire Master Plan*). Therefore, no impacts associated with hazardous design features or incompatible land uses would occur, and no mitigation would be required.

d) Would the project result in inadequate emergency access?

Less Than Significant Impact: The Project Site would retain its current access point located at the knuckle of East Palmyra Avenue and South Tracy Lane. This entry points would bifurcate into a gated one-way entry and one-way exit drive aisle. The entry drive aisle would be located north of the exit drive aisle and circulate vehicles into the proposed parking lot. Circulation would maintain one-way direction and loop around a center aisle of parking stalls and onto the exit drive aisle. The Proposed Project provides drive aisles, turning radius, and parking stalls compliant with City requirements. The site's access point located are designed for emergency access and would allow for emergency vehicle access to the Project Site on both the interior and exterior sides of the proposed vehicle gates. **Figure 26** denotes areas of fire access lanes and

drive aisles meeting the minimum 20-foot fire access roadway requirement[15]. The Proposed Project would include a third designated fire access lane directly in front of the building, with a proposed fire hydrant onsite located immediately south of the interior fire access lane. The Proposed Project's driveway would be designed and constructed to City standards and comply with City width, clearance, and turning-radius requirements. The Project Site would be accessible to emergency responders during construction and operation of the Proposed Project. Because the Proposed Project would comply with all applicable local requirements related to emergency vehicle access and circulation, the Proposed Project would not result in inadequate emergency access. Therefore, potential impacts associated with inadequate emergency access would be less than significant and no mitigation would be required.

Mitigation Measures

No mitigation measures associated with impacts to Transportation would apply to the Proposed Project.

Conclusion

Potential impacts of the Proposed Project associated with Transportation would be less than significant and no mitigation would be required.

[15] https://www.cityoforange.org/DocumentCenter/View/9331/Fire-Master-Plan-Guidelines-#:~:text=Fire%20apparatus%20access%20roads%20in,not%20less%20than%2028%20feet Accessed April 21, 2021

4.18 Tribal Cultural Resources

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

A Cultural and Paleontological Resources Assessment was completed to determine potential impacts to cultural resources associated with the development of the Proposed Project (**Appendix D** – *Cultural and Paleontological Resources Assessment for the Palmyra Cemetery Project, City of Orange, Orange County, California*, Cogstone, April 2021).

Appendix D consists of cultural and paleontological resources records searches, and assessment of the existing historic age building on the Project Site. Tribal consultation is required under AB52 because the Proposed Project qualifies as a CEQA project.

An intensive archaeological and paleontological resources survey of the Project Site was conducted of the entire 5.9-acre Project Site on February 4, 2021.

The proximity to the Santiago Creek corridor created an environment for Native American and early settler presence. A segment of the Santiago Creek flow north/south through the western portion of the Project Site. The Project Site is located within the traditional territory of the Gabrielino (Tongva) who were semi-sedentary hunters and gatherers. According to Appendix D, the Gabrielino consisted of more than 5,000 people living in various settlements throughout the area, with villages housing up to 150 people. The Gabrielino are considered to have been one of the wealthiest tribes and to have influenced tribes they traded with (Appendix D). The closest known major ethnohistoric village to the Project Site is Pasbenga located approximately 4.4 miles to the southwest (McCawley 1996). However, smaller villages and seasonal camps may have been present closer to the Project Site.

Gabrielino culture was heavily affected by colonial Spanish missionary efforts long before systematic ethnographic studies could be conducted, indeed before there was such a discipline as ethnography. Disease and forced participation in the mission system disrupted most

traditional cultural ways of life and resulted in a catastrophic reduction of the native population. Information about their material culture and lifeways is very limited and derived from historical sources, such as the diaries and records of early missionaries, soldiers, and explorers. While traveling through the area in 1769, Father Juan Crespi, a missionary, noted the presence of a large village, Hotuuknga, upstream from present day Olive on the north side of the Santa Ana River. Crespi wrote that 52 Native Americans came to greet them and accepted blankets, beads, and other goods. When he returned two years later, the group was hostile, and the Spaniards quickly continued on their way. As late as the 1870s, a small "Indian camp" was visible on the north side of Santiago Creek just west of the Glassell Street crossing.

Environmental Analysis

Effective July 1, 2015, Assembly Bill 52 (AB52) requires meaningful consultation with California Native American Tribes on potential impacts associated with tribal cultural resources, as defined in §21074. A tribe must submit a written request to the relevant lead agency if it wishes to be notified of projects within its traditionally and culturally affiliated area. The lead agency must provide written, formal notification to the tribes that have requested it within 14 days of determining that a project application is complete or deciding to undertake a project. The tribe must respond to the lead agency within 30 days of receipt of the notification if it wishes to engage in consultation on the project, and the lead agency must begin the consultation process within 30 days of receiving the request for consultation. Consultation concludes when either 1) the parties agree to mitigation measures to avoid a significant effect, if one exists, on a tribal cultural resource, or 2) a party, acting in good faith and after reasonable effort, concludes that agreement cannot be reached. AB 52 also addresses confidentiality during tribal consultation per Public Resources Code §21082.3(c). The City of Orange has received notification requests from four Native American tribes, who were notified of the Proposed Project in accordance with AB52.

