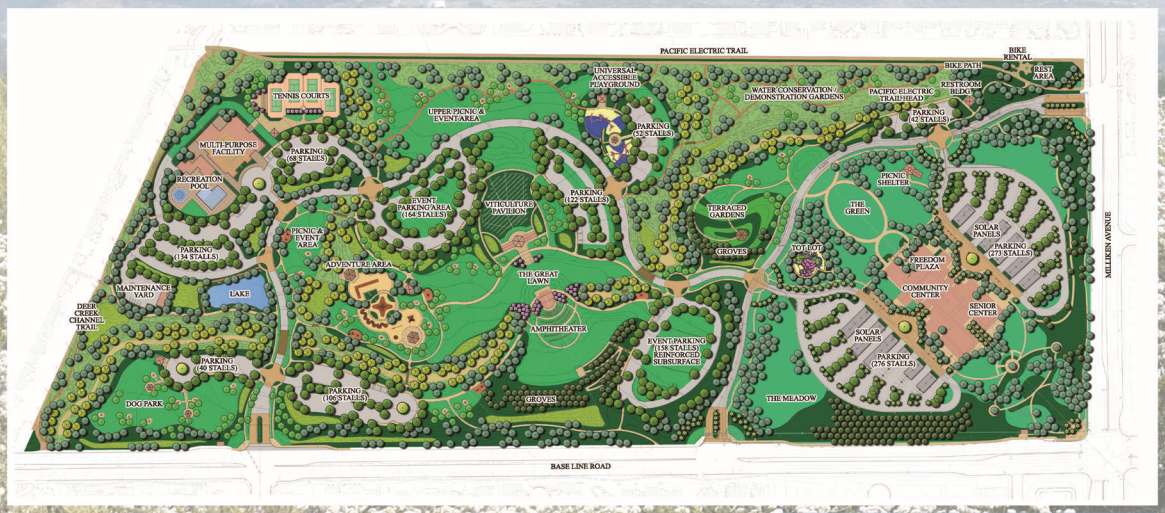
RANCHO CUCAMONGA

DRAFT
CENTRAL PARK MASTER PLAN UPDATE REVISION
PROGRAM ENVIRONMENTAL IMPACT REPORT



TETRA TECH

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DRAFT

Central Park Master Plan Update reVISION

Program Environmental Impact Report

Prepared for:

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

Contact: Jeff Benson

Prepared by:

17885 Von Karman Avenue, Suite 500
Irvine, California 92614

Contact: Paula Fell

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ABBREVIATIONS AND ACRONYMS

AB	Assembly Bill
APSE	area of potential significant effects
AQMP	Air Quality Management Plan
BP	before present
BUOW	burrowing owl
CAAQS	California Ambient Air Quality Standards
CAGN	California gnatcatcher
CalEEMod	California Emissions Estimator Model®
CARB	California Air Resources Board
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CH_4	methane
City	City of Rancho Cucamonga
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalents
CRHR	California Inventory of Historical Resources
CVWD	Cucamonga Valley Water District
CWA	Clean Water Act
cy	cubic yard
dB	decibel scale
dBA	A-weighted sound level
DTSC	Department of Toxic Substance Control
EIR	Environmental Impact Report
ESA	Endangered Species Act
GHG	greenhouse gas
HCP	Habitat Conservation Plan
HVAC	heating, ventilation, and air conditioning

IEUA	Inland Empire Utilities Agency
IS/MND	Initial Study/Mitigated Negative Declaration
ITE	Institute of Transportation Engineers
LST	localized significance threshold
MBTA	Migratory Bird Treaty Act
mgd	million gallons per day
$MTCO_2e$	metric tons of carbon dioxide equivalent
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NO_2	nitrogen dioxide
NOP	Notice of Preparation
NO_X	nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Administration
PM	particulate matter
PM_{10}	particulate matter 10 micrometers or less in diameter
$PM_{2.5}$	particulate matter 2.5 micrometers or less in diameter
PRC	Public Resource Code
Project	Central Park Master Plan Update reVISION Project
RAFSS	Riversidean alluvial fan sage scrub
RCFD	Rancho Cucamonga Fire District
RCRA	Resources Conservation and Recovery Act
RP-4	Regional Plant No. 4
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SBKR	San Bernardino Kangaroo Rat
SBTAM	San Bernardino Transportation Analysis Model
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SF_6	sulfur hexafluoride
SGMA	Sustainable Groundwater Management Act

SLF	sacred lands files
SO_2	sulfur dioxide
SoCAB	South Coast Air Basin
SO_X	sulfur
sq. ft.	square feet/foot
SWPPP	Stormwater Pollution Prevention Plan
TDF	travel demand forecasting
TDM	transportation demand management
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VdB	Vibration Velocity Level
VMT	Vehicle Miles Traveled
WQMP	Water Quality Management Plan

CHAPTER 1
EXECUTIVE SUMMARY

1.1 INTRODUCTION

In 1984, the City of Rancho Cucamonga (City) Council acquired approximately 103.4 gross acres of land northwest of the corner of Milliken Avenue and Base Line Road for a park that would serve the whole City and become a major public resource on the order of other great parks in other major cities. A Central Park Master Plan was developed in the late 1980s, however, no revenue was available at the time for plan development. In the early 2000s, the Goldy S. Lewis Community Center and James L. Brulte Senior Center and the Central Park Playground were developed. Negative economic conditions had not allowed for the development of the remainder of the park.

In 2017, the City Council approved efforts for a Central Park Master Plan Update. As part of the Central Park Master Plan Update, the City conducted an extensive community outreach and public input process. This outreach process was intended to highlight the historical design and development efforts to date on Central Park and to seek public input for its future and ultimate development. A combination of local community workshops, online surveys, social networking, and a live Facebook broadcast were conducted to develop the resulting Central Park Master Plan Update reVISION. The Central Park Master Plan Update reVISION reflects the historical design philosophy, is responsive to the past planning efforts, includes modern community inspired recreation elements, and incorporates a phased approach providing for fiscally achievable project segments ranging in size from 1 acre to 11 acres (proposed Project). Implementation of the proposed Project requires the approval of the Central Park Master Plan Update reVISION, Final Site Plans and certification of the Final Program Environmental Impact Report (EIR).

“Projects” within the State of California are required to undergo environmental review to determine the environmental impacts associated with implementation of the project in accordance with the California Environmental Quality Act (CEQA). For the proposed Project, the City is the lead agency, and thus is required to conduct an environmental review to analyze the potential environmental effects associated with the proposed Project.

This document is a Draft EIR prepared in accordance with CEQA. It provides an overview of the proposed Project and considers alternatives, identifies the anticipated environmental impacts from the proposed Project and the alternatives, and identifies mitigation measures designed to reduce the level of significance of any significant impact.

1.2 PURPOSE OF THE ENVIRONMENTAL IMPACT REPORT

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 the significant environmental impacts resulting from proposed projects, when feasible, and to identify a range of feasible alternatives to the proposed Project that could reduce those environmental effects. The EIR must include the contents required by

CEQA and the *CEQA Guidelines*, and examine all phases of the project, including planning, construction, operation, and any reasonably foreseeable future phases.

1.3 PROJECT LOCATION

The City of Rancho Cucamonga's Central Park is located approximately in the center of the City of Rancho Cucamonga at 11200 Base Line Road, and is within Section 36 of Township 1 North, Range 7 West, on the Guasti, California, U.S. Geological Survey 7.5-minute Quadrangle Map (CNPS 2018). Bounded on the south by Base Line Road and on the east by Milliken Avenue, the Park is approximately 2.5 miles west of Interstate 15, 3.7 miles north of Interstate 10, and 0.7 miles south of the State Route 210 in Rancho Cucamonga.

1.4 PROJECT OBJECTIVES

Throughout the last 30 years the vision for Central Park revolved around an Olmstedian Philosophy. The idea that a design's psychology and the visual effects on people can be an antidote to the stress and artificiality of urban life.

In order to ensure that the proposed Project is characterized by community inspired recreation elements, functional integrity, dynamic economic responsiveness, environmental sensitivity, and aesthetic quality, the following objectives have been identified for the proposed Project:

1. To develop a comprehensive planning document that will establish the preliminary land use development for the balance of the Central Park area.
2. To create a unique recreational facility in the City with a variety of active and passive recreational opportunities and amenities accessible within the community and offering multiple options for pedestrian mobility and non-vehicular access.
3. To identify a variety of recreational opportunities designed to be implemented in small (1–11 acres) buildable sections in Central Park responsive to evolving, economic conditions and City-wide recreational needs.
4. To implement a landscape concept that features drought-tolerant plant materials that create an aesthetically pleasing, thematically coherent outdoor environment while minimizing demand for water resources.

1.5 PROJECT DESCRIPTION

The Central Park Master Plan Update reVISION is a comprehensive planning document which defines the development of the remaining, undeveloped land located west of the existing Senior and Community Centers at Central Park. It identifies smaller (1.6- to 11-acre), buildable sections comprised of financially responsible amenities, so that when funding becomes available, park development could continue within the framework of a comprehensive community inspired vision. For purposes of this EIR, the proposed Project includes all the elements presented in the Central Park Master Plan Update reVISION with the exception of the amphitheater element which has been analyzed under a separate CEQA document, see Section 2.1. The amphitheater project is included in the list of cumulative projects utilized in the analysis of cumulative impacts, see Section 3.9.

The proposed Project is composed of recreation areas and elements that relate to the existing open drainage channel spine and is anchored by the Senior and Community Centers to the east and the proposed Recreation Pool, Multi-Purpose Facility, and Tennis Courts to the west. The park will provide a variety of both active and passive zones and uses for groups of all ages. The Universal Accessible Playground will provide access and opportunity for people of all ages and abilities to promote play, physical activity, sociability, and learning. The Adventure Area will promote a unique outdoor experience for personal physical development, leadership, and team building. The park also features the "Great Lawn", Viticulture Pavilion, a flexible park area for large community event gatherings and celebrations. The smaller parcel sizes will allow the City flexibility to develop portions of the park as funds become available.

1.6 PROJECT IMPLEMENTATION SCHEDULE

The proposed Project has been designed to allow the City flexibility to develop portions of the park as funds become available. Several of the proposed Project elements have the potential to be constructed in the relatively near future.

Construction of Element A - Pacific Electric Trail Head, Element B - Terraced Gardens, and Element C - Water Conservation/Demonstration Garden is expected to begin within the next couple of years and be completed in 2024. Construction of Element J - Dog Park is expected to begin early 2020 and be completed in 2022. Element L - Recreation Pool is expected to begin within the next couple of years and be completed in 2024.

The expected buildout of the remainder of the proposed Project is not known at this time. For the purposes of evaluation, it is assumed in this Draft Program EIR, that the design and construction of all the proposed Project's elements would occur over a 20- to 30-year period.

1.7 SUMMARY OF IMPACTS

Table 1.7-1: Summary of Potential Impacts and Mitigation Measures summarizes the potential impacts for the proposed Project. The table also identifies mitigation measures recommended to reduce, avoid or minimize significant impacts and indicates the net level of impact following implementation of all mitigation measures.

The potentially adverse effects of the proposed Project are discussed in Chapters 4.1 through 4.9 of this Draft Program EIR. Mitigation measures have been recommended that would avoid, reduce, or minimize impacts. All of the potential impacts associated with the proposed Project would be either less than significant or mitigated to less than significant. The proposed Project would not result in any significant unavoidable impacts.

Table 1.7-1: Summary of Potential Impacts and Mitigation Measures

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
4.1 AIR QUALITY			
IMPACT 4.1-1: Would the project conflict with or obstruct implementation of the applicable air quality plan?	Less than Significant	No mitigation required.	Less than Significant
IMPACT 4.1-2: Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?	Significant	**AIR-1: Reducing Air Pollutant Emissions.** The Project will be required to comply with regional rules that assist in reducing air pollutant emissions. South Coast Air Quality Management District (SCAQMD) Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 402 requires implementing dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Implementing these dust suppression techniques will reduce the fugitive dust generation (and thus the PM_{10} component). Compliance with these rules will reduce impacts on nearby sensitive receptors. Standard requirements and Best Management Practices include the following: • Equipment/vehicles shall not be left idling for periods in excess of five minutes. • Engines shall be maintained in good working order to reduce emissions. • On-site electrical power connections shall be made available where feasible. • Low-sulfur diesel fuel shall be utilized. • Electric and gasoline powered equipment shall be substituted for diesel powered equipment where feasible. • Exposed soils and haul roads shall be watered at a minimum of twice per day to reduce fugitive dust during grading/construction activities, if necessary. • Street sweeping shall be conducted when visible soil accumulations occur along site access roadways to remove dirt dropped by construction vehicles. • Site access driveways and adjacent streets shall be washed daily, if there are visible signs of any dirt track-out at the conclusion of any workday. • Construction vehicle tires shall be cleaned prior to leaving the project site.	Less than Significant

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		• All trucks hauling dirt away from the site shall be covered, and speeds on unpaved roads shall be reduced below 15 miles per hour. • During high wind conditions (i.e., sustained wind speeds exceeding 20 miles per hour), areas with disturbed soil shall be watered hourly and activities on unpaved surfaces shall cease until wind speeds no longer exceed 20 miles per hour. • Storage piles that are to be left in place for more than three working days shall either be sprayed with a non-toxic soil binder, covered with plastic or revegetated. • Areas of disturbance shall be limited to 5 acres per day.	
IMPACT 4.1-3: 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	No mitigation required.	Less than Significant
IMPACT 4.1-4: Would the project expose sensitive receptors to substantial pollutant concentrations?	Significant	**AIR-1: Reducing Air Pollutant Emissions**	Less than Significant
IMPACT 4.1-5: Would the project create objectionable odors affecting a substantial number of people?	Less than Significant	No mitigation required.	Less than Significant
4.2 BIOLOGICAL RESOURCES			
IMPACT 4.2-1: 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 the U.S. Fish and Wildlife Service?	Significant	**BIO-1**: **Pre-Construction BUOW And Breeding Bird Survey Within 14 Days Prior To Construction –** A qualified biologist shall conduct a 14-day pre-construction focused burrowing owl (BUOW) survey and breeding bird survey. The pre-construction BUOW survey (Take Avoidance Survey) shall be conducted in accordance with the Staff Report on Burrowing Owl Mitigation (CDFG 2012) no less than 14 days prior to initiating ground disturbance activities. The survey may detect changes in BUOW presence such as colonizing BUOWs that have recently moved onto the site, migrating BUOWs, resident BUOWs changing burrow use, or young of the year that are still present and have not dispersed (CDFG 2012). Following the completion of the survey, the biologist shall prepare a memo summarizing the results of the survey. The memo shall be submitted to the City and California Department of Fish and Wildlife (CDFW) prior to initiating any ground disturbance activities.	Less than Significant

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		If no BUOWs, signs of BUOWs, or breeding birds are observed during the survey and concurrence is received from CDFW, project activities may begin, and no further mitigation would be required. If BUOWs or signs of BUOWs are observed during the survey, the site shall be considered occupied. The biologist shall contact the City and CDFW to assist in the development of avoidance, minimization, and mitigation measures, prior to commencing project activities. If an active bird nest (not a BUOW nest) is located during the pre-construction survey and potentially would be disturbed, a no-activity buffer zone shall be delineated on maps and marked (flagging or other means) up to 500 feet for special-status avian species and raptors, or 100 feet for non-special status avian species. The limits of the buffer shall be demarcated to not provide a specific indicator of the location of the nest to predators or people. Materials used to demarcate the nests shall be removed as soon as work is complete, or the fledglings have left the nest. The biologist shall determine the appropriate size of the buffer zone based on the type of activities planned near the nest and bird species because some bird species are more tolerant than others to noise and other disturbances. Buffer zones shall not be disturbed until a qualified biologist determines that the nest is inactive. Additionally, the area shall also not be disturbed until the young have fledged, the young are no longer being fed by the parents, the young have left the area, or the young would no longer be impacted by project activities. The results of the 14-day pre-construction BUOW survey will be valid for 14 days. If construction is delayed more than 14 days, then the 14-day pre-construction BUOW survey must be repeated. **BIO-2**: **Pre-Construction BUOW And Breeding Bird Survey Within 24 Hours Prior To Construction –** In addition to the 14-day pre-construction BUOW survey, a 24-hour pre-construction BUOW survey and breeding bird survey shall be conducted following the same measures described above in Mitigation Measures BIO-1. The results of the 24-hour pre-construction BUOW survey shall be valid for 24 hours. If construction is delayed more than 24 hours, then the 24-hour pre-construction BUOW survey shall be repeated.	
IMPACT 4.2-2: 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	No mitigation required.	Less than Significant

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
IMPACT 4.2-3: 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?	Significant	**BIO-3: Permits for Impacts on Jurisdictional Areas –** Impacts on jurisdictional areas will require permits; therefore, the City shall need to obtain the following permits for the development of Project Elements B, C, E, I, K, M, and O: • Waste Discharge Requirements (WDRs) from the RWQCB. • Lake or Streambed Alteration Agreement with CDFW. To follow Porter-Cologne and the California Fish and Game Code, the City shall obtain these permits prior to the issuance of grading or building permits for the Project Elements B, C, E, I, K, M, and O, and prior to any impacts on jurisdictional areas. These permits and approvals would mandate best management practices, avoidance and protection measures, and/or compensatory mitigation measures for impacts on sensitive biological resources and jurisdictional areas. The amount of mitigation required, and specific mitigation details would be determined through the permitting process with the regulatory agencies. All measures to protect waters, water quality, fish, and wildlife resources would be incorporated into the project design as appropriate. Compliance with the requirements of the regulatory agency programs and implementation of the mitigation measures required by the permits would offset the loss of jurisdictional areas and mitigate the project's impacts to less than significant levels. Copies of permits including any extensions and amendments, approvals, and biological reports and plans shall be available to all persons who will be working on the project. These documents shall be available at the work site during periods of work and shall be presented upon request by any resource agency personnel with a reasonable reason for making such a request. Resource agency personnel may enter the Project site at any time to verify compliance with the permits, approvals, reports, and plans. Central Park is in an area of San Bernardino County that is under the jurisdiction of the following resource agencies' field offices: • CDFW: Inland Desert Region 6. • RWQCB: Regional Board 8 - Santa Ana Region. <u>Waste Discharge Requirements (WDRs)</u> Project Elements B, C, E, I, K, M, and O contain Waters of the State that will be unavoidably impacted by the proposed Project; therefore, the City will need to obtain authorization from the RWQCB. The City will need to apply for and obtain Waste Discharge Requirements (WDRs) from the RWQCB prior to impacting the drainages.	Less than Significant

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Section 13260 of the California Water Code states that persons discharging or proposing to discharge waste that could affect the quality of Waters of the State, other than into a community sewer system, will file a ROWD with RWQCB. The City will prepare and submit an application permit package to the RWQCB. The application permit package constitutes a ROWD pursuant to California Water Code section 13260. The package will be used to start the application process for all WDRs. Prior to any impacts on jurisdictional Waters of the State, the City would obtain WDRs from the RWQCB pursuant to Porter-Cologne. The permit will mandate BMPs, avoidance and protection measures, and/or compensatory mitigation measures for impacts on jurisdictional Waters of the State. Compliance with the RWQCB's WDRs and implementation of the measures required by the permit would offset the loss of jurisdictional Waters of the State and mitigate the Project's impacts to less than significant levels. <u>Lake or Streambed Alteration Agreement</u> Project Elements B, C, E, I, K, M, and O contain CDFW jurisdictional areas that will be unavoidably impacted by the Project; therefore, the Project shall require a permit from CDFW pursuant to sections 1600–1616 of the California Fish and Game Code. CDFW generally regulates waters, wetlands, and riparian areas through its Lake and Streambed Alteration Program that requires execution of an agreement with CDFW before any activity substantially modifies a river, stream or lake. It is not legal to alter the bed or bank of a stream or lake or their natural water flow without a CDFW Lake or Streambed Alteration Agreement. The California Fish and Game Code section 1602 requires an entity to notify CDFW of any proposed activity that may substantially modify a perennial, intermittent, and ephemeral river, stream, or lake in the state. The notification requirement applies to any work undertaken in or near a river, stream, or lake that flows at least intermittently through a bed or channel. This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water. It is anticipated that the City will need a standard Streambed Alteration Agreement for the project.	
IMPACT 4.2-4: 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	No mitigation required.	Less than Significant

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
IMPACT 4.2-5: Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No Impact	No mitigation required.	No Impact
4.3 CULTURAL RESOURCES			
IMPACT 4.3-1: Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	Significant	**CUL-1: Worker Education/Training –** Prior to construction of the Project, the City will retain a qualified archaeologist who will provide a cultural resource briefing that includes all applicable laws and penalties pertaining to disturbing cultural resources, a brief discussion of the prehistoric and historic regional context and archaeological sensitivity of the area, types of cultural resources found in the area, instruction that Project workers will halt construction if a cultural resource is inadvertently discovered during construction, and procedures to follow in the event an inadvertent discovery (Inadvertent Discovery Plan discussed below) is encountered, including appropriate treatment and respectful behavior of a discovery (e.g., no posting to social media or photographs). The consulting tribes will provide a representative to participate in the environmental training to discuss or provide input from a tribal cultural perspective regarding the potential cultural resources within the region. After the training, all personnel will be given a worker education/training brochure regarding identification of cultural resources and protocols for reporting finds. Any employee beginning work following the initial worker education/training secession must also receive commensurate cultural and archaeological resources sensitivity training and be provided the brochure. **CUL-2: Inadvertent Discovery of Archaeological Resources During Construction –** A qualified archaeologist shall be retained on-call and to prepare a Monitoring and Inadvertent Discovery Plan for the Project which includes appropriate Monitoring and Inadvertent Discovery Procedures. The Plan shall include, but not be limited to: the duration of monitoring based on grading plans, locations of areas to be monitored, procedures to stop and redirect work in the event of a find (see below), procedures for daily monitoring reporting and final reporting, etc. The draft plan shall be developed and reviewed by the City and interested tribes. During Project-level construction, should subsurface archaeological resources be discovered, all activity in the vicinity of the find (and within a 60-foot buffer) shall stop and a qualified archaeologist shall be contacted to assess the significance of the find according to CEQA Guidelines Section 15064.5 and/or NRHP criteria (as applicable). In addition, the lead representative for the consulting tribes (i.e. San Manuel Band of Mission Indians and San	Less than Significant

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Gabriel Band of Mission Indians) will be notified. If any find is determined to be significant, the archaeologist shall determine, in consultation with the implementing agencies and any local Native American groups expressing interest (e.g. San Manuel Band of Mission Indians), appropriate avoidance measures or other appropriate mitigation. Under CEQA Guidelines Section 15126.4(b)(3), preservation in place shall be the preferred means to avoid impacts to significant tribal cultural resources (as defined by PRC 21074), and archaeological resources qualifying as historical resources. Methods of avoidance may include, but shall not be limited to, Project reroute or re-design, Project cancellation, or identification of protection measures such as capping or fencing, PRC 20180.3.1(b)(2) provides examples of mitigation measures that lead agencies may consider to avoid or minimize impacts to tribal cultural resources. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures, such as data recovery or other appropriate measures, in consultation with the implementing agency and any local Native American representatives expressing interest in prehistoric or tribal resources. If an archaeological site does not qualify as an historical resource but meets the criteria for a unique archaeological resource as defined in PRC Section 21083.2, then the site shall be treated in accordance with the provisions of PRC Section 21083.2. Should any significant resource and/or tribal cultural resource not be a candidate for avoidance or preservation in place, and the removal of the resource(s) is necessary to mitigate impacts, the research design shall include a comprehensive discussion of sampling strategies, resource processing, analysis, and reporting protocols/obligations. Removal of any cultural resource(s) shall be conducted with the presence of Tribal Monitors representing the consulting tribes, if the consulting tribes elect to have a tribal monitor present. All plans for analysis shall be reviewed and approved by the applicant and the consulting tribes prior to implementation, and all removed material shall be temporarily curated in a secure location on-site. It is the preference of San Manuel Band of Mission Indians that removed cultural material be reburied as close to the original find location as possible. However, should reburial within or near the original find location during project implementation not be feasible, then a reburial location for future reburial shall be decided upon by San Manuel Band of Mission Indians, other consulting tribes, and the City, and all finds shall be reburied within this location. Additionally, in this case, reburial shall not occur until all ground-disturbing activities associated with the Project have been completed, all monitoring has ceased, all cataloguing and basic recordation of cultural resources have been completed, and a final monitoring report has been	

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		issued to the City, the South Central Coastal Information Center, and to consulting tribes. A reburial of cultural items is subject to a reburial agreement that shall be developed between the landowner (the City) and the consulting tribes, outlining the determined reburial process and location, and shall include measures and provisions to protect the reburial area from any future impacts (vis a vis project plans, conservation/preservation easements, etc.). If avoidance, preservation in place, and on-site reburial are not options, the City shall relinquish all ownership and rights to this material and confer with consulting tribes to identify an American Association of Museums-accredited facility within the County, as appropriate. All draft records and reports containing the significance and treatment findings and data recovery results shall be prepared by the archaeologist and submitted to the City and the consulting tribes for their review and comment. After review by all parties, the final reports and site/isolate records (as appropriate) are to be submitted to the local South Central Coastal Information Center, the City, and the consulting tribes. **CUL-3**: An archaeological and tribal monitor shall be present during ground disturbing activities below 1 foot in depth, as described in the monitoring plan (see CUL-2) and as appropriate. The monitors will observe ground disturbing activities for signs of cultural resources and will have the authority to stop and redirect ground disturbing activities in the event of an inadvertent discovery. The monitors shall follow the protocols set forth in the Monitoring and Inadvertent Discovery Plan.	
IMPACT 4.3-2: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section15064.5?	Significant	**Mitigation Measures CUL-1, CUL-2, CUL-3.**	Less than Significant
IMPACT 4.3-3: Would the project disturb any human remains, including those interred outside of formal cemeteries?	Less than Significant	No mitigation required.	Less than Significant
4.4 GEOLOGY AND SOILS			
IMPACT 4.4-1: Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: 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	No mitigation required.	Less than Significant

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
IMPACT 4.4-2: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Significant	**GEO-1: Inadvertent Discoveries of Paleontological Resources –** If the construction staff or others observe previously unidentified paleontological resources during ground disturbing activities, they will halt work within a 200-foot radius of the find(s), delineate the area of the find with flagging tape or rope (may also include dirt spoils from the find area), and immediately notify a qualified Paleontologist. Construction will halt within the flagged or roped-off area. The Paleontologist will assess the resource as soon as possible and determine appropriate next steps in coordination with the City. Such finds will be formally recorded and evaluated. The resource will be protected from further disturbance or looting pending evaluation. The paleontologist shall prepare a report of findings which provides specific recommendations regarding further mitigation measures (e.g., paleontological monitoring) that may be appropriate. Where mitigation monitoring is indicated, the program must include, but not be limited to, the following measures: • A paleontological monitor trained and equipped to allow the rapid removal of fossils with minimal construction delay, will be assigned to the site full-time during the interval of earth-disturbing activities. • If fossils are found within an area being cleared or graded, earth-disturbing activities will be diverted elsewhere until the monitor has completed salvage. If construction personnel make the discovery, the grading contractor should immediately divert construction and notify the monitor of the find. • All recovered fossils will be prepared, identified, and curated as part of documentation in a summary report. All fossils and associated reporting will be transferred to an appropriate depository (i.e., San Bernardino County Museum). • A copy of the summary report will be sent to the City of Rancho Cucamonga.	Less than Significant
4.5 GREENHOUSE GAS EMISSIONS			
IMPACT 4.5-1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less than Significant	No mitigation required.	Less than Significant
IMPACT 4.5-2: 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	No mitigation required.	Less than Significant

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
4.6 HAZARDS AND HARDOUS MATERIALS			
IMPACT 4.6-1: 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	No mitigation required.	Less than Significant
IMPACT 4.6-2: Would the project create a significant hazard to the public or the environment through the reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?	Significant	**HAZ-1: Site Assessment.** Before issuance of a grading permit for the proposed Project the following will take place: • Investigation of the Project site to determine whether it or immediately adjacent areas have a record of hazardous material contamination via the preparation of a Phase I Environmental Site Assessment. If contamination is found to be likely, the City shall require a Phase II Environmental Investigation be conducted to characterize the nature and extent of contamination present at the site before development activities can proceed. Even if the Phase I Environmental Site Assessment does not identify other contamination, a Phase II Environmental Investigation will be conducted to at least check for pesticide residue. • A Phase II Environmental Investigation will be conducted to check for pesticide residue. If the Phase I Environmental Site Assessment determines there is a potential for any other contamination, the Phase II Environmental Investigation must characterize the site according to the nature and extent of contamination that is present before development activities precede at that site. • If the Phase II Environmental Investigation determines that contamination is present on-site, the City, in accordance with appropriate agency requirements, shall require remediation of the soil and/groundwater contamination on the site. • If remediation is determined to be required, it must be accomplished in a manner that reduces risk to below applicable standards and must be completed prior to issuance of any occupancy permits. Soil remediation methods that could be employed include, but are not limited to, one or more of the following: excavation and on-site treatment, such as above ground bioremediation, soil washing, soil stabilization, soil vapor extraction, or high-temperature soil thermal desorption. Groundwater remediation methods that could be employed include, but are not limited to, pumping water to surface, treating, and returning to aquifer; treating groundwater in place by injecting oxidizing agents; and placing membrane in aquifer and using natural flows to trap contaminants.	Less than Significant

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		• Closure reports or other reports acceptable to the City of Rancho Cucamonga Fire Protection District that document the successful completion of required remediation activities, if any, for contaminated media, must be submitted and approved by the City prior to the issuance of grading permits for site development. **HAZ-2:** If previously unknown or unidentified soil and/or groundwater contamination that could present a threat to human health or the environment is encountered during construction within the Project site, construction activities in the immediate vicinity of the contamination must cease immediately. If contamination is encountered, a Risk Management Plan must be prepared and implemented that (1) identifies the contaminants of concern and the potential risk each contaminant would pose to human health and the environment during construction and post-development, and (2) describes measures to be taken to protect workers and the public from exposure to potential site hazards. Such measures must provide a range of options, including, but not limited to, physical site controls during construction, remediation, long-term monitoring, post-development maintenance or access limitations, or some combination thereof. Examples of soil remediation methods that may be employed include, but are not limited to, one or more of the following: excavation and on-site treatment, such as above ground bioremediation, soil washing, soil stabilization, soil vapor extraction, or high-temperature soil thermal desorption. Example groundwater remediation methods that may be employed include, but are not limited to, pumping water to surface, treating, and returning to aquifer; treating groundwater in place by injecting oxidizing agents; and placing membrane in aquifer and using natural flows to trap contaminants. Depending on the nature of contamination, if any, appropriate agencies must be notified (e.g., Rancho Cucamonga Fire Protection District and San Bernardino County Environmental Health Division). If needed, a Site Health and Safety Plan that meets Occupational Safety and Health Administration requirements must be prepared and in place prior to commencement of work in any contaminated area.	
IMPACT 4.6-3: Would the project emit hazardous emissions or handle hazardous materials or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	Less than Significant	No mitigation required.	Less than Significant

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
4.7 NOISE			
IMPACT 4.7-1: Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Significant	**NOISE-1:** Construction noise levels fluctuate depending on the construction phase, equipment type, and duration of use; distance between noise source and sensitive receptor; and the presence or absence of barriers between noise source and receptors. Therefore, construction activities shall be limited as follows: • Equipment and trucks used for Project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds) wherever feasible. In addition, the time allowed for equipment and trucks to idle will be limited to the extent practicable. • Stationary noise sources shall be located as far from adjacent receptors as possible and shall be muffled and enclosed within temporary sheds, incorporate insulation barriers or other measures to the extent feasible. • Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for Project construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically-powered tools. However, where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to 10 dBA. External jackets on the tools themselves shall be used where feasible. This could achieve a reduction of 5 dBA. Quieter procedures shall be used such as drilling rather that impact equipment whenever feasible. • When heavy construction activities are located within 800 feet of a residential structure, a temporary portable sound barrier will be deployed between the construction activities and nearest sensitive receptor.	Less than Significant
IMPACT 4.7-2: Would the project result in generation of excessive groundborne vibration or groundborne noise levels?	Less than Significant	No mitigation required.	Less than Significant

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
4.8 TRANSPORTATION			
IMPACT 4.8-1: Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	Less than Significant	No mitigation required.	Less than Significant
IMPACT 4.8-2: Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	Less than Significant	No mitigation required.	Less than Significant
4.9 TRIBAL CULTURAL RESOURCES			
IMPACT 4.9-1: Would the project cause a substantial adverse change in the significance of a Tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is: i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)? ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.	Significant	**Mitigation Measures CUL-1, CUL-2, CUL-3**	Less than Significant

1.8 PROJECT ALTERNATIVES

Section 15126.6 of the *CEQA Guidelines* requires consideration and discussion of alternatives to the proposed Project, which would feasibly attain most of the basic objectives of the Project and would avoid or substantially lessen any of the significant effects of the proposed Project. In addition to the proposed Project, two project alternatives were considered and are briefly summarized here (and are discussed in detail in Chapter 6 of this Draft Program EIR).

- No Project Alternative – This alternative assumes that changes described for the proposed Project would not be implemented. The Project site would continue undeveloped for the near future.
- Buckwheat Scrub Habitat Border Alternative – Under this alternative, Element O: Deer Creek Channel Trail would not be developed. Bordering the west side of Central Park, this element involves landscaping and improvements to this portion of the Deer Creek Channel Trail in a 4.1-acre area. Instead of developing this element, the Element O area would retain the existing buckwheat scrub vegetation. In addition, the jurisdictional areas within the Element O site would not be removed or disturbed.

1.9 AREAS OF CONTROVERSY

Section 15123 (b)(2) of the *CEQA Guidelines* requires that an EIR Executive Summary identify areas of controversy known to the lead agency, including issues raised by other agencies and the public.

In accordance with the CEQA Guidelines, a Notice of Preparation (NOP) was prepared and distributed to responsible agencies, affected agencies, and other interested parties on November 20, 2019. The NOP was posted in the County Clerk's office for 30 days. The NOP was submitted to the State Clearinghouse to officially solicit participation from interested public agencies in determining the scope of the EIR.

Three comment letters were received in response to the NOP for this EIR. The primary areas of concern identified by the public and agencies include:

- Identify any potential air quality, health risk, or greenhouse gas (GHG) impacts related to the proposed Project;
- Adequately identify and/or mitigate the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources;
- Identify potential impacts to cultural resources and tribal cultural resources; and,
- Comply with Senate Bill 18 and Assembly Bill 52 tribal consultation requirements.

A copy of the written responses to the NOP are included in Appendix A of this Draft Program EIR. Since these concerns are areas commonly covered in an EIR, no outstanding issues of controversy are known at this time.

CHAPTER 2
INTRODUCTION

2.1 BACKGROUND AND PROJECT HISTORY

In 1984, the City of Rancho Cucamonga (City) Council acquired approximately 103.4 gross acres of land northwest of the corner of Milliken Avenue and Base Line Road for a park that would serve the whole city and become a major public resource on the order of other great parks in other major cities. The City negotiated a purchase agreement with Lewis Homes to acquire the Central Park property over a ten-year period through a land purchase agreement and note. Central Park was placed into the City's General Plan and the property was reserved for future park purposes.

During the late 1980s a Central Park Task Force was organized to begin workshops on the development of a conceptual master plan for Central Park. No revenue was available for its construction nor was there any timeline for plan development. Approved in 1987, the original Park Master Plan integrated the cultural and sports-related needs of the community, as well as the need for a large open park setting. The Master Plan contained three major use areas or elements: the OmniCenter, Sports Complex, and Park and Open Space.

Negative economic conditions in the early 1990s and rejection of a bond measure for development of Central Park in 2000 delayed development of Central Park. In 2002 major funding was received through approval of the 2002 State Proposition 40 Bond Act, through the Department of Veterans Affairs/U.S. Department of Housing and Urban Development Appropriations Committee, and a significant donation from the Lewis Family, combined with investment of Redevelopment Agency funds, allowed for the development of approximately 30 acres, including a 57,000-square foot (sq. ft.) facility, home to the Goldy S. Lewis Community Center and James L. Brulte Senior Center. City Park Development fees allowed for the development of the Central Park Playground with two children's play equipment areas.

In 2006, efforts began to update the Central Park Master Plan to reflect that some of the originally envisioned Central Park elements, including a performing arts venue and a second library location, had been developed in other parts of the City. An amphitheater was part of the 2007 Central Park Master Plan Update, located a little further to the west of the Central Park site with 280 seats. The Initial Study that was prepared for this update in 2008 did not identify any unmitigable significant impacts.

The advent of the economic recession in 2007 and the elimination of the City's Redevelopment Agency (along with the loss of the Agency's funds) prevented the City from implementing the 2007 Central Park Master Plan Update.

In 2017 the Rancho Cucamonga City Council approved efforts for a Central Park Master Plan Update. As part of the Central Park Master Plan Update, the City conducted an extensive community outreach and public input process. This outreach process was intended to highlight the historical design and development efforts to date on Central Park and to seek public input for its future and ultimate development. A combination of local community workshops, online surveys, social networking, and a live Facebook broadcast were conducted to develop the resulting Central

Park Master Plan Update reVISION. The Central Park Master Plan Update reVISION reflects the historical design philosophy, is responsive to previous planning efforts, includes modern community inspired recreation elements, and incorporates a phased approach providing for fiscally achievable project segments ranging in size from 1 acre to 11 acres.

One of the proposed segments of the Central Park Master Plan Update reVISION involved the development of an amphitheater (Segment D). The development of a new amphitheater is needed to replace the use of the aging Red Hill Park facilities, which are currently used for City-sponsored events. Red Hill Park is located approximately 2.5 miles west of the proposed Project site. The City has applied for grant funding to assist with the development of an amphitheater in Central Park through the California Department of Parks and Recreation Office of Grants and Local Services Statewide Park Development and Community Revitalization Program. The Statewide Park Development and Community Revitalization Program provides grants to assist with creating new parks and new recreation opportunities across California. Projects eligible for this grant funding include expansion or renovating an existing park.

In order to qualify for the grant funding, the Central Park Amphitheater Project was recently assessed in an Initial Study/Mitigated Negative Declaration (IS/MND). The IS/MND, which was certified on October 2, 2019, determined that impacts associated with the implementation of the Central Park Amphitheater Project would not be significant or would be reduced to less than significant through mitigation measures.

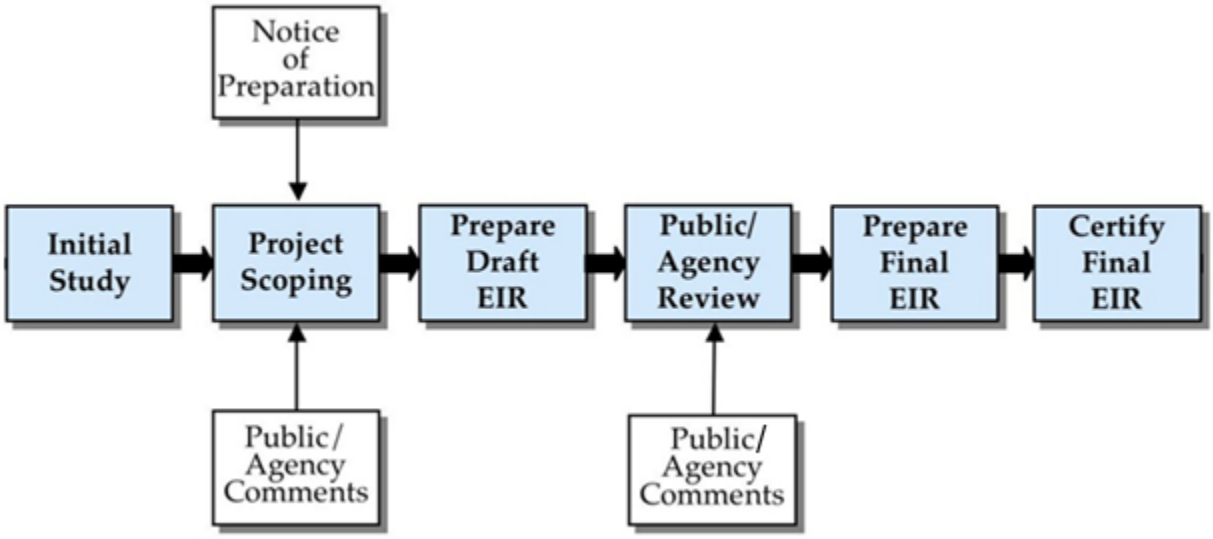
2.2 PURPOSE OF THE ENVIRONMENTAL IMPACT REPORT

In accordance with the California Environmental Quality Act (CEQA; California Public Resources Code (PRC), Sections 21000 through 21189), all “projects” within the State of California are required to undergo environmental review to determine the environmental impacts associated with implementation of the project.

CEQA was enacted in 1970 by the California Legislature to disclose to decision-makers and the public the anticipated significant environmental effects of a proposed project and identify possible ways to avoid or minimize those significant environmental effects by recommending mitigation measures or feasible alternatives to the project. As the “Lead Agency” under CEQA, the City is required to conduct an environmental review to analyze the potential environmental effects associated with proposed projects located within the City. When an Environmental Impact Report (EIR) is to be prepared, the City is the lead agency for the preparation of the EIR.

Once completed, a Draft EIR is circulated to the public and affected agencies for review and comment. One primary objective of CEQA is to enhance public participation in the planning process and inform the public. During the environmental review process, CEQA provides several opportunities for the public to participate and provide input. The diagram below illustrates the CEQA process and points generally when public and agency input is received. Additionally, lead agencies are required to respond to public comments in the Final EIR. All this information is then considered by the decision-makers prior to taking final action on a proposed project.

The Environmental Review Process



2.3 USE OF THE PROGRAM EIR

For the proposed Project, a Program EIR is the approach chosen based on CEQA Guidelines, Section 15168 (14 California Code of Regulations Section 15168), which states that a Program EIR can be based on a series of actions that can be characterized as one large project and are related, as follows:

1. Geographically
2. Logically as a part in the chain of contemplated actions
3. In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program
4. As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects that can be mitigated in similar ways

Using a Program EIR to assess the Central Park Master Plan Update reVISION Project provides the advantage of looking at the whole of the action in a more thorough manner than might be possible on an individual project basis, the examination of cumulative impacts in a more comprehensive manner than on an individual basis, and the consideration of program-wide mitigation measures. It could also save time by doing one program-wide CEQA document rather than a series of multiple documents as each project arises. Subsequent activities would still have to be assessed in light of the Program EIR to determine whether an additional environmental document must be prepared. If an agency finds that no new impacts would occur or no new mitigation measures would be required, the agency can approve the activity as being within the scope of the project covered by the Program EIR, and no new environmental document would be required. As stated in CEQA Guidelines, Section 15168(c)(5), "[A] program EIR will be most helpful in dealing with later activities if it deals with the effects of the program as specifically and

comprehensively as possible. With a good and detailed project description and analysis of the program, many later activities could be found to be within the scope of the project described in the Program EIR, and no further environmental documents would be required." It is possible for a program-level analysis to identify and address all potential environmental impacts, which would preclude the need for additional project-level environmental documentation. A project-level analysis generally includes the necessary construction information to analyze the specific details of the environmental effects of the proposed elements.

When the term "proposed Project" is used in this Program EIR, it refers to all the individual elements proposed as part of the Central Park Master Plan Update reVISION with the exception of the amphitheater element which has been analyzed under a separate CEQA document, see Section 2.1. Nevertheless, the amphitheater project is included in the list of projects evaluated in an analysis of cumulative impacts, see Section 3.9. Therefore, except as noted above, the proposed Project is the entirety of the Central Park Master Plan Update reVISION envisioned over the planning horizon and does not refer to any one individual element proposed under the Central Park Master Plan Update reVISION.

Section 3 describes the various program- and project-level elements of the proposed Project evaluated in this Program EIR. Based on the information in the Central Park Master Plan Update reVISION and provided by the City, some elements would be assessed at the program-level because specific project details are not known at this time. Other proposed Project elements that have detailed information available and are expected to commence in the relatively near future, would receive project-level assessment. The proposed Project elements that would receive project-level assessment include: Element A. Pacific Electric Trail Head; Element B. Terraced Gardens; Element C. Water Conservation/Demonstration Garden; Element J. Dog Park; and Element L. Recreation Pool. In addition, in order to facilitate flexibility in developing portions of the park, some site improvements may be completed beyond the element area being developed. As such, completion of an additional on-site park roadway and associated on-site dry utility trench would also be analyzed at the project-level.

2.4 SCOPE OF THE PROGRAM ENVIRONMENTAL IMPACT REPORT

The required contents and scope of an EIR are set forth in CEQA and its companion document, the CEQA Guidelines (California Code of Regulations, Section 15000 through 15387). This section provides a summary of the issues addressed in this Program EIR. Under the CEQA Guidelines, the analysis in the Draft EIR need only focus on issues determined to be potentially significant, whereas issues found to have less than significant impacts or no impact, do not require further evaluation.

As Lead Agency, the City completed a preliminary analysis of the proposed Central Park Master Plan Update reVISION Project (the "proposed Project") and determined that due to the potential for significant environmental effects, an EIR must be prepared. Based on that preliminary review and public and agency input received during the initial public scoping process, several environmental factors were determined to be less than significant or to have no measurable impact, and thus do not require further evaluation in this Draft Program EIR. Section 5.1 of this Draft Program EIR (Environmental Effects Found Not to be Significant) discusses the effects found not to be significant and which are not analyzed further in this Draft Program EIR, along

with the reasons supporting that determination. In summary, environmental effects found not to be significant include the following:

- Aesthetics
- Agricultural Resources
- Biological Resources (conflict with habitat conservation plan)
- Energy
- Geology and Soils (liquefaction, landslides, soil erosion, unstable geologic unit, expansive soils, septic tanks)
- Hazards and Hazardous Materials (hazardous materials sites; public airport hazard; emergency response plan; wildland fires)
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise (expose people to airport noise)
- Population and Housing
- Recreation
- Transportation (increasing hazards; inadequate emergency access)
- Utilities and Service Systems
- Wildfire

Environmental effects that were determined to be potentially significant or less than significant after mitigation are the focus of this Draft Program EIR and are discussed in detail under Chapter 4 of this Draft Program EIR (Environmental Analysis) and include the following:

- Air Quality
- Biological Resources (sensitive species, riparian habitat, wetlands, wildlife movement, local policies)
- Cultural Resources
- Geology and Soils (earthquake fault rupture, seismic shaking, paleontological resources)
- GHG Emissions
- Hazards and Hazardous Materials (routine use of hazardous materials; release of hazardous materials; hazardous emissions or handle hazardous materials within 0.25 mile of an existing or proposed school)
- Noise (increase in noise, generation of vibration)
- Transportation (conflict with transportation plan, Section 15064.3, increased hazards)
- Tribal Cultural Resources

Mitigation measures to reduce impacts to a less-than-significant level are proposed whenever feasible and appropriate. In addition to the environmental issues identified above, this Draft Program EIR includes all of the sections required by the CEQA Guidelines, including a discussion of feasible alternatives to the proposed Project, evaluation of cumulative and other related projects, growth-inducing effects of the proposed Project and irreversible environmental changes.

2.5 PUBLIC SCOPING PROCESS

This Draft Program EIR was prepared following input from the public, responsible agencies, and affected agencies through the EIR scoping process (see Appendix A), which included the following:

- In accordance with the CEQA Guidelines, a NOP was prepared and distributed to responsible agencies, affected agencies, and other interested parties on November 20, 2019.
- The NOP was posted in the County Clerk's office for 30 days. The NOP was submitted to the State Clearinghouse to officially solicit participation from interested public agencies in determining the scope of the Program EIR.
- A public scoping meeting was held on December 3, 2019 at 6:30 PM at 11200 Baseline Road, Rancho Cucamonga, CA, 91701 in the Alta Loma Room of the Goldy S. Lewis Community Center.
- Information requested and input provided during the 30-day public review period, regarding the contents of the NOP and the scope of the Program EIR, were incorporated in this Draft Program EIR (see Appendix A).

In addition to the EIR scoping process, the City conducted California Native American tribal consultation through the Assembly Bill (AB) 52 process for input regarding potential impacts to tribal cultural resources. The City sent formal AB 52 notification letters on November 2, 2019 to the following tribes: San Gabriel Band of Mission Indians, San Manuel Band of Mission Indians, Soboba Band of Luiseno Indians, and the Torres Martinez Desert Cahuilla Indians. Consultation was requested by the San Manuel Band of Mission Indians. The City completed consultation with the San Manuel Band of Mission Indians and the information has been incorporated in Section 4.9 of this Draft Program EIR (Tribal Cultural Resources).

2.6 ORGANIZATION OF THE PROGRAM EIR

The Draft Program EIR is organized into the following chapters so the reader can easily obtain information about the proposed Project and related environmental issues:

Chapter 1: Executive Summary – Consistent with CEQA Guidelines Section 15123, the Executive Summary chapter provides a summary of the proposed Project and discussion of the Project alternatives, areas of controversy and issues to be resolved and conclusions regarding growth inducement and cumulative impacts. A summary of Project impacts and recommended mitigation measures is also provided.

Chapter 2: Introduction – Describes the purpose and use of the Draft Program EIR, provides a brief overview of the proposed Project, and outlines the organization of this Draft Program EIR.

Chapter 3: Project Description – Describes the environmental setting, proposed Project objectives, characteristics, land uses and requested Project actions.

Chapter 4: Environmental Analysis – Describes the existing physical and regulatory conditions, methods and assumptions used in impact analysis; thresholds criteria used to

determine the impact significance; impacts that would result from the proposed Project; and applicable mitigation measures that would eliminate or reduce significant impacts for each environmental issue of concern.

Chapter 5: Other CEQA Considerations – Includes a discussion of issues required by CEQA that are not covered in other chapters. This includes unavoidable adverse impacts, impacts found not to be significant, irreversible environmental changes, and growth inducing impacts.

Chapter 6: Alternatives – Consistent with CEQA Guidelines Section 15126.6, this chapter evaluates feasible alternatives to the proposed Project and the potential environmental effects of those alternatives. The analysis includes evaluation of the No-Project Alternative and discusses the Environmentally Superior Project Alternative.

Chapter 7: References – Identifies the documents and individuals consulted in preparing the Draft Program EIR.

Chapter 8: List of Preparers – Lists the individuals involved in preparing the Draft Program EIR and organizations and persons consulted.

Appendices – The Appendices include technical studies and reports and other relevant reference material used in evaluating the impacts of the proposed Project and referenced in the environmental analysis.

2.7 PUBLIC REVIEW AND THE FINAL PROGRAM EIR

Notice of availability of the Draft Program EIR for the proposed Project has been distributed to public agencies, organizations, and interested groups and persons for comment during the formal review period. Copies of the Draft Program EIR are available upon request and also available for review at the following locations:

- *City of Rancho Cucamonga City Clerk Office*, located at 10500 Civic Center Drive, Rancho Cucamonga, CA, during weekdays Monday through Thursday between the hours of 10:00 a.m. and 4:00 p.m.
- *City of Rancho Cucamonga Website:* https://www.cityofrc.us/current-projects
- *CEQAnet Web Portal:* https://ceqanet.opr.ca.gov/2019110342/2

Interested agencies and members of the public are invited to provide written comments on the Draft Program EIR. Due to the time limits mandated by state law (CEQA Guidelines Section 15205(d)), comments should be sent to the City at the earliest possible date but received no later than **4:00 PM on November 23, 2020**, which is 45 days after publication of the Notice of Availability for this Draft Program EIR. Upon completion of the 45-day review period, the City will review all written comments received and prepare written responses for each comment. A Final Program EIR will be prepared incorporating all the comments received, responses to the comments, and changes (if any) to the Draft Program EIR that result from the comments received.

Written comments, to be received no later than **4:00 PM on November 23, 2020**, can be sent to the City at the mailing address or email address below:

City of Rancho Cucamonga
Community Services Department
10500 Civic Center Drive
Rancho Cucamonga, CA 91730
Attn: Jeff Benson, Management Analyst II
Jeff.Benson@cityofrc.us

It is requested that all mailed or emailed communications on this proposed Project include reference to the Project title "Central Park Master Plan Update reVISION Project" in the subject line. Agency responses to the Draft Program EIR should include the name and contact information of the person within the commenting agency to whom responses or future information may be directed.

CHAPTER 3
PROJECT DESCRIPTION

3.1 OVERVIEW

Central Park consists of approximately 103.4 gross acres of which approximately 30 acres have been developed. Since the original Master Plan for the Park was approved in 1987 there have been several versions of the Central Park vision.

This chapter includes a description of the existing environmental setting and the planning principles and objectives developed to implement the proposed Project. This chapter also provides a detailed description of the purpose and need for the proposed Project, Project characteristics proposed, and a summary of the discretionary approvals required for implementation.

3.2 LOCATION

Central Park is located approximately in the center of the City (see Figure 3.2-1). The City is situated within the greater Inland Empire, at the base of the San Gabriel Mountains in western San Bernardino County. It is bound by the cities of Upland, Ontario, Fontana, the San Bernardino National Forest, and parts of unincorporated areas of San Bernardino County. Major transportation facilities in and near the City include State Route 210, Interstate 15, Interstate 10, Foothill Boulevard, also known as Historic Route 66, the Metrolink train, and Los Angeles/Ontario International Airport.

Central Park is within Section 36 of Township 1 South, Range 7 West, on the Cucamonga Peak, California, U.S. Geological Survey 7.5-minute Quadrangle Map (1980) (Figure 3.2-2). Bounded on the south by Base Line Road and on the east by Milliken Avenue, the Park is approximately 2.5 miles west of Interstate 15, 3.7 miles north of Interstate 10, and 0.7 miles south of the State Route 210 in Rancho Cucamonga (Figure 3.2-2). The Park is also bordered on the north by residential uses and on the west by Deer Creek Channel.

As shown in Figure 3.2-2, the proposed Project site consists of approximately 61 acres of Central Park, located to the west of the currently developed portion of the Park.

3.3 EXISTING SETTING

3.3.1 City of Rancho Cucamonga

The City covers approximately 20,707 acres, with another 3,735 acres within the City's Sphere of Influence. Existing land uses within the City include a range of residential, commercial, industrial, open space, and institutional uses, with the majority of residential uses located north of Foothill Boulevard and industrial uses largely located south of Foothill Boulevard. The City has an estimated 2019 population of 179,412 (DOF 2019).

City of Rancho Cucamonga Central Park

Figure 3.2-1 Regional Location

San Bernardino County, CA

★ Project Location

N

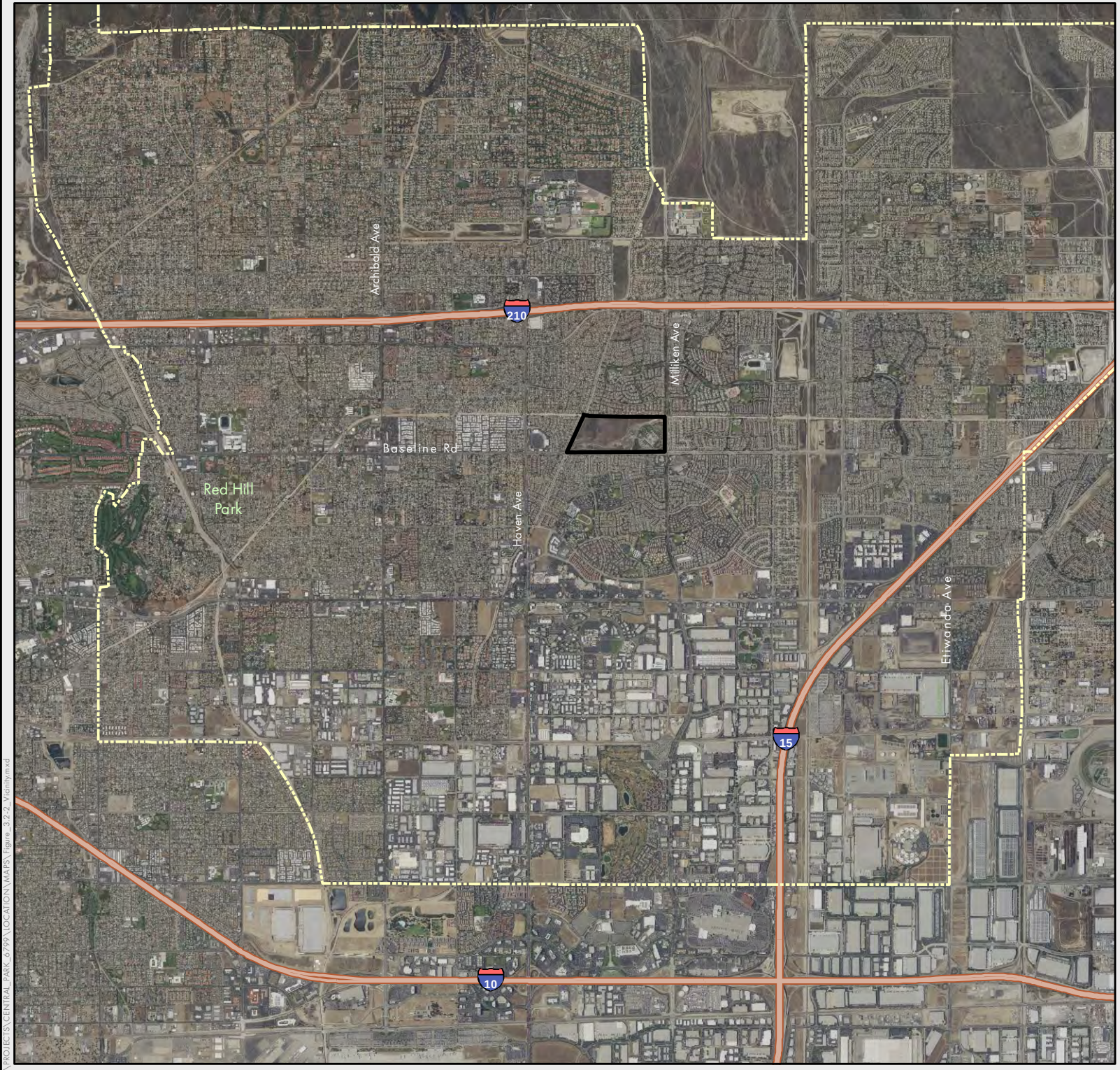
0 5 10 20

Miles

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, NGCC, © OpenStreetMap contributors, and the GIS User Community

RANCHO CUCAMONGA

TETRA TECH



City of Rancho Cucamonga Central Park

Figure 3.2-2 Project Vicinity

San Bernardino County, CA

Project Area

City of Rancho Cucamonga Boundary

Interstate

N

0 0.25 0.5 1

Miles

Imagery Source: USDA NAIP 2016

RANCHO CUCAMONGA

TETRA TECH

G:\PROJECTS\CENTRAL_PARK_6799\LOCATION\MAPS\Figure_3.2-2_Vicinity.mxd

The City has approximately 347.6 acres of parkland and recreational facilities. These include 25 neighborhood parks, three community parks, and eight special use facilities. In addition, the City's Multi-Use Regional and Community Trails add approximately 295 acres of land for recreational use. The trails provide a network of interconnecting off-road, urban, and wilderness trails that allow horseback riding, hiking, jogging, running, bicycling, and walking into open space areas and connect the residential areas to commercial activity centers.

3.3.2 Central Park Characteristics

The proposed Project site is relatively flat and ranges in elevation from approximately 1,300 to 1,360 feet. Approximately 30 acres on the east end of the park are currently developed. This includes a 57,000 sq. ft. facility, home to both the Goldy S. Lewis Community Center and James L. Brulte Senior Center. The facility offers meeting rooms, event halls, and a courtyard, and is the setting for many programs, classes, and special events offered to the public year-round. Other attractions within Central Park include the Central Park Playground with two children's play equipment areas, the Central Park Pavilion, a shade pavilion with picnic tables and barbeques, access to the multi-purpose Pacific Electric Trail, and Freedom Courtyard, a reflection site where families and friends come to pay tribute and honor the service and sacrifices of veterans past, present and future. Existing Park facilities are shown in Figures 3.3-1, 3.3-2, and 3.3-3.

The remaining acres of Central Park are not yet developed due to funding constraints. This area is comprised of disturbed coastal sage scrub habitat, as shown in Figure 3.3-4.

3.3.3 Existing Land Use Designations and Zoning

The Central Park site has a General Plan land use designation of Public Facilities - Parks and a zoning designation of Terra Vista Planned Community (PC-TV).

3.3.4 Surrounding Land Uses

Uses surrounding the proposed Project site include existing Central Park facilities, residential uses, Deer Creek Flood Control Channel, and commercial uses. The existing Central Park facilities are located on the eastern third of the Central Park site. The majority of the surrounding uses are single family residential uses found all around the Central Park boundaries. Deer Creek Flood Control Channel is located on the western boundary of the Central Park site. Commercial uses are located at the southeast and southwest corners of Milliken Avenue and Base Line Road and at the northeast corner of Haven Avenue and Base Line Road.

3.4 PROJECT OBJECTIVES

Throughout the last 30 years the vision for Central Park revolved around an Olmstedian Philosophy. The idea that a design's psychology and the visual effects on people can be an antidote to the stress and artificiality of urban life.

In order to ensure that the proposed Project is characterized by community inspired recreation elements, functional integrity, dynamic economic responsiveness, environmental sensitivity, and aesthetic quality, the following objectives have been identified for the proposed Project:

Goldy S. Lewis Community Center, southwest side of the joint facility building.

James L. Brulte Senior Center, northeast side of the joint facility building.

City of Rancho Cucamonga
Central Park

Figure 3.3-1
Existing Central Park Facilities:
Community/Senior Center

San Bernardino County, CA

RANCHO CUCAMONGA

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Central Park Playground with two children's play equipment areas.

Central Park Pavilion, a shade pavilion with picnic tables and barbeques.

City of Rancho Cucamonga
Central Park

Figure 3.3-2
Existing Central Park Facilities:
Playground/Shade Pavilion

San Bernardino County, CA

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Freedom Courtyard, a reflection site honoring the service and sacrifices of veterans.

Pacific Electric Trail, a regional multi-purpose trail which follows the east-west route of the old Pacific Electric Railroad.

City of Rancho Cucamonga
Central Park

Figure 3.3-3
Existing Central Park Facilities:
Freedom Courtyard/
Pacific Electric Trail

San Bernardino County, CA

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Southwest view of disturbed coastal sage scrub vegetation from northeast corner of the Project site.

Northeast view of disturbed coastal sage scrub vegetation from southwest corner of the Project site.

City of Rancho Cucamonga
Central Park

Figure 3.3-4
Existing
Project Site Conditions

San Bernardino County, CA

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1. To develop a comprehensive planning document that will establish the preliminary land use development for the balance of the Central Park area.
2. To create a unique recreational facility in the City with a variety of active and passive recreational opportunities and amenities accessible within the community and offering multiple options for pedestrian mobility and non-vehicular access.
3. To identify a variety of recreational opportunities designed to be implemented in small (1.6 to 11 acre) buildable sections in Central Park responsive to evolving, economic conditions and City-wide recreational needs.
4. To implement a landscape concept that features drought-tolerant plant materials that create an aesthetically pleasing, thematically coherent outdoor environment while minimizing demand for water resources.

3.5 PROJECT DESCRIPTION

3.5.1 Proposed Project Overview

The Central Park Master Plan Update reVISION is a comprehensive planning document which defines the development of the remaining, undeveloped land located west of the existing Senior and Community Centers at Central Park. It identifies smaller (1.6 to 11 acre) buildable sections comprised of financially responsible amenities, so that when funding becomes available, park development can continue within the framework of a comprehensive community inspired vision (see Table 3.5-1). The proposed Project includes all the elements presented in the Central Park Master Plan Update reVISION with the exception of the amphitheater element which has been analyzed under a separate CEQA document, see Section 2.1.

The proposed Project is composed of recreation areas and elements that relate to the existing open drainage channel spine and is anchored by the Senior and Community Centers to the east and the proposed Recreation Pool, Multi-Purpose Facility, and Tennis Courts to the west (Figure 3.5-1). The park will provide a variety of both active and passive zones and uses for groups of all ages. The Universal Accessible Playground will provide access and opportunity for people of all ages and abilities to promote play, physical activity, sociability, and learning. The Adventure Area will promote a unique outdoor experience for personal physical development, leadership, and team building. The park also features the “Great Lawn,” Viticulture Pavilion, a flexible park area for large community event gatherings and celebrations.

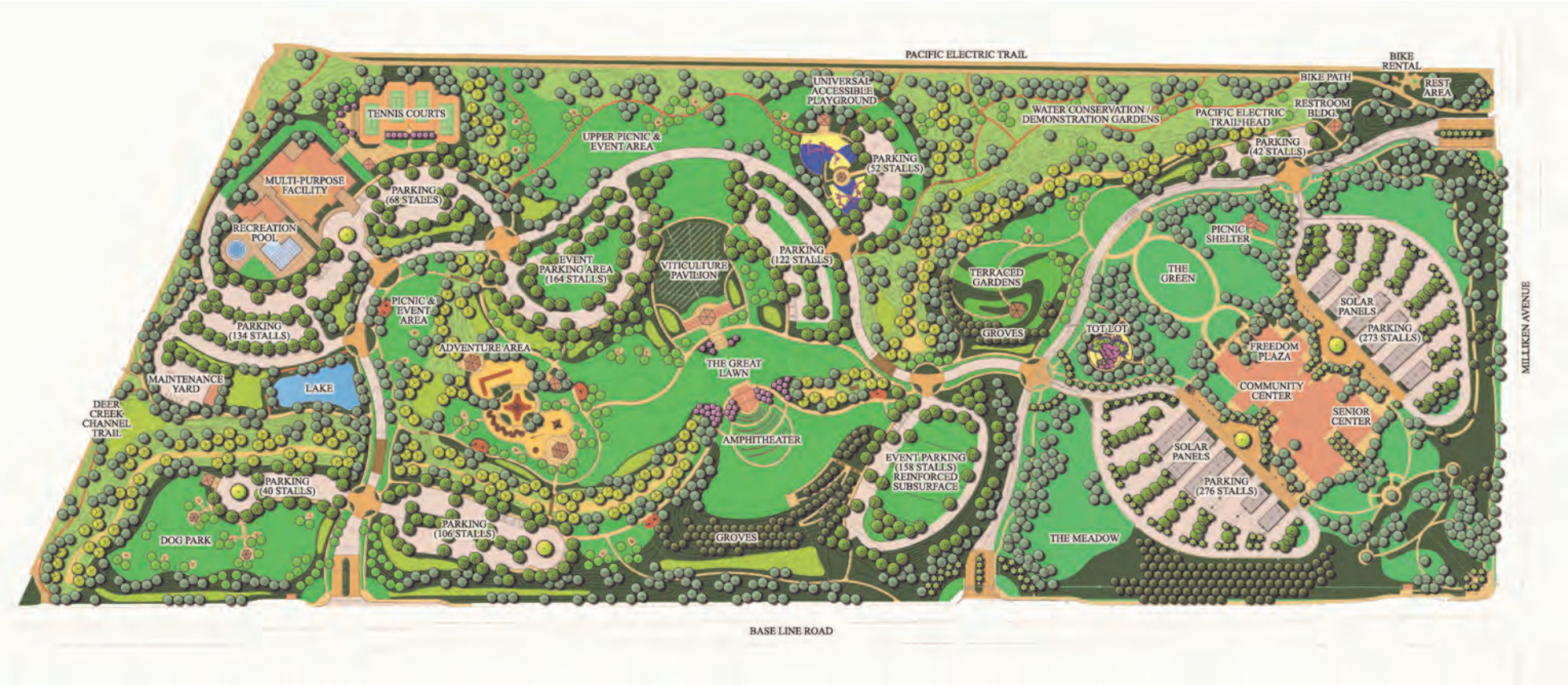
The proposed Project identifies proposed development elements of 1.6- to 11-acre parcels. The proposed Project elements and associated acreages are shown in Figure 3.5-2. Element D has been analyzed under a separate CEQA document, see Section 2.1.

The element order as presented in Figure 3.5-2 does not represent the sequence of improvements that may occur. As shown in Figure 3.5-2, the elements are presented, roughly, from the east to the west ends of Central Park. The smaller parcel sizes will allow the City flexibility to develop portions of the park as funds become available.

Table 3.5-1. Proposed Project Elements

Element	Features	Acres
A: Pacific Electric Trail Head	Parking area and restrooms added to existing trail rest area.	2.6
B: Terraced Gardens	Showcase gardens, event area, and gazebo.	4.7
C: Water Conservation/Demonstration Garden	Water conservation demonstration gardens	4.4
E: Universal Accessible Playground	Play equipment, event area, gazebo, and restrooms.	4.7
F: Viticulture Pavilion and Vineyards	Pavilion, vineyards, Great Lawn	6.7
G: Upper Picnic and Event Area	Picnic tables and shade structures.	2.6
H: Event Parking Area	Turf surfaced event parking area.	4.4
I: Adventure Area Parking and Event/Picnic Area	Event area and parking, picnic pavilion and deck, restrooms, and facilities for active play, fitness training, climbing, and parkour.	9.5
J: Dog Park	Fenced dog park, gazebos and shade structures, picnic tables and benches, restrooms, and parking area.	4.4
K: Multi-purpose Facility and Parking	27,000 sq. ft. facility including one regulation high school basketball court with two short court overlay.	5.4
L: Recreation Pool	Indoor or outdoor 25-yard lap pool, outdoor teaching pool, indoor or outdoor 50-yard lap pool, aquatics building, and parking area.	2.7
M: Tennis Courts	4 tennis courts, spectator viewing areas, event area and parking, and gazebo.	3.1
N: Maintenance Yard	Maintenance building and electric vehicle charging station.	1.6
O: Deer Creek Chanel Trail:	Landscaping and improvements to this portion of existing Deer Creek Channel Trail.	4.1
Parking	728 spaces[1]	n/a[2]
New park roadway	2 acres	n/a[2]
	Total Acres	**61**

[1] The existing Community Center/Senior Center currently provides 552 parking spaces. An additional 158 event parking spaces will be provided through development of the Amphitheater.
[2] Acreage accounted for within elements.



City of Rancho Cucamonga
Central Park

Figure 3.5-1
Project Site Plan

San Bernardino County, CA

Showing full build-out of Central Park
including existing Community Center and Senior Center

Source: RJM Design Group, Central Park Master Plan Update. January 29, 2018

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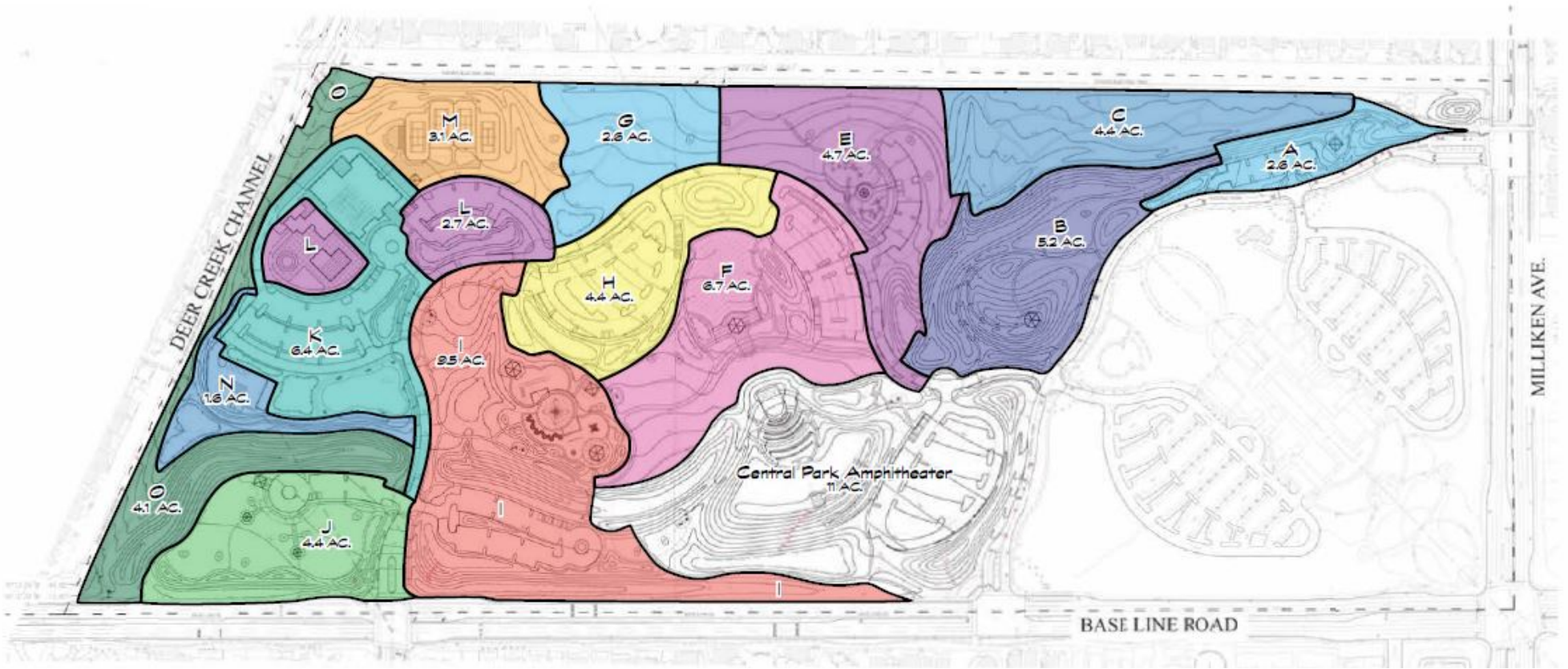

City of Rancho Cucamonga
Central Park

Figure 3.5-2
Element Plan with Acreage

San Bernardino County, CA

A. PACIFIC ELECTRIC TRAILHEAD
B. TERRACED GARDENS
C. WATER CONSERVATION/ DEMONSTRATION GARDEN
D. AMPHITHEATER
E. UNIVERSAL ACCESSIBLE PLAYGROUND
F. VITICULTURE PAVILION
G. UPPER PICNIC AREA AND EVENT AREA
H. EVENT PARKING AREA
I. ADVENTURE AREA PARKING AND EVENT/PICNIC AREA
J. DOG PARK
K. MULTI-PURPOSE FACILITY AND PARKING
L. RECREATION POOL
M. TENNIS COURTS
N. MAINTENANCE YARD
O. DEER CREEK CHANNEL TRAIL

NOTES:
1. Order does not represent actual sequence of areas for improvement.
2. Sub-phasing of improvements may occur within each identified element.

Source: RJM Design Group, Central Park Master Plan Update. January 29, 2018

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3.5.2 Comparison to Previous Central Park Master Plan

Approved in 1987, the original Park Master Plan integrated the cultural and sports-related needs of the community, as well as the need for a large open park setting. The Master Plan contained three major use areas or elements: the OmniCenter, Sports Complex (non-sports fields), and Park and Open Space. The OmniCenter was envisioned to contain five separate but integrated components: a central library, a community center, a children's theater and lecture hall, a fine arts center and museum, and finally a one-acre central plaza. The Sports Complex contained a multi-purpose facility, recreation center, swim complex and tennis complex. It purposefully did not include sports fields as the Task Force and City Council determined that these elements were available at other parks within the City and wanted Central Park to be unique in providing grand amenities not found at other locations. Park and Open Space was perhaps the most important element and was the link tying the other two elements together. It provided a variety of active and passive recreation opportunities to draw people from all over the City. The park area contained two lakes with a stream and waterfalls, group and individual picnic areas, a performance pavilion on the lake's edge with natural amphitheater seating, children's play areas, a botanical garden, interpretive trail and a series of walking paths throughout the park. Phase I of the Central Park Master Plan, which included the Goldy S. Lewis Community Center and James L. Brulte Senior Center and the Central Park Playground was completed in 2006.

Since 1987 there have been several versions of the vision of Central Park, the most recent version prepared in 2007. This version defined the elements for the remainder of the Park, or Phase II, and reflected some of the original elements being constructed elsewhere in the City. In 2008, an IS/MND was prepared for the 2007 Central Park Master Plan Update. The 2007 Central Park Master Plan Update contained the following elements: an aquatic center with an indoor pool, a fire station, tennis courts, park maintenance center, an amphitheater, group picnic facilities, lake development, play area, general park amenities and associated parking. Table 3.5-2 below presents a comparison of the 2007 Central Park Master Plan Update elements to the proposed Project.

Table 3.5-2. Comparison of 2007 Central Park Master Plan Update and Proposed Project Elements

Master Plan Elements	2007 Central Park Master Plan Update	Proposed Project
Multi-purpose Sports Facility	75,000 sq. ft.	27,000 sq. ft.
Family Aquatics Center	Indoor lap/therapy pool Outdoor teaching/lap pool Outdoor recreational pool Aquatics building	Indoor or outdoor 25-yard lap pool Outdoor teaching pool Indoor or outdoor 50-yard lap pool Aquatics building
Tennis Complex	2,000 sq. ft. tennis building, 6 to 9 courts	4 courts
Lakes	2 lakes plus stream system	1 lake
Open Space/Picnic Areas/Gardens/ Play Areas	54 Acres	60 acres
Fire Station	6,000 sq. ft.	Built in elsewhere in the City
Parking	808 spaces	728 spaces[1]

[1] The existing Community Center/Senior Center currently provides 552 parking spaces. An additional 158 event parking spaces will be provided through development of the Amphitheater.

3.5.3 Project-Level Assessment Elements

Based on the information in the Central Park Master Plan Update reVISION and provided by the City, Project elements described below have detailed information available and are expected to commence in the relatively near future. These elements will receive project-level assessment. The Project elements that would receive project-level assessment include: Element A. Pacific Electric Trail Head; Element B. Terraced Gardens; Element C. Water Conservation/Demonstration Garden; Element J. Dog Park; and Element L. Recreation Pool. In addition, in order to facilitate flexibility in developing portions of the park, some site improvements may be completed beyond the element area being developed. As such, completion of an additional on-site park roadway and associated on-site dry utility trench would also be analyzed at the project-level.

Park Elements

Element A: Pacific Electric Trail Head: An existing landscaped rest area is found at the northeast corner of Central Park, adjacent to the Pacific Electric Trail. This element will add 2.6 acres to the trail head area and will include a 42-space parking area and restroom facility. Other amenities will include bioretention basins and storm drainage, electrical improvements, irrigation and water improvements, landscaped improvements including trees, parking lot and pedestrian security lighting, site furnishing and signage, trail route markers, and walkways.

Element B: Terraced Gardens: This element includes 4.7 acres to showcase garden types that have a significant influence in Rancho Cucamonga and the region. This element includes a gazebo and an event area for gatherings. There is also opportunity to display public art in the form of a Sculpture Garden or memorial pieces. Other amenities will include bioretention basins and storm drainage, electrical improvements, irrigation and water improvements, landscaped improvements including trees, pedestrian security lighting, site furnishing and signage, trail route markers, and walkways.

Element C: Water Conservation/Demonstration Garden: This element includes 4.4 acres to demonstrate water conservation practices, to include selection of California friendly plants, smart irrigation systems, mulching, water scheduling and monitoring. Opportunity for interpretive displays will provide educational information. The garden will provide an outdoor learning center, teaching about the overall park landscape, conservation and sustainable practices, and water quality treatment techniques. Other amenities will include bioretention basins, irrigation and water improvements, landscaped improvements including trees, pedestrian security lighting, site furnishing and signage, trails and trail route markers.

Element J: Dog Park: Located near the southwest corner of Central Park, the 4.4 acres of this element will include a fenced dog park, gazebos and shade structures, picnic tables and benches, restrooms, bioretention basins, and a 40-space parking area. Other amenities will include irrigation and water improvements, landscaped improvements including trees, parking lot and pedestrian security lighting, site furnishing and signage, trail route markers, and walkways.

Element L: Recreation Pool: Located next to the Multi-purpose Facility, this element involves 2.7 acres on the west side of Central Park. This element will initially provide: a 25-yard, eight lane pool that will either be indoors or outdoors and shaded; an outdoor teaching pool; an administration building; a splash pad; an event area; and a 68-space parking area. This element may be later expanded to include a café, a gym, and a 50-yard pool that will either be indoors or outdoors and

shaded. Other amenities will include bioretention basins and site drainage, electrical improvements, irrigation and water improvements, landscaped improvements including trees, parking lot and pedestrian security lighting, site furnishing and signage, trail route markers, and walkways.

Site Improvement: Central Park's existing roadway, Central Park Drive, is accessed from Base Line Road and Milliken Avenue. The proposed Project will involve the construction of approximately two acres of additional roadway which will be accessed from Base Line Road, west of the existing Base Line Road access point. This roadway will progress north to the Multi-purpose Facility area, turn northeast toward the Universal Accessible Playground, then turn southeast until it intersects with the existing Central Park Drive (see Figure 3.5-3). In order to facilitate City flexibility to develop portions of the Park as funds become available, the roadway may be completed during the development of initial elements. This roadway would include a joint on-site dry utility trench directly behind the curb, which will include electrical, cable, telephone, fiber and gas utilities.

3.5.4 Program-Level Assessment Elements

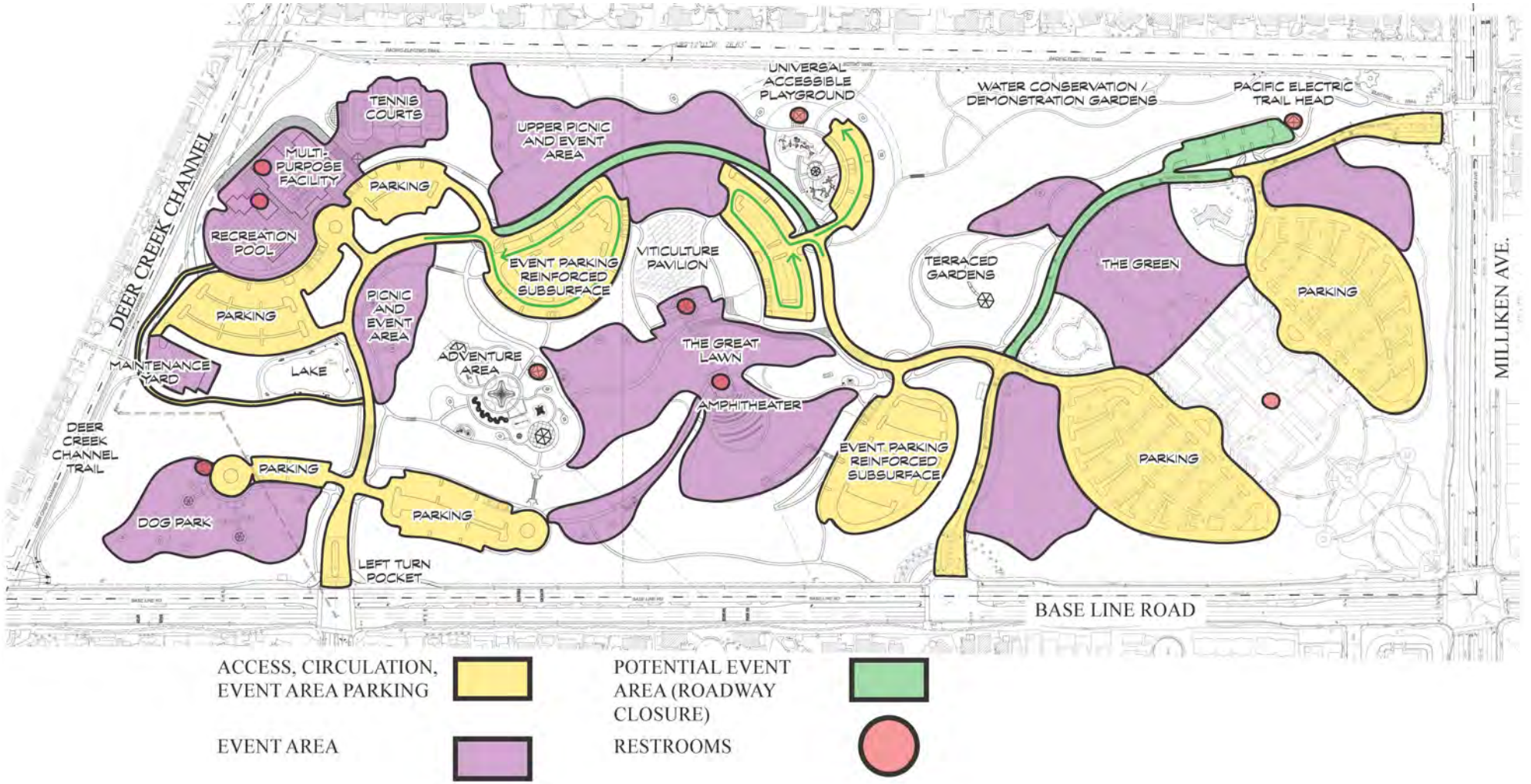
The following elements will be assessed at the program-level because specific Project details and Project timing are not known at this time.

Park Elements

Element E: Universal Accessible Playground: Located at the northcentral end of Central Park, this element will provide 4.7 acres of playground area. This element will include play equipment, an event area, a gazebo, and restrooms. The playground will provide access opportunity for people of all ages and abilities to promote play, physical activity, sociability, and learning. Other amenities will include bioretention basins and storm drainage, electrical improvements, irrigation and water improvements, landscaped improvements including trees, parking lot and pedestrian security lighting, resilient surfacing, site furnishing and signage, trail route markers, and walkways.

Element F: Viticulture Pavilion and Vineyards: Located in the center of Central Park, this element includes 6.7 acres to provide insight into the viticulture heritage in Rancho Cucamonga. The approximately 2,270 sq. ft. pavilion will provide information on the art and science of viticulture, a café, and restrooms. The gardens will include preservation and replication of the vineyards that once occupied the parkland. This element also includes the Great Lawn which will provide a passive recreational area and a flexible park area for large community event gatherings and celebrations. The Great Lawn also provides a spectator area for the secondary stage of the amphitheater that will be a gently sloping grass area suitable for blanket or lawn chair seating. Other amenities will include bioretention basins and storm drainage, electrical improvements, irrigation and water improvements, landscaped improvements including trees, pedestrian security lighting, site furnishing and signage, trail crossing and trail route markers, and walkways.

Element G: Upper Picnic and Event Area: This element is located on the north end of Central Park, between the viticulture pavilion and vineyards and the tennis courts. This area will include picnic tables and shade structures. In addition to providing picnicking and other passive recreational activities, these 2.6 acres will provide a flexible park area for large community event gatherings and celebrations. Other amenities will include bioretention basins and storm drainage, electrical improvements, irrigation and water improvements, landscaped improvements including trees, pedestrian security lighting, site furnishing and signage, and trail and trail route markers.



City of Rancho Cucamonga
Central Park

Figure 3.5-3
Access, Circulation and Parking

San Bernardino County, CA

Source: RJM Design Group, Central Park Master Plan Update. January 29, 2018

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Element H: Event Parking Area: The element involves 4.4 acres adjacent to the upper picnic and event area. This area will provide event parking to accommodate overflow parking needs during such events. Turf is proposed for this parking area, so it can be used as large open space passive area when not needed for event parking. Other amenities will include bioretention basins and site drainage, electrical improvements, irrigation and water improvements, landscaped improvements including trees, parking lot and pedestrian security lighting, site furnishing and signage, trail route markers, and walkways.

Element I: Adventure Area Parking and Event/Picnic Area: This element involves 9.5 acres located at the southern end of Central Park, west of the amphitheater. The Adventure Area will promote a unique outdoor experience for personal physical development, leadership, and team building. This area will include an event area and event parking, a picnic pavilion and deck, restrooms, and facilities for active play, fitness training, climbing, and parkour. Other amenities will include bioretention basins and storm drainage, electrical improvements, irrigation and water improvements, landscaped improvements including trees, parking lot and pedestrian security lighting, site furnishing and signage, trail route markers, and walkways.

Element K: Multi-purpose Facility and Parking: This element involves 5.4 acres on the west side of Central Park. This element will provide an approximately 27,000 sq. ft. facility that will include one regulation high school basketball court with two short court overlay. The landscaping for the element includes a lake with perimeter walkway around the lake. Other amenities will include bioretention basins and storm drainage, electrical improvements, irrigation and water improvements, landscaped improvements including trees, parking lot and pedestrian security lighting, site furnishing and signage, trail route markers, and walkways.

Element M: Tennis Courts: This element involves 3.1 acres located at the northwest corner of Central Park and includes four outdoor tennis courts with spectator viewing areas, an event area and event parking, and a gazebo. Other amenities will include bioretention basins and site drainage, electrical improvements, irrigation and water improvements, landscaped improvements including trees, parking lot and pedestrian security lighting, site furnishing and signage, trail route markers, and walkways.

Element N: Maintenance Yard: This element involves 1.6 acres on the west side of Central Park, next to the multi-purpose facility. This element will include a maintenance building and an electric vehicle charging station. Other amenities will include bioretention basins and site drainage, electrical improvements, irrigation and water improvements, landscaped improvements including trees, parking lot and pedestrian security lighting, site furnishing and signage, trail route markers, and walkways.

Element O: Deer Creek Channel Trail: Bordering the west side of Central Park, this element involves landscaping and improvements to this portion of the Deer Creek Channel Trail in this 4.1-acre area. Other amenities will include bioretention basins and site drainage, irrigation improvements, landscaped improvements including trees, site lighting, site furnishing and signage, trail and trail route markers.

3.5.5 Proposed Site Improvements

In conjunction with the development of the above elements, the proposed Project site will include the development of trail routes, access, circulation, and parking facilities, landscaping, and installation of utilities.

In order to facilitate flexibility in developing portions of the park, some site improvements may be completed beyond the element area being developed. For example, the additional park roadway, described below, may be completed during the development of initial elements, to facilitate circulation and development of a joint on-site dry utility trench.

Access, Circulation and Parking Facilities

Central Park's existing roadway, Central Park Drive, is accessed from Base Line Road and Milliken Avenue. The proposed Project will involve the construction of an additional park roadway which will be accessed from Base Line Road, west of the existing Base Line Road access point. This roadway will progress north to the multi-purpose facility area, turn northeast toward the universal accessible playground, then turn southeast until it intersects with the existing Central Park Drive, see Figure 3.5-3. In order to facilitate City flexibility to develop portions of the park as funds become available, the roadway may be completed during the development of initial elements.

The proposed Project will provide parking throughout the proposed Project site, see Figure 3.5-3. This will include approximately 728 parking spaces in in eight parking areas.

Trail Routes

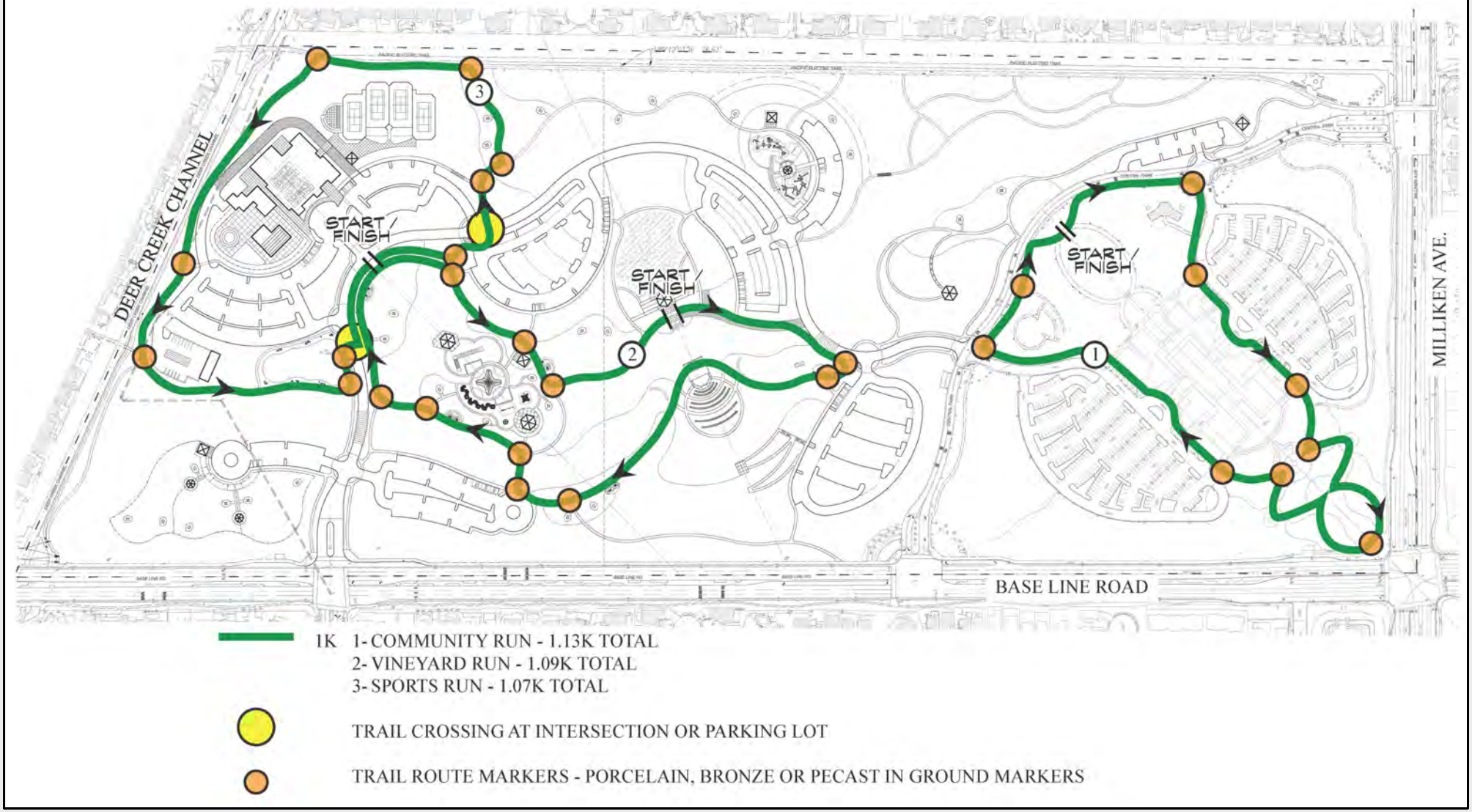
In addition to the existing Pacific Electric Trail on the north end and the proposed Deer Creek Trail on the west end of Central Park, the proposed Project will provide multiple trail routes throughout the Park, as shown in Figures 3.5-4 through 3.5-6. These routes will be identified at distances of 1 kilometer, 3 kilometers and 5 kilometers. The routes will have signs to differentiate each trail loop with milestone markers to provide the casual jogger/walker and runner with a pacing system. Each route is designed to minimize roadway crossing, providing continuous, uninterrupted experiences.

Landscape Character

Landscape provides a framework to reinforce the park entrances, circulation, open spaces, recreation facilities and landscape features. Plant types and species will be selected based on hydro zones (water use requirements), function (screening, shade), maintenance and aesthetics.

Shade canopy trees will be used in parking lot islands when appropriate to provide shade and reduce the heat island effect. In addition, turf is proposed in parking lots that will accommodate larger events in the Great Lawn where use of the lots is limited to certain times of the year. Finger islands in these lots are used to delineate the perimeter access drive and center concrete mow curbs between islands define parking organization and alignment. Parking lots have been designed to accommodate solar shade structures.

The open channel is a major landscape feature and will include riparian type planting. Parkland trees and understory planting will help to create the outdoor rooms; define large multi-purpose open spaces; used to help with separation between vehicles and pedestrians; and provide buffer between the adjacent residents.



City of Rancho Cucamonga
Central Park

Figure 3.5-4
Trail Routes 1K

San Bernardino County, CA

Source: RJM Design Group, Central Park Master Plan Update. January 29, 2018

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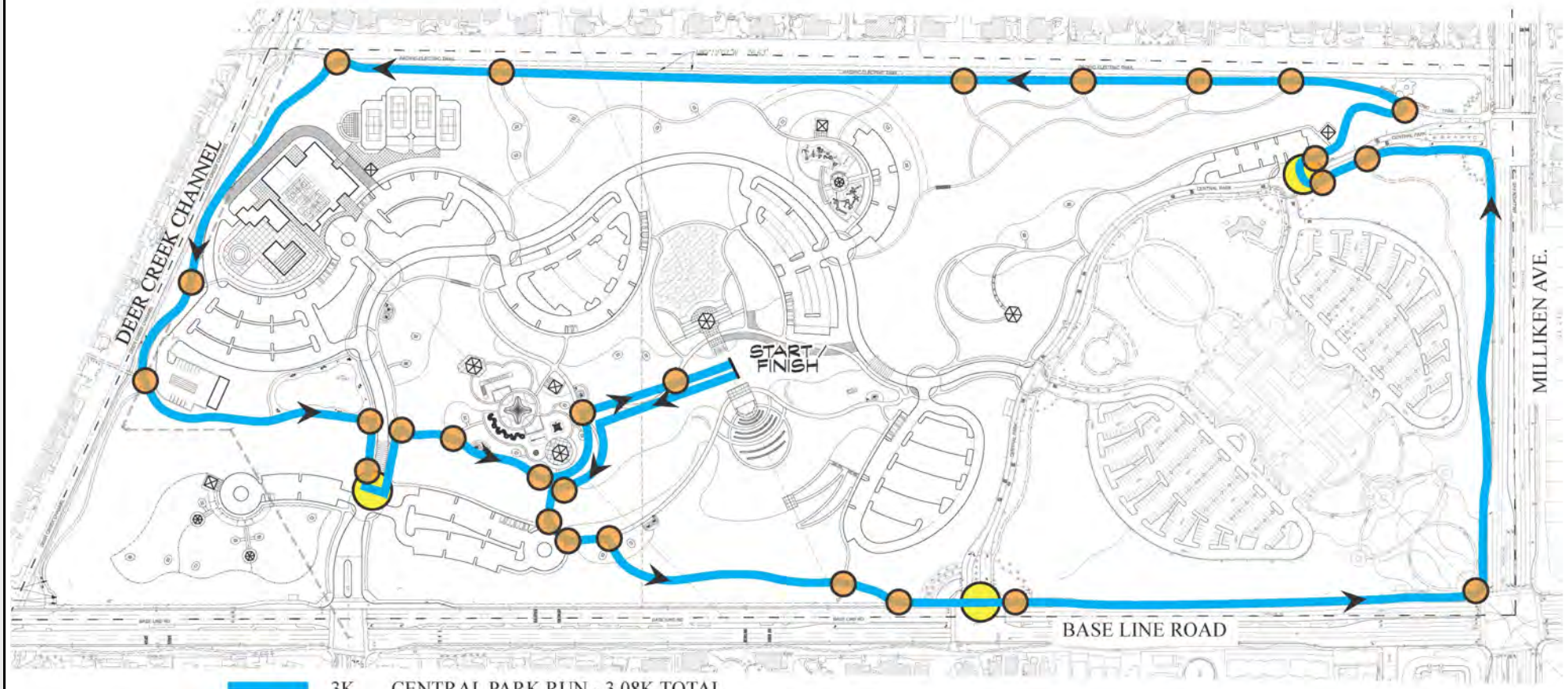

City of Rancho Cucamonga
Central Park

Figure 3.5-5
Trail Routes 3K

San Bernardino County, CA

Source: RJM Design Group, Central Park Master Plan Update. January 29, 2018

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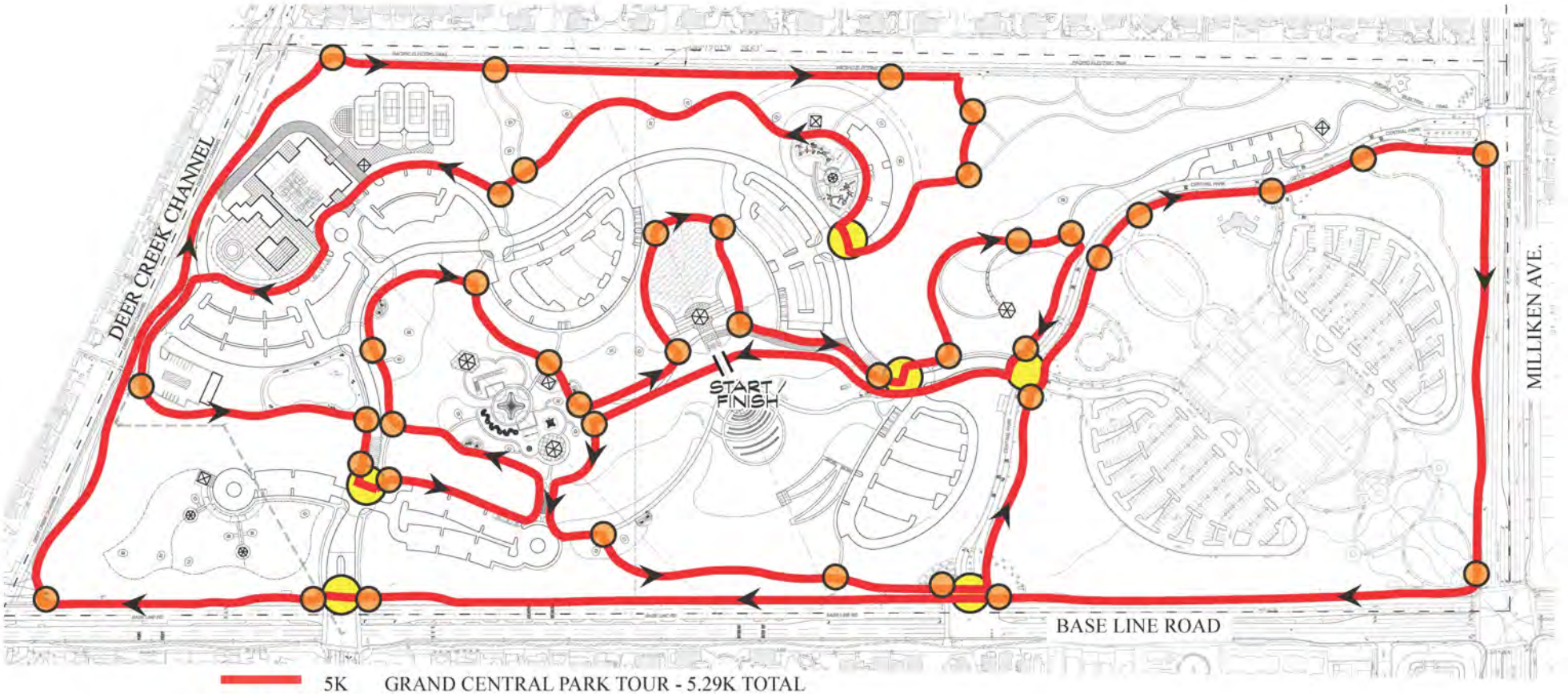

City of Rancho Cucamonga
Central Park

Figure 3.5-6
Trail Routes 5K

San Bernardino County, CA

Source: RJM Design Group, Central Park Master Plan Update. January 29, 2018

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Utilities

The proposed Project includes provision of sewer, water, storm drain, electric, gas, telephone, data and cable TV, to the Project elements. Locations of the various existing utilities are shown in Figure 3.5-7.

Electric services will be provided by Southern California Edison or Rancho Cucamonga Municipal Utility (if available). On the north side of Base Line Road exists an underground Southern California Edison transmission line (66 kilovolts) and distribution line which provides electric service for the senior and community centers at Central Park Drive and Base Line Road. The distribution line that runs parallel can service subsequent Project development, including the recreation pool, tennis courts and the multi-purpose facility. Electric service will be available at Spruce Avenue and Base Line Road.

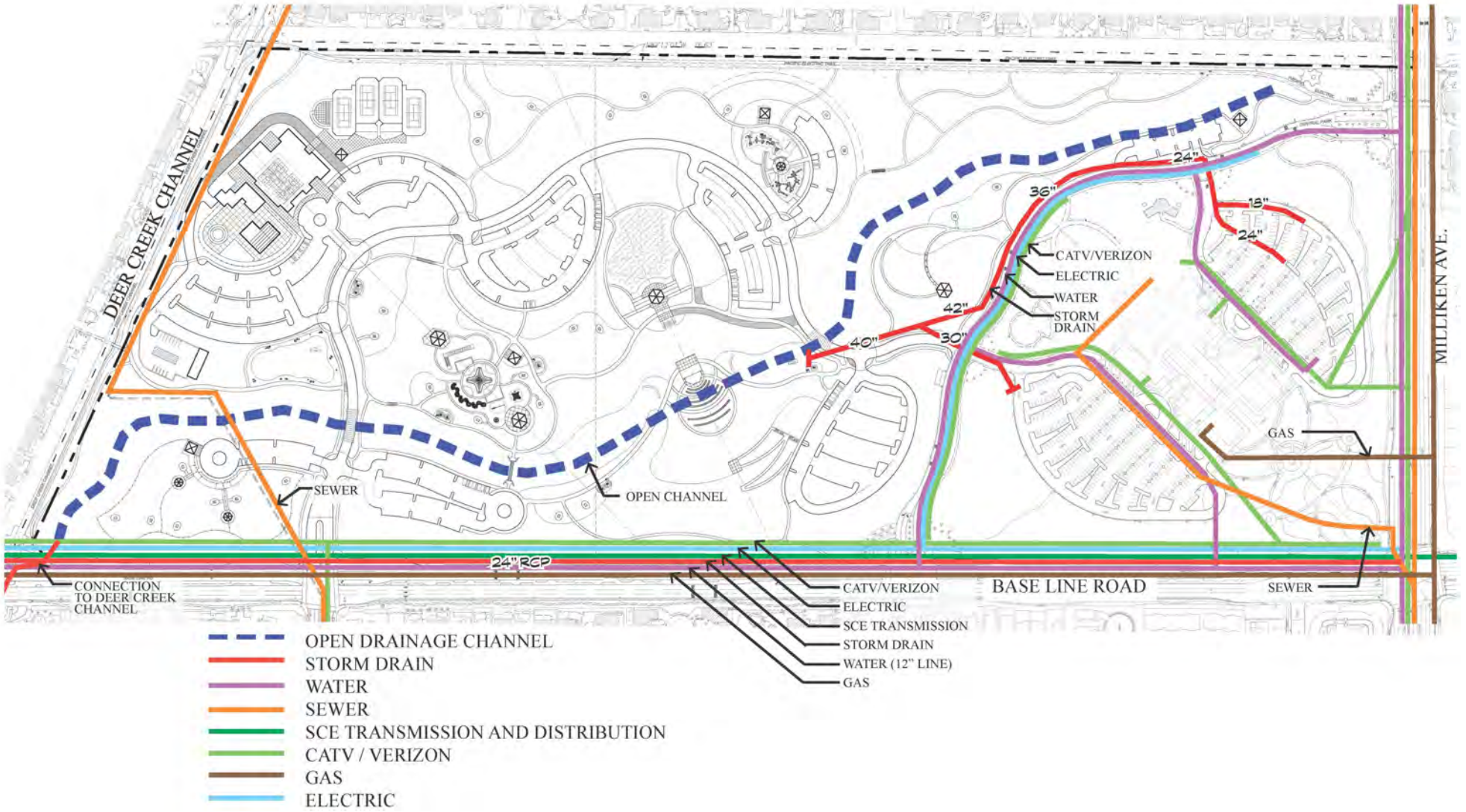
Telephone, gas and cable TV exist along Base Line Road as well and will be utilized to service the future Project development. The pick-up points for subsequent Project development for electric, telephone, gas and cable TV are located at the northeast corner of Base Line Road and Spruce Avenue. Across the intersection at the southwest corner is the connection point for fiber.

In order to reduce construction costs, a joint on-site dry utility trench will be located along Central Park Drive, directly behind the curb which will include electrical, cable, telephone, fiber and gas, as shown in Figure 3.5-8. The joint utility trench will tie into the Project development, north of the senior center. From this main trench, lateral utility trenches will service the viticulture pavilion, multi-purpose facility, recreation pool, tennis courts, and maintenance yard. Facilities directly adjacent to one another will be split in order to accommodate phased element development.

Potable water will be provided by Cucamonga Valley Water District (CVWD). On the north side of Base Line Road and the west side of Milliken Avenue exists 24-inch reinforced concrete pipe water mains. A 30-inch water main is located along Central Park Drive, providing water service for the senior and community centers. As shown in Figure 3.5-9, the pick-up points for subsequent Project development will be located at the northeast corner of Base Line Road and Spruce Avenue or from Central Park Drive.

Wastewater conveyance is handled by the City and CVWD, and wastewater is processed by CVWD and the Inland Empire Utilities Agency (IEUA). A sewer line is located on the west side of Milliken Avenue. Another sewer line extends northwest from the northwest corner of Base Line Road and Spruce Avenue to the western boundary of the proposed Project site and continues north. The sewer line servicing the senior and community centers extends from this line at Central Park Drive and Base Line Road. As shown in Figure 3.5-9, the pick-up points for subsequent Project development will be located from the line located on the western boundary or from the line servicing the senior and community center facilities.

The mainline routing with secondary point of connections for the landscape irrigation system is shown in Figure 3.5-10. The irrigation system will be designed for future reclaimed water. The irrigation design will require water use allocation calculations and programming parameters per the state model water efficient ordinance, AB 1881.



City of Rancho Cucamonga
Central Park

Figure 3.5-7
Existing Site Utilities

San Bernardino County, CA

Source: RJM Design Group, Central Park Master Plan Update. January 29, 2018

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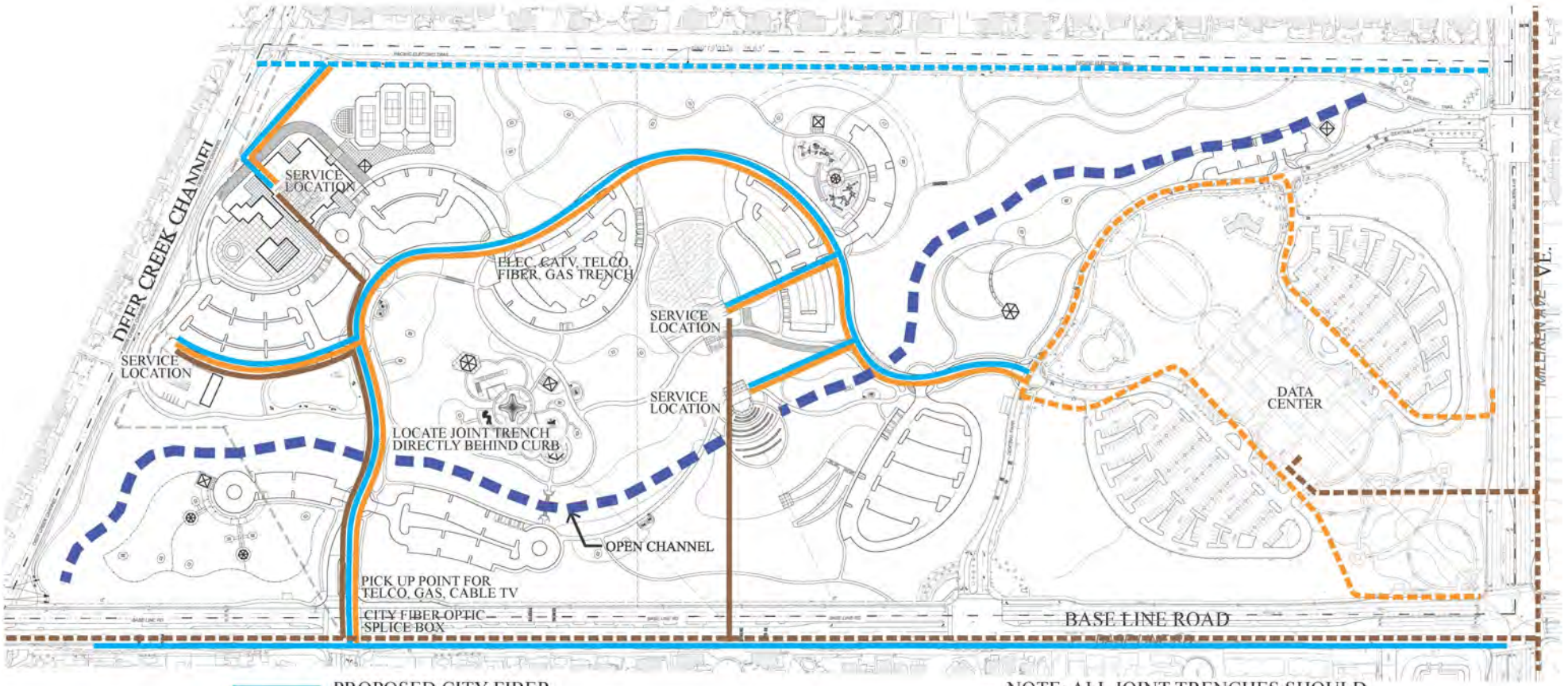

City of Rancho Cucamonga
Central Park

Figure 3.5-8
Conceptual Dry Utilities

San Bernardino County, CA

Source: RJM Design Group, Central Park Master Plan Update. January 29, 2018

0 100 200 400
Feet

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RANCHO CUCAMONGA

TETRA TECH

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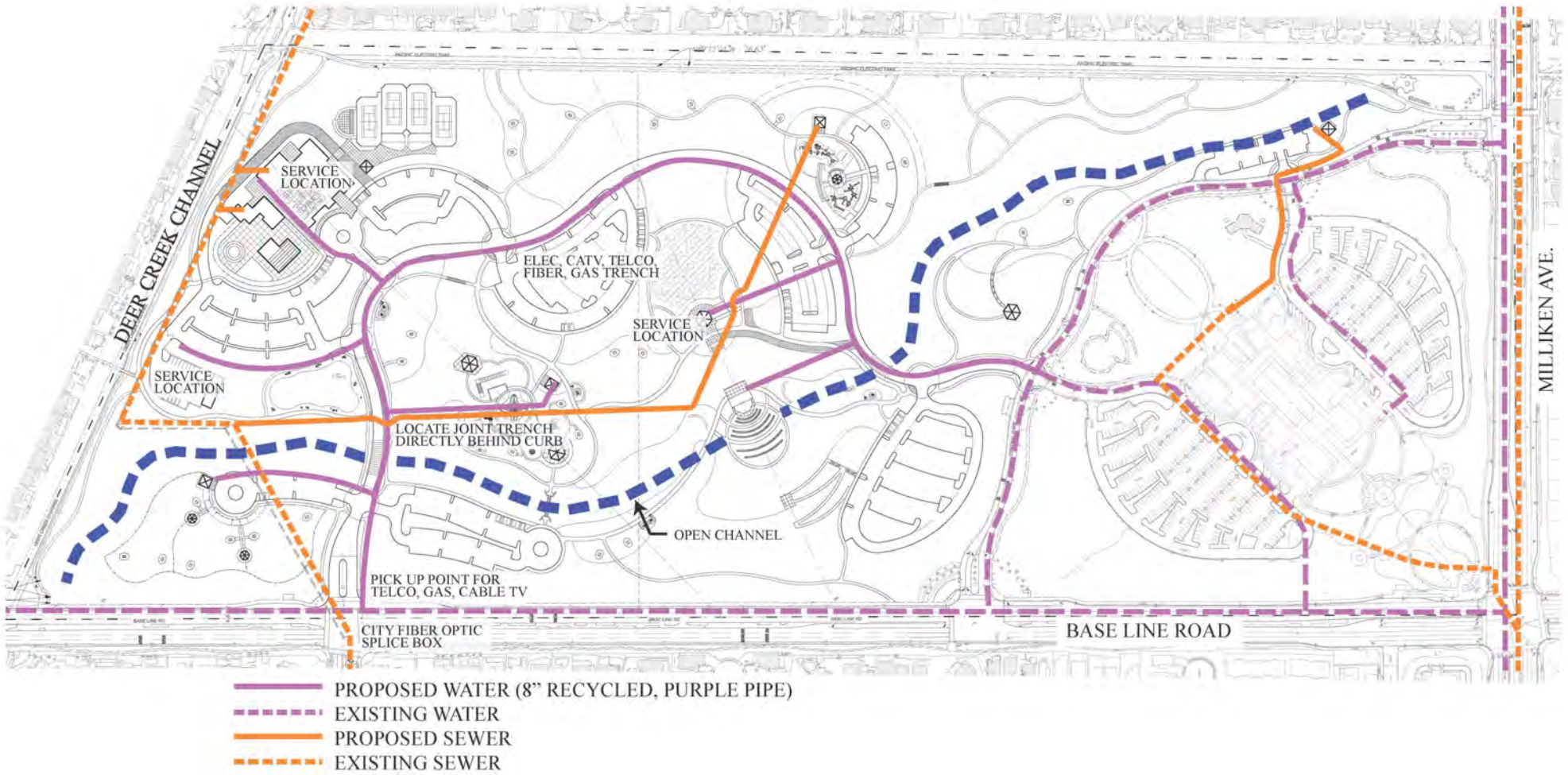

City of Rancho Cucamonga
Central Park

Figure 3.5-9
Conceptual Wet Utilities

San Bernardino County, CA

Source: RJM Design Group, Central Park Master Plan Update. January 29, 2018

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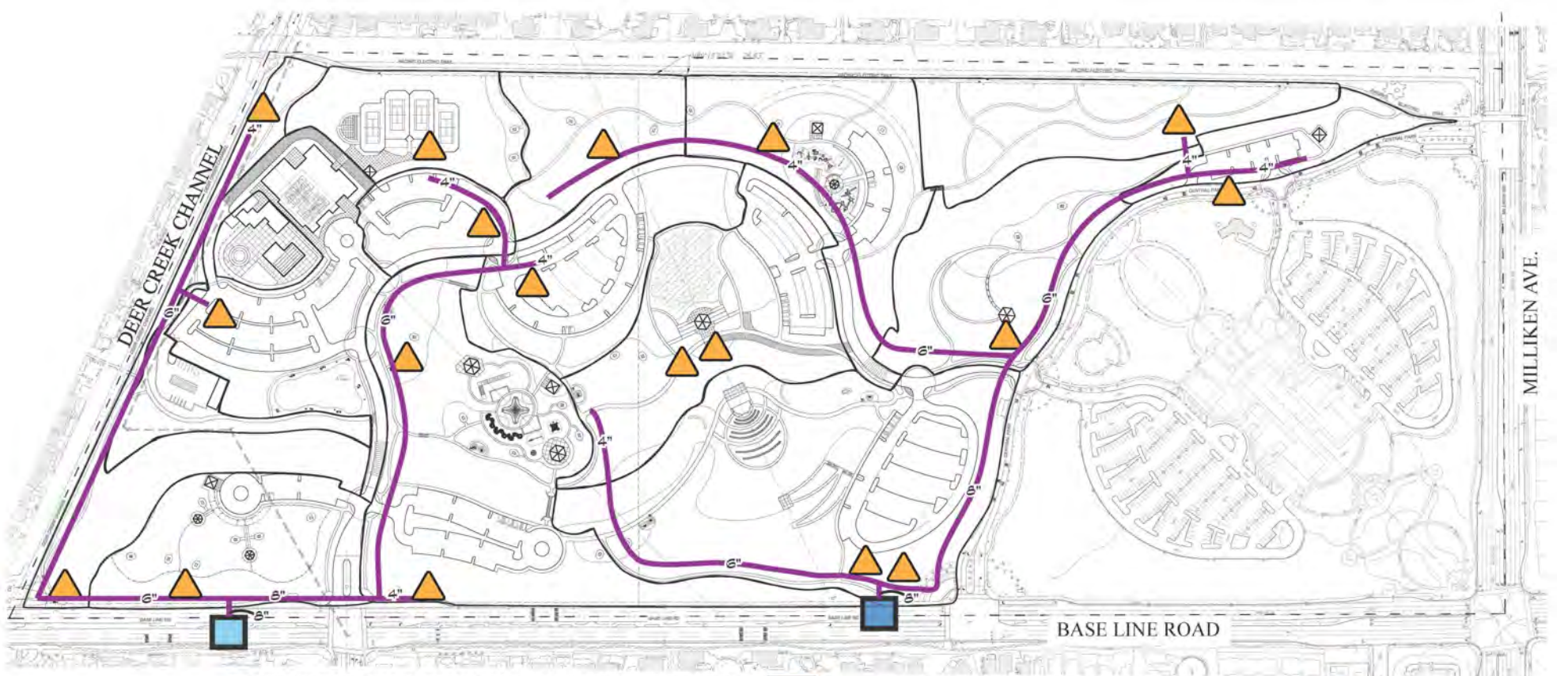

PROPOSED MASTER IRRIGATION WATER METER P.O.C. 2
4" METER W/6" SERVICE
437 GPM ESTIMATED DEMAND

PROPOSED MASTER IRRIGATION WATER METER P.O.C. 3
4" METER W/6" SERVICE
323 GPM ESTIMATED DEMAND

PROPOSED IRRIGATION CONTROLLER
120V ELECTRICAL CONNECTION REQUIRED

PROPOSED IRRIGATION MAINLINE
4"-8" CL 200PVC, SIZE AS SHOWN

PHASING SEPARATION LINE

City of Rancho Cucamonga
Central Park

Figure 3.5-10
Landscape Irrigation
Master Plan

San Bernardino County, CA

Source: RJM Design Group, Central Park Master Plan Update. January 29, 2018

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3.6 GRADING PLAN

Detailed grading studies and cut and fill calculations have been developed to generate the grading concept for the proposed Project. Preliminary grading studies have been prepared to include the entire Park site with consideration to the existing senior and community centers. Figure 3.6-1 represents the existing topography of Central Park. Figure 3.6-2 presents the proposed grading plan for the proposed Project. The proposed Project will require approximately 66,000 cubic yards (cy) of cut soils and 84,000 cy of fill soils. As indicated, there is a shortage of fill, in particular the parking area at the multi-purpose facility. The shortage of approximately 18,000 cy will either be addressed by increase of cut soil along the northern property edge of the site or through the import of soils from other private developer projects within the City needing to export soil. However, any soil brought on-site shall be tested for contamination and evaluated prior to use.

3.7 WATER QUALITY PLAN

The proposed Project will use a series of water treatment and bioretention basins for treatment of storm water runoff. Bioretention basins are shallow, vegetated, depressed basins which function to collect, store and treat storm water runoff. The basin is designed to incorporate an engineered soil media to assist in plant uptake of pollutants. The bioretention basin allows infiltration to the extent the on-site soil and engineered soil media can accommodate. When the infiltration rate of the underlying soil is exceeded, the treated flows are discharged through an underdrain system. As shown in Figure 3.7-1 each proposed Project element is designed with its own bioretention facility, sized according to the required treatment volume as determined by the proposed Water Quality Master Plan.

3.8 PROJECT IMPLEMENTATION SCHEDULE

The proposed Project has been designed to allow the City flexibility to develop portions of the park as funds become available. Some of the proposed Project elements have the potential to be constructed in the relatively near future.

Construction of Element A - Pacific Electric Trail Head, Element B - Terraced Gardens, and Element C - Water Conservation/Demonstration Garden is expected to begin within the next couple of years and be completed in 2024. Construction of Element J - Dog Park is expected to begin early 2020 and be completed in 2022. Construction of Element L - Recreation Pool is expected to begin within the next couple of years and be completed by 2024.

The expected buildout of the remainder of the proposed Project is not known at this time. For the purposes of evaluation, it is assumed in this Draft Program EIR, that the design and construction of all the proposed Project's elements would occur over a 20 to 30-year period.

City of Rancho Cucamonga
Central Park

Figure 3.6-1
Existing Topography

San Bernardino County, CA

Source: RJM Design Group, Central Park Master Plan Update. January 29, 2018

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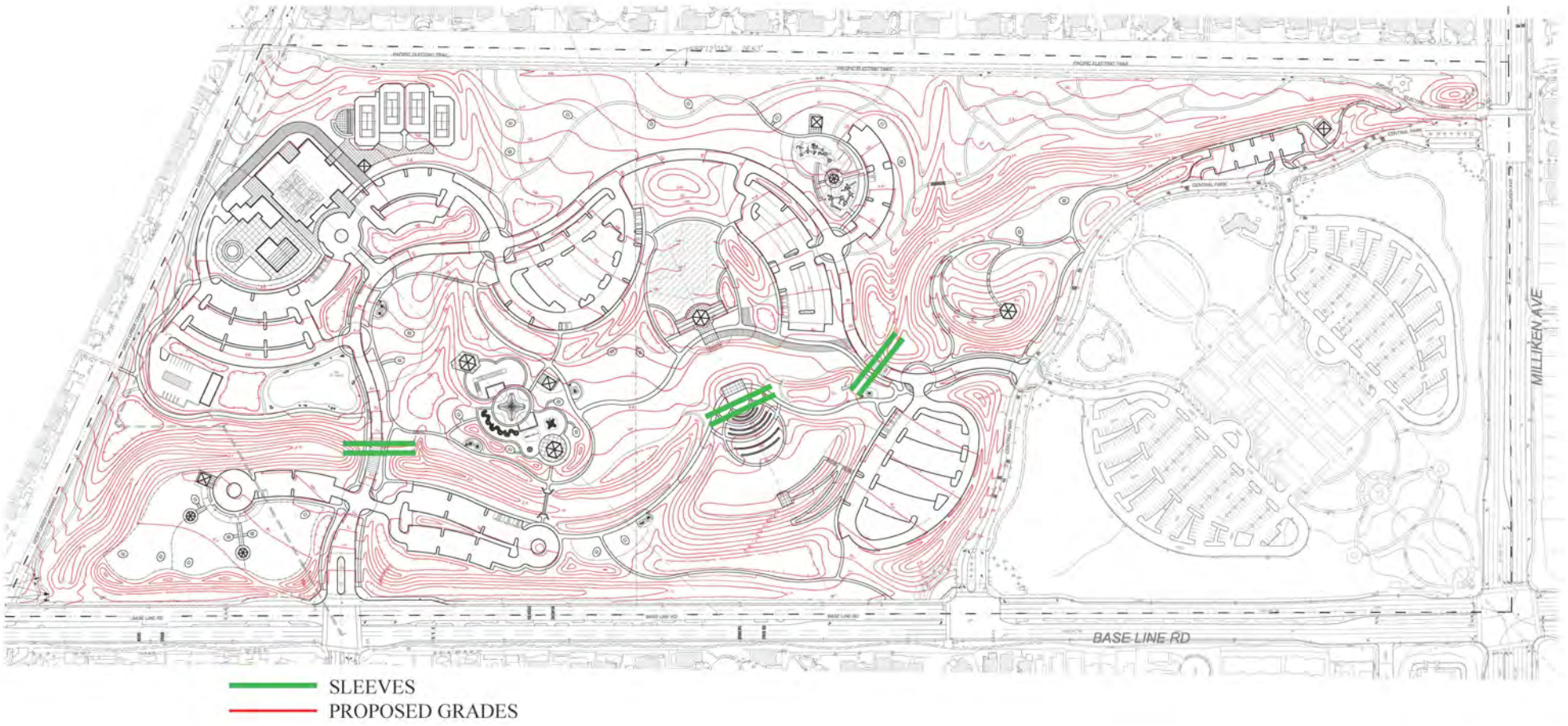

City of Rancho Cucamonga
Central Park

Figure 3.6-2
Grading Master Plan

San Bernardino County, CA

Source: RJM Design Group, Central Park Master Plan Update. January 29, 2018

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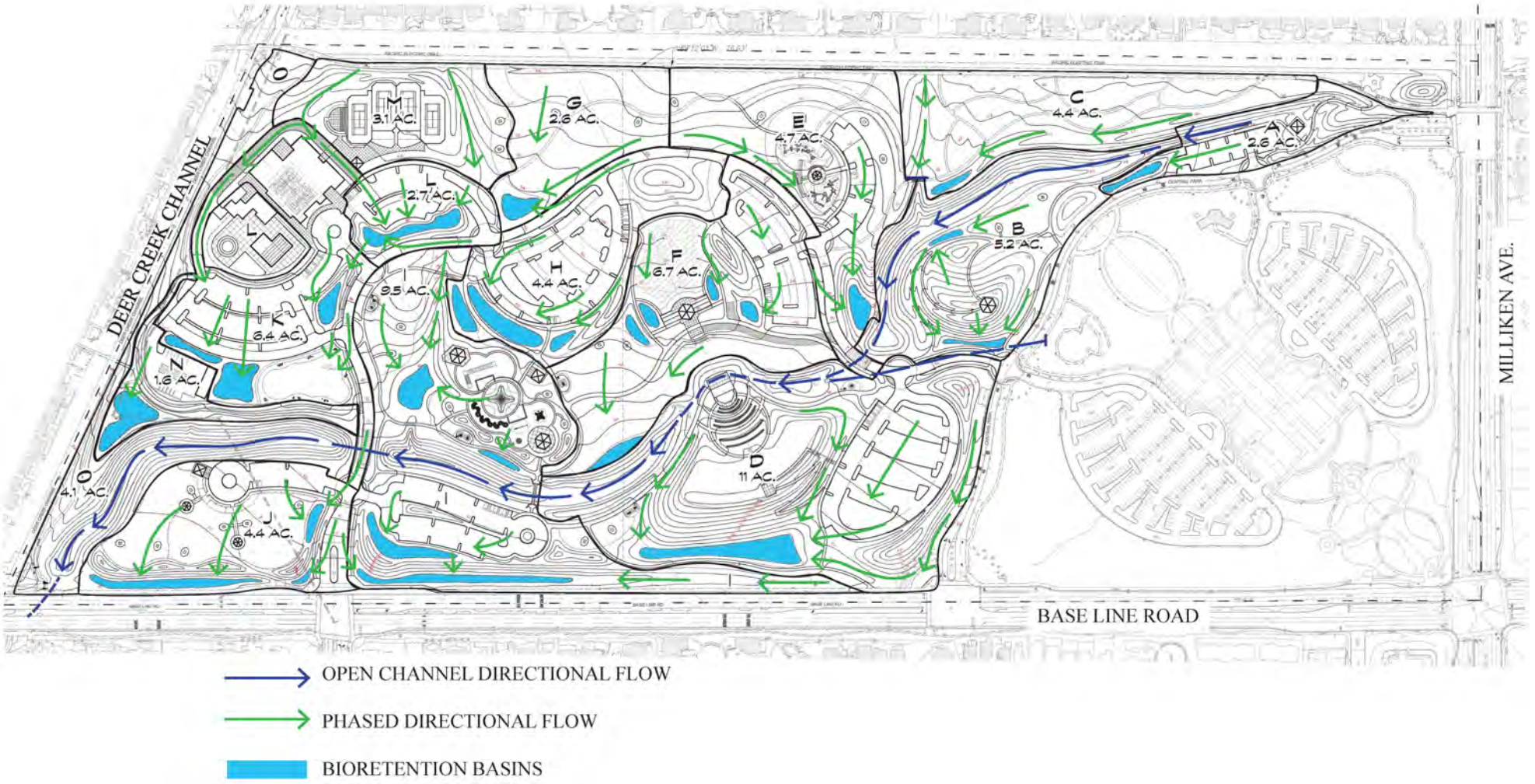

City of Rancho Cucamonga
Central Park

Figure 3.7-1
Preliminary
Water Quality Plan

San Bernardino County, CA

Source: RJM Design Group, Central Park Master Plan Update. January 29, 2018

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3.9 CUMULATIVE PROJECTS

Cumulative impacts refer to the combined effect of proposed Project impacts with the impacts of other past, present, and reasonably foreseeable future projects. According to the CEQA Guidelines Section 15355 "cumulative impacts" refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the proposed Project when added to other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time. In addition, as stated in the CEQA Guidelines Section 15064 (h)(4), "the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed Project's incremental effects are cumulatively considerable."

The CEQA Guidelines Section 15130 (b)(1) states that the information utilized in an analysis of cumulative impacts should come from one of two sources, either:

1) A list of past, present and probable future projects producing related cumulative impacts, including, if necessary, those projects outside the control of the agency; or
2) A summary of projections contained in an adopted general plan or related planning document designed to evaluate regional or area-wide conditions.

The cumulative analysis provided in this Draft Program EIR utilize the first method and is based on a list of future projects provided by the City Community Services Department. Cumulative project land uses and intensities are provided in Table 3.9-1.

Table 3.9-1. Cumulative Projects

Cumulative Project	Location	Description
Central Park Amphitheater	Central Park	Approximately 40,000 sq. ft. amphitheater on 11 acres at the southcentral portion of Central Park.
Etiwanda Heights Specific Plan	Bounded by unincorporated County land to the west, San Bernardino National Forest to the north, City of Fontana to the east, and Rancho Cucamonga's foothill neighborhoods to the south	4,393-acre Etiwanda Heights Neighborhood & Conservation Plan Area
Sycamore Heights	North side of Foothill Boulevard, between Red Hill Country Club Drive and the Pacific Electric Trail Right-of-Way	175 Attached Condominium Units
Weaver Lane	East side of Carnellian Street, north of Hillside Road	26 Single-Family Residences
Day Creek Villas	Terminus of Firehouse Court, west of Day Creek Boulevard	140 Affordable Senior Apartments
East Avenue Villa	6737 East Avenue	12 Single-Family residences
Single-Family residences	North of the 210 Freeway, east of East Avenue at the easterly extension of Wilshire Drive and Copley Drive	10 Single-Family residences

Cumulative Project	Location	Description
Cadence Senior Assisted Living	10459 Church Street	97 Assisted Senior Apartments
SUBTPM18961 6-Lot Subdivision	Brittany Lane and Sapphire Street	6 Single-Family Residence
Westbury	West side of East Avenue, north of Foothill Boulevard	133 Unit Mixed Use Project
Cityscape	Northwest corner of Foothill Boulevard and Etiwanda	160 Unit Mixed Use Project
City Center	South side of Foothill Boulevard, west of Haven Avenue	298 Unit Mixed Use Project
Pacific Reserve	North side of Foothill Boulevard, west of Cornwall Court	73 Unit Multi-Family Development
Haven and Arrow	Southwest corner of Haven Avenue and Arrow Route	200,175 square-foot commercial/office complex
Premier Swim Academy	7827 Haven Avenue	9,695 square foot swim school
Kiddie Academy	Southwest corner of Atwood Street and Victoria Park Lane	10,763 square foot child care facility
St. Mary's Montessori	6880 North Victoria Windrows Loop	9,970 square foot expansion to existing daycare center and after-school facility.
Carden Arbor View School	19th Street and Beryl Street	18,000 square foot K-8 school
8281 Utica Office	8281 Utica Avenue	12,000 square foot office building
6th and Center Industrial	Northeast corner of 6th Street and Center Avenue	87,554 square-foot industrial/warehouse development consisting of three buildings
Foothill and Mayten Industrial	South of Foothill Boulevard at Mayten Avenue	171,322 square foot industrial/warehouse development consisting of six buildings
Hickory and Arrow Industrial	Southwest corner of Hickory Avenue and Arrow Route	34,161 square foot industrial/warehouse building
BOB 2.0	8794 Lion Street	15,000 square foot warehouse building at the City's Public Works Yard
Milliken and Jersey Industrial	Northwest corner of Jersey Boulevard and Milliken Avenue	143,014 square-foot industrial warehouse
7th and Center Industrial	9063 Center Avenue	110,743 square foot industrial/warehouse building
REF Industrial Building Expansion	7915 Center Avenue	7,782 square foot expansion to an existing 16,000 square foot industrial building
Bolnado's 20K Building	8th Street and Vineyard Avenue	25,399 square foot industrial building
104,269 square feet. Industrial Building	East side of East Avenue, South of Arrow	104,269 square-foot industrial building
1.452M warehouse building	12434 East 4th Street	1.452 million square foot warehouse building to replace existing building of same size
Panattoni 9th and Vineyard	Southwest corner of 9th Street and Vineyard Avenue	1,037,467 square-foot industrial warehouse (3 buildings)
Day Creek Villages	Southwest corner of Day Creek Boulevard and Baseline Road	392 residential units, 71 room hotel, and 21,627 square feet of commercial space
The Resort	North of 4th Street, south of the Metrolink Tracks, west of Milliken Avenue, and east of Cleveland Avenue	2,650 to 3,450 residential units, and up to 220,000 square-feet of non-residential uses.

3.10 DISCRETIONARY ACTIONS

3.10.1 City of Rancho Cucamonga

The City is expected to use the information contained in this Draft Program EIR for consideration of approvals related to and involved in proposed Project implementation. Potential actions to be considered by the City for the proposed Project may include, but not be limited to the following:

- Certification of the Final Program EIR
- Adoption of the Central Park Master Plan Update reVISION

In addition to the discretionary action listed above, subsequent actions by the City to construct specific elements of the proposed Project may include approval of:

- Final Site Plans
- Building Permits
- Design Review

3.10.2 Responsible and Trustee Agencies

The Program EIR provides environmental information to responsible and trustee agencies and other public agencies that may be required to grant approvals or coordinate with the City as a part of implementation of the proposed Project. These agencies would include the following:

- California Department of Fish and Wildlife
- Regional Water Quality Control Board – Santa Ana (Region 8)
- South Coast Air Quality Management District
- San Bernardino County Flood Control District
- Cucamonga Valley Water District

CHAPTER 4
ENVIRONMENTAL ANALYSIS

CHAPTER 4.0 - ENVIRONMENTAL ANALYSIS

As discussed in Chapter 1.0, the City determined that an EIR would be required for the proposed Project. Issue areas discussed in Section 5.1 were identified as having no impact or a less than significant impact and further analysis of those issues is not discussed in this Draft Program EIR. Chapter 4.0 of this Draft Program EIR includes the environmental analysis for each environmental topic for which the proposed Project may result in potentially significant adverse impacts, which include the following:

- 4.1 – Air Quality
- 4.2 – Biological Resources
- 4.3 – Cultural Resources
- 4.4 – Geology
- 4.5 – Greenhouse Gas Emissions
- 4.6 – Hazards and Hazardous Materials
- 4.7 – Noise
- 4.8 – Transportation
- 4.9 – Tribal Cultural Resources

Sections 4.1 through 4.9 provide a discussion of each topical area organized as follows:

- Introduction
- Environmental Setting
- Regulatory Setting
- Methodology
- Thresholds of Significance
- Impacts and Mitigation
  - Impact Analysis
  - Mitigation Measures
  - Level of Significance (after Mitigation)
  - Cumulative Impacts

For potential impact and threshold criteria, a determination of the level of significance of the impact is provided in accordance with the following categories:

- **Less Than Significant.** A *less than significant impact* would cause no substantial adverse change in the environment.
- **Potentially Significant.** A *potentially significant impact* would have a substantial adverse impact on the environment.
- **Significant and Unavoidable.** A *significant and unavoidable impact* would cause a substantial adverse effect on the environment and no feasible mitigation measures would be available to reduce the impact to a less-than-significant level.

4.1 AIR QUALITY

This section describes the existing air quality and potential impacts of the proposed Project on the proposed Project site and the surrounding area.

4.1.1 Existing Conditions

California is divided into air basins, which are served by either county air pollution control districts or multi-county air quality management districts. Air basins are delineated based on their potential for trapping air pollutants due to natural barriers such as mountains. Pollutants tend to stagnate unless dispersed into other areas by prevailing winds strong enough to do so.

The project site is located within the City of Rancho Cucamonga in the South Coast Air Basin (SoCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SoCAB is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The SoCAB includes all of Orange County and the non-desert portions of Los Angeles, San Bernardino, and Riverside Counties.

The California Air Resources Board (CARB) tracks attainment of air quality standards (established by both USEPA and SCAQMD) for basins throughout the State. The SoCAB has been designated as a non-attainment area for ozone, particulate matter equal to and less than 2.5 microns in diameter ($PM_{2.5}$), and particulate matter equal to and less than 10 microns in diameter (PM_{10}) as it does not meet the California Ambient Air Quality Standards (CAAQS) for certain pollutants regulated under the Federal Clean Air Act. The SoCAB fails to meet national standards for ozone and $PM_{2.5}$ and therefore is considered a Federal "non-attainment" area for these pollutants.

Table 4.1-1 lists criteria air pollutants and their attainment status in the SoCAB.

Table 4.1-1. Criteria Pollutants Attainment Status in the South Coast Air Basin

Air Pollutant	State Attainment Status[1]	Federal Attainment Status[2]
Ozone (1-hour)	Nonattainment	Extreme Nonattainment
Ozone (8-hour)	Nonattainment	Extreme Nonattainment
$PM_{2.5}$	Nonattainment	Serious Nonattainment
PM_{10}	Nonattainment	Attainment/Maintenance
NO_2	Attainment	Attainment/Maintenance
CO	Attainment	Attainment/Maintenance
SO_2	Attainment	Attainment
Lead	Attainment	Attainment
Particulate Sulfate	Attainment	Attainment
Hydrogen Sulfide	Unclassified	Attainment
Visibility Reducing Particles	Unclassified	Attainment

Source: (1) USEPA 2020b; (2) CARB 2019a

Table 4.1-2 lists criteria air pollutant de minimis levels based on Federal attainment status.

Table 4.1-2. Federal Attainment Status/De Minimis Levels

Pollutant	Area Type	Tons/Year
Ozone (volatile organic compounds or NO_X)	Serious nonattainment	50
	Severe nonattainment	25
	Extreme nonattainment	10
	Other areas outside an ozone transport region	100
Ozone (NO_X)	Marginal and moderate nonattainment inside an ozone transport region	100
	Maintenance	100
Ozone (volatile organic compounds)	Marginal and moderate nonattainment inside an ozone transport region	50
	Maintenance within an ozone transport region	50
	Maintenance outside an ozone transport region	100
CO, SO_2 and NO_2	All nonattainment & maintenance	100
PM_{10} and $PM_{2.5}$	Serious nonattainment	70
	Moderate nonattainment and maintenance	100
Lead	All nonattainment & maintenance	25

Source: USEPA 2020b. (https://www.epa.gov/general-conformity/de-minimis-tables)

4.1.2 Regulatory Setting

The air quality at the proposed Project site is addressed through the efforts of various international, federal, state, regional, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, regulations, planning, policy-making, education, and a variety of programs.

Federal

The United States Environmental Protection Agency (USEPA) classifies the air quality in an area with regard to its attainment of federal primary and secondary National Ambient Air Quality Standards (NAAQS). Primary standards prescribe the maximum permissible concentration in the ambient air and are required to protect public health. Secondary standards specify levels of air quality required to protect public welfare, including materials, soils, vegetation, and wildlife, from any known or anticipated adverse effects (USEPA 2020a). NAAQS are established for six pollutants (known as criteria pollutants): ozone, particle pollution (i.e., respirable PM_{10} and respirable $PM_{2.5}$), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead. A summary of NAAQS is provided in Table 4.1-3. Under the Clean Air Act Amendments of 1990 directive, attainment and maintenance of NAAQS is required.

Table 4.1-3. National and State Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]	National Standards[2]	
		Concentration[3]	Primary[3,4]	Secondary[5]
Ozone[6]	1 Hour	0.09 ppm (180 µg/m^3)	--	Same as Primary Standard
	8 Hour	0.070 ppm (137 µg/m^3)	0.070 ppm (137 µg/m^3)	
Respirable Particulate Matter (PM_{10})[7]	24 Hour	50 µg/m^3	150 µg/m^3	Same as Primary Standard
	Annual	20 µg/m^3	--	
Fine Particulate Matter ($PM_{2.5}$)[7]	24 Hour	--	35 µg/m^3	Same as Primary Standard
	Annual	12 µg/m^3	12 µg/m^3	15 µg/m^3
Carbon Monoxide (CO)	1 Hour	20 ppm (23,000 µg/m^3)	35 ppm (40,000 µg/m^3)	--
	8 Hour	9 ppm (10 µg/m^3)	9 ppm (10 µg/m^3)	--
Nitrogen Dioxide (NO_2)[8]	1 Hour	0.18 (339 µg/m^3)	100 ppb (188 µg/m^3)	--
	Annual	0.030 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3)	Same as Primary Standard
Sulfur Dioxide (SO_2)[9]	1 Hour	0.25 ppm (655 µg/m^3)	75 ppb (196 µg/m^3)	--
	3 Hour	--	--	0.5 ppm (1300 µg/m^3)
	24 Hour	0.04 ppm (105 µg/m^3)	0.14 ppm (for certain areas)[9]	--
	Annual	--	0.030 ppm (for certain areas)[9]	--
Lead[10,11]	30-Day Average	1.5 µg/m^3	--	--
	Calendar Quarter	--	1.5 µg/m^3 (for certain areas)[10]	Same as Primary Standard
	Rolling 3-Month Average	--	0.15 µg/m^3	
Visibility Reducing Particles[12]	8 Hour	See footnote 12	No National Standards	
Sulfates	24 Hour	25 µg/m^3	No National Standards	
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	No National Standards	
Vinyl Chloride[10]	24 Hour	0.01 ppm (26 µg/m^3)	No National Standards	

Sources: Table extracted from http://www.arb.ca.gov/research/aaqs/aaqs2.pdf on February 2020 with information dated 4 May 2016 (CARB 2016)

Notes:

1. California standards for ozone, carbon monoxide, sulfur dioxide (1- and 24-hour), nitrogen dioxide, and particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24- hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 micrograms per cubic meter (µg/m^3) is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25 degrees Celsius (°C) and a reference pressure of 760 Torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 Torr; ppm in this table refers to parts per million (ppm) by volume, or micromoles of pollutant per mole of gas.
4. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
5. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
6. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
7. On 14 December 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m^3 to 12.0 µg/m^3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standard of 15 µg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
8. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
9. On 2 June 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at

each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved. Note that the 1-hour national standard is in units of ppb. California standards are in units of ppm. To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

10. The CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
11. The national standard for lead was revised on 15 October 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m^3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
12. In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

The following narratives provide a brief description of effects of criteria air pollutants.

Ozone

Ozone at the ground level is not emitted directly into the air. Instead, it is formed from a reaction between nitrogen oxide (NO_x) and volatile organic compounds in the presence of sunlight. NO_x is produced from the combustion of fossil fuels (e.g., diesel, gasoline, and natural gas) through various processes including vehicles, furnaces, and boilers. Volatile organic compounds are emitted from solvent and/or solvent based products such as architectural coatings and degreasers. Ozone is harmful to health particularly in young children, the elderly and populations with respiratory conditions such as asthma.

Particulate Matter

Particulate matter (PM) are a mixture of solid particles and liquid droplets found in the air. Depending on their size, PM are classified as $PM_{2.5}$ and PM_{10}. Sources of PM include construction sites, combustion gases, smoke, and soot. $PM_{2.5}$ is primarily responsible for visibility reduction in the air. $PM_{2.5}$ relevant health effects include exacerbation of symptoms in sensitive patients with respiratory or cardiovascular disease, decline in pulmonary function or growth in children, and increased risk of premature death. PM_{10} can enter the lungs and blood stream causing also adverse health effects.

Carbon Monoxide

CO is a colorless odorless gas that results from combustion sources. If inhaled in large amounts, it can cause serious health problems, including dizziness, confusion, unconsciousness, and death.

Nitrogen Oxides

NO_2 is the primary member and used as the indicator for of the family of NO_x. NO_2 results from the burning of fuel in a variety of sources including cars, trucks and buses, power plants, and off-road equipment. NO_2 can react with other pollutants to form ozone and PM. NO_2 can primarily affect the respiratory system in humans. Short-term exposure to high concentrations of NO_2 can aggravate existing respiratory conditions such as asthma. Long-term exposure to NO_2 can result in the development of respiratory diseases such as asthma.

Sulfur Dioxide

SO_2 is the primary member of and used as the indicator for the family oxides of sulfur (SO_X). SO_2 results from combustion of fuels primarily at power plants and other industrial facilities. SO_2 reacts with other pollutants to form fine PM. SO_2 affects the respiratory system in humans, and at high concentrations, it can damage trees and crops.

Lead

Major sources of lead in the air include ore and metals processing and piston-engine aircraft operating on leaded aviation fuel. Other sources are waste incinerators, utilities, and lead-acid battery manufacturers. Areas near lead smelters have the highest air concentrations of lead. Lead health effects include learning disabilities, impairment of blood formation, and nerve conduction.

Pursuant to USEPA guidelines, an area with air quality better than the NAAQS for a specific pollutant is designated as being in attainment for that pollutant. Any area not meeting the NAAQS for a specific pollutant is classified as nonattainment for that particular pollutant. Where there is a lack of data for the USEPA to make a determination regarding attainment or nonattainment, the area is designated as unclassified and is treated as an attainment area until proven otherwise. Areas that were once designated as nonattainment but are currently meeting and maintaining the NAAQS are designated as maintenance areas. States with nonattainment or maintenance areas are required to prepare plans, known as State Implementation Plans, stating how they will attain or maintain NAAQS. State Implementation Plans are a compilation of new and previously approved plans, programs, district rules, state regulations and federal controls. States and local air quality management agencies prepare State Implementation Plans for approval by the USEPA.

State

At the state level, the CARB has also adopted air quality standards for California, known as the CAAQS pursuant to the California Clean Air Act (CCAA). The CAAQS are generally more stringent than the NAAQS and include air quality standards for all criteria pollutants listed under NAAQS, plus sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particulate matter. The CCAA established California's air quality goals, planning mechanisms, regulatory strategies, and standards of progress aimed at meeting and/or exceeding CCAA requirements for air quality. The CCAA requires attainment of CAAQS for criteria pollutants by the earliest practicable date. A summary of CAAQS is presented in Table 4.1-3 above.

Regional

SCAQMD

The SCAQMD is required, pursuant to the Clean Air Act, to reduce emissions of certain pollutants for which the SoCAB is in non-attainment (i.e. ozone, PM_{10}, and $PM_{2.5}$). The proposed Project would be subject to the SCAQMD's Air Quality Management Plan (AQMP). The AQMP contains a comprehensive list of pollution control strategies directed at reducing emissions and achieving ambient air quality standards. These strategies are developed, in part, based on regional population, housing, and employment projections prepared by the Southern California Association of Governments (SCAG). The SCAQMD adopted the 2016 AQMP on March 3, 2017. The AQMP has been developed in partnership with the CARB, USEPA, SCAG, and stakeholders

throughout the region, to promote reductions in criteria pollutants, GHG, and toxic risk. The AQMP is the legally enforceable blueprint for how to meet and maintain State and Federal air quality standards.

SCAQMD Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source or create a nuisance off-site. Implementation of the dust suppression techniques outlined in Rule 403 would reduce the fugitive dust generation (PM_{10} and $PM_{2.5}$). Compliance with these rules would reduce impacts on nearby sensitive receptors.

SCAG

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino and Imperial Counties and serves as a forum for regional issues relating to transportation, the economy, community development and the environment. SCAG serves as the federally designated metropolitan planning organization for the southern California region. With regard to air quality planning, SCAG has prepared the Regional Comprehensive Plan and Guide, which includes Growth Management and Regional Mobility chapters that form the basis for the land use and transportation control portions of the AQMP and are utilized in the preparation of air quality forecasts and consistency analysis included in the AQMP. Both the Regional Comprehensive Plan and Guide and AQMP strategy incorporate projections from local planning documents.

Local

City of Rancho Cucamonga

Section 17.66.060, Odor, Particulate Matter, and Air Containment Standards of the City's Development Code includes performance standards to ensure that uses and activities occur in a manner to protect the public health and safety and do not produce adverse impacts on surrounding properties or on the community at large. The following standards are relevant to air quality:

a. Sources of odorous emissions, particulate matter, and air containment standards shall comply with the rules and regulations of the air pollution control district and the State Health and Safety Code;

b. Noxious odorous emissions in a manner or quantity that is detrimental to or endanger the public health, safety, comfort, or welfare is declared to be a public nuisance and unlawful, and shall be modified to prevent further emissions release, except for agricultural operations in compliance with this title. No emission of odors shall be permitted in such quantities as to be readily detectable when diluted in the ratio of one volume of odorous air to four volumes of clean air at the property line as specified in section 17.66.030 (Points of Measurements). Any process which may involve the creation or emission of any odors shall be provided with a secondary safeguard system, so that control will be maintained if the primary safeguard system should fail;

c. No dust or particulate matter shall be emitted that is detectable by a reasonable person without instruments; and

d. Exhaust air ducts shall be located or directed away from abutting residentially zoned properties.

4.1.3 Methodology

Short-term or construction-related emissions are typically generated on-road (e.g., by employee vehicles and vendor/delivery and water trucks) and off-road (e.g., by backhoes, dozers, portable generators, and cranes). Short-term emissions end once the construction phase for each Element is complete. The proposed Project's construction phase consists of Site preparation; grading; construction of recreational facilities and restrooms; paving; and application of architectural coatings to buildings and parking lots. Emissions from the construction phase result primarily from mobile on-road (e.g., workers vehicles, material and equipment delivery trucks, soil haul trucks) and off-road sources (i.e. construction equipment). The construction equipment used for the proposed Project would include air compressors, cranes, forklift, excavators, pavers, rollers, rubber-tired dozers, generator sets, backhoes, graders, paving equipment and welders.

Long-term or operational emissions are emissions that result from activities conducted during the operation of a project (e.g., heating, employee commute, park visitors, and facility upkeep). Long-term impacts to air quality would be associated with emissions from equipment used during operation of the proposed Project (e.g., commercial water heaters, space heaters, and lawn mowers) and from motor vehicles associated with park employees, visitors, and vendors. Other activities that would contribute emissions during the operation of the proposed Project include upkeep of structures (e.g., reapplication of architectural coatings and patching of paved surfaces).

SCAQMD has established daily significance thresholds and the USEPA has established annual de minimis levels to address pollution sources associated with general construction and operation activities. The SCAQMD has developed localized significance thresholds (LSTs) for criteria pollutant emissions to determine whether a project may generate significant adverse localized air quality impacts. The LSTs represent maximum allowable emissions (pounds per day) for criteria pollutants NO_X, CO, PM_{10} and $PM_{2.5}$, and vary based on source receptor area, minimum receptor-source distance, and maximum daily disturbed acreage. The Project is located within source receptor area 32 Northwest San Bernardino Valley. The LST look-up tables allow for a minimum receptor-source distance of 82 feet (25 meters). Since construction will periodically occur near residences, localized on-site emissions were assessed at this minimum distance (82 feet or 25 meters) for all construction and operation activities. This receptor-source distance criteria are considered conservative as the majority of activity will occur at a greater distance from residences.

The use of LSTs is recommended for projects with a maximum daily disturbed acreage less than or equal to five acres. The project is comprised of 14 Elements with proposed development occurring in phases spanning 20–30 years, and construction of several Elements proposed within the next 2–4 years. Each Element ranges in size from 1.6 acres to 9.5 acres, with an average of 4.4 acres per Element. Given the size and expected construction schedule of each Element, a maximum daily disturbed area of less than or equal to five acres is expected. In order to determine if daily emissions for proposed construction and operation activities could result in significant localized air quality impacts, a worst-case scenario was assessed. Several project Elements will include parking areas or building facilities, so these land uses were included in the assessment of worst-case Element emissions. Table 4.1-4 summarizes the proposed land uses for each Element, including total acreage, building area, and number of parking stalls. In order to capture

a worst-case Element emissions scenario, the study conservatively assessed the maximum area of each land use across all project Elements; a 9.5-acre city park development, including a 30,000 square foot recreational facility building, and 164 parking spaces. This combination of land uses is intended to represent a worst-case scenario and is considered conservative as not all project Elements will include parking areas or buildings. In reality, each Element will have less overall development. Additionally, the assessment assumed a construction schedule of 2021–2022, though most Elements will be developed later when emission factors are expected to improve.

Table 4.1-4. Central Park Element Land Uses

Element		Total Area (acres)	Estimated Building Area (square feet)	Number of Parking Stalls
A	Pacific Electric Trail Head	2.6	1,000	42
B	Terraced Gardens	4.7	0	0
C	Water Conservation/Demonstration Garden	4.4	0	0
E	Universal Accessible Playground	4.7	1,000	52
F	Viticulture Pavilion and Vineyards	6.7	3,000	122
G	Upper Picnic and Event Area	2.6	0	0
H	Event Parking Area	4.4	0	164
I	Adventure Area Parking and Event/Picnic Area	9.5	1,000	106
J	Dog Park	4.4	1,000	40
K	Multi-purpose Facility and Parking	5.4	27,000	134
L	Recreation Pool	2.7	30,000	68
M	Tennis Courts	3.1	0	0
N	Maintenance Yard	1.6	2,000	0
O	Deer Creek Channel Trail	4.1	0	0
	Maximum Land Use Area	9.5	30,000	164

Emissions from construction and operation activities were calculated for this worst-case Element scenario using the California Emissions Estimator Model (CalEEMod). CalEEMod is widely accepted to provide a uniform platform to estimate potential emissions resulting from construction and operation activities of land use projects. The model takes user entered data to calculate emissions using preprogramed algorithms. The algorithms are designed to take information such as project size and length; vehicle types, operating hours, and trip lengths; and emissions mitigation criteria to calculate emissions of criteria pollutants and GHGs. Detailed CalEEMod input values and calculated air emission results for the proposed worst-case Element are included as Appendix B. Air emissions were compared to significance thresholds established by the SCAQMD to determine project impacts on air quality.

4.1.4 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the CEQA Guidelines. Under these guidelines, the proposed Project would have a significant impact to air quality if it would result in any of the following:

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

- *Violate any air quality standard or contribute substantially to an existing or projected air quality violation?*
- *Would the project result in a cumulatively considerable net increase of any criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*
- *Would the project expose sensitive receptors to substantial pollutant concentrations?*
- *Would the project create objectionable odors affecting a substantial number of people?*

4.1.5 Impacts Analysis

IMPACT 4.1-1: *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

Less than Significant Impact. The determination of AQMP consistency is primarily concerned with the long-term influence of a project on air quality in the SoCAB. Neither the development of the proposed Project nor its operation would result in long-term regional impacts. The proposed Project would comply with SCAQMD Rule 403 and would implement all feasible mitigation measures for control of PM_{10} and $PM_{2.5}$; the proposed Project would be consistent with the goals and policies of the AQMP for control of fugitive dust. Because the proposed Project would not result in a change in dwelling units or occupants, it is not in conflict with the AQMP. The proposed Project's long-term influence would also be consistent with the goals and policies of the AQMP and is, therefore, considered consistent with the SCAQMD's AQMP and no significant impact will occur.

IMPACT 4.1-2: *Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

Less than Significant Impact with Mitigation Incorporated. Worst-case Element construction and operation emissions were calculated using the CalEEMod emissions inventory model. The analysis assumed that construction activities would comply with applicable portions of SCAQMD Rule 403 regarding the control of fugitive dust. Table 4.1-5 summarizes the on-site construction and operation emissions for the worst-case study scenario with comparison to LSTs. In order to assess maximum daily on-site emissions from operation of the entire development, on-site emissions resulting from the worst-case Element scenario (9.5 acres) were scaled up based on the total acreage of the proposed development (61 acres) and compared to LSTs. The results of the CalEEMod model runs, showing the construction and operation emissions in detail, are presented in Appendix B.

Table 4.1-5. Localized Significance Analysis[a]

Activity	Maximum Daily On-site Emissions (lbs/day)			
	NO_X	CO	PM_{10}[b]	$PM_{2.5}$[b]
Construction				
Unmitigated	40	21	20	12
Mitigated	40	21	10	6
Localized Significance Threshold (lbs/day)	**270**	**2193**	**16**	**9**
Exceed Localized Significance Threshold?	*No*	*No*	*No*	*No*
Operation				

Activity	Maximum Daily On-site Emissions (lbs/day)			
	NO_X	CO	PM_{10}[b]	$PM_{2.5}$[b]
Area Sources – Worst-case Element (9.5-acre)	< 1	< 1	< 1	< 1
Area Sources – Full Development (61-acre)	< 1	< 1	< 1	< 1
Localized Significance Threshold (lbs/day)	**270**	**2193**	**4**	**2**
Exceed Localized Significance Threshold?	*No*	*No*	*No*	*No*

a. Compiled using the CalEEMod emissions inventory model, provided in Appendix B.
b. PM_{10} and $PM_{2.5}$ emissions estimates are based on compliance with SCAQMD Rule 403 requirements for fugitive dust suppression.

Table 4.1-5 shows that emissions from construction of each Element would fall below local emissions thresholds with mitigation, resulting in a less than significant impact. Mitigation Measure AIR-1 is based on SCAQMD Rule 403, and detailed below, would be applied and would reduce the project's construction PM_{10} and $PM_{2.5}$ levels below local emissions thresholds. Emissions from operation of each Element, as well as the full park development, would also result in a less than significant impact. Therefore, the construction and operation local criteria pollutant impacts would be less than significant levels and would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.

IMPACT 4.1-3: *Would the project result in a cumulatively considerable net increase of any criteria pollutants 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 results in an increase in short-term emissions related to construction and long-term operational emissions for the pollutants and precursors for which the SoCAB is in nonattainment (ozone, PM_{10}, and $PM_{2.5}$). In order to assess maximum daily emissions from operation of the entire development, operational emissions resulting from the worst-case Element scenario (9.5 acres) were scaled up based on the total acreage of the full park development (61 acres) and compared to SCAQMD regional significance thresholds. Additionally, operational emissions from the amphitheater, which were assessed previously under separate cover, were added to compare cumulative impacts to SCAQMD thresholds. Construction and operational emissions for the proposed project are presented in Table 4.1-6. The CalEEMod model runs, which estimate the construction and operational emissions in detail, are presented in Appendix B.

Table 4.1-6. Regional Significance Analysis[a]

Activity	Daily Regional Emissions (lbs/day)					
	ROG	NO_X	CO	SO_X	PM_{10}[b]	$PM_{2.5}$[b]
Construction						
Unmitigated	15	51	24	< 1	20	12
Mitigated	15	51	24	< 1	10	6
SCAQMD Regional Significance Threshold (lbs/day)	**N/A**	**N/A**	**N/A**	**N/A**	**150**	**55**
Exceed Regional Significance Threshold?	*No*	*No*	*No*	*No*	*No*	*No*
Operation						
Area, Energy & Mobile Sources – Worst-Case Element (9.5-acre)	3	14	21	< 1	6	2
Area, Energy & Mobile Sources – Full Development (61-acre)	18	93	134	1	42	11
Area, Energy & Mobile Sources – Amphitheater	1	3	2	<1	<1	<1

Activity	Daily Regional Emissions (lbs/day)					
	ROG	NO_X	CO	SO_X	PM_{10}[b]	$PM_{2.5}$[b]
SCAQMD Regional Significance Threshold (lbs/day)	**N/A**	**N/A**	**N/A**	**N/A**	***150***	***55***
Exceed Regional Significance Threshold?	*No*	*No*	*No*	*No*	*No*	*No*

a. Compiled using the CalEEMod emissions inventory model, provided in Appendix B.
b. PM_{10} emissions estimates are based on compliance with SCAQMD Rule 403 requirements for fugitive dust suppression.

Although the project site is located in a region that is in nonattainment for ozone, PM_{10}, and $PM_{2.5}$, the cumulative emissions associated with the project would not be considerable because the emissions fall below significance thresholds for those pollutants. Unmitigated construction emissions as well as operational emissions for the full development fall well below SCAQMD Regional Significant Thresholds. The project will not result in the violation of air quality standards or contribute substantially to an existing or projected air quality violation for any pollutants that are in non-attainment. A less than significant construction impact is anticipated.

IMPACT 4.1-4: *Would the project expose sensitive receptors to substantial pollutant concentrations?*

Less than Significant Impact with Mitigation Incorporated. The proposed Project site is adjacent to single family residential land to the north, south and west; and the existing Community Center/Senior Center to the east. The proposed Project involves construction of park facilities, during which time nearby sensitive receptors could potentially be affected.

The closest residence to the construction footprint is approximately 60 feet. The SCAQMD LST look-up tables at a minimum receptor-source distance of 25 meters (82 feet) were used for Source Receptor Area 32 Northwest San Bernardino Valley for a five-acre maximum daily disturbance area. As described previously, with the implementation of Mitigation Measure AIR-1, construction and operation of the project would not result in emissions of criteria pollutants in excess of established thresholds. Because emissions of toxic air contaminants from diesel-powered construction equipment are expected to be minimal, intermittent, and of short duration, the project is not expected to substantially increase ambient concentrations of toxic air contaminants regionally or locally. Therefore, the project would not expose sensitive receptors to substantial pollutant concentrations. As such, localized impacts to off-site sensitive receptors would be less than significant.

IMPACT 4.1-5: *Would the project create objectionable odors affecting a substantial number of people?*

Less than Significant Impact. During project-related construction activities, various diesel-powered vehicles and equipment could create minor odors. These odors are not likely to be noticeable beyond the immediate vicinity and would be temporary and short-lived due to rapid dissipation. No long-term odor impacts would occur with project implementation. Operation of the proposed project is not expected to create objectionable odors as the primary purpose will be to provide recreational space and services to the community. Therefore, the proposed project is not expected to result in objectionable odors affecting a substantial number of people and project impact would be less than significant.

4.1.6 Mitigation Measures

AIR-1: Reducing Air Pollutant Emissions

The Project will be required to comply with regional rules that assist in reducing air pollutant emissions. South Coast Air Quality Management District (SCAQMD) Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 402 requires implementing dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Implementing these dust suppression techniques will reduce the fugitive dust generation (and thus the PM_{10} component). Compliance with these rules will reduce impacts on nearby sensitive receptors. Standard requirements and Best Management Practices include the following:

- Equipment/vehicles shall not be left idling for periods in excess of five minutes.
- Engines shall be maintained in good working order to reduce emissions.
- On-site electrical power connections shall be made available where feasible.
- Low-sulfur diesel fuel shall be utilized.
- Electric and gasoline powered equipment shall be substituted for diesel powered equipment where feasible.
- Exposed soils and haul roads shall be watered at a minimum of twice per day to reduce fugitive dust during grading/construction activities, if necessary.
- Street sweeping shall be conducted when visible soil accumulations occur along site access roadways to remove dirt dropped by construction vehicles.
- Site access driveways and adjacent streets shall be washed daily, if there are visible signs of any dirt track-out at the conclusion of any workday.
- Construction vehicle tires shall be cleaned prior to leaving the project site.
- All trucks hauling dirt away from the site shall be covered, and speeds on unpaved roads shall be reduced below 15 miles per hour.
- During high wind conditions (i.e., sustained wind speeds exceeding 20 miles per hour), areas with disturbed soil shall be watered hourly and activities on unpaved surfaces shall cease until wind speeds no longer exceed 20 miles per hour.
- Storage piles that are to be left in place for more than three working days shall either be sprayed with a non-toxic soil binder, covered with plastic or revegetated.
- Areas of disturbance shall be limited to 5 acres per day.

4.1.7 Level of Significance after Mitigation

Mitigation Measure AIR-1 is provided to meet SCAQMD and CARB compliance requirements. With implementation of this mitigation measure, project impact would be less than significant.

4.1.8 Cumulative Impacts

A cumulative impact discussion is provided under **IMPACT 4.1-3** above.

4.2 BIOLOGICAL RESOURCES

This section describes the biological resources[1] of the proposed Project Area and evaluates habitat conditions to determine the potential for occurrence of common and special-status species[2] and their habitats[3].

As discussed in Section 5.1.3, the proposed Project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan and thus further analysis is not provided.

Information presented in this section is based on the following reports included in the Biological Resources Report, Appendix C, of this Draft Program EIR. Biologists from Tetra Tech, ELMT Consulting, Inc. (ELMT), and LSA Associates, Inc. (LSA) conducted literature reviews and field surveys of the biological resources potentially associated with the Central Park site. Biologists visited the site 24 times in 2007, 2008, and 2019 to conduct the following types of general and focused biological surveys:

- General site assessment and plant community mapping.
- General plant survey.
- General wildlife survey.
- Protocol coastal California gnatcatcher (CAGN; *Polioptila californica californica*) surveys.
- Protocol burrowing owl (BUOW; *Athene cunicularia*) surveys.
- Focused San Bernardino kangaroo rat (SBKR) (*Dipodomys merriami parvus*) small mammal trapping surveys.
- Jurisdictional assessment and delineation.
- Wildlife movement evaluation.

The Biological Resources Report, Appendix C, of this Draft Program EIR is based on the following documentation of the biological resources of the Central Park site:

- Central Park Master Plan Update Habitat Assessment (ELMT 2020a) (Attachment 1, 2020 Central Park Property Biological Resources Report).
- Central Park Master Plan Update Delineation of State and Federal Jurisdictional Waters (ELMT 2020b) (Attachment 2, 2020 Central Park Property Jurisdictional Delineation Report).
- Central Park Amphitheater Habitat Assessment (ELMT 2019) (Attachment 3, 2019 Central Park Amphitheater Site Biological Resources Report).

[1] For the purposes of this analysis, “biological resources” refers to the plants, wildlife, and habitats that occur, or have the potential to occur, within the biological study area.

[2] For the purposes of this analysis, “special-status species” refers to any species that has been afforded special protection by federal, state, or local resource agencies (e.g., United States Fish and Wildlife Service, California Department of Fish and Wildlife) or resource conservation organizations (e.g., California Native Plant Society). The term “special-status species” excludes those avian species solely identified under Section 10 of the Migratory Bird Treaty Act for federal protection. Nonetheless, Migratory Bird Treaty Act Section 10 protected species are afforded avoidance and minimization measures per state and federal requirements.

[3] A “habitat” is defined as the place, or type of locale where a plant or animal naturally or normally lives and grows.

- General Biological Resources Assessment Report, Central Park Project (LSA 2007) (Attachment 4, 2007 Biological Resources Report).
- Jurisdictional Delineation Report, Central Park Project, City of Rancho Cucamonga, San Bernardino County, California (LSA 2008b) (Attachment 5, 2008 Jurisdictional Delineation Report).
- Results of Focused Burrowing Owl Survey for Central Park Project located in the City of Rancho Cucamonga, San Bernardino County (LSA Project No. CRG0703*)* (LSA 2008d) (Attachment 6, *2008 Protocol Burrowing Owl Survey Letter*).
- Results of a Focused California Gnatcatcher Survey for Central Park Phase II Project Site in the City of Rancho Cucamonga, San Bernardino County (LSA Project Number CRG0703) (LSA 2008c) (Attachment 7, *2008 Protocol Coastal California Gnatcatcher Survey Letter*).
- 70-Acre Central Park Parcel in the City of Rancho Cucamonga, San Bernardino County, Kangaroo Rat Trapping, February 2008 (LSA 2008a) (Attachment 8, *2008 Focused San Bernardino Kangaroo Rat Small Mammal Trapping Survey Letter*).
- Plant Special-status Species Inventory and Potential Occurrence Determination, Attachment 9.
- Wildlife Special-status Species Inventory and Potential Occurrence Determination, Attachment 10.
- Natural Resources Conservation Service Soils Report, Attachment 11.
- Plant and Wildlife Species Recorded during the Field Surveys, Attachment 12.

4.2.1 Existing Conditions

Site Setting

Central Park is situated on the alluvial fan of the eastern most portion of the San Gabriel mountain range (RCFD 2017). Central Park is in the Fontana Plain-Calimesa Terraces Ecological Subsection of the Southern California Mountains and Valleys Ecological Section as described within the *Ecological Subregions of California: Section and Subsection Descriptions* (Miles and Goudey 1997). This subsection is on very gently to gently sloping alluvial fans, mostly from the San Gabriel and San Bernardino Mountains and the predominant natural plant communities are California sagebrush and California buckwheat series and needlegrass grasslands (Miles and Goudey 1997).

The City of Rancho Cucamonga is considered to have a “Mediterranean” climate with hot, arid, and clear summers and long, cool, and partly cloudy winters. Most of the City’s rainfall occurs almost entirely in the winter between the months of December and March, with hardly any occurring in the months from May to October (ELMT 2019, 2020a, 2020b).

The Central Park property is generally flat with a gentle slope from the north to the south. It has an elevation range of 1,324 to 1,377 feet above mean sea level. The proposed Project site contains no areas of significant topographic relief (terrain) except for a drainage feature that flows from the northeast to the southwest along the southern portion of the site that has created a swale with sloped sides (ELMT 2019, 2020a, 2020b).

The proposed Project site consists of both disturbed and undeveloped land that has been subject to a variety of direct and indirect human-related disturbances from historical agricultural activities, grading activities, adjacent development, weed abatement, construction staging, and storage activities (ELMT 2019, 2020b). The earliest available aerial photos indicate that agricultural activities occurred on-site from 1938 and ceased between 1980 and 1994 when all the surrounding areas were developed (ELMT 2019, 2020b). In the decades since active agricultural activities (mostly grape vineyards) ceased, native vegetation communities typical of disturbed areas have reestablished on-site; however, on-site anthropogenic disturbances have greatly disturbed the natural plant communities that once occurred within the boundaries of the proposed Project site, reducing their ability to provide suitable habitat for special-status plant and wildlife species (ELMT 2019, 2020b).

The developed portion of Central Park continues to provide ongoing anthropogenic influences on the remainder of the property by encouraging public access to the remaining open spaces (ELMT 2019, 2020b). Walking and cycling trails occur on the western and northern boundaries and connect the surrounding residential development to the existing Central Park facilities (ELMT 2019, 2020b).

Land Cover

Five different land cover categories were observed and mapped within the proposed Project site during the latest field survey conducted in 2019. Table 4.2-1, *Acreage of Mapped Land Cover*, lists the land cover categories; the corresponding name according to *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986) and *A Manual of California Vegetation, Second Edition* (Sawyer et al. 2009); and the California Natural Community Codes listed in the California Natural Communities List (CDFW 2019b). Figure 4.2-1 depicts the location and size of each mapped land cover category within the proposed Project site.

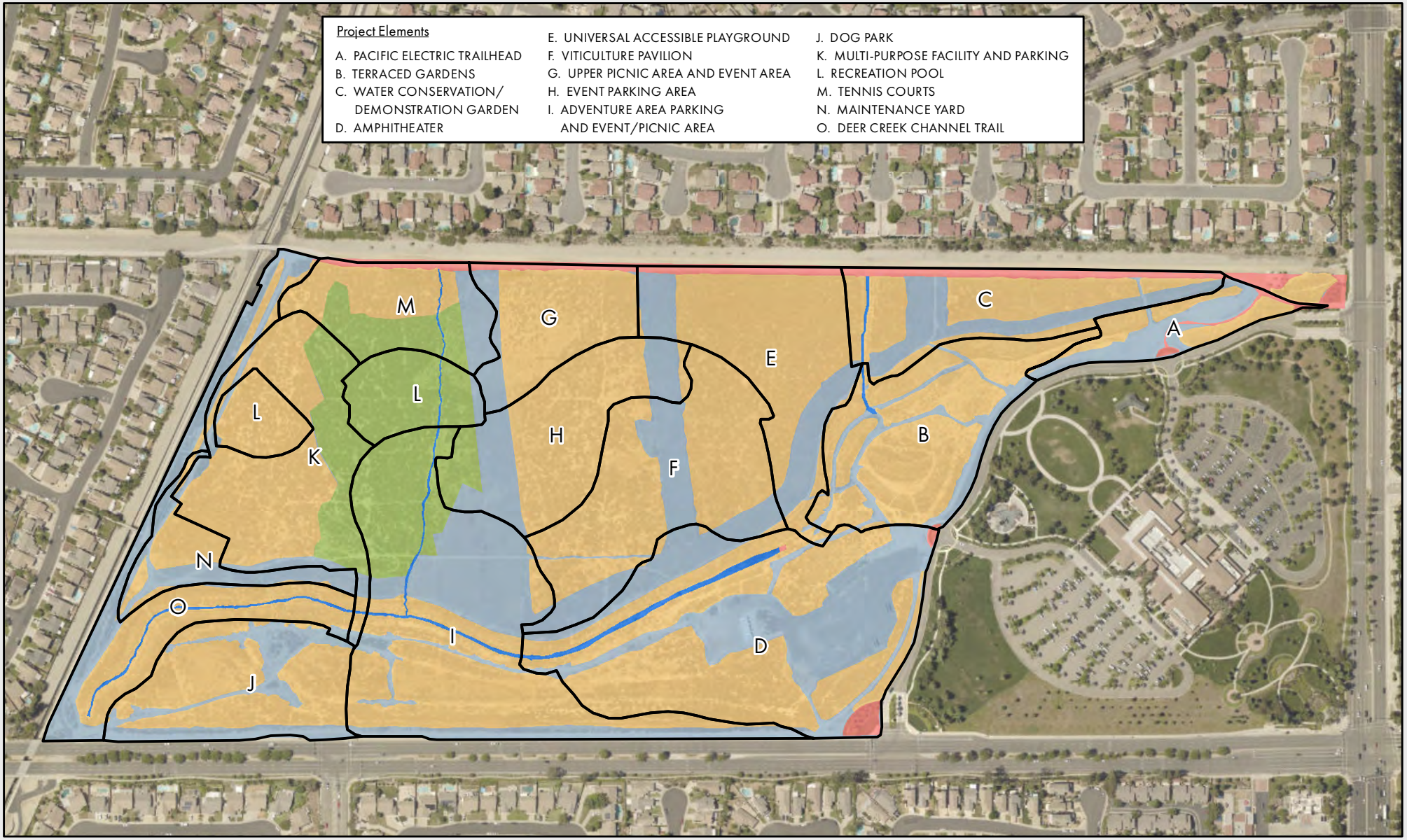
Table 4.2-1. Acreage of Mapped Land Cover

Mapped Land Cover Category	Community Name by Reference		California Natural Community Code (CaCode)	Global Rank and State Rank	Mapped Acreage
	Preliminary Descriptions of the Terrestrial Communities of California	A Manual of California Vegetation			
California buckwheat scrub	Riversidean sage scrub (Element Code: 32700)	*Eriogonum fasciculatum* shrubland alliance (California buckwheat scrub)	32.040.02	G5, S5	37.70
California sagebrush scrub	Riversidean sage scrub (Element Code: 32700)	*Artemisia californica* shrubland alliance (California sagebrush scrub)	32.010.01	G4, S4	6.62
Drainage feature	N/A	N/A	N/A	N/A	0.30
Ruderal/disturbed habitat	N/A	N/A	N/A	N/A	15.14
Developed land	N/A	N/A	N/A	N/A	1.16

Notes:

Global Rank: the global rank (G-rank) reflects the overall status of an element throughout its global range.
G4 = **Apparently Secure:** Uncommon but not rare; some cause for long-term concern due to declines or other factors.
G5 = **Secure:** Common; widespread and abundant.