Senate Bill 18 (SB18) places requirements on local governments for developments within or near traditional tribal cultural places. SB18 requires local jurisdictions to provide opportunities for involvement of California Native American Tribes in the land-planning process for the purpose of preserving traditional tribal cultural places (TTCP). The Final Tribal Guidelines recommends that the NAHC provide written information as soon as possible but no later than 30 days after the receipt of the notification to inform the lead agency if the Proposed Project is determined to be in proximity to a TTCP, and another 90 days for tribes to respond to if they want to consult with the local government to determine whether the project would have an adverse impact on the TTCP. There is no statutory limit on the consultation duration. Forty-five days before the action is publicly considered by the local government council, the local government refers action to agencies, following the CEQA public review period. The CEQA public distribution list may include tribes listed by the NAHC who have requested consultation, or it may not. If the NAHC, the tribe, and interested parties agree upon the mitigation measures necessary for the Proposed Project, it would be included in the project's environmental document. If both the lead agency and the tribe agree that adequate mitigation or preservation measures cannot be taken, then neither party is obligated to act. SB 18 requires a city or county to consult with the NAHC and any appropriate Native American tribe prior to the adoption, revision, amendment, or update of a city's or county's General Plan. In addition, SB 18 provides a new definition of TTCP that requires

a traditional association of the site with Native American traditional beliefs, cultural practices, or ceremonies, or the site must be shown to actually have been used for activities related to traditional beliefs, cultural practices, or ceremonies. Previously, the site was defined to require only an association with traditional beliefs, practices, lifeways, and ceremonial activities. In addition, SB 18 law amended Civil Code Section 815.3 and added California Native American tribes to the list of entities that can acquire and hold conservation easements for the purpose of protecting their cultural places.

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

Less Than Significant Impact: As discussed in Section 4.5(a), there are no existing buildings or other cultural resources on the Project Site that are listed or eligible for listing in the California Register of Historical Resources. None of the historic documents reviewed as part of Appendices B and C indicate that the Project Site is associated with any significant historical event. The records search from the SCCIC indicated that no cultural resources have been previously recorded on the Project Site. Therefore, substantial adverse impacts associated with historical resources listed or eligible for listing in the California Register of Historical Resources or the Citywide Historic Preservation Plan would be less than significant, and no mitigation would be required.

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

Less Than Significant Impacts with Mitigation Incorporated: Assembly Bill 52 (AB 52), signed into law in 2014, amended CEQA and established new requirements for tribal notification and consultation. AB 52 applies to all projects for which a notice of preparation or notice of intent to adopt a negative declaration/mitigated negative declaration is issued after July 1, 2015. AB 52 also broadly defines a new resource category of tribal cultural resources and established a more robust process for meaningful consultation that includes:

- Prescribed notification and response timelines;
- Consultation on alternatives, resource identification, significance determinations, impact evaluation, and mitigation measures; and
- Documentation of all consultation efforts to support CEQA findings.

A tribe must submit a written request to the relevant lead agency if it wishes to be notified of projects within its traditionally and culturally affiliated area. The lead agency must provide written, formal notification to the tribes that have requested it within 14 days of determining that a project application is complete or deciding to undertake a project. The tribe must respond to the lead agency within 30 days of receipt of the notification if it wishes to engage in consultation on the Proposed Project, and the lead agency must begin the consultation process within 30 days of receiving the request for consultation. Consultation concludes when either 1) the parties agree to mitigation measures to avoid a significant effect, if one exists, on a tribal cultural resource, or 2) a party, acting in good faith and after reasonable effort, concludes that

mutual agreement cannot be reached. AB 52 also addresses confidentiality during tribal consultation per Public Resources Code §21082.3(c).

AB52 Consultation

The City of Orange received requests from four California Native American Tribes to be notified of projects in which the City of Orange is the Lead Agency under CEQA. The Gabrielino/Tongva Nation, Torres Martinez Desert Cahuilla Indians, San Gabriel Band Of Mission Indians, and Gabrieleno Band of Mission Indians – Kizh Nation were notified of the Proposed Project via certified mail sent on June 1, 2021, which were received by the Native American Tribes between June 9th through June 15th.The 60-day[16] notification period lapsed on August 1, 2021, with the Gabrieleno Band of Mission Indians – Kizh Nation responding on July 7, 2021. Gabrieleno Band of Mission Indians – Kizh Nation indicated that the Project Site is within the boundaries of the Tribe's cultural and ancestral territory.