State Rank: the state rank (S-rank) refer to the imperilment status only within California's state boundaries.
S4 = **Apparently Secure:** Uncommon but not rare in the state; some cause for long-term concern due to declines or other factors.
S5 = **Secure:** Common, widespread, and abundant in the state.



City of Rancho Cucamonga
Central Park

Figure 4.2-1
Element Plan and Delineated Habitat

San Bernardino County, CA

Element Plan Areas

Delineated Habitat

- Buckwheat Scrub
- California Sage Scrub
- Developed
- Disturbed
- Drainage

Element Plan Source: RJM Design Group, Central Park Master Plan Update. January 29, 2018

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Common communities are usually widespread across a region and/or they generally are considered common enough not to be of concern. Disturbed plant communities are usually dominated by non-native species; degraded in nature; not conducive to the establishment of any special-status plant populations; provides little to no habitat value for sensitive wildlife; and are not designated a sensitive plant community. Common plant communities can be disturbed, and sensitive plant communities can also be disturbed.

California Department of Fish and Wildlife (CDFW) defines sensitive plant communities as communities that are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects. They are usually uncommon and restricted to specific habitats and are often threatened with local extirpation. Therefore, they are considered to be valuable biological resources.

Most habitats in California are evaluated and assigned a conservation status rank, which is an assessment of the level of risk of elimination or collapse of an ecosystem. This ranking system is maintained by NatureServe and includes a Global rank and a State rank from 1, which is very rare and threatened, to 5 which is considered secure. The Global rank reflects the overall status of an element throughout its global range and the State rank refers to the imperilment status only within the state of California. Communities with Global ranks of G1, G2, or G3, and State ranks of S1, S2, or S3, are considered sensitive. None of the plant communities identified and mapped within the proposed Project site during the field surveys are considered sensitive natural communities.

California Buckwheat Scrub

The California buckwheat scrub plant community was observed throughout the proposed Project site. California buckwheat scrub has been designated by NatureServe as a secure (G5 and S5) natural community. Secure communities are common, widespread, and abundant in the state. This community is considered low priority for inventory by CDFW and is not considered sensitive.

The California buckwheat scrub plant community has established throughout most of the proposed Project site since the completion of agricultural activities (ELMT 2019, 2020b). This transitional plant community supports early pioneer plant species typically found in Riversidean sage scrub but is dominated by a monoculture of California buckwheat (*Eriogonum fasciculatum*; ELMT 2019, 2020b).

Other plant species observed within this plant community include deerweed (*Acmispon glaber*), California croton (*Croton californicus*), common phacelia (*Phacelia distans*), chia (*Salvia columbariae*), California sagebrush (*Artemisia californica*), western ragweed (*Ambrosia psilostachya*), white sage (*Salvia apiana*), common cryptantha (*Cryptantha intermedia*), mule fat (*Baccharis salicifolia* ssp. *salicifolia*), coastal prickly pear (*Opuntia littoralis*), slender buckwheat (*Eriogonum gracile*), pine scented goldenbush (*Ericameria pinifolia*), telegraph weed (*Heterotheca grandiflora*), and scale-broom (*Lepidospartum squamatum*) (ELMT 2019, 2020b).

Scale-broom was primarily observed along the western boundary of the proposed Project site and in sparse patches throughout the site (ELMT 2019, 2020b). While scale-broom can be an indicator of a sensitive plant community known as Riversidean alluvial fan sage scrub (RAFSS), it does not indicate that community on the proposed Project site (ELMT 2019, 2020b). The Central Park site

historically supported a RAFSS plant community along its western boundary in association with Deer Creek prior to agricultural activities; however, Deer Creek was channelized several decades ago and now exists as an open concrete channel with no vegetation (ELMT 2019, 2020b). In addition, the Central Park site had been under active agriculture as a vineyard prior to its purchase by the City for the development of Central Park and maintenance of the site has primarily been disking for weed abatement for the last twenty years and now the site is dominated by buckwheat scrub (ELMT 2019, 2020b).

A few scale-broom plants were found scattered throughout the site, but this is a direct result of the species adaptation to disturbances, needed by species living in the harsh environment of a native streambed like Deer Creek that only receives water during intense flood events (ELMT 2019, 2020b). The plant's deep root systems and its ability to regrow from its roots following a flood event that has scoured out the adult plant, allows the species to re-establish itself following major flood events or other disturbances (ELMT 2019, 2020b). As noted, the conversion of Deer Creek into a concrete channel eliminated all native vegetation, including scale-broom, from the channel and surrounding lands (ELMT 2019, 2020b). As noted, a few scattered scale-broom plants have been able to regrow from their roots; however, these plants are not within an area that is subjected to the hydrologic influences needed to maintain a viable RAFSS habitat, and therefore are not in an area that supports RAFSS habitat (ELMT 2019, 2020b).

California Sagebrush Scrub

The California sagebrush scrub plant community was observed in the western half of the property. California sagebrush scrub plant community has been designated by NatureServe as an apparently secure (G4 and S4) natural community. Apparently secure communities are uncommon, but not rare in the state; there is some cause for long-term concern due to declines or other factors. This community is considered low priority for inventory by CDFW and is not considered sensitive.

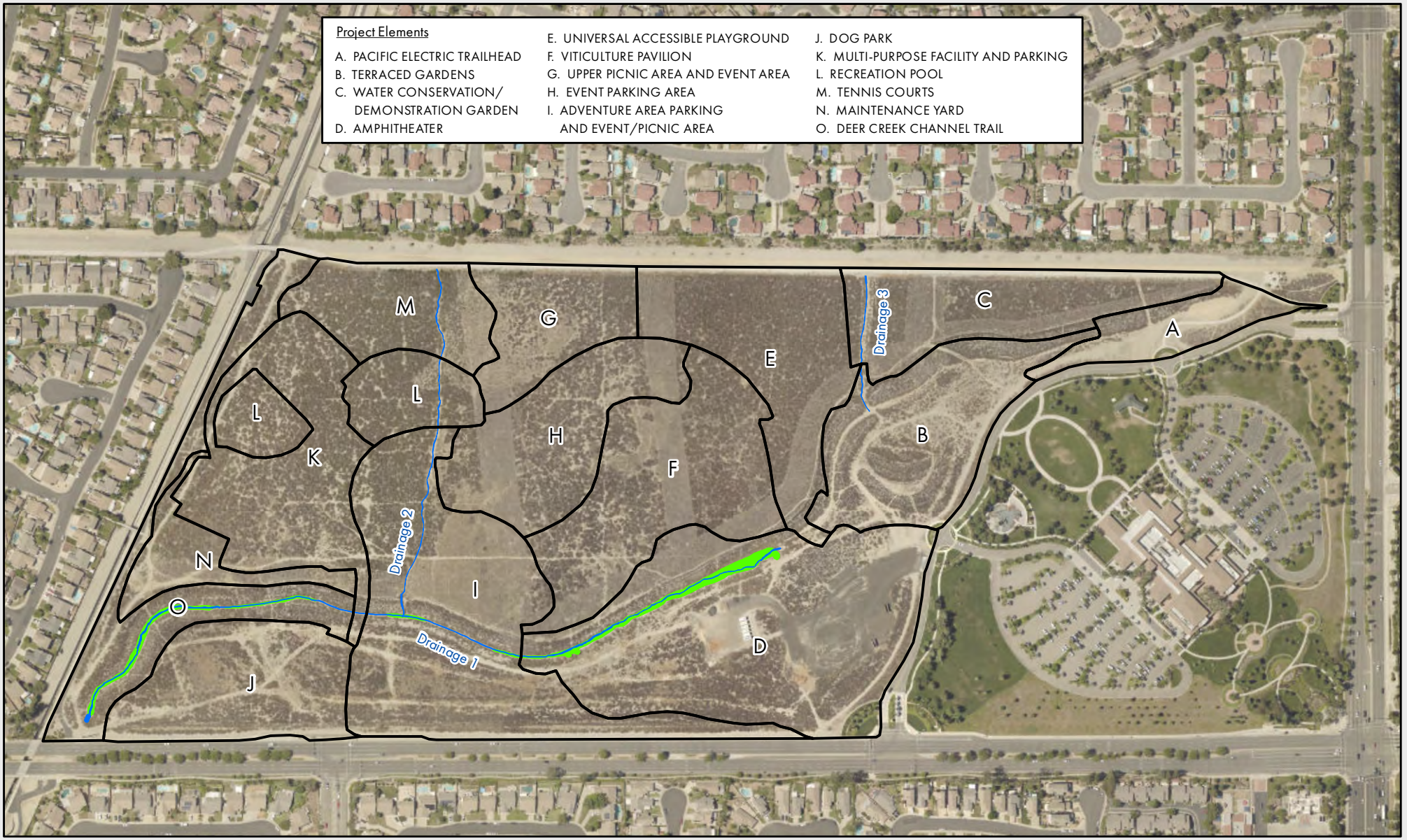
This plant community is dominated by California sagebrush. Other common plant species observed on-site in this plant community included the same species as those found in the California buckwheat scrub community (ELMT 2019, 2020b).

Drainage Feature

The proposed Project site contains three unnamed, ephemeral drainages (Drainages 1, 2, and 3), see Figure 4.2-2. Drainages 2 and 3 are tributaries to Drainage 1. Drainage 1 on the southern portion of the undeveloped part of Central Park accommodates stormwater runoff associated with development of the eastern third of Central Park in 2003 which flows east to west into a 3-foot diameter concrete-lined culvert before entering the Deer Creek Channel (ELMT 2019, 2020b). Drainage 2 is located on the western half of the proposed Project site and connects into Drainage 1 (ELMT 2019, 2020b). Drainage 3 is located on the eastern half of the proposed Project site discharges into an area just north of paved Central Park Drive (ELMT 2019, 2020b).

Ruderal/Disturbed Habitat

Disturbed areas are found throughout the proposed Project site and are associated with ongoing weed abatement activities, disking, and walking trials (ELMT 2019, 2020b). Ruderal/disturbed areas are heavily to sparsely vegetated by non-native, weedy plant species (ruderal vegetation) or they lack vegetation completely. These areas are persistent where habitat has been physically



City of Rancho Cucamonga Central Park

Figure 4.2-2 Element Plan and Jurisdictional Waters

San Bernardino County, CA

Element Plan Areas

Regional Board/CDFW Jurisdictional Non-Wetland Waters

CDFW Associated Streambed

Element Plan Source: RJM Design Group, Central Park Master Plan Update. January 29, 2018

0 100 200 400

Feet

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disturbed by human activities, resulting in compacted soils, and a dominance of ruderal plants. Bare areas include dirt lots, dirt access roads, and other maintained areas. Ruderal plants are adapted to frequent disturbances and easily colonize areas that are devoid of vegetation. This ruderal/disturbed community is degraded in nature; not conducive to the establishment of any special-status plant populations; provides little to no habitat value for wildlife; and is not considered a sensitive plant community. The characteristic ruderal plant species observed include short-podded mustard (*Hirschfeldia incana*), wild oat (*Avena fatua*), flax-leaved horseweed (*Erigeron bonariensis*), London rocket (*Sisymbrium irio*), Mediterranean grass (*Schismus barbatus*), and tacolote (*Centaurea melitensis*) (ELMT 2019, 2020b). Despite the presence of some native species, the ruderal/disturbed sites are dominated by invasive non-native vegetation.

Developed Land

Developed lands are described as areas occupied by man-made structures, are paved over, or are covered by other impermeable surfaces. Developed areas are found along the northern boundary, in the northwest corner, and at the middle of the eastern boundary of the proposed Project site (ELMT 2019, 2020b). Many of these areas within the proposed Project site have been paved for pedestrian access (ELMT 2019, 2020b). Although developed lands are not considered to be a plant community, they can include vegetation such as turf, landscaping, and ornamental plants. The developed areas provide virtually no habitat for wildlife species.

Plants

Approximately 45 plant species from 16 plant families were observed within the proposed Project site. A list of these plant species is provided in Appendix C, Attachment 12, Plant and Wildlife Species Recorded during the Field Surveys; however, ornamental and landscaped vegetation are not included in the totals reported here.

The proposed Project site consists of both disturbed and undeveloped land that supports native vegetation and natural plant communities that have gradually reestablished following agricultural activities on-site and surrounding development (ELMT 2019, 2020b). Even though the site supports native vegetation, the heavy disturbances from historic agricultural activities, surrounding development and channelization of Deer Creek have isolated the proposed Project site from undisturbed native plant communities and scouring regimes following storm events (ELMT 2019, 2020b). These activities have reduced, if not eliminated, the ability of the plant communities on-site to provide suitable habitat for special-status plant species and seed sources for special-status plant species (ELMT 2019, 2020b). No listed and/or sensitive plant species or City designated Heritage Trees[4] were observed within the proposed Project site during the field surveys.

Wildlife

The proposed Project site supports an assortment of wildlife and provides shelter, cover, roosting, foraging, and breeding habitats to reptiles, birds, and mammals as year-round residents, seasonal

[4] A Heritage Tree is defined as any tree, shrub, or plant meeting at least one of the following criteria: (1) eucalyptus windrows; (2) woody plants in excess of 15 feet in height and having a single trunk circumference of 15 inches or more measured 24 inches from ground level; (3) multi-trunk trees having a total circumference of 30 inches or more measured 24 inches from ground level; (4) a stand of trees the nature of which makes each dependent upon the others for survival; or (5) any other tree as may be deemed historically or culturally significant by the Planning Director because of size, condition, location, or aesthetic qualities.

residents, and/or migrants. During the 2007, 2008, and 2019 field surveys, three reptile, 35 bird, and six mammal species were recorded within the proposed Project site. Wildlife activity was low during the field surveys and consisted of primarily avian species. A list of wildlife species recorded during the field surveys is provided in Appendix C, Attachment 12. Due to the developed nature of the properties surrounding Central Park, the site also provides habitat for common species known to occur within urban settings such as coyote (*Canis latrans*), northern raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), and Virginia opossum (*Didelphis virginiana*).

Vegetation communities form the basis of the wildlife habitats and provide the primary plant productivity upon which wildlife depends, along with nesting and denning sites, escape and movement cover, and protection from adverse weather and predation. Some species are dependent on specific habitats, while many wildlife species move freely between and utilize various plant communities. In general, more complex natural communities with more vegetation layers and more plant species provide higher value wildlife habitat than less complex vegetation communities. Communities that are more complex, have more niches for wildlife and usually support more animal species than less complex communities do. Although simple communities may support few wildlife species, they may provide habitat for great numbers of those few species. The Central Park lacks complex vegetation communities and has low vegetation species diversity; therefore, the site supports low habitat value for wildlife.

Listed Wildlife

No listed wildlife species were observed within the proposed Project site during the field surveys. In addition, the literature review and field surveys concluded that the site lacks suitable and adequate biological and physical features that are needed to support any listed species.

Coastal California Gnatcatcher

No CAGNs were observed during the 2007/2008 protocol CAGN surveys. In addition, no CAGNs were observed during any of the other 2007/2008/2019 biological resources surveys conducted at Central Park. Site conditions have not changed since the 2007/2008 protocol CAGN surveys (ELMT 2019, 2020b). The Primary Constituent Elements essential to support the biological needs of foraging, reproducing, rearing of young, intra-specific communication, dispersal, genetic exchange, or sheltering for CAGN are listed below (ELMT 2019, 2020b):

- Dynamic and successional sage scrub habitats and associated vegetation that provide space for individual and population growth, normal behavior, breeding, reproduction, nesting, dispersal and foraging; and
- Non-sage scrub habitats such as chaparral, grassland, and riparian areas, in proximity to sage scrub habitats that provide linkages to help with dispersal, foraging and nesting. These habitats have the potential to provide linkages to help with dispersal, foraging and nesting.

The California buckwheat scrub and California sagebrush plant communities on-site have been isolated from occupied sage scrub habitats in the region by surrounding development and have only recently established after agricultural activities ceased (ELMT 2019, 2020b). In addition, these communities have been degraded from existing anthropogenic disturbances (ELMT 2019, 2020b). Based on these conditions, it was determined that the proposed Project site does not

provide the requisite Primary Constituent Elements which are needed by CAGN to be present; therefore, it was determined that CAGN is absent from the site (ELMT 2019, 2020b).

San Bernardino Kangaroo Rat

No San Bernardino Kangaroo Rats (SBKRs) were captured within the proposed Project site during the 2008 focused SBKR small mammal trapping surveys. Deer Creek was channelized for flood control purposes and residential development; therefore, Central Park has been isolated from the influences of Deer Creek and the alluvial fans extending out of the San Gabriel Mountains (ELMT 2019, 2020b). The channelization of Deer Creek and surrounding development has eliminated the Central Park area from being subjected to scouring regimes historically associated with Deer Creek that would have had the potential to provide suitable habitat for SBKR (ELMT 2019, 2020b).

Central Park and the surrounding area are no longer exposed to fluvial processes needed to maintain the intermediate RAFSS habitat that would be required for long-term SBKR conservation (ELMT 2019, 2020b). Plant species representative of RAFSS habitats, the vegetation typically occupied by SBKR, are patchy, except for the western boundary where scale-broom exists.

Due to the history of regular disruption and manipulation of the native soils, the loss of fluvial scouring due to flood control activities, and isolation from known occupied habitat, it was determined that the proposed Project site does not provide the requisite Primary Constituent Elements which are needed by SBKR to be present; therefore, it was determined that SBKR is presumed absent from the site (ELMT 2019, 2020b).

Sensitive Wildlife

Three sensitive animals, rufous hummingbird (*Selasphorus rufus*), California gull (*Larus californicus*), and Cooper's hawk (*Accipiter cooperii*), were observed within the proposed Project site during the 2007/2008 field surveys. Rufous hummingbird was observed during the 2007 biological resources reconnaissance survey. California gull was observed during the 2007/2008 BUOW protocol surveys. Cooper's hawk was observed during the 2007/2008 CAGN protocol surveys. The LSA biological resources report, BUOW report, and CAGN report do not give information about these observations, only that they were sighted.

According to the *City of Rancho Cucamonga Central Park Fire Hazard Reduction and Vegetation Management Plan*, Blainville's horned lizard (*Phrynosoma blainvillii*) and California glossy snake (*Arizona elegans occidentalis*) occupy the proposed Project site. Table 4.2-2 lists the sensitive wildlife species known to occupy and/or use the proposed Project and it lists each species' status in California. Besides the animals listed below, no other sensitive wildlife species were observed within the proposed Project site during the field surveys. Sensitive wildlife species were not observed or detected during the 2019 field surveys.

Table 4.2-2. Sensitive Wildlife Species known to use the Project Site

Scientific Name (=Synonym)	Common Name (=Synonym)	Status in California
Phrynosoma blainvillii	Blainville's horned lizard (=coast horned lizard)	SSC
Arizona elegans occidentalis	California glossy snake	SSC
Selasphorus rufus	rufous hummingbird	BCC
Larus californicus	California gull	WL
Accipiter cooperii	Cooper's hawk	WL

Notes:

California Department of Fish and Wildlife Designations:
SSC = species of special concern: a species of special concern is a species, subspecies, or distinct population of an animal (fish, amphibian, reptile, bird and mammal) native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria: is extirpated from the state or, in the case of birds, in its primary seasonal or breeding role; is listed as federally, but not state, threatened or endangered; meets the state definition of threatened or endangered, but has not formally been listed; is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for state threatened or endangered status; has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for state threatened or endangered status.
WL = watch list: this list includes birds identified in the *California Bird Species of Special Concern* (Shuford and Gardali 2008) report and are not on the current CDFW species of special concern list, but were on previous lists and they have not been state-listed under California Endangered Species Act; were previously state or federally listed and now are on neither list; or are on the list of fully protected species.

United States Fish and Wildlife Service Designations:
BCC = bird of conservation concern: a bird of conservation concern is listed in the United States Fish and Wildlife's 2008 *Birds of Conservation Concern* report. The report identifies species, subspecies, and populations of all migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act. While all the bird species included in the report is priorities for conservation action, the list makes no finding about whether they warrant consideration for Endangered Species Act listing.

The literature review and field surveys concluded that a majority of the sensitive species in the wildlife inventory do not have more than a low potential to exist within the proposed Project site due to a lack of some suitable biological and physical features that are needed to support them adequately; however, habitat conditions create a high potential for four sensitive wildlife species to occur within the site (Table 4.2-3).

Table 4.2-3. Sensitive Wildlife Species that have a High Potential to Occur

Scientific Name	Common Name	Status in California	Potential to Occur on the Project Site
Aspidoscelis hyperythra beldingi	Belding's orange-throated whiptail	WL	high potential to occur
Aspidoscelis tigris stejnegeri	coastal whiptail	SSC	high potential to occur
Elanus leucurus	white-tailed kite	fully protected	high potential for foraging
Accipiter striatus	sharp-shinned hawk	WL	high potential for foraging

Notes:

SSC: see Table 4.2-2 for description.

WL: see Table 4.2-2 for description.

Fully protected: fully protected animal species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock. Lists were created for fish (Fish and Game Code section 5515), amphibians and reptiles (Fish and Game Code section 5050), birds (Fish and Game Code section 3511) and mammals (Fish and Game Code section 4700).

Burrowing Owl

Even though the proposed Project site contained fossorial mammal burrows, no BUOWs, occupied burrows, or sign of BUOWs (past or present) were observed during the 2007/2008 protocol BUOW surveys. In addition, no BUOWs or signs were observed during any of the other 2007/2008/2019 biological resources surveys conducted at the proposed Project site. The site provides minimal line-of-sight opportunities favored by BUOWs and most of the site lacks suitable burrows (greater than 4 inches in diameter) capable of providing roosting and nesting opportunities (ELMT 2019, 2020b). Even though BUOWs were not detected on-site during the focused BUOW surveys or during any of the other field visits, the site contains suitable habitat that could potentially support BUOW in the future.

Hydrology

Central Park is located within the following watersheds (CDFW 2019a):

- *HUC 12*: majority of the site is in the Lower Cucamonga Creek Watershed and the western edge of Central Park is in the Upper Cucamonga Creek Watershed.
- *HUC 10*: Chino Creek Watershed.
- *HUC 8*: Santa Ana River Watershed.

Central Park lacks open water, such as a river, stream, creek, lake, or pond. As described earlier, Central Park is generally flat with a gentle slope from the north to the south. Surface runoff is through sheet flow to the south (Kleinfelder West 2009). An earthen drainage channel extends from northeast to southwest along the southern portion of the proposed Project site to accommodate stormwater runoff associated with development of the eastern third of Central Park (ELMT 2019, 2020a, 2020b). The channel continues to aid in the flow of residential runoff from the north to Deer Creek Channel west of Central Park. Stormwater continues to enter the site via a culvert in the middle of the southern portion of the site and flow east to west into the Deer Creek Channel (ELMT 2019, 2020a, 2020b).

The 2019 jurisdictional delineation survey determined that the undeveloped portion of Central Park contains a total of three unnamed, ephemeral drainages , see Figure 4.2-2. These drainages consisted of a main drainage (Drainage 1) with two smaller tributaries (Drainage 2 and Drainage 3). The flow of water through the drainages is ephemeral (seasonal) and typically water is present for only a very brief period of time. Most flows occur after rain events, and therefore, the drainages are dry for most of the year.

United States Army Corps of Engineers Defined Wetlands

In 2019, there were no United States Army Corps of Engineers (USACE) defined wetlands identified within the proposed Project site. In order to qualify as a USACE defined wetland, an aquatic feature must exhibit all three wetland parameters (i.e., wetland hydrology, hydric soils, and hydrophytic vegetation). Although evidence of hydrology (i.e., surface water) was present within portions of Drainages 1, 2, and 3 during the 2019 field surveys, these areas were primarily dominated by upland/facultative upland plant species. Only one area, within Drainage 1, at the beginning of the drainage near the existing storm drain outlet supported minimal hydrophytic vegetation consisting of mule fat. Mule fat has likely established from nuisance flows exiting the culvert. Further, it is assumed that water does not persist long enough to create hydric soil

(anaerobic) conditions. LSA sampled one soil pit during the 2008 field delineation, at the culvert within Drainage 1. At the time of their survey, the area supported mule fat and arroyo willow (*Salix lasiolepis*). Based on the results of the soil pit, no hydric soils were present.

All drainage courses exhibited an ordinary high-water mark consisting primarily of a scoured channel bed. Based on the very limited extent of riparian vegetation (present at the storm drain outlet at the beginning of Drainage 1), it is concluded that all drainage courses are ephemeral and do not meet the USACE three-parameter definition required to qualify as jurisdictional wetlands.

Jurisdictional Acreage

The project site contains jurisdictional Waters of the State regulated by the RWQCB. It was determined that the project site does not contain any Waters of the U.S., including wetlands. The three onsite drainage features (Drainage 1, 2, and 3) are ephemeral features that flow only in direct response to precipitation. They are not considered perennial or intermittent tributaries that contribute surface water flows to downstream waters. Based on the Corps' April 2020 regulations (Navigable Waters Protection Rule), the onsite drainage features will not fall under the regulatory authority of the Corps.

The site also contains jurisdictional areas regulated by CDFW. Table 4.2-4 summarizes the current extent of jurisdictional areas mapped within the proposed Project site.

Table 4.2-4. Acreage of Mapped Jurisdictional Areas within the Project Site

Jurisdictional Feature	Stream Flow	Cowardin Class	Class of Aquatic Resource	RWQCB Jurisdictional Areas: Porter-Cologne		CDFW Jurisdictional Areas: Fish and Game Code	
				Acreage	Linear Feet	Acreage	Linear Feet
Drainage 1	Ephemeral	Riverine	Non-Section 10 Non-Wetland	0.115	2,215	0.571	2,215
Drainage 2	Ephemeral	Riverine	Non-Section 10 Non-Wetland	0.031	990	0.031	990
Drainage 3	Ephemeral	Riverine	Non-Section 10 Non-Wetland	0.013	380	0.013	380
			Totals:	**0.159**	**3,585**	**0.615**	**3,585**

Wildlife Movement

A wildlife corridor is a connection of habitat, generally native vegetation, which joins two or more larger areas of similar habitat that are otherwise separated by natural barriers, changes in vegetation composition, or land permanently altered for human activities, such as farms; and infrastructure, such as roads, railroads, residential development, or fencing. When native vegetation is cleared, fragmented patches of open space or isolated "islands" of wildlife habitat are created. Fragmentation and habitat loss are the two main contributors to continuing biodiversity decline. The main goal of corridors is to facilitate movement of individuals, through dispersal, seasonal migration, and movement for foraging, breeding, cover, etc. Corridors allow for physical and genetic exchange between isolated wildlife populations and are critical for the maintenance of ecological processes, including allowing for the movement of animals and the continuation of viable populations and higher species diversity.

The literature review determined that Central Park is not located within a CDFW designated Essential Connectivity Area or a Natural Landscape Block; however, Central Park is in an area designated as a Natural Areas Small - California Essential Habitat Connectivity [ds1073]. Natural Areas Small are natural areas smaller than 2,000 acres that otherwise meet Natural Landscape Block criteria.

Although Central Park is designated as a Natural Areas Small by CDFW, the literature review and field surveys determined that Central Park does not function as a wildlife movement corridor. Even though the proposed Project site is undeveloped, it is in an area of the City that is heavily influenced by human development and is surrounded by development and roadways. These permanent structures serve as significant barriers to wildlife movement through the site and region. Human activities, lighting, noise, and traffic associated with the development and roadways, would most likely deter wildlife movement through the site. In addition, the site does not contain and is not connected to an established wildlife corridor and it does not provide connectivity between large areas of open space on a local or regional scale.

Wildlife movement would most likely occur in the foothills of the San Gabriel Mountains, Deer Canyon, and Day Canyon to the north; Deer Creek Channel to the west; and Day Creek Channel to the east; however, the roadways, paved trails, and development that surrounds the proposed Project site prevents wildlife movement from those external areas where they can be found. Travel through the site is likely limited to common urban tolerant wildlife species such as coyote, northern raccoon, striped skunk, and Virginia opossum. These species could be expected to travel though Central Park and neighboring developed areas.

Native Wildlife Nursery Sites

No native wildlife nursery sites, such as bird rookeries or bat roosts, were observed within the proposed Project site during the field surveys.

4.2.2 Regulatory Setting

Federal Endangered Species Act

The federal Endangered Species Act (ESA) of 1973, as amended (Title 16, United States Code 1531, *et seq.*) designates and provides for protection of federally listed threatened and endangered plant and animal species and their critical habitat. The United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service share responsibility for administration of the ESA. These responsibilities include listing and delisting species, designating critical habitat, and formulating recovery plans. The USFWS has primary responsibility for terrestrial and freshwater organisms, while the responsibilities of the National Marine Fisheries Service are mainly marine wildlife.

The ESA is divided into 18 sections that are intended to work together to prevent species from going extinct by helping to stabilize populations, reduce the threats to their survival, and helping species recover to the point that they no longer require federal protection. Once a species is listed, section 9 of the ESA makes it unlawful for any person, including private and public entities, to "take" species listed as endangered or without a permit issued pursuant to section 10 or an incidental take statement issued pursuant to section 7. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 (Title 16, United States Code sections 703–712), as amended, implements various treaties and conventions between the United States and Canada, Japan, Mexico and the former Soviet Union for the protection of migratory birds. The MBTA makes it unlawful to pursue, hunt, take, capture, kill, possess, sell, purchase, barter, import, export, or transport any migratory bird, or any part, nest, or egg or any such bird, unless authorized under a permit issued by the Secretary of the Interior. Some regulatory exceptions apply. Take is defined in regulations implementing the MBTA as "to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to carry out these activities." The MBTA prohibits the collection and destruction of a migratory bird, its nest, and birds or eggs contained in the nest. USFWS' Migratory Bird Permit Memorandum (MBPM-2) dated April 15, 2003, clarifies that destruction of most unoccupied bird nests is permissible under the MBTA; exceptions include nests of federally listed threatened or endangered migratory birds, bald eagles (*Haliaeetus leucocephalus*), and golden eagles (*Aquila chrysaetos*). Take under the MBTA does not include habitat destruction or alteration, if there is not a direct taking of birds, nests, eggs, or parts thereof. The USFWS has statutory authority and responsibility for enforcing the MBTA.

California Endangered Species Act

The California Endangered Species Act (CESA; California Fish and Game Code section 2050, *et seq.*) was enacted in 1984 to parallel the federal ESA and allows the California Fish and Game Commission to designate species, including plants, as "threatened" or "endangered." The CESA states that all native species of fishes, amphibians, reptiles, birds, mammals, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected or preserved. Unlike the ESA, the CESA does not include listing provisions for invertebrate species.

CESA makes it illegal to import, export, take, possess, purchase, sell, or attempt to do any of those actions to species that are designated as threatened, endangered, or candidates for listing, unless permitted by the CDFW. Section 2080 of the California Fish and Game Code prohibits take of any species that the California Fish and Game Commission determines to be an endangered species or a threatened species. "Take" is defined in section 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

Under section 2081 of CESA, CDFW may permit take or possession of threatened, endangered, or candidate species for scientific, educational, or management purposes, and may also permit take of these species that is incidental to otherwise lawful activities if certain conditions are met. Some of the conditions for issuance of permits allowing incidental take are that the adverse effects of the take must be minimized and fully mitigated, adequate funding must be ensured for implementation of identified mitigation, and that the activity shall not jeopardize the continued existence of the listed species. CESA emphasizes early consultation to avoid potential impacts on candidate and listed endangered and threatened species, and to develop appropriate mitigation to offset project caused losses of listed species populations and their essential habitats.

California Fish and Game Code

Sections 3511, 4700, 5050 and 5515 - Fully Protected Species

The classification of fully protected was the State of California's initial effort in the 1960s to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for birds (section 3511), mammals (section 4700), amphibians and reptiles (section 5050), and fish (section 5515). Fully protected animal species may not be taken or possessed at any time and no licenses or permits may be issued for their take, except for collecting these species for scientific research and relocation of the species for certain purposes.

Section 3503 - Bird Nests and Eggs

California Fish and Game Code section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) may be considered take. Avoidance measures sufficient to prevent incidental take of bird nests and eggs protected by this statute must be incorporated into the project.

Section 3503.5 - Birds of Prey and their Eggs

All raptors and their nests are protected under section 3503.5. Avoidance measures sufficient to prevent incidental take of these species, their eggs and their nests protected by this statute must be incorporated into the project.

Section 3513 - Migratory Birds

California Fish and Game Code section 3513 protects California's migratory birds by making it unlawful to take or possess any migratory non-game bird as designated by the MBTA, except as authorized in regulations adopted by the federal government under provisions of the MBTA. Except as permitted by USFWS under a Habitat Conservation Plan (HCP), avoidance measures sufficient to prevent incidental take of these species, their eggs and their nests protected by this statute must be incorporated into the project.

Sections 1900–1913 - Native Plant Protection Act

The Native Plant Protection Act, enacted in 1977, allows the California Fish and Game Commission to designate native plants as state "endangered" or "rare," mirroring the designations created for animal species by the CESA of 1970. The Native Plant Protection Act, administered by CDFW, requires all state agencies to utilize their authority to preserve, protect and enhance endangered or rare native plants of California. Section 1908 of the Act prohibits the take of any native plant that the California Fish and Game Commission determines to be an endangered or rare native plant, except when the take is incidental to agricultural and nursery operations, emergencies, or the possession or sale of real property on which the plant is growing. Section 1913(c) further provides that where the owner of land has been notified by CDFW that native plant listed as rare or endangered is growing on such land, the owner shall notify CDFW at least 10 days in advance of changing the land use to allow for salvage of the listed plant(s) subject to the notification. The failure by CDFW to salvage such plant within 10 days of notification of change in land use shall entitle the owner of the land to proceed with the change.

Clean Water Act

The CWA is the principal federal law governing pollution control and water quality of the nation's waterways. The objective of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” It establishes the basic structure for regulating discharges of pollutants into Waters of the U.S. and for regulating water quality and establishing water quality standards for surface waters. Sections 404 and 401 of the CWA are pertinent to surface and coastal Waters of the U.S. The CWA provides regulatory authority over the navigable waters of the U.S. which are defined as the “waters of the United States, including the territorial seas.” 33 United States Code section 1362(7). This statute is implemented by the USACE and the USEPA.

Congress did not define in the CWA what it meant by “Waters of the U.S.” and left it up to the USACE and USEPA to provide more detail through rulemaking. Waters of the U.S. are comprised of those wetland and non-wetland bodies of water that met criteria set forth in 33 Code of Federal Regulations (CFR) section 328.3, as interpreted by several court opinions and guidance. On June 29, 2015, the USACE and USEPA published an amendment to 33 CFR section 328.3 revising the definition of Waters of the U.S. in a manner intended to consider, but supersede prior judicial decisions, regulations and guidance. The revised regulation, named the “Clean Water Rule” was published in the Federal Register (80 FR 124: 37054-37127) and became effective on August 28, 2015.

The Clean Water Rule was challenged in court and on October 22, 2019, the USACE and EPA published a final rule (Step One) to repeal the 2015 Clean Water Rule and to restore the regulatory text that existed prior to the 2015 Clean Water Rule. The final rule (Step One) became effective on December 23, 2019.

On April 21, 2020, the USACE and EPA completed Step Two of the two-step "repeal and replace" process by publishing The Navigable Waters Protection Rule: Definition of “Waters of the United States” in the Federal Register. The Navigable Waters Protection Rule revises the definition of Waters of the U.S. under the CWA. It creates four categories of jurisdictional waters and it provides specific exclusions for many water features that traditionally have not been regulated. The Navigable Waters Protection Rule (Step Two) became effective on June 22, 2020, replacing the final rule (Step One).

Porter-Cologne Water Quality Control Act (Porter-Cologne)

In 1969, the California State Legislature enacted the Porter-Cologne Water Quality Control Act (Porter-Cologne) to revise the existing water quality laws in California. Through the act, the SWRCB and nine RWQCBs were entrusted with duties and powers to preserve, restore, and enhance the quality of California's water resources. The SWRCB has the ultimate authority over state water rights and water quality policy. The SWRCB adopts statewide water quality control plans, policies and guidance that direct RWQCBs in designating beneficial uses, setting water quality control standards, and administering programs to protect and preserve the “Waters of the State.” Pursuant to these statewide plans, policies and guidance, each of the nine RWQCBs within California is required to adopt a Basin Plan that sets water quality standards, including narrative and numeric water quality objectives for various constituents of concern, recognizing and reflecting the regional differences in existing water quality, the beneficial uses of the region’s ground and surface waters, and local water quality conditions

Pursuant to Porter-Cologne, the SWRCB and RWQCBs, on a statewide and regional basis, respectively, have authority to regulate the "discharge of waste" to "Waters of the State" independently of the CWA and as a matter of state law. Discharges of waste are defined to "include sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation or of human or animal origin, or from any producing, manufacturing or processing operations, include waste placed in containers of whatever nature prior to and for purposes of, disposal." Cal. Water Code § 13050(d). Discharges of fill are included in the Porter-Cologne definition of discharge of "waste."

"Waters of the State" are defined to mean "any surface water or groundwater, including saline waters, within the boundaries of the state." Cal. Water Code § 13050(e). Under Porter-Cologne, Waters of the State include, but are not limited to, Waters of the U.S. As a matter of state law, any party proposing a discharge of waste, including fill or other pollutants, that threatens to affect any Water of the State that is not also a water of the United States must file a Report of Waste Discharge (ROWD) with the SWRCB or appropriate RWQCB, as applicable. Cal. Water Code §§ 13260; 13264. The water board, after a public hearing, will then respond to the ROWD by imposing appropriate Waste Discharge Requirements (WDRs) (Cal. Water Code §§ 13263; 13264), or by issuing a Waiver of WDRs with appropriate conditions (Cal. Water Code § 13269) to control discharges for the protection of Waters of the State.

The SWRCB and RWQCBs, on a statewide and regional basis, respectively, also have authority to issue, deny, condition, enforce and otherwise administer all CWA section 402 National Pollutant Discharge Elimination System (NPDES) Permits for discharges of pollutants into Waters of the U.S., and section 401 WQCs for section 404 permits. 33 U.S.C. § 1311; Cal. Water Code § 13160; Memorandum of Understanding Regarding Permit and Enforcement Programs Between the State Water Resources Control Board and the Regional Administrator, Region IX, Environmental Protection Agency (effective March 26, 1973) as supplemented by the NPDES Memorandum of Agreement between the U.S. Environmental Protection Agency and the California State Water Resources Control Board (effective June 8, 1989). USACE retains and has not delegated jurisdiction to issue section 404 permits for discharges of fill to Waters of the U.S.

Accordingly, the SWRCB and RWQCBs have, respectively, issued the statewide Construction General NPDES Permit and the MS4 NPDES Permits which constitute both Federal CWA section 402 permits and state Porter-Cologne WDRs Under guidance issued by the SWRCB, discharges of fill subject to USACE CWA section 404 permitting are reviewed and protected by the SWRCB by issuance of section 401 water quality certifications, and no additional state law WDRs are required to authorize discharges of fill. Discharges of fill to Waters of the State that are not also Waters of the U.S. are subject to regulation by the SWRCB or appropriate RWQCBs, as applicable. Any project proponent proposing such discharges of fill must submit a report of waste discharges along with USACE jurisdictional disclaimers, and prior to placing such fill, must either obtain coverage for such discharges under:

(i) the SWRCB's Statewide General Waste Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be Outside of Federal Jurisdiction, Order No. 2004-004-DWQ,

(ii) individual WDRs, or

(iii) a conditional waiver of WDRs. Guidance for Regulation of Discharges to "Isolated" Waters (Celeste Cantu, Executive Director June 25, 2004).

California Fish and Game Code Sections 1600–1616

Pursuant to sections 1600–1616 of the California Fish and Game Code, the CDFW regulates all substantial diversions, obstructions, or changes to the natural flow or the bed, channel, or bank of any river, stream, or lake, which provides habitat and supports fish or wildlife. CDFW defines a "stream" (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation" (CCR, Title 14, Division 1, Subdivision 1, Chapter 1, section 1.72). "Bank" means the slope or elevation of land that bounds the bed of the stream in a permanent or longstanding way, and that confines the stream water up to its highest level. "Lake" includes "natural lakes or man-made reservoirs."

Rivers, streams, lakes, and riparian vegetation that provide habitat for fish and wildlife species are subject to jurisdiction by the CDFW under sections 1600–1616 of the California Fish and Game Code. Riparian areas are lands adjacent to streams, lakes, and estuarine-marine shorelines. Section 2785(e) defines "riparian habitat" as lands that contain habitat which grows close to and which depends upon soil moisture from a nearby freshwater source. CDFW regulates the bed, bank to bank, as well as associated riparian vegetation, and fish and wildlife resources. CDFW has interpreted jurisdictional boundaries to be defined by the tops of stream banks (i.e., the limit of stream influence) and/or the limit of the canopy of riparian vegetation (outer drip line) that is hydrologically connected to river, stream, or lake, whichever is greatest. As a result, the area of CDFW jurisdiction is usually greater than the active channel and overlaps and extends beyond the USACE jurisdiction. Isolated wetlands not associated with a river, stream or lake are not protected under sections 1600 *et seq.* of the California Fish and Game Code. In addition, CDFW does not have regulatory authority on Tribal Lands.

CDFW jurisdiction may also extend to altered or artificial waterways based upon the value of those waterways to fish and wildlife (CDFG ESD 1994), particularly to the extent that such constructed waterways were originally natural waterways.

The Lake and Streambed Alteration Program requires execution of an agreement with CDFW before any activity substantially modifies a river, stream or lake. It is not legal to alter the bed or bank of a stream or lake or their natural water flow without a CDFW Streambed Alteration Agreement. The California Fish and Game Code section 1602 requires an entity to notify CDFW of any proposed activity that may substantially modify a perennial, intermittent, and ephemeral river, stream, or lake in the state. Notification is required by any person, business, state or local government agency, or public utility that proposes an activity that will:

- Substantially divert or obstruct the natural flow of any river, stream or lake.
- Substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake.

- Deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

The notification requirement applies to any work undertaken in or near a river, stream, or lake that flows at least intermittently through a bed or channel. This includes intermittent and ephemeral streams and washes, and other watercourses with subsurface flows, or drainages with beds and banks that support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife.

City of Rancho Cucamonga Tree Preservation Ordinance

The City's Tree Preservation Ordinance in the Municipal Code (Title 19, Environmental Protection - Chapter 19.08) states that eucalyptus, palm, oak, sycamore, pine, and other trees growing within the City are a natural aesthetic resource and are worthy of protection (BonTerra 2010). A permit is required for the removal, relocation, or destruction of a Heritage Tree (BonTerra 2010).[5] Prior to removal of a Heritage Tree within the City limits, a Tree Removal Permit shall be obtained from the Planning Director and replacement trees may be required consistent with the City code.

4.2.3 Methodology

The following summarizes the literature and field survey methods used for evaluating the biological resources that exist within the Central Park property and project vicinity. See Appendix C for more details on methodology.

Literature Review

Prior to the field surveys, biologists reviewed relevant literature, databases, agency web sites, reports, management plans, Geographic Information System data, maps, and aerial imagery. The following sources were reviewed:

- **Ecoregions -** Jepson eFlora website and CDFW's Biogeographic and Information Observation System.
- **Topography -** United States Geological Survey (USGS) 7.5-Minute Topographic Map *Guasti* and *Cucamonga Peak* Quadrangles, aerial imagery (Google Earth©), historic imagery (Google Earth© and Historic Aerials by Netronline), and resource agencies interactive maps.
- **Soils -** Natural Resources Conservation Service Web Soil Survey.
- **Sensitive Natural Communities -** CDFW's California Natural Diversity Database.
- **Special-status Plant and Wildlife Species[6] -** California Native Plant Society (CNPS) online *Inventory of Rare and Endangered Plants of California*, 8th Edition; CDFW's CNDDB RareFind 5 online database; USFWS' Information, Planning, and Conservation system.

[5] A Heritage Tree is defined as any tree, shrub, or plant meeting at least one of the following criteria: (1) eucalyptus windrows; (2) woody plants in excess of 15 feet in height and having a single trunk circumference of 15 inches or more measured 24 inches from ground level; (3) multi-trunk trees having a total circumference of 30 inches or more measured 24 inches from ground level; (4) a stand of trees the nature of which makes each dependent upon the others for survival; or (5) any other tree as may be deemed historically or culturally significant by the Planning Director because of size, condition, location, or aesthetic qualities.

[6] Plant nomenclature and taxonomic sequence within this report is based on the CNPS' On-Line Inventory of Rare, Threatened, and Endangered Plants of California and *The Jepson Manual: Vascular Plants of California*, second edition (Baldwin et al. 2012). Wildlife nomenclature and taxonomic sequence are based on the following: amphibians

- **Hydrology -** The watershed boundary data set containing the most current 8-, 10-, and 12-digit hydrologic unit code (HUC; CDFW 2019a); USFWS National Wetlands Inventory database and maps; USEPA's WATERS GeoViewer data; Federal Emergency Management Act Flood Map Service Center.
- **Critical Habitats -** USFWS' Critical Habitat Portal.
- **Wildlife Corridors -** CDFW's Biogeographic and Information Observation System Habitat Connectivity Viewer.

Field Survey Methods

Biologists from LSA and ELMT visited the proposed Project site 24 times in 2007, 2008, and 2019 to conduct the following types of general and focused biological surveys:

- General site assessment and plant community mapping.
- General plant survey.
- General wildlife survey.
- Protocol CAGN surveys.
- Protocol BUOW surveys.
- Focused SBKR small mammal trapping surveys.
- Jurisdictional assessment and delineation.
- Wildlife movement evaluation.

Surveys were conducted during daylight hours and not during abnormal or excessive cold, heat, wind, rain, or other inclement weather. Surveys were conducted on foot and covered all accessible areas of the proposed Project site by meandering transects. The surveys did not extend beyond the proposed Project site boundary. Biologists used binoculars from strategic vantage points whenever direct access was not possible. Observations were also made with aerial imagery.

Biologists used pertinent regional flora/fauna field guides and topographic/aerial maps during the field surveys. In addition, Global Positioning System units and other Geographic Information System and survey-related techniques, hardware and software were used to collect locational data and record relevant attributes of features or species encountered. Digital color photographs were taken during the field surveys to record existing site conditions. Data collected during the site visits were recorded in field notebooks, data sheets, and/or on color mapped aerials. See Appendix C for additional details regarding the methodology of each type of survey listed above.

Impact Analysis

Biological resources either may be "directly" or "indirectly" impacted by a project (defined by State CEQA Guidelines section 15358).

and reptiles - Center for North American Herpetology; birds - American Ornithologists' Union checklist of North American Birds, 7th edition (AOU 1998 and supplements); and mammals - *Mammal Species of the World* (Wilson and Reeder 2005).

- *Direct impact*: impacts which are caused by the project and occur at the same time and place. Any alteration, disturbance or destruction of biological resources that could result from project-related activities is considered a direct impact.
- *Indirect impact*: impacts which are caused by the project and are later in time or farther removed in distance but are still reasonably foreseeable. Examples include growth-inducing impacts and other impacts related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems, including ecosystems.

Impacts either may be "permanent" or "temporary" in nature:

- *Temporary impacts (short-term)*: impacts considered having reversible impacts on biological resources can be viewed as temporary, such as construction noise.
- *Permanent impacts (long-term)*: impacts that result in the irreversible removal of biological resources are considered permanent.

Potential Direct Impacts

Direct impacts on sensitive biological resources have immediate consequences, such as the changes that occur when land is converted and/or jurisdictional waters are removed, filled in, channelized, stabilized, altered, or modified. The remaining undeveloped portion of Central Park will be developed through implementation of the Central Park Master Plan Update reVISION Project and the Central Park Amphitheater Project. All habitats, vegetation, non-vegetated features, and jurisdictional areas in the currently undeveloped areas would be removed. In order to determine impacts on biological resources from implementation of these Projects, the proposed development design provided by the project architect (RJM Design Group, Inc.), was overlaid on the result maps that were prepared after conducting the literature review and field surveys. Direct, permanent project impact areas include all areas within the limits of grading in the footprint of the Projects.

Potential Indirect Impacts

Indirect impacts may either be short-term related to construction or long-term and may affect plant and wildlife populations, habitats, and water quality over an extended period, long after construction activities have been completed.

4.2.4 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the CEQA Guidelines. The proposed Project would have a significant impact on biological resources if it would result in any of the following:

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

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

4.2.5 Impacts Analysis

IMPACT 4.2-1: *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 the U.S. Fish and Wildlife Service?*

Less than Significant Impact with Mitigation Incorporated. No listed or sensitive plant species were observed within the proposed Project site and all the special-status plant species in the plant inventory do not have more than a low potential to exist; therefore, no direct impacts on listed or sensitive plants are anticipated as a result of implementation of the proposed Project. In addition, the developed lands bordering the proposed Project site are not anticipated to support listed or sensitive plants; therefore, the proposed Project is not anticipated to have direct or indirect impacts on listed plants and mitigation is not required.

No listed wildlife species were observed or detected within the proposed Project site and all the listed species in the wildlife inventory have no potential to exist; therefore, no direct impacts on listed wildlife are anticipated as a result of implementation of the proposed Project. In addition, the developed lands bordering the proposed Project site are not anticipated to support listed wildlife; therefore, no indirect impacts on listed wildlife are anticipated as a result of implementation of the proposed Project. The proposed Project is not anticipated to have direct or indirect impacts on listed wildlife and mitigation is not required.

Three sensitive animals, rufous hummingbird, California gull, and Cooper's hawk, were observed within the proposed Project site during the 2007 and 2008 field surveys. Blainville's horned lizard and California glossy snake are also known to occupy the site. Habitat conditions within the site create a high potential for four sensitive wildlife species to occur: Belding's orange-throated whiptail (*Aspidoscelis hyperythra beldingi*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), white-tailed kite (*Elanus leucurus*), and sharp-shinned hawk (*Accipiter striatus*). The proposed Project will permanently impact and remove all habitats located within the proposed Project's footprints; therefore, these animals could potentially be directly and/or indirectly impacted by the proposed Project should they exist within or adjacent to the proposed Project's footprints during construction activities. Impacts would be considered less than significant for the following reasons:

- Blainville's horned lizard, Belding's orange-throated whiptail, coastal whiptail, California glossy snake, rufous hummingbird, California gull, white-tailed kit, sharp-shinned hawk, and Cooper's hawk are widespread in California and have low sensitivity statuses.

- The loss of one or a few individual sensitive species would not substantially reduce or threaten the regional or local populations of these common species below self-sustaining levels.
- California gulls are not anticipated to use the proposed Project site for foraging or breeding and are anticipated to use the site only for short time periods.
- Rufous hummingbird, white-tailed kit, sharp-shinned hawk, and Cooper's hawk would most likely only use the proposed Project site for foraging purposes. Breeding habitats are absent.
- Any loss of foraging habitat is unlikely to create a significant, permanent impact because the proposed Project site hosts no special foraging habitat (e.g., large healthy riparian courses) and there is identical foraging habitat outside of the site (north of Central Park).
- The proposed Project would result in the loss of low quality, degraded, and disturbed California buckwheat scrub habitats that is surrounded by development. The state of the habitats makes them less valuable as habitat to support wildlife diversity or special-status species.
- Because of the low quality, degraded and disturbed habitats, the removal of potential sensitive bird foraging habitat would be considered a less than significant impact under CEQA.
- The sensitive birds are highly mobile and would most likely be able to avoid direct contact with construction vehicles, equipment, and personnel.

Due to these reasons, impacts on sensitive wildlife species on a local or regional level would be considered less than significant and mitigation is not required.

The proposed Project site also supports shrub vegetation and other physical features that could potentially provide foraging, nesting, and cover habitats to support bird species (year-round residents, seasonal residents, and migrants). Those birds that could potentially breed within the undeveloped portion of Central Park are protected by the MBTA and Fish and Game Code section 3503, section 3503.5, and section 3513. The statutes make it unlawful to take native breeding birds, and their nests, eggs, and young. Activities that are most likely to result in take of migratory birds during the breeding bird season when eggs or young are likely to be present include, but are not limited to, clearing or grubbing of bird nesting habitat, or structure demolition. The proposed Project will permanently impact and remove all habitats located within the proposed Project's footprints; therefore, breeding birds, their nests, young, or eggs could potentially be directly and/or indirectly impacted by the proposed Project should they exist within or adjacent to the proposed Project's footprints during construction activities. Implementing Mitigation Measures BIO-1 and BIO-2 will help to avoid, eliminate and/or reduce impacts on breeding birds, their nests, young, or eggs.

IMPACT 4.2-2: *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. Direct, permanent impact areas include all areas within the proposed Project site. Habitats, vegetation, and non-vegetated features would be permanently

removed within the proposed Project's footprint. Implementation of the proposed Project would result in the loss and removal of all vegetation and wildlife habitat that currently are found on the project sight (Table 4.2-5).

Table 4.2-5. Acreage of Anticipated Direct Impacts on Land Cover by Project Element Area

Project Element Area	Mapped Land Cover Category Acreage				
	California Buckwheat Scrub	California Sagebrush Scrub	Developed Land	Ruderal/ Disturbed Habitat	Drainage Feature
A: Pacific Electric Trail Head	0.79	-	0.14	1.67	-
B: Terraced Gardens	4.29	-	0.01	0.38	0.02
C: Water Conservation/Demonstration Garden	2.50	-	0.50	1.37	0.03
E: Universal Accessible Playground	3.81	-	0.26	0.62	-
F: Viticulture Pavilion and Vineyards	4.65	-	-	2.05	-
G: Upper Picnic and Event Area	2.33	-	0.10	0.17	-
H: Event Parking Area	2.89	0.41	-	1.10	-
I: Adventure Area Parking and Event/Picnic Area	4.24	1.97	-	3.18	0.11
J: Dog Park	3.19	-	-	1.21	-
K: Multi-purpose Facility and Parking	3.45	1.51	-	0.44	-
L: Recreation Pool	0.98	1.64	-	0.06	0.01
M: Tennis Courts	1.30	1.09	0.14	0.56	0.02
N: Maintenance Yard	0.76	-	-	0.84	-
O: Deer Creek Chanel Trail:	2.51	-	-	1.49	0.10
Total	**37.70**	**6.62**	**1.16**	**15.14**	**0.30**

Non-sensitive vegetation communities including California buckwheat scrub, California sagebrush scrub, ruderal/disturbed habitat, and all drainage features are located within the proposed Project's footprints and would be directly impacted by the proposed Project. Mitigation is not required for direct impacts on these communities.

No sensitive vegetation communities were observed within or adjacent to the proposed Project site; therefore, no direct or indirect impacts on sensitive vegetation communities are anticipated as a result of implementation of the proposed Project and mitigation is not required.

Riparian habitats are those on, relating to, or near the banks of a river, stream, creek, spring, seep, pond or lake. No riparian habitats were observed within or adjacent to the proposed Project site; therefore, no direct impacts on riparian habitats are anticipated as a result of implementation of the proposed Project and mitigation is not required.

IMPACT 4.2-3: *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 with Mitigation Incorporated. Implementation of the proposed Project would result in the loss and removal of all jurisdictional areas located within Project Elements B, C, E, I, K, M, and O (Table 4.2-6). These direct impacts would trigger the need for permits. Direct impacts to jurisdictional areas will be reduced to less than significant with the

implementation of Mitigation Measure BIO-3. There would be no direct impacts to jurisdictional areas associated with the development of Project Elements A, F, G, H, J, N. No mitigation would be required for development of these Project Elements.

Table 4.2-6. Acreage of Anticipated Direct Impacts on Jurisdictional Areas within Project Site Element Areas

Project Element Area	Waters of the State - Non-wetland Waters		CDFW Jurisdictional Areas: Fish and Game Code	
	Acreage	Linear Feet	Acreage	Linear Feet
A: Pacific Electric Trail Head	0	0	0	0
B: Terraced Gardens	0.005	136	0.005	136
C: Water Conservation/Demonstration Garden	0.008	240	0.008	240
E: Universal Accessible Playground	0.0002	4	0.0002	4
F: Viticulture Pavilion and Vineyards	0	0	0	0
G: Upper Picnic and Event Area	0	0	0	0
H: Event Parking Area	0	0	0	0
I: Adventure Area Parking and Event/Picnic Area	0.037	979	0.037	979
J: Dog Park	0	0	0	0
K: Multi-purpose Facility and Parking	0.002	40	0.002	40
L: Recreation Pool	0.005	198	0.029	198
M: Tennis Courts	0.010	257	0.010	257
N: Maintenance Yard	0	0	0	0
O: Deer Creek Chanel Trail	0.058	926	0.206	926
Total	**0.124**	**2,780**	**0.297**	**2,780**

Deer Creek is a jurisdictional channel located adjacent to the west of the proposed Project. Deer Creek will not be directly impacted by the proposed Project; however, there is a potential for indirect impacts on Deer Creek as a result of implementation of the proposed Project. Project work crews shall be directed to use industry accepted and standard construction Best Management Practices, where applicable, to avoid, eliminate, and/or reduce potential construction-related impacts on biological resources. These Best Management Practices shall be identified prior to construction and incorporated into the construction operations. Best Management Practices shall be monitored and repaired if necessary, to ensure maximum erosion, sediment, and pollution control. Indirect impacts to jurisdictional areas will be reduced to less than significant with the implementation of industry accepted and standard construction Best Management Practices.

There are no USACE defined wetlands based on the absence of hydric soil indicators, hydrophytic vegetation and/or wetland hydrology. The proposed Project would have no adverse effect on federally protected wetlands as defined by section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

IMPACT 4.2-4: *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 proposed Project site is not located within or adjacent to a CDFW designated Essential Connectivity Area or a Natural Landscape Block; therefore, no direct or indirect impacts on CDFW designated wildlife corridors are anticipated as a result of implementation of the proposed Project and mitigation is not required.

The proposed Project site was determined not to function as a wildlife movement corridor; therefore, no direct impacts on fish or wildlife movement are anticipated as a result of implementation of the proposed Project. Deer Creek serves as a wildlife movement corridor and is located adjacent to the proposed Project site. Deer Creek will not be directly impacted by the proposed Project; however, there is a potential for indirect impacts on fish or wildlife movement to occur as a result of implementation of the proposed Project. This impact would be considered less than significant for the following reasons:

- The proposed Project would not increase habitat fragmentation or impede the movement of wildlife in the area.
- The proposed Project would not remove any vegetation within or interfere with the functions of the corridor.
- Wildlife would still be able to continue to use Deer Creek during construction activities and even after development of the proposed Project.
- Indirect impacts on Deer Creek from the proposed Project would be minimal because the proposed Project site is already impacted by the existing development.
- During construction, wildlife that uses Deer Creek may be affected by increased air and noise pollution and human presence; however, construction would only affect wildlife movement temporarily.

No mitigation is needed for these impacts.

No native wildlife nursery sites, such as bird rookeries or bat roosts, were observed within or adjacent to the proposed Project site; therefore, no direct or indirect impacts on native wildlife nursery sites are anticipated as a result of implementation of the proposed Project and mitigation is not required.

IMPACT 4.2-5: *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

No Impact. No trees protected by the City's Tree Preservation Ordinance were observed within or adjacent to the proposed Project site; therefore, no direct or indirect impacts on protected trees are anticipated as a result of implementation of the proposed Project and mitigation is not required.

4.2.6 Mitigation Measures

BIO-1: Pre-Construction BUOW And Breeding Bird Survey Within 14 Days Prior To Construction

A qualified biologist shall conduct a 14-day pre-construction focused BUOW survey and breeding bird survey. The pre-construction BUOW survey (Take Avoidance Survey) shall be conducted in accordance with the Staff Report on Burrowing Owl Mitigation (CDFG 2012) no less than 14 days

prior to initiating ground disturbance activities. The survey may detect changes in BUOW presence such as colonizing BUOWs that have recently moved onto the site, migrating BUOWs, resident BUOWs changing burrow use, or young of the year that are still present and have not dispersed (CDFG 2012).

Following the completion of the survey, the biologist shall prepare a memo summarizing the results of the survey. The memo shall be submitted to the City and CDFW prior to initiating any ground disturbance activities.

If no BUOWs, signs of BUOWs, or breeding birds are observed during the survey and concurrence is received from CDFW, project activities may begin, and no further mitigation would be required.

If BUOWs or signs of BUOWs are observed during the survey, the site shall be considered occupied. The biologist shall contact the City and CDFW to assist in the development of avoidance, minimization, and mitigation measures, prior to commencing project activities.

If an active bird nest (not a BUOW nest) is located during the pre-construction survey and potentially would be disturbed, a no-activity buffer zone shall be delineated on maps and marked (flagging or other means) up to 500 feet for special-status avian species and raptors, or 100 feet for non-special status avian species. The limits of the buffer shall be demarcated to not provide a specific indicator of the location of the nest to predators or people. Materials used to demarcate the nests shall be removed as soon as work is complete, or the fledglings have left the nest. The biologist shall determine the appropriate size of the buffer zone based on the type of activities planned near the nest and bird species because some bird species are more tolerant than others to noise and other disturbances. Buffer zones shall not be disturbed until a qualified biologist determines that the nest is inactive. Additionally, the area shall not be disturbed until the young have fledged, the young are no longer being fed by the parents, the young have left the area, or the young would no longer be impacted by project activities.

The results of the 14-day pre-construction BUOW survey will be valid for 14 days. If construction is delayed more than 14 days, then the 14-day pre-construction BUOW survey must be repeated.

BIO-2: Pre-Construction BUOW And Breeding Bird Survey Within 24 Hours Prior To Construction

In addition to the 14-day pre-construction BUOW survey, a 24-hour pre-construction BUOW survey and breeding bird survey shall be conducted following the same measures described above in Mitigation Measure BIO-1. The results of the 24-hour pre-construction BUOW survey shall be valid for 24 hours. If construction is delayed more than 24 hours, then the 24-hour pre-construction BUOW survey shall be repeated.

BIO-3: Permits for Impacts on Jurisdictional Areas

Impacts on jurisdictional areas will require permits; therefore, the City shall need to obtain the following permits for the development of Project Elements B, C, E, I, K, M, and O:

- Waste Discharge Requirements (WDRs) from the RWQCB.
- Lake or Streambed Alteration Agreement with CDFW.

To follow Porter-Cologne and the California Fish and Game Code, the City shall obtain these permits prior to the issuance of grading or building permits for the Project Elements B, C, E, I, K, M, and O, and prior to any impacts on jurisdictional areas. These permits and approvals would mandate best management practices, avoidance and protection measures, and/or compensatory mitigation measures for impacts on sensitive biological resources and jurisdictional areas. The amount of mitigation required, and specific mitigation details would be determined through the permitting process with the regulatory agencies. All measures to protect waters, water quality, fish, and wildlife resources would be incorporated into the Project design as appropriate. Compliance with the requirements of the regulatory agency programs and implementation of the mitigation measures required by the permits would offset the loss of jurisdictional areas and mitigate the Project's impacts to less than significant levels.

Copies of permits including any extensions and amendments, approvals, and biological reports and plans shall be available to all persons who will be working on the Project. These documents shall be available at the work site during periods of work and shall be presented upon request by any resource agency personnel with a reasonable reason for making such a request. Resource agency personnel may enter the proposed Project site at any time to verify compliance with the permits, approvals, reports, and plans.

Central Park is in an area of San Bernardino County that is under the jurisdiction of the following resource agencies' field offices:

- CDFW: Inland Desert Region 6.
- RWQCB: Regional Board 8 - Santa Ana Region.

Waste Discharge Requirements (WDRs)

Project Elements B, C, E, I, K, M, and O contain Waters of the State that will be unavoidably impacted by the proposed Project; therefore, the City will need to obtain authorization from the RWQCB. The City will need to apply for and obtain Waste Discharge Requirements (WDRs) from the RWQCB prior to impacting the drainages.

Section 13260 of the California Water Code states that persons discharging or proposing to discharge waste that could affect the quality of Waters of the State, other than into a community sewer system, will file a ROWD with RWQCB. The City will prepare and submit an application permit package to the RWQCB. The application permit package constitutes a ROWD pursuant to California Water Code section 13260. The package will be used to start the application process for all WDRs.

Prior to any impacts on jurisdictional Waters of the State, the City would obtain WDRs from the RWQCB pursuant to Porter-Cologne. The permit will mandate BMPs, avoidance and protection measures, and/or compensatory mitigation measures for impacts on jurisdictional Waters of the State. Compliance with the RWQCB's WDRs and implementation of the measures required by the permit would offset the loss of jurisdictional Waters of the State and mitigate the Project's impacts to less than significant levels.

Lake or Streambed Alteration Agreement

Project Elements B, C, E, I, K, M, and O contain CDFW jurisdictional areas that will be unavoidably impacted by the proposed Project; therefore, the proposed Project shall require a permit from CDFW pursuant to sections 1600–1616 of the California Fish and Game Code. CDFW generally regulates waters, wetlands, and riparian areas through its Lake and Streambed Alteration Program that requires execution of an agreement with CDFW before any activity substantially modifies a river, stream or lake. It is not legal to alter the bed or bank of a stream or lake or their natural water flow without a CDFW Lake or Streambed Alteration Agreement. The California Fish and Game Code section 1602 requires an entity to notify CDFW of any proposed activity that may substantially modify a perennial, intermittent, and ephemeral river, stream, or lake in the state. The notification requirement applies to any work undertaken in or near a river, stream, or lake that flows at least intermittently through a bed or channel. This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water. It is anticipated that the City will need a standard Streambed Alteration Agreement for the project.

4.2.7 Level of Significance After Mitigation

With the implementation of Mitigation Measures BIO-1 through BIO-3, impacts to biological resources will be reduced to less than significant.

4.2.8 Cumulative Impacts

The City of Rancho Cucamonga, including the proposed Project site, is predominantly developed and surrounded by urban development to the south, east, and west. The proposed Project site does not contain sensitive biological resources and the potential cumulative projects in other developed areas of the City would not be expected to impact areas that contain significant biological resources. Additionally, the proposed Project and any future development in the City would be required to comply with existing regulations for the protection of biological resources. Therefore, impacts to biological resources would not be cumulatively significant.

Therefore, it is anticipated that the proposed Project in combination with past, present, and reasonably foreseeable probable future projects in the environment around the proposed Project site would have little to no cumulative impacts on wildlife movement in the region.

4.3 CULTURAL RESOURCES

The information in this Chapter is based on a Phase I Cultural Resources Investigation, prepared by Tetra Tech, dated February 2020, which reviewed the conditions of the undeveloped portion of Central Park (approximately 73 acres) and the potential for impacts to cultural resources (see Appendix D, Cultural Resources Reports; Tetra Tech 2020). This area of Central Park encompasses the proposed Project (approximately 61 acres) and the Central Park Amphitheater Project site (approximately 11 acres). Note: a separate cultural resources technical memo also was prepared for the Central Park Amphitheater Project IS/MND on August 14, 2019.

Cultural resources are defined as buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, or scientific importance. The term cultural resources also encompass the National Historic Preservation Act term “historic property” as well as CEQA terms “historic resource” and “unique archaeological resource.” Under the National Historic Preservation Act, historic property refers to a property that is listed on, or determined eligible for listing on, the National Register of Historic Places (NRHP).

Section 15064.5(a) of the CEQA Guidelines generally defines a historical resource as one that is (a) listed in, or eligible for listing in, the California Register of Historical Resources, (b) listed in a local register of historical resources, (c) identified as significant in a historical resource survey (meeting the requirements of Section 5024.1(g) of the PRC), or (d) determined to be a historical resource by a project's lead agency. Historic, cultural, and paleontological resources include historic buildings, structures, artifacts, sites, and districts of historic, architectural, archaeological, or paleontological significance. Unique archaeological resources are archaeological artifacts, objects, or sites that contain information to answer important scientific questions, possess a particular quality such as the oldest of its type, or are directly associated with a recognized important prehistoric or historic event or person.

The area of potential significant effects (APSE) (or impacts) includes the horizontal and vertical areas of ground disturbance. Ground disturbance would occur within the proposed Project area, through construction activities such as grading, trenching, vegetation removal, etc. This horizontal disturbance includes a total of approximately 61 acres. Vertical ground disturbance would occur at depths ranging from 0 to 6 feet. Staging and laydown areas will be located within the proposed Project site. Access to the proposed Project will occur on existing paved roads (e.g. Baseline Road).

In summary, the proposed Project’s horizontal APSE is considered the proposed Project area (approximately 61 acres). The vertical APSE is estimated to range from 0 to 6 feet below the ground surface.

A cultural resource literature review through the California Historical Resources Information Center’s South Central Coastal Information Center (SCCIC), Native American Heritage Commission (NAHC) sacred land files (SLF) search, and pedestrian archaeological survey was conducted for the entire undeveloped portion of the Central Park property.

4.3.1 Existing Conditions

Reginal and Local Setting

The proposed Project vicinity is within the north-central section of the Chino Valley, just south of the eastern San Gabriel Mountains, and at the upper elevations of the Los Angeles Basin. The Chino Valley is bound by the San Gabriel Mountains to the north, the San Bernardino Mountains to the northeast, the Puente Hills to the Southwest, and the Jurupa Hills to the southeast. The proposed Project APSE is undeveloped and surrounded by a highly developed urban area with major roads, single-family residential homes, and commercial buildings. The APSE is bounded to the north by the Pacific Electric Inland Empire Trail (a multi-purpose pedestrian trail), to the east by Milliken Avenue, to the south by Base Line Road, and to the west by Deer Creek and Deer Creek Channel Trail (Deer Creek is a flood control channel and the trail is a Class I designated off-road bike path).

The proposed Project is just south of the San Gabriel Mountains, within the broad Chino Valley, near the southern boundary of the Transverse Ranges geomorphic province, and within the northern portion of the Peninsular Ranges geomorphic province. The San Gabriel Mountains are located within the Transverse Ranges geomorphic province that is comprised of steeply sloped, east to west trending compressional (folding and faulting) mountain ranges and valleys (Kleinfelder West 2009). The San Gabriel Mountain range is comprised of igneous and metamorphic rocks that were formed over 65 million years ago and consist of steep and rugged topography, with peaks exceeding 9,000 feet above mean sea level. Streams from the mountain range carried alluvial deposits down into the valley, with deposits consisting of coarse gravels to fine-grained sands deposited more than 10,000 years ago. These alluvial deposits can range from 500 to over 1,000 feet in depth. The Peninsular Range geomorphic province is comprised of northwest trending mountain ranges (including the San Bernardino Mountains northeast of the proposed Project), valleys, and faults parallel and subparallel to the San Andreas Fault.

The proposed Project APSE sits atop a series of coalescing alluvial fans derived from the San Gabriel Mountains (Kleinfelder West 2009). Deer Creek Wash (currently channelized) is to the west of the proposed Project. Elevations in the APSE range from approximately 1,360 feet above mean sea level on the north to 1,320 feet above mean sea level on the south (Kleinfelder West 2009). Deposits encountered during soil investigations of the APSE were identified as late Holocene alluvial fan deposits of sand, silty sand, sandy gravel, and gravelly sand to bouldery alluvium (Morton et al. 2001; Kleinfelder West 2009).

Currently, the APSE consists of undeveloped desert land that has been subjected to a variety of direct and indirect human-related disturbances such as historical agricultural activities (e.g. row crop vineyard, grading, plowing), historic and modern extensive grading activities, adjacent development, mountain bike and walking trails, weed abatement, City storage activities, and local refuse dumping (e.g. domestic trash). Based on historic aerials, agricultural activities occurred on-site from 1938 and ceased between 1980 and 1994 when residential and commercial development began to increase in the area. In the decades since active agricultural activities (i.e., grape vineyards) ceased, both invasive and native vegetation communities, typical of disturbed areas, have reestablished on-site and are subject to routine weed abatement activities.

Vegetation in the proposed Project area consists of alluvial scrub habitat, such as white sage, sage brush, yerba Santa, buckwheat, annual grasses, junipers, and yuccas (Barbour and Wirka 1997).

Cultural Context

Pre-Contact

The prehistory of southern California is defined by different temporal periods and cultural complexes based on cross-dating of distinct artifact types, cultural patterns, and radiocarbon dates, if available. The cultural chronology of human occupation is characterized by changing settlement and subsistence strategies typically in response to environmental conditions, available resources, and population fluctuations. There is no single cultural historical framework that encompasses the entire prehistoric record for southern California. Several key archaeologists have contributed to the development and chronological framework throughout regions of southern California such as Wallace (1955), Warren (1968), Warren and Crabtree (1986), Moratto (1984), Chartkoff and Chartkoff (1984), and several others. A generalized cultural sequence is provided below.

Paleo Indian Period/Terminal Pleistocene (13,000 BP to 9,000 BP)

There are very few recorded resources that represent this time in California. The lack of archaeological representation is often attributed to a mobile and low human population, the susceptibility of site to erosion (e.g. sea level rise, landslides, etc.), and alluvial and aeolian deposits (Byrd and Raab 2007). Available archaeological evidence suggested that Paleo-Indian groups were hunter and gatherers that were highly mobile and lived in temporary camps near fresh water sources (Sutton et. al. 2007). The Paleo-Indian period is generally characterized by small mobile groups that utilized tools such as large fluted points, crescents, domed scrapers, and flake tools of local chert. Groundstone is typically absent or rare.

The Arlington Springs (CA-SRI-173) and the Daisy Cave site (CA-SMI-261) provide evidence of a late Pleistocene occupation along the southern California Pacific Coast (Waguespack 2007; Erlandson 1994; Erlandson et al. 2008). The Arlington Springs site identified on Santa Rosa Island yielded human remains of one individual that date to approximately 13,000 Before Present (BP), no other artifacts were recovered (Erlandson et al. 2008). The Daisy Cave site on San Miguel Island was first occupied around 11,500 BP, is associated with a small rock shelter, and yielded expedient flake tools and faunal remains that include shellfish (red abalone, black turban), and a few marine fish bones (Torben et al. 2001; Erlandson et al. 2008). The Arlington Springs and Daisy Cave sites represent a late Pleistocene maritime adaption near the mainland, suggesting people also used boat technology (Erlandson et al. 2007). Inland, this period is presented by the C.W. Harris site (CA-SDI-149) identified by Claude Warren (1968) in San Diego County. Warren and Ore (2011) suggest occupation at the C.W. Harris site occurred approximately 11,222 to 8,540 BP (based on radiocarbon dates). The C.W. Harris site artifact assemblage was termed the San Dieguito Complex and yielded a combination of percussion and pressure flaking techniques for bifaces, projectile points, crescents, and other formal flake tools (Warren and Ore 2011). Warren et al. (2004) suggest that this complex is derived from desert cultures of the Great Basin to the east.

Archaic Period (9,000 to 1,500 BP)

The Archaic Period (similar to Millingstone Horizon, Encinitas tradition, La Jolla Complex) is characterized by a transition from large projectile point tool use to a period of extensive millingstone and core tool use. The artifact assemblage typically consists of millingstones (manos or handstones, and metates), hammerstones, crude scrapers, cores, and other flaked-based stone tools. Manos and metates are thought to have been used to process small, hard seeds (and possibly nut) associated with the local vegetation communities (Glassow et al. 2007). Faunal assemblages from sites occupied along or near the southern California coast (bays, lagoons, and estuaries) suggest subsistence consisted primarily of shellfish and plant resources, with hunting and fishing secondary (Erlandson 1994; Byrd and Raab 2007). Interior sites also illustrate an emphasis on processing floral (e.g., nuts and seeds) resources and hunting of a variety of faunal resources (e.g., deer) (Byrd and Raab 2007; Glassow et al. 2007). Populations were semisedentary.

Late Prehistoric Period (1,500 BP to 1769)

The Late Prehistoric period is defined by regional local patterns of change, an increase of human population, resource intensification, sedentism, associated expansion of cultural practices, food storage, and the introduction of the bow and arrow (Byrd and Reddy 2002; Byrd and Raab 2007). Assemblages are typically characterized by small projectile points, pottery, mortar and pestle, shell fishhooks, the use of asphaltum, decorative shell and bone ornaments, and cremations. Bedrock mortars (a shallow-hole mortar[s] in bedrock) are also attributed to this period. Subsistence during this period varied dependent upon the local environment and foraging adaptions. Overexploitation of high-ranking subsistence resources by hunters and gatherers resulted in resource depression and the intensification of more labor intensive floral and faunal resources, such as small plant seeds (e.g., grasses), acorns, small shellfish, fish, and terrestrial animals (Byrd and Raab 2007). Settlement patterns during this period included large residential camps (e.g., villages) and smaller, subsistence related short term encampments.

Ethnographic Context

The proposed Project area is within the traditional territorial boundaries of the Serrano (Maara'yam) and Gabrieliño (also spelt Gabrieleño; Tongva) people, that both spoke a variation of the Takic language subfamily (Bean and Smith 1978a, 1978b; Kroeber 1925; San Manuel Band of Mission Indians 2019). A brief ethnographic summary of both groups is provided below.

Serrano

The indigenous people of the San Bernardino highlands, passes, valleys and mountains, as well as the Mojave River and Desert areas, were identified as Serrano by the Spanish at their first contact. Prior to Spanish contact, the Serrano referred to themselves collectively as the Maara'yam (Alexandra McCleary, Personal Communication 2019). Within this collective, there were no less than a dozen Serrano clans co-existing in their shared ancestral lands, which comprise over 7 million acres. Serrano territory lies within the San Bernardino Mountains extending east of Cajon Pass to Twentynine Palms, south to Yucaipa Valley, and north of Victorville (Bean and Smith 1978a). The topographically varied territory allowed Serrano populations to utilize a wide variety of ecological niches within the mountains, foothills, valley, and desert region. Oral histories, Spanish Mission and ethnographic records affiliate the Serrano with Rancho Cucamonga, where they lived alongside the Tongva. The Serrano village of Cucamobit

was proximal to the Tongva village at Kuukamonga (Mertz 1976:7) and represented the wildcat moiety (Harrington 1934; Kroeber 1925:615).

Serrano people lived in patrilineal-based, band-level groups. Serrano were also exogamous, meaning that spouses had to be found outside the group. Specifically, spouses had to be located outside of one's own moiety—a two-part socio-religious structure. In Serrano culture, each clan, village, and person were assigned to either the Coyote or the Wildcat moiety. The Serrano occupied village-hamlets located mainly in the foothills and to a lesser extent along the desert floor, near water sources (Bean and Smith 1978a). Family homes were typically built with willow frames and yucca fibers or tule thatching, were circular and domed in shape, and called a Kiic (San Manuel Band of Mission Indians 2019; Bean and Smith 1978a). Other types of structures included ramadas (a wall-less structure with a willow thatched roof), large ceremonial houses, open semi-subterranean, earth covered sweathouses located near water, and granaries (Bean and Smith 1978a). Groups occupied a local clan-based territory, but also shared resources and visited with one another during large gathering/hunting forays and for the corporate practice of ceremonies. The division of labor was split between women gathering and men hunting and fishing (Bean and Smith 1978a; Warren 1964).

Serrano groups primarily hunted large and small terrestrial fauna and gathered flora resources for subsistence. Floral resources included items such as acorns, piñon nuts, and various roots, bulbs, shoots, and seeds (Bean and Smith 1978a). Faunal resources included deer, big horn sheep, pronghorn, cotton tail and jack rabbits, rodents, and quail. Technology (e.g. food processing tools, utilitarian tools and other purposes) included a variety of items made from stone, wood, bone, plant fibers, and shell such as highly decorated baskets, pottery, rabbit skin blankets, bone awls, bows and arrows, arrow straighteners, fire drills, stone pipes, stone tools (e.g. mortars, metates, flint knives), musical instruments, feathered costumes, mats, bags, storage pouches, cordage, and nets.

A key element of Serrano social organization is the idea of unity and reciprocity between the different clans, as well as with neighbors. Historically, the holding of rituals involved various forms of ritual reciprocity between a host clan and allied clans and guests that participated. This included assistance in carrying out ritual activities and exchanges of gifts and offerings. Trade and exchange played an important role in the Serrano economy. The foothill villages would trade goods, such as acorns and piñon nuts with the lower-elevation, desert floor villages for cacti fruits. This trade network would not only distribute the resources that were available within the different ecozones but would also integrate the economy (Bean and Smith 1978a; Cisneros 2012).

By 1834, most of the western Serrano population were removed from their aboriginal homelands/territory and integrated (or enslaved and forced) into the mission system (i.e., Mission San Gabriel). Today, most Serrano people live on either the federally recognized Morongo Band of Mission Indians (Banning, California) or San Manuel Band of Mission Indian (near Highland, California) reservations (Morongo Band of Mission Indians 2019; San Manuel Band of Mission Indians 2019). The Serrano people continue traditional practices and a special connection to their aboriginal homelands.

Gabrieliño

The proposed Project area is also within the ethnographic territory traditionally inhabited by the Gabrieliño (Tongva) people. The City is named after the Gabrieliño village of Kuukamonga, Corbonamga, or Cucamonga (Kroeber 1925; Merriam 1929) that was located within the extreme eastern area of the tribe's territory. The Gabrieliño occupied most of Los Angeles and Orange counties, including the watersheds of the Los Angeles, San Gabriel, and Santa Ana rivers, the Los Angeles basin to the Santa Monica and Santa Ana mountains, along the coast from Aliso Creek in the south to Topanga Creek in the north, and the islands of San Clemente, San Nicolas, and Santa Catalina (Bean and Smith 1978b; Kroeber 1925).

Gabrieliño was one of the Cupan languages in the Takic family, part of the Uto-Aztecan linguistic stock. There were up to six different dialects spoken throughout the Gabrieliño territory. The name Gabrieliño was derived from the San Gabriel Spanish mission located along the coast within Gabrieliño territory (Bean and Smith 1978b). Settlement patterns on the mainland were located near water sources and exhibit a logistical mobility with large villages and smaller satellite camps occupied seasonally. Structures were domed, circular structures with tule, fern, or Carrizo thatching and sweathouses were small, semicircular, earth-covered buildings (Bean and Smith 1978b). Although it is unknown exactly how many people inhabited the area, it is estimated that at least 50 to 100 villages occupied the mainland and coastal region, with village populations ranging from 50 to 200 individuals (Bean and Smith 1978b). The Gabrieliño were fisher-hunter-gatherers and exploited a variety of coastal bay, littoral, riverine, and inland floral and faunal resources available within the diverse ecological zones of their territory (i.e., coastal plain, rivers, foothills, mountains, and ocean). Subsistence resources included items such as several species of oak trees, grasses, sage bushes, rabbits, deer, fish, shellfish, and other terrestrial and marine mammals. The Gabrieliño would move seasonally throughout the region, between mountain and coastal locales, to hunt terrestrial and sea mammals and to collect terrestrial flora and intertidal species. In 1771, the San Gabriel mission was established, and the Spanish begin to integrate (or enslave and force) the Gabrieliño into the mission system. By 1800, much of the Gabrieliño people were missionized and many had succumbed to introduced diseases or conflicts or fled the area (Bean and Smith 1978b). Currently, the Gabrieliño-Tongva Tribe (historically known as the San Gabriel Band of Mission Indians) are a state of California recognized tribe and their tribal office is located in Los Angeles, California (Gabrieliño-Tongva Tribe 2019).

Historic Context

In California, the historic era is generally divided into three periods: the Spanish Mission Period (1769-1821), the Mexican Rancho Period (1821-1848), and the American Period (1848-present).

Spanish Mission Period (1769–1821)

The Spanish Mission Period is between 1769 and 1821 and designates the time when the Spanish established missions along the California coast. The first recorded contact between California natives and Europeans occurred in 1542, when the Ron Rodriguez Cabrillo expedition traveled along the west coast of California. Between the spring and summer of 1769, the Spanish founded 21 missions from San Diego north to the San Francisco bay area (Presidio). In 1771, Mission San Gabriel Arcàngel (near present day Pasadena) was the first Spanish mission established west of the proposed Project area. The San Gabriel Arcàngel mission's economic industry focused on cattle ranching and agriculture (Hoover et al. 1966). The mission complex and associated crops

were decimated in 1776 due to a flash flood. In the same year, the mission was rebuilt north of the original location. The mission lands extended from the San Bernardino Valley (including Rancho Cucamonga) west to Los Angeles. The local Tongva population was forcibly indoctrinated into the mission system and were baptized at neophytes. The padres also used the Tongva as laborers for the mission's large tract of land, putting them to work with agricultural and ranching duties. The mental and physical health of the Tongva people suffered and many people died or tried to escape. In 1772, Alta California Governor Pedro Fages explored the Riverside and San Bernardino area in search of Native Americans that fled (or escaped) the San Gabriel mission (Beck and Haase 1974). The transition between the Spanish release of the northwest coast of California territory to Mexico occurred from 1821 to 1823.

Mexican Rancho Period (1821–1848)

The period from 1821 to 1848 is referred to here as the Mexican Rancho Period. In 1821, Mexico gained independence from Spain, and the secularization of the Missions was completed in 1834. It was during this period that large tracts of land called ranchos were granted by the various Mexican Governors of Alta California, usually to individuals who had worked in the service of the Mexican Government. In 1839, Tiburcio Tapia was awarded a larger tract of land named Rancho Cucamonga. The rancho was over 13,000 acres in size and encompassed parts of the modern cities of Upland and Rancho Cucamonga. Tapia built a large adobe atop Red Hill, raised cattle, planted a vineyard and built a small winery on his land. Today, California Historical Landmark No. 360, Tapia Adobe, commemorates the period of the rancho and Tapia's occupation of the area, the adobe no longer is extant (this landmark is 4 miles southwest of the proposed Project). Tapia built his estate with the use of Native American (most likely local Tongva people) and Mexican laborers (Simmons 1946; Hoover et al. 1966; Chattel 2009). When Tapia no longer had use for the Native American laborers, he expelled them from the rancho property forcing them into the hills (Simmons 1946). This led to a series of cattle raids due to the lack of available land with subsistence resources. Tapia retaliated by enlisting a corps of soldiers to seek out the native people responsible for the raids and kill them, many native people lost their lives in the massacre (Simmons 1946). Tapia later relied on Mexican laborers to expand his vineyard and maintain the rancho.

Tapia's Rancho Cucamonga Winery was one of the first in Rancho Cucamonga and was expanded almost 100 years later as the Thomas Winery in 1933, and later the Filippi Vineyards winery in 1967 (Chattel 2009). California Historical Landmark No. 490, the Cucamonga Rancho Winery, commemorates Tapia's winery as "California's Oldest Winery" (the landmark is 4 miles southwest of the proposed Project). Tapia died in 1845 and his daughter Maria Merced Tapia de Prudhomme and her husband Leon Victor Prudhomme inherited her father's land.

American Period (Post 1848)

Following the end of hostilities between Mexico and the United States in January 1847, the United States officially obtained California from Mexico through the Treaty of Guadalupe Hidalgo on February 2, 1848 (Hoover et al. 1966). In 1850, California was accepted into the Union of the United States, primarily due to the population increase created by the Gold Rush of 1849.

Agriculture and Winemaking 1858 to present day

In 1858, the Prudhommes sold Rancho Cucamonga to John Rains, a rancher turned tycoon by means of marriage to a young wealthy heiress named Maria Merced Williams (Hoover et al. 1966; Emick 2011). The Rains built a new brick residence and various structures associated with agricultural and ranching endeavors. Rains planted an additional 160 acres of vineyard, expanded the winery, planted walnut trees, and raised sheep, horses, and cattle on the property. The John Rains house still exist today and is currently a museum listed on the NRHP (75-428) and is 4 miles southwest of the proposed Project. During this time, wine production in the Cucamonga Valley became an important economic resource between San Bernardino and the Los Angeles region (Chattel 2009). John Rains was murdered in 1862 while traveling alone to Los Angeles. His widow, Dona Merced, remained on the property with their five children and eventually remarried Jose C. Carrillo in 1864 (Hoover et al. 1966). The Carrillos maintained the rancho for several years but a growing debt and a long drought in the region decimated the vineyard and livestock and forced Dona Merced to foreclose on the property in 1870 (Hoover et al. 1966; Emick 2011).

Isaias Hellman, a German immigrant and prominent banker and real-estate financer in the Los Angeles area was in the business of purchasing and selling large parcels of land (including many ranchos) in the southern California region. Hellman, along with his business partners, purchased Rancho Cucamonga at a sheriff's auction in the early 1870s (Emick 2011). Several acres of the rancho were subdivided into parcels and sold. Hellman and his associates retained some land remaining under the partnership of the Cucamonga Company, and sold remaining parcels under the partnership of the Cucamonga Homestead Association (Simmons 1946; Chattel 2009). Agriculture was the main economy during this time and Hellman and his associates planted wheat, walnuts, oranges, and other crops on the land (Dinkelspiel 2008). Hellman also invested in the skills of a renowned winemaker, Jean Sainsevaine (a French immigrant), to salvage and expand the vineyards on his land. They began producing the sweet wine Angelica, port, and brandy (Dinkelspiel 2008). In 1873, Joseph S. Garcia (a Portuguese ship captain) purchased several parcels that were once part of the Cucamonga Rancho. Garcia partnered with Pierre Sainsevaine (Jean Sainsevaine's brother) and together they planted vineyards on the land and constructed a winery (Simmons 1946). Due to competition with the large Garcia-Sainsevaine winery, several smaller vineyard owners in the area formed the Cucamonga Vineyard Company in an effort to pool their agricultural efforts and resources together for economic reasons (Simmons 1946). Garcia eventually maintained a home and winery on his property. Garcia's home and several other land holdings were purchased by George and William Chaffey in the 1880s. They established the colonies of Etiwanda in 1881 and Ontario in 1882 (Hartig and McCoy 2002). Thanks to the restoration efforts of the Etiwanda Historical Society, Garcia's home still exists (although not in its original location) as the Garcia-Chaffey House museum (located 3 miles east of the proposed Project).

In 1887, the Cucamonga Vineyard Company merged with Hellman's newly developed Cucamonga Fruit and Land Company. The Fruit and Land company owned water rights to the north and east and formed the Cucamonga Water Company (Mendenhall 1908; Simmons 1946). Under the guidance of engineer George Day, the company delivered water to the area (Simmons 1946; Chattel 2009). The Cucamonga Water Company utilized primarily Chinese immigrants as laborers to assist horizontal drilling for underground springs at Cucamonga Canyon, within the south facing San Gabriel Mountains (Chattel 2009). The arrival of the Santa Fe Railroad to Cucamonga also occurred in 1887. The local agricultural economy began to thrive with not only

grapes but also potatoes, nut orchards (walnuts, chestnuts, almonds), and citrus and fruit orchards (oranges, peaches, apricots, pears), and hay grain (Chattel 2009).

Based on the 1888 Detailed Irrigation Map (Ontario Sheet), the APSE is labeled as "Obersteller," to the west is the Hermosa Tract, directly south is the Cucamonga Fruit Land Company, the Cucamonga Colony, Cucamonga North, the Haven Vineyard, and the Cucamonga Vineyard Co. (southwest), and a mile east is the Etiwanda Colony (See Appendix D for historic maps). No additional historic information could be found for the name "Obersteller."

By the turn of the century, a slow increase in settlement occurred in the region and the Cucamonga area boasted two hotels, a courthouse, three schools, two churches, several merchants, and a bank (Simmons 1946). In 1900, Secondo Guasti (an Italian immigrant) and his investors established the Italian Vineyard Company. Guasti's vineyards were dry farmed and he produced wine from over 5,000 acres of grapes in the Cucamonga Valley (Walker and Peragine 2017). His winery included a company town site called Guasti village (formerly known as the town sites of Zucker and South Cucamonga near the current day Ontario airport) and another labor camp in North Cucamonga. Guasti employed many Italian, Spanish, French, African, Mexican American, and Mexican laborers who came to work in the vineyards and winery and lived at either Guasti or North Cucamonga (Walker and Peragine 2017). By 1917, Guasti had expanded his vineyards to encompass approximately 20,000 acres in the Cucamonga Valley (current day Ontario and Rancho Cucamonga; Walker and Peragine 2017). For a moment in time, the Cucamonga Valley was known as the largest wine producing region in California (Dinkelspiel 2008; Chattel 2009; Emick 2011).

In 1919, the Eighteenth Amendment to the Constitution, known as the Prohibition, banned the production and sale of alcohol in the United States until the ratification of the Twenty-first Amendment in 1933. Many vintners in the Cucamonga Valley were unsuccessful at maintaining their businesses while others adapted, maintained their vineyards, and survived by selling products such as table grapes (often used for home wine brewing), grape juice, grape and wine jellies, wines for religious rituals, medicinal wines or health tonics, and raisins during the 14 years of prohibition (Chattel 2009; Walker and Peragine 2017; Hartig and McCoy 2002). Once prohibition ended many existing wineries resumed the production of wine and several new wineries appeared in the Cucamonga Valley. New wineries included the Filippi Winery in current day Rancho Cucamonga (still in production) and the NRHP listed family owned Galleano Winery (still in production) in current day Mira Loma (25 miles south of the proposed Project). In the 1930s, large scale wine production operations made it difficult for smaller operations to compete. The cooperative Cucamonga Pioneer Vineyard Association was formed in 1934 by several small-scale wine producers in an effort to effectively market their products and compete with the larger companies like Guasti (Hartig and McCoy 2002; Chattel 2009). By 1938, the colony of Cucamonga (now city of Cucamonga) had 15,500 acres of land dedicated to wine grapes, 525 acres for raisin grapes, and 340 acres for table grapes (Simmons 1946). The second largest crop in Cucamonga was citrus fruit such as Navel and Valencia oranges and lemons and encompassed 4,700 acres of land. Wine production in the Cucamonga Valley continued to be a successful industry throughout the 1940s. By 1950, over 20 wineries were operating in the Cucamonga Valley and the leading family owned wineries included the Filippi, Aggozzottis, Vies, Opics, Pias, and the Galleanos (Chattel 2009; Hartig and McCoy 2002). The 1950s began the decline of wine production in the valley due to several factors such as replacement of vineyards

by urban development, poor harvests due to adverse weather conditions, and the changing taste of the consumer's pallet for drier wines produced from Northern California (e.g. Napa Valley). The region remained a rural agricultural area throughout the 1960s. As the southern California area grew in population, vineyards were replaced with urban development and by the 1970s only five wineries remained in production. In 1977, the cities of Alta Loma, Etiwanda, and Cucamonga were incorporated as the city of Rancho Cucamonga. Today, the City is densely developed with urban uses and limited vacant land. Currently, there are a handful of wineries left in the Cucamonga Valley. The Joseph Filippi Winery is the last of the historically established wineries to remain in production in Rancho Cucamonga

Record Search Results

A California Historical Resources Information Center records search of the proposed Project area and a one-half mile buffer was conducted via the SCCIC, Division of Anthropology, California State University, Fullerton, in July 2019 (Records Search File No.: 20318.6401). As part of this records search, the SCCIC database of survey reports and overviews was consulted, as well as other resources (documented cultural resources, cultural landscapes, and ethnic resources). Additionally, the search included a review of the following publications and lists:

- California Office of Historic Preservation Historic Properties Directory,
- National Register of Historic Places,
- Office of Historic Preservation Archaeological Determinations of Eligibility,
- California Inventory of Historical Resources (CRHR),
- California Points of Historical Interest,
- California Historical Landmarks,
- ethnographic information,
- historical literature,
- historical maps and plats,
- and local historic resource inventories.

The records search focused specifically on the proposed Project's APSE and a half mile buffer centered on the proposed Project area. The records search results are included in Appendix D Cultural Resources Reports.

One previously conducted survey (SB-00479: 1977) is within the APSE. A total of 16 previous surveys have been conducted within one-half mile of the APSE between 1975 and 2010. These cultural resource investigations include archaeological surveys, architectural surveys, and desktop studies. The previous surveys within the APSE and within one-half mile of the APSE are listed in Table 4.3.1-1.

No previously recorded sites were identified within the APSE and only one was identified within one-half mile of the APSE. Site P-36-020137 (CA-SBR-15904) is a segment of the former Pacific Electric Railway's San Bernardino Line that was removed in the 1990s and replaced with a paved bike and pedestrian trail. P-36-020137 has been determined not eligible for the CRHR or NRHP (Table 4.3.1-2). No CRHR or NRHP eligible archaeological sites were identified within the APSE or within a half mile of the APSE.

Table 4.3.1-1. Cultural Resources Surveys Conducted within the APSE and within one-half mile of the APSE

Report No.	Year	Author(s)/ Affiliation	Title	Survey Type	Resources Identified
Previous Cultural Resource Surveys Conducted within the APSE.					
SB-00479	1977	Joseph Hearn, SBCMA	*Archaeological – Historical Resources Assessment of Lewis Homes Project in the Etiwanda Area.*	Archaeological/ Architectural Survey	--
Previous Cultural Resource Surveys Conducted within a half mile of the APSE					
SB-00286	1975	James Crowell, SBCMA	*Archaeological – Historical Resources Assessment of 82 Acres between Haven Ave. and Deer Creek Wash and the Pacific Electronic Railroad Tracks and a Projection East of 19th Street in the Alta Loma Area.*	Archaeological/ Architectural Survey	--
SB-00317	1976	Patricia Martz, ARC	*Description and Evaluation of the Cultural Resources: Cucamonga, Demens, Deer, and Hillside Creek Channels, San Bernardino and Riverside Counties.*	Archaeological/ Architectural Survey	Over 9, see attached data sheet
SB-00342	1976	Ruth Harris, SBCMA	*Archaeological – Historical Resources Assessment of Project No. 76-66.*	Archaeological/ Architectural Survey	--
SB-00352	1976	Ruth Harris, SBCMA	*Archaeological – Historical Resources Assessment of Project No. 76-64, Alta Loma.*	Archaeological/ Architectural Survey	--
SB-00353	1976	Ruth Harris, SBCMA	*Archaeological – Historical Resources Assessment of 76-74, and 76-76.*	Archaeological/ Architectural Survey	--
SB-00368	1976	Ruth Harris, SBCMA	*Archaeological – Historical Resources Assessment of Two Parcels.*	Archaeological/ Architectural Survey	--
SB-00479	1977	Joseph Hearn, SBCMA	*Archaeological – Historical Resources Assessment of Lewis Homes Project in the Etiwanda Area.*	Archaeological/ Architectural Survey	--
SB-00495	1977	Joseph Hearn, SBCMA	*Archaeological – Historical Resources Assessment of Road Improvement HO 6451.*	Archaeological/ Architectural Survey	--
SB-03222	1979	Scientific Resource Survey	*Archaeological/Paleontological Report on the William Lyon Co. Rancho Cucamonga Property, Rancho Cucamonga, CA.*	Archaeological/ Paleontological Survey	--
SB-03581	2000	Phillipe Lapin, LSA	*Cultural Resource Assessment for PBW Facility CM 226-01, County of San Bernardino, CA.*	Archaeological Survey	--
SB-04156	2002	Curt Duke, LSA	*Cultural Resource Assessment: Cingular Wireless Facility No. CM226-03, San Bernardino County, CA.*	Archaeological Survey	--
SB-04679	2006	Riordan Goodwin, et al., LSA	*Historical Resources Evaluation Report and Archaeological Survey Report for the Pacific Electric Inland Empire Trail, Phase I, City of Rancho Cucamonga, San Bernardino County, CA.*	Archaeological/ Architectural Survey	36-016448, 36-020136, 36-020137, 36-020138

Report No.	Year	Author(s)/ Affiliation	Title	Survey Type	Resources Identified
SB-05358	1976	W.A. Sider	*Cucamonga Creek 1776-1976 After 200 Years.*	Archaeological Survey	--
SB-06419	2009	Phil Fulton, LSA	*Cultural Resource Assessment Verizon Wireless Services Stoneridge Facility, City of Rancho Cucamonga, San Bernardino County, CA.*	Archaeological Survey	--
SB-06815	2010	Wayne Bonner and Sarah Williams, MBA	*Cultural Resources Records Search and Site Visit Results for T-Mobile USA Candidate IE24081-D (Terra Vista Cohab at Central Park Plaza), Milliken and Baseline, Rancho Cucamonga, San Bernardino, CA.*	Record Search and Site Visit.	--
SB-06816	2010	Robert Wlodarski,	*Records Search and Field Reconnaissance Phase for the proposed AT&T Wireless Telecommunications Site ES0142 (Milliken Tower) Milliken and Baseline, Rancho Cucamonga, CA 91730.*	Archaeological Survey	--

SBCMA=San Bernardino County Museum Association; ARC=Archaeological Research Unit; MBA=Michael Brandon Associates; LSA= LSA Associates, Inc.

Table 4.3.1-2. Cultural Resources Identified within a half mile of the APSE

Site No./ Isolate No.	Time Period	Site Type	Date/ Recorder	CRHR/ NRHP Eligibility	Approximate Distance to Project Area
P-36-020137 (CA-SBR-15904)	Historic	Railroad alignment, associated track, ties, etc. removed in 1990s. Currently a paved bike or pedestrian trail.	2004; White, and several others.	Not eligible.	Adjacent, north.

Review of Historic Aerial Photographs

Review of historic maps provides information regarding potential unrecorded historic features or sites within the APSE. Based on the historic map and aerial review, the proposed Project site and surrounding area appears as undeveloped agricultural land from 1938 to 1980s, with the Deer Creek channel to the west, and Base Line Road established by the 1960s to the south. The results of the review of available historic aerials and USGS quadrangle maps are presented in Table 4.3.1-3 below. See Appendix D for historic maps.

Table 4.3.1-3. Review of Historic USGS Maps and Aerial Photographs for Township 1 South, Range 7 West, Section 36 (southwest portion)

Map Name	Date(s)	Author	Description of Potential Resource within Project Area of Impact
GLO Plat Map	1858	Surveyor General's Office	The Project site and surrounding area appears undeveloped and the section is illustrated as "School Land."
GLO Plat Map	1865	Surveyor General's Office	The Project site and surrounding area appears undeveloped, no names or homesteads are identified within the Section.

Map Name	Date(s)	Author	Description of Potential Resource within Project Area of Impact
Detail Irrigation Map	1888	California State Engineering Department	Section 36 is labeled as "Obersteller", and a southwest to northeast trail is illustrated near the northwestern boundary of the Project. The following are illustrated beyond Section 36: Hermosa tract is to the west, the Etiwanda Colony is illustrated a mile east, the Cucamonga Fruit and Land Company and the Cucamonga Colony is to the south and southwest
USGS 1:62,500, Cucamonga CA	1897, 1900, 1903, 1906, 1908, 1911, 1912, 1917, 1927, 1929	USGS staff	The Project site and surrounding area appears undeveloped with a road to the south. A creek is to the west.
USGS 1:24,000, Guasti, California	1953	USGS staff	The Project site and surrounding area appears undeveloped with an east to west trending road to the south (current Base Line Road), and a two-track road within the Project site. A creek is to the west.
USGS 1:24,000, Guasti, California	1961, 1966, 1975	USGS staff	The Project site and surrounding area appears undeveloped agricultural land with an east to west trending road to the south labeled "Base Line Road", and a two-track road within the Project site. Deer Creek is to the west.
Historic Aerial	1938, 1948, 1959, and 1966	Netonline	The Project area appears as undeveloped agricultural land (row crops), with Deer Creek wash adjacent west, and the surrounding area is undeveloped agricultural land.
Historic Aerial	1980	Netonline	The Project area appears as undeveloped agricultural land (row crops), with the channelized Deer Creek adjacent west, and the surrounding area as undeveloped agricultural land with a residential development to the northwest.
Historic Aerial	1994	Netonline	The Project area appears as undeveloped agricultural land (row crops), with the channelized Deer Creek adjacent west, and the surrounding area is developed with residential and commercial structures.

T=Township, R=Range, USGS=United States Geological Survey; Netonline=Historic Aerials by Netonline 2018. Electronic database located at https://www.historicaerials.com/viewer accessed 4/23/2019.

A search of federal land patents through the Bureau of Land Management's General Land Office Records website identified one early patent holder for Township 1 South, Range 7 West, Section 36, by the State of California in 1857 under the title authority of the California Enabling Act (see Table 4.3.1-4). Federal land patents provide information on the initial transfer of land titles from the federal government to private (individuals or companies) or local governments by the title transfer authority.

Table 4.3.1-4. Historic Land Patent for Township 7 South, Range 7 West, Section 36 (southwest portion), San Bernardino Baseline Meridian

Patent # or BLM Accession #	Date	Patentee	Legal Description	Transfer Authority
CACAAA 000001 5P	6/19/1874	State of California	T1S, R7W, S36	California Enabling Act, March 3, 1853 (10 Stat. 244).

BLM=Bureau of Land Management, T=Township, R=Range

Chain of Title Review for Township 1 South, Range 7 West, Section 36, Lots 1-11

A search of County records was conducted through the San Bernardino County's Hall of Records, Property Records, and Archive Office on August 11, 2019. The records provide information regarding previous ownership of the proposed Project Area parcel(s). The records indicate that the L Bar S Ranch partners, Wilbur H. Latimer, Winifred Latimer, and Charles R. Latimer, owned the property by 1961. Prior to 1961, no records or original title to the land were available and it is unclear when the Latimers first acquired the property. By 1970, the land had transferred to the estate of Charles R. Latimer and was in trust to Roy and Phyllis Leventhal. The property was sold in 1977 to Richard A. Lewis of Lewis Homes of California (real-estate developers). By 1984, the property was acquired by the City of Rancho Cucamonga. The historic record search did not identify any additional titles or previous owner information prior to the L Bar S Ranch (Latimer family), except for the name Obersteller illustrated on an 1888 map (see Table 4.3.1-3). Table 4.3.1-5 list details from available San Bernardino County land records. See Appendix D for available chain of title records.

Table 4.3.1-5. Chain of Title Review for the APSE in Township 1 South, Range 7 West, Section 36

Type of Record	Date	Description	Legal Description	Parcel Ownership/ Acquired Property
Grant of Easement	11/13/1961	L Bar S Ranch grants and easement to Southern California Edison Company within T1S, R7W, S36, Serial No 28035A.	T1S, R7W, S36	L Bar S Ranch partners: Wilbur H. Latimer, Winifred Latimer, and Charles R. Latimer
Record of Survey	11/05/1970	Engineer Survey of Parcel: Illustrates Base Line Road to north and Pacific Electric Railway to North, no other feature illustrated.	T1S, R7W, 260 acres of S36	The Estate of Charles Latimer
Superior Court of California, County of San Bernardino: Court Ordered Sale of Personal Property via Mr. Charles E. Latimer's (deceased) Living Will	11/17/1977	Confirming sale of property (land was in trust to Roy and Phyllis Leventhal)	T1S, R7W, 260 acres of S36	Richard A. Lewis of Lewis Homes of California purchases land.
Release of Property Grant Deed	07/14/1980	Lewis Homes of California, a partnership grants Lewis Construction Co./Lewis Constriction Inc. a corporation, a grant deed for the property.	T1S, R7W, 260 acres of S36, 260 acres of S36	Lewis Homes of California
Release of Property Grant Deed	10/24/1984	Lewis Homes of California, a partnership, Lewis Construction Co./Lewis Constriction Inc. a corporation, grants City of Rancho Cucamonga the grant deed for the property.	T1S, R7W, 260 acres of S36, 260 acres of S36	City of Rancho Cucamonga

T=Township, R=Range, S=south, W=west

Native American Heritage Commission Sacred Lands Files Search

Tetra Tech, Inc. contacted the NAHC on June 6, 2019 and requested that the NAHC review its SLF. The NAHC replied on June 21, 2019, that results were negative for Native American tribal resources within the APSE and provided a list of local Native American contacts with knowledge of the proposed Project area (see Appendix D). The NAHC recommends conducting outreach to the listed tribes or individuals as they may have knowledge of cultural resources within or near

the proposed Project area. Native American consultation is part of the lead CEQA agency's responsibilities under AB 52. See Section 4.9. Tribal Cultural Resources.

Archaeological Sensitivity

The SCCIC records review results indicated that a small portion of the APSE had been previously surveyed, and no previously recorded resources were identified within the APSE. Only one historic site (railroad) was identified within a half mile of the APSE. No prehistoric sites have been identified within the APSE or within 1 mile of the APSE. Nearby creeks and various coalescing unnamed stream channels associated with spring fed drainages emanating from the San Gabriel Mountains, would have provided seasonal fresh water to regional occupants, and faunal and flora resources within the nearby foothills and mountains would have potentially provided a variety of subsistence resources for pre-contact and historic people.

The proposed Project area is underlain by a series of coalescing alluvial fans derived from the San Gabriel Mountains (Kleinfelder West 2009). The proposed Project area contains late Pleistocene and Holocene alluvial fan deposits and fluvial deposits at various depths. Late Pleistocene and Holocene deposits are generally considered more likely to contain prehistoric deposits. Despite the potential sensitivity of these deposits and the number of previous archaeological investigations in the study area, no prehistoric resources have been recorded within these sediments within a half mile of the APSE. In addition, portions of the APSE are within a disturbed environment. Based on historic aerial photographs (1938 to 1994) the entire proposed Project area was historically utilized for agriculture (row crops, most likely a vineyard). In addition, portions of the proposed Project area have been graded and include underground utilities. Therefore, previous subsurface ground disturbance is estimated at approximately 1 to 2 feet in depth (plow zone).

Based on the natural setting, cultural context, and the SCCIC records search results (including historic maps), the proposed Project area resource sensitivity is assessed as low to low-moderate.

A cultural resource literature review through the California Historical Resources Information Center's SCCIC, NAHC SLF search, and pedestrian archaeological survey was conducted for the entire undeveloped portion of the Central Park property.

Archaeological Survey Methods and Results

Tetra Tech's qualified archaeologists conducted an archaeological survey of the entire 73-acre APSE on July 17, 2019 (see Appendix D Cultural Resources Reports). The APSE is within a suburban area surrounded by major roads, single and multifamily residential properties, and commercial buildings. The APSE was surveyed with closely spaced linear and meandering transects (15 meters apart), dependent upon terrain and areas with dense vegetation. The APSE is located on desert land with cleared areas and patches of dense brush, annual grasses, and shrubs. Ground surface visibility was generally good to fair due to cleared or graded surface areas. However, patches of dense vegetation were also encountered throughout the proposed Project area. Based on historic aerial photographs (1938 to 1994) the entire proposed Project area was historically utilized for agriculture (row crops: vineyard). Therefore, previous subsurface ground disturbance is estimated at 1 foot in depth (plow zone). Other noted disturbances include graded and areas cleared of vegetation, dirt bike or mountain bike paths and trails, evidence of homeless camps (e.g. clothes, personal effects, trash, etc.), and trash (e.g. furniture, televisions).

Newly Recorded Cultural Resource and CRHR Recommendation

One newly discovered historic cultural resource was recorded during the pedestrian survey. The site was assigned temporary number RCCP-01. The Trinomial and/or Primary number will be assigned by the SCCIC. The resource is described below and the DPR 523 form is in Appendix D.

RCCP-01 consists of an agricultural vineyard remnant of approximately seven living grapevines and several dead grapevine stumps. The grapevines are roughly aligned in east-west and north-south trending rows. No other agricultural features or historic artifacts were identified. Based on historic aerials, the site and proposed Project parcel appears to have been in agricultural use (row crops) from 1938 to at least the 1960s. By 1980/1990s, the area appears completely overgrown and no longer in use for agricultural purposes. The site (and surrounding area) has been impacted by the lack of continued agricultural use and maintenance, the encroachment of dominant vegetation, and various land use activities (e.g. grading and scraping of paths throughout the property, and development).

Review of historic maps did not identify any structures or features in or near the site area. The site area in Section 36 (and entire section) of T1N/R7W was patented by the State of California in 1874 under the California Enabling Act, March 3, 1853 (10 Stat. 244). This Act granted the 16th and 36th Sections in each township for school purposes. The review of an historic 1888 irrigation map illustrates the name Obersteller for the entire Section 36 of T1N/R7W (includes the site area) (California State Engineering Department 1888). No additional information on the name Obersteller could be found. A search of San Bernardino County records indicates that at least 260 acres within Section 36 (southeasterly portion, includes site area) were acquired by the L Bar S Ranch partners, Wilbur H. Latimer, Winifred Latimer, and Charles R. Latimer, prior to 1960. Charles Latimer was born in Ottawa, Canada in 1887 and moved to Riverside, California with his parents at age three (Stoddard 1994). His father, Hugh Latimer, invested in buying raw land and planting citrus groves for his family and to sell to other ranchers. The Latimer family owned land and citrus groves throughout Riverside and Ontario and they played a major role in the Ontario citrus industry (Stoddard 1994). The Latimers owned and operated the San Antonio Orchard Company (with associated building and packing house) in Ontario. In 1907, Charles Latimer moved to Ontario to manage the San Antonio Orchard Company and the family's large citrus groves. The 1930 census indicates that Charles was married to Winifred and they had three sons, Wilbur H., Charles R., and John S. The Latimer family also held interest in potato crops and local vineyards in the region and produced grape juice (Stoddard 1994). No records were found of when the Latimer partners originally acquired the site and surrounding land in Rancho Cucamonga. The property was eventually sold by the Latimer Estate trust in 1977 to Richard A. Lewis of Lewis Homes of California (real-estate developers).

The Latimer family owned and operated a large, significant citrus agricultural business in nearby Riverside and Ontario during the early twentieth century. The Latimers also owned other crops including several vineyards in the region. Charles Latimer, under the partnership of the L Bar S Ranch, acquired the site (RCCP-01) and surrounding land prior to the 1960s and presumably grew grapes on the property (most likely for grape juice production), although the extent of agricultural productivity at this site is unclear.

Because the site is a vineyard remnant with few extant vines and no associated artifacts or other features, it does not retain its original physical integrity and does not convey any historical

significance. The Latimer's vineyards do not appear to have played a significant role in their contribution to local agricultural production (Criteria 1 and 2). The site neither embodies the distinctive characteristics of an architectural style or architect, nor exhibits high artistic value (Criterion 3). Tetra Tech's documentation of the features (remaining grape vines) has likely exhausted the site's data potential (Criterion 4). Thus, RCCP-01 is recommended as not eligible for listing on the CRHR and no further management is necessary.

4.3.2 Regulatory Setting

State

California Environmental Quality Act

CEQA (PRC Section 21084.1) requires a lead agency to determine whether a project could have a significant effect on historical resources and tribal cultural resources, as defined in PRC Section 21074(a). Under the CEQA Guidelines (Section 15064.5), a historic resource (e.g. building, structure, or archaeological resource) is listed in, or determined to be eligible for listing in, the CRHR or a local register or landmark, identified as significant in a historical resource survey (meeting the requirements of Section 5024.1(g) of the PRC), or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (Section 15064.5(a)(3)). Under the CCR, Title 14, Chapter 11.5, properties listed on or formally determined to be eligible for listing in the NRHP are automatically eligible for listing in the CRHR. A resource is generally considered to be historically significant under CEQA if it meets the following criteria for listing in the CRHR (also see PRC Section 5024.1, Title 14 CCR, Section 4850 *et seq.*):

- 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 (Criterion 1)
- Associated with the lives of persons important to local, California or national history (Criterion 2).
- 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 (Criterion 3).
- Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation (Criterion 4).

California Health and Safety Code, Section 7052 and 7050.5

Section 7052 of the California Health and Safety Code states that it is a felony to disturb Native American burials. Section 7050.5(c) requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If determined to be Native American, the coroner must contact the California NAHC.

California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural, and Sacred Sites Act (the Act) applies to both state and private lands. The Act requires that upon discovery of human remains, construction or excavation activity cease and that the county coroner be notified. If the remains are Native

American, the coroner must notify the NAHC. The NAHC will then identify and notify a most likely descendant. The Act stipulates the procedures the most likely descendant may follow for treating or disposing of the remains and associated grave goods.

California Public Resource Code, Sections 5097 *et seq.*

California PRC Sections 5097 *et seq.* specify the procedures to be followed in the event of an unexpected discovery of human remains on non-federal land. The disposition of Native American remains falls within the jurisdiction of the NAHC. Section 5097.5 of the Public Resources Code states:

"A person shall not knowingly and willfully excavate upon, or remove, destroy, injure or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands… A violation of this section is a misdemeanor.

As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof."

Assembly Bill 52

Under CEQA, AB 52 requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. Consultations must include discussing the type of environmental review necessary, the significance of tribal cultural resources, and the significance of the project's impacts on the tribal cultural resources, and alternatives and mitigation measures recommended by the tribe. That consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project.

Local

City of Rancho Cucamonga

Municipal Code, Title 2, Chapter 2.24 Historic Preservation:

It is found that the protection, enhancement, perpetuation, and use of districts, sites, and structures of historic, cultural, and architectural significance located within the city are of aesthetic and economic value to the city. It is further found that cultural and historic resources contribute to the city's character, atmosphere, and reputation, and that respecting the heritage of the city will enhance its economic, cultural, and aesthetic standing. Therefore, it is imperative that the city safeguards these irreplaceable resources for the welfare, enjoyment, and education of the present and future community.

A. The purpose of Chapter 2.24 is to:

> 1. Provide a mechanism to identify, designate, protect, preserve, enhance, and perpetuate those historic sites, structures, and objects that embody and reflect the city's aesthetic, cultural, architectural, and historic heritage;

2. Foster civic pride in the beauty and accomplishments represented by the city's historic landmarks and distinctive neighborhoods and recognize these resources as economic assets;

3. Encourage the protection, enhancement, appreciation, and use of structures of historical, cultural, architectural, community, or aesthetic value that have not been designated as historical resources but are deserving of recognition;

4. Enhance the quality of life and promote future economic development within the city by stabilizing and improving the aesthetic and economic value of such districts, sites, structures, and objects;

5. Encourage adaptive reuse of the city's historic resources by promoting public awareness of the value of rehabilitation, restoration, and maintenance of existing buildings as a means to conserve reusable material and energy resources;

6. Integrate historic preservation within the city's comprehensive development plan;

7. Promote and encourage historic preservation through continued private ownership and utilization of such sites, buildings, and other structures now so owned and used, to the extent that the objectives listed above can be attained under such policy.

4.3.3 Methodology

The analysis of potential impacts to cultural resources that would be associated with the proposed Project included (as described above) a cultural resource literature review through the SCCIC, NAHC SLF search, and pedestrian archaeological survey, and reporting (Appendix D).

4.3.4 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the CEQA Guidelines. The proposed Project would have a significant impact to cultural resources if it would result in any of the following:

- *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*
- *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*
- *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

4.3.5 Impacts Analysis

IMPACT 4.3-1: *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

Less than Significant Impact with Mitigation Incorporated. No historic resources were identified in the proposed Project area as a result of the SCCIC records search. The intensive pedestrian survey identified one historic archaeological resource RCCP-01. This resource did not possess any significant qualities or provided information that would qualify it as eligible for listing in the CRHR under any significance criteria. If construction ground disturbance depths extend to

native soils (approximately 1 foot or more in depth), there would be a potential to impact previously unrecorded subsurface cultural resources. With implementation of Mitigation Measures CUL-1, CUL-2, and CUL-3, impacts to previously unrecorded subsurface cultural resources will be less than significant.

IMPACT 4.3-2: *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. No archaeological resources were identified in the proposed Project area as a result of the SCCIC records search. The intensive pedestrian survey identified one historic archaeological resource RCCP-01. This resource did not possess any significant qualities or information that would qualify it eligible for listing in the CRHR under any significance criteria. If construction ground disturbance depths extend to native soils (approximately 1 foot or more in depth), there would be a potential to impact previously unrecorded subsurface cultural resources. With implementation of Mitigation Measures CUL-1, CUL-2, and CUL-3, impacts to previously unrecorded subsurface cultural resources will be less than significant.

IMPACT 4.3-3: *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

Less Than Significant. No human remains or cemeteries were identified as a result of the SCCIC search and pedestrian field survey. Existing regulations require that if human remains and/or cultural items defined by Health and Safety Code Section 7050.5, are inadvertently discovered, all work in the vicinity of the find would cease and the San Bernardino County Coroner (909-387-2978) would be contacted immediately. The following steps will occur if an inadvertent discovery of human remains occur:

- If the construction staff or others inadvertently discover human remains during ground-disturbing activities, they will halt work within a 100-foot radius of the discovery, the person that discovered the find will immediately contact the on-site lead foreman or project manager and on-site cultural monitors (as applicable), and ensure that the remains are not disturbed further and that the remains and other cultural items are protected;
- The project lead foreman or project manager will immediately notify the San Bernardino County Coroner;
- The project lead foreman or project manager will also notify the City project lead, the landowner (City of Rancho Cucamonga), the San Manuel Band of Mission Indians, and other consulting Native American Tribes that have requested consultation;
- Project personnel will ensure confidentiality of the find under a need-to-know basis and ensure that the remains are treated with dignity, not touched, moved, photographed, and not discussed on the news or social media sources (e.g., Facebook, Twitter, Instagram, etc.), or further disturbed.

If the remains are found to be Native American as defined by Health and Safety Code Section 7050.5, the San Bernardino County coroner will contact the Native American Heritage Commission by telephone within 24 hours. The coroner will have 2 working days to examine the remains after being notified by the responsible person.

- If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission;
- When the NAHC receives notification of a discovery of Native American human remains from the county coroner pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, it shall immediately notify those persons it believes to be most likely descended from the deceased Native American (California PRC Section 5097.98 (a);
- The most likely descendent has 48 hours to make recommendations to the landowner, or representative, for the treatment or disposition, with proper dignity, of the human remains and grave goods;

Reburial of human remains, and/or funerary objects shall be accomplished in compliance with the California PRC Section 5097.98 (a) and (b).

- Construction will not proceed within the 100-foot area around the discovery until the appropriate approvals are obtained.

By complying with the existing regulations, impacts associated with disturbing any human remains, including those interred outside of formal cemeteries, will be less than significant.

4.3.6 Mitigation Measures

The following mitigation measures are recommended to reduce significant impacts to cultural and tribal resources (see Section 4.9 for discussion of tribal cultural resources). Both Cultural and Tribal Cultural Resources are combined here for clarity within the Project's Mitigation Program.

CUL-1: Worker Education/Training – Prior to construction of the proposed Project, the City will retain a qualified archaeologist who will provide a cultural resource briefing that includes all applicable laws and penalties pertaining to disturbing cultural resources, a brief discussion of the prehistoric and historic regional context and archaeological sensitivity of the area, types of cultural resources found in the area, instruction that Project workers will halt construction if a cultural resource is inadvertently discovered during construction, and procedures to follow in the event an inadvertent discovery (Inadvertent Discovery Plan discussed below) is encountered, including appropriate treatment and respectful behavior of a discovery (e.g., no posting to social media or photographs). The consulting tribes will provide a representative to participate in the environmental training to discuss or provide input from a tribal cultural perspective regarding the potential cultural resources within the region. After the training, all personnel will be given a worker education/training brochure regarding identification of cultural resources and protocols for reporting finds. Any employee beginning work following the initial worker education/training secession must also receive commensurate cultural and archaeological resources sensitivity training and be provided the brochure.

CUL-2: Inadvertent Discovery of Archaeological Resources During Construction – A qualified archaeologist shall be retained on-call and to prepare a Monitoring and Inadvertent Discovery Plan for the proposed Project which includes appropriate Monitoring and Inadvertent Discovery Procedures. The Plan shall include but not limited to: the duration of monitoring based on grading plans, locations of areas to be monitored, procedures to stop and redirect work in the

event of a find (see below), procedures for daily monitoring reporting and final reporting, etc. The draft plan shall be developed and reviewed by the City and interested tribes. During Project-level construction, should subsurface archaeological resources be discovered, all activity in the vicinity of the find (and within a 60-foot buffer) shall stop and a qualified archaeologist shall be contacted to assess the significance of the find according to CEQA Guidelines Section 15064.5 and/or NRHP criteria (as applicable). In addition, the lead representative for the consulting tribes (i.e. San Manuel Band of Mission Indians and San Gabriel Band of Mission Indians) will be notified. If any find is determined to be significant, the archaeologist shall determine, in consultation with the implementing agencies and any local Native American groups expressing interest (e.g. San Manuel Band of Mission Indians), appropriate avoidance measures or other appropriate mitigation. Under CEQA Guidelines Section 15126.4(b)(3), preservation in place shall be the preferred means to avoid impacts to significant tribal cultural resources (as defined by PRC 21074), and archaeological resources qualifying as historical resources. Methods of avoidance may include, but shall not be limited to, Project reroute or re-design, Project cancellation, or identification of protection measures such as capping or fencing, PRC 20180.3.1(b)(2) provides examples of mitigation measures that lead agencies may considered to avoid or minimize impacts to tribal cultural resources. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures, such as data recovery or other appropriate measures, in consultation with the implementing agency and any local Native American representatives expressing interest in prehistoric or tribal resources. If an archaeological site does not qualify as an historical resource but meets the criteria for a unique archaeological resource as defined in PRC Section 21083.2, then the site shall be treated in accordance with the provisions of PRC Section 21083.2.

Should any significant resource and/or tribal cultural resource not be a candidate for avoidance or preservation in place, and the removal of the resource(s) is necessary to mitigate impacts, the research design shall include a comprehensive discussion of sampling strategies, resource processing, analysis, and reporting protocols/obligations. Removal of any cultural resource(s) shall be conducted with the presence of Tribal Monitors representing the consulting tribes, if the consulting tribes elect to have a tribal monitor present. All plans for analysis shall be reviewed and approved by the applicant and the consulting tribes prior to implementation, and all removed material shall be temporarily curated in a secure location on-site. It is the preference of the San Manuel Band of Mission Indians that removed cultural material be reburied as close to the original find location as possible. However, should reburial within or near the original find location during project implementation not be feasible, then a reburial location for future reburial shall be decided upon by the San Manuel Band of Mission Indians, other consulting tribes, and the City, and all finds shall be reburied within this location. Additionally, in this case, reburial shall not occur until all ground-disturbing activities associated with the Project have been completed, all monitoring has ceased, all cataloguing and basic recordation of cultural resources have been completed, and a final monitoring report has been issued to the City, the SCCIC, and to consulting tribes. A reburial of cultural items is subject to a reburial agreement that shall be developed between the landowner (the City) and the consulting tribes, outlining the determined reburial process and location, and shall include measures and provisions to protect the reburial area from any future impacts (vis a vis project plans, conservation/preservation easements, etc.). If avoidance, preservation in place, and on-site reburial are not options, the City shall relinquish all ownership and rights to this material and confer with consulting tribes to identify an American Association of

Museums-accredited facility within the County, as appropriate. All draft records and reports containing the significance and treatment findings and data recovery results shall be prepared by the archaeologist and submitted to the City and the consulting tribes for their review and comment. After review by all parties, the final reports and site/isolate records (as appropriate) are to be submitted to the local SCCIC, the City, and the consulting tribes.

CUL-3: An archaeological and tribal monitor shall be present during ground disturbing activities below 1 foot in depth, as described in the monitoring plan (see CUL-2) and as appropriate. The monitors will observe ground disturbing activities for signs of cultural resources and will have the authority to stop and redirect ground disturbing activities in the event of an inadvertent discovery. The monitors shall follow the protocols set forth in the Monitoring and Inadvertent Discovery Plan.

4.3.7 Level of Significance After Mitigation

As discussed above, Mitigation Measures CUL-1 through CUL-3 would ensure that impacts to cultural resources would be less than significant. Compliance with existing regulations will ensure that any impacts to human remains would be less than significant.

4.3.8 Cumulative Impacts

Cumulative impacts to historic resources consider the impact of the proposed Project in connection with past or related future projects. The CEQA Guidelines define a cumulative impact as two or more individual effects which, when considered together, are considerable, or which compound, or increase other environmental impacts. When analyzing cumulative impacts to cultural resources, and assessment is made of impacts on individual resources as well as the inventory of cultural resources within the cumulative impact analysis area. The cumulative area for cultural resources is the 73-acre undeveloped Central Park area. No structures or buildings of historic age or historic resources were identified within the proposed Project area or within a half mile of the proposed Project. Thus, implementation of the proposed Project would not contribute to cumulative impacts to historic resources and would result in a less than significant impact. If construction ground disturbance depths extend to native soils (approximately 1 foot or more in depth), there would be a potential to impact previously unrecorded subsurface cultural resources or human remains. As discussed above, Mitigation Measures CUL-1 through CUL-3, would ensure that impacts to cultural resources would be less than significant, and compliance with existing regulations will ensure that any impacts to human remains would be less than significant. In addition, cultural resources that are potentially affected by related or future projects would be subject to the same requirements of CEQA and the laws and regulations discussed above in section 4.3.2 Regulatory Setting. Therefore, the proposed Project would have no significant cumulative impacts associated with cultural resources.

4.4 GEOLOGY AND SOILS

This section describes the existing geological setting and potential impacts of the proposed Project on the proposed Project site and the surrounding area. Information in this section is based on a geotechnical investigation report prepared by Kleinfelder West, Inc. (Kleinfelder West 2009) and a paleontological records search conducted at the San Bernardino County Museum (Appendix E), and the Rancho Cucamonga 2010 General Plan Update Draft EIR Geology and Soils Section.

As discussed in Section 5.1.5, the proposed Project will not:

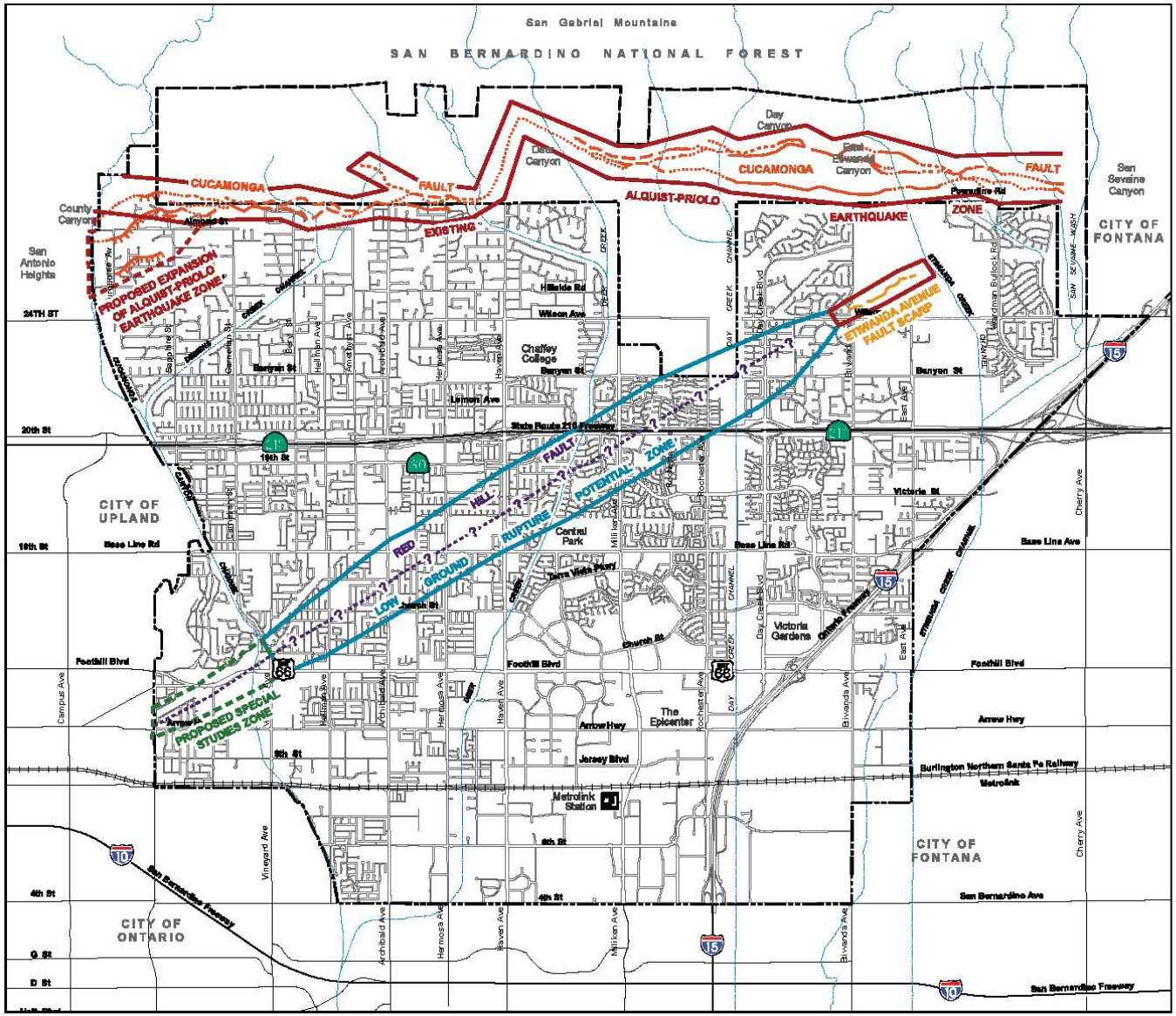
- directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction or landslides;
- result in substantial soil erosion or the loss of topsoil;
- be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or offsite landslides, lateral spreading, subsidence, liquefaction, or collapse;
- be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property;
- or have soils that are incapable of supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

4.4.1 Existing Conditions

Seismicity

The proposed Project site is located south of the San Gabriel Mountains (Transverse Ranges Geomorphic Province of Southern California) at the upper elevations of the Los Angeles Basin (comprised of alluvial sediment). The general area in which the proposed Project site is located is underlain by a series of coalescing alluvial fans derived from the San Gabriel Mountains (Kleinfelder West 2009).

The proposed Project site is not located within an Alquist-Priolo Earthquake Fault Zone and no known active faults traverse the site. The principal seismic hazard that could affect the site is ground shaking resulting from an earthquake occurring along any one of several major active faults in the region. The nearest active fault to the proposed Project site is the Cucamonga fault located approximately 3 miles north of the site. The Red Hill Fault is also located nearby, approximately 2.5 miles southwest of the site, but is not considered to be active by the State of California (Kleinfelder West 2009). An inferred buried/uncertain segment of the Red Hill fault is located approximately 1,000 feet northwest of the proposed Project site, see Figure 4.4-1. The northwest corner of Central Park is located in the Low Ground Rupture Potential Zone for the buried/uncertain segment of the Red Hill Fault. Geotechnical investigations are required for essential and critical facilities along the buried/uncertain segment of the Red Hill Fault, with a setback requirement of at least 50 feet.



City of Rancho Cucamonga
Central Park

Figure 4.4-1
Earthquake Hazard Zones

San Bernardino County, CA

Source: City of Rancho Cucamonga General Plan, Figure PS-2: Fault Hazard

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Paleontological Resources

The City is underlain by a variety of bedrock types: some exposures of gneissic metamorphic rocks; exposures of younger Quaternary alluvium derived as fan deposits from the San Bernardino Mountains with some fluvial deposits in drainages; younger Quaternary alluvium exposed across the entire northeastern portion of the City with some fluvial deposits in the intermittent drainages; and exposures of older fan deposits around Red Hill in the southwestern portion of the City. Shallow excavations within the younger Quaternary alluvium are unlikely to expose significant vertebrate fossils, however, deeper excavations that extend into older Quaternary deposits may encounter significant fossils (BonTerra 2010).

A paleontological record search conducted at the San Bernardino County Museum, included in Appendix E, indicates that no paleontological sites or resources have been recorded within Central Park. However, one San Bernardino County Museum locality was found within 1.5 miles directly east of Central Park (San Bernardino County Museum Locality number 5.1.13). This locality produced fossils representing extinct taxa including Neotoma sp., Neotoma lepida, Thomomys bottae, and Rodentia. Fossils were recovered from a fine grained, well-sorted yellow sand representing older alluvium after a 5-foot down cut (SBCM 2019).

4.4.2 Regulatory Setting

Federal

Earthquake Hazards Reduction Act

The United States Congress passed the Earthquake Hazards Reduction Act in 1977 to reduce the risks to life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards reduction program. To accomplish this goal, the act established the National Earthquake Hazards Reduction Program. This program was substantially amended in November 1990 by the National Earthquake Hazards Reduction Program Act, which refined the description of agency responsibilities, program goals, and objectives.

State

Alquist-Priolo Earthquake Fault Zoning Act

The 1971 San Fernando Earthquake in Southern California resulted in the development of the Alquist-Priolo Special Studies Zones Act of 1972. The Act was renamed in 1994 to the Alquist-Priolo Earthquake Fault Zoning (A-P) Act. The *California Department of Mines and Geology (CDMG) Special Publication 42* includes the provisions of the Act and an index to maps of Earthquake Fault-Rupture Zones (formerly Alquist-Priolo Special Study Zones), as well as current revisions to these two documents.

Earthquake fault-rupture zones have been delineated to prevent the construction of urban development across the trace of active faults. The boundary of the fault zone is approximately 500 feet from major active faults and 200 to 300 feet from well-defined minor faults. The State Geologist defines an active fault as a fault that has previously had surface displacement within the Holocene Period (the last 11,000 years). A potentially active fault is defined as any fault that has had surface displacement during Quaternary time (last 1,600,000 years) but not within the Holocene period.

Land subdivisions and habitable structures consisting of four units or more that are proposed within A-P zones are required to have detailed fault investigations performed so that engineering geologists can mitigate the hazards associated with active faults.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 (PRC, Chapter 7.8, Section 2690–2699.6) directs the State of California Department of Conservation to identify and map areas subject to earthquake hazards (such as liquefaction, earthquake-induced landslides, and amplified ground shaking). Passed by the State legislature after the 1989 Loma Prieta earthquake, the Seismic Hazards Mapping Act was aimed at reducing the threat to public safety and minimizing potential loss of life and property in the event of a damaging earthquake event. A product of the resultant Seismic Hazards Mapping Program, Seismic Zone Hazard Maps identify Zones of Required Investigation, which are those with potential seismic hazards; most developments designed for human occupancy planned within these zones are subject to site specific geotechnical investigations to identify the hazard and to develop appropriate mitigation measures prior to permitting by local jurisdictions.

County

San Bernardino County Development Code

Chapter 82.20 Paleontologic Resources Overlay

Section 82.20.010 Purpose: The Paleontologic Resources Overlay established by Sections 82.01.020 (Land Use Plan and Land Use Zoning Districts) and 82.01.030 (Overlays) is created in recognition of the following:

(a) The identification and preservation of significant paleontologic (fossil) resources is necessary as many such resources are unique and non-renewable.

(b) Preservation of such paleontologic resources provides a greater knowledge of County natural history, thus promoting County identity and conserving scientific amenities for the benefit of future generations.

Section 82.20.020 Location Requirements: The Paleontologic Resources Overlay may be applied to those areas where paleontologic resources are known to occur or are likely to be present.

Detailed criteria for evaluation of paleontological resources and paleontologist qualifications are described in Sections 82.20.030 and 82.20.040 of the San Bernardino County Development Code.

Local

City of Rancho Cucamonga General Plan

The Seismic and Geologic Hazards section of the City's General Plan Public Health and Safety Chapter identifies potential seismic hazards and methods to minimize the destructive effects. The following General Plan policies are applicable to the proposed Project:

Policy PS-5.1: Require geological and geotechnical investigations in areas of potential seismic or geologic hazards as part of the environmental and developmental review process for all structures proposed for human occupancy.

4.4.3 Methodology

The analysis of potential impacts to geologic and soil hazards that would be associated with the Plan included the review of available geotechnical literature, reports, maps, and agency information pertinent to the study area including the geotechnical investigation report prepared by Kleinfelder West, Inc. (Kleinfelder West 2009) and a paleontological records search conducted at the San Bernardino County Museum (Appendix E).

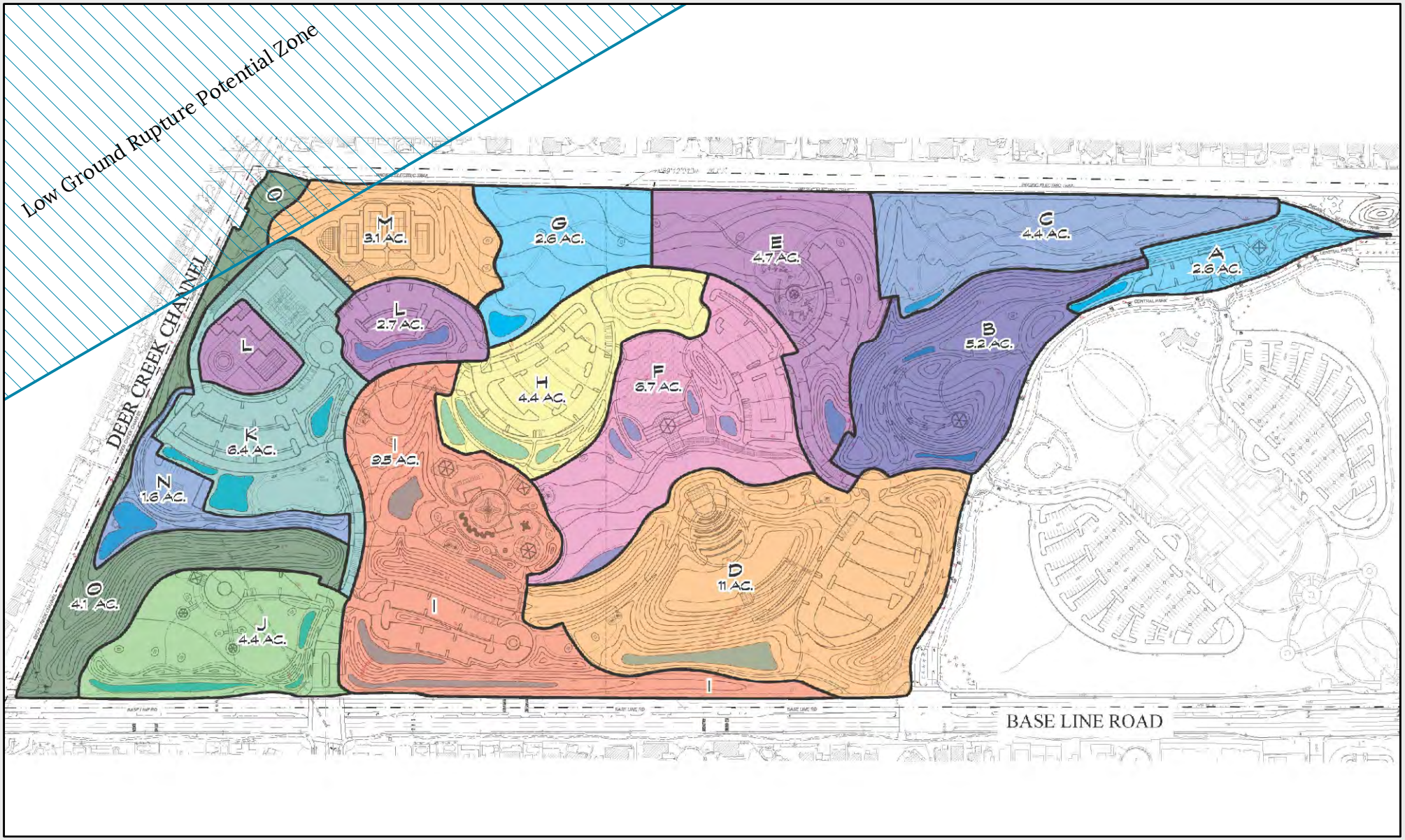
4.4.4 Thresholds of Significance

- *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the state geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42; or strong seismic ground shaking?*
- *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

4.4.5 Impacts Analysis

IMPACT 4.4-1: *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving 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 or strong seismic ground shaking?*

Less Than Significant. The proposed Project is located within the seismically active Southern California region and is likely to experience strong ground shaking from seismic events generated on regionally active faults. The proposed Project site is not located within an Alquist-Priolo Earthquake Fault Zone. The northwest corner of Central Park is located in the Low Ground Rupture Potential Zone for the buried/uncertain segment of the Red Hill Fault, see Figure 4.4-2. As shown, small portions of Elements M and O will be located in this zone. The Element M tennis court facility will be located outside of the zone. The portion of Element O located in the zone will only include a trail. Geotechnical investigations are required for essential and critical facilities along the buried/uncertain segment of the Red Hill Fault, with a setback requirement of at least 50 feet. The proposed Project site is located approximately 1,000 feet from the buried/uncertain segment of the Red Hill Fault. Essential and critical facilities are considered to be fire stations, hospitals, emergency operations centers, schools, shelters, communication centers, and other facilities that are needed during an emergency. The proposed Project does not contain any essential and critical facilities.



City of Rancho Cucamonga
Central Park

Figure 4.4-2
Low Ground Rupture
Potential Zone

San Bernardino County, CA

A. PACIFIC ELECTRIC TRAILHEAD
B. TERRACED GARDENS
C. WATER CONSERVATION/ DEMONSTRATION GARDEN
D. AMPHITHEATER
E. UNIVERSAL ACCESSIBLE PLAYGROUND
F. VITICULTURE PAVILION
G. UPPER PICNIC AREA AND EVENT AREA
H. EVENT PARKING AREA
I. ADVENTURE AREA PARKING AND EVENT/PICNIC AREA
J. DOG PARK
K. MULTI-PURPOSE FACILITY AND PARKING
L. RECREATION POOL
M. TENNIS COURTS
N. MAINTENANCE YARD
O. DEER CREEK CHANNEL TRAIL

NOTES:
1. Order does not represent actual sequence of areas for improvement.
2. Sub-phasing of improvements may occur within each identified element.

Source: RJM Design Group, Central Park Master Plan Update. January 29, 2018
Fault overlay: City of Rancho Cucamonga General Plan, Figure PS-2: Fault Hazard

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However, in addition to design-level geotechnical recommendations that will be prepared for the proposed Project, design and construction of the proposed Project will comply with seismic safety requirements of the City's General Plan and the California Building Code. Compliance with these requirements would ensure that potential hazards from earthquake fault rupture or strong seismic shaking would be less than significant.

IMPACT 4.4-2: *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Less Than Significant with Mitigation Incorporated. As discussed above, a record search indicates that no paleontological sites or resources have been recorded within Central Park. While paleontological resources have not been observed on the proposed Project site, ground-disturbing activities planned for the proposed Project site such as grading, and excavation could unearth undocumented paleontological resources or unique geologic features by disturbing native soils that may contain such resources. Therefore, since the proposed Project could potentially cause a substantial adverse change in significance to a paleontological resource, the incorporation of Mitigation Measure GEO-1 (see Section 4.4.6) would reduce the potential impact on paleontological resources to less than significant.

4.4.6 Mitigation Measures

Mitigation Measures: GEO-1: *Inadvertent Discoveries of Paleontological Resources* — If the construction staff or others observe previously unidentified paleontological resources during ground disturbing activities, they will halt work within a 200-foot radius of the find(s), delineate the area of the find with flagging tape or rope (may also include dirt spoils from the find area), and immediately notify a qualified Paleontologist. Construction will halt within the flagged or roped-off area. The Paleontologist will assess the resource as soon as possible and determine appropriate next steps in coordination with the City. Such finds will be formally recorded and evaluated. The resource will be protected from further disturbance or looting pending evaluation.

In the event of such discovery, the qualified paleontologist shall prepare a report of findings, in a timely manner, which provides specific recommendations regarding further mitigation measures (e.g., paleontological monitoring) that may be appropriate. Where mitigation monitoring is indicated, the program must include, but not be limited to, the following measures:

- A paleontological monitor trained and equipped to allow the rapid removal of fossils with minimal construction delay, will be assigned to the site full-time during the interval of earth-disturbing activities.
- If fossils are found within an area being cleared or graded, earth-disturbing activities will be diverted elsewhere until the monitor has completed salvage. If construction personnel make the discovery, the grading contractor should immediately divert construction and notify the monitor of the find.
- All recovered fossils will be prepared, identified, and curated as part of documentation in a summary report. All fossils and associated reporting will be transferred to an appropriate depository (i.e., San Bernardino County Museum).
- A copy of the summary report will be sent to the City of Rancho Cucamonga.

4.4.7 Level of Significance After Mitigation

Project impacts associated with a known fault or strong seismic ground shaking or impacts are less than significant, and no mitigation measures are required.

Implementation of mitigation measures **GEO-1** would ensure that proposed Project impacts to paleontological resources remain less than significant.

4.4.8 Cumulative Impacts

Impacts associated with geology are generally site specific and cannot be accurately assessed on a cumulative basis, in part because it is not definitively known if a paleontological resource is present until ground-disturbing activities commence. Paleontological resources that are impacted through implementation of multiple projects could result in a loss of multiple resources representing a similar period or species, leading to a loss of information which could contribute to cumulative impacts to paleontological resources. Implementation of the proposed mitigation measures would reduce impacts to project-specific paleontological resources, thereby reducing the likelihood of a significant cumulative impact to paleontological resources.

4.5 GREENHOUSE GAS EMISSIONS

This section describes the proposed project's potential to affect GHG emissions. Climate change refers to any significant change in measures of climate, such as average temperature, precipitation, or wind patterns over a period of time. Climate change may result from natural factors, natural processes, and human activities that change the composition of the atmosphere and alter the surface and features of the land. Global climate patterns have recently been associated with global warming, an average increase in the temperature of the atmosphere near the Earth's surface, attributed to accumulation of GHG emissions in the atmosphere. GHGs trap heat in the atmosphere, which, in turn, heats the surface of the Earth. Some GHGs occur naturally and are emitted to the atmosphere through natural processes, while others are created and emitted solely through human activities.

4.5.1 Existing Conditions

Based on the 2019 Edition of the GHG Emission Inventory for 2000 to 2017 prepared by the CARB, California emitted 424 million metric tons of carbon dioxide (CO_2) equivalent in 2017 (CARB 2019b). According to CARB, the potential impacts in California due to global climate change may include loss in snow pack; sea level rise; more extreme heat days per year; more high ozone days; more large forest fires; more drought years; increased erosion of California's coastlines; sea water intrusion into deltas and associated levee systems; and increased pest infestation. As discussed in Section 4.1, various measures have been implemented by the federal and state governments to reduce GHG emissions in an effort to mitigate the effects of climate change resulting from anthropogenic activity.

4.5.2 Regulatory Setting

Federal

The USEPA is the agency responsible for writing and implementing federal regulations for the protection of the environment, including regulations for GHG emissions. To this end, the USEPA pursues a number of efforts including collection of data, emissions reductions by increasing production of clean energy, and partnering with states, localities, and tribes. The USEPA delegates its authority to ten regional offices in the United States each of which is responsible for the execution of USEPA programs. California is within the jurisdiction of Region 9.

The USEPA has instituted various measures to reduce GHGs. One of these is codified under 40 CFR, Part 98, and requires mandatory reporting of GHG emissions (i.e., CO_2, methane [CH_4], N_2O, sulfur hexafluoride (SF_6), hydrofluorocarbons, and other fluorinated gases) for certain industrial operations. These industrial operations include electrical energy generation, oil refining, and manufacturing. Mandatory reporting is also required for combustion sources, such as boilers and stationary engines, which emit more than 25,000 metric tons of carbon dioxide-equivalents ($MTCO_2e$) per year.

State

California has addressed GHG emission reductions through SB 32, AB 197, AB 32, Executive Order B-16-2012, AB 32, Executive Order S-3-05, and CCR sections 95100–95157.

On September 8, 2016, Governor Edmund G. Brown signed SB 32 and AB 197, which require the state of California to cut emissions by 30 percent below 1990 levels by 2030.

In March 2012 Executive Order B-16-2012 was issued to support the reduction of GHGs by promoting the use of zero-emission vehicles. California's goal was by the year 2050 to reduce transportation sector GHG emissions by 80 percent of 1990 levels.

On September 27, 2006, Governor Arnold Schwarzenegger signed into law AB 32, California Global Warming Solutions Act of 2006, which requires the CARB to develop and implement regulations and initiatives to reduce GHG emissions to 1990 levels, or lower, by 2020. The CARB established the 1990 target at 427 million metric tons of carbon dioxide equivalent. Pursuant to AB 32, the CARB has also adopted a number of regulations that are outlined in the initial Scoping Plan, which the CARB adopted in 2008 to prescribe actions aimed at reducing California's GHG emissions. Under AB 32, the CARB has primary responsibility for promulgating regulations, programs, and enforcement mechanisms to achieve the GHG reduction target. AB 32 requires the CARB to:

1. Establish a program geared toward tracking and reporting GHG emissions;
2. Approve a scoping plan for achieving the maximum technologically feasible and cost-effective reductions from sources of GHG emissions;
3. Adopt early reduction measures to begin moving forward; and
4. Adopt, implement, and enforce regulations—including market mechanisms such as "cap-and-trade" programs—to ensure the required reductions occur.

The CARB recently adopted a statewide GHG emissions limit and an emissions inventory, along with requirements to measure, track, and report GHG emissions by the industries it determined to be significant sources of GHG emissions.

AB 32 requires the CARB to update the Scoping Plan every five years. The most recent Scoping Plan update is reflected by the 2017 Scoping Plan Update. The 2017 Scoping Plan Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The 2017 Scoping Plan is guided by the 2030 target of 40 percent emissions reduction below 1990 levels established through Executive Order B-30-15.

On December 2007, California adopted regulations for the mandatory reporting of GHG emissions (mandatory reporting regulation) under CCR sections 95100–95157 to comply with requirements promulgated by the USEPA in 40 CFR, Part 98. The mandatory reporting regulation sets emissions reporting thresholds of 10,000 $MTCO_2e$. Therefore, any project or facility with the potential to emit equal to or greater than 10,000 $MTCO_2e$ from combustion and process emissions would be subject to the mandatory reporting regulation requirements.

Regulated GHGs under California Health and Safety Code 38505 include CO_2, CH_4, nitrous oxide (N_2O), hydrofluorocarbons, perfluorocarbons, SF_6, and nitrogen trifluoride (NF_3). GHGs are commonly quantified in the equivalent mass of CO_2, denoted CO_2e, which addresses the global warming potential of each individual GHG compound. The most common GHG that results from human activity is CO_2, followed by CH_4 and N_2O.

The following narratives provide a brief summary of GHGs.

- Carbon dioxide enters the atmosphere through burning fossil fuels (coal, natural gas, and oil), solid waste, trees and wood products, and also as a result of certain chemical reactions (e.g., manufacture of cement). Carbon dioxide is removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle.
- Methane is emitted during the production and transportation of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and by the decay of organic waste in municipal solid waste landfills.
- Nitrous oxide is emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste.
- Hydrofluorocarbons, perfluorocarbons, SF6 and nitrogen trifluoride are synthetic, powerful GHGs that are emitted from a variety of industrial processes. Hydrofluorocarbons and perfluorocarbons are sometimes used as substitutes for stratospheric ozone-depleting substances (e.g., chlorofluorocarbons, hydrochlorofluorocarbons, and halons). These gases are typically emitted in smaller quantities, but because they are potent GHGs, they are sometimes referred to as High Global Warming Potential gases. SF6 is employed in electricity transmission and distribution and semiconductor manufacturing. Nitrogen trifluoride results from semiconductor manufacturing processes (CARB 2018).

Regional

SCAG is the regional planning agency for ensuring implementation of SB 375. SB 375, or the Sustainable Communities and Climate Protection Act of 2008, supports the State's climate action goals to reduce GHG emissions through coordinated transportation and land use planning with the goal of more sustainable communities. Under the Sustainable Communities Act, the Air Resources Board sets regional targets for GHG emissions reductions from passenger vehicle use.

Local

Rancho Cucamonga Sustainable Community Action Plan

On April 2017, the City adopted the Rancho Cucamonga Sustainable Community Action Plan. The Plan identifies steps that Rancho Cucamonga can take to contribute towards a GHG reduction target in order to align with the State's long-term GHG reduction goals. The City would need to reduce emissions equivalent to the following levels:

- To 1990 levels by 2020 (equivalent to 15 percent below 2008 baseline levels), consistent with AB 32
- To 40 percent below 1990 levels by 2030 (equivalent to 49 percent below 2008 baseline levels), consistent with Executive Order B-30-15 and SB 32
- To 80 percent below 1990 levels by 2050 (equivalent to 83 percent below 2008 baseline levels), consistent with Executive Order S-2-05

4.5.3 Methodology

On December 5, 2008, the SCAQMD Governing Board adopted a proposal for an interim GHG threshold of significance for projects where the SCAQMD is the lead agency. The threshold of

significance is applicable for stationary sources and can be used for determining significant impacts for proposed projects (SCAQMD 2008). Under the interim thresholds of significance, projects can emit up to 10,000 $MTCO_2e$ per year before being deemed as having significant impacts. GHGs resulting from the proposed project were calculated using CalEEMod and compared to the SCAQMD threshold of 10,000 $MTCO_2e$ per year.

There are three types of GHG from fuel combustion, including CO_2, CH_4 and N_2O. GHG emissions are presented as carbon dioxide equivalents (CO_2e). CO_2e is computed based on global warming equivalence. The CH_4 global warming equivalence is 25 times that of CO_2, and the N_2O global warming equivalence is 298 times that of CO_2.

Mathematically, the CO_2e can be represented by the following equation:

$$CO_2e \text{ Emissions} = CO_2 \text{ Emissions} + 25 \times CH_4 \text{ Emissions} + 298 \times N_2O \text{ Emissions}$$

The CalEEMod model provides a CO_2 profile only and does not quantify CO_2e, CH_4 and N_2O emissions. The analysis assumed that the CO_2 emissions are CO_2e. For typical diesel-fueled combustion equipment used in construction activities, the emissions factors adjusted with global warming equivalence are the following:

1. CO_2 emission factors are 22.4 pounds of CO_2e per gallon consumed;
2. CH_4 emission factors are 0.065 pounds of CO_2e per gallon consumed; and
3. N_2O emission factors are 0.068 pounds of CO_2e per gallon consumed.

As shown in these emission factors, the CO_2 profile is 99 percent of the total GHG emissions generated in combustion equipment. Therefore, the CO_2 emissions were assumed to be equivalent to the CO_2e emissions levels.

The CalEEMod model was used to estimate GHG emissions during the construction and operation of the proposed project. Based on the construction schedule, types and quantities of construction equipment, and haul trucks, etc., the maximum CO_2e emissions were estimated. The GHG emissions for each construction year are compared with SCAQMD's GHG screening threshold and summarized in Table 4.5-1.

Table 4.5-1. Construction and Operational Emissions – GHG[a]

	CO_2e (tpy)
Worst-Case Element (9.5 acres)	
Construction	778
Operation	1,319
Construction Amortized over 30 years, plus Operational	1,345
SCAQMD GHG Screening Threshold (tons/year)	**10,000**
Exceeds Screening Threshold?	*No*
Full Development (61 acres)	
Construction	5,068
Operation	8,595
Construction Amortized over 30 years, plus Operational	8,764

	CO_2e (tpy)
Worst-Case Element (9.5 acres)	
SCAQMD GHG Screening Threshold (tons/year)	**10,000**
Exceeds Screening Threshold?	*No*

a. Compiled using the CalEEMod emissions inventory model, provided in the Appendix B.

4.5.4 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the CEQA Guidelines. The proposed Project would have a significant impact to GHG emissions if it would result in any of the following:

- *Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*
- *Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

4.5.5 Impacts Analysis

IMPACT 4.5-1: *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 CalEEMod model was used to estimate GHG emissions during construction and operation of the proposed project. Construction emissions are based on the construction schedule, types and quantities of construction equipment, and on-road vehicles (i.e. workers, vendors and hauling). Operational emissions are estimated for on-road vehicles (i.e. workers, visitors, and deliveries), off-road equipment used for maintenance activities (e.g. landscaping), and solvents such as cleaning supplies and aerosols. The electricity used for lighting and power would be generated off-site and emissions associated with these activities would also be in the form of GHGs. In order to assess annual GHG emissions from the entire development, construction and operational CO_2e emissions resulting from the 9.5-acre worst-case scenario were scaled up based on the total acreage of the development (61 acres) and compared to the SCAQMD GHG screening thresholds. The annualized CO_2e emissions were compared with SCAQMD's GHG screening threshold and summarized in Table 4.5-1.

As indicated in Table 4.5-1, annualized CO_2e emissions for each Element as well as the entire development will not exceed the SCAQMD GHG screening threshold. The project's construction- and operation-related GHG emissions cumulatively are not a considerable contribution to climate change and, therefore, are less than significant.

Due to the complex physical, chemical and atmospheric mechanisms involved in global climate change, there is no basis for concluding that the project's theoretically small emissions increase could cause a measurable increase in global GHG emissions necessary to influence global climate change. The GHG emissions of the project alone will likely not cause a direct physical change in the environment. It is global emissions in their aggregate that contribute to climate change, not any one source of emissions alone. Therefore, due to the limited incremental amount of GHG emissions estimated for this project, and the lack of any evidence for concluding that the project's GHG emissions could cause any measurable increase in global GHG emissions necessary to force global climate change, the project is not considered to be hindering the goals

of AB32. Thus, because the project would result in total GHG emissions less than the SCAQMD 10,000 $MTCO_2e$ annual threshold, it is not considered to have a significant impact on a cumulative level.

IMPACT 4.5-2: *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. As noted above, GHG emissions generated by the proposed project would not exceed the SCAQMD threshold of 10,000 $MTCO_2e$. Neither construction nor operation of the proposed project is expected to conflict with any applicable plan, policy or regulation of any agency adopted for the purpose of reducing the emissions of GHGs. Therefore, project impacts are considered less than significant.

4.5.6 Mitigation Measures

No Mitigation Measures are required.

4.5.7 Level of Significance After Mitigation

No Mitigation Measures are required, project impact would be less than significant.

4.5.8 Cumulative Impacts

The proposed project would contribute GHGs to those emitted locally and globally. However, the GHG emissions from the proposed project would not exceed the SCAQMD interim threshold of 10,000 $MTCO_2e$ per year and therefore cumulative project impacts are considered less than significant. Additionally, the Amphitheater was assessed under separate cover and was estimated to emit 332 tonnes per year CO_2e. When added to the GHG emissions for the proposed site, cumulative CO_2e emissions are still less than significant.

4.6 HAZARDS AND HAZARDOUS MATERIALS

This section describes the existing hazards and hazardous materials setting and potential impacts of the proposed Project on the proposed Project site and the surrounding area.

As discussed in Section 5.1.6, the proposed Project will not:

- be located on a site that is included on a list of hazardous material 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;
- be located within an airport land use plan or, where such a plan has not been adopted, within 2 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;
- impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan;
- expose people or structures, either directly or indirectly, to the risk of loss, injury, or death involving wildland fires.

4.6.1 Existing Conditions

The proposed Project site is currently undeveloped. Agricultural activities took place on the proposed Project site (mostly grape vineyards) from 1938 to at least the 1960s (see Section 4.3 Cultural Resources). Uses surrounding the proposed Project site include existing Central Park facilities, residential uses, Deer Creek Flood Control Channel, and commercial uses. The existing Central Park facilities are located on the eastern third of the Central Park site. The majority of the surrounding uses are single family residential uses found all around the Central Park boundaries. Deer Creek Flood Control Channel is located on the western boundary of the Central Park site. Commercial uses are located at the southeast and southwest corners of Milliken Avenue and Base Line Road and at the northeast corner of Haven Avenue and Base Line Road. Victoria Groves Elementary School is located approximately 0.23 mile to the north of the proposed Project site.

The proposed Project site is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (DTSC 2019; CWRCB 2019; BonTerra 2010).

4.6.2 Regulatory Setting

Federal

Comprehensive Environmental Response, Compensation, and Liability Act

Comprehensive Environmental Response, Compensation, and Liability Act (42 United States Code section 9601 *et seq.* 1980), otherwise known as the Superfund law, was enacted in 1980 by Congress, creating a federal authority responsible for responding to releases or threatened releases of hazardous materials that can become a threat to public health or the environment. Comprehensive Environmental Response, Compensation, and Liability Act also provides the legal framework for dealing directly with abandoned properties containing hazardous waste and

liability of potential responsible parties for the release of hazardous waste. It established a fund for cleanup costs when no responsible party is identified.

Emergency Planning and Community Right-to-Know Act

The Emergency Planning and Community Right-to-Know Act of 1986 (42 United States Code Section 11001 *et seq.*) commonly known as Title III of the Superfund Amendments and Reauthorization Act, was enacted by Congress as national legislation on community safety. This law was designated to help local communities protect public health, safety, and the environment from chemical hazards. The primary purpose of Emergency Planning and Community Right-to-Know Act is to inform communities and citizens of chemical hazards in their areas by requiring businesses to report the locations and quantities of chemicals stored on-site to state and local agencies. This law requires businesses to report on emissions of certain toxic chemicals, and that information is placed into the Toxics Release Inventory, a publicly accessible data bank. The law also requires certain businesses to report releases of extremely hazardous chemicals to State and local authorities, and to disclose the quantities and types of toxic chemicals stored on-site.

Resources Conservation and Recovery Act

Resources Conservation and Recovery Act (RCRA) is a federal law that provides authority over the disposal of solid and hazardous waste including “cradle to grave” requirements. RCRA’s cradle to grave authority includes managing every step of a particular waste stream including the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also provides the legal framework for the management of nonhazardous waste.

Toxic Substances Control Act

The Toxic Substance Control Act of 1976 (15 United States Code section 2601) gives the USEPA the ability to track the 75,000 industrial chemicals currently produced or imported into the United States. The USEPA repeatedly screens these chemicals and requires reporting or testing of those that may pose an environmental or human health hazard. The USEPA also has the ability to ban the manufacture and import of chemicals that pose an unreasonable risk. The USEPA tracks thousands of new chemicals that are developed each year with either unknown or dangerous characteristics. They then control these chemicals, as necessary, to protect human health and the environment.

Hazardous Materials Transportation Act

The United States Department of Transportation, in conjunction with the USEPA, is responsible for enforcement and implementation of federal laws and regulations pertaining to safe storage and transportation of hazardous materials. The CFR Title 49, Sections 171–180, regulates the transportation of hazardous materials, types of material defined as hazardous, and the marking of vehicles transporting hazardous materials.

State

Within the California Environmental Protection Agency, the Department of Toxic Substance Control (DTSC) is the responsible governing agency that regulates the permitting for the generation, handling, treatment, and disposal of hazardous waste in the State of California. The DTSC and the State Water Resources Control Board (per the Porter-Cologne Water Quality

Control Act of 1969) regulate the cleanup activities of hazardous waste sites in California that have caused contamination in soil and groundwater.

California Occupational Safety and Health Administration

Federal and state occupational safety and health laws contain requirements regarding the handling of hazardous waste concerning worker safety, training, and right-to-know. Authority to enforce federal Occupational Safety and Health Administration (OSHA) requirements has been delegated to California OSHA, which has developed provisions that are at least as stringent as those enforced at the federal level. California OSHA regulates and enforces occupational and public safety laws protecting the public and workers from any safety hazards.

Hazardous Waste Control Act

The California Hazardous Waste Control Act, as found in the California Health and Safety Code, Division 20, Chapter 6.5, Article 2, Section 25100, *et seq.*, authorizes the California State DTSC and local Certified Unified Program Agencies to regulate facilities that generate or treat hazardous waste. The Certified Unified Program Agency for the City of Rancho Cucamonga is the San Bernardino County Fire Department. The California Hazardous Waste Control Act is the State equivalent of RCRA and regulates the generation, treatment, storage, and disposal of hazardous waste.

California Hazardous Materials Release Response Plans and Inventory Law of 1985

The California Hazardous Materials Release Response Plans and Inventory Law of 1985 (Business Plan Act) requires preparation of hazardous materials business plans and disclosure of hazardous materials inventories, including an inventory of hazardous materials handled, plans showing where hazardous materials are stored, an emergency response plan, and provisions for employee training in safety and emergency response procedures (HSC, Division 20, Chapter 6.95, Article 1).

Statewide, DTSC has primary regulatory responsibility for management of hazardous materials, with delegation of authority to local jurisdictions that enter into agreements with the state. Local agencies are responsible for administering these regulations. Several state agencies regulate the transportation and use of hazardous materials to minimize potential risks to public health and safety, including California Environmental Protection Agency and California Office of Emergency Services. The California Highway Patrol and Caltrans enforce regulations specifically related to the transport of hazardous materials. Together, these agencies determine container types used and license hazardous waste haulers for hazardous waste transportation on public roadways.

Local

Rancho Cucamonga General Plan

The Public Health and Safety Element of the Rancho Cucamonga General Plan provides a proactive approach to public health and safety Planning. The Rancho Cucamonga Fire Protection District coordinates hazardous materials and emergency preparedness planning and appropriate response efforts with other City departments and outside agencies. Rancho Cucamonga participates in a county-wide interagency coalition to better utilize the expertise and equipment that exists within all participating fire agencies.

Local Hazard Mitigation Plan

The City maintains a Local Hazard Mitigation Plan which assess the significant natural and manmade hazards that may affect the City and provides direction and guidance for officials and citizens in the event of emergency (City of Rancho Cucamonga 2013).

4.6.3 Methodology

To evaluate potential impacts, existing and proposed on-site hazards were identified and compared against the established safety standards and regulations to determine if the proposed Project would result in impacts related to hazardous materials. The analysis of the potential impacts regarding hazardous materials management was based on review of appropriate hazardous material databases and lists, and review of the Public Health and Safety Element of the Rancho Cucamonga General Plan.

4.6.4 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the CEQA Guidelines. The proposed Project would have a significant impact to hazards and hazardous materials if it would result in any of the following:

- *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*
- *Would the project create a significant hazard to the public or the environment through the reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?*
- *Would the project emit hazardous emissions or handle hazardous materials or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

4.6.5 Impacts Analysis

IMPACT 4.6-1: *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. Hazardous materials in the City are routinely used, stored, and transported in government facilities as well as in educational facilities, commercial/retail businesses, hospitals, and households. A hazardous material is defined as any material that due to its quantity, concentration, physical or chemical characteristics, poses a significant presence or potential hazard to human health or to the environment if released. Hazardous materials include, but are not limited to, inorganic and organic chemicals, solvents, mercury, lead, asbestos, paints, cleansers, or pesticides.

Construction and operation of the proposed Project would involve the transport, storage, use and/or disposal of limited quantities of hazardous materials, such as fuels, solvents, degreasers and paints. The use of these materials during Project construction would be short-term and would occur in accordance with standard construction practices, as well as with applicable federal, state, and local regulations. Potentially hazardous materials would be contained, stored, and used in accordance with manufacturers' instructions and handled in compliance with applicable standards

and regulations. Examples of such activities include fueling and servicing construction equipment and applying paints and other coatings. Proposed Project construction would be temporary, and on-site activities would be governed by existing regulations of several agencies. Construction activities would comply with the relevant sections of the RCRA; Comprehensive Environmental Response, Compensation, and Liability Act; California Hazardous Waste Control Law; and with requirements of OSHA; and the Sherriff's Department.

Operation of the proposed Project would involve storage and use of commercially available janitorial and landscaping supplies. The use of these materials would be stored, handled, and disposed of in accordance with applicable regulations. These uses would not involve the routine transport, use, or disposal of quantities of hazardous materials that may create a significant hazard to the public or environment.

These regulations would be implemented by the proposed Project and its operators, as appropriate, and would be monitored by the state (e.g., California OSHA in the workplace or DTSC for hazardous waste), and/or local jurisdictions (e.g., the City and the Rancho Cucamonga Fire District [RCFD]), as appropriate. The level of risk associated with the accidental release of these hazardous substances is not considered significant due to the small volume and low concentration of hazardous materials utilized during construction and operation. Because substantial regulation and documentation exists to address hazardous materials, potential effects due to use or transport of hazardous materials would be less than significant.

IMPACT 4.6-2: *Would the project create a significant hazard to the public or the environment through the reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?*

Less than Significant Impact with Mitigation Incorporated. During construction, there is a potential for accidental release of hazardous substances such as petroleum-based fuels or hydraulic fluid used by construction equipment. The level of risk associated with the accidental release of these hazardous substances is not considered significant due to the small volume and low concentration of hazardous materials utilized during construction. The construction contractor would be required to use standard construction controls and safety procedures that would avoid and minimize the potential for accidental release of such substances into the environment. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, state, and federal law. All chemical and fuel storage and usage would comply with existing federal, state, and local requirements (including chemical hygiene requirements administered by the California OSHA).

The proposed Project site is currently undeveloped. Agricultural activities took place on the proposed Project site (mostly grape vineyards) from 1938 to at least the 1960s. As discussed previously, the proposed Project site is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (DTSC 2019; CWRCB 2019; BonTerra 2010). With the exception of the agricultural activities (discussed below), it is unlikely that there is any other environmental contamination on the Project site.

If any hazardous materials are encountered during development of the Project site, remediation and cleanup under the supervision of the State DTSC, or other regulatory agency (as deemed appropriate), would be required. In order to address the potential for encountering contamination

within the proposed Project site, Mitigation Measures HAZ-1 and HAZ-2 are proposed that would minimize the potential risk. Consequently, the potential impacts would be reduced to less than significant.

Agricultural activities took place on the proposed Project site (mostly grape vineyards) from 1938 to at least the 1960s. Since the proposed Project site was previously used for agriculture, there is the potential for presence of pesticide residue, such as arsenic compounds, organochlorine pesticides, chlorinated herbicides or organophosphate pesticides. Implementation of Mitigation Measures HAZ-1 and HAZ-2 will reduce any potential impact associated with pesticide residue to less than significant.

IMPACT 4.6-3: *Would the project emit hazardous emissions or handle hazardous materials or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

Less than Significant Impact. Victoria Groves Elementary School is located approximately 0.23 mile to the north of the proposed Project site. There is a potential for release of hazardous emissions or handling of hazardous materials and substances during the short-term construction activities during the development of the Project elements. However, because substantial federal, state and local regulations addressing the transport, use, storage and disposal of hazardous materials are in place, the potential for impacts and risks from hazardous emissions, including to schools, would be less than significant. Compliance with applicable hazardous materials regulations would reduce the likelihood of unsafe release of hazardous emissions to less than significant levels.

4.6.6 Mitigation Measures

HAZ-1: Site Assessment. Before issuance of a grading permit for the proposed Project the following will take place:

- Investigation of the Project site to determine whether it or immediately adjacent areas have a record of hazardous material contamination via the preparation of a Phase I Environmental Site Assessment. If contamination is found to be likely, the City shall require a Phase II Environmental Investigation be conducted to characterize the nature and extent of contamination present at the site before development activities can proceed. Even if the Phase I Environmental Site Assessment does not identify other contamination, a Phase II Environmental Investigation will be conducted to at least check for pesticide residue.
- A Phase II Environmental Investigation will be conducted to check for pesticide residue. If the Phase I Environmental Site Assessment determines there is a potential for any other contamination, the Phase II Environmental Investigation must characterize the site according to the nature and extent of contamination that is present before development activities precede at that site.
- If the Phase II Environmental Investigation determines that contamination is present on-site, the City, in accordance with appropriate agency requirements, shall require remediation of the soil and/groundwater contamination on the site.
- If remediation is determined to be required, it must be accomplished in a manner that reduces risk to below applicable standards and must be completed prior to issuance of

any occupancy permits. Soil remediation methods that could be employed include, but are not limited to, one or more of the following: excavation and on-site treatment, such as above ground bioremediation, soil washing, soil stabilization, soil vapor extraction, or high-temperature soil thermal desorption. Groundwater remediation methods that could be employed include, but are not limited to, pumping water to surface, treating, and returning to aquifer; treating groundwater in place by injecting oxidizing agents; and placing membrane in aquifer and using natural flows to trap contaminants.

- Closure reports or other reports acceptable to the City of Rancho Cucamonga Fire Protection District that document the successful completion of required remediation activities, if any, for contaminated media, must be submitted and approved by the City prior to the issuance of grading permits for site development.

HAZ-2: Newly Identified Contamination. If previously unknown or unidentified soil and/or groundwater contamination that could present a threat to human health or the environment is encountered during construction within the Project site, construction activities in the immediate vicinity of the contamination must cease immediately. If contamination is encountered, a Risk Management Plan must be prepared and implemented that (1) identifies the contaminants of concern and the potential risk each contaminant would pose to human health and the environment during construction and post-development, and (2) describes measures to be taken to protect workers, and the public from exposure to potential site hazards. Such measures must provide a range of options, including, but not limited to, physical site controls during construction, remediation, long-term monitoring, post-development maintenance or access limitations, or some combination thereof. Examples of soil remediation methods that may be employed include, but are not limited to, one or more of the following: excavation and on-site treatment, such as above ground bioremediation, soil washing, soil stabilization, soil vapor extraction, or high-temperature soil thermal desorption. Example groundwater remediation methods that may be employed include, but are not limited to, pumping water to surface, treating, and returning to aquifer; treating groundwater in place by injecting oxidizing agents; and placing membrane in aquifer and using natural flows to trap contaminants. Depending on the nature of contamination, if any, appropriate agencies must be notified (e.g., Rancho Cucamonga Fire Protection District and San Bernardino County Environmental Health Division). If needed, a Site Health and Safety Plan that meets OSHA requirements must be prepared and in place prior to commencement of work in any contaminated area.

4.6.7 Cumulative Impacts

Existing on-site conditions related to hazardous materials are localized and site-specific. Potential impacts are not expected to combine with similar impacts of past, present, or reasonably foreseeable projects. As described above, with implementation of Mitigation Measure HAZ-1, no significant impacts associated with hazardous materials are expected with the proposed Project. Only the Central Park Amphitheater Project is within the immediate vicinity of the proposed Project site and would have the potential to combine with the proposed Project to create a cumulative hazardous materials impact. With implementation of appropriate rules, regulations and project Best Management Practices, no significant impacts associated with hazardous materials are expected with the Central Park Amphitheater Project, therefore, no significant cumulative hazardous materials impacts are expected.

4.7 NOISE

4.7.1 Existing Conditions

The existing noise environment consists of vehicle noise from local street traffic on Base Line Road and Milliken Avenue, nature sounds, and community sounds. The majority of the land uses surrounding Central Park are single family residential uses found all around the Central Park boundaries. Deer Creek Flood Control Channel is located on the western boundary of the Central Park site. Commercial uses are located at the southeast and southwest corners of Milliken Avenue and Base Line Road and at the northeast corner of Haven Avenue and Base Line Road. The nearest airport is Ontario International Airport located approximately 4 miles to the southwest. The proposed Project site is not within the Airport Influence Area or the Safety Zone for Ontario International Airport (Ontario Airport Planning 2011).

In order to obtain typical ambient noise levels at the proposed Project site, two short term ambient noise measurements of 30 minutes each were taken during the daytime period within the proposed Project boundary, see Figure 4.7-1. The measurements were taken with a Larson Davis 831 sound level meter using a Type 1 microphone. The sound level meter was calibrated before and after each field measurement. The measured ambient noise levels ranged from 46 dBA L_{eq} to 61 dBA L_{eq}. The Rancho Cucamonga 2010 General Plan shows the levels at the proposed Project site ranging from 70 dBA CNEL to under 55 dBA CNEL (2010 General Plan Figure PS-9 [Rancho Cucamonga 2010]).

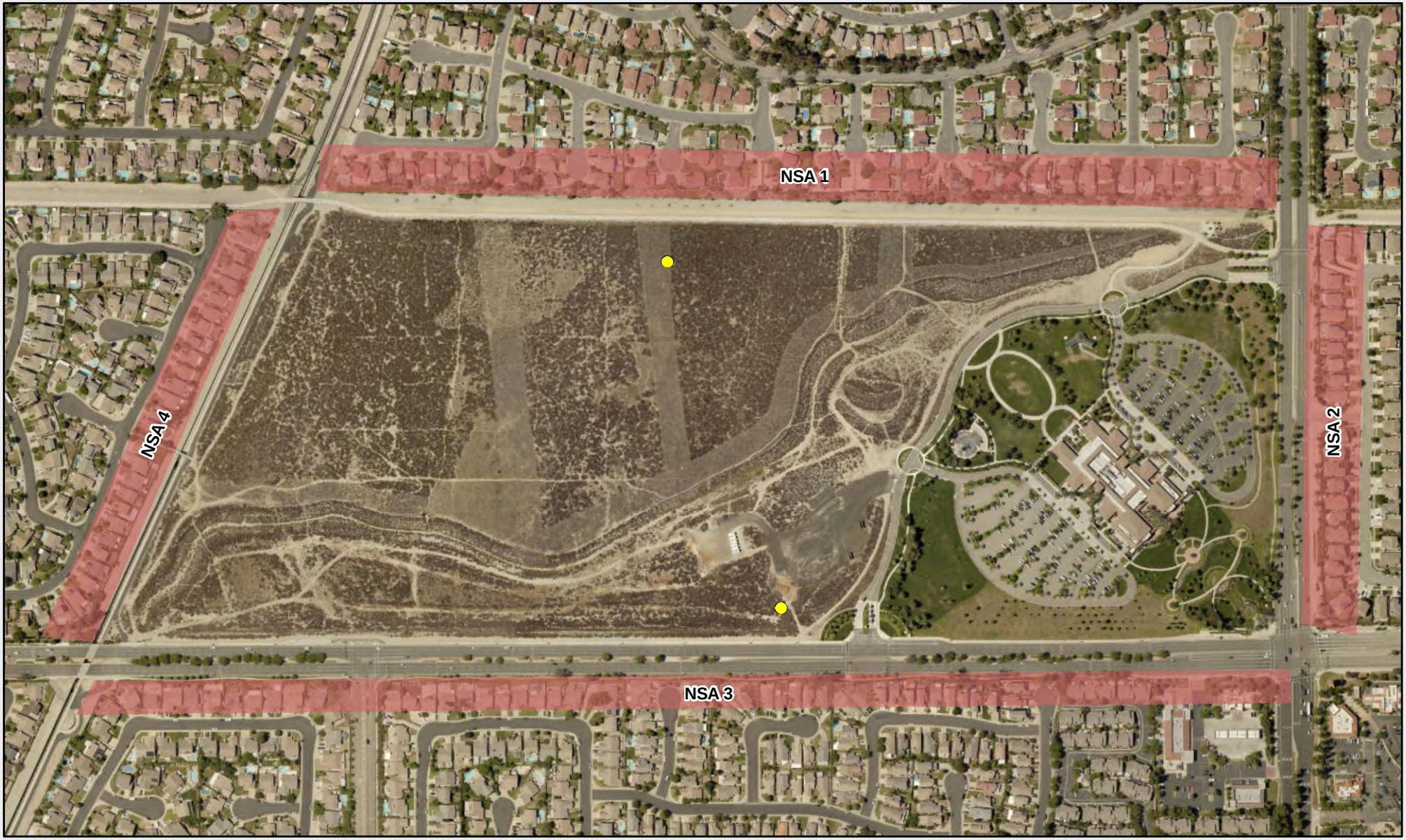
4.7.2 Regulatory Setting

The City of Rancho Cucamonga Public Health and Safety Chapter of the 2010 General Plan specifies outdoor noise level limits for land uses impacted by transportation noise sources. Generally, the City requires that new developments be designed to achieve these standards.

Section 17.66.050 of the City of Rancho Cucamonga's municipal code sets limits on the exterior noise levels that would be tolerated. Noise ordinance limits are specified using the "Basic Noise Level" as its reference criteria. The municipal code defines the Basic Noise Level as "the acceptable noise level within a given district." The City's exterior noise standard puts restrictions on the duration of noises of various magnitudes. The noise ordinance sets the following time limits on noise sources in all residential and commercial districts:

- Basic Noise Level for a cumulative period of not more than 15 minutes in any one hour; or
- Basic Noise Level plus 5 dBA for a cumulative period of not more than 10 minutes in any one hour; or
- Basic Noise Level plus 14 dBA for a cumulative period of not more than 5 minutes in any one hour; or
- Basic Noise level plus 15 dBA at any time.

The municipal code goes on to set maximum allowable limits for exterior and interior location within residential districts.



City of Rancho Cucamonga
Central Park

Figure 4.7-1
Noise Monitoring
Locations

San Bernardino County, CA

Ambient Monitoring Location

Noise Sensitive Area

0 100 200 400
Feet

N

RANCHO CUCAMONGA

TETRA TECH

Table 4.7-1. City of Rancho Cucamonga Noise Standards

Location of Measurement	Maximum Allowable	
	10 PM to 7 AM	7 AM to 10 PM
Exterior	60 dBA	65 dBA
Interior*	45 dBA	50 dBA
*With windows and doors shut		

Furthermore, the following activities are exempted from the provisions of the Municipal Code:

1. City or school approved activities conducted on public parks, public playgrounds, and public or private school grounds including, but not limited to, athletic and school entertainment events between the hours of 7:00 a.m. and 10:00 p.m.
2. Occasional outdoor gatherings, dances, shows, and sporting and entertainment events, provided said events are conducted pursuant to the approval of a temporary use permit issued by the city.
3. Any mechanical device, apparatus, or equipment used, related to, or connected with emergency machinery, vehicle, work, or warning alarm or bell, provided the sounding of any bell or alarm on any building or motor vehicle shall terminate its operation within 30 minutes in any hour of its being activated.
4. Noise sources associated with, or vibration created by, construction, repair, remodeling, or grading of any real property or during authorized seismic surveys, provided said activities:
    a. When adjacent to a residential land use, school, church or similar type of use, the noise generating activity does not take place between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, including Saturday, or at any time on Sunday or a national holiday, and provided noise levels created do not exceed the noise standard of 65 dBA when measured at the adjacent property line.
    b. When adjacent to a commercial or industrial use, the noise generating activity does not take place between the hours of 10:00 p.m. and 6:00 a.m. on weekdays, including Saturday and Sunday, and provided noise levels created do not exceed the noise standards of 70 dBA when measured at the adjacent property line.
5. All devices, apparatus, or equipment associated with agricultural operations, provided:
    a. Operations do not take place between 8:00 p.m. and 7:00 a.m. on weekdays, including Saturday, or at any time on Sunday or a national holiday.
    b. Such operations and equipment are utilized for protection or salvage of agricultural crops during periods of potential or actual frost damage or other adverse weather conditions.
    c. Such operations and equipment are associated with agricultural pest control through pesticide application, provided the application is made in accordance with permits issued by, or regulations enforced by, the state department of agriculture.
6. Noise sources associated with the maintenance of real property, provided said activities take place between the hours of 7:00 a.m. and 8:00 p.m. on any day.
7. Any activity to the extent regulation thereof has been preempted by state or federal law.

4.7.3 Methodology

The noise levels resulting from construction activities vary greatly depending on such factors as the type of equipment, the specific equipment model, the operations being performed, and the overall condition of the equipment. The USEPA has published data on the L_{eq} sound levels for typical construction phases (USEPA 1971). Following the USEPA method, sound levels were calculated from the center of each project element to the nearest noise sensitive area in each cardinal direction, see Figure 4.7-1. This calculation conservatively assumes all equipment operating concurrently on-site for the specified construction phase and no sound attenuation for ground absorption or on-site shielding by the existing buildings or structures.

To determine potential noise effects of the proposed Project during the operations of the facility, a noise model was constructed to evaluate the effects of the proposed Project related noise sources on the environment. Modeling of the project site and surrounding environment was accomplished using Cadna (Computer Aided Noise Abatement), which is a model-based computer program developed for predicting noise impacts in a wide variety of conditions. Cadna allows for the input of project information such as noise source data, barriers, structures, and topography to create a detailed computer aided design (CAD) model and uses the most up-to-date calculation standards to predict outdoor noise impacts at property lines and in adjacent surrounding areas. The primary source of noise during proposed Project operations would be from heating, ventilation, and air conditioning (HVAC) units associated with Project Element A, Element E, Element I, Element J, Element L, and Element N. Table 3.5-1 in Section 3.5.1 describes the proposed Project elements.

4.7.4 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the CEQA Guidelines. The proposed Project would have a significant impact to noise if it would result in any of the following:

- *Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*
- *Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

4.7.5 Impacts Analysis

IMPACT 4.7-1: *Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Less than Significant Impact with Mitigation Incorporated. The dominant noise sources in the vicinity of the proposed Project site is traffic noise associated with Base Line Road and Milliken Avenue. Based on existing traffic volumes, noise impacts to adjacent residences range from 57 dBA CNEL to 67 dBA CNEL. The proposed Project would result in a maximum increase in traffic along Base Line Road of 1,959 weekday project trips and 917 weekend Project trips. This increase in average daily trips represents an increase of less than 2 dBA at the residences adjacent to the proposed Project. It is widely accepted that an increase of 3 dBA is barely

perceptible (Caltrans 2020). Therefore, an increase in the overall ambient community noise level of less than 2 dBA is considered to be a less than significant impact. The construction of the proposed Project would have only a minimal impact on daily traffic volumes in the Project vicinity, and thus would have minimal impact on traffic noise conditions.

The proposed Project will include 14 proposed project elements and a new park roadway. Construction of the proposed Project will begin in 2020 and continue intermittently as each element is approved. Construction for each of the proposed elements will take approximately 12 months. The proposed Project construction activities are anticipated to occur in phases and include site preparation, grading, trenching, building construction, paving, and architectural coating. These construction activities would require use of a variety of equipment for each different element. Construction equipment numbers per phase per element were assumed based on activity and land area and can be seen in Table 4.7-2. Typical construction equipment would not be expected to generate noise levels above 90 dBA at 50 feet, and most equipment types would typically generate noise levels of less than 85 dBA at 50 feet. Using noise emission levels published by the USEPA, construction levels were calculated from the border of each project element to the closest noise sensitive area in each cardinal direction and are shown in Table 4.7-3.

Table 4.7-3 shows that during construction of the Project Elements there will frequently be phases of work for each Element that will be out of compliance with the 65 dBA limit. With implementation of Mitigation Measure Noise-1, Project construction will be in compliance with this limit and construction noise impacts will be less than significant.

To determine potential noise effects of the proposed Project during the operations of the facility, a noise model was constructed to evaluate the effects of the proposed Project related noise sources on the environment. The primary source of noise during Project operations would be from HVAC and exhaust fan units associated with Project Element A, Element E, Element I, Element J, Element L, and Element N.

The mechanical design for the HVAC and exhaust fan units has not been currently prepared. Therefore, this noise analysis assumed that HVAC units sound power rating would be 74 dBA and the exhaust fans sound power rating would be 64 dBA to account for a “worst case” analysis.

In total this analysis assumes that the proposed Project will include a total of six new HVAC units and nine new exhaust fans. Given the elevated rooftop height for the mechanical equipment and assuming the rooftop mechanical equipment operates simultaneously, the noise levels from the operation of all the rooftop mechanical equipment would range from 56 dBA L_{eq} at the residential houses to the north of the proposed Project, 51 dBA L_{eq} at the residential homes located directly east of the proposed Project, 53 dBA L_{eq} at the residential homes directly south of the proposed Project, and 59 dBA L_{eq} at the residential homes to the east of the proposed Project. The noise impacts from the rooftop mechanical equipment is within compliance of local noise regulation. Noise impacts associated with operation of the proposed Project would be less than significant.

Table 4.7-2. Assumed Construction Equipment Based on Land Area and Phase

Phase	Equipment	A Pacific Electric Trail Head	B Terraced Gardens	C Water Conservation/ Demonstration Garden	E Universal Accessible Playground	F Viticulture Pavilion and Vineyards	G Upper Picnic and Event Area	H Event Parking Area	I Adventure Area Parking and Event/Picnic Area	J Dog Park	K Multi-purpose Facility and Parking	L Recreation Pool	M Tennis Courts	N Maintenance Yard	O Deer Creek Channel Trail	Site Improvement (New Road)
Total Area (acres)		**2.6**	**4.7**	**4.4**	**4.7**	**6.7**	**2.6**	**4.4**	**9.5**	**4.4**	**5.4**	**2.7**	**3.1**	**1.6**	**4.1**	**2**
Building/Restrooms (sq. ft.)		**1000**	**0**	**0**	**1000**	**3000**	**0**	**0**	**1000**	**1000**	**27000**	**5000**	**0**	**2000**	**0**	**0**
Parking Lot (stalls)		**42**	**0**	**0**	**52**	**122**	**0**	**164**	**106**	**40**	**134**	**68**	**0**	**0**	**0**	**0**
Site Preparation	Crawler Tractors	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Excavators	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Graders	1	0	0	0	0	1	0	0	0	0	1	0	1	0	0
	Scrapers	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0
	Rubber Tired Dozers	0	3	3	3	3	0	3	3	3	3	0	3	1	3	0
	Tractors/Loaders/Backhoes	1	4	4	4	4	1	4	4	4	4	1	4	1	4	0
Grading	Crawler Tractors	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Excavators	0	1	1	1	1	0	1	1	1	1	0	1	0	1	3
	Graders	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Rollers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	Rubber Tired Dozers	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
	Rubber Tired Loaders	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Scrapers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	Tractors/Loaders/Backhoes	2	3	3	3	3	2	3	3	3	3	2	3	1	3	2
Trenching	Air Compressors	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1
	Generator Sets	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1
	Graders	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1
	Plate Compactors	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1
	Pumps	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1
	Rough Terrain Forklifts	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1
	Scrapers	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2
	Tractors/Loaders/Backhoes	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2
Building Construction	Cranes	1	NA	NA	1	1	NA	NA	1	1	1	1	NA	1	NA	NA
	Forklifts	2	NA	NA	3	3	NA	NA	3	3	3	2	NA	1	NA	NA
	Generator Sets	1	NA	NA	1	1	NA	NA	1	1	1	1	NA	1	NA	NA
	Tractors/Loaders/Backhoes	1	NA	NA	3	3	NA	NA	3	3	3	1	NA	1	NA	NA
	Welders	3	NA	NA	1	1	NA	NA	1	1	1	3	NA	3	NA	NA
Paving	Cement and Mortar Mixers	1	2	2	2	0	1	2	0	2	0	1	2	1	2	0
	Pavers	1	1	1	1	2	1	1	2	1	2	1	1	1	1	1
	Paving Equipment	1	2	2	2	2	1	2	2	2	2	1	2	1	2	1
	Rollers	2	2	2	2	2	2	2	2	2	2	2	2	1	2	3
	Tractors/Loaders/Backhoes	1	1	1	1	0	1	1	0	1	0	1	1	1	1	2
Architectural Coating	Air Compressors	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0

Table 4.7-3. Received Construction Noise Levels Per Phase

Construction Phase	Receptor	Distance (ft)	Predicted Noise Level (dBA)					
			Site prep	Grading	Trenching	Building Construction	Paving	Architectural Coating
Element A	NSA 1	100	79	79	---	79	82	70
	NSA 2	200	73	73	---	73	76	64
	NSA 3	1050	58	59	---	59	61	50
	NSA 4	2300	51	52	---	52	54	43
Element B	NSA 1	250	75	73	---	---	75	62
	NSA 2	950	64	61	---	---	71	50
	NSA 3	650	67	65	---	---	67	54
	NSA 4	1850	58	56	---	---	57	45
Element C	NSA 1	100	83	81	---	---	86	70
	NSA 2	350	72	70	---	---	72	59
	NSA 3	1050	63	61	---	---	62	50
	NSA 4	1850	58	56	---	---	57	45
Element E	NSA 1	100	83	81	---	80	83	70
	NSA 2	1500	60	57	---	57	59	47
	NSA 3	650	67	65	---	64	67	54
	NSA 4	1050	63	61	---	60	62	50
Element F	NSA 1	300	74	73	---	71	73	61
	NSA 2	1700	59	58	---	56	58	45
	NSA 3	400	71	71	---	68	71	58
	NSA 4	1200	62	60	---	59	61	48
Element G	NSA 1	100	79	80	---	---	82	70
	NSA 2	2100	52	53	---	---	55	44
	NSA 3	1000	59	70	---	---	62	50
	NSA 4	650	63	63	---	---	66	54
Element H	NSA 1	300	74	71	---	---	73	61
	NSA 2	2000	57	55	---	---	57	44
	NSA 3	700	66	64	---	---	66	53
	NSA 4	800	65	63	---	---	65	52
Element I	NSA 1	500	69	67	---	66	69	56
	NSA 2	1650	59	57	---	56	59	46
	NSA 3	100	83	81	---	80	83	70
	NSA 4	850	65	62	---	62	64	51
Element J	NSA 1	1050	63	61	---	60	73	50
	NSA 2	2950	54	52	---	51	53	41
	NSA 3	100	83	81	---	80	82	70
	NSA 4	300	74	71	---	71	73	61
Element K	NSA 1	300	74	71	---	71	74	61
	NSA 2	2800	54	52	---	51	54	41
	NSA 3	300	74	71	---	71	74	61
	NSA 4	200	77	75	---	74	77	64
Element L	NSA 1	350	68	68	---	68	71	59
	NSA 2	2500	51	51	---	51	54	42
	NSA 3	1000	59	59	---	59	62	50
	NSA 4	250	71	71	---	71	74	62
Element M	NSA 1	100	83	81	---	---	83	70
	NSA 2	2500	55	53	---	---	55	42
	NSA 3	1650	59	57	---	---	58	46
	NSA 4	250	75	73	---	---	75	62

Construction Phase	Receptor	Distance (ft)	Predicted Noise Level (dBA)					
			Site prep	Grading	Trenching	Building Construction	Paving	Architectural Coating
Element N	NSA 1	800	61	61	---	65	30	53
	NSA 2	3000	49	49	---	53	51	41
	NSA 3	500	65	65	---	69	67	56
	NSA 4	150	75	75	---	79	77	67
Element O	NSA 1	900	64	62	---	---	64	51
	NSA 2	3000	54	51	---	---	53	41
	NSA 3	400	71	69	---	---	71	58
	NSA 4	100	83	81	---	---	83	70
New Road	NSA 1	550	65	70	67	---	68	---
	NSA 2	2700	52	56	54	---	54	---
	NSA 3	100	80	85	82	---	83	---
	NSA 4	650	64	69	66	---	67	---

dBA=decibels, A-scale; ft=feet; NSA=noise sensitive area

IMPACT 4.7-2: *Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

Less than Significant Impact. The Project operations would not generate significant vibration; however, construction and site grading would require the use of equipment that could generate vibration. Possible sources of vibration may include bulldozers, dump trucks, backhoes, rollers, and other construction equipment that produces vibration. No blasting will be required at the Project site.

Table 4.7-3 shows the distance to the nearest sensitive receptors (single family residences) in relationship to each proposed Project element. As shown, the closest sensitive receptors are located approximately 100 feet from the construction activities for several of the proposed Project elements. The other sensitive receptors are located at distances greater than 100 feet. According to the Federal Transit Administration guidelines, a vibration level of 78 VdB (Vibration Velocity Level) is the threshold of perceptibility for humans. For a significant impact to occur, vibration levels must exceed 80 VdB during infrequent events (FTA 2006). Based on the levels published by the Federal Transit Administration (2006) and the type of equipment (HVAC units and exhaust fans) planned for use at the proposed Project, analysis shows that the vibration levels will be 77 VdB at 100 feet. This is considered acceptable for impacts to sensitive receptors located 100 feet and greater from the construction activities. Impacts associated with construction vibration levels will be less than significant.

Project operations do not include any vibratory equipment and would not cause a vibratory impact to sensitive receptors.

4.7.6 Mitigation Measures

NOISE-1: Construction noise levels fluctuate depending on the construction phase, equipment type and duration of use; distance between noise source and sensitive receptor; and the presence or absence of barriers between noise source and receptors. Therefore, construction activities shall be limited as follows:

- Equipment and trucks used for Project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds) wherever feasible. In addition, the time allowed for equipment and trucks to idle will be limited to the extent practicable.
- Stationary noise sources shall be located as far from adjacent receptors as possible and shall be muffled and enclosed within temporary sheds, incorporate insulation barriers or other measures to the extent feasible.
- Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for Project construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically-powered tools. However, where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to 10 dBA. External jackets on the tools themselves shall be used where feasible. This could achieve a reduction of 5 dBA. Quieter procedures shall be used such as drilling rather that impact equipment whenever feasible.
- When heavy construction activities are located within 800 feet of a residential structure, a temporary portable sound barrier will be deployed between the construction activities and nearest sensitive receptor.

4.7.7 Cumulative Impacts

Cumulative impacts should consider the effects of existing, current and reasonably foreseeable future projects. As noted above, the proposed Project is shown to not significantly increase the overall ambient community noise level and would not expose persons to or generate excessive groundborne vibration or groundborne noise.

The only cumulative project close enough to the proposed Project to potentially result in a cumulative noise impact is the Central Park Amphitheater Project. Cumulative impacts will include traffic and operational noise associated with amphitheater events at the proposed Project site. The amphitheater would result in a maximum increase in traffic along Base Line Road during the six large summer concerts, which occur on Thursday evenings. Based on the existing concerts attendance the maximum increase of 3,425 average daily trips at Baseline Road is estimated. The proposed Project would result in a maximum increase in traffic along Base Line Road of 1,959 weekday project trips and 917 weekend Project trips. The cumulative impact from the increase in average daily trips from the proposed Project and amphitheater represents an increase of less than 3 dBA at residences adjacent to the proposed Project area. It is widely accepted that an increase of 3 dBA is barely perceptible (Caltrans 2020). Therefore, an increase in the overall ambient community noise level of less than 3 dBA is considered to be a less than significant impact.

City-sponsored events will occur up to 12 times per year at the amphitheater. The noise levels from the future events are predicted to have noise impacts ranging from 63 dBA L_{eq} at the residential homes to the south, 56 dBA L_{eq} at the residential homes to the west, 61 dBA L_{eq} at the residential homes to the north, and 53 dBA L_{eq} at the residential homes to the east. These levels combined with the proposed Project's operations would generate noise levels of 63 dBA L_{eq} at the residential homes

to the south, 58 dBA L_{eq} at the residential homes to the west, 62 dBA L_{eq} at the residential homes to the north, and 53 dBA L_{eq} to the residential homes to the east.

These City-sponsored events are exempt from the Rancho Cucamonga's municipal code noise threshold limits. Nevertheless, the noise levels generated by these City-sponsored events will comply with the Rancho Cucamonga's General Plan and municipal code. Furthermore, the noise generated by these events would result in an overall increase of less than 3 dBA. Therefore, Project impact is less than significant.

4.8 TRANSPORTATION

A separate Vehicle Miles Traveled (VMT) Assessment was prepared for the proposed Project and is provided as Appendix F of this Draft Program EIR. The following discussion includes summaries this report and provides specific discussions of results and conclusions.

4.8.1 Existing Conditions

Bounded on the south by Base Line Road and on the east by Milliken Avenue, Central Park is approximately 2.5 miles west of Interstate 15, 3.7 miles north of Interstate 10, and 0.7 miles south of the State Route 210 in Rancho Cucamonga (Figure 3.2-2). Central Park's existing roadway, Central Park Drive, is accessed from Base Line Road and Milliken Avenue. The existing Community Center/Senior Center, located on Central Park Drive, currently provides 552 parking spaces.

The City has approximately 347.6 acres of parkland and recreational facilities. These include 25 neighborhood parks, three community parks, and eight special use facilities. In addition, the City's Multi-Use Regional and Community Trails add approximately 295 acres of land for recreational use. The trails provide a network of interconnecting off-road, urban, and wilderness trails that allow horseback riding, hiking, jogging, running, bicycling, and walking into open space areas and connect the residential areas to commercial activity centers.

A segment of the 21-mile Pacific Electric Trail is located on the northern boundary of Central Park (Figure 3.3-3). This regional multi-purpose trail follows the east-west route of the old Pacific Electric Railroad. The trail serves as an alternative transportation/recreation corridor shared by bicyclists, pedestrians, runners, and equestrians. The trail has two pavement surfaces: the concrete trail is intended for pedestrians and bicyclists, while the softer granite trail is intended for joggers and equestrians.

4.8.2 Regulatory Setting

Senate Bill 743 (SB 743)

Senate Bill 743, which was codified in PRC Section 21099, required changes to the guidelines implementing CEQA (CEQA Guidelines) (CCR, Title 14, Div. 6, Ch. 3, § 15000 *et seq.*) regarding the analysis of transportation impacts. Pursuant to PRC Section 21099(b)(1), the criteria for determining the significance of transportation impacts must "promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses." (See adopted CEQA Guidelines Section 15064.3(b), Criteria for Analyzing Transportation Impacts). To that end, in developing the criteria, the Governor's Office of Planning and Research (OPR) has proposed, and the California Natural Resources Agency (Agency) has certified and adopted, changes to the CEQA Guidelines that identify VMT as the most appropriate metric to evaluate a project's transportation impacts. With the California Natural Resources Agency's certification and adoption of the changes to the CEQA Guidelines, automobile delay, as measured by "level of service" and other similar metrics, no longer constitutes (in most cases) a significant environmental effect under CEQA. (PRC Section 21099(b)(3))

CEQA Guidelines Section 15064.3, subdivision (b)

CEQA Guidelines Section 15064.3(b) describes specific considerations for evaluating a project's transportation impacts. Generally, VMT is the most appropriate measure of transportation impacts. VMT refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided in subdivision (b)(2) (regarding roadway capacity), a project's effect on automobile delay shall not constitute a significant environmental impact

Rancho Cucamonga Municipal Code Transportation Demand Management

Chapter 17.78 of the Rancho Cucamonga Municipal Code addresses transportation demand management (TDM) requirements for various project development. The purpose of TDM requirements is to encourage large employers to implement programs and make site improvements that will help reduce the number of single-occupancy vehicle commuters on the roads. Large numbers of commuters have many negative impacts on the community such as increased traffic congestion, reduced worker productivity, and air quality and other environmental impacts. TDM requirements apply if the minimum thresholds in Municipal Code Table 17.78.010-1 (TDM Requirements Based on Development Size) are met by a new, remodeled, or expanded development that could include a single building or multiple buildings. Table 4.8-1 shows the minimum thresholds in the Municipal Code Table 17.78.010-1. The proposed Project does not include any of these uses, therefore, TDM requirements do not apply.

Table 4.8-1. Municipal Code Table 17.78.010-1 TDM Requirements Based on Development Size

Type of Use	Minimum Development Size
Office (excluding medical)	80,000 sq. ft.
Industrial Office Park (MP)	200,000 sq. ft.
Hospital and Medical Offices	100,000 sq. ft.
Commercial	150,000 sq. ft.
Light Industrial (M-1)	250,000 sq. ft.
Heavy Industrial (M-2)	350,000 sq. ft.
Hotels/ Motels	150 rooms
Mixed or Multiple Uses	(1)

(1) The minimum development size for mixed or multiple-use developments shall be calculated based on the proportional square footage of areas devoted to each type of use.

(Code 1980, Section 17.78.010; Ord. No. 855 Section 4, 2012)

Other provisions of Title 17 of the Rancho Cucamonga Municipal Code (the Development Code) call for an access and circulation design that provides a safe and efficient system for vehicles and pedestrians. The guidelines address points of access, reduction of conflicts between vehicular and pedestrian traffic, minimal impacts on adjacent properties, adequate maneuvering areas, separation of vehicular and pedestrian traffic, and interconnected public and private sidewalks. Title 17 also includes Parking Regulation requirements for the provision, design, and location of parking spaces needed to serve new buildings, new land uses, building expansions or changes in occupancy.

Title 12 of the Rancho Cucamonga Municipal Code (Streets, Sidewalks and Public Places) requires that an encroachment permit be obtained from the City Engineer for the construction of public improvements or the protection of public improvements from construction activities. The permit requires compliance with the Work Area Protection and Traffic Control Manual and the Manual on Uniform Traffic Controls for Street and Highways.

Hiking and Riding Trails Master Plan

The City's Hiking and Riding Trails Master Plan identifies a system of regional and community trails, needed bridges and street undercrossings, and trailheads to access the trail system at locations throughout the City. The Pacific Electric Inland Empire Trail is a Regional Multi-Purpose Trail, which, upon completion, will connect the cities of Claremont, Montclair, Upland, Rancho Cucamonga, Fontana, and Rialto. A portion of this trail runs east to west across the northern boundary of Central Park.

4.8.3 Methodology

Trip Generation

Trip generation rates from Trip Generation, 10th Edition (ITE 2017) were used to estimate the number of trips associated with the proposed Project. The Trip Generation Handbook does not contain unique rates for uses such as dog park, playground or gardens; most uses were assumed to be appropriately represented by the Institute of Transportation Engineers (ITE) code 411, Public Park, in the trip generation estimates. The multipurpose building is represented by ITE code 495, Recreational Community Center, which includes the pool area. Tennis courts have a specific ITE code, 490, and were separated from the other uses. However, ITE code 490 does not have a weekend rate, only a weekday rate, and so ITE code 488 (Soccer Complex) was referenced to proportionally increase the weekday trip generation rate to estimate a weekend rate. ITE code 488 (Soccer Complex) weekday daily and PM peak hour trip generation rates are approximately half of the weekend daily and peak hour trip generation rates. Since these uses are similar in nature (sports facilities), the ITE code 490 weekday trip generation rates were doubled to estimate the weekend rates.

A conservative approach was applied to trip generation and no reductions were applied to account for internalization between uses on-site. Please note that all trip generation estimates are shown as vehicle trips and these estimates do not include walking or biking trips.

Vehicle Miles Traveled

Project Vehicle Miles Traveled

VMTis a function of the number of daily trips and the length of those trips. In order to estimate the average project trip lengths, trip length data utilized in the VMT analysis for the Central Park Amphitheater Project IS/MND (Fehr & Peers 2019) has been used in this VMT analysis for the proposed Project. Big Data,[7] which is anonymous travel data derived from mobile phones, was utilized to develop average trip lengths from visitors to the Concerts in the Park events between

[7] Big Data was provided by the vendor Streetlight. Streetlight uses location-based services data from hundreds of smartphone apps (passively and anonymously) and has partnerships with geospatial data providers to leverage GPS data in their data collection and processing.

2016 and 2018. Over 500 records were tracked from the 18 concert events that occurred between 2016 and 2018 and the average trip length per record was estimated to be 6.6 miles. The concerts are a unique attraction that draws in visitors from further distances than is anticipated for the proposed Project, therefore the 6.6-mile average trip length is considered a conservative trip length to be used for VMT estimation.

In order to measure the proposed Project's potential VMT impact, OPR recommends comparing the proposed Project's per capita VMT against an agency's regional per capita VMT threshold of significance. Per capita VMT estimates were prepared for the proposed Project by calculating Project VMT and normalizing by the proposed Project's service population. The proposed Project's service population is represented by the number of visitors and employees of the proposed Project. To estimate the proposed Project's service population, first the proposed Project's trip generation estimates and a 2.5 person per vehicle occupancy was utilized based on the family nature of park uses and professional judgement. This estimate was increased by 10 percent to account for a 10 percent mode split to walking and biking (this assumes that 10 percent of the proposed Project service population will walk or bike instead of drive to the proposed Project). A 10 percent mode split to walking and biking is considered a conservative estimate given the active nature of parks and that the SCAG model assumes that San Bernardino County has approximately 10 percent mode split to walking and biking for all trip purposes.

Other methods of estimating average trip length were considered, such as use of the local travel demand forecasting (TDF) model, the San Bernardino Transportation Analysis Model (SBTAM). The TDF model estimates traffic on the SBTAM roadway network by matching origin and destination pairs from zones throughout the SCAG region through trip generation, trip distribution, mode choice and trip assignment. SBTAM land use and roadway networks are consistent with the 2016 SCAG Regional Transportation Plan and Sustainable Communities Strategy. This model is typically the best tool available in the region to estimate vehicle trips, trip distance and VMT. However, the model is calibrated and validated towards commute, shopping and school trips, and is not sensitive towards recreational uses such as parks. Trip length data was referenced from the model for use in this assessment but is not considered appropriate based on model limitations.

Regional Vehicle Miles Traveled

SBTAM was utilized to estimate VMT in the region for comparative purposes. Different types of trips are tracked in the TDF model, including home-based-work trips (commute trips to and from home), homebased-other trips (other trips such as shopping and school trips originating or ending from home) and nonhome-based trips (all other trips that don't start or end at home such as from work to shopping).

Average trip lengths for trips originating or ending in Rancho Cucamonga were extracted from the base year (2012) version of SBTAM to compare against the proposed Project. The Origin-Destination Methodology described above utilizes trips after the final assignment step and VMT was estimated using "full accounting," which accounts for the full length of each trip. The service population in the table is the total population and employment in the City of Rancho Cucamonga. The SBTAM does not have a weekend calibrated version and only weekday estimates are presented.

VMT Impact Thresholds

PRC Section 21099 directs OPR to propose criteria for determining the significance of transportation impacts. OPR provides its recommendations to assist lead agencies in selecting a significance threshold that may be appropriate for their particular projects (*OPR 2018*). While OPR's Technical Advisory is not binding on public agencies, CEQA allows lead agencies to "consider thresholds of significance… recommended by other public agencies, provided the decision to adopt those thresholds is supported by substantial evidence." (CEQA Guidelines, Section 15064.7, subd. (c).) Based on OPR's extensive review of the applicable research, and in light of an assessment by the CARB quantifying the need for VMT reduction in order to meet the State's long-term climate goals, OPR recommends that a per capita or per employee VMT that is 15 percent below that of existing development may be a reasonable threshold.

4.8.4 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the CEQA Guidelines. The proposed Project would have a significant impact to transportation and traffic if it would result in any of the following:

- *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*
- *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

4.8.5 Impacts Analysis

IMPACT 4.8-1: *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

Less than Significant Impact. As discussed previously, the Rancho Cucamonga Municipal Code TDM requirements apply if the minimum thresholds in Municipal Code Table 17.78.010-1 (TDM Requirements Based on Development Size) are met by a new, remodeled, or expanded development that could include a single building or multiple buildings. Table 4.8-1 shows the minimum thresholds in the Municipal Code Table 17.78.010-1. The proposed Project does not include any of these uses, therefore, TDM requirements do not apply.

The proposed Project will be required to comply with all applicable regulations, including other provisions of Titles 12 and 17 of the Rancho Cucamonga Municipal Code. This will include (a) providing a safe and efficient circulation system; (b) appropriate locations and numbers of parking spaces; and (c) compliance with the requirements of the proposed Project's encroachment permit for construction activities.

The proposed Project will involve the construction of an additional park roadway which will be accessed from Base Line Road, west of the existing Base Line Road access point. This roadway will progress north to the multi-purpose facility area, turn northeast toward the universal accessible playground, then turn southeast until it intersects with the existing Central Park Drive, see Figure 3.5-3. In order to facilitate City flexibility to develop portions of the park as funds become available, the roadway may be completed during the development of initial elements. The

Project roadway design does not include the construction of any sharp curves and will be compatible with the existing park facilities. The construction of the proposed Project will not result in any closure, nor will it otherwise obstruct traffic on the surrounding streets.

The proposed Project will provide parking throughout the proposed Project site, as shown in Figure 3.5-3. This will include approximately 728 parking spaces in in eight parking areas. The existing Community Center/Senior Center currently provides 552 parking spaces. An additional 158 event parking spaces will be provided through development of the Amphitheater. Recommended parking spaces for event areas and buildings are based on the expected occupancy, square footage of areas, and number of facilities. These quantities are considered estimates and will be clarified during the development of each improvement phase. Parking layout and quantity of spaces for persons with disabilities will be in conformance with local requirements, California Title 24, and the Americans with Disabilities Act, and have been designed to exceed all requirements. By complying with all applicable regulations, including other provisions of Titles 12 and 17 of the Rancho Cucamonga Municipal Code, no significant impacts associated with circulation systems or parking are expected.

Element A, the Pacific Electric Trail Head, will add 2.6 acres to the existing landscaped rest area found at the northeast corner of Central Park, adjacent to the Pacific Electric Trail. Improvements will include a 42-space parking area, a restroom facility, and other site amenities. Element O, the Deer Creek Channel Trail, will provide landscaping and other site improvements to the Central Park portion of the Deer Creek Channel Trail. The proposed Project will also provide multiple trail routes throughout the Park, as shown in Figures 3.5-4 through 3.5-6. These routes will be identified by signage installed at distances of 1 kilometer, 3 kilometers and 5 kilometers. Each route is designed to minimize roadway crossings, providing continuous, uninterrupted experiences. These trail improvements and new trail routes will improve and expand the City's existing system of regional and community trails; therefore, no significant impacts to bicycle and pedestrian facilities are expected.

IMPACT 4.8-2: *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

Less than Significant Impact. Trip generation rates from Trip Generation, 10th Edition (ITE 2017) were used to estimate the number of trips associated with the proposed Project. The referenced trip generation rates and estimates for the proposed Project are presented in Tables 4.8-2 and 4.8-3 for typical weekday and weekend.

The proposed Project is anticipated to draw visitors from the local community. This park will provide amenities closer to many Rancho Cucamonga residents and is anticipated to shorten existing trips. For example, tennis players may find it more convenient to play at Central Park facilities rather than travel further to other nearby courts at Beryl Park East, Lions Park, or Day Creek Park, all of which provide tennis courts and are within a 2-mile radius of the proposed Project.

Table 4.8-2. Weekday Trip Generation Estimate

Type	ITE Land Use Code	Size	Unit	Weekday Trip Generation Rates[a]							Trip Generation Estimate						
				Daily Rate	AM Peak Hour			PM Peak Hour			Daily Trips	AM Peak			PM Peak		
					Rate	% In	% Out	Rate	% In	% Out		In	Out	Total	In	Out	Total
Recreational Community Center	495	62	KSF	28.82	1.76	66%	34%	2.31	47%	53%	1,796	73	37	110	68	76	144
Tennis Courts	490	4	Court	30.32	0.42	50%	50%	4.21	50%	50%	121	1	1	2	9	8	17
Public Park	411	54	Acre	0.78	0.02	59%	41%	0.11	55%	45%	42	1	0	1	3	3	6
Net External Project Trips											**1,959**	**75**	**38**	**113**	**80**	**87**	**167**

Notes:
a: Trip generation rates from Trip Generation,10th Edition.

Table 4.8-3. Weekend Trip Generation Estimate

Type	ITE Land Use Code	Size	Unit	Weekend Trip Generation Rates[a]				Trip Generation Estimate			
				Daily Rate	Peak Hour			Daily Trips	Peak Hour Trips		
					Rate	% In	% Out		In	Out	Total
Recreational Community Center	495	62	KSF	9.10	1.07	54%	46%	567	36	31	67
Tennis Courts[b]	490	4	Court	60.64	8.42	48%	52%	243	16	18	34
Public Park	411	54	Acre	1.96	0.28	55%	45%	107	8	7	15
Net External Project Trips								**917**	**60**	**56**	**116**

Notes:
a: Trip generation rates from Trip Generation,10th Edition.
b: ITE Trip Generation Manual does not contain weekend trip generation rate for Tennis Court. The trip rate proportion of weekends of Soccer Complex (ITE code 488) is applied as a similar sports facility.

As described previously under Section 4.8.3 Methodology, a conservative average trip length of 6.6 miles was used for VMT estimation and a 2.5 person per vehicle occupancy was utilized to estimate the service population based on the family nature of park uses. Table 4.8-4 presents the daily Project VMT estimation for typical weekday and weekend.

Table 4.8-4. Project Daily VMT Estimates

Weekday			Weekend		
Daily Trips	Daily VMT	VMT/SP	Daily Trips	Daily VMT	VMT/SP
1,959	12,929	2.40	917	6,052	2.40

VMT: vehicle miles travels

SP: service population

SBTAM was utilized to estimate VMT in the region for comparative purposes. Different types of trips are tracked in the TDF model, including home-based-work trips (commute trips to and from home), homebased-other trips (other trips such as shopping and school trips originating or ending from home) and nonhome-based trips (all other trips that don't start or end at home such as from work to shopping).

Average trip lengths for trips originating or ending in Rancho Cucamonga were extracted from the base year (2012) version of SBTAM to compare against the proposed Project. Rancho Cucamonga origin and destination trip assignment matrices (number of trips) were multiplied by the highway skim matrices (travel distance) to estimate VMT and is presented in Table 4.8-5. The Origin-Destination Methodology described above utilizes trips after the final assignment step and VMT was estimated using "full accounting," which accounts for the full length of each trip. The service population in the table is the total population and employment in the City of Rancho Cucamonga. SBTAM does not have a weekend calibrated version and only weekday estimates are presented in the table below.

Table 4.8-5. Citywide Daily VMT Estimates

Weekday	
Daily VMT	VMT/SP
8,444,376	31.99

SP=Service Population; VMT=Vehicle Miles Traveled.

As shown in Table 4.8-5, the average VMT per service population for the City of Rancho Cucamonga is 31.99, which is substantially higher than the Project VMT/SP. The proposed Project is estimated to generate VMT/SP less than 15 percent of the region average (the City in this case) which is the recommended threshold proposed in the Technical Advisory (OPR 2018) related to VMT impact thresholds. Therefore, the proposed Project is not anticipated to result in a significant impact related to VMT.

4.8.6 Mitigation Measures

Impacts related to transportation would be less than significant; therefore, no mitigation measures are necessary.

4.8.7 Level of Significance After Mitigation

Because there would be no significant impacts requiring mitigation, residual impacts would be less than significant.

4.8.8 Cumulative Impacts

Given that the proposed Project is consistent with regional plans, including the City's General Plan and the SCAG Regional Transportation Plan and Sustainable Communities Strategy land use, the buildout of the proposed Project is not anticipated to result in a cumulative transportation impact related to VMT.

4.9 TRIBAL CULTURAL RESOURCES

4.9.1 Existing Conditions

The proposed Project area and surrounding region is within land traditionally occupied by two Native American groups within the valley, the Serrano and Gabrieliño (Tongva) people (see Ethnographic Context in Section 4.3.1). Prior to contact, the Serrano referred to themselves collectively as the Maara'yam (Alexandra McCleary, Personal Communication 2019). An ethnographic review of tribal cultural resources was performed via the SCCIC record search, NAHC SLF search, and review of available ethnographic documents. In addition, a cultural resource field survey was conducted (discussed in Section 4.3), and the City conducted California Native American tribal consultation through the AB 52 process with the following tribes: San Gabriel Band of Mission Indians, San Manuel Band of Mission Indians, Soboba Band of Luiseno Indians, and the Torres Martinez Desert Cahuilla Indians. To date, no Tribal Cultural Resources have been identified within the proposed Project area.

4.9.2 Regulatory Setting

Assembly Bill 52

A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource, may have a significant effect on the environment (PRC Section 21084.2). As specified in the PRC Section 21080.3.1, as amended by AB 52 (Gatto 2014), a lead agency is required to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. Consultations must include discussing the type of environmental review necessary, the significance of tribal cultural resources, and the significance of the project's impacts on the tribal cultural resources, and alternatives and mitigation measures recommended by the tribe (PRC Sections 21080.3.1(a) and 21084.3(b)); Government Code Section 65352.4). That consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project.

Public Resource Code Section 21074 defines tribal resources as follows:

(a) "Tribal cultural resources" are either of the following:

(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

(A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.

(B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

(2) 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this

paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

(b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

(c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

California Code of Regulation Section 15120(d) Confidentiality

Section 15120(d) of Title 14 of the California Code of Regulations states that information and locational information regarding archaeological sites, sacred lands, or other information is confidential and is restricted from disclosure in public documents.

California Health and Safety Code, Sections 7052 and 7050.5

Section 7052 of the California Health and Safety Code states that it is a felony to disturb Native American burials. Health and Safety Code Section 7050.5 requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If determined to be Native American, the coroner must contact the California NAHC.

California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural, and Sacred Sites Act (the Act), Public Resources Code Sections 5097.9 *et seq.*, applies to both state and private lands. The Act requires that upon discovery of human remains, construction or excavation activity cease and that the county coroner be notified. If the remains are Native American, the coroner must notify the NAHC. The NAHC will then identify and notify a most likely descendant. The Act stipulates the procedures the most likely descendant may follow for treating or disposing of the remains and associated grave goods.

California Public Resource Code Sections 5097 *et seq.*

California PRC Sections 5097 *et seq.* specify the procedures to be followed in the event of an unexpected discovery of human remains on non-federal land. The disposition of Native American remains falls within the jurisdiction of the NAHC. PRC Section 5097.5 states:

"A person shall not knowingly and willfully excavate upon, or remove, destroy, injure, or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands… A violation of this section is a misdemeanor.

As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof."

4.9.3 Methodology

The analysis of potential impacts to tribal cultural resources that would be associated with the proposed Project included (as described above and in Section 4.3 Cultural Resources) a cultural resource literature review through the SCCIC, NAHC SLF search, ethnographic literature review, pedestrian archaeological survey and reporting, and tribal consultation; the City sent formal AB 52 notification letters on November 2, 2019 to the following:

- San Gabriel Band of Mission Indians: *Anthony Morales, Chief*
- San Manuel Band of Mission Indians: *Lee Clauss*
- Soboba Band of Luiseno Indians; *Joseph Ontiveros, Cultural Resource Director*
- Torres Martinez Desert Cahuilla Indians; *Michael Mirelez, Cultural Resource Coordinator*
- Gabrieleño Band of Mission Indians – Kizh Nation: *Andrew Salas, Chairman*
- Morongo Band of Mission Indians: *Raymond Huaute, Tribal Historic Preservation Officer*

4.9.4 Thresholds of Significance

In recognition of AB 52, which strengthens the level of review required for Tribal cultural resources and establishes guidelines for require consultation with Native American Tribes, the following threshold is included:

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

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

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

4.9.5 Impacts Analysis

IMPACT 4.9-1: *Would the project cause a substantial adverse change in the significance of a Tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:*

iii) 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 with Mitigation Incorporated. The combined SCCIC record search, NAHC SLF search, and pedestrian field survey did not identify any existing historic resources within the proposed Project area. As a result, it is believed the proposed Project would not cause a substantial adverse change in the significance of a known historic resource as defined in PRC 5020.1 (k).

If construction ground disturbance depths range within native soils (at least 1 foot or more below the ground surface), there would be a potential to impact previously unrecorded subsurface tribal cultural resources. With Mitigation Measures CUL-1 through CUL-3 incorporated, a less than significant impact is anticipated.

As specified in AB 52, the City provided written notification on November 2, 2019 regarding the proposed Project to the San Gabriel Band of Mission Indians, San Manuel Band of Mission Indians, Soboba Band of Luiseno Indians, Torres Martinez Desert Cahuilla Indians, the Gabrieleño Band of Mission Indians – Kizh Nation, and the Morongo Band of Mission Indians. The following responses and comments were received:

- On November 12, 2019 the Morongo Band of Mission Indians responded that the tribe had no comments regarding the proposed Project.
- On November 14, 2019, the San Manuel Band of Mission Indians stated that the proposed Project is within Serrano ancestral territory, is of interest to the tribe, and requested consultation. They asked that ethnographic information previously provided by Alexandra McCleary, Tribal Archaeologist, San Manuel Band of Mission Indians for the Central Park Amphitheater Project be incorporated in the Program EIR. On December 3, 2019, the City and San Manuel Band of Mission Indians had a conference call to discuss the proposed Project and any concerns. The San Manuel Band of Mission Indians responded to the City on December 13, 2019 and requested*: Any and all content regarding the City's tribal history as it relates to Central Park planning (such as interpretive panels and public art) shall be subject to review and approval by consulting tribes*. The City agreed to consult with the San Manuel Band of Mission Indians regarding Central Park interpretive panels or public art as it relates tribal history of the region. The City will provide the San Manuel Band of Mission Indians (and other known local tribes, as applicable) the opportunity to review and comment on tribal history interpretive panels or art installations.

The City has completed consultation with local tribes as part of the AB 52 process. Based on the combined SCCIC record search, NAHC SLF search, pedestrian field survey, and City's AB 52 consultation with California Native American tribes (as discussed above), the proposed Project is determined to have less than significant impacts related to tribal cultural resources with the implementation of Mitigation Measures CUL-1 through CUL-3. If construction ground disturbance depths range within native soils (at least 1 foot or more below the ground surface), there would be a potential to impact previously unrecorded subsurface tribal cultural resources. With Mitigation Measures CUL-1 through CUL-3 incorporated, a less than significant impact is anticipated.

4.9.6 Mitigation Measures

Implement Mitigation Measures CUL-1 through CUL-3. See Section 4.3.

4.9.7 Level of Significance After Mitigation

As discussed above, Mitigation Measures CUL-1 through CUL-3 would ensure that impacts to tribal cultural resources would be less than significant. Compliance with existing regulations will ensure that any impacts to human remains would be less than significant.

4.9.8 Cumulative Impacts

Cumulative impacts to historic resources or tribal cultural resources consider the impact of the proposed Project in connection with past or related future projects. Section 15355 of the CEQA Guidelines define a cumulative impact as two or more individual effects which, when considered together, are considerable, or which compound, or increase other environmental impacts. When analyzing cumulative impacts to cultural resources, and assessment is made of impacts on individual resources as well as the inventory of cultural resources within the cumulative impact analysis area. The cumulative area for historic resources or tribal cultural resources is the undeveloped Central Park area. To date, no historic resources or tribal cultural resources were identified within the proposed Project area or within a half mile of the proposed Project. Thus, implementation of the proposed Project would not contribute to cumulative impacts to historic resources or tribal cultural resources and would result in a less than significant impact. If construction ground disturbance depths extend to native soils (approximately 1 foot or more in depth), there would be a potential to impact previously unrecorded subsurface cultural resources or human remains. As discussed above, Mitigation Measures CUL-1 through CUL-3 would ensure that impacts to tribal cultural resources would be less than significant, and compliance with existing regulations will ensure that any impacts to human remains would be less than significant. In addition, tribal cultural resources that are potentially affected by related or future projects would be subject to the same requirements of CEQA and the laws and regulations discussed above and in Section 4.3.2 Regulatory Setting.

CHAPTER 5
OTHER CEQA CONSIDERATIONS

This chapter addresses other environmental topics required under CEQA to be discussed in an EIR. These other CEQA considerations include environmental effects that were found to not be significant, growth-inducing impacts, or significant effects that are adverse, irreversible or unavoidable.

5.1 ENVIRONMENTAL EFFECTS FOUND NOT TO BE SIGNIFICANT

In accordance with the CEQA Guidelines Section 15063(a), the City determined the an EIR would be required for the approval of the proposed Project. Pursuant to CEQA Guidelines Section 15060(d), "If the lead agency can determine that an EIR will be clearly required for a project, the agency may skip further initial review of the project and begin work directly on the EIR process…in the absence of an initial study, the lead agency shall still focus the EIR on the significant effects of the project and indicate briefly its reasons for determining that other effects would not be significant or potentially significant." The City completed a preliminary analysis of the proposed Project and determined that due to the potential for significant environmental effects, an EIR must be prepared. Based on that preliminary review and public and agency input received during the initial public scoping process, several environmental factors were determined to be less than significant or to have no measurable impact, and thus are do not require further evaluation in this Draft Program EIR. Environmental effects that were determined to be potentially significant or less than significant after mitigation are discussed in detail under Chapter 4, Environmental Analysis, of this Draft Program EIR.

In accordance with CEQA, the following section substantiates the elimination of those specific environmental issues that were determined to result in no impacts or less-than-significant impacts and therefore, are not analyzed further in this Draft Program EIR. In summary, environmental effects found not to be significant include the following, with the reasons supporting the determination presented in the discussion below:

- Aesthetics
- Agriculture and Forestry Resources
- Biological Resources (conflict with habitat conservation plan)
- Energy
- Geology and Soils (liquefaction, landslides, soil erosion, unstable geologic unit, expansive soils, septic tanks)
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise (expose people to airport noise)
- Population and Housing
- Public Services
- Recreation

- Transportation (increasing hazards; inadequate emergency access)
- Utilities and Service Systems
- Wildfire

5.1.1 Aesthetics

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

Less than Significant Impact. The proposed Project site is located in an urban setting characterized by views primarily of residential areas, as well as park and commercial areas. According to the General Plan, major scenic resources for the City include the San Gabriel and San Bernardino Mountains and foothills (Figure 3.2-1), vistas of the City from hillside areas, and other views of special vegetation and permanent open space features. As the north-south views are particularly prominent along the straight alignments of Archibald, Haven, and Etiwanda Avenues, these roadways are designated as view corridors. Haven Avenue is the closest City designated view corridor to Central Park, located approximately 0.3 mile to the west of Central Park (Figure 3.2-2). Due to intervening structures, the proposed Project site is not visible from Haven Avenue and no impact will occur.

The City also designated Base Line Road and Milliken Avenue as Special Boulevards. Roadways designated “Special Boulevards” are to incorporate extensive landscape setback areas, and denote where landscape and hardscape design, trails, and setback standards will be master planned and implemented. The landscape prominence of these roadways has been and will continue to be a focus in the design process for both the private and public sectors (City of Rancho Cucamonga 2010). Development along these Special Boulevards is reviewed for compliance with these development standards and is required to comply with the General Plan guidelines to provide the appropriate setbacks, attractive landscaping, and community design elements. As the proposed Project will comply with all applicable setbacks, attractive landscaping, and community design elements, no impact will occur.

Direct views of the proposed Project site are from surrounding residential, park uses, and adjacent roadways, as shown in Figure 5.1-1. Views of the San Gabriel Mountains to the north are available from Base Line Road adjacent to the proposed Project site.

The proposed Project involves developing approximately 61-acres of Central Park with recreation areas and elements. Grading for the proposed Project will change the proposed Project site’s existing topography as shown in Figures 3.6-1 and 3.6-2. With the development of the proposed Project, the southern end of the proposed Project site will be more prominent in the foreground views from Base Line Road and from the residences south of Base Line Road that currently have views of the proposed Project site. This prominence will be similar to the views of the developed third of Central Park from Base Line Road. While the proposed Project would add developed foreground elements to these views, the background views of the San Gabriel Mountains would not be blocked. As the proposed Project will not significantly block existing views of any scenic vista, no significant impact is expected. Further analysis is not required.

View of Project Site looking north.

View of Project site from northeast corner of Project site looking southwest.

City of Rancho Cucamonga
Central Park

Figure 5.1-1
Views of Project Site
From Base Line Road

San Bernardino County, CA

RANCHO CUCAMONGA

TETRA TECH

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

No Impact. According to the Caltrans Map of Designated Scenic Routes (BonTerra 2010), there are no official State-designated routes in the proposed Project vicinity. State Route 2 (Angeles Crest Scenic Highway), a designated State Scenic Highway, is located approximately 12 miles north of the City's northern boundary. The proposed Project site is not visible from State Route 1 due to distance and intervening structures and topography. The proposed Project site is not in the viewshed of any designated or eligible State scenic highway. In addition, the proposed Project site does not contain trees, rock outcroppings, or historic buildings. No impact to a scenic highway will occur. Further analysis is not required.

Would the project conflict with applicable zoning and other regulations governing scenic quality?

Less Than Significant Impact. The proposed Project would involve both temporary and permanent changes to the visual character of the site. Temporary changes are associated with construction activities, including construction equipment, staging, and Site construction. These visual impacts would be short-term in nature and are not considered to be significant.

Implementation of the proposed Project would result in long-term/permanent changes to the visual character of the site from undeveloped with native and non-native vegetation to developed with recreation elements and landscaping. New buildings and site furnishings have a consistent character and image with the existing Senior and Community Center improvements. The site furnishing elements are intended to work as a family to be consistent in form, color and material throughout the park, while complementing building architecture, color palette, materials, and aesthetics. Project landscaping will provide a framework to reinforce the park entrances, circulation, open spaces, recreation facilities and landscape features. Plant types and species will be selected based on hydro zones (water use requirements), function (screening, shade), maintenance and aesthetics.

In 1984, the City of Rancho Cucamonga (City) Council acquired approximately 103.4 gross acres of land northwest of the corner of Milliken Avenue and Base Line Road for a park that would serve the whole city and become a major public resource on the order of other great parks in other major cities. Throughout the last 30 years the vision for Central Park revolved around an Olmstedian Philosophy. The idea that a design's psychology and the visual effects on people can be an antidote to the stress and artificiality of urban life. In 2017, the Rancho Cucamonga City Council approved efforts for a Central Park Master Plan Update. As part of the Central Park Master Plan Update, the City conducted an extensive community outreach and public input process. This outreach process was intended to highlight the historical design and development efforts to date on Central Park and to seek public input for its future and ultimate development. A combination of local community workshops, online surveys, social networking, and a live Facebook broadcast were conducted to develop the resulting Central Park Master Plan Update reVISION. The Central Park Master Plan Update reVISION reflects the historical design philosophy, is responsive to the past planning efforts, includes modern community inspired recreation elements, and incorporates a phased approach providing for fiscally achievable project segments ranging in size from 1 acre to 11 acres.

According to the City General Plan Land Use Map, the land use designation for Central Park, including the proposed Project site, is Public Facilities - Parks and it is zoned Terra Vista Planned Community (PC-TV). The surrounding areas have mostly residential land use designations and zoning with some commercial designations. According to the Terra Vista Community Plan, the proposed Project site is identified as a central park at the northwest corner of Base Line Road and Milliken Avenue, which would serve the entire City of Rancho Cucamonga (Gruen Associates 1996). The PC-TV zone does not define zoning regulations specific to the Central Park site. Specific regulations for the Central Park site are defined by the General Plan land use designation. The City's General Plan Public Facilities - Parks designation is applied to both existing and planned public parks. Central Park, including the proposed Project site, is designated City Park. As described in the General Plan, the Parks designation identifies both existing and planned public parks within the City and Sphere of Influence. Existing parks include developed parkland owned by the City. Parklands include traditional neighborhood level and community-level parks, as well as multi-purpose recreation-oriented lands such as the Epicenter and Central Park (City of Rancho Cucamonga 2010).

The permitted uses under the City's General Plan land use designations for the proposed Project site include the proposed Project elements and the existing park uses. Development of the proposed Project site with park uses would be consistent with the General Plan and the zoning for the site. As the proposed Project would be consistent with the General Plan and the development standards for Special Boulevards and would be consistent with the existing developed portion of Central Park, impacts to visual character would be less than significant. Further analysis is not required.

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. There are two primary sources of light to be considered: light emanating from building interiors that pass through windows, and light from exterior sources (e.g., street lighting, parking lot lighting, building illumination, security lighting, and landscape lighting). Light introduction can be a nuisance to adjacent uses and diminish the view of the clear night sky. The proposed Project site is located in a developed area, with substantial existing light sources. Currently, light and glare in the proposed Project vicinity is produced by vehicle headlights, street lighting, and lighting from the adjacent residential and park uses.

Development of the proposed Project would change the character of the site from undeveloped to developed with park uses that would introduce new sources of light and glare from lighting and building materials. All lighting and materials used within the proposed comply with lighting standards contained within the City's Municipal Code (City of Rancho Cucamonga 2019a). These regulations require lighting to be directed away and shielded from nearby residential areas. The regulations also prohibit the creation of areas with intense light or glare. As described in the Central Park Master Plan Update reVISION, lighting will have a consistent character with the existing lighting in the developed portion of Central Park. This lighting is designed to be directed away and shielded from nearby residential areas. The nearby residential areas produce medium ambient brightness and the light associated with the proposed Project would be similar.

As described above, the proposed Project will be required to comply with the site lighting standards contained in the City's Development Code, thereby reducing any potential for light

impacts on neighboring properties to a less than significant level. Furthermore, since the structures would not include shiny finishes, the proposed Project is not expected to create any daytime glare. Therefore, a less than significant impact from the standpoint of light and glare would occur. Further analysis is not required.

5.1.2 Agricultural Resources

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 Farmland Mapping and Monitoring Program Map for California, the proposed Project site is designated as Other Land and is surrounded by land designated as Urban and Built-Up Land (CDC 2017). Other Land is vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres. No Prime or Unique Farmland, or Farmland of Statewide importance exists within the proposed Project site or vicinity; therefore, no impact would occur. Further analysis is not required.

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

No Impact. The proposed Project site is zoned as Terra Vista Planned Community (PC-TV). The City does not have an agricultural land use designation in its Land Use Plan, there is no agriculturally zoned land within the City, and there are no Williamson Act contracts within the City (City of Rancho Cucamonga 2010). As the proposed Project site is not zoned for any agricultural uses and is not part of a Williamson Act contract, the implementation of the proposed Project would not result in any impacts to existing zoning for agricultural use or to Williamson Act land; therefore, no impact would occur. Further analysis is not required.

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

No Impact. The proposed Project site is zoned as Terra Vista Planned Community (PC-TV). The proposed Project would not conflict with existing zoning, or cause rezoning of forest land or timberland resources. Therefore, no impact would occur. Further analysis is not required.

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

No Impact. There is no forest land in the vicinity of the proposed Project site. Therefore, the proposed Project would not result in the loss of forest land or conversion of forest land to non-forest use. No impact would occur. Further analysis is not required.

Would the project involve other changes in the existing environment that, due to their location or nature, could individually or cumulatively result in loss of Farmland to non-agricultural use or conversion of forest land to non-forest use?

No Impact. Agriculture was the main industry in the Rancho Cucamonga area in the mid to late nineteenth century with crops of citrus fruits and grapes. The region remained a rural agricultural

area until, and throughout the 1960s. Urban development (e.g. residential subdivisions and commercial areas) began to take root in the 1920s through the 1970s. The City of Rancho Cucamonga was incorporated in 1977, consolidating the three towns of Cucamonga, Alta Loma and Etiwanda into one municipality. Today, the City is densely developed with urban uses and limited vacant land. Based on historic aerial photographs (1938 to 1980) the entire proposed Project area was historically utilized for agriculture (row crops, most likely a vineyard). Active farming on the proposed Project site ceased after the property was obtained by the City. There is currently no farmland or forest land located within or near the proposed Project site. Therefore, the proposed Project would not involve any changes that could result in the loss or conversion of farmland or forest land to other uses. No impact would occur. Further analysis is not required.

5.1.3 Biological Resources

Would the project conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or any other approved local, regional, or state habitat conservation plan?

No Impact. The proposed Project site is not located within the boundary of and does not contain undeveloped natural lands subject to an adopted HCP, natural community conservation plan or other approved local, regional, or state HCP (ELMT 2019); therefore, the proposed Project would not conflict with the provisions of an adopted HCP, natural community conservation plan, or other approved local, regional, or state HCP, and no impact would occur. Further analysis is not required.

5.1.4 Energy

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

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

The Resource Conservation Element of the General Plan contains a discussion of energy resources as they relate to quality of life and sustainability issues and contains goals and policies to encourage the use of energy resources efficiently (City of Rancho Cucamonga 2010).

The 2019 California Green Building Standards Code (24 CCR, Part 11), also known as the CALGreen Code, contains mandatory requirements for new residential and nonresidential buildings throughout California. The CALGreen Code is intended to (1) cause a reduction in GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the

directives by the Governor. The CALGreen Code was established to reduce construction waste; make buildings more efficient in the use of materials and energy; and reduce environmental impact during and after construction.

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

During Project construction, energy will be consumed in the form of electricity associated with powering lights, electronic equipment, or other construction activities necessitating electrical power. Project construction will also consume energy in the form of petroleum-based fuels associated with the use of construction vehicles and equipment on the proposed Project site, construction worker travel to and from the proposed Project site, and truck trips delivering building materials to the proposed Project site and hauling solid waste from the proposed Project site. The construction of the proposed Project will require an estimated 158,078 gallons of gasoline and 290,824 gallons of diesel fuel to power construction equipment. Consumption of fuel would be short-term during construction.

During Project operation, energy consumption will involve electricity and natural gas to run Project facilities and petroleum-based fuels associated with trips to and from the proposed Project site. Annual Project operations (workers, visitors, deliveries) is estimated to demand 780,194 gallons of gasoline, 771,820 kilowatt hour of electricity, and 2.1 million kilo-British thermal units or 21 therms of natural gas.

San Bernardino County's total electrical and natural gas consumption in 2018 was approximately 15,633 million kilowatt-hours and 500 million therms (CEC 2020a). At full build-out, the proposed Project's electricity use would be approximately 0.004 percent of the existing electricity use in San Bernardino County and natural gas use would be approximately 0.00000042 percent of the existing natural gas use in San Bernardino County.

Natural gas services are provided to Central Park by Southern California Gas Company. Natural gas provided by the Southern California Gas Company service area in 2018 was approximately 5,156 million therms (CEC 2020a). The proposed Project would account for an extremely small percentage of the current consumption in Southern California Gas Company's planning area and would use existing infrastructure.

Electric services are provided to Central Park by Southern California Edison. Electricity provided by Southern California Edison service area in 2018 was approximately 85,276 million therms (CEC 2020a). The proposed Project would account for an extremely small percentage of the current consumption in Southern California Edison's planning area and would use existing infrastructure. The Clean Energy and Pollution Reduction Act, SB 350, requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 40 percent of total retail sales by 2024, 45 percent of total retail sales by 2027, and 50 percent of total retail sales by 2030 (CEC 2020b). The current renewable sources procured by Southern California Edison, including wind, solar, and geothermal sources, accounted for 36 percent of Southern California Edison's overall energy mix in 2018 (SCE 2019).

This represents the available offsite renewable sources of energy that would meet the proposed Project's energy demand.

The proposed Project's energy consumption is expected to be reduced through the implementation of all applicable regulations and codes, including the CALGreen code. The proposed Project would not result in excessive long-term operational energy demand.

The proposed Project will comply with all applicable regulations and codes which require achievement of various levels of energy efficiency in building construction, design and operation. The consumption of such resources would represent a long-term commitment of those resources. The commitment of resources required for the construction and operation of the proposed Project would limit the availability of such resources for future generations or for other uses during the life of the proposed Project. However, use of such resources will be short-term and minimal during construction and operation will not result in energy consumption requiring a significant increase in energy production for the energy provider. In addition, the proposed Project will comply with all applicable regulations and codes. Therefore, the energy demand associated with the proposed Project will be less than significant. Further analysis is not required.

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

No Impact. As noted above, the proposed Project will not result in energy consumption requiring a significant increase in energy production for the energy provider. The proposed Project is not expected to conflict with or obstruct a state or local plan for renewable energy or energy efficiency and therefore, no impacts are expected. Further analysis is not required.

5.1.5 Geology and Soils

Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

Less than Significant Impact. Liquefaction refers to a phenomenon when surface soils (generally alluvial in nature) if saturated with water lose their structural integrity and react as a liquid rather than a solid during strong ground-shaking activity. The potential for liquefaction is increased in areas with susceptibility for high water tables (i.e., saturated subsurface conditions very close to the ground surface) or inundation coupled with ground shaking. Liquefaction more often occurs in earthquake prone areas underlain by young alluvium where the groundwater table is less than 50 feet below ground surface. The depth to groundwater in the proposed Project site area is in excess of 50 feet below ground surface and the potential for liquefaction in the proposed Project area is considered remote (Kleinfelder West 2009). Settlement is often caused by loose to medium granular soils being consolidated due to soil particle redistribution into a more compact state during ground shaking. Based on the type of soils encountered at the proposed Project site, the potential for ground failure is negligible (Kleinfelder West 2009). The proposed Project would not expose people or structures to substantial impacts involving seismic-related ground failure from liquefaction; therefore, a less than significant impact would occur. Further analysis is not required.

Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

No Impact. The proposed Project site is not located in a landslide area. The land within and in the vicinity of the proposed Project site is relatively flat; thus, no impact from landslides is anticipated. Further analysis is not required.

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

Less than Significant Impact. Construction of the proposed Project would include ground-disturbing activities, such as excavation and grading in order to build the Project elements. The proposed Project (in its entirety) will require a cut volume of approximately 65,932 cy of soil and a fill volume of approximately 83,743 cy of soils. The shortage of approximately 17,811 cy of fill will be addressed through the import of soils from other private developer projects within the City needing to export soil. However, any soil brought on-site shall be tested and evaluated prior to use.

The proposed Project would be subject to the requirements of the Construction General Permit under the National Pollutant Discharge Elimination System (NPDES) program administered by the State Water Resources Control Board. This would include the submittal of a Stormwater Pollution Prevention Plan (SWPPP) to address erosion and discharge impacts associated with the proposed on-site grading. The SWPPP is also required to include a Water Quality Management Plan (WQMP) for the control of post construction pollutants. Post-construction, the proposed Project site will be developed with recreation facilities, landscaping, and hardscaping, eliminating exposed soil and associated soil erosion potential. Adherence to the requirements of NPDES, SWPPP and Rule 402 and 403 provisions would reduce impacts related to erosion to a less than significant level. Further analysis is not required.

Is the project 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 onsite or offsite landslides, lateral spreading, subsidence, liquefaction, or collapse?

Less than Significant Impact. No impact would be experienced related to liquefaction or on-site or off-site landslides. Lateral spreading generally occurs during seismic shaking conditions due to consolidation of liquefied soils and the reduced shear resistance of slopes. Based on site soils and depth to groundwater at the site, the potential for lateral spreading is considered to be low (Kleinfelder West 2009). Subsidence generally occurs as vertical “block” of soil zones which move in a vertical fashion at varying rates due to underground anomalies, soil collapse, or due to fluid withdrawals, such as groundwater or oil withdrawal. Subsidence is not considered an issue for the proposed Project site (Kleinfelder West 2009). Collapsible soils are generally defined as soils that have potential to suddenly decrease in volume upon increase in moisture content even without increase in external loads. Soils tested in Central Park have indicated collapse potential in the low to moderate range (Kleinfelder West 2009). Compliance with the City’s Building Regulations for the preparation of geotechnical investigations would require the design and construction of structures and infrastructure to withstand anticipated levels of soil settlement, thereby reducing potential hazards related to collapsible soils to less than significant levels. In addition to design-level geotechnical recommendations prepared for the proposed Project, design and construction of the proposed Project will comply with seismic safety requirements of the California Building Code. Compliance with these requirements would ensure that potential

hazards from seismic-related ground failure, including collapsible soils would be less than significant. Further analysis is not required.

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

Less than Significant Impact. Expansiveness refers to the potential to swell and shrink with repeated cycles of wetting and drying and is commonly associated with fine-grained or clayey soils. This wetting and drying causes damage due to differential settlement within buildings and other improvements. However, due to the granular nature of the soils encountered in Central Park (limited presence of clay-particle size fraction and predominance of the sand (or larger) particle sizes, the potential for expansive soils is considered to be low (Kleinfelder West 2009). In addition, the design and construction of the Project elements will comply with applicable regulations and standard specifications to prevent potential risk of damage from expansive soils. Therefore, regulatory compliance will ensure that impacts would be less than significant. Further analysis is not required.

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

No Impact. No septic tanks or alternative wastewater systems will be constructed as part of the proposed Project, and no impacts will occur. Further analysis is not required.

5.1.6 Hazards and Hazardous Materials

The City maintains a Local Hazard Mitigation Plan which assess the significant natural and manmade hazards that may affect the City and provides direction and guidance for officials and citizens in the event of emergency (City of Rancho Cucamonga 2013).

Is the project located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. The proposed Project site is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (DTSC 2019; CWRCB 2019). Since the proposed Project site is not on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, there would be no hazard to the public or environment and therefore, no impact would be experienced. Further analysis is not required.

For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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 site is not located within 2 miles of a public airport or public use airport. The nearest airport is Ontario International Airport located approximately 4 miles to the southwest. The proposed Project site is not within the Airport Influence Area or the Safety Zone for Ontario International Airport (Ontario Airport Planning 2011). The proposed Project would not result in a safety hazard nor produce excessive noise for people residing or working in the proposed Project area and no impact would occur. Further analysis is not required.

Would the project impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?

No Impact. Project construction activities will be confined to the proposed Project site and will not obstruct access to the surrounding lots or otherwise hinder emergency evacuation within the surrounding properties. At no time will any of the surrounding streets be completely closed to traffic to accommodate construction equipment or activities. During Project operation, emergency access would be maintained to all residences and public facilities since the existing adjacent roads would not be altered. Therefore, the proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan and impacts would be less than significant. Further analysis is not required.

Would the project expose people or structures, either directly or indirectly, to the risk of loss, injury, or death involving wildland fires.

Less than Significant Impact. The RCFD provides emergency response to fires and hazardous materials incidents in the City. Central Park is located in a Wildland-Urban Interface Fire Area designated as Very High Fire Severity Zone (City of Rancho Cucamonga 2019b). The Wildland-Urban Interface Fire Area refers to the zone where undeveloped, wildland vegetation transitions to developed land such as residential neighborhoods. Communities adjacent to and surrounded by wildlands are at risk of wildfires.

A Fire Protection Plan is required for all development within hazardous fire areas. The Central Park Fire Hazard Reduction and Vegetation Management Plan establishes a sustainable and annually recurring program for maintaining perimeter vegetation fuel removal and interior vegetation fuel breaks in the native (non-landscaped) vegetation at Central Park (RCFD 2017).

While Central Park is surrounded by urban development, the majority of the Park has not been developed and consists of disturbed coastal sage scrub habitat. The current vegetation fuel management plan for Central Park consists of annually maintaining the perimeter of the Park in compliance with the City's requirements for vegetation fuel set-backs from roads, structures, and publicly accessible paths and trails in addition to the annual maintenance of the interior fuel breaks.

Landscaping planned for the Project elements will follow guidance provided by the RCFD (2019a) for urban-wildland interface areas. By following the guidance, the proposed landscaping would not create hazardous conditions due to wildland fires. Proposed project facilities would be developed in compliance with applicable provisions of the California Fire and Residential Codes along with the requirements of the RCFD's Standards and Guidance documents (RCFD 2020). This will include, but not necessarily be limited to, requirements for fire apparatus access roads, address and building signage, fire protection water supply systems, and site plan criteria. Development plans would be reviewed by the RCFD to ensure compliance with the RCFD's Fire Protection Standards, Guidance Documents, and the California Fire Code. In addition, the existing vegetation fuel management plan for Central Park will continue to be implemented for the undeveloped portions of the Park. The proposed Project would not contribute to wildland fire hazards and is actually expected to reduce such risks. Therefore, no significant impact would occur, and further analysis is not required.

5.1.7 Hydrology and Water Quality

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

Less than Significant Impact.

Short-term Impacts.

The proposed Project could potentially result in water quality impacts during the short-term construction process. The grading and excavation required for proposed Project implementation would result in exposed soils that may be subject to wind and water erosion. The proposed Project would be subject to the requirements of the Construction General Permit under the stormwater NPDES program administered by the State Water Resources Control Board. This would include preparation of a SWPPP to address erosion and discharge impacts associated with the proposed on-site grading. The SWPPP is also required to include a WQMP for the control of post construction pollutants. Adherence to the requirements of NPDES and SWPPP would reduce impacts related to the potential for water quality impacts during construction to a less than significant level. Further analysis is not required.

Long-Term Operational Impacts.

As shown in Figure 3.7-1, the proposed Project will use a combination of phased directional flow conveyances (for collection and infiltration of surface water) and bioretention basins for treatment of storm water runoff. Bioretention basins are shallow, vegetated, depressed basins which function to collect, store and treat storm water runoff. The basin is designed to incorporate an engineered soil media to assist in plant uptake of pollutants. The bioretention basin also allows infiltration to the extent the on-site soil and engineered soil media can accommodate. When the infiltration rate of the underlying soil is exceeded, the treated flows are discharged through an underdrain system. Estimated treatment volumes for each Element area are shown in Figure 3.7-2. The proposed Project's water treatment and bioretention basins for treatment of storm water runoff would reduce impacts related to the potential for water quality impacts to less than significant. Further analysis is not required.

Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less than Significant Impact. The proposed Project site is underlain by the Chino groundwater basin. Groundwater depths in the Chino Basin in the City range from 350 to 600 feet below the ground surface, with deeper groundwater levels at the northern section and shallower groundwater levels at the southern section (BonTerra 2010). Groundwater levels in the proposed Project area are approximately 400 feet or more below ground surface (Kleinfelder West 2009).

With construction of all the Project elements, the pervious area of the proposed Project site will be reduced by approximately 25 percent. The remainder of the proposed Project site will remain pervious. The increase in impervious surface is not expected to result in any significant change to groundwater recharge opportunity. In addition, the proposed Project site is not within an area designated as a recharge basin or spreading ground (BonTerra 2010).

Operation of the proposed Project will require water service for the facilities (i.e. Viticulture Pavilion, Recreation Pool, Tennis Courts) and for irrigation of the proposed Project landscaping. The irrigation system will be designed for future reclaimed water. The irrigation design will also require water use allocation calculations and programming parameters per the state model water efficient ordinance, AB 1881. The proposed Project will include the use of bioretention basins which will collect, store, and treat storm water runoff. In addition, the basins could potentially increase on-site groundwater recharge, or at least off-set the limited loss of pervious areas within the proposed Project site.

The proposed Project is served by the CVWD. CVWD's water is provided by surface water (7 percent), groundwater (45 percent), and imported water (47 percent) (CVWD 2016). The CVWD has adopted an Urban Water Management Plan that estimates demand needs through the year 2035. Currently there is sufficient water supply available to the City to serve this Project (CVWD 2016). Additionally, the proposed Project contains no residential development and does not trigger the requirement (i.e., reaching or exceeding 500 dwelling units or equivalent with project implementation) for preparation of a water supply assessment as set forth in Sections 10910–10912 of the California Water Code. The CVWD has established conditions that development projects in its service area must meet and the RCFD has established standards to satisfy fire flow requirements.

As the proposed Project will result in little, if any, reduction of groundwater recharge and will comply with the water service requirements of the CVWD and RCFD, impacts to groundwater supply would be less than significant. Further analysis is not required.

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 that would: (i). Result in substantial erosion or siltation on site or off site?; (ii). Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on site or off site?; (iii). Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less than Significant Impact. Adherence to the requirements of the NPDES and the SWPPP would reduce impacts related to the potential for erosion or siltation impacts to adjacent storm drains or Deer Creek Channel during construction to a less than significant level. Post-construction, the proposed Project site will be developed with recreation facilities, landscaping, and hardscaping, eliminating exposed soil and associated soil erosion potential. Further analysis is not required.

With construction of all the Project elements, the pervious area of the proposed Project site will be reduced by approximately 25 percent. The remainder of the proposed Project site will remain pervious. The increase in impervious surface is not expected to substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off site. Use of the bioretention basin may decrease site runoff in comparison to existing conditions. Impacts would be less than significant. Further analysis is not required.

Post-construction, the drainage pattern on the proposed Project site will include directed runoff conveyances and bioretention basins to control and treat storm water runoff. The proposed Project's bioretention/water treatment basins would reduce potential water quality impacts to

surface water to less than significant. Also, as the use of the bioretention basin may decrease site runoff in comparison to existing conditions, the proposed Project would not contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems. Further analysis is not required.

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

No Impact. The proposed Project site is not located within a 100-year floodplain (FEMA 2015). The proposed Project site is not located in any flood hazard, tsunami, or seiche zones (BonTerra 2010). The proposed Project site is not located near any areas at risk for seiche, tsunami or mudflows; therefore, no impacts associated with these hazards would occur. Further analysis is not required.

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

Less Than Significant Impact. All development projects in the City are required to comply with the Santa Ana RWQCB WQMP. The WQMP requires that all construction and post-construction developments incorporate Best Management Practices to reduce water quality impacts.

On September 16, 2014, Governor Jerry Brown signed into law a three-bill legislative package, composed of AB1739, SB 1168, and SB 1319, collectively known as the Sustainable Groundwater Management Act (SGMA). This act provides a framework for sustainable, groundwater management (California Department of Water Resources 2020), SGMA exempts adjudicated groundwater basins that already operate under a court-ordered water management plan from the requirements of designating a Groundwater Sustainability Agency and developing a Groundwater Sustainability Plan. The Chino Basin is an adjudicated basin, managed according to the rights to pump from the basin, and is expressly included in SGMA's list of exempt basins. Because of this, the Chino Basin is not required to have a sustainable groundwater sustainability plan.

Adherence to the requirements of NPDES, SWPPP, and Best Management Practices would reduce impacts related to the potential for erosion, siltation, or hazardous materials spills impacts during construction to a less than significant level. The post-construction drainage pattern within the proposed Project site will include both phased directional flow conveyances and bioretention basins for treatment of storm water runoff. The basin is designed to incorporate an engineered soil media to assist in plant uptake of pollutants. The bioretention basin also allows infiltration to the extent the on-site soil and engineered soil media can accommodate. When the infiltration rate of the underlying soil is exceeded, the treated flows are discharged through an underdrain system. The proposed Project's bioretention/water treatment basins would reduce impacts to surface water quality to less than significant. In addition, these conveyances and the bioretention basins could potentially increase on-site groundwater recharge. The proposed Project would not conflict with the Santa Ana RWQCB WQMP, CVWD Urban Water Management Plan or the NPDES program. Impacts would be less than significant. Further analysis is not required.

5.1.8 Land Use and Planning

Would the project physically divide an established community?

No Impact. The proposed Project is located within Central Park. Land uses surrounding the proposed Project site include existing Central Park facilities, residential uses, Deer Creek Flood Control Channel, and commercial uses. The proposed Project area is urbanized with park, residential, and commercial land uses. Development of the proposed Project site would not hinder pedestrians or travelers on the adjacent streets or sidewalks from accessing other areas in the surrounding community. Therefore, the proposed Project would not divide an established community and no impact would occur. Further analysis is not required.

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

No Impact. In 1984, the City of Rancho Cucamonga (City) Council acquired approximately 103.4 gross acres of land northwest of the corner of Milliken Avenue and Base Line Road for a park that would serve the whole city and become a major public resource on the order of other great parks in other major cities. A Central Park Master Plan was developed in the late 1980s, however, no revenue was available at the time for plan development. In 2017, the Rancho Cucamonga City Council approved efforts for a Central Park Master Plan Update. The Central Park Master Plan Update reVISION reflects the historical design philosophy, is responsive to the past planning efforts, includes modern community inspired recreation elements, and incorporates a phased approach providing for fiscally achievable project segments ranging in size from 1 acre to 11 acres.

Land use in the City is directed by the City's General Plan (City of Rancho Cucamonga 2010). According to the City General Plan Land Use Map, the land use designation for Central Park, including the proposed Project site, is Public Facilities - Parks and it is zoned Terra Vista Planned Community (PC-TV). The surrounding areas have mostly residential land use designations and zoning with some commercial designations. The City's General Plan Public Facilities - Parks designation is applied to both existing and planned public parks. Under the PC-TV, Central Park is designated City Park. The permitted uses under the City's General Plan and zoning designations for the proposed Project site include future and existing park uses. The proposed Project is considered an allowed use under these designations.

The Community Services Element of the 2010 General Plan describes the earlier Central Park Master Plan as containing three major use areas or elements: 1) Senior and community centers; 2) the sports complex, housing a gymnasium, family aquatics center, and tennis complex; and 3) park and open space areas, providing scenic water features, group and individual picnic areas, children's play areas, trails and trail connections to community and regional trails, and open grassy areas for field play. Implementation of the Central Park Master Plan will be completed in phases.

Goal CS-1 of the Community Services Element Goals and Policies states: Provide attractive, high-quality community services facilities that adequately meet the community's need. Policy CS-1.3 specifically addresses this goal in relation to Central Park. Policy CS-1.3 states: Continue to develop Central Park as envisioned in the Central Park Master Plan. As of 2009, a portion of

Central Park has been built that includes the James L. Brulte Senior Center and the Goldy S. Lewis Community Center as well as outdoor areas. The Central Park Master Plan, prepared by a broad-based citizen task force and subsequently approved by the Park and Recreation Commission and the City Council, provides guidance on the remaining unfinished portions of the park. Future Central Park development should reflect what was envisioned in the Central Park Master Plan.

Approved in 1987, the original Park Master Plan integrated the cultural and sports-related needs of the community, as well as the need for a large open park setting. The Master Plan contained three major use areas or elements: the OmniCenter, Sports Complex (non-sports fields), and Park and Open Space. The OmniCenter was envisioned to contain five separate but integrated components: a central library, a community center, a children's theater and lecture hall, a fine arts center and museum, and finally a one-acre central plaza. The Sports Complex contained a multi-purpose facility, recreation center, swim complex and tennis complex. It purposefully did not include sports fields as the Task Force and City Council determined that these elements were available at other parks within the City and wanted Central Park to be unique in providing grand amenities not found at other locations. Park and Open Space was perhaps the most important element and was the link tying the other two elements together. It provided a variety of active and passive recreation opportunities to draw people from all over the City. The park area contained two lakes with a stream and waterfalls, group and individual picnic areas, a performance pavilion on the lake's edge with natural amphitheater seating, children's play areas, a botanical garden, interpretive trail and a series of walking paths throughout the park. Phase I of the Central Park Master Plan, which included the Goldy S. Lewis Community Center and James L. Brulte Senior Center and the Central Park Playground was completed in 2006.

Since 1987 there have been several versions of the vision of Central Park, the most recent version prepared in 2007. This version defined the elements for the remainder of the Park, or Phase II, and reflected some of the original elements being constructed elsewhere in the City. In 2008, an IS/MND was prepared for the 2007 Central Park Master Plan Update. The 2007 Central Park Master Plan Update contained the following elements: an aquatic center with an indoor pool, a fire station, tennis courts, park maintenance center, an amphitheater, group picnic facilities, lake development, play area, general park amenities and associated parking.

The proposed Project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the proposed Project; therefore, no impacts would occur. Further analysis is not required.

5.1.9 Mineral Resources

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. Mineral Resource Zones are commercially viable mineral or aggregate deposits, such as sand, gravel, and other construction aggregate. The mineral resources in the City consist of deposits of regionally significant aggregate resources identified by the California Department of Conservation, Divisions of Mines and Geology. The Mineral Land Classification for Central Park is MRZ-2, where significant mineral deposits are present. These significant sand and gravel resources for the City are found in alluvial fans in and near the City, including the Lytle Creek,

San Antonio Creek, Cucamonga Creek, Deer Creek, and Day Creek. These alluvial fans generally start at the canyons at the base of the San Gabriel Mountains, north of the City. While the northern ends of these fans remain undeveloped, the creeks have been channelized in and near the City and in developed areas along the creeks. The portion of Day Creek on the western boundary of Central Park is channelized. As of 2008, no mining operations occur within the City along Day Creek (BonTerra 2010). There are no oil, gas, or geothermal resources in Central Park or the surrounding area (CDC 2019). No mineral recovery activities currently occur in the proposed Project area, and portion of Day Creek on the western boundary of Central Park is channelized. The proposed Project site is not located within an area of oil and gas resources. Thus, no impacts would occur. Further analysis is not required.

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. No mineral recovery activities currently occur in the proposed Project area, and portion of Day Creek on the western boundary of Central Park is channelized. The proposed Project site is not located within an area of oil and gas resources. Thus, no impacts would occur. Further analysis is not required.

5.1.10 Noise

For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The nearest airport is Ontario International Airport located approximately 4 miles to the southwest. The proposed Project site is not within the Airport Influence Area or the Safety Zone for Ontario International Airport (Ontario Airport Planning 2011). There is no public airport or public use airport located within 2 miles of the proposed Project site. The proposed Project would expose people residing or working in the proposed Project area to excessive noise levels associated with a public airport and no impact would occur. Further analysis is not required.

5.1.11 Population and Housing

Would the project induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and business) or indirectly (e.g., through extension of roads or other infrastructure)?

No Impact. Estimates from the California Department of Finance show the City's 2019 population to be 179,412, a 0.44 percent increase from 2018 (DOF 2019). The City has an estimated 59,399 housing units. The proposed Project would not involve the construction of any homes, businesses, or other uses that would result in direct population growth or infrastructure that indirectly results in population growth. No impacts related to growth-inducement are expected. Further analysis is not required.

Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. Construction of the proposed Project would not require the removal or obstruction of existing housing and thus would not require the displacement of people or the construction of replacement housing elsewhere. No impacts would occur. Further analysis is not required.

5.1.12 Public Services

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a 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 and other related services in the City are provided by the RCFD. The closest RCFD station to the proposed Project site is Station No. 173, located at 12270 Firehouse Court, approximately 1.25 miles east of the proposed Project site (RCFD 2019b). The proposed Project will add new structures to Central Park. This is not expected to significantly increase the need for fire protection services as the development of the Project elements will decrease the disturbed coastal sage scrub habitat, thereby reducing the Wildland-Urban Interface Fire Area designated as Very High Fire Severity Zone. In addition, there are no residential uses proposed and the proposed Project is not expected to result in an increase in the City's population. Proposed Project facilities would be developed in compliance with applicable provisions of the California Fire and Residential Codes along with the requirements of the RCFD's Standards and Guidance documents, including but not limited to, requirements for fire apparatus access roads, address and building signage, fire protection water supply systems, and site plan criteria. Development plans would be reviewed by the RCFD to ensure compliance with the RCFD's Fire Protection Standards, Guidance Documents, and the California Fire Code. No significant impacts to fire protection services or facilities are expected. Further analysis is not required.

ii.) Police Protection

Less Than Significant. Police protection services for the City are provided by the San Bernardino County Sheriff's Department. The San Bernardino County Sheriff's Department Rancho Cucamonga Station is located at 10510 Civic Center Drive, approximately 1.3 miles south of the proposed Project site. This station will provide police service to the proposed Project site, Rancho Cucamonga Station currently has 182 personnel including 141 sworn staff and 41 civilian staff. The Rancho Cucamonga Station strives to provide quality law enforcement services in an efficient and expeditious manner. Calls for service are appropriately prioritized (emergency, priority 1 through 4) to ensure proper response times. The average response time for emergency calls is 4 minutes and 16 seconds and for non-emergency calls (priority 1-4) is 12 minutes and 33 seconds. The Rancho Cucamonga Station is currently adequately staffed to provide quality police services to the City of Rancho Cucamonga. (San Bernardino County Sheriff's Department 2020)

The proposed Project will add new structures to Central Park. Currently, the Rancho Cucamonga Station is adequately staffed to provide quality police services to the City of Rancho Cucamonga and is expected to remain adequately staffed at current levels to accommodate any additional

demand resulting from the proposed Project (San Bernardino County Sheriff's Department 2020). The proposed Project is not expected to significantly increase the need for police protection beyond what is currently provided and therefore, would not require police facilities to be altered. No significant impacts to police protection services or facilities are expected. Further analysis is not required.

iii.) Schools

No Impact. Four elementary school districts, one high school district, and one community college district serve the City (City of Rancho Cucamonga 2019c). Implementation of the proposed Project would not result in the need for the construction of additional school facilities, as the Project would not result in an increase in population nor would it result in a removal of a school, a reduction of school capacity, or displacement of students from existing schools. Therefore, no impact to school services or facilities are expected. Further analysis is not required.

iv.) Parks

Less Than Significant Impact. The City has approximately 347.6 acres of parkland and recreational facilities. These include 25 neighborhood parks, three community parks, and eight special use facilities (BonTerra 2010). Implementation of the proposed Project would not create need for construction of additional park facilities, as the proposed Project would not result in an increase in population nor would it result in a removal of a park. The proposed Project involves construction of Project elements. The environmental impacts associated with the construction of the proposed Project will not result in any significant impacts that could not be reduced to less than significant with mitigation as described in this Draft Program EIR. Impacts to parks would be less than significant. Further analysis is not required.

v.) Other Public Facilities

No Impact. The City library system consists of two library locations: the Archibald Library at 7368 Archibald Avenue and the Paul A. Blane Library at 12505 Cultural Center Drive (City of Rancho Cucamonga 2019d). The proposed Project would not result in an increase in population and associated demand on libraries. No impacts are expected. Further analysis is not required.

5.1.13 Recreation

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

No Impact. The City has approximately 347.6 acres of parkland and recreational facilities. These include 25 neighborhood parks, three community parks, and eight special use facilities (BonTerra 2010). The proposed Project involves the addition of proposed Project elements the existing Central Park. The construction of the proposed Project will not affect the use of the other existing facilities at Central Park. Therefore, the development of the proposed Project will not drive current users of Central Park to other recreational facilities. The proposed Project would not add additional residences or business in the neighborhood and thus would not cause additional use of any park or other recreational facilities in the area. No impact is expected to occur. Further analysis is not required.

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

Less Than Significant Impact. The proposed Project involves the addition of Project elements to the existing Central Park. The environmental impacts associated with the construction of the proposed Project will not result in any significant impacts as described in this Draft Program EIR. Impacts to parks would be less than significant. Further analysis is not required.

5.1.14 Transportation

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 proposed Project design does not include the construction of any sharp curves. As the proposed Project involves improvements to an existing park, the proposed Project would be compatible with the existing park facilities. The proposed Project does not include the construction of any structure or feature that would substantially increase hazards due to a design feature, therefore no impact associated with this issue would occur and no mitigation is required. Further analysis is not required.

Would the project result in inadequate emergency access?

No Impact. The construction and operation of the proposed Project will not result in any public access closure, nor will it otherwise obstruct traffic on the surrounding streets. In addition, the construction of the proposed Project will not impede emergency access to the adjacent properties. The proposed Project would be required to design, construct, and maintain structures, roadways, and facilities to allow for adequate emergency access and evacuation routes. No impacts are expected. Further analysis is not required.

5.1.15 Utilities and Service Systems

Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less than Significant Impact. Wastewater conveyance is handled by the City and CVWD and wastewater is processed by CVWD and the IEUA. Wastewater from Central Park is treated at IEUA's Regional Plant No. 4 (RP-4), located in the City at the intersection of 6th Street and Etiwanda (BonTerra 2010). RP-4 treats an average flow of 10 million gallons per day (mgd) and has a treatment capacity of 14 mgd (IEUA 2019). West of Milliken Avenue, along Base Line Road an underground sewer main is located which provides sewer service for the existing facilities in the southeast corner of Central Park at Milliken Avenue and Base Line Road (RJM 2018).

Storm drainage in the City is provided by curbs and gutter along streets, which direct storm water into catch basins, pipes, and concrete channels that run southerly in or near the City. The City's storm drainage facilities connect to the regional storm drainage system owned and maintained by the San Bernardino County Department of Public Works, which includes channelized creeks, debris basins, and spreading grounds. Together, the City and the San Bernardino County Department of Public Works prepare drainage plans and review development projects using the County's design

criteria (BonTerra 2010). On the north side of Base Line Road, exists a 24-inch underground storm drain. Storm drain facilities are also found along Central Park Drive (RJM 2018).

On the north side of Base Line Road, exists a 12-inch water main which provides water service for the existing Park facilities at Central Park Drive and Base Line Road (RJM 2018).

Electric services are provided to Central Park by Southern California Edison. On the north side of Base Line Road, exists an underground Southern California Edison transmission line (66 kilovolt) and distribution line which provides electric service for the existing Park facilities at Central Park Drive and Base Line Road (RJM 2018).

Natural gas services are provided to Central Park by Southern California Gas Company. An underground Southern California Gas Company distribution line is located on the north side of Base Line Road (RJM 2018).

Communication services, including digital cable and high-speed internet services are provided to Central Park by Verizon. Underground transmission lines are located on the north side of Base Line Road, the west side of Milliken Avenue, and the east side of Central Park Drive (RJM 2018).

The proposed Project will construct connections to the existing systems adjacent to the proposed Project site. Construction of these connections would result in temporary and minor impacts to air quality (see Section 4.1), noise (see Section 4.7), and traffic (see Section 4.8) during construction activities, but these have been reduced through adherence to applicable rules and regulations and mitigation (see Mitigation Measures AIR-1 and NOISE-1) to maintain impacts at a less than significant level. Further analysis is not required.

Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less than Significant Impact. Potable water is provided to the proposed Project site by the CVWD, which serves a 47-square mile area including the City, portions of the cities of Upland, Ontario, and Fontana, and some unincorporated areas of San Bernardino County. CVWD's water is provided by surface water (7 percent), groundwater (45 percent), and imported water (47 percent; CVWD 2016). The 2015 volume of water supplies provided by CVWD (the most current available data) is 42,678 acre-feet per year. The CVWD has adopted an Urban Water Management Plan that estimates demand needs through the year 2035. Per the Urban Water Management Plan, CVWD will be able to provide the project Year 2035 demand of 65,700 acre-feet per year. This includes demands from the City which represent approximately 83.84 percent of the CVWD service area. The projected demand from the City is based on the City's remaining buildable areas 2010 General Plan land use designations.

The CalEEMod model used to estimate air quality and GHG emissions during the construction and operation of the proposed Project (see Section 4.5) estimates the proposed Project's potential water consumption at approximately 11.6 million gallons per year or approximately 35.6 acre-feet per year. The CalEEMod emissions inventory model is provided in Appendix B. This represents a small amount of the projected demand for the City. In addition, the proposed Project is consistent with the 2010 General Plan's land use designation for the proposed Project site and is therefore accounted for under the CVWD's Urban Water Management Plan.

There is currently a sufficient water supply available to the City to serve this proposed Project (CVWD 2016). Additionally, the proposed Project contains no residential development and does not trigger the requirement (500 dwelling units or equivalent) for preparation of a water supply assessment as set forth in Sections 10910–10912 of the California Water Code. The CVWD has established conditions that development projects in its service area must meet and the RCFD has established standards to satisfy fire flow requirements. With compliance with the water service requirements of the CVWD and RCFD, impacts to water supply would be less than significant. Further analysis is not required.

Would the project result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less than Significant Impact. Wastewater from the proposed Project would be treated at the IEUA RP-4 treatment plant. The plant's average daily treatment flow of 10 mgd is below the it's treatment capacity of 14 mgd. As the wastewater generated by the proposed Project would occur infrequently and would be expected to be well within the capacity of the RP-4 treatment plant, impacts to wastewater treatment systems would be less than significant. Further analysis is not required.

Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less than Significant Impact. The California Integrated Waste Management Act of 1989 (AB 939) established the California Integrated Waste Management Board and its review, approval, permitting and enforcement authority related to AB 939 requirements. The California Integrated Waste Management Act required all counties to prepare an Integrated Waste Management Plan, and required all cities and counties to divert 50 percent of all solid waste from landfills or transformation facilities by January 1, 2000 through source reduction, recycling and compost activities, and established California Integrated Waste Management Board.

To attain the goals of AB 939, the City implemented a series of programs with local businesses and public agencies for recycling materials that significantly decreased the amount of waste the City sent to landfills. In addition to the existing recycling programs, one of the basic principles of "Green Building," discussed in the Resource Conservation chapter of the General Plan, is to use recycled and reused materials in new construction. Construction and building demolition debris produce large quantities of solid waste, much of which can be recycled or processed for reuse. By 2006 (the most recent year a California Integrated Waste Management Board-approved diversion rate is available), Rancho Cucamonga diverted 57 percent of its waste from landfills through recycling and reuse. (BonTerra 2010)

In 2008, the California State Senate passed Senate Bill 1016 (SB 1016) that builds upon AB 939. Instead of looking at diversion rates for cities and counties, this law requires jurisdictions to report waste generation factors based on disposal weight, as reported by disposal facilities, and reported population and employment data (BonTerra 2010). The City's target and the disposal rates for 2017 and 2018 are summarized in Table 5.1.15-1 below. As shown, the actual rates of disposal for both 2017 and 2018 are well below the target rates.

Table 5.1.15-1. City of Rancho Cucamonga Solid Waste Disposal Rates

Disposal Rates Basis	Calculated Rates Pounds Per Day (pounds)		
	Target[1]	2017[2]	2018[2]
Per Resident	6.8	4.8	4.9
Per Employee	16.7	10.5	10.8

1: Rancho Cucamonga General Plan Update: Public Facilities and Infrastructure Chapter
2: CalRecycle, Jurisdiction Review Reports, https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/ReviewReports, accessed August 2020.

Since 2007 Burrtec Waste Industries has been the single franchised waste hauler for the City, and has been responsible for providing recycling, refuse, and green waste services for residents, commercial and industrial customers. Burrtec Waste Industries is the only business permitted to haul solid waste in the City (City of Rancho Cucamonga 2019e).

Solid waste generated in the City is transferred to Burrtec's West Valley Materials Recovery Facility, located immediately southeast of the City at 13373 Napa Street in Fontana. Solid waste that is not diverted is primarily disposed at Mid-Valley Landfill, a County Class III (i.e., municipal waste) landfill located at 2390 North Alder Avenue in Rialto (BonTerra 2010). Mid-Valley Landfill has a daily permitted capacity of 7,500 tons per day, a remaining capacity of 67,520,000 cy, and an anticipated close date of 2033 (CalRecycle 2019).

During construction (short-term) and operation (long-term), bulk solid waste, excess building material, fill, etc., shall be disposed of in a manner consistent with State of California Integrated Waste Management Act of 1989 and shall be removed from the proposed Project site.

The CalEEMod model used to estimate air quality and GHG emissions during the construction and operation of the proposed Project (see Section 4.5) estimated the proposed Project's potential solid waste generation at approximately 171.63 tons per year. The CalEEMod emissions inventory model is provided in Appendix B. It is anticipated that the proposed Project's solid waste disposal needs would continue to be served by Burrtec Waste Industries. Consistent with the City's ongoing recycling programs, all recyclable materials generated as a result of construction/demolition and proposed Project operation would be sent to the West Valley Materials Recovery Facility in Fontana. If a conservative recycling rate of 50 percent is assumed, then the proposed Project would send approximately 0.24 tons per day to an area landfill. These amounts represent approximately 0.0032 percent of the daily permitted capacity of 7,500 tons per day for the Mid-Valley Landfill. The amount of solid waste generated and disposed of in the nearby landfill during operation of the proposed Project is expected to be within the permitted capacity of this landfill. Given these considerations, and with recycling required by the City implemented during all construction phases of the proposed Project, potential impacts associated with solid waste capacity would be considered less than significant. Further analysis is not required.

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

No Impact. Federal, State, and local statutes and regulations regarding solid waste generation, transport, and disposal are intended to decrease solid waste generation through mandatory reductions in solid waste quantities (e.g., through recycling and composting of green waste) and the safe and efficient transport of solid waste. The City would coordinate with Burrtec Waste Industries to develop a collection program for recyclables (e.g., paper, plastics, glass and

aluminum) similar to the existing program for the existing Central Park facilities, in in accordance with local and State programs, including the California Solid Waste Reuse and Recycling Act of 1991. Additionally, the City would continue to comply with applicable practices enacted by the City under AB 939 and any other applicable local, State, and federal solid waste management regulations. AB 939 requires all Counties to prepare a County Integrated Waste Management Plan. The proposed Project would comply with all federal, State, and local statutes and regulations related to solid waste, including the California Integrated Waste Management Act and City requirements for solid waste generated during the construction process; therefore, no impact would occur. Further analysis is not required.

5.1.16 Wildfire

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

Less than Significant Impact. The RCFD provides emergency response to fires and hazardous materials incidents in the City. Central Park is located in a Wildland-Urban Interface Fire Area designated as Very High Fire Severity Zone (City of Rancho Cucamonga 2019b). The Wildland-Urban Interface Fire Area refers to the zone where undeveloped, wildland vegetation transitions to developed land such as residential neighborhoods. Communities adjacent to and surrounded by wildlands are at risk of wildfires.

A Fire Protection Plan is required for all development within hazardous fire areas, The Central Park Fire Hazard Reduction and Vegetation Management Plan establishes a sustainable and annually recurring program for maintaining perimeter vegetation (i.e., through fuel removal) and interior vegetation (through fuel breaks) in the native (non-landscaped) vegetation at Central Park (RCFD 2017).

For construction of the proposed Project, traffic control will be used to temporarily reduce available lanes during the construction of connections to storm drain and utility services and street resurfacing. Full road closures are not anticipated, however. In addition, a traffic control plan will be prepared to accommodate any work involve the local roadways. These impacts would be short term and temporary and would have a less than significant impact to roadways utilized for emergency purposes. Through City review, the proposed Project would provide adequate vehicular access along public roads and Project driveways, thereby accommodating access for all emergency vehicles. During Project operation, emergency access would be maintained since the existing adjacent roads would not be altered. Therefore, the proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan and therefore any impacts would be less than significant. Further analysis is not required.

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

Less Than Significant Impact. While Central Park is surrounded by urban development, the majority of the Park has not been developed and consists of disturbed coastal sage scrub habitat. The vegetation fuel management plan for Central Park consists of annually maintaining the perimeter of the park in compliance with the City's requirements for vegetation fuel set-backs from

roads, structures, and publicly accessible paths and trails in addition to the annual maintenance of the interior fuel breaks.

Landscaping for the proposed Project will follow the Landscaping Guidelines for Projects Located in the Wildland Urban Interface Fire Area developed by the RCFD (2019a). By following the guideline, the proposed landscaping would not create hazardous conditions due to wildland fires. Proposed Project facilities would be developed in compliance with applicable provisions of the California Fire and Residential Codes along with the requirements of the RCFD's Standards and Guidance documents, including but not limited to, requirements for fire apparatus access roads, address and building signage, fire protection water supply systems, and site plan criteria. Development plans would be reviewed by the RCFD to ensure compliance with the RCFD's Fire Protection Standards, Guidance Documents, and the California Fire Code. In addition, the existing vegetation fuel management plan for Central Park will continue to be implemented for the undeveloped portions of the Park as long as needed. Therefore, the proposed Project would not contribute to and would likely reduce fire hazard risk and no significant impact would occur. Further analysis is not required.

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

Less Than Significant Impact. As discussed above, the proposed Project would not contribute to fire hazard risk and no significant impact would occur.

Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact. The land within and in the vicinity of the proposed Project site is relatively flat. The proposed Project site is not located within a 100-year floodplain (FEMA 2015). The proposed Project site is not located in any other flood inundation area (BonTerra 2010). The proposed Project would not exacerbate any flooding or landslide risks associated with post-fire conditions, therefore, no impacts are expected. Further analysis is not required.

5.1.17 Other less Than Significant Impacts

As detailed in Chapters 4.1 through 4.9 of this Draft Program EIR, after a more detailed evaluation of the environmental issues associated with the proposed Project, the EIR determined that impacts would be less than significant with incorporation of mitigation measures for the following environmental issue areas:

- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Noise

- Transportation
- Tribal Cultural Resources

5.2 SIGNIFICANT AND UNAVOIDABLE ENVIRONMENTAL IMPACTS

The potentially adverse effects of the proposed Project are discussed in Chapters 4.1 through 4.9 of this Draft Program EIR. Mitigation measures have been recommended that would avoid, reduce or minimize impacts. All the potential impacts associated with the proposed Project would be either less than significant or mitigated to less than significant. The proposed Project would not result in any significant unavoidable impacts.

5.3 IRREVERSIBLE ENVIRONMENTAL CHANGES

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

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

Title 24 of the California Administrative Code regulates the amount of energy consumed by new development. Nevertheless, the consumption of such resources would represent a long-term commitment of those resources. The commitment of resources required for the construction and operation of the proposed Project would limit the availability of such resources for future generations or for other uses during the life of the proposed Project. However, continued use of such resources is consistent with the planned changes on the proposed Project site and within the general vicinity.

5.4 GROWTH INDUCING IMPACTS

Pursuant to the CEQA Guidelines (Section 15126.2(d)): an EIR must address whether a project will directly, or indirectly foster growth as follows:

[An EIR shall] discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of wastewater treatment plant, might, for example, allow for more construction in service areas). Increases in the population may further tax existing community service facilities

so consideration must be given to this impact. Also, discuss the characteristic of some projects, which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.]

As discussed below, this analysis evaluates whether the approval of the proposed Project would directly, or indirectly, induce economic, population, or housing growth in the surrounding environment.

Direct Growth-Inducing Impacts in the Surrounding Environment

Direct growth-inducing impacts occur when the development of a project induces population growth or the construction of additional developments in the same area of a proposed project and produces related growth-associated impacts. Growth-inducing projects remove physical obstacles to population growth, such as the construction of a new road into an undeveloped area, a wastewater treatment plant expansion, and projects that allow new development in the service area. Construction of such infrastructure projects are considered in relation to the potential development and the potential environmental impacts.

The proposed Project would not directly induce growth as it does not involve residential development. The proposed Project site has been designated for park uses and is contemplated and provided for within the City's adopted General Plan. In addition, the proposed Project would not remove obstacles to regional growth and related development.

Although the proposed Project site is currently undeveloped, its surrounding areas are currently developed with urban land uses. Buildout of the Central Park Master Plan Update reVISION would include infrastructure improvements and extensions, including roadways, storm drains, retention basins, wastewater, potable water, and dry utilities (e.g., natural gas, electric, telephone, and cable). These infrastructure improvements would connect to existing facilities within and adjacent to the proposed Project site to support the proposed recreational uses. No significant impacts related to growth inducement would occur.

Indirect Growth-Inducing Impacts in the Surrounding Environment

The proposed Project would not indirectly induce growth through substantial increase in employment opportunities or an employment-related increase in population. Construction workers for the proposed Project are expected to be drawn from the local labor pool. It is expected that during operation of the proposed Project, most of proposed Project employment opportunities would be filled by residents of communities adjacent to the proposed Project site. The proposed Project could indirectly result in a minimal growth in population of the immediate area. This minimal growth would not represent unplanned population growth in the community or result in economic growth that exceeds levels anticipated in plans adopted by the City. Therefore, no significant impacts related to growth inducement would occur.

CHAPTER 6
ALTERNATIVES

6.1 PURPOSE OF THE PROJECT ALTERNATIVES

CEQA requires that an EIR describe a range of reasonable alternatives to the project, or to the location of the project, which could feasibly avoid or lessen any significant environmental impacts while substantially attaining the basic objectives of the project. An EIR should also evaluate the comparative merits of the alternatives. This chapter describes potential alternatives to the proposed Project that were considered, identifies alternatives that were eliminated from further consideration and reasons for dismissal, and analyzes available alternatives in comparison to the potential environmental impacts associated with the proposed Project.

Key provisions of the CEQA Guidelines pertaining to the alternatives analysis are summarized below:

- The discussion of alternatives shall focus on alternatives to the proposed Project or its location that are capable of avoiding or substantially lessening any significant effects of the proposed Project, even if these alternatives would impede to some degree the attainment of the proposed Project objectives, or would be more costly.
- The No Project Alternative shall be evaluated along with its impact. The No Project analysis shall discuss the existing conditions at the time the NOP is published. Additionally, the analysis shall discuss what would be reasonably expected to occur in the foreseeable future if the proposed Project were not approved, based on current plans and consistent with available infrastructure and community services.
- The range of alternatives required in an EIR is governed by a “rule of reason”; therefore, the EIR must evaluate only those alternatives necessary to permit a reasoned choice. Alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the proposed Project.
- For alternative locations, only locations that would avoid or substantially lessen any of the significant effects of the proposed Project need to be considered for inclusion in the EIR.
- An EIR need not consider an alternative whose effects cannot be reasonably ascertained and whose implementation is remote and speculative.

The range of feasible alternatives is selected and discussed in a manner to foster meaningful public participation and inform decision-making. Among the factors that may be taken into account when addressing the feasibility of alternatives are environmental impacts, site suitability, economic viability, availability of infrastructure, general plan consistency, regulatory limitations, jurisdictional boundaries, and whether the proponent could reasonably acquire, control, or otherwise have access to an alternative site. An EIR need not consider an alternative whose effects cannot be reasonably identified, whose implementation is remote or speculative, or that would not achieve the basic project objectives.

6.2 PROJECT OBJECTIVES

In order to ensure that the proposed Project is characterized by community inspired recreation elements, functional integrity, dynamic economic responsiveness, environmental sensitivity, and aesthetic quality, the following objectives have been identified for the proposed Project:

1. To develop a comprehensive planning document that will establish the preliminary land use development for the balance of the Central Park area.
2. To create a unique recreational facility in the City with a variety of active and passive recreational opportunities and amenities accessible within the community and offering multiple options for pedestrian mobility and non-vehicular access.
3. To identify a variety of recreational opportunities designed to be implemented in small (1–11 acres) buildable sections in Central Park responsive to evolving, economic conditions and City-wide recreational needs.
4. To implement a landscape concept that features drought-tolerant plant materials that create an aesthetically pleasing, thematically coherent outdoor environment while minimizing demand for water resources.

6.3 ALTERNATIVES CONSIDERED AND ELIMINATED

Section 15126.6(c) of the *CEQA Guidelines* suggests that an EIR identify alternatives that were considered for analysis but rejected as infeasible and briefly explain the reasons for their rejection.

According to the CEQA Guidelines, the following factors may be used to eliminate alternatives from detailed consideration: the alternative's failure to meet most of the basic project objectives, the alternative's infeasibility, or the alternative's inability to avoid significant environmental impacts.

Alternatives to the proposed Project should include those that would obtain most of the Project objectives (listed above), while reducing one or more of the significant and unavoidable impacts of the propose Project. In addition, CEQA requires that the No Project be evaluated and requires that an Alternative Site Location be considered when appropriate.

As the primary objective of the proposed Project is to establish the preliminary land use development for the balance of the Central Park area, an alternative site would not be appropriate as an alternative to the proposed Project. An alternative site would not meet the specific objective of developing the balance of the Central Park area. Alternatives involving non-park uses development of the proposed Project site were also eliminated from consideration because most of the established objectives for would be met.

6.4 ALTERNATIVES SELECTED FOR FURTHER ANALYSIS

In addition to the mandatory No Project Alternative, a buckwheat scrub habitat border project was considered due to this alternative's potential to attain the basic Project objectives discussed above, and to lessen or avoid significant environmental effects, primarily biological resources, resulting from implementation of the proposed Project. Alternatives considered in this Draft Program EIR include:

- No Project Alternative – This alternative assumes that improvements described for the proposed Project would not be implemented.
- Buckwheat Scrub Habitat Border Alternative – Under this alternative, Element O: Deer Creek Channel Trail would not be developed. Bordering the west side of Central Park, this element involves landscaping and improvements to this portion of the Deer Creek Channel Trail in a 4.1-acre area. Instead of developing this element, the Element O area would retain the existing buckwheat scrub vegetation. In addition, the jurisdictional areas within the Element O site would not be removed or disturbed.

6.4.1 No Project Alternative

According to the *CEQA Guidelines* (Section 15126.6(e)(3)(b)), the No Project Alternative is defined as the "circumstance under which the project does not proceed." Section 15126.6(e) of the CEQA Guidelines requires analysis of a No Project alternative that (1) discusses existing site conditions at the time the NOP is prepared or the EIR is commenced, and (2) analyzes what can reasonably be expected to occur in the foreseeable future based on current plans if the proposed Project were not approved. Under the No Project Alternative, the proposed Project would not be implemented and approximately 61 acres of the Central Park site would remain undeveloped. There would be a continuation of the existing disturbed coastal sage scrub habitat. Potential impacts for the No Project Alternative are discussed below.

Air Quality

Implementation of this alternative would not create new sources of regional air emissions. There would be no impact to air quality.

Biological Resources

Since no changes to land uses are proposed under this alternative, no impacts to existing biological resources on, or surrounding, the proposed Project site would occur.

Cultural Resources

Most of the proposed Project area has been disturbed by past agricultural activities. This alternative would not include any new type of ground-disturbing activities or involve removal of any cultural resources. No impacts to cultural resources would occur.

Geology and Soils

This alternative would not include any new development on the site, new type of ground-disturbing activities, or involve removal of any paleontological resources. No impacts to geology and soil resources would occur.

Greenhouse Gas Emissions

This alternative does not include uses that would create new sources of regional air emissions and contribute to global climate change. There would be no impact to global climate change.

Hazards and Hazardous Materials

This alternative would not include any new development on the site or other ground-disturbing activities. No impacts associated with the accidental release of hazardous substances during

construction and operation or with the potential for disturbing unknown hazardous materials during construction would occur.

Noise

This alternative would not introduce new land uses that would generate construction or operational noise that would increase the ambient noise levels in the surrounding area. No impacts to existing noise levels would occur.

Transportation

Under this alternative, development of the proposed Project site would not occur. The proposed Project site would remain undeveloped and traffic volumes in the surrounding area would not increase as a result of this alternative. This alternative would not have any impacts to the existing transportation system or traffic volumes.

Tribal Cultural Resources

Most the proposed Project area has been disturbed by past agricultural activities. This alternative would not include any new type of ground-disturbing activities or involve removal of any tribal cultural resources. No impacts to cultural resources would occur.

Conclusion and Relationship to Project Objectives

The No Project Alternative would result in the continuation of existing conditions on the proposed Project site. This would be the environmentally superior alternative as no impacts or less than significant impacts would occur if the proposed Project site were to remain undeveloped. However, the four Project objectives would not be met.

6.4.2 Buckwheat Scrub Habitat Border Alternative

Buckwheat Scrub Habitat Border Alternative – Under this alternative, Element O: Deer Creek Channel Trail would not be developed. Bordering the west side of Central Park, this element involves landscaping and improvements to this portion of the Deer Creek Channel Trail in a 4.1-acre area. Instead of developing this element, the Element O area would retain the existing approximately 2.51 acres of buckwheat scrub vegetation. In addition, the jurisdictional area within Element O (approximately 0.6 acre) would not be removed or disturbed. Included in this area are approximately 0.6 acre of Waters of the U.S. (non-wetlands waters) and approximately 0.15 acre of CDFW jurisdictional area. Potential impacts for the Buckwheat Scrub Habitat Border Alternative are discussed below.

Air Quality

The elimination of Element O would reduce the duration of construction activities associated with this alternative. However, impacts related to daily construction emissions would remain similar to the impacts identified under the proposed Project since daily construction activities would be assumed to be similar to the proposed Project but would occur over a shorter duration due to the reduction of development. Consistent with the proposed Project, construction-related impacts to air quality would be less than significant.

Operations-related emissions impacts from this alternative would not be significantly less than the proposed Project since use of a trail does not tend to be a vehicle trip generator. Operations-related emissions impacts would be less than significant, similar to the proposed Project.

Biological Resources

Implementation of the Buckwheat Scrub Habitat Border Alternative would result in a slightly smaller area disturbed by Project construction (approximately 4.1 acres fewer than the proposed Project). The potential for impacting biological resources would be slightly reduced. Without developing Element O, this area would retain approximately 2.51 acres of existing buckwheat scrub vegetation. In addition, approximately 0.6 acre of jurisdictional area within Element O would not be removed or disturbed. This includes approximately 0.6 acre of Waters of the U.S. non-wetlands waters and approximately 0.15 acre of CDFW jurisdictional area. Nevertheless, mitigation measures similar to those identified in Section 4.2 still would be required for the other elements, and these would reduce impacts to biological resources to less than significant levels.

Cultural Resources

Implementation of the Buckwheat Scrub Habitat Border Alternative would disturb about 4.1 acres less during Project construction than would be disturbed by the proposed Project. Thus, the potential for disturbing undocumented cultural resources would be slightly less than under the proposed Project. For the remainder of the proposed Project site area, this alternative would require similar site improvements to those required for the proposed Project. Impacts to cultural resources on the alternative site would be slightly less than those identified for the proposed Project. Mitigation measures similar to those identified in Section 4.3 still would be required under this alternative, which would reduce impacts related to cultural resources to less than significant levels.

Geology and Soils

Under this alternative, impacts associated with potential hazards from earthquake fault rupture or strong seismic shaking would be the same as for the proposed Project. In addition to design-level geotechnical recommendations prepared for the proposed Project, design and construction of this alternative would comply with seismic safety requirements of the City's General Plan and the California Building Code. Compliance with these requirements would ensure that potential hazards from earthquake fault rupture or strong seismic shaking would be less than significant.

Implementation of the Buckwheat Scrub Habitat Border Alternative would disturb an area that is about 4.1 acres smaller than the proposed Project. The potential for disturbing undocumented paleontological resources would be slightly reduced. For the remainder of the proposed Project site, this alternative would require similar site improvements required for the proposed Project. Impacts to paleontological resources on the proposed Project site would be slightly lower than those identified for the proposed Project. Mitigation measures similar to those identified in Section 4.4 would be required, which would result in fewer impacts related to paleontological resources to less than significant levels.

Greenhouse Gas Emissions

Under the Buckwheat Scrub Habitat Border Alternative, the area of the park to be developed would be slightly smaller than the area developed for the proposed Project. This is not expected to result in a significantly smaller number of vehicle trips as trails do not tend to be vehicle trip

generators. Energy usage would be slightly less during construction of this alternative due to smaller development area and during operation due to a smaller area requiring maintenance. Therefore, the GHG emissions from this alternative would be slightly reduced in comparison to the proposed Project. As with the proposed Project impacts to associated with GHG emissions would be less than significant.

Hazards and Hazardous Materials

Potential impacts associated with associated with hazards and hazardous materials would be similar to the proposed Project. The level of risk associated with the accidental release of hazardous substances during construction and operation is not considered significant due to the small volume and low concentration of hazardous materials utilized during construction and operation. Because substantial regulation and documentation exists to address hazardous materials, potential effects due to use or transport of hazardous materials would be less than significant.

Implementation of the Buckwheat Scrub Habitat Border Alternative would disturb a smaller area during Project construction (approximately 4.1 acres less than the proposed Project). The potential for disturbing unknown hazardous materials during construction would be slightly less than those identified for the proposed Project. Mitigation measures similar to those identified in Section 4.6 still would be required for this alternative, reducing impacts associated with hazards and hazardous materials to less than significant levels.

Noise

The slightly smaller area to be developed under this alternative would result in a shorter duration of construction activities than under the proposed Project. However, impacts related to construction noise would remain similar to the impacts identified under the proposed Project since daily construction activities would be assumed to be similar to the proposed Project. However, construction would occur over a slightly shorter duration due to the slightly smaller development area. Mitigation measures similar to those identified in Section 4.7 for the proposed Project would be required, and these would reduce construction-related impacts to less than significant.

Compared to the proposed Project, the Buckwheat Scrub Habitat Border would not result in significantly lower noise levels compared to the proposed Project, as trails do not tend to be vehicle trip generators. As with the proposed Project impacts associated with noise during operation would be less than significant.

Transportation

Compared to the proposed Project, the Buckwheat Scrub Habitat Border would not result in significantly lower traffic levels compared to the proposed Project, as trails do not tend to be vehicle trip generators. As with the proposed Project, impacts the associated with traffic would be less than significant.

Tribal Cultural Resources

Implementation of the Buckwheat Scrub Habitat Border Alternative would disturb by construction about 4.1 acres fewer than the proposed Project. The potential for disturbing undocumented tribal cultural resources, therefore, would be slightly less than projected for the proposed Project. In the remainder of the proposed Project site, this alternative would require similar site improvements to

those required for the proposed Project. Impacts to tribal cultural resources on the proposed site area for this alternative would be slightly less than those identified for the proposed Project. Mitigation measures required for this alternative would be similar to those identified in Section 4.9, and these would reduce impacts related to tribal cultural resources to less than significant levels.

Conclusion and Relationship to Project Objectives

The Reduced Project Alternative would disturb a slightly smaller area than the proposed Project (about 57 acres compared to 61 acres). Therefore, the area experiencing environmental impacts would be slightly smaller than the proposed Project. Nevertheless, most impacts under the Reduced Project Alternative would be substantially similar to those expected under the proposed Project.

This Reduced Project Alternative would achieve most of the objectives of the proposed Project. However, the number of recreational amenities (Project Objective No. 2) would be less than expected for the proposed Project.

6.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. This would ideally be the alternative that results in fewer (or no) significant and unavoidable impacts. CEQA Guidelines Section 15126(d)(2) states that if the environmentally superior alternative is the No Project alternative, the EIR shall also identify an environmentally superior alternative from among the other alternatives.

Table 6-1, Summary of Project Alternatives, provides a comparison of each alternative. The No Project Alternative would result in no impacts or less than significant impacts to any of the issue areas. The Buckwheat Scrub Habitat Border Project Alternative would slightly reduce potential impacts of the proposed Project. The No Project Alternative would be the environmentally superior alternative but would not meet any of the Project objectives. The environmentally superior development alternative would be the Buckwheat Scrub Habitat Border Alternative since this alternative would result in slightly fewer impacts due to decrease of development on the proposed Project site.

Table 6-1. Summary of Project Alternatives

Issue Area	Proposed Project	No Project	Buckwheat Scrub Habitat Border Project
Air Quality	LTS	NI	LTS
Biological Resources	LTS/M	NI	LTS/M
Cultural Resources	LTS/M	NI	LTS/M
Geology and Soils	LTS/M	NI	LTS/M
Greenhouse Gas Emissions	LTS	NI	LTS
Hazards and Hazardous Materials	LTS/M	NI	LTS/M
Noise	LTS/M	NI	LTS/M
Transportation	LTS	NI	LTS
Tribal Cultural Resources	LTS/M	NI	LTS/M

NI = No Impact
LTS = Less Than Significant
LTS/M = Less Than Significant with Mitigation
S = Significant and Unavoidable

CHAPTER 7
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CHAPTER 8
LIST OF PREPARERS

8.1 CITY OF RANCHO CUCAMONGA (LEAD AGENCY)

Jeff Benson, Management Analyst II, Project Manager
Jennifer Nakamura, Management Analyst II
Jennifer Brown, Management Analyst I

8.2 TETRA TECH (TECHNICAL ASSISTANCE)

Paula Fell, Project Manager
Derrick Coleman, PhD, Deputy Project Manager
Amanda Beck, Biological Resources
Jenna Farrell, Cultural Resources
Kevin Fowler, Noise
Chris Hulik, Noise
Jeff Harrington, Air Quality/GHG
Tiffanie Ramos, Air Quality/GHG
DeeAnna Garcia, Word Processor/Editor
Sierra Marrs, Mapping/Graphics

8.3 SUBCONSULTANTS

Fehr and Peers (Traffic Consultants)

Paul Herrmann, P.E.
Biling Liu, P.E.

ELMT (Biological Resources Consultants)

Tom McGill, PhD
Travis McGill

APPENDIX A NOP/Comments Received

NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT

FOR THE

CENTRAL PARK MASTER PLAN UPDATE reVISION PROJECT

NOTICE IS HEREBY GIVEN to all interested parties that the City of Rancho Cucamonga, as the Lead Agency, will be preparing a Program Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA) Guidelines Section 15082. A Notice of Preparation (NOP) has been prepared to describe the Project and identify the scope of environmental issues recommended to be addressed in the EIR, and to seek your comments on what environmental effects and alternatives the Program EIR should study. You are being notified of the City of Rancho Cucamonga's intent, as Lead Agency, to prepare a Program EIR for this Project, as it is located in an area of interest to you and/or the organization or agency you represent.

PROJECT TITLE: Central Park Master Plan Update reVISION

LEAD AGENCY: City of Rancho Cucamonga

PROJECT LOCATION: The proposed Project site is located in Central Park, in the City of Rancho Cucamonga and the County of San Bernardino. Central Park is located approximately in the center of the City of Rancho Cucamonga at 11200 Base Line Road, and is within Section 36 of Township 1 South, Range 7 West, on the Cucamonga Peak, California, U.S. Geological Survey 7.5-minute quadrangle Map (1980). Bounded on the south by Base Line Road and on the east by Milliken Avenue, Central Park is approximately 2.5 miles west of Interstate 15 (I-15), 3.7 miles north of Interstate 10 (I-10), and 0.7 miles south of the State Route 210 (SR-210) in Rancho Cucamonga, see Figure 1.

PROJECT DESCRIPTION: The Central Park Master Plan Update reVISION is a comprehensive planning document which defines the development of the remaining, undeveloped land located west of the existing Senior and Community Centers at Central Park, see Figure 2: Site Plan. It identifies smaller (1-11 acre), buildable sections comprised of financially responsible amenities, so that when funding becomes available, park development could continue within the framework of a comprehensive community inspired vision, see Figure 3: Elements Plan by Acreage. The proposed Project is composed of recreation areas and elements that relate to the existing open drainage channel spine and is anchored by the Senior and Community Centers to the east and the proposed Recreation Pool, Multi-Purpose Facility, and Tennis Courts to the west. The park will provide a variety of both active and passive zones and uses for groups of all ages. The Universal Accessible Playground will provide access to opportunity for people of all ages and abilities to promote play, physical activity, sociability, and learning. The Adventure Area will promote a unique outdoor experience for personal physical development, leadership, and team building. The park also features the "Great Lawn", Viticulture Pavilion, a flexible park area for large community event gatherings and celebrations.

The Central Park Master Plan Update reVISION also included the development of an Amphitheater (Element D). In order to qualify for the grant funding, the Central Park Amphitheater Project was recently assessed in an Initial Study/Mitigated Negative Declaration

(IS/MND). The IS/MND, which was certified on October 2, 2019, determined that impacts associated with the implementation of the Central Park Amphitheater Project would not be significant or would be reduced to less than significant through mitigation measures.

POTENTIAL ENVIRONMENTAL EFFECTS: In accordance with the CEQA Guidelines Section 15063(a), the City of Rancho Cucamonga determined that an EIR would be required for the proposed Project. Pursuant to CEQA Guidelines Section 15060(s), "If the lead agency can determine that an EIR will be clearly required for a project, the agency may skip further initial review of the project and begin work directly on the EIR process…in the absence of an initial study, the lead agency shall still focus the EIR on the significant effects of the project and indicate briefly its reasons for determining that other effects would not be significant or potentially significant." Additionally, as stated in CEQA Guidelines Section 15063, if a lead agency can determine that an EIR will clearly be required for the project, an Initial Study is not required. In accordance with these CEQA Guidelines sections, the City has prepared this Notice of Preparation for the proposed Project without an accompanying Initial Study. The City will instead substantiate the elimination of the following topical areas in the *Effects Found Not To Be Significant* Section of the EIR: Aesthetics; Agriculture and Forestry Resources; Energy; Hazards and Hazardous Materials; Hydrology and Water Quality; Land Use; Mineral Resources; Population and Housing; Recreation; and Utilities and Service Systems; and Wildfire.

The following issues will be analyzed in detail in the respective sections of the EIR: Air Quality; Biological Resources; Cultural Resources; Geology and Soils; Greenhouse Gas Emissions; Noise; Transportation and Traffic; and Tribal Cultural Resources.

RESPONDING TO THIS NOTICE: Pursuant to Section 15082 of the State CEQA Guidelines, responsible and trustee agencies and other interested parties, including members of the public, must submit any comments in response to this notice no later than 30 days after receipt. Comments and suggestions should, at a minimum, (1) identify the significant environmental issues, reasonable alternatives, and mitigation measures that should be explored in the EIR; (2) whether the responding agency will be a responsible or trustee agency for the proposed project; and (3) any related issues raised by organizations and/or interested parties other than potential responsible or trustee agencies, including interested or affected members of the public. Please identify a contact person for your agency.

DUE DATE FOR PUBLIC SCOPING COMMENTS: The City of Rancho Cucamonga invites you to submit written comments describing your specific environmental concerns about the proposed Project. It is requested that all mailed or emailed communications on this project include reference to the Project title "Central Park Master Plan Update reVISION Project" in the subject line. Agency responses should include the name and contact information of the person within the commenting agency. Due to the time limits mandated by State Law, your response must be sent at the earliest possible date, but not later than *5:00 p.m. on December 19, 2019*.

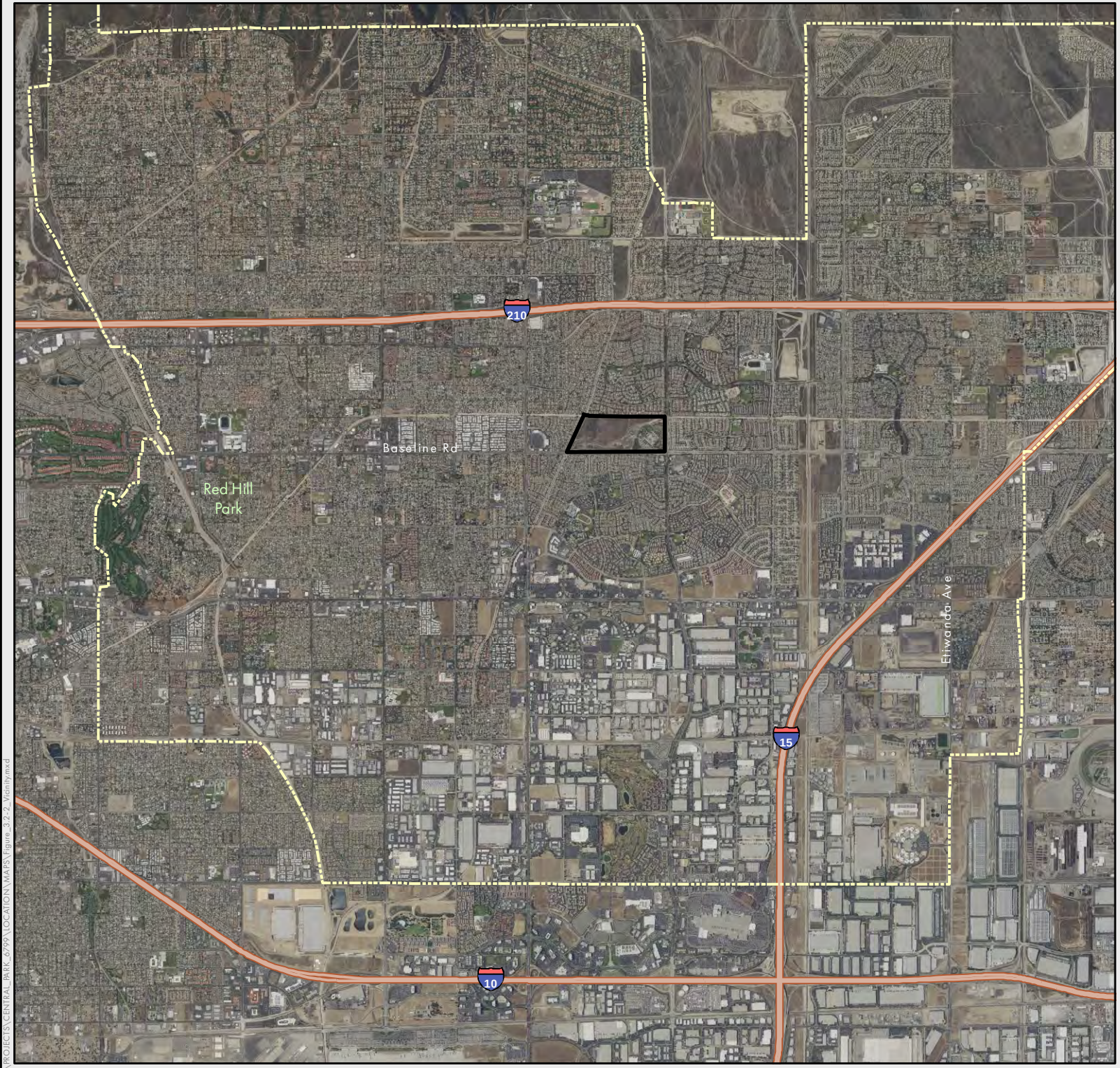
Please send your responses by mail to: City of Rancho Cucamonga
Community Services Department
10500 Civic Center Drive

Rancho Cucamonga, CA 91730
Attn: Jeff Benson, Management Analyst II

Or by email to: Jeff.Benson@cityofrc.us

NOTICE OF SCOPING MEETING: A scoping meeting for the proposed Project will be held on December 3, 2019 at 6:30 PM at 11200 Baseline Road, Rancho Cucamonga, CA, 91701 in the Alta Loma Room of the Goldy S. Lewis Community Center.

HAZARDOUS MATERIALS STATEMENT: The project site is not listed on any list of hazardous waste sites prepared pursuant to Government Code Section 65962.5.



City of Rancho Cucamonga
Central Park

Figure 1
Project Vicinity

San Bernardino County, CA

Project Area

City of Rancho Cucamonga Boundary

Interstate

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Imagery Source: USDA NAIP 2016

RANCHO CUCAMONGA

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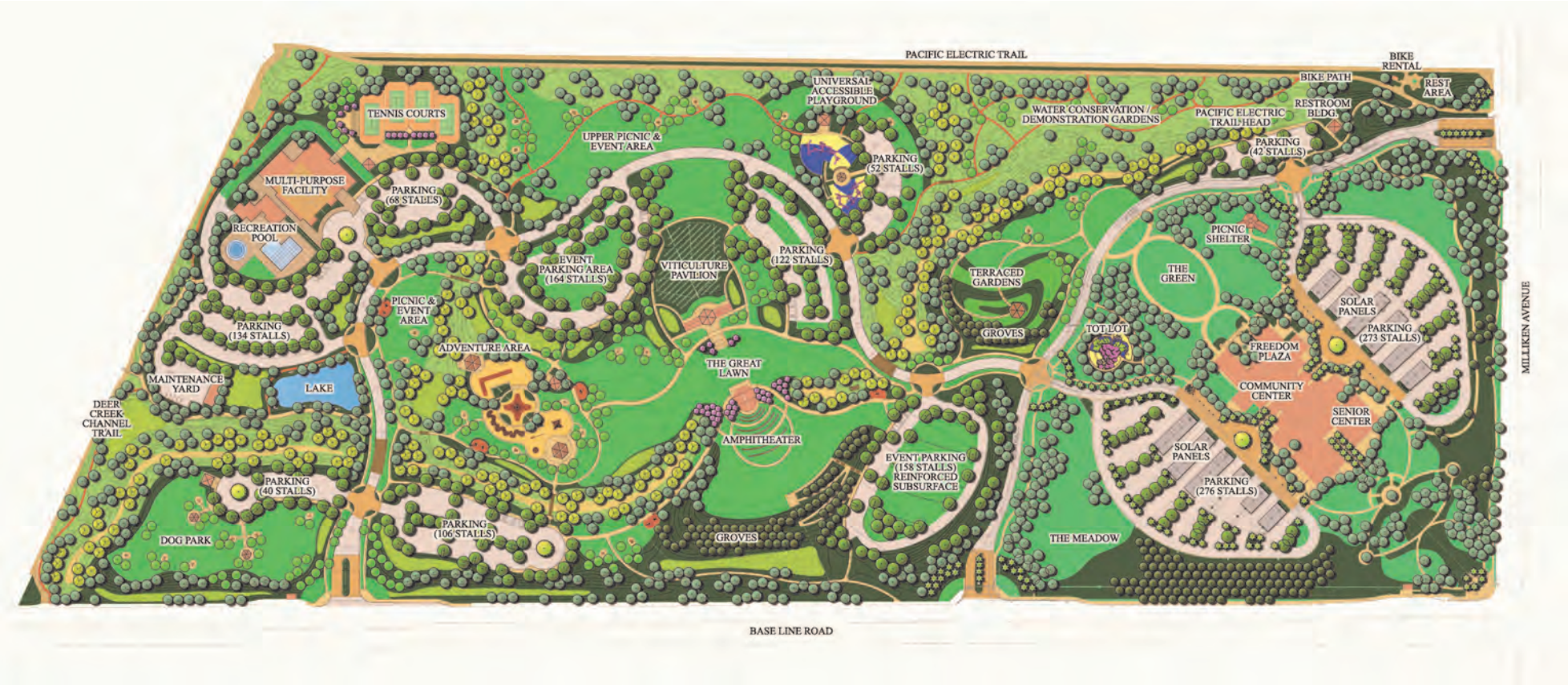

City of Rancho Cucamonga
Central Park

Figure 2
Project Site Plan

San Bernardino County, CA

Showing full build-out of Central Park
including existing Community Center and Senior Center

Source: RJM Design Group, Central Park Master Plan Update. January 29, 2018

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RANCHO CUCAMONGA

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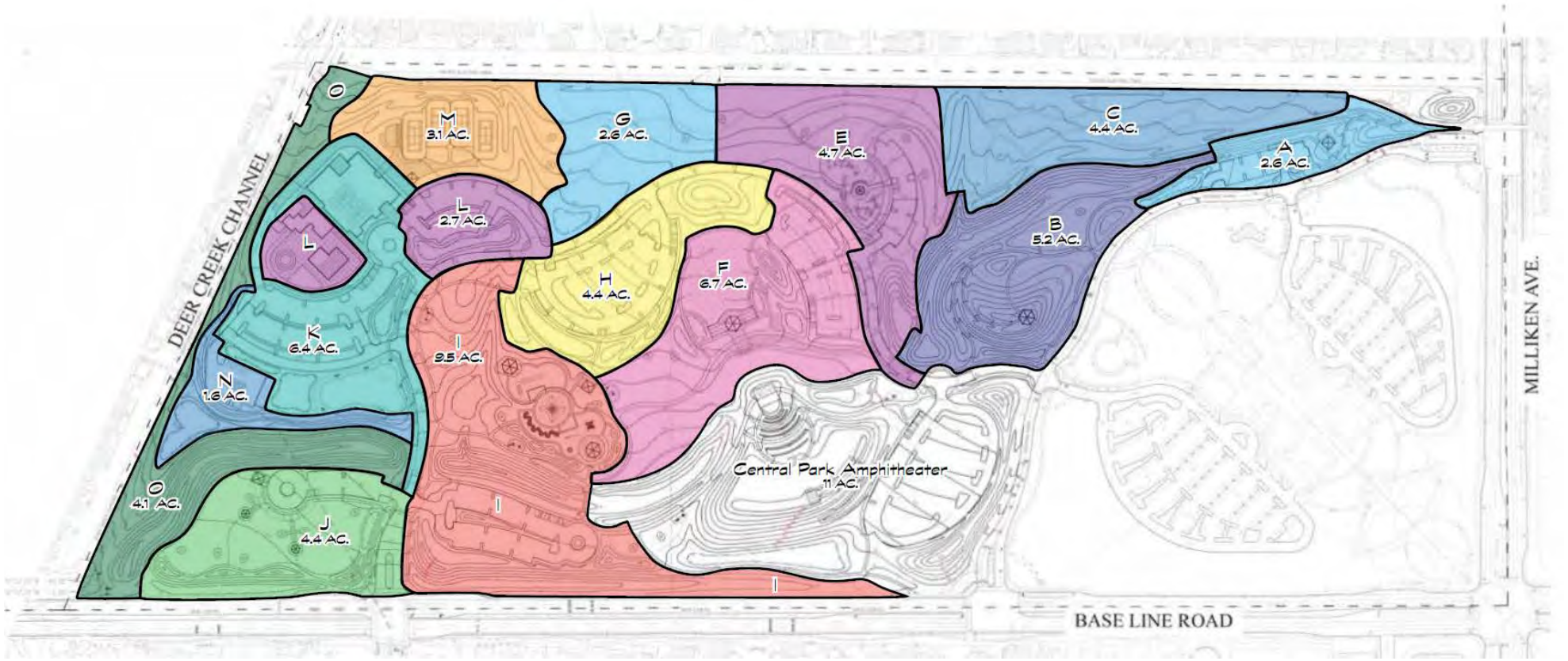

City of Rancho Cucamonga
Central Park

Figure 3
Element Plan with Acreage

San Bernardino County, CA

A. PACIFIC ELECTRIC TRAILHEAD
B. TERRACED GARDENS
C. WATER CONSERVATION/ DEMONSTRATION GARDEN
D. AMPHITHEATER
E. UNIVERSAL ACCESSIBLE PLAYGROUND
F. VITICULTURE PAVILION
G. UPPER PICNIC AREA AND EVENT AREA
H. EVENT PARKING AREA
I. ADVENTURE AREA PARKING AND EVENT/PICNIC AREA
J. DOG PARK
K. MULTI-PURPOSE FACILITY AND PARKING
L. RECREATION POOL
M. TENNIS COURTS
N. MAINTENANCE YARD
O. DEER CREEK CHANNEL TRAIL

NOTES:
1. Order does not represent actual sequence of areas for improvement.
2. Sub-phasing of improvements may occur within each identified element.

Source: RJM Design Group, Central Park Master Plan Update. January 29, 2018

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RANCHO CUCAMONGA

TETRA TECH

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NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691 Phone: (916) 373-3710
Email: nahc@nahc.ca.gov
Website: http://www.nahc.ca.gov

November 18, 2019

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

RE: SCH# 2019110342, Central Park Master Plan Update reVISION Project, San Bernardino County

Dear Mr. Benson:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements**. If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
   - **a.** A brief description of the project.
   - **b.** The lead agency contact information.
   - **c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
   - **d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).
   - **a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
   - **a.** Alternatives to the project**.**
   - **b.** Recommended mitigation measures**.**
   - **c.** Significant effects**.** (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:
   - **a.** Type of environmental review necessary.
   - **b.** Significance of the tribal cultural resources.
   - **c.** Significance of the project's impacts on tribal cultural resources.
   - **d.** If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
   - **a.** Whether the proposed project has a significant impact on an identified tribal cultural resource.
   - **b.** Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:
    a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
    b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:
    a. Avoidance and preservation of the resources in place, including, but not limited to:
        i. Planning and construction to avoid the resources and protect the cultural and natural context.
        ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
    b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
        i. Protecting the cultural character and integrity of the resource.
        ii. Protecting the traditional use of the resource.
        iii. Protecting the confidentiality of the resource.
    c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
    d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).
    e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
    f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
    a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
    b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
    c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
    b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
    a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
    b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
    a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
    b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
    c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address:

Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green
Staff Services Analyst

cc: State Clearinghouse

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

SENT VIA USPS AND E-MAIL: December 17, 2019

Jeff.Benson@cityofrc.us
Jeff Benson, Management Analyst II
City of Rancho Cucamonga, Community Services Department
10500 Civic Center Drive
Rancho Cucamonga, CA 91730

Notice of Preparation of an Environmental Impact Report for the Proposed Central Park Master Plan Update reVISION Project

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. South Coast AQMD staff's comments are recommendations regarding the analysis of potential air quality impacts from the Proposed Project that should be included in the Environmental Impact Report (EIR). Please send South Coast AQMD a copy of the EIR upon its completion. Note that copies of the EIR that are submitted to the State Clearinghouse are not forwarded to South Coast AQMD. Please forward a copy of the EIR directly to South Coast AQMD at the address shown in the letterhead. **In addition, please send with the EIR all appendices or technical documents related to the air quality, health risk, and greenhouse gas analyses and electronic versions of all air quality modeling and health risk assessment files[1]. These include emission calculation spreadsheets and modeling input and output files (not PDF files). Without all files and supporting documentation, South Coast AQMD staff will be unable to complete our review of the air quality analyses in a timely manner. Any delays in providing all supporting documentation will require additional time for review beyond the end of the comment period.**

Air Quality Analysis

South Coast AQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. South Coast AQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from South Coast AQMD's Subscription Services Department by calling (909) 396-3720. More guidance developed since this Handbook is also available on South Coast AQMD's website at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993). South Coast AQMD staff also recommends that the Lead Agency use the CalEEMod land use emissions software. This software has recently been updated to incorporate up-to-date state and locally approved emission factors and methodologies for estimating pollutant emissions from typical land use development. CalEEMod is the only software model maintained by the California Air Pollution Control Officers Association (CAPCOA) and replaces the now outdated URBEMIS. This model is available free of charge at: www.caleemod.com.

South Coast AQMD has also developed both regional and localized significance thresholds. South Coast AQMD staff requests that the Lead Agency quantify criteria pollutant emissions and compare the results to South Coast AQMD's CEQA regional pollutant emissions significance thresholds to determine air

[1] Pursuant to the CEQA Guidelines Section 15174, the information contained in an EIR shall include summarized technical data, maps, plot plans, diagrams, and similar relevant information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public. Placement of highly technical and specialized analysis and data in the body of an EIR should be avoided through inclusion of supporting information and analyses as appendices to the main body of the EIR. Appendices to the EIR may be prepared in volumes separate from the basic EIR document, but shall be readily available for public examination and shall be submitted to all clearinghouses which assist in public review.

quality impacts. South Coast AQMD's CEQA regional pollutant emissions significance thresholds can be found here at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf. In addition to analyzing regional air quality impacts, South Coast AQMD staff recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LSTs can be used in addition to the recommended regional significance thresholds as a second indication of air quality impacts when preparing a CEQA document. Therefore, when preparing the air quality analysis for the Proposed Project, it is recommended that the Lead Agency perform a localized analysis by either using the LSTs developed by South Coast AQMD staff or performing dispersion modeling as necessary. Guidance for performing a localized air quality analysis can be found at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the Proposed Project and all air pollutant sources related to the Proposed Project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, such as sources that generate or attract vehicular trips, should be included in the analysis.

In the event that the Proposed Project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the Lead Agency perform a mobile source health risk assessment. Guidance for performing a mobile source health risk assessment ("*Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*") can be found at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis. An analysis of all toxic air contaminant impacts due to the use of equipment potentially generating such air pollutants should also be included.

In addition, guidance on siting incompatible land uses can be found in the California Air Resources Board's *Air Quality and Land Use Handbook: A Community Health Perspective*, which can be found at: http://www.arb.ca.gov/ch/handbook.pdf. CARB's Land Use Handbook is a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process. Guidance[2] on strategies to reduce air pollution exposure near high-volume roadways can be found at: https://www.arb.ca.gov/ch/rd_technical_advisory_final.PDF.

Mitigation Measures

In the event that the Proposed Project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize these impacts. Pursuant to CEQA Guidelines Section 15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed. Several resources are available to assist the Lead Agency with identifying potential mitigation measures for the Proposed Project, including:

[2] In April 2017, CARB published a technical advisory, *Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways: Technical Advisory*, to supplement CARB's Air Quality and Land Use Handbook: A Community Health Perspective. This technical advisory is intended to provide information on strategies to reduce exposures to traffic emissions near high-volume roadways to assist land use planning and decision-making in order to protect public health and promote equity and environmental justice. The technical advisory is available at: https://www.arb.ca.gov/ch/landuse.htm.

- Chapter 11 "Mitigating the Impact of a Project" of South Coast AQMD'S *CEQA Air Quality Handbook* South Coast AQMD's CEQA web pages available here: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mitigation-measures-and-control-efficiencies
- South Coast AQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook for controlling construction-related emissions and Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities
- South Coast AQMD's Mitigation Monitoring and Reporting Plan (MMRP) for the 2016 Air Quality Management Plan (2016 AQMP) available here (starting on page 86): http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2017/2017-mar3-035.pdf
- CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures* available here: http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf

Alternatives

In the event that the Proposed Project generates significant adverse air quality impacts, CEQA requires the consideration and discussion of alternatives to the project or its location which are capable of avoiding or substantially lessening any of the significant effects of the project. The discussion of a reasonable range of potentially feasible alternatives, including a "no project" alternative, is intended to foster informed decision-making and public participation. Pursuant to CEQA Guidelines Section 15126.6(d), the EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the Proposed Project.

Permits

If implementation of the Proposed Project requires a permit from South Coast AQMD, South Coast AQMD should be identified as a Responsible Agency for the Proposed Project in the EIR. For more information on permits, please visit South Coast AQMD's webpage at: http://www.aqmd.gov/home/permits. Questions on permits can be directed to South Coast AQMD's Engineering and Permitting staff at (909) 396-3385.

Data Sources

South Coast AQMD rules and relevant air quality reports and data are available by calling South Coast AQMD's Public Information Center at (909) 396-2001. Much of the information available through the Public Information Center is also available at South Coast AQMD's webpage at: http://www.aqmd.gov.

South Coast AQMD staff is available to work with the Lead Agency to ensure that project's air quality and health risk impacts are accurately evaluated and mitigated where feasible. If you have any questions regarding this letter, please contact me at lsun@aqmd.gov.