SB18 Consultation

At the request of the City of Orange, NAHC provided a list of 16 California Native American Tribes to be notified pursuant to SB18. The following Native American Tribes were notified of the Proposed Project via certified mail sent on June 1, 2021: Campo Band of Diegueno Missions Indians, Ewiiaapaayp Band of Kumeyaay 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, Juaneno Band of Mission Indians Acjachemen Nation – Belardes, La Posta Band of Diegueno Mission Indians, Manzanita Band of Kumeyaay Nation, Mesa Grande Band of Diegueno Mission Indians, Pala Band of Mission Indians, Sant Rosa Band of Cahuilla Indians, Soboba Band of Luiseno Indians, and Sycuan Band of the Kumeyaay Nation. The 90-day notification period lapsed on August 30, 2021, with one response from the Gabrieleno Band of Mission Indians – Kizh Nation of the above listed tribes.

The Gabrieleno Band of Mission Indians – Kizh Nation was notified of the Proposed Project and requested consultation by letter on July 7, 2021. Consultation took place between the City and Gabrieleno Band of Mission Indians – Kizh Nation via email and resulted in project specific mitigation measures **MM TCR-1, MM TCR-2,** and **MM TCR-3**, as outlined below, and successfully concluding consultation.

There is little potential for the inadvertent discovery of intact subsurface archaeological deposits on the Project Site. Nonetheless, the possibility exists, albeit remote, that tribal cultural resources of significance could be encountered during subsurface ground-disturbing activities. With the

[16] Executive Order N-54-20 extended the AB52 consultation timelines to 60-days, effective April 22, 2020, in response to COVID-19 public health concerns.
State of California Native American Heritage Commission. (2021). *Executive Order N-54-20: Extension of AB 52 Tribal Consultation Timelines.* http://nahc.ca.gov/2020/04/executive-order-n-54-20-extension-of-ab-52-tribal-consultation-timelines/ Accessed September 21, 2021.

incorporation of **MM TCR-1, MM TCR-2,** and **MM TCR-3**, potential impacts associated with tribal cultural resources would be less than significant.

Mitigation Measures

MM TCR-1 Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities:

A. The Project Applicant/Lead Agency shall retain a Native American monitor from (or approved by) the Gabrieleño Band of Mission Indians – Kizh Nation (the "Kizh" or the "Tribe") - the direct lineal descendants of the project location. The monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the Proposed Project, at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground-disturbing activity" includes, but is not limited to, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.

B. A copy of the executed monitoring agreement shall be provided to the Lead Agency prior to the earlier of the commencement of any ground-disturbing activity for the project, or the issuance of any permit necessary to commence a ground-disturbing activity.

C. The Project Applicant/Developer shall provide the Tribe with a minimum of 30 days advance written notice of the commencement of any project ground-disturbing activity so that the Tribe has sufficient time to secure and schedule a monitor for the project.

D. The Project Applicant/Developer shall hold at least one (1) pre-construction sensitivity/educational meeting prior to the commencement of any ground-disturbing activities, where at a senior member of the Tribe will inform and educate the project's construction and managerial crew and staff members (including any project subcontractors and consultants) about the TCR mitigation measures and compliance obligations, as well as places of significance located on the project site (if any), the appearance of potential TCRs, and other informational and operational guidance to aid in the project's compliance with the TCR mitigation measures.

E. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the project applicant/lead agency upon written request.

F. Native American monitoring for the project shall conclude upon the latter of the following: (1) written confirmation from a designated project point of contact to the Tribe that all ground-disturbing activities and all phases that may involve ground-disturbing activities on the project site and at any off-site project location are complete; or (2) written notice by the Tribe to the project applicant/lead agency that no future, planned construction activity and/or development/construction phase (known by the Tribe at that time) at the project site and at any off-site project location possesses the potential to impact TCRs.

MM TCR-2 Discovery of TCRs, Human Remains, and/or Grave Goods

A. Upon the discovery of a TCR, all construction activities in the immediate vicinity of the discovery (i.e., not less than the surrounding 50 feet) shall cease. The Tribe shall be immediately informed of the discovery, and a Kizh monitor and/or Kizh archaeologist will promptly report to the location of the discovery to evaluate the TCR and advise the project manager regarding the matter, protocol, and any mitigating requirements. No project construction activities shall resume in the surrounding 50 feet of the discovered TCR unless and until the Tribe has completed its assessment/evaluation/recovery of the discovered TCR and surveyed the surrounding area.
B. The Tribe will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate in its sole discretion, and for any purpose the Tribe deems appropriate, including but not limited to, educational, cultural and/or historic purposes.
C. If Native American human remains and/or grave goods are discovered or recognized on the project site or at any off-site project location, then all construction activities shall immediately cease. Native American "human remains" are defined to include "an inhumation or cremation, and in any state of decomposition or skeletal completeness." (Pub. Res. Code § 5097.98 (d)(1).) Funerary objects, referred to as "associated grave goods," shall be treated in the same manner and with the same dignity and respect as human remains. (Pub. Res. Code § 5097.98 (a), d)(1) and (2).)
D. Any discoveries of human skeletal material or human remains shall be immediately reported to the County Coroner (Health & Safety Code § 7050.5(c); 14 Cal. Code Regs. § 15064.5(e)(1)(B)), and all ground-disturbing project ground-disturbing activities on site and in any other area where the presence of human remains and/or grave goods are suspected to be present, shall immediately halt and remain halted until the coroner has determined the nature of the remains. (14 Cal. Code Regs. § 15064.5(e).) If the coroner recognizes the human remains to be those of a Native American or has reason to believe they are Native American, he or she shall contact, within 24 hours, the Native American Heritage Commission, and Public Resources Code Section 5097.98 shall be followed.

E. Thereafter, construction activities may resume in other parts of the project site at a minimum of 200 feet away from discovered human remains and/or grave goods, if the Tribe determines in its sole discretion that resuming construction activities at that distance is acceptable and provides the project manager express consent of that determination (along with any other mitigation measures the Tribal monitor and/or archaeologist deems necessary). (14 Cal. Code Regs. § 15064.5(f).)
F. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or grave goods.
G. Any historic archaeological material that is not Native American in origin (non-TCRs) shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County 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.
H. Any discovery of human remains and/or grave goods discovered and/or recovered shall be kept confidential to prevent further disturbance.

MM TCR-3 Procedures for Burials, Funerary Remains, and Grave Goods:

A. As the Most Likely Descendant ("MLD"), the Koo-nas-gna Burial Policy shall be implemented for all discovered Native American human remains and/or grave goods. Tribal Traditions include, but are not limited to, the preparation of the soil for burial, the burial of funerary objects and/or the deceased, and the ceremonial burning of human remains.
B. If the discovery of human remains includes four (4) or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created.
C. The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated "grave goods" (aka, burial goods or funerary objects) are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later, as well as other items made exclusively for burial purposes or to contain human remains. Cremations will either be removed in bulk or by means necessary to ensure complete recovery of all sacred materials.
D. In the case where discovered human remains cannot be fully recovered (and documented) on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to divert the project while keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed.

E. In the event preservation in place is not possible despite good faith efforts by the project applicant/developer and/or landowner, before ground-disturbing activities may resume on the project site, the landowner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects. The site of reburial/repatriation shall be agreed upon by the Tribe and the landowner and shall be protected in perpetuity.
F. Each occurrence of human remains and associated grave goods will be stored using opaque cloth bags. All human remains, grave goods, funerary objects, sacred objects, and objects of cultural patrimony will be removed to a secure container on site if possible. These items will be retained and shall be reburied within six months of recovery.
G. The Tribe will work closely with the project's qualified archaeologist to ensure that the excavation is treated carefully, ethically, and respectfully. If data recovery is approved by the Tribe, documentation shall be prepared and shall include (at a minimum) detailed descriptive notes and sketches. All data recovery data recovery-related forms of documentation shall be approved in advance by the Tribe. If any data recovery is performed, once complete, a final report shall be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains.

Conclusion

With incorporation of **MM TCR-1**, **MM TCR-2**, and **MM TCR-3**, potential impacts of the Proposed Project associated with Tribal Cultural Resources would be less than significant.

4.19 Utilities and Service Systems

Would the project:	Potentially Significant Impact	Less Than Significant 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?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project (including large-scale developments as defined by Public Resources Code Section 21151.9 and described in Question No. 20 of the Environmental Information Form) and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Environmental Analysis

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?

Less Than Significant Impact: The Project Site is an approximate 5.99-acre site in an urbanized area of Orange that is surrounded by residential, open space and institutional development, including Santiago Creek and multi-purpose Santiago Creek Trail directly west of the Proposed Project area. The Project Site contains multipurpose and recreation facilities that include a former YMCA building that was destroyed by fire in the central portion, parking lot in the east-central portion, a former BMX track in the northern portion, and former sports field in the southern portion. The Proposed Project would disturb only a portion of the Project Site and would avoid the portions of the Santiago Creek and multi-purpose Santiago Creek Trail located onsite. No ground disturbing activities, vegetation removal, or demolition/construction would occur within the Santiago Creek.