Sincerely,

Lijin Sun

Lijin Sun, J.D.
Program Supervisor, CEQA IGR
Planning, Rule Development & Area Sources

LS
SBC191119-05
Control Number

APPENDIX B Air Quality and Greenhouse Gas Emission Calculations

City of Rancho Cucamonga - Central Park Master Plan reVISION

San Bernardino-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	164.00	Space	1.48	65,600.00	0
City Park	7.33	Acre	7.33	319,294.80	0
Recreational Swimming Pool	30.00	1000sqft	0.69	30,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Conservative case based on 10-acre development (164-space parking lot, 30,000 sq ft recreational/multi-purpose building facility, and 7.33 acres of city park)

Construction Phase - Default phasing for Site Preparation, Grading, Building Construction, Paving, Architectural Coating; no Demolition

Grading - Potential import of 18,000 cy soils

Architectural Coating - Defaults based on Non-Residential Building Interior/Exterior, Parking Area

Vehicle Trips - Defaults (conservative) based on City Park and Recreational Swimming Pool vehicle trips

Energy Use - Energy Use for recreational/mutli-purpose building facility based on 'Place of Worship' default values to capture assembly uses (e.g. meetings, classes, and occasional catering or parties)

Construction Off-road Equipment Mitigation - SCAQMD Fugitive Dust Mitigation Measures and Control Efficiencies

Mobile Land Use Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblEnergyUse	LightingElect	0.00	2.93
tblEnergyUse	NT24E	0.00	5.02
tblEnergyUse	NT24NG	0.00	17.00
tblEnergyUse	T24E	0.00	2.20
tblEnergyUse	T24NG	0.00	15.00
tblGrading	MaterialImported	0.00	18,000.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.3817	3.5485	3.0891	8.5600e-003	0.4476	0.1356	0.5831	0.1620	0.1270	0.2890	0.0000	775.2990	775.2990	0.1013	0.0000	777.8321
2022	0.1653	0.1269	0.1803	3.1000e-004	5.4800e-003	6.5300e-003	0.0120	1.4600e-003	6.0700e-003	7.5300e-003	0.0000	26.9664	26.9664	6.7600e-003	0.0000	27.1353
Maximum	**0.3817**	**3.5485**	**3.0891**	**8.5600e-003**	**0.4476**	**0.1356**	**0.5831**	**0.1620**	**0.1270**	**0.2890**	**0.0000**	**775.2990**	**775.2990**	**0.1013**	**0.0000**	**777.8321**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.3817	3.5485	3.0891	8.5600e-003	0.3360	0.1356	0.4715	0.1089	0.1270	0.2359	0.0000	775.2987	775.2987	0.1013	0.0000	777.8317
2022	0.1653	0.1269	0.1803	3.1000e-004	5.0500e-003	6.5300e-003	0.0116	1.3500e-003	6.0700e-003	7.4200e-003	0.0000	26.9664	26.9664	6.7600e-003	0.0000	27.1353
Maximum	**0.3817**	**3.5485**	**3.0891**	**8.5600e-003**	**0.3360**	**0.1356**	**0.4715**	**0.1089**	**0.1270**	**0.2359**	**0.0000**	**775.2987**	**775.2987**	**0.1013**	**0.0000**	**777.8317**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**24.72**	**0.00**	**18.82**	**32.58**	**0.00**	**17.95**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-4-2021	4-3-2021	1.2175	1.2175
2	4-4-2021	7-3-2021	0.8937	0.8937
3	7-4-2021	10-3-2021	0.9035	0.9035
4	10-4-2021	1-3-2022	0.8865	0.8865
5	1-4-2022	4-3-2022	0.2790	0.2790
		Highest	1.2175	1.2175

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1307	2.0000e-005	2.5700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.0000e-003	5.0000e-003	1.0000e-005	0.0000	5.3300e-003
Energy	5.1800e-003	0.0471	0.0395	2.8000e-004		3.5800e-003	3.5800e-003		3.5800e-003	3.5800e-003	0.0000	155.5650	155.5650	5.2900e-003	1.8300e-003	156.2427
Mobile	0.2532	1.9231	2.7908	0.0111	0.8185	7.7700e-003	0.8263	0.2194	7.2800e-003	0.2267	0.0000	1,030.3844	1,030.3844	0.0589	0.0000	1,031.8559
Waste						0.0000	0.0000		0.0000	0.0000	34.8393	0.0000	34.8393	2.0590	0.0000	86.3130
Water						0.0000	0.0000		0.0000	0.0000	0.5629	42.1264	42.6893	0.0596	1.7200e-003	44.6923
Total	**0.3891**	**1.9702**	**2.8329**	**0.0114**	**0.8185**	**0.0114**	**0.8299**	**0.2194**	**0.0109**	**0.2302**	**35.4022**	**1,228.0808**	**1,263.4831**	**2.1827**	**3.5500e-003**	**1,319.1092**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1307	2.0000e-005	2.5700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.0000e-003	5.0000e-003	1.0000e-005	0.0000	5.3300e-003
Energy	5.1800e-003	0.0471	0.0395	2.8000e-004		3.5800e-003	3.5800e-003		3.5800e-003	3.5800e-003	0.0000	155.5650	155.5650	5.2900e-003	1.8300e-003	156.2427
Mobile	0.2532	1.9231	2.7908	0.0111	0.8185	7.7700e-003	0.8263	0.2194	7.2800e-003	0.2267	0.0000	1,030.3844	1,030.3844	0.0589	0.0000	1,031.8559
Waste						0.0000	0.0000		0.0000	0.0000	34.8393	0.0000	34.8393	2.0590	0.0000	86.3130
Water						0.0000	0.0000		0.0000	0.0000	0.5629	42.1264	42.6893	0.0596	1.7200e-003	44.6923
Total	**0.3891**	**1.9702**	**2.8329**	**0.0114**	**0.8185**	**0.0114**	**0.8299**	**0.2194**	**0.0109**	**0.2302**	**35.4022**	**1,228.0808**	**1,263.4831**	**2.1827**	**3.5500e-003**	**1,319.1092**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/4/2021	1/15/2021	5	10	
2	Grading	Grading	1/16/2021	2/12/2021	5	20	
3	Building Construction	Building Construction	2/13/2021	12/31/2021	5	230	
4	Paving	Paving	1/1/2022	1/28/2022	5	20	
5	Architectural Coating	Architectural Coating	1/29/2022	2/25/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 1.48

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 45,000; Non-Residential Outdoor: 15,000; Striped Parking Area: 3,936 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	2,250.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	174.00	68.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	35.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.2025	0.1058	1.9000e-004		0.0102	0.0102		9.4000e-003	9.4000e-003	0.0000	16.7179	16.7179	5.4100e-003	0.0000	16.8530
Total	**0.0194**	**0.2025**	**0.1058**	**1.9000e-004**	**0.0903**	**0.0102**	**0.1006**	**0.0497**	**9.4000e-003**	**0.0591**	**0.0000**	**16.7179**	**16.7179**	**5.4100e-003**	**0.0000**	**16.8530**

3.2 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	3.1000e-004	3.2100e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8189	0.8189	2.0000e-005	0.0000	0.8195
Total	**4.1000e-004**	**3.1000e-004**	**3.2100e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**9.9000e-004**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.8189**	**0.8189**	**2.0000e-005**	**0.0000**	**0.8195**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0386	0.0000	0.0386	0.0212	0.0000	0.0212	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.2025	0.1058	1.9000e-004		0.0102	0.0102		9.4000e-003	9.4000e-003	0.0000	16.7178	16.7178	5.4100e-003	0.0000	16.8530
Total	**0.0194**	**0.2025**	**0.1058**	**1.9000e-004**	**0.0386**	**0.0102**	**0.0488**	**0.0212**	**9.4000e-003**	**0.0306**	**0.0000**	**16.7178**	**16.7178**	**5.4100e-003**	**0.0000**	**16.8530**

3.2 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	3.1000e-004	3.2100e-003	1.0000e-005	9.1000e-004	1.0000e-005	9.2000e-004	2.4000e-004	1.0000e-005	2.5000e-004	0.0000	0.8189	0.8189	2.0000e-005	0.0000	0.8195
Total	**4.1000e-004**	**3.1000e-004**	**3.2100e-003**	**1.0000e-005**	**9.1000e-004**	**1.0000e-005**	**9.2000e-004**	**2.4000e-004**	**1.0000e-005**	**2.5000e-004**	**0.0000**	**0.8189**	**0.8189**	**2.0000e-005**	**0.0000**	**0.8195**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0665	0.0000	0.0665	0.0338	0.0000	0.0338	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0229	0.2474	0.1586	3.0000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2644
Total	**0.0229**	**0.2474**	**0.1586**	**3.0000e-004**	**0.0665**	**0.0116**	**0.0781**	**0.0338**	**0.0107**	**0.0445**	**0.0000**	**26.0537**	**26.0537**	**8.4300e-003**	**0.0000**	**26.2644**

3.3 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.8100e-003	0.2627	0.0422	8.6000e-004	0.0194	7.3000e-004	0.0201	5.3200e-003	7.0000e-004	6.0200e-003	0.0000	83.2905	83.2905	4.6900e-003	0.0000	83.4076
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.9000e-004	5.2000e-004	5.3400e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3649	1.3649	4.0000e-005	0.0000	1.3658
Total	**7.5000e-003**	**0.2632**	**0.0476**	**8.8000e-004**	**0.0210**	**7.4000e-004**	**0.0218**	**5.7600e-003**	**7.1000e-004**	**6.4700e-003**	**0.0000**	**84.6553**	**84.6553**	**4.7300e-003**	**0.0000**	**84.7734**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0285	0.0000	0.0285	0.0145	0.0000	0.0145	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0229	0.2474	0.1586	3.0000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2643
Total	**0.0229**	**0.2474**	**0.1586**	**3.0000e-004**	**0.0285**	**0.0116**	**0.0401**	**0.0145**	**0.0107**	**0.0251**	**0.0000**	**26.0537**	**26.0537**	**8.4300e-003**	**0.0000**	**26.2643**

3.3 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.8100e-003	0.2627	0.0422	8.6000e-004	0.0181	7.3000e-004	0.0188	5.0000e-003	7.0000e-004	5.6900e-003	0.0000	83.2905	83.2905	4.6900e-003	0.0000	83.4076
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.9000e-004	5.2000e-004	5.3400e-003	2.0000e-005	1.5200e-003	1.0000e-005	1.5300e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.3649	1.3649	4.0000e-005	0.0000	1.3658
Total	**7.5000e-003**	**0.2632**	**0.0476**	**8.8000e-004**	**0.0196**	**7.4000e-004**	**0.0203**	**5.4100e-003**	**7.1000e-004**	**6.1100e-003**	**0.0000**	**84.6553**	**84.6553**	**4.7300e-003**	**0.0000**	**84.7734**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2186	2.0047	1.9062	3.1000e-003		0.1102	0.1102		0.1037	0.1037	0.0000	266.3829	266.3829	0.0643	0.0000	267.9895
Total	**0.2186**	**2.0047**	**1.9062**	**3.1000e-003**		**0.1102**	**0.1102**		**0.1037**	**0.1037**	**0.0000**	**266.3829**	**266.3829**	**0.0643**	**0.0000**	**267.9895**

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0207	0.7608	0.1548	2.0800e-003	0.0493	1.3100e-003	0.0506	0.0142	1.2500e-003	0.0155	0.0000	198.5993	198.5993	0.0134	0.0000	198.9338
Worker	0.0921	0.0696	0.7130	2.0100e-003	0.2194	1.4300e-003	0.2208	0.0583	1.3200e-003	0.0596	0.0000	182.0711	182.0711	5.1000e-003	0.0000	182.1985
Total	**0.1128**	**0.8304**	**0.8678**	**4.0900e-003**	**0.2687**	**2.7400e-003**	**0.2714**	**0.0725**	**2.5700e-003**	**0.0751**	**0.0000**	**380.6704**	**380.6704**	**0.0185**	**0.0000**	**381.1323**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2186	2.0047	1.9062	3.1000e-003		0.1102	0.1102		0.1037	0.1037	0.0000	266.3826	266.3826	0.0643	0.0000	267.9892
Total	**0.2186**	**2.0047**	**1.9062**	**3.1000e-003**		**0.1102**	**0.1102**		**0.1037**	**0.1037**	**0.0000**	**266.3826**	**266.3826**	**0.0643**	**0.0000**	**267.9892**

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0207	0.7608	0.1548	2.0800e-003	0.0462	1.3100e-003	0.0475	0.0135	1.2500e-003	0.0147	0.0000	198.5993	198.5993	0.0134	0.0000	198.9338
Worker	0.0921	0.0696	0.7130	2.0100e-003	0.2023	1.4300e-003	0.2037	0.0541	1.3200e-003	0.0554	0.0000	182.0711	182.0711	5.1000e-003	0.0000	182.1985
Total	**0.1128**	**0.8304**	**0.8678**	**4.0900e-003**	**0.2485**	**2.7400e-003**	**0.2512**	**0.0675**	**2.5700e-003**	**0.0701**	**0.0000**	**380.6704**	**380.6704**	**0.0185**	**0.0000**	**381.1323**

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895
Paving	1.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0130**	**0.1113**	**0.1458**	**2.3000e-004**		**5.6800e-003**	**5.6800e-003**		**5.2200e-003**	**5.2200e-003**	**0.0000**	**20.0276**	**20.0276**	**6.4800e-003**	**0.0000**	**20.1895**

3.5 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-004	4.7000e-004	4.9000e-003	1.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3157	1.3157	3.0000e-005	0.0000	1.3165
Total	**6.5000e-004**	**4.7000e-004**	**4.9000e-003**	**1.0000e-005**	**1.6400e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.3157**	**1.3157**	**3.0000e-005**	**0.0000**	**1.3165**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0275	20.0275	6.4800e-003	0.0000	20.1895
Paving	1.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0130**	**0.1113**	**0.1458**	**2.3000e-004**		**5.6800e-003**	**5.6800e-003**		**5.2200e-003**	**5.2200e-003**	**0.0000**	**20.0275**	**20.0275**	**6.4800e-003**	**0.0000**	**20.1895**

3.5 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-004	4.7000e-004	4.9000e-003	1.0000e-005	1.5200e-003	1.0000e-005	1.5300e-003	4.1000e-004	1.0000e-005	4.1000e-004	0.0000	1.3157	1.3157	3.0000e-005	0.0000	1.3165
Total	**6.5000e-004**	**4.7000e-004**	**4.9000e-003**	**1.0000e-005**	**1.5200e-003**	**1.0000e-005**	**1.5300e-003**	**4.1000e-004**	**1.0000e-005**	**4.1000e-004**	**0.0000**	**1.3157**	**1.3157**	**3.0000e-005**	**0.0000**	**1.3165**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1482					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e-003	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574
Total	**0.1502**	**0.0141**	**0.0181**	**3.0000e-005**		**8.2000e-004**	**8.2000e-004**		**8.2000e-004**	**8.2000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.7000e-004**	**0.0000**	**2.5574**

3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5100e-003	1.0900e-003	0.0114	3.0000e-005	3.8400e-003	2.0000e-005	3.8600e-003	1.0200e-003	2.0000e-005	1.0400e-003	0.0000	3.0699	3.0699	8.0000e-005	0.0000	3.0719
Total	**1.5100e-003**	**1.0900e-003**	**0.0114**	**3.0000e-005**	**3.8400e-003**	**2.0000e-005**	**3.8600e-003**	**1.0200e-003**	**2.0000e-005**	**1.0400e-003**	**0.0000**	**3.0699**	**3.0699**	**8.0000e-005**	**0.0000**	**3.0719**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1482					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e-003	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574
Total	**0.1502**	**0.0141**	**0.0181**	**3.0000e-005**		**8.2000e-004**	**8.2000e-004**		**8.2000e-004**	**8.2000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.7000e-004**	**0.0000**	**2.5574**

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5100e-003	1.0900e-003	0.0114	3.0000e-005	3.5400e-003	2.0000e-005	3.5600e-003	9.5000e-004	2.0000e-005	9.7000e-004	0.0000	3.0699	3.0699	8.0000e-005	0.0000	3.0719
Total	**1.5100e-003**	**1.0900e-003**	**0.0114**	**3.0000e-005**	**3.5400e-003**	**2.0000e-005**	**3.5600e-003**	**9.5000e-004**	**2.0000e-005**	**9.7000e-004**	**0.0000**	**3.0699**	**3.0699**	**8.0000e-005**	**0.0000**	**3.0719**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2532	1.9231	2.7908	0.0111	0.8185	7.7700e-003	0.8263	0.2194	7.2800e-003	0.2267	0.0000	1,030.3844	1,030.3844	0.0589	0.0000	1,031.8559
Unmitigated	0.2532	1.9231	2.7908	0.0111	0.8185	7.7700e-003	0.8263	0.2194	7.2800e-003	0.2267	0.0000	1,030.3844	1,030.3844	0.0589	0.0000	1,031.8559

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	13.85	166.76	122.70	147,466	147,466
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	1,014.60	273.00	408.00	2,001,991	2,001,991
Total	1,028.45	439.76	530.70	2,149,457	2,149,457

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.553113	0.036408	0.180286	0.116335	0.016165	0.005101	0.018218	0.063797	0.001357	0.001565	0.005903	0.000808	0.000944
Parking Lot	0.553113	0.036408	0.180286	0.116335	0.016165	0.005101	0.018218	0.063797	0.001357	0.001565	0.005903	0.000808	0.000944
Recreational Swimming Pool	0.553113	0.036408	0.180286	0.116335	0.016165	0.005101	0.018218	0.063797	0.001357	0.001565	0.005903	0.000808	0.000944

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	104.3358	104.3358	4.3100e-003	8.9000e-004	104.7090
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	104.3358	104.3358	4.3100e-003	8.9000e-004	104.7090
NaturalGas Mitigated	5.1800e-003	0.0471	0.0395	2.8000e-004		3.5800e-003	3.5800e-003		3.5800e-003	3.5800e-003	0.0000	51.2293	51.2293	9.8000e-004	9.4000e-004	51.5337
NaturalGas Unmitigated	5.1800e-003	0.0471	0.0395	2.8000e-004		3.5800e-003	3.5800e-003		3.5800e-003	3.5800e-003	0.0000	51.2293	51.2293	9.8000e-004	9.4000e-004	51.5337

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	960000	5.1800e-003	0.0471	0.0395	2.8000e-004		3.5800e-003	3.5800e-003		3.5800e-003	3.5800e-003	0.0000	51.2293	51.2293	9.8000e-004	9.4000e-004	51.5337
Total		**5.1800e-003**	**0.0471**	**0.0395**	**2.8000e-004**		**3.5800e-003**	**3.5800e-003**		**3.5800e-003**	**3.5800e-003**	**0.0000**	**51.2293**	**51.2293**	**9.8000e-004**	**9.4000e-004**	**51.5337**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	960000	5.1800e-003	0.0471	0.0395	2.8000e-004		3.5800e-003	3.5800e-003		3.5800e-003	3.5800e-003	0.0000	51.2293	51.2293	9.8000e-004	9.4000e-004	51.5337
Total		**5.1800e-003**	**0.0471**	**0.0395**	**2.8000e-004**		**3.5800e-003**	**3.5800e-003**		**3.5800e-003**	**3.5800e-003**	**0.0000**	**51.2293**	**51.2293**	**9.8000e-004**	**9.4000e-004**	**51.5337**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	22960	7.3156	3.0000e-004	6.0000e-005	7.3417
Recreational Swimming Pool	304500	97.0202	4.0100e-003	8.3000e-004	97.3673
Total		**104.3358**	**4.3100e-003**	**8.9000e-004**	**104.7090**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	22960	7.3156	3.0000e-004	6.0000e-005	7.3417
Recreational Swimming Pool	304500	97.0202	4.0100e-003	8.3000e-004	97.3673
Total		**104.3358**	**4.3100e-003**	**8.9000e-004**	**104.7090**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1307	2.0000e-005	2.5700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.0000e-003	5.0000e-003	1.0000e-005	0.0000	5.3300e-003
Unmitigated	0.1307	2.0000e-005	2.5700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.0000e-003	5.0000e-003	1.0000e-005	0.0000	5.3300e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0148					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1157					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.4000e-004	2.0000e-005	2.5700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.0000e-003	5.0000e-003	1.0000e-005	0.0000	5.3300e-003
Total	**0.1307**	**2.0000e-005**	**2.5700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**5.0000e-003**	**5.0000e-003**	**1.0000e-005**	**0.0000**	**5.3300e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0148					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1157					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.4000e-004	2.0000e-005	2.5700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.0000e-003	5.0000e-003	1.0000e-005	0.0000	5.3300e-003
Total	**0.1307**	**2.0000e-005**	**2.5700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**5.0000e-003**	**5.0000e-003**	**1.0000e-005**	**0.0000**	**5.3300e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	42.6893	0.0596	1.7200e-003	44.6923
Unmitigated	42.6893	0.0596	1.7200e-003	44.6923

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 8.73356	30.9158	1.2800e-003	2.6000e-004	31.0264
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	1.77429 / 1.08747	11.7736	0.0583	1.4600e-003	13.6659
Total		**42.6893**	**0.0596**	**1.7200e-003**	**44.6923**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 8.73356	30.9158	1.2800e-003	2.6000e-004	31.0264
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	1.77429 / 1.08747	11.7736	0.0583	1.4600e-003	13.6659
Total		**42.6893**	**0.0596**	**1.7200e-003**	**44.6923**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	34.8393	2.0590	0.0000	86.3130
Unmitigated	34.8393	2.0590	0.0000	86.3130

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.63	0.1279	7.5600e-003	0.0000	0.3168
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	171	34.7115	2.0514	0.0000	85.9962
Total		**34.8393**	**2.0590**	**0.0000**	**86.3130**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.63	0.1279	7.5600e-003	0.0000	0.3168
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	171	34.7115	2.0514	0.0000	85.9962
Total		**34.8393**	**2.0590**	**0.0000**	**86.3130**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

City of Rancho Cucamonga - Central Park Master Plan reVISION

San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	164.00	Space	1.48	65,600.00	0
City Park	7.33	Acre	7.33	319,294.80	0
Recreational Swimming Pool	30.00	1000sqft	0.69	30,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Conservative case based on 10-acre development (164-space parking lot, 30,000 sq ft recreational/multi-purpose building facility, and 7.33 acres of city park)

Construction Phase - Default phasing for Site Preparation, Grading, Building Construction, Paving, Architectural Coating; no Demolition

Grading - Potential import of 18,000 cy soils

Architectural Coating - Defaults based on Non-Residential Building Interior/Exterior, Parking Area

Vehicle Trips - Defaults (conservative) based on City Park and Recreational Swimming Pool vehicle trips

Energy Use - Energy Use for recreational/mutli-purpose building facility based on 'Place of Worship' default values to capture assembly uses (e.g. meetings, classes, and occasional catering or parties)

Construction Off-road Equipment Mitigation - SCAQMD Fugitive Dust Mitigation Measures and Control Efficiencies

Mobile Land Use Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblEnergyUse	LightingElect	0.00	2.93
tblEnergyUse	NT24E	0.00	5.02
tblEnergyUse	NT24NG	0.00	17.00
tblEnergyUse	T24E	0.00	2.20
tblEnergyUse	T24NG	0.00	15.00
tblGrading	MaterialImported	0.00	18,000.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.9796	50.4435	25.0125	0.1187	18.2675	2.0458	20.3132	9.9840	1.8821	11.8661	0.0000	12,319.4245	12,319.4245	1.4311	0.0000	12,355.2031
2022	15.1878	11.1672	15.1509	0.0244	0.3912	0.5689	0.7366	0.1038	0.5234	0.5679	0.0000	2,365.8507	2,365.8507	0.7182	0.0000	2,383.8055
Maximum	**15.1878**	**50.4435**	**25.0125**	**0.1187**	**18.2675**	**2.0458**	**20.3132**	**9.9840**	**1.8821**	**11.8661**	**0.0000**	**12,319.4245**	**12,319.4245**	**1.4311**	**0.0000**	**12,355.2031**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.9796	50.4435	25.0125	0.1187	7.9088	2.0458	9.9545	4.2949	1.8821	6.1770	0.0000	12,319.4245	12,319.4245	1.4311	0.0000	12,355.2031
2022	15.1878	11.1672	15.1509	0.0244	0.3606	0.5689	0.7235	0.0962	0.5234	0.5647	0.0000	2,365.8507	2,365.8507	0.7182	0.0000	2,383.8055
Maximum	**15.1878**	**50.4435**	**25.0125**	**0.1187**	**7.9088**	**2.0458**	**9.9545**	**4.2949**	**1.8821**	**6.1770**	**0.0000**	**12,319.4245**	**12,319.4245**	**1.4311**	**0.0000**	**12,355.2031**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**55.68**	**0.00**	**49.27**	**56.47**	**0.00**	**45.78**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7168	1.9000e-004	0.0206	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0441	0.0441	1.2000e-004		0.0470
Energy	0.0284	0.2579	0.2166	1.5500e-003		0.0196	0.0196		0.0196	0.0196		309.4279	309.4279	5.9300e-003	5.6700e-003	311.2667
Mobile	2.2442	14.1190	22.8082	0.0888	6.2918	0.0584	6.3501	1.6836	0.0546	1.7382		9,072.1881	9,072.1881	0.4828		9,084.2581
Total	**2.9893**	**14.3771**	**23.0454**	**0.0904**	**6.2918**	**0.0780**	**6.3698**	**1.6836**	**0.0743**	**1.7579**		**9,381.6600**	**9,381.6600**	**0.4889**	**5.6700e-003**	**9,395.5717**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7168	1.9000e-004	0.0206	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0441	0.0441	1.2000e-004		0.0470
Energy	0.0284	0.2579	0.2166	1.5500e-003		0.0196	0.0196		0.0196	0.0196		309.4279	309.4279	5.9300e-003	5.6700e-003	311.2667
Mobile	2.2442	14.1190	22.8082	0.0888	6.2918	0.0584	6.3501	1.6836	0.0546	1.7382		9,072.1881	9,072.1881	0.4828		9,084.2581
Total	**2.9893**	**14.3771**	**23.0454**	**0.0904**	**6.2918**	**0.0780**	**6.3698**	**1.6836**	**0.0743**	**1.7579**		**9,381.6600**	**9,381.6600**	**0.4889**	**5.6700e-003**	**9,395.5717**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/4/2021	1/15/2021	5	10	
2	Grading	Grading	1/16/2021	2/12/2021	5	20	
3	Building Construction	Building Construction	2/13/2021	12/31/2021	5	230	
4	Paving	Paving	1/1/2022	1/28/2022	5	20	
5	Architectural Coating	Architectural Coating	1/29/2022	2/25/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 1.48

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 45,000; Non-Residential Outdoor: 15,000; Striped Parking Area: 3,936 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	2,250.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	174.00	68.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	35.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.2 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0915	0.0565	0.7452	1.9800e-003	0.2012	1.2900e-003	0.2025	0.0534	1.1900e-003	0.0545		196.9345	196.9345	5.6000e-003		197.0746
Total	**0.0915**	**0.0565**	**0.7452**	**1.9800e-003**	**0.2012**	**1.2900e-003**	**0.2025**	**0.0534**	**1.1900e-003**	**0.0545**		**196.9345**	**196.9345**	**5.6000e-003**		**197.0746**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.7233	0.0000	7.7233	4.2454	0.0000	4.2454			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**7.7233**	**2.0445**	**9.7678**	**4.2454**	**1.8809**	**6.1263**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.2 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0915	0.0565	0.7452	1.9800e-003	0.1855	1.2900e-003	0.1867	0.0495	1.1900e-003	0.0507		196.9345	196.9345	5.6000e-003		197.0746
Total	**0.0915**	**0.0565**	**0.7452**	**1.9800e-003**	**0.1855**	**1.2900e-003**	**0.1867**	**0.0495**	**1.1900e-003**	**0.0507**		**196.9345**	**196.9345**	**5.6000e-003**		**197.0746**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6541	0.0000	6.6541	3.3829	0.0000	3.3829			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.6541**	**1.1599**	**7.8140**	**3.3829**	**1.0671**	**4.4500**		**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

3.3 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6685	25.6597	3.9743	0.0874	1.9688	0.0726	2.0414	0.5398	0.0695	0.6092		9,283.3839	9,283.3839	0.4976		9,295.8247
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0762	0.0471	0.6210	1.6500e-003	0.1677	1.0700e-003	0.1687	0.0445	9.9000e-004	0.0455		164.1121	164.1121	4.6700e-003		164.2289
Total	**0.7447**	**25.7068**	**4.5952**	**0.0891**	**2.1364**	**0.0737**	**2.2101**	**0.5842**	**0.0704**	**0.6547**		**9,447.4960**	**9,447.4960**	**0.5023**		**9,460.0536**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.8446	0.0000	2.8446	1.4462	0.0000	1.4462			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**2.8446**	**1.1599**	**4.0045**	**1.4462**	**1.0671**	**2.5133**	**0.0000**	**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

3.3 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6685	25.6597	3.9743	0.0874	1.8349	0.0726	1.9075	0.5069	0.0695	0.5764		9,283.3839	9,283.3839	0.4976		9,295.8247
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0762	0.0471	0.6210	1.6500e-003	0.1546	1.0700e-003	0.1556	0.0413	9.9000e-004	0.0422		164.1121	164.1121	4.6700e-003		164.2289
Total	**0.7447**	**25.7068**	**4.5952**	**0.0891**	**1.9895**	**0.0737**	**2.0631**	**0.5482**	**0.0704**	**0.6186**		**9,447.4960**	**9,447.4960**	**0.5023**		**9,460.0536**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1760	6.5578	1.2340	0.0183	0.4355	0.0112	0.4468	0.1254	0.0108	0.1362		1,935.2073	1,935.2073	0.1223		1,938.2647
Worker	0.8841	0.5465	7.2033	0.0191	1.9449	0.0124	1.9574	0.5158	0.0115	0.5273		1,903.7001	1,903.7001	0.0542		1,905.0546
Total	**1.0601**	**7.1042**	**8.4373**	**0.0375**	**2.3804**	**0.0237**	**2.4041**	**0.6412**	**0.0222**	**0.6634**		**3,838.9074**	**3,838.9074**	**0.1765**		**3,843.3193**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1760	6.5578	1.2340	0.0183	0.4076	0.0112	0.4189	0.1186	0.0108	0.1293		1,935.2073	1,935.2073	0.1223		1,938.2647
Worker	0.8841	0.5465	7.2033	0.0191	1.7927	0.0124	1.8052	0.4785	0.0115	0.4899		1,903.7001	1,903.7001	0.0542		1,905.0546
Total	**1.0601**	**7.1042**	**8.4373**	**0.0375**	**2.2003**	**0.0237**	**2.2240**	**0.5970**	**0.0222**	**0.6192**		**3,838.9074**	**3,838.9074**	**0.1765**		**3,843.3193**

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.1939					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2967**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

3.5 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0712	0.0424	0.5705	1.5900e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		158.1904	158.1904	4.1900e-003		158.2951
Total	**0.0712**	**0.0424**	**0.5705**	**1.5900e-003**	**0.1677**	**1.0400e-003**	**0.1687**	**0.0445**	**9.6000e-004**	**0.0454**		**158.1904**	**158.1904**	**4.1900e-003**		**158.2951**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.1939					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2967**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

3.5 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0712	0.0424	0.5705	1.5900e-003	0.1546	1.0400e-003	0.1556	0.0413	9.6000e-004	0.0422		158.1904	158.1904	4.1900e-003		158.2951
Total	**0.0712**	**0.0424**	**0.5705**	**1.5900e-003**	**0.1546**	**1.0400e-003**	**0.1556**	**0.0413**	**9.6000e-004**	**0.0422**		**158.1904**	**158.1904**	**4.1900e-003**		**158.2951**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.8172					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**15.0217**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1661	0.0988	1.3311	3.7100e-003	0.3912	2.4300e-003	0.3937	0.1038	2.2400e-003	0.1060		369.1109	369.1109	9.7800e-003		369.3552
Total	**0.1661**	**0.0988**	**1.3311**	**3.7100e-003**	**0.3912**	**2.4300e-003**	**0.3937**	**0.1038**	**2.2400e-003**	**0.1060**		**369.1109**	**369.1109**	**9.7800e-003**		**369.3552**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.8172					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**15.0217**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1661	0.0988	1.3311	3.7100e-003	0.3606	2.4300e-003	0.3630	0.0962	2.2400e-003	0.0985		369.1109	369.1109	9.7800e-003		369.3552
Total	**0.1661**	**0.0988**	**1.3311**	**3.7100e-003**	**0.3606**	**2.4300e-003**	**0.3630**	**0.0962**	**2.2400e-003**	**0.0985**		**369.1109**	**369.1109**	**9.7800e-003**		**369.3552**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.2442	14.1190	22.8082	0.0888	6.2918	0.0584	6.3501	1.6836	0.0546	1.7382		9,072.1881	9,072.1881	0.4828		9,084.2581
Unmitigated	2.2442	14.1190	22.8082	0.0888	6.2918	0.0584	6.3501	1.6836	0.0546	1.7382		9,072.1881	9,072.1881	0.4828		9,084.2581

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	13.85	166.76	122.70	147,466	147,466
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	1,014.60	273.00	408.00	2,001,991	2,001,991
Total	1,028.45	439.76	530.70	2,149,457	2,149,457

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.553113	0.036408	0.180286	0.116335	0.016165	0.005101	0.018218	0.063797	0.001357	0.001565	0.005903	0.000808	0.000944
Parking Lot	0.553113	0.036408	0.180286	0.116335	0.016165	0.005101	0.018218	0.063797	0.001357	0.001565	0.005903	0.000808	0.000944
Recreational Swimming Pool	0.553113	0.036408	0.180286	0.116335	0.016165	0.005101	0.018218	0.063797	0.001357	0.001565	0.005903	0.000808	0.000944

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0284	0.2579	0.2166	1.5500e-003		0.0196	0.0196		0.0196	0.0196		309.4279	309.4279	5.9300e-003	5.6700e-003	311.2667
NaturalGas Unmitigated	0.0284	0.2579	0.2166	1.5500e-003		0.0196	0.0196		0.0196	0.0196		309.4279	309.4279	5.9300e-003	5.6700e-003	311.2667

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	2630.14	0.0284	0.2579	0.2166	1.5500e-003		0.0196	0.0196		0.0196	0.0196		309.4279	309.4279	5.9300e-003	5.6700e-003	311.2667
Total		**0.0284**	**0.2579**	**0.2166**	**1.5500e-003**		**0.0196**	**0.0196**		**0.0196**	**0.0196**		**309.4279**	**309.4279**	**5.9300e-003**	**5.6700e-003**	**311.2667**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	2.63014	0.0284	0.2579	0.2166	1.5500e-003		0.0196	0.0196		0.0196	0.0196		309.4279	309.4279	5.9300e-003	5.6700e-003	311.2667
Total		**0.0284**	**0.2579**	**0.2166**	**1.5500e-003**		**0.0196**	**0.0196**		**0.0196**	**0.0196**		**309.4279**	**309.4279**	**5.9300e-003**	**5.6700e-003**	**311.2667**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.7168	1.9000e-004	0.0206	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0441	0.0441	1.2000e-004		0.0470
Unmitigated	0.7168	1.9000e-004	0.0206	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0441	0.0441	1.2000e-004		0.0470

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0812					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6337					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.9100e-003	1.9000e-004	0.0206	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0441	0.0441	1.2000e-004		0.0470
Total	**0.7168**	**1.9000e-004**	**0.0206**	**0.0000**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**		**0.0441**	**0.0441**	**1.2000e-004**		**0.0470**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0812					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6337					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.9100e-003	1.9000e-004	0.0206	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0441	0.0441	1.2000e-004		0.0470
Total	**0.7168**	**1.9000e-004**	**0.0206**	**0.0000**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**		**0.0441**	**0.0441**	**1.2000e-004**		**0.0470**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

City of Rancho Cucamonga - Central Park Master Plan reVISION

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	164.00	Space	1.48	65,600.00	0
City Park	7.33	Acre	7.33	319,294.80	0
Recreational Swimming Pool	30.00	1000sqft	0.69	30,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

City of Rancho Cucamonga - Central Park Master Plan reVISION - San Bernardino-South Coast County, Winter

Project Characteristics -

Land Use - Conservative case based on 10-acre development (164-space parking lot, 30,000 sq ft recreational/multi-purpose building facility, and 7.33 acres of city park)

Construction Phase - Default phasing for Site Preparation, Grading, Building Construction, Paving, Architectural Coating; no Demolition

Grading - Potential import of 18,000 cy soils

Architectural Coating - Defaults based on Non-Residential Building Interior/Exterior, Parking Area

Vehicle Trips - Defaults (conservative) based on City Park and Recreational Swimming Pool vehicle trips

Energy Use - Energy Use for recreational/mutli-purpose building facility based on 'Place of Worship' default values to capture assembly uses (e.g. meetings, classes, and occasional catering or parties)

Construction Off-road Equipment Mitigation - SCAQMD Fugitive Dust Mitigation Measures and Control Efficiencies

Mobile Land Use Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblEnergyUse	LightingElect	0.00	2.93
tblEnergyUse	NT24E	0.00	5.02
tblEnergyUse	NT24NG	0.00	17.00
tblEnergyUse	T24E	0.00	2.20
tblEnergyUse	T24NG	0.00	15.00
tblGrading	MaterialImported	0.00	18,000.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.9798	50.5424	23.9269	0.1162	18.2675	2.0458	20.3132	9.9840	1.8821	11.8661	0.0000	12,059.2452	12,059.2452	1.4734	0.0000	12,096.0792
2022	15.1886	11.1694	15.0476	0.0242	0.3912	0.5689	0.7366	0.1038	0.5234	0.5679	0.0000	2,349.5822	2,349.5822	0.7177	0.0000	2,367.5242
Maximum	**15.1886**	**50.5424**	**23.9269**	**0.1162**	**18.2675**	**2.0458**	**20.3132**	**9.9840**	**1.8821**	**11.8661**	**0.0000**	**12,059.2452**	**12,059.2452**	**1.4734**	**0.0000**	**12,096.0792**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.9798	50.5424	23.9269	0.1162	7.9088	2.0458	9.9545	4.2949	1.8821	6.1770	0.0000	12,059.2452	12,059.2452	1.4734	0.0000	12,096.0792
2022	15.1886	11.1694	15.0476	0.0242	0.3606	0.5689	0.7235	0.0962	0.5234	0.5647	0.0000	2,349.5822	2,349.5822	0.7177	0.0000	2,367.5242
Maximum	**15.1886**	**50.5424**	**23.9269**	**0.1162**	**7.9088**	**2.0458**	**9.9545**	**4.2949**	**1.8821**	**6.1770**	**0.0000**	**12,059.2452**	**12,059.2452**	**1.4734**	**0.0000**	**12,096.0792**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**55.68**	**0.00**	**49.27**	**56.47**	**0.00**	**45.78**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7168	1.9000e-004	0.0206	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0441	0.0441	1.2000e-004		0.0470
Energy	0.0284	0.2579	0.2166	1.5500e-003		0.0196	0.0196		0.0196	0.0196		309.4279	309.4279	5.9300e-003	5.6700e-003	311.2667
Mobile	1.9440	14.0515	20.3990	0.0817	6.2918	0.0590	6.3507	1.6836	0.0552	1.7388		8,358.0423	8,358.0423	0.4986		8,370.5077
Total	**2.6892**	**14.3095**	**20.6362**	**0.0833**	**6.2918**	**0.0786**	**6.3704**	**1.6836**	**0.0749**	**1.7585**		**8,667.5142**	**8,667.5142**	**0.5047**	**5.6700e-003**	**8,681.8214**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7168	1.9000e-004	0.0206	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0441	0.0441	1.2000e-004		0.0470
Energy	0.0284	0.2579	0.2166	1.5500e-003		0.0196	0.0196		0.0196	0.0196		309.4279	309.4279	5.9300e-003	5.6700e-003	311.2667
Mobile	1.9440	14.0515	20.3990	0.0817	6.2918	0.0590	6.3507	1.6836	0.0552	1.7388		8,358.0423	8,358.0423	0.4986		8,370.5077
Total	**2.6892**	**14.3095**	**20.6362**	**0.0833**	**6.2918**	**0.0786**	**6.3704**	**1.6836**	**0.0749**	**1.7585**		**8,667.5142**	**8,667.5142**	**0.5047**	**5.6700e-003**	**8,681.8214**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/4/2021	1/15/2021	5	10	
2	Grading	Grading	1/16/2021	2/12/2021	5	20	
3	Building Construction	Building Construction	2/13/2021	12/31/2021	5	230	
4	Paving	Paving	1/1/2022	1/28/2022	5	20	
5	Architectural Coating	Architectural Coating	1/29/2022	2/25/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 1.48

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 45,000; Non-Residential Outdoor: 15,000; Striped Parking Area: 3,936 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	2,250.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	174.00	68.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	35.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.2 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0917	0.0595	0.6112	1.7700e-003	0.2012	1.2900e-003	0.2025	0.0534	1.1900e-003	0.0545		176.6696	176.6696	4.9200e-003		176.7925
Total	**0.0917**	**0.0595**	**0.6112**	**1.7700e-003**	**0.2012**	**1.2900e-003**	**0.2025**	**0.0534**	**1.1900e-003**	**0.0545**		**176.6696**	**176.6696**	**4.9200e-003**		**176.7925**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.7233	0.0000	7.7233	4.2454	0.0000	4.2454			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**7.7233**	**2.0445**	**9.7678**	**4.2454**	**1.8809**	**6.1263**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.2 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0917	0.0595	0.6112	1.7700e-003	0.1855	1.2900e-003	0.1867	0.0495	1.1900e-003	0.0507		176.6696	176.6696	4.9200e-003		176.7925
Total	**0.0917**	**0.0595**	**0.6112**	**1.7700e-003**	**0.1855**	**1.2900e-003**	**0.1867**	**0.0495**	**1.1900e-003**	**0.0507**		**176.6696**	**176.6696**	**4.9200e-003**		**176.7925**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6541	0.0000	6.6541	3.3829	0.0000	3.3829			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.6541**	**1.1599**	**7.8140**	**3.3829**	**1.0671**	**4.4500**		**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

3.3 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6987	25.7562	4.5389	0.0851	1.9688	0.0736	2.0424	0.5398	0.0704	0.6102		9,040.0921	9,040.0921	0.5404		9,053.6026
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0764	0.0496	0.5093	1.4800e-003	0.1677	1.0700e-003	0.1687	0.0445	9.9000e-004	0.0455		147.2247	147.2247	4.1000e-003		147.3271
Total	**0.7751**	**25.8057**	**5.0482**	**0.0866**	**2.1364**	**0.0747**	**2.2111**	**0.5842**	**0.0714**	**0.6556**		**9,187.3167**	**9,187.3167**	**0.5445**		**9,200.9297**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.8446	0.0000	2.8446	1.4462	0.0000	1.4462			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**2.8446**	**1.1599**	**4.0045**	**1.4462**	**1.0671**	**2.5133**	**0.0000**	**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

3.3 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6987	25.7562	4.5389	0.0851	1.8349	0.0736	1.9085	0.5069	0.0704	0.5773		9,040.0921	9,040.0921	0.5404		9,053.6026
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0764	0.0496	0.5093	1.4800e-003	0.1546	1.0700e-003	0.1556	0.0413	9.9000e-004	0.0422		147.2247	147.2247	4.1000e-003		147.3271
Total	**0.7751**	**25.8057**	**5.0482**	**0.0866**	**1.9895**	**0.0747**	**2.0641**	**0.5482**	**0.0714**	**0.6196**		**9,187.3167**	**9,187.3167**	**0.5445**		**9,200.9297**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1867	6.4879	1.4434	0.0176	0.4355	0.0116	0.4471	0.1254	0.0111	0.1365		1,860.0389	1,860.0389	0.1356		1,863.4277
Worker	0.8860	0.5748	5.9083	0.0171	1.9449	0.0124	1.9574	0.5158	0.0115	0.5273		1,707.8060	1,707.8060	0.0475		1,708.9944
Total	**1.0727**	**7.0627**	**7.3517**	**0.0348**	**2.3804**	**0.0240**	**2.4044**	**0.6412**	**0.0225**	**0.6637**		**3,567.8448**	**3,567.8448**	**0.1831**		**3,572.4221**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1867	6.4879	1.4434	0.0176	0.4076	0.0116	0.4192	0.1186	0.0111	0.1296		1,860.0389	1,860.0389	0.1356		1,863.4277
Worker	0.8860	0.5748	5.9083	0.0171	1.7927	0.0124	1.8052	0.4785	0.0115	0.4899		1,707.8060	1,707.8060	0.0475		1,708.9944
Total	**1.0727**	**7.0627**	**7.3517**	**0.0348**	**2.2003**	**0.0240**	**2.2243**	**0.5970**	**0.0225**	**0.6195**		**3,567.8448**	**3,567.8448**	**0.1831**		**3,572.4221**

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.1939					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2967**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

3.5 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0715	0.0445	0.4671	1.4200e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		141.9219	141.9219	3.6800e-003		142.0139
Total	**0.0715**	**0.0445**	**0.4671**	**1.4200e-003**	**0.1677**	**1.0400e-003**	**0.1687**	**0.0445**	**9.6000e-004**	**0.0454**		**141.9219**	**141.9219**	**3.6800e-003**		**142.0139**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.1939					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2967**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

3.5 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0715	0.0445	0.4671	1.4200e-003	0.1546	1.0400e-003	0.1556	0.0413	9.6000e-004	0.0422		141.9219	141.9219	3.6800e-003		142.0139
Total	**0.0715**	**0.0445**	**0.4671**	**1.4200e-003**	**0.1546**	**1.0400e-003**	**0.1556**	**0.0413**	**9.6000e-004**	**0.0422**		**141.9219**	**141.9219**	**3.6800e-003**		**142.0139**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.8172					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**15.0217**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1669	0.1039	1.0900	3.3200e-003	0.3912	2.4300e-003	0.3937	0.1038	2.2400e-003	0.1060		331.1511	331.1511	8.5800e-003		331.3657
Total	**0.1669**	**0.1039**	**1.0900**	**3.3200e-003**	**0.3912**	**2.4300e-003**	**0.3937**	**0.1038**	**2.2400e-003**	**0.1060**		**331.1511**	**331.1511**	**8.5800e-003**		**331.3657**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.8172					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**15.0217**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1669	0.1039	1.0900	3.3200e-003	0.3606	2.4300e-003	0.3630	0.0962	2.2400e-003	0.0985		331.1511	331.1511	8.5800e-003		331.3657
Total	**0.1669**	**0.1039**	**1.0900**	**3.3200e-003**	**0.3606**	**2.4300e-003**	**0.3630**	**0.0962**	**2.2400e-003**	**0.0985**		**331.1511**	**331.1511**	**8.5800e-003**		**331.3657**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.9440	14.0515	20.3990	0.0817	6.2918	0.0590	6.3507	1.6836	0.0552	1.7388		8,358.0423	8,358.0423	0.4986		8,370.5077
Unmitigated	1.9440	14.0515	20.3990	0.0817	6.2918	0.0590	6.3507	1.6836	0.0552	1.7388		8,358.0423	8,358.0423	0.4986		8,370.5077

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	13.85	166.76	122.70	147,466	147,466
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	1,014.60	273.00	408.00	2,001,991	2,001,991
Total	1,028.45	439.76	530.70	2,149,457	2,149,457

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.553113	0.036408	0.180286	0.116335	0.016165	0.005101	0.018218	0.063797	0.001357	0.001565	0.005903	0.000808	0.000944
Parking Lot	0.553113	0.036408	0.180286	0.116335	0.016165	0.005101	0.018218	0.063797	0.001357	0.001565	0.005903	0.000808	0.000944
Recreational Swimming Pool	0.553113	0.036408	0.180286	0.116335	0.016165	0.005101	0.018218	0.063797	0.001357	0.001565	0.005903	0.000808	0.000944

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0284	0.2579	0.2166	1.5500e-003		0.0196	0.0196		0.0196	0.0196		309.4279	309.4279	5.9300e-003	5.6700e-003	311.2667
NaturalGas Unmitigated	0.0284	0.2579	0.2166	1.5500e-003		0.0196	0.0196		0.0196	0.0196		309.4279	309.4279	5.9300e-003	5.6700e-003	311.2667

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	2630.14	0.0284	0.2579	0.2166	1.5500e-003		0.0196	0.0196		0.0196	0.0196		309.4279	309.4279	5.9300e-003	5.6700e-003	311.2667
Total		**0.0284**	**0.2579**	**0.2166**	**1.5500e-003**		**0.0196**	**0.0196**		**0.0196**	**0.0196**		**309.4279**	**309.4279**	**5.9300e-003**	**5.6700e-003**	**311.2667**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	2.63014	0.0284	0.2579	0.2166	1.5500e-003		0.0196	0.0196		0.0196	0.0196		309.4279	309.4279	5.9300e-003	5.6700e-003	311.2667
Total		**0.0284**	**0.2579**	**0.2166**	**1.5500e-003**		**0.0196**	**0.0196**		**0.0196**	**0.0196**		**309.4279**	**309.4279**	**5.9300e-003**	**5.6700e-003**	**311.2667**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.7168	1.9000e-004	0.0206	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0441	0.0441	1.2000e-004		0.0470
Unmitigated	0.7168	1.9000e-004	0.0206	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0441	0.0441	1.2000e-004		0.0470

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0812					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6337					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.9100e-003	1.9000e-004	0.0206	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0441	0.0441	1.2000e-004		0.0470
Total	**0.7168**	**1.9000e-004**	**0.0206**	**0.0000**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**		**0.0441**	**0.0441**	**1.2000e-004**		**0.0470**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0812					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6337					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.9100e-003	1.9000e-004	0.0206	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0441	0.0441	1.2000e-004		0.0470
Total	**0.7168**	**1.9000e-004**	**0.0206**	**0.0000**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**		**0.0441**	**0.0441**	**1.2000e-004**		**0.0470**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

APPENDIX C Biological Resources Report

City of Rancho Cucamonga
Central Park Master Plan Update reVISION Project

APPENDIX C

Biological Resources Report

Prepared for:

City of Rancho Cucamonga
10500 Civic Center Drive
Rancho Cucamonga, California 91730
Contact: Jeff Benson
714.647.5629

Prepared by:

Tetra Tech, Inc.
17885 Von Karman Ave. Suite 500
Irvine, CA 92614-5227
Contact: Paula Fell
949.809.5147

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ATTACHMENTS

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ABBREVIATIONS AND ACRONYMS

Acronym/ Abbreviation	Term
°F	degrees Fahrenheit
BUOW	burrowing owl
CAGN	coastal California gnatcatcher
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CWA	Federal Clean Water Act
EIR	Environmental Impact Report
ELMT	ELMT Consulting, Inc.
EPA	United States Environmental Protection Agency
ESA	federal Endangered Species Act
IS	Initial Study
HCP	Habitat Conservation Plan
HUC	hydrologic unit code
LSA	LSA Associates, Inc.
MBTA	Migratory Bird Treaty Act
MND	Mitigated Negative Declaration
NCCP	Natural Community Conservation Plan
NLB	Natural Landscape Block
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
OHWM	ordinary high-water mark
PCN	Pre-Construction Notification
Porter-Cologne	Porter-Cologne Water Quality Control Act
RAFSS	Riversidean alluvial fan sage scrub
ROWD	Report of Waste Discharge
RWQCB	Regional Water Quality Control Board
SBKR	San Bernardino kangaroo rat
SWRCB	State Water Resources Control Board
U.S.	United States

Acronym/ Abbreviation	Term
U.S.C.	United States Code
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WDRs	Waste Discharge Requirements

1 INTRODUCTION

Biologists from Tetra Tech, ELMT Consulting, Inc. (ELMT), and LSA Associates, Inc. (LSA) conducted literature reviews and field surveys of the biological resources potentially associated with Central Park. Biologists visited the site 24 times in 2007, 2008, and 2019 to conduct the following types of general and focused biological surveys:

- General site assessment and plant community mapping.
- General plant survey.
- General wildlife survey.
- Protocol coastal California gnatcatcher (CAGN; *Polioptila californica californica*) surveys.
- Protocol burrowing owl (BUOW; *Athene cunicularia*) surveys.
- Focused San Bernardino kangaroo rat (SBKR; (*Dipodomys merriami parvus*) small mammal trapping surveys.
- Jurisdictional assessment and delineation.
- Wildlife movement evaluation.

Tetra Tech biologists used the reports and documents listed below and above to help prepare this report:

- Central Park Master Plan Update Habitat Assessment (ELMT 2020b) (Attachment 1, 2020 Central Park Property Biological Resources Report).
- Central Park Master Plan Update Delineation of State and Federal Jurisdictional Waters (ELMT 2020a) (Attachment 2, 2020 Central Park Property Jurisdictional Delineation Report).
- Central Park Amphitheater Habitat Assessment (ELMT 2019) (Attachment 3, 2019 Central Park Amphitheater Site Biological Resources Report).
- General Biological Resources Assessment Report, Central Park Project (LSA 2007) (Attachment 4, 2007 Biological Resources Report).
- Jurisdictional Delineation Report, Central Park Project, City of Rancho Cucamonga, San Bernardino County, California (LSA 2008b) (Attachment 5, 2008 Jurisdictional Delineation Report).
- Results of Focused Burrowing Owl Survey for Central Park Project located in the City of Rancho Cucamonga, San Bernardino County (LSA Project No. CRG0703*)* (LSA 2008d) (Attachment 6, *2008 Protocol Burrowing Owl Survey Letter*).
- Results of a Focused California Gnatcatcher Survey for Central Park Phase II Project Site in the City of Rancho Cucamonga, San Bernardino County (LSA Project Number CRG0703) (LSA 2008c) (Attachment 7, *2008 Protocol Coastal California Gnatcatcher Survey Letter*).
- 70-Acre Central Park Parcel in the City of Rancho Cucamonga, San Bernardino County, Kangaroo Rat Trapping, February 2008 (LSA 2008a) (Attachment 8, *2008 Focused San Bernardino Kangaroo Rat Small Mammal Trapping Survey Letter*).
- Plant Special-status Species Inventory and Potential Occurrence Determination, Attachment 9.
- Wildlife Special-status Species Inventory and Potential Occurrence Determination, Attachment 10.
- Natural Resources Conservation Service (NRCS) Soils Report, Attachment 11.
- Plant and Wildlife Species Recorded during the Field Surveys, Attachment 12.

This report documents the methods and results of the 2019 literature review and field surveys and recaps the results of the 2007, 2008, and 2019 field surveys where appropriate. This section summarizes the existing biological resources and conditions within the Project site, project vicinity, and provides an analysis of the potential impacts on those resources from project implementation. Finally, it recommends measures to avoid, eliminate, and reduce impacts on biological resources.

2 REGULATORY SETTING

This section summarizes the major applicable federal and state laws that apply to protecting sensitive biological resources and which may be relevant and applicable to the project.

2.1 FEDERAL ENDANGERED SPECIES ACT

The federal Endangered Species Act (ESA) of 1973, as amended (Title 16, United States Code [U.S.C.] 1531, et seq.) designates and provides for protection of federally listed threatened and endangered plant and animal species, and their critical habitat. The United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service share responsibility for administration of the ESA. These responsibilities include listing and delisting species, designating critical habitat, and formulating recovery plans. The USFWS has primary responsibility for terrestrial and freshwater organisms, while the responsibilities of the National Marine Fisheries Service are mainly marine wildlife.

The ESA is divided into 18 sections that are intended to work together to prevent species from going extinct by helping to stabilize populations, reduce the threats to their survival, and helping species recover to the point that they no longer require federal protection. Once a species is listed, section 9 of the ESA makes it unlawful for any person, including private and public entities, to "take" species listed as endangered or without a permit issued pursuant to section 10 or an incidental take statement issued pursuant to section 7. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.

2.2 MIGRATORY BIRD TREATY ACT

The Migratory Bird Treaty Act (MBTA) of 1918 (Title 16, U.S.C. sections 703–712), as amended, implements various treaties and conventions between the United States (U.S.) and Canada, Japan, Mexico and the former Soviet Union for the protection of migratory birds. The MBTA makes it unlawful to pursue, hunt, take, capture, kill, possess, sell, purchase, barter, import, export, or transport any migratory bird, or any part, nest, or egg or any such bird, unless authorized under a permit issued by the Secretary of the Interior. Some regulatory exceptions apply. Take is defined in regulations implementing the MBTA as "to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to carry out these activities." The MBTA prohibits the collection and destruction of a migratory bird, its nest, and birds or eggs contained in the nest. USFWS' Migratory Bird Permit Memorandum (MBPM-2) dated April 15, 2003, clarifies that destruction of most unoccupied bird nests is permissible under the MBTA; exceptions include nests of federally listed threatened or endangered migratory birds, bald eagles (*Haliaeetus leucocephalus*), and golden eagles (*Aquila chrysaetos*). Take under the MBTA does not include habitat destruction or alteration, if there is not a direct taking of birds, nests, eggs, or parts thereof. The USFWS has statutory authority and responsibility for enforcing the MBTA.

2.3 CALIFORNIA ENVIRONMENTAL QUALITY ACT

The California Environmental Quality Act of 1970 (CEQA; Public Resources Code, sections 21000–21178), applies to discretionary projects proposed to be carried out by public agencies. CEQA defines projects broadly to include an activity which may cause either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment, and is an activity directly undertaken by a public agency, an activity undertaken by a persons that is supported by a public agency, or an activity that involves the issuance to a person of a lease, permit, license, certificate, or other entitlement.

If the lead agency, as defined in section 21067, determines that a project not otherwise exempt from CEQA would not have a significant effect on the environment, the lead agency shall adopt a negative declaration

prior to approving the project. If, however, there is substantial evidence before the lead agency presenting a fair argument that the project may have a significant effect on the environment, CEQA requires the lead agency to prepare an Environmental Impact Report (EIR).

CEQA further prohibits public agencies from approving a project for which an EIR has been prepared without first finding, for each of the significant effects identified in the EIR, that: 1) changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment; 2) those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency; or 3) specific economic, legal, social, technological, or other considerations make infeasible additional mitigation measures or implementation of the other alternatives identified in the EIR.

CEQA is implemented though regulations adopted by the California Resources Agency and commonly referred to as the "State CEQA Guidelines," California Code of Regulations, Title 14, sections 15000, et seq. Appendix G to the State CEQA Guidelines sets forth suggested thresholds of significance for impacts on biological resources. Appendix G thresholds may be but are not required to be relied on by lead agencies in determining whether a project may result in a potentially significant impact to biological resources, including endangered, rare or threatened species.

2.4 CALIFORNIA ENDANGERED SPECIES ACT

The California Endangered Species Act (CESA; California Fish and Game Code section 2050, et seq.) was enacted in 1984 to parallel the federal ESA and allows the California Fish and Game Commission to designate species, including plants, as "threatened" or "endangered." The CESA states that all native species of fishes, amphibians, reptiles, birds, mammals, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected or preserved. Unlike the ESA, the CESA does not include listing provisions for invertebrate species.

CESA makes it illegal to import, export, take, possess, purchase, sell, or attempt to do any of those actions to species that are designated as threatened, endangered, or candidates for listing, unless permitted by the California Department of Fish and Wildlife (CDFW). Section 2080 of the California Fish and Game Code prohibits take of any species that the California Fish and Game Commission determines to be an endangered species or a threatened species. "Take" is defined in section 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

Under section 2081 of CESA, CDFW may permit take or possession of threatened, endangered, or candidate species for scientific, educational, or management purposes, and may also permit take of these species that is incidental to otherwise lawful activities if certain conditions are met. Some of the conditions for issuance of permits allowing incidental take are that the adverse effects of the take must be minimized and fully mitigated, adequate funding must be ensured for implementation of identified mitigation, and that the activity shall not jeopardize the continued existence of the listed species. CESA emphasizes early consultation to avoid potential impacts on candidate and listed endangered and threatened species, and to develop appropriate mitigation to offset project caused losses of listed species populations and their essential habitats.

2.5 CALIFORNIA FISH AND GAME CODE

2.5.1 Sections 3511, 4700, 5050 and 5515 - Fully Protected Species

The classification of fully protected was the State of California's initial effort in the 1960s to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for birds (section 3511), mammals (section 4700), amphibians and reptiles (section 5050), and fish (section 5515). Fully protected animal species may not be taken or possessed at any time and no licenses or permits may be issued for their take, except for collecting these species for scientific research and relocation of the species for certain purposes. "Take" is defined in section 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Under section 2835 of the California Fish and Game Code, CDFW may only issue permits allowing incidental take of fully protected species if a Natural Community Conservation Plan (NCCP) is prepared that provides for the protection of that species in accordance with the requirements and standards applicable to NCCPs (California Fish and Game Code sections 2800–2835). Alternatively, avoidance measures sufficient to prevent incidental take of fully protected species must be incorporated into the project.

2.5.2 Section 3503 - Bird Nests and Eggs

California Fish and Game Code section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) may be considered take. Avoidance measures sufficient to prevent incidental take of bird nests and eggs protected by this statute must be incorporated into the project.

2.5.3 Section 3503.5 - Birds of Prey and their Eggs

The word "raptor" is the term used for a group of birds consisting of hawks, falcons, kites, eagles, vultures and owls. Raptors, also referred to as "birds of prey," are a valuable resource to the State of California. More than 30 species of raptors inhabit California at some point in their life cycle. California Fish and Game Code section 3503.5 makes it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (raptors) or to take, posses, or destroy the nest or eggs of any such birds except as otherwise provided by this code or any regulation adopted pursuant thereto. The order Falconiformes comprises four families with around 311 species. These are the birds of prey (falcons, hawks, eagles, vultures, and ospreys). The order Strigiformes consists solely of owls and contains two families and over 130 species. All raptors and their nests are protected under section 3503.5. Avoidance measures sufficient to prevent incidental take of these species, their eggs and their nests protected by this statute must be incorporated into the project.

2.5.4 Section 3513 - Migratory Birds

California Fish and Game Code section 3513 protects California's migratory birds by making it unlawful to take or possess any migratory non-game bird as designated by the MBTA, except as authorized in regulations adopted by the federal government under provisions of the MBTA. Except as permitted by USFWS under a Habitat Conservation Plan (HCP), avoidance measures sufficient to prevent incidental take of these species, their eggs and their nests protected by this statute must be incorporated into the project.

2.5.5 Sections 1900–1913 - Native Plant Protection Act

The Native Plant Protection Act (NPPA), enacted in 1977, allows the California Fish and Game Commission to designate native plants as state "endangered" or "rare," mirroring the designations created for animal

species by the CESA of 1970. The NPPA, administered by CDFW, requires all state agencies to utilize their authority to preserve, protect and enhance endangered or rare native plants of California. Section 1908 of the act prohibits the take of any native plant that the California Fish and Game Commission determines to be an endangered or rare native plant, except when the take is incidental to agricultural and nursery operations, emergencies, or the possession or sale of real property on which the plant is growing. Section 1913(c) further provides that where the owner of land has been notified by CDFW that native plant listed as rare or endangered is growing on such land, the owner shall notify CDFW at least 10 days in advance of changing the land use to allow for salvage of the listed plant(s) subject to the notification. The failure by CDFW to salvage such plant within 10 days of notification of change in land use shall entitle the owner of the land to proceed with the change.

2.6 CLEAN WATER ACT

The Clean Water Act (CWA) is the principal federal law governing pollution control and water quality of the nation's waterways. The objective of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” It establishes the basic structure for regulating discharges of pollutants into Waters of the U.S. and for regulating water quality and establishing water quality standards for surface waters. Sections 404 and 401 of the CWA are pertinent to surface and coastal Waters of the U.S. The CWA provides regulatory authority over the navigable waters of the U.S. which are defined as the “waters of the United States, including the territorial seas.” 33 U.S.C. 1362(7). This statute is implemented by the United States Army Corps of Engineers (USACE) and the United States Environmental Protection Agency (EPA).

Congress did not define in the CWA what it meant by “Waters of the U.S.” and left it up to the USACE and EPA to provide more detail through rulemaking. Waters of the U.S. are comprised of those wetland and non-wetland bodies of water that met criteria set forth in 33 Code of Federal Regulations (CFR) section 328.3, as interpreted by several court opinions and guidance. On June 29, 2015, the USACE and EPA published an amendment to 33 CFR section 328.3 revising the definition of Waters of the U.S. in a manner intended to take into account, but supersede prior judicial decisions, regulations and guidance. The revised regulation, named the “Clean Water Rule” was published in the Federal Register (80 FR 124: 37054-37127) and became effective on August 28, 2015.

The Clean Water Rule was challenged in court and on October 22, 2019, the USACE and EPA published a final rule (Step One) to repeal the 2015 Clean Water Rule and to restore the regulatory text that existed prior to the 2015 Clean Water Rule. The final rule (Step One) became effective on December 23, 2019.

On April 21, 2020, the USACE and EPA completed Step Two of the two-step "repeal and replace" process by publishing The Navigable Waters Protection Rule: Definition of “Waters of the United States” in the Federal Register. The Navigable Waters Protection Rule revises the definition of Waters of the U.S. under the CWA. It creates four categories of jurisdictional waters and it provides specific exclusions for many water features that traditionally have not been regulated. The Navigable Waters Protection Rule (Step Two) became effective on June 22, 2020, replacing the final rule (Step One).

2.7 PORTER-COLOGNE WATER QUALITY CONTROL ACT

In 1969, the California State Legislature enacted the Porter-Cologne Water Quality Control Act (Porter-Cologne) to revise the existing water quality laws in California. Through the act, the State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs) were entrusted with duties and powers to preserve, restore, and enhance the quality of California's water resources. The SWRCB has the ultimate authority over state water rights and water quality policy. The SWRCB adopts statewide water quality control plans, policies and guidance that direct RWQCBs in designating beneficial

uses, setting water quality control standards, and administering programs to protect and preserve the "Waters of the State." Pursuant to these statewide plans, policies and guidance, each of the nine RWQCBs within California are required to adopt a Basin Plan that sets water quality standards, including narrative and numeric water quality objectives for various constituents of concern, recognizing and reflecting the regional differences in existing water quality, the beneficial uses of the region's ground and surface waters, and local water quality conditions

Pursuant to Porter-Cologne, the SWRCB and RWQCB, on a statewide and regional basis, respectively, have authority to regulate the "discharge of waste" to "Waters of the State" independently of the CWA and as a matter of state law. Discharges of waste are defined to "include sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation or of human or animal origin, or from any producing, manufacturing or processing operations, include waste placed in containers of whatever nature prior to and for purposes of, disposal." California Water Code Section 13050(d). Discharges of fill are included in the Porter-Cologne definition of discharge of "waste."

"Waters of the State" are defined to mean "any surface water or groundwater, including saline waters, within the boundaries of the state." California Water Code Section 13050(e). Under Porter-Cologne, Waters of the State include, but are not limited to, Waters of the U.S. As a matter of state law, any party proposing a discharge of waste, including fill or other pollutants, that threatens to affect any Water of the State that is not also a Water of the U.S. must file a Report of Waste Discharge (ROWD) with the SWRCB or appropriate RWQCB, as applicable. California Water Code Sections 13260; 13264. The SWRCB, after a public hearing, will then respond to the ROWD by imposing appropriate Waste Discharge Requirements (WDRs) (California Water Code Sections 13263; 13264), or by issuing a waiver of WDRs with appropriate conditions (California Water Code Section 13269) to control discharges for the protection of Waters of the State.

The SWRCB and RWQCBs, on a statewide and regional basis, respectively, also have authority to issue, deny, condition, enforce and otherwise administer all CWA Section 402 National Pollutant Discharge Elimination System (NPDES) Permits for discharges of pollutants into Waters of the U.S., and Section 401 RWQCs for Section 404 permits. 33 U.S.C. Section 1311; California Water Code Section 13160; Memorandum of Understanding Regarding Permit and Enforcement Programs Between the SWRCB and the Regional Administrator, Region IX, EPA (effective March 26, 1973) as supplemented by the NPDES Memorandum of Agreement between the EPA and the California SWRCB (effective June 8, 1989). USACE retains and has not delegated jurisdiction to issue Section 404 permits for discharges of fill to Waters of the U.S.

Accordingly, the SWRCB and RWQCBs have, respectively, issued the statewide Construction General NPDES Permit and the MS4 NPDES Permits which constitute both Federal CWA section 402 permits and state Porter-Cologne WDRs under guidance issued by the SWRCB, discharges of fill subject to USACE CWA Section 404 permitting are reviewed and protected by the SWRCB by issuance of Section 401 water quality certifications, and no additional state law WDRs are required to authorize discharges of fill. Discharges of fill to Waters of the State that are not also Waters of the U.S. are subject to regulation by the SWRCB or appropriate RWQCBs, as applicable. Any project proponent proposing such discharges of fill must submit ROWDs along with USACE jurisdictional disclaimers, and prior to placing such fill, must either obtain coverage for such discharges under:

(i) the SWRCB's Statewide General Waste Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be Outside of Federal Jurisdiction, Order No. 2004-004-DWQ,

(ii) individual WDRs, or

(iii) a conditional waiver of WDRs. Guidance for Regulation of Discharges to “Isolated” Waters (Celeste Cantu, Executive Director June 25, 2004).

2.8 CALIFORNIA FISH AND GAME CODE SECTIONS 1600–1616

Pursuant to sections 1600–1616 of the California Fish and Game Code, the CDFW regulates all substantial diversions, obstructions, or changes to the natural flow or the bed, channel, or bank of any river, stream, or lake, which provides habitat and supports fish or wildlife. CDFW defines a “stream” (including creeks and rivers) as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation” (California Code of Regulations, Title 14, Division 1, Subdivision 1, Chapter 1, section 1.72). “Bank” means the slope or elevation of land that bounds the bed of the stream in a permanent or longstanding way, and that confines the stream water up to its highest level. “Lake” includes “natural lakes or man-made reservoirs.”

Rivers, streams, lakes, and riparian vegetation that provide habitat for fish and wildlife species are subject to jurisdiction by the CDFW under sections 1600–1616 of the California Fish and Game Code. Riparian areas are lands adjacent to streams, lakes, and estuarine-marine shorelines. Section 2785(e) defines “riparian habitat” as lands that contain habitat which grows close to and which depends upon soil moisture from a nearby freshwater source. CDFW regulates the bed, bank to bank, as well as associated riparian vegetation, and fish and wildlife resources. CDFW has interpreted jurisdictional boundaries to be defined by the tops of stream banks (i.e., the limit of stream influence) and/or the limit of the canopy of riparian vegetation (outer drip line) that is hydrologically connected to river, stream, or lake, whichever is greatest. As a result, the area of CDFW jurisdiction is usually greater than the active channel and overlaps and extends beyond the USACE jurisdiction. Isolated wetlands not associated with a river, stream or lake are not protected under sections 1600 et seq. of the California Fish and Game Code. In addition, CDFW does not have regulatory authority on Tribal Lands.

CDFW jurisdiction may also extend to altered or artificial waterways based upon the value of those waterways to fish and wildlife (CDFG ESD 1994), particularly to the extent that such constructed waterways were originally natural waterways.

The Lake and Streambed Alteration Program require execution of an agreement with CDFW before any activity substantially modifies a river, stream or lake. It is not legal to alter the bed or bank of a stream or lake or their natural water flow without a CDFW Streambed Alteration Agreement. The California Fish and Game Code section 1602 requires an entity to notify CDFW of any proposed activity that may substantially modify a perennial, intermittent, and ephemeral river, stream, or lake in the state. Notification is required by any person, business, state or local government agency, or public utility that proposes an activity that will:

- Substantially divert or obstruct the natural flow of any river, stream or lake.
- Substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake.
- Deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

The notification requirement applies to any work undertaken in or near a river, stream, or lake that flows at least intermittently through a bed or channel. This includes intermittent and ephemeral streams and washes, and other watercourses with subsurface flows, or drainages with beds and banks that support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife.

3 METHODOLOGY

3.1 LITERATURE REVIEW

This section describes the study methods (literature review) used for evaluating the biological resources that exist within the Central Park property and project vicinity.

3.1.1 Ecoregions

The Jepson eFlora website and CDFW's Biogeographic and Information Observation System were reviewed to determine within which eco-geographic region and subregion the Central Park property is located (Calflora 2019; CDFW 2019b).

3.1.2 Topography

Topography describes the physical features of an area of land. Maps such as the United States Geological Survey (USGS) 7.5-Minute Topographic Map *Guasti* and *Cucamonga Peak* Quadrangles, aerial imagery (Google Earth©), historic imagery (Google Earth© and Historic Aerials by Netronline), and other interactive maps were reviewed in order to gain a perspective of the topographic features associated with the Central Park property and project vicinity.

3.1.3 Soils

The NRCS operates the Web Soil Survey that provides soil data and information produced by the National Cooperative Soil Survey. The Web Soil Survey (USDA NRCS 2019) was used to create a custom soils report for the soils associated with the Central Park property (Attachment 11).

3.1.4 Sensitive Natural Communities

CDFW's California Natural Diversity Database (CNDDB; CDFW 2019d) was used to identify sensitive natural communities that may exist within the USGS 7.5-Minute Topographic Map *Guasti* and *Cucamonga Peak* Quadrangles. The CNDDB search determined that four sensitive habitats have the potential to occur within the Central Park property:

- California walnut woodland.
- Coastal and valley freshwater marsh.
- Riversidian alluvial fan sage scrub.
- Southern sycamore alder riparian woodland.

3.1.5 Special-status Plant and Wildlife Species[1]

Plant and wildlife species protected by federal agencies, state agencies, and local conservation agencies and organizations, such as the California Native Plant Society (CNPS), are collectively referred to as "special-status species" in this report.[2] The methods described below were used to research and derive a

[1] Plant nomenclature and taxonomic sequence within this report is based on the CNPS' On-Line Inventory of Rare, Threatened, and Endangered Plants of California and *The Jepson Manual: Vascular Plants of California*, second edition (Baldwin et al. 2012). Wildlife nomenclature and taxonomic sequence are based on the following: amphibians and reptiles - Center for North American Herpetology; birds - American Ornithologists' Union checklist of North American Birds, 7th edition (AOU 1998 and supplements); and mammals - *Mammal Species of the World* (Wilson and Reeder 2005).

[2] Avian species protected by the MBTA are not considered "special-status species."

comprehensive project-specific list of special-status plants (plant inventory) and wildlife (wildlife inventory) to potentially target during the field surveys.

- CDFW's CNDDB RareFind 5 online database (CDFW 2019d) was used to identify special-status plant and wildlife species that may exist within the USGS 7.5-Minute Topographic Map *Guasti* and *Cucamonga Peak* Quadrangles.
- USFWS' Information, Planning, and Conservation system (USFWS 2019b) was used to identify federal threatened and endangered plant and wildlife species, critical habitats, and other natural resources of concern that may exist within the Central Park property.
- CNPS' online *Inventory of Rare and Endangered Plants of California*, 8th Edition (CNPS 2019) was used to identify special-status plants that may exist within the USGS 7.5-Minute Topographic Map *Guasti* and *Cucamonga Peak* Quadrangles.
- Previous consultant studies and reports were reviewed to gain a sense of the existing conditions at the time the studies were conducted (ELMT 2019, 2020a, 2020b; LSA 2007, 2008a, 2008b, 2008c, 2008d).

The literature review and query of the databases for reported locations of special-status species helped to identify the known locations of these resources in the project region and assisted in identifying the potential for on-site occurrence of such species. Although the inventory list of special-status plant and wildlife species was not exhaustive of species that might be of concern for the property, it provided a wide range of species that are representative of the habitats in the project area.

The literature review found that 37 special-status plant species (plant inventory) and 63 special-status wildlife species (wildlife inventory) may be present within the Central Park property. The plant inventory is provided in Attachment 9, *Plant Special-status Species Inventory and Potential Occurrence Determination* and the wildlife inventory is provided in Attachment 10, *Wildlife Special-status Species Inventory and Potential Occurrence Determination*. Two plants and 14 animals are designated federally, or state listed endangered, threatened, candidate, or state rare (plants only) under the ESA, CESA, and/or the NPPA (plants only). These plant and wildlife species are referred to as "listed species" in this report. Thirty-five of the special-status plant species and 49 of the special-status wildlife species have no designated status under the ESA, the CESA, and/or the NPPA, but are designated as sensitive or locally important by federal agencies, state agencies, and/or nonprofit resource organizations, such as the CNPS. These plant and wildlife species are referred to as "sensitive species" in this report.

Each species listed in the inventories were assessed for their potential to occur within the Central Park property by comparing each species' habitat elevational range and distribution (if known) obtained from the literature review, with the location and elevational range of the Central Park property. A species was determined as having "no potential to occur" if the Central Park property is outside the species' known distribution and/or the species' known elevational range. Through this initial analysis, 25 special-status plant species and 17 special-status wildlife species were determined to have no potential to occur within the Central Park property (Attachment 9 and Attachment 10). It is anticipated that the project will have no impacts on these species, and they are not discussed further in this report.

3.1.6 Protected Trees/Shrubs

In addition to the Rancho Cucamonga General Plan (Rancho Cucamonga 2010), applicable City ordinances and municipal codes pertaining to tree and shrub preservation and protective measures and their replacement conditions or permits required were reviewed.

3.1.7 Hydrology

In order to identify known locations of aquatic features within Central Park property and project vicinity the following databases were queried:

- The watershed boundary data set containing the most current 8-, 10-, and 12-digit hydrologic unit code (HUC; CDFW 2019b).
- The National Wetlands Inventory (NWI) database and maps developed by the USFWS were used as preliminary indicators of potential wetland areas based on changes in vegetation patterns as observed from satellite imagery. The USFWS Wetlands Mapper (USFWS 2019c) was used to review and download the digital wetland data for the project vicinity.
- EPA's WATERS GeoViewer data (EPA 2019).
- Federal Emergency Management Act Flood Map Service Center (FEMA 2019).

3.1.8 Jurisdictional Areas

The following were reviewed and consulted to determine jurisdictional areas within the Central Park property:

- Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987).
- Field Guide for Wetland Delineation: 1987 Corps of Engineers Manual (WTI 1999).
- Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (USACE 2008).
- The National Wetland Plant List: 2016 wetland ratings (Lichvar et al. 2016).
- A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (Lichvar and McColley 2008).
- Distribution of OHWM Indicators and their Reliability in Identifying the Limits of "Waters of the United States" in Arid Southwestern Channels (Lichvar et al. 2006).
- Field Indicators of Hydric Soils in the United States, Version 8.2 (USDA NRCS 2018).
- A Field Guide to Lake and Streambed Alteration Agreements, Sections 1600–1607 (CDFG ESD 1994).

3.1.9 Critical Habitats

The USFWS' Critical Habitat Portal (USFWS 2019a) was reviewed to identify federal threatened and endangered species designated final and proposed critical habitat designations within the Central Park property and project vicinity.

3.1.10 Wildlife Corridors

CDFW's Biogeographic and Information Observation System Habitat Connectivity Viewer (CDFW 2019a) was used to review the Essential Connectivity Map and to search for Natural Landscape Blocks (NLBs) and Essential Connectivity Areas within Central Park property and project vicinity. The California Essential Connectivity Map depicts large, relatively natural habitat blocks that support native biodiversity (NLBs) and areas essential for ecological connectivity between them (Essential Connectivity Areas). In addition, maps and NLB and Essential Connectivity Area descriptions were reviewed within the *California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California* (Spencer et al. 2010).

An evaluation of potential wildlife movement within the Central Park property and project vicinity was also conducted by examining aerial imagery and maps. Finally, the literature review also included maps and reports on wildlife home ranges and migration and dispersal patterns (CDFG 1988a and updates, 1988b and updates, 1988c and updates).

3.2 FIELD SURVEY METHODS

This section describes the field survey methods used within the Project site during the biological field surveys. Biologists from LSA and ELMT visited the Project site 24 times in 2007, 2008, and 2019 to conduct the following types of general and focused biological surveys:

- General site assessment and plant community mapping.
- General plant survey.
- General wildlife survey.
- Protocol CAGN surveys.
- Protocol BUOW surveys.
- Focused SBKR small mammal trapping surveys.
- Jurisdictional assessment and delineation.
- Wildlife movement evaluation.

Surveys were conducted during daylight hours and not during abnormal or excessive cold, heat, wind, rain, or other inclement weather. Surveys were conducted on foot and covered all accessible areas of the Project site by meandering transects. The surveys did not extend beyond the Project site boundary. Biologists used binoculars from strategic vantage points whenever direct access was not possible. Observations were also made with aerial imagery.

Biologists used pertinent regional flora/fauna field guides and topographic/aerial maps during the field surveys. In addition, Global Positioning System units and other Geographic Information System and survey-related techniques, hardware and software were used to collect locational data and record relevant attributes of features or species encountered. Digital color photographs were taken during the field surveys to record existing site conditions. Data collected during the site visits were recorded in field notebooks, data sheets, and/or on color mapped aerials.

3.2.1 General Site Assessment and Plant Community Mapping

Biologists characterized the existing land cover and searched for the presence of sensitive plant communities within the Project site. Identification of habitats and plant communities were based on observed dominant species. Land cover categories were identified and mapped in the field by marking their limits on a color aerial map and/or with the use of a Global Positioning System unit/iPad. Topography, soil characteristics, substrates, rock formations, vernal pools, and site disturbances (natural and human caused) were also components of the habitat assessment. The purpose of the habitat assessment was to ascertain existing site conditions and identify habitat areas that could potentially support special-status plant and wildlife species.

3.2.2 General Plant Surveys

Biologists surveyed the Project site for common plants and for the presence of special-status plant species listed in the plant inventory. Plant species were identified in the field and in the office, when necessary,

using plant field guides, plant taxonomic guides, photographs, and from collections of plants taken in the field. Identified plants were recorded in field notes.

3.2.3 General Wildlife Surveys

Biologists surveyed the Project site for common wildlife and for the presence of special-status wildlife species listed in the wildlife inventory.[3] Biologists also searched for signs of wildlife, including animal tracks, burrows, dens, nests, nest sites, scat, or remains. Wildlife signs and wildlife species encountered visually or audibly during the field surveys were identified and recorded in field notes.

3.2.4 Protocol Coastal California Gnatcatcher Surveys

Central Park is located within the range of the CAGN (*Polioptila californica californica*) and the 2007 habitat assessment determined that the Project site contains coastal sage scrub habitat that could potentially support CAGNs; therefore, protocol CAGN surveys were required. Surveys were conducted in the Project site by LSA Senior Biologist, Mr. Stan Spencer, under LSA Federal 10(a)(1)(A) Permit TE-777965 and under a Letter of Agreement from CDFW in lieu of a Memorandum of Understanding between LSA and CDFW. Surveys conformed to the USFWS *Coastal California Gnatcatcher (Polioptila californica californica) Presence/Absence Survey Guidelines* (dated February 28, 1997 [USFWS 1997a] and revised July 28, 1997 [USFWS 1997b]) for the CAGN non-breeding season. Surveys were conducted on the following dates: December 10 and 24, 2007; January 8 and 22; February 5 and 19; March 6 and 20; and April 4, 2008. Details of the field survey methods can be found in LSA's *Results of a Focused California Gnatcatcher Survey for Central Park Phase II Project Site in the City of Rancho Cucamonga, San Bernardino County, (LSA Project Number CRG0703)* letter (LSA 2008c; Attachment 7). The purpose of these surveys was to determine CAGN presence or absence within the Project site.

3.2.5 Protocol Burrowing Owl Surveys

Central Park is located within the range of the BUOW and the 2007 habitat assessment determined that the Project site contains habitat that could potentially support BUOWs; therefore, protocol BUOW surveys were required. Surveys were conducted in the Project site by LSA Biologist, Ms. Lisa Wadley, and they were conducted in accordance with the guidelines set forth by the California Burrowing Owl Consortium, Santa Cruz Predatory Bird Research Group Burrowing Owl Survey Protocol (1993), and CDFW internal memo (February 1995). Surveys were conducted on the following dates: December 3, 5, 13, and 17, 2007; and January 2, 2008. Details of the field survey methods can be found in LSA's *Results of Focused Burrowing Owl Survey for Central Park Project located in the City of Rancho Cucamonga, San Bernardino County (LSA Project No. CRG0703)* letter (LSA 2008d; Attachment 6). The purpose of the surveys was to determine BUOW presence or absence within the Project site.

3.2.6 Focused San Bernardino Kangaroo Rat Small Mammal Trapping Surveys

Central Park is located within range of the SBKR and the 2007 habitat assessment determined that the Project site contains habitat that could potentially support SBKRs; therefore, focused SBKR small mammal trapping surveys were required. Surveys were conducted in the Project site by LSA Biologists, Mr. Richard Erickson and/or Mr. Leo Simone, under LSA Federal 10(a)(1)(A) Permit TE-777965-7 (May 10, 2004–May 9, 2007; renewal request submitted April 9, 2007, extending coverage indefinitely) and a temporary authorization from CDFW (May 12, 2003–March 31, 2007; renewal request submitted March 26, 2007, extending coverage indefinitely) in lieu of a Memorandum of Understanding between LSA and CDFW. Surveys were conducted on the following dates: February 25–29, 2007; and March 1, 2008. Details of the

[3] The Project site is within the general distributional range of several special-status species; however, most of the special-status wildlife species that could occur within the site are not subject to specific published survey protocols or guidelines.

field survey methods can be found in LSA's *70-Acre Central Park Parcel in the City of Rancho Cucamonga, San Bernardino County, Kangaroo Rat Trapping, February 2008* (LSA 2008a; Attachment 8). The purpose of the surveys was to detect the presence of SBKR within the Project site.

3.2.7 Jurisdictional Assessment and Delineation

During the initial 2007 reconnaissance-level biological survey, LSA biologist, Ms. Lisa Wadley, searched the Project site for the potential presence of federal or state wetlands, waters, and vegetation that are potentially subject to the jurisdictional authority of the USACE, RWQCB, and CDFW. She determined that the site did indeed contain jurisdictional areas and recommended that a formal jurisdictional delineation be conducted.

On December 4, 2007, LSA Senior Biologist, Mr. Leo Simone, conducted a formal jurisdictional delineation survey on the Project site. The survey was conducted according to then current USACE and CDFW guidelines. Details of the field survey methods can be found in LSA's *Jurisdictional Delineation Report, Central Park Project, City of Rancho Cucamonga, San Bernardino County, California* (LSA 2008b; Attachment 5).

On July 17, and October 8, 2019, ELMT biologists, Mr. Thomas J. McGill, Mr. Travis J. McGill, and Mr. Jacob H. Lloyd Davies, conducted a formal jurisdictional delineation survey on the Project site. The survey was conducted according to up-to-date regulations. Details of the field survey methods can be found in ELMT's *Central Park Master Plan Update Delineation of State and Federal Jurisdictional Waters* (ELMT 2020a; Attachment 2).

3.2.8 Wildlife Movement Evaluation

Biologists searched the Project site for potential natural and man-made travel routes that wildlife could use to traverse the site. Biologists assumed wildlife species would use these linear features for travel if they occurred within the site. Biologists also searched for natural and man-made barriers to wildlife movement, such as permanent structures, paved roads, sound walls, concrete walls, or fences that would interfere with the movement of wildlife. A formal wildlife movement corridor study was not conducted.

3.2.9 Post Surveys Evaluation

After the field surveys and mapping of the plant communities were complete, an additional evaluation was conducted later in the office for each special-status plant and wildlife species listed in the plant inventory (Attachment 9) and wildlife inventory (Attachment 10). The evaluation considered whether the Project site contained suitable habitats and conditions to support those special-status species listed in the inventories. A species was determined to have "no potential to occur" within the Project site if suitable and adequate biological and physical features that are needed to support the plant and wildlife species were absent. For example, animal species that are only found within rivers, sand dunes, desert scrub, or conifer forests would be determined to have no potential to occur within the Project site because those habitats are absent from the Project site. Since they are unlikely to occur, there would be no effect to these species from the project. Those species were eliminated from further evaluation and are not discussed further.

4 EXISTING CONDITIONS

This section describes the results of the literature review and the 2007, 2008, and 2019 field surveys (Table 1, *Field Survey Information*). Photographs that were taken during the 2019 field surveys can be found in Attachments 1 and 2 of Appendix C.

4.1 ECOREGIONS AND LOCAL SETTING

Central Park is in the center of the City of Rancho Cucamonga, in southwestern San Bernardino County. The City of Rancho Cucamonga is located at the north-central section of the Chino Valley, just south of the eastern San Gabriel Mountains (BonTerra Consulting 2010) which are part of the Transverse Ranges. Central Park is located south within the Peninsular Ranges Geomorphic Province. The property is also in the Southwestern California Region and the South Coast Subregion of the California Floristic Province as described within the Jepson eFlora Project (Jepson Flora Project [eds.] 2019). This subregion extends along the Pacific Coast, from Point Conception in Santa Barbara County, to Mexico.

Central Park is situated on the alluvial fan of the eastern most portion of the San Gabriel mountain range (Rancho Cucamonga Fire District 2017). Central Park is in the Fontana Plain-Calimesa Terraces Ecological Subsection of the Southern California Mountains and Valleys Ecological Section as described within the *Ecological Subregions of California: Section and Subsection Descriptions* (Miles and Goudey 1997). This subsection is on very gently to gently sloping alluvial fans, mostly from the San Gabriel and San Bernardino Mountains and the predominant natural plant communities are California sagebrush - California buckwheat series and needlegrass grasslands (Miles and Goudey 1997).

The Central Park property is bounded by the following:

- *North*: The Pacific Electric Inland Empire Trail. This trail is a multi-purpose commuter and recreation trail that includes a 10-foot-wide, concrete trail for bikes and a 10-foot-wide side path of decomposed granite for running, walking, and horseback riding.
- *East*: Milliken Avenue.
- *South*: Base Line Road.
- *West*: Deer Creek and Deer Creek Channel Trail. Deer Creek is a flood control channel and the trail is a Class I designated off-road bike path.

4.2 LOCAL CLIMATE

The City of Rancho Cucamonga is considered having a “Mediterranean” climate with hot, arid, and clear summers and long, cool, and partly cloudy winters. Most of the City’s rainfall occurs almost entirely in the winter between the months of December and March, with hardly any occurring in the months between May and October (ELMT 2019, 2020a, 2020b). Climatological data obtained for the City of Rancho Cucamonga indicates the annual precipitation averages 16.8 inches per year (ELMT 2019, 2020a, 2020b). The average maximum and minimum temperatures for the region are 78.4-and 52.5-degrees Fahrenheit (°F) respectively with July (monthly average 93.7° F) being the hottest month and December and January (monthly average 41.4°F) being the coldest (ELMT 2019, 2020a, 2020b).

Table 1: Field Survey Information

Survey Type	Survey Date	Survey Time (Start–Finish)	Temperature Fahrenheit (°F) (Start–Finish)	Wind (mph) (Start–Finish)	% Cloud Cover (Start–Finish)	Company: Surveyors
Biological Resources Reconnaissance Surveys						
Survey 1	June 28, 2007	/	/	/	/	LSA: Ms. Lisa Wadley
Survey 2	July 17, 2019	/	high 80s–low 90s	calm	0–0	ELMT: Mr. Thomas J. McGill, Ph.D., Mr. Travis J. McGill, and Mr. Jacob H. Lloyd Davies
Survey 3	October 8, 2019	/	high 80s–low 90s	calm	0–0	
Protocol Coastal California Gnatcatcher Surveys						
Survey 1	December 10, 2007	7:40–10:40 a.m.	55–58	<1–1-3	0–0	LSA: Mr. Stan Spencer
Survey 2	December 24, 2007	7:30–10:30 a.m.	56–73	<1–1-3	0–0	
Survey 3	January 8, 2008	7:20–11:00 a.m.	44–57	<1–1-3	20–20	
Survey 4	January 22, 2008	7:30–11:00 a.m.	49–59	<1–<1	98–40	
Survey 5	February 5, 2008	7:26–10:15 a.m.	48–58	1-3–1-3	0–0	
Survey 6	February 19, 2008	7:30–10:25 a.m.	54–56	<1–<1	100–100	
Survey 7	March 6, 2008	7:35–10:35 a.m.	60–70	<1–<1	10–10	
Survey 8	March 20, 2008	7:25–10:10 a.m.	55–61	<1–1-3	30–30	
Survey 9	April 4, 2008	8:00–10:50 a.m.	54–67	1-3–<1	0–0	
Protocol Burrowing Owl Surveys						
Burrow Survey	December 3, 2007	8:30–10:15 a.m.	56–67	0-3–0-2	0–0	LSA: Ms. Lisa Wadley
Survey 1	December 5, 2007	6:30–7:45 a.m.	51–61	0-2–0-1	0–5	
Survey 2	December 13, 2007	6:40–7:50 a.m.	44–55	0-3–0	25–15	
Survey 3	December 17, 2007	6:40–7:50 a.m.	42–42	0-1–0-1	10–5	
Survey 4	January 2, 2008	6:50–8:15 a.m.	50–52	0-3–0-2	100–70	
Focused San Bernardino Kangaroo Rat Small Mammal Trapping Surveys						
Night Survey 1	February 25, 2008	p.m.	/	/	/	LSA: Mr. Richard Erickson and Mr. Leo Simone
Morning Survey 1 Night Survey 2	February 26, 2008	a.m. and p.m.	/	/	/	
Morning Survey 2 Night Survey 3	February 27, 2008	a.m. and p.m.	/	/	/	
Morning Survey 3 Night Survey 4	February 28, 2008	a.m. and p.m.	/	/	/	

Survey Type	Survey Date	Survey Time	Temperature Fahrenheit (°F)	Wind (mph)	% Cloud Cover	Company: Surveyors
		(Start–Finish)				
Morning Survey 4 Night Survey 5	February 29, 2008	a.m. and p.m.	/	/	/	
Morning Survey 5	March 1, 2008	a.m.	/	/	/	
Jurisdictional Delineation Survey						
Survey 1	December 4, 2007	/	/	/	/	LSA: Mr. Leo Simone
Survey 2	July 17, 2019	/	high 80s–low 90s	calm	0–0	ELMT: Mr. Thomas J. McGill, Ph.D., Mr. Travis J. McGill, and Mr. Jacob H. Lloyd Davies
Survey 3	October 8, 2019	/	high 80s–low 90s	calm	0–0	
/ = no information described in the specific reports.						

4.3 TOPOGRAPHY

The Central Park property is in a developed urban portion of the City. Around Central Park, land use is built-up and developed lands including residential neighborhoods, transportation roadways (Milliken Avenue and Base Line Road), recreation trails (Pacific Electric Inland Empire Trail and Deer Creek Channel Trail), and a commercial complex (Terra Vista shopping center).

The Central Park property encompasses approximately 103.4 acres of land and it currently supports a mix of developed lands and undeveloped natural lands. Approximately 30.4 acres is currently developed with the Goldy S. Lewis Community Center, James L. Brulte Senior Center, and Freedom Courtyard, leaving approximately 73 acres of Central Park undeveloped. The developed portion Central Park contain City buildings, courtyards, and associated pavings (parking lots, roads, driveways, sidewalks, trails), gardens, turf, and landscaping. The built-up and developed lands provide little to no habitat for wildlife species. Included with the built-up and developed lands are its associated vegetation which includes landscaping, ornamental vegetation, gardens, and turf. This vegetation is predominately non-native, and it could potentially provide habitat for wildlife species.

Grading and construction in most of the eastern and southern portions of the Central Park property began in 2003 (ELMT 2019, 2020b). The middle of the southern section was utilized as a staging area for early development and continues to host equipment and machinery that will be used in further development (ELMT 2019, 2020b).

As noted above, the undeveloped portion of Central Park encompasses approximately 73 acres. The Central Park Master Plan Update reVISION Project site encompasses approximately 62 acres. The Central Park Amphitheater Project encompasses approximately 11 acres. These Project sites consists of both disturbed and undeveloped land. This document describes impacts to the biological resources in the undeveloped portion of Central Park associated with the development of the Central Park Master Plan Update reVISION Project and the Central Park Amphitheater Project. The Central Park Amphitheater Project was recently assessed in an Initial Study/Mitigated Negative Declaration (IS/MND). The IS/MND, which was certified on October 2, 2019, contained mitigation measures to reduce impacts, including those to biological resources to less than significant.

The Central Park property is generally flat with a gentle slope from the north to the south. It has an elevation range of 1,324 to 1,377 feet above mean sea level. The Project site contains no areas of significant topographic relief (terrain) except for a drainage feature that flows from the northeast to the southwest along the southern portion of the site that has created a swale with sloped sides (ELMT 2019, 2020a, 2020b).

4.4 SOILS

The general area in which the site is located is underlain by a series of coalescing alluvial fans derived from stream systems from the eastern San Gabriel Mountains (Kleinfelder 2009). Adjacent to the mountains, the alluvial fan deposits are very coarse and crudely bedded and consist mainly of fine- to coarse-grained sand and gravel with cobbles and boulders (Kleinfelder 2009). Beyond the mountain front the alluvial deposits are interlayered with eolian deposits which are represented by thin silt and fine sand lenses throughout the soil profiles (Kleinfelder 2009). Soil moisture regimes are xeric (Miles and Goudey 1997).

Kleinfelder West, Inc. conducted a geotechnical investigation in 2009 within the Project site. The earth materials encountered during their survey consisted of alluvial fan deposits comprising of, sand, silty sand, sandy gravel, and gravelly sand (Kleinfelder 2009).

Soils onsite have been mechanically disturbed and heavily compacted from historic land uses (i.e., agricultural, clearing/grading, and storage activities) (ELMT 2019, 2020b). Based on the NRCS Soil Survey, the Central Park property contains two soil map units which are listed in Table 2, *Summary of Soil Mapping Units,* and described within the custom soils reports found within Attachment 11, *NRCS Soils Report*. Map unit delineations on soil maps represent an area dominated by one or more major kinds of soil areas. A map unit is identified and named according to the taxonomic classification of the dominant soils.

Table 2: Summary of Soil Mapping Units

Soil Map Unit Symbol	Soil Map Unit Name	Percent of Central Park Property	Natural Drainage Class
TuB	Tujunga loamy sand, 0 to 5 percent slopes	41.7%	Somewhat excessively drained
TvC	Tujunga gravelly loamy sand, 0 to 9 percent slopes	58.3%	Somewhat excessively drained

TuB=Tujunga loamy sands, TvC=Tujunga gravelly loamy sand

Tujunga loamy sands (TuB) consist of brown loamy sand and pale-brown coarse sand. These soils are about 60 inches thick, somewhat excessively drained, and found on nearly level to moderately sloping alluvial fans (BonTerra Consulting 2010). Tujunga soils are slightly acidic and highly permeable so runoff on these soils is slow to very slow (BonTerra Consulting 2010). Tujunga gravelly loamy sand (TvC) has the same characteristics as TuB soils, except for a higher gravel content (15 to 30 percent by volume) (BonTerra Consulting 2010). These soils are fair sources of sand and gravel (BonTerra Consulting 2010).

4.5 SITE DISTURBANCES

The undeveloped portion of Central Park consists of both disturbed and undeveloped land that has been subject to a variety of direct and indirect human-related disturbances from historical agricultural activities, grading activities, adjacent development, weed abatement, construction staging, and storage activities (ELMT 2019, 2020b). The earliest available aerials indicate that agricultural activities occurred onsite from 1938 and ceased between 1980 and 1994 when all the surrounding areas were developed (ELMT 2019, 2020b). In the decades since active agricultural activities (i.e., grape vineyards) ceased, native vegetation communities typical of disturbed areas have reestablished onsite; however, onsite anthropogenic disturbances have greatly disturbed the natural plant communities that once occurred within the boundaries of the Project site, reducing their ability to provide suitable habitat for special-status plant and wildlife species (ELMT 2019, 2020b).

The developed portion of Central Park continues to provide ongoing anthropogenic influences on the remainder of the property by encouraging public access to the remaining open spaces (ELMT 2019, 2020b). Walking and cycling trails occur on the western and northern boundaries and connect the surrounding residential development to the existing Central Park facilities (ELMT 2019, 2020b).

4.6 GROUND COVER

The Central Park property once contained a grape vineyard that was used in the region's wine making industry (Rancho Cucamonga Fire District 2017). The vineyard went dormant and then in 1984, the City purchased the Central Park property (Rancho Cucamonga Fire District 2017). A decision was made years ago by the City to provide vegetation ground cover to reduce the occurrence of blowing sand and dust during Rancho Cucamonga's frequent wind events (Rancho Cucamonga Fire District 2017). It was decided that seeding the park with a native coastal sage scrub mix would provide the desired ground cover and dust reduction while eliminating the need for costly irrigation (Rancho Cucamonga Fire District 2017). As the ground cover took hold over the ensuing years, a coastal sage scrub habitat was created (Rancho

Cucamonga Fire District 2017). Over the years, the vegetation has grown to maturity and is now a mostly continuous cover of shrubs and herbs (Rancho Cucamonga Fire District 2017). Grape plants were observed scattered throughout the site from historical agricultural activities (ELMT 2019, 2020b).

4.7 LAND COVER

A plant community is a group of one or more populations of plants growing together in a recognizable pattern across a landscape. Each plant community has a distinct look from other communities. Generally, classifications of habitat types or plant communities were based on Holland's *Preliminary Descriptions of the Terrestrial Communities of California* (Holland 1986) and *A Manual of California Vegetation, Second Edition* (Sawyer et al. 2009), with modifications to better represent existing site conditions. The classifications were then checked against CDFW's California Natural Communities List (CDFW 2019c) and CDFW's California Sensitive Natural Communities List (CDFW 2019e). The list indicates which natural communities are sensitive given the current state of the California classification and includes alliance rankings according to their degree of imperilment.

Five different land cover categories were observed and mapped within the Project site during the latest field survey conducted in 2019. Table 3, *Acreage of Mapped Land Cover*, lists the land cover categories with approximate acreages mapped; the corresponding name according to *Preliminary Descriptions of the Terrestrial Communities of California* (Holland 1986) and *A Manual of California Vegetation, Second Edition* (Sawyer et al. 2009); and the California Natural Community Codes listed in the California Natural Communities List (CDFW 2019c). Exhibit 5 in Attachment 1 depicts the location and size of each mapped land cover category within the Project site. Characteristics of each land cover category are described in detail below in the following sections.

Table 3: Acreage of Mapped Land Cover

Mapped Land Cover Category	Community Name by Reference		California Natural Community Code (CaCode)	Global Rank and State Rank	Mapped Acreage
	Preliminary Descriptions of the Terrestrial Communities of California	A Manual of California Vegetation			
California buckwheat scrub	Riversidean sage scrub (Element Code: 32700)	*Eriogonum fasciculatum* shrubland alliance (California buckwheat scrub)	32.040.02	G5, S5	44.23
California sagebrush scrub	Riversidean sage scrub (Element Code: 32700)	*Artemisia californica* shrubland alliance (California sagebrush scrub)	32.010.01	G4, S4	6.62
Drainage feature	N/A	N/A	N/A	N/A	0.52
Ruderal/disturbed habitat	N/A	N/A	N/A	N/A	17.96
Developed land	N/A	N/A	N/A	N/A	1.91

Notes:

Global Rank: the global rank (G-rank) reflects the overall status of an element throughout its global range.
G4 = **Apparently Secure:** Uncommon but not rare; some cause for long-term concern due to declines or other factors.
G5 = **Secure:** Common; widespread and abundant.
State Rank: the state rank (S-rank) refer to the imperilment status only within California's state boundaries.
S4 = **Apparently Secure:** Uncommon but not rare in the state; some cause for long-term concern due to declines or other factors.
S5 = **Secure:** Common, widespread, and abundant in the state.

Common communities are usually widespread across a region and/or they generally are considered common enough not to be of concern. Disturbed plant communities are usually dominated by non-native species; degraded in nature; not conducive to the establishment of any special-status plant populations; provides little to no habitat value for sensitive wildlife; and are not designated a sensitive plant community. Common plant communities can be disturbed, and sensitive plant communities can also be disturbed.

CDFW defines sensitive plant communities as communities that are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects. They are usually uncommon and restricted to specific habitats and are often threatened with local extirpation. Therefore, they are considered as valuable biological resources.

Most habitats in California are evaluated and assigned a conservation status rank, which is an assessment of the level of risk of elimination or collapse of an ecosystem. This ranking system is maintained by NatureServe and includes a Global rank and a State rank from 1, which is very rare and threatened, to 5 which is considered secure. The Global rank reflects the overall status of an element throughout its global range and the State rank refers to the imperilment status only within the state of California. Communities with Global ranks of G1, G2, or G3, and State ranks of S1, S2, or S3, are considered sensitive. None of the plant communities identified and mapped within the Project site during the field surveys are considered sensitive natural communities.

4.7.1 California Buckwheat Scrub

The California buckwheat scrub plant community was observed throughout Project site. California buckwheat scrub has been designated by NatureServe as a secure (G5 and S5) natural community. Secure communities are common, widespread, and abundant in the state. This community is considered low priority for inventory by CDFW and is not considered sensitive.

The California buckwheat scrub plant community has established throughout most of the Project site since the completion of agricultural activities (ELMT 2019, 2020b). This transitional plant community supports early pioneer plant species typically found in Riversidean sage scrub but is dominated by a monoculture of California buckwheat (*Eriogonum fasciculatum*; ELMT 2019, 2020b).

Other plant species observed within this plant community include deerweed (*Acmispon glaber*), California croton (*Croton californicus*), common phacelia (*Phacelia distans*), chia (*Salvia columbariae*), California sagebrush (*Artemisia californica*), western ragweed (*Ambrosia psilostachya*), white sage (*Salvia apiana*), common cryptantha (*Cryptantha intermedia*), mule fat (*Baccharis salicifolia* ssp. *salicifolia*), coastal prickly pear (*Opuntia littoralis*), slender buckwheat (*Eriogonum gracile*), pine scented goldenbush (*Ericameria pinifolia*), and telegraph weed (*Heterotheca grandiflora*), and scale-broom (*Lepidospartum squamatum*) (ELMT 2019, 2020b).

Scale-broom was primarily observed along the western boundary of the project site and in sparse patches throughout the site (ELMT 2019, 2020b). Scale-broom, while it can be an indicator of a sensitive plant community known as Riversidean alluvial fan sage scrub (RAFSS), on the Project site, it does not (ELMT 2019, 2020b). The Central Park site historically supported a RAFSS plant community along its western boundary in association with Deer Creek prior to agricultural activities; however, Deer Creek was channelized several decades ago and now exists as an open concrete channel with no vegetation (ELMT 2019, 2020b). In addition, the Central Park site had been under active agriculture as a vineyard prior to its purchase by the City for the development of Central Park and maintenance of the site has primarily been disking for weed abatement for the last twenty years and now the site is dominated by buckwheat scrub (ELMT 2019, 2020b).

A few scattered scale-broom plants were found scattered throughout the site, but this is a direct result of the species adaptation to disturbances, needed by species living in the harsh environment of a native streambed like Deer Creek that only receives water during intense flood events (ELMT 2019, 2020b). The plant's deep root systems and its ability to regrow from its roots following a flood event that has scoured out the adult plant, allows the species to re-establish itself following major flood events or other disturbances (ELMT 2019, 2020b). As noted, the conversion of Deer Creek into a concrete channel eliminated all native vegetation, including scale-broom, from the channel and surrounding lands (ELMT 2019, 2020b). As noted, a few scattered scale-broom plants have been able to regrow from their roots; however, these plants are not within an area that is subjected to hydrologic influences of Deer Creek, needed to maintain viable RAFSS habitat, and are no longer in an area that supports RAFSS habitat (ELMT 2019, 2020b).

4.7.2 California Sagebrush Scrub

The California sagebrush scrub plant community was observed in the western half of the property. California sagebrush scrub plant community has been designated by NatureServe as an apparently secure (G4 and S4) natural community. Apparently secure communities are uncommon, but not rare in the state; there is some cause for long-term concern due to declines or other factors. This community is considered low priority for inventory by CDFW and is not considered sensitive.

This plant community is dominated by California sagebrush. Other common plant species observed onsite in this plant community included the same species as those found in the California buckwheat scrub community (ELMT 2019, 2020b).

4.7.3 Drainage Feature

A main drainage channel was constructed on the southern portion of the undeveloped portion of Central Park to accommodate stormwater runoff associated with development of the eastern third of Central Park in 2003 via a culvert in the middle of the southern portion of the site and flow east to west into the Deer Creek Channel (ELMT 2019, 2020b). In addition, two secondary drainage features were observed onsite that generally flow north to south that collect stormwater flows from the northern portion of the undeveloped portion of Central Park and convey them to the southern portion of the site (ELMT 2019, 2020b). One of the secondary drainage features is located on the western half of the undeveloped portion of Central Park and connects into the main drainage feature on the southern boundary of the site (ELMT 2019, 2020b). The other secondary drainage feature is located on the eastern half of the undeveloped portion of Central Park and terminates into an area just north of paved Central Park Drive (ELMT 2019, 2020b).

4.7.4 Ruderal/Disturbed Habitat

Disturbed areas are found throughout the undeveloped portion of Central Park and are associated with ongoing weed abatement activities, disking, and walking trials (ELMT 2019, 2020b). Ruderal/disturbed areas are heavily to sparsely vegetated by non-native, weedy plant species (ruderal vegetation) or they lack vegetation completely. These areas are persistent where habitat has been physically disturbed by human activities, resulting in compacted soils, and a dominance of ruderal plants. Bare areas include dirt lots, dirt access roads, and other maintained areas. Ruderal plants are adapted to frequent disturbances and easily colonize areas that are devoid of vegetation. This ruderal/disturbed community is degraded in nature; not conducive to the establishment of any special-status plant populations; provides little to no habitat value for wildlife; and is not considered a sensitive plant community. The characteristic ruderal plant species observed include short-podded mustard (*Hirschfeldia incana*), wild oat (*Avena fatua*), flax-leaved horseweed (*Erigeron bonariensis*), London rocket (*Sisymbrium irio*), Mediterranean grass (*Schismus barbatus*), and tacolote (*Centaurea melitensis*) (ELMT 2019, 2020b). Despite the presence of some native species, the ruderal/disturbed sites are dominated by invasive non-native vegetation.

4.7.5 Developed Land

Developed lands are features that describe areas occupied by man-made structures, pavings, and other impermeable surfaces. Developed areas are found along the northern boundary, in the northwest corner, and at the middle of the eastern boundary of the Project site (ELMT 2019, 2020b). These areas have been paved for pedestrian access (ELMT 2019, 2020b). Developed lands are not a plant community; however, these lands do include vegetation, such as turf, landscaping, and ornamental plants. The developed areas provide virtually no habitat for wildlife species.

4.8 PLANTS

This section describes the plants identified during the 2007, 2008, and 2019 field surveys and the special-status plants that have a potential to occur within the Project site as identified by the literature review and field surveys. This section reflects the best professional judgment of the biologists on special-status plant occurrence within the Project site.

4.8.1 Plant Species Recorded during the Field Surveys

Approximately 45 plant species from 16 plant families were observed within the Project site. This list of plant species is provided in Attachment 12, *Plant and Wildlife Species Recorded during the Field Surveys*; however, ornamental and landscaped vegetation are not included in the totals reported here. It should be noted that grape plants were observed scattered throughout the site from historical agricultural activities (ELMT 2019, 2020b).

The Project site consists of both disturbed and undeveloped land that supports native vegetation and natural plant communities that have gradually reestablished following agricultural activities onsite and surrounding development (ELMT 2019, 2020b). Even though the site supports native vegetation, the heavy disturbances from historic agricultural activities, surrounding development and channelization of Deer Creek have isolated the Project site from undisturbed native plant communities and scouring regimes following storm events (ELMT 2019, 2020b). These activities have reduced, if not eliminated, the ability of the plant communities onsite to provide suitable habitat for special-status plant species and seed sources for special-status plant species (ELMT 2019, 2020b).

4.8.2 Listed Plants

No listed plant species were observed within the undeveloped portion of Central Park during the field surveys. In addition, the literature review and field surveys determined that the site lacks suitable habitats, soils, and/or other factors to support any of the listed species in the plant inventory.

4.8.3 Sensitive Plants

No sensitive plant species were observed within the undeveloped portion of Central Park during the field surveys. In addition, the literature review and field surveys concluded that all the sensitive species in the plant inventory do not have more than a low potential to exist within the site due to a lack of suitable habitats, soils, and/or other factors to support them.

4.8.4 Protected Trees/Shrubs

The City's Tree Preservation Ordinance in the Municipal Code (Title 19, Environmental Protection - Chapter 19.08) states that eucalyptus, palm, oak, sycamore, pine, and other trees growing within the City are a natural aesthetic resource and are worthy of protection (BonTerra Consulting 2010). A permit is required

for the removal, relocation, or destruction of a Heritage Tree (BonTerra Consulting 2010).[4] Prior to removal of a Heritage Tree within the City limits, a Tree Removal Permit shall be obtained from the Planning Director and replacement trees may be required consistent with the City code (BonTerra Consulting 2010). No trees protected by the City were observed within the undeveloped portion of Central Park during the field surveys.

4.9 WILDLIFE

This section describes the wildlife identified during the 2007, 2008, and 2019 field surveys and the special-status wildlife that have a potential to occur within the undeveloped portion of Central Park as determined by the literature review and field surveys. Based on the literature review and field surveys, this section reflects the best professional judgment of the biologists on special-status wildlife occurrence within the Project site.

The wildlife observed and/or detected during the field surveys represent the diversity of wildlife in the surrounding areas; however, there were limitations to the field surveys. They include the following:

- The biological field surveys were conducted during the daytime to maximize the detection of most wildlife; however, many species are nocturnal. Birds represent the largest component of the fauna observed because most birds are active in the daytime. In contrast, daytime surveys usually result in few observations of mammals, many of which may only be active at night.
- Many wildlife species are secretive in their habits and are difficult for biologists to observe in a walking survey; therefore, wildlife may have been unnoticed because of their subterranean habitats and/or camouflaged appearance.
- Many species are intolerant of human interfaces and hide.
- Many wildlife species are wide-ranging and move about a territory; they only occur on a seasonal basis; they only occur during migration; and/or they may have become dormant for the season.
- Additional wildlife species that likely use Central Park were not observed or indirectly detected during the field surveys, due to their scarcity or the need for special survey methods, such as using herp arrays and mist netting.

4.9.1 Wildlife Species Recorded during the Field Surveys

The undeveloped portion of Central Park supports an assortment of wildlife and provides shelter, cover, roosting, foraging, and breeding habitats to reptiles, birds, and mammals as year-round residents, seasonal residents, and/or migrants. During the 2007, 2008, and 2019 field surveys, three reptile, 35 bird, and six mammal species were recorded within the undeveloped portion of Central Park. Wildlife activity was low during the field surveys and consisted of primarily avian species. A list of wildlife species recorded during the field surveys is provided in Attachment 12. Due to the developed nature of the properties surrounding Central Park, the site also provides habitat for common species known to occur within urban settings such as coyote (*Canis latrans*), northern raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), and Virginia opossum (*Didelphis virginiana*).

Vegetation communities form the basis of the wildlife habitats and provide the primary plant productivity upon which wildlife depends, along with nesting and denning sites, escape and movement cover, and

[4] A Heritage Tree is defined as any tree, shrub, or plant meeting at least one of the following criteria: (1) eucalyptus windrows; (2) woody plants in excess of 15 feet in height and having a single trunk circumference of 15 inches or more measured 24 inches from ground level; (3) multi-trunk trees having a total circumference of 30 inches or more measured 24 inches from ground level; (4) a stand of trees the nature of which makes each dependent upon the others for survival; or (5) any other tree as may be deemed historically or culturally significant by the Planning Director because of size, condition, location, or aesthetic qualities.

protection from adverse weather and predation. Some species are habitat specific for their life history requirements, while many wildlife species move freely between plant communities to obtain their life history needs. In general, more complex natural communities with more vegetation layers and more plant species provide higher value wildlife habitat than less complex vegetation communities. Communities that are more complex, have more niches for wildlife and usually support more animal species than less complex communities do. Although simple communities may support few wildlife species, they may provide habitat for great numbers of those few species. The Central Park lacks complex vegetation communities and has low vegetation species diversity; therefore, the site supports low habitat value for wildlife.

4.9.1.1 Fish

No fish or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) with frequent sources of water that would provide suitable habitat for fish were observed within the undeveloped portion of Central Park; therefore, no fish are expected to occur and are presumed absent (ELMT 2019, 2020b).

4.9.1.2 Amphibians

No amphibians or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for amphibian species were observed within the undeveloped portion of Central Park; therefore, no amphibians are expected to occur and are presumed absent (ELMT 2019, 2020b).

4.9.1.3 Reptiles

The undeveloped portion of Central Park provides a limited amount of habitat for a few reptile species adapted to a high degree of human disturbance associated with onsite disturbances and surrounding development (ELMT 2019, 2020b).

4.9.1.4 Birds

The undeveloped portion of Central Park provides suitable foraging and cover habitat for a variety of year-round and seasonal avian residents, as well as migrating bird species (ELMT 2019, 2020b). In addition, the site has the potential to provide suitable nesting opportunities for birds that nest on the open ground and those acclimated to routine disturbances (i.e., killdeer [*Charadrius vociferus*]) (ELMT 2019, 2020b).

4.9.1.5 Mammals

The undeveloped portion of Central Park and surrounding areas have the potential to support mammalian species adapted to human presence and disturbance (ELMT 2019, 2020b). No bat species are expected to occur due to a lack of suitable roosting habitat (i.e., trees, crevices, abandoned structures) within and surrounding the site (ELMT 2019, 2020b).

4.9.2 Listed Wildlife

No listed wildlife species were observed within the undeveloped portion of Central Park during the field surveys. In addition, the literature review and field surveys concluded that the site lacks suitable and adequate biological and physical features that are needed to support any of the listed species in the wildlife inventory.

4.9.2.1 Coastal California Gnatcatcher

No CAGNs were observed during the 2007/2008 protocol CAGN surveys. In addition, no CAGNs were observed during any of the other 2007/2008/2019 biological resources surveys conducted at Central Park. Site conditions have not changed since the 2007/2008 protocol CAGN surveys (ELMT 2019, 2020b).

The Primary Constituent Elements essential to support the biological needs of foraging, reproducing, rearing of young, intra-specific communication, dispersal, genetic exchange, or sheltering for CAGN are (ELMT 2019, 2020b):

- Dynamic and successional sage scrub habitats and associated vegetation that provide space for individual and population growth, normal behavior, breeding, reproduction, nesting, dispersal and foraging; and
- Non-sage scrub habitats such as chaparral, grassland, and riparian areas, in proximity to sage scrub habitats that provide linkages to help with dispersal, foraging and nesting. These habitats have the potential to provide linkages to help with dispersal, foraging and nesting.

The California buckwheat scrub and California sagebrush plant communities onsite have been isolated from occupied sage scrub habitats in the region by surrounding development and have only recently established after agricultural activities ceased (ELMT 2019, 2020b). In addition, these communities have been degraded from existing anthropogenic disturbances (ELMT 2019, 2020b). Based on these conditions, it was determined that the undeveloped portion of Central Park does not provide the requisite Primary Constituent Elements which are needed by CAGN to be present; therefore, it was determined that CAGN is absent from the site (ELMT 2019, 2020b). Additional protocol CAGN surveys are not recommended.

4.9.2.2 San Bernardino Kangaroo Rat

No SBKRs were captured within the undeveloped portion of Central Park during the 2008 focused SBKR small mammal trapping surveys. Deer Creek was channelized for flood control purposes and residential development; therefore, Central Park has been isolated from the influences of Deer Creek and the alluvial fans extending out of the San Gabriel Mountains (ELMT 2019, 2020b). The channelization of Deer Creek and surrounding development has eliminated the Central Park area from being subjected to scouring regimes historically associated with Deer Creek that would have had the potential to provide suitable habitat for SBKR (ELMT 2019, 2020b).

Central Park and the surrounding area are no longer exposed to fluvial processes needed to maintain the intermediate RAFSS habitat that would be required for long-term SBKR conservation (ELMT 2019, 2020b). Plant species representative of RAFSS habitats, the vegetation typically occupied by SBKR, are patchy, except for the western boundary where scale-broom exists.

Due to the history of regular disruption and manipulation of the native soils, the loss of fluvial scouring due to flood control activities, and isolation from known occupied habitat, it was determined that the undeveloped portion of Central Park does not provide the requisite Primary Constituent Elements which are needed by SBKR to be present; therefore, it was determined that SBKR is presumed absent from the site (ELMT 2019, 2020b). Additional focused SBKR surveys are not recommended.

4.9.3 Sensitive Wildlife

Three sensitive animals, rufous hummingbird (*Selasphorus rufus*), California gull (*Larus californicus*), and Cooper's hawk (*Accipiter cooperii*), were observed within the undeveloped portion of Central Park during the 2007/2008 field surveys. Rufous hummingbird was observed during the 2007 biological resources reconnaissance survey. California gull was observed during the 2007/2008 BUOW protocol surveys. Cooper’s hawk was observed during the 2007/2008 CAGN protocol surveys. The LSA biological resources report, BUOW report, and CAGN report do not give information about these observations, only that they were sighted.

According to the *City of Rancho Cucamonga Central Park Fire Hazard Reduction and Vegetation Management Plan*, Blainville's horned lizard (*Phrynosoma blainvillii*) and California glossy snake (*Arizona elegans occidentalis*) occupy the undeveloped portions of the Central Park property. Table 4, *Sensitive Wildlife Species known to use the Central Park Site*, lists the sensitive wildlife species known to occupy and/or use the Project and it lists each species' status in California.

Table 4: Sensitive Wildlife Species known to use the Central Park site

Scientific Name (=Synonym)	Common Name (=Synonym)	Status in California
Phrynosoma blainvillii	Blainville's horned lizard (=coast horned lizard)	SSC
Arizona elegans occidentalis	California glossy snake	SSC
Selasphorus rufus	rufous hummingbird	BCC
Larus californicus	California gull	WL
Accipiter cooperii	Cooper's hawk	WL

Notes:

CDFW Designations:
SSC = species of special concern: a species of special concern is a species, subspecies, or distinct population of an animal (fish, amphibian, reptile, bird and mammal) native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria: is extirpated from the state or, in the case of birds, in its primary seasonal or breeding role; is listed as federally-, but not state-, threatened or endangered; meets the state definition of threatened or endangered, but has not formally been listed; is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for state threatened or endangered status; has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for state threatened or endangered status.

WL = watch list: this list includes birds identified in the *California Bird Species of Special Concern* (Shuford and Gardali 2008) report and are not on the current CDFW species of special concern list, but were on previous lists and they have not been state-listed under CESA; were previously state or federally listed and now are on neither list; or are on the list of fully protected species.

United States Fish and Wildlife Service (USFWS) Designations:
BCC = bird of conservation concern: a bird of conservation concern is listed in the USFWS' 2008 *Birds of Conservation Concern* report. The report identifies species, subspecies, and populations of all migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that, without additional conservation actions, are likely to become candidates for listing under the ESA. While all the bird species included in the report is priorities for conservation action, the list makes no finding with regard to whether they warrant consideration for ESA listing.

Besides the animals listed above, no other sensitive wildlife species were observed within the Project site during the field surveys. Sensitive wildlife species were not observed or detected during the 2019 field surveys.

The literature review and field surveys concluded that a majority of the sensitive species in the wildlife inventory do not have more than a low potential to exist within the Project site due to a lack of some suitable biological and physical features that are needed to support them adequately; however, habitat conditions create a high potential for four sensitive wildlife species to occur within the site (Table 5, *Sensitive Wildlife Species that have a High Potential to Occur*).

Table 5: Sensitive Wildlife Species that have a High Potential to Occur

Scientific Name	Common Name	Status in California	Potential to Occur on the Project Site
Aspidoscelis hyperythra beldingi	Belding's orange-throated whiptail	WL	high potential to occur
Aspidoscelis tigris stejnegeri	coastal whiptail	SSC	high potential to occur
Elanus leucurus	white-tailed kite	fully protected	high potential for foraging
Accipiter striatus	sharp-shinned hawk	WL	high potential for foraging

Notes:
SSC: see Table 4 for description.
WL: see Table 4 for description.
Fully protected: fully protected animal species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock. Lists were created for fish (Fish and Game Code section 5515), amphibians and reptiles (Fish and Game Code section 5050), birds (Fish and Game Code section 3511) and mammals (Fish and Game Code section 4700).

4.9.3.1 Burrowing Owl

Even though the undeveloped portion of Central Park contained fossorial mammal burrows, no BUOWs, occupied burrows, or sign of BUOWs (past or present) were observed during the 2007/2008 protocol BUOW surveys. In addition, no BUOWs or signs were observed during any of the other 2007/2008/2019 biological resources surveys conducted at the undeveloped portions of the Central Park site. The site provides minimal line-of-sight opportunities favored by BUOWs and most of the site lacks suitable burrows (>4 inches in diameter) capable of providing roosting and nesting opportunities (ELMT 2019, 2020b). Even though BUOWs were not detected onsite during the focused BUOW surveys or during any of the other field visits, the site contains suitable habitat that could potentially support BUOW in the future. Additional protocol BUOW surveys are not recommended; however, pre-construction bird surveys are recommended prior to ground disturbance.

4.9.4 Hydrology

4.9.4.1 Watersheds

A watershed is an area of land within which waterways drain or seep to one specified place, such as an ocean, river, stream, reservoir, marsh, wetland, lake, playa, pond, or groundwater. Mountains, hills, and ridges usually separate watersheds. Central Park is located within the following watersheds (CDFW 2019b):

- *HUC 12*: majority of the site is in the Lower Cucamonga Creek Watershed and the western edge of Central Park is in the Upper Cucamonga Creek Watershed.
- *HUC 10*: Chino Creek Watershed.
- *HUC 8*: Santa Ana River Watershed.

The following paragraphs are taken from ELMT's *Central Park Master Plan Update Delineation of State and Federal Jurisdictional Waters* (ELMT 2020b; Attachment 2). The Santa Ana River Watershed is in southern California, south and east of the City of Los Angeles. The watershed includes much of Orange County, the northwestern corner of Riverside County, the southwestern corner of San Bernardino County, and a small portion of Los Angeles County. The watershed is bounded on the south by the Santa Margarita watershed, on the east by the Salton Sea and Southern Mojave watersheds, and on the north/west by the Mojave and San Gabriel watersheds. The watershed is approximately 2,800 square miles in area.

The Santa Ana River Watershed is in the Peninsular Ranges and Transverse Ranges Geomorphic Provinces of southern California (California Geological Survey Note 36). The highest elevations (upper

reaches) of the watershed occur in the San Bernardino Mountains, eastern San Gabriel Mountains, and San Jacinto Mountains. Further downstream, the Santa Ana Mountains and the Chino Hills form a topographic high before the river flows into the Coastal Plain (in Orange County) and into the Pacific Ocean. Primary slope direction is northeast to southwest, with secondary slopes controlled by local topography.

This watershed is in an arid region, and therefore has little natural perennial surface water. Surface waters start in the upper erosion zone of the watershed, primarily in the San Bernardino and San Gabriel Mountains. This upper zone has the highest gradient and soils/geology that do not allow large quantities of percolation of surface water into the ground. Flows consist mainly of snowmelt and storm runoff from the lightly developed San Bernardino National Forest; this water is generally high quality at this point. In this zone, the Santa Ana River is generally confined in its lateral movement, contained by the slope in the mountainous regions. In the upper valley, flows from the Seven Oaks Dam to the City of San Bernardino consist mainly of storm flows, flows from the San Timoteo Creek, and groundwater that is rising due to local geological conditions. From the City of San Bernardino to the City of Riverside, the river flows perennially, and it includes treated discharges from wastewater treatment plants. From the City of Riverside to the recharge basins below Imperial Highway, river flow consists of highly treated wastewater discharges, urban runoff, irrigation runoff, and groundwater forced to the surface by shallow/rising bedrock. Near Corona, the river cuts through the Santa Ana Mountains and the Puente-Chino Hills. The river then flows into the Orange County Coastal Plain; the channel lessens and the gradient decreases. In a natural environment, a river in this area would have a much wider channel, increased meandering, and increased sediment build-up. However, much of the Santa Ana River channel in this area has been contained in concrete-lined channels, which modifies the flow regime and sediment deposition environment.

4.9.4.2 Blue-lined Streams

“Blue-line streams” are broken or solid blue or purple lines on USGS topographic maps; however, topographic maps do not show all drainages or streams that might exist. The literature review determined that Central Park does not contain blue-line streams; however, Deer Creek, located west of Central Park, is a blue-line stream as shown on the USGS 7.5-Minute Topographic Map *Guasti* and *Cucamonga Peak* Quadrangles. Deer Creek drains the western section of the City (BonTerra Consulting 2010).

4.9.4.3 National Wetlands Inventory Wetlands

The literature review determined that Central Park does not contain NWI wetlands; however, Deer Creek, located west of Central Park is designated as riverine wetlands.

4.9.4.4 Flood Zone

Based on Federal Emergency Management Agency’s Flood Insurance Rate Map Nos. 06071C8630J and 06071C8635J, Central Park is located within Zone X - Area of Minimal Flood Hazard. Deer Creek, along the western boundary of the site, is channelized in a concrete lined open box channel, which is located within Zone A, a special flood hazard area without base flood elevation and with 1 percent annual chance flood discharge contained in structure.

4.9.4.5 General Aquatic Features

Central Park lacks open water, such as a river, stream, creek, lake, or pond. As described earlier, Central Park is generally flat with a gentle slope from the north to the south. Surface runoff is through sheet flow to the south (Kleinfelder West 2009). In late 2003, an earthen drainage channel was constructed that extends from northeast to southwest along the southern portion of the undeveloped portion of Central Park to accommodate stormwater runoff associated with development of the eastern third of Central Park (ELMT 2019, 2020a, 2020b). The channel continues to aid in the flow of residential runoff from the north to Deer

Creek Channel west of Central Park. Stormwater continues to enter the site via a culvert in the middle of the southern portion of the site and flow east to west into the Deer Creek Channel (ELMT 2019, 2020a, 2020b).

4.9.4.6 2007 Drainage Features

In 2007, LSA mapped and described five unnamed aquatic features (drainages) within the undeveloped portion of Central Park. These drainages consisted of a main drainage (Drainage A) with four smaller tributaries (Drainage B, C, D, and E). Details of each drainage are described in LSA's *Jurisdictional Delineation Report, Central Park Project, City of Rancho Cucamonga, San Bernardino County, California* (LSA 2008b; Attachment 5).

4.9.4.7 2019 Drainage Features

In 2019, ELMT mapped and described three unnamed aquatic features (drainages) within the undeveloped portion of Central Park. These drainages consisted of a main drainage (Drainage 1) with two smaller tributaries (Drainage 2 and Drainage 3). The flow of water through the drainages is ephemeral (seasonal) and typically present only very briefly after. Most flows occur after rain events, and therefore, the drainages are dry for most of the year. Details of each drainage are described below and are taken from ELMT's jurisdictional report (Attachment 2).

The 2008 jurisdictional delineation report prepared by LSA documented five ephemeral drainage features within the boundaries of the undeveloped portion of Central Park; however, during the 2019 delineation by ELMT, only three ephemeral drainage features were observed onsite. Drainage A in LSA's 2008 jurisdictional delineation report corresponds with Drainage 1; Drainage C corresponds with Drainage B; and Drainage D corresponds with Drainage 3. As described in the 2008 jurisdictional delineation report, Drainage B and Drainage E were small ephemeral drainage features that were mapped extending for approximately 70 feet in length. Both features were not observed onsite during the 2019 field delineation as they were likely small erosional features that were incidentally removed by weed abatement activities over the past decade. As a result, Drainage B and Drainage E no longer occur onsite.

4.9.4.7.1 Drainage 1

Drainage 1 is the main drainage that runs across the undeveloped portion of Central Park (LSA 2007). It is an unnamed, ephemeral drainage that originates at a 48 inch culvert in the middle of the southeastern portion of the site and flows east to west for approximately 2,215 feet before flowing into the Deer Creek Channel via a 60 inch culvert on the southwest corner of the site under Baseline Road. Drainage 1 is primarily fed by nuisance flows from adjacent residential and park development and direct precipitation. The western portion of the drainage is engineered and lined with imported cobble and river-rock at where the drainage outlets from the concrete culvert, while the eastern portion of the drainage has a natural gravelly/sandy bottom. The eastern half of the drainage is small and well-defined, with vegetation consisting primarily of upland sage/scrub species: California buckwheat (UPL), California sagebrush (UPL), and brome (*Bromus* sp., UPL). Other plant species found on the banks of the drainage feature include scale-broom (FACU), mule fat (FACW), and horseweed (FACU).

4.9.4.7.2 Drainage 2

Drainage 2 is an unnamed ephemeral drainage that flows in a north to south direction on the northwestern portion of the undeveloped portion of Central Park, extending for approximately 990 feet before converging with Drainage 1 near the southwest corner of the site. Drainage 2 originates at a 24-inch storm drain outlet on the northern boundary of the site where it receives water during storm events from nuisance flows from adjacent residential development and the Pacific Electric Bike Trail and direct precipitation. Substrate within the drainage primarily consists of sand, gravel, and cobble with native upland plant species along its banks.

California buckwheat (UPL) and California sagebrush (UPL) are the dominant plant species found in association with this drainage feature. Other common plant species observed on the banks of this drainage feature included white sage (UPL), scale-broom (FACU), short-podded mustard (UPL), coastal prickly pear (UPL), and horseweed (FACU).

4.9.4.7.3 Drainage 3

Drainage 3 is an unnamed ephemeral drainage that flows in a north to south direction on the northeastern portion of the undeveloped portion of Central Park, extending for approximately 380 feet before dissipating and transitioning to sheet flow north of the paved Central Park Road. Historically, storm water flows within Drainage 3 and converged with the beginning of Drainage 1; however, it is assumed that storm water within this drainage feature infiltrates quickly due to the composition of loose, sandy, well drained soils found at the terminus of the drainage. Flows from the terminus of Drainage 3 have the potential to reach Drainage 1 during large storm events (greater than a 10-year storm event), approximately 475 feet to the southwest, but are not frequent enough to create an OHWM or well-defined streambed.

Drainage 3 originates at a 24-inch storm drain outlet on the northern boundary of the undeveloped portion of Central Park where it receives water during storm events from nuisance flows from adjacent residential development and the Pacific Electric Bike Trail and direct precipitation. Substrate within the drainage primarily consists of sand, gravel, and cobble with native upland plant species along its banks. California buckwheat (UPL) was the dominant plant species found in association with this drainage feature.

4.9.4.8 Jurisdictional Areas

The 2007 jurisdictional delineation was conducted during an abnormally dry rainy season; however, the fieldwork was completed three days after a rainfall event that deposited up to 1.5 inches in the undeveloped portion of Central Park area. In 2019, ELMT field staff encountered no limitations during the field delineation.

The 2019 literature review and jurisdictional delineation survey determined that the undeveloped portion of Central Park contains a total of three unnamed ephemeral drainages (non-tidal jurisdictional areas).

4.9.4.8.1 Drainage 1

No surface water was present within Drainage 1 during the 2019 site visit; however, evidence of an OHWM was observed via scour, changes in substrate, shelving, and lack of vegetation. The OHWM ranged from approximately 1–12 feet in width throughout the length of the drainage. It should be noted that a soil pit was taken at the beginning of Drainage 1 during 2008 delineation where nuisance runoff collects at the mouth of the culvert. Temporary ponding appears to occur in the area of the storm drain outlet, with vegetation dominated primarily by mule fat (FACW). The soil pit within this drainage indicated that no hydric soils were present. Most of Drainage 1 does not support a dominance of hydrophytic vegetation that would meet the hydrophytic parameter for a USACE wetland.

4.9.4.8.2 Drainage 2

No surface water was present within the drainage during the 2019 site visit; however, evidence of an OHWM was observed via scour, changes in substrate, and lack of vegetation. The OHWM ranged from approximately 1–3 feet in width throughout the length of the drainage. Due to the lack of riparian vegetation, and defined bed and bank, CDFW jurisdiction was synonymous with that of the OHWM. Drainage 2 does not meet wetland requirements; however, Drainage 2 is still considered jurisdictional, non-wetland waters, under the RWQCB, and CDFW due to its historic connectivity to Drainage 1.

4.9.4.8.3 Drainage 3

No surface water was present within the drainage during the 2019 site visit; however, evidence of an OHWM was observed via scour, changes in substrate, and lack of vegetation. The OHWM ranged from approximately 1–3 feet in width throughout the length of the Drainage. Due to the lack of riparian vegetation, and defined bed and bank, CDFW jurisdiction was synonymous with that of the OHWM. Drainage 3 does not meet wetland requirements; however, Drainage 3 is still considered jurisdictional, non-wetland waters, under the RWQCB, and CDFW due to its historic connectivity to Drainage 1.

4.9.4.8.4 USACE Defined Wetlands

In 2019, there were no USACE defined wetlands identified within the undeveloped portion of Central Park. In order to qualify as a USACE defined wetland, an aquatic feature must exhibit all three wetland parameters (i.e., wetland hydrology, hydric soils, and hydrophytic vegetation). Although evidence of hydrology (i.e., surface water) was present within portions of Drainages 1, 2, and 3 during the 2019 field surveys, these areas were primarily dominated by upland/facultative upland plant species. Only one area, within Drainage 1, at the beginning of the drainage near the existing storm drain outlet supported minimal hydrophytic vegetation consisting of mule fat. Mule fat has likely established from nuisance flows exiting the culvert. Further, it is assumed that water does not persist long enough to create hydric soil (anaerobic) conditions. LSA sampled one soil pit during the 2008 field delineation, at the culvert within Drainage 1. At the time of their survey, the area supported mule fat and arroyo willow (*Salix lasiolepis*). Based on the results of the soil pit, no hydric soils were present.

All drainage courses exhibited an OHWM consisting primarily of a scoured channel bed. Indicators of wetland hydrology were not observed. Based on the very limited extent of riparian vegetation (present at the storm drain outlet at the beginning of Drainage 1), it is concluded that all drainage courses are ephemeral and do not meet the USACE three-parameter definition required to qualify as jurisdictional wetlands under the CWA.

4.9.4.8.5 Jurisdictional Acreage

The project site contains jurisdictional Waters of the State regulated by the RWQCB. It was determined that the project site does not contain any Waters of the U.S., including wetlands. The three onsite drainage features (Drainage 1, 2, and 3) are ephemeral features that flow only in direct response to precipitation. They are not considered perennial or intermittent tributaries that contribute surface water flows to downstream waters. Based on the USACE's April 2020 regulations (Navigable Waters Protection Rule), the onsite drainage features will not fall under the regulatory authority of the USACE. The site also contains jurisdictional areas regulated by CDFW. Table 6, *Acreage of Mapped Jurisdictional Areas within Central Park*, summarizes the current extent of jurisdictional areas mapped within the undeveloped portion of Central Park.

Table 6: Acreage of Mapped Jurisdictional Areas within Central Park

Jurisdictional Feature	Stream Flow	Cowardin Class	Class of Aquatic Resource	RWQCB Jurisdictional Areas: Porter-Cologne		CDFW Jurisdictional Areas: Fish and Game Code	
				Acreage	Linear Feet	Acreage	Linear Feet
Drainage 1	Ephemeral	Riverine	Non-Section 10 Non-Wetland	0.115	2,215	0.571	2,215
Drainage 2	Ephemeral	Riverine	Non-Section 10 Non-Wetland	0.031	990	0.031	990
Drainage 3	Ephemeral	Riverine	Non-Section 10 Non-Wetland	0.013	380	0.013	380
			Totals:	**0.159**	**3,585**	**0.615**	**3,585**

4.10 CRITICAL HABITATS

When a species is listed as federally endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat.[5] Federal agencies are prohibited from authorizing, funding or carrying out actions that "destroy or adversely modify" critical habitats. For listed species, critical habitat may include areas that are not currently occupied by the species, but that will be needed for its recovery. While development is not precluded from designated critical habitat, these areas have been afforded legal protection, which requires developers to consult with the USFWS if a project would affect critical habitat, or any listed species.

The literature review determined that Central Park is not located within a designated or proposed critical habitat for listed plant or wildlife species (Exhibit 6 in Attachment 1). The nearest designated critical habitat is for SBKR and is located north and northeast of Central Park (approximately 1.2 miles northeast).

State CEQA Guidelines do not address critical habitats and the project is not anticipated to impact designated critical habitats; therefore, further analysis is not provided.

4.11 WILDLIFE MOVEMENT

A wildlife corridor is a connection of habitat, generally native vegetation, which joins two or more larger areas of similar habitat that are otherwise separated by natural barriers, changes in vegetation composition, or land permanently altered for human activities, such as farms; and infrastructure, such as roads, railroads, residential development, or fencing. When native vegetation is cleared, fragmented patches of open space or isolated "islands" of wildlife habitat are created. Fragmentation and habitat loss are the two main contributors to continuing biodiversity decline. The main goal of corridors is to facilitate movement of individuals, through dispersal, seasonal migration, and movement for foraging, breeding, cover, etc. Corridors allow for physical and genetic exchange between isolated wildlife populations and are critical for the maintenance of ecological processes, including allowing for the movement of animals and the continuation of viable populations and higher species diversity.

Wildlife corridors may either be contiguous strips of vegetation and habitat, such as ridgelines or riverbeds, or intermittent patches of habitat or physical features spaced closely enough to allow safe travel. The habitat within the corridor generally contains biological and physical features that are needed to temporarily support wildlife and allow avian and ground-dwelling wildlife to safely move through it. Corridors can be natural, such as a riparian corridor, or man-made, such as culverts, tunnels, drainage pipes, underpasses, or overpasses. Manufactured corridors are often referred to as "wildlife crossings" and they allow wildlife to pass over, under, or through physical barriers that otherwise hinder movement, such as roads or highways. Wildlife corridors also vary greatly in size, shape, and composition. The wider and more safeguarded a wildlife corridor is from adjacent human activities, noise, traffic, and light, the better it functions for the movement of wildlife. Generally, there are three types of wildlife corridors:

- *Regional corridor*: a primary landscape connection between larger important areas of habitat. They are generally substantial in width (more than 2,000 feet) and not only provide for dispersal of individual species, but act as habitat for a range of species. These areas provide adequate food, water, cover, and shelter to support wildlife within the corridor.
- *Sub-regional corridor*: a landscape connection not as wide as a regional corridor, but wide enough (generally more than 1,000 feet) to provide species movement and dispersal. Sub-regional corridors typically connect larger vegetated landscape features such as ridgelines and valley floors.

[5] Designated critical habitats are described in 50 CFR sections 17 and 226.

- *Local corridor*: smaller, shorter, less defined linkages that provide local connection of remnant patches of vegetation and landscape features such as creek lines, gullies, and wetlands. They may, in some cases be less than 160 feet wide and thus may be influenced by edge effects. Many of wildlife crossings are considered local corridors.

The literature review determined that Central Park is not located within a CDFW designated ESA or an NLB; however, Central Park is in an area designated as a Natural Areas Small - California Essential Habitat Connectivity [ds1073]. Natural Areas Small are natural areas smaller than 2,000 acres that otherwise meet NLB criteria.

Although, Central Park is designated as a Natural Areas Small by CDFW, the literature review and field surveys determined that Central Park does not function as a wildlife movement corridor. Even though a portion of Central Park is undeveloped, it is in an area of the City that is heavily influenced by human development and is surrounded by development and roadways. These permanent structures serve as significant barriers to wildlife movement through the site and region. In addition, human activities, lighting, noise, and traffic associated with the development and roadways, would most likely deter wildlife movement through the site. In addition, the site does not contain and is not connected to an established wildlife corridor and it does not provide connectivity between large areas of open space on a local or regional scale.

Wildlife movement would most likely occur in the foothills of the San Gabriel Mountains, Deer Canyon, and Day Canyon to the north; Deer Creek Channel to the west; and Day Creek Channel to the east; however, the roadways, paved trails, and development that surrounds the Project site prevents wildlife movement from those directions. Travel through the site is likely limited to common urban tolerant wildlife species such as coyote, northern raccoon, striped skunk, and Virginia opossum. These species could be expected to travel though Central Park and neighboring developed areas.

4.12 NATIVE WILDLIFE NURSERY SITES

No native wildlife nursery sites, such as bird rookeries or bat roosts, were observed within the undeveloped portion of Central Park during the field surveys.

5 THRESHOLDS OF SIGNIFICANCE

This section was prepared in support of the CEQA review. It describes the significance criteria used for determining significant impacts on biological resources. Significance criteria serves as a benchmark for determining if a project would result in a significant environmental impact when evaluated against the baseline. State CEQA Guidelines (section 15065[a](1)) state that a project may have a "significant impact" on the environment if the project has 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; or
- Substantially reduce the number or restrict the range of an endangered, rare or threatened species.

The Environmental Checklist Form in Appendix G of the State CEQA Guidelines was used to determine the level of significance of project related impacts on biological resources. Under State CEQA Guidelines (Appendix G, *Biological Resources*), impacts on biological resources are considered potentially "significant" if one or more of the following thresholds is met.

Impact 1: *The project would 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 CDFW and USFWS.*

Impact 2: *The project would have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW and USFWS.*

Impact 3: *The project would 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.*

Impact 4: *The project would 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.*

Impact 5: *The project would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.*

Impact 6: *The project would conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP.*

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6 IMPACT ANALYSIS

This section discusses potential effects or impacts[6] on the biological resources that could result from project implementation. “Effects analyzed under CEQA must be related to a physical change” (State CEQA Guidelines section 15358). Biological resources either may be “directly” or “indirectly” impacted by a project (defined by State CEQA Guidelines section 15358).

- *Direct impact*: impacts which are caused by the project and occur at the same time and place. Any alteration, disturbance or destruction of biological resources that could result from project-related activities is considered a direct impact.
- *Indirect impact*: impacts which are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable. Examples include growth-inducing impacts and other impacts related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems, including ecosystems.

Impacts either may be “permanent” or “temporary” in nature:

- *Temporary impacts (short-term)*: impacts considered having reversible impacts on biological resources can be viewed as temporary, such as construction noise.
- *Permanent impacts (long-term)*: impacts that result in the irreversible removal of biological resources are considered permanent.

6.1 POTENTIAL DIRECT IMPACTS

Direct impacts on sensitive biological resources have immediate consequences, such as the changes that occur when land is converted and/or jurisdictional waters are removed, filled in, channelized, stabilized, altered, or modified. The remaining undeveloped portion of Central Park will be developed through implementation of the Central Park Master Plan Update reVISION Project and the Central Park Amphitheater Project. All habitats, vegetation, non-vegetated features, and jurisdictional areas in the currently undeveloped areas would be removed. In order to determine impacts on biological resources from implementation of these Projects, the proposed development design provided by the project architect (RJM Design Group, Inc.), was overlaid on the result maps that were prepared after conducting the literature review and field surveys. Direct, permanent project impact areas include all areas within the limits of grading in the footprint of the Projects. Project construction-related ground-disturbing and habitat-altering activities could directly kill, injure, or harass wildlife located within the Projects site.

6.2 POTENTIAL INDIRECT IMPACTS

Indirect impacts may either be short-term related to construction or long-term and may affect plant and wildlife populations, habitats, and water quality over an extended period, long after construction activities have been completed. All vegetation and habitats in the Projects’ footprints will be entirely removed by the Projects; therefore, no indirect impacts on sensitive biological resources located within the Projects sites are anticipated as a result of project implementation. Indirect impacts may occur on biological resources located adjacent to the Projects sites.

Impact 1: *The project would 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 CDFW and USFWS.*

[6] “Effects” and “impacts” are synonymous in this report.

Less than Significant Impact

No listed or sensitive plant species were observed within the undeveloped portion of Central Park and all the special-status plant species in the plant inventory do not have more than a low potential to exist; therefore, no direct impacts on listed or sensitive plants are anticipated as a result of implementation of the Projects. In addition, the developed lands bordering the Projects sites are not anticipated to support listed or sensitive plants; therefore, the Projects are not anticipated to have direct or indirect impacts on listed plants and mitigation is not required.

No listed wildlife species were observed or detected within the undeveloped portion of Central Park and all the listed species in the wildlife inventory have no potential to exist; therefore, no direct impacts on listed wildlife are anticipated as a result of implementation of the Projects. In addition, the developed lands bordering the Projects sites are not anticipated to support listed wildlife; therefore, no indirect impacts on listed wildlife are anticipated as a result of implementation of the Projects. The Projects are not anticipated to have direct or indirect impacts on listed wildlife and mitigation is not required.

Three sensitive animals, rufous hummingbird, California gull, and Cooper's hawk, were observed within the undeveloped portion of Central Park during the 2007 and 2008 field surveys. In addition, Blainville's horned lizard and California glossy snake are also known to occupy the site. In addition, habitat conditions within the site create a high potential for four sensitive wildlife species to occur: Belding's orange-throated whiptail (*Aspidoscelis hyperythra beldingi*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), white-tailed kite (*Elanus leucurus*), and sharp-shinned hawk (*Accipiter striatus*). The Projects will permanently impact and remove all habitats located within the Projects' footprints; therefore, these animals could potentially be directly and/or indirectly impacted by the Projects should they exist within or adjacent to the Projects' footprints during construction activities. Impacts would be considered less than significant for the following reasons:

- Blainville's horned lizard, Belding's orange-throated whiptail, coastal whiptail, California glossy snake, rufous hummingbird, California gull, white-tailed kit, sharp-shinned hawk, and Cooper's hawk are widespread in California and have low sensitivity statuses.
- The loss of one or a few individual sensitive species would not substantially reduce or threaten the regional or local populations of these common species below self-sustaining levels.
- California gull are not anticipated to use the undeveloped portion of Central Park for foraging or breeding and are anticipated to use the site only for short time use.
- Rufous hummingbird, white-tailed kit, sharp-shinned hawk, and Cooper's hawk would most likely only use the undeveloped portion of Central Park for foraging purposes. Breeding habitats are absent.
- Any loss of foraging habitat is unlikely to create a significant, permanent impact because the undeveloped portion of Central Park hosts no special foraging habitat (e.g., large healthy riparian courses) and there is identical foraging habitat outside of the site (north of the Central Park property).
- The Projects would result in the loss of low quality, degraded, and disturbed California buckwheat scrub and California sage scrub habitats that is surrounded by development. The state of the habitats makes them less valuable as habitat to support wildlife diversity or special-status species.
- Because of the low quality, degraded and disturbed habitat, the removal of potential sensitive bird foraging habitat would be considered a less than significant impact under CEQA.
- The sensitive birds are highly mobile and would most likely be able to avoid direct contact with construction vehicles, equipment, and personnel.

Due to these reasons, impacts on sensitive wildlife species on a local or regional level would be considered less than significant and mitigation is not required.

The undeveloped portion of Central Park also supports shrub vegetation and other physical features that could potentially provide foraging, nesting, and cover habitats to support bird species (year-round residents, seasonal residents, and migrants). Those birds that could potentially breed within the undeveloped portion of Central Park are protected by the MBTA and Fish and Game Code section 3503, section 3503.5, and section 3513. The statutes make it unlawful to take native breeding birds, and their nests, eggs, and young. Activities that are most likely to result in take of migratory birds during the breeding bird season when eggs or young are likely to be present include, but are not limited to, clearing or grubbing of bird nesting habitat, or structure demolition. The Projects will permanently impact and remove all habitats located within the Projects' footprints; therefore, breeding birds, their nests, young, or eggs could potentially be directly and/or indirectly impacted by the Projects should they exist within or adjacent to the Projects' footprints during construction activities. Implementing BIO-1, BIO-2, and BIO-3 will help to avoid, eliminate and/or reduce impacts on breeding birds, their nests, young, or eggs.

Impact 2: *The project would have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW and USFWS.*

No Impact

Direct, permanent impact areas include all areas within the Projects sites. Habitats, vegetation, and non-vegetated features would be permanently removed within the Projects' footprints. Implementation of the Projects would result in the loss and removal of all vegetation and wildlife habitat (Table 7, *Acreage of Anticipated Direct Impacts on Land Cover*). The Projects will not have temporary impacts on plant communities since the entire Central Park site will be developed.

Table 7: Acreage of Anticipated Direct Impacts on Land Cover

Mapped Land Cover Category	Total Acreage within the Project site	Total Avoided Acreage within the Project site	Total Impact Acreage within the Project site		
			Permanent Impacts	Temporary Impacts	Total Impacts
California buckwheat scrub	44.23	0	44.23	0	44.23
California sagebrush scrub	6.62	0	6.62	0	6.62
Drainage feature	0.52	0	0.52	0	0.52
Ruderal/disturbed habitat	17.96	0	17.96	0	17.96
Developed land	1.91	0	1.91	0	1.91
Total Acreage:	**71.24**	**0**	**71.24**	**0**	**71.24**

Non-sensitive vegetation communities including, California buckwheat scrub, California sagebrush scrub, ruderal/disturbed habitat, and all drainage features are located within the Projects' footprints and would be directly impacted by the Projects. Mitigation is not required for direct impacts on these communities.

No sensitive vegetation communities were observed within or adjacent to the Projects sites; therefore, no direct or indirect impacts on sensitive vegetation communities are anticipated as a result of implementation of the Projects and mitigation is not required.

Riparian habitats are those on, relating to, or near the banks of a river, stream, creek, spring, seep, pond or lake. No riparian habitats were observed within or adjacent to the undeveloped portion of Central Park;

therefore, no direct impacts on riparian habitats are anticipated as a result of implementation of the Projects and mitigation is not required.

Impact 3: *The project would 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 with Mitigation Incorporated

Direct, permanent impact areas include all areas within the undeveloped portion of Central Park. Implementation of the Projects would result in the loss and removal of all jurisdictional areas located within the Projects sites (Table 8, *Acreage of Anticipated Direct Impacts on Jurisdictional Areas*). Impacts are regulated by the resource agencies and would trigger the need for permits. The Projects will not have temporary impacts on jurisdictional areas since the entire Central Park site will be developed.

Deer Creek is a jurisdictional channel located adjacent to the project footprint - west of Central Park and the Deer Creek Channel Trail. Deer Creek will not be directly impacted by the Projects; however, there is a potential for indirect impacts on jurisdictional areas to occur as a result of implementation of the Projects.

Jurisdictional areas are located within the Projects sites and would be directly impacted by the Projects. Implementing BIO-3 will help to avoid, eliminate and/or reduce impacts on jurisdictional areas.

There are no s*tate* or federally protected wetlands based on the absence of hydric soil indicators, hydrophytic vegetation and/or wetland hydrology; therefore, the Projects are anticipated to have no substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means.

Impact 4: *The project would 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 Central Park is not located within or adjacent to a CDFW designated ESA or an NLB; therefore, no direct or indirect impacts on CDFW designated wildlife corridors are anticipated as a result of implementation of the Projects and mitigation is not required.

Central Park was determined not to function as a wildlife movement corridor; therefore, no direct impacts on fish or wildlife movement are anticipated as a result of implementation of the Projects. Deer Creek serves as a wildlife movement corridor and is located adjacent to the undeveloped portion of Central Park and the Deer Creek Channel Trail. Deer Creek will not be directly impacted by the Projects; however, there is a potential for indirect impacts on fish or wildlife movement to occur as a result of implementation of the Projects. Impacts would be considered less than significant for the following reasons:

- The Projects would not increase habitat fragmentation or impede the movement of wildlife in the area.
- The Projects would not remove any vegetation within Deer Creek or interfere with the functions of the corridor.

Table 8: Acreage of Anticipated Direct Impacts on Jurisdictional Areas

Jurisdictional Areas	Total Mapped Acreage	Total Avoided Acreage	Total Impact Acreage					
			Permanent Impacts		Temporary Impacts		Total Impacts	
			Acreage	Linear Feet	Acreage	Linear Feet	Acreage	Linear Feet
Waters of the State	0.159	0.0	0.159	3,585	0.0	0.0	**0.159**	**3,585**
CDFW jurisdictional areas	0.615	0.0	0.615	3,585	0.0	0.0	**0.615**	**3,585**

- Wildlife would still be able to continue to use Deer Creek during construction activities and even after development of the Projects.
- Indirect impacts on Deer Creek from the Projects would be relatively minimal because the undeveloped portion of Central Park is already impacted by the existing development.
- During construction, wildlife that uses Deer Creek may be affected due to increased air and noise pollution and human presence; however, construction would only affect wildlife movement temporarily.

No mitigation is needed for these impacts.

No native wildlife nursery sites, such as bird rookeries or bat roosts, were observed within or adjacent to the undeveloped portion of Central Park; therefore, no direct or indirect impacts on native wildlife nursery sites are anticipated as a result of implementation of the Projects and mitigation is not required.

Impact 5: *The project would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.*

No Impact

No trees protected by the City's Tree Preservation Ordinance were observed within or adjacent to the undeveloped portion of Central Park; therefore, no direct or indirect impacts on protected trees are anticipated as a result of implementation of the Projects and mitigation is not required.

Impact 6: *The project would conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP.*

No Impact

Central Park is not located within the boundary of and does not contain undeveloped natural lands subject to an adopted HCP, NCCP or other approved local, regional, or state HCP; therefore, the Projects would not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP. Mitigation is not required.

7 MITIGATION MEASURES

The above analysis describes impacts to the biological resources in the undeveloped portion of Central Park associated with the development of the Central Park Master Plan Update reVISION Project and the Central Park Amphitheater Project. The Central Park Amphitheater Project was recently assessed in an IS/MND. The IS/MND, which was certified on October 2, 2019, contained mitigation measures to reduce impacts, including those to biological resources to less than significant.

This section describes measures recommended and/or required to reduce, avoid, and/or eliminate anticipated and potential impacts on biological resources associated with the implementation of the Central Park Master Plan Update reVISION Project.

7.1 BIO-1: PRE-CONSTRUCTION BUOW AND BREEDING BIRD SURVEY WITHIN 14 DAYS PRIOR TO CONSTRUCTION

A qualified biologist shall conduct a 14-day pre-construction focused BUOW survey and breeding bird survey. The pre-construction BUOW survey (Take Avoidance Survey) shall be conducted in accordance with the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012) no less than 14 days prior to initiating ground disturbance activities. The survey may detect changes in BUOW presence such as colonizing BUOWs that have recently moved onto the site, migrating BUOWs, resident BUOWs changing burrow use, or young of the year that are still present and have not dispersed (CDFG 2012).

Following the completion of the survey, the biologist shall prepare a memo summarizing the results of the survey. The memo shall be submitted to the City and CDFW prior to initiating any ground disturbance activities.

If no BUOWs, signs of BUOWs, or breeding birds are observed during the survey and concurrence is received from CDFW, project activities may begin, and no further mitigation would be required.

If BUOWs or signs of BUOWs are observed during the survey, the site shall be considered occupied. The biologist shall contact the City and CDFW to assist in the development of avoidance, minimization, and mitigation measures, prior to commencing project activities.

If an active bird nest (not a BUOW nest) is located during the pre-construction survey and potentially would be disturbed, a no-activity buffer zone shall be delineated on maps and marked (flagging or other means) up to 500 feet for special-status avian species and raptors, or 100 feet for non-special status avian species. The limits of the buffer shall be demarcated to not provide a specific indicator of the location of the nest to predators or people. Materials used to demarcate the nests shall be removed as soon as work is complete, or the fledglings have left the nest. The biologist shall determine the appropriate size of the buffer zone based on the type of activities planned near the nest and bird species because some bird species are more tolerant than others to noise and other disturbances. Buffer zones shall not be disturbed until a qualified biologist determines that the nest is inactive. Additionally, the area shall also not be disturbed until the young have fledged, the young are no longer being fed by the parents, the young have left the area, or the young would no longer be impacted by project activities.

The results of the 14-day pre-construction BUOW survey will be valid for 14 days. If construction is delayed more than 14 days, then the 14-day pre-construction BUOW survey must be repeated.

7.2 BIO-2: PRE-CONSTRUCTION BUOW AND BREEDING BIRD SURVEY WITHIN 24 HOURS PRIOR TO CONSTRUCTION

In addition to the 14-day pre-construction BUOW survey, a 24-hour pre-construction BUOW survey and breeding bird survey shall be conducted following the same measures described above in BIO-1. The results of the 24-hour pre-construction BUOW survey shall be valid for 24 hours. If construction is delayed more than 24 hours, then the 24-hour pre-construction BUOW survey shall be repeated.

7.3 BIO-3: PERMITS FOR IMPACTS ON JURISDICTIONAL AREAS

Impacts on jurisdictional areas will require permits; therefore, the City shall need to obtain the following permits for the project:

- WDRs from the RWQCB.
- Lake or Streambed Alteration Agreement with CDFW.

To follow Porter-Cologne and the California Fish and Game Code, the City shall obtain these permits prior to the issuance of grading or building permits for the project, and prior to any impacts on jurisdictional areas. These permits and approvals would mandate best management practices, avoidance and protection measures, and/or compensatory mitigation measures for impacts on sensitive biological resources and jurisdictional areas. The amount of mitigation required, and specific mitigation details would be determined through the permitting process with the regulatory agencies. All measures to protect waters, water quality, fish, and wildlife resources would be incorporated into the project design as appropriate. Compliance with the requirements of the regulatory agency programs and implementation of the mitigation measures required by the permits would offset the loss of jurisdictional areas and mitigate the project's impacts to less than significant levels.

Copies of permits including any extensions and amendments, approvals, and biological reports and plans shall be available to all persons who will be working on the project. These documents shall be available at the work site during periods of work and shall be presented upon request by any resource agency personnel with a reasonable reason for making such a request. Resource agency personnel may enter the Project site at any time to verify compliance with the permits, approvals, reports, and plans.

Central Park is in an area of San Bernardino County that is under the jurisdiction of the following resource agencies' field offices:

- CDFW: Inland Desert Region 6.
- RWQCB: Regional Board 8 - Santa Ana Region.

7.3.1 Waste Discharge Requirements

The Project site contains Waters of the State that will be unavoidably impacted by the proposed Project; therefore, the City will need to obtain authorization from the RWQCB. The City will need to apply for and obtain WDRs from the RWQCB prior to impacting the drainages.

Section 13260 of the California Water Code states that persons discharging or proposing to discharge waste that could affect the quality of Waters of the State, other than into a community sewer system, will file a ROWD with RWQCB. The City will prepare and submit an application permit package to the RWQCB. The application permit package constitutes a ROWD pursuant to California Water Code Section 13260. The package will be used to start the application process for all WDRs.

Prior to any impacts on jurisdictional Waters of the State, the City would obtain WDRs from the RWQCB pursuant to Porter-Cologne. The permit will mandate best management practices, avoidance and protection measures, and/or compensatory mitigation measures for impacts on jurisdictional Waters of the State. Compliance with the RWQCB's WDRs and implementation of the measures required by the permit would offset the loss of jurisdictional Waters of the State and mitigate the Project's impacts to less than significant levels.

7.3.2 Lake or Streambed Alteration Agreement

The Project site contains CDFW jurisdictional areas that will be unavoidably impacted by the project; therefore, the project shall require a permit from CDFW pursuant to sections 1600–1616 of the California Fish and Game Code. CDFW generally regulates waters, wetlands, and riparian areas through its Lake and Streambed Alteration Program that requires execution of an agreement with CDFW before any activity substantially modifies a river, stream or lake. It is not legal to alter the bed or bank of a stream or lake or their natural water flow without a CDFW Lake or Streambed Alteration Agreement. The California Fish and Game Code section 1602 requires an entity to notify CDFW of any proposed activity that may substantially modify a perennial, intermittent, and ephemeral river, stream, or lake in the state. The notification requirement applies to any work undertaken in or near a river, stream, or lake that flows at least intermittently through a bed or channel. This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water. It is anticipated that the City will need a standard Streambed Alteration Agreement for the project.

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8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Table 9, *Impact Summary Table*, recaps the anticipated or potential impacts the project could have on biological resources; the level of significance of those impacts; and lists measures used to avoid, eliminate, and/or reduce the project's impacts (some to less than significant levels).

Table 9: Impact Summary Table

Biological Resource	Biological Resource Present on the Project Site	The Project is Anticipated to Have/Has the Potential to Have:			Notes	Level of Significance of Potential Impacts	Measures Used to Avoid, Eliminate, and/or Reduce Impacts
		No Impacts	Direct Impacts	Indirect Impacts			
Plant Resources							
Sensitive plant communities	no	X		.	.	*No Impact*	N/A
Riparian habitats	no	X	.	.	.	*No Impact*	N/A
Listed plants	unlikely	X	.	.	The project site lacks suitable habitats, soils, and/or other factors to support listed plant species.	*No Impact*	N/A
Sensitive plants	unlikely	X	.	.	Sensitive plant species do not have more than a low potential to exist within the project site due to a lack of suitable habitats, soils, and/or other factors to support them.	*No Impact*	N/A
Protected trees/shrubs	no	X	.	.	.	*No Impact*	N/A
Wildlife Resources							
Listed wildlife	unlikely	X	.	.	The project site lacks suitable and adequate biological and physical features that are needed to support listed wildlife species.	*No Impact*	N/A
CAGN	no	X	.	.	.	*No Impact*	N/A
SBKR	no	X	.	.	.	*No Impact*	N/A
Sensitive wildlife	yes	.	X	X	Direct and/or indirect impacts on sensitive wildlife should they exist within or adjacent to the project footprint during construction activities.	*Less than Significant Impact*	N/A
BUOW	no	X	.	.	Even though BUOW was not detected on the project site during the field surveys, the site contains suitable habitat to potentially support BUOW in the future.	*Less than Significant with Mitigation Incorporated*	BIO-1, BIO-2 (see notes)
Breeding birds, their nests, young or eggs	potentially	.	X	X	Direct and/or indirect impacts on breeding birds, their nests, young or eggs should they exist within or adjacent to the project footprint during construction activities.	*Less than Significant with Mitigation Incorporated*	BIO-1, BIO-2

Biological Resource	Biological Resource Present on the Project Site	The Project is Anticipated to Have/Has the Potential to Have:			Notes	Level of Significance of Potential Impacts	Measures Used to Avoid, Eliminate, and/or Reduce Impacts
		No Impacts	Direct Impacts	Indirect Impacts			
CDFW designated wildlife corridors	no	X	.	.	.	*No Impact*	N/A
Wildlife corridors	no	.	.	X	Potential indirect impacts within Deer Creek which could serve as a wildlife movement corridor.	*Less than Significant Impact*	N/A
Native wildlife nursery sites	no	X	.	.	.	*No Impact*	N/A
Aquatic Resources							
Waters of the U.S.: non-wetland waters[1]	no	.X		X	Potential indirect impacts within Deer Creek.	*Less than Significant with Mitigation Incorporated*	BIO-3
Waters of the U.S.: USACE defined wetlands	no	X	.	.	Biologists did not conduct a jurisdictional delineation survey within Deer Creek, so unable to determine whether the creek contains USACE defined wetlands.	*No Impact*	N/A
Waters of the State	yes		X	X		*Less than Significant with Mitigation Incorporated*	BIO-3
CDFW[2] jurisdictional areas	yes	.	X	X	Potential indirect impacts within Deer Creek.	*Less than Significant with Mitigation Incorporated*	BIO-3
Vernal pools	no	X	.	.	.	*No Impact*	N/A
NWI wetlands	no	X	.	.	.	*No Impact*	N/A
Other							
Rock formations[3]	no	X	.	.	.	*No Impact*	N/A
USFWS designated critical habitats[4]	no	X	.	.	.	*No Impact*	N/A

Notes:

1 The Environmental Checklist Form in Appendix G, Biological Resources of the State CEQA Guidelines does not specifically address Waters of the U.S.: non-wetland waters; however, it is added to this table for summary purposes. The checklist only addresses USACE defined wetlands.

2 The Environmental Checklist Form in Appendix G, Biological Resources of the State CEQA Guidelines does not specifically address CDFW jurisdictional areas; however, it is added to this table for summary purposes. The checklist only addresses USACE defined wetlands.

3 The Environmental Checklist Form in Appendix G, Biological Resources of the State CEQA Guidelines does not specifically address rock formations; however, it is added to this table for summary purposes.

4 The Environmental Checklist Form in Appendix G, Biological Resources of the State CEQA Guidelines does not specifically address USFWS designated critical habitats; however, it is added to this table for summary purposes.

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9 CUMULATIVE IMPACTS

CEQA requires that the cumulative impacts of a proposed project be assessed and disclosed. Cumulative impacts consider the project direct and indirect impacts collectively with other current, future and reasonably foreseeable actions within the project area. If the project has a potential to have direct or indirect impacts, then there is a potential to have cumulative impacts.

State CEQA Guidelines section 15355 describes a cumulative effect as “to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” Section 15355 further states the following regarding cumulative effects:

a. The individual effects may be changes resulting from a single project or a number of separate projects.

b. The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time. Ibid.

With the implementation of Mitigation Measures BIO-1 through BIO-3, the Projects are not anticipated to have direct or indirect impacts on biological resources.

The City of Rancho Cucamonga, including the Projects sites, is predominantly developed and surrounded by urban development to the south, east, and west. The Projects sites do not contain sensitive biological resources and, the potential cumulative projects in other developed areas of the City would not be expected to impact areas that contain significant biological resources. Additionally, the Projects and any future development in the City would be required to comply with existing regulations for the protection of biological resources. Therefore, impacts to biological resources would not be cumulatively significant.

Therefore, it is anticipated that the Projects in combination with past, present, and reasonably foreseeable probable future projects in the environment around the Projects sites would have little to no cumulative impacts on wildlife movement in the region.

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ATTACHMENT 1

2020 CENTRAL PARK MASTER PLAN HABITAT ASSESSMENT REPORT

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CENTRAL PARK MASTER PLAN UPDATE

CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CALIFORNIA

Habitat Assessment

Prepared For:

Tetra Tech, Inc.
17885 Von Karman Avenue, Suite 500
Irvine, California 92614
Contact: *John Gifford*

Prepared By:

ELMT Consulting, Inc.
2201 N. Grand Avenue #10098
Santa Ana, California 92711
Contact: *Thomas J. McGill, Ph.D.*
714.714-5050

January 2020

CENTRAL PARK MASTER PLAN UPDATE

CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CALIFORNIA

Habitat Assessment

The undersigned certify that the statements furnished in this report and exhibits present data and information required for this biological evaluation, and the facts, statements, and information presented is a complete and accurate account of the findings and conclusions to the best of our knowledge and beliefs.

Travis J. McGill
Biologist/Director

Thomas J. McGill, Ph.D.
Managing Director

January 2020

Table of Contents

EXHIBITS

APPENDIX

Section 1 Introduction

This report contains the findings of ELMT Consulting's (ELMT) Habitat Assessment for the Central Park Master Plan Update (project site or site) located in the City of Rancho Cucamonga, San Bernardino County, California. ELMT Biologists Thomas J. McGill, Ph.D., Travis J. McGill, and Jacob H. Lloyd Davies inventoried and evaluated the condition of the habitat within the project site on July 17, and October 8, 2019. The habitat assessment was conducted to characterize existing site conditions and to assess the probability of occurrence of special-status plant and wildlife species that could pose a constraint to project implementation. This report provides an in-depth assessment of the suitability of the on-site habitat to support burrowing owl (*Athene cunicularia*), coastal California gnatcatcher (*Polioptila californica californica*), and San Bernardino kangaroo rat (*Dipodomys merriami parvus*), as well as other special-status plant and wildlife species identified by the California Natural Diversity Data Base (CNDDB) and other electronic databases as potentially occurring in the vicinity of the project site.

1.1 PROJECT LOCATION

The project site is generally located north of Interstate 10, south of State Route 210, west of Interstate 15, and east of State Route 83 in the City of Rancho Cucamonga, San Bernardino County, California (Exhibit 1, *Regional Vicinity*). The project site is depicted on the Guasti quadrangle of the United States Geological Survey's (USGS) 7.5-minute topographic map series in Section 36, Township 1 North, Range 7 West (Exhibit 2, *Site Vicinity*). Specifically, the project site located in Central Park, which is located at the northwest corner of the intersection of Baseline Road and Milliken Avenue. The project site is bordered to the north by the Pacific Electric Trail, to the east by the currently developed portion of Central Park, to the south by Baseline Road, and to the west by the Deer Creek Channel (Exhibit 3, *Project Site*).

1.2 PROJECT DESCRIPTION

Approved in 1987, the original Central Park Master Plan integrated the cultural and sports-related needs of the community, as well as the need for a large open park setting. Negative economic conditions delayed development of Central Park until 2002 when funds were received for the development of approximately thirty acres of the eastern third of Central Park. Development included the James L. Brulte Senior Center, Gold S. Lewis Community Center, courtyard spaces, a playground, landscaped walking trails, and associated parking. Current uses for the developed portion of Central Park include rental facilities, classroom facilities, social activities, and outdoor recreation.

In 2017 the Rancho Cucamonga City Council approved efforts for a Central Park Master Plan Update, resulting in the Central Park Master Plan Update reVISION. The Central Park Master Plan Update reVISION is a comprehensive planning document which defines the development of the remaining, undeveloped land located west of the existing Senior and Community Centers at Central Park. It identifies smaller (1.6- to 11-acre), buildable sections, so that when funding becomes available, park development could continue within the framework of a comprehensive community inspired vision. The Project is composed of recreation areas and elements that relate to the existing open drainage channel spine and is anchored by the Senior and Community Centers to the east and the proposed Recreation Pool, Multi-Purpose Facility, and Tennis Courts to the west. The park will provide a variety of both active and passive

zones and uses for groups of all ages. The Universal Accessible Playground will provide access and opportunity for people of all ages and abilities to promote play, physical activity, sociability, and learning. The Adventure Area will promote a unique outdoor experience for personal physical development, leadership, and team building. The park also features the “Great Lawn”, Viticulture Pavilion, a flexible park area for large community event gatherings and celebrations. The smaller parcel sizes will allow the City flexibility to develop portions of the park as funds become available.

CENTRAL PARK MASTER PLAN UPDATE
HABITAT ASSESSMENT

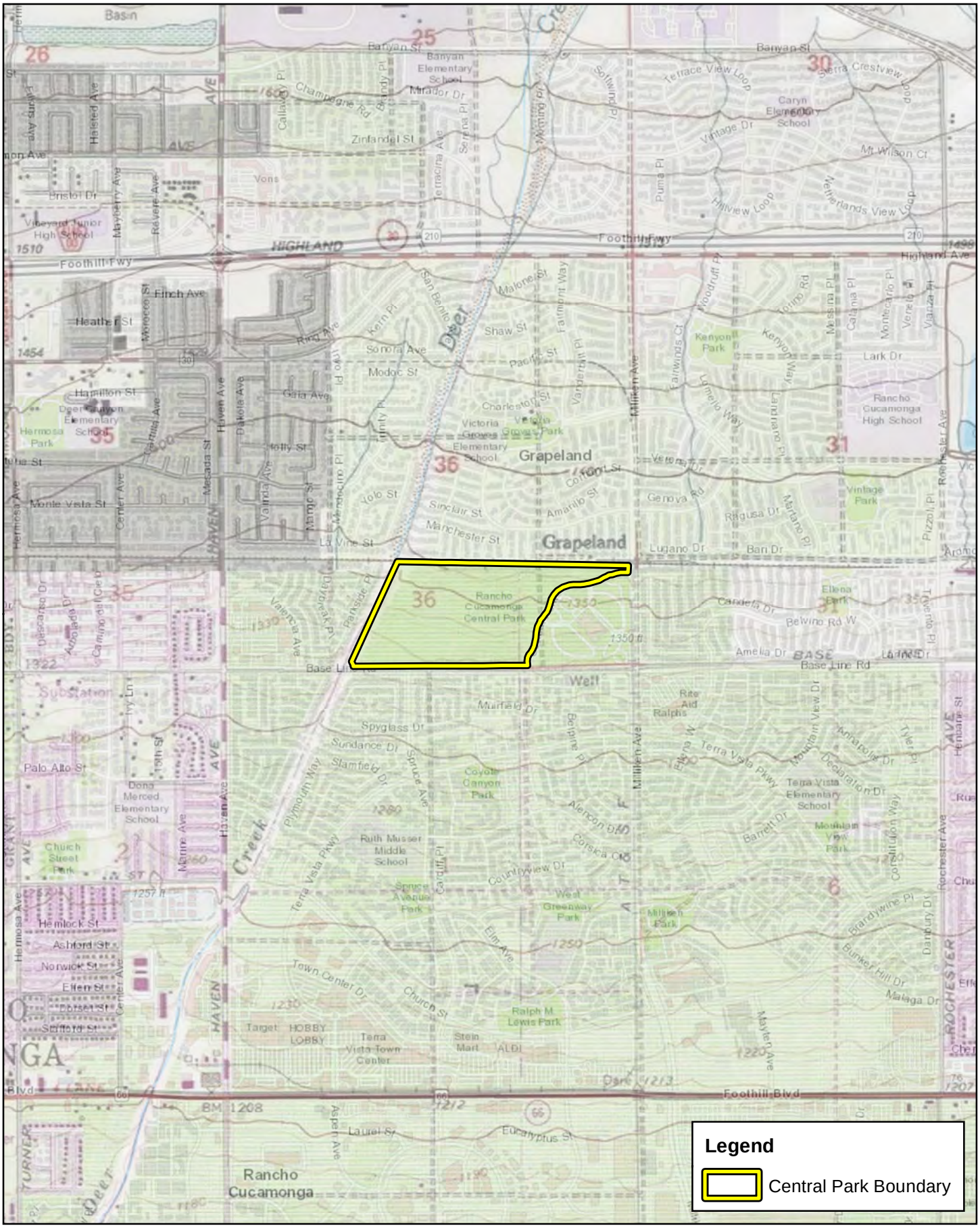
Regional Vicinity

ELMT CONSULTING

0 5 10 20 Miles

Source: Federal Highway Administration, US Department of Transportation

Exhibit 1



CENTRAL PARK MASTER PLAN UPDATE
HABITAT ASSESSMENT

Site Vicinity

ELMT CONSULTING

Source: USA Topographic Map, San Bernardino County

Exhibit 2

ELMT CONSULTING

0 250 500 1,000 Feet

Source: ESRI Aerial Imagery, World Transportation, San Bernardino County

CENTRAL PARK MASTER PLAN UPDATE
HABITAT ASSESSMENT

Project Site

Exhibit 3

Section 2 Methodology

A literature review and records search were conducted to determine which special-status biological resources have the potential to occur on or within the general vicinity of the project site. In addition to the literature review, a general habitat assessment or field investigation of the project site was conducted. The field investigation was conducted to document existing conditions within the project site and assess the potential for special-status biological resources to occur.

2.1 LITERATURE REVIEW

Prior to conducting the field investigation, a literature review and records search was conducted for special-status biological resources potentially occurring on or within the vicinity of the project site. Previously recorded occurrences of special-status plant and wildlife species and their proximity to the project site were determined through a query of the California Department of Fish and Wildlife (CDFW) QuickView Tool in the Biogeographic Information and Observation System (BIOS), CNDDB Rarefind 5, the California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California, Calflora Database, compendia of special-status species published by CDFW, and the United States Fish and Wildlife Service (USFWS) species listings.

All available reports, survey results, and literature detailing the biological resources previously observed on or within the vicinity of the project site were reviewed to understand existing site conditions and note the extent of any disturbances that have occurred on the project site that would otherwise limit the distribution of special-status biological resources. Standard field guides and texts were reviewed for specific habitat requirements of special-status and non-special-status biological resources, as well as the following resources:

- Google Earth Pro historic aerial imagery (1994-2018);
- General Biological Resources Assessment Report – Central Park Project (LSA, 2007);
- Jurisdictional Delineation Report – Central Park Project (LSA 2008);
- Focused Burrowing Owl Survey – Central Park Project (LSA 2008);
- Focused Coastal California Gnatcatcher Survey – Central Park Project (LSA, 2007);
- San Bernardino County General Plan;
- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Soil Survey;
- USFWS Critical Habitat designations for Threatened and Endangered Species; and
- USFWS Endangered Species Profiles.

The literature review provided a baseline from which to inventory the biological resources potentially occurring on the subject property. The CNDDB database was used, in conjunction with ArcGIS software,

to locate the nearest recorded occurrences of special-status species and determine the distance from the project site.

2.2 FIELD INVESTIGATION

ELMT biologists Thomas J. McGill, Ph.D. Travis J. McGill, and Jacob H. Lloyd Davies evaluated the extent and conditions of the plant communities found within the boundaries of the project site on July 17, and October 8, 2019. Plant communities identified on aerial photographs during the literature review were verified in the field by walking meandering transects through the on-site plant communities and along boundaries between plant communities. The plant communities were evaluated for their potential to support special-status plant and wildlife species. In addition, field staff identified any natural corridors and linkages that may support the movement of wildlife through the area. Special attention was given to special-status habitats and/or undeveloped areas, which have higher potentials to support special-status plant and wildlife species.

All plant and wildlife species observed, as well as dominant plant species within each plant community, were recorded. Wildlife detections were made through observation of scat, trails, tracks, burrows, nests, and/or visual and aural observation. In addition, site characteristics such as soil condition, topography, hydrology, anthropogenic disturbances, indicator species, condition of on-site plant communities, and presence of potential jurisdictional drainage and/or wetland features were noted.

2.3 SOIL SERIES ASSESSMENT

On-site and adjoining soils were researched prior to the field survey using the USDA NRCS Soil Survey for San Bernardino County, California. In addition, a review of the local geological conditions and historical aerial photographs was conducted to assess the ecological changes that the project site has undergone.

2.4 PLANT COMMUNITIES

Plant communities were mapped using 7.5-minute USGS topographic base maps and aerial photography. The plant communities were classified in accordance with Sawyer, Keeler-Wolf and Evens (2009), CDFW (2010) and Holland (1986), delineated on an aerial photograph, and then digitized into ArcGIS. The ArcGIS application was used to compute the area of each plant community in acres.

2.5 PLANTS

Common plant species observed during the field survey were identified by visual characteristics and morphology in the field and recorded in a field notebook. Unusual and less familiar plants were photographed in the field and identified in the laboratory using taxonomic guides. Taxonomic nomenclature used in this study follows the 2012 Jepson Manual (Hickman 2012). In this report, scientific names are provided immediately following common names of plant species (first reference only).

2.6 WILDLIFE

Wildlife species detected during field surveys by sight, calls, tracks, scat, or other sign were recorded during surveys in a field notebook. Field guides were used to assist with identification of wildlife species during the survey included The Sibley Field Guide to the Birds of Western North America (Sibley 2003), A Field Guide to Western Reptiles and Amphibians (Stebbins 2003), and A Field Guide to Mammals of North America (Reid 2006). Although common names of wildlife species are fairly well standardized, scientific names are provided immediately following common names in this report (first reference only).

2.7 JURISDICTIONAL DRAINAGES AND WETLANDS

Aerial photography was reviewed prior to conducting a field investigation in order to locate and inspect any potential natural drainage features, ponded areas, or water bodies that may fall under the jurisdiction of the United States Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), or CDFW. In general, surface drainage features indicated as blue-line streams on USGS maps that are observed or expected to exhibit evidence of flow are considered potential riverine habitat and are also subject to state and federal regulatory jurisdiction. In addition, ELMT reviewed jurisdictional waters information through examining historical aerial photographs to gain an understanding of the impact of land-use on natural drainage patterns in the area. The USFWS National Wetland Inventory (NWI) and Environmental Protection Agency (EPA) Water Program “My Waters” data layers were also reviewed to determine whether any hydrologic features and wetland areas have been documented on or within the vicinity of the project site. A Jurisdictional Delineation report by LSA Associates, Inc. was conducted in 2008 and was also reviewed prior to conducting jurisdictional analysis.

Section 3 Existing Conditions

3.1 LOCAL CLIMATE

San Bernardino County is characterized by cool winter temperatures and warm summer temperatures, with its rainfall occurring almost entirely in the winter. Relative to other areas in Southern California, winters are colder with chilly to cold morning temperatures common. Climatological data obtained for the City of Rancho Cucamonga indicates the annual precipitation averages 16.8 inches per year. Almost all of the precipitation occurs in the months between December and March, with hardly any occurring in the months between May and October. The wettest month is January, with a monthly average total precipitation of 3.50 inches. The average maximum and minimum temperatures for the region are 78.4- and 52.5-degrees Fahrenheit (F) respectively with July (monthly average 93.7° F) being the hottest month and December and January (monthly average 41.4° F) being the coldest. The temperature during the site visits were in the high-80s to low-90s° F with no cloud cover overhead and calm winds.

3.2 TOPOGRAPHY AND SOILS

On-site surface elevation ranges from approximately 1,324 to 1,372 feet above mean sea level and generally slopes from north to south. The proposed project site is relatively flat with no areas of significant topographic relief, with the exception of a drainage feature that flows from the northeast to the southwest along the southern portion of the site that has created a swale with sloped sides. Based on the USDA NRCS Web Soil Survey, the project site is underlain by the following soil units: Tujunga loamy sand (0 to 5 percent slopes) and Tujunga gravelly loamy sand (0 to 9 percent slopes) (Exhibit 4, *Soils*). Soils onsite have been mechanically disturbed from historic land uses (i.e., agricultural, clearing/grading, weed abatement, and storage activities).

3.3 SURROUNDING LAND USES

The greater Central Park property is located in an urbanized area and is surrounded entirely by existing residential development. The project site is located on the remaining undeveloped portion (western area) of the Central Park property and is immediately bordered to the east by the developed area of Central Park. The development began in 2003 with grading and construction in the majority of the eastern and southern portions of the property. The majority of the eastern third of the property was developed into the James L. Brulte Senior Center and Goldy S. Lewis Community Center with associated structures including a playground, classrooms, and parking areas. The middle of the southern section was utilized as a staging area for early development and continues to host equipment and machinery that will be used in further development.

ELMT CONSULTING

0 250 500 1,000 Feet

Source: ESRI Aerial Imagery, World Transportation, San Bernardino County

CENTRAL PARK MASTER PLAN UPDATE
HABITAT ASSESSMENT

Soils

Exhibit 4

Section 4 Discussion

4.1 SITE CONDITIONS

The project site consists of undeveloped land that has been subjected to a variety of direct and indirect human-related disturbances from historical agricultural activities, extensive grading activities, adjacent development, weed abatement, and storage activities. The earliest available aerials indicate that agricultural activities occurred onsite from 1938 and ceased between 1980 and 1994 when all of the surrounding areas were developed. In the decades since active agricultural activities (i.e., grape vineyards) ceased, native vegetation communities, typical of disturbed areas, have reestablished onsite that are subject to routine weed abatement activities. Refer to Appendix A, *Site Photographs*, for representative site photographs.

During the development of the eastern third of Central Park, an earthen storm drain was installed that extends from northeast to southwest along the southern portion of the site. The channel was constructed to accommodate runoff associated with initial developments and continues to aid in the flow of residential runoff from the north to Deer Creek Channel west of the project site. While this development was completed in the mid 2000's, the facilities on-site have continued to provide ongoing anthropogenic influences on the remainder of the property by encouraging public access to the remaining open spaces. Walking and cycling trails occur on the western and northern boundaries and connect the surrounding residential development to the existing Central Park facilities.

4.2 VEGETATION

The anthropogenic disturbances onsite and surrounding development have significantly reduced the onsite plant community's ability to provide suitable habitat for special-status plant and wildlife species known to occur in the area. Two (2) plant communities were observed within the boundaries of the project site during the habitat assessment: California Buckwheat Scrub, and California Sagebrush Scrub (Exhibit 5, *Vegetation*). The project site also supports three land cover types that would be classified as drainage, disturbed and developed. It should be noted that grape plants were observed scattered throughout the site from historical agricultural activities. The plant communities and land cover types are described in further detail below.

4.2.1 California Buckwheat Scrub (44.23 Acres)

This habitat type corresponds with the California Buckwheat Scrub Shrubland Alliance in the Manual of California Vegetation System (Sawyer et al. 2009) and is most similar to the Riversidean Sage Scrub – California Buckwheat Series in the Holland system (1986). The California buckwheat scrub plant community has established throughout the majority of the project site since the completion of agricultural activities. This transitional plant community supports early pioneer plant species typically found in Riversidean Sage Scrub but is dominated by a monoculture of California buckwheat (*Eriogonum fasciculatum*). Monotypic California buckwheat scrub plant communities are common after heavy land disturbances, and the land revegetates naturally.

ELMT CONSULTING

0 250 500 1,000 Feet

Source: ESRI Aerial Imagery, World Transportation, San Bernardino County

CENTRAL PARK MASTER PLAN UPDATE
HABITAT ASSESSMENT

Vegetation

Exhibit 5

Other native plant species observed within this plant community included deer weed (*Acmispon glaber*), California croton (*Croton californicus*), common phacelia (*Phacelia distans*), chia (*Salvia columbariae*), California sagebrush (*Artemisia californica*), western ragweed (*Ambrosia psilostachya*), white sage (*Salvia apiana*), common cryptantha (*Cryptantha intermedia*), mulefat (*Baccharis salicifolia*), prickly pear (*Opuntia littoralis*), slender buckwheat (*Eriogonum gracile*), pine goldenbush (*Ericameria pinifolia*), telegraph weed (*Heterotheca grandiflora*), and scalebroom (*Lepidospartum squamatum*).

Scalebroom, while it can be an indicator of a sensitive plant community known as Riversidean Alluvial Fan Sage Shrub (RAFSS), on the project site, it does not. The project historically supported a RAFSS plant community along its western boundary in association with Deer Creek prior to agricultural activities on the project site. However, Deer Creek was channelized several decades ago and now exists as an open concrete channel with no vegetation. The project had been under active agriculture as a vineyard prior to its purchase by the City for the development of Central Park. Maintenance of the site has primarily been disking for weed abatement for the last twenty years and now the site is dominated by buckwheat scrub.

A few scattered scalebroom plants were found scattered throughout the site but this is a direct result of the species adaptation to disturbances, needed by species living in the harsh environment of a native streambed like Deer Creek that only receives water during intense flood events. The plant's deep root systems and its ability to regrow from its roots following a flood event that has scoured out the adult plant, allows to species to re-establish itself following major flood events or other disturbances. As noted, the conversion of Deer Creek into a concrete channel eliminated all native vegetation, including scalebroom, from the channel and surrounding lands. As noted, a few scattered scalebroom plants have been able to regrow from their roots on the project site. However, these plants are not within an area that is subjected hydrologic influences of Deer Creek, needed to maintain viable RAFSS habitat, and are no longer in an area that supports RAFSS habitat.

4.2.2 California Sagebrush Scrub (6.62 Acres)

This habitat type corresponds with the California Sagebrush – California Buckwheat Scrub Shrubland Alliance in the Manual of California Vegetation System (Sawyer et al. 2009) and is most similar to the Riversidean Sage Scrub – California Sagebrush Series in the Holland system (1986).The California Sagebrush Scrub plant community was observed in the western half of the property. This plant community is dominated by California sagebrush. Common plant species observed onsite in this plant community included the same species as those found in the California Buckwheat Scrub community.

4.2.3 Drainage (0.52 Acre)

A drainage channel was constructed on the southern portion of the project site to accommodate stormwater runoff associated with development of the eastern third of Central Park in 2003 via a culvert in the middle of the southern portion of the site and flow east to west into the Deer Creek Channel. In addition, two secondary drainage features were observed onsite that generally flow north to south that collect stormwater flows from the northern portion of the project site and convey them to the southern portion of the site. One of the secondary drainage features is located on the western half of the project site and connects into the main drainage feature on the southern boundary of the site. The other secondary drainage feature is located on the eastern half of the project site and terminates into an area just north of paved Central Park road.

Within these drainage features, vegetation consisted primarily of upland sage/scrub species including: California buckwheat, California sagebrush, scale-broom, mule fat, white sage, prickly pear, short-podded mustard, horseweed, and brome (*Bromus* sp.),

4.2.4 Disturbed (17.96 Acres)

Disturbed areas are generally areas that have been subject to a high level of human disturbances and no longer comprise a native plant community. These areas are unpaved and are primarily or entirely devoid of vegetation, or support ruderal/weedy plant species. Disturbed areas are found throughout the project site and are associated with ongoing weed abatement activities, disking, and walking trials. Plant species observed within this plant community include short-podded mustard (*Hirschfeldia incana*), wild oat (*Avena fatua*), flax-leaved horseweed (*Erigeron bonariensis*), London rocket (*Sisymbrium irio*), Mediterranean grass (*Schismus barbatus*), and tacolote (*Centaurea melitensis*).

4.2.5 Developed (1.91 Acres)

Developed areas are found along the northern boundary, in the northwest corner, and at the middle of the eastern boundary of the project site. These areas have been paved for pedestrian access and landscaped with ornamental plant species. Non-native/ornamental plant species were observed within the developed portions of the site.

4.3 WILDLIFE

Plant communities provide foraging habitat, nesting and denning sites, and shelter from adverse weather or predation. This section provides a discussion of those wildlife species that were observed during the field survey or that are expected to occur within the project site. The discussion is to be used as a general reference and is limited by the season, time of day, and weather condition in which the field survey was conducted. Wildlife detections were based on calls, songs, scat, tracks, burrows, and direct observation.

4.3.1 Fish

No fish or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) with frequent sources of water that would that would provide suitable habitat for fish were observed on or within the vicinity of the project site. Therefore, no fish are expected to occur and are presumed absent from the project site.

4.3.2 Amphibians

No amphibians or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) with frequent sources of water that would provide suitable habitat for amphibian species were observed on or within the vicinity of the project site. Therefore, no amphibians are expected to occur on the project site and are presumed absent.

4.3.3 Reptiles

The project site provides a limited amount of habitat for a few reptile species adapted to a high degree of human disturbance associated with onsite disturbances and and surrounding development. The only

reptilian species obseved onsite during the field investigation was common side-blotched lizard (*Uta stansburiana elegans*). Other common reptilian species expected to occur on-site include gopher snake (*Pituophis catenifer*), Great Basin fence lizard (*Sceloporus occidentalis longipes*) and southern alligator lizard (*Elgaria multicarinata*).

4.3.4 Birds

The project site provides suitable foraging and cover habitat for a variety of resident and migrant bird species. Bird species detected during the field survey include Anna's hummingbird (*Calypte anna*), northern mockingbird (*Mimus polyglottos*), lesser goldfinch (*Spinus psaltria*), mourning dove (*Zenaida macroura*), California towhee (*Melozone crissalis*), Bewick's wren (*Thryomanes bewickii*), American crow (*Corvus brachyrhynchos*), Cassin's kingbird (*Tyrannus vociferans*), house finch (*Haemorhous mexicanus*), red-tailed hawk (*Buteo jamaicensis*), northern rough-winged swallow (*Stelgidopteryx serripennis*), California thrasher (*Toxostoma redividum*), barn swallow (*Hirundo rustica*), bushtit (*Psaltriparus minimus*), lesser nighthawk (*Chordeiles acutipennis*), and European starling (*Sturnus vulgaris*).

4.3.5 Mammals

The project site and surrounding areas have the potential to support mammalian species adapted to human presence and disturbance. The only mammalian species observed during the field survey was desert cottontail (*Sylvilagus audubonii*). Other common mammalian species expected to occur include coyote (*Canis latrans*), opossum (*Didelphis virginiana*), and raccoon (*Procyon lotor*). No bat species are expected to occur due to a lack of suitable roosting habitat (i.e., trees, crevices, abandoned structures) within and surrounding the project site.

4.4 NESTING BIRDS

No active nests or birds displaying nesting behavior were observed during the field survey. The project site and surrounding area provides suitable foraging and nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area that area adapted to urban environments. In additon, the project site has the potential to provide suitable nesting opportunities for birds that nest on the open ground and those aclimated to routine disturbances (i.e., killdeer (*Charadrius vociferus*)). A pre-construction nesting bird clearance survey should be conducted within three (3) days prior to ground disturbance to ensure no nesting birds will be impacted from site development.

4.5 WILDLIFE CORRIDORS AND LINKAGES

Habitat linkages provide links between larger undeveloped habitat areas that are separated by development. Wildlife corridors are similar to linkages, but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet inadequate for others. Wildlife corridors are significant features for dispersal, seasonal migration, breeding, and foraging. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

The project site has not been identified as a wildlife corridor or linkage in accordance with the San Bernardino County General Plan. The proposed development will be confined to existing areas that have been heavily disturbed and surrounded by development. The project site is isolated from regional wildlife corridors and linkages, and there are no riparian corridors, creeks, or useful patches of stepping-stone habitat (natural areas) within or connecting the project site to the natural, undeveloped areas. As such, development of the project site is not expected to impact wildlife movement opportunities or prevent existing wildlife movement corridors in the region from functioning. Therefore, impacts to wildlife corridors or linkages are not expected to occur.

4.6 STATE AND FEDERAL JURISDICTIONAL AREAS

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates discharge of dredge and/or fill materials into "waters of the United States" pursuant to Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the Regional Board regulates discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act and the CDFW regulates alterations to streambed and associated plant communities pursuant to Section 1602 of the California Fish and Game Code.

ELMT reviewed the USFWS' NWI maps prior to conducting the field investigation. No blueline streams, riverine resource, or wetlands have been mapped on the project site. However, Deer Creek Channel, that borders the western boundary of the site has been mapped as a riverine feature.

Three (3) drainage features (Drainages 1, 2, and 3) were observed within the boundaries of the project site. In late 2003, a drainage channel was constructed on the southern portion of the project site to accommodate stormwater runoff associated with development of the eastern third of Central Park (Drainage 1). Stormwater continues to enter the site via a culvert in the middle of the southern portion of the site and flow east to west into the Deer Creek Channel. Deer Creek converges into Cucamonga Creek, which is tributary to Mill Creek and the Santa Ana River (Relatively Permeant Water), and ultimately to the Pacific Ocean (Traditional Navigable Water). As a result, the onsite drainage feature exhibits a surface hydrologic connection to downstream waters of the U.S. and falls under the regulatory authority of the Corps, Regional Board, and the CDFW.

In addition, two secondary drainage features were observed onsite that generally flow north to south. These drainage features collect stormwater flows from the northern portion of the project site and convey them to the southern portion of the site. One of the secondary drainage features, Drainage s, is located on the western half of the project site and converges with Drainage 1 near the southwestern boundary of the project site. The other secondary drainage feature, Drainage 3, is located on the eastern half of the project site before dissipating and transitioning to sheet flow north of the paved Central Park road.

Historically, storm flows within Drainage 3 converged with the beginning of Drainage 1; however, it is assumed that storm water within this drainage feature infiltrates quickly due to the composition of loose, sandy, well drained soils found at the terminus of the drainage. Flows from the terminus of Drainage 3 have the potential to reach Drainage 1 during large storm events (greater than a 10-year storm event), but are not frequent enough to create an OHWM or well-defined streambed.

If the onsite drainage features will be impacted from implementation of the proposed project, the City will need to obtain the following regulatory approvals prior to impacts occurring within the identified jurisdictional areas: Corps CWA Section 404 Permit; Regional Board CWA Section 401 Water Quality Certification; and CDFW Section 1602 Streambed Alteration Agreement (SAA).

4.7 SPECIAL-STATUS BIOLOGICAL RESOURCES

The QuickView BIOS, CNDDB Rarefind 5 and the CNPS Electronic Inventory of Rare and Endangered Vascular Plants of California were queried for reported locations of special-status plant and wildlife species as well as special-status natural plant communities in the Cucamonga Peak and Guasti USGS 7.5-minute quadrangles. The habitat assessment evaluated the conditions of the habitat(s) within the boundaries of the project site to determine if the existing plant communities, at the time of the survey, have the potential to provide suitable habitat(s) for special-status plant and wildlife species.

The literature search identified thirty-seven (37) special-status plant species, fifty-three (53) special-status wildlife species, and four (4) special-status plant communities as having potential to occur within the Cucamonga Peak and Guasti quadrangles. Special-status plant and wildlife species were evaluated for their potential to occur within the project boundaries based on habitat requirements, availability and quality of suitable habitat, and known distributions. Species determined to have the potential to occur within the general vicinity are presented in *Table B-1: Potentially Occurring Special-Status Biological Resources*, provided in Appendix B. Refer to Table B-1 for a determination regarding the potential occurrence of special-status plant and wildlife species within the project site.

4.7.1 Special-Status Plants

According to the CNDDB and CNPS, thirty-seven (37) special-status plant species have been recorded in the Cucamonga Peak and Guasti quadrangles (refer to Appendix B). The project site consists of both disturbed and undeveloped land that supports native vegetation and natural plant communities that have gradually reestablished following agricultural activities onsite and surrounding development. Even though the project site supports native vegetation, the heavy disturbances from historic agricultural activities, surrounding development and channelization of Deer Creek have isolated the project site from undisturbed native plant communities and scouring regimes following storm events. These activities have reduced, if not eliminated, the ability of the plant communities onsite to provide suitable habitat for special-status plant species and seed sources for special-status plant species.

Based on habitat requirements for specific special-status plant species and the availability and quality of habitats needed by each species, it was determined that the project site does not provide suitable habitat for any of the special-status plant species known to occur in the area and all are presumed to be absent from the project site.

4.7.2 Special-Status Wildlife

According to the CNDDB, fifty-three (53) special-status wildlife species have been reported in the Cucamonga Peak and Guasti quadrangles (refer to Appendix B). No special-status wildlife species were observed onsite during the 2019 habitat assessment; however, Cooper's hawk (*Accipiter cooperii*),

California gull (*Larus californicus*), and rufous hummingbird (*Selasphorus rufus*) were observed onsite during the 2007 biological studies.

Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the project site has a high potential to provide suitable habitat for Cooper's hawk (*Accipiter cooperii*); a moderate potential to provide suitable habitat for California glossy snake (*Arizona elegans occidentalis*), orange-throated whiptail (*Aspidoscelis hyperythra*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), and coast horned lizard *(Phrynosoma blainvillii*); and a low potential to provide suitable habitat for great egret (*Ardea alba*), great blue heron (*Ardea herodias*), bells sage sparrow (*Artemisiospiza belli belli*), burrowing owl, Costa's hummingbird (*Calypte costae*), northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*), white-tailed kite (*Elanus leucurus*), California horned lark (*Eremophila alpestris actia*), loggerhead shrike (*Lanius ludovicianus*), San Diego desert woodrat (*Neotoma lepida intermedia*), Los Angles pocket mouse (*Perognathus longimembris brevinasus*), and coastal California gnatcatcher. It should be noted that California glossy snake and coast horned lizard have been recorded as occurring onsite according to the *City of Rancho Cucamonga Central Park Fire Hazard Reduction and Vegetation Management Plan*, but were not observed onsite during the 2019 or 2007 biological studies. Further it was determined that the project site does not provide suitable habitat for any of the other special-status wildlife species known to occur in the area since the project site has been heavily disturbed from onsite disturbances and surrounding development.

With the exception of coastal California gnatcatcher, none of the aforementioned species are federally or state listed as endangered or threatened. It should be noted that a focused presence/absence survey for coastal California gnatcatcher was conducted in 2008 and was negative; therefore, coastal California gnatcatcher is presumed absent from the project site since site conditions have not changed since the focused survey was conducted. In order to ensure impacts to Cooper's hawk, great egret great blue heron, bells sage sparrow, burrowing owl, Costa's hummingbird, white-tailed kite, California horned lark, loggerhead shrike, California gull, and rufous hummingbird do not occur from implementation of the proposed project, a pre-construction nesting bird clearance survey shall be conducted within three (3) days prior to ground disturbance. With implementation of mitigation through a pre-construction nesting bird clearance survey, impacts to the aforementioned special-status avian species will be less than significant.

Northwestern San Diego pocket mouse, San Diego desert woodrat, and Los Angles pocket mouse were not captured onsite during the 2008 San Bernardino kangaroo rat trapping study. As a result they are presumed absent from the project site and no impacts will occur to these species.

Based on regional significance, the potential occurrence of burrowing owl, San Bernardino kangaroo rat and coastal California gnatcatcher within the project site are described in further detail below.

Burrowing Owl

Burrowing owl is currently designated as a California Species of Special Concern. The burrowing owl is a grassland specialist distributed throughout western North America where it occupies open areas with short vegetation and bare ground within shrub, desert, and grassland environments. Burrowing owls use a wide variety of arid and semi-arid environments with level to gently-sloping areas characterized by open vegetation and bare ground. The western burrowing owl (*A.c. hypugaea*), which occurs throughout the

western United States including California, rarely digs its own burrows and is instead dependent upon the presence of burrowing mammals (i.e., California ground squirrels, coyotes, and badgers) whose burrows are often used for roosting and nesting. The presence or absence of colonial mammal burrows is often a major factor that limits the presence or absence of burrowing owls. Where mammal burrows are scarce, burrowing owls have been found occupying man-made cavities, such as buried and non-functioning drain pipes, stand-pipes, and dry culverts. They also require low growth or open vegetation allowing line-of-sight observation of the surrounding habitat to forage and watch for predators. In California, the burrowing owl breeding season extends from the beginning of February through the end of August.

Despite a systematic search of the project site, no burrowing owls or recent sign (i.e., pellets, feathers, castings, or white wash) was observed during the field investigation. The project site provides minimal line-of-sight opportunities favored by burrowing owls. However, the majority of the project site lacks suitable burrows (>4 inches in diameter) capable of providing roosting and nesting opportunities. As a result, burrowing owl was determined to have a low potential to occur onsite. Further, no burrowing owls were observed onsite during the 2008 burrowing owl focused survey prepared by LSA. Out of an abundance of caution and to ensure burrowing owl remain absent from the project site, it is recommended that a pre-construction burrowing owl clearance survey be conducted prior to ground disturbance.

San Bernardino Kangaroo Rat

The San Bernardino kangaroo rat, federally listed as endangered, is one of several kangaroo rat species in its range. The Dulzura, the Pacific kangaroo rat (*Dipodomys agilis*) and the Stephens kangaroo rat (*Dipodomys stephensi*) occur in areas occupied by the San Bernardino kangaroo rat, but these other species have a wider habitat range. San Bernardino kangaroo rat historically ranged from the San Bernardino Valley in San Bernardino County, to southwest Perris, Bautista Canyon, and Murrieta Hot Springs in Riverside County, with at least 25 separate localities identified. Currently, populations of the San Bernardino kangaroo rat are limited to seven widely separated locations in San Bernardino and Riverside Counties, four of which (City Creek, Etiwanda, Reche Canyon, and South Bloomington) support only small, remnant populations. The Santa Ana River, Lytle and Cajon washes, and the San Jacinto River support the largest extant concentrations of San Bernardino kangaroo rat and the largest areas of habitat for this species (approximately 3,200 acres total). The total area of occupied habitat occurs across a mosaic of approximately 13,697 acres of potential habitat; however, all but the 3,215 occupied areas are currently more mature than the open, early successional habitat types preferred by the San Bernardino kangaroo rat (USFWS 2009).

San Bernardino kangaroo rat is found primarily on sandy and loamy sand substrates, where they can readily excavate simple, shallow burrows. This is typically associated with RAFSS habitats, a relatively uncommon desert-influenced plant community in southern California that develops on alluvial fans and floodplains subjected to scouring and deposition (USFWS 2009). Adjacent upland habitat provide refuge for San Bernardino kangaroo rat during flood events. Animals occupying this refugia habitat are able to repopulate core habitat areas within the floodplain following major flood events. Most of the drainages have been historically altered as a result of flood control efforts and the resulting increased use of river resources, including mining, off-road vehicle use and road and housing development. This increased use of river resources has resulted in a reduction in both the amount and quality of habitat available for the San

Bernardino kangaroo rat. The past habitat losses and potential future losses prompted the emergency listing of the San Bernardino kangaroo rat as an endangered species (USFWS, 1998a).

For decades, the project site was generally in agriculture (mainly grape vineyards) but now the project site is fallow. The project site and surrounding area is no longer exposed to fluvial processes needed to maintain the intermediate RAFSS habitat that would be required for the long-term San Bernardino kangaroo rat conservation. The site has been isolated from the influences of Deer Creek and the alluvial fans extending out of the San Gabriel Mountains since the early- to mid-1980s from channelization of Deer Creek for flood control purposes and residential development.

Plant species representative of RAFSS habitats, the vegetation typically occupied by San Bernardino kangaroo rat, are patchy, with the exception of the western boundary where there is a large population of scalebroom. Due to the history of regular disruption and manipulation of the native soils, the loss of fluvial scouring due to flood control activities, and isolation from known occupied habitat, it was determined that the project site does not provide suitable habitat for San Bernardino kangaroo rat.

Further, a San Bernardino kangaroo rat trapping study was conducted on-site in 2008 (LSA 2008). No San Bernardino kangaroo rat, northwestern San Diego pocket mouse, San Diego desert woodrat, or Los Angeles pocket mouse were detected during the study. The study confirmed the presence of deer mouse and what was reported as "Pacific/San Diego kangaroo rat," with San Diego kangaroo rat being a pseudonym for Dulzura kangaroo rat. Based on known geographic ranges for Dulzura kangaroo rat and the results of the 2008 trapping study, it should be assumed that Dulzura kangaroo rat is present on the project site. No further trapping studies are recommended.

Coastal California Gnatcatcher

Coastal California gnatcatcher is a federally threatened species with restricted habitat requirements, being an obligate resident of sage scrub habitats that are dominated by California sagebrush. This species generally occurs below 750 feet elevation in coastal regions and below 1,500 feet inland. It ranges from Ventura County south to San Diego County and northern Baja California and is less common in sage scrub with a high percentage of tall shrubs. It prefers habitat with more low-growing vegetation. Coastal California gnatcatchers breed between mid-February and the end of August, with peak activity from mid-March to mid-May. Population estimates indicate that there are approximately 1,600 to 2,290 pairs of coastal California gnatcatcher remaining. Declines are attributed to loss of sage scrub habitat due to development, as well as cowbird nest parasitism.

The Primary Constituent Elements (PCEs) essential to support the biological needs of foraging, reproducing, rearing of young, intra-specific communication, dispersal, genetic exchange, or sheltering for coastal California gnatcatcher are:

1. Dynamic and Successional sage scrub Habitats and Associated Vegetation (RAFSS, Coastal Sage-Chaparral Scrub, etc.) that provide space for individual and population growth, normal behavior, breeding, reproduction, nesting, dispersal and foraging; and
2. Non-sage scrub habitats such as chaparral, grassland, and riparian areas, in proximity to sage scrub habitats that provide linkages to help with dispersal, foraging and nesting.

Non-sage scrub habitats such as chaparral, grassland, and riparian areas, in proximity to sage scrub habitats have the potential to provide linkages to help with dispersal, foraging and nesting.

The California buckwheat scrub and California sagebrush plant communities onsite have been isolated from occupied sage scrub habitats in the region by surrounding development, and have only recently established after agricultural activities ceased. Based on these conditions, it was determined that the project site does not provide the requisite PCEs which are needed by coastal California gnatcatcher to be present. Therefore, it was determined that coastal California gnatcatcher is presumed absent from the project site. Further, a coastal California gnatcatcher presence/absence survey was conducted in 2007 and 2008 by LSA and no coastal California gnatcatcher were observed onsite. Site conditions have not changed since the LSA focused survey, and as a result, coastal California gnatcatcher is presumed absent from the project site.

4.7.3 Special-Status Plant Communities

The CNDDB lists four (4) special-status plant community as being identified within the Cucamonga Peak and Guasti USGS 7.5-minute quadrangles: California Walnut Woodland, Coastal and Valley Freshwater Marsh, Riversidean Alluvial Fan Sage Scrub, and Southern Sycamore Alder Riparian Woodland. No special-status plant communities were observed on-site.

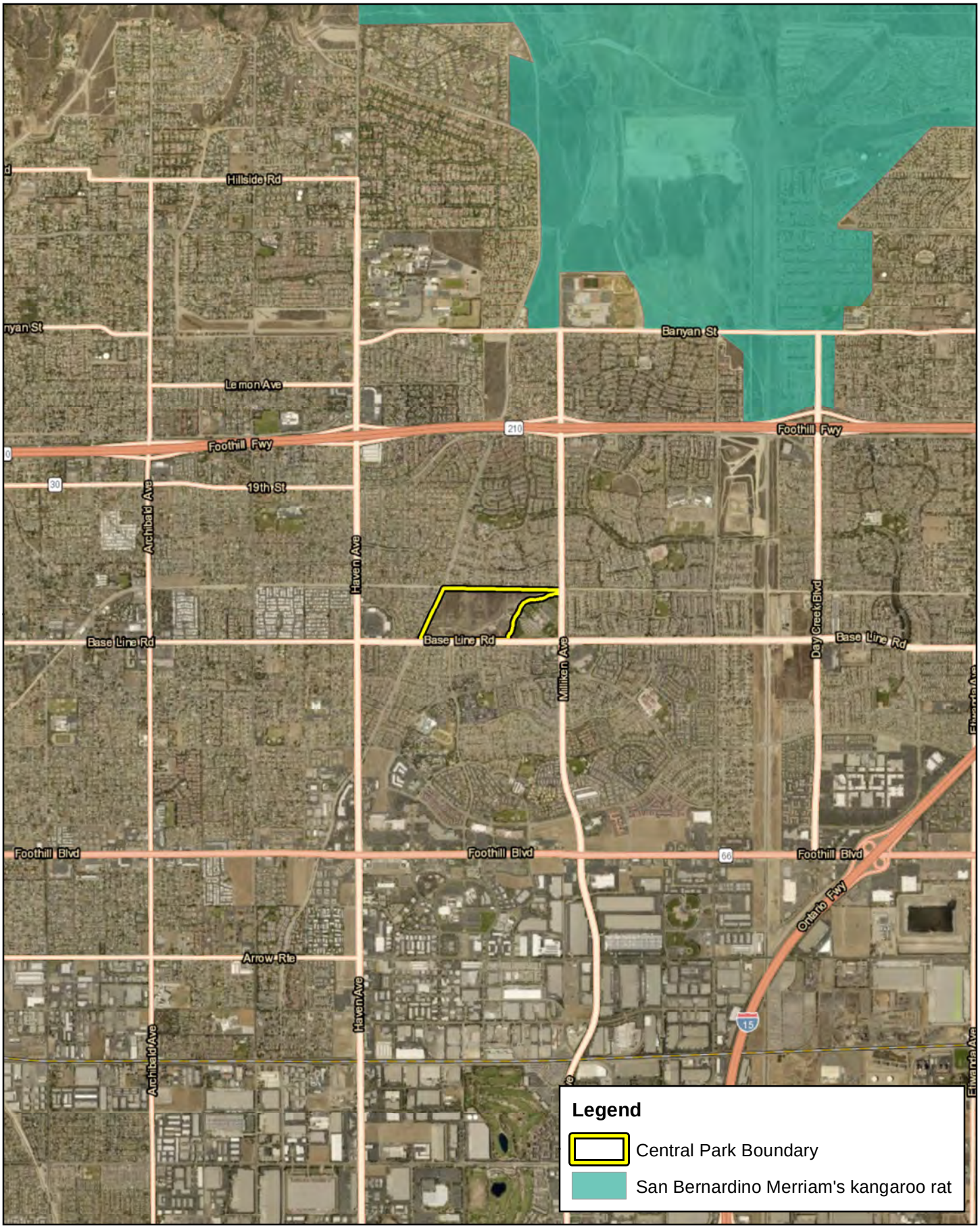
Scalebroom was found on-site, which can be an indicator/pioneer plant species found with RAFSS habitats. However, is was primarily observed along the western boundary of the project site and in sparse patches throughout the site. Further, the site lacks the hydrologic scouring regimes associated with RAFSS habitats due to surrounding development and historical land uses. Therefore, the plant communities onsite were not considered RAFSS habitat.

4.8 CRITICAL HABITAT

Under the federal Endangered Species Act, "Critical Habitat" is designated at the time of listing of a species or within one year of listing. Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or not. All federal agencies are required to consult with the USFWS regarding activities they authorize, fund, or permit which may affect a federally listed species or its designated Critical Habitat. The purpose of the consultation is to ensure that projects will not jeopardize the continued existence of the listed species or adversely modify or destroy its designated Critical Habitat. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing is on federal lands, uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highways Administration or a CWA Permit from the Corps). If a there is a federal nexus, then the federal agency that is responsible for providing the funding or permit would consult with the USFWS.

The project site is not located within federally designated Critical Habitat. The closest Critical Habitat designation is located approximately 1.2 miles northwest of the project site for San Bernardino kangaroo rat (Exhibit 6, *Critical Habitat*). Therefore, the loss or adverse modification of Critical Habitat from site

development will not occur and consultation with the USFWS for impacts to Critical Habitat will not be required for implementation of the proposed project.



CENTRAL PARK MASTER PLAN UPDATE
HABITAT ASSESSMENT

Critical Habitat

ELMT CONSULTING

0 0.25 0.5 1 Miles

Source: ESRI Aerial Imagery, USFWS Critical Habitat, San Bernardino County

Exhibit 6

Section 5 Conclusion and Recommendations

The project site consists of undeveloped land that has been subjected to a variety of direct and indirect human-related disturbances from historical agricultural activities, extensive grading activities, adjacent development, weed abatement, and storage activities. Agricultural activities occurred onsite from 1938 and ceased between 1980 and 1994 when all of the surrounding areas were developed. In the decades since active agricultural activities (i.e., grape vineyards) ceased, native vegetation communities, typical of disturbed areas, have reestablished onsite that are subject to routine weed abatement activities.

The anthropogenic disturbances onsite and surrounding development have significantly reduced the onsite plant community's ability to provide suitable habitat for special-status plant and wildlife species known to occur in the area. Three (3) plant communities were observed within the boundaries of the project site during the habitat assessment: California Buckwheat Scrub, California Sagebrush Scrub, and drainage. The project site also supports two land cover types that would be classified as disturbed and developed. It should be noted that grape plants were observed scattered throughout the site from historical agricultural activities.

In late 2003, a drainage channel was constructed on the southern portion of the project site to accommodate stormwater runoff associated with the development of the eastern third of Central Park. Stormwater continues to enter the site via a culvert in the middle of the southern portion of the site and flow east to west into the Deer Creek Channel. Deer Creek converges into Cucamonga Creek, which is tributary to Mill Creek and the Santa Ana River (Relatively Permeant Water), and ultimately to the Pacific Ocean (Traditional Navigable Water). As a result, the onsite drainage feature exhibits a surface hydrologic connection to downstream waters of the U.S. and falls under the regulatory authority of the Corps, Regional Board, and the CDFW.

Two secondary drainage features were observed onsite that generally flow north to south. These drainage features collect stormwater flows from the northern portion of the project site and convey them to the southern portion of the site. The secondary drainage features on the western half of the project site connects into the main drainage feature on the southern boundary of the site. The other secondary drainage feature, located on the eastern half of the project site, terminates into an area just north of paved Central Park road, with loose, sandy, well drained soils. It is assumed that storm water within this drainage feature infiltrates quickly, as no visible streambed or hydrologic connectivity offsite was observed at the southern terminus of this drainage feature. If the onsite drainage features will be impacted from implementation of the proposed project, the City will need to obtain the following regulatory approvals prior to impacts occurring within the identified jurisdictional areas: Corps CWA Section 404 Permit; Regional Board CWA Section 401 Water Quality Certification; and CDFW Section 1602 Streambed Alteration Agreement (SAA).

No special-status plant species were observed onsite during the 2019 field survey. However, Cooper's hawk, California gull, and rufous hummingbird were observed onsite during the 2007 biological studies, and Dulzura kangaroo rats were captured during the 2008 five-night trapping study. It should be noted that California glossy snake and coast horned lizard have been recorded as occurring onsite according to the *City of Rancho Cucamonga Central Park Fire Hazard Reduction and Vegetation Management Plan*. Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the project site has a high potential to provide suitable habitat for Cooper's hawk; a

moderate potential to provide suitable habitat for California glossy snake, orange-throated whiptail, coastal whiptail, and coast horned lizard; and a low potential to provide suitable habitat for great egret, great blue heron, bells sage sparrow, burrowing owl, Costa's hummingbird, northwestern San Diego pocket mouse, white-tailed kite, California horned lark, loggerhead shrike, San Diego desert woodrat, Los Angles pocket mouse, and coastal California gnatcatcher.

In order to ensure impacts to Cooper's hawk, great egret great blue heron, bells sage sparrow, burrowing owl, Costa's hummingbird, white-tailed kite, California horned lark, loggerhead shrike, California gull, and rufous hummingbird do not occur from implementation of the proposed project, a pre-construction nesting bird clearance survey shall be conducted within three (3) days prior to ground disturbance. With implementation of mitigation through a pre-construction nesting bird clearance survey, impacts to the aforementioned special-status avian species will be less than significant.

Northwestern San Diego pocket mouse, San Diego desert woodrat, and Los Angles pocket mouse were not captured onsite during the 2008 San Bernardino kangaroo rat trapping study. As a result they are presumed absent from the project site and no impacts will occur to these species.

Based on the proposed project footprint, and with the implementation of a pre-construction nesting bird clearance survey, none of the special-status species known to occur in the general vicinity of the project site will be directly or indirectly impacted from implementation of the proposed project. Therefore, it was determined that this project will have "no effect" on federally or State listed species or habitats known to occur in the general vicinity of the project site. Additionally, the project will have "no effect" on designated Critical Habitats.

Migratory Bird Treaty Act and Fish and Game Code Compliance

Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513 prohibit the take, possession, or destruction of birds, their nests or eggs). In order to protect migratory bird species, a nesting bird clearance survey should be conducted prior to any ground disturbance or vegetation removal activities that may disrupt the birds during the nesting season.

If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds should be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities should stay outside of a no-disturbance buffer. The size of the no-disturbance buffer will be determined by the wildlife biologist and will depend on the level of noise and/or surrounding anthropogenic disturbances, line of sight between the nest and the construction activity, type and duration of construction activity, ambient noise, species habituation, and topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer distances. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting

behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.

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Appendix A Site Photographs

Photograph 1: Looking west along the northern boundary near the northeast corner of the project site.

Photograph 2: Looking south from the northern boundary into the eastern half of the project site. The development from Phase I can be seen in the background.

Photograph 3: Looking south from the northern boundary into the western portion of the project site.

Photograph 4: Looking southwest across the northwest corner of the project site.

Photograph 5: Looking northeast from the southwest corner of the project site. The culvert that drains into Deer Creek Channel is located beneath the fencing on the left side of the photo.

Photograph 6: Looking northwest from the southeast boundary of the project site. The photograph occurs on the boundary between the Amphitheater site and the rest of Phase II development.

Photograph 7: Looking west from within California buckwheat scrub in the eastern portion of the project site on the slopes above the main drainage feature.

Photograph 8: Looking north from within California sagebrush scrub in the western portion of the project site.

Photograph 9: Looking north from within a disturbed area. The abrupt shift to California sagebrush scrub indicates routine disturbance activities for weed abatement.

Photograph 10: Looking east (upstream) with the main drainage feature found on the southern portion of the site.

Appendix B Potentially Occurring Special-Status Biological Resources

Table B-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
SPECIAL-STATUS WILDLIFE SPECIES				
Accipiter cooperii Cooper's hawk	Fed: None CA: WL	Common yearlong resident of California. Typically forages in broken woodland and habitat edges with dense stands of coast live oak (*Quercus agrifolia*), riparian deciduous, or other forest habitat near water. Usually nests in dense riparian areas, usually near streams.	Yes	**Present:** Species observed during the 2007 biological studies. There is suitable foraging habitat throughout the site, but no suitable nesting opportunities onsite. This species is adapted to urban environments and occurs commonly.
Agelaius tricolor tricolored blackbird	Fed: None CA: **CEND/** SSC	Highly colonial yearlong resident of California that frequents emergent wetlands, croplands, grassy fields, flooded land and along edges of ponds. Usually nests near fresh water, preferably in emergent wetland with tall, dense cattails (*Typha sp.*) or tules (*Schoenoplectus sp.*), but also in thickets of willow (*Salix sp.*), blackberry (*Rubus sp.*), and tall herbs.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Aimophila ruficeps canescens southern California rufous-crowned sparrow	Fed: None CA: WL	Typically found between 3,000 and 6,000 feet in elevation. Breed in sparsely vegetated scrubland on hillsides and canyons. Prefers coastal sage scrub dominated by California sagebrush (*Artemisia californica*), but they can also be found breeding in coastal bluff scrub, low-growing serpentine chaparral, and along the edges of tall chaparral habitats.	No	**Presumed Absent:** No suitable habitat is present within the project site.
Anniella stebbinsi southern California legless lizard	Fed: None CA: SSC	Occurs in sparsely vegetated habitat types including coastal sand dunes, chaparral, pine-oak woodland, desert scrub, open grassland, and riparian areas. Requires sandy or loose loamy substrates conducive to burrowing.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Ardea alba great egret	Fed: None CA: None	Yearlong resident throughout California, except for the high mountains and deserts. Feeds and rests in fresh, and saline emergent wetlands, along the margins of estuaries, lakes, and slow-moving streams, on mudflats and salt ponds, and in irrigated croplands and pastures.	No	**Low:** The project site provides minimal foraging habitat, but no suitable nesting opportunities.
Ardea herodias great blue heron	Fed: None CA: None	Fairly common all year throughout most of California, in shallow estuaries and fresh and saline emergent wetlands. Less common along riverine and rocky marine shores, in croplands, pastures, and in mountains about foothills.	No	**Low:** The project site provides minimal foraging habitat, but no suitable nesting opportunities.
Arizona elegans occidentalis California glossy snake	Fed: None CA: SSC	Occurs in a wide variety of habitat types including open desert, grasslands, shrublands, chaparral, and woodlands. Prefers areas where the soil is loose and sandy which allows for burrowing.	No	**Moderate:** The undeveloped portions of the site provide marginal habitat on the project site. According to the *City of Rancho Cucamonga Central Park Fire Hazard Reduction and Vegetation Management Plan*, this species occupies the site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
Artemisiospiza belli belli Bell's sage sparrow	Fed: None CA: WL	Occurs in chaparral dominated by fairly dense stands of chamise. Also found in coastal sage scrub in south of range.	No	**Low**: Although isolated, the buckwheat scrub provides minimal habitat onsite.
Asio otus long-eared owl	Fed: None CA: SSC	Requires riparian or other thickets with small, densely canopied trees for roosting and nesting. Also occurs in dense conifer stands at higher elevations.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Aspidoscelis hyperythra orange-throated whiptail	Fed: None CA: WL	Inhabits low-elevations coastal scrub, chamise-redshank chaparral, mixed chaparral, and valley-foothill hardwood habitats. Semi-arid brushy areas typically with loose soil and rocks, including washes, stream sides, rocky hillsides, and coastal chaparral.	No	**Moderate**: Although isolated, the buckwheat scrub provides marginal habitat onsite.
Aspidoscelis tigris stejnegeri coastal whiptail	Fed: None CA: SSC	Found in a variety of ecosystems, primarily hot and dry open areas with sparse foliage - chaparral, woodland, and riparian areas.	No	**Moderate**: Although isolated, the buckwheat scrub provides marginal habitat onsite.
Athene cunicularia burrowing owl	Fed: None CA: SSC	Common yearlong resident of southern California. Prefers open, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Requires fossorial burrows for roosting and nesting surrounded by relatively short vegetation and open habitat for foraging and watching for predators. Also known to occupy man-made structures including drain pipes, debris piles, and development pads.	No	**Low:** The project site provides minimal habitat. There are a few areas with line-of-sight opportunities for owls, but overall plant communities do not provide suitable habitat.
Batrachoseps gabrieli San Gabriel slender salamander	Fed: None CA: None	Known from select localities in the San Gabriel Mountains and the Mt. Baldy area of Los Angeles County and the western end of the San Bernardino Mountains in San Bernardino Co., with an elevation range of 1,200- 5,085 feet. Occurs on talus slopes surrounded by a variety of conifer and montane hardwood species, including bigcone spruce, pine, white fir, incense cedar, canyon live oak, black oak, and California laurel.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Bombus crotchii Crotch bumble bee	Fed: None CA: None	Exclusive to coastal California east towards the Sierra-Cascade Crest; less common in western Nevada.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Calypte costae Costa's hummingbird	Fed: None CA: None	Desert and semi-desert, arid brushy foothills and chaparral. A desert hummingbird that breeds in the Sonoran and Mojave Deserts. Departs desert heat moving into chaparral, scrub, and woodland habitats.	No	**Low:** The project site provides minimal habitat.
Chaetodipus fallax fallax northwestern San Diego pocket mouse	Fed: None CA: SSC	Occurs in desert and coastal habitats in southern California, Mexico, and northern Baja California, from sea level to at least 1,400 meters above msl. Found in a variety of temperate habitats ranging from chaparral and grasslands to scrub forests and deserts. Requires low growing vegetation or rocky outcroppings, as well as sandy soils for burrowing.	No	**Low**: Although isolated, the buckwheat scrub provides minimal habitat onsite.

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
Circus cyaneus northern harrier	Fed: None CA: SSC	Frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands; seldom found in wooded areas. Mostly found in flat, or hummocky, open areas of tall, dense grasses moist or dry shrubs, and edges for nesting, cover, and feeding.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Coleonyx variegatus abbotti San Diego banded gecko	Fed: None CA: None	Prefers rocky areas in coastal sage and chaparral within granite or rocky outcrops. Occurs in coastal and cismontane southern California from interior Ventura Co. south.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Diadophis punctatus modestus San Bernardino ringneck snake	Fed: None CA: None	Common in open, relatively rocky areas within valley-foothill, mixed chaparral, and annual grass habitats.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Dipodomys merriami parvus San Bernardino kangaroo rat	Fed: **END** CA: SSC	Primarily found in Riversidean alluvial fan sage scrub (RAFSS) and sandy loam soils, alluvial fans and flood plains, and along washes with nearby sage scrub. May also occur at lower densities in Riversidean upland sage scrub, chaparral and grassland in uplands and tributaries in proximity to RAFSS habitat. Tends to avoid rocky substrates.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Dipodomys simulans Dulzura kangaroo rat	Fed: None CA: None	Relatively common in chaparral, coastal sage scrub, Riversidean alluvial fan sage scrub, and peninsular juniper woodland habitats.	Yes	**Present**: Although isolated, the buckwheat scrub provides minimal habitat onsite. A 2008 trapping study determined it occurs onsite.
Dipodomys stephensi Stephens' kangaroo rat	Fed: **END** CA: **THR**	Occur in arid and semi-arid habitats with some grass or brush. Prefer open habitats with less than 50% protective cover. Require soft, well-drained substrate for building burrows and are typically found in areas with sandy soil.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Egretta thula snowy egret	Fed: None CA: None	Widespread in California along shores of coastal estuaries, fresh and saline emergent wetlands, ponds, slow-moving rivers, irrigation ditches, and wet fields. In southern California, common yearlong in the Imperial Valley and along the Colorado River.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Elanus leucurus white-tailed kite	Fed: None CA: FP	Occurs in low elevation, open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Uses trees with dense canopies for cover. Important prey item is the California vole.	No	**Low:** The project site provides minimal foraging habitat.
Empidonax traillii willow flycatcher	Fed: None CA: **END**	A rare to locally uncommon, summer resident in wet meadow and montane riparian habitats (2,000 to 8,000 ft) in the Sierra Nevada and Cascade Range. Most often occurs in broad, open river valleys or large mountain meadows with lush growth of shrubby willows.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Empidonax traillii extimus southwestern willow flycatcher	Fed: **END** CA: **END**	Occurs in riparian woodlands in southern California. Typically requires large areas of willow thickets in broad valleys, canyon bottoms, or around ponds and lakes. These areas typically have standing or running water, or are at least moist.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Eremophila alpestris actia California horned lark	Fed: None CA: WL	Occurs in meadows, grasslands, open fields, prairie, and alkali flats. This subspecies is typically found in coastal regions.	No	**Low:** The project site provides minimal foraging habitat.

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
Eumops perotis californicus western mastiff bat	Fed: None CA: SSC	Primarily a cliff-dwelling species, roost generally under exfoliating rock slabs. Roosts are generally high above the ground, usually allowing a clear vertical drop of at least 3 meters below the entrance for flight. In California, it is most frequently encountered in broad open areas including dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Lampropeltis zonata (parvirubra) California mountain kingsnake (San Bernardino population)	Fed: None CA: CSC	Found in diverse habitats including coniferous forest, oak-pine woodlands, riparian woodland, chaparral, Manzanita, and coastal sage scrub. Wooded areas near a stream with rock outcrops, talus or rotting logs that are exposed to the sun.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Lanius ludovicianus loggerhead shrike	Fed: None CA: SSC	Common yearlong resident of California. Prefers open habitats with bare ground, scattered shrubs, and areas with low or sparse herbaceous cover. Requires suitable perches including trees, posts, fences, utility lines, or other perches.	No	**Low**: Although isolated, the buckwheat scrub provides minimal habitat onsite.
Larus californicus California gull	Fed: None CA: WL	Require isolated islands in rivers, reservoirs and natural lakes for nesting, where predations pressures from terrestrial mammals are diminished. Uses both fresh and saline aquatic habitats at variable elevations and degrees of aridity for nesting and for opportunistic foraging.	Yes	**Present:** This species was observed during the 2007 biological studies. The project site provides minimal foraging habitat, but no suitable nesting opportunities.
Lasiurus xanthinus western yellow bat	Fed: None CA: SSC	Occurs in valley/foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts under palm trees and feeds in, and near, palm oases and riparian habitats.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Laterallus jamaicensis coturniculus California black rail	Fed: None CA: **THR**/FP	Suitable habitat includes salt marshes, freshwater marshes, and wet meadows. In tidal areas they require dense cover of upland vegetation for protection from predators.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Lepus californicus bennettii San Diego black-tailed jackrabbit	Fed: None CA: SSC	Occupies many diverse habitats, but primarily is found in arid regions supporting short-grass habitats, agricultural fields, or sparse coastal scrub.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Neotoma lepida intermedia San Diego desert woodrat	Fed: None CA: SSC	Occurs in coastal scrub communities between San Luis Obispo and San Diego Counties. Prefers moderate to dense canopies, and especially rocky outcrops.	No	**Low**: Although isolated, the buckwheat scrub provides minimal habitat onsite. No midden were observed onsite.
Nycticorax nycticorax black-crowned night heron	Fed: None CA: None	Common in wetlands across North America, including saltmarshes, freshwater marshes, swamps, streams, rivers, lakes, ponds, lagoons, tidal mudflats, and wet agricultural fields. They require aquatic habitat for foraging and terrestrial vegetation for cover.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
Onychomys torridus ramona southern grasshopper mouse	Fed: None CA: SSC	Inhabits alkali desert scrub and other desert scrub habitats, and to a lesser extent succulent shrubs, desert washes, desert riparian, coastal scrub, mixed chaparral, and sagebrush habitats. Generally rare in valley foothill and montane riparian habitats. Prefers low to moderate shrub cover and requires friable soils.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Ovis canadensis nelsoni desert bighorn sheep	Fed: None CA: FP	Require a variety of habitat characteristics related to topography, visibility, forage quality and quantity, and water availability (USFWS 2000). Prefer areas on or near mountainous terrain that are visually open, as well as steep and rocky. Alluvial fans and washed in flatter terrain is also used for foraging, water, and connectivity between mountainous areas. Tend to avoid dense vegetation and higher elevations that support chaparral.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Perognathus longimembris brevinasus Los Angeles pocket mouse	Fed: None CA: SSC	Occurs in lower elevation grasslands and coastal sage scrub communities in and around the Los Angeles Basin. Prefers open ground with fine sandy soils. May not dig extensive burrows, but instead will seek refuge under weeds and dead leaves instead.	No	**Low**: Although isolated, the buckwheat scrub provides minimal habitat onsite. None were captured during the 2008 trapping study.
Perognathus longimembris pacificus Pacific pocket mouse	Fed: **END** CA: SSC	Associated with fine grain, sandy substrates in coastal strand, coastal dunes, river alluvium and coastal sage scrub habitats.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Phalacrocorax auritus double-crested cormorant	Fed: None CA: WL	Prefers water less than 30 feet deep with rocky or gravel bottom. Rests in daytime and roosts overnight beside water on offshore rocks, islands, cliffs, dead branches of trees, wharfs, jetties, or even transmission lines.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Phrynosoma blainvillii coast horned lizard	Fed: None CA: SSC	Found in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest. The key elements of such habitats are loose, fine soils with a high sand fraction; an abundance of native ants or other insects; and open areas with limited overstory for basking and low, but relatively dense shrubs for refuge.	No	**Moderate:** The undeveloped portions of the site provide marginal habitat on the project site. According to the *City of Rancho Cucamonga Central Park Fire Hazard Reduction and Vegetation Management Plan*, this species occupies the site.
Polioptila californica californica coastal California gnatcatcher	Fed: **THR** CA: SSC	Common yearlong resident of southern California in sage scrub habitats that are dominated by California sagebrush (*Artemisia californica*). Prefers scrub habitat with more low-growing vegetation. Species generally occurs below 750 feet above mean sea level (msl) along the coast and below 1,500 feet above msl within inland regions.	No	**Low**: Although isolated, the buckwheat scrub provides minimal habitat onsite. None were observed onsite during the 2008 focused survey.
Rana muscosa southern mountain yellow-legged frog	Fed: **END** CA: **END** ; WL	Prefers high-altitude mountain streams, typically those with boulders in them. Always found in the water, on rocks, or within a foot or two of the water's edge.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Rhaphiomidas terminatus abdominalis Delhi Sands flower-loving fly	Fed: **END** CA: None	DSF habitat is limited to areas that include Delhi fine sand, an aeolian (wind-deposited) soil type. The highest density of DSF have been found in habitat that includes a variety of plants including California buckwheat, California croton, deerweed, and telegraph weed.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
Salvadora hexalepis virgultea coast patch-nosed snake	Fed: None CA: SSC	Inhabits semi-arid brushy areas and chaparral in canyons, rocky hillsides, and plains. Requires friable soils for burrowing.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Selasphorus rufus rufous hummingbird	Fed: None CA: None	Breed in open or shrubby areas, forest openings, yards, and parks. During migration they are commonly found in disturbed areas where its food flowers are in bloom.	Yes	**Present:** This species was observed onsite during the 2007 biological studies. The project site provides suitable habitat.
Setophaga petichia yellow warbler	Fed: None CA: SSC	Nests over all of California except the Central Valley, the Mojave Desert region, and high altitudes and the eastern side of the Sierra Nevada. Winters along the Colorado River and in parts of Imperial and Riverside Counties. Nests in riparian areas dominated by willows, cottonwoods, sycamores, or alders or in mature chaparral. May also use oaks, conifers, and urban areas near stream courses.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Spea hammondii western spadefoot	Fed: None CA: SSC	Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Rain pools which do not contain bullfrogs, fish, or crayfish are necessary for breeding.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Spinus lawrencei Lawrence's goldfinch	Fed: None CA: None	Open woodlands, chaparral, and weedy fields. Closely associated with oaks. Nests in open oak or other arid woodland and chaparral near water.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Spizella breweri Brewer's sparrow	Fed: None CA: None	Habitats include sagebrush and brushy plains.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Thamnophis hammondii two-striped garter snake	Fed: None CA: SSC	Occurs in or near permanent fresh water, often along streams with rocky beds and riparian growth up to 7,000 feet in elevation.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Xanthocephalus xanthocephalus yellow-headed blackbird	Fed: None CA: SSC	Occurs in freshwater emergent wetlands, and moist, open areas along croplands and mud flats of lacustrine habitats. Prefers to nest in dense wetland vegetation characterized by tules, cattails, or other similar plant species along the border of lakes and ponds.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
SPECIAL-STATUS PLANT SPECIES				
Acanthoscyphus parishii var. parishii Parish's oxytheca	Fed: None CA: None CNPS: 4.2	Habitats include sandy or shale chaparral. Found at elevations ranging from 3,750 to 6,748 feet above mean sea level (msl). Blooming period is from June to August.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Arctostaphylos glandulosa* ssp. *gabrielensis San Gabriel manzanita	Fed: None CA: None CNPS: 1B.2	Habitat includes rocky chaparral. Found at elevations ranging from 1,952 to 4,921 feet above msl. Blooming period is March.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
Asplenium vespertinum western spleenwort	Fed: None CA: None CNPS: 4.2	Occurs on rocky soils in chaparral, cismontane woodland, and coastal scrub habitats. Found at elevations ranging from 590 to 3,280 feet above msl. Blooming period is from February to June.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Calochortus catalinae Catalina mariposa-lily	Fed: None CA: None CNPS: 4.2	Grows in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland habitats. Found at elevations ranging from 49 to 2,297 feet. Blooming period is from March to June.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Calochortus plummerae Plummer's mariposa-lily	Fed: None CA: None CNPS: 4.2	Prefers openings in chaparral, foothill woodland, coastal sage scrub, valley and foothill grasslands, cismontane woodland, lower montane coniferous forest and yellow pine forest. Often found on dry, rocky slopes and soils and brushy areas. Can be very common after a fire. From 328 to 5,577 feet in elevation. Blooming period is from May to July.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Chorizanthe parryi* var. *parryi Parry's spineflower	Fed: None CA: None CNPS: 1B.1	Occurs on sandy and/or rocky soils in chaparral, coastal sage scrub, and sandy openings within alluvial washes and margins. Found at elevations ranging from 951 to 3,773 feet. Blooming period is from April to June.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Cladium californicum California saw-grass	Fed: None CA: None CNPS: 2B.2	Found in meadows and seeps, marshes and alkaline swamps or freshwater habitats. Found at elevations ranging from 197 to 5,249 feet. Blooming period is from June to September.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Claytonia lanceolata* var. *peirsonii Peirson's spring beauty	Fed: None CA: None CNPS: 3.1	Habitats include subalpine coniferous forest and upper montane coniferous forest. Found at elevations ranging from 4,954 to 9,005 feet above msl. Blooming period is from March to June.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Deinandra paniculata paniculate tarplant	Fed: None CA: None CNPS: 4.2	Occurs in coastal scrub, vernal pools, valley and foothill grassland habitats. Found at elevations ranging from 82 to 3,084 feet. Blooming period is from April to November.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Diplacus johnstonii Johnston's monkeyflower	Fed: None CA: None CNPS: 4.3	Occurs in lower montane coniferous forest (scree, disturbed areas, rocky or gravelly roadside) habitat. Found at elevations ranging from 3,199 to 9,580 feet above msl. Blooming period is from May to August.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Eriogonum microthecum* var. *alpinum alpine slender buckwheat	Fed: None CA: None CNPS: 4.3	Associated with alpine dwarf scrub and great basin scrub. Found at elevations ranging from 8,202 to 10,862 feet above msl. Blooming period is from July to September.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Eriogonum microthecum* var. *johnstonii Johnston's buckwheat	Fed: None CA: None CNPS: 1B.3	Grows in rocky soils within subalpine coniferous forest and upper montane coniferous forest. Found at elevations ranging from 6,000 to 9,600 feet above msl. Blooming period is from July to September.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Eriogonum umbellatum* var. *minus alpine sulphur-flowered buckwheat	Fed: None CA: None CNPS: 4.3	Occurs in gravelly soils within subalpine coniferous forest and upper montane coniferous forests. Found at elevations ranging from 5,906 to 10,066 feet above msl. Blooming period is from June to September.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Eriophyllum lanatum* var. *obovatum southern Sierra woolly sunflower	Fed: None CA: None CNPS: 4.3	Found in sandy loam soils within lower and upper montane coniferous forests. Found at elevations ranging from 3,655 to 8,202 feet above msl. Blooming period is from June to July.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
Fritillaria pinetorum pine fritillary	Fed: None CA: None CNPS: 4.3	Associated with granitic and metamorphic soils within chaparral, lower montane coniferous forest, upper montane coniferous forest, subalpine coniferous forest, pinyon and juniper woodland. Found at elevations ranging from 5,692 to 10,826 feet above msl. Blooming period is from May to September.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Galium angustifolium* ssp. *gabrielense San Antonio Canyon bedstraw	Fed: None CA: None CNPS: 4.3	Grows in granitic, sandy or rocky soils within chaparral and lower montane coniferous forests. Found at elevations ranging from 3,937 to 8,694 feet above msl. Blooming period is from April to August.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Galium jepsonii Jepson's bedstraw	Fed: None CA: None CNPS: 4.3	Found in granitic, rocky or gravelly soils within lower montane coniferous forest and upper montane coniferous forest habitats. Found at elevations ranging from 5,052 to 8,202 feet above msl. Blooming period is from July to August.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Galium johnstonii Johnston's bedstraw	Fed: None CA: None CNPS: 4.3	Preferred habitats include chaparral, riparian woodland, lower montane coniferous forest, pinyon and juniper woodland. Found at elevations ranging from 4,003 to 7,546 feet above msl. Blooming period is from June to July.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Heuchera caespitosa urn-flowered alumroot	Fed: None CA: None CNPS: 4.3	Grows in rocky soils within cismontane woodland, lower montane coniferous forest, riparian forest, and upper montane coniferous forest. Found at elevations ranging from 3,789 to 8,694 feet above msl. Blooming period is from May to August.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Horkelia cuneata* var. *puberula mesa horkelia	Fed: None CA: None CNPS: 1B.1	Occurs on sandy or gravelly soils in chaparral, woodlands, and coastal scrub plant communities. Found at elevations ranging from 230 to 2,657 feet. Blooming period is from February to September.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Juglas californica southern California black walnut	Fed: None CA: None CNPS: 4.2	Found in chaparral, cismontane woodland, coastal scrub, and riparian woodland habitats. Found at elevations ranging from 164 to 2,953 feet. Blooming period is from March to August.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Juncus duranii Duran's rush	Fed: None CA: None CNPS: 4.3	Habitats include lower and upper montane coniferous forests, meadows and seeps. Found at elevations ranging from 5,801 to 9,199 feet above msl. Blooming period is from July to August.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Lepechinia fragrans fragrant pitcher sage	Fed: None CA: None CNPS: 4.2	Occurs in chaparral habitat. Found at elevations ranging from 66 to 4,298 feet above msl. Blooming period is from March to October.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Lilium humboldtii* ssp. *ocellatum ocellated humboldt lily	Fed: None CA: None CNPS: 4.2	Found in openings within chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and riparian woodland habitats. Found at elevations ranging from 98 to 5,906 feet in elevation above msl. Blooming period is from March to August.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Lilium parryi lemon lily	Fed: None CA: None CNPS: 1B.2	Prefers lower montane coniferous forest, riparian forests, upper montane coniferous forests, meadows and seeps. Found at elevations ranging from 4,003 to 9,006 feet above msl. Blooming period is from July to August.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
Linanthus concinnus San Gabriel linanthus	Fed: None CA: None CNPS: 1B.2	Occurs in rocky, openings within chaparral, lower montane and upper montane coniferous forests. Found at elevations ranging from 4,987 to 9,186 feet above msl. Blooming period is from April to July.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Monardella australis* ssp. *jokerstii Jokerst's monardella	Fed: None CA: None CNPS: 1B.1	Habitat includes chaparral and lower montane coniferous forest. Found on steep or talus slopes between breccia, secondary alluvial benches along drainages and washes. Found at elevations ranging from 4,429 to 5,741 feet above msl. Blooming period is from July to September.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Muhlenbergia californica California muhly	Fed: None CA: None CNPS: 4.3	Found in mesic, seeps, and streambanks within chaparral, coastal scrub, lower montane coniferous forest, and meadows and seeps. Found at elevations ranging from 328 to 6,562 feet. Blooming period is from June to September.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Navarretia prostrata prostrate vernal pool navarretia	Fed: None CA: None CNPS: 1B.1	Coastal scrub, valley and foothill grasslands, and vernal pools. Grows in elevation from 49 to 2,297 feet in elevation. Blooming period ranges from April to July.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Oreonana vestita woolly mountain-parsley	Fed: None CA: None CNPS: 1B.3	Associated with gravel and talus soils within lower montane coniferous forest, subalpine coniferous forest, and upper montane coniferous forest. Found at elevations ranging from 5,299 to 11,483 feet above msl. Blooming period is from March to September.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Phacelia mohavensis Mojave phacelia	Fed: None CA: None CNPS: 4.3	Occurs in sandy or gravelly soils within cismontane woodland, lower montane coniferous forest, meadows and seeps, pinyon and juniper woodland. Found at elevations ranging from 4,593 to 8,202 feet above msl. Blooming period is from April to August.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Phacelia stellaris Brand's star phacelia	Fed: None CA: None CNPS: 1B.1	Occurs in coastal dunes and coastal sage scrub habitats. Grows in elevations ranging from 3 to 1,312 feet. Blooming period is from March to June.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Pseudognaphalium leucocephalum white rabbit-tobacco	Fed: None CA: None CNPS: 2B.2	Chaparral, cismontane woodland, coastal scrub, riparian woodlands in sandy gravelly soils. Grows in elevation from 3 to 6,890 feet in elevation. Blooming period ranges from July to December.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Sagittaria sanfordii Sanford's arrowhead	Fed: None CA: None CNPS: 1B.2	Grows in freshwater marshes and swamps. Found at elevations ranging from 0 to 2,132 feet above msl. Blooming period is from May to November.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Streptanthus bernardinus Laguna Mountains jewelflower	Fed: None CA: None CNPS: 4.3	Associated with chaparral and lower montane coniferous forest. Found at elevations ranging from 2,198 to 8,202 feet above msl. Blooming period is from May to August.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Symphyotrichum defoliatum San Bernardino aster	Fed: None CA: None CNPS: 1B.2	Coastal scrub, valley and foothill grasslands, and vernal pools. Grows in elevation from 49 to 2,297 feet in elevation. Blooming period ranges from April to July.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Viola pinetorum* var. *grisea grey-leaved violet	Fed: None CA: None CNPS: 1B.3	Associated with upper montane coniferous forest, subalpine coniferous forest, meadows and seeps. Found at elevations ranging from 4,921 to 11,155 feet above msl. Blooming period is from April to July.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
SPECIAL-STATUS PLANT COMMUNITIES				
California Walnut Woodland	CDFW Sensitive Habitat	Occurs on valley slopes and in valley bottoms, as well as around rocky outcrops. This habitat usually occurs in areas with relatively moist, fine soils. It can intergrade with coast live oak woodland and coast live oak forest in more mesic areas. The canopy is relatively open and is dominated by California walnut with a grassy understory.	No	**Absent**
Coastal and Valley Freshwater Marsh	CDFW Sensitive Habitat	Found along the coast and in coastal valleys near river mouths and around the margins of lakes and springs. Site lacks significant current and is permanently flooded by fresh water. Prolonged saturation permits accumulations of deep, peaty soils.	No	**Absent**
Riversidian Alluvial Fan Sage Scrub	CDFW Sensitive Habitat	Occur within broad washes of sandy alluvial drainages that carry rainfall runoff sporadically in winter and spring, but remain relatively dry through the remainder of the year. Is restricted to drainages and floodplains with very sandy substrates that have a dearth of decomposed plant material. These areas do not develop into riparian woodland or scrub due to the limited water resources and scouring by occasional floods.	No	**Absent**
Southern Sycamore Alder Riparian Woodland	CDFW Sensitive Habitat	Below 2,000 meters in elevation, sycamore and alder often occur along seasonally-flooded banks; cottonwoods and willows also are often present. Poison-oak, mugwort, elderberry and wild raspberry may be present in the understory.	No	**Absent**

U.S. Fish and Wildlife Service (USFWS) - Federal
END - Federally Endangered
THR - Federally Threatened

California Department of Fish and Wildlife (CDFW) - California
END - State Endangered
CEND - State Candidate Endangered
SSC - Species of Special Concern
WL - Watch List
FP - Fully Protected

California Native Plant Society (CNPS)
California Rare Plant Rank
1A Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere
1B Plants Rare, Threatened, or Endangered in California and Elsewhere
2B Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere
4 Plants of Limited Distribution – A Watch List

Threat Ranks
0.1 - Seriously threatened in California
0.2 - Moderately threatened in California
0.3 - Not very threatened in California

Appendix C Regulations

Special status species are native species that have been afforded special legal or management protection because of concern for their continued existence. There are several categories of protection at both federal and state levels, depending on the magnitude of threat to continued existence and existing knowledge of population levels.

Federal Regulations

Endangered Species Act of 1973

Federally listed threatened and endangered species and their habitats are protected under provisions of the Federal Endangered Species Act (ESA). Section 9 of the ESA prohibits "take" of threatened or endangered species. "Take" under the ESA is defined as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any of the specifically enumerated conduct." The presence of any federally threatened or endangered species that are in a project area generally imposes severe constraints on development, particularly if development would result in "take" of the species or its habitat. Under the regulations of the ESA, the United States Fish and Wildlife Service (USFWS) may authorize "take" when it is incidental to, but not the purpose of, an otherwise lawful act.

Critical Habitat is designated for the survival and recovery of species listed as threatened or endangered under the ESA. Critical Habitat includes those areas occupied by the species, in which are found physical and biological features that are essential to the conservation of an ESA listed species and which may require special management considerations or protection. Critical Habitat may also include unoccupied habitat if it is determined that the unoccupied habitat is essential for the conservation of the species.

Whenever federal agencies authorize, fund, or carry out actions that may adversely modify or destroy Critical Habitat, they must consult with USFWS under Section 7 of the ESA. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highway Administration or a permit from the U.S. Army Corps of Engineers (Corps)).

If USFWS determines that Critical Habitat will be adversely modified or destroyed from a proposed action, the USFWS will develop reasonable and prudent alternatives in cooperation with the federal institution to ensure the purpose of the proposed action can be achieved without loss of Critical Habitat. If the action is not likely to adversely modify or destroy Critical Habitat, USFWS will include a statement in its biological opinion concerning any incidental take that may be authorized and specify terms and conditions to ensure the agency is in compliance with the opinion.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S. Government Code [USC] 703) makes it unlawful to pursue, capture, kill, possess, or attempt to do the same to any migratory bird or part, nest, or egg of any such bird listed in wildlife protection treaties between the United States, Great Britain, Mexico, Japan, and the countries of the former Soviet Union, and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703; 50 CFR 10, 21).

The MBTA covers the taking of any nests or eggs of migratory birds, except as allowed by permit pursuant to 50 CFR, Part 21. Disturbances causing nest abandonment and/or loss of reproductive effort (i.e., killing or abandonment of eggs or young) may also be considered "take." This regulation seeks to protect migratory birds and active nests.

In 1972, the MBTA was amended to include protection for migratory birds of prey (e.g., raptors). Six families of raptors occurring in North America were included in the amendment: Accipitridae (kites, hawks, and eagles); Cathartidae (New World vultures); Falconidae (falcons and caracaras); Pandionidae (ospreys); Strigidae (typical owls); and Tytonidae (barn owls). The provisions of the 1972 amendment to the MBTA protects all species and subspecies of the families listed above. The MBTA protects over 800 species including geese, ducks, shorebirds, raptors, songbirds and many relatively common species.

State Regulations

California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) provides for the protection of the environment within the State of California by establishing State policy to prevent significant, avoidable damage to the environment through the use of alternatives or mitigation measures for projects. It applies to actions directly undertaken, financed, or permitted by State lead agencies. If a project is determined to be subject to CEQA, the lead agency will be required to conduct an Initial Study (IS); if the IS determines that the project may have significant impacts on the environment, the lead agency will subsequently be required to write an Environmental Impact Report (EIR). A finding of non-significant effects will require either a Negative Declaration or a Mitigated Negative Declaration instead of an EIR. Section 15380 of the CEQA Guidelines independently defines "endangered" and "rare" species separately from the definitions of the California Endangered Species Act (CESA). Under CEQA, "endangered" species of plants or animals are defined as those whose survival and reproduction in the wild are in immediate jeopardy, while "rare" species are defined as those who are in such low numbers that they could become endangered if their environment worsens.

California Endangered Species Act (CESA)

In addition to federal laws, the state of California implements the CESA which is enforced by CDFW. The CESA program maintains a separate listing of species beyond the FESA, although the provisions of each act are similar.

State-listed threatened and endangered species are protected under provisions of the CESA. Activities that may result in "take" of individuals (defined in CESA as; "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") are regulated by CDFW. Habitat degradation or modification is not included in the definition of "take" under CESA. Nonetheless, CDFW has interpreted "take" to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is considered as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the

absence of special protection or management. A rare species is one that is considered present in such small numbers throughout its range that it may become endangered if its present environment worsens. State threatened and endangered species are fully protected against take, as defined above.

The CDFW has also produced a species of special concern list to serve as a species watch list. Species on this list are either of limited distribution or their habitats have been reduced substantially, such that a threat to their populations may be imminent. Species of special concern may receive special attention during environmental review, but they do not have formal statutory protection. At the federal level, USFWS also uses the label species of concern, as an informal term that refers to species which might be in need of concentrated conservation actions. As the Species of Concern designated by USFWS do not receive formal legal protection, the use of the term does not necessarily ensure that the species will be proposed for listing as a threatened or endangered species.

Fish and Game Code

Fish and Game Code Sections 3503, 3503.5, 3511, and 3513 are applicable to natural resource management. For example, Section 3503 of the Code makes it unlawful to destroy any birds' nest or any birds' eggs that are protected under the MBTA. Further, any birds in the orders Falconiformes or Strigiformes (Birds of Prey, such as hawks, eagles, and owls) are protected under Section 3503.5 of the Fish and Game Code which makes it unlawful to take, possess, or destroy their nest or eggs. A consultation with CDFW may be required prior to the removal of any bird of prey nest that may occur on a project site. Section 3511 of the Fish and Game Code lists fully protected bird species, where the CDFW is unable to authorize the issuance of permits or licenses to take these species. Pertinent species that are State fully protected by the State include golden eagle (*Aquila chrysaetos*) and white-tailed kite (*Elanus leucurus*). Section 3513 of the Fish and Game Code makes it unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Native Plant Protection Act

Sections 1900–1913 of the Fish and Game Code were developed to preserve, protect, and enhance Rare and Endangered plants in the state of California. The act requires all state agencies to use their authority to carry out programs to conserve Endangered and Rare native plants. Provisions of the Native Plant Protection Act prohibit the taking of listed plants from the wild and require notification of the CDFW at least ten days in advance of any change in land use which would adversely impact listed plants. This allows the CDFW to salvage listed plant species that would otherwise be destroyed.

California Native Plant Society Rare and Endangered Plant Species

Vascular plants listed as rare or endangered by the CNPS, but which have no designated status under FESA or CESA are defined as follows:

California Rare Plant Rank

1A- Plants Presumed Extirpated in California and either Rare or Extinct Elsewhere

1B- Plants Rare, Threatened, or Endangered in California and Elsewhere

2A- Plants Presumed Extirpated in California, But More Common Elsewhere

2B- Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

3- Plants about Which More Information is Needed - A Review List

4- Plants of Limited Distribution - A Watch List

Threat Ranks

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

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

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

Local Regulations

Rancho Cucamonga Municipal Code

Under the Rancho Cucamonga Municipal Code (17.16.080), certain trees may qualify as Heritage Trees and require a permit for removal. A heritage tree is defined as any tree which meets at least one of the following criteria:

- All eucalyptus windrows; or
- Any tree in excess of 30 feet in height and having a single trunk diameter at breast height (DBH) of 20 inches or more as measured 4½ feet from ground level; or
- Multi-trunk trees having a total diameter at breast height (DBH) of 30 inches or more as measured 4½ feet from ground level; or
- A stand of trees the nature of which makes each dependent upon the others for survival; or
- Any other tree as may be deemed historically or culturally significant by the planning director because of age, size, condition, location, or aesthetic qualities.

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates activities pursuant to Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFG regulates activities under the Fish and Game Code Section 1600-1616, and the Regional Board regulates activities pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

Federal Regulations

Section 404 of the Clean Water Act

Since 1972, the Corps and U.S. Environmental Protection Agency (EPA) have jointly regulated the filling of "waters of the U.S.," including wetlands, pursuant to Section 404 of the Clean Water Act (CWA). The Corps has regulatory authority over the discharge of dredged or fill material into the waters of the United States under Section 404 of the CWA. The Corps and EPA define "fill material" to include any "material placed in waters of the United States where the material has the effect of: (i) replacing any portion of a water of the United States with dry land; or (ii) changing the bottom elevation of any portion of the waters of the United States." Examples include, but are not limited to, sand, rock, clay, construction debris, wood chips, and "materials used to create any structure or infrastructure in the waters of the United States." In order to further define the scope of waters protected under the CWA, the Corps and EPA published the Clean Water Rule on June 29, 2015. Pursuant to the Clean Water Rule, the term "*waters of the United States*" is defined as follows:

(i) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.

(ii) All interstate waters, including interstate wetlands[1].

(iii) The territorial seas.

(iv) All impoundments of waters otherwise defined as waters of the United States under the definition.

(v) All tributaries[2] of waters identified in paragraphs (i) through (iii) mentioned above.

(vi) All waters adjacent[3] to a water identified in paragraphs (i) through (v) mentioned above, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters.

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1 The term *wetlands* means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

2 The terms *tributary* and *tributaries* each mean a water that contributes flow, either directly or through another water (including an impoundment identified in paragraph (iv) mentioned above), to a water identified in paragraphs (i) through (iii) mentioned above, that is characterized by the presence of the physical indicators of a bed and banks and an ordinary high water mark.

3 The term *adjacent* means bordering, contiguous, or neighboring a water identified in paragraphs (i) through (v) mentioned above, including waters separated by constructed dikes or barriers, natural river berms, beach dunes, and the like.

(vii) All prairie potholes, Carolina bays and Delmarva bays, Pocosins, western vernals pools, Texas coastal prairie wetlands, where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (i) through (iii) meantioned above.

(viii) All waters located within the 100-year floodplain of a water identified in paragraphs (i) through (iii) mentioned above and all waters located within 4,000 feet of the high tide line or ordinary high water mark of a water identified in paragraphs (i) through (v) mentioned above, where they are determined on a case-specific basis to have a significant nexus to a waters identified in paragraphs (i) through (iii) mentioned above.

The following features are not defined as "waters of the United States" even when they meet the terms of paragraphs (iv) through (viii) mentioned above:

(i) Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act.

(ii) Prior converted cropland.

(iii) The following ditches:

- (A) Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary.
- (B) Ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands.
- (C) Ditches that do not flow, either directly or through another water, into a water of the United States as identified in paragraphs (i) through (iii) of the previous section.

(iv) The following features:

- (A) Artificially irrigated areas that would revert to dry land should application of water to that area cease;
- (B) Artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, settling basins, fields flooded for rice growing, log cleaning ponds, or cooling ponds;
- (C) Artificial reflecting pools or swimming pools created in dry land;
- (D) Small ornamental waters created in dry land;
- (E) Water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water;
- (F) Erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of a tributary, non-wetland swales, and lawfully constructed grassed waterways; and
- (G) Puddles.

(v) Groundwater, including groundwater drained through subsurface drainage systems.

(vi) Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.

(vii) Wastewater recycling structures constructed in dry land; detention and retention basins built for wastewater recycling; groundwater recharge basins; percolation ponds built for wastewater recycling; and water distributary structures built for wastewater recycling.

Section 401 of the Clean Water Act

Pursuant to Section 401 of the CWA, any applicant for a federal license or permit to conduct any activity which may result in any discharge to waters of the United States must provide certification from the State or Indian tribe in which the discharge originates. This certification provides for the protection of the physical, chemical, and biological integrity of waters, addresses impacts to water quality that may result from issuance of federal permits, and helps insure that federal actions will not violate water quality standards of the State or Indian tribe. In California, there are nine Regional Water Quality Control Boards (Regional Board) that issue or deny certification for discharges to waters of the United States and waters of the State, including wetlands, within their geographical jurisdiction. The State Water Resources Control Board assumed this responsibility when a project has the potential to result in the discharge to waters within multiple Regional Boards.

State Regulations

Fish and Game Code

Fish and Game Code Sections 1600 et. seq. establishes a fee-based process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely impact fish and wildlife resources, or, when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

Fish and Game Code Section 1602 requires any person, state, or local governmental agency or public utility to notify the CDFW before beginning any activity that will do one or more of the following:

(1) substantially obstruct or divert the natural flow of a river, stream, or lake;
(2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or
(3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

Fish and Game Code Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State. CDFW's regulatory authority extends to include riparian habitat (including wetlands) supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. Generally, the CDFW takes jurisdiction to the top of bank of the stream or to the outer limit of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that will take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation. A Section 1602 Streambed Alteration Agreement would be required if impacts to identified CDFW jurisdictional areas occur.

Porter Cologne Act

The California *Porter-Cologne Water Quality Control Act* gives the State very broad authority to regulate waters of the State, which are defined as any surface water or groundwater, including saline waters. The Porter-Cologne Act has become an important tool in the post SWANCC and Rapanos regulatory environment, with respect to the state's authority over isolated and insignificant waters. Generally, any person proposing to discharge waste into a water body that could affect its water quality must file a Report of Waste Discharge in the event that there is no Section 404/401 nexus. Although "waste" is partially defined as any waste substance associated with human habitation, the Regional Board also interprets this to include fill discharged into water bodies.

ATTACHMENT 2

2020 CENTRAL PARK MASTER PLAN JURISDICTIONAL DELINEATION REPORT

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CENTRAL PARK MASTER PLAN UPDATE

CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CALIFORNIA

Delineation of State and Federal Jurisdictional Waters

Prepared For:

Tetra Tech, Inc.
17885 Von Karman Avenue, Suite 500
Irvine, California 92614
Contact: *John Gifford*

Prepared By:

ELMT Consulting, Inc.
2201 N. Grand Avenue #10098
Santa Ana, California 92711
Contact: *Thomas J. McGill, Ph.D.*
714.714.5050

January 2020
Updated September 2020

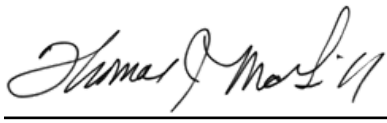
CENTRAL PARK MASTER PLAN UPDATE

CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CALIFORNIA

Delineation of State and Federal Jurisdictional Waters

The undersigned certify that the statements furnished in this report and exhibits present data and information required for this biological evaluation, and the facts, statements, and information presented is a complete and accurate account of the findings and conclusions to the best of our knowledge and beliefs.

Travis J. McGill
Biologist/Director



Thomas J. McGill, Ph.D.
Managing Director

January 2020
Updated September 2020

Executive Summary

ELMT Consulting (ELMT) has prepared this Delineation of State and Federal Jurisdictional Waters Report for the Central Park Master Plan Update (project site or site) located in the City of Rancho Cucamonga, San Bernardino County, California. The jurisdictional delineation documents the regulatory authority of the U.S. Army Corps of Engineers (Corps), the Regional Water Quality Control Board (Regional Board), and the California Department of Fish and Wildlife (CDFW) pursuant to Section 401 and 404 of the Federal Clean Water Act (CWA), the California Porter-Cologne Water Quality Control Act, and Sections 1600 *et. seq.* of the California Fish and Game Code.[1]

Three (3) drainage features (Drainages 1, 2, and 3) were observed within the boundaries of the project site. Drainage 1 flows east to west into the Deer Creek Channel. Deer Creek converges into Cucamonga Creek, which is tributary to Mill Creek and the Santa Ana River (Relatively Permeant Water), and ultimately to the Pacific Ocean (Traditional Navigable Water). Drainage 2 is located on the western half of the project site and flows north to south and converges with Drainage 1 near the southwest corner of the site. Drainage 3 flows in a north to south direction on the north eastern portion of the project site, before dissipating and transitioning to sheet flow north of the paved Central Park road. Historically, storm flows within Drainage 3 converged with the beginning of Drainage 1; however, it is assumed that storm water within this drainage feature infiltrates quickly due to the composition of loose, sandy, well drained soils found at the terminus of the drainage.

Even though the onsite drainage features have a connection to downstream waters, based on the Corps' April 2020 regulations (33 CFR 328.3(b)(9)), features that only contain water in direct response to rainfall (e.g., ephemeral features), groundwater, many ditches, prior converted cropland, and waste treatment systems are excluded from the definition of "waters of the United States." Specifically, the three onsite drainage features are ephemeral features that flow only in direct response to precipitation, and are not considered perennial or intermittent tributaries that contribute surface water flows to downstream waters. As a result, the onsite drainage features will not fall under the regulatory authority of the Corps.

However, Drainage 1, 2, and 3 will still be considered waters of the State under the regulatory authority of the Regional Board, and jurisdictional streambed by CDFW. Table ES-1, *Jurisdictional Areas*, identifies the onsite jurisdictional features including the total acreage of jurisdiction for each regulatory agency within the boundaries of the project site.

[1] The field surveys for this jurisdictional delineation were conducted on July 17 and October 8, 2019 pursuant to the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, Version 2.0* (Corps 2008); and *Minimum Standards for Acceptance of Aquatic Resources Delineation Reports* (Corps 2017); *The MESA Field Guide: Mapping Episodic Stream Activity* (CDFW 2014); and a *Review of Stream Processes and Forms in Dryland Watersheds* (CDFW 2010).

Table ES-1: Jurisdictional Areas

Jurisdictional Feature	Stream Flow	Cowardin Class	Class of Aquatic Resource	Regional Board Waters of the State		CDFW Streambed and Riparian Habitat	
				Acreage	Linear Feet	Acreage	Linear Feet
Drainage 1	Ephemeral	Riverine	Non-Section 10 Non-Wetland	0.115	2,215	0.571	2,215
Drainage 2	Ephemeral	Riverine	Non-Section 10 Non-Wetland	0.031	990	0.031	990
Drainage 3	Ephemeral	Riverine	Non-Section 10 Non-Wetland	0.013	380	0.013	380
			TOTALS	**0.159**	**3,585**	**0.615**	**3,585**

Any impacts to on-site jurisdictional areas will require the following regulatory approvals prior to project implementation: Regional Board Report of Waste Discharge permit, and CDFW Section 1602 Lake or Streambed Alteration Agreement. Refer to Sections 1-7 for a detailed analysis of site conditions and regulatory requirements.

Table of Contents

EXHIBITS

APPENDIX

Section 1 Introduction

This delineation has been prepared for the proposed project located on the Central Park Master Plan Update (project site or site) in order to document the jurisdictional authority of the U.S. Army Corps of Engineers (Corps), the Regional Water Quality Control Board (Regional Board), and the California Department of Fish and Wildlife (CDFW) pursuant to Section 401 and 404 of the Federal Clean Water Act (CWA), the California Porter-Cologne Water Quality Control Act and Sections 1600 *et seq.* of the California Fish and Game Code. The analysis presented in this report is supported by field surveys and verification of site conditions conducted on July 17, and October 8, 2019. The report updates the 2008 Jurisdictional Delineation report prepared by LSA for the Central Park Project.

This jurisdictional delineation explains the methodology undertaken by ELMT Consulting (ELMT) to define the regulatory authority of the aforementioned regulatory agencies and documents the findings made by ELMT. This report presents our best effort at documenting the jurisdictional boundaries using the most up-to-date regulations, written policy, and guidance from the regulatory agencies. Ultimately the regulatory agencies make the final determination of jurisdictional boundaries.

1.1 PROJECT LOCATION

The project site is generally located north of Interstate 10, south of State Route 210, west of Interstate 15, and east of State Route 83 in the City of Rancho Cucamonga, San Bernardino County, California (Exhibit 1, *Regional Vicinity*). The project site is depicted on the Guasti quadrangle of the United States Geological Survey's (USGS) 7.5-minute topographic map series in Section 36, Township 1 North, Range 7 West (Exhibit 2, *Site Vicinity*). Specifically, the project site located in Central Park, which is located at the northwest corner of the intersection of Baseline Road and Milliken Avenue. The project site is bordered to the north by the Pacific Electric Trail, to the east by the currently developed portion of Central Park, to the south by Baseline Road, and to the west by the Deer Creek Channel (Exhibit 3, *Project Site*).

1.2 PROJECT DESCRIPTION

Approved in 1987, the original Central Park Master Plan integrated the cultural and sports-related needs of the community, as well as the need for a large open park setting. Negative economic conditions delayed development of Central Park until 2002 when funds were received for the development of approximately thirty acres of the eastern third of Central Park. Development included the James L. Brulte Senior Center, Gold S. Lewis Community Center, courtyard spaces, a playground, landscaped walking trails, and associated parking. Current uses for the developed portion of Central Park include rental facilities, classroom facilities, social activities, and outdoor recreation.

In 2017 the Rancho Cucamonga City Council approved efforts for a Central Park Master Plan Update, resulting in the Central Park Master Plan Update reVISION. The Central Park Master Plan Update reVISION is a comprehensive planning document which defines the development of the remaining, undeveloped land located west of the existing Senior and Community Centers at Central Park. It identifies smaller (1.6- to 11-acre), buildable sections, so that when funding becomes available, park development could continue within the framework of a comprehensive community inspired vision. The Project is

composed of recreation areas and elements that relate to the existing open drainage channel spine and is anchored by the Senior and Community Centers to the east and the proposed Recreation Pool, Multi-Purpose Facility, and Tennis Courts to the west. The park will provide a variety of both active and passive zones and uses for groups of all ages. The Universal Accessible Playground will provide access and opportunity for people of all ages and abilities to promote play, physical activity, sociability, and learning. The Adventure Area will promote a unique outdoor experience for personal physical development, leadership, and team building. The park also features the "Great Lawn", Viticulture Pavilion, a flexible park area for large community event gatherings and celebrations. The smaller parcel sizes will allow the City flexibility to develop portions of the park as funds become available.

CENTRAL PARK MASTER PLAN UPDATE
DELINEATION OF STATE AND FEDERAL JURISDICTIONAL WATERS

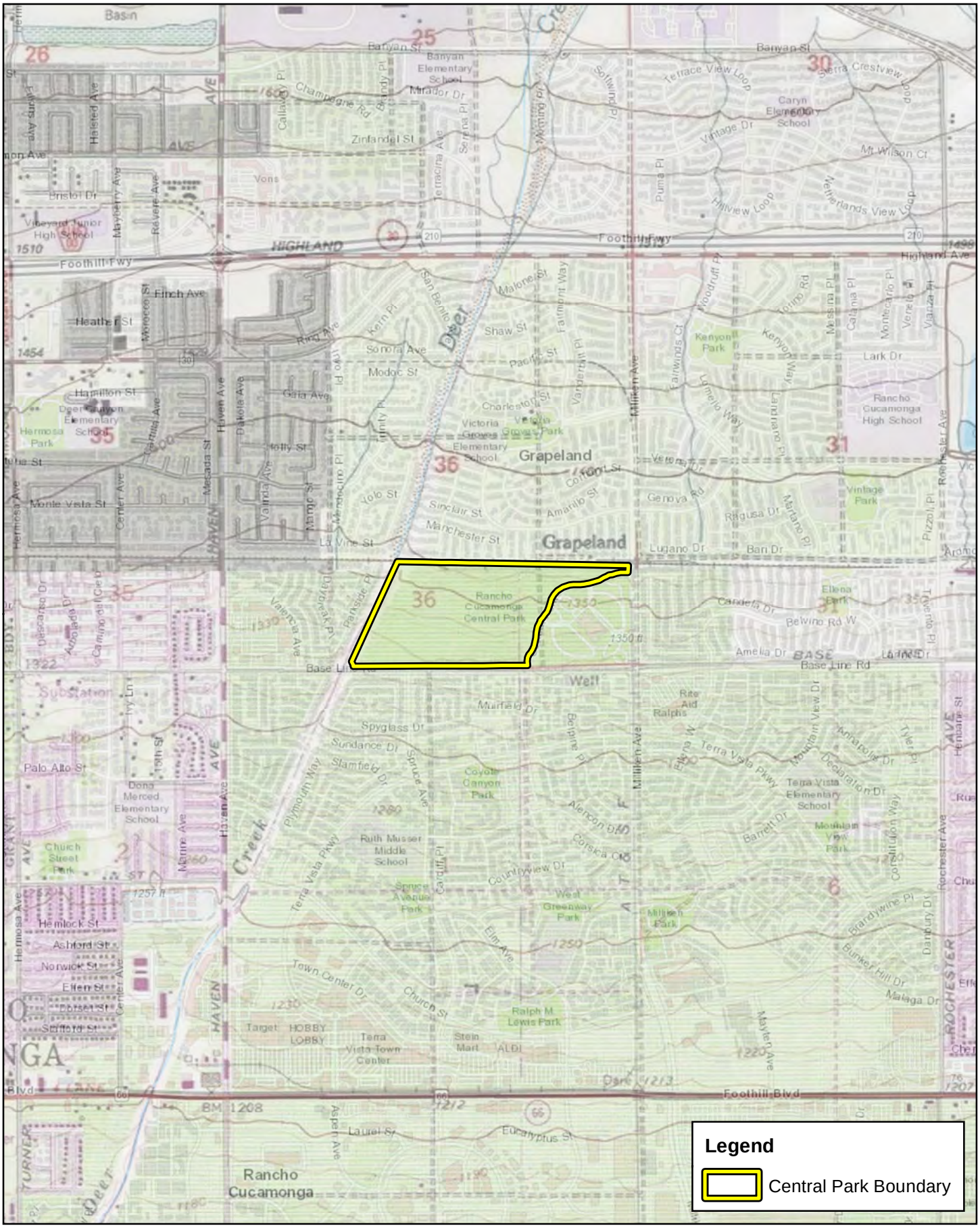
ELMT CONSULTING

0 5 10 20 Miles

Source: Federal Highway Administration, US Department of Transportation

Regional Vicinity

Exhibit 1



CENTRAL PARK MASTER PLAN UPDATE
DELINEATION OF STATE AND FEDERAL JURISDICTIONAL WATERS

Site Vicinity

ELMT CONSULTING

Source: USA Topographic Map, San Bernardino County

Exhibit 2

CENTRAL PARK MASTER PLAN UPDATE
DELINEATION OF STATE AND FEDERAL JURISDICTIONAL WATERS

Project Site

ELMT CONSULTING

0 250 500 1,000 Feet

Source: ESRI Aerial Imagery, World Transportation, San Bernardino County

Exhibit 3

Section 2 Regulations

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Division regulates activities pursuant to Section 404 of the CWA, Section 10 of the Rivers and Harbors Act, and Section 103 of the Marine Protection, Research, and Sanctuaries Act. The Regional Board regulates activities pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act and the CDFW regulates activities under Sections 1600 *et seq*. of the California Fish and Game Code.

2.1 U.S. ARMY CORPS OF ENGINEERS

Since 1972, the Corps and U.S. Environmental Protection Agency (EPA) have jointly regulated the discharge of dredged or fill material into waters of the United States, including wetlands, pursuant to Section 404 of the CWA. The Corps and EPA define "fill material" to include any "material placed in waters of the United States where the material has the effect of: (i) replacing any portion of a water of the United States with dry land; or (ii) changing the bottom elevation of any portion of the waters of the United States." Examples include, but are not limited to, sand, rock, clay, construction debris, wood chips, and "materials used to create any structure or infrastructure in the waters of the United States."

On April 21, 2020, the Environmental Protected Agency and Corps published a final rule defining the scope of waters subject to federal regulation under the Clean Water Act ("Navigable Waters Protection Rule"). The rule codifies the long-standing exclusion of "water-filled depressions constructed or excavated upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel." (33 CFR 328.3(b)(9); *see also* 85 FR 22252, 22323 (Apr. 21, 2020).)

2.2 REGIONAL WATER QUALITY CONTROL BOARD

Pursuant to Section 401 of the CWA, any applicant for a federal license or permit to conduct any activity which may result in any discharge to waters of the United States must provide certification from the State or Indian tribe in which the discharge originates. This certification provides for the protection of the physical, chemical, and biological integrity of waters, addresses impacts to water quality that may result from issuance of federal permits and helps insure that federal actions will not violate water quality standards of the State or Indian tribe. In California, there are nine Regional Boards that issue or deny certification for discharges to waters of the United States and waters of the State, including wetlands, within their geographical jurisdiction. The State Water Resources Control Board (SWRCB) assumes this responsibility when a project has the potential to result in the discharge to waters within multiple Regional Boards.

Additionally, the California Porter-Cologne Water Quality Control Act gives the State very broad authority to regulate waters of the State, which are defined as any surface water or groundwater, including saline waters. The Porter-Cologne Water Quality Control Act has become an important tool post *Solid Waste*

Agency of Northern Cook County vs. United States Corps of Engineers[2] (SWANCC) and *Rapanos v. United States*[3] (Rapanos) court cases with respect to the State's regulatory authority over isolated and insignificant waters. Generally, any applicant proposing to discharge waste into a water body must file a Report of Waste Discharge in the event that there is no Section 404/401 nexus. Although "waste" is partially defined as any waste substance associated with human habitation, the Regional Board also interprets this to include discharge of dredged and fill material into water bodies.

2.3 CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

Sections 1600 *et seq.* of the California Fish and Game Code establishes a fee-based process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely impact fish and wildlife resources, or, when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided. Pursuant to Section 1602 of the California Fish and Game Code, a notification must be submitted to the CDFW for any activity that will divert or obstruct the natural flow or alter the bed, channel, or bank (which may include associated biological resources) of a river or stream or use material from a streambed. This includes activities taking place within rivers or streams that flow perennially or episodically and that are defined by the area in which surface water currently flows, or has flowed, over a given course during the historic hydrologic regime, and where the width of its course can reasonably be identified by physical and biological indicators.

[2] Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers, 531 U.S. 159 (2001)
[3] Rapanos v. United States, 547 U.S. 715 (2006)

Section 3 Methodology

The analysis presented in this report is supported by field surveys and verification of site conditions conducted on July 17, and October 8, 2019. ELMT conducted a field delineation to determine the jurisdictional limits of "waters of the State" and jurisdictianl streambed (including potential wetlands), located within the boundaries of the project site. While in the field, jurisdictional features were recorded on a aerial base map at a scale of 1" = 50' using topographic contours and visible landmarks as guidelines. Data points were obtained with a Garmin Map62 Global Positioning System to record and identify specific widths for ordinary high water mark (OHWM) indicators and the locations of photographs, soil pits, and other pertinent jurisdictional features, if present. This data was then transferred as a .shp file and added to the Project's jurisdictional exhibits. The jurisdictional exhibits were prepared using ESRI ArcInfo Version 10 software.

3.1 WATERS OF THE UNITED STATES

In the absence of adjacent wetlands, the limits of the Corps jurisdiction in non-tidal waters extend to the OHWM, which is defined as "*. . . that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.*"[4] Indicators of an OHWM are defined in *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (Corps 2008). An OHWM can be determined by the observation of a natural line impressed on the bank; shelving; changes in the character of the soil; destruction of terrestrial vegetation; presence of litter and debris; wracking; vegetation matted down, bent, or absent; sediment sorting; leaf litter disturbed or washed away; scour; deposition; multiple observed flow events; bed and banks; water staining; and/or change in plant community.

Pursuant to the Corps Wetland Delineation Manual (Corps 1987), the identification of wetlands is based on a three-parameter approach involving indicators of hydrophytic vegetation, hydric soils, and wetland hydrology. In order to qualify as a wetland, a feature must exhibit at least minimal characteristics within each of these three parameters. It should also be noted that both the Regional Board and CDFW follow the methods utilized by the Corps to identify wetlands. For this project location, Corps jurisdictional wetlands are delineated using the methods outlined in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, Version 2.0* (Corps 2008).

3.2 WATERS OF THE STATE

3.2.1 REGIONAL WATER QUALITY CONTROL BOARD

The California *Porter-Cologne Water Quality Control Act* gives the Regional Board very broad authority to regulate waters of the State, which are defined as any surface water or groundwater, including saline

[4] CWA regulations 33 CFR §328.3(e).

waters. The Regional Board shares the Corps' methodology for delineating the limits of jurisdiction based on the identification of OHWM indicators and utilizing the three parameter approach for wetlands.

3.2.2 CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

Sections 1600 *et seq*. of the California Fish and Game Code applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State. Generally, the CDFW's jurisdictional limit is not defined by a specific flow event, nor by the presence of OHWM indicators or the path of surface water as this path might vary seasonally. Instead, CDFW's jurisdictional limit is based on the topography or elevation of land that confines surface water to a definite course when the surface water rises to its highest point. Further, the CDFW's jurisdictional limit extends to include any habitat (e.g. riparian), including wetlands and vernal pools, supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. For this project location, CDFW jurisdictional limits were delineated using the methods outlined in the *MESA Field Guide* (Brady, III and Vyverberg 2013) and *A Review of Stream Processes and Forms in Dryland Watersheds* (Vyverberg 2010), which were developed to provide guidance on the methods utilized to describe and delineate episodic streams within the inland deserts region of southern California.

Section 4 Literature Review

ELMT conducted a thorough review of relevant literature and materials to preliminarily identify areas that may fall under the jurisdiction of the regulatory agencies. A summary of materials utilized during ELMT's literature review is provided below and in Appendix A. In addition, refer to Section 8 for a complete list of references used throughout the course of this delineation.

4.1 WATERSHED REVIEW

The project site is located within the Santa Ana River Watershed (HUC 18070203). The Santa Ana River watershed is located in southern California, south and east of the City of Los Angeles. The watershed includes much of Orange County, the northwestern corner of Riverside County, the southwestern corner of San Bernardino County, and a small portion of Los Angeles County. The watershed is bounded on the south by the Santa Margarita watershed, on the east by the Salton Sea and Southern Mojave watersheds, and on the north/west by the Mojave and San Gabriel watersheds. The watershed is approximately 2,800 square miles in area.

The Santa Ana River Watershed is located in the Peninsular Ranges and Transverse Ranges Geomorphic Provinces of Southern California (California Geological Survey Note 36). The highest elevations (upper reaches) of the watershed occur in the San Bernardino Mountains, eastern San Gabriel Mountains, and San Jacinto Mountains. Further downstream, the Santa Ana Mountains and the Chino Hills form a topographic high before the river flows into the Coastal Plain (in Orange County) and into the Pacific Ocean. Primary slope direction is northeast to southwest, with secondary slopes controlled by local topography.

This watershed is in an arid region, and therefore has little natural perennial surface water. Surface waters start in the upper erosion zone of the watershed, primarily in the San Bernardino and San Gabriel Mountains. This upper zone has the highest gradient and soils/geology that do not allow large quantities of percolation of surface water into the ground. Flows consist mainly of snowmelt and storm runoff from the lightly developed San Bernardino National Forest; this water is generally high quality at this point. In this zone, the Santa Ana River is generally confined in its lateral movement, contained by the slope in the mountainous regions. In the upper valley, flows from the Seven Oaks Dam to the City of San Bernardino consist mainly of storm flows, flows from the San Timoteo Creek, and groundwater that is rising due to local geological conditions. From the City of San Bernardino to the City of Riverside, the river flows perennially, and it includes treated discharges from wastewater treatment plants. From the City of Riverside to the recharge basins below Imperial Highway, river flow consists of highly treated wastewater discharges, urban runoff, irrigation runoff, and groundwater forced to the surface by shallow/rising bedrock. Near Corona, the river cuts through the Santa Ana Mountains and the Puente-Chino Hills. The river then flows into the Orange County Coastal Plain; the channel lessens and the gradient decreases. In a natural environment, a river in this area would have a much wider channel, increased meandering, and increased sediment build-up. However, much of the Santa Ana River channel in this area has been contained in concrete-lined channels, which modifies the flow regime and sediment deposition environment.

4.2 LOCAL CLIMATE

San Bernardino County is characterized by cool winter temperatures and warm summer temperatures, with its rainfall occurring almost entirely in the winter. Relative to other areas in Southern California, winters are colder with chilly to cold morning temperatures common. Climatological data obtained for the City of Rancho Cucamonga indicates the annual precipitation averages 16.8 inches per year. Almost all of the precipitation occurs in the months between December and March, with hardly any occurring in the months between May and October. The wettest month is January, with a monthly average total precipitation of 3.50 inches. The average maximum and minimum temperatures for the region are 78.4- and 52.5-degrees Fahrenheit (F) respectively with July (monthly average 93.7° F) being the hottest month and December and January (monthly average 41.4° F) being the coldest. The temperature during the site visits were in the high-80s to low-90s° F with no cloud cover overhead and calm winds.

4.3 USGS TOPOGRAPHIC QUADRANGLE

The USGS 7.5 Minute Series Topographic Quadrangle maps show geological formations and their characteristics, describing the physical setting of an area through contour lines and major surface features including lakes, rivers, streams, buildings, landmarks, and other factors that may fall under an agency's jurisdiction. Additionally, the maps depict topography through color and contour lines, which are helpful in determining elevations and latitude and longitude within the project site.

The project site is located within the Guasti quadrangle of the United States Geological Survey's (USGS) 7.5-minute topographic map series in Section 36, Township 1 North, Range 7 West. According to the topographic map, the project site consists entirely of vacant/undeveloped land with Deer Creek along the western boundary of the project site.

Onsite surface elevation ranges from approximately 1,324 to 1,372 feet above mean sea level and generally slopes from north to south. The proposed project site is relatively flat with no areas of significant topographic relief, with the exception of a drainage feature that flows from the northeast to the southwest along the southern portion of the site that has created a swale with sloped sides.

4.4 AERIAL PHOTOGRAPHS

Prior to conducting the field delineation, ELMT reviewed current and historical aerial photographs (1994-2018) of the project as available from Google Earth Pro Imaging. Aerial photographs can be useful during the delineation process, as they often indicate the presence of drainage features and riverine habitat within the boundaries of the project site, if any.

The greater Central Park property is located in an urbanized area and is surrounded entirely by existing residential development. The project site is located on the remaining undeveloped portion (western area) of the Central Park property and is immediately bordered to the east by the developed area of Central Park. The development began in 2003 with grading and construction in the majority of the eastern and southern portions of the property. The majority of the eastern third of the property was developed into the James L. Brulte Senior Center and Goldy S. Lewis Community Center with associated structures including a playground, classrooms, and parking areas. The middle of the southern section was utilized as a staging

area for early development and continues to host equipment and machinery that will be used in further development.

The project site consists of undeveloped land that has been subjected to a variety of direct and indirect human-related disturbances from historical agricultural activities, extensive grading activities, adjacent development, weed abatement, and storage activities. The earliest available aerials indicate that agricultural activities occurred onsite from 1938 and ceased between 1980 and 1994 when all of the surrounding areas were developed. In the decades since active agricultural activities (i.e., grape vineyards) ceased, native vegetation communities, typical of disturbed areas, have reestablished onsite that are subject to routine weed abatement activities. Refer to Appendix A, *Site Photographs*, for representative site photographs.

During the development of the eastern third of Central Park, an earthen storm drain was installed that extends from northeast to southwest along the southern portion of the site. The channel was constructed to accommodate runoff associated with initial developments and continues to aid in the flow of residential runoff from the north to Deer Creek Channel west of the project site. While this development was completed in the mid 2000's, the facilities on-site have continued to provide ongoing anthropogenic influences on the remainder of the property by encouraging public access to the remaining open spaces. Walking and cycling trails occur on the western and northern boundaries and connect the surrounding residential development to the existing Central Park facilities.

4.5 SOILS

Soils within and adjacent to the Project site were researched prior to the field delineation using the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Custom Soil Resource Report for Riverside County. Soil surveys furnish soil maps and interpretations originally needed in providing technical assistance to farmers and ranchers; in guiding other decisions about soil selection, use, and management; and in planning, research, and disseminating the results of the research. In addition, soil surveys are now heavily utilized in order to obtain soil information with respect to potential wetland environments and jurisdictional areas (i.e., soil characteristics, drainage, and color).

According to the Custom Soil Resource Report, the project site is underlain by the following soil units: Tujunga loamy sand (0 to 5 percent slopes) and Tujunga gravelly loamy sand (0 to 9 percent slopes) (Exhibit 4, *Soils*). Soils onsite have been mechanically disturbed from historic land uses (i.e., agricultural, clearing/grading, weed abatement, and storage activities).

4.6 HYDRIC SOILS LIST OF CALIFORNIA

ELMT reviewed the USDA NRCS Hydric Soils List of California in an effort to verify whether on-site soils are considered to be hydric[5]. It should be noted that lists of hydric soils along with soil survey maps provide off-site ancillary tools to assist in wetland determinations, but they are not a substitute for field investigations. The presence of hydric soils is initially investigated by comparing the mapped soil series for

[5] A hydric soil is a soil that formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions in the upper part.

the site to the County list of hydric soils. According to the hydric soils list, Tujunga gravelly loamy sand (0 to 9 percent slopes) is listed as hydric in San Bernardino County Southwestern Part.

4.7 NATIONAL WETLANDS INVENTORY

ELMT reviewed the U.S. Fish and Wildlife Service's (USFWS) National Wetland Inventory maps. The NWI map depicts a riverine resource bordering the western boundary of the project site in association with Deer Creek Channel. No other resources have been mapped on the project site or in the immediate vicinity of the project site. Refer to Appendix A, *Documentation*.

4.8 FLOOD ZONE

ELMT searched the Federal Emergency Management Act website for flood data for the project site. Based on Flood Insurance Rate Map Nos. 06071C8630J and 06071C8635J the project site is located within Zone X – Area of Minimal Flood Hazard. Deer Creek, along the western boundary of the site, is channelized in a concrete lined open box channel, which is located within Zone A, a special flood hazard area without base flood elevation, and with 1 percent annual chance flood discharge contained in structure. Refer to Appendix A, *Documentation*.

ELMT CONSULTING

0 250 500 1,000 Feet

Source: ESRI Aerial Imagery, World Transportation, San Bernardino County

CENTRAL PARK MASTER PLAN UPDATE
DELINEATION OF STATE AND FEDERAL JURISDICTIONAL WATERS

Soils

Exhibit 4

Section 5 Site Conditions

ELMT biologists Thomas J. McGill, Ph.D., Travis J. McGill, and Jacob H. Lloyd Davies conducted a field delineation on July 17, and October 8, 2019 to verify existing site conditions and document the extent of potential jurisdictional areas within the boundaries of the project site. The temperature during the site visits were in the high-80s to low-90s° F with no cloud cover overhead and calm winds. ELMT field staff encountered no limitations during the field delineation. Refer to Appendix B for representative site photographs.

5.1 ON-SITE FEATURES

5.1.1 DRAINAGE FEATURES

Three (3) ephemeral drainage features (Drainages 1, 2, and 3) were observed within the boundaries of the project site during the 2019 field delineation. Descriptions of the onsite drainage features are provided below. Refer to Appendix B, *Site Photographs*, for representative photographs of each drainage feature.

Drainage 1

Drainage 1 is an unnamed, ephemeral drainage that originates at a 48 inch culvert in the middle of the south eastern portion of the site and flows east to west for approximately 2,215 feet before flowing into the Deer Creek Channel via a 60 inch culvert on the southwest corner of the site under Baseline Road. Deer Creek converges into Cucamonga Creek, which is tributary to Mill Creek and the Santa Ana River (Relatively Permeant Water), and ultimately to the Pacific Ocean (Traditional Navigable Water). The onsite drainage feature will fall under the regulatory authority of the Regional Board, and the CDFW.

Drainage 1 is primarily fed by nuisance flows from adjacent residential and park development and direct precipitation. The western portion of the drainage is engineered and lined with imported cobble and river-rock at where the drainage outlets from the concrete culvert, while the eastern portion of the drainage has a natural gravelly/sandy bottom. The eastern half of the drainage is small and well-defined, with vegetation consisting primarily of upland sage/scrub species: California buckwheat (*Eriogonum fasiculatum,* UPL), California sagebrush (*Artemisia califomica,* UPL), and brome (*Bromus* spp., UPL). Other plant species found on the banks of the drainage feature include scalebroom (*Lepidospartum squamatum;* FACU), *mulefat* (*Baccharis salicifolia,* FACW), and horseweed (*Erigeron bonariensis*; FACU)

No surface water was present within the drainage during the site visit; however, evidence of an OHWM was observed via scour, changes in substrate, shelving, and lack of vegetation. The OWHM ranged from approximately 1-12 feet in width throughout the length of the drainage. Within Drainage 1, approximately 0.115 acre of jurisdictional, non-wetland waters of the State and 0.571 acre of CDFW jurisdictional streambed were mapped as determined from width measurements taken in the field.

It should be noted that a soil pit was taken at the beginning of Drainage 1 during 2008 delineation where nuisance runoff collects at the mouth of the culvert. Temporary ponding appears to occur in the area of the storm drain outlet, with vegetation dominated primarily by *mulefat* (FACW). The soil pit within this

drainage, indicated that no hydric soils were present. The majority of Drainage 1 does not support a dominance of hydrophytic vegetation that would meet the hydrophytic parameter for a Corps wetland.

Drainage 2

Drainage 2 is an unnamed ephemeral drainage that flows in a north to south direction on the north western portion of the project site, extending for approximately 990 feet before converging with Drainage 1 near the southwest corner of the project site. Drainage 2 originates at a 24-inch storm drain outlet on the northern boundary of the project site where it receives water during storm events from nuisance flows from adjacent residential development and the Pacific Electric Bike Trail and direct precipitation. Substrate within the drainage primarily consists of sand, gravel, and cobble with native upland plant species along its banks. California buckwheat and California sagebush are the dominant plant species found in association with this drainage feature. Other common plant species observed on the banks of this drainage feature included white sage (*Saliva apiana*; UPL), scalebroom (FACU), short podded mustard (*Hirschfeldia incana*; UPL), prickly pear (*Opuntia littoralis*; UPL), and horseweed (FACU).

No surface water was present within the drainage during the site visit; however, evidence of an OHWM was observed via scour, changes in substrate, and lack of vegetation. The OWHM ranged from approximately 1-3 feet in width throughout the length of the drainage. Due to the lack of riparian vegetation, and defined bed and bank, CDFW jurisdiction was synonymous with that of the Corps.

Drainage 2 does not meet wetland requirements; however, Drainage 2 is still considered jurisdictional, non-wetland waters of the Sate the Regional Board and jurisdictional streambed by CDFW due to its historic connectivity to Drainage 1. Within Drainage 2, approximately 0.031 acre of jurisdictional, non-wetland waters of the State and streambed were mapped as determined from width measurements taken in the field.

Drainage 3

Drainage 3 is an unnamed ephemeral drainage that flows in a north to south direction on the north eastern portion of the project site, extending for approximately 380 feet before dissipating and transitioning to sheet flow north of the paved Central Park road. Historically, storm flows within Drainage 3 converged with the beginning of Drainage 1; however, it is assumed that storm water within this drainage feature infiltrates quickly due to the composition of loose, sandy, well drained soils found at the terminus of the drainage. Flows from the terminus of Drainage 3 have the potential to reach Drainage 1 during large storm events (greater than a 10-year storm event), approximately 475 feet to the southwest, but are not frequent enough to create an OHWM or well-defined streambed.

Drainage 3 originates at a 24-inch storm drain outlet on the northern boundary of the project site where it receives water during storm events from nuisance flows from adjacent residential development and the Pacific Electric Bike Trail and direct precipitation. Substrate within the drainage primarily consists of sand, gravel, and cobble with native upland plant species along its banks. California buckwheat was the dominant plant species found in association with this drainage feature. No surface water was present within the drainage during the site visit; however, evidence of an OHWM was observed via scour, changes in substrate, and lack of vegetation. The OWHM ranged from approximately 1-3 feet in width throughout the length of the Drainage. Due to the lack of riparian vegetation, and defined bed and bank, CDFW jurisdiction was synonymous with that of the Regional Board.

Drainage 3 does not meet wetland requirements; however, Drainage 3 is still considered jurisdictional, non-wetland waters of the State under the Regional Board, and jurisdictional streambed by CDFW due to its historic connectivity to Drainage 1. Within Drainage 3, approximately 0.013 acre of jurisdictional, non-wetland waters of the State and streambed were mapped as determined from width measurements taken in the field.

5.1.2 WETLAND FEATURES

In order to qualify as a wetland, a feature must exhibit all three wetland parameters (i.e., vegetation, soils, and hydrology) described in the Corps Arid West Regional Supplement. Although evidence of hydrology (i.e., surface water) was present within portions of Drainages 1, 2, and 3 during the field surveys, these areas were primarily dominated by upland/facultative upland plant species. Only one area, within Drainage 1, at the beginning of the drainage near the existing storm drain outlet supported minimal hydrophytic vegetation consisting of mulefat. Mulefat has likely established from nuisance flows exiting the culvert. Further, it is assumed that water does not persist long enough on the project site to create hydric soil (anaerobic) conditions. LSA sampled one soil pit during the 2008 field delineation, at the culvert within Drainage 1. At the time of their survey, the area supported mulefat and arroyo willow (*Salix lasiolepis*). Based on the results of the soil pit, no hydric soils were present.

All drainage courses exhibited an OHWM consisting primarily of a scoured channel bed. Indicators of wetland hydrology were not observed. Based on the very limited extent of riparian vegetation (present at the storm drain outlet at the beginning of Drainage 1), it is concluded that all drainage courses are ephemeral and do not meet the Corps three-parameter definition required to qualify as jurisdictional wetlands.

5.2 PREVIOUS SURVEY RESULTS

The 2008 jurisdictional delineation report prepared by LSA documented five (5) ephemeral drainage features within the boundaries of the project site. However, during the 2019 delineation, only three (3) ephemeral drainage features were observed onsite. Drainage A in the 2008 report corresponds with Drainage 1 in this report, Drainage C in the 2008 report corresponds with Drainage B in this report, and Drainage D in the 2008 report corresponds with Drainage 3 in this report.

As described in the 2008 report by LSA, Drainage B and Drainage E were small ephemeral drainage features that were mapped extending for approximately 70 feet in length. Both of these features were not observed onsite during the 2019 field delineation as they were likely small erosional features that were incidentally removed by weed abatement activities over the past decade. As a result, Drainage B and Drainage E no longer occur onsite.

0 250 500 1,000 Feet

Source: ESRI Aerial Imagery, World Transportation, San Bernardino County

CENTRAL PARK MASTER PLAN UPDATE
DELINEATION OF STATE AND FEDERAL JURISDICTIONAL WATERS

Jurisdictional Areas

Exhibit 5

Section 6 Findings

This report presents ELMT's best effort at determining the extent of jurisdictional features using the most up-to-date regulations, written policy, and guidance from the regulatory agencies. Please refer to the following sections for a summary of jurisdictional areas within the project site and Table ES-1.

6.1 U.S. ARMY CORPS OF ENGINEERS DETERMINATION

6.1.1 WATERS OF THE UNITED STATES DETERMINATION

Based on the Corps' April 2020 regulations, the three onsite drainage features are ephemeral features that flow only in direct response to precipitation, and are not considered perennial or intermittent tributaries that contribute surface water flows to downstream waters. As a result, the onsite drainage features will not fall under the regulatory authority of the Corps.

6.1.2 WETLAND DETERMINATION

An area must exhibit all three wetland parameters described in the Corps Arid West Regional Supplement to be considered a jurisdictional wetland. Based on the results of the field delineation, it was determined that no areas within the project site met all three wetland parameters. Therefore, no jurisdictional wetland features exist within the project site.

6.2 REGIONAL WATER QUALITY CONTROL BOARD

The onsite drainage features exhibit characteristics consistent with the Regional Board's methodology and would be considered jurisdictional waters of the State. Based on the field delineation, approximately 0.159 acre (3,585 linear feet) of non-wetland waters of the State occur onsite. Refer to Exhibit 5, *Jurisdictional Areas*, for an illustration of Regional Board jurisdictional areas.

6.3 CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

The onsite drainage features exhibit characteristics consistent with CDFW's methodology and would be considered CDFW streambed. Based on the field delineation, approximately 0.615 acre (3,585 linear feet) of CDFW jurisdiction is located within boundaries of the Project site. Refer to Exhibit 5, *Jurisdictional Areas*, for an illustration of CDFW jurisdictional areas.

Section 7 Regulatory Approval Process

The following is a summary of the various permits, certifications, and agreements that may be necessary prior to construction and/or alteration within jurisdictional areas. Ultimately the regulatory agencies make the final determination of jurisdictional boundaries and permitting requirements.

7.1 REGIONAL WATER QUALITY CONTROL BOARD

In the absence of federal waters of the United States, the Regional Board regulates waters under the California Porter-Cologne Water Quality Control Act. Therefore, any impacts to onsite jurisdictional areas will require a Report of Waste Discharge permit from the Regional Board prior to project implementation. The application fee is based on the extent of project impacts and the permit will not be issued until all fees are paid to the Regional Board. It should also be noted that the Regional Board requires that California Environmental Quality Act (CEQA) compliance be obtained prior to issuance of the Report of Waste Discharge permit.

7.2 CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

Pursuant to Section 1602 of the California Fish and Game Code, the CDFW regulates any activity that will divert or obstruct the natural flow or alter the bed, channel, or bank (which may include associated biological resources) of a river or stream. Therefore, any impacts to the on-site jurisdictional areas will require a Section 1602 Streambed Alteration Agreement from the CDFW prior to project implementation. The notification fee is based on the term and cost of a project. The Section 1602 Streambed Alteration Agreement will not be issued until all fees are paid to the CDFW.

7.3 RECOMMENDATIONS

It is recommended that this delineation be forwarded to the regulatory agencies for their review and concurrence. The concurrence/receipt would solidify findings noted within this report.

Section 8 References

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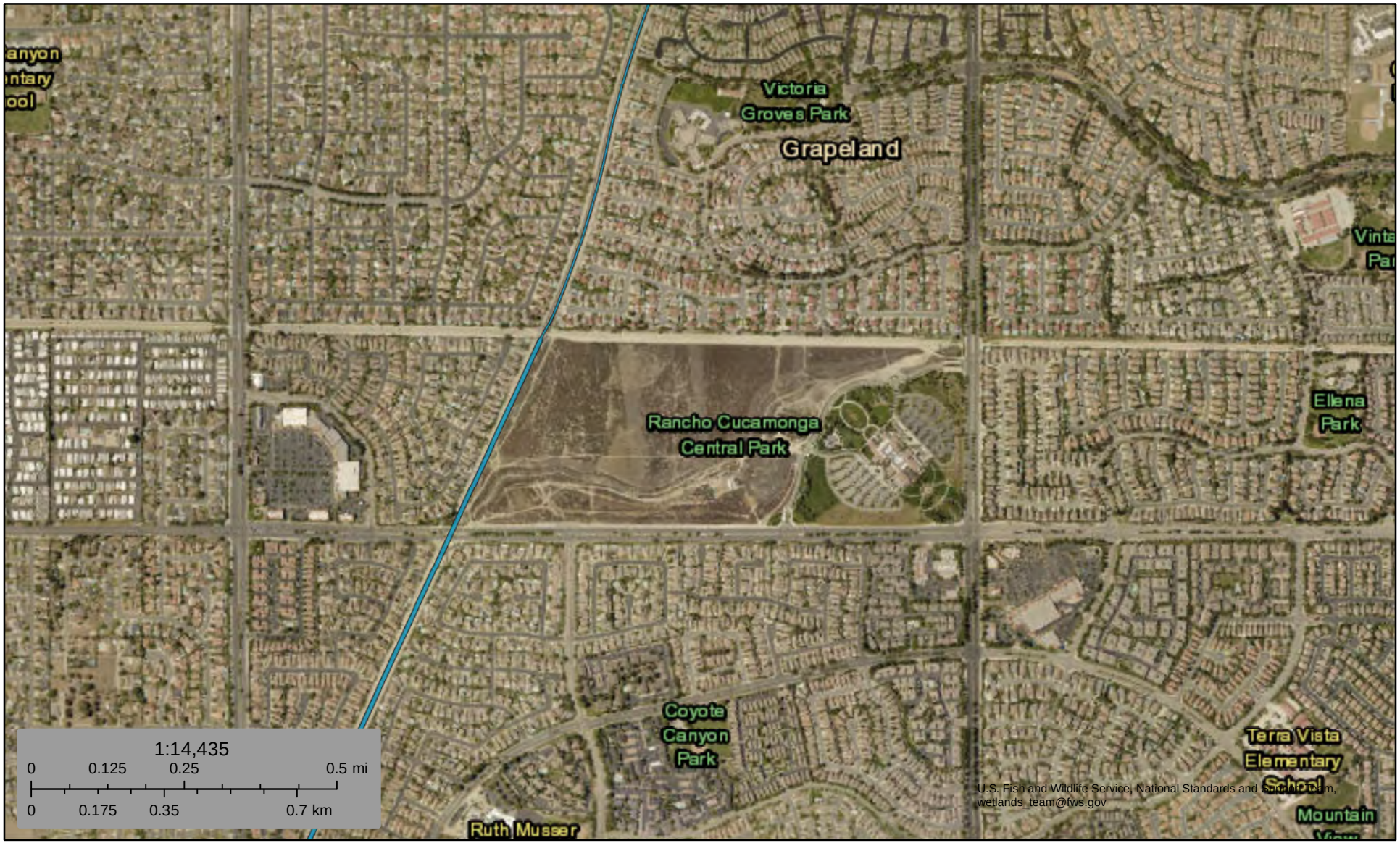
Appendix A Documentation

U.S. Fish and Wildlife Service
National Wetlands Inventory

Central Park Master Plan Update



January 22, 2020

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

National Flood Hazard Layer FIRMette

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN — Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 — Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

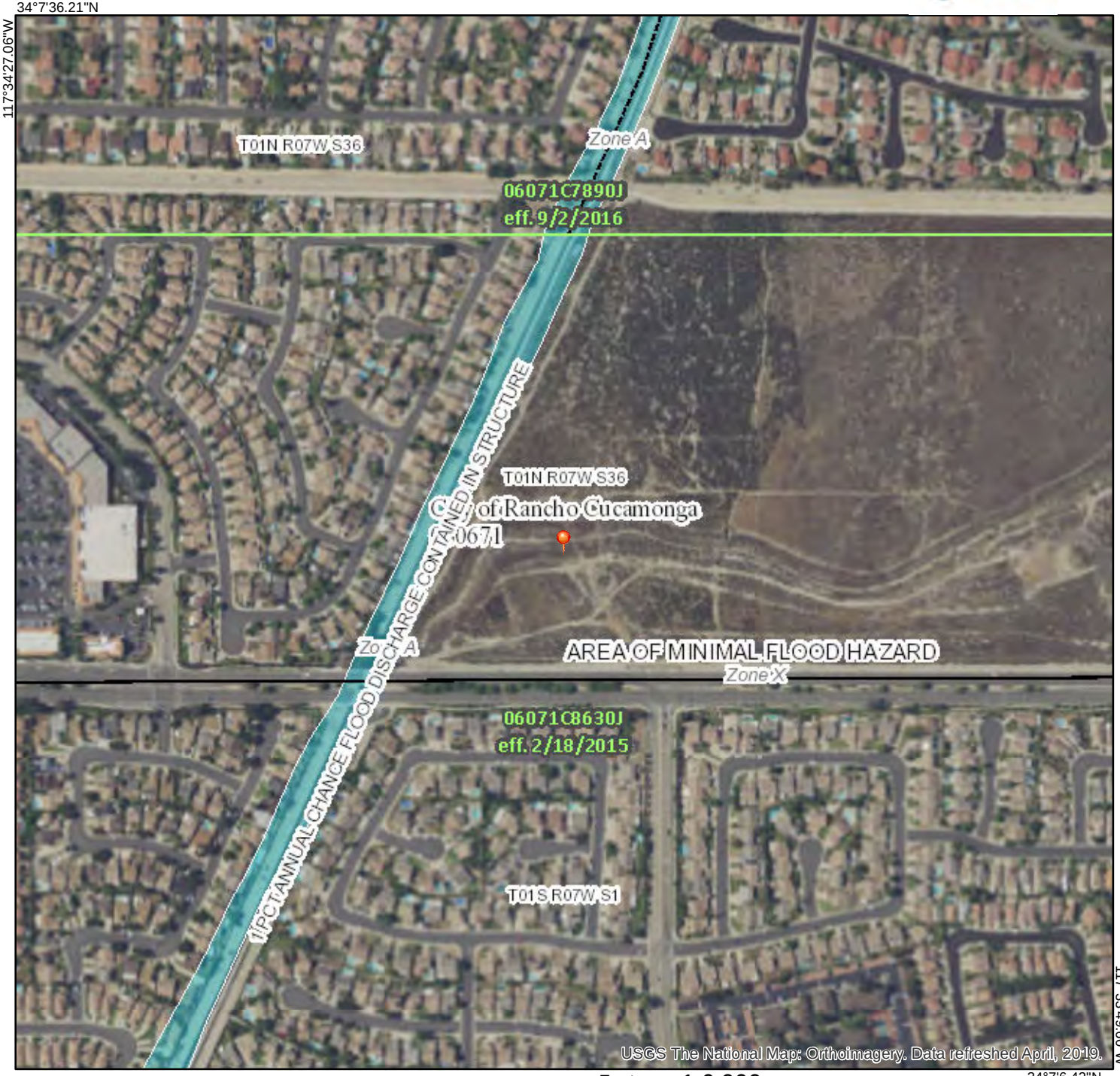
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 1/23/2020 at 3:10:06 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMette



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

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- With BFE or Depth *Zone AE, AO, AH, VE, AR*
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OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
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- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

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Appendix B Site Photographs

Photograph 1: Looking west at the beginning of Drainage 1.

Photograph 2: Looking west at the eastern portion of Drainage 1.

Photograph 3: View of western portion of Drainage 1.

Photograph 4: Western portion of Drainage 1 with imported cobble and river-rock.

Photograph 5: Looking at the portion of Drainage 1 that converts from the imported cobble to a gravelly/sandy bottom.

Photograph 6: Looking west at Drainage 1 from the middle of the feature.

Photograph 7: Western portion of Drainage 1.

Photograph 8: Looking south at the western portion of Drainage 1.

Photograph 9: View of the southwest portion of Drainage 1.

Photograph 10: Looking northeast at the southwest portion of Drainage 1.

Photograph 11: View of the of the terminus of Drainage 1 at the culvert on the southwest corner of the site.

Photograph 12: Looking south from the northern end of Drainage 2.

Photograph 13: Looking south at the northern portion of Drainage 2.

Photograph 14: View of the middle portion of Drainage 2.

Photograph 15: Looking north at the middle portion of Drainage 2.

Photograph 16: Looking south at the southern portion of Drainage 2.

Photograph 17: View of the southern portion of Drainage 2.

Photograph 18: Looking at Drainage 2 where it begins to slope down the bank of Drainage 1.

Photograph 19: View of Drainage 2 where it is more incised on the bank of Drainage 1.

Photograph 20: View of the southern terminus of Drainage 3 before it converges with Drainage 1.

Photograph 21: Looking north at the beginning of Drainage 3.

Photograph 22: Looking south at the northern portion of Drainage 3.

Photograph 23: Looking at the middle of Drainage 3 where it becomes more incised as it slopes down the hill on the site.

Photograph 24: Looking at the southern portion of Drainage 3.

Photograph 25: View of the southern terminus of Drainage 3 before it sheet flows.

Photograph 26: View of the terminus of Drainage 3.

Photograph 27: Looking west at the area where Drainage 3 sheet flows towards Drainage 1.

Appendix C Methodology

WATERS OF THE UNITED STATES

Since 1972, the Corps and EPA have jointly regulated the filling of waters of the United States, including wetlands, pursuant to Section 404 of the CWA. The Corps has regulatory authority over the discharge of dredged or fill material into the waters of the United States under Section 404 of the CWA. The Corps and EPA define "fill material" to include any "material placed in waters of the United States where the material has the effect of: (i) replacing any portion of a water of the United States with dry land; or (ii) changing the bottom elevation of any portion of the waters of the United States." Examples include, but are not limited to, the placement of sand, rock, clay, construction debris, wood chips, and "materials used to create any structure or infrastructure in the waters of the United States."

In April of 2020, the Corps and the EPA provided a new definition for *waters of the United States* [Federal Register, Vol. 85, No. 77 (April 21, 2020)] which encompass:

- The territorial seas and traditional navigable waters;
- Perennial and intermittent tributaries that contribute surface water flow to such waters;
- Certain lakes, ponds, and impoundments of jurisdictional waters; and
- Wetlands adjacent to other jurisdictional waters.

Additionally, the new definition identifies 12 categories of those waters and features that are excluded from the definition of ''waters of the United State, such as features that only contain water in direct response to rainfall (e.g., ephemeral features), groundwater, many ditches, prior converted cropland, and waste treatment systems. The final rule excludes from the definition of ''waters of the United States'' all waters or features not mentioned above. In addition to this general exclusion, the final rule specifically clarifies that waters of the United States do not include the following:

- Groundwater, including groundwater drained through subsurface drainage systems;
- Ephemeral features that flow only indirect response to precipitation, including ephemeral streams, swales, gullies, rills, and pools;
- Diffuse stormwater runoff and directional sheet flow over upland;
- Ditches that are not traditional navigable waters, tributaries, or that are not constructed in adjacent wetlands, subject to certain limitations;
- Prior converted cropland;
- Artificially irrigated areas that would revert to upland if artificial irrigation ceases;
- Artificial lakes and ponds that are not jurisdictional impoundments and that are constructed or excavated in upland or non-jurisdictional waters;

- Water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non jurisdictional waters for the purpose of obtaining fill, sand, or gravel;
- Stormwater control features constructed or excavated in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater runoff;
- Groundwater recharge, water reuse, and wastewater recycling structures constructed or excavated in upland or in non-jurisdictional waters; and
- Waste treatment systems.

WETLANDS

For this project location, Corps jurisdictional wetlands are delineated using the methods outlined in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, Version 2.0* (Corps 2008). This document is one of a series of Regional Supplements to the Corps Wetland Delineation Manual (Corps 1987). The identification of wetlands is based on a three-parameter approach involving indicators of hydrophytic vegetation, hydric soil, and wetland hydrology. In order to be considered a wetland, an area must exhibit at least minimal characteristics within these three (3) parameters. The Regional Supplement presents wetland indicators, delineation guidance, and other information that is specific to the Arid West Region. In the field, vegetation, soils, and evidence of hydrology are examined using the methodology listed below and documented on Corps wetland data sheets, when applicable. It should be noted that both the Regional Board and the CDFW jurisdictional wetlands encompass those of the Corps.

Vegetation

Nearly 5,000 plant types in the United States may occur in wetlands. These plants, often referred to as hydrophytic vegetation, are listed in regional publications by the U.S. Fish and Wildlife Service (USFWS). In general, hydrophytic vegetation is present when the plant community is dominated by species that can tolerate prolonged inundation or soil saturation during growing season. Hydrophytic vegetation decisions are based on the assemblage of plant species growing on a site, rather than the presence or absence of particular indicator species. Vegetation strata are sampled separately when evaluating indicators of hydrophytic vegetation. A stratum for sampling purposes is defined as having 5 percent or more total plant cover. The following vegetation strata are recommended for use across the Arid West:

- *Tree Stratum:* Consists of woody plants 3 inches or more in diameter at breast height (DBH), regardless of height;
- *Sapling/shrub stratum:* Consists of woody plants less than 3 inches DBH, regardless of height;
- *Herb stratum:* Consists of all herbaceous (non-woody) plants, including herbaceous vines, regardless of size; and,

- *Woody vines:* Consists of all woody vines, regardless of size.

The following indicator is applied per the test method below.[1] Hydrophytic vegetation is present if any of the indicators are satisfied.

Indicator 1 – Dominance Test

Cover of vegetation is estimated and is ranked according to their dominance. Species that contribute to a cumulative total of 50% of the total dominant coverage, plus any species that comprise at least 20% (also known as the "50/20 rule") of the total dominant coverage, are recorded on a wetland data sheet. Wetland indicator status in California (Region 0) is assigned to each species using the *National Wetland Plant List, version 2.4.0* (Corps 2012). If greater than 50% of the dominant species from all strata were Obligate, Facultative-wetland, or Facultative species, the criteria for wetland vegetation is considered to be met. Plant indicator status categories are described below:

- *Obligate Wetland (OBL):* Plants that almost always occur in wetlands;
- *Facultative Wetland (FACW):* Plants that usually occur in wetlands, but may occur in non-wetlands;
- *Facultative (FAC):* Plants that occur in wetlands and non-wetlands;
- *Facultative Upland (FACU):* Plants that usually occur in non-wetlands, but may occur in wetlands; and,
- *Obligate Upland (UPL):* Plants that almost never occur in wetlands.

Hydrology

Wetland hydrology indicators are presented in four (4) groups, which include:

Group A – Observation of Surface Water or Saturated Soils

Group A is based on the direct observation of surface water or groundwater during the site visit.

Group B – Evidence of Recent Inundation

Group B consists of evidence that the site is subject to flooding or ponding, although it may not be inundated currently. These indicators include water marks, drift deposits, sediment deposits, and similar features.

Group C – Evidence of Recent Soil Saturation

[1] Although the Dominance Test is utilized in the majority of wetland delineations, other indicator tests may be employed. If one indicator of hydric soil and one primary or two secondary indicators of wetland hydrology are present, then the Prevalence Test (Indicator 2) may be performed. If the plant community satisfies the Prevalence Test, then the vegetation is hydric. If the Prevalence Test fails, then the Morphological Adaptation Test may be performed, where the delineator analyzes the vegetation for potential morphological features.

Group C consists of indirect evidence that the soil was saturated recently. Some of these indicators, such as oxidized rhizospheres surrounding living roots and the presence of reduced iron or sulfur in the soil profile, indicate that the soil has been saturated for an extended period.

Group D – Evidence from Other Site Conditions or Data

Group D consists of vegetation and soil features that indicate contemporary rather than historical wet conditions, and include shallow aquitard and the FAC-neutral test.

If wetland vegetation criteria is met, the presence of wetland hydrology is evaluated at each transect by recording the extent of observed surface flows, depth of inundation, depth to saturated soils, and depth to free water in the soil test pits. The lateral extent of the hydrology indicators are used as a guide for locating soil pits for evaluation of hydric soils and jurisdictional areas. In portions of the stream where the flow is divided by multiple channels with intermediate sand bars, the entire area between the channels is considered within the OHWM and the wetland hydrology indicator is considered met for the entire area.

Soils

A hydric soil is a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper 16-20 inches.[2] The concept of hydric soils includes soils developed under sufficiently wet conditions to support the growth and regeneration of hydrophytic vegetation. Soils that are sufficiently wet because of artificial measures are included in the concept of hydric soils. It should also be noted that the limits of wetland hydrology indicators are used as a guide for locating soil pits. If any hydric soil features are located, progressive pits are dug moving laterally away from the active channel until hydric features are no longer present within the top 20 inches of the soil profile.

Once in the field, soil characteristics are verified by digging soil pits along each transect to an excavation depth of 20 inches; in areas of high sediment deposition, soil pit depth may be increased. Soil pit locations are usually placed within the drainage invert or within adjoining vegetation. At each soil pit, the soil texture and color are recorded by comparison with standard plates within a *Munsell Soil Chart* (2009). Munsell Soil Charts aid in designating color labels to soils, based by degrees of three simple variables – hue, value, and chroma. Any indicators of hydric soils, such as organic accumulation, iron reduction, translocation, and accumulation, and sulfate reduction, are also recorded.

Hydric soil indicators are present in three groups, which include:

All Soils

"All soils" refers to soils with any United States Department of Agriculture (USDA) soil texture. Hydric soil indicators within this group include histosol, histic epipedon, black histic, hydrogen sulfide, stratified layers, 1 cm muck, depleted below dark surface, and thick dark surface.

[2] According to the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, Version 2.0 (Corps 2008), growing season dates are determined through on-site observations of the following indicators of biological activity in a given year: (1) above-ground growth and development of vascular plants, and/or (2) soil temperature.

Sandy Soils

"Sandy soils" refers to soil materials with a USDA soil texture of loamy fine sand and coarser. Hydric soil indicators within this group include sandy mucky mineral, sandy gleyed matrix, sandy redox, and stripped matrix.

Loamy and Clayey Soils

"Loamy and clayey soils" refers to soil materials with a USDA soil texture of loamy very fine sand and finer. Hydric soil indicators within this group include loamy mucky mineral, loamy gleyed matrix, depleted matrix, redox dark surface, depleted dark surface, redox depressions, and vernal pools.

SWANCC WATERS

The term "isolated waters" is generally applied to waters/wetlands that are not connected by surface water to a river, lake, ocean, or other body of water. In the presence of isolated conditions, the Regional Board and CDFW take jurisdiction through the application of the OHWM/streambed and/or the 3 parameter wetland methodology utilized by the Corps.

RAPANOS WATERS

The Corps will assert jurisdiction over non-navigable, not relatively permanent tributaries and their adjacent wetlands where such tributaries and wetlands have a significant nexus to a Traditional Navigable Water (TNW). The flow characteristics and functions of the tributary itself, in combination with the functions performed by any wetlands adjacent to the tributary, determine if these waters/wetlands significantly affect the chemical, physical, and biological integrity of the TNWs. Factors considered in the significant nexus evaluation include:

(1) The consideration of hydrologic factors including, but not limited to, the following:

- volume, duration, and frequency of flow, including consideration of certain physical characteristics of the tributary
- proximity to the TNW
- size of the watershed average annual rainfall
- average annual winter snow pack

(2) The consideration of ecologic factors including, but not limited to, the following:

- the ability for tributaries to carry pollutants and flood waters to TNWs
- the ability of a tributary to provide aquatic habitat that supports a TNW
- the ability of wetlands to trap and filter pollutants or store flood waters
- maintenance of water quality

ATTACHMENT 3

2019 CENTRAL PARK AMPHITHEATER SITE HABITAT ASSESSMENT REPORT

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CENTRAL PARK AMPHITHEATER

CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CALIFORNIA

Habitat Assessment

Prepared For:

Tetra Tech, Inc.
17885 Von Karman Avenue, Suite 500
Irvine, California 92614
Contact: *John Gifford*

Prepared By:

ELMT Consulting, Inc.
2201 N. Grand Avenue #10098
Santa Ana, California 92711
Contact: *Thomas J. McGill, Ph.D.*
714.714-5050

August 2019

CENTRAL PARK AMPHITHEATER

CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CALIFORNIA

Habitat Assessment

The undersigned certify that the statements furnished in this report and exhibits present data and information required for this biological evaluation, and the facts, statements, and information presented is a complete and accurate account of the findings and conclusions to the best of our knowledge and beliefs.

Travis J. McGill
Biologist/Director

Thomas J. McGill, Ph.D.
Managing Director

August 2019

Table of Contents

EXHIBITS

APPENDIX

Section 1 Introduction

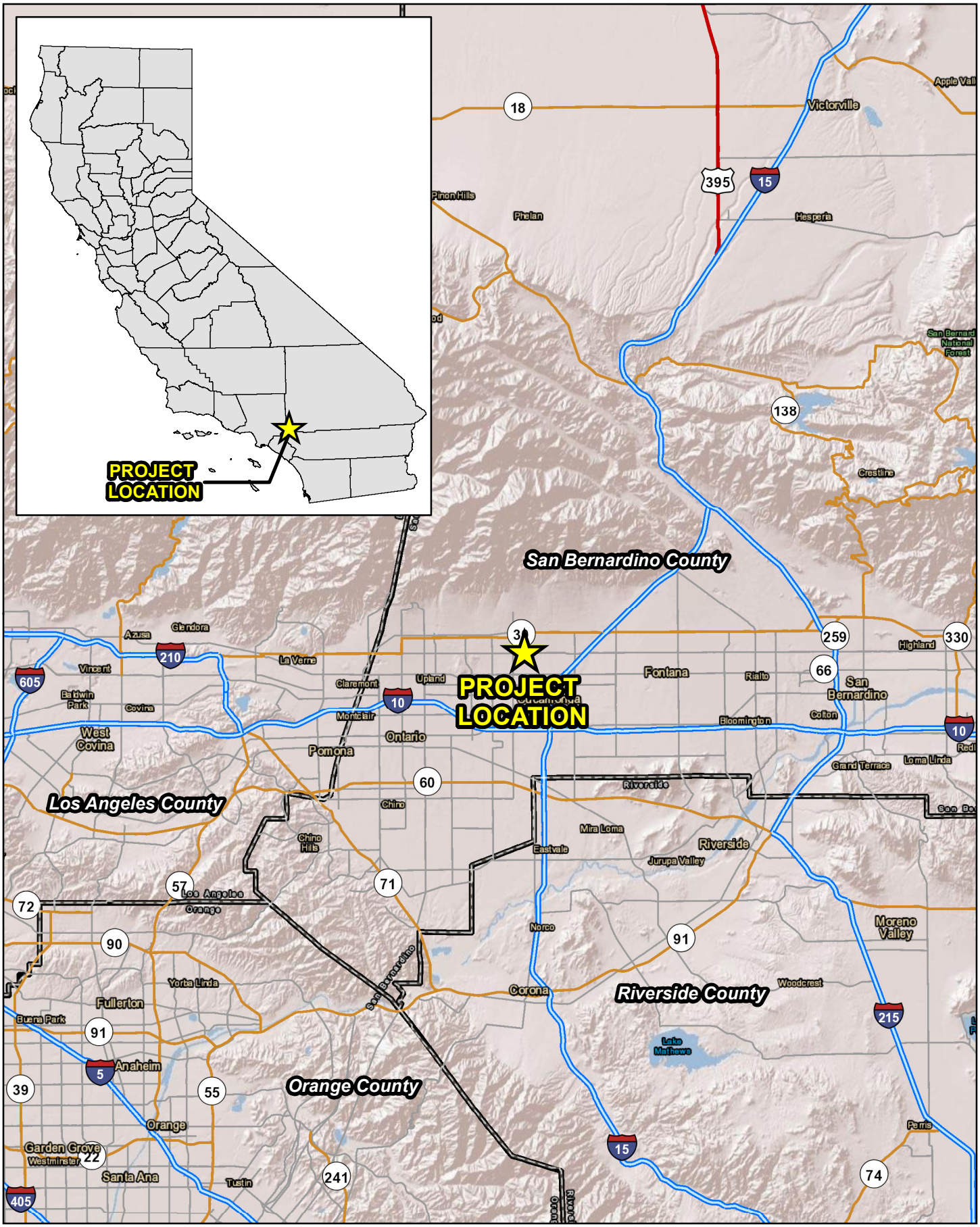
This report contains the findings of ELMT Consulting's (ELMT) Habitat Assessment for the Central Park Amphitheater (project site or site) located in the City of Rancho Cucamonga, San Bernardino County, California. ELMT Biologists Thomas J. McGill, Ph.D., Travis J. McGill, and Jacob H. Lloyd Davies inventoried and evaluated the condition of the habitat within the project site on July 17, 2019. The habitat assessment was conducted to characterize existing site conditions and to assess the probability of occurrence of special-status plant and wildlife species that could pose a constraint to project implementation. This report provides an in-depth assessment of the suitability of the on-site habitat to support burrowing owl (*Athene cunicularia*), California gnatcatcher (*Polioptila californica californica*), and San Bernardino kangaroo rat (*Dipodomys merriami parvus*), as well as other special-status plant and wildlife species identified by the California Natural Diversity Data Base (CNDDB) and other electronic databases as potentially occurring in the vicinity of the project site.

1.1 PROJECT LOCATION

The project site is generally located north of Interstate 10, south of State Route 210, west of Interstate 15, and west of state route 83 in the City of Rancho Cucamonga, San Bernardino County, California (Exhibit 1, *Regional Vicinity*). The project site is depicted on the Guasti quadrangle of the United States Geological Survey's (USGS) 7.5-minute topographic map series in Section 36, Township 1 North, Range 7 West (Exhibit 2, *Site Vicinity*). Specifically, the project site located in the northwest corner of the intersection of Baseline Road and Central Park, which is located on the southeast corner of the remaining vacant property bordered to the north by the Pacific Electric Trail, to the east by Milliken Avenue, to the south by Baseline Road, and to the west by the Deer Creek Channel (Exhibit 1, *Project Site*).

1.2 PROJECT DESCRIPTION

The project proposes to initiate Phase II construction of the Rancho Cucamonga Central Park Master Plan and erect an amphitheater in the southeast corner of the approximately 70 remaining undeveloped acres of the 103.4-acre City-owned property. Refer to Appendix A, *Central Park Phasing Plan – Amphitheater.*



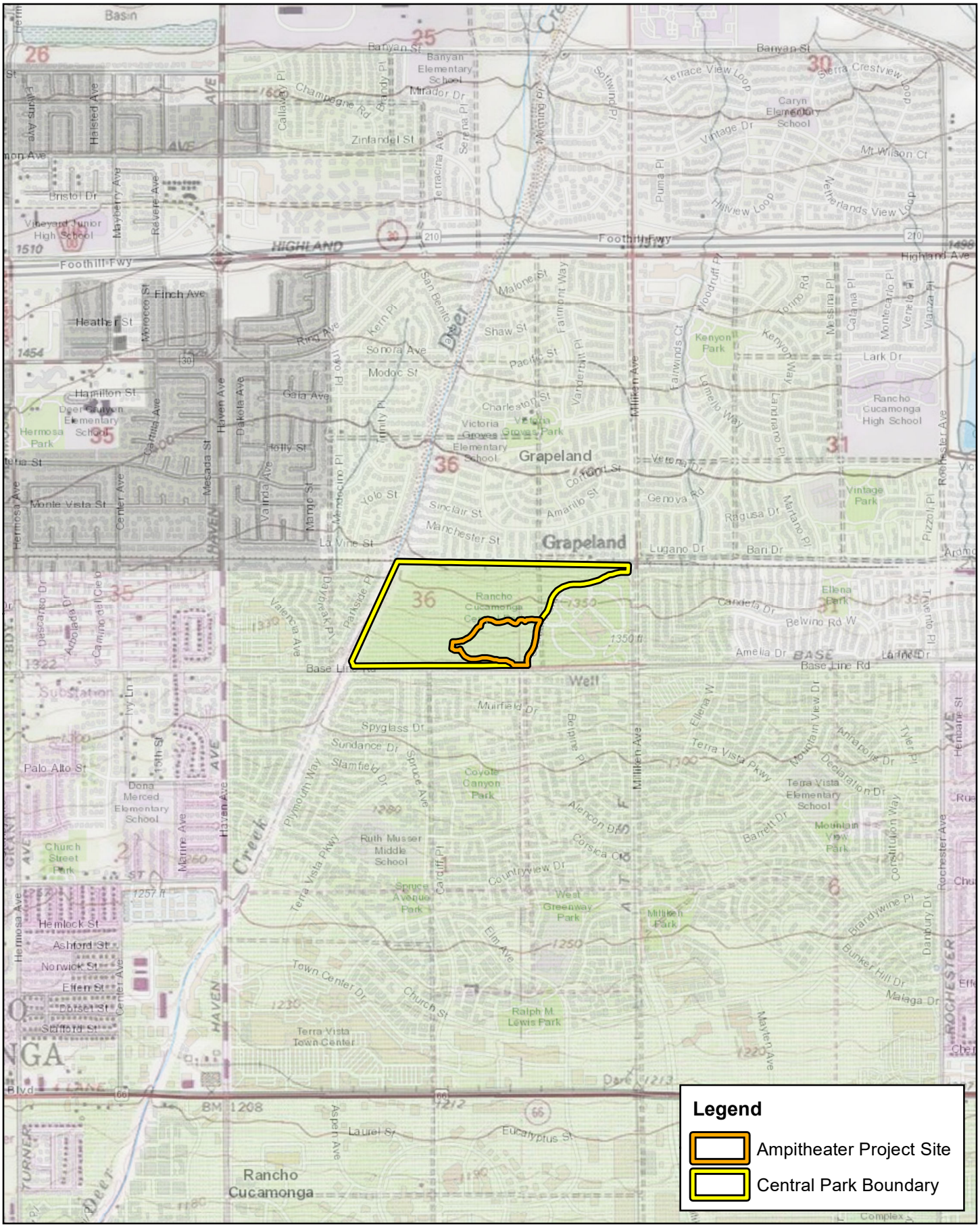
CENTRAL PARK AMPITHEATER PROJECT
HABITAT ASSESSMENT

Regional Vicinity

ELMT CONSULTING

Source: Federal Highway Administration, US Department of Transportation

Exhibit 1



CENTRAL PARK AMPITHEATER PROJECT
HABITAT ASSESSMENT

Site Vicinity

ELMT CONSULTING

Exhibit 2

ELMT CONSULTING

0 250 500 1,000 Feet

Source: ESRI Aerial Imagery, World Transportation, San Bernardino County

CENTRAL PARK AMPITHEATER PROJECT
HABITAT ASSESSMENT

Project Site

Exhibit 3

Section 2 Methodology

A literature review and records search were conducted to determine which special-status biological resources have the potential to occur on or within the general vicinity of the project site. In addition to the literature review, a general habitat assessment or field investigation of the project site was conducted. The field investigation was conducted to document existing conditions within the project site and assess the potential for special-status biological resources to occur.

2.1 LITERATURE REVIEW

Prior to conducting the field investigation, a literature review and records search was conducted for special-status biological resources potentially occurring on or within the vicinity of the project site. Previously recorded occurrences of special-status plant and wildlife species and their proximity to the project site were determined through a query of the CDFW QuickView Tool in the Biogeographic Information and Observation System (BIOS), CNDDB Rarefind 5, the California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California, Calflora Database, compendia of special-status species published by CDFW, and the United States Fish and Wildlife Service (USFWS) species listings.

All available reports, survey results, and literature detailing the biological resources previously observed on or within the vicinity of the project site were reviewed to understand existing site conditions and note the extent of any disturbances that have occurred on the project site that would otherwise limit the distribution of special-status biological resources. Standard field guides and texts were reviewed for specific habitat requirements of special-status and non-special-status biological resources, as well as the following resources:

- Google Earth Pro historic aerial imagery (1994-2018);
- San Bernardino County General Plan;
- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Soil Survey;
- USFWS Critical Habitat designations for Threatened and Endangered Species; and
- USFWS Endangered Species Profiles.

The literature review provided a baseline from which to inventory the biological resources potentially occurring on the subject property. The CNDDB database was used, in conjunction with ArcGIS software, to locate the nearest recorded occurrences of special-status species and determine the distance from the project site.

2.2 FIELD INVESTIGATION

ELMT biologists Thomas J. McGill, Ph.D. Travis J. McGill, and Jacob H. Lloyd Davies evaluated the extent and conditions of the plant communities found within the boundaries of the project site on July 17,

2019. Plant communities identified on aerial photographs during the literature review were verified in the field by walking meandering transects through the on-site plant communities and along boundaries between plant communities. The plant communities were evaluated for their potential to support special-status plant and wildlife species. In addition, field staff identified any natural corridors and linkages that may support the movement of wildlife through the area. Special attention was given to special-status habitats and/or undeveloped areas, which have higher potentials to support special-status plant and wildlife species.

All plant and wildlife species observed, as well as dominant plant species within each plant community, were recorded. Wildlife detections were made through observation of scat, trails, tracks, burrows, nests, and/or visual and aural observation. In addition, site characteristics such as soil condition, topography, hydrology, anthropogenic disturbances, indicator species, condition of on-site plant communities, and presence of potential jurisdictional drainage and/or wetland features were noted.

2.3 SOIL SERIES ASSESSMENT

On-site and adjoining soils were researched prior to the field survey using the USDA NRCS Soil Survey for San Bernardino County, California. In addition, a review of the local geological conditions and historical aerial photographs was conducted to assess the ecological changes that the project site has undergone.

2.4 PLANT COMMUNITIES

Plant communities were mapped using 7.5-minute USGS topographic base maps and aerial photography. The plant communities were classified in accordance with Sawyer, Keeler-Wolf and Evens (2009), CDFW (2010) and Holland (1986), delineated on an aerial photograph, and then digitized into ArcGIS. The ArcGIS application was used to compute the area of each plant community in acres.

2.5 PLANTS

Common plant species observed during the field survey were identified by visual characteristics and morphology in the field and recorded in a field notebook. Unusual and less familiar plants were photographed in the field and identified in the laboratory using taxonomic guides. Taxonomic nomenclature used in this study follows the 2012 Jepson Manual (Hickman 2012). In this report, scientific names are provided immediately following common names of plant species (first reference only).

2.6 WILDLIFE

Wildlife species detected during field surveys by sight, calls, tracks, scat, or other sign were recorded during surveys in a field notebook. Field guides were used to assist with identification of wildlife species during the survey included The Sibley Field Guide to the Birds of Western North America (Sibley 2003), A Field Guide to Western Reptiles and Amphibians (Stebbins 2003), and A Field Guide to Mammals of North America (Reid 2006). Although common names of wildlife species are fairly well standardized, scientific names are provided immediately following common names in this report (first reference only).

2.7 JURISDICTIONAL DRAINAGES AND WETLANDS

Aerial photography was reviewed prior to conducting a field investigation in order to locate and inspect any potential natural drainage features, ponded areas, or water bodies that may fall under the jurisdiction of the United States Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), or CDFW. In general, surface drainage features indicated as blue-line streams on USGS maps that are observed or expected to exhibit evidence of flow are considered potential riparian/riverine habitat and are also subject to state and federal regulatory jurisdiction. In addition, ELMT reviewed jurisdictional waters information through examining historical aerial photographs to gain an understanding of the impact of land-use on natural drainage patterns in the area. The USFWS National Wetland Inventory (NWI) and Environmental Protection Agency (EPA) Water Program "My Waters" data layers were also reviewed to determine whether any hydrologic features and wetland areas have been documented on or within the vicinity of the project site.

Section 3 Existing Conditions

3.1 LOCAL CLIMATE

San Bernardino County is characterized by cool winter temperatures and warm summer temperatures, with its rainfall occurring almost entirely in the winter. Relative to other areas in Southern California, winters are colder with chilly to cold morning temperatures common. Climatological data obtained for the City of Rancho Cucamonga indicates the annual precipitation averages 16.8 inches per year. Almost all of the precipitation occurs in the months between December and March, with hardly any occurring in the months between May and October. The wettest month is January, with a monthly average total precipitation of 3.50 inches. The average maximum and minimum temperatures for the region are 78.4- and 52.5-degrees Fahrenheit (F) respectively with July (monthly average 93.7° F) being the hottest month and December and January (monthly average 41.4° F) being the coldest. The temperature during the site visit was in the high-80s to low-90s° F with no cloud cover overhead and calm winds.

3.2 TOPOGRAPHY AND SOILS

On-site surface elevation ranges from approximately 1,335 to 1,347 feet and generally slopes from north to south. The proposed project site is relatively flat with no areas of significant topographic relief. Based on the USDA NRCS Web Soil Survey, the project site is underlain by the following soil units: Tujunga loamy sand (0 to 5 percent slopes) and Tujunga gravelly loamy sand (0 to 9 percent slopes) (Exhibit 4, *Soils*). Soils onsite have been mechanically disturbed and heavily compacted from historic land uses (i.e., agricultural, clearing/grading, and storage activities).

3.3 SURROUNDING LAND USES

The project site is located in an urbanized area and is primarily surrounded by existing development. The entire Central Project boundary is bordered existing residential developments to the north, south, east and west. The proposed amphitheater project site by site is bordered by undeveloped, vacant land within the Central Park boundary to the west and north, institutional developments (James L. Brulte Senior Center and Goldy S. Lewis Community Center) to the east, and residential development to the south. The James L. Brulte Senior Center and Goldy S. Lewis Community Center were constructed during Phase I of the Central Park Master Plan.

ELMT CONSULTING

0 125 250 500 Feet

Source: ESRI Aerial Imagery, Soil Survey Geographic Database, World Transportation, San Bernardino County

CENTRAL PARK AMPITHEATER PROJECT
HABITAT ASSESSMENT

Soils

Exhibit 4

Section 4 Discussion

4.1 SITE CONDITIONS

The project site consists of both disturbed and undeveloped land that has been subject to a variety of direct and indirect human-related disturbances from historical agricultural activities, grading activities, adjacent development, weed abatement, and storage activities. In the decades since active agricultural activities (i.e., grape vineyards) ceased, native vegetation communities typical of disturbed areas have reestablished onsite. In late 2003, a drainage channel was constructed on the northern portion of the project site to accommodate stormwater runoff associated with construction from Phase I of the Central Park Master Plan. Stormwater continues to enter the site via a culvert in the middle of the northern boundary of the site and flows to the west and off-site into Deer Creek Channel. In the middle and eastern portions of the project site, disturbed areasa were observed in association with construction staging and storage areas.

4.2 VEGETATION

Onsite anthropogenic disturbances have greatly disturbed the natural plant communities that once occurred within the boundaries of the project site, reducing their ability to provide suitable habitat for special-status plant and wildlife species. Refer to Attachment B, *Site Photographs*, for representative site photographs. One (1) plant community was observed within the boundaries of the project site during the habitat assessment: California buckwheat scrub (Exhibit 5, *Vegetation*). The project site also supports two land cover types that would be classified as disturbed and developed. The plant community and land cover types are described in further detail below.

4.2.1 California Buckwheat Scrub

The California buckwheat scrub plant community was observed throughout the western, central, and northern portions of the project site. This plant community supports a monoculture of California buckwheat (*Eriogonum fasciculatum*). Buckwheat scrub plant communities often reestablish after disturbed areas are allowed to revegetate with native plants. Other plant species observed in this plant community include deer weed (*Acmispon glaber*), California croton (*Croton californicus*), common phacelia (*Phacelia distans*), chia (*Salvia columbariae*), California sagebrush (*Artemisia californica*), western ragweed (*Ambrosia psilostachya*), white sage (*Salvia apiana*), common cryptantha (*Cryptantha intermedia*), mulefat (*Baccharis salicifolia*), prickly pear (*Opuntia littoralis*), slender buckwheat (*Eriogonum gracile*), pine goldenbush (*Ericameria pinifolia*), and telegraph weed (*Heterotheca grandiflora*).

4.2.2 Disturbed

Disturbed areas are generally areas that have been subject to a high level of human disturbances and no longer comprise a native plant community. These areas are unpaved and are primarily or entirely devoid of vegetation, or support ruderal/weedy plant species. The disturbed areas of the project site are associated with ongoing weed abatement activities, materials storage, and construction staging activities. Plant species observed within this plant community include short-podded mustard (*Hirschfeldia incana*), wild oat (*Avena fatua*), flax-leaved horseweed (*Erigeron bonariensis*), and tacolote (*Centaurea melitensis*).

ELMT CONSULTING

0 125 250 500 Feet

Source: ESRI Aerial Imagery, World Transportation, San Bernardino County

CENTRAL PARK AMPITHEATER PROJECT
HABITAT ASSESSMENT

Vegetation

Exhibit 5

4.2.3 Developed

The developed portions of the project site include two areas in the northwest and southwest corners of the site, and one area near the northern boundary. These areas have been paved for pedestrian access and landscaped with ornamental plant species. No plant species other than the non-native/ornamental plant species were observed within the developed portions of the site. The northern area includes the drainage culvert and associated paving and riprap.

4.3 WILDLIFE

Plant communities provide foraging habitat, nesting and denning sites, and shelter from adverse weather or predation. This section provides a discussion of those wildlife species that were observed during the field survey or that are expected to occur within the project site. The discussion is to be used as a general reference and is limited by the season, time of day, and weather condition in which the field survey was conducted. Wildlife detections were based on calls, songs, scat, tracks, burrows, and direct observation.

4.3.1 Fish

No fish or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) with frequent sources of water that would that would provide suitable habitat for fish were observed on or within the vicinity of the project site. Therefore, no fish are expected to occur and are presumed absent from the project site.

4.3.2 Amphibians

No amphibians or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for amphibian species were observed on or within the vicinity of the project site. Therefore, no amphibians are expected to occur on the project site and are presumed absent.

4.3.3 Reptiles

The project site provides a limited amount of habitat for a few reptile species adapted to a high degree of human disturbance associated with onsite disturbances and and surrounding development. The only reptilain species obseved onsite during the field investigation was common side-blotched lizard (*Uta stansburiana elegans*). Other common reptilian species expected to occur on-site include gopher snake (*Pituophis catenifer*), Great Basin fence lizard (*Sceloporus occidentalis longipes*) and southern alligator lizard (*Elgaria multicarinata*).

4.3.4 Birds

The project site provides suitable foraging and cover habitat for a variety of resident and migrant bird species. Bird species detected during the field survey include Anna's hummingbird (*Calypte anna*), northern mockingbird (*Mimus polyglottos*), lesser goldfinch (*Spinus psaltria*), mourning dove (*Zenaida macroura*), California towhee (*Melozone crissalis*), Bewick's wren (*Thryomanes bewickii*), American crow (*Corvus brachyrhynchos*), Cassin's kingbird (*Tyrannus vociferans*), house finch (*Haemorhous mexicanus*), red-tailed hawk (*Buteo jamaicensis*), northern rough-winged swallow (*Stelgidopteryx serripennis*),

California thrasher (*Toxostoma redividum*), barn swallow (*Hirundo rustica*), bushtit (*Psaltriparus minimus*), lesser nighthawk (*Chordeiles acutipennis*), and European starling (*Sturnus vulgaris*).

4.3.5 Mammals

The project site and surrounding areas have the potential to support mammalian species adapted to human presence and disturbance. The only mammalian species observed during the field survey was desert cottontail (*Sylvilagus audubonii*). Other common mammalian species expected to occur include coyote (*Canis latrans*), opossum (*Didelphis virginiana*), and raccoon (*Procyon lotor*). No bat species are expected to occur due to a lack of suitable roosting habitat (i.e., trees, crevices, abandoned structures) within and surrounding the project site.

4.4 NESTING BIRDS

No active nests or birds displaying nesting behavior were observed during the field survey. The project site and surrounding area provides suitable foraging and nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area that area adapted to urban environments. In additon, the project site has the potential to provide suitable nesting opportunities for birds that nest on the open ground and those aclimated to routine disturbances (i.e., killdeer (*Charadrius vociferus*)). A pre-construction nesting bird clearance survey should be conducted within three (3) days prior to ground disturbance to ensure no nesting birds will be impacted from site development.

4.5 WILDLIFE CORRIDORS AND LINKAGES

Habitat linkages provide links between larger undeveloped habitat areas that are separated by development. Wildlife corridors are similar to linkages, but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet inadequate for others. Wildlife corridors are significant features for dispersal, seasonal migration, breeding, and foraging. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

The project site has not been identified as a wildlife corridor or linkage in accordance with the San Bernardino County General Plan. The proposed development will be confined to existing areas that have been heavily disturbed and surrounded by development. The project site is isolated from regional wildlife corridors and linkages, and there are no riparian corridors, creeks, or useful patches of stepping stone habitat (natural areas) within or connecting the project site to the San Gabriel Mountains. As such, development of the project site is not expected to impact wildlife movement opportunities or prevent existing wildlife movement corridors in the region from functioning. Therefore, impacts to wildlife corridors or linkages are not expected to occur.

4.6 STATE AND FEDERAL JURISDICTIONAL AREAS

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates discharge of dredge and/or fill materials into "waters of the United States" pursuant to Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the Regional Board regulates discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act and the CDFW regulates alterations to streambed and associated plant communities pursuant to Section 1602 of the California Fish and Game Code.

In late 2003, a drainage channel was constructed on the northern portion of the project site to accommodate stormwater runoff associated with construction from Phase I of the Central Park Master Plan. Stormwater continues to enter the site via a culvert in the middle of the northern boundary of the site and flows to the west and off-site into Deer Creek Channel. Deer Creek is tributary to Cucamonga Creek, which is tributary to Mill Creek and the Santa Ana River (Relatively Permeant Water), which is ultimately tributary to the Pacific Ocean (traditional Nag viable Water). As a result, the onsite drainage feature exhibits a surface hydrologic connection to downstream waters of the U.S. and falls under the regulatory authority of the Corps, Regional Board, and the CDFW.

If the onsite drainage feature will be impacted from implementation of the proposed project, the City will need to obtain the following regulatory approvals prior to impacts occurring within the identified jurisdictional areas: Corps CWA Section 404 Permit; Regional Board CWA Section 401 Water Quality Certification; and CDFW Section 1602 Streambed Alteration Agreement (SAA). The preparation of a formal jurisdictional delineation is recommended if site development will impact the onsite drainage feature.

4.7 SPECIAL-STATUS BIOLOGICAL RESOURCES

The CNDDB Rarefind 5 and the CNPS Electronic Inventory of Rare and Endangered Vascular Plants of California were queried for reported locations of special-status plant and wildlife species as well as special-status natural plant communities in the Cucamonga Peak and Guasti USGS 7.5-minute quadrangles. The habitat assessment evaluated the conditions of the habitat(s) within the boundaries of the project site to determine if the existing plant communities, at the time of the survey, have the potential to provide suitable habitat(s) for special-status plant and wildlife species.

The literature search identified thirty-seven (37) special-status plant species, fifty-three (53) special-status wildlife species, and four (4) special-status plant communities as having potential to occur within the Cucamonga Peak and Guasti quadrangles. Special-status plant and wildlife species were evaluated for their potential to occur within the project boundaries based on habitat requirements, availability and quality of suitable habitat, and known distributions. Species determined to have the potential to occur within the general vicinity are presented in *Table C-1: Potentially Occurring Special-Status Biological Resources*, provided in Appendix C. Refer to Table C-1 for a determination regarding the potential occurrence of special-status plant and wildlife species within the project site.

4.7.1 Special-Status Plants

According to the CNDDB and CNPS, thirty-seven (37) special-status plant species have been recorded in the Cucamonga Peak and Guasti quadrangles (refer to Appendix C). The project site consists of both disturbed and undeveloped land that has been subject to a variety of direct and indirect human-related disturbances from historical agricultural activities, grading activities, adjacent development, weed abatement, and storage activities. These disturbances and surrounding development have isolated the project site from undisturbed native plant communities and have reduced, if not eliminated, the ability of the project site to provide suitable habitat for special-status plant species. Based on habitat requirements for specific special-status plant species and the availability and quality of habitats needed by each species, it was determined that the project site does not provide suitable habitat for any of the special-status plant species known to occur in the area and are presumed to be absent from the project site.

4.7.2 Special-Status Wildlife

According to the CNDDB, fifty-three (53) special-status wildlife species have been reported in the Cucamonga Peak and Guasti quadrangles (refer to Appendix C). No special-status wildlife species were observed onsite during the habitat assessment. Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the project site has a high potential to provide suitable habitat for Cooper's hawk (*Accipiter cooperii*); and a low potential to provide suitable habitat for great egret (*Ardea alba*), great blue heron (*Ardea herodias*), bells sage sparrow (*Artemisiospiza belli belli*), burrowing owl, northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*), Dulzura kangaroo rat (*Dipodomys simulans*), snowy egret (*Egretta thula*), California horned lark (*Eremophila alpestris actia*), loggerhead shrike (*Lanius ludovicianus*), California gull (*Larus californicus*), San Diego desert woodrat (*Neotoma lepida intermedia*), Los Angles pocket mouse (*Perognathus longimembris brevinasus*), and rufous hummingbird (*Selasphorus rufus*). Further it was determined that the project site does not provide suitable habitat for any of the other special-status wildlife species known to occur in the area since the project site has been heavily disturbed from onsite disturbances and surrounding development.

None of the aforementioned species are federally or state listed as endangered or threatened. In order to ensure impacts to Cooper's hawk, great egret, great blue heron, bells sage sparrow, burrowing owl, snowy egret, California horned lark, loggerhead shrike, California gull, and rufous hummingbird do not occur from implementation of the proposed project, a pre-construction nesting bird clearance survey shall be conducted within three (3) days prior to ground disturbance. With implementation of mitigation through the pre-construction nesting bird clearance survey, impacts to the aforementioned special-status avian species will be less than significant.

Northwestern San Diego pocket mouse, Dulzura kangaroo rat, San Diego desert woodrat, and Los Angles pocket mouse were not captured onsite during the 2008 San Bernardino Kangaroo Rat Trapping Study conducted for the overall Central Park Project (LSA 2008). Even though the project site was determined have a low potential to support these special-status mammal species, due to the results of the trapping study, they are presumed absent from the project site and no impacts will occur to these species from site development.

Based on regional significance, the potential occurrence of burrowing owl, San Bernardino kangaroo rat and California gnatcatcher within the project site are described in further detail below.

Burrowing Owl

Burrowing owl is currently designated as a California Species of Special Concern. The burrowing owl is a grassland specialist distributed throughout western North America where it occupies open areas with short vegetation and bare ground within shrub, desert, and grassland environments. Burrowing owls use a wide variety of arid and semi-arid environments with level to gently-sloping areas characterized by open vegetation and bare ground. The western burrowing owl (*A.c. hypugaea*), which occurs throughout the western United States including California, rarely digs its own burrows and is instead dependent upon the presence of burrowing mammals (i.e., California ground squirrels, coyotes, and badgers) whose burrows are often used for roosting and nesting. The presence or absence of colonial mammal burrows is often a major factor that limits the presence or absence of burrowing owls. Where mammal burrows are scarce, burrowing owls have been found occupying man-made cavities, such as buried and non-functioning drain pipes, stand-pipes, and dry culverts. They also require low growth or open vegetation allowing line-of-sight observation of the surrounding habitat to forage and watch for predators. In California, the burrowing owl breeding season extends from the beginning of February through the end of August.

Despite a systematic search of the project site, no burrowing owls or recent sign (i.e., pellets, feathers, castings, or white wash) was observed during the field investigation. The project site provides minimal line-of-sight opportunities favored by burrowing owls. However, the majority of the project site lacks suitable burrows (>4 inches in diameter) capable of providing roosting and nesting opportunities. As a result, burrowing owl was determined to have a low potential to occur onsite. Further, no burrowing owls were observed onsite during the 2008 focused survey prepared by LSA. Out of abundance of cation and to ensure burrowing owl remain absent from the project site, it is recommended that a pre-construction burrowing owl clearance survey be conducted prior to ground disturbance.

San Bernardino Kangaroo Rat

The San Bernardino kangaroo rat, federally listed as endangered, is one of several kangaroo rat species in its range. The Dulzura, the Pacific kangaroo rat (*Dipodomys agilis*) and the Stephens kangaroo rat (*Dipodomys stephensi*) occur in areas occupied by the San Bernardino kangaroo rat, but these other species have a wider habitat range. The habitat of the San Bernardino kangaroo rat is described as being confined to pioneer and intermediate Riversidean Alluvial Fan Sage Scrub (RAFSS) habitats, with sandy soils deposited by fluvial (water) rather than Aeolian (wind) processes. Burrows are dug in loose soil, usually near or beneath shrubs.

The San Bernardino kangaroo rat is one of three subspecies of the Merriam's kangaroo rat. The Merriam's kangaroo rat is a widespread species that can be found from the inland valleys to the deserts. The subspecies known as the San Bernardino kangaroo, however, is confined to inland valley scrub communities, and more particularly, to scrub communities occurring along rivers, streams and drainages. Most of the drainages have been historically altered as a result of flood control efforts and the resulting increased use of river resources, including mining, off-road vehicle use and road and housing development. This increased use of river resources has resulted in a reduction in both the amount and quality of habitat available for the San

Bernardino kangaroo rat. The past habitat losses and potential future losses prompted the emergency listing of the San Bernardino kangaroo rat as an endangered species (USFWS, 1998a). Primary Constituent Elements (PCE's) are physical or biological features essential to the conservation of a species for which its designated critical habitat is based on. Examples of PCE's include food, water, space for individual and population growth, cover or shelter, etc. The PCEs essential to support the biological needs of foraging, reproducing, rearing of young, intra-specific communication, dispersal, genetic exchange, or sheltering for San Bernardino kangaroo rat are:

1. River, creek, stream, and wash channels; alluvial fans, flood plains, flood benches and terraces; and historic braided channels that are subject to dynamic geomorphological and hydrological processes;
2. Alluvial sage scrub and associated vegetation such as coastal sage scrub and chamise chaparral with a moderately open canopy;
3. Soil series consisting of sand, sandy loam, or loam within its geographical range; and
4. Upland areas proximal to flood plains containing suitable habitat (land adjacent to alluvial fan that provides Refugia).

The project site does not support Riversidian alluvial fan sage scrub plant communities, and is no longer exposed to hydrological processes needed to maintain the openness of suitable San Bernardino kangaroo rat habitat, and does not contain upland areas proximal to flood plains that contain suitable refuge habitat for San Bernardino kangaroo rat. The channelization of Deer Creek and surrounding development has eliminated the project site from being subjected to scouring regimes historically associated with Deer Creek that would have had the potential to provide suitable habitat for San Bernardino kangaroo rat. Based on these conditions, it was determined that the project site does not provide the requisite PCEs which are needed by San Bernardino kangaroo rat to be present. Therefore, it was determined that San Bernardino kangaroo rat is presumed absent from the project site. Further, San Bernardino kangaroo rat was not captured onsite during the 2008 focused trapping study conducted by LSA.

California Gnatcatcher

California gnatcatcher is a federally threatened species with restricted habitat requirements, being an obligate resident of sage scrub habitats that are dominated by California sagebrush. This species generally occurs below 750 feet elevation in coastal regions and below 1,500 feet inland. It ranges from Ventura County south to San Diego County and northern Baja California and is less common in sage scrub with a high percentage of tall shrubs. It prefers habitat with more low-growing vegetation. California gnatcatchers breed between mid-February and the end of August, with peak activity from mid-March to mid-May. Population estimates indicate that there are approximately 1,600 to 2,290 pairs of California gnatcatcher remaining. Declines are attributed to loss of sage scrub habitat due to development, as well as cowbird nest parasitism.

The PCEs essential to support the biological needs of foraging, reproducing, rearing of young, intra-specific communication, dispersal, genetic exchange, or sheltering for California gnatcatcher are:

1. Dynamic and Successional sage scrub Habitats and Associated Vegetation (RAFSS, Coastal Sage-Chaparral Scrub, etc.) that provide space for individual and population growth, normal behavior, breeding, reproduction, nesting, dispersal and foraging; and

2. Non-sage scrub habitats such as chaparral, grassland, and riparian areas, in proximity to sage scrub habitats that provide linkages to help with dispersal, foraging and nesting.

Non-sage scrub habitats such as chaparral, grassland, and riparian areas, in proximity to sage scrub habitats have the potential to provide linkages to help with dispersal, foraging and nesting.

The buckwheat scrub plant community onsite has been degraded from existing anthropogenic disturbances, and is isolated from occupied sage scrub habitats in the region. Based on these conditions, it was determined that the project site does not provide the requisite PCEs which are needed by California gnatcatcher to be present. Therefore, it was determined that California gnatcatcher is presumed absent from the project site. Further, California gnatcatcher was not observed onsite during the 2007 and 2008 focused surveys conducted by LSA.

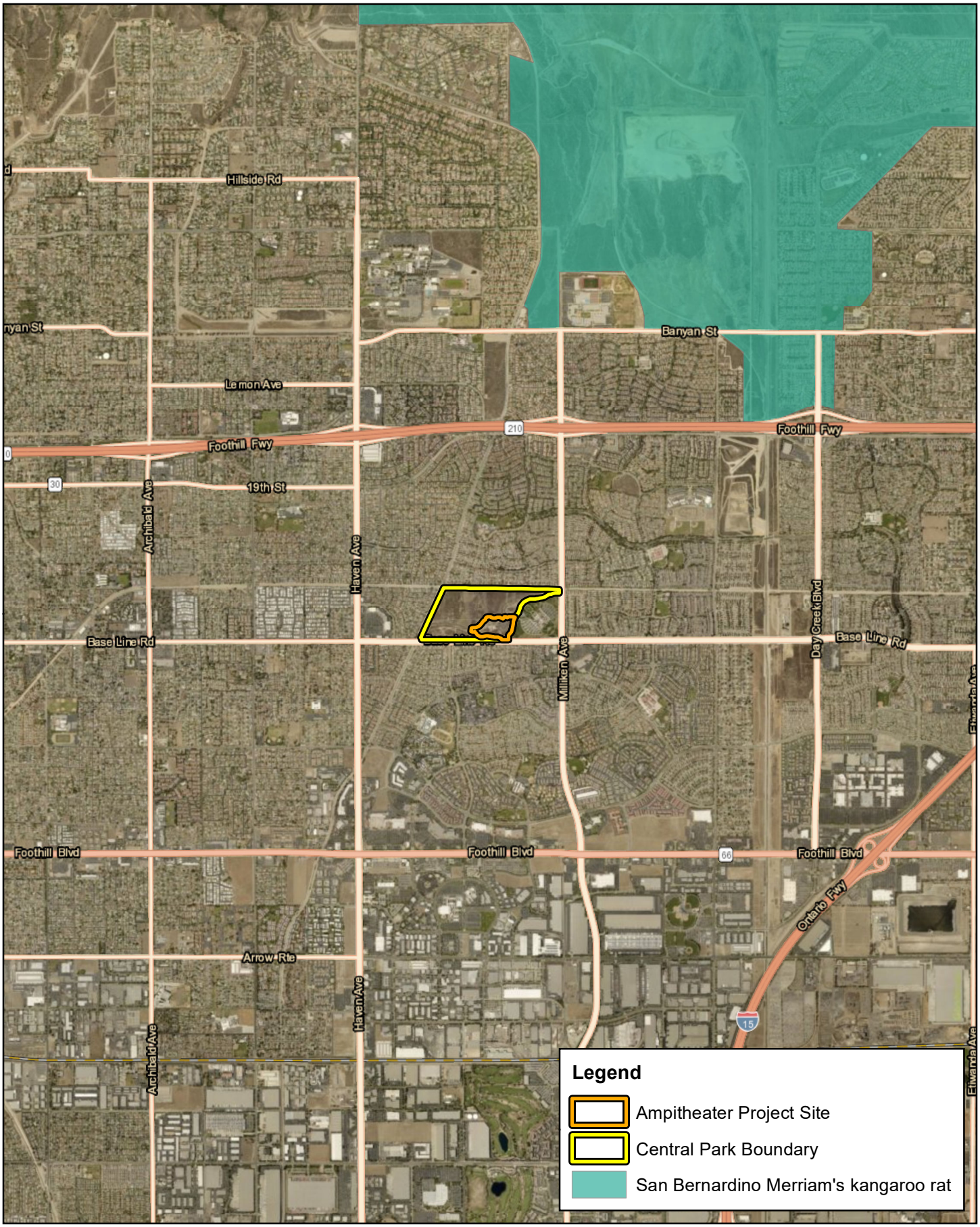
4.7.3 Special-Status Plant Communities

The CNDDB lists four (4) special-status plant community as being identified within the Cucamonga Peak and Guasti USGS 7.5-minute quadrangles: California Walnut Woodland, Coastal and Valley Freshwater Marsh, Riversidean Alluvial Fan Sage Scrub, and Southern Sycamore Alder Riparian Woodland. No special-status plant communities were observed on-site.

4.8 CRITICAL HABITAT

Under the federal Endangered Species Act, "Critical Habitat" is designated at the time of listing of a species or within one year of listing. Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or not. All federal agencies are required to consult with the United States Fish and Wildlife Service (USFWS) regarding activities they authorize, fund, or permit which may affect a federally listed species or its designated Critical Habitat. The purpose of the consultation is to ensure that projects will not jeopardize the continued existence of the listed species or adversely modify or destroy its designated Critical Habitat. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing is on federal lands, uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highways Administration or a CWA Permit from the Corps). If a there is a federal nexus, then the federal agency that is responsible for providing the funding or permit would consult with the USFWS.

The project site is not located within federally designated Critical Habitat. The closest Critical Habitat designation is located approximately 1.6 miles northwest of the project site for San Bernardino kangaroo rat (Exhibit 6, *Critical Habitat*). Therefore, the loss or adverse modification of Critical Habitat from site development will not occur and consultation with the USFWS for impacts to Critical Habitat will not be required for implementation of the proposed project.



CENTRAL PARK AMPITHEATER PROJECT
HABITAT ASSESSMENT

Critical Habitat

ELMT CONSULTING

0 0.25 0.5 1 Miles

Source: ESRI Aerial Imagery, USFWS Critical Habitat, San Bernardino County

Exhibit 6

Section 5 Conclusion and Recommendations

The project site is located in an urbanized area and is primarily surrounded by existing development. The entire Central Project boundary is bordered existing residential developments to the north, south, east and west. The project site consists of both disturbed and undeveloped land that has been subject to a variety of direct and indirect human-related disturbances from historical agricultural activities, grading activities, adjacent development, weed abatement, and storage activities. In the decades since active agricultural activities (i.e., grape vineyards) ceased, native vegetation communities typical of disturbed areas have reestablished onsite.

Onsite anthropogenic disturbances have greatly disturbed the natural plant communities that once occurred within the boundaries of the project site, reducing their ability to provide suitable habitat for special-status plant and wildlife species. One (1) plant community was observed within the boundaries of the project site during the habitat assessment: buckwheat scrub. The project site also supports two land cover types that would be classified as disturbed and developed. The plant community and land cover types are described in further detail below.

In late 2003, a drainage channel was constructed on the northern portion of the project site to accommodate stormwater runoff associated with construction from Phase I of the Central Park Master Plan. Stormwater continues to enter the site via a culvert in the middle of the northern boundary of the site and flows to the west and off-site into Deer Creek Channel. The onsite drainage feature exhibits a surface hydrologic connection to downstream waters of the U.S. and falls under the regulatory authority of the Corps, Regional Board, and the CDFW. If the onsite drainage feature will be impacted from implementation of the proposed project, the City will need to obtain the following regulatory approvals prior to impacts occurring within the identified jurisdictional areas: Corps CWA Section 404 Permit; Regional Board CWA Section 401 Water Quality Certification; and CDFW Section 1602 Streambed Alteration Agreement (SAA).

No special-status plant species were observed onsite during the field survey. Onsite disturbances have reduced, if not eliminated, the ability of the project site to provide suitable habitat for special-status plant species. Based on habitat requirements for specific special-status plant species and the availability and quality of habitat needed by each species, it was determined that the project site does not provide suitable habitat for any of the special-status plant species that were determined to have the potential to occur in the vicinity of the project site.

No special-status wildlife species were observed during the field investigation. Based on the field investigation, it was determined that the project site has a high potential to provide suitable habitat for Cooper's hawk; and a low potential to provide suitable habitat for great egret, great blue heron, bells sage sparrow, burrowing owl, northwestern San Diego pocket mouse, Dulzura kangaroo rat, snowy egret , California horned lark, loggerhead shrike, California gull, San Diego desert woodrat, Los Angles pocket mouse, and rufous hummingbird. All remaining special-status wildlife species are presumed to be absent from the project site based on habitat requirements, availability and quality of habitat needed by each species, and known distributions.

Based on the proposed project footprint, and with the implementation of a pre-construction nesting bird clearance survey, none of the special-status species known to occur in the general vicinity of the project site will be directly or indirectly impacted from implementation of the proposed project. Therefore, it was determined that this project will have "no effect" on federally or State listed species or habitats known to occur in the general vicinity of the project site. Additionally, the project will have "no effect" on designated Critical Habitats.

Migratory Bird Treaty Act and Fish and Game Code Compliance

Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513 prohibit the take, possession, or destruction of birds, their nests or eggs). In order to protect migratory bird species, a nesting bird clearance survey should be conducted prior to any ground disturbance or vegetation removal activities that may disrupt the birds during the nesting season.

If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds should be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities should stay outside of a no-disturbance buffer. The size of the no-disturbance buffer will be determined by the wildlife biologist and will depend on the level of noise and/or surrounding anthropogenic disturbances, line of sight between the nest and the construction activity, type and duration of construction activity, ambient noise, species habituation, and topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer distances. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.

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Appendix A Central Park Phasing Plan – Amphitheater

A. PACIFIC ELECTRIC TRAIL HEAD
B. TERRACED GARDENS
C. WATER CONSERVATION / DEMONSTRATION GARDEN
D. AMPHITHEATER
E. UNIVERSAL ACCESSIBLE PLAYGROUND
F. VITICULTURE PAVILION
G. UPPER PICNIC AREA AND EVENT AREA
H. EVENT PARKING AREA
I. ADVENTURE AREA PARKING AND EVENT / PICNIC AREA
J. DOG PARK
K. MULTI-PURPOSE FACILITY AND PARKING
L. RECREATION POOL
M. TENNIS COURTS
N. MAINTENANCE YARD
O. DEER CREEK CHANNEL TRAIL

NOTES:
1. Phase order does not represent actual sequence of areas for improvement.
2. Sub-phasing of improvements may occur within each identified phase.

RJM DESIGN GROUP

PHASING PLAN

CITY OF RANCHO CUCAMONGA, CALIFORNIA

Appendix B Site Photographs

Photograph 1: Looking north towards the northeast corner of the project site.

Photograph 2: Looking south towards the northeast corner of the project site.

Photograph 3: Looking northeast from the middle of the southern boundary of the project site.

Photograph 4: Looking southeast from the middle of the northern boundary of the project site.

Photograph 5: Looking south from the center of the eastern portion of the project site.

Photograph 6: Looking north from the center of the eastern portion of the project site.

Photograph 7: Looking west from the middle of the project site.

Photograph 8: Looking south from the middle of the northern boundary of the project site.

Photograph 9: Looking west over the outflowing culvert.

Photograph 10: Looking west along the drainage feature on the northern boundary of the project site.