The Proposed Project involves the construction of a 3,339-gravesite cemetery, a 5,138 sf , two-story building to support activities associated with funeral burial practices, accessory parking,

and landscaping. The Project Site is currently developed with existing wet and dry utilities; however, the project would include new onsite storm water drainage facilities and onsite fire service water lines for the redevelopment. Existing 8-inch sewer and water mains located within the adjacent street frontages currently service the Project Site and would continue to provide water and sewer service to the site, with no proposed changes to those existing connections. An existing electrical utility transformer is located at the southeast corner of the site to be protected in place during all phases of construction and continue to serve the site during operation. An existing 24-inch underground storm drain gravity main is located on the Project Site. Other utilities, such as telecommunications, would be connected to existing infrastructure in the area, consistent with City and provider regulations.

The Proposed Project would entail installation of new storm drain facilities throughout the Project Site for onsite collection and include installation of a 72-inch underground storage pipe and modular wetland located on the eastern property line boundary (**Figure 22**). The new storm drain system would convey the collections from onsite to the pretreatment unit before entering the existing 24-inch underground storm drain. A proposed 4-inch fire service water line would connect from the former building that would be reconstructed and run through the proposed parking lot area, transitioning to a 6-inch line closer to the project boundary. The 6-inch line would then connect to the existing 8-inch water main located in East Palmyra Avenue. This fire service line would to an onsite fire hydrant proposed and supply water for emergency purposes.

The Proposed Project would connect to existing water mains that are serviced by the City of Orange Water Division, the water service provider for the project location. According to the City's General Plan EIR (2010), the City's estimated available water supply in 2030 would have increased to approximately 85,062 AFY (49,079 AFY from groundwater and 35,983 AFY from imported water), a level that would be sufficient to serve the proposed General Plan estimated buildout population. While the Proposed Project includes a GPA to change a portion of the site's land use designation from LDR to OS-P, the change would not increase the potential density for the site. The Proposed Project is consistent with the allowable uses for the Recreational Open Space zoning and would not increase intensity beyond those projected. The project would not increase the size of the previously existing building onsite and would be subject to the required regulations for water efficient landscaping as outlined in the City of Orange Mandatory Water Conservation Program and Resolution Number 7793 and Sections IX, Water Efficient Landscapes and IX.6 Water Efficient Landscape Guidelines. The Proposed Project would use a nominal percentage of the projected water supply available to the City in future year scenarios.

Therefore, potential impacts associated with the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities would be less than significant, and no mitigation would be required.

b) Would the project have sufficient water supplies available to serve the project (including large-scale developments as defined by Public Resources Code Section 21151.9 and described in Question No. 20 of the Environmental Information Form) and reasonably foreseeable future development during normal, dry, and multiple dry years?

Less Than Significant Impact: According to the City's General Plan EIR (2010), the City's average annual water use from 1997 to 2005 in comparison to population was approximately 0.24 AF per person. The proposed General Plan buildout population at a point in time after 2030 is estimated to be 194,543. If the same ratio of water use per person continues through year 2030 and beyond, approximately 46,800 AFY would be needed at buildout. The City's estimated available water supply in 2030 would have increased to approximately 85,062 AFY (49,079 AFY from groundwater and 35,983 AFY from imported water), a level that would be sufficient to serve the proposed General Plan estimated buildout population. While the Proposed Project includes a GPA to change a portion of the site's land use designation from LDR to OS-P, the change would not increase the potential density for the site. The Proposed Project is consistent with the allowable uses for the Recreational Open Space zoning and would not increase intensity beyond those projected. The project would not increase the size of the previously existing building onsite and would be subject to the required regulations for water efficient landscaping as outlined in the City of Orange Mandatory Water Conservation Program and Resolution Number 7793 and Sections IX, Water Efficient Landscapes and IX.6 Water Efficient Landscape Guidelines. The Proposed Project would use a nominal percentage of the projected water supply available to the City in future year scenarios. The City's Urban Water Management Plan (UWMP) (2015) states the City is 100 percent reliable for normal year demands from 2020 through 2040 under normal-year reliability and single-dry year demands. The City's 2015 UWMP also states The City is capable of meeting all customers' demands with significant reserves held by Metropolitan, local groundwater supplies, and conservation in multiple dry years from 2020 through 2040 with a demand increase of six percent from normal demand with significant reserves held by Metropolitan, local groundwater supplies, and conservation. Therefore, impacts associated with water supply would be less than significant and no mitigation would be required.

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: The Infrastructure Element also addresses wastewater systems. Cities throughout Orange County, including the City of Orange, rely on the Orange County Sanitation District (OCSD) for the regional collection and treatment of domestic, commercial, and industrial sewage. Although OCSD operates a comprehensive regional system of collection mains and treatment plants, individual cities are responsible for installing and maintaining local collection facilities. An existing 24-inch underground storm drain gravity main is located on the Project Site.

Wastewater generated by the Proposed Project would be treated at the OCSD Reclamation Plant No. 1, located at 10844 Ellis Avenue in Fountain Valley, and Treatment Plant No. 2 located at 22212 Brookhurst Street in Huntington Beach. OCSD facilities have design capacities that exceed their current utilization. The Proposed Project would generate nominal amounts of wastewater

per day, which is nominal compared to the average daily amount of wastewater treated by OCSD's wastewater facilities and its surplus capacity. Therefore, potential impacts associated with wastewater treatment capacity would be less than significant and no mitigation would be required.

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: OC Waste & Recycling operates three active landfills in Orange County: Olinda Alpha Landfill near Brea; the Frank R. Bowerman Landfill near Irvine; and the Prima Deschecha Landfill in San Juan Capistrano. The Olinda Alpha Landfill is the closest facility to the Project Site and would receive waste from the Proposed Project. This landfill has a daily maximum of 8,000 tons per day[17]. However, according to OC Waste & Recycling, the Olinda Alpha Landfill is scheduled to close in December 2021, with all in-county tonnage to Olinda projected for diversion to Frank R. Bowerman Landfill after Olinda's closure[18]. Frank R. Bowerman has a daily maximum of 11,500 tons per day and is the ninth largest landfill in the United States with enough projected capacity to serve residents and businesses until approximately 2053[19,20].

Solid waste from the project would be nominal. Any demolition of the existing development on the Project Site would require a building permit through the City, which includes the requirement to provide a construction waste management plan to insure consistency with federal, state, and local waste requirements. Operation of the site would include funerary uses and general landscape maintenance, which would be disposed of in accordance with state and local requirements. Therefore, potential impacts associated with solid waste disposal would be less than significant and no mitigation would be required.

e) *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

Less Than Significant Impact: As discussed above, solid waste generated by the Proposed Project would be disposed of at one of the three landfills in Orange County. Disposal of solid waste would be required to comply with all federal state, and local statutes and regulations related to solid waste. This would include providing receptacles for green waste, recyclables, and garbage. Therefore, potential impacts associated with compliance with solid waste statutes and regulations would be less than significant and no mitigation would be required.

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[17] https://www.oclandfills.com/sites/ocwr/files/2021-01/122020-olindafactsheet_ocrecycleguide_0.pdf Accessed March 22, 2021

[18] https://www.oclandfills.com/sites/ocwr/files/import/data/files/115754.pdf Accessed March 22, 2021

[19] https://oclandfills.com/landfills/active-landfills/frank-r-bowerman-landfill#:~:text=The%20landfill%20has%20enough%20projected,and%20businesses%20until%20approximately%202053 Accessed March 26, 2021

[20] https://www.oclandfills.com/sites/ocwr/files/2021-01/122020-frbfact_sheet_ocrecycleguide_0.pdf Accessed March 22, 2021

Mitigation Measures

No mitigation measures associated with impacts to Utilities and Service Systems apply to the Proposed Project.

Conclusion

Potential impacts of the Proposed Project associated with Utilities and Service Systems would be less than significant and no mitigation would be required.

4.20 Wildfire

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

Environmental Analysis

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. The Proposed Project would not impair the way emergency access is provided to the Project Site via Palmyra Avenue or South Tracy Lane. The closest emergency services facility is Fire Station no. 1 located approximately 1.2 miles northwest of the Project Site at the corner of South Grand Street and East Almond avenue, just west of SR-55. The proposed on-site accessways meet the turning radii and street width requirements of the Orange City Fire Department as shown on **Figure 26**. The Proposed Project includes design features such as onsite fire access lanes and fire hydrant, a fire sprinkler system, in addition to required 150-foot hose pulls. These standards would ensure adequate access within the Project Site for emergency response or evacuation plan. In addition, as part of the plan check process, the Project Site plan would undergo a fire, life, and safety review by the Orange City Fire Department to ensure adequate infrastructure for emergency response and access. Therefore, potential impacts associated with an adopted emergency response plan or emergency evacuation plan would be less than significant and no mitigation would be required.

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

Less Than Significant Impact. Fires can occur in urban environments and can also impact unpopulated areas that may contain brush or grasslands. Wildland fires are most problematic along the developed residential fringes of the hillsides, known as the wildland-urban interface. On a seasonal basis, dry vegetation, little seasonal rain, and Santa Ana wind conditions combine to increase wildfire potential. New development, particularly in the eastern portion of Orange, will result in increased fire hazards due to higher levels of interface between residential

development and open grassland and vegetation along hillsides. As shown in **Figure 2** – *Project Vicinity Map*, the Project Site is in the highly urbanized area of central Orange.

Other factors contribute to the severity of fires including weather and winds. Specifically, winds commonly referred to as Santa Ana winds, which occur during fire season (typically from June to the first significant rain in November) are particularly significant. Such "fire weather" is characterized by several days of hot dry weather and high winds, resulting in low fuel moisture in vegetation.