Appendix C Potentially Occurring Special-Status Biological Resources

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
SPECIAL-STATUS WILDLIFE SPECIES				
Accipiter cooperii Cooper's hawk	Fed: None CA: WL	Common yearlong resident of California. Typically forages in broken woodland and habitat edges with dense stands of coast live oak (*Quercus agrifolia*), riparian deciduous, or other forest habitat near water. Usually nests in dense riparian areas, usually near streams.	No	**High:** There is suitable foraging habitat throughout the site, but no suitable nesting opportunities onsite. This species is adapted to urban environments and occurs commonly.
Agelaius tricolor tricolored blackbird	Fed: None CA: **CEND/** SSC	Highly colonial yearlong resident of California that frequents emergent wetlands, croplands, grassy fields, flooded land and along edges of ponds. Usually nests near fresh water, preferably in emergent wetland with tall, dense cattails (*Typha sp.*) or tules (*Schoenoplectus sp.*), but also in thickets of willow (*Salix sp.*), blackberry (*Rubus sp.*), and tall herbs.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Aimophila ruficeps canescens southern California rufous-crowned sparrow	Fed: None CA: WL	Typically found between 3,000 and 6,000 feet in elevation. Breed in sparsely vegetated scrubland on hillsides and canyons. Prefers coastal sage scrub dominated by California sagebrush (*Artemisia californica*), but they can also be found breeding in coastal bluff scrub, low-growing serpentine chaparral, and along the edges of tall chaparral habitats.	No	**Presumed Absent:** No suitable habitat is present within the project site.
Anniella stebbinsi southern California legless lizard	Fed: None CA: SSC	Occurs in sparsely vegetated habitat types including coastal sand dunes, chaparral, pine-oak woodland, desert scrub, open grassland, and riparian areas. Requires sandy or loose loamy substrates conducive to burrowing.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Ardea alba great egret	Fed: None CA: None	Yearlong resident throughout California, except for the high mountains and deserts. Feeds and rests in fresh, and saline emergent wetlands, along the margins of estuaries, lakes, and slow-moving streams, on mudflats and salt ponds, and in irrigated croplands and pastures.	No	**Low:** The project site provides minimal foraging habitat, but no suitable nesting opportunities.
Ardea herodias great blue heron	Fed: None CA: None	Fairly common all year throughout most of California, in shallow estuaries and fresh and saline emergent wetlands. Less common along riverine and rocky marine shores, in croplands, pastures, and in mountains about foothills.	No	**Low:** The project site provides minimal foraging habitat, but no suitable nesting opportunities.
Arizona elegans occidentalis California glossy snake	Fed: None CA: SSC	Occurs in a wide variety of habitat types including open desert, grasslands, shrublands, chaparral, and woodlands. Prefers areas where the soil is loose and sandy which allows for burrowing.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Artemisiospiza belli belli Bell's sage sparrow	Fed: None CA: WL	Occurs in chaparral dominated by fairly dense stands of chamise. Also found in coastal sage scrub in south of range.	No	**Low**: Although isolated, the buckwheat scrub provides minimal habitat onsite.
Asio otus long-eared owl	Fed: None CA: SSC	Requires riparian or other thickets with small, densely canopied trees for roosting and nesting. Also occurs in dense conifer stands at higher elevations.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
Aspidoscelis hyperythra orange-throated whiptail	Fed: None CA: WL	Inhabits low-elevations coastal scrub, chamise-redshank chaparral, mixed chaparral, and valley-foothill hardwood habitats. Semi-arid brushy areas typically with loose soil and rocks, including washes, stream sides, rocky hillsides, and coastal chaparral.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Aspidoscelis tigris stejnegeri coastal whiptail	Fed: None CA: SSC	Found in a variety of ecosystems, primarily hot and dry open areas with sparse foliage - chaparral, woodland, and riparian areas.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Athene cunicularia burrowing owl	Fed: None CA: SSC	Common yearlong resident of southern California. Prefers open, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Requires fossorial burrows for roosting and nesting surrounded by relatively short vegetation and open habitat for foraging and watching for predators. Also known to occupy man-made structures including drain pipes, debris piles, and development pads.	No	**Low:** The project site provides minimal habitat.
Batrachoseps gabrieli San Gabriel slender salamander	Fed: None CA: None	Known from select localities in the San Gabriel Mountains and the Mt. Baldy area of Los Angeles County and the western end of the San Bernardino Mountains in San Bernardino Co., with an elevation range of 1,200- 5,085 feet. Occurs on talus slopes surrounded by a variety of conifer and montane hardwood species, including bigcone spruce, pine, white fir, incense cedar, canyon live oak, black oak, and California laurel.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Bombus crotchii Crotch bumble bee	Fed: None CA: None	Exclusive to coastal California east towards the Sierra-Cascade Crest; less common in western Nevada.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Calypte costae Costa's hummingbird	Fed: None CA: None	Desert and semi-desert, arid brushy foothills and chaparral. A desert hummingbird that breeds in the Sonoran and Mojave Deserts. Departs desert heat moving into chaparral, scrub, and woodland habitats.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Chaetodipus fallax fallax northwestern San Diego pocket mouse	Fed: None CA: SSC	Occurs in desert and coastal habitats in southern California, Mexico, and northern Baja California, from sea level to at least 1,400 meters above msl. Found in a variety of temperate habitats ranging from chaparral and grasslands to scrub forests and deserts. Requires low growing vegetation or rocky outcroppings, as well as sandy soils for burrowing.	No	**Low**: Although isolated, the buckwheat scrub provides minimal habitat onsite.
Circus cyaneus northern harrier	Fed: None CA: SSC	Frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands; seldom found in wooded areas. Mostly found in flat, or hummocky, open areas of tall, dense grasses moist or dry shrubs, and edges for nesting, cover, and feeding.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Coleonyx variegatus abbotti San Diego banded gecko	Fed: None CA: None	Prefers rocky areas in coastal sage and chaparral within granite or rocky outcrops. Occurs in coastal and cismontane southern California from interior Ventura Co. south.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Diadophis punctatus modestus San Bernardino ringneck snake	Fed: None CA: None	Common in open, relatively rocky areas within valley-foothill, mixed chaparral, and annual grass habitats.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
Dipodomys merriami parvus San Bernardino kangaroo rat	Fed: **END** CA: SSC	Primarily found in Riversidean alluvial fan sage scrub (RAFSS) and sandy loam soils, alluvial fans and flood plains, and along washes with nearby sage scrub. May also occur at lower densities in Riversidean upland sage scrub, chaparral and grassland in uplands and tributaries in proximity to RAFSS habitat. Tends to avoid rocky substrates.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Dipodomys simulans Dulzura kangaroo rat	Fed: None CA: None	Relatively common in chaparral, coastal sage scrub, Riversidean alluvial fan sage scrub, and peninsular juniper woodland habitats.	No	**Low**: Although isolated, the buckwheat scrub provides minimal habitat onsite.
Dipodomys stephensi Stephens' kangaroo rat	Fed: **END** CA: **THR**	Occur in arid and semi-arid habitats with some grass or brush. Prefer open habitats with less than 50% protective cover. Require soft, well-drained substrate for building burrows and are typically found in areas with sandy soil.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Egretta thula snowy egret	Fed: None CA: None	Widespread in California along shores of coastal estuaries, fresh and saline emergent wetlands, ponds, slow-moving rivers, irrigation ditches, and wet fields. In southern California, common yearlong in the Imperial Valley and along the Colorado River.	No	**Low:** The project site provides minimal foraging habitat, but no suitable nesting opportunities.
Elanus leucurus white-tailed kite	Fed: None CA: FP	Occurs in low elevation, open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Uses trees with dense canopies for cover. Important prey item is the California vole.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Empidonax traillii willow flycatcher	Fed: None CA: **END**	A rare to locally uncommon, summer resident in wet meadow and montane riparian habitats (2,000 to 8,000 ft) in the Sierra Nevada and Cascade Range. Most often occurs in broad, open river valleys or large mountain meadows with lush growth of shrubby willows.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Empidonax traillii extimus southwestern willow flycatcher	Fed: **END** CA: **END**	Occurs in riparian woodlands in southern California. Typically requires large areas of willow thickets in broad valleys, canyon bottoms, or around ponds and lakes. These areas typically have standing or running water, or are at least moist.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Eremophila alpestris actia California horned lark	Fed: None CA: WL	Occurs in meadows, grasslands, open fields, prairie, and alkali flats. This subspecies is typically found in coastal regions.	No	**Low:** The project site provides minimal foraging habitat.
Eumops perotis californicus western mastiff bat	Fed: None CA: SSC	Primarily a cliff-dwelling species, roost generally under exfoliating rock slabs. Roosts are generally high above the ground, usually allowing a clear vertical drop of at least 3 meters below the entrance for flight. In California, it is most frequently encountered in broad open areas including dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Lampropeltis zonata (parvirubra) California mountain kingsnake (San Bernardino population)	Fed: None CA: CSC	Found in diverse habitats including coniferous forest, oak-pine woodlands, riparian woodland, chaparral, Manzanita, and coastal sage scrub. Wooded areas near a stream with rock outcrops, talus or rotting logs that are exposed to the sun.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
Lanius ludovicianus loggerhead shrike	Fed: None CA: SSC	Common yearlong resident of California. Prefers open habitats with bare ground, scattered shrubs, and areas with low or sparse herbaceous cover. Requires suitable perches including trees, posts, fences, utility lines, or other perches.	No	**Low:** The project site provides minimal foraging habitat, but no suitable nesting opportunities.
Larus californicus California gull	Fed: None CA: WL	Require isolated islands in rivers, reservoirs and natural lakes for nesting, where predations pressures from terrestrial mammals are diminished. Uses both fresh and saline aquatic habitats at variable elevations and degrees of aridity for nesting and for opportunistic foraging.	No	**Low:** The project site provides minimal foraging habitat, but no suitable nesting opportunities.
Lasiurus xanthinus western yellow bat	Fed: None CA: SSC	Occurs in valley/foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts under palm trees and feeds in, and near, palm oases and riparian habitats.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Laterallus jamaicensis coturniculus California black rail	Fed: None CA: **THR**/FP	Suitable habitat includes salt marshes, freshwater marshes, and wet meadows. In tidal areas they require dense cover of upland vegetation for protection from predators.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Lepus californicus bennettii San Diego black-tailed jackrabbit	Fed: None CA: SSC	Occupies many diverse habitats, but primarily is found in arid regions supporting short-grass habitats, agricultural fields, or sparse coastal scrub.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Neotoma lepida intermedia San Diego desert woodrat	Fed: None CA: SSC	Occurs in coastal scrub communities between San Luis Obispo and San Diego Counties. Prefers moderate to dense canopies, and especially rocky outcrops.	No	**Low**: Although isolated, the buckwheat scrub provides minimal habitat onsite.
Nycticorax nycticorax black-crowned night heron	Fed: None CA: None	Common in wetlands across North America, including saltmarshes, freshwater marshes, swamps, streams, rivers, lakes, ponds, lagoons, tidal mudflats, and wet agricultural fields. They require aquatic habitat for foraging and terrestrial vegetation for cover.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Onychomys torridus ramona southern grasshopper mouse	Fed: None CA: SSC	Inhabits alkali desert scrub and other desert scrub habitats, and to a lesser extent succulent shrubs, desert washes, desert riparian, coastal scrub, mixed chaparral, and sagebrush habitats. Generally rare in valley foothill and montane riparian habitats. Prefers low to moderate shrub cover and requires friable soils.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Ovis canadensis nelsoni desert bighorn sheep	Fed: None CA: FP	Require a variety of habitat characteristics related to topography, visibility, forage quality and quantity, and water availability (USFWS 2000). Prefer areas on or near mountainous terrain that are visually open, as well as steep and rocky. Alluvial fans and washed in flatter terrain is also used for foraging, water, and connectivity between mountainous areas. Tend to avoid dense vegetation and higher elevations that support chaparral.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Perognathus longimembris brevinasus Los Angeles pocket mouse	Fed: None CA: SSC	Occurs in lower elevation grasslands and coastal sage scrub communities in and around the Los Angeles Basin. Prefers open ground with fine sandy soils. May not dig extensive burrows, but instead will seek refuge under weeds and dead leaves instead.	No	**Low**: Although isolated, the buckwheat scrub provides minimal habitat onsite.

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
Perognathus longimembris pacificus Pacific pocket mouse	Fed: **END** CA: SSC	Associated with fine grain, sandy substrates in coastal strand, coastal dunes, river alluvium and coastal sage scrub habitats.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Phalacrocorax auritus double-crested cormorant	Fed: None CA: WL	Prefers water less than 30 feet deep with rocky or gravel bottom. Rests in daytime and roosts overnight beside water on offshore rocks, islands, cliffs, dead branches of trees, wharfs, jetties, or even transmission lines.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Phrynosoma blainvillii coast horned lizard	Fed: None CA: SSC	Found in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest. The key elements of such habitats are loose, fine soils with a high sand fraction; an abundance of native ants or other insects; and open areas with limited overstory for basking and low, but relatively dense shrubs for refuge.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Polioptila californica californica coastal California gnatcatcher	Fed: **THR** CA: SSC	Common yearlong resident of southern California in sage scrub habitats that are dominated by California sagebrush (*Artemisia californica*). Prefers scrub habitat with more low-growing vegetation. Species generally occurs below 750 feet above mean sea level (msl) along the coast and below 1,500 feet above msl within inland regions.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Rana muscosa southern mountain yellow-legged frog	Fed: **END** CA: **END** ; WL	Prefers high-altitude mountain streams, typically those with boulders in them. Always found in the water, on rocks, or within a foot or two of the water's edge.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Rhaphiomidas terminatus abdominalis Delhi Sands flower-loving fly	Fed: **END** CA: None	DSF habitat is limited to areas that include Delhi fine sand, an aeolian (wind-deposited) soil type. The highest density of DSF have been found in habitat that includes a variety of plants including California buckwheat, California croton, deerweed, and telegraph weed.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Salvadora hexalepis virgultea coast patch-nosed snake	Fed: None CA: SSC	Inhabits semi-arid brushy areas and chaparral in canyons, rocky hillsides, and plains. Requires friable soils for burrowing.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Selasphorus rufus rufous hummingbird	Fed: None CA: None	Breed in open or shrubby areas, forest openings, yards, and parks. During migration they are commonly found in disturbed areas where its food flowers are in bloom.	No	**Low:** The project site provides minimal habitat.
Setophaga petichia yellow warbler	Fed: None CA: SSC	Nests over all of California except the Central Valley, the Mojave Desert region, and high altitudes and the eastern side of the Sierra Nevada. Winters along the Colorado River and in parts of Imperial and Riverside Counties. Nests in riparian areas dominated by willows, cottonwoods, sycamores, or alders or in mature chaparral. May also use oaks, conifers, and urban areas near stream courses.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Spea hammondii western spadefoot	Fed: None CA: SSC	Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Rain pools which do not contain bullfrogs, fish, or crayfish are necessary for breeding.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
Spinus lawrencei Lawrence's goldfinch	Fed: None CA: None	Open woodlands, chaparral, and weedy fields. Closely associated with oaks. Nests in open oak or other arid woodland and chaparral near water.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Spizella breweri Brewer's sparrow	Fed: None CA: None	Habitats include sagebrush and brushy plains.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Thamnophis hammondii two-striped garter snake	Fed: None CA: SSC	Occurs in or near permanent fresh water, often along streams with rocky beds and riparian growth up to 7,000 feet in elevation.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Xanthocephalus xanthocephalus yellow-headed blackbird	Fed: None CA: SSC	Occurs in freshwater emergent wetlands, and moist, open areas along croplands and mud flats of lacustrine habitats. Prefers to nest in dense wetland vegetation characterized by tules, cattails, or other similar plant species along the border of lakes and ponds.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
SPECIAL-STATUS PLANT SPECIES				
Acanthoscyphus parishii var. parishii Parish's oxytheca	Fed: None CA: None CNPS: 4.2	Habitats include sandy or shale chaparral. Found at elevations ranging from 3,750 to 6,748 feet above mean sea level (msl). Blooming period is from June to August.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Arctostaphylos glandulosa* ssp. *gabrielensis San Gabriel manzanita	Fed: None CA: None CNPS: 1B.2	Habitat includes rocky chaparral. Found at elevations ranging from 1,952 to 4,921 feet above msl. Blooming period is March.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Asplenium vespertinum western spleenwort	Fed: None CA: None CNPS: 4.2	Occurs on rocky soils in chaparral, cismontane woodland, and coastal scrub habitats. Found at elevations ranging from 590 to 3,280 feet above msl. Blooming period is from February to June.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Calochortus catalinae Catalina mariposa-lily	Fed: None CA: None CNPS: 4.2	Grows in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland habitats. Found at elevations ranging from 49 to 2,297 feet. Blooming period is from March to June.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Calochortus plummerae Plummer's mariposa-lily	Fed: None CA: None CNPS: 4.2	Prefers openings in chaparral, foothill woodland, coastal sage scrub, valley and foothill grasslands, cismontane woodland, lower montane coniferous forest and yellow pine forest. Often found on dry, rocky slopes and soils and brushy areas. Can be very common after a fire. From 328 to 5,577 feet in elevation. Blooming period is from May to July.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Chorizanthe parryi* var. *parryi Parry's spineflower	Fed: None CA: None CNPS: 1B.1	Occurs on sandy and/or rocky soils in chaparral, coastal sage scrub, and sandy openings within alluvial washes and margins. Found at elevations ranging from 951 to 3,773 feet. Blooming period is from April to June.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Cladium californicum California saw-grass	Fed: None CA: None CNPS: 2B.2	Found in meadows and seeps, marshes and alkaline swamps or freshwater habitats. Found at elevations ranging from 197 to 5,249 feet. Blooming period is from June to September.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Claytonia lanceolata* var. *peirsonii Peirson's spring beauty	Fed: None CA: None CNPS: 3.1	Habitats include subalpine coniferous forest and upper montane coniferous forest. Found at elevations ranging from 4,954 to 9,005 feet above msl. Blooming period is from March to June.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
Deinandra paniculata paniculate tarplant	Fed: None CA: None CNPS: 4.2	Occurs in coastal scrub, vernal pools, valley and foothill grassland habitats. Found at elevations ranging from 82 to 3,084 feet. Blooming period is from April to November.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Diplacus johnstonii Johnston's monkeyflower	Fed: None CA: None CNPS: 4.3	Occurs in lower montane coniferous forest (scree, disturbed areas, rocky or gravelly roadside) habitat. Found at elevations ranging from 3,199 to 9,580 feet above msl. Blooming period is from May to August.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Eriogonum microthecum* var. *alpinum alpine slender buckwheat	Fed: None CA: None CNPS: 4.3	Associated with alpine dwarf scrub and great basin scrub. Found at elevations ranging from 8,202 to 10,862 feet above msl. Blooming period is from July to September.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Eriogonum microthecum* var. *johnstonii Johnston's buckwheat	Fed: None CA: None CNPS: 1B.3	Grows in rocky soils within subalpine coniferous forest and upper montane coniferous forest. Found at elevations ranging from 6,000 to 9,600 feet above msl. Blooming period is from July to September.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Eriogonum umbellatum* var. *minus alpine sulphur-flowered buckwheat	Fed: None CA: None CNPS: 4.3	Occurs in gravelly soils within subalpine coniferous forest and upper montane coniferous forests. Found at elevations ranging from 5,906 to 10,066 feet above msl. Blooming period is from June to September.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Eriophyllum lanatum* var. *obovatum southern Sierra woolly sunflower	Fed: None CA: None CNPS: 4.3	Found in sandy loam soils within lower and upper montane coniferous forests. Found at elevations ranging from 3,655 to 8,202 feet above msl. Blooming period is from June to July.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Fritillaria pinetorum pine fritillary	Fed: None CA: None CNPS: 4.3	Associated with granitic and metamorphic soils within chaparral, lower montane coniferous forest, upper montane coniferous forest, subalpine coniferous forest, pinyon and juniper woodland. Found at elevations ranging from 5,692 to 10,826 feet above msl. Blooming period is from May to September.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Galium angustifolium* ssp. *gabrielense San Antonio Canyon bedstraw	Fed: None CA: None CNPS: 4.3	Grows in granitic, sandy or rocky soils within chaparral and lower montane coniferous forests. Found at elevations ranging from 3,937 to 8,694 feet above msl. Blooming period is from April to August.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Galium jepsonii Jepson's bedstraw	Fed: None CA: None CNPS: 4.3	Found in granitic, rocky or gravelly soils within lower montane coniferous forest and upper montane coniferous forest habitats. Found at elevations ranging from 5,052 to 8,202 feet above msl. Blooming period is from July to August.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Galium johnstonii Johnston's bedstraw	Fed: None CA: None CNPS: 4.3	Preferred habitats include chaparral, riparian woodland, lower montane coniferous forest, pinyon and juniper woodland. Found at elevations ranging from 4,003 to 7,546 feet above msl. Blooming period is from June to July.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Heuchera caespitosa urn-flowered alumroot	Fed: None CA: None CNPS: 4.3	Grows in rocky soils within cismontane woodland, lower montane coniferous forest, riparian forest, and upper montane coniferous forest. Found at elevations ranging from 3,789 to 8,694 feet above msl. Blooming period is from May to August.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
Horkelia cuneata* var. *puberula mesa horkelia	Fed: None CA: None CNPS: 1B.1	Occurs on sandy or gravelly soils in chaparral, woodlands, and coastal scrub plant communities. Found at elevations ranging from 230 to 2,657 feet. Blooming period is from February to September.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Juglas californica southern California black walnut	Fed: None CA: None CNPS: 4.2	Found in chaparral, cismontane woodland, coastal scrub, and riparian woodland habitats. Found at elevations ranging from 164 to 2,953 feet. Blooming period is from March to August.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Juncus duranii Duran's rush	Fed: None CA: None CNPS: 4.3	Habitats include lower and upper montane coniferous forests, meadows and seeps. Found at elevations ranging from 5,801 to 9,199 feet above msl. Blooming period is from July to August.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Lepechinia fragrans fragrant pitcher sage	Fed: None CA: None CNPS: 4.2	Occurs in chaparral habitat. Found at elevations ranging from 66 to 4,298 feet above msl. Blooming period is from March to October.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Lilium humboldtii* ssp. *ocellatum ocellated humboldt lily	Fed: None CA: None CNPS: 4.2	Found in openings within chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and riparian woodland habitats. Found at elevations ranging from 98 to 5,906 feet in elevation above msl. Blooming period is from March to August.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Lilium parryi lemon lily	Fed: None CA: None CNPS: 1B.2	Prefers lower montane coniferous forest, riparian forests, upper montane coniferous forests, meadows and seeps. Found at elevations ranging from 4,003 to 9,006 feet above msl. Blooming period is from July to August.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Linanthus concinnus San Gabriel linanthus	Fed: None CA: None CNPS: 1B.2	Occurs in rocky, openings within chaparral, lower montane and upper montane coniferous forests. Found at elevations ranging from 4,987 to 9,186 feet above msl. Blooming period is from April to July.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Monardella australis* ssp. *jokerstii Jokerst's monardella	Fed: None CA: None CNPS: 1B.1	Habitat includes chaparral and lower montane coniferous forest. Found on steep or talus slopes between breccia, secondary alluvial benches along drainages and washes. Found at elevations ranging from 4,429 to 5,741 feet above msl. Blooming period is from July to September.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Muhlenbergia californica California muhly	Fed: None CA: None CNPS: 4.3	Found in mesic, seeps, and streambanks within chaparral, coastal scrub, lower montane coniferous forest, and meadows and seeps. Found at elevations ranging from 328 to 6,562 feet. Blooming period is from June to September.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Navarretia prostrata prostrate vernal pool navarretia	Fed: None CA: None CNPS: 1B.1	Coastal scrub, valley and foothill grasslands, and vernal pools. Grows in elevation from 49 to 2,297 feet in elevation. Blooming period ranges from April to July.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Oreonana vestita woolly mountain-parsley	Fed: None CA: None CNPS: 1B.3	Associated with gravel and talus soils within lower montane coniferous forest, subalpine coniferous forest, and upper montane coniferous forest. Found at elevations ranging from 5,299 to 11,483 feet above msl. Blooming period is from March to September.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Phacelia mohavensis Mojave phacelia	Fed: None CA: None CNPS: 4.3	Occurs in sandy or gravelly soils within cismontane woodland, lower montane coniferous forest, meadows and seeps, pinyon and juniper woodland. Found at elevations ranging from 4,593 to 8,202 feet above msl. Blooming period is from April to August.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
Phacelia stellaris Brand's star phacelia	Fed: None CA: None CNPS: 1B.1	Occurs in coastal dunes and coastal sage scrub habitats. Grows in elevations ranging from 3 to 1,312 feet. Blooming period is from March to June.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Pseudognaphalium leucocephalum white rabbit-tobacco	Fed: None CA: None CNPS: 2B.2	Chaparral, cismontane woodland, coastal scrub, riparian woodlands in sandy gravelly soils. Grows in elevation from 3 to 6,890 feet in elevation. Blooming period ranges from July to December.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Sagittaria sanfordii Sanford's arrowhead	Fed: None CA: None CNPS: 1B.2	Grows in freshwater marshes and swamps. Found at elevations ranging from 0 to 2,132 feet above msl. Blooming period is from May to November.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Streptanthus bernardinus Laguna Mountains jewelflower	Fed: None CA: None CNPS: 4.3	Associated with chaparral and lower montane coniferous forest. Found at elevations ranging from 2,198 to 8,202 feet above msl. Blooming period is from May to August.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Symphyotrichum defoliatum San Bernardino aster	Fed: None CA: None CNPS: 1B.2	Grows in cismontane woodland, coastal scrub, montane/coniferous forest, meadows, seeps, marshes, swamps, and valley/foothill grassland (vernally mesic). Can be found growing near ditches, streams, and springs within these habitats. Found at elevations ranging from 7 to 6,693 feet. Blooming period is from July to November.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
Viola pinetorum* var. *grisea grey-leaved violet	Fed: None CA: None CNPS: 1B.3	Associated with upper montane coniferous forest, subalpine coniferous forest, meadows and seeps. Found at elevations ranging from 4,921 to 11,155 feet above msl. Blooming period is from April to July.	No	**Presumed Absent:** There is no suitable habitat within or adjacent to the project site.
SPECIAL-STATUS PLANT COMMUNITIES				
California Walnut Woodland	CDFW Sensitive Habitat	Occurs on valley slopes and in valley bottoms, as well as around rocky outcrops. This habitat usually occurs in areas with relatively moist, fine soils. It can intergrade with coast live oak woodland and coast live oak forest in more mesic areas. The canopy is relatively open and is dominated by California walnut with a grassy understory.	No	**Absent**
Coastal and Valley Freshwater Marsh	CDFW Sensitive Habitat	Found along the coast and in coastal valleys near river mouths and around the margins of lakes and springs. Site lacks significant current and is permanently flooded by fresh water. Prolonged saturation permits accumulations of deep, peaty soils.	No	**Absent**
Riversidian Alluvial Fan Sage Scrub	CDFW Sensitive Habitat	Occur within broad washes of sandy alluvial drainages that carry rainfall runoff sporadically in winter and spring, but remain relatively dry through the remainder of the year. Is restricted to drainages and floodplains with very sandy substrates that have a dearth of decomposed plant material. These areas do not develop into riparian woodland or scrub due to the limited water resources and scouring by occasional floods.	No	**Absent**
Southern Sycamore Alder Riparian Woodland	CDFW Sensitive Habitat	Below 2,000 meters in elevation, sycamore and alder often occur along seasonally-flooded banks; cottonwoods and willows also are often present. Poison-oak, mugwort, elderberry and wild raspberry may be present in the understory.	No	**Absent**

U.S. Fish and Wildlife Service (USFWS) - Federal
END - Federally Endangered
THR - Federally Threatened

California Department of Fish and Wildlife (CDFW) - California
END - State Endangered
CEND - State Candidate Endangered
SSC - Species of Special Concern
WL - Watch List
FP - Fully Protected

California Native Plant Society (CNPS)
California Rare Plant Rank
1A Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere
1B Plants Rare, Threatened, or Endangered in California and Elsewhere
2B Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere
4 Plants of Limited Distribution – A Watch List

Threat Ranks
0.1 - Seriously threatened in California
0.2 - Moderately threatened in California
0.3 - Not very threatened in California

Appendix D Regulations

Special status species are native species that have been afforded special legal or management protection because of concern for their continued existence. There are several categories of protection at both federal and state levels, depending on the magnitude of threat to continued existence and existing knowledge of population levels.

Federal Regulations

Endangered Species Act of 1973

Federally listed threatened and endangered species and their habitats are protected under provisions of the Federal Endangered Species Act (ESA). Section 9 of the ESA prohibits "take" of threatened or endangered species. "Take" under the ESA is defined as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any of the specifically enumerated conduct." The presence of any federally threatened or endangered species that are in a project area generally imposes severe constraints on development, particularly if development would result in "take" of the species or its habitat. Under the regulations of the ESA, the United States Fish and Wildlife Service (USFWS) may authorize "take" when it is incidental to, but not the purpose of, an otherwise lawful act.

Critical Habitat is designated for the survival and recovery of species listed as threatened or endangered under the ESA. Critical Habitat includes those areas occupied by the species, in which are found physical and biological features that are essential to the conservation of an ESA listed species and which may require special management considerations or protection. Critical Habitat may also include unoccupied habitat if it is determined that the unoccupied habitat is essential for the conservation of the species.

Whenever federal agencies authorize, fund, or carry out actions that may adversely modify or destroy Critical Habitat, they must consult with USFWS under Section 7 of the ESA. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highway Administration or a permit from the U.S. Army Corps of Engineers (Corps)).

If USFWS determines that Critical Habitat will be adversely modified or destroyed from a proposed action, the USFWS will develop reasonable and prudent alternatives in cooperation with the federal institution to ensure the purpose of the proposed action can be achieved without loss of Critical Habitat. If the action is not likely to adversely modify or destroy Critical Habitat, USFWS will include a statement in its biological opinion concerning any incidental take that may be authorized and specify terms and conditions to ensure the agency is in compliance with the opinion.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S. Government Code [USC] 703) makes it unlawful to pursue, capture, kill, possess, or attempt to do the same to any migratory bird or part, nest, or egg of any such bird listed in wildlife protection treaties between the United States, Great Britain, Mexico, Japan, and the countries of the former Soviet Union, and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703; 50 CFR 10, 21).

The MBTA covers the taking of any nests or eggs of migratory birds, except as allowed by permit pursuant to 50 CFR, Part 21. Disturbances causing nest abandonment and/or loss of reproductive effort (i.e., killing or abandonment of eggs or young) may also be considered "take." This regulation seeks to protect migratory birds and active nests.

In 1972, the MBTA was amended to include protection for migratory birds of prey (e.g., raptors). Six families of raptors occurring in North America were included in the amendment: Accipitridae (kites, hawks, and eagles); Cathartidae (New World vultures); Falconidae (falcons and caracaras); Pandionidae (ospreys); Strigidae (typical owls); and Tytonidae (barn owls). The provisions of the 1972 amendment to the MBTA protects all species and subspecies of the families listed above. The MBTA protects over 800 species including geese, ducks, shorebirds, raptors, songbirds and many relatively common species.

State Regulations

California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) provides for the protection of the environment within the State of California by establishing State policy to prevent significant, avoidable damage to the environment through the use of alternatives or mitigation measures for projects. It applies to actions directly undertaken, financed, or permitted by State lead agencies. If a project is determined to be subject to CEQA, the lead agency will be required to conduct an Initial Study (IS); if the IS determines that the project may have significant impacts on the environment, the lead agency will subsequently be required to write an Environmental Impact Report (EIR). A finding of non-significant effects will require either a Negative Declaration or a Mitigated Negative Declaration instead of an EIR. Section 15380 of the CEQA Guidelines independently defines "endangered" and "rare" species separately from the definitions of the California Endangered Species Act (CESA). Under CEQA, "endangered" species of plants or animals are defined as those whose survival and reproduction in the wild are in immediate jeopardy, while "rare" species are defined as those who are in such low numbers that they could become endangered if their environment worsens.

California Endangered Species Act (CESA)

In addition to federal laws, the state of California implements the CESA which is enforced by CDFW. The CESA program maintains a separate listing of species beyond the FESA, although the provisions of each act are similar.

State-listed threatened and endangered species are protected under provisions of the CESA. Activities that may result in "take" of individuals (defined in CESA as; "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") are regulated by CDFW. Habitat degradation or modification is not included in the definition of "take" under CESA. Nonetheless, CDFW has interpreted "take" to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is considered as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the

absence of special protection or management. A rare species is one that is considered present in such small numbers throughout its range that it may become endangered if its present environment worsens. State threatened and endangered species are fully protected against take, as defined above.

The CDFW has also produced a species of special concern list to serve as a species watch list. Species on this list are either of limited distribution or their habitats have been reduced substantially, such that a threat to their populations may be imminent. Species of special concern may receive special attention during environmental review, but they do not have formal statutory protection. At the federal level, USFWS also uses the label species of concern, as an informal term that refers to species which might be in need of concentrated conservation actions. As the Species of Concern designated by USFWS do not receive formal legal protection, the use of the term does not necessarily ensure that the species will be proposed for listing as a threatened or endangered species.

Fish and Game Code

Fish and Game Code Sections 3503, 3503.5, 3511, and 3513 are applicable to natural resource management. For example, Section 3503 of the Code makes it unlawful to destroy any birds' nest or any birds' eggs that are protected under the MBTA. Further, any birds in the orders Falconiformes or Strigiformes (Birds of Prey, such as hawks, eagles, and owls) are protected under Section 3503.5 of the Fish and Game Code which makes it unlawful to take, possess, or destroy their nest or eggs. A consultation with CDFW may be required prior to the removal of any bird of prey nest that may occur on a project site. Section 3511 of the Fish and Game Code lists fully protected bird species, where the CDFW is unable to authorize the issuance of permits or licenses to take these species. Pertinent species that are State fully protected by the State include golden eagle (*Aquila chrysaetos*) and white-tailed kite (*Elanus leucurus*). Section 3513 of the Fish and Game Code makes it unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Native Plant Protection Act

Sections 1900–1913 of the Fish and Game Code were developed to preserve, protect, and enhance Rare and Endangered plants in the state of California. The act requires all state agencies to use their authority to carry out programs to conserve Endangered and Rare native plants. Provisions of the Native Plant Protection Act prohibit the taking of listed plants from the wild and require notification of the CDFW at least ten days in advance of any change in land use which would adversely impact listed plants. This allows the CDFW to salvage listed plant species that would otherwise be destroyed.

California Native Plant Society Rare and Endangered Plant Species

Vascular plants listed as rare or endangered by the CNPS, but which have no designated status under FESA or CESA are defined as follows:

California Rare Plant Rank

1A- Plants Presumed Extirpated in California and either Rare or Extinct Elsewhere

1B- Plants Rare, Threatened, or Endangered in California and Elsewhere

2A- Plants Presumed Extirpated in California, But More Common Elsewhere

2B- Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

3- Plants about Which More Information is Needed - A Review List

4- Plants of Limited Distribution - A Watch List

Threat Ranks

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

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

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

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates activities pursuant to Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFG regulates activities under the Fish and Game Code Section 1600-1616, and the Regional Board regulates activities pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

Federal Regulations

Section 404 of the Clean Water Act

Since 1972, the Corps and U.S. Environmental Protection Agency (EPA) have jointly regulated the filling of "waters of the U.S.," including wetlands, pursuant to Section 404 of the Clean Water Act (CWA). The Corps has regulatory authority over the discharge of dredged or fill material into the waters of the United States under Section 404 of the CWA. The Corps and EPA define "fill material" to include any "material placed in waters of the United States where the material has the effect of: (i) replacing any portion of a water of the United States with dry land; or (ii) changing the bottom elevation of any portion of the waters of the United States." Examples include, but are not limited to, sand, rock, clay, construction debris, wood chips, and "materials used to create any structure or infrastructure in the waters of the United States." In order to further define the scope of waters protected under the CWA, the Corps and EPA published the Clean Water Rule on June 29, 2015. Pursuant to the Clean Water Rule, the term "*waters of the United States*" is defined as follows:

(i) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.

(ii) All interstate waters, including interstate wetlands[1].

(iii) The territorial seas.

(iv) All impoundments of waters otherwise defined as waters of the United States under the definition.

(v) All tributaries[2] of waters identified in paragraphs (i) through (iii) mentioned above.

(vi) All waters adjacent[3] to a water identified in paragraphs (i) through (v) mentioned above, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters.

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1 The term *wetlands* means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

2 The terms *tributary* and *tributaries* each mean a water that contributes flow, either directly or through another water (including an impoundment identified in paragraph (iv) mentioned above), to a water identified in paragraphs (i) through (iii) mentioned above, that is characterized by the presence of the physical indicators of a bed and banks and an ordinary high water mark.

3 The term *adjacent* means bordering, contiguous, or neighboring a water identified in paragraphs (i) through (v) mentioned above, including waters separated by constructed dikes or barriers, natural river berms, beach dunes, and the like.

(vii) All prairie potholes, Carolina bays and Delmarva bays, Pocosins, western vernals pools, Texas coastal prairie wetlands, where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (i) through (iii) meantioned above.

(viii) All waters located within the 100-year floodplain of a water identified in paragraphs (i) through (iii) mentioned above and all waters located within 4,000 feet of the high tide line or ordinary high water mark of a water identified in paragraphs (i) through (v) mentioned above, where they are determined on a case-specific basis to have a significant nexus to a waters identified in paragraphs (i) through (iii) mentioned above.

The following features are not defined as "waters of the United States" even when they meet the terms of paragraphs (iv) through (viii) mentioned above:

(i) Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act.

(ii) Prior converted cropland.

(iii) The following ditches:

(A) Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary.
(B) Ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands.
(C) Ditches that do not flow, either directly or through another water, into a water of the United States as identified in paragraphs (i) through (iii) of the previous section.

(iv) The following features:

(A) Artificially irrigated areas that would revert to dry land should application of water to that area cease;
(B) Artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, settling basins, fields flooded for rice growing, log cleaning ponds, or cooling ponds;
(C) Artificial reflecting pools or swimming pools created in dry land;
(D) Small ornamental waters created in dry land;
(E) Water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water;
(F) Erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of a tributary, non-wetland swales, and lawfully constructed grassed waterways; and
(G) Puddles.

(v) Groundwater, including groundwater drained through subsurface drainage systems.

(vi) Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.

(vii) Wastewater recycling structures constructed in dry land; detention and retention basins built for wastewater recycling; groundwater recharge basins; percolation ponds built for wastewater recycling; and water distributary structures built for wastewater recycling.

Section 401 of the Clean Water Act

Pursuant to Section 401 of the CWA, any applicant for a federal license or permit to conduct any activity which may result in any discharge to waters of the United States must provide certification from the State or Indian tribe in which the discharge originates. This certification provides for the protection of the physical, chemical, and biological integrity of waters, addresses impacts to water quality that may result from issuance of federal permits, and helps insure that federal actions will not violate water quality standards of the State or Indian tribe. In California, there are nine Regional Water Quality Control Boards (Regional Board) that issue or deny certification for discharges to waters of the United States and waters of the State, including wetlands, within their geographical jurisdiction. The State Water Resources Control Board assumed this responsibility when a project has the potential to result in the discharge to waters within multiple Regional Boards.

State Regulations

Fish and Game Code

Fish and Game Code Sections 1600 et. seq. establishes a fee-based process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely impact fish and wildlife resources, or, when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

Fish and Game Code Section 1602 requires any person, state, or local governmental agency or public utility to notify the CDFW before beginning any activity that will do one or more of the following:

(1) substantially obstruct or divert the natural flow of a river, stream, or lake;
(2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or
(3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

Fish and Game Code Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State. CDFW's regulatory authority extends to include riparian habitat (including wetlands) supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. Generally, the CDFW takes jurisdiction to the top of bank of the stream or to the outer limit of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that will take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation. A Section 1602 Streambed Alteration Agreement would be required if impacts to identified CDFW jurisdictional areas occur.

Porter Cologne Act

The California *Porter-Cologne Water Quality Control Act* gives the State very broad authority to regulate waters of the State, which are defined as any surface water or groundwater, including saline waters. The Porter-Cologne Act has become an important tool in the post SWANCC and Rapanos regulatory environment, with respect to the state's authority over isolated and insignificant waters. Generally, any person proposing to discharge waste into a water body that could affect its water quality must file a Report of Waste Discharge in the event that there is no Section 404/401 nexus. Although "waste" is partially defined as any waste substance associated with human habitation, the Regional Board also interprets this to include fill discharged into water bodies.

ATTACHMENT 4

2007 CENTRAL PARK BIOLOGICAL RESOURCES ASSESSMENT REPORT

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GENERAL BIOLOGICAL RESOURCES ASSESSMENT REPORT

CENTRAL PARK PROJECT

CITY OF RANCHO CUCAMONGA

SAN BERNARDINO COUNTY, CALIFORNIA

LSA

October 1, 2007

GENERAL BIOLOGICAL RESOURCES ASSESSMENT REPORT

CENTRAL PARK PROJECT

CITY OF RANCHO CUCAMONGA

SAN BERNARDINO COUNTY, CALIFORNIA

Prepared for:

City of Rancho Cucamonga
Attn: Ms. Karen McGuire-Emery
10500 Civic Center Drive
Rancho Cucamonga, California 91730

Prepared by:

LSA Associates, Inc.
1500 Iowa Avenue, Suite 200
Riverside, California 92507
(951) 781-9310

LSA Project No. CRG0702

LSA

October 1, 2007

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The site is relatively flat and ranges in elevation from approximately 1,300 to 1,360 feet. The soils present on site, as mapped by the Soil Conservation Service (USDA 2005), are Tujunga loamy sand (0–5% slopes) and Tujunga gravelly loamy sand (0–9% slopes). The proposed site is bordered on the north by a recreation trail and housing, on the east by community and senior center and Milliken Avenue, on the south by Base Line Road, and on the west by Deer Creek Channel.

Vegetation

The dominant plant community on-site is California sagebrush scrub (Holland 1996; Sawyer and Keeler-Wolf 1995). Dominant species identified in this plant community include California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), horehound (*Marrubium vulgare*), and deerweed (*Lotus scoparius*). Figure 3 is a vegetation map with photograph locations, and Figures 3A through 3C show typical conditions currently found on the site. A complete list of plant species observed is attached in Appendix A.

Wildlife

Typical wildlife observed or other presence noted (e.g., scat, tracks, and burrows) during the survey included desert cottontail (*Sylvilagus audubonii*), coyote (*Canis latrans*), California ground squirrel (*Spermophilus beecheyi*), red-tailed hawk (*Buteo jamaicensis*), and Say's phoebe (*Sayornis saya*). A complete list of animal species observed is attached in Appendix A.

The literature review revealed a total of 69 sensitive species with the potential to occur within the nine USGS quadrangles surrounding the area of the proposed project site. Appendix B lists these species with a data summary for each and a determination as to the likelihood of the species occurring on the project site.

Other Species of Special Concern

Of the 54 other sensitive species identified in Appendix B, 41 are considered to be absent from the project site based on a lack of suitable habitat. One sensitive species, Los Angeles pocket mouse (*Perognathus longimembris brevinasus*), has a moderate probability of occurrence on the site. Twelve sensitive species (listed below) have a low probability for occurrence on the proposed site.

- Chaparral sand-verbena (*Abronia villosa* var. *aurita*);
- Parry's spineflower (*Chorizanthe parryi* var. *parryi*);
- Robinson's peppergrass (*Lepidium virginicum* var. *robinsonii*);
- Chaparral nolina (*Nolina cismontana*);
- Belding's orange-throated whiptail (*Aspidoscelis hyperythra beldingi*);
- Coastal western whiptail (*Aspidoscelis tigris stejnegeri*);

EXECUTIVE SUMMARY

LSA Associates, Inc. (LSA) was retained by the City of Rancho Cucamonga to prepare a general biological resources assessment for the proposed development of approximately 70 acres located at the northwest corner of Base Line Road and Milliken Avenue in the City of Rancho Cucamonga, San Bernardino County, California.

The following is a list of additional surveys required to complete environmental review.

- The southwest corner of the 100-acre parcel has been developed leaving approximately 70 acres of disturbed coastal sage scrub habitat.
- There is a drainage feature on the project site; thus, a formal jurisdictional delineation is recommended.
- The proposed project site does not lie within designated critical habitat for any listed species; however, presence/absence surveys are required for coastal California gnatcatcher (*Polioptila californica californica*). Due to the presence of suitable habitat (approximately 35 acres of coastal sage scrub), there is potential for isolated pair(s) of gnatcatchers to be present on the proposed project site.
- The proposed project site does have suitable habitat for the listed San Bernardino Merriam's kangaroo rat (*Dipodomys merriami parvus*). The Los Angeles pocket mouse (*Perognathus longimembris brevinasus*), a California Department of Fish and Game species of concern, also has a potential for occurrence on the project site. Small mammal trapping for these species is needed to determine their presence or absence on the proposed project site.
- The burrowing owl (*Athene cunicularia hypugaea*), a CDFG species of concern, has the potential to occur within the remnant vineyard and/or drainage feature on the project site. Focused presence/absence surveys are required to avoid impacts to any nesting owls that may occupy the site.

INTRODUCTION

LSA Associates, Inc. (LSA) conducted a biological resources assessment survey for the proposed development project. The southeast portion of the parcel (approximately 30 acres) has already been developed leaving approximately 70 acres for development. The project site is located at the northwest corner of Milliken Avenue and Base Line Road in the City of Rancho Cucamonga, San Bernardino County, California. This report presents the results of a literature review, a field survey, and identification of potential jurisdictional waters.

PROJECT DESCRIPTION AND LOCATION

The proposed project is to develop the remaining approximately 70 acres of the 100-acre site. Specifically, the site is located in the southeast ¼ and a portion of the southwest ¼ of the southeast ¼ of Section 36, Township 1 North, Range 7 West, in the City of Rancho Cucamonga, San Bernardino County, California, as shown on the *Cucamonga Peak, California* and *Guasti, California* 7.5-minute series U.S. Geological Survey (USGS) topographic maps (Figure 1).

The project includes the development of Central Park Phase II. Phase I is developed (Figure 2). Phase II will encompass the remaining 70 acres of the Central Park site. Proposed uses for Phase II of Central Park include a tennis complex, a gymnasium, an aquatic center, an indoor pool, a fire station, maintenance yard, an amphitheater, overnight family camping, group picnic facilities, lake development, potential parking structure, equestrian facilities, adjacent regional trail, and associated parking.

BACKGROUND

Species of Special Concern

"Species of Special Concern" is a designation assigned by the California Department of Fish and Game (CDFG) to animals and plants that are thought to be at the beginning stage of becoming threatened or endangered. Legal protection for sensitive species varies widely, from the comprehensive protection extended to listed threatened/endangered species to no legal status at present. The CDFG, U.S. Fish and Wildlife Service (USFWS), local agencies, and special interest groups, such as the California Native Plant Society (CNPS), publish watch lists of declining species. Species on watch lists can be included as part of the sensitive species assessment. Non-listed species that are considered sensitive species, species of concern or are candidates for state and/or federal listing are also included in the species of special concern discussion.

Inclusion in the sensitive species analysis is based on the following criteria:

1. Direct observation of the species or its sign in the study area or immediate vicinity during surveys conducted for this study or reported in previous biological studies;
2. Sighting by other qualified observers;
3. Record reported by the California Natural Diversity Data Base (CNDDB) published by CDFG;
4. Presence or location of specific species lists provided by private groups (e.g., CNPS); or
5. Study area lies within known distribution of a given species and contains appropriate habitat.

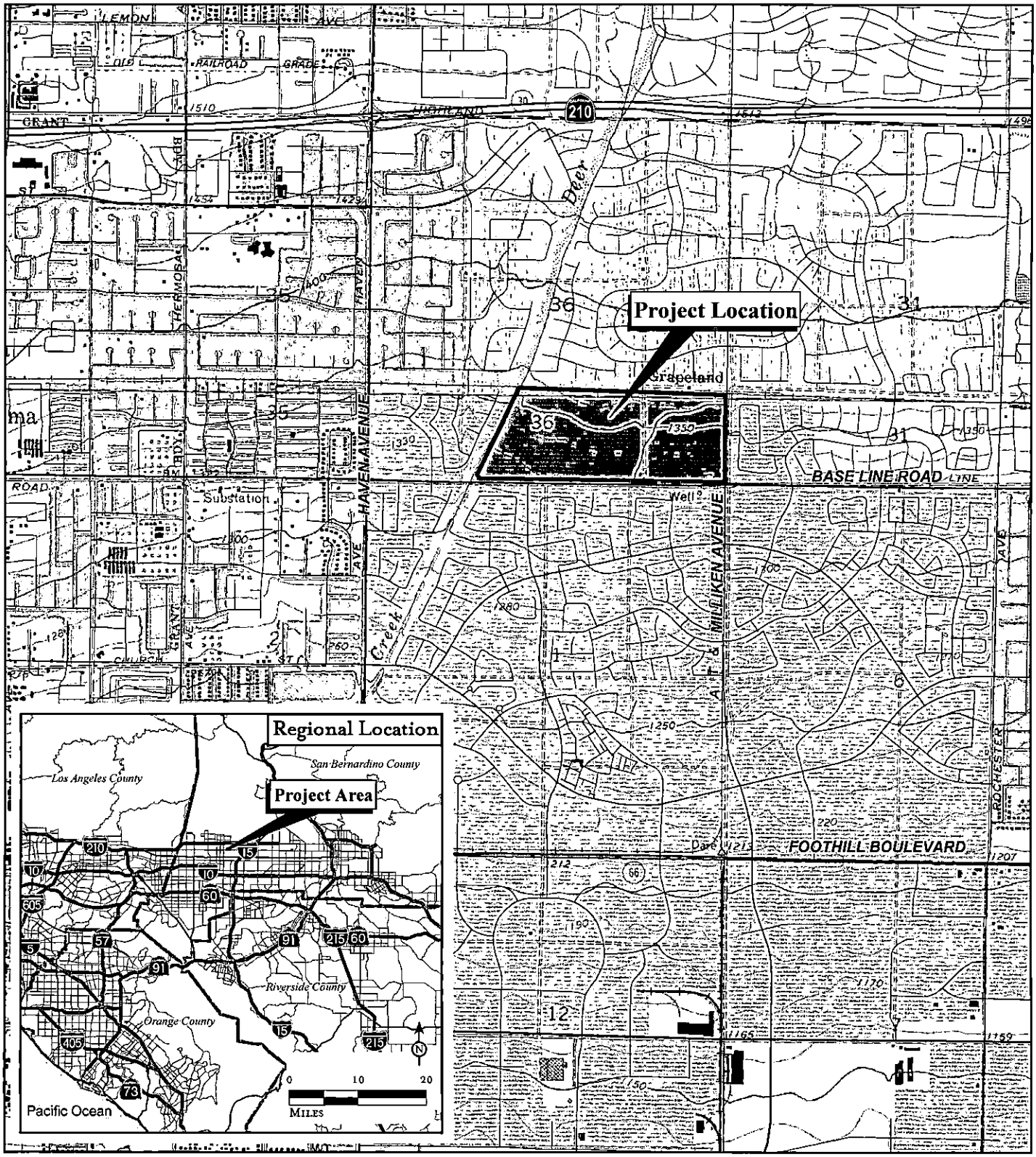

FIGURE 1

Central Park
General Biological Report

Regional and Project Location

SOURCE: USGS 7.5' Quads: Cucamonga Peak(1988), Guasti (1981), CA; Thomas Bros., 2006

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LSA

FIGURE 2

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FEET

SOURCE: RJM Design Group Inc, 2007.

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Central Park
General Biological Resources Assessment

Conceptual Site Plan

Threatened and Endangered Listed Species

The USFWS designates as threatened or endangered, species that are at risk of extinction. The USFWS may also adopt recovery plans that identify specific areas that are essential to the conservation of a listed species. Critical habitat areas which may require special management considerations or protections can also be designated.

Protected Bird Species

Most bird species are protected under the Migratory Bird Treaty Act (MBTA) and under the California Fish and Game Code. It is unlawful to take, possess, or needlessly destroy any bird of prey or the nests or eggs of any kind of bird species except as otherwise provided in California Fish and Game Codes and regulations. Disturbance of any active bird nest during the breeding season is prohibited. Disturbances at the active nesting territories should be avoided during the nesting season, typically February 1 through August 31.

Jurisdictional Waters and Streambeds

The U.S. Army Corps of Engineers (ACOE), under Section 404 of the Federal Clean Water Act (CWA), regulates discharges of dredged or fill material into "waters of the United States." These waters include wetlands and non-wetland areas including ephemeral drainage courses. The ACOE typically regulates as non-wetland waters of the U.S. any drainage displaying an "ordinary high water mark" (OHWM). In order to be considered a jurisdictional wetland under Section 404 of the CWA, an area must possess hydrophytic vegetation, hydric soils, and wetland hydrology.

The Regional Water Quality Control Board (RWQCB) is responsible for the administration of Section 401 of the CWA, through water quality certification of any activity that may result in a discharge to jurisdictional waters of the U.S. The RWQCB also regulates discharges to "waters of the State," including wetlands, under the California Porter-Cologne Water Quality Control Act. The CDFG, under Sections 1600 et seq. of the California Fish and Game Code, regulates alterations to lakes, rivers, and streams. A stream is defined by the presence of a channel bed and banks and at least an ephemeral flow of water.

Wildlife Movement, Corridors, and Nursery Sites

Wildlife movement includes seasonal movement along migration corridors, as well as daily movements for foraging and may include movement of large mammals, riparian corridors providing cover for migrating birds, routes between breeding waters and upland habitat for amphibians, and between roosting and feeding areas for birds.

Local Policies and Ordinances Protecting Biological Resources

City and county general plans and development ordinances may include regulations or policies governing biological resources. For example, policies may include tree preservation, locally designated species survey areas, local species of interest, and significant ecological areas.

Direct Effects

Direct effects are impacts that occur at the same time and in the location of the actual construction work. The associated impacts with construction activities have the potential to result in the destruction, disturbance, and removal of plants, animals, watercourses, and natural communities.

Indirect Effects

Indirect effects are impacts caused by the project action but are later in time or farther in distance from the actual construction work. Indirect effects include growth inducement, changes in land use patterns, increased human intrusion, population growth, noise, and impacts to air quality, wind movements, water quality, hydrology, plant communities, wildlife movement, and regional ecosystems.

Cumulative Effects

Cumulative impacts refer to incremental effects of an individual project when viewed in connection with the effects of past projects, current projects, and probable future projects. Cumulative impact assessments are difficult because the consequences triggered by the impacts affect resources that function as part of a larger complex natural system, and because the effects may be removed in time and space and may not be apparent when only considering the local and short-term direct impacts.

METHODS

Literature Search

A literature review was conducted to determine the existence or potential occurrence of sensitive plant and animal species on the proposed project site or in the vicinity. Database records for the *Cucamonga Peak, California; Guasti, California; Corona North, California; Fontana, California; Ontario, California; Mt. Baldy, California; Devore, California; Prado Dam, California;* and *Riverside West, California* USGS 7.5-minute quadrangles were reviewed on June 27, 2007, using the CDFG's *Rarefind 3* California Natural Diversity Data Base (CNDDB) 2007 and the CNPS *Electronic Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2007). A current aerial photograph (Eagle Aerial 2006) was also reviewed. Maps of USFWS-designated critical habitat were used to determine the location of critical habitats relative to the project site.

General Biological Survey

A reconnaissance-level field survey was conducted on June 28, 2007, by LSA Assistant Wildlife Biologist Lisa Wadley, who noted general site conditions, vegetation, potential jurisdictional areas of ACOE and CDFG, and suitability of habitat for various sensitive elements. All plant and animal species observed or otherwise detected during this field survey were noted. A list of plants and animals observed is provided in Appendix A.

RESULTS AND EXISTING AND ADJACENT LAND USE

Topography and Soils

The site is relatively flat and ranges in elevation from approximately 1,300 to 1,360 feet. The soils present on site, as mapped by the Soil Conservation Service (USDA 2005), are Tujunga loamy sand (0–5% slopes) and Tujunga gravelly loamy sand (0–9% slopes). The proposed site is bordered on the north by a recreation trail and housing, on the east by community and senior center and Milliken Avenue, on the south by Base Line Road, and on the west by Deer Creek Channel.

Vegetation

The dominant plant community on-site is California sagebrush scrub (Holland 1996; Sawyer and Keeler-Wolf 1995). Dominant species identified in this plant community include California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), horehound (*Marrubium vulgare*), and deerweed (*Lotus scoparius*). Figure 3 is a vegetation map with photograph locations, and Figures 3A through 3C show typical conditions currently found on the site. A complete list of plant species observed is attached in Appendix A.

Wildlife

Typical wildlife observed or other presence noted (e.g., scat, tracks, and burrows) during the survey included desert cottontail (*Sylvilagus audubonii*), coyote (*Canis latrans*), California ground squirrel (*Spermophilus beecheyi*), red-tailed hawk (*Buteo jamaicensis*), and Say's phoebe (*Sayornis saya*). A complete list of animal species observed is attached in Appendix A.

The literature review revealed a total of 69 sensitive species with the potential to occur within the nine USGS quadrangles surrounding the area of the proposed project site. Appendix B lists these species with a data summary for each and a determination as to the likelihood of the species occurring on the project site.

Other Species of Special Concern

Of the 54 other sensitive species identified in Appendix B, 41 are considered to be absent from the project site based on a lack of suitable habitat. One sensitive species, Los Angeles pocket mouse (*Perognathus longimembris brevinasus*), has a moderate probability of occurrence on the site. Eleven sensitive species (listed below) have a low probability for occurrence on the proposed site.

- Chaparral sand-verbena (*Abronia villosa* var. *aurita*);
- Parry's spineflower (*Chorizanthe parryi* var. *parryi*);
- Robinson's peppergrass (*Lepidium virginicum* var. *robinsonii*);
- Chaparral nolina (*Nolina cismontana*);
- Belding's orange-throated whiptail (*Aspidoscelis hyperythra beldingi*);
- Coastal western whiptail (*Aspidoscelis tigris stejnegeri*);

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PHASE BOUNDARY
COASTAL SAGE SCRUB
DEVELOPED (PHASE 1)
DRAINAGE FEATURE
GRADED/DISCED AREAS
NON-NATIVE GRASSLAND
PHOTOGRAPH LOCATIONS
REMNANT VINEYARDS
STAGING/STORAGE

0 300 600
FEET

SOURCE: AirPhoto USA 2006; Thomas Bros., 2006

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FIGURE 3

Central Park
General Biological Report

Vegetation, Existing Land Use, Site Photograph Map

PHOTOGRAPH 1: *View of earthen drainage feature as seen from north boundary facing south.*

PHOTOGRAPH 2: *View of recreational trail that borders project site's north boundary as seen facing west from north boundary.*

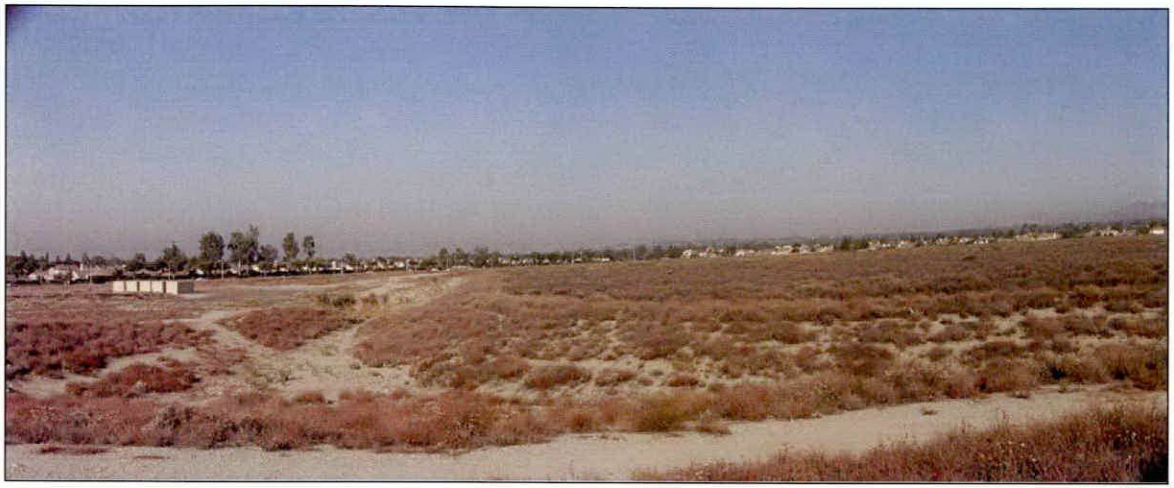
PHOTOGRAPH 3: *Panoramic view of graded/disked area and storage area as seen from the northeast corner of the site facing west.*

LSA

FIGURE 3A

Central Park
General Biological Report

Site Photographs



PHOTOGRAPH 4: *View of Coastal Sage Scrub vegetation and drainage feature as seen from the center of the project site facing southwest.*

PHOTOGRAPH 5: *View of drainage feature in south half of the project site as seen facing west.*

LSA

FIGURE 3B

Central Park
General Biological Report

Site Photographs

PHOTOGRAPH 7: *View of drainage feature and culvert on project site as seen facing Base Line Road (south boundary).*

PHOTOGRAPH 8: *View of access road found along west boundary of the project site.*

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FIGURE 3C

Central Park
General Biological Report
Site Photographs

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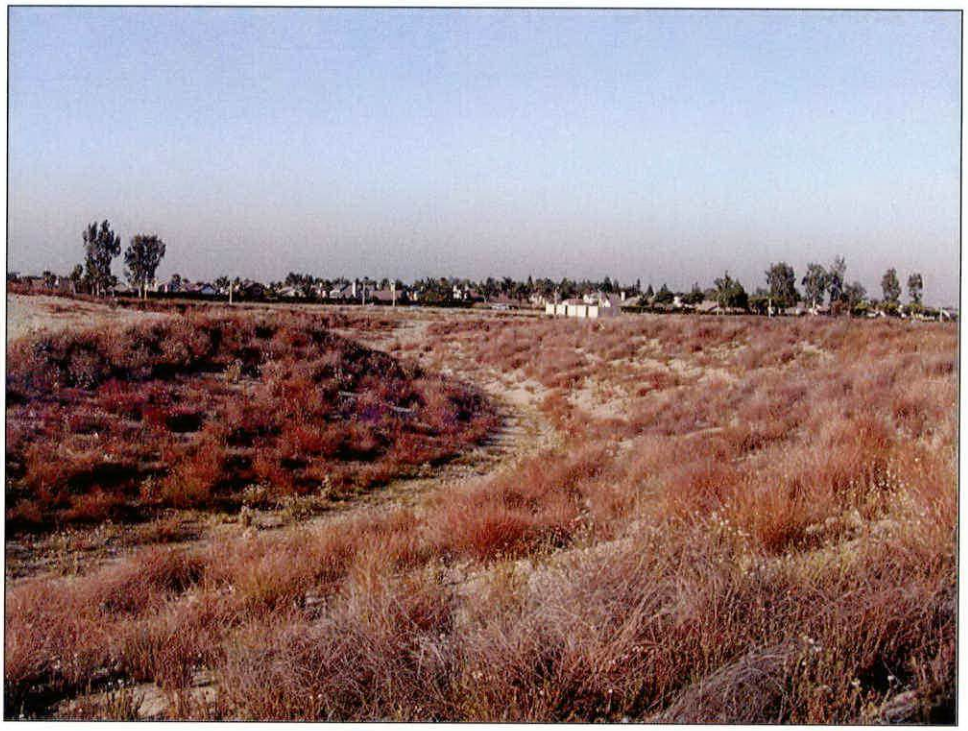

PHOTOGRAPH 7: *View of drainage feature as shown facing southwest towards Baseline Road.*

PHOTOGRAPH 8: *View of culvert in the center of the site as seen facing southeast. Showing mule fat and California buckwheat.*

LSA

FIGURE 3D

Central Park
General Biological Report
Site Photographs

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- Northern red-diamond rattlesnake (*Crotalus ruber ruber*);
- Bell's sage sparrow (*Amphispiza belli belli*);
- Western burrowing owl (*Athene cunicularia hypugaea*);
- Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*); and
- San Diego desert woodrat (*Neotoma lepida intermedia*).

Potential Jurisdictional Waters and Wetlands

The drainage feature present on-site flows from the north boundary to a culvert at the southwest corner of the project site. Currently, the channel is earthen and appears to flow beneath Base Line Road and tie into the Deer Creek Channel. Vegetation identified in the drainage feature includes mule fat (*Baccharis* salicifolia), tree tobacco (*Nicotiana* glauca), California buckwheat, and London rocket (*Sisymbrium irio*). This drainage feature is a potential jurisdictional area and a formal jurisdictional delineation is required since the drainage is tributary to traditional navigable waters.

CEQA Impact Significance Criteria and Thresholds of Significance

The proposed project will have a significant effect on the environment if it will cause any of the following to occur:

- The proposed project would substantially and adversely affect, either directly or through habitat modifications, any candidate for listing, any listed threatened, or endangered species of plant or animal or the habitat of the species; or
- The proposed project would substantially affect any riparian habitat or other sensitive natural community identified in local or regional plan, policies, regulations, or by the CDFG or USFWS; or
- The proposed project would substantially and adversely affect federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruptions, or other means; or
- The proposed project would interfere substantially with the movement of any 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; or
- The proposed project would conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance; or
- The proposed project would conflict with provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Special Interest Plant Communities

The proposed project site's dominant plant community is disturbed coastal sage scrub. This plant community is not considered to be a sensitive natural community.

Threatened and Endangered Species

In total, 15 federal/state listed species were identified as potentially present in the project vicinity. Thirteen of the federal/state listed species are considered to be absent from the project site based on a lack of suitable habitat.

One listed mammal, the San Bernardino Merriam's kangaroo rat, has a low potential of occurrence on the proposed project site. There is a small drainage feature that meanders through the proposed project site that provides marginally suitable habitat (gravelly and sandy soils). The nearest occurrence of this species is approximately ten miles north of the site. Small mammal trapping for this species is needed to determine its presence or absence on the proposed project site.

Coastal California Gnatcatcher. The federally threatened coastal California gnatcatcher (*Polioptila californica californica*) (CAGN) has a low potential of occurring within the project site. Typically the CAGN occurs in or near sage scrub habitat. The majority of plant species found in sage scrub habitat are low-growing, drought-deciduous shrubs and sub-shrubs. Generally, most sage scrub habitats are dominated by one or more of the following: California sagebrush, California buckwheat, California encelia (*Encelia californica*), brittlebush (*Encelia farinosa*), white sage (*Salvia apiana*), purple sage (*Salvia leucophylla*), and black sage (*Salvia mellifera*). Often the sage scrub occurs in a patchy, or mosaic, distribution pattern throughout the range of the CAGN. CAGN also uses chaparral, grassland, and riparian habitats; these areas are used for foraging and dispersal.

The CAGN is nonmigratory and defends breeding territories ranging in size from 2 to 4 acres and has a reported home range of between 13 and 39 acres in size. The breeding season for the CAGN extends from late February through July, with the peak of nest initiations (startups) occurring from mid-March through mid-May. Dispersal of juveniles generally requires a corridor of native vegetation providing certain foraging and shelter requisites to link larger patches of appropriate sage scrub vegetation. Juvenile CAGN are capable of dispersing long distances (up to 14 miles) across fragmented and highly disturbed sage scrub habitat, like those found along highway and utility corridors or remnant mosaics of habitat adjacent to developed lands. Generally, however, the species disperses short distances through contiguous undisturbed habitat (Federal Register Notice/Volume 68, No. 79 Thursday April 24, 2003).

In the CDFG CNDDB, two occurrences have been reported within 5 miles east of the project site. The first reported occurrence is "0.25 mile east/southeast of the intersection of Willow Drive and the south end of Poplar Avenue, in the Jurupa Mountains" (CNDDB 1998) a. The second reported occurrence is "south side of Base Line Road, 0.75 mile west of Etiwanda Avenue, between Fontana and Rancho Cucamonga" (CNDBB 1998)b.

Approximately 35 acres of coastal sage scrub is present on the project site that provides moderately suitable nesting and foraging habitat for this listed species. A focused survey for this species is

needed to determine its presence or absence on the proposed project site. If CAGN are found to be present on the site, consultation with the CDFG will be required to obtain impact minimization, avoidance, and relocation procedures.

Non-listed Sensitive Species

The sensitive species identified in Appendix B as potentially present on the proposed project site have limited population distribution in southern California and land development is further reducing their ranges and numbers. These species have no official state or federal protection status, but require consideration under the CEQA. Because the proposed project site is bordered by existing development and soon-to-be developed land, impacts to these sensitive species are not considered significant.

Los Angeles Pocket Mouse. The Los Angeles pocket mouse is a CDFG species of special concern that has a moderate potential of occurrence within the project site. Specific habitat identified on site includes sandy soil for burrowing, a gravelly drainage feature, and California sagebrush scrub. The nearest occurrence of this species is two miles northeast of the site, north of San Bernardino freeway (I-10), west side of Etiwanda Avenue, Fontana. Small mammal trapping for this species is needed to determine its presence or absence on the proposed project site.

Western Burrowing Owl. The burrowing owl is protected by the MBTA and under the California Fish and Game Code. It is unlawful to take, possess, or needlessly destroy any bird of prey or the nests or eggs of any kind of bird species except as otherwise provided in CDFG Codes and regulations. Disturbance of any active bird nest during the breeding season is prohibited. Disturbances at the active nesting territories should be avoided during the nesting season; for the burrowing owl nesting season is typically February 1 through August 31.

Suitable habitat is present on the project site in the form of remnant vineyards adjacent to an earthen drainage feature. Both areas provide suitable burrows that can be occupied and utilized by the burrowing owl. A focused burrowing owl survey is recommended to determine the presence or absence of this species and to avoid impacts to a CDFG sensitive species. A pre-construction survey may also be necessary. If owls are found to be present on the site, consultation with the CDFG will be required to obtain impact minimization, avoidance, and relocation procedures.

Jurisdictional Waters

Potential jurisdictional waters regulated by the ACOE and CDFG are present on the site. A jurisdictional delineation is required to determine extent of jurisdiction.

Habitat Fragmentation and Wildlife Movement

The project site is surrounded by residential housing borders on the north, south, and west. A community center and senior citizen center borders the site on the east. The development of the 70

acres will not have a significant impact related to habitat fragmentation or wildlife movement in the area.

Local Policies and Ordinances

There are no additional local policies or ordinances that the project site would need to observe.

Adopted Habitat Conservation Plans

The site does not lie within a draft or adopted habitat conservation plan area.

Cumulative Effects

Cumulative impacts refer to incremental effects of an individual project when viewed in connection with the effects of past projects, current projects, and probable future projects (Section 15130 of the *CEQA Guidelines*) (State of California 2007). Due to continuing development growth in the City of Rancho Cucamonga, impacts are not considered to be cumulatively significant.

CONCLUSIONS

The approximately 70-acre site is vegetated by disturbed California sagebrush scrub, 35 acres of this has the potential to provide suitable California gnatcatcher habitat. Impacts to this plant community are not considered significant.

There are potential jurisdictional areas regulated by the ACOE and CDFG on the project site. A drainage feature is present that flows from the north boundary to a culvert at the southwest corner of the project site. This drainage feature is most likely to be jurisdictional and a delineation survey and report is recommended to document extent of potential waters of the U.S.

The proposed project site does not lie within designated critical habitat for any listed species; however, presence/absence surveys are required for coastal California gnatcatcher. Due to the presence of suitable habitat (approximately 35 acres of coastal sage scrub), there is potential for isolated, pair(s) of gnatcatchers to be present on the proposed project site. If CAGN are found to be present on the site, consultation with the CDFG will be required to obtain impact minimization, avoidance, and relocation procedures.

The proposed project site has suitable habitat for the listed San Bernardino Merriam's kangaroo rat (SBKR). The Los Angeles pocket mouse, a CDFG species of concern, also has a potential for occurrence on the project site. Small mammal trapping for these species is needed to determine their presence or absence on the proposed project site. If the SBKR or Los Angeles pocket mouse is found to be present on the site, consultation with the agencies will be required to obtain impact minimization, avoidance, and relocation procedures.

The burrowing owl is protected by the MBTA and under the California Fish and Game Code. Suitable habitat is present on the project site. A focused burrowing owl survey is recommended to determine

the presence or absence of this species and to avoid impacts to a CDFG sensitive species. A pre-construction survey may also be necessary. If owls are found to be present on the site, consultation with the CDFG will be required to obtain impact minimization, avoidance, and relocation procedures.

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Species Observed

Scientific Name	Common Name
Asteraceae	**Sunflower family**
Artemisia californica	California sagebrush
Baccharis salicifolia	Mule fat
Ericameria pinifolia	Pine goldenbush
Heterotheca grandiflora	Telegraph weed
Pseudognaphalium stramineum	Cottonbatting plant
Senecio flaccidus	Shrubby butterweed
Boraginaceae	**Borage family**
Cryptantha sp.	Cryptantha
Brassicaceae	**Mustard family**
Hirschfeldia incana	Shortpod mustard
Sisymbrium irio	London rocket
Cactaceae	**Cactus family**
Opuntia basilaris	Beavertail cactus
Fabaceae	**Pea family**
Lotus scoparius	Deerweed
Lamiaceae	**Mint family**
Marrubium vulgare	Horehound
Polygonaceae	**Buckwheat family**
Eriogonum fasciculatum	California buckwheat
Scrophulariaceae	**Figwort family**
Penstemon spectabilis	Royal penstemon
Solanaceae	**Nightshade family**
Nicotiana glauca	Tree tobacco
Vitaceae	**Grape family**
Vitis vinifera	Cultivated grape
Poaceae	**Grass family**
Schismus barbatus (non-native species)	Common Mediterranean grass
ANIMALS OBSERVED	
Birds	
Accipitridae	**Kites, Hawks, and Eagles**
Buteo jamaicensis	Red-tailed hawk
Falconidae	**Falcons**
Falco sparverius	American kestrel
Charadriidae	**Plovers and Lapwings**
Charadrius vociferus	Killdeer

Species Observed

Scientific Name	Common Name
Trochilidae	**Hummingbirds**
Archilochus alexandri	Black-chinned hummingbird
Calypte anna	Anna's hummingbird
Selasphorus rufus	Rufous hummingbird
Tyrannidae	**Tyrant Flycatchers**
Sayornis saya	Say's phoebe
Tyrannus verticalis	Western kingbird
Hirundinidae	**Swallows**
Stelgidopteryx serripennis	Northern rough-winged swallow
Fringillidae	**Finches**
Carpodacus mexicanus	House finch
Mammals	
Leporidae	**Rabbits and Hares**
Sylvilagus audubonii	Desert cottontail
Sciuridae	**Squirrels**
Spermophilus beecheyi	California ground squirrel
Canidae	**Foxes, Wolves and Dogs**
Canis latrans	Coyote

Special Interest Species Summary

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Plants				
Abronia villosa var. *aurita* **Chaparral sand-verbena**	US: – CA: SP CNPS: 1B	Sandy areas in chaparral and coastal sage scrub 80 to 1,600 meters (300 to 5,300 feet) elevation. Known only from Riverside, Orange (believed extirpated), and San Diego Counties.	January through August (annual herb)	**Absent:** The proposed project site lies outside the known range for this species.
Ambrosia pumila **San Diego ambrosia**	US: FE CA: SP CNPS: 1B	Occurs in open habitats in coarse substrates near drainages, and in upland areas on clay slopes or on the dry margins of vernal pools. This species occurs in a variety of associations dominated by sparse grasslands or marginal wetland habitats such as river terraces, pools, and alkali playas. Known populations in Riverside County are associated with silty alkaline soils in open, gently-sloped grasslands. Known from western San Diego County, southwestern Riverside County (at Skunk Hollow, and north of Lake Elsinore along Nichols Road), and Baja California from 20 to 415 meters (70 to 1,400 feet) elevation.	Generally non-flowering (perennial herb)	**Absent:** Suitable habitat (open habitats in coarse substrates near drainages or upland areas on clay slopes or on the dry margins of vernal pools) is not present on the proposed project site for this species.
Arenaria paludicola **Marsh sandwort**	US: FE CA: SE CNPS: 1B	Found in freshwater marshes and swamps. This plant was historically found in scattered colonies in California and Washington. Currently, the only known extant population is on Nipomo Mesa; elevations 3 to 180 meters (10 to 600 feet). The last known record of this species in Riverside and San Bernardino Counties is from 1899.	May through August	**Absent:** Suitable habitat (freshwater marshes and swamps) is not present on the proposed project site for this species.
Aster greatae **Greata's aster**	US: – CA: SP CNPS: 1B	Broad-leaved upland forest, chaparral, cismontane woodland, lower montane coniferous forest, riparian woodland/mesic; elevation 300 to 2,010 meters (1,000 to 6,600 feet). Known from Los Angeles County.	June through October (perennial herb)	**Absent:** Suitable habitat (upland forest, chaparral, cismontane woodland, lower montane coniferous forest, riparian woodland/mesic) is not present on the proposed project site for this species.

Special Interest Species Summary

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Atriplex coulteri **Coulter's saltbush**	US: – CA: SP CNPS: 1B	Alkaline or clay soils in ocean bluffs and ridgetops and alkaline low places in coastal bluff scrub, coastal dunes, coastal sage scrub, and valley and foothill grasslands below 460 meters (1,500 feet) elevation. In California, known only from Los Angeles, Orange, Santa Barbara, San Bernardino, and San Diego Counties. Reports of this species from Riverside County are based on misidentification of *Atriplex serenana* ssp. *davidsonii* (*The Vascular Plants of Western Riverside County, California.* F.M. Roberts et al., 2004).	March through October (perennial herb)	**Absent:** Suitable habitat (alkaline or clay soils) is not present on the proposed project site for this species.
Berberis nevinii **Nevin's barberry**	US: FE CA: SE CNPS: 1B	Gravelly wash margins in alluvial scrub, or coarse soils in chaparral; typically 275 to 825 meters (900 to 2,700 feet) elevation; Los Angeles, San Bernardino, Riverside, and San Diego Counties.	Blooms March through April (evergreen shrub, survey year-round)	**Absent:** Suitable habitat (gravelly wash margins in alluvial scrub or coarse soils in chaparral) is not present on the proposed project site for this species.
Calochortus clavatus var. *gracilis* **Slender mariposa lily**	US: – CA: SP CNPS: 1B	Shaded foothill canyons in areas of chaparral; typically 360 to 1,000 meters (1,200 to 3,300 feet) elevation; known only from San Gabriel Mountains of Los Angeles and San Bernardino Counties.	March	**Absent:** Suitable habitat (foothill canyons in areas of chaparral) is not present on the proposed project site for this species.
Calochortus plummerae **Plummer's mariposa lily**	US: – CA: SP CNPS: 1B	Sandy or rocky sites of (usually) granitic or alluvial material in valley and foothill grassland, coastal scrub, chaparral, cismontane woodland, and lower montane coniferous forest at 100 to 1,700 meters (300 to 5,600 feet) elevation. Known from the Santa Monica Mountains to San Jacinto Mountains in Riverside, San Bernardino, Los Angeles, and Ventura Counties. In the western Riverside County area, this species is known from the foothills of the San Bernardino Mountains, northeastern Santa Ana Mountains, Box Springs Mountains, and from the Lake Skinner area (*The Vascular Plants of Western Riverside County, California.* F.M. Roberts et al., 2004).	Blooms May through July (perennial herb)	**Absent:** Suitable habitat (sandy or rocky sites of granitic or alluvial material in valley and foothill grassland, coastal scrub, chaparral, cismontane woodland, and lower montane coniferous forest) is not present on the proposed project site for this species.

Special Interest Species Summary

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Calochortus weedii var. *intermedius* **Intermediate mariposa lily**	US: – CA: SP CNPS: 1B MSHCP: P	Rocky areas in hills with annual grassland and coastal sage scrub. 180 to 855 meters (600 to 2,800 feet) elevation. Los Angeles, Orange, and Riverside Counties. In the western Riverside County area, this species is known from the hills and valleys west of Lake Skinner and Vail Lake (*The Vascular Plants of Western Riverside County, California.* F.M. Roberts et al., 2004).	June through July	**Absent:** Suitable habitat (rocky areas in hills with annual grassland and coastal sage scrub) is not present on the proposed project site for this species.
Centromadia pungens ssp. *laevis* **Smooth tarplant**	US: – CA: SP CNPS: 1B MSHCP: S	Alkaline areas in chenopod scrub, meadows, playas, riparian woodland, valley and foothill grassland below 480 meters (1,600 feet) elevation. Known from Riverside and San Bernardino Counties, extirpated from San Diego County.	Blooms April through November (annual herb)	**Absent:** The proposed project site is above the known elevation range for this species and suitable habitat (alkaline areas in chenopod scrub, meadows, playas, riparian woodland, and valley and foothill grassland) is not present on the proposed project site for this species.
Chorizanthe parryi var. *parryi* **Parry's spineflower**	US: – CA: SP CNPS: 3	Dry sandy soils in chaparral or coastal scrub at 40 to 1,750 meters (100 to 5,700 feet) elevation. Known only from Riverside and San Bernardino Counties and possibly extending into Los Angeles County.	April through June (annual herb)	**Low:** Marginally suitable habitat (dry sandy soils in coastal scrub) is present on the proposed project site for this species.
Chorizanthe xanti var. *leucotheca* **White-bracketed spineflower**	US: – CA: SP CNPS: 1B	Mojave desert scrub and pinyon and juniper woodland 300 to 1,200 meters (900 to 4,000 feet) elevation. Reported from Los Angeles, Riverside, and San Bernardino Counties. However, reports of this species from western Riverside County are doubtful (*The Vascular Plants of Western Riverside County, California.* F.M. Roberts et al., 2004).	April through June (annual herb)	**Absent:** Suitable habitat (Mojave desert scrub and pinyon and juniper woodland) is not present on the proposed project site for this species.
Claytonia lanceolata var. *peirsonii* **Peirson's spring beauty**	US: – CA: SP CNPS: 1B	This subspecies known only from San Bernardino County in subalpine and upper montane coniferous forest of the San Gabriel Mountains; gravelly soils or scree; elevations 2,135 to 2,750 meters (7,000 to 9,000 feet).	May through June	**Absent:** Suitable habitat (subalpine and upper montane coniferous forest) is not present on the proposed project site for this species.

Special Interest Species Summary

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Cordylanthus maritimus spp. *maritmus* **Salt marsh bird's beak**	US: FE CA: SE CNPS: 1B	Coastal dunes and salt marshes below 30 meters (100 feet) elevation. In California, known from Los Angeles, Orange, Santa Barbara, San Diego, San Luis Obispo, and Ventura Counties. Historical collections referred to this taxon from alkaline meadow in vicinity of San Bernardino Valley are intermediate to *C. maritimus* ssp. *canescens*.	Blooms May through October (annual herb)	**Absent:** The proposed project site is above the elevational range for this species and suitable habitat (coastal dunes and salt marshes) is not present on the proposed project site for this species.
Dodecahema leptoceras **Slender-horned spineflower**	US: FE CA: SE CNPS: 1B MSHCP: S	In the Vail Lake area, occurs in gravel soils of Temecula arkose deposits in openings in chamise chaparral. In other areas, occurs in sandy cobbly riverbed alluvium in alluvial fan sage scrub (usually late seral stage), on floodplain terraces and benches that receive infrequent overbank deposits from generally large washes or rivers, where it is most often found in shallow silty depressions dominated by leather spineflower (*Lastarriaea coriacea*) and other native annual species, and is often associated with cryptogamic soil crusts composed of bryophytes, algae and/or lichens. Occurs at 200 to 760 meters (600 to 2,500 feet) elevation. Known only from Los Angeles, Riverside, and San Bernardino Counties.	Blooms April through June (annual herb)	**Absent:** Suitable habitat (gravel soils of Temecula arkose deposits) is not present on the proposed project site for this species.
Dudleya multicaulis **Many-stemmed dudleya**	US: – CA: SP CNPS: 1B MSHCP: S	Often on clay soils also around granitic outcrops in chaparral, coastal sage scrub, and grassland; below 790 meters (2,600 feet) elevation. Los Angeles, Orange, Riverside, San Bernardino, and San Diego Counties.	Blooms May through June (perennial herb)	**Absent:** Suitable habitat (clay soils) is not present on the proposed project site for this species.
Eriastrum densifolium ssp. *sanctorum* **Santa Ana River woollystar**	US: FE CA: SE CNPS: 1B	Sandy soils of floodplains and terraced fluvial deposits of the Santa Ana River and larger tributaries (Lytle and Cajon Creeks, lower portions of City and Mill Creeks) at 120 to 625 meters (400 to 2,100 feet) elevation in San Bernardino and Riverside Counties.	Blooms June through September	**Absent:** Suitable habitat (sandy soils of floodplains and terraced fluvial deposits of the Santa Ana River) is not present on the proposed project site for this species.

Special Interest Species Summary

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Eriogonum microthecum var. *johnstonii* **Johnston's buckwheat**	US: – CA: SP CNPS: 1B	Upper montane and subalpine coniferous forest of the San Gabriel Mountains; 2,150 to 2,900 meters (7,000 to 9,500 feet) elevation.		**Absent:** Suitable habitat (upper montane and subalpine coniferous forest) is not present on the proposed project site for this species.
Horkelia cuneata ssp. *puberula* **Mesa horkelia**	US: – CA: SP CNPS: 1B	Sandy or gravelly soils in chaparral, or rarely in cismontane woodland or coastal scrub at 70 to 825 meters (200 to 2,700 feet) elevation. Occurs in San Luis Obispo, Santa Barbara, Ventura, Los Angeles, and Orange Counties. Believed extirpated from San Bernardino, Riverside, and San Diego Counties.	February through September	**Absent:** Suitable habitat (sandy or gravelly soils in chaparral, or rarely in cismontane woodland or coastal scrub) is not present on the proposed project site for this species.
Lasthenia glabrata ssp. *coulteri* **Coulter's goldfields**	US: – CA: SP CNPS: 1B	Annual herb usually found on alkaline soils in marshes, playas, vernal pools, and valley and foothill grassland below 1,400 meters (4,600 feet) elevation. Known from Kern, Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, San Luis Obispo, and Ventura Counties. Also occurs on Santa Rosa Island and Baja California, Mexico.	Blooms February through June (annual herb)	**Absent:** Suitable habitat (alkaline soils in marshes, playas, vernal pools, and valley and foothill grassland) is not present on the proposed project site for this species.
Lepidium virginicum var. *robinsonii* **Robinson's pepper-grass**	US: – CA: SP CNPS: 1B	Dry soils in coastal sage scrub and chaparral, typically below 500 meters (1,600 feet) elevation. In California, known only from Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, and San Diego Counties.	January through July	**Low:** Marginally suitable habitat (dry soils in coastal sage scrub) is present on the proposed project site for this species.
Lilium parryi **Lemon lily**	US: – CA: SP CNPS: 1B MSHCP: P	Bulbiferous perennial herb of wet areas in meadows and riparian and montane coniferous forests at 1,300 to 2,790 meters (4,300 to 9,200 feet) elevation. In California, known from Los Angeles, Riverside, San Bernardino, and San Diego Counties.	Blooms July through August	**Absent:** Suitable habitat (wet areas in meadows and riparian and montane coniferous forests) is not present on the proposed project site for this species.

Special Interest Species Summary

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Linanthus concinnus **San Gabriel linanthus**	US: – CA: SP CNPS: 1B	Lower and upper montane coniferous forest; found on dry rocky slopes, often in Jeffrey pine/canyon oak forest; 1,675 to 2,800 meters (5,500 to 9,200 feet) elevation; known only from Los Angeles and San Bernardino Counties.	May through July (annual herb)	**Absent:** Suitable habitat (lower and upper montane coniferous forest) is not present on the proposed project site for this species.
Lycium parishii **Parish's desert-thorn**	US: – CA: SP CNPS: 2	Deciduous shrub of coastal scrub and Sonoran desert scrub at 305 to 1,000 meters (1,000 to 3,300 feet) elevation. In California, known from Imperial and San Diego Counties. Report from Riverside County is based on a misidentification. Known only historically from San Bernardino County (benches and/or foothills north of San Bernardino).	Blooms March through April	**Absent:** Suitable habitat (Sonoran desert scrub) is not present on the proposed project site for this species.
Monardella macrantha ssp. *hallii* **Hall's monardella**	US: – CA: SP CNPS: 1B MSHCP: C	Dry slopes and ridges in openings in chaparral, woodland, and forest at 695 to 2,195 meters (2,280 to 7,200 feet) elevation. Known only from San Diego, Orange, Riverside, and San Bernardino Counties. In the western Riverside County area, known only from higher elevations in the Santa Ana and Aqua Tibia Mountains (*The Vascular Plants of Western Riverside County, California*. F.M. Roberts et al., 2004).	June through August (perennial herb)	**Absent:** The proposed project site is outside the known range for this species and suitable habitat (dry slopes and ridges in openings in chaparral, woodland, and forest) is not present on the proposed project site for this species.
Monardella pringlei **Pringle's monardella**	US: – CA: SP CNPS: 1A	Sandy hills in coastal sage scrub at 300 to 400 meters (980 to 1,300 feet) elevation. Known only from two occurrences west of Colton. Last seen in 1941. Habitat lost to urbanization. Presumed extinct.	May through June	**Absent:** The proposed project site is outside the known range for this species.
Navarretia prostrata **Prostrate navarretia**	US: – CA: SP CNPS: 1B MSHCP: S	Vernal pools in coastal scrub or valley and foothill grassland (alkaline) of Los Angeles, Merced, Monterey, Orange, Riverside, San Diego and possibly San Bernardino Counties; 15 to 700 meters (50 to 2,300 feet) elevation.	Blooms April through July (annual herb)	**Absent:** Suitable habitat (vernal pools in coastal scrub or valley and foothill grassland (alkaline)) is not present on the proposed project site for this species.

Special Interest Species Summary

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Nolina cismontana **Chaparral nolina**	US: – CA: SP CNPS: 1B	Evergreen shrub found in chaparral, coastal sage scrub, sandstone or gabbro; elevations from 140 to 1,275 meters (500 to 4,200 feet). Known from Los Angeles, Orange, San Diego, and Ventura Counties.	Blooms May through July; with foliage year-round	**Absent:** The proposed project is outside the known range for this species.
Oreonana vestita **Woolly mountain-parsley**	US: – CA: SP CNPS: 1B	Scree, talus, or gravel on high ridges in subalpine coniferous forest and upper montane coniferous forest at 2285 to 3500 meters (7,500 to 11,500 feet) elevation. Known only from Los Angeles and San Bernardino Counties.	May through September (perennial herb)	**Absent:** The proposed project site is below the known elevational range for this species and suitable habitat (scree, talus, or gravel on high ridges in subalpine coniferous forest and upper montane coniferous forest) is not present on the proposed project site for this species.
Orobanche valida spp. *valida* **Rock Creek broomrape**	US: – CA: SP CNPS: 4	Parasitic on various chaparral shrubs. Found in granitic soils of chaparral, pinyon-juniper woodland; elevation 1,250 to 2,000 meters (4,100 to 6,600 feet). Known from only three occurrences in Los Angeles and Ventura Counties.	June through September (perennial herb)	**Absent:** The proposed project site is below the known elevational range for this species and suitable habitat (granitic soils of chaparral, pinyon-juniper woodland) is not present on the proposed project site for this species.
Symphyotrichum defoliatum (Aster defoliatus) **San Bernardino aster**	US: – CA: SP CNPS: 1B	Vernally wet sites (such as ditches, streams, and springs) in many plant communities below 2,040 meters (6,700 feet) elevation. In California, known from Ventura, Kern, San Bernardino, Los Angeles, Orange, Riverside, and San Diego Counties. In the western Riverside County area, this species is scarce, and documented only from Temescal and San Timoteo Canyons (*The Vascular Plants of Western Riverside County, California*. F.M. Roberts et al., 2004).	Blooms July through November (perennial herb)	**Absent:** Suitable habitat (vernally wet sites (such as ditches, streams, and springs) is not present on the proposed project site for this species.

Special Interest Species Summary

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Pseudognaphalium leucocephalum **white rabbit-tobacco**	US: – CA: SP CNPS: 2	Sandy and gravelly creek bottoms of the coastal slope below 2,100 meters (6,900 feet) elevation. Known in California from Los Angeles, Orange, Riverside, Santa Barbara, San Diego, San Luis Obispo, and Ventura Counties. Also known from Arizona, New Mexico, Texas, and Mexico.	Generally blooms August through November	**Absent:** Suitable habitat (sandy and gravelly creek bottoms of the coastal slope) is not present on the proposed project site for this species.
Invertebrates				
Rhaphiomidas terminatus abdominalis **Delhi sands flower-loving fly**	US: FE CA: SA MSHCP: S	Restricted to Delhi series sands in western Riverside and San Bernardino Counties.	Above ground emergence August and September. Not visible during the rest of the year.	**Absent:** Suitable habitat (Delhi series sands) is not present on the proposed project site for this species.
Fish				
Catostomus santaanae **Santa Ana sucker**	US: FT CA: CSC	The Santa Ana sucker's historical range includes the Los Angeles, San Gabriel, and Santa Ana River drainage systems located in Southern California. An introduced population also occurs in the Santa Clara River drainage system in southern California. Found in shallow, cool, running water.	Year-round	**Absent:** Suitable habitat (shallow, cool, running water) is not present on the proposed project site for this species.
Gila orcutti **Arroyo chub**	US: – CA: CSC	Perennial streams or intermittent streams with permanent pools; slow water sections of streams with mud or sand substrates; spawning occurs in pools. Native to Los Angeles, San Gabriel, San Luis Rey, Santa Ana, and Santa Margarita River systems; introduced in Santa Ynez, Santa Maria, Cuyama, and Mojave River systems and smaller coastal streams.	Year-round	**Absent:** Suitable habitat (perennial streams or intermittent streams with permanent pools; slow water sections of streams with mud or sand substrates) is not present on the proposed project site for this species.
Rhinichthys osculus ssp. 3 **Santa Ana speckled dace**	US: – CA: CSC	Found in the headwaters of the Santa Ana and San Gabriel River drainages. Found in riffles in small streams and shore areas with abundant gravel and rock.	Year-round	**Absent:** Suitable habitat (riffles in small streams and shore areas with abundant gravel and rock) is not present on the proposed project site for this species.

Special Interest Species Summary

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Amphibians				
Rana muscosa **Mountain yellow-legged frog**	US: FE CA: CSC	Ponds, lakes, and streams at moderate to high elevation; appears to prefer bodies of water with open margins and gently sloping bottom. Sierra Nevada Mountains and Transverse Ranges.	March through June	**Absent:** Suitable habitat (ponds, lakes, and streams) is not present on the proposed project site for this species.
Taricha torosa torosa **Coast Range newt**	US: – CA: CSC	Breeds in ponds, reservoirs, and slow-moving streams; uses nearby upland areas including grassland, chaparral, and woodland; coastal drainages from Mendocino County south to San Diego County, with populations from San Luis Obispo County south designated as sensitive.	October through May	**Absent:** Suitable habitat (ponds, reservoirs, or slow-moving streams) is not present on the proposed project site for this species.
Reptiles				
Aspidoscelis hyperythra beldingi **Belding's orange-throated whiptail**	US: – CA: CSC	Prefers chaparral, coastal sage scrub, juniper woodland, and oak woodland from sea level to 915 meters (3,000 feet) elevation; inland and coastal valleys of Riverside, Orange, San Diego and extreme southern San Bernardino Counties, and Baja California.	March through July with reduced activity August through October	**Low:** Suitable habitat (coastal sage scrub) is present on the proposed project site for this species.
Aspidoscelis tigris stejnegeri **Coastal western whiptail**	US: – CA: SA	Wide variety of habitats including coastal sage scrub, sparse grassland, and riparian woodland; coastal and inland valleys and foothills; Ventura County to Baja California.	April through August	**Low:** Suitable habitat (coastal sage scrub) is present on the proposed project site for this species.
Coleonyx variegatus abbotti **San Diego banded gecko**	US: – CA: SA	Often associated with rocks. Coastal sage scrub and chaparral, most often on granite or rocky outcrops in these habitats. Interior Ventura County south.	Nocturnal April through October	**Absent:** Suitable habitat (granite or rocky outcrops in coastal sage scrub or chaparral) is not present on the proposed project site for this species.
Crotalus ruber ruber **Northern red-diamond rattlesnake**	US: – CA: CSC	Desert scrub, thornscrub, open chaparral and woodland; occasional in grassland and cultivated areas. Prefers rocky areas and dense vegetation. Morongo Valley in San Bernardino and Riverside Counties to the west and south to Baja California.	Mid-spring through mid-fall	**Low:** Marginally suitable habitat (rocky areas in dense vegetation) is present on a portion of the proposed project site for this species.

Special Interest Species Summary

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Emys (=Clemmys) marmorata pallida **Southwestern pond turtle**	US: – CA: CSC	Inhabits permanent or nearly permanent water below 1,830 meters (6,000 feet) from central California, west of the Sierra-Cascade crest south to north-western Baja California. Absent from desert regions, except in the Mojave Desert along the Mojave River and its tributaries. Requires basking sites such as partially submerged logs, rocks, or open mud banks.	Year-round with reduced activity November through March	**Absent:** Suitable habitat (permanent or nearly permanent water) is not present on the proposed project site for this species.
Phrynosoma coronatum **Coast horned lizard**	US: – CA: CSC	Occurs in annual grassland, coastal sage scrub, chaparral, and woodland communities. Prefers open country, especially sandy areas, washes, and floodplains. Requires open areas for sunning, bushes for cover, patches of loose soil for burial, and an abundant supply of ants or other insects. Occurs in Siskiyou County, in the Central Valley and adjacent foothills below 1,200 meters (4,000 feet) elevation, in coastal areas of central California, and in non-desert areas of southern California below 1,830 meters (6,000 feet) elevation, and throughout the Baja California Peninsula.	April through July with reduced activity August through October	**Low:** Marginally suitable habitat (sandy areas with open areas for sunning, bushes for cover, patches of loose soil for burial and abundant supply of ants or other insects) is present on a portion of the proposed project site for this species.
Birds				
Agelaius tricolor (nesting colony) **Tricolored blackbird**	US: – CA: CSC	Open country in western Oregon, California, and northwestern Baja California. Breeds near fresh water, preferably in emergent wetland with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, tall herbs and forages in grassland and cropland habitats. Seeks cover for roosting in emergent wetland vegetation, especially cattails and tules, and also in trees and shrubs.	Year-round	**Absent:** Suitable habitat (freshwater, emergent wetland with tall, dense cattails or tules, thickets of willow, blackberry, wild rose, tall herbs) is not present on the proposed project site for this species.

Special Interest Species Summary

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Aimophila ruficeps canescens **Southern California rufous-crowned sparrow**	US: – CA: CSC	Steep, rocky coastal sage scrub and open chaparral habitats, particularly scrubby areas mixed with grasslands. From Santa Barbara County to northwestern Baja California.	Year-round, diurnal activity	**Absent:** Suitable habitat (steep, rocky coastal sage scrub and open chaparral habitats) is not present on the proposed project site for this species.
Amphispiza belli belli **Bell's sage sparrow**	US: – CA: CSC	Occupies chaparral and coastal sage scrub from west central California to northwestern Baja California.	Year-round, diurnal activity	**Low:** Suitable habitat (coastal sage scrub habitat) is present on the proposed project site for this species.
Aquila chrysaetos **Golden eagle**	US: – CA: CSC, CFP	Generally open country of the Temperate Zone worldwide. Nesting primarily in rugged mountainous country. Uncommon resident in southern California.	Year-round diurnal	**Absent:** Suitable habitat (open country, mountainous country) is not present on the proposed project site for this species.
Asio otus (nesting) **Long-eared owl**	US: – CA: CSC	Scarce and local in forests and woodlands throughout much of the Northern Hemisphere. Rare resident in coastal southern California. Nests and roosts in dense willow-riparian woodland and oak woodland, but forages over wider areas. Breeds from valley foothill hardwood up to ponderosa pine habitat.	Nocturnal Year-round	**Absent:** Suitable habitat (forests and woodlands, dense willow-riparian woodland, oak woodland) is not present on the proposed project site for this species.
Athene cunicularia (burrow sites) **Burrowing owl**	US: – CA: CSC	Open country in much of North and South America. Usually occupies ground squirrel burrows in open, dry grasslands, agricultural and range lands, railroad rights-of-way, and margins of highways, golf courses, and airports. Often utilizes man-made structures, such as earthen berms, cement culverts, cement, asphalt, rock, or wood debris piles.	Year-round	**Low to Moderate** Suitable habitat (remnant vineyards (agricultural), sandy, earthen drainage feature) is present on the proposed project site for this species.
Coccyzus americanus occidentalis (nesting) **Western yellow-billed cuckoo**	US: FC CA: SE	Breeds and nests in extensive stands of dense cottonwood/willow riparian forest along broad, lower flood bottoms of larger river systems at scattered locales in western North America; winters in South America.	May through September	**Absent:** Suitable habitat (extensive stands of dense cottonwood/willow/riparian forest) is present on the proposed project site for this species.

Special Interest Species Summary

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Cypseloides niger **Black swift**	US: – CA: CSC	Most frequently seen in the air feeding on tiny airborne insects. Usually seen near cliffs in mountainous regions; occasionally coastal. Nests in crevices in deep canyon cliffs near waterfalls or in sea cliffs. In California, breeds very locally in the Sierra Nevada and Cascade Range, the San Gabriel, San Bernardino, and San Jacinto Mountains, and in coastal bluffs and mountains from San Mateo County south to probably San Luis Obispo County.		**Absent:** Suitable habitat (cliffs in mountainous regions; deep canyon cliffs near waterfalls or sea cliffs) is present on the proposed project site for this species.
Dendroica petechia brewsteri (nesting) **California yellow warbler**	US: – CA: CSC	Riparian woodland while nesting in the western U.S. and northwestern Baja California; more widespread in brushy areas and woodlands during migration and winter, when occurring from western Mexico to northern South America. Migrants belonging to other subspecies are widespread and common.	Summer, winter, or Year-round, depending on locale	**Absent:** Suitable habitat (riparian woodland) is present on the proposed project site for this species.
Empidonax traillii extimus **Southwestern willow flycatcher**	US: FE CA: SE	Rare and local breeder in extensive riparian areas of dense willows or (rarely) tamarisk, usually with standing water, in the southwestern U.S. and (formerly?) northwestern Mexico. Winters in Central and South America.	May through September	**Absent:** Suitable habitat (riparian areas of dense willows or (rarely) tamarisk usually in standing water) is present on the proposed project site for this species.
Icteria virens (nesting) **Yellow-breasted chat**	US: – CA: CSC	Riparian thickets of willow, brushy tangles near watercourses. Nests in riparian woodland throughout much of western North America. Winters in Central America.	Summer in California	**Absent:** Suitable habitat (riparian thickets of willow, brushy tangles near watercourses) is present on the proposed project site for this species.
Polioptila californica californica **Coastal California gnatcatcher**	US: FT CA: CSC	Inhabits coastal sage scrub in low-lying foothills and valleys in cismontane southwestern California and Baja California.	Year-round	**Low:** Suitable habitat (coastal sage scrub in low-lying foothills and valleys) is present on the proposed project site. Nearest recorded occurrence is approximately 5 miles east of site.
Vireo bellii pusillus **Least Bell's vireo**	US: FE CA: SE	Riparian forests and willow thickets. Nests from central California to northern Baja California. Winters in southern Baja California.	April through September	**Absent:** Suitable habitat (riparian forests and willow thickets) is not present on the proposed project site for this species.

Special Interest Species Summary

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Mammals				
Antrozous pallidus **Pallid bat**	US: – CA: CSC	Day roosts in caves, crevices, mines and occasionally hollow trees and buildings. Night roosts may be more open sites, such as porches and open buildings. Hibernation sites are probably rock crevices. Grasslands, shrublands, woodlands, and forest in western North America.	Year-round Nocturnal	**Absent:** Suitable habitat (caves, crevices, mines and hollow trees and buildings) is not present on the proposed project site for this species.
Chaetodipus fallax fallax **Northwestern San Diego pocket mouse**	US: – CA: CSC	Found in sandy herbaceous areas, usually associated with rocks or coarse gravel in coastal scrub, chaparral, grasslands, and sagebrush, from Los Angeles County through southwestern San Bernardino, western Riverside, and San Diego Counties to northern Baja California.	Year-round	**Low:** Suitable habitat (sandy herbaceous areas, with rocks or coarse gravel in coastal scrub) is present on the proposed project site for this species.
Chaetodipus fallax pallidus **Pallid Sand Diego pocket mouse**	US: – CA: CSC	Found in sandy herbaceous areas, usually associated with rocks or coarse gravel in desert wash, desert scrub, desert succulent scrub, pinyon-juniper woodlands, etc. in desert border areas of Southern California into Mexico.	Nocturnal, active year-round	**Absent:** Suitable habitat (sandy herbaceous areas, with rocks or coarse gravel in desert scrub and desert wash) is not present on the proposed project site for this species.
Dipodomys merriami parvus **San Bernardino Merriam's kangaroo rat**	US: FE CA: CSC	Gravelly and sandy soils of alluvial fans, braided river channels, active channels and terraces; San Bernardino Valley (San Bernardino County) and San Jacinto Valley (Riverside County).	Nocturnal, active year-round	**Low:** Marginally suitable habitat (gravelly and sandy soils of alluvial fans) is present on the proposed project site for this species. Nearest occurrence of species approximately ten miles north of site.
Dipodomys stephensi **Stephens' kangaroo rat**	US: FE CA: ST	Found in plant communities transitional between grassland and coastal sage scrub, with perennial vegetation cover of less than 50%. Most commonly associated with *Artemesia tridentata, Eriogonum fasciculatum,* and *Erodium.* Requires well-drained soils with compaction characteristics suitable for burrow construction. Not found in soils that are highly rocky, less than 20 inches deep, or heavily alkaline or clay, or in areas exceeding 25% slope. Occurs only in western	Year-round	**Absent:** Suitable habitat (plant communities transitional between grassland and coastal sage scrub) is not present on the proposed project site for this species.

Special Interest Species Summary

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
		Riverside County, northern San Diego County, and extreme southern San Bernardino County, below 915 meters (3,000 feet) elevation. In northwestern Riverside County, known only from east of Interstate 15.		
Eumops perotis **Western mastiff bat**	US: – CA: CSC	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc.; roosts in crevices in vertical cliff faces, high buildings, and tunnels, and travels widely when foraging.	Primarily the warmer months	**Absent:** Suitable habitat (cliff faces, high buildings, tunnels in open, semi-arid to arid habitats, conifer and deciduous woodlands, coastal scrub, grasslands etc;) is not present on the proposed project site for this species.
Lasiurus xanthinus **Western yellow bat**	US: – CA: SA	Occurs in southern California in palm oases and in residential areas with untrimmed palm trees. Roosts primarily in trees, especially the dead fronds of palm trees. Forages over water and among trees.	Primarily the warmer months	**Absent:** Suitable habitat (untrimmed palm trees) is not present on the proposed project site for this species.
Lepus californicus bennettii **San Diego black-tailed jackrabbit**	US: – CA: CSC	Variety of habitats including herbaceous and desert scrub areas, early stages of open forest and chaparral. Most common in relatively open habitats. Restricted to the cismontane areas of Southern California, extending from the coast to the Santa Monica, San Gabriel, San Bernardino, and Santa Rosa Mountain ranges.	Year-round, diurnal and crepuscular activity	**Absent:** Suitable habitat (desert scrub areas, early stages of open forest and chaparral) is not present on the proposed project site for this species.
Neotoma lepida intermedia **San Diego desert woodrat**	US: – CA: CSC	Found in desert scrub and coastal sage scrub habitat, especially in association with cactus patches. Builds stick nests around cacti, or on rocky crevices. Occurs along the Pacific slope from San Luis Obispo County to northwest Baja California.	Year-round, mainly nocturnal, occasionally crepuscular and diurnal	**Low:** Marginally suitable habitat (coastal sage scrub habitat with patches of cactus) is present on the proposed project site for this species.
Nyctinomops macrotis **Big free-tailed bat**	US: – CA: CSC	Inhabits rugged, rocky canyon country in southwestern United States. Found from northern South America and the Caribbean Islands northward to the western United States. In the southwestern U.S., populations appear to be scattered.		**Absent:** Suitable habitat (rugged, rocky canyon country) is not present on the proposed project site for this species.

Special Interest Species Summary

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Ovis canadensis nelsoni **Nelson's bighorn sheep**	US: – CA: SA	Occurs in open, rocky, steep areas with available water and herbaceous forage; widely distributed from the White Mountains in Mono County to the Chocolate Mountains in Imperial County.		**Absent:** Suitable habitat (open, rocky, steep areas with available water and herbaceous forage) is not present on the proposed project site for this species.
Perognathus longimembris brevinasus **Los Angeles pocket mouse**	US: – CA: CSC	Prefers sandy soil for burrowing, but has been found on gravel washes and stony soils. Found in coastal sage scrub in Los Angeles, Riverside, and San Bernardino Counties.	Nocturnal. Active late spring to early fall.	**Moderate:** Suitable habitat (sandy soil for burrowing, gravelly drainage feature, coastal sage scrub) is present on the proposed project site for this species. Nearest occurrence of species two miles northeast of site.

LEGEND

US: Federal Classifications

FE	Taxa listed as Endangered.
FT	Taxa listed as Threatened.
FC	Candidate for listing as Threatened or Endangered.

CA: State Classifications

SE	Taxa State-listed as Endangered.
ST	Taxa State-listed as Threatened.
CSC	California Species of Special Concern. Refers to animals with vulnerable or seriously declining populations.
CFP	California Fully Protected. Refers to animals protected from take under Fish and Game Code sections 3511, 4700, 5050, and 5515.
SA	Special Animal. Refers to any other animal monitored by the Natural Diversity Data Base, regardless of its legal or protection status.
SP	Special Plant. Refers to any other plant monitored by the Natural Diversity Data Base, regardless of its legal or protection status.

CNPS: California Native Plant Society Classifications

1A	Plants presumed extinct in California.
1B	Plants considered by CNPS to be rare, threatened, or endangered in California and elsewhere.
2	Plants considered by CNPS to be rare, threatened, or endangered in California, but more common elsewhere.
3	Plants about which more information is needed – a CNPS review list.
4	Plants of limited distribution whose status is monitored by CNPS.

MSHCP: Western Riverside County MSHCP Status

S	Species is adequately conserved under the MSHCP, but surveys are required within indicated habitats and/or survey areas.
C	Species is adequately conserved under the MSHCP.
P	Species is covered but not considered adequately conserved pending completion of MSHCP specified requirements.

ATTACHMENT 5

2008 CENTRAL PARK JURISDICTIONAL DELINEATION REPORT

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JURISDICTIONAL DELINEATION REPORT

CENTRAL PARK PROJECT
CITY OF RANCHO CUCAMONGA
SAN BERNARDINO COUNTY, CALIFORNIA

LSA

January 2008

JURISDICTIONAL DELINEATION REPORT

CENTRAL PARK PROJECT
CITY OF RANCHO CUCAMONGA
SAN BERNARDINO COUNTY, CALIFORNIA

Prepared for:
City of Rancho Cucamonga
Attn: Ms. Karen McGuire-Emery
10500 Civic Center Drive
Rancho Cucamonga, California 91730

Prepared by:
LSA Associates, Inc.
20 Executive Park, Suite 200
Irvine, California 92614
(949) 553-0666
LSA Project No. CRG0703

LSA

January 2008

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INTRODUCTION

LSA Associates, Inc. (LSA) was retained by the City of Rancho Cucamonga to conduct a wetlands/jurisdictional delineation at the approximately 70-acre Central Park Phase II project site. This evaluation of regulatory jurisdiction has been prepared for use primarily by the United States Army Corps of Engineers (Corps), the California Department of Fish and Game (CDFG), and the Regional Water Quality Control Board (RWQCB) as part of their evaluation for permit authorization under Section 404 of the federal Clean Water Act (CWA) for Streambed Alteration Agreement processing under Section 1600 et seq. of the California Fish and Game Code and certification under Section 401 of the CWA, respectively. This jurisdictional delineation is also an important source of California Environmental Quality Act (CEQA) information for the evaluation of potential impacts associated with the proposed expansion of the City of Rancho Cucamonga Central Park.

PROPOSED PROJECT

The City of Rancho Cucamonga proposes to develop the remaining approximately 70 acres of the original 100-acre site. The project includes the development of Central Park Phase II. Phase I is developed (Figure 1). Proposed uses for Phase II of Central Park include a tennis complex, a gymnasium, an aquatic center, an indoor pool, a fire station, a maintenance yard, an amphitheater, overnight family camping, group picnic facilities, lake development, a parking structure, equestrian facilities, an adjacent regional trail, and associated parking.

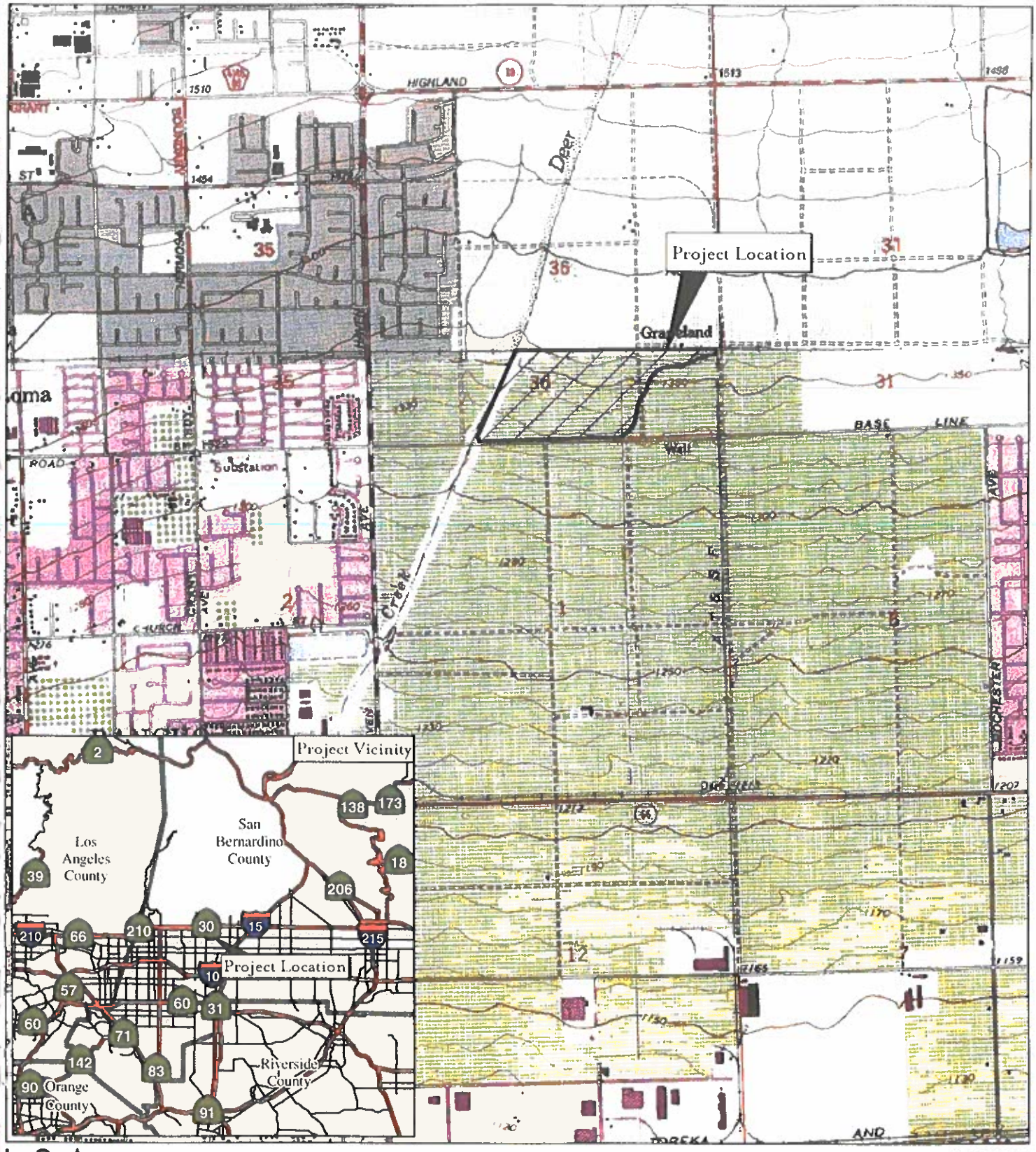
PROPERTY DESCRIPTION

The study area consists of approximately 70 acres located in the southeast ¼ and a portion of the southeast ¼ of the southwest ¼ of Section 36, Township 1 North, Range 7 West, in the City of Rancho Cucamonga, San Bernardino County, California, as shown on the *Cucamonga Peak, California* and *Guasti, California* 7.5-minute series United States Geological Survey (USGS) topographic maps (Figure 1).

The dominant plant community on site is California sagebrush scrub (Holland 1996; Sawyer and Keeler-Wolf 1995). Dominant species identified in this plant community include California buckwheat *(Eriogonum fasciculatum),* California sagebrush *(Artemisia californica),* horehound *(Marrubium vulgare),* and deerweed *(Lotus scoparius).*

The site is relatively flat and ranges in elevation from approximately 1,320 to 1,380 feet (ft). The soils present on site, as mapped by the Soil Conservation Service (USDA 2005), are Tujunga loamy sand (0–5 percent slopes) and Tujunga gravelly loamy sand (0–9 percent slopes). The proposed site is bordered on the north by a recreation trail and housing, on the east by a community and senior center and Milliken Avenue, on the south by Base Line Road, and on the west by the Deer Creek Channel.

The entire study area is located within the Santa Ana River Watershed, which has an overall size of 2,800 square miles. The average annual rainfall for this area is 13 inches. This delineation followed an abnormally dry rainy season. In the 2006/2007 rainy season, the counties received only 2.1 inches of rainfall. However, the fieldwork for this delineation was completed three days after a December 1 rainfall event that deposited up to 1.5 inches in the project area.



LSA

FIGURE 1

LEGEND

Project Boundary

N

0 1,000 2,000 Feet

Central Park Phase II

Project Location Map

SOURCE: USGS 7.5' QUAD - CUCAMONGA PEAK ('88), GUASTI ('81), CALIF.

I:\CRG070\GIS\FIGURE_1.mxd (1/14/2008)

Wetlands

Wetland delineations for Section 404 purposes must be conducted according to the Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Regional Supplement) (Corps 2006) and the Corps of Engineers 1987 Wetland Delineation Manual (1987 Manual) (Environmental Laboratory 1987). Where there are differences between the two documents, the Regional Supplement takes precedence over the 1987 Manual.

The Corps and Environmental Protection Agency (EPA) define wetlands as follows:

> "Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted to life in saturated soil conditions."

In order to be considered a jurisdictional wetland under Section 404, an area must possess three wetland characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology. Each characteristic has a specific set of mandatory wetland criteria that must be satisfied in order for that particular wetland characteristic to be met. Several parameters (indicators) may be analyzed to determine whether the criteria are satisfied.

Hydrophytic vegetation and hydric soils indicators provide evidence that episodes of inundation have lasted more than a few days or have occurred repeatedly over a period of years, but do not confirm that an episode has occurred recently. Conversely, wetland hydrology provides evidence that an episode of inundation or soil saturation occurred recently, but does not provide evidence that episodes have lasted more than a few days or have occurred repeatedly over a period of years. Because of this, if an area lacks one of the three characteristics under normal circumstances, the area is considered nonwetland under most circumstances.

Determination of wetland limits may be obfuscated by a variety of natural environmental factors or human activities (collectively called difficult wetland situations), including cyclic periods of drought and flooding or highly ephemeral stream systems. During periods of drought, for example, bank return flows are reduced and water tables are lowered. This results in a corresponding lowering of ordinary high water and an invasion of upland plant species into wetland areas. Conversely, extreme flooding may create physical evidence of high water well above what might be considered ordinary and may allow the temporary invasion of hydrophytic species into nonwetland areas. In highly ephemeral systems typical of Southern California, these problems are encountered frequently. In these situations, professional judgment based on years of practical experience and extensive knowledge of local ecological conditions comes into play in delineating wetlands. The Regional Supplement provides additional guidance for difficult wetland situations.

Hydrophytic Vegetation. Hydrophytic vegetation is plant life that grows and is typically adapted for life in permanently or periodically saturated soils. The hydrophytic vegetation criterion is met if more than 50 percent of the dominant plant species from all strata (tree, shrub, herb, and woody vine layers) are considered hydrophytic. Hydrophytic species are those included on the *National List of Plant Species That Occur in Wetlands: California (Region 0)* (Reed 1988), published by the United States Fish and Wildlife Service (USFWS). Each species on the list is rated according to a wetland indicator category, as shown in Table A.

Table A: Hydrophytic Vegetation

Category		Probability
Obligate Wetland	OBL	Almost always occurs in wetlands (estimated probability > 99 percent)
Facultative Wetland	FACW	Usually occurs in wetlands (estimated probability 67–99 percent)
Facultative	FAC	Equally likely to occur in wetlands and nonwetlands (estimated probability 34–66 percent)
Facultative Upland	FACU	Usually occurs in nonwetlands (estimated probability 67–99 percent)
Obligate Upland	UPL	Almost always occurs in nonwetlands (estimated probability > 99 percent)

To be considered hydrophytic, the species must have wetland indicator status (i.e., be rated as obligate wetland [OBL], facultative wetland [FACW], or facultative [FAC]).

The delineation of hydrophytic vegetation is typically based on the most dominant species from each vegetative stratum (strata are considered separately); when more than 50 percent of these dominant species are hydrophytic (i.e., FAC, FACW, or OBL), the vegetation is considered hydrophytic. In particular, the Corps recommends the use of the "50/20" rule (also known as the dominance test) from the Regional Supplement for determining dominant species. Under this method, dominant species are the most abundant species that immediately exceed 50 percent of the total dominance measure for the stratum, plus any additional species composing 20 percent or more of the total dominance measure for the stratum. In cases where indicators of hydric soil and wetland hydrology are present but the vegetation initially fails the dominance test, the prevalence index must be used. The prevalence index is a weighted average of all plant species within a sampling point. The prevalence index is particularly useful when communities only have one or two dominant species, where the species are present at roughly equal coverage, or when strata differ greatly in total plant cover. In addition, Corps guidance provides that morphological adaptations may be considered when determining hydrophytic vegetation when indicators of hydric soil and wetland hydrology are present (Corps 2006). If the plant community passes either the dominance test or prevalence index after reconsidering the indicator status of any plant species that exhibit morphological adaptations for life in wetlands, then the vegetation is considered hydrophytic.

Hydric Soils.[1] Hydric soils are defined as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part.[2] Soils are considered likely to meet the definition of a hydric soil when one or more of the following criteria are met:

[1] The hydric soil definition and criteria included in the 1987 Manual are obsolete. Users of the Manual are directed to the United States Department of Agriculture (USDA) Natural Resources Conservation Service Web site for the most current information on hydric soils.

[2] Current definition as of 1994 (FR, July 13, 1994).

- All Histels except Folistels and Histosols except Folists;
- Soils that are frequently ponded for long durations or very long durations[1] during the growing season; or
- Soils that are frequently flooded for long durations or very long durations during the growing season.

Hydric soils develop under conditions of saturation and inundation combined with microbial activity in the soil that causes a depletion of oxygen. While saturation may occur at any time of year, microbial activity is limited to the growing season, when soil temperature is above biologic zero (the soil temperature at a depth of 50 centimeters [cm], below which the growth and function of locally adapted plants are negligible). Biogeochemical processes that occur under anaerobic conditions during the growing season result in the distinctive morphologic characteristics of hydric soils.

The Regional Supplement has a number of field indicators that may be used to identify hydric soils. The Natural Resources Conservation Service (NRCS) (2003) has also developed a number of field indicators that may demonstrate the presence of hydric soils. These indicators include hydrogen sulfide generation; accumulation of organic matter; and the reduction, translocation and/or accumulation of iron and other reducible elements. These processes result in soil characteristics that persist during both wet and dry periods. Separate indicators have been developed for sandy soils and for loamy and clayey soils.

Wetland Hydrology. Under natural conditions, development of hydrophytic vegetation and hydric soils is dependent on a third characteristic: wetland hydrology. Areas with wetland hydrology are those where the presence of water has an overriding influence on vegetation and soil characteristics due to anaerobic and reducing conditions, respectively (Environmental Laboratory 1987). The wetland hydrology parameter is satisfied if the area is seasonally inundated or saturated to the surface for a minimum of 14 consecutive days during the growing season in most years (Corps 2006).

Hydrology is often the most difficult criterion to measure in the field due to seasonal and annual variations in water availability. Some of the indicators that are commonly used to identify wetland hydrology include visual observation of inundation or saturation, watermarks, recent sediment deposits, surface scour, and oxidized root channels (rhizospheres) resulting from prolonged anaerobic conditions.

California Department of Fish and Game

The CDFG, through provisions of the California Fish and Game Code (Section 1600 et seq.), is empowered to issue agreements for any alteration of a river, stream, or lake where fish or wildlife resources may be adversely affected. Streams (and rivers) are defined by the presence of a channel bed and banks and at least an intermittent flow of water. The CDFG regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake as defined by the CDFG.

[1] Long duration is defined as a single event ranging from 7 to 30 days; very long duration is defined as a single event that lasts longer than 30 days.

In obtaining CDFG agreements, the limits of wetlands are not typically determined. The reason for this is that the CDFG generally includes, within the jurisdictional limits of streams and lakes, any riparian habitat present. Riparian habitat includes willows, mulefat, and other vegetation typically associated with the banks of a stream or lake shorelines. In most situations, wetlands associated with a stream or lake would fall within the limits of riparian habitat. Thus, defining the limits of CDFG jurisdiction based on riparian habitat will automatically include any wetland areas and may include additional areas that do not meet Corps criteria for soils and/or hydrology (e.g., where riparian woodland canopy extends beyond the banks of a stream away from frequently saturated soils).

Regional Water Quality Control Board

The California RWQCB is responsible for the administration of Section 401 of the CWA. Typically, the areas subject to RWQCB jurisdiction coincide with those of the Corps (i.e., waters of the United States, including any wetlands). The RWQCB also asserts authority over waters of the State under waste discharge requirements pursuant to the Porter-Cologne Act.

METHODOLOGY

The fieldwork for this evaluation was conducted by LSA senior biologist Leo Simone on December 4, 2007. The field map of the area to be surveyed was prepared using a 2007 aerial photograph base at a scale of 1 inch = 250 ft. The project area was surveyed on foot, and all areas of potential jurisdiction were evaluated according to Corps, CDFG, and RWQCB criteria. Data were recorded either directly onto the field map or with a handheld global positioning system (GPS) device.

Areas supporting hydrology or species of plant life potentially indicative of wetlands were evaluated according to routine wetland delineation procedures described in the Regional Supplement. One representative sample point was selected and examined in the field in an area where wetland jurisdiction was in question. Figure 2 shows the location of the sample point and the potential jurisdictional features identified. At the sample point, the dominant and subdominant plant species were identified and their wetland indicator status was noted (Reed 1988). A small sample pit (approximately 20 inches deep) was dug at the point in order to examine soil characteristics and composition. Soil matrix colors were classified according to the Munsell Soil Color Charts (Munsell Color 2000). Hydrological conditions, including any surface inundation, saturated soils, groundwater levels, and/or other wetland hydrology indicators, were recorded. General site characteristics were also noted. A Wetland Determination Data Form – Arid West Region was completed for the sample point; a copy of the data form is included as Appendix A of this report.

RESULTS

Corps Jurisdiction: Nexus to Navigable Waters

The study area is located east of the Deer Creek Channel, a concrete lined channel at this location. Surface water occurring on site is conveyed into Deer Creek via an unnamed ephemeral drainage. Deer Creek is tributary to Cucamonga Creek, which is tributary to the Santa Ana River (Figure 2). The Santa Ana River ultimately flows into the Pacific Ocean. At least a portion of the Santa Ana

LSA

N

0 125 250 Feet

LEGEND

Project Boundary

Potential Jurisdictional Waters/Streambeds

Width of Jurisdictional Waters Federal' / State'

Sample Point (with ID)

Photographic Location (with ID)

SOURCE: Air Photo USA (2007)

I:\CRG0701\GIS\bio_drainage.mxd (1/14/2008)

FIGURE 2

Central Park Phase II

Jurisdictional Delineation

Potential Waters of the U.S./Streambeds of the State and Photographic Locations

River is considered traditional navigable water due to tidal influences at its mouth approximately 60 miles from the project area. Other portions of the Santa Ana River are relatively permanent waters, if not traditional navigable waters. The determination of traditional navigable waters will be made by the Corps.

During report preparation, the study area was assessed and all drainages were assigned a letter designation. The study area is discussed by drainage below. There are five ephemeral drainage courses where potential Corps jurisdiction occurs within the project site, identified as Drainage A through E (Figure 2). All five drainages are well-drained ephemeral channels. None of these drainages satisfies all three criteria for Corps jurisdictional wetlands. Drainage A conveys storm water and nuisance flows into Deer Creek via a storm drain outlet. Drainages B through E are tributary to Drainage A. A breakdown of the location, size, and general characteristics of each drainage is provided in Table B as well. Please refer to the attached Wetland Determination Data Form – Arid West Region (Appendix A) for a full description of the sample point results.

Drainage A

Drainage A (Figure 2) is an ephemeral drainage that originates near the northeast corner of the project site. This drainage traverses the study area in a southwesterly direction for approximately 2,862 ft before exiting at the southwestern site boundary where flows empty into a 3 ft diameter concrete-lined culvert before entering Deer Creek on the south side of Base Line Road. Drainage A is fed primarily by nuisance flows from adjacent residential and park development. Most of the western portion of the drainage is engineered and lined with imported cobble and river-rock, while the eastern portion of the drainage has a natural gravelly/sandy bottom (Figure 3). The eastern half of the drainage is small and well-defined, with vegetation consisting primarily of upland sage/scrub species: California buckwheat (*Eriogonum fasiculatum*, UPL), California sagebrush (*Artemisia californica*, UPL), and brome (*Bromus* spp., UPL). Near the center of the drainage (Sample Point 1) nuisance runoff from adjacent development is fed into the drainage via an approximately 5 x 3 ft concrete-lined storm drain outlet. Temporary ponding appears to occur in the area of the storm drain outlet, with vegetation dominated primarily by mulefat (*Baccharis salicifolia*, FACW) and arroyo willow (*Salix lasiolepis*, FACW).

The OHWM in this drainage was determined by a number of factors, including water staining on rocks, scouring, shelving, and changes in the vegetation cover. Sample Point 1 was taken within this drainage, and indicators of hydric soils were not found. Drainage A cross sections between the OHWM range in width from approximately 1 to 4 ft. Within Drainage A, approximately 0.117 acre of jurisdictional nonwetland waters occurs within the OHWM, as determined from width measurements taken in the field. There are no wetland waters within this drainage.

Drainage B

Drainage B (Figure 2) is a small ephemeral drainage that flows in a north to south direction for approximately 70 ft before entering Drainage A. Vegetation associated with this drainage consists entirely of upland sage/scrub species. Soils within this drainage are a mix of gravelly sand and sandy loam that does not meet the criteria for hydric soils.

Table B: Potential Corps, CDFG, and RWQCB Jurisdictional Areas

Drainage ID	County	Linear Feet	UTM–Begin	UTM–End	California Quadrangle	Hydrologic Regime	Likely Corps Jurisdictional Status[1]	Potential Corps Nonwetland Waters (acres)	Potential Corps Wetlands (acres)	Total Potential Corps (acres)	CDFG (acres)	RWQCB (acres)	Corps OHWM (ft)	CDFG Streambed (ft)	Depth Estimate (ft)	Side Slope Estimate	Primary Substrate	Hydrologic Indicators	Chemical Characteristics	Biological Characteristics
A	San Bernardino	2862	0448259 3776123	0447403 3775805	*Guasti, Cucamonga Pk.*	Partially engineered ephemeral	Jurisdictional	0.117	0	0.0.117	0.758	0.117	1–4	6-25	0.5	2:1	Loam/ sand/ gravel/ cobbles	Defined OHWM	None	Sage scrub, mulefat, arroyo willow
B	San Bernardino	70	0447605 3775904	0447611 3775914	*Guasti, Cucamonga Pk.*	Ephemeral	Jurisdictional	0.003	0	0.003	0.008	0.003	1–2	3–5	0.2	4:1	Gravelly sand/ loam	Defined OHWM	None	Sage scrub
C	San Bernardino	986	0447702 3776180	0447709 3776070	*Guasti, Cucamonga Pk.*	Ephemeral	Jurisdictional	0.042	0	0.042	0.167	0.042	1–3	2–12	0.2	4:1	Gravelly sand loam	Defined OHWM	None	Sage scrub
D	San Bernardino	512	0448074 3776174	0448068 3776064	*Guasti, Cucamonga Pk.*	Engineered ephemeral	Jurisdictional	0.018	0	0.018	0.047	0.018	1–2	3–5	0.3	3:1	Sand/ gravel	Defined OHWM	None	Bare ground
E	San Bernardino	71	0448126 3776109	0448130 3776094	*Guasti, Cucamonga Pk.*	Ephemeral	Jurisdictional	0.002	0	0.002	0.006	0.002	2–4	4–6	0.2	4:1	Gravelly sand/ loam	Defined OHWM	None	Sage scrub
Total – Entire Study Area								0.182	0	0.182	0.986	0.182								

Photo 1: Storm drain outlet with associated remnant hydrophytic vegetation at Drainage A, near middle of site looking southwest.

Photo 2: Channelized portion of Drainage A, lined with imported cobble and river-rock looking southwest.

Photo 3: Near southwest end of Drainage A, vegetation consists entirely of upland sage scrub species; photograph looking southwest.

Photo 4: Culvert under Base Line Road leading into Deer Creek at terminus of Drainage A; photograph looking south.

LSA

FIGURE 3

Central Park Phase II

Site Photos

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Cross sections of Drainage B between the OHWM range in width from approximately 1 to 2 ft. Within Drainage B, approximately 0.003 acre of jurisdictional nonwetland waters occurs within the OHWM, as determined from width measurements taken in the field. There are no wetland waters within this drainage.

Drainage C

Drainage C (Figure 2) is an ephemeral drainage that originates at the northern edge of the project site approximately 500 ft east of the Deer Creek Channel. This drainage flows in a general north to south direction for approximately 986 ft before entering Drainage A. Vegetation associated with this drainage consists entirely of upland sage/scrub species. Soils within this drainage are a mixture of gravelly sand and sandy loam and do not meet the criteria for hydric soils.

Cross sections of Drainage C between the OHWM range in width from approximately 1 to 3 ft. Within Drainage C, approximately 0.042 acre of jurisdictional nonwetland waters occurs within the OHWM, as determined from width measurements taken in the field. There are no wetland waters within this drainage.

Drainage D

Drainage D (Figure 2) appears to be an engineered earthen-lined, trapezoidal-shaped ephemeral drainage that originates at an 18-inch storm drain outlet on the north edge of the project site. This drainage flows in a north to south direction for approximately 512 ft before entering Drainage A. This drainage feature is fed primarily by nuisance flows from adjacent residential development. Soils within this drainage are composed of coarse gravelly sand and do not meet the criteria for hydric soils.

Within Drainage D, approximately 0.018 acre of jurisdictional nonwetland waters occurs within the OHWM, as determined from width measurements taken in the field. Cross sections of Drainage D between the OHWM range in width from approximately 1 to 2 ft. There are no wetland waters within this drainage.

Drainage E

Drainage E (Figure 2) is a small ephemeral drainage that flows in a northeast to southwest direction for approximately 71 ft before entering Drainage A. Vegetation associated with this drainage consists entirely of upland sage/scrub species. Soils within this drainage are a mix of coarse gravelly sand and sandy loam and do not meet the criteria for hydric soils.

Cross sections of Drainage E between the OHWM range in width from approximately 1 to 2 ft. Within Drainage E, approximately 0.002 acre of jurisdictional nonwetland waters occurs within the OHWM, as determined from width measurements taken in the field. There are no wetland waters within this drainage.

Vegetation

Dominant vegetation observed in the drainage courses consisted primarily of upland species, including California buckwheat, California sagebrush, and brome grass. Hydrophytic vegetation potentially indicative of wetlands, primarily consisting of mulefat and arroyo willow, was primarily observed at the storm drain outlet in the central part of Drainage A, identified on Figure 2 at Sample Point 1. Scattered, isolated mulefat shrubs were present at several locations throughout this drainage. All of the areas examined lacked wetland hydrology and hydric soil indicators.

Soils

The Soil Survey of San Bernardino County Southwestern Part, California describes the soil expected to be found in the study area as Tujunga series.

The following Tujunga series mapping unit was identified as present in the study area by the *Soil Survey*:

- TuB: Tujunga loamy sand (0–5 percent slopes) and
- TvC: Tujunga gravelly, loamy sand, 0–9 percent slopes

The Tujunga series consists of somewhat excessively drained, nearly level to moderately sloping soils that formed on alluvial fans in granitic alluvium. Runoff is very slow to slow, and hazard of erosion is slight because of the gravelly surface layer.

Hydric soil indicators were not observed in any of the soils examined within the study area.

Hydrology

All of the five drainage courses exhibited an OHWM consisting primarily of a scoured channel bed. Indicators of wetland hydrology were not observed.

Based on the very limited extent of riparian vegetation (present at the storm drain outlet in the central part of Drainage A), it is concluded that all five drainage courses are ephemeral and do not meet the Corps three-parameter definition required to qualify as jurisdictional wetlands under Section 404 of the CWA.

CONCLUSIONS

Corps Jurisdiction

Each of the ephemeral drainages shown in Figure 2 requires a significant nexus determination, per Rapanos guidance, in order to assess its jurisdictional status. Based on the jurisdictional delineation, LSA has concluded that within the study area, Table B shows the total potential Corps jurisdictional areas within the study area. Approximately 0.182 acre is potentially jurisdictional nonwetland waters of the United States; none of the area meets the three parameters required to qualify as jurisdictional wetlands under Section 404 of the CWA.

CDFG Jurisdiction

All of the areas satisfying the Corps jurisdictional criteria for waters of the United States, as described above, are also subject to CDFG jurisdiction pursuant to Section 1602 of the California Fish and Game Code. Potential CDFG jurisdiction encompasses approximately 0.986 acre of stream bed habitat. See Figure 2 for the extent of CDFG jurisdiction. Table B shows the total potential CDFG jurisdictional areas within the project area.

RWQCB Jurisdiction

Since there is no public guidance on determining RWQCB jurisdictional areas, jurisdiction was determined based on the federal definition of wetlands (three parameters) and other waters (OHWM) as recommended by the September 2004 Workplan. Therefore, potential RWQCB jurisdiction encompasses 0.182 acre. The total area of potential RWQCB jurisdiction is shown in Table B.

This jurisdictional determination is subject to verification by the Corps, CDFG, and RWQCB.

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APPENDIX A

COPY OF WETLAND DATA FORM – ARID WEST REGION

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: CENTRAL PARK-RANCHO CUCAMONGA City/County: RANCHO CUCAMONGA / SAN BERNARDINO Sampling Date: 12/4/07

Applicant/Owner: CITY OF RANCHO CUCAMONGA State: CA Sampling Point: 1

Investigator(s): L. SIMONE Section, Township, Range: S36, T1N, R7W

Landform (hillslope, terrace, etc.): ALLUVIAL FAN Local relief (concave, convex, none): NONE Slope (%): 5-10%

Subregion (LRR): C Lat: 34°07'30" Long: 117°34'30" Datum: 1929

Soil Map Unit Name: TUJUNGA NWI classification: NONE

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No ____	Is the Sampled Area within a Wetland? Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks: HYDROPHYTIC VEGETATION ASSOCIATED WITH RUNOFF FROM STORM DRAIN OUTFALL. SOILS CONSIST OF COARSE LOAMY SAND. NO EVIDENCE OF WETLAND HYDROLOGY PRESENT

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. [illegible]			
2.			
3.			
4.			
Total Cover: 0			
Sapling/Shrub Stratum			
1. BACCHARIS SALICIFOLIA	40		FACW
2. SALIX LASIOLEPIS	30		FACW
3.			
4.			
5.			
Total Cover: 70			
Herb Stratum			
1. BROMUS SP	10		UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover: 10			
Woody Vine Stratum			
1.			
2.			
Total Cover: 0			

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species ____	x 1 =	____
FACW species 2	x 2 =	4
FAC species ____	x 3 =	____
FACU species ____	x 4 =	____
UPL species ____	x 5 =	____
Column Totals: ____ (A)		____ (B)

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:

- X Dominance Test is >50%
- X Prevalence Index is ≤3.0[1]
- ____ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: HYDROPHYTIC VEGETATION IS ISSOLATED AND APPEARS TO BE PRESENT BECAUSE OF NUISANCE RUNOFF ASSOCIATED WITH STORM OUTFALL FROM ADJACENT DEVELOPMENT

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2"	5Y 2.5/2						Loamy Sand	
2-20"	5Y 3/1						Loamy Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (LRR C)
- ___ 1 cm Muck (A9) (LRR D)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (LRR C)
- ___ 2 cm Muck (A10) (LRR B)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: SOILS CONSIST OF LOAMY SANDS. NO HYDRIC INDICATORS PRESENT

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (Nonriverine)
- ___ Sediment Deposits (B2) (Nonriverine)
- ___ Drift Deposits (B3) (Nonriverine)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (Riverine)
- ___ Sediment Deposits (B2) (Riverine)
- ___ Drift Deposits (B3) (Riverine)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: NO HYDROLOGIC INDICATORS PRESENT

ATTACHMENT 6

2008 CENTRAL PARK PROTOCOL BURROWING OWL SURVEY LETTER

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LSA

LSA ASSOCIATES, INC.
1500 IOWA AVENUE, SUITE 200
RIVERSIDE, CALIFORNIA 92507

951.781.9310 TEL
951.781.4277 FAX

BERKELEY
CARLSBAD
COLMA
FORT COLLINS
IRVINE
PALM SPRINGS
POINT RICHMOND
ROCKLIN
SAN LUIS OBISPO

January 11, 2008

City of Rancho Cucamonga
Planning Department
Attn: Ms. Karen McGuire-Emery
10500 Civic Center Drive
Rancho Cucamonga, California 91730

Subject: Results of Focused Burrowing Owl Survey for Central Park Project located in the City of Rancho Cucamonga, San Bernardino County (LSA Project No. CRG0703)

Dear Ms. McGuire-Emery:

This letter report was prepared for City of Rancho Cucamonga to document the results of a focused survey for the western burrowing owl (*Athene cunicularia hypugaea*) conducted by LSA Associates, Inc. (LSA) at the above-referenced site. The proposed project is to develop the remaining approximately 70 acres of the Central Park project. The site is located in the south ½ of the southeast ¼ and a portion of the southeast ¼ of the southwest ¼ of Section 36, Township 1 North, Range 7 West, in the City of Rancho Cucamonga, San Bernardino County, California, as shown on the *Cucamonga Peak, California* and *Guasti, California* 7.5-minute series U.S. Geological Survey (USGS) topographic maps (attached Figure 1). Figure 2 shows the conceptual site plan.

No burrowing owls were detected during the December 2007 focused surveys for this species.

BURROWING OWL BACKGROUND

The burrowing owl is protected under the Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711) and under Sections 3500, 3503, and 3800 of the California Fish and Game Code (Code). These sections of the Code prohibit take, possession, or destruction of birds, their nests, or eggs. When the owl is present, avoidance of take requires that project-related disturbance be avoided during the critical phases of the nesting cycle (typically from February 1 through August 31 in San Bernardino County).

The western burrowing owl is a small ground-dwelling owl with a round head that lacks the feather tufts on the head typical of other owls. It has white eyebrows, yellow eyes, and long stilt-like legs. The owl is sandy-colored on the head, back, and upper parts of the wings and white-to-cream with barring on the breast and belly. Unlike most owls, the male is slightly larger than the female, and the females are usually darker than the males.

The western burrowing owl is found in western North America from Canada to Mexico and east to Texas and Louisiana. In certain areas of its range, it is migratory (in the northern areas of the Great

Plains and Great Basin). Although the burrowing owl in northern California is thought to migrate, owls within central and southern California are predominantly non-migratory.

Burrowing owls are found in open, dry grasslands, agricultural and range lands, and desert habitats often associated with burrowing animals. They also inhabit grass, forb, shrub stages of pinyon and ponderosa pine habitats. The owl can be found at elevations ranging from 200 feet below sea level to 9,000 feet above mean sea level (AMSL). In California, the highest elevation where this species has been found is 5,300 feet in Lassen County. The owl commonly perches on fence posts or on top of mounds outside its burrow. These owls can commonly be found at the margins of airports and golf courses and in vacant urban lots. They are active day and night but usually less active during the peak of day.

Burrowing owls tend to be opportunistic feeders. Large arthropods, mainly beetles and grasshoppers, comprise a large portion of their diet. Small mammals, especially mice, rats, gophers, and ground squirrels, are also important food items. Other prey animals include reptiles and amphibians, scorpions, young rabbits, bats, and birds, such as sparrows and horned larks (*Eremophila* sp.). Consumption of insects increases during the breeding season. Burrowing owls are primarily crepuscular (active at dusk and dawn) but will hunt throughout a 24-hour period.

As their name suggests, burrowing owls nest in burrows in the ground, often in old ground squirrel burrows or badger dens. They can dig their own burrows but prefer deserted excavations of other animals. They are also known to use artificial burrows, such as pipes, concrete debris piles, or rock outcrops.

Burrowing owl nesting season begins between February and April and lasts until the end of August. The peak of the nesting season is from April 15 through July 15. The owls often line their nests with an assortment of dry materials. Adults usually return to the same burrow or nearby area each year.

One or more "satellite" burrows can usually be found near the nest burrow and are used by adult males during the nesting period and by juvenile owls for a few weeks after they emerge from the nest. The female will lay five to six (sometimes 3–11) white eggs a day apart, which are incubated for 28 to 30 days by the female. The male brings food to the female during incubation and stands guard near the burrow by day. At 14 days of age, the young may be seen roosting at the entrance to the burrow, waiting for the adults to return with food. The young leave the nest at about 40–45 days of age and begin chasing live insects between 49 and 56 days of age.

METHODS

The burrowing owl survey was conducted in accordance with the recommendations of the California Burrowing Owl Consortium, Santa Cruz Predatory Bird Research Group Burrowing Owl Survey Protocol (1993), and California Department of Fish and Game (CDFG) internal memo (February 1995).

A focused burrow survey was conducted by LSA Assistant Wildlife Biologist Lisa Wadley on December 3, 2007, in order to determine locations of fossorial mammal burrows and/or burrows with burrowing owl sign (e.g., individuals, feathers, pellets, whitewash, or prey remnants) or other

structures with the potential for the owl(s) to inhabit (e.g., drainage pipes, concrete refuse piles, debris piles, and detention basins) within the project area.

Burrowing owl surveys were conducted by Lisa Wadley on the mornings of December 5, 13, 17, 2007, and on the morning of January 2, 2008 (Table A).

Table A: Focused Survey Dates and Weather Conditions

Survey	Date	Time (24-Hour) (start/finish)	Temp. (°F) (start/finish)	Wind (mph) (start/finish)	Weather Conditions
Burrow Survey	December 3, 2007	0830-1015	56 / 67	0-3 / 0-2	clear
Presence/Absence Survey 1	December 5, 2007	0630-0745	51 / 61	0-2 / 0-1	clear / 5%
Presence/Absence Survey 2	December 13, 2007	0640-0750	44 / 55	0-3 / 0	25% / 15%
Presence/Absence Survey 3	December 17, 2007	0640-0750	42 / 42	0-1 / 0-1	10% / 5%
Presence/Absence Survey 4	January 2, 2008	0650-0815	50 / 52	0-3 / 0-2	100% / 70%

The focused survey provided 100 percent site coverage by observing areas with suitable burrows within the project area. Observations were made with binoculars and spotting scope at point locations adjacent to suitable burrowing owl habitat (remnant vineyards and non-native grassland areas) (Figure 3). The survey did not include the 150-meter zone of influence transects where that area is under separate ownership, due to the lack of authorization to enter adjacent properties. However, suitable habitat adjacent to the project site was observed through binoculars and spotting scope during the survey. See Figure 3 for location of owl survey areas and Figures 3A–3D for site photographs.

ENVIRONMENTAL SETTING

The proposed project is to develop the remaining approximately 70 acres of the 100-acre site. The project includes the development of Central Park Phase II. Phase I is developed (Figure 3). Proposed uses for Phase II of Central Park include a tennis complex, a gymnasium, an aquatic center, an indoor pool, a fire station, maintenance yard, an amphitheater, overnight family camping, group picnic facilities, lake development, potential parking structure, equestrian facilities, adjacent regional trail, and associated parking.

The site is relatively flat and ranges in elevation from approximately 1,300 to 1,360 feet. The soils present on site, as mapped by the Soil Conservation Service (USDA 2005), are Tujunga loamy sand (0–5% slopes) and Tujunga gravelly loamy sand (0–9% slopes). The proposed site is bordered on the north by a recreation trail and housing, on the east by the Community and Senior Center and Milliken Avenue, on the south by Base Line Road, and on the west by Deer Creek Channel.

The dominant plant community on site is California sagebrush scrub (Holland 1996; Sawyer and Keeler-Wolf 1995). Dominant species identified in this plant community include California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), horehound

(*Marrubium vulgare*), and deerweed (*Lotus scoparius*). Figure 3 includes a vegetation map with photograph locations, and Figures 3A through 3D show typical conditions currently found on the site. A complete list of plant species observed is attached in Table B.

RESULTS

Fossorial mammal burrows were observed within the remnant vineyard area and the non-native grassland area on the site (Figure 3). Although the sizes of the burrows are suitable for burrowing owls, no owl sign was found, and no owls were observed utilizing these burrows at the time of the surveys. Since the burrowing owl is a mobile species, it has a potential to subsequently occupy any suitable burrows on site. Therefore, a pre-construction survey will be required to ensure that no owls have subsequently occupied the site prior to grading activities.

CERTIFICATION

I hereby certify that I have read this report and that the statements furnished herein and in the attached exhibits present the data and information required for this biological evaluation; and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Please do not hesitate to contact me with any questions or comments you may have.

Sincerely,

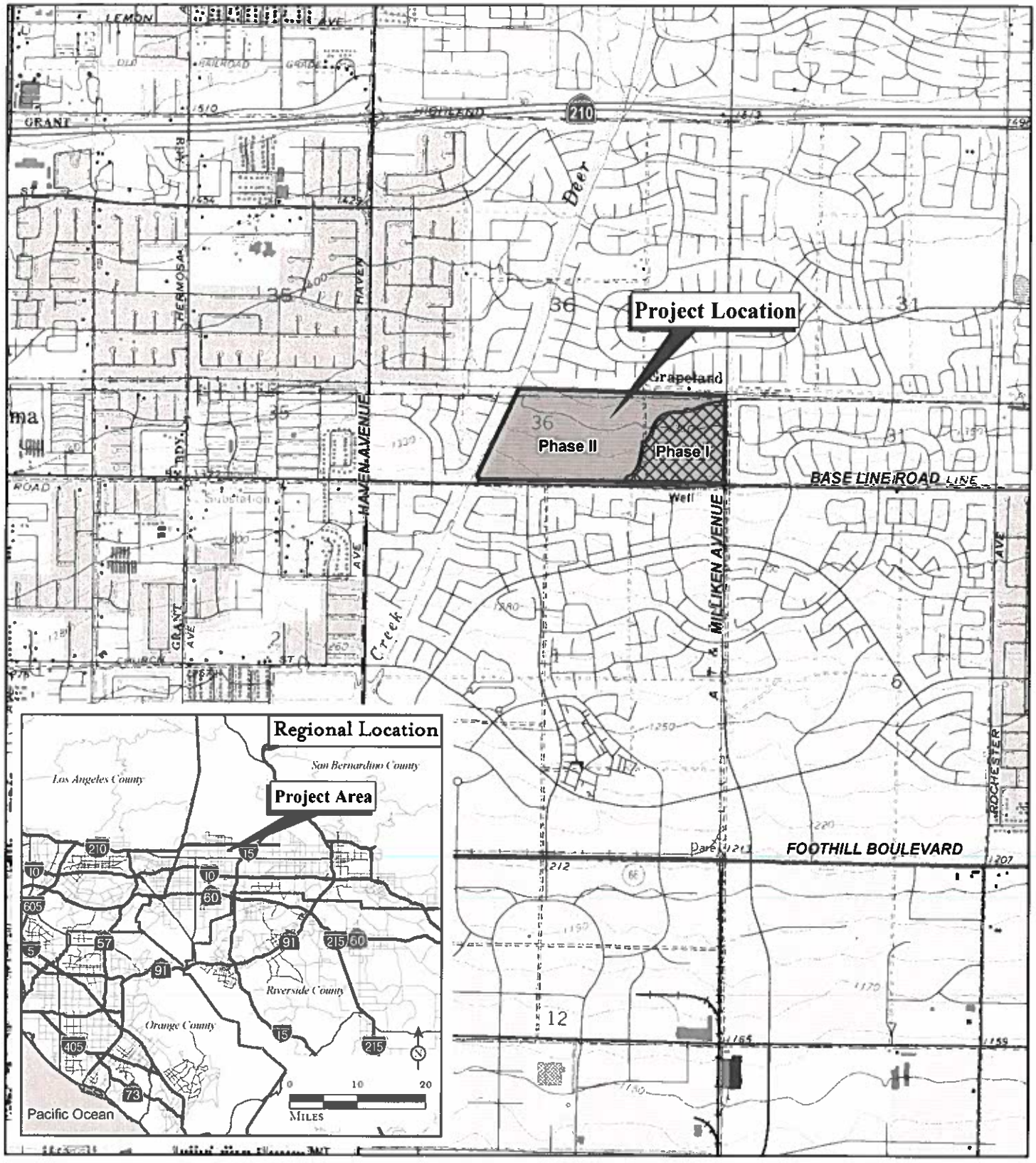
LSA ASSOCIATES, INC.

Lisa Wadley
Assistant Wildlife Biologist

Phone: (951) 781-9310
E-mail: Lisa.Wadley@lsa-assoc.com

ATTACHMENTS:

Figure 1: Regional and Project Location
Figure 2: Site Plan
Figure 3: Vegetation, Land Use and Site Photograph Locations
Figure 3A: Site Photographs
Figure 3B: Site Photographs
Figure 3C: Site Photographs
Figure 3D: Site Photographs
Table B: Plants and Animals Observed



LSA

FIGURE 1

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FEET

SOURCE: USGS 7.5' Quads: Cucamonga Peak(1988), Guasti (1981), CA; Thomas Bros., 2006

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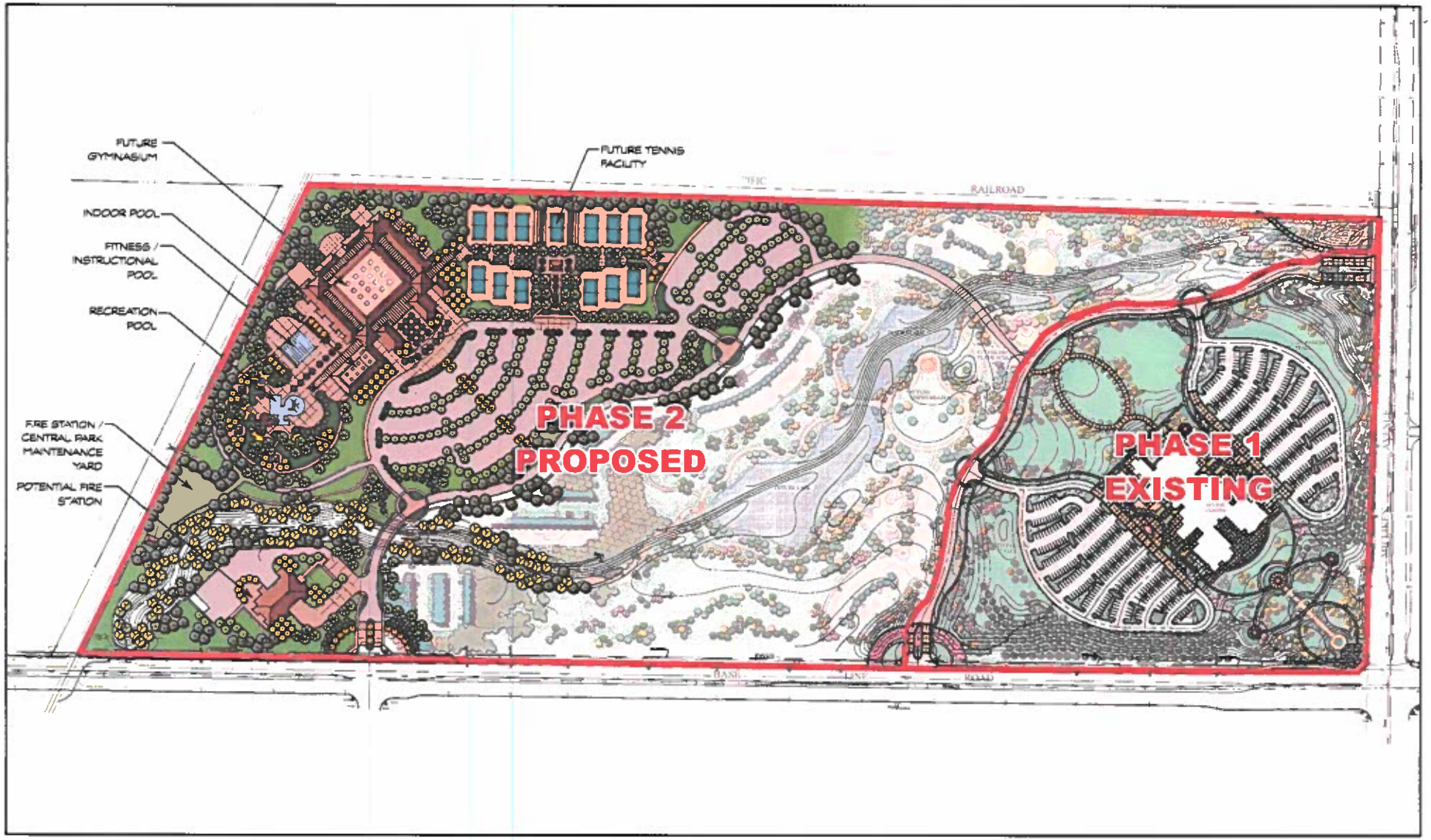
Central Park
Focused Burrowing Owl Survey Report

Regional and Project Location



LSA

FIGURE 2

N

0 200 400

FEET

SOURCE: RJM Design Group Inc, 2007

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Central Park
Focused Burrowing Owl Survey Report

Conceptual Site Plan

PHOTOGRAPH 1: *View of earthen drainage feature as seen from north boundary facing south.*

PHOTOGRAPH 2: *View of recreational trail that borders project site's north boundary as seen facing west along north boundary.*

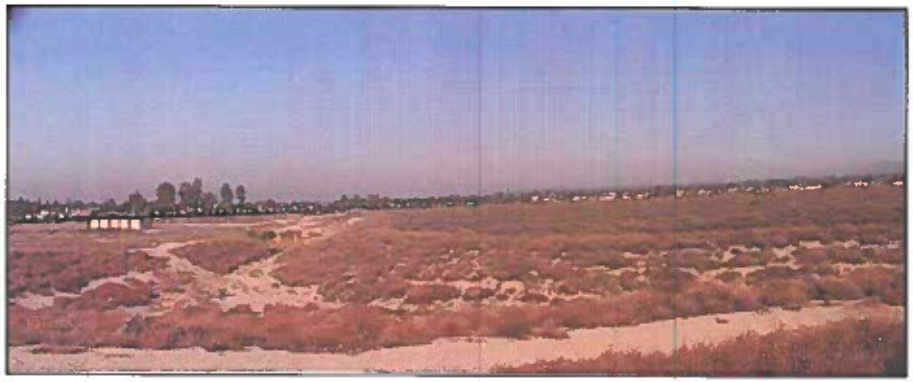
PHOTOGRAPH 3: *Panoramic view of graded/disked area and storage area as seen from the northeast corner of the site facing west.*

LSA

FIGURE 3A

Central Park
Focused Burrowing Owl Survey Report

Site Photographs



PHOTOGRAPH 4: *View of Coastal Sage Scrub vegetation and drainage feature as seen from the center of the project site facing southwest.*

PHOTOGRAPH 5: *View of drainage feature in south half of the project site as seen facing west.*

PHOTOGRAPH 6: *View of remnant vineyards present in the south half of the project site as seen facing northeast/ easterly.*

LSA

FIGURE 3B

Central Park
Focused Burrowing Owl Survey Report

Site Photographs

PHOTOGRAPH 7: *View of drainage feature and culvert on project site as seen facing Base Line Road (southwest corner).*

PHOTOGRAPH 8: *View of access road found along west boundary of the project site.*

LSA

FIGURE 3C

Central Park
Focused Burrowing Owl Survey Report
Site Photographs

PHOTOGRAPH 7: *View of drainage feature as shown facing southwest towards Base line Road.*

PHOTOGRAPH 8: *View of culvert in the center of the site as seen facing southeast. Showing mule fat and California buckwheat.*

LSA

FIGURE 3D

Central Park
Focused Burrowing Owl Survey Report
Site Photographs

Table B: Plants and Animals Observed

SCIENTIFIC NAME	COMMON NAME
PLANTS	
Asteraceae	**Sunflower family**
Artemisia californica	California sagebrush
Baccharis salicifolia	Mule fat
Ericameria pinifolia	Pine goldenbush
Heterotheca grandiflora	Telegraph weed
Pseudognaphalium stramineum	Cottonbatting plant
Senecio flaccidus	Shrubby butterweed
Boraginaceae	**Borage family**
Cryptantha sp.	Cryptantha
Brassicaceae	**Mustard family**
Hirschfeldia incana (Non-native species)	Shortpod mustard
Sisymbrium irio (Non-native species)	London rocket
Cactaceae	**Cactus family**
Opuntia basilaris	Beavertail cactus
Fabaceae	**Pea family**
Lotus scoparius	Deerweed
Lamiaceae	**Mint family**
Marrubium vulgare (Non-native species)	Horehound
Polygonaceae	**Buckwheat family**
Eriogonum fasciculatum	California buckwheat
Scrophulariaceae	**Figwort family**
Penstemon spectabilis	Royal penstemon
Solanaceae	**Nightshade family**
Nicotiana glauca (Non-native species)	Tree tobacco
Vitaceae	**Grape family**
Vitis vinifera (Non-native species)	Cultivated grape
Poaceae	**Grass family**
Schismus barbatus (Non-native species)	Common Mediterranean grass
BIRDS	
Accipitridae	**Kites, Hawks, and Eagles**
Buteo jamaicensis	Red-tailed hawk
Falconidae	**Falcons**
Falco sparverius	American kestrel
Charadriidae	**Plovers and Lapwings**
Charadrius vociferus	Killdeer
Laridae	**Skuas, Gulls, Terns, Skimmers**
Larus californicus	California gull
Columbidae	**Pigeons and Doves**
Zenaida macroura	Mourning dove
Trochilidae	**Hummingbirds**
Calypte anna	Anna's hummingbird

Table B: Plants and Animals Observed

SCIENTIFIC NAME	COMMON NAME
Picidae	**Woodpeckers**
Colaptes auratus	Northern flicker
Tyrannidae	**Tyrant Flycatchers**
Sayornis nigricans	Black phoebe
Sayornis saya	Say's phoebe
Tyrannus verticalis	Western kingbird
Hirundinidae	**Swallows**
Stelgidopteryx serripennis	Northern rough-winged swallow
Parulidae	**Wood Warblers**
Dendroica coronata	Yellow-rumped warbler
Emberizidae	**Emberizines**
Zonotrichia leucophrys	White-crowned sparrow
Fringillidae	**Finches**
Carpodacus mexicanus	House finch
MAMMALS	
Leporidae	**Rabbits and Hares**
Sylvilagus audubonii	Desert cottontail
Sciuridae	**Squirrels**
Spermophilus beecheyi	California ground squirrel
Canidae	**Foxes, Wolves and Dogs**
Canis latrans	Coyote

ATTACHMENT 7

2008 CENTRAL PARK PROTOCOL COASTAL CALIFORNIA GNATCATCHER SURVEY LETTER

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LSA

LSA ASSOCIATES, INC.
1500 IOWA AVENUE, SUITE 200
RIVERSIDE, CALIFORNIA 92507

951.781.9310 TEL
951.781.4277 FAX

BERKELEY
CARLSBAD
COLMA
FORT COLLINS
IRVINE
PALM SPRINGS
POINT RICHMOND
ROCKLIN
SAN LUIS OBISPO

May 1, 2007

Ms. Sandra Marquez
U.S. Fish and Wildlife Service
Carlsbad Field Office
6010 Hidden Valley Road
Carlsbad, California 92009

Dr. John R. Gustafson
California Department of Fish and Game
Wildlife Branch
1416 Ninth Street, 12th Floor
Sacramento, California 95814

Subject: Results of a Focused California Gnatcatcher Survey for Central Park Phase II Project Site in the City of Rancho Cucamonga, San Bernardino County (LSA Project Number CRG0703)

Dear Ms. Marquez and Dr. Gustafson:

This letter provides the results of a focused presence/absence survey for California gnatcatcher (*Polioptila californica californica*) by LSA Associates, Inc. (LSA) on the above-referenced approximately 70-acre project site in the City of Rancho Cucamonga, San Bernardino County. The Central Park Phase II project site is located at the north edge of Baseline Road between Deer Creek Channel and Milliken Avenue, within the south ½ of Section 36, Township 1 North, Range 7 West as shown on the *Guasti, California* and *Cucamonga Peak, California* 7.5-minute series U.S. Geological Survey (USGS) topographic maps (see attached Figure 1). Development on the project site will include a fire station, recreational park, campground, maintenance area, and associated parking.

The approximately 70-acre project site is bordered on the north by a recreation trail and housing, on the east by the Community and Senior Center and Milliken Avenue, on the south by Base Line Road, and on the west by Deer Creek Channel (see attached Figure 2). The site supports about 35 acres of coastal sage scrub habitat. The remainder of the site consists of non-native grassland, remnants of a vineyard, and areas that are unvegetated or with predominantly ruderal or ornamental vegetation. Dominant species within the coastal sage scrub areas include California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), horehound (*Marrubium vulgare*), and deerweed (*Lotus scoparius*). The remnant vineyard area is dominated by cultivated grapes and horehound. The area of non-native grassland is dominated by common cryptantha (*Cryptantha intermedia*), tocalote (*Centaurea melitensis*), redstem stork's bill (*Erodium cicutarium*), and Mediterranean schismus (*Schismus barbatus*).

METHODS

The California gnatcatcher survey was conducted by LSA Senior Biologist Stan Spencer under LSA Federal 10(a)(1)(A) Permit TE-777965 and under a Letter of Agreement (LOA) from the California Department of Fish and Game in lieu of a Memorandum of Understanding between LSA and the CDFG. The survey was conducted in accordance with *Coastal California Gnatcatcher (*Polioptila californica californica*) Presence/Absence Survey Protocol* (U.S. Fish and Wildlife Service, Revised July 28, 1997). The survey was conducted following the gnatcatcher survey guidelines for the non-breeding season survey

period (nine site visits, each at least two weeks apart). Suitable habitat within the project area consists of approximately 35 acres of coastal sage scrub.

All coastal sage scrub and immediately adjacent areas were surveyed. Average survey rate was about 10 acres per hour. Taped vocalizations were used periodically during each site visit. Table A provides the survey personnel, dates, and weather conditions for each site visit.

Table A – Survey Personnel, Dates and Weather Conditions

Personnel	Date	Time (24-hour) Start/Finish	Cloud Cover (%) Start-Finish	Wind (mph) Start/Finish	Temperature (°F) Start-Finish
Stan Spencer	12/10/07	0740/1040	0/0	<1/1-3	55/58
Stan Spencer	12/24/07	0730/1030	0/0	<1/1-3	56/73
Stan Spencer	1/8/08	0720/1100	20/20	<1/1-3	44/57
Stan Spencer	1/22/08	0730/1100	98/40	<1/<1	49/59
Stan Spencer	2/5/08	0726/1015	0/0	1-3/1-3	48/58
Stan Spencer	2/19/08	0730/1025	100/100	<1/<1	54/56
Stan Spencer	3/6/08	0735/1035	10/10	<1/<1	60/70
Stan Spencer	3/20/08	0725/1010	30/30	<1/1-3	55/61
Stan Spencer	4/4/08	0800/1050	0/0	1-3/<1	54/67

RESULTS

California gnatcatcher was not observed during the focused survey. A list of bird species observed during the focused survey is attached.

Please contact me if you require any additional information.

Sincerely,

LSA ASSOCIATES, INC.

Stanley C. Spencer, Ph.D.
Senior Biologist

Attachments: Certification
Figure 1: Regional and Project Location
Figure 2: Land Cover
List of Bird Species Observed

cc: Mr. Richard Erickson, LSA Associates, Inc.
Ms. Karen McGuire-Emery, City of Rancho Cucamonga

I CERTIFY THAT THE INFORMATION IN THIS SURVEY REPORT AND ATTACHED EXHIBITS FULLY AND ACCURATELY REPRESENTS MY WORK:

SURVEYOR:	PERMIT NUMBER	DATE:
Stanley C. Spencer	TE-777965-7	May 1, 2007

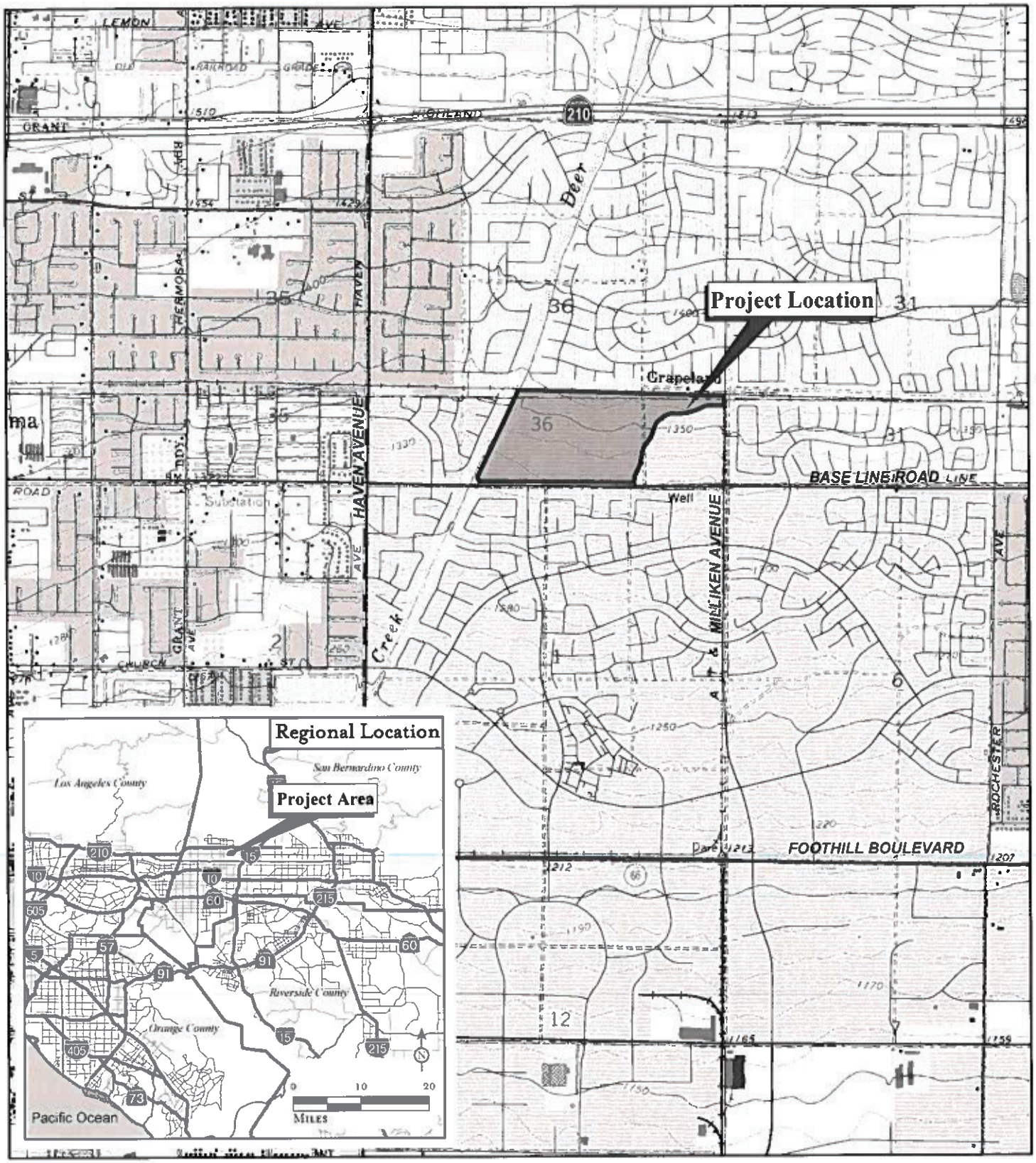

FIGURE 1

LSA

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FEET

SOURCE: USGS 7.5' Quads: Cucamonga Peak(1988), Guasti (1981), CA; Thomas Bros., 2006

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Central Park Phase II
California Gnatcatcher Survey

Regional and Project Location

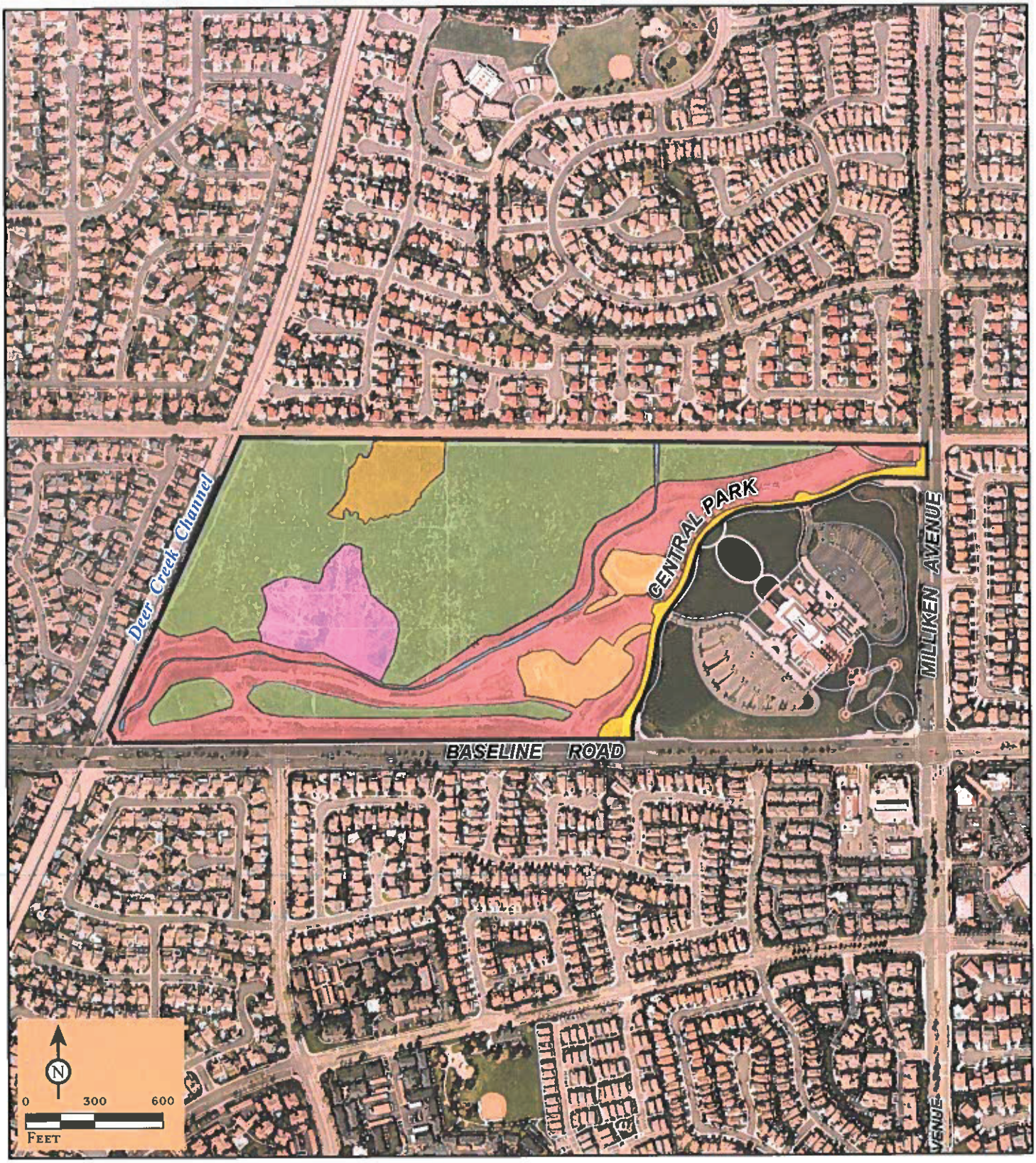

FIGURE 2

LSA

PROJECT BOUNDARY
COASTAL SAGE SCRUB
DEVELOPED
DRAINAGE FEATURE
GRADED/DISCED AREAS
NON-NATIVE GRASSLAND
REMNANT VINEYARDS
STAGING/STORAGE

SOURCE: AirPhoto USA 2007; Thomas Bros., 2006

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Central Park Phase II
California Gnatcatcher Survey

Land Cover

BIRD SPECIES OBSERVED

Scientific Name	Common Name
Accipitridae	**Kites, Hawks, and Eagles**
Accipiter cooperii	Cooper's hawk
Buteo jamaicensis	Red-tailed hawk
Falconidae	**Falcons**
Falco sparverius	American kestrel
Columbidae	**Pigeons and Doves**
Zenaida macroura	Mourning dove
Trochilidae	**Hummingbirds**
Calypte anna	Anna's hummingbird
Picidae	**Woodpeckers**
Colaptes auratus	Northern flicker
Tyrannidae	**Tyrant Flycatchers**
Sayornis nigricans	Black phoebe
Sayornis saya	Say's phoebe
Tyrannus verticalis	Western kingbird
Corvidae	**Crows and Ravens**
Corvus corax	Common raven
Aegithalidae	**Bushtits**
Psaltriparus minimus	Bushtit
Troglodytidae	**Wrens**
Thryomanes bewickii	Bewick's wren
Regulidae	**Kinglets**
Regulus calendula	Ruby-crowned kinglet
Sylviidae	**Old World Warblers and Gnatcatchers**
Polioptila caerulea	Blue-gray gnatcatcher
Mimidae	**Mockingbirds and Thrashers**
Mimus polyglottos	Northern mockingbird
Parulidae	**Wood Warblers**
Dendroica coronata	Yellow-rumped warbler
Emberizidae	**Emberizines**
Pipilo crissalis	California towhee
Melospiza melodia	Song sparrow
Zonotrichia leucophrys	White-crowned sparrow
Icteridae	**Blackbirds, Orioles and Allies**
Sturnella neglecta	Western meadowlark

BIRD SPECIES OBSERVED

Scientific Name	Common Name
Fringillidae	**Finches**
Carpodacus mexicanus	House finch
Carduelis psaltria	Lesser goldfinch
Passeridae	**Old World Sparrows**
Passer domesticus (Non-native species)	House sparrow

ATTACHMENT 8

2008 CENTRAL PARK FOCUSED SAN BERNARDINO KANGAROO RAT SMALL MAMMAL TRAPPING SURVEY LETTER

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LSA

LSA ASSOCIATES, INC.
20 EXECUTIVE PARK, SUITE 200
IRVINE, CALIFORNIA 92614

949.553.0666 TEL
949.553.8076 FAX

BERKELEY
CARLSBAD
COLMA
FORT COLLINS
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROCKLIN
SAN LUIS OBISPO

May 1, 2008

Ms. Sandra Marquez
U.S. Fish and Wildlife Service
Carlsbad Field Office
6010 Hidden Valley Road
Carlsbad, California 92011

Dr. John Gustafson
Habitat Conservation Planning Branch
California Department of Fish and Game
1416 9th Street, 12th Floor
Sacramento, California 95814

Subject: 70-Acre Central Park Parcel in the City of Rancho Cucamonga, San Bernardino County, Kangaroo Rat Trapping, February 2008

Dear Ms. Marquez and Dr. Gustafson:

This letter report documents the results of five nights of small mammal live trapping on the approximately 70-acre project site located in the City of Rancho Cucamonga, San Bernardino County, California. Trapping was conducted within areas of suitable habitat. The trapping was conducted to determine the presence or absence of the endangered San Bernardino kangaroo rat *(Dipodomys merriami parvus)* according to survey guidelines established by the U.S. Fish and Wildlife Service. No San Bernardino kangaroo rats were captured.