The City has identified properties within High and Very High Fire Hazard Severity Zones. As shown in Figure PS-1: *Environmental and Natural Hazard Policy Map,* such areas include the ridgeline areas and undeveloped wildland areas located east of the Costa Mesa (SR-55) Freeway and south of the Riverside (SR-91) Freeway, the areas of the City located east of Villa Park. The City provides safeguards to prevent devastation from fires such as routine inspections of homes and the surrounding areas. The Project Site is not located within a High or Very High Fire Hazard Severity Zone as designated by the City. Additionally, the Proposed Project would adhere to the development standards outlined in both the 2019 Building Code and 2016 Fire Code, including the use of fire suppression devices such as fire sprinklers. Further, the Project Site area proposed for disturbance (i.e., excluding the Santiago Creek and multi-purpose Santiago Creek Trail) is flat, and does not contain significant slopes which could exacerbate wildland fire risk. Therefore, potential impacts due to slope, prevailing winds, and other factors, which exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from wildfire or the uncontrolled spread of a wildfire, would be less than significant and no mitigation would be required.

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

Less Than Significant Impact. The Project Site is in a built-out area of the City and is not located within a High or Very High Fire Hazard Severity Zone, with surrounding development and roadway infrastructure existing in place. The Proposed Project would not require infrastructure improvements that would exacerbate fire risk, as the project would entail redevelopment of a lot currently developed with multipurpose recreational facilities connected to existing infrastructure such as roads, water, electricity, and sewer. The Proposed Project would adhere to the development standards outlined in both the 2019 Building Code and 2019 Fire Code, including the use of fire suppression devices such as fire sprinklers. Impacts to the environment from the Proposed Project are detailed throughout the entirety of this document, and are either less than significant, or less than significant with mitigation incorporated. Therefore, potential impacts associated with the exacerbation of fire risk or result in temporary or ongoing impacts to the environment would be less than significant and no mitigation would be required.

d) 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?

Less Than Significant Impact. The Project Site's existing drainage sheet flows from the site to the surrounding area. A minimum seven-foot landfill cover (five (5) feet for graves, and a two-foot buffer above the landfill) would be constructed in the areas of the proposed gravesites for drainage improvements. To achieve the seven-foot landfill cover thickness, clean soil would be imported in areas where the landfill cover is less than seven (7) feet. Little to none of the existing landfill cover would be altered to reach the final design grades. The existing LFG monitoring probes and groundwater monitoring well would be protected during site grading activities to prevent damage. The proposed grading for the landfill portion of the Project Site would allow sheet flow by gravity via the proposed storm drains. The proposed gravesite area would be graded to provide adequate drainage of surface water run-off. The grading design would allow for stormwater to drain away from the landfill portion of the site and discharged into the City's stormwater system. The Proposed Project would include a proprietary biofiltration system would provide treatment to stormwater runoff generated from disturbed areas. A dedicated program to inspect and maintain the surface drainage on the site would be in effect and would continue throughout the duration of the post-closure period. The proposed drainage system would be checked for blockages, ponding, overflowing, collapse, or structural failure on an annual basis. Post-earth moving activities would in a flat Project Site, with no substantial slopes on-site. The Proposed Project would not involve grading or ground disturbing activities within the Santiago Creek and Multi-purpose Santiago Creek Trail. Therefore, potential impacts associated with the exposure of 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 would be less than significant, and no mitigation would be required.

Mitigation Measures

No mitigation measures associated with impacts to Wildfire apply to the Proposed Project.

Conclusion

Potential impacts of the Proposed Project associated Wildfire risk would be less than significant and no mitigation would be required.

4.21 Mandatory Findings of Significance

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

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

Less Than Significant Impact with Mitigation Incorporated: As previously described, the Proposed Project is an infill development project located in an urbanized area of the City and the Project Site is not within or adjacent to and would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, other approved local, regional, or state habitat conservation plan.

According to the Cultural and Paleontological Resources Assessment (Appendix D), no cultural resources have been recorded within the Project Site, and the Project Site does not contain any resources that are important to major periods of California history or prehistory. Appendix D incorporates two project design features (PDF) that would ensure effects to unknown cultural, archaeological, and paleontological resources remain less than significant in the event of an unanticipated discovery with implementation of **MM CUL-1** and **MM GEO-2**. Although the Project Site does not contain any documented cultural resources, there is a low possibility that undiscovered, buried resources (including paleontological and tribal cultural resources) might be encountered during construction. Therefore, with implementation of **MM CUL-1** and **MM GEO-2** potential impacts associated with any undiscovered resources would be less than significant and ensure that the Proposed Project would not eliminate important examples of the major periods of California history or prehistory.

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

Less Than Significant with Mitigation Incorporated: The Proposed Project would result in potentially significant project-specific impacts to biological resources, cultural resources, geology and soils, hazards and hazardous waste, hydrology and water quality, noise, and tribal cultural resources. However, **MM BIO-1**, **MM CUL-1**, **MM GEO-1**, **MM GEO-2**, **MM HAZ-1**, **MM HAZ-2**, **MM HAZ-3**, **MM NOI-1, MM TCR-1**, **MM TCR-2**, and **MM TCR-3**, would reduce these impacts to less than significant levels. Furthermore, the Air Quality and Transportation analyses presented in Section 4.3 and Section 4.17, respectively, of this document considered cumulative impacts and determined that cumulative air and traffic impacts would be less than significant, and no mitigation would be required, as outlined in those sections. No additional mitigation measures would be required to reduce cumulative impacts to less than significant levels.

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

Less Than Significant with Mitigation Incorporated: All potential impacts of the Proposed Project have been identified, and mitigation measures have been provided, where applicable, to reduce potential impacts to less than significant levels. Upon implementation of mitigation measures, the Proposed Project would not have the potential to result in substantial adverse impacts on human beings either directly or indirectly. No additional mitigation measures would be required.

5 LIST OF PREPARERS

Sagecrest Planning+Environmental
Christine Saunders, Director, Environmental Services
Veronica Morones, Associate Environmental Planner

Subconsultants
Perrie Ilercil, PE – Ganddini Group
Giancarlo Ganddini, TE, PTP – Ganddini Group
Roma Stomberg, INCE, MS – Ganddini Group
Katie Wilson, MS – Ganddini Group
Catherine Howe, MS – Ganddini Group
Dennis Kawasaki – Ardent Environmental Group, Inc.
Paul A. Roberts, P.G. – Ardent Environmental Group, Inc.
Craig Metheny, C.A.C. - Ardent Environmental Group, Inc.
Lenny Malo, MS – Noreas Environmental Engineering and Science
Lincoln Hulse, BS – Noreas Environmental Engineering and Science
Vir McCoy, BS – Noreas Environmental Engineering and Science
Matthew South, BS - Noreas Environmental Engineering and Science
Greg Applegate, RCA – Arborgate Consulting, Inc.
Gregory R. Cooke, P.E., PLS, RCE – DRC Engineering, Inc.
John Gust, Ph. D, RPA – Cogstone
Kim Scott, MS – Cogstone
Sandy Duarte, BS – Cogstone
Shannon Lopez - Cogstone
Kelly Vreeland, MS - Cogstone

City Staff
Planning Division, Community Development Department
Vidal Marquez, Assistant Planner

Development Services Division, Engineering, Public Works Department
Medel Llanes, Principal Civil Engineer
Tawnie Schraan, Associate Civil Engineer

Traffic Division, Public Works Department
Larry Tay, City Traffic Engineer
Doug Keys, Transportation Analyst

Surface Water Quality, Public Works Department
Mike Carney, Environmental Program Manager

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Appendix A - *Air Quality, Global Climate Change, and Energy Impact Analysis*, Ganddini Group, May 2021, Revised February 2022

Appendix B – *Orange Palmyra Cemetery Project Biological Technical Report*, Noreas, February 2021

Appendix C – *Tree Evaluation Report for: Proposed Palmyra Cemetery Site*, Arborgate Consulting, Inc., August 2020

Appendix D – *Cultural and Paleontological Resources Assessment for the Palmyra Cemetery Project, City of Orange, Orange County, California*, Cogstone, April 2021, Revised December 2021

Appendix E – *Geotechnical Feasibility Assessment, Proposed Palmyra Cemetery, 2205 E. Palmyra Avenue and 290 South Yorba Street, Orange, California*, Hamilton and Associates, July 2021.

Appendix F - *Preliminary Priority Water Quality Management Plan (WQMP) Kornerstone Muslim Cemetery*, DRC Engineering, Inc., April 2021

Appendix G – *Post Closure Land Use Plan Former La Veta Refuse Disposal Station*, Ardent Environmental Group, Inc., October 2020

Appendix H – *Soil Management Plan Former La Veta Refuse Disposal Station,* Ardent Environmental Group, Inc., October 2020

Appendix I – *Conceptual Hydrology Study for Kornerstone Muslim Cemetery*, DRC Engineering, Inc., May 2021

Appendix J – *Palmyra Cemetery – CEQA Questions*, DRC Engineering, Inc., May 2021

Appendix K – *Orange Palmyra Cemetery Noise Impact Analysis, City of Orange*, Ganddini Group Inc., May 2021, Revised February 2022

Appendix L - *Orange Palmyra Cemetery Focused Vibration Analysis*, Ganddini Group Inc., June 2021, Revised February 2022

Appendix M – *Orange Palmyra Cemetery Project Trip Generation & Vehicle Miles Traveled Screening Analysis*, Ganddini Group, March 2021

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