STUDY AREA

The project site is located at the northwest corner of Milliken Avenue and Base Line Road in the City of Rancho Cucamonga, San Bernardino County, California. The southeast portion of the parcel (approximately 30 acres) has already been developed, leaving approximately 70 acres for development. Residential development surrounds the site on all sides. The undeveloped portion of the proposed project site consists of relatively undisturbed sage scrub vegetation. Geographically, the study area is located in the southeast ¼ and a portion of the southwest ¼ of the southeast ¼ of Section 36, Township 1 North, Range 7 West, in the City of Rancho Cucamonga, San Bernardino County, California, as shown on the *Cucamonga Peak, California* and *Guasti, California* 7.5-minute series U.S. Geological Survey (USGS) topographic maps (Figure 1; all figures attached). Approximate Universal Transverse Mercator (UTM) coordinates are $^{37}75^{500m}$ on the north, $^{37}76^{000m}$ on the south, $^{4}47^{500m}$ on the west, and $^{4}48^{000m}$ on the east. The elevation of the study area averages approximately 1,350 feet above mean sea level. Vegetation on site is dominated by coastal sage scrub.

METHODS

Richard Erickson and/or Leo Simone were present and responsible for the entire trapping effort pursuant to the LSA Associates, Inc. (LSA) Federal Fish and Wildlife Permit No. TE-777965-7 (May 10, 2004–May 9, 2007; renewal request submitted April 9, 2007, extending coverage indefinitely) and a temporary authorization from the California Department of Fish and Game

(Department) (May 12, 2003–March 31, 2007; renewal request submitted March 26, 2007, extending coverage indefinitely) in lieu of a Memorandum of Understanding between LSA and the Department.

A total of 100 Sherman live traps were set in three traplines, as shown in Figure 2. The traps were set and baited in the evening with a mixture of wild birdseed and rolled oats. Traps were checked at midnight and at dawn, at which time captured animals were identified and released unharmed.

RESULTS

Trapping resulted in 10 small mammal captures involving two species. A summary of all trapping results is shown in Table A. No San Bernardino kangaroo rats were captured.

Please contact Richard Erickson or Leo Simone if you have any questions about this survey.

Sincerely,

LSA ASSOCIATES, INC.

Richard Erickson
Associate/Biologist

Leo Simone
Senior Biologist

Attachments: Figures 1 and 2
Table A
CNDDB Form

I CERTIFY THAT THE INFORMATION IN THIS SURVEY REPORT AND ATTACHED EXHIBITS FULLY AND ACCURATELY REPRESENT MY WORK:

SURVEYOR:	PERMIT NUMBER:	DATE:
Richard Erickson	TE-777965-7	May 1, 2008
Leo Simone	TE-777965-7	May 1, 2008

Table A: 70-Acre Rancho Cucamonga Site Trapping Summary, February 2008

Date	Capture Totals										Grand Total
	Feb. 2 p.m.	Feb. 26 a.m.	Feb. 26 p.m.	Feb. 27 a.m.	Feb. 27 p.m.	Feb. 28 a.m.	Feb. 28 p.m.	Feb. 29 a.m.	Feb. 29 p.m.	Mar. 1 a.m.	
Number of Traps Checked	100		100		100		100		100		500
Species											
Pacific/San Diego kangaroo rat *(Dipodomys agilis/simulans)*	0	0	1	0	1	0	0	0	0	0	**2**
Deer mouse *(Peromyscus maniculatus)*	1	0	2	1	2	0	0	2	0	0	**8**
Total Rodent Captures	**1**	**0**	**3**	**1**	**3**	**0**	**0**	**2**	**0**	**0**	**10**
California towhee *(Pipilo crissalis)*	0	0	0	1	0	0	0	0	0	0	**1**
White-crowned sparrow *(Zonotrichia leucophrys)*	0	0	0	3	0	3	0	2	0	0	**8**
Total Bird Captures	**0**	**0**	**0**	**4**	**0**	**3**	**0**	**2**	**0**	**0**	**9**

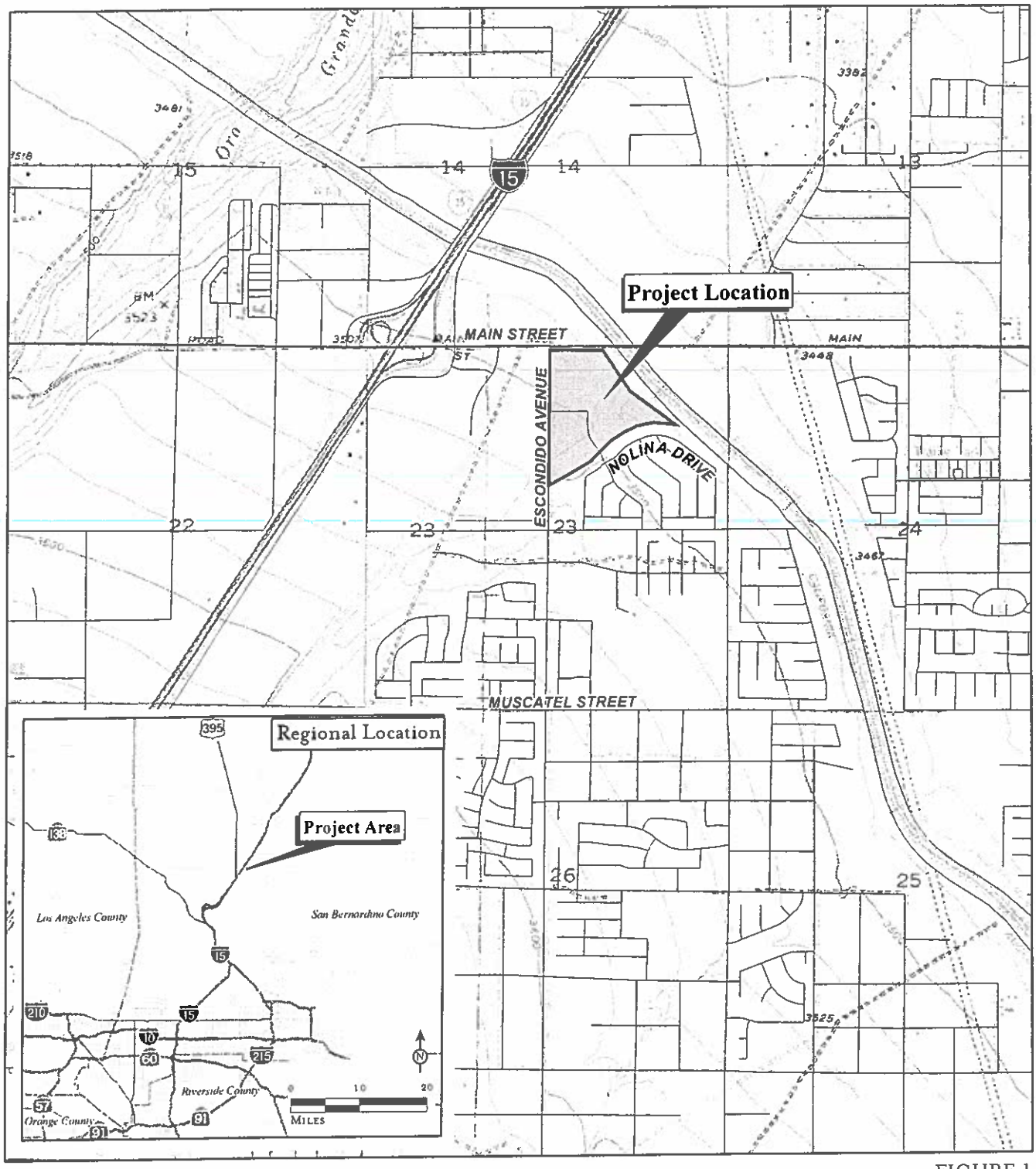

FIGURE 1

Hesperia Wal-Mart
Desert Tortoise Survey

Regional and Project Location

SOURCE: USGS 7.5' Quads: Baldy Mesa (1988) and Hesperia (1980), CA; Thomas Bros. 2007

I:\GVS0702\Reports\Tortoise\reg_loc.mxd (03/20/08)

LSA

LEGEND

Project Boundary

Trapline

0 125 250 Feet

SOURCE: Air Photo USA (2007)

I:\CRG0701\GIS\traplines.mxd (3/12/2008)

FIGURE 2

Central Park Phase II
Initial Study
Trapline Locations

Mail to:
California Natural Diversity Database
Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95814
Fax: (916) 324-0475 email: CNDDB@dfg.ca.gov

Date of Field Work (mm/dd/yyyy): 03/01/2008

For Office Use Only
Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Dipodomys merriami parvus*

Common Name: San Bernardino kangaroo rat

Species Found? ☐ Yes ☑ No — not present (If not, why?)

Total No. Individuals _____ Subsequent Visit? ☐ yes ☐ no

Is this an existing NDDB occurrence? _____ (Yes, Occ. #) ☐ no ☑ unk.

Collection? If yes: _____ (Number) _____ (Museum / Herbarium)

Reporter: Leo Simone
Address: 20 Executive Park, Suite 200
Irvine, CA 92614
E-mail Address: leo.simone@lsa-assoc.com
Phone: (949) 553-0666

Plant Information

Phenology: _____% vegetative _____% flowering _____% fruiting

Animal Information

_____ # adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown

☐ breeding ☐ wintering ☐ burrow site ☐ rookery ☐ nesting ☐ other

Location Description ***(please attach map AND/OR fill out your choice of coordinates, below)***

County: San Bernardino Landowner / Mgr.: City of Rancho Cucamonga
Quad Name: Cucamonga Peak Elevation: 1,350 ft.
T 1N R 7W Sec 36, SE ¼ of SW ¼, Meridian: H☐ M☐ S☐ Source of Coordinates (GPS, topo. map & type): _____
T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ GPS Make & Model _____
DATUM: NAD27 ☐ NAD83 ☐ WGS84 ☐ Horizontal Accuracy _____ meters/feet
Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☐ *OR* Geographic (Latitude & Longitude) ☐
Coordinates:

Habitat Description *(plant communities, dominants, associates, substrates/soils, aspects/slope):*

costal sage scrub

Other rare taxa seen at THIS site on THIS date:
(separate form preferred)

Site Information Overall site/occurrence quality/viability (site + population): ☐ Excellent ☐ Good ☐ Fair ☑ Poor

Immediate AND surrounding land use: City park, residential homes

Visible disturbances: Adjacent development

Threats:

Comments:

Determination: *(check one or more, and fill in blanks)*

- ☐ Keyed (cite reference): _____
- ☐ Compared with specimen housed at: _____
- ☐ Compared with photo / drawing in: _____
- ☐ By another person (name): _____
- ☐ Other: _____

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	☐	☐	☐
Habitat	☐	☐	☐
Diagnostic feature	☐	☐	☐

May we obtain duplicates at our expense? yes ☐ no ☐

ATTACHMENT 9

PLANT SPECIAL-STATUS SPECIES INVENTORY AND POTENTIAL OCCURRENCE DETERMINATION

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The literature review provided a list of 37 special-status plant species (plant inventory). Table 2, *Special-Status Plant Inventory and Potential Occurrence within the Phase II Project Site Determination* contains the list of the plant inventory that was created through the literature review. Table 2 provides both the taxonomic name (scientific name) and common name of each plant species, describes each species' status in California, and describes each species' requirements and preferred habitat in California. Table 2 is organized in plant taxonomic order. Plant taxonomic order is based on *The Jepson Manual: Vascular Plants of California*, second edition (Baldwin et al., 2012).

Each special-status plant species was assessed for its potential to occur within the Phase II project site by comparing its elevational range and distribution, retrieved from CNPS and other databases and literature, with the site's location and elevation range. A species was determined as having "no potential to occur" within the Phase II project site if the site is well outside the species' known distribution and/or the species' known elevation range.

Table 2 also summarizes conclusions from the literature review and field surveys regarding the potential occurrence of special-status plant species within the Phase II project site. While conducting the field surveys, the biologists evaluated whether the Phase II project site contained suitable and adequate biological and physical features that are needed to support plants. Note the detection of suitable habitat does not indicate presence or absence of a species. The potential for special-status plant species to occur within the Phase II project site was assessed based on the following criteria (Table 1, *Potential Occurrence Determination Descriptions*).

Table 1: Potential Occurrence Determination Descriptions

Potential for Plant to Occur within the Phase II Project Site	Description
Present	The special-status plant species was observed in the Phase II project site during the field surveys and/or has been recorded on-site by other qualified biologists
High	There are reported occurrences of the special-status plant species within the Phase II project site or the immediate project vicinity and/or some of the existing habitat and soils within the Phase II project site are highly suitable to support the species. The species has a high likelihood of being found on the site.
Moderate	There are reported occurrences of the special-status plant species within the Phase II project site or the immediate project vicinity and/or some of the existing habitat and soils within the Phase II project site are moderately suitable to support the species. The species has a moderate likelihood of being found on the site.
Low	There are no known recorded occurrences of the special-status plant species in the Phase II project site or the immediate project vicinity and/or the existing habitat and soils within the Phase II project site are of poor quality or are unsuitable to support the species. The species is not likely to be found on the site.
No	The Phase II project site is located outside the plant species' known distribution, elevation range, and/or the Phase II project site lacks suitable habitats and/or soils to support the plant species. It is highly unlikely for the plant species to have a potential to occur within the Phase II project site

Even with field surveys, the biologists assessed the probability of occurrence rather than make a definitive conclusion about species presence or absence. Population numbers and failure to detect the

presence of a plant species are not definitive and vary from year to year. This may be due to variable effects associated with weather, fires, drought, rainfall patterns, temperatures, and/or season. Those special-status plant species listed in Table 2 that were determined to have a no potential or low potential to occur within the Phase II project site are not discussed further in the report.

Table 2: Special-Status Plant Inventory and Potential Occurrence within the Phase II Project Site Determination

Scientific Name (=Synonym)	Common Name (=Synonym)	Status in California	General Habitat Description in California	Plant Elevation Range (feet amsl)	Phase II Project Site is Located within the Species' Known:		Potential to Occur	Rational
					Elevation Range	General Distribution		
Listed Endangered, Threatened, Candidate and State Rare Plants: **Plants with official status under the federal Endangered Species Act (ESA), the California Endangered Species Act (CESA), and/or the Native Plant Protection Act (NPPA). A species may have other sensitive designations in addition to their federal or state listing.**								
Ambrosia pumila	**San Diego ambrosia (=dwarf burr ambrosia)**	♦ FE ♦ CRPR: 1B.1	San Diego ambrosia is a perennial rhizomatous herb. Creek beds, seasonally dry drainages, and floodplains are the preferred historical habitat; usually on the periphery of willow woodlands without a protective tree canopy. Riverwash and sandy alluvium underlie these locales. San Diego ambrosia occurs in open habitats such as chaparral and coastal sage scrub in coarse substrates near drainages, and in upland areas on clay slopes or on the dry margins of vernal pools. This species occurs in a variety of associations that are dominated by sparse grasslands or marginal wetland habitats such as river terraces, pools, and alkali playas. This listed plant flowers from April to October.	66 - 1,361	yes	no	**no**	Even though the project site is located within this species' known elevational range, it is not located within the plant's general distribution and the project site does not contain suitable habitats and/or soils to support this species.
Astragalus brauntonii	**Braunton's milk-vetch**	♦ FE ♦ CRPR: 1B.1	Braunton's milk-vetch is a perennial herb that occurs in recently burned or disturbed chaparral areas particularly on limestone-derived calcareous soils. It is also found in valley grasslands, coastal sage scrub, and closed-pine cone coniferous forests. This species is closely associated with disturbed areas such as recent burns, firebreaks, and roads, germinating soon after the disturbance and declining as other vegetation recovers in later years. This listed plant flowers from January to August.	13 - 2,100	yes	no	**no**	Even though the project site is located within this species' known elevational range, it is not located within the plant's general distribution and the project site does not contain suitable habitats and/or soils to support this species.
Sensitive Plants: **These plants have no official status under the ESA, the CESA, and/or the NPPA; however, they are designated as sensitive or locally important by federal agencies, state agencies, and/or local conservation agencies and organizations.**								
Asplenium vespertinum	**western spleenwort**	♦ CRPR: 4.2	Western spleenwort is a perennial rhizomatous herb that is found in rocky habitats within chaparral, cismontane woodlands, and coastal scrub. It grows in moist, shady, rocky places, such as the shadows beneath cliff overhangs. This sensitive plant flowers from February to June.	590 - 3,280	yes	yes	**no**	Even though the project site is located within this species' known elevational range and general distribution, it does not contain suitable habitats and/or soils to support this species.
Oreonana vestita	**woolly mountain-parsley**	♦ CRPR: 1B.3	Woolly mountain-parsley is a perennial herb that prefers scree, talus or gravel on high ridge tops and slopes in lower montane coniferous forests, subalpine coniferous forests and upper montane coniferous forests. This sensitive plant flowers from March to September.	5,297 - 11,480	no	no	**no**	The project site is located outside of this species' general distribution and known elevational range and does not contain suitable habitats and/or soils to support this species.
***Deinandra paniculata* (=*Hemizonia paniculata*)**	**paniculate tarplant (=San Diego tarweed)**	♦ CRPR: 4.2	Paniculate tarplant is an annual herb that is found in coastal scrub and valley and foothill grasslands often in clay or clay loam soils or vernally moist situations, and frequently in disturbed sites. It is usually found in vernally mesic sites. Sometimes found in vernal pools or on Mima mounds near them. Habitat is variously described as vernal pool margins, grasslands, open habitats such as roadsides and disturbed areas and inland from the coast within its range on mesas and dry foothills. This sensitive plant flowers from April to November.	82 - 3,083	yes	yes	**no**	Even though the project site is located within this species' known elevational range and general distribution, it does not contain suitable habitats and/or soils to support this species.
Eriophyllum lanatum* var. *obovatum	**southern Sierra woolly sunflower**	♦ CRPR: 4.3	Southern Sierra woolly sunflower is a perennial herb that is found in lower and upper montane coniferous forests within sandy loam soils. This sensitive plant flowers from June to July.	3,654 - 8,202	no	no	**no**	The project site is located outside of this species' general distribution and known elevational range and does not contain suitable habitats and/or soils to support this species.
***Pseudognaphalium leucocephalum* (=*Gnaphalium leucocephalum*)**	**white rabbit-tobacco**	♦ CRPR: 2B.2	White rabbit-tobacco is a biennial or short-lived perennial herb that occurs on sandy and gravelly sites within chaparral, cismontane woodlands (oak-sycamore, oak-pine, to pine woodlands), coastal scrub, and riparian woodlands; usually on dry stream bottoms, arroyos, and canyon bottoms. Commonly found in riparian vegetation. This sensitive plant flowers from (July) August to November (December). Months in parentheses are uncommon.	0 - 6,888	yes	yes	**no**	Even though the project site is located within this species' known elevational range and general distribution, it does not contain suitable habitats and/or soils to support this species.
Symphyotrichum	**San Bernardino**	♦ CRPR: 1B.2	San Bernardino aster is a perennial rhizomatous herb that is found in cismontane	7 - 6,691	yes	yes	**low**	The project site is located within this species' known

Scientific Name (=Synonym)	Common Name (=Synonym)	Status in California	General Habitat Description in California	Plant Elevation Range (feet amsl)	Phase II Project Site is Located within the Species' Known:		Potential to Occur	Rational
					Elevation Range	General Distribution		
***defoliatum* (=*Aster bernardinus*)**	**aster**		woodlands, coastal scrub, lower montane coniferous forests, meadows and seeps, marshes and swamps, and vernally mesic valley and foothill grasslands. While this species usually occurs in meadows, springs and streams, it also occurs in upland habitats. Can be found near ditches, streams, springs or disturbed areas. Grows in seasonally moist fine alluvial soils. This sensitive plant flowers from July to November and sometimes December.					distribution and contains marginal habitats to support this plant onsite.
Phacelia mohavensis	**Mojave phacelia**	♦ CRPR: 4.3	Mojave phacelia is an annual herb that is found in sandy or gravelly sites within cismontane woodland, lower montane coniferous forest, meadows and seeps, pinyon and juniper woodlands. This sensitive plant flowers from April to August.	4,593 - 8,202	no	no	**no**	The project site is located outside of this species' general distribution and known elevational range and does not contain suitable habitats and/or soils to support this species.
Phacelia stellaris	**Brand's star phacelia (=Brand's phacelia)**	♦ CRPR: 1B.1	Brand's star phacelia is an annual herb that is found on coastal dunes and/or coastal scrub in sandy openings, sandy benches, dunes, sandy washes, or flood plains of rivers and is restricted to clay soils. It is primarily associated with coastal dunes and/or coastal scrub. This listed plant flowers from March to June.	3 - 1,312	yes	yes	**no**	Even though the project site is located within this species' known elevational range and general distribution, it does not contain suitable habitats and/or soils to support this species. One occurrence of *Phacelia stellaris* was documented from San Bernardino County in Rancho Cucamonga southwest of the intersection of Foothill Blvd. and Interstate 15 in 2003 but has since been extirpated by development.
Streptanthus bernardinus	**Laguna Mountains jewel-flower**	♦ CRPR: 4.3	Laguna Mountains jewel-flower is a perennial herb that is found in montane coniferous forests and chaparral. All reports indicate populations occur in association with conifers. While typically in mesic situations, it can occupy drier embankments in granitic gravels and sand. This sensitive plant flowers from May to August.	2,198 - 8,200	no	no	**no**	The project site is located outside of this species' general distribution and known elevational range and does not contain suitable habitats and/or soils to support this species.
***Arctostaphylos glandulosa* ssp. *gabrielensis* (=*Arctostaphylos gabrielensis*)**	**San Gabriel manzanita**	♦ CRPR: 1B.2	San Gabriel manzanita is a perennial evergreen shrub that is found within rocky habitats in chaparral. This sensitive plant flowers in March.	1,952 - 4,920	no	no	**no**	The project site is located outside of this species' general distribution and known elevational range and does not contain suitable habitats and/or soils to support this species. Since this species is a perennial evergreen shrub that can grows to a height of 6.5 feet, it most likely would have been observed during the field surveys conducted within the project site.
***Juglans californica* (=*Juglans californica* var. *californica*)**	**Southern California black walnut**	♦ CRPR: 4.2	California black walnut is a large perennial deciduous shrub or tree that utilizes a variety of habitats in Southern California. Scattered individuals commonly co-occur with laurel sumac on alluvium located at the base of hills and in canyons. Individuals also occur infrequently on south-facing slopes, and more commonly, on west-facing slopes. On mesic north-facing slopes this walnut is primarily a member of open woodlands of various types and sometimes produces pure stands. It is sometimes present within coastal sage scrub and rarely occurs in chaparral. Along intermittent streams it tolerates high salinity, alkalinity, prefers the dryer slopes that are almost never prone to flooding and erosional activity yet are near groundwater, and seasonal surface water. Found on slopes, hillsides, canyons, valleys, often near stream beds or washes. This sensitive plant flowers from March to August.	164 - 2,952	yes	yes	**no**	Even though the project site is located within this species' known elevational range and general distribution, it does not contain suitable habitats and/or soils to support this species. Since this species is a perennial tree that can grows to a height of 75 feet, it most likely would have been observed during the field surveys conducted within the project site.
Lepechinia fragrans	**fragrant pitcher sage**	♦ CRPR: 4.2	Fragrant pitcher sage is a perennial shrub that is found in open areas in dry ravines, on rocky slopes and ridgetops often north facing where chaparral is the dominant cover. This sensitive plant flowers from March to October.	66 - 4,297	yes	no	**no**	Even though the project site is located within this species' known elevational range, it is not located within the plant's general distribution and the project site does not contain suitable habitats and/or soils to support this species. Since this species is a perennial shrub that can grows to a height of 5 feet, it most likely would have been observed during the field surveys conducted within the

Scientific Name (=Synonym)	Common Name (=Synonym)	Status in California	General Habitat Description in California	Plant Elevation Range (feet amsl)	Phase II Project Site is Located within the Species' Known:		Potential to Occur	Rational
					Elevation Range	General Distribution		
								project site.
Monardella australis* ssp. *jokersti	**Jokerst's monardella**	♦ CRPR: 1B.1	Jokerst's monardella is a perennial rhizomatous herb that is found in chaparral and lower montane coniferous forests on steep scree or talus slopes between breccia, secondary alluvial benches along drainages and washes. This sensitive plant flowers from July to September.	4,428 - 5,740	no	no	**no**	The project site is located outside of this species' general distribution and known elevational range and does not contain suitable habitats and/or soils to support this species.
Claytonia lanceolata* var. *peirsonii	**Peirson's spring beauty (=western spring beauty)**	♦ CRPR: 3.1	Peirson's spring beauty is a perennial herb that is found in upper montane coniferous forests and subalpine coniferous forests. Usually found on granitic scree slopes, often with a sandy or fine soil component and granitic cobbles. This sensitive plant flowers from May to June.	4,952 - 9,004	no	no	**no**	The project site is located outside of this species' general distribution and known elevational range and does not contain suitable habitats and/or soils to support this species.
Linanthus concinnus	**San Gabriel linanthus**	♦ CRPR: 1B.2	San Gabriel linanthus is an annual herb that is found in chaparral, lower montane coniferous forests and upper montane coniferous forests. It is usually found on dry rocky slopes, often in Jeffrey pine/canyon oak forests. This sensitive plant flowers from April to July.	4,986 - 9,184	no	no	**no**	The project site is located outside of this species' general distribution and known elevational range and does not contain suitable habitats and/or soils to support this species.
Navarretia prostrata	**prostrate vernal pool navarretia (=prostrate navarretia)**	♦ CRPR: 1B.1	Prostrate vernal pool navarretia is an annual herb that is found within coastal sage scrub, valley and foothill grassland (alkaline washes) and vernal pools. This sensitive plant flowers from April to July.	49 - 3,969	yes	no	**no**	Even though the project site contains some habitats that could potentially support this species and is located within this species' known elevation range, it is located outside of this species' known general distribution.
Acanthoscyphus parishii* var. *parishii	**Parish's oxytheca**	♦ CRPR: 4.2	Parish's oxytheca is an annual herb that is found on sandy to gravelly flats and slopes within chaparral communities and montane conifer woodlands. This sensitive plant flowers from June to September.	4,002 - 8,530	no	no	**no**	The project site is located outside of this species' general distribution and known elevational range and does not contain suitable habitats and/or soils to support this species.
Chorizanthe parryi* var. *parryi	**Parry's spineflower**	♦ CRPR: 1B.1	Parry's spineflower is an annual herb that grows on dry, sandy soil of alluvium in flood plains and in washes of chaparral and coastal sage scrub. It is also found on dry slopes and flats of coastal sage scrub and chaparral and sometimes is found at an interface of two vegetation types such as chaparral and oak woodland. This sensitive plant flowers from April to June.	902 - 4,002	yes	yes	**low**	The project site is located within this species' known distribution and contains marginal habitats to support this plant onsite.
Eriogonum microthecum* var. *alpinum	**alpine slender buckwheat (=northern limestone buckwheat)**	♦ CRPR: 4.3	Alpine slender buckwheat is a perennial herb that is found on sandy to gravelly granitic or volcanic slopes within subalpine and alpine conifer woodlands and Great Basin scrub. This sensitive plant flowers from July to September.	8,202 - 10,826	no	no	**no**	The project site is located outside of this species' general distribution and known elevational range and does not contain suitable habitats and/or soils to support this species.
Eriogonum microthecum* var. *johnstonii	**Johnston's buckwheat**	♦ CRPR: 1B.3	Johnston's buckwheat is a perennial deciduous shrub that is found in rocky substrates and granitic slopes within subalpine coniferous forests and upper montane coniferous forests. This sensitive plant flowers from July to September.	5,999 - 9,597	no	no	**no**	The project site is located outside of this species' general distribution and known elevational range and does not contain suitable habitats and/or soils to support this species. Since this species is a perennial shrub, it most likely would have been observed during the field surveys conducted within the project site.
Eriogonum umbellatum* var. *minus	**alpine sulfur-flowerd buckwheat (=old Baldy sulphur flower)**	♦ CRPR: 4.3	Alpine sulfur-flowered buckwheat is a perennial herb that is found on gravelly to rocky or talus slopes and ridges, sagebrush communities, and montane to subalpine conifer woodlands. This sensitive plant flowers from June to September.	5,905 - 10,065	no	no	**no**	The project site is located outside of this species' general distribution and known elevational range and does not contain suitable habitats and/or soils to support this species.
***Horkelia cuneata* var. *puberula* (=*Horkelia cuneata* ssp. *puperula*)**	**mesa horkelia**	♦ CRPR: 1B.1	Mesa horkelia is a perennial herb that is found in sandy or gravelly sites of maritime chaparral, coastal scrub, and cismontane woodlands. This sensitive plant flowers from February to September.	230 - 2,657	yes	yes	**low**	The project site is located within this species' known distribution and contains marginal and habitats to support this plant onsite.

Scientific Name (=Synonym)	Common Name (=Synonym)	Status in California	General Habitat Description in California	Plant Elevation Range (feet amsl)	Phase II Project Site is Located within the Species' Known:		Potential to Occur	Rational
					Elevation Range	General Distribution		
Galium angustifolium* ssp. *gabrielense	**San Antonio Canyon bedstraw**	♦ CRPR: 4.3	San Antonio Canyon bedstraw is a perennial herb that is found in granitic, sandy or rocky sites on slopes, ridges, within high chaparral and within open Lower montane coniferous forests. This sensitive plant flowers from April to August.	3,937 - 8,694	no	no	**no**	The project site is located outside of this species' general distribution and known elevational range and does not contain suitable habitats and/or soils to support this species.
Galium johnstonii	**Johnston's bedstraw**	♦ CRPR: 4.3	Johnston's bedstraw is a perennial herb that grows within chaparral, lower montane coniferous forests, pinyon and juniper woodlands, and riparian woodlands. It tends to grow in open places. This sensitive plant flowers from June to July.	4,002 - 7,545	no	no	**no**	The project site is located outside of this species' general distribution and known elevational range and does not contain suitable habitats and/or soils to support this species.
***Heuchera caespitosa* (=*Heuchera elegans*)**	**urn-flowered alumroot**	♦ CRPR: 4.3	Urn-flowered alumroot is a perennial rhizomatous herb that is found on sandstone cliffs, sandstone outcrops, or other rocky areas, often near creeks or waterfalls, within cismontane woodlands, montane riparian forests, and lower and upper montane coniferous forests. This sensitive plant flowers from May to August.	3,788 - 8,692	no	no	**no**	The project site is located outside of this species' general distribution and known elevational range and does not contain suitable habitats and/or soils to support this species.
***Viola pinetorum* var. *grisea* (=*Viola pinetorum* ssp. *grisea*)**	**grey-leaved violet**	♦ CRPR: 1B.2	Grey-leaved violet is a perennial herb that is found on moderate slopes and sand flats bordering meadows and seeps, subalpine coniferous forests, and upper montane coniferous forests. It is usually found on dry mountain peaks and slopes. This sensitive plant flowers from April to July.	4,920 - 11,152	no	no	**no**	The project site is located outside of this species' general distribution and known elevational range and does not contain suitable habitats and/or soils to support this species.
Sagittaria sanfordii	**Sanford's arrowhead**	♦ CRPR: 1B.2	Sanford's arrowhead is a perennial rhizomatous herb (emergent) that is found in marshes and swamps (assorted shallow freshwater). It is also found growing in ditches, sloughs, ponds or slow-moving streams with silty or muddy substrates. This sensitive plant flowers from May to November.	0 - 2,132	yes	no	**no**	Even though the project site is located within this species' known elevational range, it is not located within the plant's general distribution and the project site does not contain suitable habitats and/or soils to support this species.
Cladium californicum	**California sawgrass**	♦ CRPR: 2B.2	California sawgrass is a perennial rhizomatous herb that is found in moist areas in several habitat types, often in alkaline soils: meadows and seeps and alkaline or freshwater marshes and swamps. This sensitive plant flowers from June to September.	197 - 2,837	yes	yes	**no**	Even though the project site is located within this species' known elevational range and general distribution, it does not contain suitable habitats and/or soils to support this species.
***Juncus duranii* (=*Juncus mertensianus* var. *duranii*)**	**Duran's rush**	♦ CRPR: 4.3	Duran's rush is a perennial rhizomatous herb that is found on creek banks and in wet (mesic) places in lower montane coniferous forests, meadows and seeps, and upper montane coniferous forests. This sensitive plant flowers from July to August.	5,799 - 9,197	no	no	**no**	The project site is located outside of this species' general distribution and known elevational range and does not contain suitable habitats and/or soils to support this species.
Calochortus catalinae	**Catalina mariposa lily**	♦ CRPR: 4.2	Catalina mariposa lily is a perennial bulbiferous herb that is found in heavy soils, open slopes and openings of chaparral, valley and foothill grasslands, cismontane woodlands, and coastal sage scrub. This sensitive plant flowers from February to June.	49 - 2,296	yes	yes	**low**	The project site is located within this species' known distribution and contains marginal habitats to support this plant onsite.
Calochortus plummerae	**Plummer's mariposa lily**	♦ CRPR: 4.2	Plummer's mariposa lily is a perennial bulbiferous herb that prefers openings in chaparral, cismontane woodlands, coastal scrub, valley and foothill grasslands, and lower montane coniferous forests. It is found on dry, rocky slopes and soils and brushy areas and can be very common after fire. This sensitive plant flowers from May to July.	328 - 5,576	yes	yes	**low**	The project site is located within this species' known distribution and contains marginal habitats to support this plant onsite.
Fritillaria pinetorum	**pine lily**	♦ CRPR: 4.3	Pine lily is a perennial bulbiferous herb that is found in shaded granitic or metamorphic sites within chaparral, lower montane coniferous forests, pinyon and juniper woodlands, subalpine coniferous forests, and upper montane coniferous forests. This sensitive plant flowers from May to July (September).	5,692 - 10,826	no	no	**no**	The project site is located outside of this species' general distribution and known elevational range and does not contain suitable habitats and/or soils to support this species.
***Lilium humboldtii* ssp. *ocellatum* (=*Lilium fairchildii*)**	**ocellated Humboldt lily**	♦ CRPR: 4.2	Ocellated Humboldt lily is a perennial bulbiferous herb that is associated with riparian corridors in lower montane coniferous forest and coastal chaparral below 5,500 feet. This species typically occurs on lower stream benches but can also occur on shaded,	98 - 5,904	yes	no	**no**	Even though the project site is located within this species' known elevational range, it is not located within the plant's general distribution and the project site does not

Scientific Name (=Synonym)	Common Name (=Synonym)	Status in California	General Habitat Description in California	Plant Elevation Range (feet amsl)	Phase II Project Site is Located within the Species' Known:		Potential to Occur	Rational
					Elevation Range	General Distribution		
			dry slopes, beneath a dense coniferous canopy and cismontane oak woodlands. This sensitive plant flowers from March to July (August).					contain suitable habitats and/or soils to support this species.
***Lilium parryi* (=*Lilium parryi* var. *kessleri*)**	**lemon lily**	♦ CRPR: 1B.2	Lemon lily is a perennial bulbiferous herb that prefers wet (mesic), mountainous terrain in forested areas. It is found within lower montane coniferous forests, meadows and seeps, riparian forests, and upper montane coniferous forests. Lemon lily requires moisture year-round and the distribution of this species is limited to the banks of seeps, springs and permanent streams. Typical habitat consists of forested, shady stream banks within narrow canyon bottoms. This sensitive plant flowers from July to August.	4,002 - 9,004	no	no	**no**	The project site is located outside of this species' general distribution and known elevational range and does not contain suitable habitats and/or soils to support this species.
Muhlenbergia californica	**California muhly**	♦ CRPR: 4.3	California muhly is a perennial rhizomatous herb that occurs in chaparral, coastal scrub, lower montane coniferous forests, and meadows, usually near mesic seeps or along streambanks. This sensitive plant flowers from June to September.	328 - 6,560	yes	yes	**no**	Even though the project site is located within this species' known elevational range and general distribution, it does not contain suitable habitats and/or soils to support this species.

Legend and Notes

Notes and Abbreviations:

- **amsl** = above mean sea level.
- A CNPS elevation range is provided for each taxon in feet above mean sea level. The stated range is for the California portion of a plant's range only (if the taxon also occurs outside the state). These CNPS elevation range data are accumulated from literature, herbarium specimens, and field survey information.
- The Phase II project site contains approximate elevations of 1,324 to 1,377 feet above mean sea level (amsl).
- **yes** = the project site is located within the plant species' known distribution and/or elevation range. The plant species has a potential to occur within the project site. Further evaluation is needed.
- **no** = the project site is located outside the plant species' known distribution and/or elevation range. It is highly unlikely for the plant species to have a potential to occur within the project site. No further evaluation is needed.

Federal Endangered Species Act (ESA) Listing Codes:

The ESA is administered by the USFWS and NMFS. The USFWS has primary responsibility for terrestrial and freshwater organisms, while the responsibilities of NMFS are mainly marine wildlife such as whales and anadromous fish such as salmon. For the purposes of the ESA, Congress defined species to include subspecies, varieties, and, for vertebrates, distinct population segments. The official federal listing of Endangered and Threatened plants is published in 50 CFR § 17.12.

- **FE = federally listed as endangered:** any species of plant or animal that is in danger of extinction throughout all or a significant portion of their range.

California Rare Plant Ranks (Formerly known as CNPS Lists):

The CNPS is a statewide, nonprofit organization that maintains, with CDFW, an Inventory of Rare and Endangered Plants of California. In the spring of 2011, CNPS and CDFW officially changed the name "CNPS List" or "CNPS Ranks" to "California Rare Plant Rank" (or CPRP). This was done to reduce confusion over the fact that CNPS and CDFW jointly manage the Rare Plant Status Review Groups and the rank assignments are the product of a collaborative effort and not solely a CNPS assignment.

- **CRPR: 1B = California Rare Plant Rank 1B - plants rare, threatened, or endangered in California and elsewhere:** plants with a CRPR of 1B are rare throughout their range with most of them endemic to California. Most of the plants that are ranked 1B have declined significantly over the last century. All the plants constituting CRPR 1B meet the definitions of § 2062 and § 2067 (CESA) of the Fish and Game Code and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.
- **CRPR: 2B = California Rare Plant Rank 2B - plants rare, threatened, or endangered in California, but more common elsewhere:** except for being common beyond the boundaries of California, plants with a CRPR of 2B would have been ranked 1B. From the federal perspective, plants common in other states or countries are not eligible for consideration under the provisions of the ESA. All the plants constituting CRPR 2B meet the definitions of § 2062 and § 2067 (CESA) of the Fish and Game Code and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.
- **CRPR: 3 = California Rare Plant Rank 3 - plants about which more information is needed - a review list:** the plants that comprise CRPR 3 are united by one common theme - CNPS and CDFW lack the necessary information to assign them to one of the other ranks or to reject them. Nearly all the plants constituting CRPR 3 are taxonomically problematic. Some of the plants constituting CRPR 3 meet the definitions of § 2062 and § 2067 (CESA) of the Fish and Game Code and are eligible for state listing. CNPS strongly recommends that CRPR 3 plants be evaluated for consideration during preparation of environmental documents relating to CEQA.
- **CRPR: 4 = California Rare Plant Rank 4 - plants of limited distribution - a watch list**: the plants in this category are of limited distribution or infrequent throughout a broader area in California. While CNPS and CDFW cannot call these plants "rare" from a statewide perspective, they are uncommon enough that their status should be monitored regularly. Should the degree of endangerment or rarity of a CRPR 4 plant change, CNPS and CDFW will transfer it to a more appropriate rank. Some of the plants constituting CRPR 4 meet the definitions of § 2062 and § 2067 (CESA) of the Fish and Game Code, and few, if any, are eligible for state listing. Nevertheless, many of them are significant locally, and CNPS strongly recommends that CRPR 4 plants be evaluated for consideration during preparation of environmental documents relating to CEQA.
- **Considered but Rejected =** plants that have been considered for inclusion into the CNPS *Inventory* but were not included for various reasons.

California Native Plant Society (CNPS) Threat Ranks:

Scientific Name (=Synonym)	Common Name (=Synonym)	Status in California	General Habitat Description in California	Plant Elevation Range (feet amsl)	Phase II Project Site is Located within the Species' Known:		Potential to Occur	Rational
					Elevation Range	General Distribution		
The CNPS Threat Rank is an extension added onto the California Rare Plant Rank (CRPR) (as a decimal code) and designates the level of threats by a 1 to 3 ranking with 1 being the most threatened and 3 being the least threatened. A Threat Rank is present for all CRPR 1B's, 2B's, 4's, and the majority of CRPR 3's. CRPR 4 plants are seldom assigned a Threat Rank of .1, as they generally have large enough populations to not have significant threats to their continued existence in California; however, certain conditions exist to make the plant a species of concern and hence be assigned a CRPR. In addition, all CRPR 1A and 2A (presumed extirpated in California), and some CRPR 3 (need more information) plants, which lack threat information, do not have a Threat Rank extension. • **.1** = seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat). • **.2** = moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat). • **.3** = not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known).								

Sources for Table 2:

- Baldwin, B. G., D. H. Goldman, D. J. Keil, R. Patterson, T. J. Rosatti, and D. H. Wilken, editors. 2012. *The Jepson Manual: Vascular Plants of California, second edition. University California Press, Berkeley.*
- California Department of Fish and Game. 2005. The Status of Rare, Threatened, and Endangered Plants and Animals of California, 2000-2004. Sacramento, CA.
- California Department of Fish and Wildlife, Natural Diversity Database. 2019a. Special Vascular Plants, Bryophytes, and Lichens List. Quarterly publication. August 2019. 140 pp.
- California Department of Fish and Wildlife, Natural Diversity Database. 2019b. State and Federally Listed Endangered, Threatened, and Rare Plants of California. August 6, 2019.
- Individual species' petitions to list under the Federal Endangered Species Act.
- USFWS' recovery plans, recovery goals, and recovery outlines for individual species.
- USFWS' 5-Year Review reports for individual species.
- USFWS' Species Accounts for individual species.
- NCCP/HCP management plans.
- In-house data and records.

Websites used for Table 2:

- Calflora: www.calflora.org/.
- CNPS' Calscape: https://calscape.org/.
- CNPS' Inventory of Rare, Threatened, and Endangered Plants of California: www.rareplants.cnps.org/.
- eFloras.org: www.efloras.org/.
- The Jepson Herbarium: http://ucjeps.berkeley.edu/eflora/.
- NatureServe: www.natureserve.org/.

ATTACHMENT 10

WILDLIFE SPECIAL-STATUS SPECIES INVENTORY AND POTENTIAL OCCURRENCE DETERMINATION

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The literature review provided a list of 63 special-status wildlife species (wildlife inventory). Table 2, *Special-Status Wildlife Inventory and Potential Occurrence within the Phase II Project Site Determination* contains the wildlife inventory that was created through the literature review. Table 2 provides both the taxonomic name (scientific name) and common name of each wildlife species, describes each species' status in California, and describes each species' requirements and preferred habitat in California. Table 2 is organized by wildlife taxonomic order.

Each special-status wildlife species was assessed for its potential to occur within the Phase II project site by comparing its elevational range (if known) and distribution, retrieved from databases and literature, with the Phase II project site's location and elevation range. A species was determined as having "no potential to occur" within the Phase II project site if the Phase II project site is well outside the species' known distribution and/or the species' known elevation range.

Table 2 also summarizes conclusions from the literature review and field surveys regarding the potential occurrence of special-status wildlife species within the Phase II project site. While conducting the field surveys, the biologists evaluated whether the Phase II project site contained suitable and adequate biological and physical features that are needed to support wildlife. These include the following:[1]

- Space for individual and population growth and for normal behavior.
- Cover or shelter.
- Food, water, air, light, minerals, or other nutritional or physiological requirements.
- Sites for breeding and rearing offspring.
- Habitats that are protected from disturbances.

Note that the detection of suitable habitat does not indicate presence or absence of a species. The potential for special-status wildlife species to occur within the Phase II project site was assessed based on the following criteria (Table 1, *Potential Occurrence Determination Descriptions*).

Table 1: Potential Occurrence Determination Descriptions

Potential for Wildlife to Occur within the Phase II Project Site	Description
Present	The special-status wildlife species was observed in the Phase II project site during the field surveys and/or has been recorded on-site by other qualified biologists.
High	There are reported sightings of the special-status wildlife species within the Phase II project site or the immediate project vicinity and/or areas within the Phase II project site contain highly suitable and adequate biological and physical features that are needed to support the species. The species has a high likelihood of being found on the Phase II project site.
Moderate	There are reported sightings of the special-status wildlife species within the Phase II project site or the immediate project vicinity and/or areas within the Phase II project site contain moderately suitable and adequate biological and physical features that are needed to support the species. The species has a moderate likelihood of being found on the Phase II project site.
Low	There are no known recorded occurrences of the special-status wildlife species within the Phase II project site or the immediate project vicinity and/or the Phase II project site

[1] USFWS website: www.fws.gov/midwest/endangered/saving/CriticalHabitatFactSheet.html.

Potential for Wildlife to Occur within the Phase II Project Site	Description
	contains scant suitable and adequate biological and physical features that are needed to support the species. The species is not likely to be found on the Phase II project site.
No	The Phase II project site is located outside the wildlife species' known distribution, elevation range; there are no known recorded occurrences of the special-status wildlife species within the Phase II project site; and/or the Phase II project site lacks suitable and adequate biological and physical features that are needed to support the species. It is highly unlikely for the wildlife species to have a potential to occur within the Phase II project site.
Absent	Focused wildlife surveys failed to detect the special-status wildlife species in the Phase II project site.

Even with field surveys, biologists assessed probability of occurrence rather than making definitive conclusions about species presence or absence. Failure to detect the presence of a wildlife species is not definitive and may be due to variable effects associated with migration, weather, fires, drought, rainfall patterns, temperatures, season, and/or time of day/year. Those special-status wildlife species listed in Table 2 that were determined to have a no potential or low potential to occur within the Phase II project site are not discussed further in the report.

Table 2: Special-Status Wildlife Inventory and Potential Occurrence within the Phase II Project Site Determination

Scientific Name (=Synonym)	Common Name (=Synonym)	Status in California	General Habitat Description in California	Potential to Use the Site	Rational
Listed Endangered, Threatened, and Candidate Wildlife: **Wildlife with official status under the federal Endangered Species Act (ESA) and/or the California Endangered Species Act (CESA). A species may have other sensitive designations in addition to their federal or state listing.**					
Listed Invertebrates					
Rhaphiomidas terminatus abdominalis	**Delhi sands flower-loving fly (DSFLF)**	♦ FE	Found in sparsely vegetated areas of partly consolidated dunes composed of unique, fine, sandy soils known as the "Delhi series: sands." The specific native plants important to this fly are unknown, but California buckwheat, California croton, deerweed, California evening primrose and telegraph weed are dominant in its habitat. It spends most of the year underground in sandy soils where vegetation is generally low growing, providing sparse ground cover (10-20%). It emerges during an eight to ten-week period during the summer for reproduction. They probably live only a week or two. Oviposition (egg-laying) occurs within loose, sandy soils in late summer months and may primarily occur near telegraph weed. Larval stages develop completely underground and emerge as adults from July through September. The flight period begins as early as July 1. Adults are most active during the warmest, sunniest parts of the day, and both males and females extract nectar from California buckwheat and other plants.	**no**	The project site is located within this species' known distribution; however, it does not contain sandy Delhi series soils to support this species.
Listed Fish					
Catostomus santaanae	**Santa Ana sucker**	♦ FT[2]	The Santa Ana sucker generally lives in small, shallow perennial streams, less than 25 feet in width, with currents ranging from swift in the canyons to sluggish in the bottom lands. They are found in permanent streams in water ranging in depth from a few centimeters to a meter or more. Preferred substrates are generally coarse and consist of gravel, rubble, and boulders with growths of filamentous algae, but occasionally they are found on sand/mud substrates. They appear to be most abundant where the water is cool, clean, and clear, although the species can tolerate seasonally turbid water. They use partially submersed emergent aquatic macrophytes and riparian vegetation as the predominant cover. Within the Santa Ana River, larvae and juveniles of the species are most abundant in near-shore edge habitats in long runs, with gradually tapering shallows and shallow backwaters, often with circular flow. Adult suckers concentrate in widely scattered deeper pools and wide areas of gravel and rock substrates in flowing sections of river. Overhanging riparian plants, mainly alders and sedges, provide cover for the fish. Santa Ana suckers utilize all areas and do not require streamside cover when larger, deeper holes and riffles are present for refuge, particularly for adult fish. They are intolerant of polluted or highly modified streams. The species is a non-migrant.	**no**	The project site is not located within the known distributional range of this sucker and it does not contain suitable freshwater aquatic systems and microhabitats for spawning, rearing, and foraging to support this species.
Listed Amphibians					
Rana muscosa[3]	**southern mountain yellow-legged frog - southern DPS**[4]	♦ FE ♦ SE	Associated with streams, lakes, and ponds in montane habitats. In southern California, it is restricted to rocky streams in ponderosa pine, montane hardwood-conifer, and montane riparian habitats. They occupy streams in narrow rock-walled canyons and streams in the chaparral belt. In the Sierra Nevada, it is associated with wet meadows, streams, lakes, ponds, isolated pools, and sunny riverbanks in montane riparian, lodgepole pine, subalpine conifer, and wet meadow habitats. This aquatic species is always encountered within three feet of water. Absent from the smallest creeks because these have insufficient depth for adequate refuge and overwintering and it rarely occurs where predatory fishes have been introduced. During winter, adults apparently hibernate beneath ice-covered streams, lakes, and ponds. Both adults and larvae overwinter for up to nine months in the bottoms of lakes and ponds that are at least 5.6 feet deep. In lakes and ponds that do not freeze to the bottom in winter, they may overwinter in the shelter of bedrock crevices. They emerge from overwintering sites immediately following snowmelt. In southern California, some individuals aestivate within rodent burrows during especially dry periods of late summer. Reproduction is aquatic and they deposit their eggs underwater in clusters which they attach to rocks, gravel, vegetation, or under banks.	**no**	The project site is not located within the San Gabriel, San Jacinto, or the San Bernardino Mountains of Riverside, San Bernardino and Los Angeles counties where these frogs are known to occur. The project site does not contain suitable aquatic breeding or foraging sites within montane and alpine habitats to support this species.
Listed Birds					
Coccyzus americanus occidentalis	**western yellow-billed**	♦ FT ♦ SE	The western yellow-billed cuckoo is a neotropical migratory bird whose nesting habitat is restricted to relatively dense growths of trees and shrubs in riparian habitats that lines rivers and streams. They are confined to large blocks, or	**no**	The project site is located outside of this bird's known distribution and does not contain suitable and adequate breeding and foraging dense,

2 Federal listing applies to populations in the Los Angeles, San Gabriel, and Santa Ana River basins.

3 *Rana muscosa* has been split into *Rana sierrae*, the Sierra Nevada yellow-legged frog, found in the northern and central Sierra Nevada and *Rana muscosa*, the southern mountain yellow-legged frog, found in the southern Sierra Nevada and southern California.

4 San Gabriel, San Jacinto, and San Bernardino Mountains only.

Scientific Name (=Synonym)	Common Name (=Synonym)	Status in California	General Habitat Description in California	Potential to Use the Site	Rational
	cuckoo (cuckoo)	♦ BCC *Season of Concern: breeding	contiguous areas, of cottonwood-willow riparian forests adjacent to sloughs and slow-moving rivers. Cuckoos have large home ranges, often exceeding 50 acres, and sometimes approaching 100 acres, in extent. Few cuckoos are found in forest habitat of less than 25 acres, and dense, low-level foliage is an important determination of nesting habitat. Sites with less than 40% canopy closure are unsuitable, those with 40%-65% are marginal to suitable, and those with greater than 65% are optimal.		wide riparian blocks with aquatic habitats to support this species.
Laterallus jamaicensis coturniculus	**California black rail**	♦ ST ♦ fully protected ♦ BCC	Suitable California black rail habitat generally includes salt, brackish and freshwater marshes. Most or all southwestern U.S. populations are non-migratory, and these habitat types serve for breeding, foraging, and overwintering. A highly secretive and rarely observed bird, there appears to be a preference in coastal areas for tidal salt marshes dominated by dense pickleweed with an open structure below. This provides a dense canopy for protective cover while providing nesting habitat and accessibility below the canopy. A dense canopy that provides optimal cover is essential for survival. Freshwater marshes are typically dominated by bulrushes and cattails. These sites are very shallow (usually less than three cm) but require a perennial water source. Too much water will prevent nesting and too little water will lead to abandonment of the site. They are also associated with plants of the upland/wetland interface, such as seep willow, arrowweed, saltgrass, and cottonwood. Nests are usually located in or along the edge of a marsh.	**no**	The project site is located outside of this bird's known distribution and does not contain suitable and adequate breeding marsh habitats and mudflat foraging habitats to support this species.
Gymnogyps californianus	**California condor**	♦ FE ♦ SE ♦ fully protected	Requires vast expanses of open woodlands, oak savannahs, grasslands, coniferous forests and foothill chaparral, with cliffs, large trees, and snags for roosting and nesting. Forages by soaring, often less than 2,000 feet above ground, looking for carrion. Prefers recently dead large animals, such as deer, sheep, or cattle. Dead cattle have provided the most important food source in recent decades. Food must be in open areas to enable landing and take-off. Often forages over areas 3 to 12 mi^2, or larger. May fly 35 miles or more, from roost to feeding sites. Traditional roosting sites are ledges or cavities on cliffs. Also uses old-growth Douglas-fir, ponderosa pine, and snags, in undisturbed areas. Nests in rugged mountainous terrain with forests and steep cliffs. Nest site is usually in cave or large crevice in cliff; sometimes in crevice among large rocks on steep slope, or in burned-out cavity in huge tree, such as coast redwood or giant sequoia. Nest is not constructed; egg laid on bare surface. Key characteristics of a suitable nest site are that it is in a location at least partially sheltered from the weather and in a location easily approachable from the air, such as on a cliff, steep slope, or tall tree.	**no**	The project site is located outside of this bird's known distribution and does not contain suitable and adequate habitats for nesting, foraging, or roosting to support this species.
Empidonax traillii	**willow flycatcher**	♦ SE ♦ BCC *Season of Concern: breeding	A rare to locally uncommon, summer resident. It winters in Mexico and South America. The habitat of the willow flycatcher is extensive willow thickets. This migratory bird most often occurs in broad, open river valleys or large mountain meadows with lush growth of shrubby willow. Most numerous where extensive thickets of low, dense willows edge on wet meadows, ponds, or backwaters. This species could occur at any desert spring with large cottonwood or willow trees but would primarily be observed in riparian areas.	**no**	The project site is located outside of this bird's known distribution and does not contain suitable and adequate breeding and foraging dense riparian and aquatic habitats to support this species.
Empidonax traillii extimus	**southwestern willow flycatcher (SWFL)**	♦ FE ♦ SE ♦ BCC *Season of Concern: breeding	The southwestern willow flycatcher (SWFL) is a rare to locally uncommon, summer resident. It winters in Mexico and South America. SWFLs breed and forage in relatively dense riparian tree and shrub communities associated with rivers, swamps, and other wetlands, including lakes and reservoirs. Suitable habitat should contain: 1) there is a) surface water, b) saturated soil, or c) presence of obligate/facultative herbaceous wetland plants present during the early summer months (surface water should be present at least throughout the month of May); 2) woody riparian vegetation is present and covers a minimum aerial extent of 20 percent over a 0.5 acre section of floodplain or adjacent streamside terrace; 3) dense clumps or stands of woody vegetation are present. The riparian patches used by breeding SWFLs may be relatively dense, linear, contiguous stands or irregularly shaped mosaics of dense vegetation with open areas. SWFL also nests in thickets dominated by the non-native tamarisk and Russian olive and in habitats where native and non-native trees and shrubs are present in essentially even mixtures.	**no**	The project site is located outside of this bird's known distribution and does not contain suitable and adequate breeding and foraging dense riparian and aquatic habitats to support this species.
Vireo bellii pusillus	**least Bell's vireo (LBV)**	♦ FE ♦ SE *Season of Concern: breeding	From their wintering ground in southern Baja California, Mexico, least Bell's vireos (LBV) migrate between mid-March and early April to southern California, where they remain until July or August. They are associated with southern willow scrub, cottonwood-willow forest, mule fat scrub, sycamore alluvial woodland, coast live oak riparian forest, arroyo willow riparian forest, or mesquite in desert localities. It uses habitat which is limited to the immediate vicinity of water courses, but also inhabits thickets along dry, intermittent streams. LBVs primarily occupy willow-dominated riverine riparian habitats with well-developed overstories, understories, and low densities of aquatic and herbaceous cover. The understory frequently contains dense subshrub or shrub thickets dominated by willow or mule fat. The understory shrub thickets provide nesting habitat and willows are most commonly used. Significant overstory species include mature willows with occasional cottonwoods and western sycamores. Oak woodland with a willow riparian understory	**no**	The project site is located within this bird's known distribution; however, it does not contain suitable and breeding and foraging riparian habitats to support this species.

Scientific Name (=Synonym)	Common Name (=Synonym)	Status in California	General Habitat Description in California	Potential to Use the Site	Rational
			is also used in some areas, and individuals sometimes enter adjacent chaparral, coastal sage scrub, or desert scrub habitats to forage. On the desert slopes mesquite and sandbar willow in canyon locations may be occupied.		
Polioptila californica californica	**coastal California gnatcatcher (CAGN)**	♦ FT ♦ SSC	The coastal California gnatcatcher (CAGN) is a non-migratory, permanent resident of coastal sage scrub habitat, which is a broad category of vegetation that includes the following plant communities; Venturan coastal sage scrub, Diegan coastal sage scrub, maritime succulent scrub, Riversidean sage scrub, Riversidean alluvial fan sage scrub, southern coastal bluff scrub, and coastal sage-chaparral scrub. The majority of the plant species found in coastal sage scrub habitat are low-growing, drought-deciduous shrubs and sub-shrubs. Generally speaking, most types of sage scrub are dominated by one or more of the following; California sagebrush, California buckwheat, California encelia, brittlebush, black sage, white sage, and purple sage. In addition to coastal sage scrub, CAGNS use chaparral, grassland and riparian habitats next to coastal sage scrub, but these habitats are used for dispersal and foraging, especially in the non-breeding season.	**absent**	The project site is located within this bird's known distribution and contains coastal sage scrub habitats that could potentially support this species onsite; however, the buckwheat scrub plant community onsite has been degraded from existing anthropogenic disturbances and is isolated from occupied sage scrub habitats in the region. It was determined that the project site does not provide the requisite Primary Constituent Elements which are needed by CAGN to be present. Therefore, it was determined that CAGN is presumed absent from the project site. Further, CAGN was not observed onsite during the 2007/2008 protocol CAGN surveys conducted by LSA.
Agelaius tricolor	**tricolored blackbird**	♦ SCE[5] ♦ SSC ♦ BCC *Season of Concern: breeding colony	Tricolored blackbirds are permanent residents of California, but birds make extensive migrations and movements, both in the breeding season and in winter. Breeding tricolored blackbirds form large colonies, typically in freshwater wetlands dominated by cattails or bulrushes and thorny vegetation such as wild rose or blackberry. They may also nest in willows, thistles, and nettles. Preferred foraging habitats include agricultural crops such as rice, alfalfa, irrigated pastures, and ripening or cut grain fields (e.g., oats, wheat, silage, and rice), as well as annual grasslands, cattle feedlots, and dairies. They also forage in wet and dry vernal pools and other seasonal wetlands, riparian scrub habitats, and open marsh borders. They have three basic requirements for selecting their breeding colony sites: open, freshwater; a protected nesting site, provided by flooded, thorny, or spiny vegetation; and a suitable foraging space providing adequate insect prey within a few miles of the nesting colony.	**no**	The project site is located within this bird's known distribution; however, it does not contain suitable breeding freshwater wetland habitats or foraging grassland or agricultural lands to support this species.
Listed Mammals					
Dipodomys merriami parvus	**San Bernardino kangaroo rat (SBKR)**	♦ FE ♦ SSC	Typically, SBKR is found in Riversidean alluvial fan sage scrub, alluvial fans, river and stream terraces, flood plains, and along washes with nearby sage scrub. They are found primarily on sandy loam substrates, characteristic of alluvial fans and flood plains, where they can dig simple, shallow burrows. They are primarily associated with a variety of sage scrub vegetation with sandy soils and relatively open vegetation structure such as Riversidean alluvial fan sage scrub. Alluvial scrub includes elements from chaparral, coastal sage, and desert communities. They require open, sparse vegetation characterized by low shrub canopy cover (mostly 7 to 22 percent) and they rarely occur in dense vegetation and rocky substrates.	**absent**	The project site is located within this species' known distribution; however, it does not support Riversidian alluvial fan sage scrub plant communities and is no longer exposed to hydrological processes needed to maintain the openness of suitable SBKR habitat, and does not contain upland areas proximal to flood plains that contain suitable refuge habitat. Based on these conditions, it was determined that the project site does not provide the requisite Primary Constituent Elements which are needed by SBKR to be present. Therefore, it was determined that SBKR is presumed absent from the project site. Further, SBKR was not captured onsite during the 2008 focused trapping study conducted by LSA.
Dipodomys stephensi	**Stephens' kangaroo rat (SKR)**	♦ FE ♦ ST	SKR inhabits level or gently sloping topography and is found almost exclusively in open annual and perennial grasslands or sparse shrublands. They prefer areas with buckwheat, California sagebrush, chamise, brome grass and filaree. They avoid areas with dense grass cover (for example, non-native bromes). SKRs are typically found in transition areas, including grasslands that border coastal sage scrub, transition areas where sage scrub and grasslands are intermixed, areas of sparse sage scrub, and areas where native habitat has been removed or disturbed by agriculture and other uses. What each of these areas has in common is sparse, perennial vegetation covering less than 50% of the ground. Another common feature is the suitability of soils for SKR burrows and food sources. As a fossorial (burrowing) animal, the SKR typically is found in well drained, gravelly or sandy and sandy loam soils with low clay to gravel content. It is not found on extremely hard or sandy soils, heavily alkaline or clay soils, generally in floodplains; highly rocky soils; shallow soils less than 50 centimeters deep; soils in areas exceeding 25% slope, and; soils above approximately 3,000 feet in elevation.	**absent**	The project site is located within this species' known distribution; however, it does not contain suitable plant communities transitional between grassland and coastal sage scrub and soils with appropriate composition for burrow construction to support this species. In addition, SKR was not captured onsite during the 2008 focused SBKR small mammal trapping study conducted by LSA.
Perognathus	**Pacific pocket**	♦ FE	Found chiefly in association with fine-grained sandy or gravelly substrates in the immediate vicinity of the coast. Typical	**no**	The project site contains suitable coastal sage scrub that could

[5] The California Fish and Game Commission, at its December 10, 2015, meeting in San Diego, California, accepted for consideration the petition submitted to list the tricolored blackbird as an endangered species. As a candidate species, the tricolored blackbird receives the same legal protection afforded to an endangered or threatened species (Fish and Game Code, § 2085).

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longimembris pacificus	**mouse**	♦ SSC	habitat consists of coastal strand, coastal dunes, river alluvium, and coastal sage scrub growing on coastal terraces or in river valleys. The presence of loose or friable soils appears to be the most important factor in determining distribution. The mice appear to favor less densely vegetated areas. One of the known populations, located at Dana Point, occurs in sandy soils in association with coastal sage scrub of various densities on a coastal terrace. Another population located near San Mateo Creek is found in coastal sage scrub on ridges. The remaining population, located near the San Margarita River, is found in small patches of coastal sage scrub, bare ground, and in low-density non-native grassland within a larger matrix of dense non-native grassland, chiefly in sandy substrate. In winter, if environmental factors are unfavorable, the Pacific pocket mouse may hibernate underground until spring brings better conditions. But if adequate food supplies are available, the mouse will remain active during winter.		potentially support this mouse onsite; however, the site is located outside of this species' known distribution.
Sensitive Wildlife: **These animals have no official status under the ESA and/or the CESA; however, they are designated as sensitive or locally important by federal agencies, state agencies, and/or local conservation agencies and organizations.**					
Sensitive Fish					
Gila orcuttii	**arroyo chub**	♦ SSC	Habitat includes headwaters, creeks, and small to medium rivers, often intermittent streams; permanent, small to moderate-sized, moderate to high gradient streams with more than 50% of the habitat as runs and pools < 10 cm deep and reaches of permanent water more than 2 km long; requires some flow. Arroyo Chub are adapted to survive in cool to warm (10 - 24ºC) streams that fluctuate between large winter storm flows, and low summer flows, and the low dissolved oxygen and wide temperature fluctuations associated with this flow regime. They are most common in slow flowing or backwater areas with sand or mud substrate but may also inhabit areas with velocities in excess of 80 cm/s over coarse substrate. They feed on plants such as algae and water fern (Azolla), and on invertebrates such as insects and mollusks. Spawning takes place in pools and edge habitat from February to August with a peak in June and July. Several males may fertilize the eggs of one female. Fertilized eggs stick to plants or bottom substrate and hatch in about 4 days. Fry stay on the substrate for a few days, then rise to the surface and stay among plants or other cover for 3 - 4 months.	**no**	The project site is not located within the known distributional range of this chub. The project site does not contain suitable freshwater aquatic systems and microhabitats for spawning, rearing, and foraging to support this species.
***Rhinichthys osculus* ssp. 3**	**Santa Ana speckled dace**	♦ SSC	Santa Ana speckled dace are found mainly in perennial streams fed by cool springs that maintain summer water temperatures below 20□C. Surveys of streams in the Los Angeles basin found dace occupying shallow riffles dominated by gravel and cobble. Their habitat in the West Fork San Gabriel River was described as shallow (average depths of 15-30 cm), gravel-cobble dominated riffles with overhanging riparian vegetation. Other biologists characterized their preferred habitat as pools in low-gradient streams (0.5-2.5% slope) with sand to boulder substrates in slow-moving waters, noting that they were also found along stream edges by fast-moving water. Speckled Dace prefer habitat that includes clear, well oxygenated water, with movement due to a current or waves. In addition, the fish thrive in areas with deep cover or overhead protection from vegetation or woody debris. Speckled Dace predominantly occupy small streams of the second to third order where they feed and forage for aquatic insects. Stream dwellers spawn in riffles or gravely areas, while the lake inhabitants spawn in tributaries or in shallow shoreline regions.	**no**	The project site is not located within the known distributional range of this dace. The project site does not contain suitable freshwater aquatic systems and microhabitats for spawning, rearing, and foraging to support this species.
Sensitive Amphibians					
Spea hammondii	**western spadefoot**	♦ SSC	Found in coastal sage scrub, open chaparral, pine-oak woodlands and grassland habitats, but is most common in grasslands with vernal pools or mixed grassland/coastal sage scrub areas. They prefer open areas with sandy or gravelly soils, in a variety of habitats including sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Within these habitats they require rain pools or vernal pools in which to reproduce and persist with more than three weeks of standing water in which to metamorphose successfully. They can also breed in cattle tanks, and occasionally in pools of intermittent streams. Typically, the pools are turbid with little or no cover. Breeding takes place after heavy rainfall and the formation of temporary shallow rain pools. Water breeding sites must lack fish, bullfrogs, and crayfish for western spadefoot toads to successfully reproduce and metamorphose. They aestivate in the dry summer in upland habitats adjacent to potential breeding sites in burrows approximately one meter in depth.	**no**	The project site is located within this species' known distribution; however, it does not contain suitable substrates for burrowing or areas with temporary pools for reproduction to support this species.
Taricha torosa	**Coast Range newt (=California**	♦ SSC[6]	Occurs primarily in valley-foothill hardwood, valley-foothill hardwood-conifer, coastal scrub and mixed chaparral, but is also known from annual grassland and mixed conifer types. Optimum habitats are in or near streams in valley-foothill hardwood and hardwood-conifer habitats. Terrestrial individuals seek cover under surface objects such as rocks and	**no**	The project site is located outside of this species' known distribution and does not contain suitable and adequate breeding habitats that could support this species onsite.

[6] Monterey County and south only.

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	newt)		logs, or in mammal burrows, rock fissures, or human-made structures such as wells. The first rains of fall usually initiate migration to breeding localities. Once at the breeding sites, adults become aquatic and may remain in or near these ponds and streams for several weeks. Breeding and egg-laying occur in slow-moving streams, permanent and semi-permanent ponds, lakes and large reservoirs. The eggs are normally laid in shallow water attached to the submerged portion of emergent vegetation, on submerged vegetation, and on the underside of rocks off the bottom. Aquatic larvae find cover beneath submerged rocks, logs, debris, and undercut banks. Adults migrate back to subterranean refuges in the spring, where they spend the summer aestivating.		
Sensitive Reptiles					
Actinemys pallida[7,8] **(*=Emys marmorata pallida*)**	**southern western pond turtle**	♦ SSC	Aquatic turtle that requires stagnant or slow-moving water in aquatic habitats. They only leave the water to lay eggs, aestivate, and to overwinter. Found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, and either rocky or muddy bottoms, in woodland, forest, and grassland. In streams, prefers pools to shallower areas. Uncommon in high gradient streams most likely due to low water temperatures, high current velocity, and low food resources, which may limit their local distribution. Logs, rocks, cattail mats, and exposed banks are required for basking. Active from February to November. They hibernate underwater during several months in the winter. They cluster in the shallow end of the pond. A pond turtle will estivate during summer droughts by burying itself in soft bottom mud. From April and August, females climb onto land to dig a nest, usually along stream or pond margins, where they lay a clutch of eggs. Requires suitable upland habitat adjacent to the aquatic habitat for egg laying. Digs the nest in soil with high clay or silt content on an unshaded south-facing slope. Nest site is generally within 656 feet from the aquatic habitat but can be up to 1,319 feet.	**no**	The project site is located within this species' known distribution; however, it does not contain suitable stagnant or slow-moving permanent or nearly permanent water in aquatic habitats within basking sites to support this species.
Anniella stebbinsi	**southern California legless lizard**	♦ SSC[9]	Occurs in moist warm loose soil with plant cover. Moisture is essential. Occurs in sparsely vegetated areas of coastal beach dunes, chaparral, oak woodland and mixed conifer forest, desert scrub, sandy washes and alluvial fans, and stream terraces with sycamores, cottonwoods, or oaks. Much of the coastal dune habitat has been destroyed by coastal development between Ventura County and the Mexican Border. Fortunately, a large protected population persists in the remnant of the once extensive El Segundo Dunes at Los Angeles International Airport. Leaf litter under trees and bushes in sunny areas and dunes stabilized with bush lupine and mock heather often indicate suitable habitat. Often can be found under surface objects such as rocks, boards, driftwood, and logs. Can also be found by gently raking leaf litter under bushes and trees. Sometimes found in suburban gardens. Lives mostly underground, burrowing in loose sandy soil. Forages in loose soil, sand, and leaf litter during the day. Sometimes found on the surface at dusk and at night. Apparently active mostly during the morning and evening when they forage beneath the surface of loose soil or leaf litter which has been warmed by the sun.	**low**	The project site is located within this species' known distribution; however, it does not contain suitable moist, warm, loose substrates, leaf litter, and surface objects to support this species.
Coleonyx variegatus abbotti	**San Diego banded gecko**	♦ SSC	The San Diego banded gecko occurs in a wide variety of sage scrub and chaparral habitats, where suitable cover exists associated with granitic outcrops and boulder fields where there is also ground debris (i.e., yucca stalks). They require scattered to extensive exfoliated rocky outcrops with weathered, well-drained, coarse to rocky sandy loam soil, and healthy, mature sage scrub and chaparral habitat with an open understory. San Diego banded gecko is uncommon but typically found, in coastal scrub and chaparral, preferring granite or rocky outcrops in these habitats. Often associated with rocks and may seek shelter beneath or in crevices. Boards and other litter also serve as diurnal refuge for the banded gecko. Additionally, it may utilize mammal burrows for refuge. The San Diego banded gecko hibernates through the winter (generally November to February).	**no**	The project site is located within this species' known distribution; however, it does not contain suitable granite or rocky outcrops and surface debris within coastal scrub or chaparral habitats to support this species.
Phrynosoma blainvillii	**Blainville's horned lizard (=coast horned lizard)**	♦ SSC	Found in a wide variety of habitats including coastal sage scrub, annual grassland, chaparral, oak woodland, pine-cypress, juniper, riparian woodland and coniferous forest. They inhabit open country, especially sandy areas, washes, flood plains and wind-blown deposits in a wide variety of habitats. They require open areas for sunning, bushes for cover, patches of loose soil for burial and abundant supply of ants and other insects. Forage on the ground in open areas, usually between shrubs and often near ant nests. They are primarily ant-eating reptiles (harvester ants). Periods of inactivity and winter hibernation are spent burrowed into the soil under surface objects such as logs or rocks, in	**present**	According to the *City of Rancho Cucamonga Central Park Fire Hazard Reduction and Vegetation Management Plan*, this species occupies the undeveloped portions of the Central Park property. The project site is located within this species' known distribution and contains areas for shelter, an abundance of open areas for basking, and plenty of native ants and other insects for feeding to support this species. Even though

7 The western pond turtle has been split into two species (*Actinemys marmorata* and *Actinemys pallida*) following the previous split of the species into two subspecies, *Actinemys marmorata marmorata* and *Actinemys marmorata pallida*.

8 The genus for pond turtles in California has fluctuated between *Clemmys*, *Actinemys*, and *Emys*.

9 Legless lizards in California were traditionally considered 1 species, but are now considered 5 species. The prior and current Species of Special Concern (SSC) project evaluated the traditional single species taxon and determined all legless lizards in California to be an SSC. Therefore, the SSC status is carried over to the new taxon concepts until further notice.

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			mammal burrows, or in crevices. Emerges from hibernation in late March and is surface active mostly during April-July, after which time most adults aestivate. They then reappear again briefly in August disappearing into overwintering sites from late August through early October.		this species was not observed during the 2007, 2008, or 2019 surveys, this species has a high potential to occur onsite.
***Aspidoscelis hyperythra beldingi* (=*Cnemidophorus hypythrus beldingi*)**	**Belding's orange-throated whiptail**	♦ WL	Habitat types include chaparral, non-native grassland, (Riversidean) coastal sage scrub, juniper woodland and oak woodland. Associations include alluvial fan scrub and riparian areas. Prefers washes and other sandy areas with patches of brush and rocks. Tied to perennial vegetation because its major food source, termites, requires perennial plants as a food base. California buckwheat, California sagebrush, black sage, and white sage are an important indicator of favorable habitat. Friable soil appears to be a necessary requirement for excavating burrows and hiding eggs. During periods of inactivity individuals seek cover under surface objects such as rocks, logs, decaying vegetation, and boards, or in rock crevices. They typically occupy open, sparsely covered land. Well-drained sandy or loose soils are usually present, often with rocks. Dry, sandy washes are especially favored.	**high**	The project site is located within this species' known distribution and contains suitable coastal sage scrub and microhabitats to support this species.
Aspidoscelis tigris stejnegeri	**coastal whiptail (=San Diegan tiger whiptail)**	♦ SSC	Habitat types include chaparral, non-native grassland, (Riversidean) coastal sage scrub, juniper woodland and oak woodland. Associations include alluvial fan scrub and riparian areas. Prefers washes and other sandy areas with patches of brush and rocks. Friable soil appears to be a necessary requirement for excavating burrows and hiding eggs. During periods of inactivity individuals seek cover under surface objects such as rocks, logs, decaying vegetation, and boards, or in rock crevices. They typically occupy open, sparsely covered land. Well-drained sandy or loose soils are usually present, often with rocks. Dry, sandy washes are especially favored.	**high**	The project site is located within this species' known distribution and contains suitable coastal sage scrub and microhabitats to support this species.
Arizona elegans occidentalis	**California glossy snake**	♦ SSC	The California glossy snake usually inhabits open areas with sandy or loamy soils, typically riparian areas and wash habitats, and also occurs in coastal sage scrub, chaparral, grassland, riparian, stream courses, and sparse oak woodlands, typically in areas with sparse vegetation and loose soils (sandy and loamy soils), but also rocky areas. Refugia takes the form of mammal burrows, rock outcrops, and to a lesser extent, under surface objects.	**present**	According to the *City of Rancho Cucamonga Central Park Fire Hazard Reduction and Vegetation Management Plan*, this species occupies the undeveloped portions of the Central Park property. The project site is located within this species' known distribution and contains suitable coastal sage scrub habitats to support this species. Even though this species was not observed during the 2007, 2008, or 2019 surveys, this species has a high potential to occur onsite.
***Lampropeltis multifasciata*[10] (=*Lampropeltis zonata parvirubra*)**	**Coast mountain kingsnake (San Bernardino population)**	♦ WL	In southern California, it is primarily associated with montane coniferous forests and mixed coniferous forests and secondarily associated with riparian woodland, oak woodland, chaparral, and coastal sage scrub. It occurs in well illuminated canyons with rocky outcrops or rocky talus in association with bigcone spruce and various canyon chaparral species at lower elevations, and with California black oak, incense cedar, Jeffrey pine, and ponderosa pine at higher elevations. Usually found most commonly in wooded areas in vicinity of rock outcrops or boulders near streams or lake shores, where it may utilize rotting logs, talus and seeks cover under dense shrubs. The rocky outcrops or talus likely provide hibernation and refuge sites. Where oviposition sites are generally located is not known, but rocky outcrops and talus areas may also provide suitable oviposition sites. It spends most of the time underground, under surface objects, or inside rock crevices. They enter winter hibernation typically around November, emerging some time from February to April, depending on location and weather conditions.	**no**	The project site is located outside of this species' known distribution and does not contain vegetation communities and microhabitats to support this species.
Salvadora hexalepis virgultea	**coast patch-nosed snake**	♦ SSC	Associated with brushy or shrubby vegetation, such as chaparral in canyons and rocky hillsides. They seem to require at least a low shrub structure of minimum density since they are not found in habitats lacking this structural component. Coast patch-nosed snakes are presumed to take refuge and perhaps over winter in burrows or woodrat nests, so the presence of one or more burrow- or refuge-creating mammals may be necessary for this snake to be present. The coast patch-nosed snake is recorded as emerging from overwintering sites in March and disappearing to overwintering sites in October. May and June are the typical months of peak activity.	**no**	The project site is located within this species' known distribution; however, it does not contain vegetation communities and microhabitats to support this species. The site contains shrubby coastal sage scrub habitat; however, the site lacks chaparral, canyons, rocky hillsides, and woodrat nests and burrows.
Thamnophis hammondii	**two-striped garter snake**	♦ SSC	This snake is highly aquatic and it is rarely found far from water. It is found in or near permanent or intermittent freshwater, often along streams with rocky beds and bordered by willows or other streamside growth. Generally found around pools, creeks, cattle tanks, stock ponds, large sandy riverbeds and other water sources. It has also been found in oak woodlands, chaparral and sparse coniferous forests. During the day it often basks on streamside rocks or on densely	**no**	The project site is located within this species' known distribution; however, it does not suitable vegetation communities and microhabitats (permanent or semi-permanent bodies of water bordered by dense vegetation and basking sites) to support this snake.

[10] The SSAR has recognized that the species California Mountain Kingsnake, which formerly was viewed as one species with seven subspecies, now consists of two separate species and not subspecies: coast mountain kingsnake (*Lampropeltis multifasciata*) and California Mountain Kingsnake (*Lampropeltis zonata*). According to Myers et al (Myers, E. A., J. A. Rodríguez-Robles, D. F. DeNardo, R. E. Staub, A. Stropoli, S. Ruane, and F. T. Burbrink. 2013) "*Lampropeltis zonata* is composed of all populations in the Sierra Nevada Mountains and the Coast Ranges north of Monterey Bay, California, north into the Klamath Mountains, in Oregon, plus an additional, disjunct population along the Columbia Gorge, in the great state of Washington." "*Lampropeltis multifasciata* is composed of all populations in the Peninsular Ranges and in the Transverse Ranges, north into the Coast Ranges just south of Monterey Bay, California, including the disjunct population on Isla Sur of Islas Todos Santos, Baja California, Mexico." They also show that the southern species (*Lampropeltis multifasciata*) contains two lineages - the southern species, and the Peninsular Range lineage.

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			vegetated stream banks. The preferred nocturnal retreats of this active diurnal snake are thought to be holes, especially mammal burrows, crevices, and surface objects. They also serve as winter refuges. Young are born alive.		
Crotalus ruber	**red diamond rattlesnake**	♦ SSC	Although recorded from several vegetation types, it is most commonly associated with heavy brush with large rocks or boulders. Dense chaparral in the foothills, cactus or boulder associated coastal sage scrub, and desert slope scrub (creosote scrub) associations are known to carry populations, however, chamise and red shank associations may offer better structural habitat for refuges and food resources for this species than other habitats. It retreats into rodent burrows, into cracks in rocks or under surface cover objects for cover. Young are live-born and thus require a quiet and safe place for birth, probably in burrows or under substantial cover objects such as large rocks. This rattlesnake emerges from hibernation in late February.	**no**	The project site is located outside of this species' known distribution and does not contain suitable arid and semiarid habitats that provide dense vegetation or rocky cover to support this species.
Sensitive Birds					
Cypseloides niger	**black swift**	♦ SSC ♦ BCC *Season of Concern: breeding	Breeding black swifts are restricted to a very limited supply of potential nesting locations: behind or beside permanent or semi-permanent waterfalls, on perpendicular cliffs near water (above Sierran rivers or on the seacoast), and in sea caves. Nests in moist crevice or cave on sea cliffs above the surf, or on cliffs behind, or adjacent to, waterfalls in deep canyons. Nest constructed of mud mixed with moss, ferns, seaweed, or other plant materials; located in deep, dark crevice, in cave, or under overhang. Nests in colony of a few pairs. Nest usually kept moist by mist from the surf or waterfall. Forages widely over many habitats. In migration, rare and irregular outside the breeding range. Feeds exclusively on flying insects, captured in sustained, long-distance foraging flights, usually high in the air. Apparently the only regular resting places are on steep, rocky, often moist, cliffs such as those used for nesting.	**no**	Black swifts occur in California as a summer resident and migrant. They do not winter in the state. The project site is located outside of this bird's known distribution and does not contain suitable breeding habitats near aquatic sites to support this species.
Calypte costae	**Costa's hummingbird**	♦ BCC *Season of Concern: breeding	Occurs in more arid habitats than other hummingbirds in California. Primary habitats are desert wash, desert riparian and valley foothill riparian woodlands, coastal scrub, desert scrub, desert succulent shrub, lower-elevation chaparral, piñon pine-juniper woodland, and palm oasis. Nest placed in a wide variety of trees, cacti, shrubs, woody forbs, and sometimes vines.	**low**	The project site is located within this species' known distribution and contains marginal coastal sage scrub habitats to support this bird.
Selasphorus rufus	**rufous hummingbird**	♦ BCC *Season of Concern: breeding	Rufous hummingbirds use riparian areas, open woodlands, chaparral, mountain meadows, and other habitats rich in nectar-producing flowers, including gardens and orchards. They use valley foothill hardwood, valley foothill hardwood-conifer, riparian, and various chaparral habitats in both northward and southward migration; montane riparian, aspen, and high mountain meadows (to tree-line and above) used in southward migration. Trees and shrubs in many habitats provide cover, including lowland riparian, open woodlands, scrub, and chaparral, also mountain meadows extending to and above tree line.	**present**	Observed during the 2007 bio reconnaissance survey. The LSA bio report does not give information about this observation, only that it was sighted. The rufous humming is a common migrant and uncommon summer resident of California. A rare, winter resident in southern California. The project site is not located within coniferous forests or woodlands of northwestern coastal areas or northern and eastern-central Sierras where this species is known to breed. The project site does not contain suitable breeding and foraging habitats to support this species. Low potential to occur in the winter or during migration.
Selasphorus sasin	**Allen's hummingbird**	♦ BCC	Breeders are most common in coastal scrub, valley foothill hardwood, and valley foothill riparian habitats, but also are common in closed-cone pine-cypress, redwood habitats, well-wooded urban and suburban habitats, and city parks. Males set up breeding territories overseeing open areas of coastal scrub vegetation or riparian shrubs, including dogwood, poison oak, and especially willows, where they often perch conspicuously on exposed leafless branches or twigs at tops of shrubs, or on lateral branches of trees overlooking territory. Occurs in a variety of woodland and scrub habitats as a migrant. Winters mostly in foothills and mountain forests in Mexico.	**low**	The project site is located outside of this bird's known distribution and does not contain suitable breeding and foraging woodland or forest habitats to support this species. Low potential to occur during migration.
Larus californicus	**California gull**	♦ WL *Season of Concern: breeding colony	A common colonial nester at alkali and freshwater lacustrine habitats east of the Sierra Nevada and Cascades, and an abundant visitor to coastal and interior lowlands in nonbreeding season. A colonial nester on islets in large interior lakes, either fresh or strongly alkaline. Preferred winter habitats along the coast are sandy beaches, mudflats, rocky intertidal, and pelagic areas of marine and estuarine habitats, as well as fresh and saline emergent wetlands. Inland, frequents lacustrine, riverine, and cropland habitats, landfill dumps, and open lawns in cities.	**present**	Observed during the 2007/2008 BUOW protocol surveys. The LSA BUOW report does not give information about this observation, only that it was sighted. The project site is located within this bird's known distribution; however, it does not contain suitable and adequate foraging or breeding habitats that could support this bird onsite. Any occurrence would most likely be restricted to flyovers.
Phalacrocorax auritus	**double-crested cormorant**	♦ WL *Season of Concern: breeding colony	They require lakes, rivers, reservoirs, estuaries, bays, coasts, or ocean for foraging. Very adaptable, may be found in almost any aquatic habitat, from rocky northern coasts to mangrove swamps to large reservoirs to small inland ponds. Rests in daytime and roosts overnight beside water on offshore rocks, islands, steep cliffs, dead branches of trees, wharfs, jetties, or even transmission lines. Perching sites must be barren of vegetation. Must visit perches periodically in	**no**	The project site is located within this bird's known distribution; however, it lacks suitable breeding habitats, roosting sites, or large aquatic feeding grounds and adequate food supplies to support this species.

Scientific Name (=Synonym)	Common Name (=Synonym)	Status in California	General Habitat Description in California	Potential to Use the Site	Rational
			day to dry plumage. Requires considerable length of water, or elevated perch, for labored take-off. Requires undisturbed nest-sites beside water, on islands or mainland. Uses wide rock ledges on cliffs; rugged slopes; and live or dead trees, especially tall ones. Suitable nest-site must be within 5-10 miles of dependable food supply. They nest in colonies of a few to hundreds of pairs, or even thousands.		
Elanus leucurus	**white-tailed kite**	♦ fully protected *Season of Concern: breeding	White-tail kites forage in undisturbed, open grasslands, meadows, emergent wetlands, farmlands, crops, pastures, and other cultivated habitats. Substantial groves of dense, broad-leafed deciduous trees used for nesting and roosting. Nest placed near top of dense oak, willow, or other tree stand; usually 20-100 feet above ground. Adjacent to their nesting woodland must be open foraging grasslands, where the birds can find their small mammal prey. Main requirements seem to be trees for perching and nesting, and open ground with high populations of rodents.	**high potential to use the site for foraging**	The project site is located within this bird's known distribution and contains suitable foraging habitats; however, suitable breeding habitats are absent from the project site.
Circus cyaneus	**northern harrier**	♦ SSC *Season of Concern: breeding	Northern harriers breed and forage in a variety of open (treeless) habitats that provide adequate vegetative cover, an abundance of suitable prey, and scattered hunting, plucking, and lookout perches such as shrubs or fence posts. Such habitats include open wetlands, freshwater marshes, brackish and saltwater marshes, meadows, weedy borders of lakes, rivers and streams, annual and perennial grasslands (including those with vernal pools), weed fields, fallow fields, ungrazed or lightly grazed pastures, some croplands (especially alfalfa, grain, sugar beets, tomatoes, and melons), sagebrush flats, and desert sinks. They are seldom found in wooded areas. Northern harriers are ground nesters, with the nest placed in dense, often tall, vegetation in undisturbed areas. Mostly nests in emergent wetland or along rivers or lakes, but may nest in grasslands, grain fields, or on sagebrush flats several miles from water.	**low**	The project site is located within this bird's known distribution; however, it does not contain suitable breeding or foraging open (treeless) habitats that provide adequate vegetative cover and an abundance of suitable prey.
Accipiter striatus	**sharp-shinned hawk**	♦ WL *Season of Concern: breeding	Sharp-shinned hawks are seldom-seen nesters that breed mainly in large stands of deciduous, coniferous, and mixed pine-hardwood forests with a closed canopy dense enough that the nest is completely hidden. Nest trees are generally located near openings and brushy areas where prey is abundant, and cover is enough for the perch and dash foraging style. During migration, they use most habitat types with vegetative cover, avoiding open bare areas and extensive openings. It is not uncommon to find them at lower elevations in desert scrub, desert washes, Joshua tree woodland, and other vegetation. Riparian areas are probably the most important habitat on wintering grounds, providing foraging opportunities and roost sites for avian predators and prey species.	**high potential to use the site for foraging**	The project site is located within this bird's known distribution and contains suitable foraging habitats; however, the project site does not contain suitable breeding woodland habitats to support this species.
Accipiter cooperii	**Cooper's hawk**	♦ WL *Season of Concern: breeding	The Cooper's hawks hunt in broken woodland and habitat edges. They have been found breeding at low densities virtually throughout the state, predominantly in deciduous, conifer, and mixed woodlands typically those with tall trees and with openings or edge habitat nearby. In southern California, it generally favors extensive riparian bottomlands and oak woodlands, but is also found in montane forests, and desert oases. Most nests in a California study were in groves of six or more deciduous trees, with two or more trees close enough together that the crowns formed one continuous canopy. The Cooper's hawk seems much more tolerant of human activities near the nest and is seen more often nesting in urban/residential areas. In winter and during migration, they may be observed briefly at any location throughout the state in a wide variety of habitats.	**present**	This hawk was observed during the 2007/2008 CAGN protocol surveys. The LSA CAGN report does not give information about this observation, only that it was sighted. The project site is located within this bird's known distribution and contains suitable foraging habitats; however, the project site does not contain suitable breeding woodland habitats to support this species. This species is adapted to urban environments and occurs commonly. High potential to use the site for foraging only.
Aquila chrysaetos	**golden eagle**	♦ fully protected ♦ WL ♦ BCC *Season of Concern: breeding and wintering	Golden eagles occur primarily in mountainous canyon land, rimrock terrain of open desert and grassland areas. Habitat typically includes open rolling foothills of grasslands, oak savannas, oak and juniper woodlands, chaparral, mountain areas, and desert. They usually avoid heavily forested areas and extensive croplands. They may be found in coniferous habitat when open space is available (e.g. fire breaks, clear-cuts, burned areas, pasture-land, etc.). Golden eagles are typically not found in heavily forested areas, extensive croplands, or on the immediate coast and are almost never detected in urbanized environments. Golden eagles usually nest on cliffs. Nesting is primarily restricted to rugged, mountainous country and open habitats with canyons and escarpments. Golden eagles will also nest in trees, on ground, clay cliffs, riverbanks, and human-made structures, including windmills, observation towers, powerline poles, electricity transmission towers, nesting platforms, abandoned gold dredges, and electrical transmission towers. Many nests have an unobstructed wide view of the surrounding area or are on prominent escarpments. These eagles require a huge territory to forage for prey. They typically forage in open habitats including grasslands, deserts, savannahs, and shrublands. Preferred territory sites include those that have a favorable nest site, a dependable food supply, and broad expanses of open country for foraging. Hilly or mountainous country deeply cut canyons rising to open mountain slopes and crags are ideal habitat.	**no**	The project site is located within this bird's known distribution; however, the project site does not contain suitable breeding nest sites, a dependable food supply, and broad expanses of open country for foraging. In addition, golden eagles are almost never detected in urbanized environments. Any occurrence would most likely be restricted to flyovers.
Athene cunicularia	**burrowing owl (BUOW)**	♦ SSC ♦ BCC *Season of	The burrowing owl (BUOW) is a small, ground-inhabiting owl. Typical BUOW habitat is open, dry, flat ground or low rolling hills with sparse vegetation and available burrows. BUOWs are generally found in open country, where tree or shrub canopies cover less than 30% of the habitat. Typical habitats include annual and perennial grasslands, shortgrass	**absent**	The project site is located within this species' known distribution; however, despite a systematic search of the project site, no burrowing owls or recent sign (i.e., pellets, feathers, castings, or whitewash) was

Scientific Name (=Synonym)	Common Name (=Synonym)	Status in California	General Habitat Description in California	Potential to Use the Site	Rational
		Concern: burrowing sites and some wintering sites	prairies open agricultural areas (particularly rangelands), deserts floors, and vacant lots in residential areas and university campuses. Other habitats include oak savannah; grass, forb, and open shrub stages of pinyon-juniper and ponderosa pine habitat; sandy beaches and coastal dunes; and river bottom lands. BUOWs inhabiting urban landscaped areas may live in vacant fields/lots, pastures, airports, athletic fields, golf courses, cemeteries, city parks, road shoulders, drainage sumps, railroad beds, irrigation ditches, and road cuts. Nest and roost burrows of the BUOW in California are most commonly dug by California ground squirrels (*Spermophilus beecheyi*). BUOWs in Imperial County often use the small holes of round-tailed ground squirrels (*Citellus tereticaudus*) and Botta's pocket gophers (*Thomomys bottae*), but they also can dig their own burrows in the soft banks of irrigation canals and ditches. Where burrows are scarce, man-made structures, such as culverts, piles of concrete, rubble, or debris, pipes, asphalt, artificial nest boxes, and openings beneath cement or asphalt pavement also are used as nest sites.		observed during the field investigations. The project site provides minimal line of-sight opportunities favored by burrowing owls. However, most of the project site lacks suitable burrows (>4 inches in diameter) capable of providing roosting and nesting opportunities. As a result, burrowing owl was determined to have a low potential to occur onsite. In addition, the protocol BUOW surveys failed to detect the species within the project site.
Asio otus	**long-eared owl**	♦ SSC *Season of Concern: breeding	Long-eared owls frequent dense, riparian and live oak thickets near meadow edges, and nearby woodland and forest habitats. They are also, found in dense conifer stands at higher elevations. They breed from valley foothill hardwood up to ponderosa pine habitats. They do not build their own nests. They use abandoned nests built by other birds, such as crows, ravens, magpies, hawks, and heron in a variety of trees with dense canopies. Nests are usually 10-50 feet above ground, rarely on ground or in tree or snag cavity. Riparian or other thickets with small, densely canopied trees are required for roosting and nesting. They forage over open areas and fields, occasionally in open woods, flying back and forth a few feet above the ground.	**no**	The project site is located within this bird's known distribution; however, it does not contain suitable breeding, roosting, or foraging woodland/forest habitats to support this species.
Picoides nuttallii	**Nuttall's woodpecker**	♦ BCC	The Nuttall's woodpecker is a common resident of low-elevation oak (any species) woodlands, especially where mixed with California sycamores and deciduous riparian habitats, but they are also found in riparian willow woodlands away from oaks and rarely in conifer forests. They excavate nests mostly in riparian habitat in a dead (occasionally live) trunk or limb of willow, sycamore, cottonwood, or alder and rarely in oaks. They require snags and dead limbs for nest excavation.	**no**	The project site is located within this bird's known distribution; however, it does not contain suitable breeding, roosting, or foraging woodland/forest habitats to support this species.
Lanius ludovicianus	**loggerhead shrike**	♦ SSC ♦ BCC *Season of Concern: breeding	The loggerhead shrike is a large, predatory songbird. They are known to inhabit and forage over open country within areas of short vegetation and well-spaced shrubs or low trees, particularly those with spines or thorns. They frequent agricultural fields, pastures with fence rows, old orchards, savannas, prairies mowed roadsides, cemeteries, golf courses, riparian areas, open woodland, agricultural fields, desert washes, desert scrub, grassland, broken chaparral and beach with scattered shrubs. They prefer tall shrubs or trees (also fences or power lines) for hunting perches and territorial advertisement; open areas of short grasses, forbs, or bare ground for hunting; and large shrubs or trees for nest placement. Human disturbance does not seem to be a major concern with this species. The shrike is often seen next to well-traveled roads and near houses built in suitable habitat. In California, loggerhead shrikes breed mainly in shrublands or open woodlands with a fair amount of grass cover and areas of bare ground. They often nest in isolated trees or large shrubs.	**low**	The project site is located within this species' known distribution; however, it does not contain suitable foraging open habitats and nest sites to support this species.
Eremophila alpestris actia	**California horned lark**	♦ WL	California horned larks are residents of a variety of open habitats, usually where trees and large shrubs are absent. They are found from grasslands along the coast and deserts near sea level to alpine dwarf-shrub habitat above treeline. They prefer short, sparsely vegetated prairies, deserts, and agricultural lands. With regards to agricultural land, it may be recently plowed land, with or without emerging crops, or land used the previous year for crops, and then mowed short and left fallow, or very sparse, heavily grazed annual grassland. Or it may simply be a large expanse of mowed weeds. These birds breed primarily in open fields from March through July, with peak activity in May. They usually build a cup-shaped grass-lined nest an in depression on the ground in the open. These birds forage on the ground in either bare areas or in agricultural fields with short vegetation.	**low**	The project site is located within this bird's known distribution and contains marginal foraging habitats; however, suitable breeding habitats are absent from the project site.
Baeolophus inornatus	**oak titmouse**	♦ BCC *Season of Concern: breeding	The oak titmouse is found primarily in oak or oak-pine woodlands of the Pacific slope. Along Pacific seaboard, occurs most commonly in oak woodland, including areas where oaks meet streamside trees or pines; also, in well-wooded suburbs, rarely in coniferous forest in mountains. Despite clear preference for oaks, populations in some areas have adapted locally to warm, dry environments without oaks. Such habitats include western juniper woodland in extreme northern California, open pine forests (digger pine, Coulter pine, Jeffrey pine) on San Benito Mtn. in central California, and single-leaf piñon or California juniper mixed with Joshua trees at eastern limits of range in Kern, San Bernardino, and Riverside Counties. Nests are constructed in natural tree cavities, in old woodpecker holes, or in a bird box. Often breeds near water.	**no**	The project site is located within this bird's known distribution; however, it does not contain suitable breeding or foraging oak or oak-pine woodlands to support this species.
Spinus lawrencei	**Lawrence's**	♦ BCC	Typically occupies arid and open woodlands within the near vicinity of 3 habitat components: chaparral or other brushy	**low**	The project site is located within this bird's known distribution;

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	goldfinch	*Season of Concern: breeding	areas; tall annual weed fields; and a water source such as a stream, small lake, or farm pond. Live oaks and blue oaks are predominant trees where this species nests. To a lesser extent, the species also uses riparian woodland; chaparral; coastal scrub; open coniferous and broadleaf evergreen forests; pinyon-juniper woodlands; plantings of cypress, cedars, or junipers; and ranches and other rural residential areas near weedy fields and water sources. A water source within 0.5 km is probably necessary. Nests are in evergreen oaks, conifers, or deciduous trees.		however, the project site contains marginal foraging coastal scrub habitats. The condition of the habitat is not suitable enough to support the species onsite. Any occurrence would most likely be restricted to using the project site for short term foraging, cover, or shelter.
***Setophaga petechia* (=*Dendroica petechia*)**	**yellow warbler**	♦ SSC ♦ BCC *Season of Concern: breeding	Yellow warbler occurs principally as a migrant and summer resident from late March through early October; breeds from April to late July. For breeding, the yellow warbler is restricted to the deciduous trees of the riparian woodland from coastal desert woodlands to the Sierra Nevada - willows, cottonwoods, aspens, California sycamores, and alders. Yellow warblers generally occupy riparian vegetation near water along streams and in wet meadows and nesting habitat must contain dense understory vegetation, such as shrubby willows, California wild rose or mule fat. Also breeds in montane chaparral, and in open ponderosa pine and mixed conifer habitats with substantial amounts of brush. Nests are deep cups, placed in an upright fork in a deciduous sapling or shrub, typically 2 to 16 feet high.	**no**	The project site is located within this bird's known distribution; however, it lacks suitable breeding and foraging riparian, montane chaparral, or mixed conifer habitats to support this species.
Icteria virens	**yellow-breasted chat**	♦ SSC *Season of Concern: breeding	Yellow-breasted chats nest and forage in dense riparian thickets of willows, vines, and brush associated with streams and other wetland habitats. Nesting habitat is usually restricted to the narrow border of streams, creeks, sloughs, rivers, and the borders of small ponds. Nesting habitat must have dense understory vegetation and larger trees that are used for singing perches. California Wild rose, blackberry, wild grape, mule fat, various shrubby willows, and other plants that form dense thickets and tangles are frequently selected as nesting strata. Cottonwoods, alders, and larger willows typically form the canopy and are required for song perches. The nest is an open cup typically placed in dense shrubs or thickets within 3 to 8 feet above ground along a stream or river. Chats will also nest in tamarisk, Himalayan blackberry, Russian olive, and other non-native plants that provide dense shrub layers.	**no**	The project site is located within this bird's known distribution; however, it lacks suitable breeding and foraging riparian habitats with adequate strata to support this species.
Aimophila ruficeps canescens	**southern California rufous-crowned sparrow**	♦ WL	These sparrows are found on moderate to steep, dry, grass-covered hillsides, coastal sage scrub, and chaparral and often occur near the edges of the denser scrub and chaparral associations. Preference is shown for tracts of California sagebrush. Optimal habitat consists of sparse, low brush or grass, hilly slopes preferably interspersed with boulders and outcrops. The species may occur on steep grassy slopes without shrubs if rock outcrops are present. It is frequently found in open shrubland in valley foothill hardwood-conifer savannah and open chaparral. It is generally absent from dense, unbroken stands of coastal sage scrub and chaparral. Nests are placed in small depressions on the ground usually at base of grass or forb patches, rocks, under a shrub, and very rarely in a shrub.	**no**	The project site is located within this bird's known distribution; however, it does not contain suitable breeding and foraging habitats with low shrub cover interspersed with grasses/forbs and rock outcrops to support this species.
***Artemisiospiza belli belli* (=*Amphispiza belli belli*)**	**Bell's sage sparrow**	♦ WL ♦ BCC	Bell's sage sparrow is a breeder in dry chaparral and coastal sage scrub along the coastal lowlands, inland valleys, and in the lower foothills of local mountains. In transmontane California, it occupies sagebrush, alkali desert scrub, desert scrub, and similar habitats. In cismontane California, it frequents chaparral dominated by chamise, and coastal scrub dominated by sage. The preference for chamise chaparral appears to occur only in the more northern parts of its range. Bell's sage sparrow is also found in big sagebrush at higher elevations in southern mountains. They seek cover in dense stands in chaparral and scrub habitats in the breeding season, and they forage on the ground beneath and between shrubs. They rarely or never use grassland habitat except possibly for dispersal.	**low**	The project site is located within this bird's known distribution; however, it contains only marginal breeding and foraging shrub habitats to support this species.
Xanthocephalus xanthocephalus	**yellow-headed blackbird**	♦ SSC *Season of Concern: breeding	Yellow-headed blackbirds breed almost exclusively in marshes with tall emergent vegetation, such as tules or cattails, generally in open areas and edges over relatively deep water. Nests are fabricated from dry vegetation and placed in dense cover. Because of the need for deeper water, breeding marshes often are on the edges of water bodies such as lakes, reservoirs, or larger ponds. Males choose territories with ample open water, and within these females tend to choose edges with moderately dense vegetation and extensive channels, characteristics suited for adequate support for nests and safety from predators, respectively. Most nests are attached to cattails and tules, but rarely some are built in willows and tamarisk. Feeds in emergent vegetation, along moist shorelines, and in nearby grasslands and croplands, preferably near water or on moist ground.	**no**	The project site is located within this bird's known distribution; however, it lacks suitable foraging grassland and cropland habitats or suitable breeding marsh and aquatic habitats to support this species.
Sensitive Mammals					
Chaetodipus fallax fallax	**northwestern San Diego pocket mouse**	♦ SSC	A common resident of open, sandy herbaceous areas, usually in association with rocks or course gravel in southwestern California. Inhabits sage scrub (coastal sage scrub, Riversidean sage scrub, Riversidean alluvial fan sage scrub), sage scrub/grassland ecotones, and chaparral (including red shank chaparral) communities. To a less extent, other natural habitats include desert wash, desert scrub, desert succulent shrub, pinyon-juniper, alkali playa, coast live oak woodland, riparian, and coniferous forest, and natural habitats adjacent to croplands, grove/orchard, and residential/urban/exotic	**absent**	The project site is located within this species' known distribution. Although isolated, the buckwheat scrub provides minimal habitat onsite. In addition, this species was not captured onsite during the 2008 focused SBKR small mammal trapping study conducted by LSA.

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			areas. Generally, exhibits a strong microhabitat affinity for moderately gravelly and rocky substrates, and, to a lesser extent, shrubby areas. Burrows can be found in sandy or gravely soils.		
Chaetodipus fallax pallidus	**pallid San Diego pocket mouse**	♦ SSC	Common resident of sandy herbaceous areas, usually in association with rocks or coarse gravel. Prefer low density to sparse vegetation communities with loose and sandy soils, which allow for easy burrowing. Pallid San Diego pocket mouse prefers gravely and rocky soil, preferring to burrow underneath rocks in coastal sage scrub vegetation.	**absent**	The project site is located outside of this species' known distribution and does not contain suitable sandy herbaceous areas, with rocks or coarse gravel to support this species. In addition, this species was not captured onsite during the 2008 focused SBKR small mammal trapping study conducted by LSA.
Perognathus longimembris brevinasus	**Los Angeles pocket mouse (LAPM)**	♦ SSC	This subspecies probably inhabits open ground of fine, sandy soils and may utilize these soil types for burrowing. It may be restricted to lower elevation grassland, alluvial sage scrub, and coastal sage scrub in areas with soils composed of fine sands. Pocket mice require soils that allow them to construct burrows 2-3 feet deep for escape from the desert heat and predators. It probably prefers sparsely vegetated habitats. Pocket mice usually avoid dense grass cover because of difficulty locomoting and finding seeds.	**absent**	The project site is located within this species' known distribution. Although isolated, the buckwheat scrub provides minimal habitat onsite. In addition, this species was not captured onsite during the 2008 focused SBKR small mammal trapping study conducted by LSA.
Neotoma lepida intermedia	**San Diego desert woodrat**	♦ SSC	Occurs in desert scrublands of California, but it also occurs in large numbers in other habitats right down to the Pacific Ocean. Suitable habitat for the San Diego desert woodrat includes chaparral, coastal sage scrub (including Riversidean and Diegan coastal sage scrub), oak woodlands, desert scrub, pinyon-juniper woodlands, juniper woodland and scrub, and Riversidean alluvial fan sage scrub. They require an abundant supply of downed wood, sticks, bark, and miscellaneous plant materials to build stick houses (dens/nests) called middens. Houses are constructed with wood, twigs, sticks, cactus parts, rocks, bones, urine, feces, leaves, seeds, and fruits, depending on availability of building materials. These dens are above ground and are associated with rock outcrops, boulders, cactus patches and dense undergrowth. San Diego desert woodrats commonly select large cactus patches and *Yucca* plants in which to establish their stick nests. If not within clumps of these plants, woodrats often construct their nests in crevices in rocky outcrops or in the cracks between boulders where succulent plant material is available nearby as a combined food and water source. Houses are used for nesting, food caching, and predator escape. They are highly arboreal, and thick-leaved trees and shrubs are important habitat components. They typically avoid open areas that do not provide adequate refuge sites.	**absent**	The project site is located within this species' known distribution. Although isolated, the buckwheat scrub provides minimal habitat onsite. The project site does not contain suitable microhabitats (rock outcrops, boulders, cactus patches and dense undergrowth) for nest construction to support this species. No woodrat nests/middens were observed during the surveys. In addition, this species was not captured onsite during the 2008 focused SBKR small mammal trapping study conducted by LSA.
Onychomys torridus ramona	**southern grasshopper mouse (=Ramona grasshopper mouse)**	♦ SSC	Found among scattered brush on flat, sandy, gravelly, valley floor habitats. This taxon probably inhabits a variety of low, open and semi-open scrub habitats including coastal sage scrub, mixed chaparral, low sagebrush, riparian scrub, and annual grassland with scattered shrubs. Low to moderate shrub cover is preferred. They require relatively large expanses of habitat for viable populations. They nest in burrows, and while they may dig their own burrows in sandy or other friable substrates, they often use burrows dug by other rodents. Frequents scrub habitats with friable soils for digging.	**absent**	The project site is located within this species' known distribution. Although isolated, the buckwheat scrub provides minimal habitat onsite. In addition, this species was not captured onsite during the 2008 focused SBKR small mammal trapping study conducted by LSA.
Lepus californicus bennettii	**San Diego black-tailed jackrabbit**	♦ SSC	The San Diego black-tailed jackrabbit occupies many diverse habitats but is primarily found in arid regions supporting shortgrass habitats. They occur in open habitats with unobscured visibility, primarily including grasslands, coastal sage scrub, Riversidean sage scrub, Riversidean alluvial fan sage scrub, chaparral, Great Basin sagebrush, desert scrub, playas, juniper woodlands, oak woodlands, southern willow scrub, disturbed habitats and agriculture. Jackrabbits typically are not found in high grass or dense brush where it is difficult for them to locomote, and the openness of open scrub habitat probably is preferred over dense scrub areas. Jackrabbits are common in grasslands that are overgrazed by cattle and they are well adapted to using low-intensity agricultural habitats. They are usually not found in high mountain forests. They typically do not construct burrows or dens. During the day, they will lie quietly and motionless in a shallow scrape beneath a bush or beside some other type of cover. They are primarily nocturnal and have no need to stay close to dense cover, and commonly feed in the open.	**no**	The project site is located within this species' known distribution; however, it does not contain suitable open habitats to support this species.
Eumops perotis californicus	**western mastiff bat**	♦ SSC	In California, it is most frequently encountered in broad open areas. Its foraging habitat includes desert scrub, desert washes, flood plains, chaparral, coastal sage scrub, oak woodland, open ponderosa pine forest, grassland, and agricultural areas. The species is present only where there are significant rock features offering suitable roosting habitat. It is primarily a crevice dwelling species. They primarily roost in crevices in vertical cliffs, usually granite or consolidated sandstone, and in broken terrain with exposed rock faces. They may also be found occasionally in high buildings, trees, and tunnels. Roost sites may change from season to season. Because of its large size, this bat needs vertical faces to drop from in order to take flight (about 10 feet). It does not undergo prolonged hibernation and it does not migrate.	**no**	The project site is located within this bat's known distribution; however, it does not contain suitable and adequate foraging, roosting, or breeding habitats that could support this bat onsite.

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Nyctinomops macrotis	**big free-tailed bat**	♦ SSC	This species is believed to be a seasonal migrant. This species appears to be mainly an inhabitant of rugged, rocky habitats/canyons in arid landscapes. It has been found in a variety of plant associations, including desert shrub, woodlands, and evergreen forests. It roosts mainly in the crevices of rocks in cliff situations, although there is some documentation of roosting in buildings, caves, and tree cavities. Small nursery colonies are formed in rocky crevices in high cliffs.	**no**	Although this species may occur almost anywhere in the state, it is likely very rare, and it probably does not breed in California. The project site does not contain suitable foraging habitats and roosting sites free from human disturbance to support this species.
Lasiurus xanthinus	**western yellow bat**	♦ SSC	This species occurs year-round in California and has been found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. They roost and feed in, and near, palm oases and riparian habitats. Yellow bats are found in desert regions, where they show an association with palms and other desert riparian habitats. They are known to occur in a number of palm oases, but are also believed to be expanding their range with the increased usage of ornamental palms in landscaping. In California, this foliage-roosting species appears to roost exclusively in the skirts of palm trees, and to be limited in its distribution by the availability of palm habitat. This species is thought to be non-colonial, although aggregations of up to 15 have been found in the same roost site. Individuals usually roost in trees, hanging from the underside of a leaf. At least some individuals or populations may be migratory. Yellow bats probably do not hibernate.	**no**	The project site is located within this bat's known distribution; however, it does not contain suitable foraging desert habitats and roosting sites (palms trees) to support this species.
Antrozous pallidus	**pallid bat**	♦ SSC	In California, the species occurs throughout the state in a variety of habitats including desert, oak woodland, coastal redwood and giant sequoia forests, coniferous forests, non-coniferous woodlands, brushy terrain, rocky canyons, open farmland, extending up to 9,810 feet elevation in the Sierra Nevada. Pallid bats are colonial, with a typical colony containing 30-70 animals, although colonies of several hundred have been found. They may use a variety of roosting habitats. Common roost sites are crevices in rocky outcrops and cliffs, old buildings, bridges, caves, mines, and live and hollow trees (snags). Pallid bats are also one of the species most predictably associated with bridges. They sometimes roost in expansion joints by day, but more commonly are found night roosting, particularly under concrete girder structures. They have different day and night roost sites. Pallid bats are not known to migrate and are presumed to spend the winter hibernating close to their summer roosts.	**no**	The project site is located within this bat's known distribution; however, it does not contain suitable foraging habitats and roosting sites to support this species.
Ovis canadensis nelsoni	**desert bighorn sheep (=Nelson's bighorn sheep)**	♦ fully protected	They inhabit desert mountains, which are arid, rocky, sparsely vegetated lands. Within the desert, preferred habitat of bighorn is primarily on or near mountainous terrain above the desert floor. They graze along open slopes, washes and alluvial fans where they can see approaching predators, while steep canyons and rock bluffs serve as escape terrain. They avoid higher elevations, likely because of decreased visibility associated with dense vegetation, such as chaparral. Bighorns prefer open areas of low-growing vegetation for feeding, with proximity to steep, rugged terrain for escape, lambing, bedding, an adequate source of water, and travel routes linking these areas. Low rolling terrain and washes seasonally provide an important source of high-quality forage, with a greater diversity of browse species than in steeper terrain. Areas of flat terrain, such as valley floors, serve as important linkages between neighboring mountainous regions, thereby allowing sheep temporary access to resources (forage, water, or lambing habitat) in neighboring areas, and allowing gene flow to occur between subpopulations. The desert bighorns need water about every three days in the summer, drinking from springs, water in depressions, and wildlife refuge artificial water holes.	**no**	The project site is located outside of this species' known distribution and does not contain suitable open desert habitats with areas of low-growing vegetation for feeding; appropriate escape terrain; suitable lambing and bedding sites; and an adequate source of water to support this species.

Legend and Notes

Notes and Abbreviations:

- **amsl** = above mean sea level.
- **DPS = distinct population segment**: a DPS, or a distinct population segment, is a vertebrate population or group of populations that is discrete from other populations of the species and significant in relation to the entire species. The ESA provides for listing species, subspecies, or distinct population segments of vertebrate species.
- **ESU = evolutionarily significant unit**: a Pacific salmon population or group of populations that is substantially reproductively isolated from other conspecific populations and that represents an important component of the evolutionary legacy of the species.
- ***Season of Concern**: given the distribution and abundance of many taxa in California vary greatly seasonally, the "Season of Concern" corresponds to the season, or seasons, for which a specific taxon is ranked for conservation priority on the California Bird Species of Special Concern list.

Federal Endangered Species Act (ESA) Listing Codes:

The ESA is administered by the USFWS and NMFS. The USFWS has primary responsibility for terrestrial and freshwater organisms, while the responsibilities of NMFS are mainly marine wildlife such as whales and anadromous fish such as salmon. For the purposes of the ESA, Congress defined species to include subspecies, varieties, and, for vertebrates, distinct population segments. The official federal listing of Endangered and Threatened animals is published in 50 CFR § 17.11.

- **FE = federally listed as endangered:** any species of plant or animal that is in danger of extinction throughout all or a significant portion of their range.
- **FT = federally listed as threatened:** any species of plant or animal that is considered likely to become endangered throughout all or a significant portion of its range within the foreseeable future.

Scientific Name (=Synonym)	Common Name (=Synonym)	Status in California	General Habitat Description in California	Potential to Use the Site	Rational

California Endangered Species Act (CESA) Listing Codes:
The CESA is administered by CDFW. The official listing of *Animals of California Declared To Be Endangered or Threatened* is contained in the California Code of Regulations, Title 14, § 670.5. Species and subspecies of California native animals are declared to be endangered or threatened as defined by §§ 2062 and 2067 of the Fish and Game Code. The CESA does not allow listing of insects.

- **SE = state-listed as endangered:** "endangered species" means a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease (Fish and Game Code § 2062).
- **ST = state-listed as threatened:** "threatened species" means a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts (Fish and Game Code § 2067).
- **SCE = state candidate for listing as endangered:** a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed published in the California Regulatory Notice Register as being under review by CDFW for addition to the list of endangered species, or a species for which the Fish and Game Commission has published a notice of proposed regulation to add the species to the list (Fish and Game Code § 2068).

California Department of Fish and Wildlife (CDFW) Designations:
For some wildlife species, the CNDDB is only concerned with specific portions of the life history, such as roosts, rookeries, or nesting colonies. For many species of birds, the primary emphasis is on the breeding population in California. For some species which do not breed in California but winter here, emphasis is on wintering range. The SSC designation thus may include a comment regarding the specific protection provided such as nesting or wintering

- **SSC = species of special concern:** a species of special concern is a species, subspecies, or distinct population of an animal (fish, amphibian, reptile, bird and mammal) native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria: is extirpated from the state or, in the case of birds, in its primary seasonal or breeding role; is listed as federally-, but not state-, threatened or endangered; meets the state definition of threatened or endangered, but has not formally been listed; is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for state threatened or endangered status; has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for state threatened or endangered status.
- **Fully protected:** fully protected animal species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock. Lists were created for fish (Fish and Game Code § 5515), amphibians and reptiles (Fish and Game Code § 5050), birds (Fish and Game Code § 3511) and mammals (Fish and Game Code § 4700).
- **WL = watch list:** this list includes birds identified in the *California Bird Species of Special Concern* (Shuford and Gardali, 2008) report and are not on the current CDFW species of special concern list, but were on previous lists and they have not been state-listed under CESA; were previously state or federally listed and now are on neither list; or are on the list of fully protected species.

United States Fish and Wildlife Service (USFWS) Designations:

- **BCC = bird of conservation concern:** a bird of conservation concern is listed in the USFWS' 2008 *Birds of Conservation Concern* report. The report identifies species, subspecies, and populations of all migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that, without additional conservation actions, are likely to become candidates for listing under the ESA. While all of the bird species included in the report is priorities for conservation action, the list makes no finding with regard to whether they warrant consideration for ESA listing.

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- USFWS' Species Accounts for individual species.
- NCCP/HCP management plans.
- In-house data and records.

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Invertebrates

- Butterflies and Moths of North America: www.butterfliesandmoths.org/.
- CDFW's Special Status Invertebrate Species Accounts: www.wildlife.ca.gov/Data/CNDDB/Invertebrates.
- Xerces Society for Invertebrate Conservation: www.xerces.org/#.

Fish

- American Fisheries Society: www.fisheries.org/.
- CalFish: www.calfish.org/.
- CDFW Inland Sport Fishing: www.wildlife.ca.gov/Fishing/Inland.
- UC Davis Center for Watershed Sciences - Fish Data: www.pisces.ucdavis.edu/fish.
- UC Davis Division of Agriculture and Natural Resources - California Fish Website: www.calfish.ucdavis.edu/species/.
- USGS' American Fisheries Society Imperiled Freshwater and Diadromous Fishes of North America: www.usgs.gov/centers/wetland-and-aquatic-research-center-warc/science/american-fisheries-society-imperiled?qt-science_center_objects=0#qt-science_center_objects.

Amphibians and Reptiles

- Amphibiweb: www.amphibiaweb.org/search/index.html.
- California Herps: www.californiaherps.com.
- Center for North American Herpetology: www.cnah.org/.
- Society for the Study of Amphibians and Reptiles: www.ssarherps.org/.
- USGS' A Field Guide to the Reptiles and Amphibians of Coastal Southern California: www.werc.usgs.gov/Project.aspx?ProjectID=75.

Birds

- American Ornithologists' Union: www.americanornithology.org.
- Audubon Guide to North American Birds: www.audubon.org/bird-guide?search_api_views_fulltext=abeandfield_bird_family_tid=Allandfield_bird_region_tid=All.
- California Partners in Flight: www.prbo.org/calpif/.
- The Cornell Lab of Ornithology Birds of North America: birdsna.org/Species-Account/bna/home.

Mammals

- American Society of Mammologists: www.mammalsociety.org/.
- Mammals' Planet: www.planet-mammiferes.org/drupal/en/node/20.

Wildlife

- CDFW's California Wildlife Habitat Relationships - Online Life History Accounts and Range Maps; www.wildlife.ca.gov/Data/CWHR/Life-History-and-Range.
- NatureServe: www.natureserve.org/.
- NOAA Fisheries West Coast Region: www.westcoast.fisheries.noaa.gov/.

ATTACHMENT 11

NRCS SOILS REPORT

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United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for San Bernardino County Southwestern Part, California

July 10, 2019

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Bernardino County Southwestern Part, California
Survey Area Data: Version 10, Sep 12, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 10, 2018—Jun 5, 2018

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND

MAP INFORMATION

imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
TuB	Tujunga loamy sand, 0 to 5 percent slopes	42.3	41.7%
TvC	Tujunga gravelly loamy sand, 0 to 9 percent slopes	59.1	58.3%
Totals for Area of Interest		**101.5**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

San Bernardino County Southwestern Part, California

TuB—Tujunga loamy sand, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2sx6y
Elevation: 650 to 3,110 feet
Mean annual precipitation: 10 to 25 inches
Mean annual air temperature: 62 to 65 degrees F
Frost-free period: 325 to 365 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Tujunga, loamy sand, and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tujunga, Loamy Sand

Setting

Landform: Alluvial fans
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Typical profile

A - 0 to 6 inches: loamy sand
C1 - 6 to 18 inches: loamy sand
C2 - 18 to 60 inches: loamy sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: None
Available water storage in profile: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Tujunga, gravelly loamy sand

Percent of map unit: 10 percent
Landform: Alluvial fans
Landform position (three-dimensional): Tread
Down-slope shape: Linear

Across-slope shape: Linear
Hydric soil rating: No

Hanford, sandy loam

Percent of map unit: 5 percent
Landform: Alluvial fans
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

TvC—Tujunga gravelly loamy sand, 0 to 9 percent slopes

Map Unit Setting

National map unit symbol: hcl2
Elevation: 10 to 1,500 feet
Mean annual precipitation: 10 to 25 inches
Mean annual air temperature: 59 to 64 degrees F
Frost-free period: 250 to 350 days
Farmland classification: Not prime farmland

Map Unit Composition

Tujunga and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tujunga

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Typical profile

H1 - 0 to 36 inches: gravelly loamy sand
H2 - 36 to 60 inches: gravelly sand

Properties and qualities

Slope: 0 to 9 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: None
Available water storage in profile: Low (about 3.8 inches)

Interpretive groups

Land capability classification (irrigated): 4s
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Unnamed

Percent of map unit: 5 percent
Landform: Drainageways
Hydric soil rating: Yes

Soboba, gravelly loamy sand

Percent of map unit: 5 percent
Hydric soil rating: No

Delhi, fine sand

Percent of map unit: 5 percent
Hydric soil rating: No

ATTACHMENT 12

PLANT AND WILDLIFE SPECIES RECORDED DURING THE FIELD SURVEYS

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Table 1, *Plant Species Observed during the Field Surveys*, contains the list of vascular plant taxa recorded during the 2007, 2008, and 2019 biological surveys conducted within the Phase II project site. Ornamental and landscaped vegetation associated with the development are not included. Plant nomenclature and taxonomic order is based on *The Jepson Manual: Vascular Plants of California*, second Edition (Baldwin et al., 2012).

Table 1: Plant Species Observed during the Field Surveys

Scientific Name (=Synonym)	Common Name (=Synonym)	Non-Native	Cal-IPC Rating	Status in California
Eudicots				
Asteraceae (=Compositae): Sunflower Family				
Ambrosia acanthicarpa	annual bur ragweed (=annual bur-sage)			
Ambrosia psilostachya	western ragweed			
Artemisia californica	California sagebrush			
Baccharis salicifolia ssp. *salicifolia* (=*Baccharis salicifolia*)	mule fat (=seep willow)			
Centaurea melitensis	tocalote (=Malta star thistle)	X	Moderate	
Cirsium occidentale	western thistle (=cobwed thistle)			
Encelia farinosa	brittlebush (=incienso)			
Ericameria pinifolia	pine scented goldenbush (=pine-bush)			
Erigeron bonariensis (=*Conyza bonariensis*)	flax-leaved horseweed	X		
Erigeron canadensis (=*Conyza canadensis*)	horseweed (=mare's tail)			
Heterotheca grandiflora	telegraph weed			
Lactuca serriola	prickly lettuce (=wild lettuce)	X		
Lepidospartum squamatum	scale-broom			
Lessingia glandulifera var. *glandulifera*	valley lessingia			
Pseudognaphalium californicum (=*Gnaphalium californicum*)	California everlasting (=green everlasting, =ladies tobacco)			
Pseudognaphalium stramineum (=*Gnaphalium stramineum*)	cotton-batting plant			
Senecio flaccidus	threadleaf ragwort (=shrubby butterweed)			
Boraginaceae: Borage or Waterleaf Family				
Amsinckia sp.	fiddleneck			
Cryptantha intermedia	common cryptantha			
Eriodictyon trichocalyx	hairy yerba santa (=yerba santa)			
Phacelia distans	common phacelia			
Brassicaceae (=Cruciferae): Mustard Family				
Hirschfeldia incana (=*Brassica geniculata*)	short-podded mustard (=Mediterranean mustard)	X	Moderate	
Sisymbrium irio	London rocket	X	Moderate	

Scientific Name (=Synonym)	Common Name (=Synonym)	Non-Native	Cal-IPC Rating	Status in California
Cactaceae: Cactus Family				
Opuntia basilaris	beavertail cactus			
Opuntia littoralis	coastal prickly pear			
Euphorbiaceae: Spurge Family				
Croton californicus	California croton			
Euphorbia sp.				
Fabaceae (=Leguminosae): Legume Family				
Acmispon americanus var. *americanus* (=*Lotus purshianus*, =*Lotus unifoliatus*)	Spanish lotus (=Spanish clover)			
Acmispon glaber (=*Lotus scoparius*)	deerweed (=California broom)			
Lamiaceae (=Labiatae): Mint Family				
Marrubium vulgare	horehound	X	Limited	
Salvia apiana	white sage			
Salvia columbariae	chia			
Onagraceae: Evening-Primrose Family				
Eulobus californicus (=*Camissonia californica*)	mustard evening primrose (=California primrose)			
Plantaginaceae: Plantain Family				
Penstemon spectabilis	showy penstemon			
Polemoniaceae: Phlox Family				
Eriastrum sapphirinum	sapphire woollystar (=sapphire eriastrum)			
Polygonaceae: Buckwheat Family				
Eriogonum fasciculatum	California buckwheat			
Eriogonum gracile	slender buckwheat			
Salicaceae: Willow Family				
Populus nigra	Lombardy poplar	X		
Salix lasiolepis	arroyo willow			
Solanaceae: Nightshade Family				
Nicotiana glauca	tree tobacco	X	Moderate	
Nicotiana quadrivalvis	Indian tobacco (=coyote tobacco, =wild tobacco)			
Vitaceae: Grape Family				
Vitis vinifera	cultivated grape (=wine grape)	X		
Monocots				
Agavaceae: Century Plant Family				
Hesperoyucca whipplei (=*Yucca whipplei*)	our lord's candle (=chaparral yucca)			

Scientific Name (=Synonym)	Common Name (=Synonym)	Non-Native	Cal-IPC Rating	Status in California
Poaceae: Grass Family				
Avena fatua	wild oat	X	Moderate	
Schismus barbatus	common Mediterranean grass (=father of the earth)	X	Limited	

Legend and Notes

- **sp.** = plant only identified to genus.
- **Non-native** = taxa not native to California.

California Invasive Plant Council (Cal-IPC) Ratings: Cal-IPC is a nonprofit organization that is dedicated to protecting California's lands and waters from ecologically-damaging invasive plants. Cal-IPC maintains the California Invasive Plant Inventory, a comprehensive list of invasive plants based on ecological impacts.

- **Moderate** = these species have substantial and apparent-but generally not severe-ecological impacts on physically processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.
- **Limited** = these species are invasive but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic.

Table 2, *Wildlife Species Observed during the Field Surveys*, contains the list of wildlife species observed and/or detected during the 2007, 2008, and 2019 biological surveys conducted within the Phase II project site.

Table 2: Wildlife Species Observed during the Field Surveys

Scientific Name (=Synonym)	Common Name (=Synonym)	Non-Native	Status in California
Reptiles			
Phrynosoma blainvillii	Blainville's horned lizard (=coast horned lizard)		♦ SSC
Uta stansburiana	common side-blotched lizard		
Arizona elegans occidentalis	California glossy snake		♦ SSC
Birds			
Zenaida macroura	mourning dove		
Chordeiles acutipennis	lesser nighthawk		
Archilochus alexandri	black-chinned hummingbird		
Calypte anna	Anna's hummingbird		
Selasphorus rufus	rufous hummingbird		♦ BCC
Charadrius vociferus	killdeer		
Larus californicus	California gull		♦ WL
Accipiter cooperii	Cooper's hawk		♦ WL
Buteo jamaicensis	red-tailed hawk		
Colaptes auratus	northern flicker		
Falco sparverius	American kestrel		
Sayornis nigricans	black phoebe		
Sayornis saya	Say's phoebe		
Tyrannus vociferans	Cassin's kingbird		
Tyrannus verticalis	western kingbird		
Aphelocoma californica	California scrub-jay (=western scrub-jay)		
Corvus brachyrhynchos	American crow		
Corvus corax	common raven		
Stelgidopteryx serripennis	northern rough-winged swallow		
Hirundo rustica	barn swallow		
Psaltriparus minimus	bushtit		
Thryomanes bewickii	Bewick's wren		
Polioptila caerulea	blue-gray gnatcatcher		
Regulus calendula	ruby-crowned kinglet		

Scientific Name (=Synonym)	Common Name (=Synonym)	Non-Native	Status in California
Toxostoma redivivum	California thrasher		
Mimus polyglottos	northern mockingbird		
Sturnus vulgaris	European starling	X	
Passer domesticus	house sparrow	X	
Haemorhous mexicanus	house finch		
Spinus psaltria	lesser goldfinch		
Setophaga coronata	yellow-rumped warbler		
Melozone crissalis	California towhee		
Melospiza melodia	song sparrow		
Zonotrichia leucophrys	white-crowned sparrow		
Sturnella neglecta	western meadowlark		
Mammals			
Otospermophilus beecheyi (=*Spermophilus beecheyi*)	California ground squirrel		
Dipodomys agilis	Pacific kangaroo rat (=agile kangaroo rat)		
Dipodomys simulans	San Diego kangaroo rat (=Dulzura kangaroo rat)		
Peromyscus maniculatus	deer mouse (=North American deermouse)		
Sylvilagus audubonii	Audubon's cottontail (=desert cottontail)		
Canis latrans	coyote		

Legend

California Department of Fish and Wildlife (CDFW) Designations:

- **SSC = species of special concern:** a species of special concern is a species, subspecies, or distinct population of an animal (fish, amphibian, reptile, bird and mammal) native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria: is extirpated from the state or, in the case of birds, in its primary seasonal or breeding role; is listed as federally-, but not state-, threatened or endangered; meets the state definition of threatened or endangered, but has not formally been listed; is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for state threatened or endangered status; has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for state threatened or endangered status.

- **WL = watch list:** this list includes birds identified in the *California Bird Species of Special Concern* (Shuford and Gardali, 2008) report and are not on the current CDFW species of special concern list, but were on previous lists and they have not been state-listed under CESA; were previously state or federally listed and now are on neither list; or are on the list of fully protected species.

United States Fish and Wildlife Service (USFWS) Designations:

- **BCC = bird of conservation concern:** a bird of conservation concern is listed in the USFWS' 2008 *Birds of Conservation Concern* report. The report identifies species, subspecies, and populations of all migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered)

Scientific Name (=Synonym)	Common Name (=Synonym)	Non-Native	Status in California
that, without additional conservation actions, are likely to become candidates for listing under the ESA. While all of the bird species included in the report is priorities for conservation action, the list makes no finding with regard to whether they warrant consideration for ESA listing.			

APPENDIX D Cultural Resources Reports

Cultural Resources Investigation
for the
City of Rancho Cucamonga
Rancho Cucamonga Central Park Project
San Bernardino County, California

Prepared for:

City of Rancho Cucamonga
Rancho Cucamonga, California

Prepared by:

Tetra Tech, Inc.
2969 Prospect Park Dr. #100
Rancho Cordova, CA 95670

Author:
Jenna Farrell, Principal Investigator

February 2020

ABSTRACT

In 1984, the city of Rancho Cucamonga (City) Council acquired approximately 103.4 gross acres of land located at the northwest corner of Milliken Avenue and Base Line Road for a park (named Central Park) that would serve the whole City and public. Central Park was placed into the City's General Plan and the property was reserved for future park purposes. The City's Master Plan contained three major use areas or elements: the OmniCenter, Sports Complex (non-sports fields), and Park and Open Space. In 2002, funding was received for the development of approximately 30 acres for the Goldy S. Lewis Community Center and James L. Brulte Senior Center, and the Central Park Playground with two children's play equipment areas.

In 2017, the Rancho Cucamonga City Council approved efforts for a Central Park Master Plan Update. This update defines the development of the remaining Central Park space and identifies smaller (3-10 acres), buildable sections comprised of financially responsible amenities, as when funding becomes available, park development could continue within the framework of a comprehensive community inspired vision.

The purpose of this cultural resource investigation was to determine the presence or absence of historic resources within the remaining undeveloped areas of Central Park, approximately 73 acres and area of potential significant effects (APSE). The City is the lead agency under the California Environmental Quality Act.

A cultural resource literature review through the California Historical Resources Information Center's South Central Coastal Information Center (SCCIC), Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search, and pedestrian archaeological survey was conducted for the entire undeveloped portion of the Central Park property (approximately 73 acres).

The records search was conducted of the APSE and surrounding areas via the SCCIC, Division of Anthropology, California State University, Fullerton, of the California Historical Resources Information System on July 2019 (Records Search File No.: 20318.6401). The SCCIC search found no previously recorded archaeological sites within the APSE.

The NAHC was contacted by email on June 6, 2019 with a request for a SLF search regarding the proposed Project APSE and study area. The NAHC responded on June 21, 2019 that a SLF search had been completed regarding the APSE with negative results. No Tribal Cultural Resources were identified in the APSE by that search. Tribal consultation under Assembly Bill 52 was conducted by the City and is not addressed in this report.

On July 17, 2019, Tetra Tech, Inc.'s archaeologists conducted a pedestrian field survey of the entire APSE. One historic cultural resource, RCCP-01: a vineyard remnant, was observed within the APSE and is recommended as not eligible to the California Register of Historical Resources.

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ABBREVIATIONS AND ACRONYMS

APSE	area of potential significant effect
AB52	Assembly Bill 52
BP	Before Present
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CHRIS	California Historical Resource Information System
City	City of Rancho Cucamonga
CRHR	California Register of Historical Resources
DPR	Department of Parks and Recreation
msl	mean sea level
NAHC	Native American Heritage Commission
NRHP	National Register of Historic Places
OHP	California Office of Historic Preservation
PRC	Public Resource Code
Project	Rancho Cucamonga Central Park Project
SCCIC	South Central Coastal Information Center
SLF	Sacred Lands File
Tetra Tech	Tetra Tech, Inc.
The Act	California Native American Historical, Cultural, and Sacred Sites Act
USGS	United States Geological Survey

1.0 INTRODUCTION

In 1984, the city of Rancho Cucamonga (City) Council acquired approximately 103.4 gross acres of land northwest of the corner of Milliken Avenue and Base Line Road for a park that would serve the whole City and become a major public resource on the order of other great parks in other major cities. A Central Park Master Plan was developed in the late 1980s, however, no revenue was available at the time for plan development. In the early 2000s, the Goldy S. Lewis Community Center and James L. Brulte Senior Center and the Central Park Playground were developed on 30 acres of the land. Negative economic conditions had not allowed for the development of the remainder of the park.

In 2017, the Rancho Cucamonga City Council approved efforts for a Central Park Master Plan Update. As part of the Central Park Master Plan Update, the City conducted an extensive community outreach and public input process. This outreach process was intended to highlight the historical design and development efforts to date on Central Park and to seek public input for its future and ultimate development. A combination of local community workshops, online surveys, social networking, and a live Facebook broadcast were conducted to develop the resulting Central Park Master Plan Update reVISION. This update defines the development of the remaining Central Park space and identifies smaller (3-10 acres), buildable sections comprised of financially responsible amenities, as when funding becomes available, park development could continue within the framework of a comprehensive community inspired vision.

The purpose of this cultural resource investigation was to determine the presence or absence of historic resources within the remaining undeveloped areas of Rancho Cucamonga Central Park Project (Project), approximately 73 acres (also area of potential significant effects: APSE). The City is the lead agency under the California Environmental Quality Act (CEQA). Note: a separate memo was prepared for the City for 11 of the 73 acres on August 14, 2019, however this report addresses the entire 73 acres.

The proposed Project site is located in the city of Rancho Cucamonga, in the southwestern most portion of San Bernardino County, within Section 36 of Township 1 South, Range 7 West, on the Cucamonga Peak, California, U.S. Geological Survey (USGS) 7.5-minute Quadrangle Map (see Figure 1-1). Central Park is located at 11200 Base Line Road (northeast corner), and is bounded by Milliken Avenue to the east, Base Line Road to the south, Deer Creek Channel to the west, and the Pacific Electric Trail (paved pedestrian/bike trail) to the north.

A records search was conducted of the APSE and surrounding areas via the South Central Coastal Information Center, (SCCIC) Division of Anthropology, California State University, Fullerton, of the California Historical Resources Information System (CHRIS) on July 2019 (Records Search File No.: 20318.6401). The SCCIC search found no previously recorded archaeological sites within the APSE.

The Native American Heritage Commission was contacted by email on June 6, 2019 with a request for a Sacred Lands File search regarding the proposed Project APSE and study area. The Native American Heritage Commission responded on June 21, 2019 that a Sacred Lands File (SLF) search had been completed regarding the APSE with negative results. No Tribal Cultural Resources were identified in the APSE by that search. Tribal consultation under Assembly Bill 52 (AB52) was conducted by the City and is not addressed in this report.

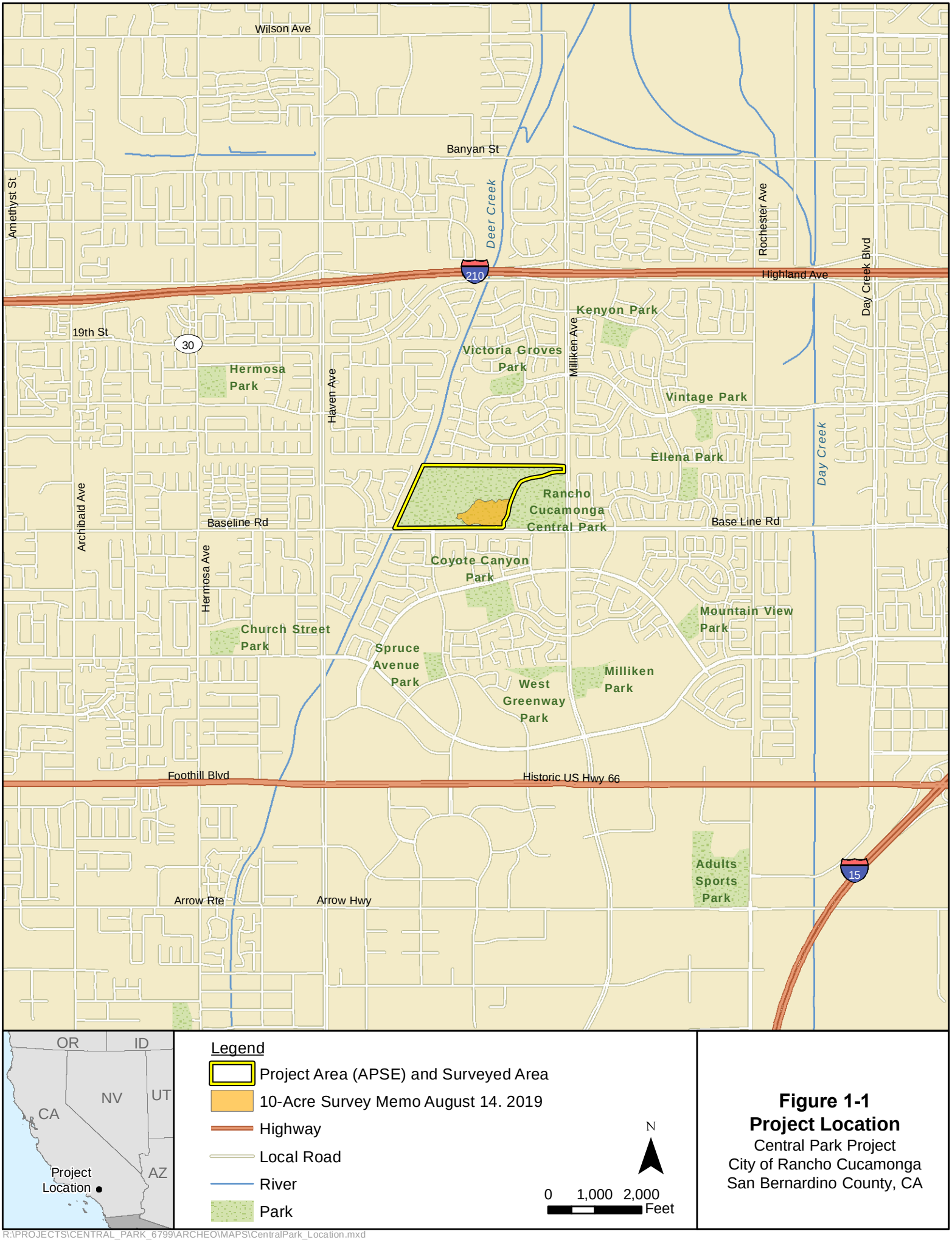

Figure 1-1
Project Location
Central Park Project
City of Rancho Cucamonga
San Bernardino County, CA

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On July 17, 2019, Tetra Tech, Inc.'s (Tetra Tech) archaeologists conducted a pedestrian field survey of the entire 73-acre APSE. One archaeological site was observed within the APSE.

1.1 AREA OF POTENTIAL SIGNIFICANT EFFECTS ON THE ENVIRONMENT

The APSE (or impacts) includes the horizontal and vertical areas of ground disturbance (see Figures 1-2 and 1-3). Ground disturbance would occur within the Project area, through construction activities such as grading, trenching, vegetation removal, etc. This horizontal disturbance includes a total of approximately 73 acres. Vertical ground disturbance would occur at depths ranging from 0 to 6 feet. Staging and laydown areas will be located within the 70 acres. Access to the Project will occur on existing paved roads (e.g. Baseline Road).

In summary, the Project's horizontal APSE is considered the Project area (70 acres). The vertical APSE is estimated to range from 0 to 6 feet below the ground surface.

1.2 REGULATORY COMPLIANCE

State

California Environmental Quality Act

CEQA (Section 21084.1) requires a lead agency determine whether a project could have a significant effect on historical resources and tribal cultural resources (Public Resource Code [PRC] Section 21074 [a][1][A]-[B]). Under the CEQA (Section 15064.5), a historic resource (e.g. building, structure, or archaeological resource) is listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR) or a local register or landmark, identified as significant in a historical resource survey (meeting the requirements of Section 5024.1(g) of the PRC), or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (Section 15064.5[a][3]). Under the California Code of Regulations (CCR), Title 14, Chapter 11.5, properties listed on or formally determined to be eligible for listing in the National Register of Historic Places (NRHP) are automatically eligible for listing in the CRHR. A resource is generally considered to be historically significant under CEQA if it meets the following criteria for listing in the CRHR (also see PRC Section 5024.1, Title 14 CCR, Section 5024.1):

- 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 (Criterion 1)
- Associated with the lives of persons important to local, California or national history (Criterion 2).
- 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 (Criterion 3).
- Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation (Criterion 4).

Legend

Project Area (APSE) and Surveyed Area

10-Acre Survey Memo August 14. 2019

N

0 200 400 Feet

Imagery Source: City of Rancho Cucamonga, 7/11/15

Figure 1-2
Project Area
Aerial Photograph

Central Park Project
City of Rancho Cucamonga
San Bernardino County, CA

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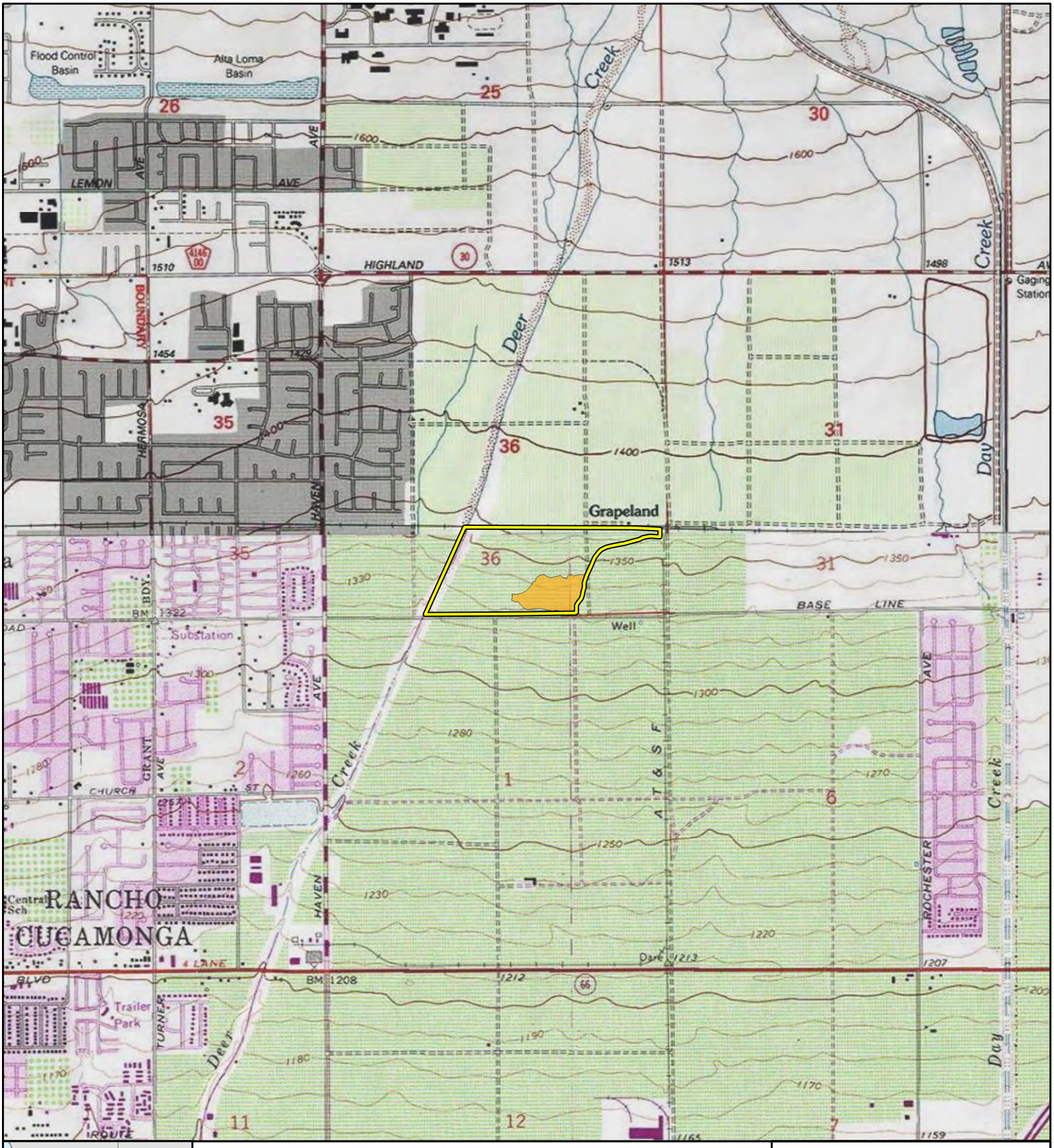

Legend

Project Area (APSE) and Surveyed Area

10-Acre Survey Memo August 14. 2019

N

USGS 7.5 Minute Quad: Guasti, California (1982)
PLSS: T1S R7W S36

0 1,000 2,000 Feet

Figure 1-3
Project Area
Topographic Map

Central Park Project
City of Rancho Cucamonga
San Bernardino County, CA

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California Health and Safety Code, Section 7052 and 7050.5

Section 7052 of the California Health and Safety Code states that it is a felony to disturb Native American burials. Section 7050.5 requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If determined to be Native American, the coroner must contact the California NAHC.

California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural, and Sacred Sites Act (the Act) applies to both state and private lands. The Act requires that upon discovery of human remains, construction or excavation activity cease and that the county coroner be notified. If the remains are Native American, the coroner must notify the NAHC. The NAHC will then identify and notify a most likely descendant. The Act stipulates the procedures the most likely descendant may follow for treating or disposing of the remains and associated grave goods.

California Public Resource Code, Section 5097

California PRC Section 5097 specifies the procedures to be followed in the event of an unexpected discovery of human remains on non-federal land. The disposition of Native American remains falls within the jurisdiction of the NAHC. Section 5097.5 of the Code states:

> "No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor."

As used in this section, "public lands" means lands owned by, or under the jurisdiction of the state or any city, county, district, authority, public corporation, or any agency thereof.

Assembly Bill 52

Under CEQA, AB52 requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. Consultations must include discussing the type of environmental review necessary, the significance of tribal cultural resources, and the significance of the project's impacts on the tribal cultural resources, and alternatives and mitigation measures recommended by the tribe. That consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project.

Local

City of Rancho Cucamonga

Municipal Code, Title 2, Chapter 2.24 Historic Preservation:

It is found that the protection, enhancement, perpetuation, and use of districts, sites, and structures of historic, cultural, and architectural significance located within the city are of aesthetic and economic value to the city. It is further found that cultural and historic resources contribute to

the city's character, atmosphere, and reputation, and that respecting the heritage of the city will enhance its economic, cultural, and aesthetic standing. Therefore, it is imperative that the city safeguards these irreplaceable resources for the welfare, enjoyment, and education of the present and future community.

A. The purpose of Chapter 2.24 is to:

1. Provide a mechanism to identify, designate, protect, preserve, enhance, and perpetuate those historic sites, structures, and objects that embody and reflect the city's aesthetic, cultural, architectural, and historic heritage;
2. Foster civic pride in the beauty and accomplishments represented by the city's historic landmarks and distinctive neighborhoods and recognize these resources as economic assets;
3. Encourage the protection, enhancement, appreciation, and use of structures of historical, cultural, architectural, community, or aesthetic value that have not been designated as historical resources but are deserving of recognition;
4. Enhance the quality of life and promote future economic development within the city by stabilizing and improving the aesthetic and economic value of such districts, sites, structures, and objects;
5. Encourage adaptive reuse of the city's historic resources by promoting public awareness of the value of rehabilitation, restoration, and maintenance of existing buildings as a means to conserve reusable material and energy resources;
6. Integrate historic preservation within the city's comprehensive development plan;
7. Promote and encourage historic preservation through continued private ownership and utilization of such sites, buildings, and other structures now so owned and used, to the extent that the objectives listed above can be attained under such policy. (Code 1980, § 2.24.010; Ord. No. 848, § 3(attach. A), 7-6-2011; Ord. No. 870 (Recodification), 2014)

2.0 SETTING

This section briefly describes the general environmental and cultural context, including a discussion of the prehistory, ethnology, and history of the Project vicinity.

2.1 NATURAL SETTING

The Project vicinity is within the north-central section of the Chino Valley, just south of the eastern San Gabriel Mountains, and at the upper elevations of the Los Angeles Basin. The Chino Valley is bound by the San Gabriel Mountains to the north, the San Bernardino Mountains to the northeast, the Puente Hills to the Southwest, and the Jurupa Hills to the southeast. The Project APSE is undeveloped and surrounded by a highly developed urban area with major roads, single-family residential homes, and commercial buildings. The APSE is bounded to the north by the Pacific Electric Inland Empire Trail (a multi-purpose pedestrian trail), to the east by Milliken Avenue, to the south by Base Line Road, and to the west by Deer Creek and Deer Creek Channel Trail (Deer Creek is a flood control channel and the trail is a Class I designated off-road bike path).

The Project is just south of the San Gabriel Mountains, within the broad Chino Valley, near the southern boundary of the Transverse Ranges geomorphic province, and within the northern portion of the Peninsular Ranges geomorphic province. The San Gabriel Mountains are located within the Transverse Ranges geomorphic province that is comprised of steeply sloped, east to west trending compressional (folding and faulting) mountain ranges and valleys (Kleinfelder West 2009). The San Gabriel Mountain range is comprised of igneous and metamorphic rocks that were formed over 65 million years ago and consist of steep and rugged topography, with peaks exceeding 9,000 feet above mean sea level (msl). Streams from the mountain range carried alluvial deposits down into the valley, with deposits consisting of coarse gravels to fine-grained sands deposited more than 10,000 years ago. These alluvial deposits can range from 500 to over 1,000 feet in depth. The Peninsular Range geomorphic province is comprised of northwest trending mountain ranges (including the San Bernardino Mountains northeast of the Project), valleys, and faults parallel and subparallel to the San Andreas Fault.

The Project APSE sits atop a series of coalescing alluvial fans derived from the San Gabriel Mountains (Kleinfelder West 2009). Deer Creek Wash (currently channelized) is to the west of the Project. Elevations in the APSE range from approximately 1,360 feet above msl on the north to 1,320 feet above msl on the south (Kleinfelder West 2009). Deposits encountered during soil investigations of the APSE were identified as late Holocene alluvial fan deposits of sand, silty sand, sandy gravel, and gravelly sand to bouldery alluvium (Morton et al. 2001; Kleinfelder West 2009).

Currently, the APSE consists of undeveloped desert land that has been subjected to a variety of direct and indirect human-related disturbances such as historical agricultural activities (e.g. row crop vineyard, grading, plowing), historic and modern extensive grading activities, adjacent development, mountain bike and walking trails, weed abatement, City storage activities, and local refuse dumping (e.g. domestic trash). Based on historic aerials, agricultural activities occurred onsite from 1938 and ceased between 1980 and 1994 when residential and commercial development began to increase in the area. In the decades since active agricultural activities

(i.e., grape vineyards) ceased, both invasive and native vegetation communities, typical of disturbed areas, have reestablished onsite and are subject to routine weed abatement activities.

Vegetation in the Project area consists of alluvial scrub habitat, such as white sage, sage brush, yerba Santa, buckwheat, annual grasses, junipers, and yuccas (Barbour and Wirka 1997).

2.2 CULTURAL CONTEXT

Prehistorically, the proposed Project region sustained varying levels of population density and utilization. The cultural chronology of human occupation is characterized by changing settlement and subsistence strategies in response to environmental conditions and available resources.

2.2.1 Prehistoric Context

The prehistory of southern California is defined by different temporal periods and cultural complexes based on cross-dating of distinct artifact types, cultural patterns, and radiocarbon dates, if available. The cultural chronology of human occupation is characterized by changing settlement and subsistence strategies typically in response to environmental conditions, available resources, and population fluctuations. There is no single cultural historical framework that encompasses the entire prehistoric record for southern California. Several key archaeologists have contributed to the development and chronological framework throughout regions of southern California such as Wallace (1955), Warren (1968), Warren and Crabtree (1986), Moratto (1984), Chartkoff and Chartkoff (1984), and several others. A generalized cultural sequence is provided below.

Paleo Indian Period/Terminal Pleistocene (13,000 BP to 9,000 BP)

There are very few recorded resources that represent this time in California. The lack of archaeological representation is often attributed to a mobile and low human population, the susceptibility of site to erosion (e.g. sea level rise, landslides, etc.), and alluvial and aeolian deposits (Byrd and Raab 2007). Available archaeological evidence suggested that Paleo-Indian groups were hunter and gatherers that were highly mobile and lived in temporary camps near fresh water sources (Sutton et. al. 2007). The Paleo-Indian period is generally characterized by small mobile groups that utilized tools such as large fluted points, crescents, domed scrapers, and flake tools of local chert. Groundstone is typically absent or rare.

The Arlington Springs (CA-SRI-173) and the Daisy Cave site (CA-SMI-261) provide evidence of a late Pleistocene occupation along the southern California Pacific Coast (Wagusepack 2007; Erlandson 1994; Erlandson et al. 2008). The Arlington Springs site identified on Santa Rosa Island yielded human remains of one individual that date to approximately 13,000 Before Present (BP), no other artifacts were recovered (Erlandson et al. 2008). The Daisy Cave site on San Miguel Island was first occupied around 11,500 BP, is associated with a small rock shelter, and yielded expedient flake tools and faunal remains that include shellfish (red abalone, black turban), and a few marine fish bones (Torben et al. 2001; Erlandson et al. 2008). The Arlington Springs and Daisy Cave sites represent a late Pleistocene maritime adaption near the mainland, suggesting people also used boat technology (Erlandson et al. 2007). Inland, this period is presented by the C.W. Harris site (CA-SDI-149) identified by Claude Warren (1968) in San Diego County. Warren and Ore (2011) suggest occupation at the C.W. Harris site occurred approximately 11,222 to 8,540 BP (based on radiocarbon dates). The C.W. Harris site artifact assemblage was termed the

San Dieguito Complex and yielded a combination of percussion and pressure flaking techniques for bifaces, projectile points, crescents, and other formal flake tools (Warren and Ore 2011). Warren et al. (2004) suggest that this complex is derived from desert cultures of the Great Basin to the east.

Archaic Period (9,000 to 1,500 BP)

The Archaic Period (similar to Millingstone Horizon, Encinitas tradition, La Jolla Complex) is characterized by a transition from large projectile point tool use to a period of extensive millingstone and core tool use. The artifact assemblage typically consists of millingstones (manos or handstones, and metates), hammerstones, crude scrapers, cores, and other flaked-based stone tools. Manos and metates are thought to have been used to process small, hard seeds (and possibly nut) associated with the local vegetation communities (Glassow et al. 2007). Faunal assemblages from sites occupied along or near the southern California coast (bays, lagoons, and estuaries) suggest subsistence consisted primarily of shellfish and plant resources, with hunting and fishing secondary (Erlandson 1994; Byrd and Raab 2007). Interior sites also illustrate an emphasis on processing floral (e.g., nuts and seeds) resources and hunting of a variety of faunal resources (e.g., deer) (Byrd and Raab 2007; Glassow et al. 2007). Populations were semisedentary.

Late Prehistoric Period (1,500 BP to 1769)

The Late Prehistoric period is defined by regional local patterns of change, an increase of human population, resource intensification, sedentism, associated expansion of cultural practices, food storage, and the introduction of the bow and arrow (Bryd and Reddy 2002; Byrd and Raab 2007). Assemblages are typically characterized by small projectile points, pottery, mortar and pestle, shell fishhooks, the use of asphaltum, decorative shell and bone ornaments, and cremations. Bedrock mortars (a shallow-hole mortar[s] in bedrock) are also attributed to this period. Subsistence during this period varied dependent upon the local environment and foraging adaptions. Overexploitation of high-ranking subsistence resources by hunters and gatherers resulted in resource depression and the intensification of more labor intensive floral and faunal resources, such as small plant seeds (e.g., grasses), acorns, small shellfish, fish, and terrestrial animals (Byrd and Raab 2007). Settlement patterns during this period included large residential camps (e.g., villages) and smaller, subsistence related short term encampments.

2.2.2 Ethnographic Context

The Project area is within the traditional territorial boundaries of the Serrano and Gabrieliño (Tongva) people, that both spoke a variation of the Takic language subfamily (Bean and Smith 1978a, 1978b; Kroeber 1925; San Manuel Band of Mission Indians 2019). A brief ethnographic summary of both groups is provided below.

Serrano

The indigenous people of the San Bernardino highlands, passes, valleys and mountains, as well as the Mojave River and Desert areas, were identified as Serrano by the Spanish at their first contact. Prior to Spanish contact, the Serrano referred to themselves collectively as the Maara'yam (Alexandra McCleary, Personal Communication 2019). Within this collective, there were no less than a dozen Serrano clans co-existing in their shared ancestral lands, which comprise over 7 million acres. Serrano territory lies within the San Bernardino Mountains

extending east of Cajon Pass to Twentynine Palms, south to Yucaipa Valley, and north of Victorville (Bean and Smith 1978a). The topographically varied territory allowed Serrano populations to utilize a wide variety of ecological niches within the mountains, foothills, valley, and desert region. Oral histories, Spanish Mission and ethnographic records affiliate the Serrano with Rancho Cucamonga, where they lived alongside the Tongva (Gabrieliño). The Serrano village of Cucamobit was proximal to the Tongva village at Kuukamonga (Mertz 1976:7) and represented the wildcat moiety (Harrington 1934; Kroeber 1925:615).

Serrano people lived in patrilineal-based, band-level groups. Serrano were also exogamous, meaning that spouses had to be found outside the group. Specifically, spouses had to be located outside of one's own moiety—a two-part socio-religious structure. In Serrano culture, each clan, village, and person were assigned to either the Coyote or the Wildcat moiety. The Serrano occupied village-hamlets located mainly in the foothills and to a lesser extent along the desert floor, near water sources (Bean and Smith 1978a). Family homes were typically built with willow frames and yucca fibers or tule thatching, were circular and domed in shape, and called a Kiic (San Manuel Band of Mission Indians 2019; Bean and Smith 1978a). Other types of structures included ramadas (a wall-less structure with a willow thatched roof), large ceremonial houses, open semi-subterranean, earth covered sweathouses located near water, and granaries (Bean and Smith 1978a). Groups occupied a local clan-based territory, but also shared resources and visited with one another during large gathering/hunting forays and for the corporate practice of ceremonies. The division of labor was split between women gathering and men hunting and fishing (Bean and Smith 1978a; Warren 1964).

Serrano groups primarily hunted large and small terrestrial fauna and gathered flora resources for subsistence. Floral resources included items such as acorns, piñon nuts, and various roots, bulbs, shoots, and seeds (Bean and Smith 1978a). Faunal resources included deer, big horn sheep, pronghorn, cotton tail and jack rabbits, rodents, and quail. Technology (e.g. food processing tools, utilitarian tools and other purposes) included a variety of items made from stone, wood, bone, plant fibers, and shell such as highly decorated baskets, pottery, rabbit skin blankets, bone awls, bows and arrows, arrow straighteners, fire drills, stone pipes, stone tools (e.g. mortars, metates, flint knives), musical instruments, feathered costumes, mats, bags, storage pouches, cordage, and nets.

A key element of Serrano social organization is the idea of unity and reciprocity between the different clans, as well as with neighbors. Historically, the holding of rituals involved various forms of ritual reciprocity between a host clan and allied clans and guests that participated. This included assistance in carrying out ritual activities and exchanges of gifts and offerings. Trade and exchange played an important role in the Serrano economy. The foothill villages would trade goods, such as acorns and piñon nuts with the lower-elevation, desert floor villages for cacti fruits. This trade network would not only distribute the resources that were available within the different ecozones but would also integrate the economy (Bean and Smith 1978a; Cisneros 2012).

By 1834, most of the western Serrano population were removed from their aboriginal homelands/territory and integrated (or enslaved and forced) into the mission system (i.e., Mission San Gabriel). Today, most Serrano people live on either the federally recognized Morongo Band of Mission Indians (Banning, California) or San Manuel Band of Mission Indian (near Highland, California) reservations (Morongo Band of Mission Indians 2019; San Manuel Band of Mission

Indians 2019). The Serrano people continue traditional practices and a special connection to their aboriginal homelands.

Gabrieliño

The Project area is also within the ethnographic territory traditionally inhabited by the Gabrieliño (Tongva) people. The City is named after the Gabrieliño village of Kuukamonga, Corbonamga, or Cucamonga (Kroeber 1925; Merriam 1929) that was located within the extreme eastern area of the tribe's territory. The Gabrieliño occupied most of Los Angeles and Orange counties, including the watersheds of the Los Angeles, San Gabriel, and Santa Ana rivers, the Los Angeles basin to the Santa Monica and Santa Ana mountains, along the coast from Aliso Creek in the south to Topanga Creek in the north, and the islands of San Clemente, San Nicolas, and Santa Catalina (Bean and Smith 1978b; Kroeber 1925).

Gabrieliño was one of the Cupan languages in the Takic family, part of the Uto-Aztecan linguistic stock. There were up to six different dialects spoken throughout the Gabrieliño territory. The name Gabrieliño was derived from the San Gabriel Spanish mission located along the coast within Gabrieliño territory (Bean and Smith 1978b). Settlement patterns on the mainland were located near water sources and exhibit a logistical mobility with large villages and smaller satellite camps occupied seasonally. Structures were domed, circular structures with tule, fern, or Carrizo thatching and sweathouses were small, semicircular, earth-covered buildings (Bean and Smith 1978b). Although it is unknown exactly how many people inhabited the area, it is estimated that at least 50 to 100 villages occupied the mainland and coastal region, with village populations ranging from 50 to 200 individuals (Bean and Smith 1978b). The Gabrieliño were fisher-hunter-gatherers and exploited a variety of coastal bay, littoral, riverine, and inland floral and faunal resources available within the diverse ecological zones of their territory (i.e., coastal plain, rivers, foothills, mountains, and ocean). Subsistence resources included items such as several species of oak trees, grasses, sage bushes, rabbits, deer, fish, shellfish, and other terrestrial and marine mammals. The Gabrieliño would move seasonally throughout the region, between mountain and coastal locales, to hunt terrestrial and sea mammals and to collect terrestrial flora and intertidal species. In 1771, the San Gabriel mission was established, and the Spanish begin to integrate (or enslave and force) the Gabrieliño into the mission system. By 1800, much of the Gabrieliño people were missionized and many had succumbed to introduced diseases or conflicts or fled the area (Bean and Smith 1978b). Currently, the Gabrieliño-Tongva Tribe (historically known as the San Gabriel Band of Mission Indians) are a state of California recognized tribe and their tribal office is located in Los Angeles, California (Gabrieliño-Tongva Tribe 2019).

2.2.3 Historic Context

In California, the historic era is generally divided into three periods: the Spanish Mission Period (1769-1821), the Mexican Rancho Period (1821-1848), and the American Period (1848-present).

Spanish Mission Period (1769–1821)

The Spanish Mission Period is between 1769 and 1821 and designates the time when the Spanish established missions along the California coast. The first recorded contact between California natives and Europeans occurred in 1542, when the Ron Rodriguez Cabrillo expedition traveled along the west coast of California. Between the spring and summer of 1769, the Spanish founded 21 missions from San Diego north to the San Francisco bay area (Presidio). In 1771, Mission San

Gabriel Arcàngel (near present day Pasadena) was the first Spanish mission established west of the Project area. The San Gabriel Arcàngel mission's economic industry focused on cattle ranching and agriculture (Hoover et al. 1966). The mission complex and associated crops were decimated in 1776 due to a flash flood. In the same year, the mission was rebuilt north of the original location. The mission lands extended from the San Bernardino Valley (including Rancho Cucamonga) west to Los Angeles. The local Tongva population was forcibly indoctrinated into the mission system and were baptized at neophytes. The padres also used the Tongva as laborers for the mission's large tract of land, putting them to work with agricultural and ranching duties. The mental and physical health of the Tongva people suffered and many people died or tried to escape. In 1772, Alta California Governor Pedro Fages explored the Riverside and San Bernardino area in search of Native Americans that fled (or escaped) the San Gabriel mission (Beck and Haase 1974). The transition between the Spanish release of the northwest coast of California territory to Mexico occurred from 1821 to 1823.

Mexican Rancho Period (1821–1848)

The period from 1821 to 1848 is referred to here as the Mexican Rancho Period. In 1821, Mexico gained independence from Spain, and the secularization of the Missions was completed in 1834. It was during this period that large tracts of land called ranchos were granted by the various Mexican Governors of Alta California, usually to individuals who had worked in the service of the Mexican Government. In 1839, Tiburcio Tapia was awarded a larger tract of land named Rancho Cucamonga. The rancho was over 13,000 acres in size and encompassed parts of the modern cities of Upland and Rancho Cucamonga. Tapia built a large adobe atop Red Hill, raised cattle, planted a vineyard and built a small winery on his land. Today, California Historical Landmark No. 360, Tapia Adobe, commemorates the period of the rancho and Tapia's occupation of the area, the adobe no longer is extant (this landmark is 4 miles southwest of the Project). Tapia built his estate with the use of Native American (most likely local Tongva people) and Mexican laborers (Simmons 1946; Hoover et al. 1966; Chattel 2009). When Tapia no longer had use for the Native American laborers, he expelled them from the rancho property forcing them into the hills (Simmons 1946). This led to a series of cattle raids due to the lack of available land with subsistence resources. Tapia retaliated by enlisting a corps of soldiers to seek out the native people responsible for the raids and kill them, many native people lost their lives in the massacre (Simmons 1946). Tapia later relied on Mexican laborers to expand his vineyard and maintain the rancho.

Tapia's Rancho Cucamonga Winery was one of the first in Rancho Cucamonga and was expanded almost 100 years later as the Thomas Winery in 1933, and later the Filippi Vineyards winery in 1967 (Chattel 2009). California Historical Landmark No. 490, the Cucamonga Rancho Winery, commemorates Tapia's winery as "California's Oldest Winery" (the landmark is 4 miles southwest of the Project). Tapia died in 1845 and his daughter Maria Merced Tapia de Prudhomme and her husband Leon Victor Prudhomme inherited her father's land.

American Period (Post 1848)

Following the end of hostilities between Mexico and the United States in January 1847, the United States officially obtained California from Mexico through the Treaty of Guadalupe Hidalgo on February 2, 1848 (Hoover et al. 1966). In 1850, California was accepted into the Union of the United States, primarily due to the population increase created by the Gold Rush of 1849.

Agriculture and Winemaking 1858 to present day

In 1858, the Prudhomme's sold Rancho Cucamonga to John Rains, a rancher turned tycoon by means of marriage to a young wealthy heiress named Maria Merced Williams (Hoover et al. 1966; Emick 2011). The Rains built a new brick residence and various structures associated with agricultural and ranching endeavors. Rains planted an additional 160 acres of vineyard, expanded the winery, planted walnut trees, and raised sheep, horses, and cattle on the property. The John Rains house still exist today and is currently a museum listed on the NRHP (75-428) and is 4 miles southwest of the Project. During this time, wine production in the Cucamonga Valley became an important economic resource between San Bernardino and the Los Angeles region (Chattel 2009). John Rains was murdered in 1862 while traveling alone to Los Angeles. His widow, Dona Merced, remained on the property with their five children and eventually remarried Jose C. Carrillo in 1864 (Hoover et al. 1966). The Carrillo's maintained the rancho for several years but a growing debt and a long drought in the region decimated the vineyard and livestock and forced Dona Merced to foreclose on the property in 1870 (Hoover et al. 1966; Emick 2011).

Isaias Hellman, a German immigrant and prominent banker and real-estate financer in the Los Angeles area was in the business of purchasing and selling large parcels of land (including many ranchos) in the southern California region. Hellman, along with his business partners, purchased Rancho Cucamonga at a sheriff's auction in the early 1870s (Emick 2011). Several acres of the rancho were subdivided into parcels and sold. Hellman and his associates retained some land remaining under the partnership of the Cucamonga Company, and sold remaining parcels under the partnership of the Cucamonga Homestead Association (Simmons 1946; Chattel 2009). Agriculture was the main economy during this time and Hellman and his associates planted wheat, walnuts, oranges, and other crops on the land (Dinkelspiel 2008). Hellman also invested in the skills of a renowned winemaker, Jean Sainsevaine (a French immigrant), to salvage and expand the vineyards on his land. They began producing the sweet wine Angelica, port, and brandy (Dinkelspiel 2008). In 1873, Joseph S. Garcia (a Portuguese ship captain) purchased several parcels that were once part of the Cucamonga Rancho. Garcia partnered with Pierre Sainsevaine (Jean Sainsevaine's brother) and together they planted vineyards on the land and constructed a winery (Simmons 1946). Due to competition with the large Garcia-Sainsevaine winery, several smaller vineyard owners in the area formed the Cucamonga Vineyard Company in an effort to pool their agricultural efforts and resources together for economic reasons (Simmons 1946). Garcia eventually maintained a home and winery on his property. Garcia's home and several other land holdings were purchased by George and William Chaffey in the 1880s. They established the colonies of Etiwanda in 1881 and Ontario in 1882 (Hartig and McCoy 2002). Thanks to the restoration efforts of the Etiwanda Historical Society, Garcia's home still exists (although not in its original location) as the Garcia-Chaffey House museum (located 3 miles east of the Project).

In 1887, the Cucamonga Vineyard Company merged with Hellman's newly developed Cucamonga Fruit and Land Company. The Fruit and Land company owned water rights to the north and east and formed the Cucamonga Water Company (Mendenhall 1908; Simmons 1946). Under the guidance of engineer George Day, the company delivered water to the area (Simmons 1946; Chattel 2009). The Cucamonga Water Company utilized primarily Chinese immigrants as laborers to assist horizontal drilling for underground springs at Cucamonga Canyon, within the south facing San Gabriel Mountains (Chattel 2009). The arrival of the Santa Fe Railroad to Cucamonga also occurred in 1887. The local agricultural economy began to thrive with not only

grapes but also potatoes, nut orchards (walnuts, chestnuts, almonds), and citrus and fruit orchards (oranges, peaches, apricots, pears), and hay grain (Chattel 2009).

Based on the 1888 Detailed Irrigation Map (Ontario Sheet), the APSE is labeled as "Obersteller," to the west is the Hermosa Tract, directly south is the Cucamonga Fruit Land Company, the Cucamonga Colony, Cucamonga North, the Haven Vineyard, and the Cucamonga Vineyard Co. (southwest), and a mile east is the Etiwanda Colony (See Appendix A for historic maps). No additional historic information could be found for the name "Obersteller."

By the turn of the century, a slow increase in settlement occurred in the region and Cucamonga area boasted two hotels, a courthouse, three schools, two churches, several merchants, and a bank (Simmons 1946). In 1900, Secondo Guasti (an Italian immigrant) and his investors established the Italian Vineyard Company. Guasti's vineyards were dry farmed and he produced wine from over 5,000 acres of grapes in the Cucamonga Valley (Walker and Peragine 2017). His winery included a company town site called Guasti village (formerly known as the town sites of Zucker and South Cucamonga near the current day Ontario airport) and another labor camp in North Cucamonga. Guasti employed many Italian, Spanish, French, African, Mexican American, and Mexican laborers who came to work in the vineyards and winery and lived at either Guasti or North Cucamonga (Walker and Peragine 2017). By 1917, Guasti's had expanded his vineyards to encompass approximately 20,000 acres in the Cucamonga Valley (current day Ontario and Rancho Cucamonga; Walker and Peragine 2017). For a moment in time, the Cucamonga Valley was known as the largest wine producing region in California (Dinkelspiel 2008; Chattel 2009; Emick 2011).

In 1919, the Eighteenth Amendment to the Constitution known as Prohibition banned the production and sale of alcohol in the United States until the ratification of the Twenty-first Amendment in 1933. Many vintners in the Cucamonga Valley were unsuccessful at maintaining their businesses while others adapted, maintained their vineyards, and survived by selling products such as table grapes (often used for home wine brewing), grape juice, grape and wine jellies, wines for religious rituals, medicinal wines or health tonics, and raisins during the 14 years of prohibition (Chattel 2009; Walker and Peragine 2017; Hartig and McCoy 2002). Once prohibition ended many existing wineries resumed the production of wine and several new wineries appeared in the Cucamonga Valley. New wineries included the Filippi Winery in current day Rancho Cucamonga (still in production) and the NRHP listed family owned Galleano Winery (still in production) in current day Mira Loma (25 miles south of the Project). In the 1930s, large scale wine production operations made it difficult for smaller operations to compete. The cooperative Cucamonga Pioneer Vineyard Association was formed in 1934 by several small-scale wine producers in an effort to effectively market their products and compete with the larger companies like Guasti (Hartig and McCoy 2002; Chattel 2009). By 1938, the colony of Cucamonga (now city of Cucamonga) had 15,500 acres of land dedicated to wine grapes, 525 acres for raisin grapes, and 340 acres for table grapes (Simmons 1946). The second largest crop in Cucamonga was citrus fruit such as Navel and Valencia oranges and lemons and encompassed 4,700 acres of land. Wine production in the Cucamonga Valley continued to be a successful industry throughout the 1940s. By 1950, over 20 wineries were operating in the Cucamonga Valley and the leading family owned wineries included the Filippi, Aggozzottis, Vies, Opics, Pias, and the Galleanos (Chattel 2009; Hartig and McCoy 2002). The 1950s began the decline of wine production in the valley due to several factors such as replacement of vineyards by urban development, poor harvests due to adverse weather conditions, and the changing taste

of the consumer's pallet for drier wines produced from Northern California (e.g. Napa Valley). The region remained a rural agricultural area throughout the 1960s. As the southern California area grew in population, vineyards were replaced with urban development and by the 1970s only five wineries remained in production. In 1977, the cities of Alta Loma, Etiwanda, and Cucamonga were incorporated as the city of Rancho Cucamonga. Today, the City is densely developed with urban uses and limited vacant land. Currently, there are a handful of wineries left in the Cucamonga Valley. The Joseph Filippi Winery is the last of the historically established wineries to remain in production in Rancho Cucamonga.

3.0 METHODS

3.1 RECORDS SEARCH METHODS

A CHRIS records search was conducted of the APSE and surrounding areas through the SCCIC in July 2019 (Records Search File No. 20318.6401). As part of this records search, the SCCIC database of survey reports and overviews, as well as documented cultural resources, cultural landscapes, and ethnic resources, was consulted. The record search focused specifically on the APSE and a half-mile buffer centered on the APSE. Additionally, the search included a review of the following publications and lists: California Office of Historic Preservation (OHP) Historic Properties Directory, NRHP, OHP Archaeological Determinations of Eligibility, California Inventory of Historical Resources/CRHR, California Points of Historical Interest, California Historical Landmarks, ethnographic information, historical literature, historical maps and plats, and local historic resource inventories. On August 12, 2019, research was conducted through the San Bernardino County's Hall of Records, Property Records and Archive Office for chain of title information for the Project parcel. In addition, the Rancho Cucamonga City's Planning Department, and the Rancho Cucamonga Historical Society, and the Joseph Filippi Winery were contacted on December 5, 2019 regarding the Project area.

In addition, the NAHC SLF was also consulted to determine the presence of documented Native American traditional or religious resources.

3.2 ARCHAEOLOGIAL FIELD METHODS

The California State Historic Preservation Office's guidelines for conducting field archaeology focuses on the identification of archaeological resources and are contained in Guidelines for Archaeological Research Design (OHP 1999). In accordance with these guidelines, Tetra Tech's archaeologists conducted a "no-collection" archaeological field survey of the APSE. Digital photographs were taken of typical conditions and features of notable interest (as applicable). Two archaeologists conducted a Phase I pedestrian archaeological field survey of the APSE.

Any newly identified cultural (archaeological and architectural) resources were documented to state standards on the appropriate State of California Department of Parks and Recreation (DPR) 523 Form. All locational data was recorded using global positioning system receivers in Universal Transverse Mercator coordinates referenced to the 1983 North American Datum. Previously recorded archaeological sites or potential cultural resources identified within the APSE from the desktop survey were monitored for locational accuracy and updated to reflect any new observations (as applicable). Any completed DPR 523 forms (or updates) as a result of the survey would be submitted to the SCCIC to obtain state resource numbers.

4.0 RESULTS

4.1 RECORDS SEARCH RESULTS

A California Historical Resources Information Center records search of the Project and surrounding areas was conducted via the SCCIC, Division of Anthropology, California State University, Fullerton, in July 2019 (Records Search File No.: 20318.6401). As part of this records search, the SCCIC database of survey reports and overviews was consulted, as well as documented cultural resources, cultural landscapes, and ethnic resources. Additionally, the search included a review of the following publications and lists: California OHP Historic Properties Directory, NRHP, OHP Archaeological Determinations of Eligibility, California Inventory of Historical Resources/CRHR, California Points of Historical Interest, California Historical Landmarks, ethnographic information, historical literature, historical maps and plats, and local historic resource inventories. The record search focused specifically on the proposed APSE and a half mile buffer centered on the Project area. The record search results are included as Enclosure 2.

One previously conducted survey (SB-00479: 1977) overlaps with the APSE. A total of 16 previous surveys have been conducted within a half mile of the APSE between 1975 and 2010. These cultural resource investigations are comprised of both archaeological and architectural surveys, and desktop studies. The previous survey within the APSE and within a half mile of the APSE are listed in Table 4-1.

The records search results for previously conducted surveys are listed in Table 4-1 and provided in Appendix B. The records search results for previously recorded sites are listed in Table 4-2 and provided in Appendix B.

Table 4-1: Cultural Resources Surveys Conducted within the APSE and within half mile of the APSE

Report No.	Year	Author(s)/Affiliation	Title	Survey Type	Resources Identified
Previous Cultural Resource Surveys Conducted within the APSE.					
SB-00479	1977	Joseph Hearn, SBCMA	*Archaeological – Historical Resources Assessment of Lewis Homes Project in the Etiwanda Area.*	Archaeological/ Architectural Survey	--
Previous Cultural Resource Surveys Conducted within a half mile of the APSE.					
SB-00286	1975	James Crowell, SBCMA	*Archaeological – Historical Resources Assessment of 82 Acres between Haven Ave. and Deer Creek Wash and the Pacific Electronic Railroad Tracks and a Projection East of 19th Street in the Alta Loma Area.*	Archaeological/ Architectural Survey	--
SB-00317	1976	Patricia Martz, ARC	*Description and Evaluation of the Cultural Resources: Cucamonga, Demens, Deer, and Hillside Creek Channels, San Bernardino and Riverside Counties.*	Archaeological/ Architectural Survey	Over 9, see attached data sheet
SB-00342	1976	Ruth Harris, SBCMA	*Archaeological – Historical Resources Assessment of Project No. 76-66.*	Archaeological/ Architectural Survey	--

Report No.	Year	Author(s)/Affiliation	Title	Survey Type	Resources Identified
SB-00352	1976	Ruth Harris, SBCMA	*Archaeological – Historical Resources Assessment of Project No. 76-64, Alta Loma.*	Archaeological/ Architectural Survey	--
SB-00353	1976	Ruth Harris, SBCMA	*Archaeological – Historical Resources Assessment of 76-74, and 76-76.*	Archaeological/ Architectural Survey	--
SB-00368	1976	Ruth Harris, SBCMA	*Archaeological – Historical Resources Assessment of Two Parcels.*	Archaeological/ Architectural Survey	--
SB-00479	1977	Joseph Hearn, SBCMA	*Archaeological – Historical Resources Assessment of Lewis Homes Project in the Etiwanda Area.*	Archaeological/ Architectural Survey	--
SB-00495	1977	Joseph Hearn, SBCMA	*Archaeological – Historical Resources Assessment of Road Improvement HO 6451.*	Archaeological/ Architectural Survey	--
SB-03222	1979	Scientific Resource Survey	*Archaeological/Paleontological Report on the William Lyon Co. Rancho Cucamonga Property, Rancho Cucamonga, CA.*	Archaeological/ Paleontological Survey	--
SB-03581	2000	Phillipe Lapin, LSA	*Cultural Resource Assessment for PBW Facility CM 226-01, County of San Bernardino, CA.*	Archaeological Survey	--
SB-04156	2002	Curt Duke, LSA	*Cultural Resource Assessment: Cingular Wireless Facility No. CM226-03, San Bernardino County, CA.*	Archaeological Survey	--
SB-04679	2006	Riordan Goodwin, et al., LSA	*Historical Resources Evaluation Report and Archaeological Survey Report for the Pacific Electric Inland Empire Trail, Phase I, City of Rancho Cucamonga, San Bernardino County, CA.*	Archaeological/ Architectural Survey	36-016448, 36-020136, 36-020137, 36-020138
SB-05358	1976	W.A. Sider	*Cucamonga Creek 1776-1976 After 200 Years.*	Archaeological Survey	--
SB-06419	2009	Phil Fulton, LSA	*Cultural Resource Assessment Verizon Wireless Services Stoneridge Facility, City of Rancho Cucamonga, San Bernardino County, CA.*	Archaeological Survey	--
SB-06815	2010	Wayne Bonner and Sarah Williams, MBA	*Cultural Resources Records Search and Site Visit Results for T-Mobile USA Candidate IE24081-D (Terra Vista Cohab at Central Park Plaza), Milliken and Baseline, Rancho Cucamonga, San Bernardino, CA.*	Record Search and Site Visit.	--
SB-06816	2010	Robert Wlodarski,	*Records Search and Field Reconnaissance Phase for the proposed AT&T Wireless Telecommunications Site ES0142 (Milliken Tower) Milliken and Baseline, Rancho Cucamonga, CA 91730.*	Archaeological Survey	--

SBCMA=San Bernardino County Museum Association; ARC=Archaeological Research Unit; MBA=Michael Brandon Associates

No previously recorded sites were identified within the APSE and one previously recorded site was identified within a half mile of the APSE. Site P-36-020137 (CA-SBR-15904) is a segment of the former Pacific Electric Railway's San Bernardino Line that was removed in the 1990s and replaced with a paved bike and pedestrian trail. P-36-020137 has been determined not eligible for the CRHR or NRHP (Table 4-2). No CRHR or NRHP eligible archaeological sites were identified within the APSE or within a half mile.

Table 4-2: Cultural Resources within half mile of the APSE

Site No./ Isolate No.	Time Period	Site Type	Date/Recorder	CRHR/NRHP Eligibility	Approx. Distance to Project Area
P-36-020137 (CA-SBR-15904)	Historic	Railroad alignment, associated track, ties, etc. removed in 1990s. Currently a paved bike or pedestrian trail.	2004; White, and several others.	Not eligible.	Adjacent, north.

Historic U.S. Geological Survey Map and General Land Office Plat Map and Historic Aerial Review

Review of historic maps provides information regarding potential unrecorded historic features or sites within the APSE. Based on the historic map and aerial review, the Project site and surrounding area appears as undeveloped agricultural land from 1938 to 1980s, with the Deer Creek channel to the west. Base Line Road was established by the 1960s to the south. By the 1980s and 1990s, the surrounding area appears developed with major roads, residential subdivisions, and commercial buildings. The results of the review of available historic aerials and USGS quadrangle maps are presented in Table 4-3 below. See Appendix A for historic maps.

Table 4-3: Review of Historic USGS Maps and Aerial Photographs for Township 1 South, Range 7 West, Section 36 (southwest portion)

Map Name	Date(s)	Author	Description of Potential Resource within Project Area of Impact
GLO Plat Map	1858	Surveyor General's Office	The project site and surrounding area appears undeveloped and the section is illustrated as "School Land."
GLO Plat Map	1865	Surveyor General's Office	The project site and surrounding area appears undeveloped, no names or homesteads are identified within the Section.
Detail Irrigation Map	1888	California State Engineering Department	Section 36 is labeled as "Obersteller", and a southwest to northeast trail is illustrated near the northwestern boundary of the project. The following are illustrated beyond Section 36: Hermosa tract is to the west, the Etiwanda Colony is illustrated a mile east, the Cucamonga Fruit and Land Company and the Cucamonga Colony is to the south and southwest
USGS 1:62,500, Cucamonga CA	1897, 1900, 1903, 1906, 1908, 1911, 1912, 1917, 1927, 1929	USGS staff	The project site and surrounding area appears undeveloped with a road to the south. A creek is to the west.
USGS 1:24,000, Guasti, California	1953	USGS staff	The project site and surrounding area appears undeveloped with an east to west trending road to the south (current Base Line Road), and a two-track road within the Project site. A creek is to the west.
USGS 1:24,000, Guasti, California	1961, 1966, 1975	USGS staff	The project site and surrounding area appears undeveloped agricultural land with an east to west trending road to the south labeled "Base Line Road", and a two-track road within the Project site. Deer Creek is to the west.

Map Name	Date(s)	Author	Description of Potential Resource within Project Area of Impact
Historic Aerial	1938, 1948, 1959, 1966	Netronline	The project area appears as undeveloped agricultural land (row crops), with Deer Creek wash adjacent west, and the surrounding area is undeveloped agricultural land.
Historic Aerial	1980	Netronline	The project area appears as undeveloped agricultural land (row crops), with the channelized Deer Creek adjacent west, and the surrounding area as undeveloped agricultural land with a residential development to the northwest.
Historic Aerial	1994	Netronline	The project area appears as undeveloped agricultural land (row crops), with the channelized Deer Creek adjacent west, and the surrounding area is developed with residential and commercial structures.

GLO=General Land Office; USGS=United States Geological Survey; Netronline=Historic Aerials by Netronline 2018. Electronic database located at https://www.historicaerials.com/viewer accessed 4/23/2019.

Federal Land Patent Review

A search of federal land patents through the Bureau of Land Management's General Land Office Records website identified one early patent holder for Township 1 South, Range 7 West, Section 36, by the State of California in 1857 under the title authority of the California Enabling Act (see Table 4-4). Federal land patents provide information on the initial transfer of land titles from the federal government to private (individuals or companies) or local governments by the title transfer authority (see Table 4-4).

Table 4-4: Historic Land Patent for Township 1 South, Range 7 West, Section 36 (southwest portion), San Bernardino Baseline Meridian

Patent # or BLM Accession #	Date	Patentee	Legal Description	Transfer Authority
CACAAA 000001 5P	6/19/1874	State of California	T1S, R7W, S36	California Enabling Act, March 3, 1853 (10 Stat. 244).

T=Township, R=Range, S=south, W=west

Chain of Title Review for Township 1 South, Range 7 West, Section 36, Lots 1-11

A search of County records was conducted through the San Bernardino County's Hall of Records, Property Records, and Archive Office on August 11, 2019. The records provide information regarding previous ownership of the Project Area parcel(s). The records indicate that the L Bar S Ranch partners, Wilbur H. Latimer, Winifred Latimer, and Charles R. Latimer, owned the property by 1961. Prior to 1961, no records or original title to the land were available and it is unclear when the Latimers first acquired the property. By 1970, the land had transferred to the estate of Charles R. Latimer and was in trust to Roy and Phyllis Leventhal. The property was sold in 1977 to Richard A. Lewis of Lewis Homes of California (real-estate developers). By 1984, the property was acquired by the City of Rancho Cucamonga. The historic record search did not identify any additional titles or previous owner information prior to the L Bar S Ranch (Latimer family), except for the name Obersteller illustrated on an 1888 map (see Table 4-3). Table 4-5 list details from available San Bernardino County land records. See Appendix C for available chain of title records.

Table 4-5: Chain of Title Review for the APSE in Township 1 South, Range 7 West, Section 36.

Type of Record	Date	Description	Legal Description	Parcel Ownership/ Acquired Property
Grant of Easement	11/13/1961	L Bar S Ranch grants and easement to Southern California Edison Company within T1S, R7W, S36, Serial No 28035A.	T1S, R7W, S36	L Bar S Ranch partners: Wilbur H. Latimer, Winifred Latimer, and Charles R. Latimer
Record of Survey	11/05/1970	Engineer Survey of Parcel: Illustrates Base Line Road to north and Pacific Electric Railway to North, no other feature illustrated.	T1S, R7W, 260 acres of S36	The Estate of Charles Latimer
Superior Court of California, County of San Bernardino: Court Ordered Sale of Personal Property via Mr. Charles E. Latimer's (deceased) Living Will	11/17/1977	Confirming sale of property (land was in trust to Roy and Phyllis Leventhal)	T1S, R7W, 260 acres of S36	Richard A. Lewis of Lewis Homes of California purchases land.
Release of Property Grant Deed	07/14/1980	Lewis Homes of California, a partnership grants Lewis Construction Co./Lewis Constriction Inc. a corporation, a grant deed for the property.	T1S, R7W, 260 acres of S36, 260 acres of S36	Lewis Homes of California
Release of Property Grant Deed	10/24/1984	Lewis Homes of California, a partnership, Lewis Construction Co./Lewis Constriction Inc. a corporation, grants City of Rancho Cucamonga the grant deed for the property.	T1S, R7W, 260 acres of S36, 260 acres of S36	City of Rancho Cucamonga

T=Township, R=Range, S=south, W=west

Native American Heritage Commission Sacred Lands File Search

Tetra Tech contacted the NAHC on June 6, 2019 and requested that the NAHC review its SLF. The NAHC replied on June 21, 2019 that results were negative for Native American tribal resources within the APSE and provided a list of local Native American contacts with knowledge of the Project area (see Enclosure 3). The NAHC recommends conducting outreach to the listed tribes or individuals as they may have knowledge of cultural resources within or near the Project area. Native American consultation is part of the lead CEQA agency's responsibilities under AB52. Per AB52, the City consulted with the following Native American tribes: San Gabriel Band of Mission Indians, San Manuel Band of Mission Indians, Soboba Band of Luiseno Indians, Torres Martinez Desert Cahuilla Indians, Gabrieleño Band of Mission Indians – Kizh Nation, and the Morongo Band of Mission Indians. The results of the City's consultation under AB52 are contained in the City's Draft Environmental Impact Report.

4.2 ARCHAEOLOGICAL SENSITIVITY

The SCCIC records review results indicated that a small portion of the APSE had been previously surveyed, and no previously recorded resources were identified within the APSE. Only one historic site (railroad) was identified within a half mile of the APSE. No prehistoric sites have been identified within the APSE or within 1 mile of the APSE. Nearby creeks and various coalescing unnamed stream channels associated with spring fed drainages emanating from the San Gabriel Mountains, would have provided seasonal fresh water to regional occupants, and faunal and flora resources within the nearby foothills and mountains would have potentially provided a variety of subsistence resources for pre-contact and historic people.

The Project area is underlain by a series of coalescing alluvial fans derived from the San Gabriel Mountains (Kleinfelder West 2009). The Project area contains late Pleistocene and Holocene alluvial fan deposits and fluvial deposits at various depths. Late Pleistocene and Holocene

deposits are generally considered more likely to contain prehistoric deposits. Despite the potential sensitivity of these deposits and the number of previous archaeological investigations in the study area, no prehistoric resources have been recorded within these sediments within a half mile of the APSE. In addition, portions of the APSE are within a disturbed environment. Based on historic aerial photographs (1938 to 1994) the entire project area was historically utilized for agriculture (row crops, most likely a vineyard). In addition, portions of the Project area have been graded and include underground utilities. Therefore, previous subsurface ground disturbance is estimated at approximately 1 to 2 feet in depth (plow zone).

Based on the natural setting, cultural context, and the SCCIC records search results (including historic maps), the Project area resource sensitivity is assessed as low to low-moderate.

4.3 ARCHAEOLOGICAL FIELD SURVEY RESULTS

The entire proposed APSE (73 acres) was intensively surveyed by two Tetra Tech archaeologists, and the results are provided below.

4.3.1 Survey of the APSE

Tetra Tech's qualified archaeologists Jenna Farrell and Sydni Kitchel conducted an archaeological survey of the entire 73-acre APSE on July 17, 2019 (see Appendix D). The APSE is within a suburban area surrounded by major roads, single and multifamily residential properties, and commercial buildings. The APSE was surveyed with closely spaced linear and meandering transects (15 meters apart), dependent upon terrain and areas with dense vegetation. The APSE is located on desert land with cleared areas and patches of dense brush, annual grasses, and shrubs. Ground surface visibility was generally good to fair due to cleared or graded surface areas. However, patches of dense vegetation were also encountered throughout the project area. Based on historic aerial photographs (1938 to 1994) the entire project area was historically utilized for agriculture (row crops: vineyard). Therefore, previous subsurface ground disturbance is estimated at 1 foot in depth (plow zone). Other noted disturbances include graded and areas cleared of vegetation, dirt bike or mountain bike paths and trails, evidence of homeless camps (e.g. clothes, personal effects, trash, etc.), and trash (e.g. furniture, televisions).

Figure 4-1. Overview of APSE: northeastern portion of APSE, view west, July 17, 2019.

Figure 4-2. Overview of APSE: northwestern portion of APSE, view north, July 17, 2019.

Figure 4-3. Overview of APSE: southeastern portion of APSE, view northwest, July 17, 2019.

Figure 4-4. Overview of APSE: Elder Creek Stormwater Channel/ Aqueduct, southwestern portion of APSE (Baseline Road in background), view south, July 17, 2019.

4.3.2 Newly Recorded Cultural Resource and CRHR Recommendation

One newly discovered historic cultural resource was recorded during the pedestrian survey. The site was assigned temporary number RCCP-01. The Trinomial and/or Primary number will be assigned by the SCCIC. The resource is described below and the DPR 523 form is in Appendix E.

RCCP-01 consists of an agricultural vineyard remnant of approximately seven living grapevines and several dead grapevine stumps. The grapevines are roughly aligned in east-west and north-south trending rows. No other agricultural features or historic artifacts were identified. Based on historic aerials, the site and Project parcel appears to have been in agricultural use (row crops) from 1938 to at least the 1960s. By 1980/1990s, the area appears completely overgrown and no longer in use for agricultural purposes. The site (and surrounding area) has been impacted by the lack of continued agricultural use and maintenance, the encroachment of dominant vegetation, and various land use activities (e.g. grading and scraping of paths throughout the property, and development).

Review of historic maps did not identify any structures or features in or near the site area. The site area in Section 36 (and entire section) of T1N/R7W was patented by the State of California in 1874 under the California Enabling Act, March 3, 1853 (10 Stat. 244). This act granted the 16th and 36th Sections in each township for school purposes. The review of an historic 1888 irrigation map illustrates the name Obersteller for the entire Section 36 of T1N/R7W (includes the site area) (California State Engineering Department 1888). No additional information on the name Obersteller could be found. A search of San Bernardino County records indicates that at least 260 acres within Section 36 (southeasterly portion, includes site area) were acquired by the L Bar S Ranch partners, Wilbur H. Latimer, Winifred Latimer, and Charles R. Latimer, prior to 1960. Charles Latimer was born in Ottawa, Canada in 1887 and moved to Riverside, California with his parents at age three (Stoddard 1994). His father, Hugh Latimer, invested in buying raw land and planting citrus groves for his family and to sell to other ranchers. The Latimer family owned land and citrus groves throughout Riverside and Ontario and they played a major role in the Ontario citrus industry (Stoddard 1994). The Latimers owned and operated the San Antonio Orchard Company (with associated building and packing house) in Ontario. In 1907, Charles Latimer moved to Ontario to manage the San Antonio Orchard Company and the family's large citrus groves. The 1930 census indicates that Charles was married to Winifred and they had three sons, Wilbur H., Charles R., and John S. The Latimer family also held interest in potato crops and local vineyards in the region and produced grape juice (Stoddard 1994). No records were found of when the Latimer partners originally acquired the site and surrounding land in Rancho Cucamonga. The property was eventually sold by the Latimer Estate trust in 1977 to Richard A. Lewis of Lewis Homes of California (real-estate developers).

The Latimer family owned and operated a large, significant citrus agricultural business in nearby Riverside and Ontario during the early twentieth century. The Latimers also owned other crops including several vineyards in the region. Charles Latimer, under the partnership of the L Bar S Ranch, acquired the site and surrounding land prior to the 1960s and presumably grew grapes on the property (for grape juice production), although the extent of agricultural productivity at this site is unclear.

Because the site is a vineyard remnant with few extant vines and no associated artifacts or other features, it does not retain its original physical integrity and does not convey any historical significance. The Latimer's vineyards do not appear to have played a significant role in their

contribution to local agricultural production (Criteria 1 and 2). The site neither embodies the distinctive characteristics of an architectural style or architect, nor exhibits high artistic value (Criterion 3). Tetra Tech's documentation of the features (remaining grape vines) has likely exhausted the site's data potential (Criterion 4). Thus, Tetra Tech recommends the RCCP-01 as not eligible for listing on the CRHR and recommends no further management.

Figure 4-5. Overview of Site RCCP-01 Vineyard Remnant, view northwest, July 17, 2019.

5.0 CONCLUSION AND RECOMMENDED MANAGEMENT MEASURES

The summary and recommended management measures resulting from this study of the APSE are below. The current Project background research, consultation, cultural resource inventory, recommendations, and impact analysis discussed in this report were conducted to partially fulfill the requirements of CEQA.

The combined cultural resource record search and NAHC SLF search did not identify any existing historic resources within the APSE. Based on the natural setting, NAHC SLF results, SCCIC records search results and literature review, distribution patterns of previously recorded sites within and near the APSE, archaeological survey, and previous disturbance to native soils (i.e., grading of areas) the APSE is assessed as having an overall low low-moderate sensitivity for cultural resources within undisturbed subsurface deposits.

Newly recorded site, RCCP-01, a vineyard remnant, was identified as a result of the pedestrian field survey. Site RCCP-01 was used for agricultural crops prior to the 1960s and is recommended as not eligible for listing in the CRHR.

Assuming compliance with the standard cultural resource management measures outlined below, implementation of the Project should exert no significant impact to historic resources listed on or eligible for nomination to the CRHR.

If construction ground disturbance depths extend to native soils, there would be a potential to impact previously unrecorded subsurface archaeological resources. Therefore, the following management measures are recommended below:

1. **Worker Education/Training** – prior to construction of the Project, the City will retain a qualified archaeologist that will provide a cultural resource briefing that includes all applicable laws and penalties pertaining to disturbing cultural resources, a brief discussion of the prehistoric and historic regional context and archaeological sensitivity of the area, types of cultural resources found in the area, instruction that Project workers will halt construction if a cultural resource is inadvertently discovered during construction, and procedures to follow in the event an inadvertent discovery (Inadvertent Discovery Plan discussed below) is encountered, including appropriate treatment and respectful behavior of a discovery (e.g., no posting to social media or photographs). If requested, a local tribal representative(s) shall be invited to participate in the environmental training to discuss or provide text from a tribal cultural perspective regarding the cultural resources within the region.
2. **Inadvertent Discovery of Archaeological Resources During Construction** – A qualified archaeologist shall prepare an Inadvertent Discovery Plan for the Project and Avoidance Procedures. During Project-level construction, should subsurface archaeological resources be discovered, all activity in the vicinity of the find shall stop and a qualified archaeologist shall be contacted to assess the significance of the find according to CEQA Guidelines Section 15064.5 and/or NRHP criteria (as applicable). If any find is determined to be significant, the archaeologist shall determine, in consultation with the implementing agencies and any local Native American groups expressing interest, appropriate avoidance measures or other appropriate mitigation. Under CEQA Guidelines Section

15126.4(b)(3), preservation in place shall be the preferred means to avoid impacts to archaeological resources qualifying as historical resources. Methods of avoidance may include, but shall not be limited to, Project reroute or re-design, Project cancellation, or identification of protection measures such as capping or fencing. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures, such as data recovery or other appropriate measures, in consultation with the implementing agency and any local Native American representatives expressing interest in prehistoric or tribal resources. If an archaeological site does not qualify as an historical resource but meets the criteria for a unique archaeological resource as defined in Section 21083.2, then the site shall be treated in accordance with the provisions of Section 21083.2.

4. **Tribal Consultation** – Per AB52, the lead agency will continue to consult with individuals identified by the NAHC and request consultation with the lead agency.

Existing regulations require that if human remains and/or cultural items defined by Health and Safety Code, Section 7050.5, are inadvertently discovered, all work in the vicinity of the find would cease and the San Bernardino County Coroner would be contacted immediately. If the remains are found to be Native American as defined by Health and Safety Code, Section 7050.5, the coroner will contact the NAHC by telephone within 24 hours.

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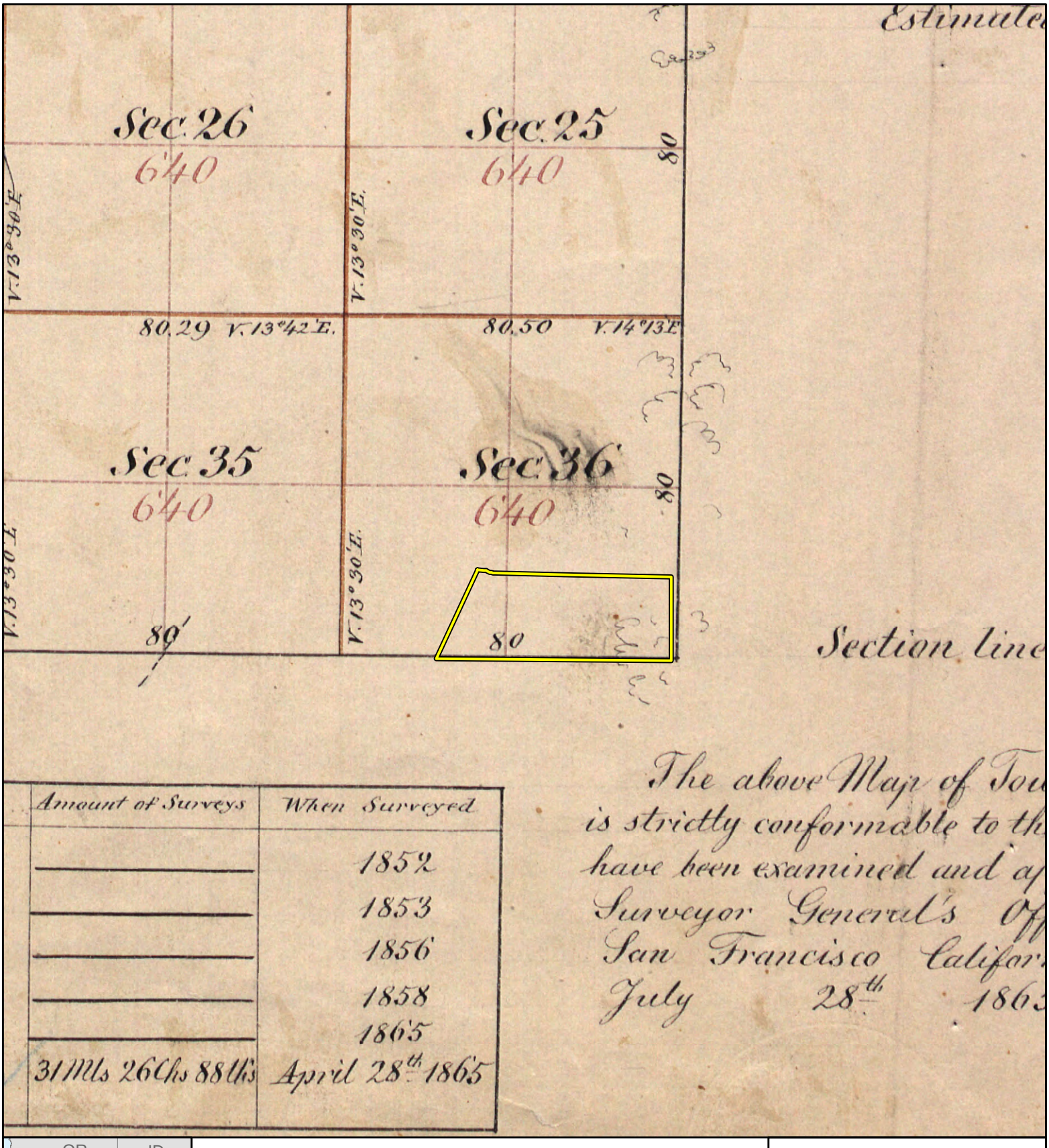
APPENDIX A
Historic Maps



Legend

Project Area

N

0 1,000 2,000 Feet

Plat 290948
1865

Central Park Project
City of Rancho Cucamonga
San Bernardino County, CA

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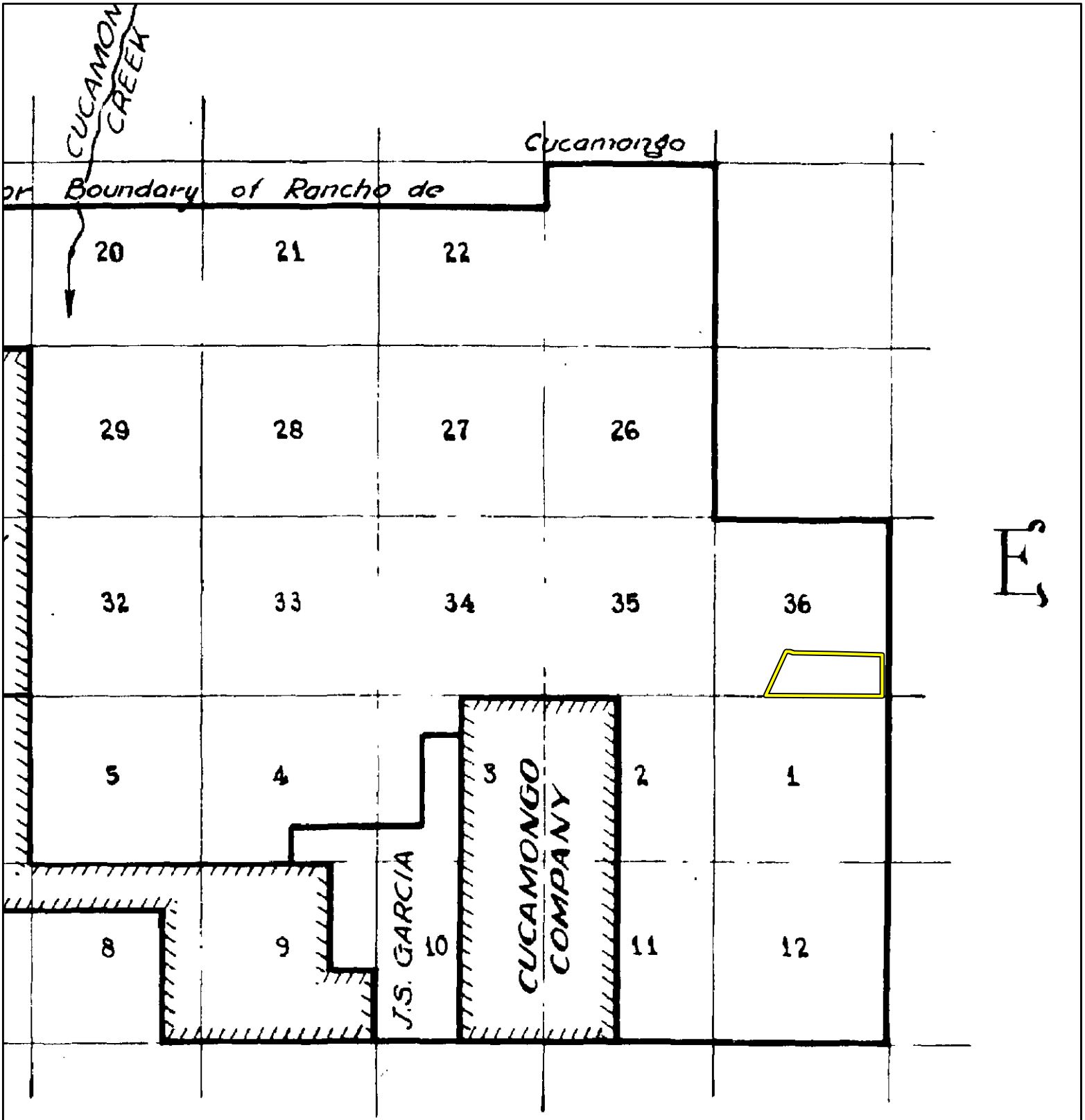


Legend

Project Area

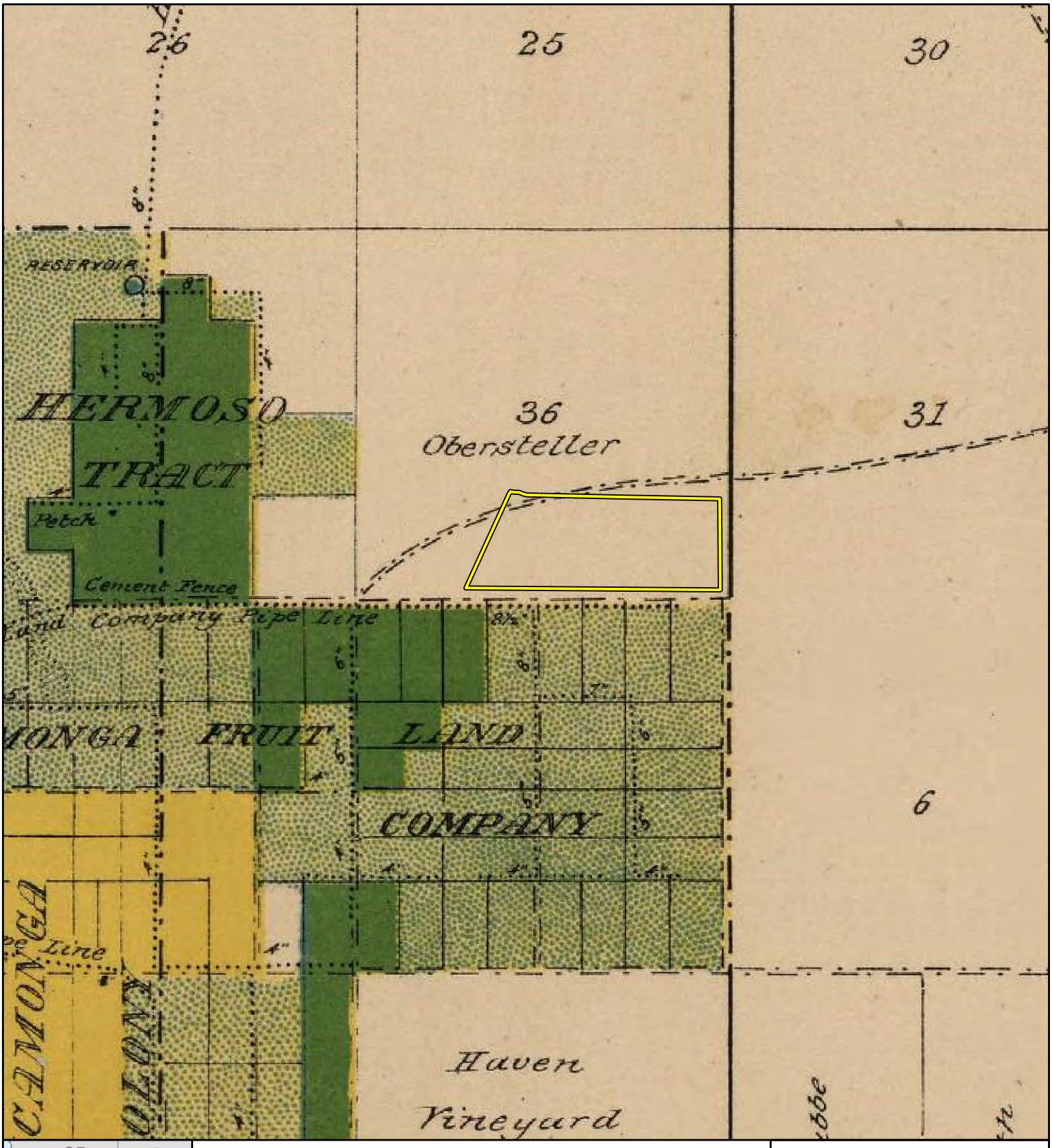
N

0 2,000 4,000 Feet

Subdivision of Rancho de Cucamongo May 14, 1871

Central Park Project
City of Rancho Cucamonga
San Bernardino County, CA

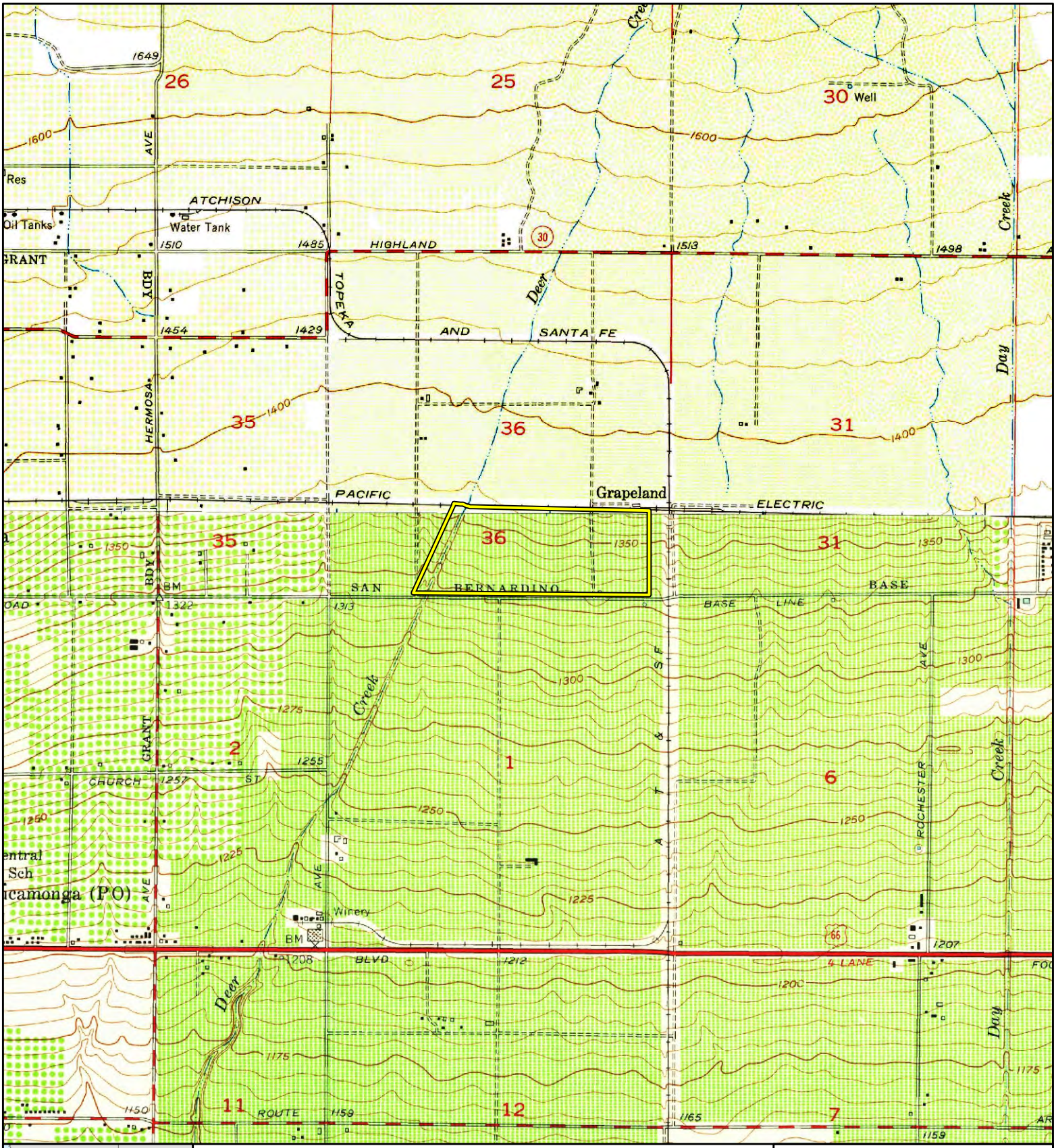
R:\PROJECTS\CENTRAL_PARK_6799\ARCHEO\MAPS\CentralPark_Amphitheater_Historic_Map_Plat_1871.mxd



Ontario Detail Irrigation Map, 1888

Central Park Project
City of Rancho Cucamonga
San Bernardino County, CA

R:\PROJECTS\CENTRAL_PARK_6799\ARCHEO\MAPS\CentralPark_Amphitheater_Historic_Map_1888.mxd



Legend

Project Area

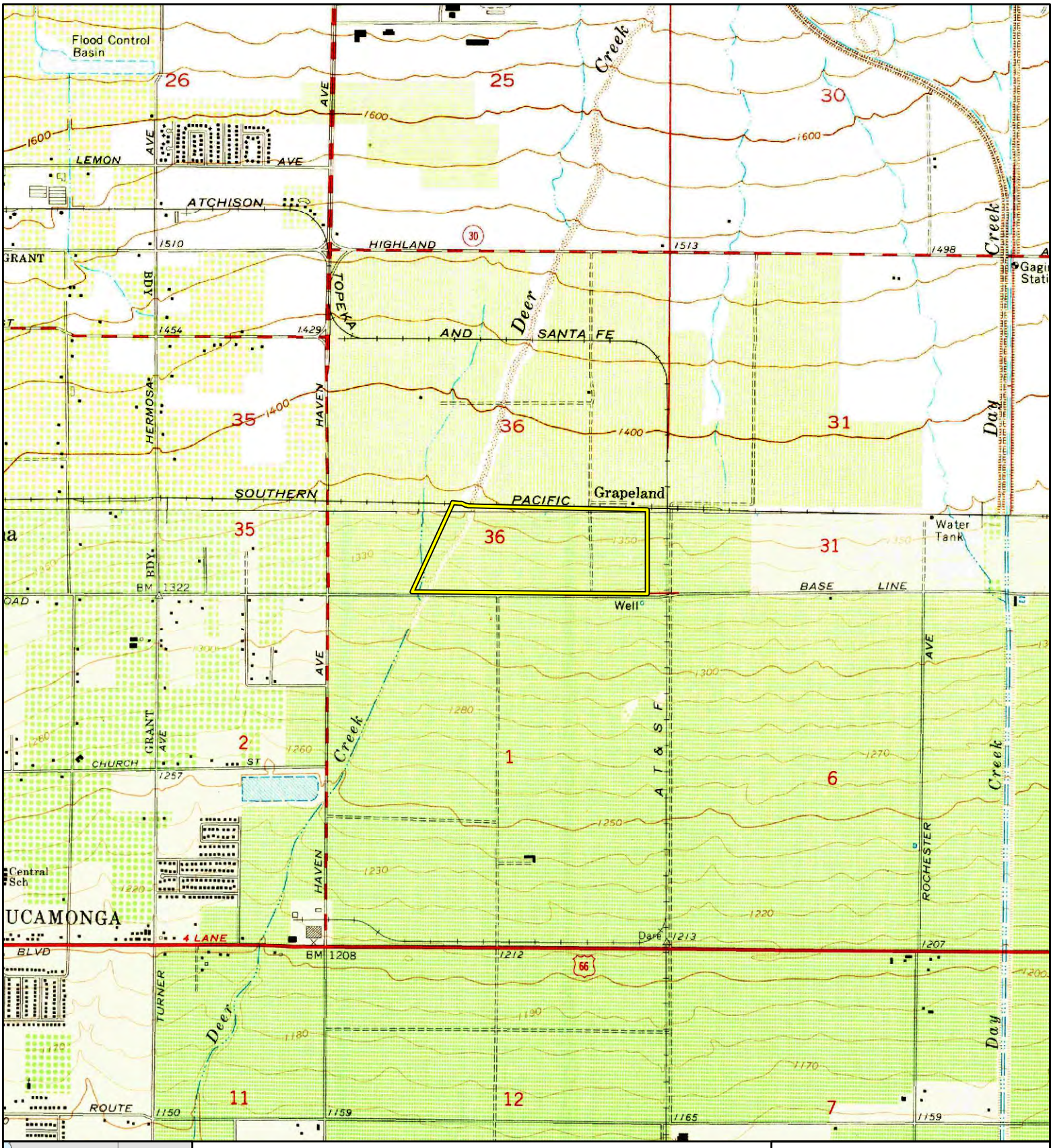
N

0 1,000 2,000 Feet

USGS Cucamonga Peak and Guasti Quads 1:24,000, 1953

Central Park Project
City of Rancho Cucamonga
San Bernardino County, CA

R:\PROJECTS\CENTRAL_PARK_6799\ARCHEO\MAPS\CentralPark_Amphitheater_Historic_Map_1953.mxd



Legend

Project Area

N

0 1,000 2,000 Feet

USGS Cucamonga Peak and Guasti Quads 1:24,000, 1966

Central Park Project
City of Rancho Cucamonga
San Bernardino County, CA

R:\PROJECTS\CENTRAL_PARK_6799\ARCHEO\MAPS\CentralPark_Amphitheater_Historic_Map_1966.mxd

APPENDIX B
SCCIC Record Search Results and NAHC Results

South Central Coastal Information Center
California State University, Fullerton
Department of Anthropology MH-426
800 North State College Boulevard
Fullerton, CA 92834-6846
657.278.5395 / FAX 657.278.5542
sccic@fullerton.edu

California Historical Resources Information System
Orange, Los Angeles, and Ventura Counties

6/17/2019 Records Search File No.: 20318.6401

Jenna Farrel
Tetra Tech, Inc.
2969 Prospect Dr. Ste. 100
Rancho Cordorva, CA 95670

Re: Record Search Results for the Central Park Project: 194-6799

The South Central Coastal Information Center received your records search request for the project area referenced above, located on the Cucamonga Peak and Guasti, CA USGS 7.5' quadrangles. The following reflects the results of the records search for the project area and a ½-mile radius:

As indicated on the data request form, the locations of resources and reports are provided in the following format: ☒ custom GIS maps ☐ shape files ☒ hand-drawn maps

Resources within project area: 0	None
Archaeological resources within ½-mile radius: 1	P-36-020137
Resources listed in the OHP Historic Properties Directory within project area: 0	None
Resources listed in the OHP Historic Properties Directory within ½-mile radius: 1	SEE ATTACHED LIST FOR INDIVIDUAL PROPERTY STATUS CODES – resource locations from the OHP HPD may or may not be plotted on the custom GIS map or provided as a shape file
Reports within project area: 1	SB-00479
Reports within ½-mile radius: 15	SEE ATTACHED MAP or LIST

Resource Database Printout (list):	☒ enclosed	☐ not requested	☐ nothing listed
Resource Database Printout (details):	☒ enclosed	☐ not requested	☐ nothing listed
Resource Digital Database (spreadsheet):	☐ enclosed	☒ not requested	☐ nothing listed
Report Database Printout (list):	☒ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (details):	☒ enclosed	☐ not requested	☐ nothing listed
Report Digital Database (spreadsheet):	☐ enclosed	☒ not requested	☐ nothing listed
Resource Record Copies:	☒ enclosed	☐ not requested	☐ nothing listed
Report Copies:	☒ enclosed	☐ not requested	☐ nothing listed

OHP Historic Properties Directory:	☒ enclosed	☐ not requested	☐ nothing listed
Archaeological Determinations of Eligibility:	☐ enclosed	☐ not requested	☒ nothing listed
Los Angeles Historic-Cultural Monuments	☐ enclosed	☐ not requested	☒ nothing listed
Historical Maps:	☐ enclosed	☒ not requested	☐ nothing listed
Ethnographic Information:	☒ not available at SCCIC		
Historical Literature:	☒ not available at SCCIC		
GLO and/or Rancho Plat Maps:	☒ not available at SCCIC		
Caltrans Bridge Survey:	☒ not available at SCCIC; please go to		

http://www.dot.ca.gov/hq/structur/strmaint/historic.htm

Shipwreck Inventory: ☒ not available at SCCIC; please go to
http://shipwrecks.slc.ca.gov/ShipwrecksDatabase/Shipwrecks_Database.asp

Soil Survey Maps: (see below) ☒ not available at SCCIC; please go to
http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System,

Isabela Kott Digitally signed by Isabela Kott
Date: 2019.07.15 10:38:55 -07'00'

Isabela Kott
GIS Technician/Staff Researcher

Enclosures:

(X) Custom Maps – 2 pages

(X) Resource Database Printout (list) – 1 page

(X) Resource Database Printout (details) – 2 pages

(X) Report Database Printout (list) – 2 pages

(X) Report Database Printout (details) – 16 pages

(X) Resource Record Copies – (project area only) 20 pages

(X) Report Copies – (project area and SB-05358, SB-04679, SB-03222, and SB-00317) 212 pages

(X) OHP Historic Properties Directory – 1 page

(X) National Register Status Codes – 1 page

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SB-00286	NADB-R - 1060286; Voided - 75-12.13	1975	CROWELL, JAMES P.	ARCHAEOLOGICAL - HISTORICAL RESOURCES, APPROXIMATELY 82 ACRES BETWEEN HAVEN AVENUE AND DEER CREEK WASH AND THE PACIFIC ELECTRIC RAILROAD TRACKS AND A PROJECTION EAST OF 19TH STREET IN THE ALTA LOMA AREA	SAN BERNARDINO COUNTY MUSEUM ASSOCIATION	
SB-00317	NADB-R - 1060317; Voided - 76-4.2	1976	MARTZ, PATRICIA	DESCRIPTION AND EVALUATION OF THE CULTURAL RESOURCES: CUCAMONGA, DEMENS, DEER AND HILLSIDE CREEK CHANNELS, SAN BERNARDINO AND RIVERSIDE COUNTIES, CALIFORNIA	ARCHAEOLOGICAL RESEARCH UNIT, UCR	36-000270, 36-000895, 36-000897, 36-000898, 36-000899, 36-000900, 36-000901, 36-000902, 36-015231
SB-00342	NADB-R - 1060342; Voided - 76-5.9	1976	HARRIS, RUTH D.	ARCHAEOLOGICAL AND HISTORICAL RESOURCES ASSESSMENT OF PROJECT NO. 76-66	SAN BERNARDINO COUNTY MUSEUM ASSOCIATION	
SB-00352	NADB-R - 1060352; Voided - 76-5.19	1976	HARRIS, RUTH D.	ARCHAEOLOGICAL AND HISTORICAL RESOURCES ASSESSMENT OF PROJECT 76-64, ALTA LOMA AREA	SAN BERNARDINO COUNTY MUSEUM ASSOCIATION	
SB-00353	NADB-R - 1060353; Voided - 76-5.20	1976	HARRIS, RUTH D.	ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF PROJ. NO. 76-64 (REV.) AND 76-76, ALTA LOMA AREA	SAN BERNARDINO COUNTY MUSEUM ASSOCIATION	
SB-00368	NADB-R - 1060368; Voided - 76-7.7	1976	HARRIS, RUTH D.	ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF TWO PARCELS	SAN BERNARDINO COUNTY MUSEUM ASSOCIATION	
SB-00479	NADB-R - 1060479; Voided - 77-3.1	1977	HEARN, JOSEPH E.	ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF LEWIS HOMES PROJECT IN THE ETIWANDA AREA	SAN BERNARDINO COUNTY MUSEUM ASSOCIATION	
SB-00495	NADB-R - 1060495; Voided - 77-5.5	1977	HEARN, JOSEPH E.	ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF ROAD IMPROVEMENT HO 6451	SAN BERNARDINO COUNTY MUSEUM ASSOCIATION	
SB-03222	NADB-R - 1063222	1979	SCIENTIFIC RESOURCE SURVEY, INC.	ARCHAEOLOGICAL/PALEONTOLOGICAL/HISTORICAL REPORT ON THE WILLIAM LYON CO. RANCHO CUCAMONGA PROPERTY, LOCATED IN THE CITY OF RANCHO CUCAMONGA, CA. 16PP	SRS	
SB-03581	NADB-R - 1063581	2000	LAPIN, PHILLIPE	CULTURAL RESOURCE ASSESSMENT FOR PBW FACILITY CM 226-01, COUNTY OF SAN BERNARDINO, CA. 5PP	LSA	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SB-04156	NADB-R - 1064156	2002	DUKE, CURT	CULTURAL RESOURCE ASSESSMENT: CINGULAR WIRELESS FACILITY NO. CM226-03, SAN BERNARDINO COUNTY, CA. 5PP	LSA	
SB-04679	NADB-R - 1064679	2006	Goodwin, Riordan, Hansen, Janet, Judith Marvin, and Laura S. White	Historical Resources Evaluation Report and Archaeological Survey Report for the Pacific Electric Inland Empire Trail, Phase I, City of Rancho Cucamonga, San Bernardino County, CA	LSA	36-016448, 36-020136, 36-020137, 36-020138
SB-05358	NADB-R - 1065358	1976	Sider, W.A.	Cucamonga Creek 1776-1976 After 200 Years.		
SB-06419		2009	Fulton, Phil	Cultural Resource Assessment Verizon Wireless Services Stoneridge Facility, City of Rancho Cucamonga, San Bernardino County, CA	LSA Associates, Inc.	
SB-06815		2010	Bonner, Wayne and Sarah Williams	Cultural Resources Records Search and Site Visit Results for T-Mobile USA Cadidate IE24081-D (Terra Vista Cohab at Central Park Plaza), Milliken and Baseline, Rancho Cucamonga, San Bernardino, CA	Michael Brandman Associates	
SB-06816		2010	Wlodarski, Robert	Records Search and Field Reconnaissance Phase for the proposed AT&T Wireless Telecommunications Site ES0142 (Milliken Tower) Milliken and Baseline, Rancho Cucamonga, CA 91730	CARE	

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-36-020137	CA-SBR-015904H	Resource Name - Pacific Electric San Bernardino Line; Resource Name - Pacific Electric Southern Pacific Alignment	Structure	Historic	AH07 (Roads/trails/railroad grades); HP11 (Engineering structure); HP19 (Bridge); HP39 (Other)	2004 (laura S White, Archaeological Associates); 2005 (Janet Hansen, LSA); 2006 (Phil Fulton, LSA); 2008 (Daniel Ballester, CRM TECH); 2011 (Patrick Stanton, SRI); 2014 (Smallwood, J.)	SB-04679, SB-06812, SB-06969, SB-07990

NAHC SLF

Results

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone: (916) 373-3710
Email: nahc@nahc.ca.gov
Website: http://www.nahc.ca.gov
Twitter: @CA_NAHC

June 21, 2019

Jenna Farrell
Tetra Tech

VIA Email to: Jenna.farrell@tetratech.com

RE: Central Park Project, San Bernardino County

Dear Ms. Farrell:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: steven.quinn@nahc.ca.gov.

Sincerely,

Steven Quinn
Associate Governmental Program Analyst

Attachment

Native American Heritage Commission
Native American Contact List
San Bernardino County
6/21/2019

Gabrieleno Band of Mission Indians - Kizh Nation
Andrew Salas, Chairperson
P.O. Box 393 — Gabrieleno
Covina, CA, 91723
Phone: (626) 926 - 4131
admin@gabrielenoindians.org

Gabrieleno/Tongva San Gabriel Band of Mission Indians
Anthony Morales, Chairperson
P.O. Box 693 — Gabrieleno
San Gabriel, CA, 91778
Phone: (626) 483 - 3564
Fax: (626) 286-1262
GTTribalcouncil@aol.com

Gabrielino /Tongva Nation
Sandonne Goad, Chairperson
106 1/2 Judge John Aiso St., #231 — Gabrielino
Los Angeles, CA, 90012
Phone: (951) 807 - 0479
sgoad@gabrielino-tongva.com

Gabrielino Tongva Indians of California Tribal Council
Robert Dorame, Chairperson
P.O. Box 490 — Gabrielino
Bellflower, CA, 90707
Phone: (562) 761 - 6417
Fax: (562) 761-6417
gtongva@gmail.com

Gabrielino-Tongva Tribe
Charles Alvarez,
23454 Vanowen Street — Gabrielino
West Hills, CA, 91307
Phone: (310) 403 - 6048
roadkingcharles@aol.com

Morongo Band of Mission Indians
Robert Martin, Chairperson
12700 Pumarra Rroad — Cahuilla, Serrano
Banning, CA, 92220
Phone: (951) 849 - 8807
Fax: (951) 922-8146
dtorres@morongo-nsn.gov

Morongo Band of Mission Indians
Denisa Torres, Cultural Resources Manager
12700 Pumarra Rroad — Cahuilla, Serrano
Banning, CA, 92220
Phone: (951) 849 - 8807
Fax: (951) 922-8146
dtorres@morongo-nsn.gov

San Fernando Band of Mission Indians
Donna Yocum, Chairperson
P.O. Box 221838 — Kitanemuk, Vanyume, Tataviam
Newhall, CA, 91322
Phone: (503) 539 - 0933
Fax: (503) 574-3308
ddyocum@comcast.net

San Manuel Band of Mission Indians
Lee Clauss, Director of Cultural Resources
26569 Community Center Drive — Serrano
Highland, CA, 92346
Phone: (909) 864 - 8933
Fax: (909) 864-3370
lclauss@sanmanuel-nsn.gov

Serrano Nation of Mission Indians
Wayne Walker, Co-Chairperson
P. O. Box 343 — Serrano
Patton, CA, 92369
Phone: (253) 370 - 0167
serranonation1@gmail.com

Serrano Nation of Mission Indians
Mark Cochrane, Co-Chairperson
P. O. Box 343 — Serrano
Patton, CA, 92369
Phone: (909) 528 - 9032
serranonation1@gmail.com

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Central Park Project, San Bernardino County.

APPENDIX C
Chain of Title Records

Chain of Title
Legal Description: Township 1 South, Range 7 West, Section 36, Lots 1-11
Rancho Cucamonga, CA

	City of Rancho Cucamonga	Lewis Construction Co. / Lewis Development Co.	Lewis Homes of California	?	Roy & Phyllis Leventhal	The Estate of Charles E. Latimer
Acquired Property on:	November 9, 1984	July, 15 1980			February 27, 1978	
Released property on:	Present	November 9, 1984	July, 15 1980	1980 - 1978		February 27, 1978
Supporting Document:	Grant Deed **Attachment A**	Grant Deed **Attachment A and Attachment B**	. Release of Property, Grant Deed **Attachment B**	Lewis Homes of Calfifornia Aquires the Property	Court Ordered Sale of Personal Property via Mr. Charles E. Latimer's (deceased) Living Will **Attachment C**	No record of the date that Mr. Latimer acquired the property. However two (2) documents were located that prove ownership on two specific dates. 1: Grant of Easement dated November, 8 1961 **Attachment D** 2: Record of Survey filed on November 5, 1970 **Attachment E**

RECORDING REQUESTED BY

AND WHEN RECORDED MAIL THIS DEED AND, UNLESS OTHER WISE SHOWN BELOW, MAIL TAX STATEMENTS TO

NAME CITY CLERK
ADDRESS CITY OF RANCHO CUCAMONGA
CITY & STATE ZIP P.O. BOX 807
RANCHO CUCAMONGA, CA 91730

Title Order No. Escrow No.

NO FEE
D

84-270091

RECORDED IN
OFFICIAL RECORDS

1984 NOV -9 AM 10: 21

SAN BERNARDINO
CO., CALIF.

84-270091

SPACE ABOVE THIS LINE FOR RECORDER'S USE

GRANT DEED

The undersigned declares that the documentary transfer tax is $ -0-* and is
☐ computed on the full value of the interest or property conveyed, or is
☐ computed on the full value less the value of liens or encumbrances remaining thereon at the time of sale. The land, tenements or realty is located in
☐ unincorporated area ☐ city of and
*Exempt per Revenue and Taxation Code Section 11922.
FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

LEWIS CONSTRUCTION CO., INC., a California Corporation, and LEWIS DEVELOPMENT CO., a General Partnership (hereinafter referred to as "Grantor"),

hereby GRANT(S) to the CITY OF RANCHO CUCAMONGA, a California Municipal Corporation (hereinafter referred to as "Grantee"),

the following described real property in the City of Rancho Cucamonga, county of San Bernardino, state of California:

Lots 1 through 11, inclusive, of Tract 12809, as shown on Pages _____, Book No. _____ of Records in the Office of the County Recorder in the County of San Bernardino, California.

SUBJECT, however, to any and all restrictions, covenants, conditions, easements, reservations, rights, and rights of way, and outstanding mineral interests, if any, as may be contained in the Official Records of San Bernardino County, California, and those certain matters contained in Exhibit "A" of this Deed, which Exhibit is attached hereto and made a part hereof.

Dated October 24, 1984

LEWIS CONSTRUCTION CO., INC.,
a California Corporation

By: Richard A. Lewis President

LEWIS DEVELOPMENT CO.,
a General Partnership

By: Richard A. Lewis Authorized Agent

STATE OF CALIFORNIA
COUNTY OF } SS
On this the day of 19 , before me the undersigned, a
Notary Public in and for said County and State, personally appeared
, personally known

FOR NOTARY SEAL OR STAMP

(Corporation)

TITLE INSURANCE AND TRUST

A TICOR COMPANY

84-270084

STATE OF CALIFORNIA
COUNTY OF SAN BERNARDINO } SS.

On October 24, 1984 before me, the undersigned, a Notary Public in and for said State, personally appeared Richard A. Lewis

known to me to be the _____ President, and _____

known to me to be _____ Secretary

of the corporation that executed the within Instrument, known to me to be the persons who executed the within Instrument on behalf of the corporation therein named, and acknowledged to me that such corporation executed the within instrument pursuant to its by-laws or a resolution of its board of directors.

WITNESS my hand and official seal.

Signature Edna A. Robinson
Edna A. Robinson

OFFICIAL SEAL
EDNA A. ROBINSON
NOTARY PUBLIC CALIFORNIA
PRINCIPAL OFFICE IN
SAN BERNARDINO COUNTY
My Comm ss on Expires Mar 17, 1987

(This area for official notarial seal)

STAPLE HERE

(Agent of Partnership)

STATE OF CALIFORNIA
COUNTY OF SAN BERNARDINO } SS.

On October 24, 1984, before me, the undersigned, a Notary Public in and for said state, personally appeared Richard A. Lewis

known to me to be the agent(s) of the partnership that executed the within instrument and acknowledged to me that he executed the same for and on behalf of said partnership and that said partnership executed the same.

WITNESS my hand and official seal.

84-270091

Signature Edna A. Robinson
Edna A. Robinson
Name (Typed or Printed)

OFFICIAL SEAL
EDNA A. ROBINSON
NOTARY PUBLIC CALIFORNIA
PRINCIPAL OFFICE IN
SAN BERNARDINO COUNTY
My Comm ss.on Expires Mar 17, 1987

(This area for official notarial seal)

STAPLE HERE

84-270091

This is to certify that the interest in real property conveyed by the within instrument to the City of Rancho Cucamonga, a City incorporated under the laws of the State of California, is hereby accepted by order of the City Council, and the grantee consents to the recordation thereof by its duly authorized officer.

Dated: Nov. 1, 1984

By: _____
Lloyd D. Hubbs, City Engineer

EXHIBIT A

TO THAT CERTAIN INDIVIDUAL GRANT DEED

SAID GRANT BEING FURTHER SUBJECT TO:

1. General and special real property taxes for the current fiscal year; a lien not yet due or payable.

2. Deeds of trust now of record.

3. A right of repurchase defined as follows: In the event Grantee does not develop and continue to use all of the Lots of this Property as public park but instead desires to sell or otherwise transfer all or a portion of the Lots directly or indirectly after reconveyance from the lien of the All Inclusive Purchase Money Deed of Trust of even date herewith, then Grantor may exercise a right of repurchase, which right shall be effective for a period of twenty (20) years from the date hereof, by serving notice of such exercise on the Grantee within sixty (60) days after notification by Grantee of its desire to sell or transfer, and by tendering to the Grantee, in cash, within one hundred eighty (180) days after such notification by Grantee the full amount paid by the Grantee for obtaining reconveyance of the Lot or Lots being repurchased from the lien of said All Inclusive Purchase Money Deed of Trust. A lease, license, or similar grant by Grantee to a private business entity for purposes of providing or operating public recreational facilities or ancillary commercial facilities shall not activate this right of repurchase. The right of repurchase shall not be appurtenant to the land, but shall belong solely to Grantor and may be assigned only to a business entity, more than fifty percent (50%) of which is owned and controlled, directly or indirectly by one or more of Ralph M. Lewis, Goldy S. Lewis, Richard A. Lewis, Robert E. Lewis, Roger G. Lewis, Randall W. Lewis, Edwin C. Kimmel, or to any one or more of such individuals or their heirs.

84-270091

175/3

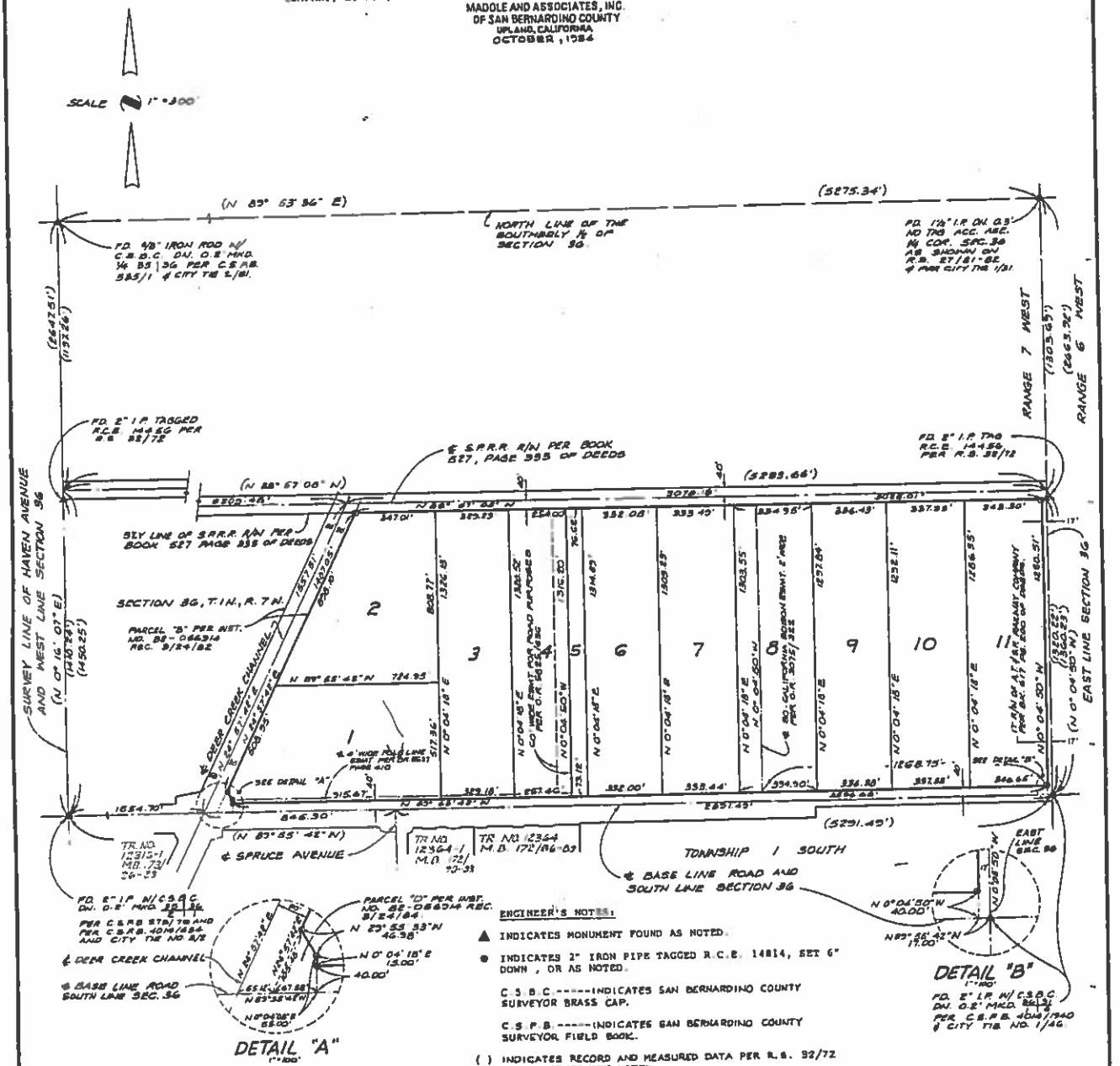
TRACT NO. 12809

100.165 ACRES GROSS
11 LOTS

IN THE CITY OF RANCHO CUCAMONGA, CALIFORNIA

BEING A SUBDIVISION OF A PORTION OF THE SOUTH ONE-HALF OF SECTION 36, TOWNSHIP 1 NORTH, RANGE 7 WEST, SAN BERNARDINO MERIDIAN, IN THE CITY OF RANCHO CUCAMONGA, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF APPROVED BY THE SURVEYOR GENERAL, DATED JUNE 20, 1884, LYING SOUTHERLY OF THE SOUTHERLY RIGHT OF WAY LINE OF THE PACIFIC ELECTRIC RAILROAD COMPANY, AS CONVEYED BY DEED FROM ITALIAN VINEYARD COMPANY, ET AL., RECORDED APRIL 22, 1913, IN BOOK 527 PAGE 333 OF DEEDS.

MADOLE AND ASSOCIATES, INC.
OF SAN BERNARDINO COUNTY
UPLAND, CALIFORNIA
OCTOBER, 1984



ENGINEER'S NOTES:

▲ INDICATES MONUMENT FOUND AS NOTED.

● INDICATES 2" IRON PIPE TAGGED R.C.E. 14814, SET 6" DOWN, OR AS NOTED.

C.S.B.C. -----INDICATES SAN BERNARDINO COUNTY SURVEYOR BRASS CAP.

C.S.F.B. -----INDICATES SAN BERNARDINO COUNTY SURVEYOR FIELD BOOK.

( ) INDICATES RECORD AND MEASURED DATA PER R.S. 92/72 UNLESS OTHERWISE NOTED.

BASIS OF BEARINGS:

THE BEARING OF N. 89°55'42" W. AS SHOWN ON THE CENTER LINE OF BASELINE ROAD ON MAP OF RECORD OF SURVEY AS RECORDED IN BOOK 32, PAGE 72 OF RECORDS OF SURVEY, WAS USED AS THE BASIS OF BEARING FOR THIS MAP.

TRACT NO. 12809

100.165 ACRES GROSS
11 LOTS

IN THE CITY OF RANCHO CUCAMONGA, CALIFORNIA

BEING A SUBDIVISION OF A PORTION OF THE SOUTH ONE-HALF OF SECTION 36, TOWNSHIP 1 NORTH, RANGE 7 WEST, SAN BERNARDINO MERIDIAN, IN THE CITY OF RANCHO CUCAMONGA, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF APPROVED BY THE SURVEYOR GENERAL, DATED JUNE 20, 1884, LYING SOUTHERLY OF THE SOUTHERLY RIGHT OF WAY LINE OF THE PACIFIC ELECTRIC RAILROAD COMPANY, AS CONVEYED BY DEED FROM ITALIAN VINEYARD COMPANY, ET AL., RECORDED APRIL 22, 1913, IN BOOK 527 PAGE 333 OF DEEDS.

MADDLE AND ASSOCIATES, INC.
OF SAN BERNARDINO COUNTY
UPLAND, CALIFORNIA

OCTOBER, 1984

TICOR TITLE INSURANCE COMPANY, FORMERLY TITLE INSURANCE AND TRUST COMPANY, A CALFORNIA CORPORATION, TRUSTEE UNDER A DEED OF TRUST RECORDED AUGUST 28, 1978, IN BOOK 9505 PAGE 1608, OFFICIAL RECORDS OF SAN BERNARDINO COUNTY.

BY Jack H. Mortensen Assistant Vice-President

BY _____

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO) SS

ON SEPTEMBER 28, 1984, BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, PERSONALLY APPEARED JACK H. MORTENSEN PERSONALLY KNOWN TO ME TO BE THE ASST. VICE PRES. AND _____ PERSONALLY KNOWN TO ME TO BE THE _____ OF TICOR TITLE INSURANCE COMPANY, FORMERLY TITLE INSURANCE AND TRUST COMPANY, A CALIFORNIA CORPORATION , THE CORPORATION THAT EXECUTED THE WITHIN INSTRUMENT, AND ACKNOWLEDGED TO ME THAT THEY EXECTUED THE SAME FOR AND ON BEHALF OF SAID ASSOCIATION AND THAT SAID ASSOCIATION EXECUTED THE SAME.

WITNESS MY HAND AND OFFICIAL SEAL:

EDNA A ROBINSON

Edna A. Robinson
A NOTARY PUBLIC IN AND FOR
SAID COUNTY AND STATE

MY COMMISSION EXPIRES 3-17-87

TICOR TITLE INSURANCE COMPANY, FORMERLY TITLE INSURANCE AND TRUST COMPANY, A CALIFORNIA CORPORATION, TRUSTEE UNDER A DEED OF TRUST RECORDED JULY 17, 1980, AS INSTRUMENT NO. 80-159728.

BY Jack H. Mortensen Assistant Vice President

BY _____

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO) SS

ON SEPTEMBER 28, 1984, BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, PERSONALLY APPEARED JACK H. MORTENSEN PERSONALLY KNOWN TO ME TO BE THE ASST. VICE PRES. AND _____ PERSONALLY KNOWN TO ME TO BE THE _____ OF TICOR TITLE INSURANCE COMPANY, FORMERLY TITLE INSURANCE AND TRUST COMPANY, A CALIFORNIA CORPORATION , THE CORPORATION THAT EXECUTED THE WITHIN INSTRUMENT, AND ACKNOWLEDGED TO ME THAT THEY EXECTUED THE SAME FOR AND ON BEHALF OF SAID ASSOCIATION AND THAT SAID ASSOCIATION EXECUTED THE SAME.

WITNESS MY HAND AND OFFICIAL SEAL:

EDNA A. ROBINSON

Edna A. Robinson
A NOTARY PUBLIC IN AND FOR
SAID COUNTY AND STATE

MY COMMISSION EXPIRES 3-17-87

SIGNATURE OMISSIONS:

1. THE SIGNATURES OF WESTERN SUPPLY CORP. OWNER OF OIL, GAS, MINERALS, HYDROCARBON AND KINDRED SUBSTANCES LYING BELOW A DEPTH OF 500 FEET, BUT WITHOUT THE RIGHT OF SURFACE ENTRY AS DISCLOSED BY DEED RECORDED 9-17-79 IN BOOK 9772, PAGE 1262 OF OFFICIAL RECORDS, HAS BEEN OMITTED UNDER THE PROVISIONS OF SECTION 66436(c) (3) OF THE SUBDIVISION MAP ACT.

2. THE SIGNATURE OF CUCAMONGA COUNTY WATER DISTRICT, THE OWNER OF AN EASEMENT FOR PIPE LINES AS DISCLOSED BY DOCUMENT RECORDED 4-3-43 IN BOOK 1509, PAGE 267 OF OFFICIAL RECORDS HAS BEEN OMITTED UNDER THE PROVISIONS OF SECTION 66436(c) (1) OF THE SUBDIVISION MAP ACT. ITS INTEREST CANNOT RIPEN INTO A FEE.

3. THE SIGNATURES OF SOUTHERN CALIFORNIA EDISON COMPANY, OWNER OF AN EASEMENT FOR POLE LINE PURPOSES AS DISCLOSED BY DEED RECORDED 12-19-52 IN BOOK 3075, PAGE 328 OF OFFICIAL RECORDS, HAS BEEN OMITTED UNDER THE PROVISIONS OF SECTION 66436 (c) (1) OF THE SUBDIVISION MAP ACT.

4. THE SIGNATURES OF SOUTHERN CALIFORNIA EDISON COMPANY, THE OWNER OF AN EASEMENT FOR GUY WIRES, POLES AND ANCHORS AS DISCLOSED BY DOCUMENT RECORDED 9-18-61 IN BOOK 5387, PAGE 440 OF OFFICIAL RECORDS, HAS BEEN OMITTED UNDER THE PROVISIONS OF SECTION 66436 (c) (1) OF THE SUBDIVISION MAP ACT. ITS INTEREST CANNOT RIPEN INTO A FEE.

5. THE SIGNATURES OF BANK OF AMERICA NATIONAL TRUST AND SAVINGS ASSOCIATION, OWNER OF AN EASEMENT FOR ROAD PURPOSES, RECORDED 12-28-62 IN BOOK 5855, PAGE 698 OF OFFICIAL RECORDS, HAS BEEN OMITTED UNDER THE PROVISIONS OF SECTION 66436 (c) (1) OF THE SUBDIVISION MAP ACT

SIGNATURE OMISSIONS CONTINUED

6. THE SIGNATURE OF CUCAMONGA COUNTY WATER DISTRICT, THE OWNER OF AN EASEMENT FOR PIPE LINES AS DISCLOSED BY DOCUMENT RECORDED 10-27-61 IN BOOK 5571, PAGE 258 OF OFFICIAL RECORDS HAS BEEN OMITTED UNDER THE PROVISIONS OF SECTION 66436 (c) (1) OF THE SUBDIVISION MAP ACT. ITS INTEREST CANNOT RIPEN INTO A FEE. CANNOT BE LOCATED FROM RECORD

7. THE SIGNATURES OF CARLSBURG RESOURCES CORPORATION, A CALIFORNIA CORPORATION, OWNER OF OIL, GAS, MINERALS, HYDROCARBON AND KINDRED SUBSTANCES LYING BELOW A DEPTH OF 500 FEET, BUT WITHOUT THE RIGHT OF SURFACE ENTRY AS DISCLOSED BY DEED RECORDED 11-30-70 IN BOOK 7669, PAGE 267 OF OFFICIAL RECORDS, HAS BEEN OMITTED UNDER THE PROVISIONS OF SECTION 66436 (c) (3) OF THE SUBDIVISION MAP ACT.

SOILS REPORT:

PURSUANT TO THE PROVISIONS OF SECTION 66436 (f) OF THE SUBDIVISION MAP ACT, A SOILS REPORT BY RICHARD MILLS AND ASSOCIATES, DATED JANUARY 28, 19 78, HAS BEEN PREPARED FOR THIS SUBDIVISION AND IS ON FILE WITH THE BUILDING DEPARTMENT OF THE CITY OF RANCHO CUCAMONGA.

175/1

TRACT NO. 12809

100.165 ACRES GROSS
11 LOTS

IN THE CITY OF RANCHO CUCAMONGA, CALIFORNIA

BEING A SUBDIVISION OF A PORTION OF THE SOUTH ONE-HALF OF SECTION 36, TOWNSHIP 1 NORTH, RANGE 7 WEST, SAN BERNARDINO MERIDIAN, IN THE CITY OF RANCHO CUCAMONGA, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF APPROVED BY THE SURVEYOR GENERAL, DATED JUNE 20, 1884, LYING SOUTHERLY OF THE SOUTHERLY RIGHT OF WAY LINE OF THE PACIFIC ELECTRIC RAILROAD COMPANY, AS CONVEYED BY DEED FROM ITALIAN VINEYARD COMPANY, ET AL., RECORDED APRIL 22, 1913, IN BOOK 527 PAGE 333 OF DEEDS.

MADOLE AND ASSOCIATES, INC.
OF SAN BERNARDINO COUNTY
UPLAND, CALIFORNIA
OCTOBER, 1984

OWNER'S CERTIFICATE:

WE HEREBY CERTIFY THAT WE ARE ALL AND THE ONLY PARTIES HAVING ANY RECORD TITLE INTEREST IN THE LAND SUBDIVIDED AS SHOWN ON THE ANNEXED MAP, AND WE HEREBY CONSENT TO THE PREPARATION AND RECORDATION OF THIS FINAL MAP.

LEWIS DEVELOPMENT CO., A CALIFORNIA GENERAL PARTNERSHIP, OWNER

BY: Richard A. Lewis
RICHARD A. LEWIS, AUTHORIZED AGENT

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO) SS

ON THIS 29TH DAY OF SEPTEMBER 1984, BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, PERSONALLY APPEARED RICHARD A. LEWIS, PERSONALLY KNOWN TO ME (OR PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE) TO BE THE AGENT OF LEWIS DEVELOPMENT CO., THE PARTNERSHIP THAT EXECUTED THE WITHIN INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR AND ON BEHALF OF SAID PARTNERSHIP AND THAT SAID PARTNERSHIP EXECUTED THE SAME.

WITNESS MY HAND AND OFFICIAL SEAL

SIGNATURE Edna A. Robinson
NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE
MY COMMISSION EXPIRES 3-17-87

LEWIS CONSTRUCTION CO. INC., A CALIFORNIA CORPORATION, OWNER

BY: Richard A. Lewis
RICHARD A. LEWIS, PRESIDENT

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO) SS

ON THIS 29TH DAY OF SEPTEMBER, 1984, BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, PERSONALLY APPEARED RICHARD A. LEWIS, PERSONALLY KNOWN TO ME (OR PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE) TO BE THE PRESIDENT OF LEWIS CONSTRUCTION CO. INC., THE CORPORATION THAT EXECUTED THE WITHIN INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR AND ON BEHALF OF SAID CORPORATION AND THAT SAID CORPORATION EXECUTED THE SAME.

WITNESS MY HAND AND OFFICIAL SEAL

SIGNATURE Edna A. Robinson
NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE
MY COMMISSION EXPIRES 3-17-87

GREAT WESTERN SAVINGS, A FEDERAL SAVINGS AND LOAN ASSOCIATION, SUCCESSOR TO LYTTON SAVINGS AND LOAN ASSOCIATION, A CALIFORNIA CORPORATION, BENEFICIARY UNDER A DEED OF TRUST RECORDED JANUARY 16, 1968, IN BOOK 6959, PAGE 190, OFFICIAL RECORDS OF SAN BERNARDINO COUNTY.

BY William DelBeato
VICE PRESIDENT

BY Jean H. Graham
ASSISTANT SECRETARY

STATE OF CALIFORNIA)
COUNTY OF Los Angeles) SS

ON Oct 2, 1984, BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, PERSONALLY APPEARED, William DelBeato PERSONALLY KNOWN TO ME TO BE THE Vice Pres. AND Jean Graham PERSONALLY KNOWN TO ME TO BE THE Asst. Secretary OF GREAT WESTERN SAVINGS, A FEDERAL SAVINGS AND LOAN ASSOCIATION, THE ASSOCIATION THAT EXECUTED THE WITHIN INSTRUMENT, AND ACKNOWLEDGED TO ME THAT THEY EXECUTED THE SAME FOR AND ON BEHALF OF SAID ASSOCIATION AND THAT SAID ASSOCIATION EXECUTED THE SAME.

WITNESS MY HAND AND OFFICIAL SEAL.

SIGNATURE
A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE
MY COMMISSION EXPIRES 10-24-86

ENGINEER'S CERTIFICATE:

I JAMES M. MADOLE, HEREBY CERTIFY THAT I AM A REGISTERED CIVIL ENGINEER OF THE STATE OF CALIFORNIA AND THAT THIS MAP CONSISTING OF 3 SHEETS IS A TRUE AND COMPLETE REPRESENTATION OF A SURVEY MADE UNDER MY SUPERVISION IN AUGUST, 1984 AND THAT ALL THE MONUMENTS SHOWN HEREON ARE OF THE CHARACTER AND OCCUPY THE POSITIONS INDICATED, OR WILL BE SET IN SUCH POSITIONS WITHIN ONE (1) YEAR OF RECORDATION, IN COMPLIANCE WITH SECTION 66495 AND 66496 OF THE SUBDIVISION MAP ACT AND ARE OR WILL BE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED.

DATED: 9/27/84

JAMES M. MADOLE, R.C.E. 14814

CITY ENGINEER'S CERTIFICATE:

I HEREBY CERTIFY THAT I HAVE EXAMINED THE ANNEXED MAP, THAT THE SUBDIVISION SHOWN THEREON IS SUBSTANTIALLY THE SAME AS IT APPEARED ON THE TENTATIVE MAP AND ANY APPROVED ALTERATIONS THERTO AND THAT ALL THE PROVISIONS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE OF THE CITY OF RANCHO CUCAMONGA MUNICIPAL CODE HAVE BEEN COMPLIED WITH AND I AM SATISFIED THAT THIS MAP IS TECHNICALLY CORRECT.

DATED: 5 October 1984 BY: Lloyd Hubbs

LLOYD HUBBS, R.C.E. 23869
CITY ENGINEER,
CITY OF RANCHO CUCAMONGA

CITY PLANNING COMMISSION CERTIFICATE:

I HEREBY CERTIFY THAT THIS SUBDIVISION SHOWN ON THE ANNEXED MAP IS IN SUBSTANTIAL CONFORMANCE WITH THE TENTATIVE MAP, APPROVED AT A MEETING OF THE PLANNING COMMISSION OF THE CITY OF RANCHO CUCAMONGA, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, HELD ON THE 26th DAY OF September 1984.

DATED: 5 October 1984 Jack Lam

JACK LAM, SECRETARY PLANNING COMMISSION
CITY OF RANCHO CUCAMONGA

RANCHO CUCAMONGA CITY COUNCIL CERTIFICATE:

I HEREBY CERTIFY THAT THE CITY COUNCIL OF THE CITY OF RANCHO CUCAMONGA, BY A MOTION DULY SECONDED AND PASSED APPROVED THE ATTACHED MAP ON THE 3rd DAY OF October, 1984.

DATED 5 October 1984 Beverly Authelet

BEVERLY AUTHELET, CITY CLERK
CITY OF RANCHO CUCAMONGA

AUDITOR'S CERTIFICATE:

I HEREBY CERTIFY THAT ACCORDING TO THE RECORDS OF THIS OFFICE, AS OF THIS DATE, THERE ARE NO LIENS AGAINST THE REAL PROPERTY SHOWN UPON THE ANNEXED MAP FOR UNPAID STATE, COUNTY, MUNICIPAL, OR LOCAL TAXES OR SPECIAL ASSESSMENTS COLLECTED AS TAXES, EXCEPT TAXES OR SPECIAL ASSESSMENTS NOT YET PAYABLE, ESTIMATED TO BE $7,000.00.

DATED: October 5, 1984 BY: Jacqueline H. Wright

ERROL J. MACKEUM, COUNTY AUDITOR
COUNTY OF SAN BERNARDINO, CALIFORNIA

BOARD OF SUPERVISOR'S CERTIFICATE:

I HEREBY CERTIFY THAT A BOND IN THE SUM OF $7500- HAS BEEN EXECUTED AND FILED WITH THE BOARD OF SUPERVISORS OF THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, CONDITIONED UPON THE PAYMENT OF ALL TAXES, STATE, COUNTY, MUNICIPAL, OR LOCAL AND ALL SPECIAL ASSESSMENTS COLLECTED AS TAXES, WHICH AT THE TIME OF FILING OF THE ANNEXED MAP WITH THE COUNTY RECORDER ARE A LIEN AGAINST SAID PROPERTY, BUT NOT PAYABLE AND THAT THE SUBDIVIDER HAS FILED WITH ME A CERTIFICATE BY THE PROPER OFFICE GIVING HIS ESTIMATE OF THE AMOUNT OF SAID TAXES AND ASSESSMENTS, AND SAID BOND HAS BEEN DULY APPROVED BY SAID BOARD OF SUPERVISORS.

Carlene Sweat
MARTHA M. SEKERAK, CLERK OF THE BOARD OF SUPERVISORS OF THE COUNTY OF SAN BERNARDINO

DEPUTY

DATE: 10/5/84

84-246629
Ticor Title Insurance
October 15 1984
12:32 P.M.
175 PAGE 1, 2, 3
MAPS
$ 10.00

175/1

RECORDING REQUESTED BY

FIRST AMERICAN TITLE INSURANCE COMPANY

AND WHEN RECORDED MAIL TO

NAME LEWIS HOMES
ADDRESS 1156 North Mountain Avenue
CITY & STATE Post Office Box 670
Upland, California 91786

MAIL TAX STATEMENTS TO

NAME LEWIS HOMES
ADDRESS 1156 North Mountain Avenue
CITY & STATE Post Office Box 670
Upland, California 91786

80-158029

RECORDED IN OFFICIAL RECORDS
JUL 15 1980 AT 8 30 A.M.
SAN BERNARDINO COUNTY, CALIF.

3.00
E

SPACE ABOVE THIS LINE FOR RECORDER'S USE

Documentary transfer tax $ 429.00
☐ Computed on full value of property conveyed, or
☒ Computed on full value less liens & encumbrances remaining thereon at time of sale.

D. Cassidy
Signature of declarant or agent determining tax firm name

☐ Unincorporated area ☐ City of

Grant Deed

L-1

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

LEWIS HOMES OF CALIFORNIA, a partnership,

hereby GRANT(S) to

LEWIS CONSTRUCTION CO., INC., a corporation,

the following described real property in the City of Rancho Cucamonga,
county of San Bernardino, state of California:

That portion of the East 280 acres of Section 36, Township 1 North, Range 7 West, San Bernardino Meridian, in the County of San Bernardino, State of California, lying Southerly of the Southerly right-of-way line of the Pacific Electric Railway as conveyed by Deed from Italian Vineyard Company, Et al, recorded April 22, 1913 in Book 527, Page 333 of Deeds.

Except therefrom that portion included in the right-of-way of the Atchison, Topeka and Santa Fe Railway Company, as contained in the Decree of Partition, dated June 28, 1917, and recorded July 5, 1917 in Book 617, Page 200 of Deeds.

Also except therefrom all oil, gas, minerals, hydrocarbon and kindred substances lying below a depth of 500 feet, but without the right of surface entry, as granted to Carlsberg Resources Corporation, a California corporation, in the Deed recorded November 30, 1970 in Book 7583, Page 227, Official Records.

Said land is also shown on record of survey recorded in Book 27 of Records Survey, Pages 81 and 82, in the Office of the County Recorder of said County.

80-158029

Dated January 3, 1977

LEWIS HOMES OF CALIFORNIA,
a partnership
BY: Richard A. Lewis
Authorized Agent

TO 1949 CA (8-74)
(Agent of Partnership)

STATE OF CALIFORNIA
COUNTY OF SAN BERNARDINO } ss.

On July 14, 1980 before me, the undersigned, a Notary Public in and for said state, personally appeared Richard A. Lewis known to me to be the agent of the partnership that executed the within instrument and acknowledged to me

(D 10000-35 D.S.

O

BOOK 9377 PAGE 932.

When recorded mail to:
WESTOVER & MACK
500 Newport Center Drive
Suite B
Newport Beach, California 92660
(714) 644-6760

Attorneys for Petitioner

(ENDORSED)
FILED
ONTARIO BRANCH
1978 Sep 22 PM 12:34
V. DENNIS WARDLE, CO. CLERK
BY GEORGIANNA LOVELADY Deputy

56028 DOC

Recording Requested By
SAFECO TITLE INSURANCE COMPANY

561

RECORDED IN OFFICIAL RECORDS
FEB 27 1978 AT 8:30 A.M.
V. DENNIS WARDLE
CLERK-RECORDER
SAN BERNARDINO COUNTY, CALIF.

12.00
E

SUPERIOR COURT OF CALIFORNIA

COUNTY OF SAN BERNARDINO

In the Matter of the Estate of CHARLES R. LATIMER, also known as CHARLES LATIMER, Deceased.	NO. PW-932 ORDER CONFIRMING SALE OF PERSONAL PROPERTY

The Return and Petition of THE BANK OF CALIFORNIA, N.A., a National Banking Association, as Successor Administrator-with-Will-Annexed of the Estate of CHARLES R. LATIMER, deceased, for confirmation of the sale of the personal property hereinafter described, HARRY E. WESTOVER, of WESTOVER & MACK, appearing as attorney for the petitioner, coming on regularly to be heard on the 12th day of September, 1977, the Court, after examining the Return of Sale of Personal Property at Private Sale and the Supplement thereto and hearing the evidence finds that due notice of the hearing of such Return and Petition has been given as required by law, that all the allegations of the petition as supplemented are true, that such sale was legally made and fairly conducted, that notice of the time, place

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and terms of the sale was duly given as required by law and that said notice adequately described the property sold and that the price obtained is the reasonable value of the property sold:

IT IS ORDERED BY THE COURT that the sale so made of the personal property hereinafter described to ROY LEVENTHAL and PHYLLIS LEVENTHAL, husband and wife, for the sum of $520,000 cash plus accrued interest on said notes to the date of the close of sale be and the same is hereby confirmed. Upon receipt of the sum of $520,000 cash plus a Promissory Note Agreement and Guarantee in the form attached to the Return of Sale of Personal Property at Private Sale filed herein on August 23, 1977 properly signed by the payors and the guarantor, THE BANK OF CALIFORNIA, N.A., a National Banking Association, as Successor Administrator-with-Will-Annexed is directed to execute to said purchasers the necessary instruments of transfer and deliver said property to them.

Said Promissory Note Agreement and Guarantee shall reflect the accrued but unpaid interest in connection with the following described personal property from November 24, 1976 to the date of the close of sale.

The personal property so sold, six (6) first trust deed notes referred to generally as Notes A, B, C, F, G and H, is described more fully as follows.

Note A dated October 15, 1970 in the face amount of $177,647.31 with principal balance as of August 22, 1977 in the amount of $119,329.77. Said note bears interest at 6% with interest and principal payable on November 23rd of each year in the amount of $18,292.31 with the unpaid balance

of principal and interest due and payable on November 23, 1982. Said note is secured by a first trust deed on real property, a copy of which trust deed is attached hereto as Exhibit A to which reference is hereby made.

Note B dated October 15, 1970 in the face amount of $186,023.32 with principal balance as of August 22, 1977 in the amount of $124,998.73. Said note bears interest at 6% with interest and principal payable on November 23rd of each year in the amount of $19,154.79 with the unpaid balance of principal and interest due and payable on November 23, 1982. Said note is secured by a first trust deed on real property, a copy of which trust deed is attached hereto as Exhibit B to which reference is hereby made.

Note C dated October 15, 1970 in the face amount of $186,023.32 with principal balance as of August 22, 1977 in the amount of $124,998.73. Said note bears interest at 6% with interest and principal payable on November 23rd of each year in the amount of $19,154.79 with the unpaid balance of principal and interest due and payable on November 23, 1982. Said note is secured by a first trust deed on real property, a copy of which trust deed is attached hereto as Exhibit C to which reference is hereby made.

Note F dated October 15, 1970 in the face amount of $167,972.51 with principal balance as of August 22, 1977 in the amount of $111,692.77. Said note bears interest at 6% with interest and principal payable on November 23rd of each year in the amount of $17,296.08 with the unpaid balance of principal and interest due and payable on November 23,

1932. Said note is secured by a first trust deed on real property, a copy of which trust deed is attached hereto as Exhibit D to which reference is hereby made.

Note G dated October 15, 1970 in the face amount of $167,972.50 with principal balance as of August 22, 1977 in the amount of $97,771.51. Said note bears interest at 6% with interest and principal payable on November 23rd of each year in the amount of $17,296.08 with the unpaid balance of principal and interest due and payable on November 23, 1982. Said note is secured by a first trust deed on real property, a copy of which trust deed is attached hereto as Exhibit E to which reference is hereby made.

Note H dated October 15, 1970 in the face amount of $167,972.49 with principal balance as of August 22, 1977 in the amount of $97,771.51. Said note bears interest at 6% with interest and principal payable on November 23rd of each year in the amount of $17,296.08 with the unpaid balance of principal and interest due and payable on November 23, 1982. Said note is secured by a first trust deed on real property, a copy of which trust deed is attached hereto as Exhibit E to which reference is hereby made.

DATED: 9/12/77

KENNETH G. ZIEBARTH, JR.
JUDGE OF THE SUPERIOR COURT

THE DOCUMENTS TO WHICH THIS CERTIFICATION IS ATTACHED ARE FULL, TRUE AND CORRECT COPIES OF THE ORIGINALS ON FILE AND OF RECORD IN MY OFFICE
THIS CERTIFICATION APPLIES TO [illegible] OFFICIAL PAGES.
ATTEST November 1, 1977

V. DENNIS WARDLE
County Clerk and Ex-Officio Clerk of the Superior Court of the State of California, in and for the County of San Bernardino.
BY Sonja E. Benitez DEPUTY

SUPERIOR COURT SAN BERNARDINO COUNTY, CAL. OFFICIAL SEAL

561

[illegible] Company
San Bernardino, California

AND WHEN RECORDED MAIL TO

NAME Crocker-Citizens National Bank
ADDRESS 4077 Main Street
CITY & STATE Riverside, California 92501
Attn: Collection Dept.

Order No. _____ Escrow No. 463309-BMC

SECURITY TITLE INSURANCE CO.
NOV 23 1970 at 8 A.M.
BOOK 7558 PAGE 973
OFFICIAL RECORDS
San Bernardino County, Calif.
Ted H. Carpenter
Recorder

$2.60
E

BOOK 9377 PAGE 936

SPACE ABOVE THIS LINE FOR RECORDER'S USE

L 92 C

CORPORATION DEED OF TRUST AND ASSIGNMENT OF RENTS

BY THIS DEED OF TRUST, made this 15th day of October, 19 70, between

CARLSBERG FINANCIAL CORPORATION, a California corporation, herein called Trustor, whose address is

1801 Avenue of the Stars, Room 533 (number and street) Century City (city) (zone) California 90067 (state)

and SECURITY TITLE INSURANCE COMPANY, a California corporation, herein called Trustee, and CROCKER-CITIZENS NATIONAL BANK, a National Banking Association, and JOSEPH L. CONNOLLY, Co-Administrators with the will annexed of the estate of Charles R. Latimer, deceased, herein called Beneficiary,

Trustor grants, transfers, and assigns to trustee, in trust, with power of sale, that property in San Bernardino County, California, described as:

All that portion of the Easterly 260 acres of Section 36, Township 1 North, Range 7 West, SAN BERNARDINO BASE AND MERIDIAN, lying Northerly of the Northerly right of way line of the Pacific Electric Railway as conveyed by deed from Italian Vineyard Company, et al., recorded April 22, 1913 in Book 527, page 333 of Deeds.
EXCEPTING therefrom the Easterly 1420.48 feet. ALSO EXCEPTING therefrom that portion included in the right-of-way of the Atchison, Topeka and Santa Fe Railway Company, as contained in the Decree of Partition, dated June 28, 1917 and recorded July 5, 1917 in Book 617, page 200 of Deeds. ALSO EXCEPTING therefrom the existing right-of-way for Highland Avenue.

This Deed of Trust is given to secure a portion of the purchase price of the property herein described.

The Addendum attached hereto is made a part hereof by this reference.

Trustor also assigns to Beneficiary all rents, issues and profits of said realty reserving the right to collect and use the same except during continuance of default hereunder and during continuance of such default authorizing Beneficiary to collect and enforce the same by any lawful means in the name of any party hereto.
For the purpose of securing:
(1) Performance of each agreement of Trustor incorporated by reference or contained herein; (2) payment of the indebtedness evidenced by one promissory note of even date herewith in the principal sum of $ 177,647.31, payable to Beneficiary or order; (3) the payment of any money that may be advanced by the Beneficiary to Trustor, or his successors, with interest thereon.
To protect the security of this Deed of Trust, Trustor agrees by the execution and delivery of this deed of trust and the note secured hereby that the provisions of section A, including paragraphs 1 to 5 thereof and the provisions of section B, including paragraphs 1 to 8 thereof of the deeds of trust recorded in the Official Records of the following counties in the state of California and in the books and at the pages of such Official Records as follows:

COUNTY	Book	Page	COUNTY	Book	Page	COUNTY	Book	Page	COUNTY	Book	Page
Amador	61	320	Los Angeles	25481	351	Orange	2527	108	Santa Barbara	763	33
Calaveras	97	51	Madera	403	365	Riverside	653	417	Santa Clara	4740	31
El Dorado	309	137	Marin	976	165	Sacramento	2930	339	Santa Cruz	1039	403
Fresno	2510	402	Mariposa	27	531	San Bernardino	2187	142	Solano	1201	478
Humboldt	586	170	Merced	912	197	San Diego	4257	114	Stanislaus	912	215
Imperial	688	555	Monterey	1651	185	San Joaquin	1109	10	Tulare	1286	325
Kern	3510	403	Napa	610	801	San Luis Obispo	465	41	Tuolumne	69	427
Kings	397	1	Nevada	213	343	San Mateo	3769	192	Ventura	1653	22
									Yolo	466	325

which provisions are identical in each of said deeds of trust, shall be and they are hereby incorporated herein as fully as though set forth herein at length; and that the references to lands, obligations, and parties in said provisions refer to the lands, obligations, and parties set forth in this deed of trust. A copy of said provisions is printed on the reverse side of this deed of trust.
The undersigned Trustor requests that a copy of any notice of default and any notice of sale hereunder be mailed to him at his address hereinabove set forth. For any statement regarding the obligations secured hereby, Beneficiary may charge the maximum amount permitted by law at the time of the request therefor.

CARLSBERG FINANCIAL CORPORATION

BY: Arthur W. Carlsberg

BY: _____

STATE OF CALIFORNIA,
COUNTY OF Los Angeles } ss.

On November 11, 1970 before me, the undersigned, a Notary Public in and for said County and State, personally appeared Arthur W. Carlsberg, known to me to be the President, and _____, known to me to be the _____ of the corporation that executed the within instrument, known to me to be the persons who executed the within instrument on behalf of the corporation therein named, and acknowledged to me that such corporation executed the within instrument pursuant to its by-laws or a resolution of its board of directors.

Velma Bates

FOR NOTARY SEAL OR STAMP

OFFICIAL SEAL
VELMA BATES
NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN
LOS ANGELES COUNTY

561

San Bernardino, California

AND WHEN RECORDED MAIL TO

NAME Crocker-Citizens National Bank
ADDRESS 4077 Main Street
CITY & STATE Riverside, CA 92501
Attn: Collection Dept.

Order No _____ Escrow No. 463309-BMC

40 [illegible]
NOV 23 1970 at 8 AM

BOOK 7558 PAGE 977
OFFICIAL RECORDS
San Bernardino County, Calif.
Ted H. Carpenter
Recorder

$2.80
B

BOOK 9377 PAGE 937

SPACE ABOVE THIS LINE FOR RECORDER'S USE

L-92 C

CORPORATION DEED OF TRUST AND ASSIGNMENT OF RENTS

BY THIS DEED OF TRUST, made this 15th day of October, 1970, between

CARLSBERG FINANCIAL CORPORATION, a California corporation

, herein called Trustor, whose address is

1801 Avenue of the Stars, Room 533, Century City California 90067
(number and street) (city) (zone) (state)

and SECURITY TITLE INSURANCE COMPANY, a California corporation, herein called Trustee, and CROCKER-CITIZENS NATIONAL BANK, a National Banking Association, and JOSEPH L. CONNOLLY, Co-Administrators with the will annexed of the estate of Charles R. Latimer, deceased, herein called Beneficiary,

Trustor grants, transfers, and assigns to trustee, in trust, with power of sale, that property in San Bernardino County, California, described as:

The Westerly 707.90 feet of the Easterly 1420.48 feet of that portion of Section 36, Township 1 North, Range 7 West, SAN BERNARDINO BASE AND MERIDIAN, lying Northerly of the Northerly right of way line of the Pacific Electric Railway as conveyed by deed from Italian Vineyard Company, et al., recorded April 22, 1913 in Book 527, page 333 of Deeds. EXCEPTING therefrom that portion included in the right-of-way of the Atchison, Topeka and Santa Fe Railway Company, as contained in the Decree of Partition, dated June 28, 1917 and recorded July 5, 1917 in Book 617, page 200 of Deeds. ALSO EXCEPTING therefrom the existing right-of-way for Highland Avenue.

This Deed of Trust is given to secure a portion of the purchase price of the property herein described.
The Addendum attached hereto is made a part hereof by this reference.

Trustor also assigns to Beneficiary all rents, issues and profits of said realty reserving the right to collect and use the same except during continuance of default hereunder and during continuance of such default authorizing Beneficiary to collect and enforce the same by any lawful means in the name of any party hereto.
For the purpose of securing:
(1) Performance of each agreement of Trustor incorporated by reference or contained herein; (2) payment of the indebtedness evidenced by one promissory note of even date herewith in the principal sum of $ 186,023.32 payable to Beneficiary or order; (3) the payment of any money that may be advanced by the Beneficiary to Trustor, or his successors, with interest thereon.
To protect the security of this Deed of Trust, Trustor agrees by the execution and delivery of this deed of trust and the note secured hereby that the provisions of section A, including paragraphs 1 to 5 thereof and the provisions of section B, including paragraphs 1 to 8 thereof of the deeds of trust recorded in the Official Records of the following counties in the state of California and in the books and at the pages of such Official Records as follows:

COUNTY	Book	Page	COUNTY	Book	Page	COUNTY	Book	Page	COUNTY	Book	Page
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Fresno	2510	402	Mariposa	27	531	San Bernardino	2187	142	Solano	1201	478
Humboldt	586	170	Merced	912	197	San Diego	4257	114	Stanislaus	912	215
Imperial	688	555	Monterey	1651	185	San Joaquin	1109	18	Tulare	1286	325
Kern	3510	403	Napa	610	801	San Luis Obispo	465	41	Tuolumne	69	427
Kings	397	1	Nevada	213	343	San Mateo	3769	192	Ventura	1653	22
									Yolo	466	325

which provisions are identical in each of said deeds of trust, shall be and they are hereby incorporated herein as fully as though set forth herein at length; and that the references to lands, obligations, and parties in said provisions refer to the lands, obligations, and parties set forth in this deed of trust. A copy of said provisions is printed on the reverse side of this deed of trust.
The undersigned Trustor requests that a copy of any notice of default and any notice of sale hereunder be mailed to him at his address hereinabove set forth. For any statement regarding the obligations secured hereby, Beneficiary may charge the maximum amount permitted by law at the time of the request therefor.

CARLSBERG FINANCIAL CORPORATION

BY: Arthur W. Carlsberg

BY: _____

STATE OF CALIFORNIA,
COUNTY OF Los Angeles } ss.

On November 11, 1970 before me, the undersigned, a Notary Public in and for said County and State, personally appeared Arthur W. Carlsberg, known to me to be the President, [illegible], of the corporation that executed the within instrument, known to me to be the persons who executed the within instrument on behalf of the corporation therein named, and acknowledged to me that such corporation executed the within instrument pursuant to its by-laws or a resolution of its board of directors.

Celma Bates

FOR NOTARY SEAL OR STAMP

OFFICIAL SEAL
CELMA BATES
NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN
LOS ANGELES COUNTY

...NANCIAL CORPORATION, a California corporation, in favor of CROCKER-CITIZENS NATIONAL BANK AND JOSEPH L. CONNOLLY as Co-Administrators with the will annexed of the Estate of Charles R. Latimer.

San Bernardino, California
October 15, 1970

For value received, receipt of which is hereby acknowledged, the undersigned do hereby transfer, set over and assign unto The United States of America, all right, title and interest in and to the within note, together with all rights accrued or to accrue under the terms of the Deed of Trust given to secure the same, insofar as said terms relate to this Note.

Crocker-Citizens National Bank and Joseph L. Connolly,
as Co-Administrators with the will annexed of the
Estate of Charles R. Latimer, deceased

BY _____
HAROLD F. ERLANDSON, Trust Officer
Co-Administrator

BY _____
JOSEPH L. CONNOLLY,
Co-Administrator

described as:

The Easterly 712.58 feet of that portion of Section 36, Township 1 North, Range 7 West, SAN BERNARDINO BASE AND MERIDIAN, lying Northerly of the Northerly right of way line of the Pacific Electric Railway as conveyed by deed from Italian Vineyard Company, et al., recorded April 22, 1913 in Book 527, page 333 of Deeds.
EXCEPTING therefrom that portion included in the right-of-way of the Atchison, Topeka and Santa Fe Railway Company, as contained in the Decree of Partition, dated June 28, 1917 and recorded July 5, 1917 in Book 617, page 200 of Deeds. ALSO EXCEPTING therefrom the existing right-of-way for Highland Avenue.

This Deed of Trust is given to secure a portion of the purchase price of the property herein described.

The Addendum attached hereto is made a part hereof by this reference.

Trustor also assigns to Beneficiary all rents, issues and profits of said realty reserving the right to collect and use the same except during continuance of default hereunder and during continuance of such default authorizing Beneficiary to collect and enforce the same by any lawful means in the name of any party hereto.
For the purpose of securing: (1) Performance of each agreement of Trustor incorporated by reference or contained herein (2) Payment of the indebtedness evidenced by one promissory note of even date herewith in the principal sum of $ 186,023.32 payable to Beneficiary or order; (3) the payment of any money that may be advanced by the Beneficiary to Trustor, or his successors, with interest thereon.
To protect the security of this Deed of Trust, Trustor agrees by the execution and delivery of this deed of trust and the note secured hereby that the provisions of section A, including paragraphs 1 to 5 thereof and the provisions of section B, including paragraphs 1 to 8 thereof of the deeds of trust recorded in the Official Records of the following counties in the state of California and in the books and at the pages of such Official Records as follows:

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Fresno	2510	402	Mariposa	27	531	San Bernardino	2187	142	Solano	1201	478
Humboldt	536	170	Merced	912	197	San Diego	4257	114	Stanislaus	912	215
Imperial	688	555	Monterey	1651	185	San Joaquin	1109	18	Tulare	1286	325
Kern	3510	403	Napa	610	801	San Luis Obispo	465	41	Tuolumne	69	427
Kings	397	1	Nevada	213	343	San Mateo	3769	192	Ventura	1653	22
									Yolo	466	325

which provisions are identical in each of said deeds of trust, shall be and they are hereby incorporated herein as fully as though set forth herein at length; and that the references to lands, obligations, and parties in said provisions refer to the lands, obligations, and parties set forth in this deed of trust. A copy of said provisions is printed on the reverse side of this deed of trust.
The undersigned Trustor requests that a copy of any notice of default and any notice of sale hereunder be mailed to him at his address hereinabove set forth. For any statement regarding the obligations secured hereby, Beneficiary may charge the maximum amount permitted by law at the time of the request therefor.

CARLSBERG FINANCIAL CORPORATION

BY: _____

BY: _____

STATE OF CALIFORNIA,
COUNTY OF Los Angeles } ss.

On November 11, 1970 before me, the undersigned, a Notary Public in and for said County and State, personally appeared Arthur W. Carlsberg known to me to be the President, XXX XXXXXXXXXXXXXXX XXXXXXXXXXXXXXX XXXXXXof the corporation that executed the within instrument, known to me to be the persons who executed the within instrument on behalf of the corporation therein named, and acknowledged to me that such corporation executed the within instrument pursuant to its by-laws or a resolution of its board of directors.

FOR NOTARY SEAL OR STAMP

OFFICIAL SEAL
CELMA BATES
NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN
[illegible] COUNTY

561

...Title Insurance Company
...Bernardino, California

AND WHEN RECORDED MAIL TO

Crocker-Citizens National Bank
4077 Main Street
Riverside, CA 92501
Attn: Collection Dept.

...der No._____ Escrow No. 463309-BMC

45 SECURITY TITLE INSURANCE CO.
NOV 23 1970 at 8 A.M.
BOOK 7558 PAGE 987
OFFICIAL RECORDS
San Bernardino County, Calif.
Ted Harpenter
Recorder

$2.80
B

BOOK 9377 PAGE 939

SPACE ABOVE THIS LINE FOR RECORDER'S USE

c

CORPORATION DEED OF TRUST AND ASSIGNMENT OF RENTS

BY THIS DEED OF TRUST, made this 15th day of October, 19 70, between

CARLSBERG FINANCIAL CORPORATION, a California corporation, herein called Trustor, whose address is

1801 Avenue of the Stars, Room 533 (number and street) Century City (city) (zone) California 90067 (state)

and SECURITY TITLE INSURANCE COMPANY, a California corporation, herein called Trustee, and CROCKER-CITIZENS NATIONAL BANK and JOSEPH L. CONNOLLY, as Co-Administrators with the will annexed of the estate of Charles R. Latimer, deceased, herein called Beneficiary,

Trustor grants, transfers, and assigns to trustee, in trust, with power of sale, that property in San Bernardino County, California, described as:

That portion of Lot 1, Tract No. 2205, as recorded in Book 34 of Maps, page 64, records of said County, described as follows: BEGINNING at a point in the North line of said Lot 1, a distance of 575.30 feet North 89° 59' 54" East from the Northwest corner of said Lot 1; thence North 89° 59' 54" East along the North line of said Lot 1, a distance of 637.90 feet; thence South 0° 17' 35" East parallel with the West line of said Lot 1, a distance of 2647.31 feet to the South line of said Lot 1; thence South 89° 53' 25" West along the South line of said Lot 1, a distance of 637.90 feet; thence North 0° 17' 35" West parallel with the West line of said Lot 1, a distance of 2648.52 feet to the point of beginning.

This Deed of Trust is given to secure a portion of the purchase price of the property herein described.

The Addendum attached hereto is made a part hereof by this reference.

Trustor also assigns to Beneficiary all rents, issues and profits of said realty reserving the right to collect and use the same except during continuance of default hereunder and during continuance of such default authorizing Beneficiary to collect and enforce the same by any lawful means in the name of any party hereto.

For the purpose of securing:
(1) Performance of each agreement of Trustor incorporated by reference or contained herein; (2) payment of the indebtedness evidenced by one promissory note of even date herewith in the principal sum of $ 167,972.51 payable to Beneficiary or order; (3) the payment of any money that may be advanced by the Beneficiary to Trustor, or his successors, with interest thereon.

To protect the security of this Deed of Trust, Trustor agrees by the execution and delivery of this deed of trust and the note secured hereby that the provisions of section A, including paragraphs 1 to 5 thereof and the provisions of section B, including paragraphs 1 to 8 thereof of the deeds of trust recorded in the Official Records of the following counties in the state of California and in the books and at the pages of such Official Records as follows:

COUNTY	Book	Page	COUNTY	Book	Page	COUNTY	Book	Page	COUNTY	Book	Page
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Fresno	2510	402	Mariposa	27	531	San Bernardino	2187	142	Solano	1204	478
Humboldt	586	170	Merced	912	197	San Diego	4257	114	Stanislaus	912	215
Imperial	688	555	Monterey	1651	185	San Francisco	A702	509	Tulare	1286	325
Kern	3510	403	Napa	610	801	San Joaquin	1109	18	Tuolumne	69	427
Kings	397	1	Nevada	213	343	San Luis Obispo	465	41	Ventura	1653	22
						San Mateo	3769	192	Yolo	466	325

which provisions are identical in each of said deeds of trust, shall be and they are hereby incorporated herein as fully as though set forth herein at length, and that the references to lands, obligations, and parties in said provisions refer to the lands, obligations, and parties set forth in this deed of trust. A copy of said provisions is printed on the reverse side of this deed of trust.

The undersigned Trustor requests that a copy of any notice of default and any notice of sale hereunder be mailed to him at his address hereinabove set forth. For any statement regarding the obligations secured hereby, Beneficiary may charge the maximum amount permitted by law at the time of the request therefor.

CARLSBERG FINANCIAL CORPORATION

BY: Arthur W. Carlsberg

BY: _____

STATE OF CALIFORNIA, COUNTY OF Los Angeles } ss.

On November 11, 1970 before me, the undersigned, a Notary Public in and for said County and State, personally appeared Arthur W. Carlsberg known to me to be the President, xxx

_____ kxxxxxxxxxxxx

_____ xxxxxx of the corporation that executed the within instrument, known to me to be the persons who executed the within instrument on behalf of the corporation therein named, and acknowledged to me that such

FOR NOTARY SEAL OR STAMP

OFFICIAL SEAL
SELMA PATES

...ty Title Insurance Co.
San Bernardino, CA

AND WHEN RECORDED MAIL TO

NAME Crocker-Citizens National Bank
ADDRESS 4077 Main Street
CITY & STATE Riverside, CA 92501

Attn: Collection Dept.

Escrow Order No. _____ Escrow No. _____

47

SECURITY TITLE INSURANCE CO.
NOV 23 1970 at 8 A.M.
BOOK 7558 PAGE 991
OFFICIAL RECORDS
San Bernardino County, Calif.

$2.80
E

Ted Carpenter
Recorder

BOOK 9377 PAGE 940

SPACE ABOVE THIS LINE FOR RECORDER'S USE

L 82 C

CORPORATION DEED OF TRUST AND ASSIGNMENT OF RENTS

BY THIS DEED OF TRUST, made this 15th day of October, 19 70, between

CARLSBERG FINANCIAL CORPORATION, a california corporation, herein called Trustor, whose address is

1801 Avenue of the Stars, Room 533, (number and street) Century City (city) (zone) California 90067 (state)

and SECURITY TITLE INSURANCE COMPANY, a California corporation, herein called Trustee, and CROCKER-CITIZENS NATIONAL BANK AND JOSEPH L. CONNOLLY, as Co-Administrators with the will annexed of the estate of Charles R. Latimer, deceased, herein called Beneficiary,

Trustor grants, transfers, and assigns to trustee, in trust, with power of sale, that property in San Bernardino County, California, described as:

That portion of Lot 1, Tract No. 2205, as per plat recorded in Book 34 of Maps, page 64, records of said County, described as follows: BEGINNING at a point in the NOrth line of said Lot 1, a distance of 1213.20 feet North 89° 59' 54" East from the Northwest corner of said Lot 1; thence North 89° 59' 54" East along the North line of said Lot 1, a distance of 637.90 feet; thence South 0° 17' 35" East parallel with the west line of said Lot 1, a distance of 2646.11 feet to the South line of said Lot 1; thence South 89° 53' 25" West along the South line of said Lot 1, a distance of 637.90 feet; thence North 0° 17' 35" West parallel with the West line of said Lot 1, a distance of 2647.31 feet to the point of beginning.

This deed of trust is given to secure a portion of the purchase price of the property herein described.

The Addendum attached hereto is made a part hereof by this reference.

Trustor also assigns to Beneficiary all rents, issues and profits of said realty reserving the right to collect and use the same except during continuance of default hereunder and during continuance of such default authorizing Beneficiary to collect and enforce the same by any lawful means in the name of any party hereto.

For the purpose of securing:

(1) Performance of each agreement of Trustor incorporated by reference or contained herein; (2) payment of the indebtedness evidenced by one promissory note of even date herewith in the principal sum of $167,972.50 payable to Beneficiary or order, (3) the payment of any money that may be advanced by the Beneficiary to Trustor, or his successors, with interest thereon.

To protect the security of this Deed of Trust, Trustor agrees by the execution and delivery of this deed of trust and the note secured hereby that the provisions of section A, including paragraphs 1 to 5 thereof and the provisions of section B, including paragraphs 1 to 8 thereof of the deeds of trust recorded in the Official Records of the following counties in the state of California and in the books and at the pages of such Official Records as follows:

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Kern	3510	403	Napa	610	801	San Luis Obispo	465	41	Tuolumne	69	427
Kings	397	1	Nevada	213	343	San Mateo	3769	192	Ventura	1653	22
									Yolo	466	325

which provisions are identical in each of said deeds of trust, shall be and they are hereby incorporated herein as fully as though set forth herein at length; and that the references to lands, obligations, and parties in said provisions refer to the lands, obligations, and parties set forth in this deed of trust. A copy of said provisions is printed on the reverse side of this deed of trust.

The undersigned Trustor requests that a copy of any notice of default and any notice of sale hereunder be mailed to him at his address hereinabove set forth. For any statement regarding the obligations secured hereby, Beneficiary may charge the maximum amount permitted by law at the time of the request therefor.

CARLSBERG FINANCIAL CORPORATION

BY _____

BY _____

STATE OF CALIFORNIA,
COUNTY OF Los Angeles } ss.

On November 11, 1970 before me, the undersigned, a Notary Public in and for said County and State, personally appeared Arthur W. Carlsberg, known to me to be the President, XXX

XXXXXXXXXXXXXX

XXXXXX of the corporation that executed the within Instrument, known to me to be the persons who executed the within Instrument on behalf of the corporation therein named, and acknowledged to me that such corporation executed the within instrument pursuant to its

FOR NOTARY SEAL OR STAMP

OFFICIAL SEAL
CELMA BATES
NOTARY PUBLIC - CALIFORNIA

Security Title Insurance Company
San Bernardino, California

AND WHEN RECORDED MAIL TO

Crocker-Citizens National Bank
4077 Main Street
Riverside, CA 92501
Attn: Collection Dept.

43

SECURITY TITLE INSURANCE CO.
NOV 23 1970 at 8 A.M.

BOOK 7558 PAGE 995
OFFICIAL RECORDS
San Bernardino County, Calif.
Ted Harpenter
Recorder

02.60
E

BOOK 9377 PAGE 941

SPACE ABOVE THIS LINE FOR RECORDER'S USE

C

CORPORATION DEED OF TRUST AND ASSIGNMENT OF RENTS

BY THIS DEED OF TRUST, made this 15th day of October, 19 70, between

CARLSBERG FINANCIAL CORPORATION, a California corporation, herein called Trustor, whose address is

1801 Avenue of the Stars, Room 533 (number and street) Century City (city) (zone) California 90067 (state)

and SECURITY TITLE INSURANCE COMPANY, a California corporation, herein called Trustee, and CROCKER-CITIZENS NATIONAL BANK and JOSEPH L. CONNOLLY, as Co-Administrators with the will annexed of the estate of Charles R. Latimer, deceased, herein called Beneficiary.

Trustor grants, transfers, and assigns to trustee, in trust, with power of sale, that property in San Bernardino County, California, described as:

That portion of Lot 1, Tract No. 2205, as per plat recorded in Book 34 of Maps, page 64 records of said County, described as follows:
BEGINNING at a point in the North line of said Lot 1, a distance of 1851.10 feet North 89° 59' 54" East from the Northwest corner of said Lot 1; thence South 0° 17' 35" East parallel with the West line of said Lot 1, a distance of 2646.11 feet to the South line of said Lot 1; thence North 89° 53' 25" East along the South line of said Lot 1, a distance of 622.33 feet, more or less, to the Southeast corner of said Lot 1; thence North 0° 21' 57" East along the East line of said Lot 1, a distance of 2644.96 feet to the Northeast corner of said Lot 1; thence South 89° 59' 54" West along the North line of said Lot 1, a distance of 652.76 feet, more or less, to the point of beginning.

This Deed of Trust is given to secure a portion of the purchase price of the property herein described.

The Addendum attached hereto is made a part hereof by this reference.

Trustor also assigns to Beneficiary all rents, issues and profits of said realty reserving the right to collect and use the same except during continuance of default hereunder and during continuance of such default authorizing Beneficiary to collect and enforce the same by any lawful means in the name of any party hereto.

For the purpose of securing:

(1) Performance of each agreement of Trustor incorporated by reference or contained herein; (2) payment of the indebtedness evidenced by one promissory note of even date herewith in the principal sum of $ 167,972.49 payable to Beneficiary or order; (3) the payment of any money that may be advanced by the Beneficiary to Trustor, or his successors, with interest thereon.

To protect the security of this Deed of Trust, Trustor agrees by the execution and delivery of this deed of trust and the note secured hereby that the provisions of section A, including paragraphs 1 to 5 thereof and the provisions of section B, including paragraphs 1 to 8 thereof of the deeds of trust recorded in the Official Records of the following counties in the state of California and in the books and at the pages of such Official Records as follows:

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which provisions are identical in each of said deeds of trust, shall be and they are hereby incorporated herein as fully as though set forth herein at length, and that the references to lands, obligations, and parties in said provisions refer to the lands, obligations, and parties set forth in this deed of trust. A copy of said provisions is printed on the reverse side of this deed of trust.

The undersigned Trustor requests that a copy of any notice of default and any notice of sale hereunder be mailed to him at his address hereinabove set forth. For any statement regarding the obligations secured hereby, Beneficiary may charge the maximum amount permitted by law at the time of the request therefor.

CARLSBERG FINANCIAL CORPORATION

BY: Arthur W. Carlsberg

BY:

STATE OF CALIFORNIA,
COUNTY OF Los Angeles } ss.

On November 11, 1970 before me, the undersigned, a Notary Public in and for said County and State, personally appeared Arthur W. Carlsberg, known to me to be the President, XXXX. XXXXXXXXXXXXXXX of the corporation that executed the within Instrument, known to me to be the persons who executed the within Instrument on behalf of the corporation therein named, and acknowledged to me that such corporation executed the within instrument pursuant to its by-laws or a resolution of its board of directors.

Velma Bates

FOR NOTARY SEAL OR STAMP

OFFICIAL SEAL
VELMA BATES
NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN
LOS ANGELES COUNTY

561

THE DOCUMENTS TO WHICH THIS CERTIFICATION IS ATTACHED ARE FULL, TRUE AND CORRECT COPIES OF THE ORIGINALS ON FILE AND OF RECORD IN MY OFFICE
THIS CERTIFICATION APPLIES TO Jew

When Recorded Return to
SOUTHERN CALIFORNIA EDISON COMPANY
P. O. BOX 351
LOS ANGELES 53, CALIF.
ATTENTION - R/W & LAND DEPT.

BOOK 5595 PAGE 15

GRANT OF EASEMENT

L BAR S RANCH, a co-partnership, hereby grants to SOUTHERN CALIFORNIA EDISON COMPANY, a corporation, its successors and assigns, the right to construct, use, maintain, alter, add to, repair, replace, inspect and/or remove, in, on and over the real property hereinafter described, situated in the County of San Bernardino, State of California, electric lines, consisting of poles, towers, necessary guys and anchors, cross-arms, wires and other fixtures and appliances, for conveying electric energy to be used for light, heat, power, telephone and/or other purposes.

Said real property is described as follows:

PARCEL 1:

That portion of a strip of land, 25 feet wide, lying within Lot 1, Tract 2205 as per map recorded in Book 34, page 64 of Maps in the office of the County Recorder of said County, the center line being described as follows:

Beginning at a point 104.00 feet Southerly, measured along the Westerly line of said Lot 1, and Westerly 28.00 feet, measured at right angles to said Westerly line of Lot 1, from a two-inch by two-inch monument set for the Northwest corner of Section 18, Township 1 South, Range 6 West, S. B. B. and M., said Northwest corner being also the Northwest corner of said Lot 1; thence North 80° 13' 30" East 192.97 feet to a point hereinafter referred to as Point "A"; thence North 88° 28' 23" East 2344.92 feet, more or less, to the intersection of the Southerly line of Eighth Street with the Northerly prolongation of the Easterly line of said Lot 1, said intersection being North 111.40 feet, more or less, measured along the Northerly prolongation of said Easterly line, from the Northeast corner of said Lot 1.

EXCEPTING THEREFROM any portion thereof lying within the Atcheson, Topeka and Santa Fe Railroad right of way.

PARCEL 2:

The Northerly 20 feet of the Southerly 50 feet of that portion of the East 260 acres of Section 36, Township 1 North, Range 7 West, S. B. B. and M., lying Westerly of the Westerly line of the East 100 feet of said Section 36.

EXCEPTING THEREFROM any portion thereof lying within the Atcheson, Topeka and Santa Fe Railroad right of way.

233

Grant of Easement
L Bar S Ranch, a co-part.
to S. C. E. Co., a corp.
Serial No. 28035A

PARCEL 3:

The Northerly 40 feet of the Southerly 70 feet of the East 100 feet of Section 36, Township 1 North, Range 7 West, S. B. B. and M.

EXCEPTING THEREFROM any portion thereof lying within the Atcheson, Topeka and Santa Fe Railroad right of way.

Grantor also grants to Grantee the right to construct, use, maintain, alter, add to, repair, replace, inspect and/or remove guy wires, a guy stub pole and anchors in, on and over the following described lands and premises, situated in said County and State, to wit:

PARCEL 4:

A strip of land, four (4) feet wide, lying within Lot 1, Tract 2205 as per map recorded in Book 34, page 64 of Maps in the office of said County Recorder, the center line of which is described as follows:

Beginning at Point "A" referred to in the center-line description of the strip of land hereinabove described and designated as Parcel 1; thence North 05° 39' 00" West 55.00 feet.

EXCEPTING THEREFROM any portion thereof lying within the Atcheson, Topeka and Santa Fe Railroad right of way.

The Grantee, its successors and assigns, and its and their agents and employees, shall have free access to said electric lines and every part thereof, at all times, for the purpose of exercising the rights herein granted, and shall have the right to keep the above described land free from brush, or any accumulation of inflammable material. And the Grantor covenants for itself, its successors and assigns, that it or they will not erect, place or maintain, or permit to be erected, placed or maintained, within the above described land, any building or other structure without first securing the written permission of the Grantee thereto, and that it will not plant or maintain,

Grant of Easement
L Bar S Ranch, a co-part.,
to S. C. E. Co., a corp.
Serial No. 28035A

endanger the wires, structures or appurtenances of the Grantee, its successors or assigns, and agrees that if any tree or shrub shall grow or be so near to any of said wires, structures or appurtenances as to endanger the same or interfere with the proper operation or care thereof, the said Grantee, its successors and assigns, and its and their agents and employees, may trim or remove such tree or shrub so as to prevent such interference or danger.

IN WITNESS WHEREOF, this instrument has been executed, this 13th day of November, 1961.

By Wilbur H. Latimer
~~William~~ H. Latimer, co-partner

By Winifred S. Latimer
co-partner

By Charles R. Latimer
co-partner

STATE OF CALIFORNIA }
COUNTY OF SAN BERNARDINO } ss.

On this 13th day of November, 1961, before me, a Notary Public in and for said County and State, personally appeared Wilbur H. Latimer, Winifred S. Latimer and Charles R. Latimer,

known to me to be ALL OF THE partners of L Bar S Ranch the partnership that executed the within instrument, and acknowledged to me that such Partnership executed the same.

WITNESS my hand and official seal.

SEAL

233

RECORDED
SECURITY T. I. CO.

Notary Public in and for said
County and State

Nov 27 8 45 AM '61
BOOK 5595 PAGE 15
OFFICIAL RECORDS
SAN BERNARDINO COUNTY, CALIF.

233

RECORD OF SURVEY

IN THE COUNTY OF SAN BERNARDINO

BEING A SURVEY OF THE EAST 260 ACRES OF SECTION 36, T.1N., R.7W., S.B.M. IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA.

SHEET 1 OF 2 SHEETS

ASSOCIATED ENGINEERS
ONTARIO, CALIFORNIA

ENGINEER'S CERTIFICATE

This map correctly represents a survey made by me or under my direction in conformance with the requirements of the Land Surveyor's Act at the request of The Estate of Charles Latimer in July, 1970.

R.C.E. 7344

COUNTY SURVEYOR'S CERTIFICATE

This map has been examined for conformance with the requirements of the Land Surveyor's Act, this 4th day of December, 1970.

J.W. AMEY
County Surveyor, County of San Bernardino, California

By Conrad A. Nunn, Deputy

NOTES AND LEGEND

The bearings are based on the centerline of Highland Avenue as bearing N 89°27' 59" E, as shown on R.S. 14-74, San Bernardino County Records.

● – Indicates monument found as shown.

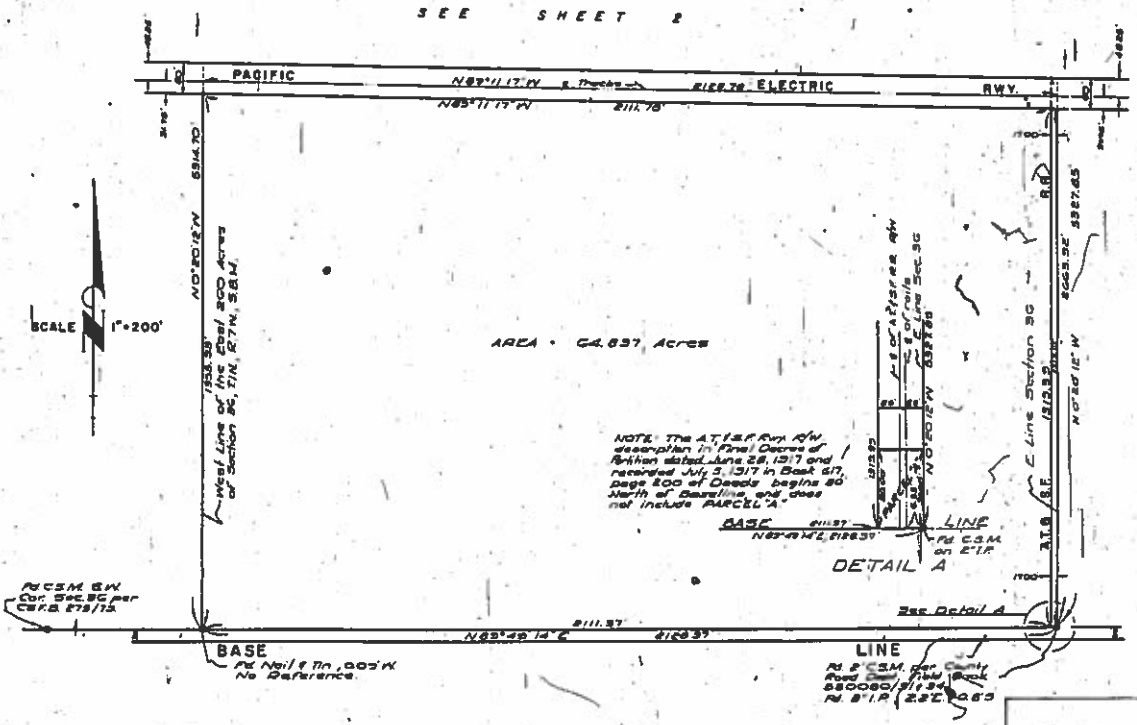
o – Indicates set 1" Iron Pipe tagged R.C.E. 7344 unless noted otherwise

C.S.N. – Indicates County Surveyor's Monument

C.S.F.B. – Indicates County Surveyor's Field Book

Areas shown are net excluding street, R. R. rights of way, and Parcel "A".

SEE SHEET 2



767

Filed this 4TH day of NOV 1970 at 2:12 PM in Book 27 of RECORD of SURVEYS at Page 81-82 Records San Bernardino County at Request of ESTATE OF CHARLES LATIMER

TED R CARPENTER
COUNTY RECORDER

By [illegible]

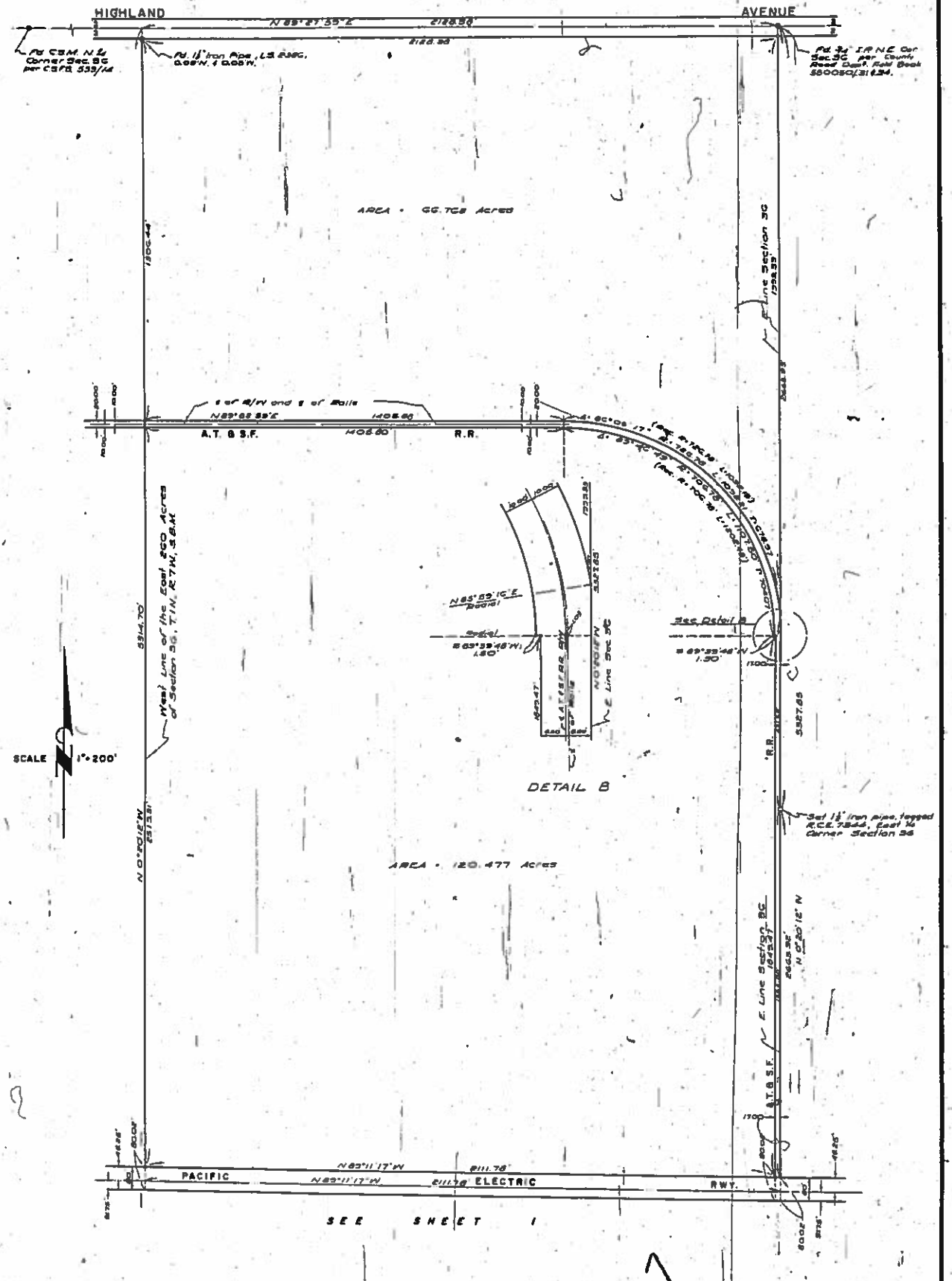
RECORD OF SURVEY

IN THE COUNTY OF SAN BERNARDINO

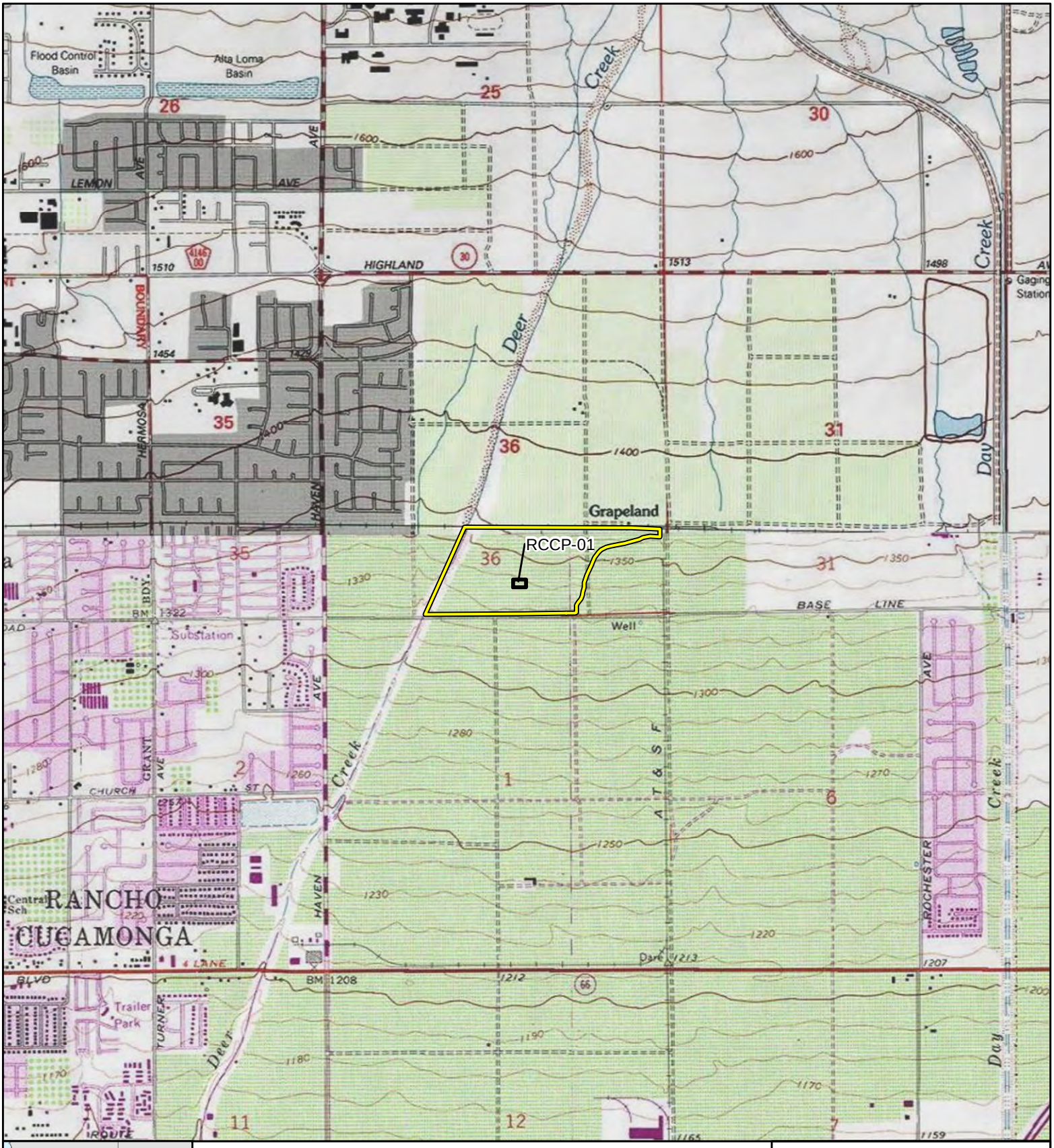
BEING A SURVEY OF THE EAST 260 ACRES OF SECTION 36, T.1N., R.7W., S.B.M. IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA.

SHEET 2 OF 2 SHEETS

ASSOCIATED ENGINEERS
ONTARIO, CALIFORNIA



APPENDIX D
Survey Result Map



Legend

Project Area/Surveyed Area

Newly Recorded Site

N

0 1,000 2,000 Feet

USGS 7.5 Minute Quad: Guasti, California (1982)
PLSS: T1S R7W S36

Appendix D
Survey Result Map

Central Park Project
City of Rancho Cucamonga
San Bernardino County, CA

R:\PROJECTS\CENTRAL_PARK_6799\ARCHEO\MAPS\CentralPark_Survey_Results.mxd

APPENDIX E

California Department of Parks and Recreation (DPR) 523 A and B Forms

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code | Reviewer | Date

 ***Resource Name or #:** RCCP-01

P1. Other Identifier:

***P2. Location:** ☑ **Not for Publication** ☐ **Unrestricted** ***a. County:** San Bernardino
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Cucamonga Peak, CA **Date:** 1980 **T** 1S ; **R** 7W ; **S**36

c. Address: within Central Park, 11200 Baseline Road, Rancho Cucamonga, CA 91701

d. UTM: 447810.22802, 3775927.15045 **GPS, NAD 83,** Zone: 11

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation: 1340 feet

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries):
The site consists of an agricultural vineyard remnant of approximately seven living grapevines and several dead grapevine stumps. The grapevines are roughly aligned in east-west and north-south trending rows. No other agricultural features or historic artifacts were identified. Based on historic aerials, the site and surrounding area appears to have been in agricultural use (row crops) from 1938 to at least the 1960s. By 1980/1990s, the area appears completely overgrown and no longer in use for agricultural purposes. The site (and surrounding area) has been impacted by the lack of continued agricultural use and maintenance, the encroachment of dominant vegetation, and various land use activities (e.g. grading of scraping of paths throughout the property, and development).

***P3b. Resource Attributes:** (List attributes and codes): AH3 (landscaping/orchard): grape vines, vineyard remnants

***P4. Resources Present:** ☐Building ☐Structure ☐Object ☑Site ☐District ☐Element of District ▫Other (Isolates, etc.)

P5a.

P5b. Description of Photo: (View, date, accession #) Overview of site RCCP-01: grapevines, 7/17/2019, #0984.

***P6. Date Constructed/Age and Sources:** ☑Historic
☐ Prehistoric ☐Both
Historic Aerial Photos, at least 1938 to 1960s.

***P7. Owner and Address:** City or Rancho Cucamonga, 11200 Base Line Road, Rancho Cucamonga, CA.

***P8. Recorded by:** (Name, affiliation, and address)
Jenna Farrell & Sydni Kitchel
2696 Prospect Park Dr. Ste. 100
Rancho Cordova, CA 95670

***P9. Date Recorded:** 7/17/2019
***P10. Survey Type:** (Describe)
Archaeological pedestrian survey.

***P11. Report Citation:** (Cite survey report and other sources or enter "none."): Cultural Resources Investigation for the City of Rancho Cucamonga Rancho Cucamonga Central Park Project, San Bernardino County, California

***Attachments:** ☐NONE ☑Location Map ☑Sketch Map ☑Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☑Photograph Record ☑ Other (List):

ARCHAEOLOGICAL SITE RECORD

 ***Resource Name or #:** RCCP-01

***A1. Dimensions: a. Length:** 35m. (117ft) × **b. Width:** 60m. (198ft)**:** 0.52 acres
Method of Measurement: ☐ Paced ☐ Taped ☐ Visual estimate ☑ Other: GIS
Method of Determination (Check any that apply.): ☐ Artifacts ☐ Features ☐ Soil ☐ Vegetation ☐ Topography
☐ Cut bank ☐ Animal burrow ☐ Excavation ☐ Property boundary ☑Other (Explain): Field Survey, visual observation
Reliability of Determination: ☑ High ☐ Medium ☐ Low Explain:
Limitations (Check any that apply): ☐ Restricted access ☐ Paved/built over ☐ Site limits incompletely defined
☐ Disturbances ☐ Vegetation ☑ Other (Explain): encroaching vegetation
A2. Depth: ☑ None ☐ Unknown Method of Determination:

***A3. Human Remains:** ☐ Present ☐ Absent ☐ Possible ☑ Unknown (Explain): None observed on surface.

***A4. Features** (Number, briefly describe, indicate size, list associated cultural constituents, and show location of each feature on sketch map.): Approximately seven living grapevines and several dead grapevine stumps.

***A5. Cultural Constituents (**Describe and quantify artifacts, ecofacts, cultural residues, etc., not associated with features.): None.

***A6. Were Specimens Collected?** ☑ No ☐ Yes (If yes, attach Artifact Record or catalog and identify where specimens are curated.)

***A7. Site Condition:** ☐ Good ☐ Fair ☑ Poor (Describe disturbances.): Several dead vines, lack of water, grading, encroachment of desert scrub vegetation.

***A8. Nearest Water** (Type, distance, and direction.)**:** Deer Creek/wash (channelized), 0.24-mile west

***A9. Elevation:** 1,320 amsl

A10. Environmental Setting (Describe culturally relevant variables such as vegetation, fauna, soils, geology, landform, slope, aspect, exposure, etc.)**:** Desert Scrub, birds of prey, rabbits, lizards, coyotes, etc., soils: deposits of sand, silty sand, sandy gravel, and gravelly sand to bouldery alluvium, coalescing alluvial fans from the San Gabriel Mountains, open.

A11. Historical Information: See Continuation Sheet and see Historic Context section of Technical Cultural Report.

***A12. Age:** ☐ Prehistoric ☐ Protohistoric ☐ 1542-1769 ☐ 1769-1848 ☐ 1848-1880 ☐ 1880-1914 ☑1914-1945 ☑Post 1945 ☐ Undetermined **Describe position in regional prehistoric chronology or factual historic dates if known:**

A13. Interpretations (Discuss data potential, function[s], ethnic affiliation, and other interpretations): See continuation Sheet

A14. Remarks: N/A

A15. References (Documents, informants, maps, and other references):

Stooddard, Mary
1994 Latimer Packing House (San Antonio Orchard Co. Fertilizer Packing House), 311 S. San Antonio Ave, Ontario, San Bernardino County, California. Historic American Building Survey (HABS) No. CA -2607, HABS-CAL 36-ONT, 1.

California State Engineering
1888 Detail Irrigation Map, Ontario Sheet. W. Ham Hall, State Engineer. Electronic document, https://calisphere.org/item/cd2cfb6e24b7fa0f5489e8c4abdedcb0/ accessed 1/17/2020.

A16. Photographs (List subjects, direction of view, and accession numbers or attach a Photograph Record.): see Continuation Sheet

Original Media/Negatives Kept at:
***A17. Form Prepared by: Jenna Farrell** **Date:** 1/17/2020
Affiliation and Address: 2969 Prospect Park Dr., Ste 100, Rancho Cordova, CA

A13. Interpertations:

Review of historic maps did not identify any structures or features in or near the site area. The site area in Section 36 (and entire section) of T1N/R7W was patented by the State of California in 1874 under the California Enabling Act, March 3, 1853 (10 Stat. 244). This act granted the 16th and 36th Sections in each township for school purposes. The review of an historic 1888 irrigation map illustrates the name Obersteller for the entire Section 36 of T1N/R7W (includes the site area) (California State Engineering Department 1888). No additional information on the name Obersteller could be found. A search of San Bernardino County records indicates that at least 260 acres within Section 36 (southeasterly portion, includes site area) were acquired by the L Bar S Ranch partners, Wilbur H. Latimer, Winifred Latimer, and Charles R. Latimer, prior to 1960. Charles Latimer was born in Ottawa, Canada in 1887 and moved to Riverside, California with his parents at age three (Stoddard 1994). His father, Hugh Latimer, invested in buying raw land and planting citrus groves for his family and to sell to other ranchers. The Latimer family owned land and citrus groves throughout Riverside and Ontario and they played a major role in the Ontario citrus industry (Stoddard 1994). The Latimers owned and operated the San Antonio Orchard Company (with associated building and packing house) in Ontario. In 1907, Charles Latimer moved to Ontario to manage the San Antonio Orchard Company and the family's large citrus groves. The 1930 census indicates that Charles was married to Winifred and they had three sons, Wilbur H., Charles R., and John S. The Latimer family also held interest in potato crops and local vineyards in the region and produced grape juice (Stoddard 1994). No records were found of when the Latimer partners originally acquired the site and surrounding land in Rancho Cucamonga. The property was eventually sold by the Latimer Estate trust in 1977 to Richard A. Lewis of Lewis Homes of California (real-estate developers).

The Latimer family owned and operated a large, significant citrus agricultural business in nearby Riverside and Ontario during the early twentieth century. The Latimers also owned other crops including several vineyards in the region. Charles Latimer, under the partnership of the L Bar S Ranch, acquired the site and surrounding land prior to the 1960s and presumably grew grapes on the property (for grape juice production), although the extent of agricultural productivity at this site is unclear. Because the site is a vineyard remnant with few extant vines and no associated artifacts or other features, it does not retain its original physical integrity and does not convey any historical significance. The Latimers' vineyards do not appear to have played a significant role in their contribution to local agricultural production (Criteria 1 & 2). The site neither embodies the distinctive characteristics of an architectural style or architect, nor exhibits high artistic value (Criterion 3). Tetra Tech's documentation of the features (remaining grape vines) has likely exhausted the site's data potential (Criterion 4). Thus, Tetra Tech recommends the RCCP-01 as not eligible for listing on the CRHR and recommends no further management.

*Recorded by: Jenna Farrell & Sydni Kitchel *Date: 7/17/2019 ☑Continuation ☐ Update

*P5a: Photographs

IMG_0983. Overview of RCCP-01: Closeup of a grapevine (view west-northwest).

IMG_0986. Overview of RCCP-01 (view south-west).

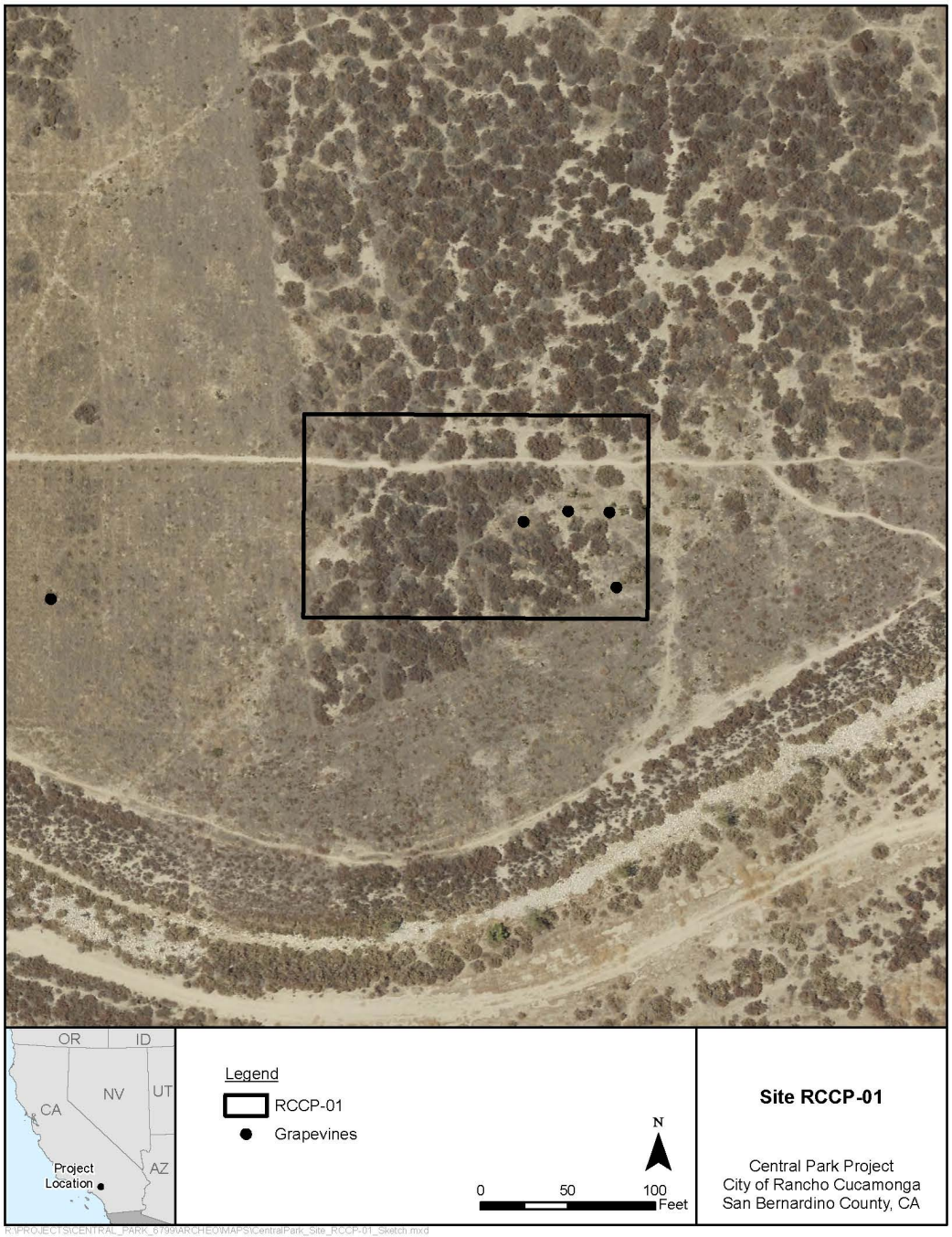
State of California ◆ Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION

SKETCH MAP

Primary #
HRI#
Trinomial:

 *Resource Name or # (Assigned by recorder) RCCP-01

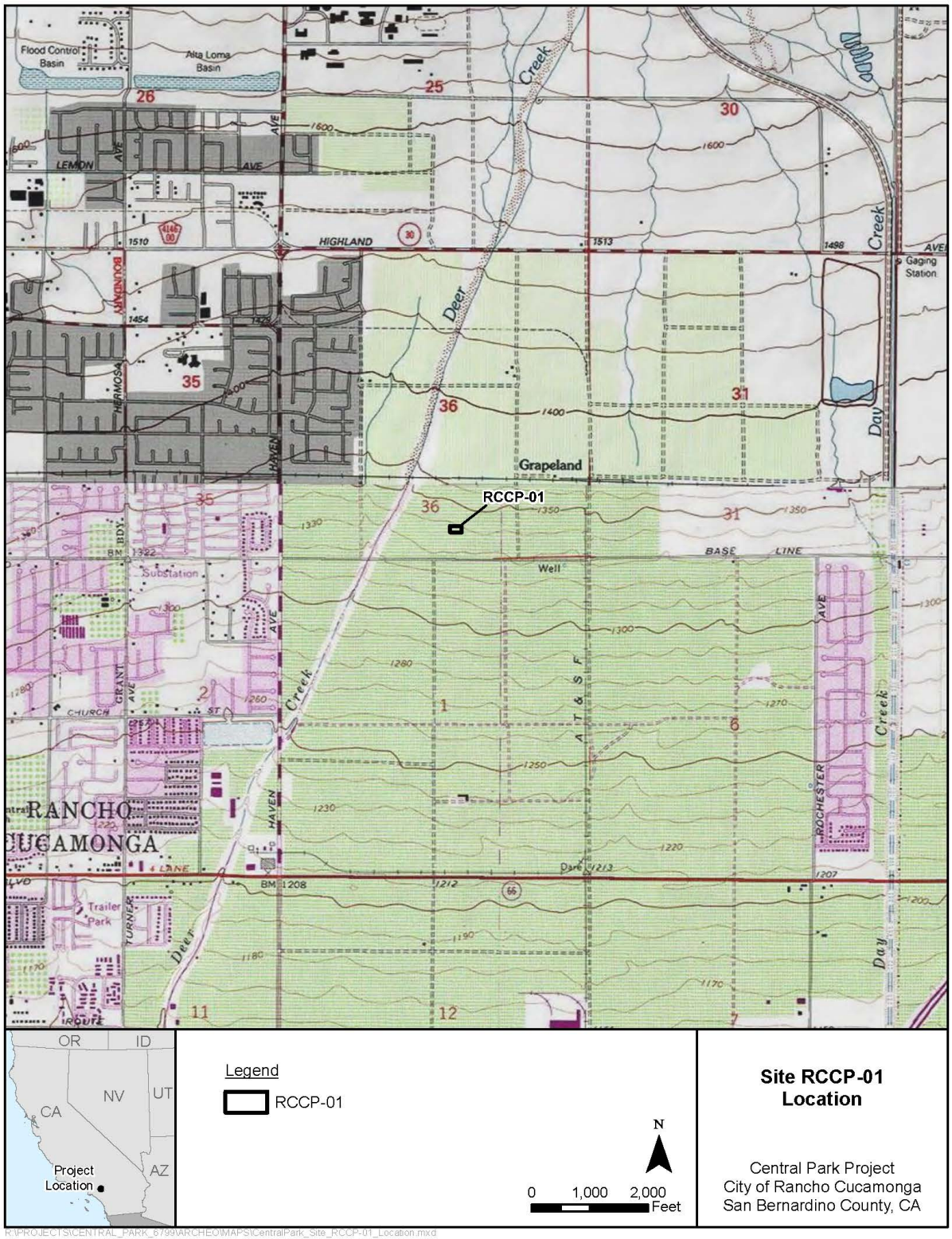
*Drawn by: GIS Sketch/Aerial Photograph *Date of map: August 2020



State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION **LOCATION MAP**	Primary # HRI# Trinomial

Page 6 **of** 6 ***Resource Name or #:** RCCP-01

***Map Name:** : Cucamonga Peak, CA (20ft Contour) ***Scale:** 1:24,000 ***Date of Map:** 1959, revised 1972



DPR 523J (1/95) ***Required information**

APPENDIX E Paleontology Record Search

2024 Orange Tree Lane, Redlands, CA 92374 | Phone: 909.798.8616 Fax: 909.307.0539
www.SBCounty.gov

SAN BERNARDINO COUNTY

San Bernardino County Museum
Division of Earth Sciences

Crystal Cortez
Curator of Earth Sciences

email: Crystal.cortez@sbcm.sbcounty.org

07 June, 2019

Tetra Tech, Inc.
Attn: Jenna Farrell, Cultural Resources
2969 Prospect Park Drive, Suite 100
Rancho Cordova, CA 95670

PALEONTOLOGY RECORDS REVIEW for proposed Central Park project, Rancho Cucamonga, California

Dear Jenna,

The Division of Earth Sciences of the San Bernardino County Museum (SBCM) has completed a records search for the above-named project in San Bernardino County, California. The proposed Central park project is located in the city of Rancho Cucamonga, between Base line road and Milliken Ave, as shown on the United States Geological Survey (USGS) 7.5 minute Guatsi, California quadrangle (1982).

For this review, I conducted a search of the Regional Paleontological Locality Inventory (RPLI) at the SBCM. The results of this search indicate that no recorded paleontological resource localities are present within the proposed project. However, one SBCM locality was found within 1 and a half miles directly east of the proposed project (SBCM Locality number 5.1.13). This locality produced fossils representing extinct taxa including Neotoma sp., Neotoma lepida, Thomomys bottae, and Rodentia. Fossils were recovered from a fine grained well sorted yellow sand representing older alluvium after a 5 foot down cut.

Please do not hesitate to contact us with any further questions that you may have.

Sincerely,

Crystal Cortez, Curator of Earth Sciences
Division of Earth Sciences
San Bernardino County Museum

APPENDIX F Vehicle Miles Traveled Assessment

FEHR PEERS

TECHNICAL MEMORANDUM

Date: February 27, 2020

To: Paula Fell, Tetra Tech

From: Paul Herrmann, P.E.

Subject: Vehicle Miles Traveled (VMT) Assessment for Rancho Cucamonga Central Park Master Plan Project

---

Fehr & Peers completed quantifying Vehicle Miles of Travel (VMT) for the Central Park Master Plan Project in the City of Rancho Cucamonga, California. This VMT analysis is consistent with requirements of Senate Bill 743 (SB 743) and the Office of Planning and Research's (OPR's) technical advisory. Our work to quantify VMT for the Project included use of Big Data (data from cell phone providers) to estimate project trip lengths.

The remainder of this memorandum is divided into five sections. Project Description, Trip Generation, Project VMT, Regional VMT, and Cumulative Effect on VMT.

Project Description

The proposed project is the build out of the Central Park Master Plan. The Central Park site has a General Plan land use designation of Public Facilities - Parks and a zoning designation of Terra Vista Planned Community (PC-TV). The park master plan consists of multiple planning areas that can be developed in a variety of sequences. The planning areas include:

Table 1
Project Description

Element	Features	Total Acres
A: Pacific Electric Trail Head	Parking area and restrooms added to existing trail rest area	2.6
B: Terraced Gardens	Showcase gardens, event area, and gazebo	4.7

Table 1 Project Description		
Element	**Features**	**Total Acres**
C: Water Conservation/ Demonstration Garden	Water conservation demonstration gardens	4.4
D: Amphitheater Area	Amphitheater, parking, and open area	11.0
E: Universal Accessible Playground	Play equipment, event area, gazebo, and restrooms	4.7
F: Viticulture Pavilion and Vineyards	Pavilion, vineyards, Great Lawn	6.7
G: Upper Picnic and Event Area	Picnic tables and shade structures	2.6
H: Event Parking Area	Turf surfaced event parking area	4.4
I: Adventure Area Parking and Event/Picnic Area	Event area and parking, picnic pavilion and deck, restrooms, and facilities for active play, fitness training, climbing, and parkour	9.5
J: Dog Park	Fenced dog park, gazebos and shade structures, picnic tables and benches, restrooms, and parking area	4.4
K: Multi-purpose Facility and Parking	31 KSF facility including one regulation high school basketball court with two short court overlay, and a lake	6.4
L: Recreation Pool	Indoor or outdoor 25-yard lap pool, outdoor teaching pool, indoor or outdoor 50-yard lap pool, aquatics building, and parking area	2.7
M: Tennis Courts	4 tennis courts, spectator viewing areas, event area and parking, and gazebo	3.1
N: Maintenance Yard	Maintenance building and fuel station	1.6
O: Deer Creek Chanel Trail:	Landscaping and improvements to existing Deer Creek Channel Trail	4.1
Parking	728 spaces[2]	n/a[3]
New park roadway	2 acres	n/a[3]
Total Acres		**61.9**

Notes:
1. The amphitheater is not included in this assessment as it is being accounted for as part of a separate project.
2. The existing Community Center/Senior Center currently provides 552 parking spaces. An additional 158 event parking spaces will be provided through development of the Amphitheater.
3. Acreage accounted for within elements.

Trip Generation

Trip generation rates from *Trip Generation, 10th Edition* (Institute of Transportation Engineers [ITE], 2017) were used to estimate the number of trips associated with the Project. The referenced trip generation rates and estimates for the Project are presented in Table 2 and 3 for typical weekday and weekend.

The Trip Generation Handbook does not contain unique rates for uses such as dog park, playground or gardens; Most uses were assumed to be appropriately represented by ITE code 411, Public Park, in the trip generation estimates. The multipurpose building is represented by ITE code 495, Recreational Community Center, which includes the pool area. Tennis courts have a specific ITE code, 490, and were separated from the other uses. However, ITE code 490 does not have a weekend rate, only a weekday rate, and so ITE code 488 (Soccer Complex) was referenced to proportionally increase the weekday trip generation rate to estimate a weekend rate. ITE code 488 (Soccer Complex) weekday daily and PM peak hour trip generation rates are approximately half of the weekend daily and peak hour trip generation rates. Since these uses are similar in nature (sports facilities), the ITE code 490 weekday trip generation rates were doubled to estimate the weekend rates.

A conservative approach was applied to trip generation and no reductions were applied to account for internalization between uses on site. Please note that all trip generation estimates are shown as vehicle trips and these estimates do not include walking or biking trips.

Table 2
Weekday Trip Generation Estimate

Type	ITE Land Use Code	Size	Unit	Weekday Trip Generation Rates[a]							Trip Generation Estimate						
				Daily Rate	AM Peak Hour			PM Peak Hour			Daily Trips	AM Peak			PM Peak		
					Rate	% In	% Out	Rate	% In	% Out		In	Out	Total	In	Out	Total
Recreational Community Center	495	62	KSF	28.82	1.76	66%	34%	2.31	47%	53%	1,796	73	37	110	68	76	144
Tennis Courts	490	4	Court	30.32	0.42	50%	50%	4.21	50%	50%	121	1	1	2	9	8	17
Public Park	411	54	Acre	0.78	0.02	59%	41%	0.11	55%	45%	42	1	0	1	3	3	6
Net External Project Trips											**1,959**	**75**	**38**	**113**	**80**	**87**	**167**

Table 3
Weekend Trip Generation Estimate

Type	ITE Land Use Code	Size	Unit	Weekend Trip Generation Rates[a]				Trip Generation Estimate			
				Daily Rate	Peak Hour			Daily Trips	Peak Hour Trips		
					Rate	% In	% Out		In	Out	Total
Recreational Community Center	495	62	KSF	9.10	1.07	54%	46%	567	36	31	67
Tennis Courts[b]	490	4	Court	60.64	8.42	48%	52%	243	16	18	34
Public Park	411	54	Acre	1.96	0.28	55%	45%	107	8	7	15
Net External Project Trips								**917**	**60**	**56**	**116**

Notes:

a: Trip generation rates from Trip Generation,10th Edition.

b: ITE Trip Generation Manual does not contain weekend trip generation rate for Tennis Court. The trip rate proportion of weekends of Soccer Complex (ITE code 488) is applied as a similar sports facility.

Project VMT

The Project is anticipated to draw visitors from the local community. This park will provide amenities closer to many Rancho Cucamonga residents and is anticipated to shorten existing trips. For example, tennis players may find it more convenient to play at Central Park facilities rather than travel further to other nearby courts at Beryl Park East, Lions Park or Day Creek Park, all of which provide tennis courts and are within a two mile radius of the Project.

VMT is a function of the number of daily trips and the length of those trips. In order to estimate the average project trip lengths, trip length data utilized in the amphitheater VMT assessment[1] was referenced. Big Data[2], which is anonymized travel data recorded from mobile devices, was utilized to develop average trip lengths from visitors to the Concerts in the Park events between 2016 and 2018. Over 500 records were tracked from the 18 concert events that occurred between 2016 and 2018 and the average trip length per record was estimated to be 6.6 miles. The concerts are a unique draw that draws in visitors from further distances than is anticipated for the Project, therefore the 6.6-mile average trip length is considered a conservative trip length to be used for VMT estimation. Table 4 presents the daily VMT estimation for typical weekday and weekend.

In order to measure the Project's potential VMT impact, OPR recommends comparing the Project's per capita VMT against an agency's regional per capita VMT threshold of significance. Per capita VMT estimates were prepared for the project by calculating Project VMT, as shown in Table 4, and normalizing by the project's service population (SP). The Project's service population is the number of visitors and employees of the Project.

To estimate the Project's service population, the Project's trip generation was converted from vehicle trips to person trips. The total daily person trips represent all the visitor and employees that make up the service population. The Project's trip generation was converted to person trips using a 2.5 person per vehicle occupancy based on the family nature of park uses and professional judgement. This estimate was then increased by ten percent to account for non-vehicular trips. This increase represents a ten percent mode split, which means that ten percent of the Project service population will walk or bike instead of drive to the Project). A ten percent mode split to walking and biking is considered a conservative estimate given the

[1] The *Draft Vehicle Miles Traveled (VMT) Assessment for Rancho Cucamonga Central Park Amphitheater Project*, Fehr & Peers, 2019.

[2] Big Data was provided by the vendor Streetlight. StreetLight uses location-based services data from hundreds of smartphone apps (passively and anonymously) and has partnerships with geospatial data providers to leverage GPS data in their data collection and processing.

active nature of parks and that the SCAG model[3] assumes that San Bernardino County has approximately 10% mode split to walking and biking for all trip purposes.

Table 4
Project Daily VMT Estimates

Weekday			Weekend		
Daily Trips	Daily VMT	VMT/SP	Daily Trips	Daily VMT	VMT/SP
1,959	12,929	2.40	917	6,052	2.40

Please note that other methods of estimating average trip length were considered, such as use of the local travel demand forecasting (TDF) model, the San Bernardino Transportation Analysis Model (SBTAM). The TDF model estimates traffic on the SBTAM roadway network by matching origin and destination pairs from zones throughout the Southern California Association of Governments (SCAG) region through trip generation, trip distribution, mode choice and trip assignment. SBTAM land use and roadway networks are consistent with the 2016 SCAG Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS). This model is typically the best tool available in the region to estimate vehicle trips, trip distance and VMT. However, the model is calibrated and validated towards commute, shopping and school trips, and is not sensitive towards recreational uses such as parks. Trip length data was referenced from the model for use in this assessment but is not considered appropriate based on model limitations.

Regional VMT

SBTAM was utilized to estimate per capita VMT in the region for comparative purposes. Different types of trips are tracked in the TDF model, including home-based-work trips (commute trips to and from home), home-based-other trips (other trips such as shopping and school trips originating or ending from home) and non-home-based trips (all other trips that don't start or end at home such as from work to shopping).

Average tip lengths for trips originating or ending in Rancho Cucamonga were extracted from the base year (2012) version of SBTAM to compare against the Project. Rancho Cucamonga origin and destination trip assignment matrices (number of trips) were multiplied by the highway skim matrices (travel distance) to estimate VMT and is presented in Table 5. The Origin-Destination Methodology described above utilizes trips after the final assignment step and VMT was estimated using "full accounting," which accounts for the full length of each trip. The service population in the table is the total population and employment in the City of Rancho Cucamonga. Please note that SBTAM does not have a weekend calibrated version and only weekday estimates are presented in the table below.

[3] 2016 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) Southern California Association of Governments (SCAG) Travel Demand Forecasting Base Year (2012) Model.

Table 5 Rancho Cucamonga Citywide Daily VMT Estimates	
Weekday	
Daily VMT	VMT/SP
8,444,376	31.99

As shown in Table 5, the average VMT per service population for the City of Rancho Cucamonga is 31.99, which is substantially higher than the project VMT/SP. The project is estimated to generate VMT/SP less than 15% of the region average (the City in this case) which is the recommended threshold proposed in the Technical Advisory[4] published by OPR related to VMT impact thresholds. Therefore, this project is anticipated to result in a less-than-significant impact related to VMT.

Cumulative Effect on VMT

Given that the proposed Project is consistent with regional plans, including the City's General Plan land use and the SCAG RTP/SCS land use, the buildout of the Project is anticipated to result in a less-than-significant cumulative transportation impact related to VMT.

We hope this information is helpful. If you have any questions or concerns, please do not hesitate to contact us at (949)-308-6318.

[4] *Technical Advisory on Evaluating Transportation Impacts in CEQA, Governor's Office of Planning and Research, State of California, December 2018,* http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf