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APPENDIX D

BIOLOGICAL RESOURCES TECHNICAL REPORT

Rincon Consultants, Inc.
8825 Aero Drive, Suite 120
San Diego, California 92123
760-918-9444

March 4, 2024
Project No. 23-15565

Enterprise BESS LLC
4350 Executive Drive, Suite 320
San Diego, California 92121

Subject: Biological Resources Technical Report to Support CEC Petition for Post-Certification Amendment for the Enterprise BESS Project in Escondido, San Diego County, California

Enterprise BESS LLC,

This report documents the findings of a biological resources literature review and reconnaissance-level biological field surveys conducted by Rincon Consultants, Inc. (Rincon) for the proposed Enterprise Battery Energy Storage System (BESS) Project (hereinafter "Project") The Project is located in the City of Escondido, California (Attachment A, Figure 1). Enterprise BESS LLC plans to construct, own and operate a nominal 52-megawatt (MW) BESS Project. The Project is located within the existing CalPeak Power – Enterprise Emergency Peaker Project (EEPP), a 49.5-MW gas-fired power plant licensed by the California Energy Commission (CEC) in June 2001 under emergency provisions (CEC Docket No. 01-EP-10). The existing EEPP is interconnected to the San Diego Gas and Electric (SDG&E) Escondido Substation to the north via an underground 69-kilovolt (kV) transmission line. The currently proposed Project is planned to be licensed via a CEC Post-Certification Amendment (PCA) to the EEPP Certification as confirmed by the CEC in 2023.

Project Description

The proposed BESS Project will support California's current need for additional electrical supply capacity during high peak load demand periods. The proposed BESS Project would utilize approximately 1.22 acres of available open areas within the overall 2.94-acre EEPP parcel, plus approximately 0.59 acre of additional land adjacent to the EEPP parcel. The Project will contain stacked containerized battery systems with internal heating, ventilation and air conditioning (HVAC) and internal fire detection and fire suppression systems in each container, battery management systems (BMS), stacked power conversion systems (PCS) (also called inverters), transformers, and electrical conductors. The Project includes an approximately 400-foot-long, onsite underground 13.8 kilovolt (kV) gen-tie line to connect the BESS to the existing EEPP switchyard generation step-up (GSU) transformer. The Project includes construction of an emergency access road spur to the southwest portion of the BESS site from an existing San Diego Gas & Electric (SDG&E) access road that connects Citracado Parkway to the existing SDG&E Palomar facility to the south. The Enterprise BESS Project includes the addition of a new offsite stormwater conveyance component consisting of buried pipe adjacent to the western EEPP property on land to be leased by SDG&E (approximately 25 feet wide by 300 feet long with 20 feet of the width on leased SDG&E land and 5 feet on the western boundary of the EEPP parcel). This new stormwater conveyance will be designed to carry stormwater via gravity flow from the southern portion of the EEPP site where the proposed BESS facilities are located to an existing stormwater conveyance which outfalls into an existing detention basin on SDG&E land to the northwest of the EEPP property.

A retaining wall up to approximately 28-feet tall will be constructed along the southern site boundary to stabilize the vertical cut near the property line that is associated with removal of the existing hillside

and the needed creation of a level area for the Project. The Project development plan includes the installation of sheet piles along the southern property line to stabilize the cut slope prior to installation of the retaining wall. To do this removal of vegetation, site grading and excavation of soil and bedrock will be necessary. An approximately 20-foot-wide by 600-foot-long temporary construction work area on the northern portion of the adjacent SDG&E property will be utilized to construct the retaining wall.

The Enterprise BESS will be connected to the electrical grid via the existing GSU at the EEPP, which has an existing 69 kV connection to the SDG&E Escondido Substation to the north. The BESS Project will not require any high voltage modifications at the EEPP switchyard or the existing offsite 69 kV line. Operation of the BESS facility will be integrated with the existing EEPP, but the BESS will be charged from the electrical grid and not the EEPP. The BESS and the EEPP may be operated simultaneously in accordance with the market-optimized dispatch instructions received from the California Independent System Operator (CAISO's) Automated Dispatching System (ADS), but the combined output will be control-limited to never exceed the limit of the Generator Interconnection Agreement.

The Enterprise BESS Project will require discretionary permitting involving approval of a Petition for Post-Certification Amendment from the CEC. It is understood that discretionary permitting with the City and/or County will not be required.

The Project's operational life and associated land leases are anticipated to be up to 40 years.

As a part of the original licensing of the EEPP Project, a biological technical analysis and site surveys were conducted (Helix Environmental Planning, Inc. 2001) covering the entire parcel inclusive of the proposed BESS Project. The 2001 report established biological Conditions of Certification (CoC) for the EEPP. Our report documents existing biological conditions at the Project and evaluates the potential for the Project to impact sensitive biological resources such as special-status species, sensitive habitats, and aquatic resources. Where impacts are identified, this report also recommends CoCs or other measures that may be required to address biological impacts.

Project Location

The Project is located at 201 Enterprise Street, Escondido, California, on Assessor's Parcel Number (APN) 232-410-45-00 (Attachment A, Figure 2). The Project will be co-located with the existing CalPeak Power EEPP. The emergency access road spur is located on APN 232-590-13. The BESS Project site is bordered to the north by Auto Art Paint & Body, and beyond to Auto Park Way, to the east and southeast by Enterprise Industrial Park commercial development, to the south by the SDG&E Palomar Energy Center Substation, and to the west by vacant, undeveloped land and associated SDG&E easement, beyond which is Citracado Parkway. The Project is located within a generally urbanized area with mixed commercial use, but is bordered by patches of sage scrub on the undeveloped land to the west.

Historical Permitting Background Summary

The EEPP is a nominal 49.5 MW simple-cycle, natural gas-fired peaking facility. EEPP was reviewed under Public Resources Code section 25705, which granted the CEC emergency permitting authority, and Executive Order D-26-01, issued February 8, 2001, and Executive Order D-28-01 issued on March 7, 2001. In Executive Order D-26-01 and D-28-01, the Governor ordered the CEC and other relevant state and local agencies to expedite review of proposed thermal power plants for construction and operation on an emergency basis by September 30, 2001. The Governor also declared that these Projects were emergency projects under Public Resources Code section 21080(b)(4) and were thereby exempt from the requirements of the California Environmental Quality Act (CEQA). The CEC Final Decision included a provision that would allow for the certification to be extended for the life of the

Project, provided that the CoCs were current and in compliance, the Project was permanent in nature, and air emission credits were in place. On April 11, 2012, the CEC approved the extension (TN64745) of the EEPP for the life of the facility, until such time that it ceases operations and commences permanent closure activities, which means the CoCs issued for the project remain binding until the facility closure.

Key CEC licensing related documents for the EEPP include:

- Application for Certification (AFC) Pursuant to 21-Day Emergency Permitting Process, CalPeak Enterprise #7, CalPeak Power, LLC, May 7, 2001
- CalPeak Enterprise #7 Escondido (01-EP-10) Staff Assessment for Emergency Permit, June 1, 2001
- CalPeak Enterprise #7 Escondido (01-EP-10), AFC Final Decision, June 6, 2001

Regulatory Background

Regulatory authority over biological resources is shared by federal, state, and local authorities under a variety of statutes and guidelines. Primary authority for general biological resources lies within the CEC standards and planning authority of local jurisdictions (in this instance, the City). The EEPP was reviewed under Public Resources Code section 25705, which granted the CEC emergency permitting authority, Executive Order D-26-01, issued February 8, 2001, and Executive Order D-28-01 issued on March 7, 2001.

The California Department of Fish and Wildlife (CDFW) is a trustee agency for biological resources throughout the state and has direct jurisdiction under the California Fish and Game Code (CFGC). Under the California Endangered Species Act and federal Endangered Species Act (CESA and ESA, respectively), the CDFW and the United States (U.S.) Fish and Wildlife Service (USFWS) have direct regulatory authority over species formally listed as Threatened or Endangered as well as native, bird species listed under the Federal Migratory Bird Treaty Act (MBTA), CFGC and Bald and Golden Eagle Protection Act (BGEPA). The U.S. Army Corps of Engineers (USACE) has regulatory authority over waters of the U.S., including wetlands, under Section 404 of the Clean Water Act. The CDFW and Regional Water Quality Control Board (RWQCB) protect streams, lakes, and associated riparian habitat and waters of the State, respectively, at the state level. The analysis in this report is guided by the requirements of these laws, and by the operating standards of the implementing agencies.

Local Regulations

Multiple Habitat Conservation Program

The San Diego Multiple Habitat Conservation Program (MHCP) is a comprehensive conservation planning process that addresses the needs of multiple plant and animal species in northwestern San Diego County. Its goal is to conserve approximately 19,000-acres of habitat, of which roughly 8,800-acres (46 percent) are already in public ownership and contribute toward the habitat preserve system for the protection of rare, threatened, or endangered species (AMEC Earth & Environmental, Inc. [AMEC] et al. 2003a, 2003b).

The MHCP Subregional Plan and Final Environmental Impact Statement/Environmental Impact Report (EIS/EIR) were adopted and certified by the San Diego Association of Governments (SANDAG) Board of Directors on March 28, 2003. A Subarea Plan for the City was prepared, but has not yet been agreed to be the City of Escondido where the BESS Project is located. The Subarea Plan would need to be

adopted by the City and implementing agreements with CDFW and USFWS would need to be signed before incidental take permits (ITP) could be issued. No ITPs are anticipated for this Project.

Although the City's MHCP Subarea Plan has not been adopted, the MHCP forms an appropriate basis for assessing the biological impacts of the Project as discussed below.

Biological Core and Linkage Areas

The MHCP identifies Biological Core and Linkage Areas (BCLA) as those areas determined biologically valuable for inclusion in the regional preserve system (AMEC Earth & Environmental, Inc. et al. 2003a, 2003b). BCLAs were designed to conserve sensitive species and corridors between areas of high-quality habitat and to provide avenues for wildlife movement between these areas.

Covered Species

A Covered Species is a species for which take authorization would be provided under the MHCP, because long-term viability was determined to be adequately maintained under a particular preserve system design. The federal action addressed in the MHCP is the issuance of Incidental Take Permits for all species on the Covered Species list whether they currently are listed or are to be listed in the future. The MHCP Covered Species include 15 plant species and 32 wildlife species.

The MHCP Subarea Plan for Escondido has not been approved or adopted; therefore, this report uses this MHCP as baseline for discussion, but is not applicable to Covered Species for this Project. No ITPs are anticipated for this Project.

City of Escondido Draft Subarea Habitat Conservation Plan/Natural Communities Conservation Plan

The City of Escondido Draft Subarea Habitat Conservation Plan/Natural Communities Conservation Plan (Draft Subarea Plan) comprehensively addresses how the City will conserve natural biotic communities and sensitive plant and wildlife species. The Draft Subarea Plan has been prepared in response to direction from the USFWS and the CDFW to meet the applicable requirements of FESA/CESA and the Natural Communities Conservation Planning Act of 1991. The City's Draft Subarea Plan is not formally approved and adopted, so all projects are required to obtain applicable permits for impacts to federally listed species as per Section 4D (for coastal sage impacts, through the I122 process), 10(a) or Section 7 (or Section 10) of the FESA. Also, because the City does not have an approved Subarea Plan, the mitigation requirements for impacts to the biological resources are based on ratios provided by the approved MHCP (AMEC Earth & Environmental, Inc. et al. 2003a, 2003b). Although the Draft Subarea Plan has not yet been approved, the plan has been used by the City as a guide for open space design and preservation.

City of Escondido General Plan

The Biological and Open Space Element in the 2012 City of Escondido General Plan contains several policies pertaining to the protection of biological resources (City of Escondido, 2012).

- **Goal 1:** Preservation and enhancement of Escondido's/ open spaces and significant biological resources as components of a sustainable community
    - **Policy 1.6:** Preserve and protect significant wetlands, riparian, and woodland habitats as well as rare, threatened or endangered plants and animals and their habitats through avoidance. If avoidance is not possible, require mitigation of resources either on- or off-site at ratios

consistent with State and federal regulations, and in coordination with those agencies having jurisdiction over such resources.

- **Policy 1.7:** Require that a qualified professional conduct a survey for proposed development projects located in areas potentially containing significant biological resources to determine their presence and significance. This shall address any flora or fauna of rare and/or endangered status, declining species, species and habitat types of unique or limited distribution, and/or visually prominent vegetation.
- **Policy 1.8:** Require that proposed development projects implement appropriate measures to minimize potential adverse impacts on sensitive habitat areas, such as buffering and setbacks. In the event that significant biological resources are adversely affected, consult with appropriate state and federal agencies to determine adequate mitigation or replacement of the resource.
- **Policy 1.9:** Encourage proposed development projects to minimize the removal of significant stands of trees unless needed to protect public safety and to limit tree removal to the minimum amount necessary to assure continuity and functionality of building spaces.

Survey Methods

The work described in this report consisted of a review of relevant literature and background information, a field reconnaissance survey, and a consistency analysis of the 2001 biological report in the context of current existing conditions and the status of those biological resources protected under current state and federal laws and regulations. The potential for special-status species to occur within the Project was evaluated based on the literature review and a survey designed to assess habitat suitability for special-status species. The Project Boundary area is defined as the Project components and limits of disturbance and the Study Area is defined as the Project Boundary area plus an additional environmental investigation area (Attachment A, Figure 2). The 300-foot Buffer Area (hereinafter "Buffer Area") as defined in Attachment A, Figure 2 was evaluated and includes the Project Boundary area and Study Area.

Literature Review

Prior to the field survey, Rincon conducted background research to preliminarily characterize the nature and extent of biological resources on and adjacent to the Project Boundary area. Rincon reviewed Project aerial photographs and previous historical land use of the Project. The literature review included queries of the CDFW California Natural Diversity Data Base (CNDDB, CDFW 2023a), USFWS Biogeographic Information and Observation System (BIOS, USFWS 2023a), and California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants of California (CNPS 2023a) for special-status species occurrences within the *Escondido, California* U.S. Geological Survey (USGS) 7.5-minute quadrangle and the surrounding eight quadrangles, were conducted to obtain comprehensive information regarding state and federally listed species as well as other special-status species considered to have potential to occur within a five-mile radius of the Project. For CNPS query purposes, a nine (9)-quadrangle search area centered on the Project was used.

Other resources reviewed included:

- USFWS National Wetlands Inventory (NWI) (USFWS 2023b);
- National Hydrography Dataset (USGS 2023);
- United States Department of Agriculture (USDA) NRCS Web Soil; Survey (USDA NRCS 2023a);
- USFWS Critical Habitat Portal (USFWS 2023c);

- Biogeographical Information and Observation System (BIOS; CDFW 2023b);
- Special Vascular Plants Bryophytes, and Lichens List (CDFW 2023d), and Special Animal List (CDFW 2023c);
- Multiple Habitat Conservation Program for the Cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Bach and Vista, Volumes I and II (SANDAG 2003);
- SANDAG SanGIS *Parcel Lookup Tool* was reviewed to determine areas designated in the MHCP Subarea Plan (SANDAG 2022);
- Natural Community Conservation Plan for the City of Escondido (City of Escondido, 2001);
- The City of Escondido General Plan (City of Escondido, 2012);
- Previous Aerial photographs, topographic maps, geologic maps, climatic data in the area were also examined. All previous documentation, including biological reports (Helix 2001), survey data, and vegetation maps were reviewed.

Field Survey

A biological resource reconnaissance-level survey was conducted within the Buffer Area, which includes the entire Study Area and Project Boundary area, to assess the habitat suitability for potential special-status species, map the existing vegetation communities and land cover types present, and map any evident sensitive biological resources currently on-site, document the presence of potential jurisdictional waters or wetlands, and record all observations of plant and wildlife species within the Buffer Area. Rincon Biologist Jacob Hargis conducted a pedestrian survey of the Buffer Area on May 11, 2023, between the hours of 9:00 am and 12:30 pm. Weather conditions were calm and clear at the time of the survey, with temperatures ranging from 54-62°F and wind speeds of approximately 2-4 mph. Site photos from the survey are included in Attachment B. A supplemental biological resource reconnaissance survey was conducted within the Buffer Area on October 16, 2023, between the hours of 8:00 am and 12:00 pm by Rincon Biologist Casey Clark.

The biologists walked the entirety of the EEPP and all accessible areas within the Buffer Area to achieve 100% visual cover. All wildlife species observations (either directly observed or detected from calls, tracks, scat, nests, or other sign) were recorded. The biologists searched for special-status plants that would have been identifiable during the time of the survey; however, a focused rare plant survey was not conducted. Similarly, the biologists documented any water flow and potentially jurisdictional waters or wetlands within the Buffer Area; however, the results of this survey do not constitute a formal jurisdictional or wetland delineation.

The habitat requirements for each regionally occurring special-status species were assessed and compared to the type and quality of the habitats observed within the Buffer Area during the site visits.

The assessment of special-status species in this report is based on the results of the site visit and literature review and is intended to assess habitat suitability and potential for the proposed Project to impact special-status species within the Buffer Area limits. The surveys were conducted to provide an initial evaluation regarding the presence or absence of terrestrial biological resources, including plants, birds, and other wildlife; however, focused protocol surveys were not conducted during the reconnaissance-level biological surveys.

Vegetation Communities

Vegetation communities observed on-site were mapped on a site-specific aerial photograph. All accessible portions of the Buffer Area were covered on foot. Vegetation was generally classified using

the systems provided in *Draft Vegetation Communities of San Diego County* (Oberbauer et. al 2008) as necessary to reflect the existing site conditions.

Flora

All plant species observed in the Buffer Area were noted, and plants that could not be identified in the field were identified later using taxonomic keys (Baldwin et al. 2012). The reconnaissance-level biological surveys included a directed search for special-status plants that would have been apparent at the time of each survey.

Fauna

Wildlife species observed directly or detected from calls, tracks, scat, nests, or other signs were documented. Zoological nomenclature for birds is in accordance with the Cornell Lab of Ornithology (Cornell University 2023); for mammals using Mammals of California (Wilson and Reeder 2005); and for amphibians and reptiles using Society for the Study of Amphibians and Reptiles' (SSAR) Checklist of the Standard English Names of Amphibians & Reptiles (SSAR 2023).

Focused Surveys

USFWS protocol breeding coastal California gnatcatcher (CAGN, *Polioptila californica californica*) surveys were conducted to support the application for the CEC PCA, which included the Project Boundary area plus a 300-foot buffer, and any observations that were found within the Project Boundary area. Survey findings for the protocol breeding surveys that were conducted from April 19, 2023, through May 24, 2023, were negative. A formal CAGN survey report was submitted to USFWS on July 7, 2023 (Rincon 2023) and is included as Attachment D.

USFWS protocol non-breeding CAGN surveys were conducted to include the remaining Study Area plus a 300-foot buffer. These protocol non-breeding surveys began on October 17, 2023, and were completed on February 13, 2024. The survey results of all nine protocol non-breeding surveys were negative. The second and final CAGN survey was submitted to USFWS in March 2024.

Aquatic Resource Delineation

The results of these surveys do not constitute a formal jurisdictional or wetland delineation; therefore, an Aquatic Resources Delineation and analysis was not conducted and is not included in this analysis. The findings and opinions conveyed in this report are based exclusively on the methodology described above.

Survey Limitations

Areas where access was restricted, including private/inaccessible property (SDG&E Palomar Energy Center Substation) to the south were surveyed with binoculars. The detection of wildlife species was limited by seasonal and temporal factors. The surveys were conducted in the early spring and fall. Spring is an optimal breeding season for wildlife and blooming periods for plant species. Fall is not the optimal period to observe potentially occurring winter migrants. The surveys were performed during daylight hours; therefore, the identification of nocturnal animals was limited to sign detection if present within the Buffer Area.

Existing Conditions

Topography and Soils

Elevation within the Project ranges from 770 feet above mean sea level (amsl) for the sloped area from the south, 750 feet from the northern boundary for the Project, sloping down to 735 feet in the southeastern portion. The Project contains steeper sloped areas with vegetation to the south and undeveloped vegetated land to the west. The topography of the Buffer Area and its immediate surroundings is characterized primarily by undeveloped property, industrial and commercial uses, substations, and active roadways. Based on the most recent U.S. Department of Agriculture, Natural Resources Conservation Service (USDA, NRCS 2023a, 2023 b) soil survey for Escondido, California (USDA, NRCS 2023a, 2023b), the Project Boundary area and Buffer Area contains one soil map unit with varying percent slopes (Table 1) (Attachment A, Figure 3):

Vista Coarse Sandy Loam typically occurs on hilly, sloping elevations and mountainous uplands with slopes ranging from 2 to 75 percent. The soil is derived from material weathered from decomposed granitic rocks. It is considered well-drained with slow to rapid run-off and moderately rapid permeability. This soil makes up the entire Buffer Area with 5-9 percent slopes in the northern portion, 15-30 percent in the southwestern portion, and 9-15 percent encompassing most of the Buffer Area.

Table 1 Soils within the Project Boundary and Buffer Area

Soil Type	Acreage Within Project Boundary	Acreage Within Buffer Area
Vista coarse sandy loam, 5 to 9 percent slopes	0.08	6.82
Vista coarse sandy loam, 9 to 15 percent slopes	1.72	24.90
Vista coarse sandy loam, 15 to 30 percent slopes	0	0.18
Total	**1.80**	**31.90**

Vegetation and Land Cover Types

The Buffer Area is in a highly industrialized and commercially developed area, and most of the Project Boundary area has been graded in the past or is currently developed. Landscaped berm areas, consisting of mainly ornamental coniferous trees such as Canary Island pines (*Pinus canariensis*) provide a visual buffer along the northern, northeastern, and northwestern boundaries of the Project. Several western sycamore trees (*Platanus racemosa*) were observed just outside of the eastern and southeastern boundaries. Additionally, one large old growth coast live oak (*Quercus agrifolia)* is located near the Enterprise Street entrance to the Project Boundary area. A small stand of dense scrub oaks (*quercus* sp.). was observed within the Buffer Area, directly south of the large mature oak tree. These scrub oaks appeared to intergrade with adjacent sage scrub and were mixed in with ornamental pines. The western portion of the Project Boundary area contains one patch of Diegan Coastal Sage Scrub and two patches of Disturbed Diegan Coastal Sage Scrub, with non-native grassland mixing in between the shrub cover. The Project Boundary area is entirely fenced in with heavy duty fence line and razor wire. The area surrounding the Project Boundary area is characterized by commercial and industrial uses, power generation, undeveloped land, and established roadways to the north and west. The habitat within the Project has retained some structure based on the 2001 data (Helix, 2001), in addition to some larger areas outside of the Project Boundary area, within the Buffer Area, consisting of mixed non-native grassland, disturbed, and ornamental communities. The Diegan Coastal Sage Scrub has become more disturbed with the increased establishment of non-native grasses, annual weeds, and forbs.

Vegetation classification was based on the classification systems provided in the *Draft Vegetation Communities of San Diego County* (Oberbauer et al. 2008) to provide consistency with the SANDAG MHCP and modified as appropriate to reflect the existing site conditions. Where applicable, vegetation communities were further classified using *A Manual of California Vegetation*, Second Edition (Sawyer et al. 2009) to better identify the species composition and provide consistency with CDFW classifications. Sensitive vegetation community ranking is based on MHCP habitat groups (SANDAG 2003). The MHCP designates six habitat group categories:

- Group A. Wetland Communities
- Group B. Rare Upland
- Group C. Coastal Sage Scrub
- Group D. Chaparral
- Group E. Annual Grassland
- Group F. Other

Six (6) vegetation/land cover types were observed in the Buffer Area: 1) urban/developed; 2) Disturbed habitat); 3) Non-native grassland; 4) Ornamental; 5) Diegan Coastal Sage Scrub; and 6) Disturbed Diegan Coastal Sage Scrub (Attachment A, Figure 4). Of these, six vegetation communities occur within the Project Boundary area and are described below; Diegan Coastal Sage Scrub , Disturbed Diegan Coastal Sage Scrub, non-native grassland, urban/developed, and ornamental. Vegetation classification was based on the classification systems provided in the Draft Vegetation Communities of San Diego County (Oberbauer et al. 2008); and modified as appropriate to reflect the existing site conditions (Table 2)

Table 2 Vegetation Community/Land Cover Types within the Project Boundary and Buffer Area

Habitat Group	Vegetation Community/ Land Cover Type (Holland Code)	Acreage Within Project Boundary*	Acreage Within Buffer Area	Sensitive
C	Disturbed Diegan Coastal Sage Scrub (32500)	0.08	0.25	Yes
C	Diegan Coastal Sage Scrub (32500)	0.02	1.87	Yes
E	Non-native grassland (42200)[1]	0.31	2.78	Yes
F	Urban/Developed (12000)	0.98	17.69	No
F	Disturbed Habitat (11300)	0.19	2.42	No
F	Ornamental	0.22	6.89	No
Total		**1.81**	**31.90**	

[1] Based on Oberbauer et al. 2008

*Note: Minor rounding discrepancies may change vegetation calculations.

Diegan Coastal Sage Scrub (32500)

This vegetation community comprises 0.02-acre within the Project Boundary area and 1.87-acres within the Buffer Area. Diegan Coastal Sage Scrub is a vegetation community featuring Diegan Coastal Sage Scrub species such as bush sunflower (*Encelia* Californica), California sagebrush (*Artemisia californica*), with coyote brush *(Baccharis pilularis*), deerweed, lemonade berry (*Rhus integrifolia*) and California buckwheat (*Eriogonum fasiculatum*).This community was found to be mixed with non-native

grassland species, ornamentals, and other non-native annual and perennial weedy species such as salt cedar (*Tamarix* sp.*),* thistles, and wild radish (*Raphanus raphanistrum*).

Species in this vegetation community were found distributed in higher densities within the open spaced habitat within the Project Boundary area and Buffer Area to the west.

Disturbed Diegan Coastal Sage Scrub (32500)

This vegetation community comprises 0.08-acre within the Project Boundary area and 0.25-acre within the Buffer Area. This community is structurally similar to Diegan Coastal Sage Scrub but has been subjected to historical anthropogenic disturbance from land use practices, most likely resulting from the initial construction of the EEPP building and fence installation. Patches of Disturbed Diegan Coastal Sage Scrub are located on the top of slope near the southwestern Project Boundary area and as corridor just outside the southern Project Boundary. The ground cover between the shrub layer is dominated by non-native and invasive grasses and weeds such as wild oat, mustards (*Brassica* sp.) and bromes (*Bromus* sp.). Dominant shrub species include California buckwheat, California sagebrush, lemonade berry (*Rhus integrifolia)* coyote brush, and deer weed, and herbaceous species such as storksbill (*Erodium cicutarium*), Spanish clover (*Acmispon americanus*), willow dock (*Rumex salicifolius*), sandysoil suncup (*Camisonnia strigulosa),* dotseed plantain (*Plantago erecta*), and two-color rabbit tobacco (*Pseudognaphalium biolettii*) observed along the disturbed slope.

Non-native (Annual) Grassland (42200)

This vegetation community comprises 0.31-acre within the Project Boundary area and 2.78-acres within the Buffer Area. The non-native grassland is located towards the southwest of the Project Boundary area with clusters of Diegan Coastal Sage Scrub, Disturbed Diegan Coastal Sage Scrub, and Disturbed Habitat throughout. As defined by Oberbauer et. al., Non-native (or annual) grassland consists of a dense to sparse cover of annual grasses with flowering culms 0.2-0.5 (1 meter) high. A typical community of non-native grassland consists of a mix of annual grasses such as *avena, bromus, erodium,* and *brassica* as common indicators. Non-native grasslands occur on fine textured, or often clay soils with oak woodlands adjacent in on better drained soils (Oberbauer et. al. 2008).

This community is mostly consistent with the 2001 study. The dominant annual grassland species within the Project Boundary area and Buffer Area include wild oat, mustards, bromes, with perennial herbaceous species that include storksbill, fennel (*Foeniculum vulgare*), and thistles (*Centaurea* sp.).

Urban/Developed (12000)

This community comprises of 0.98-acre within the Project Boundary area and 17.69-acres within the Buffer Area. Areas considered urban/developed within the Buffer Area have been constructed upon or otherwise physically altered to an extent that native vegetation is no longer supported. Developed land is characterized by permanent or semi-permanent structures, pavement or hardscape, roadways, and landscaped areas that often require irrigation. Areas where no natural land is evident due to a large amount of debris or other materials being placed upon it may also be considered Urban/Developed (e.g., frequently used equipment storage areas). Consistent with results from the 2001 study, this land cover type comprises the active power plant and associated access road, equipment staging areas, bare ground areas, and ornamental vegetation, as well as surrounding roads, substations, transmission poles, developments, and roadways within the Buffer Area.

Disturbed Habitat (11300)

This community comprises of 0.19-acre within the Project Boundary area and 2.42-acres within the Buffer Area. Areas mapped as disturbed habitat contain a cover of highly disturbed annual, non-native grasses such as red brome (*Bromus rubens*), wall barley (*Hordeum murinum*), black mustard (*Brassica nigra*), false brome (*Brachypodium distachyon),* redstem filaree (*Erodium cicutarium*), and slender oat (*Avena barbata*). Oberbauer et al., describes these areas as "areas that have been physically disturbed (by … human activity) and are no longer recognizable as a native or naturalized vegetation association, but continue to retain a soil substrate." Typically, vegetation, if present, is "nearly exclusively composed of non-native plant species such as ornamentals or disturbance-adapted ruderal exotic species or shows signs of past or present animal usage such as grazing, that removes any capability of providing viable natural habitat for uses to wildlife other than dispersal" (Oberbauer et. al. 2008). Examples of disturbed land include areas that have been graded, repeatedly cleared for fuel management purposes and/or have experienced repeated use that prevents natural revegetation (i.e., dirt parking lots, trails that have been present for several decades), recently graded firebreaks, graded construction pads, construction staging areas, off-road vehicle trails, and old homesites.

Disturbed habitat was observed along the southern slope of the EEPP, within patches throughout the Buffer Area, as well as distributed within developed, ornamental, Non-native Grassland, and Diegan Coastal Sage Scrub communities. The disturbance along the southern slope has impacted the naturally occurring vegetation community, which is limited, establishing primarily non-native plant species adapted to disturbances, including slender oat, shortpod mustard (*Hirschfeldia incana*), bromes (*bromus* sp.), sow thistle (*Sonchus oleraceus*) fennel (*Foeniculum vulgare),* prickly lettuce (L*atuca serriola*), and jersey cudweed (*Pseudognaphalium luteoalbum*). Some native species are dispersed throughout the disturbed habitat, including California sage brush (*Artemisia californica*), deer weed (*Acmispon glaber)*, common yarrow (*Achillea millefolium*) and black sage (*Salvia mellifera*).

Ornamental

This vegetation community comprises 0.22-acre within the Project Boundary area and 6.89-acres within the Buffer Area. Ornamental vegetation within the Buffer Area includes numerous Canary Island palms, paperbark trees (*Melaleuca quinquenervia*), as well as red tip photinias (*Photinia fraseri*), day lilies and other manicured ornamentals. Denser stands of pine trees provide a visual buffer around the north, northeastern, and northwestern boundaries of the Project and were observed along the eastern and western portions of the SDG&E Escondido substation.

General Wildlife

The Buffer Area and its surroundings provide habitat for wildlife species that commonly occur in urbanized and disturbed habitats within San Diego County. Wildlife species observed/detected on or adjacent to the site include Cooper's hawk (*Accipiter cooperii*; CDFW Watch List), red-tailed hawk (*Buteo jamaicensis*), California towhee (*Pipilo crissalis*), Anna's hummingbird (*Calypte anna*), Allen's hummingbird (*Selasphorus sasin*), song sparrow (*Melospiza melodia*), American crow (*Corvus brachyrhynchos*), mourning dove (*Zenaida macroura*), house finch (*Haemorhous mexicanus*), house wren (*Troglodytes aedon*), black phoebe (*Sayornis nigricans*), northern mockingbird (*Mimus polyglottos),* hooded oriole (*Icterus cucullatus*), and lesser goldfinch (*Spinus psaltria*). Several old small rodent burrows were observed, but no indication of any larger mammal burrows was present.

Special-status Biological Resources

This section discusses sensitive biological resources within the Buffer Area, including areas within the Study Area and Project Boundary, and evaluates the potential for the Buffer Area to support special-status biological resources.

Special-status Species

Local, state, and federal agencies regulate special status species and may require an assessment of their presence or potential presence to be conducted prior to the approval of proposed development on a property. Assessments for the potential occurrence of special-status species are based upon known ranges, habitat preferences for the species, species occurrence records from the CNDDB species occurrence records from other sites in the vicinity of the Buffer Area, and previous reports for the Buffer Area. The potential for each special-status species to occur in the Buffer Area was evaluated according to the following criteria:

- **Not Expected.** Habitat on and adjacent to the Buffer Area is clearly unsuitable for the species' requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime). The species is not analyzed further in this letter report.
- **Low Potential.** Few of the habitat components meeting the species' requirements are present, and/or the majority of habitat on and adjacent to the Buffer Area is unsuitable or of very poor quality. The species is not likely to be found within the Buffer Area and therefore is not analyzed further in this letter report.
- **Moderate Potential.** Some of the habitat components meeting the species' requirements are present, and/or only some of the habitat on or adjacent to the Buffer Area is unsuitable. The species has a moderate probability of being found within the Buffer Area.
- **High Potential.** All of the habitat components meeting the species' requirements are present and/or most of the habitat on or adjacent to the Buffer Area is highly suitable. The species has a high probability of being found within the Buffer Area.
- **Present.** Species is observed on the site or has been recorded (e.g., CNDDB, other reports) within the Buffer Area recently (within the last 5 years).

For the purpose of this report, special-status species are those plants and animals listed, proposed for listing, or candidates for listing as Threatened or Endangered by the USFWS or the National Marine Fisheries Service (NMFS) under the ESA; those listed or candidates for listing as Rare, Threatened, or Endangered under the CESA or Native Plant Protection Act; those identified as Fully Protected by the CFGC (Sections 3511, 4700, 5050, and 5515); those identified as Species of Special Concern (SSC) by the CDFW; and plants occurring on lists 1 and 2 of the CNPS California Rare Plant Rank (CRPR) system per the following definitions:

- **Rank 1A** = Plants presumed extinct in California
- **Rank 1B.1** = Rare or endangered in California and elsewhere; seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)
- **Rank 1B.2** = Rare or endangered in California and elsewhere; fairly endangered in California (20-80% occurrences threatened)
- **Rank 1B.3** = Rare or endangered in California and elsewhere, not very endangered in California (<20% of occurrences threatened, or no current threats known)
- **Rank 2** = Rare, threatened or endangered in California, but more common elsewhere

Results

Based on a query of the CDFW CNDDB and CNPS Inventory, there are 111 special-status plant species and 74 special-status wildlife species documented within the *Escondido, California* USGS 7.5-minute quadrangle and the eight surrounding quadrangles, which covers a radius of over 10 miles. All 185 special-status species have been evaluated for potential to occur within the Buffer Area (Attachment C).

Special-status Wildlife Species

This section discusses and evaluates the potential for the Buffer Area, including areas within the Study Area and Project Boundary, to support special-status wildlife species (Attachment C). Assessments for the potential occurrence of federal and State listed species are based upon known ranges, habitat preferences for the species, species occurrence records from the CNDDB and other species occurrence records from other sites in the vicinity of the Buffer Area, previous reports for the Project, and the results of the surveys of the Buffer Area.

The database queries and literature review performed for the Project indicated 74 special status wildlife species have been documented within the *Escondido* USGS 7.5-minute quadrangle and eight surrounding quadrangles. The review of biological databases resulted in the identification of 34 special-status wildlife species occurring within five miles of the Buffer Area. Of these, Rincon determined that two species have at least a moderate potential to occur due to the presence of suitable habitat in the Buffer Area (Attachment C). Lawrence's goldfinch (*Spinus lawrencei*), a species tracked in the CNDDB, has a low potential to occur; however, surrounding oak trees within the disturbed Diegan Coastal Sage Scrub community could provide foraging or potential nesting adjacent to the Project.

One special status-status wildlife species, an adult male Cooper's hawk (*Accipter cooperii*), was observed within the Project Boundary area during the reconnaissance-level biological field surveys. Coastal California gnatcatcher has a potential to occur within the Buffer Area based on the habitat present, but no documented evidence has been recorded in the past or during protocol surveys.

Nesting Birds and Raptors

The Buffer Area contains suitable nesting habitat for a variety of native avian species protected by the MBTA and CFGC Section 3503. The Project Boundary area and Buffer Area contains marginal quality, but suitable habitat for special-status species such as CAGN and contains suitable stands of large coniferous trees that could be utilized by Cooper's hawks. Generally, most native bird species that could nest on or adjacent to the Project do not have a special-status designation, but are addressed herein based on the protections afforded under the MBTA and CFGC, and the potential for impacts to active nests during the nesting season. The nesting season generally extends from February through September, but can vary based upon annual climatic conditions. Species of birds common to the area that typically utilize open disturbed habitats for foraging, including scrub, oak trees, or landscaped trees for nesting habitat, such as northern mockingbird, house wren, song sparrow, American crow, lesser goldfinch, mourning dove, Anna's hummingbird, California towhee, or red-tailed hawk were detected during the reconnaissance-level biological surveys.

Coastal California Gnatcatcher

Coastal California gnatcatcher, a federally threatened, SSC, and MHCP-covered species, is an obligate, permanent resident of Coastal Sage Scrub below 2,500 feet in southern California. This species occurs in low Coastal Sage Scrub in arid washes and on mesas and slopes.

The Project Boundary area and Buffer Area support marginal suitable habitat for CAGN, therefore, protocol surveys were recommended by CEC CoC BIO-7 in accordance with USFWS requirements (USFWS 1997) to further evaluate if any CAGN are utilizing the site.

USFWS protocol breeding surveys were conducted by Helix (Helix, 2001) prior to the original construction for the EEPP Project; however, survey results were negative. An updated series of presence/absence protocol breeding surveys of the Project plus a 300-foot buffer were conducted by Rincon's qualified biologist Kelly Rios, a Section 10(a)(1)(A) permitted biologist (TE 018909-6). Surveys commenced following the 15-day notification period. The surveys were conducted within the breeding season and adhered to the frequency requirements outlined in the current USFWS survey protocol (last revised June 26, 2019). Surveys were conducted from April 19, 2023 through May 24, 2023 to further evaluate any potential CAGN territories that could be affected by short-term Project construction activities, including vegetation clearance, and long-term habitat loss and indirect impacts. In accordance with the USFWS survey protocol, a minimum of six breeding season surveys were conducted at least one week apart prior to anticipated construction timeline for the Project. The results of the survey were negative and were submitted to USFWS on July 7, 2023 in a formal CAGN survey report (Rincon 2023) included as Attachment D.

USFWS protocol non-breeding CAGN surveys were conducted by Ms. Rios to address updates to the Project boundary plus a 300-foot buffer. The protocol non-breeding surveys were conducted within the non-breeding season and adhered to the frequency requirements outlined in the current U.S. Fish and Wildlife Service (USFWS) survey protocol (last revised June 26, 2019). Surveys began on October 17, 2023, and were completed on February 13, 2024. In accordance with the USFWS survey protocol, a minimum of nine surveys were conducted at least two weeks apart. Surveys commenced following the 15-day notification period. A second and final formal CAGN survey report will be submitted to USFWS in March 2024.

Cooper's Hawk

Cooper's hawk is a CDFW Watch List (WL) and MHCP-covered species that is typically found in woodland, and forested habitats and is found throughout urban landscapes where cover and prey are available. They typically nest in riparian growths of deciduous trees, oaks, canyon bottoms, and pines. The Project Boundary area and Buffer Area contains songbird prey availability with adjacent tree and shrub habitat to the north, south, central, and west. An adult male Cooper's hawk individual was observed emerging from a Canary Island pine tree and perching and vocalizing along the southern fence line. A pair was not observed during the reconnaissance-level biological surveys. There was no evidence of an active nest or behavior suggesting a nest was present within the Buffer Area; however, based on the suitable nesting and foraging habitat within the Project Boundary area and Buffer Area, this species has a high potential to occur as a transient or could potentially nest in the surrounding woodland or ornamental habitat.

Special-status Plant Species

No federal or state listed plants were observed during the reconnaissance-level biological field surveys. A protocol botanical survey for all species was not performed, and the reconnaissance surveys were conducted outside the bloom period for some of these species. The database and literature review performed for the Project indicated that 111 special-status plant species have been documented within the *Escondido, California* USGS 7.5-minute quadrangle and eight surrounding quadrangles. A total of 24 species that have been recorded to occur within five miles of the Project were also reviewed and assessed during the reconnaissance surveys. These species occur in a variety of habitats such as vernal pools, riparian woodlands and forests, meadows, and native perennial grasslands, none of

which were observed within the Buffer Area. However, the Buffer Area, which includes the Project Boundary, does include disturbed areas associated sage scrub habitats.

Based on the habitat assessment of the site and special-status plant habitat requirements, no special-status plant species were determined to have more than low potential to occur within the Buffer Area. The majority of the Buffer Area has been previously developed with structures and roads or disturbed from the installation of concrete v-ditches and fencing used for the operation and maintenance of the EEPP. Historical aerial imagery shows that the Buffer Area has been historically maintained, mowed, and graded in association with its industrial uses. Most of the vegetation within the Project Boundary area is restricted to semi-disturbed coastal scrub habitat, non-native grassland habitat, and ornamental trees. Overall, these land cover types within the Project Boundary area do not represent more than marginally suitable habitat for any of the evaluated special-status plant species with potential to occur in the region.

Given the existing and historical site conditions, lack of suitable habitat, and domination of non-native plant species, there is a low potential for any special-status plant species to occur within the Project (Attachment C).

Sensitive Vegetation Communities

Plant communities are considered sensitive biological resources if they have limited distributions, have high wildlife value, include sensitive species, or are particularly susceptible to disturbance. CDFW maintains a list of plant communities that are considered sensitive. Three native vegetation types were documented to occur within the Project Boundary area, Buffer Area, and anticipated impact area.

Disturbed Diegan Coastal Sage Scrub (DCSS) exists as small patches at the top of slope near the southern Project boundary. The larger, more intact Diegan Coastal Sage Scrub exists as a small patch in the western Project Boundary area along the proposed access road. Large areas of Diegan Coastal Sage Scrub exist, within the open spaced habitat within the Buffer Area. These communities fall within the City's "coastal sage scrub" habitat group C and type (SANDAG, 2003), which is considered a sensitive habitat group.

Non-native (annual) grassland exists in the southwestern portion of the Project Boundary area and in the undeveloped land to the west within the Buffer Area among clusters of Diegan Coastal Sage Scrub, Disturbed Diegan Coastal Sage Scrub, and Disturbed Habitat throughout. This vegetation community is considered sensitive, and ecologically important for a variety of plant and animal species, including the CAGN's use of these annual grasslands, predominately consisting of non-native grasses, in north county, as a mosaic to forage within the coastal sage scrub community (SANDAG, 2003). This community falls within the City's habitat Group E and is considered sensitive under CEC CoC BIO-10 (See Impacts Analysis and Mitigation Measures section).

Critical Habitat

Federally Designated Critical Habitat (DCH) does not occur within the Buffer Area or Project Boundaries.

Aquatic Resources

Concrete stormwater v-ditches, approximately 3-feet-wide exist within the Project Boundary and within the Study Area, occurring along the fence line to the south, along the southwestern slope, and along the western portion of the fence line. These features likely function to catch sheet flow rainfall and serve as erosional control, while transporting water off site. Stormwater appears to eventually flow into

an old drainage basin adjacent to the intersection of Citracado Parkway and Auto Park Way and disperse off site. These concrete-lined features do not convey water except for local runoff during storms, and do not have any habitat value. The ditches are not jurisdictional waters of the United States, Waters of the State, or streambeds as defined by resource agency regulations. No such waters occur in the Project Boundary Area or Buffer Area.

Habitat Connectivity and Wildlife Corridors

Wildlife movement corridors are defined as areas that connect suitable wildlife habitat areas in a region otherwise fragmented by rugged terrain, changes in vegetation, or human disturbance. Natural features such as canyon drainages, ridgelines, and areas with vegetation cover provide corridors for wildlife travel.

The Project is located outside of any Multiple Habitat Conservation Areas, Focused Planning Areas (FPA), or Biological Core and Linkage Areas (BCLA). Finally, the Project is not within or adjacent to an essential connectivity area or natural landscape block as identified by the California Essential Habitat Connectivity Project (Spencer et al. 2010, CDFW 2023e). The areas surrounding the Project are developed, and the site is not situated in an area that would be conducive to use as a movement route for wildlife making local or regional movements.

Impact Analysis and Mitigation Measures

This section discusses the potential impacts to biological resources that may occur from implementation of the BESS Project. Impacts are considered in the context of the required CoCs from the 2001 CEC license, and additional mitigation measures are recommended where needed. Construction-related activity and non-paved ground disturbance from the Project will involve grading, road construction, and battery storage facilities. These areas will be impacted in the southwestern portion of the Project Boundary area, which include Disturbed Diegan Coastal Sage Scrub, Diegan Coastal Sage Scrub, and Non-native grassland habitats. Applicable CoCs developed for the original EEPP Project will be required conditions under the licensing of the BESS Project and will be implemented. The CoCs include conditions BIO-1 through BIO-11, which read as follows:

BIO-1 The Project permitted under this emergency process will avoid all impacts to legally protected species and their habitat on site, adjacent to the site and along the right of way for linear facilities.

BIO-2 The Project permitted under this emergency process will avoid all significant non-mitigatable impacts to designated critical habitat (wetlands, vernal pools, riparian habitat, preserves) on site or adjacent to the site.

BIO-3 The Project permitted under this emergency process will avoid all impacts to locally designated sensitive species and protected areas.

BIO-4 The Project permitted under this emergency process will reduce risk of large bird electrocution by electric transmission lines and any interconnection between structures, substations and transmission lines by using construction methods identified in ‘Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 1996’ (APLIC 1996).

BIO-5 The Project biologist, a person knowledgeable of the local/regional biological resources, and Compliance Project Manager (CPM) will have access to the site and linear rights-of-way at any time prior to and during construction and have the authority to halt construction in an area necessary to protect a sensitive biological resource at any time.

BIO-6 Upon decommissioning the site, the biological resource values will be reestablished at preconstruction levels or better.

BIO-7 Prior to any site mobilization a FWS approved biologist will conduct protocol surveys of the project site and the construction laydown area for coastal California gnatcatchers.

BIO-8 Prior to any Project-related activities that will occur during the raptor breeding season (March 15 – August 15), a qualified biologist will conduct surveys of the Project site and the surrounding habitat within a half-mile radius of the Project boundary. Survey methodologies will allow for a thorough search of these areas to identify potential arboreal and/or ground nesting raptor species.

BIO-9 The Project biologist, prior to site mobilization, will fence off all sensitive natural resource areas including all DCSS habitat. The Project biologist will then be present onsite during construction until a date determined by the CPM. Finally, the Project biologist, along with the CPM will perform a site review for sensitive habitat impacts at the end of construction.

BIO-10 Prior to any operational activities, the applicant will submit a report of any impacted habitat to the CPM for review. The applicant will then develop mitigation compensation plans using a 2:1 ratio for DCSS and a 0.5:1 ratio for NNG.

BIO-11 At a time to be determined by the CPM, the applicant will develop a restoration plan for impacts resulting from grading and other activities within the construction laydown area.

Impacts to Special-status Species

Impact-1: Coastal California Gnatcatcher

As described previously, protocol-level surveys conducted for the California gnatcatcher in 2001, 2023, and 2024 have yielded negative results. As such, the habitat within the Buffer Area is considered unoccupied for purposes of this analysis. Sage scrub habitat within the Project Boundary area and Buffer Area is marginal, with evidence of non-native grasses distributed throughout, with weedy annual species present along the slopes, mixed in with other native and naturalized species. The Diegan Coastal Sage Scrub and Disturbed Diegan Coastal Sage Scrub within the Project Boundary Area and Buffer Area provide marginal quality suitable habitat for CAGN. The proposed Project would result in the permanent loss of 0.10-acre of scrub habitat. The Project is not anticipated to impact CAGN based on the survey results and assumed absence from the Project. The 2001 CEC license contains CoCs that would further reduce the possibility for this species to be impacted. CoC BIO-5 requires biological monitoring during construction, COCs BIO-7 and BIO-8 require pre-activity bird surveys prior to construction, and CoC BIO-10 requires mitigation for loss of habitat. Further, Recommended Condition BIO-12 would require construction personnel to undergo biological resources awareness training prior to working on the Project. Project impacts to the CAGN would be less than significant, and would be further reduced with the implementation these measures. Text of Recommended Condition BIO-12 is as follows:

Recommended Condition BIO-12 The applicant shall have a Worker Environmental Awareness Program (WEAP) for the construction crew that will be developed and implemented by a qualified biologist. Each employee (including temporary, contractors, and subcontractors) will receive the WEAP on the first day of working on the proposed Project. They will be advised of the potential impact to the listed species and the potential penalties for taking such species. At a minimum, the WEAP will include the following topics: occurrence of the listed and sensitive

species in the area, their general ecology, sensitivity of the species to human activities, legal protection afforded these species, penalties for violations of federal and State laws, reporting requirements, and Project features designed to reduce direct and indirect impacts to these species, including nesting birds, and promote continued successful occupation of the Project area environs.

Impact-2: Other Special Status Wildlife Species

One special-status species, an adult male Cooper's hawk, was observed flying through the Project and perching on the southern fence. No active nests, or evidence of nesting was observed during the reconnaissance-level biological surveys. Injury or mortality of individual Cooper's hawks due to contact with construction equipment is unlikely, as these hawks are highly mobile and would likely move out of the path of equipment. However, Cooper's hawks may nest in the trees along the Study Area's northern and western borders. If trees are removed during the nesting season, nests may be removed and Cooper's hawks or their eggs/young could be injured or killed if development activities occur in this area. This impact would be avoided through existing CoC BIO-8, which requires pre-construction raptor surveys if work occurs during the nesting season, and CoC BIO-2 which requires impact avoidance for protected species. In addition, CoC BIO-5 enables the Project Biologist and Compliance Manager to access the site at any time during construction and to halt construction activities if necessary to protect resources. Implementation of these CoCs would ensure that impacts to Cooper's hawk are less than significant and that the project complies with federal and state laws related to the take of raptors and their nests. Recommended Condition BIO-12 would further reduce this impact by requiring environmental education for all construction workers prior to working on the Project.

Impact-3: Nesting Birds or Raptors

The Project Boundary area and Buffer Area contain suitable foraging and nesting habitat for birds protected by the Migratory Bird Treaty Act (MBTA). Nesting birds and raptors are protected by the CFGC and the MBTA, and have potential to occur on-site or within the Buffer Area. If nesting birds are present on-site during construction, they could be affected directly (injury or mortality of individuals) or indirectly (construction noise, dust, and other human disturbances) by Project activities. The Project could adversely affect raptors and other nesting birds if construction occurs while they are present on or adjacent to the site through direct mortality or abandonment of nests due to factors such as noise, dust, nighttime lighting, human presence/disturbance, and an increase in predators. The loss of an active nest due to construction activities could be a violation of CFGC Sections 3503, 3503.5, 3513, and the MBTA. Impacts on common avian species would not rise to the level of a significant impact, and existing CoCs for the Project would ensure compliance with these laws.

CoC BIO-8 requires a focused nesting bird and raptor survey during the breeding season (March 15-August 15), CoC BIO-5 allows the Project Biologist to enter the site at any time and to temporarily halt construction if needed to protect resources. A WEAP is recommended to be implemented for the Project as described in Recommended Measure BIO-12, and part of the WEAP would be the discussion of nesting birds and defining a "no-work" buffer that would be established for any active nests that are within or near the Project. With the implementation of these measures, the impacts to nesting birds and raptors would be less than significant.

No special-status plants were observed on-site during the reconnaissance-level biological surveys, and none have more than low potential to occur on-site because the Project lacks potentially suitable habitat for special-status plants known to occur in the area. Therefore, no impacts to special-status plant species are expected. Thus, the Project would comply with CoC Bio-3 with regard to sensitive

plants. Implementation of CoC BIO-5, which allows a biologist to visit the site and verify compliance, would further ensure that impacts do not occur.

Impacts to Sensitive Natural Communities

The Project Boundary area contains sensitive habitats, including disturbed Diegan coastal sage scrub. In addition, the Project Boundary area contains non-native grassland which is protected under CoC BIO-10 although it is not listed as a sensitive natural community by CDFW.

Impact-4: Loss of Disturbed Diegan Coastal Sage Scrub, Non-Native Grassland and Trees

Implementation of the proposed Project would result in the permanent loss of 0.02-acre of Diegan Coastal Sage Scrub and 0.08-acre of Disturbed Diegan Coastal Sage Scrub for a total permanent loss of 0.10-acre of scrub habitat. It would also result in the permanent loss of 0.31-acre of non-native (annual) grassland and substantial impacts (removal) of 17 trees. Impacts resulting from the proposed Project are limited to the ornamental trees to the north, west, and south. Project impacts are limited to the existing Project Boundary area, and acreages may be refined as the Project design is finalized.

Impacts to sensitive natural communities will require mitigation as required by CoC BIO-10, which may include on-site restoration or the purchase of off-site mitigation credits. Mitigation for impacts to Diegan Coastal Sage Scrub requires mitigation at a 2:1 ratio, and non-native grassland, while not listed by CDFW as a sensitive natural community, requires mitigation at a 0.5:1 ratio under CoC BIO-10. The total impacted and mitigation acreages are shown in Table 3 below.

Table 3 Mitigation for Impacts to Sensitive Vegetation Communities

MSCP Habitat Group	Vegetation Community/ Land Cover Type (Holland Code)	Impact Acreage	Sensitive	Ratios	Proposed Mitigation
C	Disturbed Diegan Coastal Sage Scrub (32500)	0.08 ac3	Yes	2:1	0.16 ac
C	Diegan Coastal Sage Scrub (32500)	0.02 ac	Yes	2:1	0.04 ac
E	Non-native grassland	0.31 ac	Yes	0:5:1	0.16 ac
Total		**0.41 ac**			**0.36 ac**

For the proposed removal of 17 trees, if onsite replanting is proven to not be possible, planting off-site is another feasible alternative along with the purchasing of credit into an off-site mitigation bank such as the Daley Ranch Conservation Bank in the City or the donation of funds into a local agency such as the Resource Conservation District of Greater San Diego County that plants and maintains native trees. The purchased mitigation credit or donated funds should be at the same cost as the estimated total cost of replacement for the removal trees (at the same caliper and species plus installation and maintenance).

Indirect impacts to sensitive communities beyond the Project Boundary area are not expected. All natural and open space areas outside of the proposed Project Boundary area will be avoided. The use of any invasive, noxious, or exotic plant species near adjacent sensitive habitat communities will be restricted. If a landscaping plan is prepared for the Project, native species would be recommended to minimize the introduction or spread of non-native, exotic, and invasive species to adjacent habitats.

Compensation for habitat losses would reduce impacts to sensitive natural communities to a less than significant level.

Impacts to Jurisdictional Waters and Wetlands

No impacts to jurisdictional waters or wetlands are anticipated, as these features do not occur within the Project Boundary area or Buffer Area.

Impacts to Wildlife Movement

The Project is not situated within a wildlife movement corridor and is in a developed setting. Further, the site is relatively small and has existing chain-link fencing that precludes access by medium and large wildlife species. The proposed Project would not have a significant impact on wildlife movement. The proposed Project could result in an increase in lighting. All lighting would be directed away from any open space areas, which include the natural habitats to the north and west sides of the Project Boundary area, similar to adjacent residential developments. Minimizing light pollution into adjacent habitat areas would preserve the ability for wildlife to use these habitats as movement routes.

Impacts Related to Local Policies and Ordinances

The Conservation and Open Space Element of the City's General Plan includes policies related to the protection of biological resources. The applicable policies, as well as the Project's consistency with these policies are presented below:

Policy 1.6: Preserve and protect significant wetlands, riparian, and woodland habitats as well as rare, threatened, or endangered plants and animals and their habitats through avoidance. If avoidance is not possible, require mitigation of resources either on- or off-site at ratios consistent with State and federal regulations, and in coordination with those agencies having jurisdiction over such resources.

The Project Boundary area contains Diegan Coastal Sage Scrub, disturbed Diegan Coastal Sage Scrub, and non-native (annual) grassland. Mitigation for impacts to the Diegan Coastal Sage Scrub, Disturbed Diegan Coastal Sage Scrub, and non-native (annual) grassland are identified in Impact -4 above and would be less than significant with mitigation incorporated. With provision of compensatory mitigation for habitat losses, the Project does not conflict with this policy.

Policy 1.7: Require that a qualified professional conduct a survey for proposed development projects located in areas potentially containing significant biological resources to determine their presence and significance. This shall address any flora or fauna of rare and/or endangered status, declining species, species, and habitat types of unique or limited distribution, and/or visually prominent vegetation.

Reconnaissance-level biological surveys were conducted by a qualified biologist to assess the proposed Project impacts to address and identify special-status species and/or sensitive habitats with a potential to occur within the Project Boundary Area and Buffer Area. Per CoC BIO-7, protocol CAGN breeding season surveys were conducted by Kelly Rios, a Section 10(a)(1)(A) permitted biologist (TE 018909-6) with Rincon. Six surveys were conducted one week apart from March through May 2023 with negative results. Additional protocol CAGN non-breeding surveys are being conducted by Kelly Rios October 2023 – February 2024.

Policy 1.8: Require that proposed development projects implement appropriate measures to minimize potential adverse impacts on sensitive habitat areas, such as buffering and setbacks. In the event that significant biological resources are adversely affected, consult with appropriate state and federal agencies to determine adequate mitigation or replacement of the resource.

CoC BIO-9 will require a biologist present prior to site mobilization, to fence off or flag any additional Diegan Coastal Sage Scrub and/or non-native (annual) grassland habitat outside of the anticipated

impact areas. Except for the disturbed Diegan Coastal Sage Scrub, Diegan Coastal Sage Scrub, and non-native (annual) grassland, the majority of the Project Boundary area is disturbed or developed.

With the implementation of CoC BIO 10, the Project will mitigate impacts to these habitats through on-site preservation, off-site acquisition, in lieu fees, a purchase of credits from an approved mitigation bank, or a combination thereof. Therefore, implementation of the Project does not conflict with this policy.

Policy 1.9: Encourage proposed development projects to minimize the removal of significant stands of trees unless needed to protect public safety and to limit tree removal to the minimum amount necessary to assure continuity and functionality of building spaces.

The proposed Project is anticipated to remove the two rows of Canary Island pines and other smaller ornamental trees that currently serve as a visual buffer for the existing EEPP. Additionally, one protected tree, a large mature coast live oak is located along the main access road. It is recommended that Project activities limit or avoid any impacts to this individual tree. According to the Escondido Municipal Code, Chapter 33, Zoning, Article 55 Grading and Erosion Control, Section 33-1 052 Definitions: "*Protected tree* is any oak (genus *quercus*) which has a ten (10) inch or greater DBH, or any other species or individual specimen listed on the local historic register, or determined to substantially contribute to the historic character of a property or structure listed on the local historic register, pursuant to Article 40 of the Escondido Zoning Code.

A protocol tree survey was conducted by a certified Arborist and an arborist report will be submitted which will evaluate the existing conditions of the trees within and adjacent to the Project Boundary area, including locally sensitive species such as live oaks and western sycamores. A copy of the arborist report is included as Attachment E.

Conclusion

In conclusion, conditions within the Project Boundary impact area have declined in habitat value since the 2001 analysis, as the result of neighboring new development, habitat segmentation, and assumed EEPP site maintenance. The Project is anticipated to be in compliance with the CEC's CoCs. No DCH occurs on site or within the Buffer Area. Protocol surveys for CAGN were conducted from April 2023 – May 2023 and October 2023 – February 2024 and the results were negative, therefore the Project Boundary area and Buffer Area have been deemed unoccupied. To mitigate the impacts for the removal of sensitive disturbed Diegan Coastal Sage Scrub, Diegan Coastal Sage Scrub, and non-native (annual) grassland habitats that occur on-site, the applicant will purchase the appropriate mitigation credits through off-site acquisition, in lieu fees, purchase of credits from an approved mitigation bank, or a combination thereof. The Project plans are anticipated to be compliant with the proper spacing of electrical design elements compliant with the suggested practices in the referenced publication (APLIC 1996). Prior to construction, if construction occurs during the breeding season for avian species (February 15 – September 15), a pre-construction nesting bird survey, including a focused raptor survey (March 15 – August 15), will be completed, and a qualified biologist familiar with the Project will be present during vegetation removal and grading. Additionally, a WEAP will be prepared prior to site mobilization. A qualified biologist will be on-site during construction to ensure work limits are clearly delineated and no impacts to sensitive biological resources will occur.

With the implementation of the CoC Measures BIO-1-11 and recommended measure BIO-12, the Project is expected to be in compliance with the CoCs included in the CEC licensing for the EEPP.

Limitations, Assumptions, and Use Reliance

This Biological Resources Assessment has been performed in accordance with professionally accepted biological investigation practices conducted at this time and in this geographic area. The biological investigation is limited by the scope of work performed. The reconnaissance biological survey for certain taxa may have been conducted as part of this assessment but were not performed during a particular blooming period, nesting period, or particular portion of the season when positive identification would be expected if present, and therefore, cannot be considered definitive. In addition, general biological (or protocol) surveys do not guarantee that the organisms are not present and will not be discovered in the future within the site. In particular, mobile wildlife species could occupy the site on a transient basis or re-establish populations in the future. Our field studies were based on current industry practices, which change over time and may not be applicable in the future. No other guarantees or warranties, expressed or implied, are provided. The findings and opinions conveyed in this report are based on findings derived from site reconnaissance, review of CNDDB RareFind5, and specified historical and literature sources. Standard data sources relied upon during the completion of this report, such as the CNDDB, may vary regarding accuracy and completeness. In particular, the CNDDB is compiled from research and observations reported to CDFW that may or may not have been the result of comprehensive or site-specific field surveys. Although Rincon believes the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, the data sources reviewed included only those that are practically reviewable without the need for extraordinary research and analysis.

Sincerely,
Rincon Consultants, Inc.

Jacob Hargis
Biologist

Elizabeth Atherton
Project Manager

Attachments

Attachment A Project Figures

Attachment B Representative Site Photographs

Attachment C Special-status Species Evaluation Tables

Attachment D Coastal California Gnatcatcher Protocol Survey Reports (July 7, 2023 and March 1, 2024)

Attachment E Arborist Report (March 2024)

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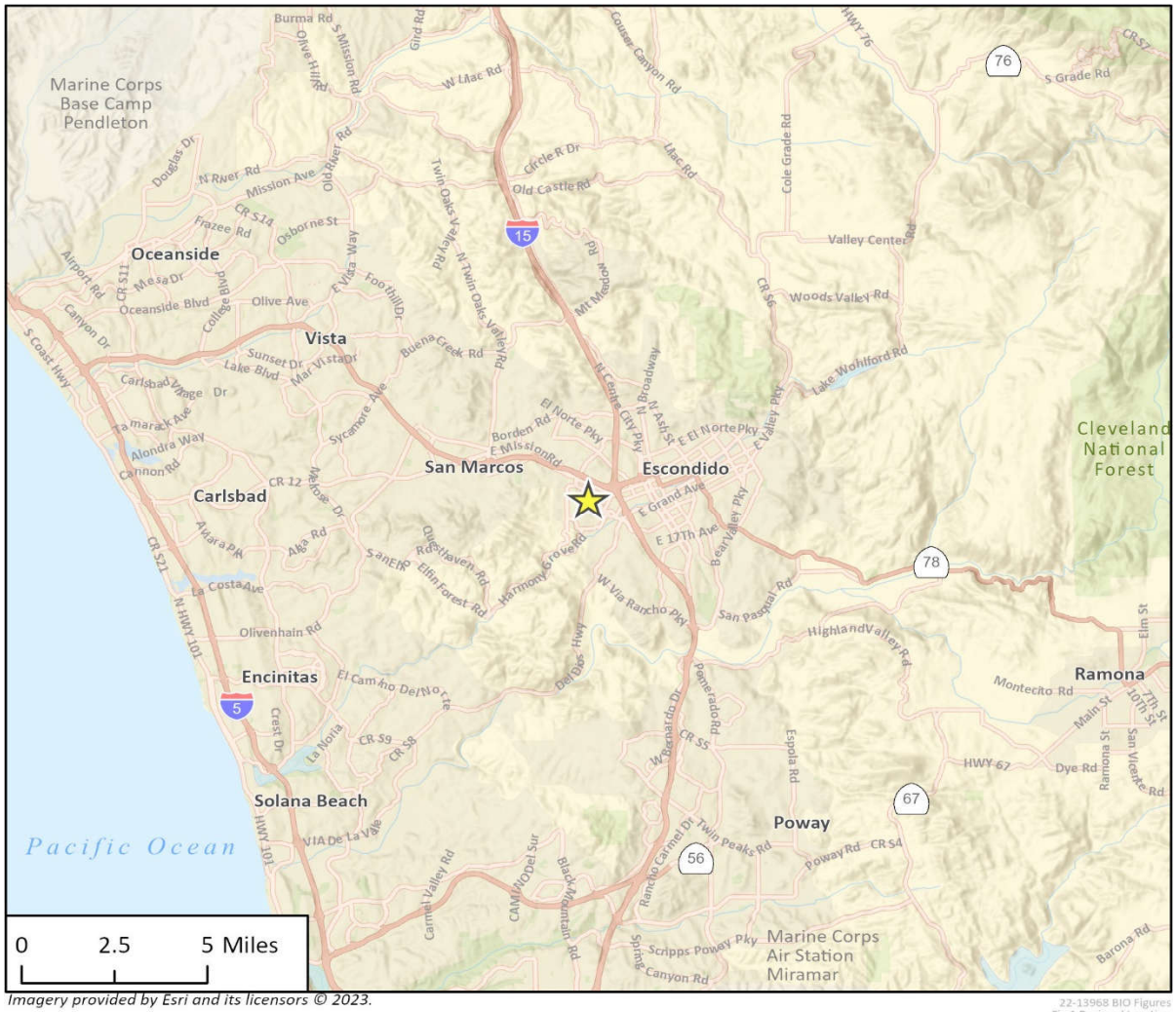
Attachment A

Project Figures

Figure 1 Regional Location



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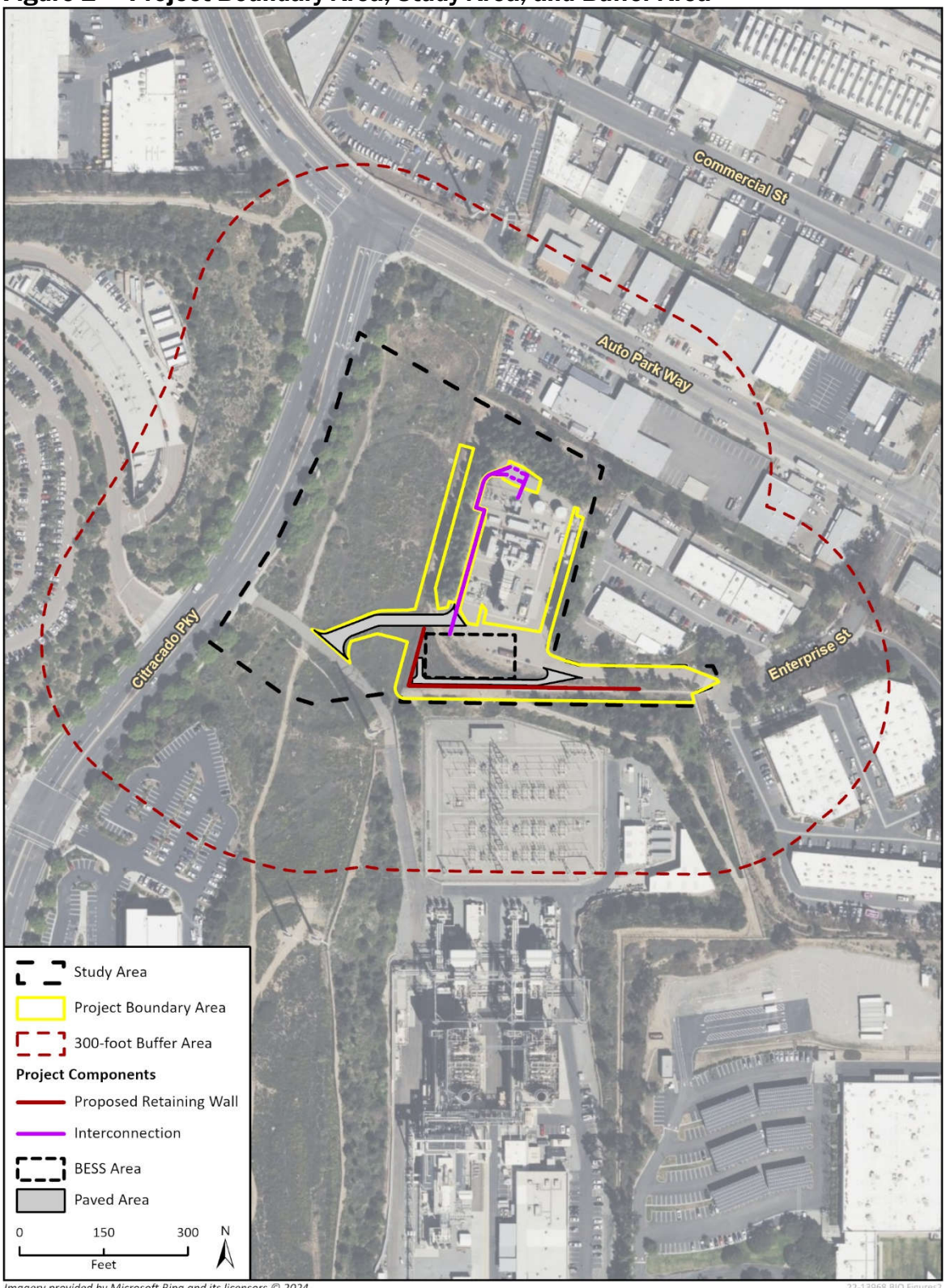
22-13968 BIO Figures
Fig 1 Regional Location

Figure 2 Project Boundary Area, Study Area, and Buffer Area



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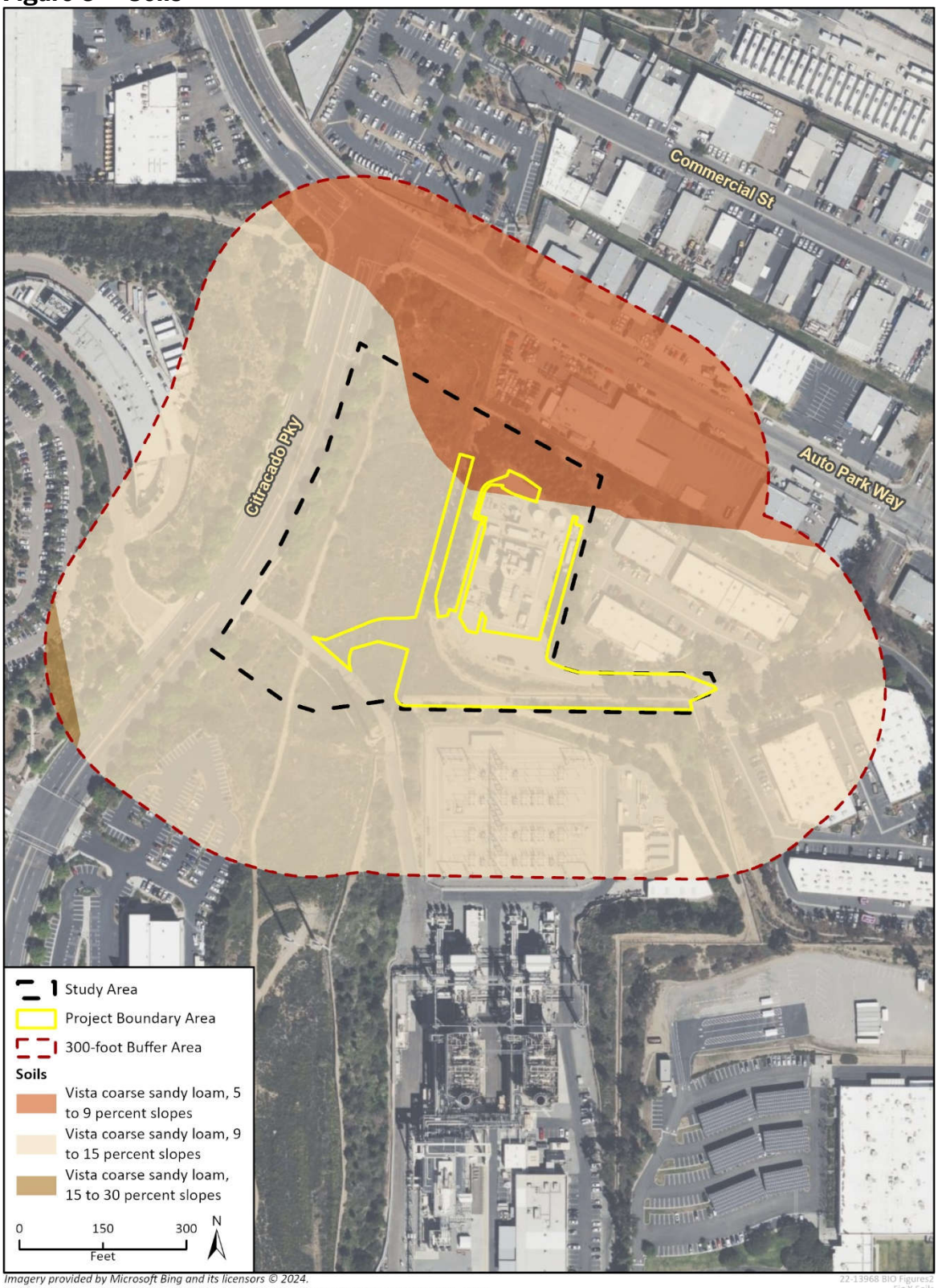
22-13968 BIO Figures2
Fig X Project Components

Figure 3 Soils



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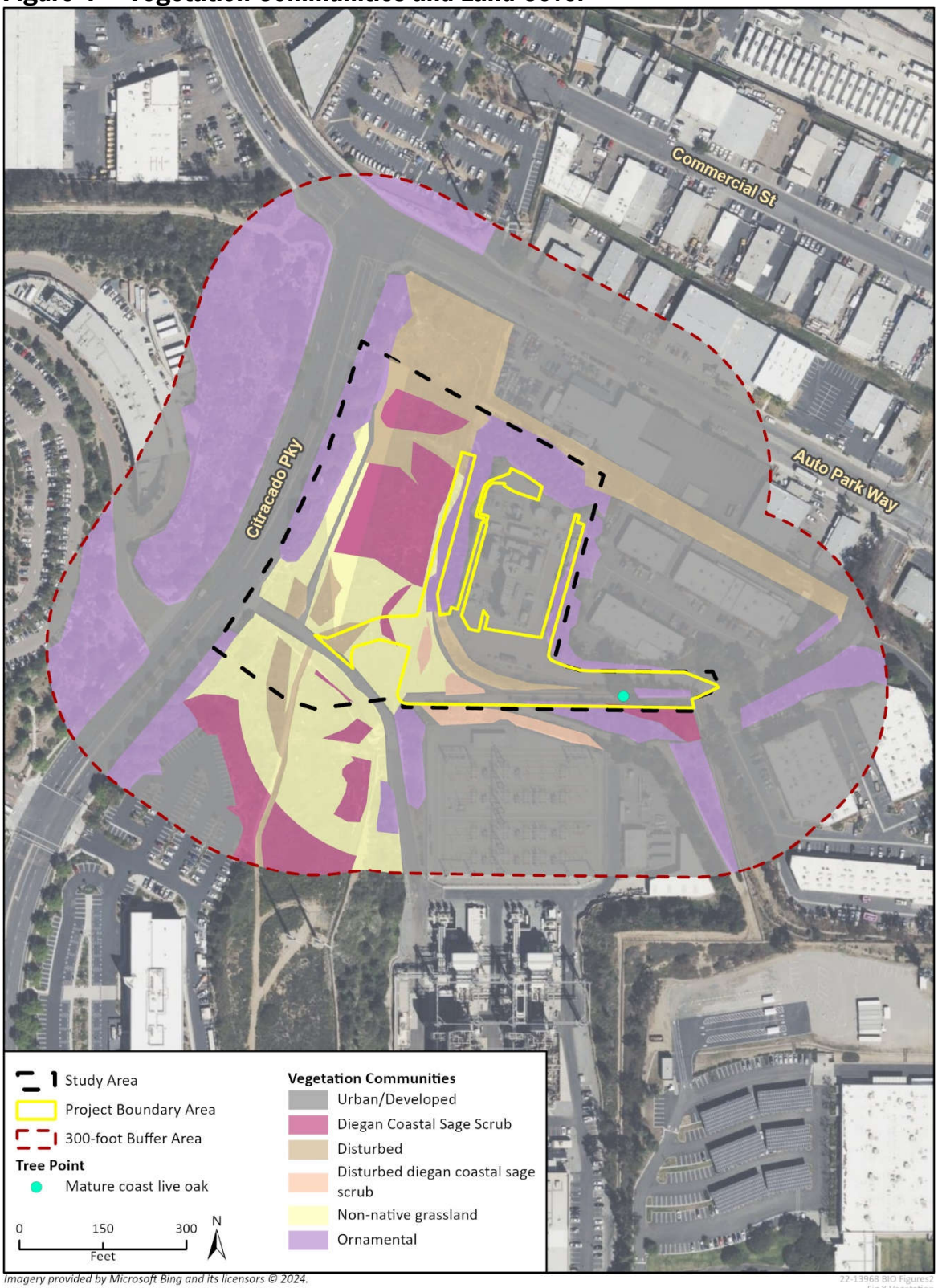
Additional data provided by Natural Resource Conservation Service Soil Survey Geographic, 2023.

22-13968 BIO Figures2
Fig X Soils

Figure 4 Vegetation Communities and Land Cover



Attachment B

Representative Site Photographs

Photograph 1. View of entrance gate, access road, and surrounding tree and manicured shrub vegetation, facing east.

Photograph 2. View of access road, mature coast live oak tree, and southern portion of Project Boundary area, facing southwest.

Photograph 3. View southern slope with disturbed slope, concrete culvert, and fence line, facing west.

Photograph 4. View of Disturbed Diegan Coastal Sage Scrub habitat along the top of slope in the southwestern corner of the Project Boundary area, facing southwest.

Photograph 5. View of second patch of Disturbed Diegan Coastal Sage Scrub with non-native grassland, fence line, and open space beyond, facing west.

Photograph 6. View of western portion of Project Boundary area, disturbed slope, existing EEPP facility, and ornamental coniferous trees to the west and north.

Photograph 7. View of northern portion of EEPP facility, graded and graveled lot with ornamental coniferous trees, facing northeast.

Photograph 8. View of eastern portion of Project Boundary area, ornamental trees, and western sycamores outside of fence line.

Photograph 9. View of disturbed slope in the southern portion of the Project Boundary area, facing west.

Photograph 10. View of southern boundary of Project Boundary area, Disturbed Diegan Coastal Sage Scrub, and existing SDG&E Palomar Energy Center Substation, facing east.

Photograph 11. View of open space habitat within the Buffer Area to the west of the Project Boundary area, showing developed access road, non-native grassland, disturbed areas, ornamental trees, and Diegan Coastal Sage Scrub.

Photograph 12. Closer view of open space habitat consisting of non-native grassland, Diegan Coastal Sage Scrub, and ornamental trees located within the Buffer Area to west of the Project Boundary area, facing north.

Attachment C

Special-status Species Evaluation Tables

Special Status Plant Species in the Regional Vicinity (Nine Quadrangles) of the Buffer Area

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CDFW	Habitat Requirements	Potential to Occur in Project Boundary Area	Habitat Suitability/ Observations
Plants and Lichens				
Acanthomintha ilicifolia San Diego thorn-mint	FT/SE G1/S1 1B.1 MHCP Covered Species	Annual herb. Chaparral, coastal scrub, valley and foothill grassland, vernal pools. Clay, openings. Elevations: 35-3150 ft. (10-960 m.) Blooms Apr-Jun.	Not Expected	The species' associated soils are not present in the Buffer Area.
Adolphia californica California adolphia	None/None G3/S2 2B.1	Perennial deciduous shrub. Chaparral, coastal scrub, valley and foothill grassland. Clay. Elevations: 35-2430 ft. (10-740 m.) Blooms Dec-May.	Not Expected	This conspicuous shrub species was not observed during any of the surveys and the species' associated soils are not present in the Buffer Area.
Agave shawii var. *shawii* Shaw's agave	None/None G2G3T2T3/S1 2B.1 MHCP Covered Species	Perennial leaf. Coastal bluff scrub, coastal scrub. Coastal bluffs and slopes within coastal sage scrub. Elevations: 10-395 ft. (3-120 m.) Blooms Sep-May.	Not Expected	The site's elevation range occurs outside of the elevation range where this species is found.
Allium marvinii Yucaipa onion	None/None G1/S1 1B.2	Perennial bulbiferous herb. Chaparral. In openings on clay soils. Elevations: 2495-3495 ft. (760-1065 m.) Blooms Apr-May.	Not Expected	The species' associated soils are not present in the Buffer Area.
Ambrosia pumila San Diego ambrosia	FE/None G1/S1 1B.1 MHCP Covered Species	Perennial rhizomatous herb. Chaparral, coastal scrub, valley and foothill grassland, vernal pools. Alkaline (sometimes), clay (sometimes), disturbed areas (often), sandy (sometimes). Elevations: 65-1360 ft. (20-415 m.) Blooms Apr-Oct.	Low Potential	The disturbances within and adjacent to the Buffer Area have been substantial over a long period of time, which has resulted in non-native herbaceous annuals to dominate the understory in the Disturbed Habitat and within the openings of the Diegan Coastal Sage Scrub. Marginal habitat for the species is present and there are observations from within five miles of the Buffer Area; however, these occurrences are associated conserved lands and with lower level of disturbances.
Aphanisma blitoides aphanisma	None/None G3G4/S2 1B.2 MHCP Covered Species	Annual herb. Coastal bluff scrub, coastal dunes, coastal scrub. Gravelly (sometimes), sandy (sometimes). Elevations: 5-1000 ft. (1-305 m.) Blooms Feb-Jun.	Not Expected	The species' associated habitat is not present in the Buffer Area. The species is typically found near the coast. No observations have occurred within five miles of the Buffer Area.

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CDFW	Habitat Requirements	Potential to Occur in Project Boundary Area	Habitat Suitability/ Observations
Aphyllon parishii ssp. *brachylobum* short-lobed broomrape	None/None G4?T4/S3 4.2	Coastal bluff scrub, coastal dunes, coastal scrub. Sandy soil near beaches; reported to grow on *Isocoma menziesii* and other shrubs. Elevations: 10-1000 ft (3-305 m). Blooms Apr-Oct.	Not Expected	The species' associated habitat is not present in the Buffer Area. The species is typically found near the coast. No observations have occurred within five miles of the Buffer Area.
Arctostaphylos glandulosa ssp. *crassifolia* Del Mar manzanita	FE/None G5T2/S2 1B.1 MHCP Covered Species	Perennial evergreen shrub. Chaparral. Sandy coastal mesas and ocean bluffs; in chaparral or Torrey pine forest. Elevations: 0-1200 ft. (0-365 m.) Blooms Jun-Apr.	Not Expected	The species' associated habitat is not present in the Buffer Area. This conspicuous shrub species was not observed during field survey.
Arctostaphylos rainbowensis Rainbow manzanita	None/None G2/S2 1B.1	Perennial evergreen shrub. Chaparral. Usually found in gabbro chaparral. Elevations: 675-2200 ft. (205-670 m.) Blooms Dec-Mar.	Not Expected	The species' associated habitat is not present in the Buffer Area. This conspicuous shrub species was not observed during field survey.
Artemisia palmeri San Diego sagewort	None/None G3?/S3? 4.2	Perennial deciduous shrub. Chaparral, coastal scrub, riparian forest, riparian scrub, riparian woodland. Mesic, sandy. Elevations: 50-3000 ft. (15-915 m.) Blooms (Feb) May-Sep.	Not Expected	Marginal suitable habitat present within the Buffer Area. This species was not observed during the field survey.
Asplenium vespertinum western spleenwort	None/None G3?/S4 4.2	Perennial rhizomatous herb. Chaparral, cismontane woodland, coastal scrub. Rocky. Elevations: 590-3280 ft. (180-1000 m.) Blooms Feb-Jun.	Not Expected	The species' associated habitat is not present in the Buffer Area. The site lacks rocky topography.
Astragalus oocarpus San Diego milk-vetch	None/None G2?/S2? 1B.2	Perennial herb. Chaparral, cismontane woodland. Openings in chaparral or on gravelly flats and slopes in thin oak woodland. Elevations: 1000-5000 ft. (305-1524 m.) Blooms May-Aug.	Not Expected	The species' associated topography is not present in the Buffer Area.
Astragalus tener var. titi coastal dunes milk-vetch	FE/SE G2T1/S1 1B.1	Annual herb. Coastal bluff scrub, coastal dunes, coastal prairie. Moist, sandy depressions of bluffs or dunes along and near the Pacific Ocean; one site on a clay terrace. Elevations: 5-165 ft. (1-50 m.) Blooms Mar-May.	Not Expected	The Buffer Area is outside of elevation range for this species. The species' associated habitat is not present in the Buffer Area.
Atriplex coulteri Coulter's saltbush	None/None G3/S1S2 1B.2	Perennial herb. Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland. Alkaline (sometimes), clay (sometimes). Elevations: 10-1510 ft. (3-460 m.) Blooms Mar-Oct.	Not Expected	The species' associated topography is not present in the Buffer Area.

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CDFW	Habitat Requirements	Potential to Occur in Project Boundary Area	Habitat Suitability/ Observations
Atriplex pacifica *south coast saltscale*	None/None G4/S2 1B.2	Annual herb. Coastal bluff scrub, coastal dunes, coastal scrub, playas. Alkali soils. Elevations: 0-460 ft. (0-140 m.) Blooms Mar-Oct.	Not Expected	The Buffer Area is outside of elevation range for this species. The species' associated habitat is not present in the Buffer Area.
Atriplex parishii Parish's brittlescale	None/None G1G2/S1 1B.1	Annual herb. Chenopod scrub, playas, vernal pools. Alkaline. Elevations: 80-6235 ft. (25-1900 m.) Blooms Jun-Oct.	Not Expected	Vernal pools are not present within the Buffer Area.
Baccharis vanessae Encinitas baccharis	FT/SE G1/S1 1B.1 MHCP Covered Species	Perennial deciduous shrub. Chaparral, cismontane woodland. Sandstone. Elevations: 195-2360 ft. (60-720 m.) Blooms Aug-Nov.	Not Expected	This conspicuous shrub species was not observed during the field surveys. The species does have recorded observations within five miles of the Buffer Area.
Bergerocactus emoryi golden-spined cereus	None/None G2G3/S2 2B.2	Perennial stem. Chaparral, closed-cone coniferous forest, coastal scrub. Sandy. Elevations: 10-1295ft. (3-395m.) Blooms May-Jun.	Not Expected	The species' associated habitat is not present in the Buffer Area.
Bloomeria clevelandii San Diego goldenstar	None/None G2/S3 1B.1	Perennial bulbiferous herb. Chaparral, coastal scrub, valley and foothill grassland, vernal pools. Clay. Elevations: 165-1525 ft. (50-465 m.) Blooms Apr-May.	Not Expected	The species' associated soils are not present in the Buffer Area.
Brodiaea filifolia thread-leaved brodiaea	FT/SE G2/S2 1B.1	Perennial bulbiferous herb. Chaparral, cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools. Clay (often). Elevations: 80-3675 ft. (25-1120 m.) Blooms Mar-Jun.	Not Expected	The species' associated soils are not present in the Buffer Area.
Brodiaea orcuttii Orcutt's brodiaea	None/None G2/S2 1B.1	Perennial bulbiferous herb. Chaparral, cismontane woodland, closed-cone coniferous forest, meadows and seeps, valley and foothill grassland, vernal pools. Clay, Mesic. Elevations: 100-5550 ft. (30-1692 m.) Blooms May-Jul.	Not Expected	The species' associated soils are not present in the Buffer Area.
Calandrinia breweri Brewer's calandrinia	None/None G4/S4 4.2	Annual herb. Chaparral, coastal scrub. Burned areas, disturbed areas, loam (sometimes), sandy (sometimes). Elevations: 35-4005 ft. (10-1220 m.) Blooms (Jan) Mar-Jun.	Low Potential	Marginal suitable habitat is present within the Buffer Area. This species was not observed during the field survey.

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CDFW	Habitat Requirements	Potential to Occur in Project Boundary Area	Habitat Suitability/ Observations
Calochortus plummerae Plummer's mariposa-lily	None/None G4/S4 4.2	Perennial bulbiferous herb. Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, valley and foothill grassland. Granitic, rocky. Elevations: 330-5580 ft. (100-1700 m.) Blooms May-Jul.	Not Expected	The Buffer Area.
Camissoniopsis lewisii Lewis' evening-primrose	None/None G4/S4 3	Annual herb. Cismontane woodland, coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland. Clay (sometimes), sandy (sometimes). Elevations: 0-985 ft. (0-300 m.) Blooms Mar-May (Jun).	Not Expected	Coastal scrub (disturbed) is present within the Buffer Area; however, most records of the species are coastal. This or other *Camissoniopsis* species were not observed during field surveys.
Ceanothus cyaneus Lakeside ceanothus	None/None G2/S2 1B.2	Perennial evergreen shrub. Chaparral, closed-cone coniferous forest. Elevations: 770-2475 ft. (235-755 m.) Blooms Apr-Jun.	Not Expected	The Buffer Area is marginally within elevation range for this species. Suitable habitat is absent.
Ceanothus verrucosus wart-stemmed ceanothus	None/None G2/S2? 2B.2 MHCP Covered Species	Perennial evergreen shrub. Chaparral. Elevations: 5-1245 ft. (1-380 m.) Blooms Dec-May.	Not Expected	The species' associated habitat is not present in the Buffer Area.
Centromadia parryi ssp. *australis* southern tarplant	None/None G3T2/S2 1B.1	Annual herb. Marshes and swamps, valley and foothill grassland, vernal pools. Often in disturbed sites near the coast at marsh edges; also in alkaline soils sometimes with saltgrass. Sometimes on vernal pool margins. Elevations: 0-1575 ft. (0-480 m.) Blooms May-Nov.	Not Expected	The species' associated habitat is not present in the Buffer Area.
Centromadia pungens ssp. *laevis* smooth tarplant	None/None G3G4T2/S2 1B.1	Annual herb. Chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland. Alkaline. Elevations: 0-2100 ft. (0-640 m.) Blooms Apr-Sep.	Not Expected	The species' associated habitat is not present in the Buffer Area.
Chaenactis glabriuscula var. *orcuttiana* Orcutt's pincushion	None/None G5T1T2/S1 1B.1	Annual herb. Coastal bluff scrub, coastal dunes. Sandy sites. Elevations: 0-330 ft. (0-100 m.) Blooms Jan-Aug.	Not Expected	The Buffer Area is outside of elevation range for this species.

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CDFW	Habitat Requirements	Potential to Occur in Project Boundary Area	Habitat Suitability/ Observations
Chamaebatia australis southern mountain misery	None/None G4/S4 4.2	Perennial evergreen shrub. Chaparral. Gabbro or metavolcanic soils. Elevations: 985-3345 ft. (300-1020 m.) Blooms Nov-May.	Not Expected	The species' associated soils are not present in the Buffer Area.
Chorizanthe leptotheca Peninsular spineflower	None/None G3/S3 4.2	Annual herb. Chaparral, coastal scrub, lower montane coniferous forest. Granitic. Elevations: 985-6235 ft. (300-1900 m.) Blooms May-Aug.	Not Expected	The Buffer Area is outside of elevation range for this species.
Chorizanthe orcuttiana Orcutt's spineflower	FE/SE G1/S1 1B.1	Annual herb. Chaparral, closed-cone coniferous forest, coastal scrub. Openings, sandy. Elevations: 10-410 ft. (3-125 m.) Blooms Mar-May.	Not Expected	The Buffer Area is outside the known range of the species, with most records being coastal.
Chorizanthe polygonoides var. *longispina* long-spined spineflower	None/None G5T3/S3 1B.2	Annual herb. Chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, vernal pools. Clay (often). Elevations: 100-5020 ft. (30-1530 m.) Blooms Apr-Jul.	Not Expected	The species' associated soils are not present in the Buffer Area.
Cistanthe maritima seaside cistanthe	None/None G3G4/S3 4.2	Annual herb. Coastal bluff scrub, coastal scrub, valley and foothill grassland. Sandy. Elevations: 15-985 ft. (5-300 m.) Blooms (Feb) Mar-Jun (Aug).	Not Expected	This species was not observed during the field surveys, with most records being coastal.
Clarkia delicata delicate clarkia	None/None G3/S3 1B.2	Annual herb. Chaparral, cismontane woodland. Gabbroic (often). Elevations: 770-3280 ft. (235-1000 m.) Blooms Apr-Jun.	Not Expected	The species' associated soils are not present in the Buffer Area.
Clinopodium chandleri San Miguel savory	None/None G2G3/S2 1B.2	Perennial shrub. Chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland. Gabbroic (sometimes), rocky (sometimes). Elevations: 395-3525 ft. (120-1075 m.) Blooms Mar-Jul.	Not expected	The species' associated soils are not present in the Buffer Area.
Comarostaphylis diversifolia ssp. *diversifolia* summer holly	None/None G3T2/S2 1B.2 MHCP Covered Species	Perennial evergreen shrub. Chaparral, cismontane woodland. Often in mixed chaparral in California, sometimes post-burn. Elevations: 100-2590 ft. (30-790 m.) Blooms Apr-Jun.	Not Expected.	The species' associated habitat is not present in the Buffer Area.

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CDFW	Habitat Requirements	Potential to Occur in Project Boundary Area	Habitat Suitability/ Observations
Convolvulus simulans small-flowered morning-glory	None/None G4/S4 4.2	Annual herb. Chaparral, coastal scrub, valley and foothill grassland. Clay, seeps, serpentinite. Elevations: 100-2430 ft. (30-740 m.) Blooms Mar-Jul.	Not Expected.	The species' associated soils are not present in the Buffer Area.
Corethrogyne filaginifolia var. *incana* San Diego sand aster	None/None G4T1Q/S1 1B.1	Perennial herb. Chaparral, coastal bluff scrub, coastal scrub. Most sites are disturbed, so hard to tell. Possibly in disturbed sites and ecotones. Elevations: 10-375 ft. (3-115 m.) Blooms Jun-Sep.	Low Potential.	Marginal suitable habitat is present within the Buffer Area. This species was not observed during the field surveys.
Corethrogyne filaginifolia var. *linifolia* Del Mar Mesa sand aster	None/None G4T1Q/S1 1B.1 MHCP Covered Species	Perennial herb. Chaparral, coastal bluff scrub, coastal scrub. In coastal, shrubby communities on maritime sediments and conglomerates; in openings. Elevations: 15-490 ft. (5-150 m.) Blooms May-Sep.	Not Expected.	The Buffer Area is outside the known range of the species, with most records being coastal.
Cylindropuntia californica var. *californica* snake cholla	None/None G3T2/S1 1B.1	Perennial stem. Chaparral, coastal scrub. Elevations: 100-490 ft. (30-150 m.) Blooms Apr-May.	Not Expected.	The Buffer Area is outside the known range of the species.
Dichondra occidentalis western dichondra	None/None G3G4/S3S4 4.2	Perennial rhizomatous herb. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. On sandy loam, clay, and rocky soils. Elevations: 165-1640 ft. (50-500 m.) Blooms (Jan)Mar-Jul.	Not Expected.	Suitable soils (sandy loam) are present within the Buffer Area. This species has been observed within 10 miles of the Buffer Area; however, these records are near Lake Hodges. This species was not observed during the field surveys.
Diplacus clevelandii Cleveland's bush monkeyflower	None/None G4/S4 4.2	Perennial rhizomatous herb. Chaparral, cismontane woodland, lower montane coniferous forest. Disturbed gravelly roadsides and slopes. Gabbro soils. Elevations: 1475-6560 ft. (450-2000 m.) Blooms Apr-Jul.	Not Expected.	The species' associated habitat and soils are not present in the Buffer Area.
Dudleya brevifolia short-leaved dudleya	None/SE G1/S1 1B.1	Perennial herb. Chaparral, coastal scrub. On Torrey sandstone soils; in pebbly openings. Elevations: 100-820 ft. (30-250 m.) Blooms Apr-May.	Not Expected	The species' associated habitat and soils are not present in the Buffer Area.

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CDFW	Habitat Requirements	Potential to Occur in Project Boundary Area	Habitat Suitability/ Observations
Dudleya variegata variegated dudleya	None/None G2/S2 1B.2	Perennial herb. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland, vernal pools. In rocky or clay soils; sometimes associated with vernal pool margins. Elevations: 10-1905 ft. (3-580 m.) Blooms Apr-Jun.	Not Expected	The species' associated habitat and soils are not present in the Buffer Area.
Dudleya viscida sticky dudleya	None/None G2/S2 1B.2	Perennial herb. Chaparral, cismontane woodland, coastal bluff scrub, coastal scrub. On north and south-facing cliffs and banks. Elevations: 35-1805 ft. (10-550 m.) Blooms May-Jun.	Not Expected	The species' associated habitat and soils are not present in the Buffer Area.
Ericameria palmeri var. *palmeri* Palmer's goldenbush	None/None G4T2?/S2 1B.1	Perennial evergreen shrub. Chaparral, coastal scrub. On granitic soils, on steep hillsides. Mesic sites. Elevations: 100-1970 ft. (30-600 m.) Blooms (Jul) Sep-Nov.	Not Expected	Suitable habitat is present within the Buffer Area. This species was not observed during the field surveys.
Eriodictyon sessilifolium sessile-leaved yerba santa	None/None G4/S1 2B.1	Perennial shrub. Coastal scrub. Volcanic. Elevations: 560-560 ft. (170-170 m.) Blooms Jul.	Not Expected	This species associated soils are not present within the Buffer Area.
Eryngium aristulatum var. *parishii* San Diego button-celery	FE/SE G5T1/S1 1B.1 MHCP Covered Species	Annual/perennial herb. Coastal scrub, valley and foothill grassland, vernal pools. San Diego mesa hardpan and claypan vernal pools and southern interior basalt flow vernal pools; usually surrounded by scrub. Elevations: 65-2035 ft. (20-620 m.) Blooms Apr-Jun.	Not Expected	Vernal pools are not present within the Buffer Area.
Erysimum ammophilum sand-loving wallflower	None/None G2/S2 1B.2	Perennial herb. Chaparral, coastal dunes, coastal scrub. Sandy openings. Elevations: 0-195 ft. (0-60 m.) Blooms Feb-Jun (Jul-Aug).	Not Expected	The Buffer Area is outside the known range of the species, with most records being coastal.
Erythranthe diffusa Palomar monkeyflower	None/None G4/S3 4.3	Annual herb. Chaparral, lower montane coniferous forest. Sandy or gravelly soils. Elevations: 4005-6005 ft. (1220-1830 m.) Blooms Apr-Jun.	Not Expected	The Buffer Area is outside the known range of the species, with most records being coastal.

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CDFW	Habitat Requirements	Potential to Occur in Project Boundary Area	Habitat Suitability/ Observations
Euphorbia misera cliff spurge	None/None G5/S2 2B.2 MHCP Covered Species	Perennial shrub. Coastal bluff scrub, coastal scrub, mojavean desert scrub. Rocky sites. Elevations: 35-1640 ft. (10-500 m.) Blooms (Oct) Dec-Aug.	Not Expected	The species' associated soils are not present in the Buffer Area. The site lacks rocky areas. This species was not observed during the field surveys.
Ferocactus viridescens San Diego barrel cactus	None/None G3?/S2S3 2B.1 MHCP Covered Species	Perennial stem. Chaparral, coastal scrub, valley and foothill grassland, vernal pools. Often on exposed, level or south-sloping areas; often in coastal scrub near crest of slopes. Elevations: 10-147 5ft. (3-450 m.) Blooms May-Jun.	Not Expected	The species was not observed during the field surveys.
Geothallus tuberosus Campbell's liverwort	None/None G2/S2 1B.1	Ephemeral liverwort. Coastal scrub, vernal pools. Liverwort known from mesic soil. Elevations: 35-1970 ft. (10-600 m.)	Not Expected	Vernal pools are not present within the Buffer Area.
Githopsis diffusa ssp. *filicaulis* Mission Canyon bluecup	None/None G5T1Q/S1 3.1	Annual herb. Chaparral. Probably in open, grassy places and mesic, disturbed areas; much overlooked. Elevations: 1475-2295 ft. (450-700m.) Blooms Apr-Jun.	Not Expected	The Buffer Area is outside the known range of the species.
Grindelia hallii San Diego gumplant	None/None G2/S2 1B.2	Perennial herb. Chaparral, lower montane coniferous forest, meadows and seeps, valley and foothill grassland. Frequently occurs in low moist areas in meadows. Associated species commonly include *Wyethia, Ranunculus, Sidalcea.* Elevations: 605-5725 ft. (185-1745 m.) Blooms May-Oct.	Not Expected	The species' associated habitat and soils are not present in the Buffer Area.
Harpagonella palmeri Palmer's grapplinghook	None/None G4/S3 4.2	Annual herb. Chaparral, coastal scrub, valley and foothill grassland. Clay soils; open grassy areas within shrubland. Elevations: 65-3135 ft. (20-955 m.) Blooms Mar-May.	Not Expected	The species' soils are not present in the Buffer Area.
Hazardia orcuttii Orcutt's hazardia	None/ST G1/S1 1B.1 MHCP Covered Species	Perennial evergreen shrub. Chaparral, coastal scrub. Often on clay; in grassy edges of chaparral and coastal scrub. Elevations: 260-280 ft. (80-85 m.) Blooms Aug-Oct.	Not Expected.	The species' associated soils are not present in the Buffer Area. This conspicuous shrub was not observed during the field surveys.

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Heterotheca sessiliflora ssp. *sessiliflora* beach goldenaster	None/None G4T2T3/S1 1B.1	Perennial herb. Chaparral, coastal dunes, coastal scrub. Sandy sites. Elevations: 0-4020 ft. (0-1225 m.) Blooms Mar-Dec.	Not Expected.	The species' associated soils are not present in the Buffer Area.
Holocarpha virgata ssp. *elongata* curving tarplant	None/None G5T3/S3 4.2	Annual herb. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Elevations: 195-3610 ft. (60-1100 m.) Blooms May-Nov.	Not Expected.	This species was not observed during the field surveys.
Hordeum intercedens vernal barley	None/None G3G4/S3S4 3.2	Annual herb. Coastal dunes, coastal scrub, valley and foothill grassland, vernal pools. Vernal pools, dry, saline streambeds, alkaline flats. 5-. Elevations: 15-3280 ft. (5-1000 m.) Blooms Mar-Jun.	Not Expected.	Vernal pools are not present within the Buffer Area.
Horkelia truncata Ramona horkelia	None/None G3/S3 1B.3	Perennial herb. Chaparral, cismontane woodland. Habitats in California include: mixed chaparral, vernal streams, and disturbed areas near roads. Clay soil; at least sometimes on gabbro. Elevations: 1310-4265 ft. (400-1300 m.) Blooms May-Jun.	Not expected.	The species' associated habitat and soils are not present in the Buffer Area.
Hulsea californica San Diego sunflower	None/None G3/S3 1B.3	Perennial herb. Chaparral, lower montane coniferous forest, upper montane coniferous forest. Burns, clearings, or openings in chaparral and pine-oak woodland. Elevations: 3000-9565 ft. (915-2915 m.) Blooms Apr-Jun.	Not Expected.	The Buffer Area is outside the known range of the species.
Isocoma menziesii var. *decumbens* decumbent goldenbush	None/None G3G5T2T3/S2 1B.2	Perennial shrub. Chaparral, coastal scrub. Sandy soils; often in disturbed sites. Elevations: 35-445 ft. (10-135 m.) Blooms Apr-Nov.	Not Expected.	Suitable habitat is present within the Buffer Area. This species was not observed during the field surveys.
Iva hayesiana San Diego marsh-elder	None/None G3/S2 2B.2 MHCP Covered Species	Perennial herb. Marshes and swamps, playas. Riverwashes. Elevations: 35-1640 ft. (10-500 m.) Blooms Apr-Oct.	Not Expected	Marshes and swamps are not present within the Buffer Area.

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Juglans californica southern California black walnut	None/None G4/S4 4.2	Perennial deciduous tree. Chaparral, cismontane woodland, coastal scrub, riparian woodland. Slopes, canyons, alluvial habitats. Elevations: 165-2955 ft. (50-900 m.) Blooms Mar-Aug.	Not Expected	Coastal scrub (disturbed) associated habitat present within the Buffer Area. However, generally suitable habitat is not present in the Buffer Area. This species was not observed during the field surveys.
Juncus acutus ssp. *leopoldii* southwestern spiny rush	None/None G5T5/S4 4.2	Perennial rhizomatous herb. Coastal dunes, marshes and swamps, meadows and seeps. Moist saline places. Elevations: 10-2955 ft. (3-900 m.) Blooms (Mar)May-Jun.	Not Expected	The species' associated habitat and soils are not present in the Buffer Area.
Lasthenia glabrata ssp. *coulteri* Coulter's goldfields	None/None G4T2/S2 1B.1	Annual herb. Marshes and swamps, playas, vernal pools. Usually found on alkaline soils in playas, sinks, and grasslands. 1-. Elevations: 5-4005 ft. (1-1220 m.) Blooms Feb-Jun.	Not Expected	The species' associated habitat and soils are not present in the Buffer Area.
Lathyrus splendens pride-of-California	None/None G4/S4 4.3	Perennial herb. Chaparral. Sandy to gravelly soils. Elevations: 655-5005 ft. (200-1525 m.) Blooms Mar-Jun.	Not Expected	The Buffer Area is outside the known range of the species.
Lepechinia cardiophylla heart-leaved pitcher sage	None/None G3/S2S3 1B.2	Perennial shrub. Chaparral, cismontane woodland, closed-cone coniferous forest. Elevations: 1705-4495 ft. (520-1370 m.) Blooms Apr-Jul.	Not Expected	The Buffer Area is outside the known range of the species.
Lepidium virginicum var. *robinsonii* Robinson's pepper-grass	None/None G5T3/S3 4.3	Annual herb. Chaparral, coastal scrub. Dry soils, shrubland. 4-. Elevations: 5-2905 ft. (1-885 m.) Blooms Jan-Jul.	Low Potential	Suitable habitat is present within the Buffer Area. This species has been observed within five miles of the Buffer Area. This species was not observed during the field surveys.
Leptosiphon grandiflorus large-flowered leptosiphon	None/None G3G4/S3S4 4.2	Annual herb. Cismontane woodland, closed-cone coniferous forest, coastal bluff scrub, coastal dunes, coastal prairie, coastal scrub, valley and foothill grassland. Open, grassy flats, generally sandy soil. Elevations: 15-4005 ft. (5-1220 m.) Blooms Apr-Aug.	Not Expected	The species' associated soils are not present within the Buffer Area. This species was not observed during the field surveys.

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Leptosyne maritima sea dahlia	None/None G2/S1S2 2B.2	Perennial herb. Coastal bluff scrub, coastal scrub. Occurs on a variety of soil types, including sandstone. Elevations: 15-490 ft. (5-150 m.) Blooms Mar-May.	Not Expected	The Buffer Area is outside the known range of the species.
Lilium humboldtii ssp. *ocellatum* ocellated humboldt lily	None/None G4T4?/S4? 4.2	Perennial bulbiferous herb. Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland. Yellow-pine forest or openings, oak canyons. Elevations: 100-5905 ft. (30-1800 m.) Blooms Mar-Jul (Aug).	Not Expected	The species' associated habitat is not present in the Buffer Area.
Lycium californicum California box-thorn	None/None G4/S4 4.2	Perennial shrub. Coastal bluff scrub, coastal scrub. Elevations: 15-490 ft. (5-150 m.) Blooms Mar-Aug(Dec).	Not Expected	The Buffer Area is outside the known range of the species.
Microseris douglasii ssp. *platycarpha* small-flowered microseris	None/None G4T4/S4 4.2	Annual herb. Cismontane woodland, coastal scrub, valley and foothill grassland, vernal pools. Alkaline clay in river bottoms. Elevations: 50-3510 ft. (15-1070 m.) Blooms Mar-May.	Not Expected	Vernal pools and alkaline soils are not present in the Buffer Area.
Monardella breweri ssp. *microcephala* small-headed monardella	None/None G5T3/S2 2B.2	Chaparral, cismontane woodland, lower montane coniferous forest. Granitic, openings, sometimes in disturbed areas. 230-1200 m. Blooms May-Aug.	Not Expected	The species' associated habitat and soils are not present in the Buffer Area.
Monardella hypoleuca ssp. *lanata* felt-leaved monardella	None/None G4T3/S3 1B.2	Perennial rhizomatous herb. Chaparral, cismontane woodland. Occurs in understory in mixed chaparral, chamise chaparral, and southern oak woodland; sandy soil. Elevations: 985-5170 ft. (300-1575 m.) Blooms Jun-Aug.	Not Expected	The Buffer Area is outside the known range of the species.
Monardella viminea willowy monardella	FE/SE G1/S1 1B.1	Perennial herb. Chaparral, coastal scrub, riparian forest, riparian scrub, riparian woodland. In canyons, in rocky and sandy places, sometimes in washes or floodplains, with Baccharis, Iva, etc. Alluvial, ephemeral washes with adjacent coastal scrub. Elevations: 165-740ft. (50-225m.) Blooms Jun-Aug.	Not Expected	The species' associated habitat is not present within the Buffer Area.

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Myosurus minimus ssp. *apus* little mousetail	None/None G5T2Q/S2 3.1 MHCP Covered Species	Annual herb. Valley and foothill grassland, vernal pools. Alkaline soils. Elevations: 65-2100ft. (20-640m.) Blooms Mar-Jun.	Not Expected	Vernal pools and alkaline soils are not present in the Buffer Area.
Navarretia fossalis spreading navarretia	FT/None G2/S2 1B.1 MHCP Covered Species	Annual herb. Chenopod scrub, marshes and swamps, playas, vernal pools. San Diego hardpan and San Diego claypan vernal pools; in swales and vernal pools, often surrounded by other habitat types. Elevations: 100-2150 ft. (30-655 m.) Blooms Apr-Jun.	Not Expected	Vernal pools are not present in the Buffer Area.
Nemacaulis denudata var. *denudata* coast woolly-heads	None/None G3G4T2/S2 1B.2	Annual herb. Coastal dunes. Elevations: 0-330 ft. (0-100 m.) Blooms Apr-Sep.	Not Expected	The Buffer Area is outside the known range of the species. Occurrences are closer to the coast.
Nolina cismontana chaparral nolina	None/None G3/S3 1B.2	Perennial evergreen shrub. Chaparral, coastal scrub. Primarily on sandstone and shale substrates; also known from gabbro. Elevations: 460-4185 ft. (140-1275 m.) Blooms (Mar) May-Jul.	Not Expected	The species associated soils are not present within the Buffer Area.
Ophioglossum californicum California adder's-tongue	None/None G4/S4 4.2	Perennial rhizomatous herb. Chaparral, valley and foothill grassland, vernal pools. Grassy pastures, vernal pool margins, chaparral. Mesic sites. Elevations: 195-1725 ft. (60-525 m.) Blooms Jan-Jun (Dec).	Not Expected	The species' associated habitat is not present within the Buffer Area.
Orcuttia californica California Orcutt grass	FE/SE G1/S1 1B.1	Annual herb. Vernal pools. Elevations: 50-2165 ft. (15-660 m.) Blooms Apr-Aug.	Not Expected	Vernal pools are not present in the Buffer Area.
Packera ganderi Gander's ragwort	None/SR G2/S2 1B.2	Perennial herb. Chaparral. Recently burned sites and gabbro outcrops. Elevations: 1310-3935 ft. (400-1200 m.) Blooms Apr-Jun.	Not Expected	The Buffer Area is outside the known range of the species.

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Pentachaeta aurea ssp. *aurea* golden-rayed pentachaeta	None/None G4T3/S3 4.2	Annual herb. Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland, valley and foothill grassland. Elevations: 260-6070 ft. (80-1850 m.) Blooms Mar-Jul.	Not Expected	The species' associated habitat is not present within the Buffer Area.
Phacelia ramosissima var. *austrolitoralis* south coast branching phacelia	None/None G5?T3Q/S3 3.2	Perennial herb. Chaparral, coastal dunes, coastal scrub, marshes and swamps. Sandy, sometimes rocky sites. Elevations: 15-985 ft. (5-300 m.) Blooms Mar-Aug.	Not Expected	The species' associated habitat is not present within the Buffer Area.
Phacelia stellaris Brand's star phacelia	None/None G1/S1 1B.1	Annual herb. Coastal dunes, coastal scrub. Open areas. Elevations: 5-1310 ft. (1-400 m.) Blooms Mar-Jun.	Not Expected	The Buffer Area is outside the known range of the species, with most records being coastal.
Pinus torreyana ssp. *torreyana* Torrey pine	None/None G1T1/S1 1B.2 MHCP Covered Species	Perennial evergreen tree. Chaparral, closed-cone coniferous forest. On dry, sandstone slopes. Elevations: 100-525 ft. (30-160 m.)	Not Expected	This conspicuous tree species was not observed during the field surveys.
Piperia cooperi chaparral rein orchid	None/None G3/S3S4 4.2	Perennial herb. Chaparral, cismontane woodland, valley and foothill grassland. Elevations: 50-5200 ft. (15-1585 m.) Blooms Mar-Jun.	Not Expected	The species' associated habitat is not present within the Buffer Area.
Pogogyne abramsii San Diego mesa mint	FE/SE G1/S1 1B.1	Annual herb. Vernal pools. Vernal pools within grasslands, chamise chaparral, or coastal sage scrub communities. Elevations: 295-655 ft. (90-200 m.) Blooms Mar-Jul.	Not Expected	Vernal pools are not present within Buffer Area.
Polygala cornuta var. *fishiae* Fish's milkwort	None/None G5T4/S4 4.3	Perennial deciduous shrub. Chaparral, cismontane woodland, riparian woodland. Scree slopes, brushy ridges, and along creeks; often with oaks. Elevations: 330-3280 ft. (100-1000 m.) Blooms May-Aug.	Not Expected	The species' associated habitat is not present within the Buffer Area.

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Psilocarphus brevissimus var. *multiflorus* Delta woolly-marbles	None/None G4T3/S3 4.2	Annual herb. Vernal pools, also on flats. Elevations: 35-1640 ft. (10-500 m.) Blooms May-Jun.	Not Expected	Vernal pools are not present within the Buffer Area.
Quercus dumosa Nuttall's scrub oak	None/None G3/S3 1B.1 MHCP Covered Species	Perennial evergreen shrub. Chaparral, closed-cone coniferous forest, coastal scrub. Generally, on sandy soils near the coast; sometimes on clay loam. Elevations: 50-1310 ft. (15-400 m.) Blooms Feb-Apr (May-Aug).	Not Expected	Suitable habitat is present within the Buffer Area. Other oak species, Q *agrifolia* and Q. *berberidifolia* were observed within the Project Boundary area and Buffer Area. This species was not observed during the field surveys.
Quercus engelmannii Engelmann oak	None/None G3/S3 4.2	Perennial deciduous tree. Chaparral, cismontane woodland, riparian woodland, valley and foothill grassland. Elevations: 165-4265 ft. (50-1300 m.) Blooms Mar-Jun.	Not Expected	Suitable habitat is present within the Project Boundary area. Other oak species, Q *agrifolia* and Q. *berberidifolia* were observed within and adjacent to the Project Boundary area. This species was not observed during the field surveys.
Rupertia rigida Parish's rupertia	None/None G4/S4 4.3	Perennial herb. Chaparral, cismontane woodland, lower montane coniferous forest, meadows and seeps, pebble (pavement) plain, valley and foothill grassland. Elevations: 2295-8205 ft. (700-2500 m.) Blooms Jun-Aug.	Not Expected	The Buffer Area is outside the known range of the species.
Salvia munzii Munz's sage	None/None G2/S2 2B.2	Perennial evergreen shrub. Chaparral, coastal scrub. Rolling hills and slopes, in rocky soil. Elevations: 375-3495 ft. (115-1065 m.) Blooms Feb-Apr.	Not Expected	Marginal suitable habitat is present within the Buffer Area. This species was not observed during the field surveys.
Selaginella cinerascens ashy spike-moss	None/None G3G4/S3 4.1	Perennial rhizomatous herb. Chaparral, coastal scrub. Elevations: 65-2100 ft. (20-640 m.)	Not Expected	Marginal suitable habitat is present within the Buffer Area. This species was not observed during the field surveys.
Senecio aphanactis chaparral ragwort	None/None G3/S2 2B.2	Annual herb. Chaparral, cismontane woodland, coastal scrub. Drying alkaline flats. Elevations: 50-2625 ft. (15-800 m.) Blooms Jan-Apr (May).	Not Expected	Alkaline flats are not present within the Buffer Area.
Sidalcea neomexicana salt spring checkerbloom	None/None G4/S2 2B.2	Perennial herb. Chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, playas. Alkali springs and marshes. Elevations: 50-5020 ft. (15-1530 m.) Blooms Mar-Jun.	Not Expected	Alkali springs and marshes are not present within the Buffer Area.

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Sphaerocarpos drewiae bottle liverwort	None/None G1/S1 1B.1	Ephemeral liverwort. Chaparral, coastal scrub. Liverwort in openings; on soil. Elevations: 295-1970 ft. (90-600 m.)	Not Expected	The species' associated soils are not present within the Buffer Area.
Stemodia durantifolia purple stemodia	None/None G5/S2 2B.1	Perennial herb. Sonoran desert scrub. Sandy soils; mesic sites. Elevations: 590-985 ft. (180-300 m.) Blooms (Jan)Apr-Dec.	Not Expected	The species' associated habitat and soils are not present within the Buffer Area.
Stipa diegoensis San Diego County needle grass	None/None G4/S4 4.2	Perennial herb. Chaparral, coastal scrub. Rocky slopes, sea cliffs and stream banks; often in mesic sites. Elevations: 35-262 5ft. (10-800 m.) Blooms Feb-Jun.	Not Expected	The species' associated habitat and soils are not present within the Buffer Area. This species was not observed during the field surveys.
Suaeda esteroa estuary seablite	None/None G3/S2 1B.2	Perennial herb. Marshes and swamps. Coastal salt marshes in clay, silt, and sand substrates. Elevations: 0-15 ft. (0-5 m.) Blooms (Jan-May)Jul-Oct.	Not Expected	The species' associated habitat and soils are not present within the Buffer Area.
Suaeda taxifolia woolly seablite	None/None G4/S4 4.2	Perennial evergreen shrub. Coastal bluff scrub, coastal dunes, marshes and swamps. Margins of salt marshes. Elevations: 0-165 ft. (0-50 m.) Blooms Jan-Dec.	Not Expected	The species' associated habitat and soils are not present within the Buffer Area.
Tetracoccus dioicus Parry's tetracoccus	None/None G2G3/S2 1B.2	Perennial deciduous shrub. Chaparral, coastal scrub. Stony, decomposed gabbro soil. Elevations: 540-3280 ft. (165-1000 m.) Blooms Apr-May.	Not Expected	The species' associated habitat and soils are not present within the Buffer Area.
Texosporium sancti-jacobi woven-spored lichen	None/None G3/S2 3	Crustose lichen (terricolous). Chaparral. Open sites; in California with *Adenostoma fasciculatum, Eriogonum, Selaginella*. Found on soil, small mammal pellets, dead twigs, and on *Selaginella*. Elevations: 195-2165 ft. (60-660 m.)	Not Expected	The species' associated habitat and soils are not present within the Buffer Area.
Triquetrella californica coastal triquetrella	None/None G2/S2 1B.2	Moss. Coastal bluff scrub, coastal scrub. Grows within 30 m. from the coast in coastal scrub, grasslands and in open gravels on roadsides, hillsides, rocky slopes, and fields. On gravel or thin soil over outcrops. Elevations: 35-330 ft. (10-100 m.)	Not Expected	The Buffer Area is outside the known range of the species.

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CDFW	Habitat Requirements	Potential to Occur in Project Boundary Area	Habitat Suitability/ Observations
Viguiera laciniata San Diego County viguiera	None/None G4/S4 4.3	Perennial shrub. Chaparral, coastal scrub. Slopes and ridges. Elevations: 195-2460 ft. (60-750 m.) Blooms Feb-Jun (Aug).	Low Potential	Marginal suitable habitat is present within the Buffer Area. This species was not observed during the field surveys.
Xanthisma junceum rush-like bristleweed	None/None G5/S4 4.3	Perennial herb. Chaparral, coastal scrub. Dry hillsides. Elevations: 785-3280 ft. (240-1000 m.) Blooms Jan-Oct.	Not Expected	The Buffer Area is outside the known range of the species.
Sensitive Natural Communities				
Southern Coast Live Oak Riparian Forest	None/None G4/S4		Not Observed	Not present within the Buffer Area.
Southern Cottonwood Willow Riparian Forest	None/None G3/S3.2		Not Observed	Not present within the Buffer Area.
Southern Riparian Forest	None/None G4/S4		Not Observed	Not present within the Buffer Area.

Regional Vicinity refers to within a 9-quad search radius of site.

Status (Federal/State)

FE = Federal Endangered
FT = Federal Threatened
FPE = Federal Proposed Endangered
FPT = Federal Proposed Threatened
FD = Federal Delisted
FC = Federal Candidate
SE = State Endangered
ST = State Threatened
SCE = State Candidate Endangered
SCT = State Candidate Threatened
SR = State Rare
SD = State Delisted
SSC = CDFW Species of Special Concern
FP = CDFW Fully Protected
WL = CDFW Watch List

CRPR (CNPS California Rare Plant Rank)

1A = Presumed extirpated in California, and rare or extinct elsewhere
1B = Rare, Threatened, or Endangered in California and elsewhere
2A = Presumed extirpated in California, but common elsewhere
2B= Rare, Threatened, or Endangered in California, but more common elsewhere

CRPR Threat Code Extension

.1 = Seriously endangered in California (>80% of occurrences threatened/high degree and immediacy of threat)
.2 = Moderately threatened in California (20-80% of occurrences threatened/moderate degree and immediacy of threat)
.3 = Not very endangered in California (<20% of occurrences threatened/low degree and immediacy of threat)

Special-Status Wildlife Species in the Regional Vicinity of the Project

Scientific Name Common Name	Status Fed/State ESA CDFW	Habitat Requirements	Potential to Occur in Project Boundary Area	Habitat Suitability/Observations
Invertebrates				
Bombus crotchii Crotch bumble bee	None/SCE G2/S2	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include *Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia,* and *Eriogonum.*	Low Potential	*Eriogonum fasciculatum* and *Eschscholzia californica are* present adjacent to the Project Boundary area for foraging, but little is known about the natural history of the species. This species was not observed during the field surveys.
Bombus pensylvanicus American bumble bee	None/None G3G4/S2	Long-tongued; forages on a wide variety of flowers including vetches (*Vicia*), clovers (*Trifolium*), thistles (*Cirsium*), sunflowers (*Helianthus*), etc. Nests above ground under long grass or underground. Queens overwinter in rotten wood or underground.	Low Potential	Foraging habitat may be present in the Buffer Area. This species was not observed during the field surveys.
Euphydryas editha quino quino checkerspot butterfly	FE/None G5T1T2/S1S2	Sunny openings within chaparral and coastal sage shrublands in parts of Riverside and San Diego counties. Hills and mesas near the coast. Need high densities of food plants *Plantago erecta, P. insularis,* and *Orthocarpus purpurescens.*	Not Expected	Marginal suitable habitat is present within the Buffer Area. *P. erecta* was observed within the Buffer Area along the disturbed slope, however the site overall lacks high densities of food plants.
Euphyes vestris harbisoni dun skipper	None/None G5T1/S1S2	Riparian oak woodland in a matrix of chamise chaparral or southern mixed chaparral. Larval host plant, *Carex spissa,* requires moist conditions.	Not Expected	Suitable habitat is absent within the Buffer Area.
Amphibians				
Anaxyrus californicus arroyo toad	FE/None G2G3/S2 SSC	Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc. Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range.	Not Expected	Suitable habitat is absent within the Buffer Area.
Rana draytonii California red-legged frog	FT/None G2G3/S2S3 SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	Not Expected	Suitable habitat is absent within the Buffer Area.

Scientific Name Common Name	Status Fed/State ESA CDFW	Habitat Requirements	Potential to Occur in Project Boundary Area	Habitat Suitability/Observations
Spea hammondii western spadefoot	None/None G2G3/S3S4 SSC	Occurs primarily in grassland habitats but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Not Expected	Suitable habitat is absent within the Buffer Area.
Reptiles				
Anniella stebbinsi Southern California legless lizard	None/None G3/S3 SSC	Generally, south of the Transverse Range, extending to northwestern Baja California. Occurs in sandy or loose loamy soils under sparse vegetation. Disjunct populations in the Tehachapi and Piute Mountains in Kern County. Variety of habitats; generally, in moist, loose soil. They prefer soils with a high moisture content.	Low Potential	The Buffer Area.contains loamy soils, but overall lacks suitable or preferred habitat such as moist soils.
Arizona elegans occidentalis California glossy snake	None/None G5T2/S2 SSC	Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California. Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	Low Potential	Suitable habitat is present in the Buffer Area. This species does have one recorded occurrence within five miles of the Project.
Aspidoscelis hyperythra orange-throated whiptail	None/None G5/S2S3 WL	Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats. Prefers washes and other sandy areas with patches of brush and rocks. Perennial plants necessary for its major food: termites.	Low Potential	Suitable habitat is present within the Project Boundary area; however, the suitable habitat is isolated, surrounded by disturbance. The site lacks rocks.
Aspidoscelis tigris stejnegeri coastal whiptail	None/None G5T5/S3 SSC	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland and riparian areas. Ground may be firm soil, sandy, or rocky.	Low Potential	Marginal suitable habitat are present within the Project Boundary area. The Buffer Area may contain more suitable habitat. This species has recorded occurrences within five miles of the Buffer Area.
Coleonyx variegatus abbotti San Diego banded gecko	None/None G5T5/S1S2 SSC	Coastal and cismontane Southern California. Found in granite or rocky outcrops in coastal scrub and chaparral habitats.	Not Expected	Suitable habitat is absent within the Buffer Area.
Crotalus ruber red-diamond rattlesnake	None/None G4/S3 SSC	Chaparral, woodland, grassland, and desert areas from coastal San Diego County to the eastern slopes of the mountains. Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects.	Low Potential	Suitable habitat is absent within the Buffer Area.

Scientific Name Common Name	Status Fed/State ESA CDFW	Habitat Requirements	Potential to Occur in Project Boundary Area	Habitat Suitability/Observations
Diadophis punctatus similis San Diego ringneck snake	None/None G5T4/S2?	Open, fairly rocky areas. Use boards, flat rocks, woodpiles, stable talus, rotting logs and small ground holes for cover. Prefer areas with surface litter or herbaceous vegetation. Often in somewhat moist areas near intermittent streams.	Not Expected	Suitable habitat is absent within the Buffer Area.
Emys marmorata western pond turtle	None/None G3G4/S3 SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Not Expected	Suitable habitat is absent within the Buffer Area.
Phrynosoma blainvillii coast horned lizard	None/None G4/S4 SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Not Expected	Suitable habitat is absent within the Buffer Area.
Plestiodon skiltonianus interparietalis Coronado skink	None/None G5T5/S2S3 WL	Grassland, chaparral, pinon-juniper and juniper sage woodland, pine-oak and pine forests in Coast Ranges of Southern California. Prefers early successional stages or open areas. Found in rocky areas close to streams and on dry hillsides.	Not Expected	Suitable habitat is absent within the Buffer Area.
Salvadora hexalepis virgultea coast patch-nosed snake	None/None G5T4/S3 SSC	Brushy or shrubby vegetation in coastal Southern California. Require small mammal burrows for refuge and overwintering sites.	Not Expected	Suitable habitat is absent within the Buffer Area.
Thamnophis hammondii two-striped gartersnake	None/None G4/S3S4 SSC	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	Not Expected	Suitable habitat is absent within the Buffer Area.
Thamnophis sirtalis pop. 1 south coast gartersnake	None/None G5T1T2/S1S2 SSC	Southern California coastal plain from Ventura County to San Diego County, and from sea level to about 850 m. Marsh and upland habitats near permanent water with good strips of riparian vegetation.	Not Expected	Suitable habitat is absent within the Buffer Area.

Scientific Name Common Name	Status Fed/State ESA CDFW	Habitat Requirements	Potential to Occur in Project Boundary Area	Habitat Suitability/Observations
Birds				
Accipiter cooperii Cooper's hawk	None/None G5/S4 WL MHCP Covered Species	Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.	High Potential	This species was observed within the Project Boundary area and is known to occur within deciduous tree habitats for nesting. An individual was observed vocalizing and perching along the southern fence line.
Accipiter striatus sharp-shinned hawk	None/None G5/S4 WL	Ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. Prefers riparian areas. North-facing slopes with plucking perches are critical requirements. Nests usually within 275 ft. of water.	Low Potential	Suitable habitat is present within the Buffer Area. This species is typically observed as a winter migrant, not as a local or resident species.
Agelaius tricolor tricolored blackbird	None/ST G1G2/S2 SSC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km. of the colony.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.
Aimophila ruficeps canescens southern California rufous-crowned sparrow	None/None G5T3/S3 WL	Resident in Southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	Low Potential	Marginal suitable habitat is present within the Buffer Area.
Ammodramus savannarum grasshopper sparrow	None/None G5/S3 SSC	Dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes. Favors native grasslands with a mix of grasses, forbs and scattered shrubs. Loosely colonial when nesting.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.
Aquila chrysaetos golden eagle	None/None G5/S3 FP WL	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.
Ardea alba great egret	None/None G5/S4	Colonial nester in large trees. Rookery sites located near marshes, tide-flats, irrigated pastures, and margins of rivers and lakes.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.

Scientific Name Common Name	Status Fed/State ESA CDFW	Habitat Requirements	Potential to Occur in Project Boundary Area	Habitat Suitability/Observations
Ardea herodias great blue heron	None/None G5/S4	Colonial nester in tall trees, cliffsides, and sequestered spots on marshes. Rookery sites in close proximity to foraging areas: marshes, lake margins, tide-flats, rivers and streams, wet meadows.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.
Artemisiospiza belli belli Bell's sparrow	None/None G5T2T3/S3 WL	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range. Nest located on the ground beneath a shrub or in a shrub 6-18 in. above ground. Territories about 50 yd. apart.	Low Potential	Marginal foraging habitat present within Buffer Area. Nesting habitat is absent. This species does have recorded occurrences within five miles of the Project.
Asio otus long-eared owl	None/None G5/S3? SSC	Riparian bottomlands grown to tall willows and cottonwoods; also, belts of live oak paralleling stream courses. Require adjacent open land, productive of mice and the presence of old nests of crows, hawks, or magpies for breeding.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.
Athene cunicularia burrowing owl	None/None G4/S3 SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.
Buteo regalis ferruginous hawk	None/None G4/S3S4 WL	Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats. Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.
Buteo swainsoni Swainson's hawk	None/ST G5/S4	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.
Calypte costae Costa's hummingbird	None/None G5/S4	Desert riparian, desert and arid scrub foothill habitats.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.
Campylorhynchus brunneicapillus sandiegensis coastal cactus wren	None/None G5T3Q/S2 SSC MHCP Covered Species	Southern California coastal sage scrub. Wrens require tall opuntia cactus for nesting and roosting.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.

Scientific Name Common Name	Status Fed/State ESA CDFW	Habitat Requirements	Potential to Occur in Project Boundary Area	Habitat Suitability/Observations
Chaetura vauxi Vaux's swift	None/None G5/S2S3 SSC	Redwood, Douglas-fir, and other coniferous forests. Nests in large hollow trees and snags. Often nests in flocks. Forages over most terrains and habitats but shows a preference for foraging over rivers and lakes.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.
Circus hudsonius northern harrier	None/None G5/S3 SSC	Coastal salt and freshwater marsh. Nest and forage in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.
Coccyzus americanus occidentalis western yellow-billed cuckoo	FT/SE G5T2T3/S1	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.
Contopus cooperi olive-sided flycatcher	None/None G4/S3 SSC	Nesting habitats are mixed conifer, montane hardwood-conifer, Douglas-fir, redwood, red fir and lodgepole pine. Most numerous in montane conifer forests where tall trees overlook canyons, meadows, lakes or other open terrain.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.
Cypseloides niger black swift	None/None G4/S2 SSC	Coastal belt of Santa Cruz and Monterey counties; central and southern Sierra Nevada; San Bernardino and San Jacinto mountains. Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above the surf; forages widely.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.
Egretta thula snowy egret	None/None G5/S4	Colonial nester, with nest sites situated in protected beds of dense tules. Rookery sites situated close to foraging areas: marshes, tidal-flats, streams, wet meadows, and borders of lakes.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.
Elanus leucurus white-tailed kite	None/None G5/S3S4 FP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.
Empidonax traillii willow flycatcher	None/SE G5/S3	Inhabits extensive thickets of low, dense willows on edge of wet meadows, ponds, or backwaters; 2000-8000 ft elevation. Requires dense willow thickets for nesting/roosting. Low, exposed branches are used for singing posts/hunting perches.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.

Scientific Name Common Name	Status Fed/State ESA CDFW	Habitat Requirements	Potential to Occur in Project Boundary Area	Habitat Suitability/Observations
Empidonax traillii extimus southwestern willow flycatcher	FE/SE G5T2/S3 MHCP Covered Species	Riparian woodlands in Southern California.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.
Eremophila alpestris actia California horned lark	None/None G5T4Q/S4 WL	Coastal regions, chiefly from Sonoma County to San Diego County. Also main part of San Joaquin Valley and east to foothills. Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.
Falco peregrinus anatum American peregrine falcon	FD/SD G4T4/S3S4 FP MHCP Covered Species	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.
Gymnogyps californianus California condor	FE/SE G1/S2 FP	Require vast expanses of open savannah, grasslands, and foothill chaparral in mountain ranges of moderate altitude. Deep canyons containing clefts in the rocky walls provide nesting sites. Forages up to 100 m. from roost/nest.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.
Haliaeetus leucocephalus bald eagle	FD/SE G5/S3 FP	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within one mi. of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.
Icteria virens yellow-breasted chat	None/None G5/S3 SSC MHCP Covered Species	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 ft. of ground.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.
Ixobrychus exilis least bittern	None/None G4G5/S2 SSC	Colonial nester in marshlands and borders of ponds and reservoirs which provide ample cover. Nests usually placed low in tules, over water.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.
Lanius ludovicianus loggerhead shrike	None/None G4/S4 SSC	Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.

Scientific Name Common Name	Status Fed/State ESA CDFW	Habitat Requirements	Potential to Occur in Project Boundary Area	Habitat Suitability/Observations
Laterallus jamaicensis coturniculus California black rail	None/ST G3T1/S2 FP	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about one in. that do not fluctuate during the year and dense vegetation for nesting habitat.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.
Nycticorax nycticorax black-crowned night heron	None/None G5/S4	Colonial nester, usually in trees, occasionally in tule patches. Rookery sites located adjacent to foraging areas: lake margins, mud-bordered bays, marshy spots.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.
Plegadis chihi white-faced ibis	None/None G5/S3S4 WL MHCP Covered Species	Shallow freshwater marsh. Dense tule thickets for nesting, interspersed with areas of shallow water for foraging.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.
Polioptila californica californica coastal California gnatcatcher	FT/None G4G5T3Q/S2 SSC MHCP Covered Species	Obligate, permanent resident of coastal sage scrub below 2500 ft. in Southern California. Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	Moderate Potential	Rincon protocol surveys conducted April 2023 – May 2023 did not observe or record any CAGN within the Project Boundary area or Buffer Area. Additional protocol surveys are being conducted October 2023 – February 2024. Surveys were also conducted in 2001 (Helix, 2001). but findings were negative. Anecdotal observations have been known to occur or have historically occurred prior to development of the EEPP in 2001. Marginal quality suitable habitat is present within the Project Boundary Area and Buffer Areat. Disturbed Diegan Coastal Sage Scrub is present in patches along the southwestern portion of the Project Boundary area along the top of slope and adjacent fence line. More contiguous patches of California brittlebush (*Encelia californica)* dominant sage scrub and surrounding non-native grassland, disturbed, and ornamental vegetation present within the open space habitat of the Buffer Area to the west.

Scientific Name Common Name	Status Fed/State ESA CDFW	Habitat Requirements	Potential to Occur in Project Boundary Area	Habitat Suitability/Observations
Progne subis purple martin	None/None G5/S3 SSC	Inhabits woodlands, low elevation coniferous forest of Douglas-fir, ponderosa pine, and Monterey pine. Nests in old woodpecker cavities mostly; also in human-made structures. Nest often located in tall, isolated tree/snag.	Low Potential	Ornamental pine trees are located along berms to the northwest, north, and eastern portions of the Project Boundary area. Presence of oak trees within and adjacent to the Project Boundary area could indicate woodpecker presence. This species was not observed during the field surveys.
Pyrocephalus rubinus vermilion flycatcher	None/None G5/S2S3 SSC	During nesting, inhabits desert riparian adjacent to irrigated fields, irrigation ditches, pastures, and other open, mesic areas. Nest in cottonwood, willow, mesquite, and other large desert riparian trees.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.
Selasphorus rufus rufous hummingbird	None/None G4/S1S2	Breeds in Transition life zone of northwest coastal area from Oregon border to southern Sonoma County. Nests in berry tangles, shrubs, and conifers. Favors habitats rich in nectar-producing flowers.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.
Setophaga petechia yellow warbler	None/None G5/S3S4 SSC	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.
Spinus lawrencei Lawrence's goldfinch	None/None G3G4/S4	Nests in open oak or other arid woodland and chaparral, near water. Nearby herbaceous habitats used for feeding. Closely associated with oaks.	Low Potential	Suitable habitat foraging and nesting habitat (oak trees) are present within the Project Boundary area. The Project Boundary area lacks water sources. This species was not observed during the field surveys.
Vireo bellii pusillus least Bell's vireo	FE/SE G5T2/S3 MHCP Covered Species	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs Projecting into pathways, usually willow, Baccharis, mesquite.	Not Expected	The species' associated nesting and foraging habitat is not present in the Buffer Area.

Scientific Name Common Name	Status Fed/State ESA CDFW	Habitat Requirements	Potential to Occur in Project Boundary Area	Habitat Suitability/Observations
Mammals				
Antrozous pallidus pallid bat	None/None G5/S3 SSC	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Not Expected	The species' associated roosting habitat is not present in the Project Boundary area.
Chaetodipus californicus femoralis Dulzura pocket mouse	None/None G5T3/S3 SSC	Variety of habitats including coastal scrub, chaparral and grassland in San Diego County. Attracted to grass-chaparral edges.	Not Expected	The local recorded occurrence of the species is historical and from chaparral habitats that are not found within the Project Boundary area.
Chaetodipus fallax fallax northwestern San Diego pocket mouse	None/None G5T3T4/S3S4 SSC MHCP Covered Species	Coastal scrub, chaparral, grasslands, sagebrush, etc. in western San Diego County. Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	Low Potential	The local recorded occurrence of the species is from chaparral habitats and are not found within the Buffer Area. This species was not observed during the field surveys.
Corynorhinus townsendii Townsend's big-eared bat	None/None G3G4/S2 SSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings of caves and abandoned buildings. Roosting sites limiting. Extremely sensitive to human disturbance.	Not Expected	The species associated roosting habitat is not present in the Buffer Area.
Eumops perotis californicus western mastiff bat	None/None G4G5T4/S3S4 SSC	Occurs in open, semi-arid to arid habitats, including coniferous and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces and caves, and buildings. Roosts typically occur high above ground.	Low Potential	Individuals of the species could utilize the Project Boundary area for foraging and the coniferous trees within for day roosts, but winter and maternal roosting by the species is not expected. This species was not observed during the field surveys.
Lasiurus cinereus hoary bat	None/None G5/S4 None	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	Low Potential	Individuals of the species could utilize the Project Boundary area for foraging and the coniferous trees within and adjacent to the Project for roosting. The site lacks riparian corridors or water. This species was not observed during the field surveys.
Lasiurus xanthinus western yellow bat	None/None G5/S3 SSC	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in broad-leaved trees, particularly palms. Forages over water and among trees.	Not Expected	The species associated roosting habitat is not present in the Buffer Area.

Scientific Name Common Name	Status Fed/State ESA CDFW	Habitat Requirements	Potential to Occur in Project Boundary Area	Habitat Suitability/Observations
Lepus californicus bennettii San Diego black-tailed jackrabbit	None/None G5T3T4/S3S4	Occurs in Los Angeles, San Bernardino, Riverside, and San Diego Counties of southern California. Typically found in open shrub habitats. Will also occur in woodland habitats with open understory adjacent to shrublands.	Not Expected	The Project is surrounded by industrial development and busy roadways. This species is typically found in arid, grassland, and patchy coastal sage scrub habitats. The species' associated habitat is not present in the Buffer Area.
Myotis yumanensis Yuma myotis	None/None G5/S4	Occurs in a variety of lowland and upland habitats including desert scrub, riparian, and woodlands and forests. Distribution is closely tied to bodies of water. Roosts in a variety of areas including caves, cliffs, mines, crevices in live trees, and buildings and other man-made structures.	Not Expected	The species associated roosting habitat is not present in the Buffer Area.
Neotoma lepida intermedia San Diego desert woodrat	None/None G5T3T4/S3S4 SSC	Coastal scrub of Southern California from San Diego County to San Luis Obispo County. Moderate to dense canopies preferred. They are particularly abundant in rock outcrops, rocky cliffs, and slopes.	Not Expected	The species associated habitat is not present within the Buffer Area. No middens (nests) were observed during the field survey.
Nyctinomops femorosaccus pocketed free-tailed bat	None/None G5/S3 SSC	Variety of arid areas in Southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, desert riparian, etc. Rocky areas with high cliffs.	Not Expected	The species associated roosting habitat is not present in the Buffer Area.
Nyctinomops macrotis big free-tailed bat	None/None G5/S3 SSC	Low-lying arid areas in Southern California. Need high cliffs or rocky outcrops for roosting sites. Feeds principally on large moths.	Not Expected	The species associated roosting habitat is not present in the Buffer Area.

Scientific Name Common Name	Status Fed/State ESA CDFW	Habitat Requirements	Potential to Occur in Project Boundary Area	Habitat Suitability/Observations
Taxidea taxus American badger	None/None G5/S3 SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Not Expected	This species associated habitat is not present within the Buffer Area. The site lacks burrowing animals. No diagnostic signs of the species (e.g., burrows or digs) were identified in the Buffer Area.

Regional Vicinity refers to within a 5-mile-search radius of site.

Status (Federal/State)

FE = Federal Endangered
FT = Federal Threatened
FPE = Federal Proposed Endangered
FPT = Federal Proposed Threatened
FD = Federal Delisted
FC = Federal Candidate
SE = State Endangered
ST = State Threatened
SCE = State Candidate Endangered
SCT = State Candidate Threatened
SR = State Rare
SD = State Delisted
SSC = CDFW Species of Special Concern
FP = CDFW Fully Protected
WL = CDFW Watch List

Additional notations may be provided as follows

T – Intraspecific Taxon (subspecies, varieties, and other designations below the level of species)
Q – Questionable taxonomy that may reduce conservation priority
? – Inexact numeric rank

Attachment D

Coastal California Gnatcatcher Protocol Survey Reports (July 7, 2023, March 1, 2024)

Rincon Consultants, Inc.
8825 Aero Drive
Suite 120
San Diego, California 92123
760-918-9444

July 7, 2023
Project No: 22-13968

Stacey Love
U.S. Fish and Wildlife Service, Carlsbad Office
2177 Salk Avenue #250
Carlsbad, California 92008
Via email: stacey_love@fws.gov

Subject: Coastal California Gnatcatcher Protocol Survey Report
Enterprise BESS Project
Escondido, San Diego County, California

Dear Ms. Love:

Rincon is submitting this letter report summarizing the results of focused surveys for the federally threatened coastal California gnatcatcher (*Polioptila californica californica*; CAGN) that were conducted on behalf of Enterprise BESS LLC for the Enterprise BESS Project (Project) at the existing Enterprise Emergency Peaker Plant (EEPP) site in Escondido, California. Specifically, the approximate center of the project is located at latitude 33.121641° N and longitude 117.117768° W (WGS84). **Results of the survey were negative, and no CAGN (individuals, pairs or nests) were observed.**

Enterprise BESS LLC proposes to construct a Battery Energy Storage System (BESS) on the site of the existing EEPP, a nominal 49.5-megawatt (MW) gas-fired power plant licensed by the California Energy Commission (CEC). As such, the BESS project is expected to be required to comply with applicable Conditions of Certification (CoC) included in the CEC permit for the EEPP, including CoC BIO-7 as outlined below, which requires protocol surveys for CAGN prior to onsite work.

BIO-7 *Prior to any site mobilization a FWS approved biologist will conduct protocol surveys of the project site and the construction laydown area for coastal California gnatcatchers.*

Verification: *The designated biologist shall submit a report of the findings to the CPM prior to construction. If California gnatcatchers or other TES species are found the CPM may recommend additional agency consultation.*

Rincon biologist Kelly Rios currently holds an Endangered and Threatened Species Permit issued by the U.S. Fish and Wildlife Service (USFWS), Permit TE 018909-06, under Section 10(a)(1)(A) of the Federal Endangered Species Act. This permit authorizes Ms. Rios to conduct presence/absence surveys for CAGN. The 15-day notification letter of intent to conduct protocol breeding season surveys for CAGN was sent to USFWS March 31, 2023.

Project Location and Environmental Setting

The Project site is located within the EEPP property on Assessor's Parcel Number (APN) 232-410-45-00, located at 201 Enterprise Street in the City of Escondido, California (Figures 1 and 3). The project is located in Township 12 South, Range 2 West and Section 20 (San Bernardino Meridian), within the United States Geological Survey (USGS) Escondido, California 7.5-minute topographic quadrangle (Figure 2).

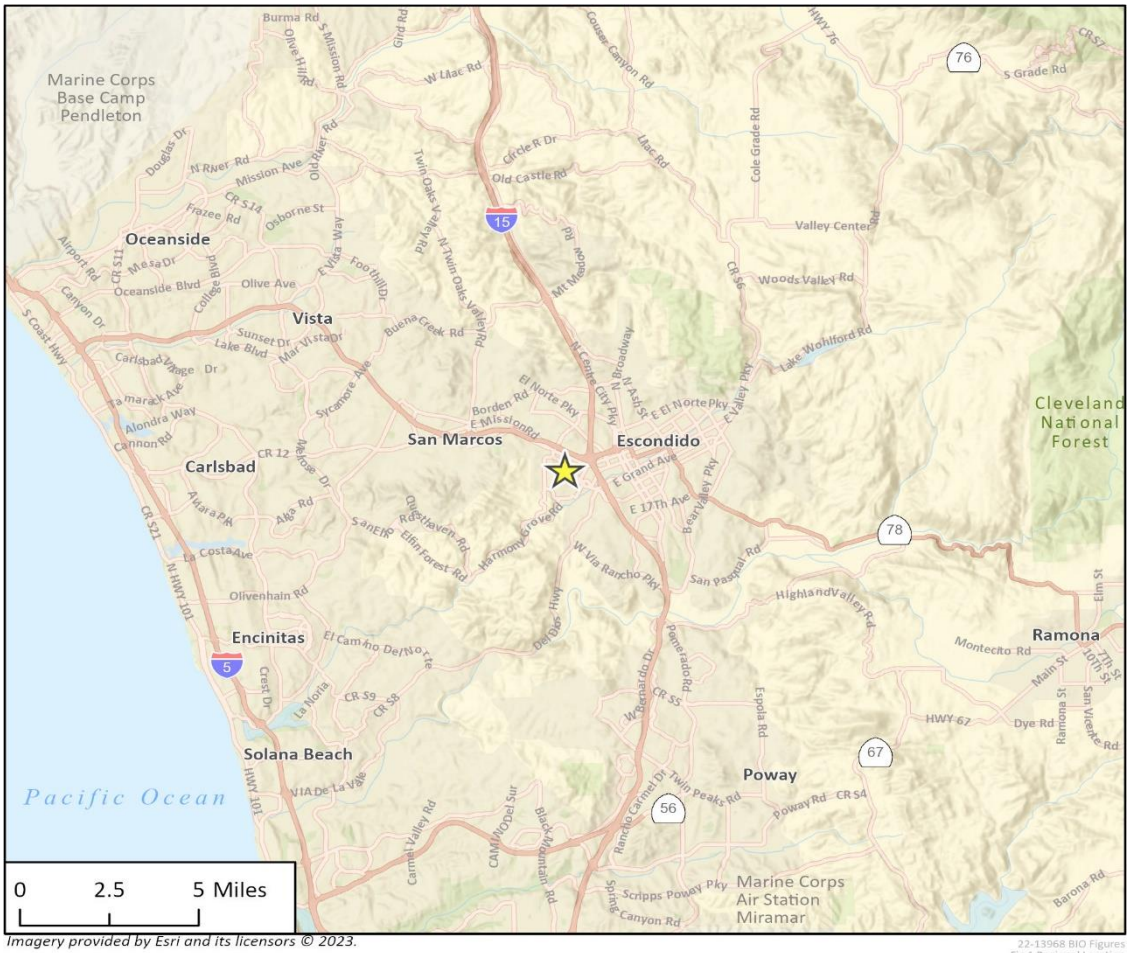
The Project site is bounded on the north by commercial/industrial development, on the east by commercial/industrial development and roadways, to the south by an existing operational SDG&E

substation; and to the west by an SDG&E easement with open habitat consisting of non-native grassland, ornamentals, disturbed and developed areas, and Diegan coastal sage scrub and Citracado Parkway beyond. The Project is located within a generally urbanized area with mixed commercial use, but is bordered by a strip of sage scrub along the western boundary (Figure 3).

The Project area supports marginally suitable habitat for CAGN and additional open space habitat within the study area supports higher quality suitable habitat adjacent to the Project area to the west and southwest, therefore, protocol surveys were recommended by CoC BIO-7 in accordance with USFWS requirements to further evaluate if any CAGN are utilizing the site. Focused CAGN surveys were limited to areas where disturbed Diegan Coastal Sage Scrub (DCSS) and DCSS habitat was mapped as those were the suitable areas encountered. Patches of disturbed Diegan Coastal Sage Scrub are located on the top of slope in southwestern corner of the Project site bounded by razor wire metal fence on the south and west sides. The surveyed habitat also included additional DCSS to the south of the Project boundaries, located within the SDG&E easement area (Figure 3). This vegetation community is structurally similar to DCSS, but has been subjected to historical anthropogenic disturbance from land use practices, most likely resulting from the initial construction of the EEPP building and fence installation. The ground cover between the shrub layer is dominated by non-native and invasive grasses and weeds such as wild oat (*Avena fatua*), mustards (*Brassica* sp.) and bromes (*Bromus* sp.). Dominant shrub species include California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), lemonade berry (*Rhus integrifolia*) coyote brush (*Baccharis pilularis*), and deerweed (*Acmispon glaber*), and herbaceous species such as storksbill (*Erodium cicutarium*), Spanish clover (*Acmispon americanus*), willow dock (*Rumex salicifolius*), sandysoil suncup (*Camisonnia strigulosa*), dotseed plantain (*Plantago erecta),* and two-color rabbit tobacco (*Pseudognaphalium biolettii*) observed along the disturbed slope.

The surveys also covered a portion of the non-disturbed DCSS habitat that occurs outside of the Project site to the south and west. DCSS features species such as bush sunflower (*Encelia Californica*), California sagebrush, with coyote brush, deerweed, lemonade berry, and California buckwheat. This community was found to be mixed with non-native grassland species, ornamentals, and other non-native annual and perennial weedy species such as salt cedar (*Tamarix* sp.), thistles, and wild radish (*Raphanus raphanistrum*). Species in this vegetation community were found distributed in higher densities within the open spaced habitat to the west.

Figure 1 Regional Location



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22-13968 BIO Figures
Fig 1 Regional Location

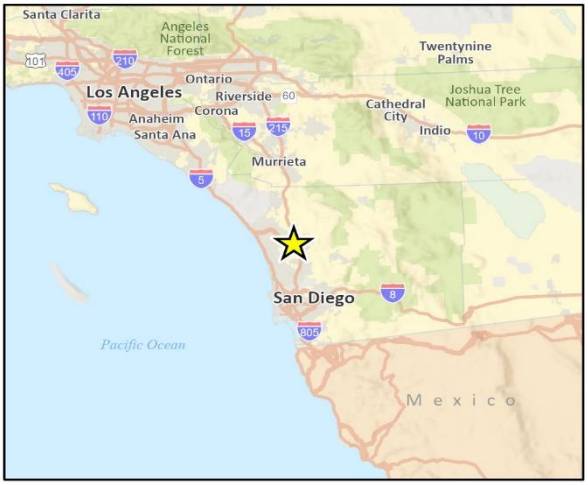
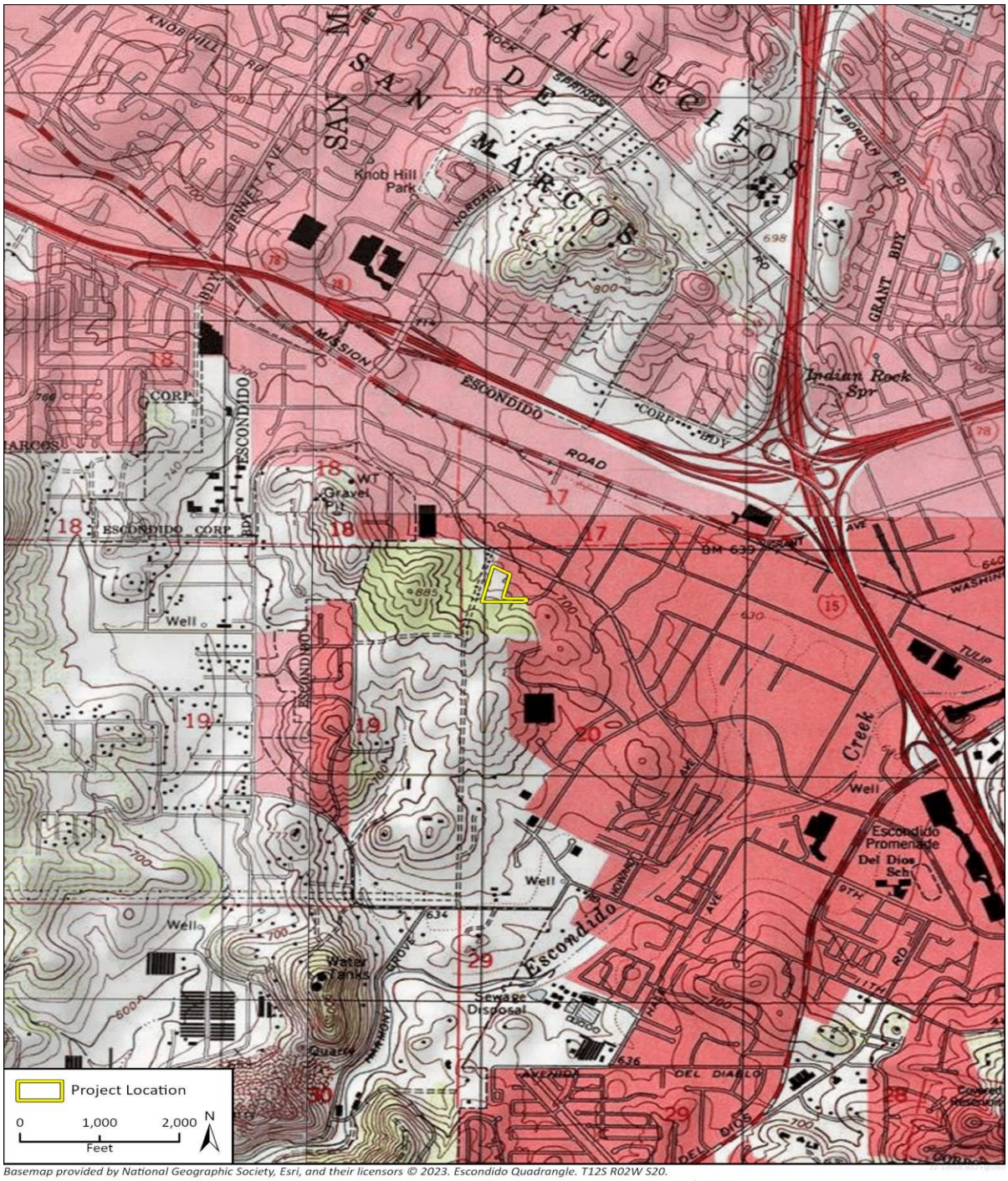
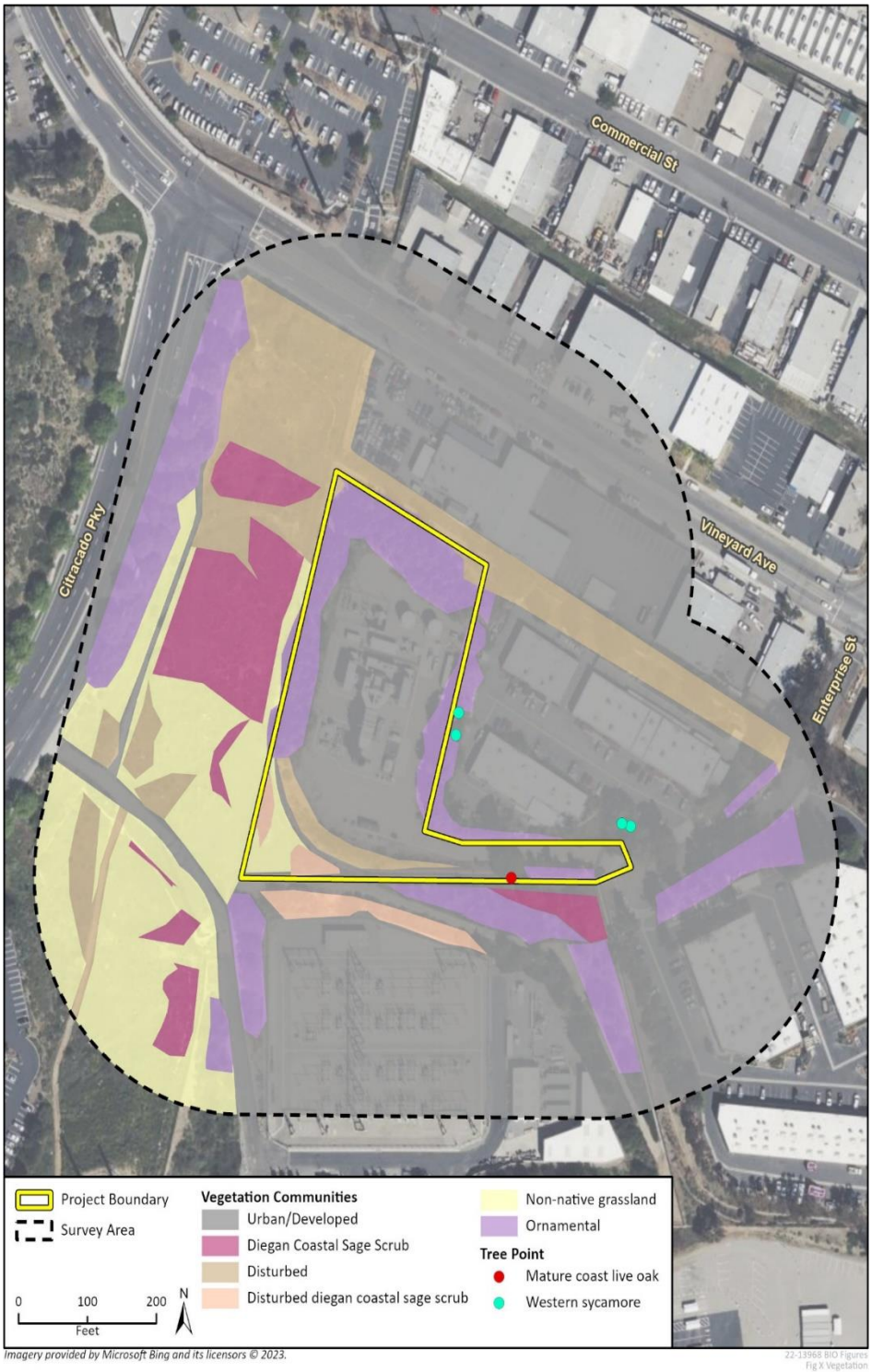


Figure 2 Project Location on USGS 7.5-minute Topographic Quadrangle



Basemap provided by National Geographic Society, Esri, and their licensors © 2023. Escondido Quadrangle. T12S R02W S20.
The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

Figure 3 Project Location and Vegetation Communities and Land Cover within Project Site and Study Area



Species Background

The CAGN is a non-migratory songbird found on the coastal slopes of southern California. It ranges from Ventura County south to northwestern Baja California, Mexico (Atwood et al. 1999; Jones and Ramirez 1995). The CAGN belongs to the old-world warbler and gnatcatcher family, *Sylviidae*. It is a small blue-gray songbird which measures 4.5 inches (11 cm) and weighs 0.2 ounces (6 grams). It has dark blue-gray feathers on its back and grayish-white feathers on its underside. The wings have a brownish wash. Its long tail is mostly black with white outer tail feathers. The species has a thin, small bill. The males have a black cap during the spring and summer which is absent during the winter. Both males and females have a white ring around their eyes.

The breeding season of the CAGN extends from late February through August with the peak of nesting occurring from mid-March through mid-May. The breeding territory size of the CAGN ranges from 2 to 22 acres (1 to 9 hectares), with home ranges expanding up to 39 acres (16 hectares), during the non-breeding season (Bontrager 1991; USFWS 1993). Nest parasitism by brown-headed cowbirds (*Molothrus ater*) has been documented (Unitt 1984). Typically, there is a high rate of nest failure each breeding season. This is offset by rapid and persistent re-nesting efforts; a breeding pair may attempt to nest as many as ten times in a year, producing up to three successful broods in a season (Atwood and Bontrager 2001). There is evidence that this species is also susceptible to nest predation by various animals such as snakes, coyotes (*Canis latrans*), fox, rodents, and other birds, such as California scrub-jays (*Aphelocoma californica*) (Atwood et al. 1999).

The CAGN are strongly associated with coastal sage scrub habitats below 820 feet in coastal areas and between 820 and 1,640 feet in inland areas (Atwood and Bolsinger 1992); however, not all types of coastal sage scrub communities are used or preferred. This species is reported to be most abundant in areas dominated by California sagebrush and California buckwheat. CAGN numbers are generally low in coastal habitats dominated by black sage, white sage (*Salvia apiana*), or lemonade berry; in inland areas, habitats dominated by black sage may be used more regularly (Atwood and Bontrager 2001).

Population estimates for the CAGN vary. Atwood (1992) estimated that 1,811 to 2,291 pairs of CAGN existed in 1992 throughout its range in southern California. In 1996, the USFWS estimated the population in San Diego County at 3,000 pairs, excluding pairs located on sites where habitat loss had already been approved (Atwood and Bontrager 2001). According to a 1999 population estimate in San Diego and other southern California counties, the USFWS estimated the population in San Diego at 1,917 pairs, Orange County at 643 pairs, Los Angeles County at 144 pairs, San Bernardino County at 27 pairs, and Ventura County at 4 pairs (Atwood and Bontrager 2001).

The CAGN is federally listed as threatened and is a California Department of Fish and Wildlife (CDFW) Species of Special Concern. The USFWS listed the CAGN as threatened (USFWS 1993) pursuant to the federal Endangered Species Act of 1973 as amended on March 30, 1993. Critical habitat was designated for CAGN on October 24, 2000 and the designation was revised in 2007 (USFWS 2007). The CAGN is also the City of Escondido's Multiple Habitat Conservation Plan (MHCP) covered species.

The primary cause of this species' decline is the cumulative loss of its coastal sage scrub vegetation community to urban and agricultural development. The USFWS has estimated that coastal sage scrub vegetation has been reduced by 70 to 90 percent of its historical extent (USFWS 1991) and little of what remains is protected in natural open space.

Survey Methodology

Notification to commence protocol surveys was provided via email correspondence to the USFWS on March 31, 2023. Kelly Rios, permitted Rincon biologist (TE-018090-06), conducted all CAGN surveys in accordance with the survey protocol for CAGN surveys within Multi-Habitat Planning Area (MHPA) areas, titled *Section III of the USFWS Coastal California Gnatcatcher Presence/Absence Survey Protocol*, issued February 28, 1997, and revised July 28, 1997. The protocol requires that between March 15 and June 30, a minimum of six surveys shall be conducted at least one week apart to determine presence/absence of CAGN; whenever possible, additional surveys should be conducted. Any deviation from this protocol requires concurrence from the USFWS.

In accordance with the USFWS survey protocol, a minimum of six breeding season surveys were conducted at least one week apart from April 19, 2023 through May 24, 2023 prior to the anticipated construction timeline for the Project. The six surveys occurred between 0800 and 1200 hours each day. Marginally suitable coastal sage scrub habitat occurs to in the southwestern corner of the Project site, with more intact, suitable habitat to the west further southwest of the Project site, consisting of a mix of sage scrub, disturbed sage scrub, non-native grassland, ornamentals, disturbed, and urban/developed vegetation and landcover communities.

A total of approximately one acre was surveyed and did not exceed the maximum of 100 acres per survey day. Surveys were not conducted during periods of excessive or abnormal heat, wind, fog, and other inclement weather. Surveys were conducted with binoculars to aid in bird detection. The surveyor slowly walked the survey area, stopping at approximate 50-foot intervals and used an audio recording of coastal CAGN vocalizations after individuals had been initially located. Recorded CAGN vocalizations were played sparingly and only if other means of detection had failed. If a CAGN was detected before playing recorded vocalizations, the recordings were not played. If CAGN is detected in response to the tape play, use of playback was discontinued immediately. If any CAGN were observed, age, sex, breeding status, and behavioral characteristics were recorded, if possible; the protocol level surveys did not include focused nest searches.

Survey Results

Details on the date, surveyor, time, conditions, and CAGN survey results are provided in Table 1.

Table 1 Coastal California Gnatcatcher Survey Conditions and Results

Date	Surveyor	Survey Conditions	Survey Results
April 19, 2023	Kelly Rios	0800 – 0900 1-2 Winds - mph 0% Cloud Cover 57-58°F	Negative
April 26, 2023	Kelly Rios	0830 – 0930 1-2 Winds - mph 0% Cloud Cover 65-66°F	Negative
May 3, 2023	Kelly Rios	0845-0940 1.2- Winds - mph 100 % Cloud Cover 55-57°F	Negative
May 10, 2023	Kelly Rios	0815-0930 1-2 Winds - mph 100% Cloud Cover	Negative

		57°F	
May 17, 2023	Kelly Rios	0845-0945 1-2 Winds - mph 100 % Cloud Cover 64-65°F	Negative
May 24, 2023	Kelly Rios	0900-1000 1-2 Winds - mph 100 % Cloud Cover 56-57°F	Negative

During the 2023 protocol surveys, no CAGN (individuals, pairs or nests) were observed.

Avian activity levels and diversity were generally moderate during the surveys. Common species expected to occur within coastal sage scrub and adjacent disturbed, ornamental, and habitats were observed on a regular basis. A complete list of avian species detected by sight or sound during the protocol level surveys is included in Table 2.

Table 2 Species Observed during Protocol Level Surveys

Scientific Family, Name	Species
Cathartidae	**New World Vultures**
Cathartes aura	turkey vulture
Accipitridae	**Hawks, Kites, & Eagles**
Buteo jamaicensis	red-tailed hawk
Falconidae	**Falcons**
Falco sparverius	American kestrel
Columbidae	**Pigeons & Doves**
Zenaida macroura	mourning dove
Trochilidae	**Hummingbirds**
Calypte anna	Anna's hummingbird
Selasphorus sasin	Allen's hummingbird
Tyrannidae	**Tyrant Flycatchers**
Sayornis nigricans	black phoebe
Corvidae	**Ravens, Crows, Jays, & Magpies**
Aphelocoma californica	California scrub-jay
Corvus brachyrhynchos	American crow

Scientific Family, Name	Species
Corvus corax	common raven
Troglodytidae	**Wrens**
Thryomanes bewickii	Bewick's wren
Troglodytes aedon	house wren
Timaliidae	**Babblers**
Chamaea fasciata	wrentit
Mimidae	**Mockingbirds & Thrashers**
Mimus polyglottos	Northern mockingbird
Emberizidae	**Emberizids**
Pipilo crissalis	California towhee
Pipilo maculatus	spotted towhee
Fringillidae	**Finches**
Carduelis psaltria	lesser goldfinch
Haemorhous mexicanus	house finch
Spinus lawrencei	Lawrence's goldfinch
Passerellidae	**Sparrows**
Melospiza melodia	song sparrow
Parulidae	**New World Warblers**
Geothlypis trichas	common yellowthroat
Aegithalidae	**Bushtits**
Psaltriparus minimus	bushtit
Apodidae	**Swifts**
Aeronautes saxatalis	white-throated swift
Sturnidae	**Starlings, Myna**
Sturnus vulgaris	European starling

Conclusions

During the 2023 CAGN protocol surveys, no CAGN (individuals, pairs or nests) were observed during the six protocol surveys from April 19, 2023 through May 24, 2023.

Certification

I certify that the information in this survey report and attached exhibits fully and accurately represents my work.

Sincerely,

Kelly Rios, TE 018909-06
Permitted Biologist

Priya Pratap
Project Manager/Senior Biologist

Jacob Hargis
Biologist

References

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Rincon Consultants, Inc.
8825 Aero Drive
Suite 120
San Diego, California 92123
760-918-9444

March 1, 2024
Project No: 22-13968

Stacey Love
U.S. Fish and Wildlife Service, Carlsbad Office
2177 Salk Avenue #250
Carlsbad, California 92008
Via email: stacey_love@fws.gov

Subject: Coastal California Gnatcatcher Protocol Survey Report
Enterprise BESS Project
Escondido, San Diego County, California

Dear Ms. Love:

Rincon is submitting this letter report summarizing the results of focused surveys for the federally threatened coastal California gnatcatcher (*Polioptila californica californica*; CAGN) that were conducted on behalf of Enterprise BESS LLC for the Enterprise BESS Project (Project) at the Enterprise Emergency Peaker Plant (EEPP) site in Escondido, California. Specifically, the approximate center of the Project is located at latitude 33.121641° N and longitude 117.117768° W (WGS84). **Results of the survey were negative, and no CAGN (individuals, pairs, or nests) were observed.**

Enterprise BESS LLC proposes to construct a Battery Energy Storage System (BESS) on the site of the existing EEPP, a nominal 49.5-megawatt (MW) gas-fired power plant licensed by the California Energy Commission (CEC). As such, the BESS project is expected to be required to comply with applicable Conditions of Certification (CoC) included in the CEC permit for the EEPP, including CoC BIO-7 as outlined below, which requires protocol surveys for CAGN prior to onsite work.

BIO-7 *Prior to any site mobilization a FWS approved biologist will conduct protocol surveys of the project site and the construction laydown area for coastal California gnatcatchers.*

Verification: *The designated biologist shall submit a report of the findings to the [Compliance Project Manager] prior to construction. If California gnatcatchers or other [Threatened and Endangered] species are found the [Compliance Project Manager] may recommend additional agency consultation.*

Rincon biologist Kelly Rios currently holds an Endangered and Threatened Species Permit issued by the U.S. Fish and Wildlife Service (USFWS), Permit TE 018909-06, under Section 10(a)(1)(A) of the Endangered Species Act. This permit authorizes Ms. Rios to conduct presence/absence surveys for CAGN. The 15-day notification letter of intent to conduct protocol non-breeding season surveys for CAGN was sent to USFWS October 2, 2023 and no response was received.

Project Location and Environmental Setting

The Project boundary area is located within the EEPP property on Assessor's Parcel Numbers (APN) 232-410-45-00 and 232-590-13-00, located at 201 Enterprise Street in the City of Escondido, California (Figures 1 and 3). The Project will be co-located with the existing CalPeak Power EEPP. The Project is located in Township 12 South, Range 2 West and Section 20 (San Bernardino Meridian), within the United States Geological Survey (USGS) *Escondido, California* 7.5-minute topographic quadrangle (Figure 2). The Project boundary area is defined as the Project components and limits of

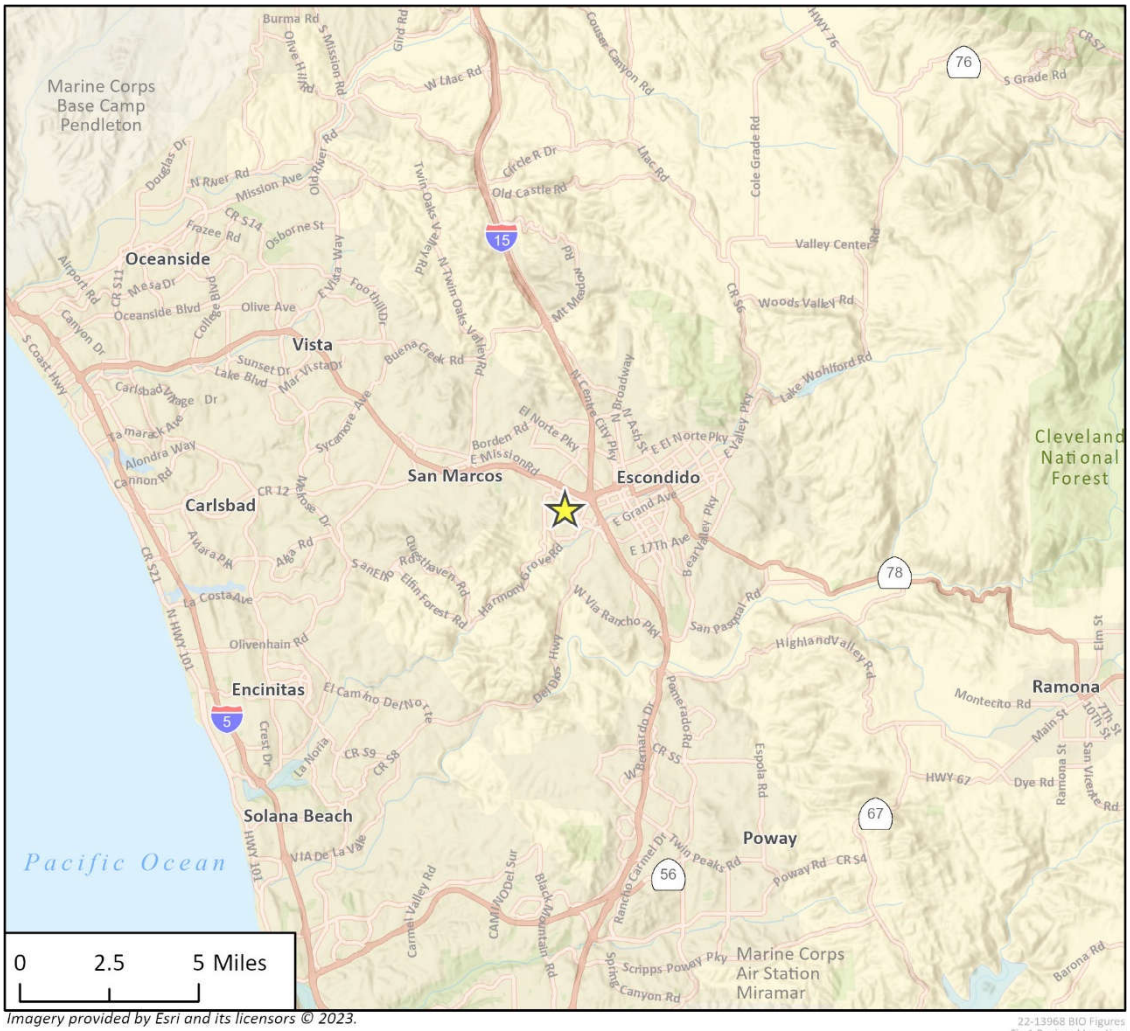
disturbance and the Study Area is defined as the Project boundary area plus an additional environmental investigation area. The 300-foot Buffer Area was evaluated and includes the Project boundary area and Study Area.

The Project boundary area is bordered to the north by Auto Art Paint & Body, and beyond to Auto Park Way, to the east and southeast by Enterprise Industrial Park commercial development, to the south by the SDG&E Palomar Energy Center Substation, and to the west by an SDG&E easement with open habitat consisting of non-native grassland, ornamentals, disturbed and developed areas, and Diegan Coastal Sage Scrub and Citracado Parkway beyond. The Project is located within a generally urbanized area with mixed commercial use but is bordered by a strip of disturbed Diegan Coastal Sage Scrub along the western boundary (Figure 3).

The Project boundary area supports marginally suitable and highly suitable habitat for CAGN and additional open space habitat within the Study Area, therefore, protocol surveys were required by CoC BIO-7 in accordance with USFWS requirements to further evaluate if any CAGN are utilizing the site. Focused CAGN surveys were limited to areas where disturbed Diegan Coastal Sage Scrub (DCSS) and DCSS habitat was mapped as those were the suitable areas encountered. Patches of disturbed DCSS are located on the top of slope in the southern portion of the Study Area and the 300-foot Buffer Area (Figure 3). This vegetation community is structurally similar to DCSS but has been subjected to historical anthropogenic disturbance from land use practices, most likely resulting from the initial construction of the EEPP building and fence installation. The ground cover between the shrub layer is dominated by non-native and invasive grasses and weeds such as wild oat (*Avena fatua*), mustards (*Brassica* sp.) and bromes (*Bromus* sp.). Dominant native shrub species include California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), lemonade berry (*Rhus integrifolia*) coyote brush (*Baccharis pilularis*), and deerweed (*Acmispon glaber*), and herbaceous species such as storksbill (*Erodium cicutarium*), Spanish clover (*Acmispon americanus*), willow dock (*Rumex salicifolius*), sandysoil suncup (*Camisonnia strigulosa*), dotseed plantain (*Plantago erecta),* and two-color rabbit tobacco (*Pseudognaphalium biolettii*) observed along the disturbed slope.

The surveys also covered a portion of the non-disturbed DCSS habitat that occurs within the western portion of the Study Area. DCSS features species such as bush sunflower (*Encelia Californica*), California sagebrush, with coyote brush, deerweed, lemonade berry, and California buckwheat. This community was found to be mixed with non-native grassland species, ornamentals, and other non-native annual and perennial weedy species such as salt cedar (*Tamarix* sp.), thistles, and wild radish (*Raphanus raphanistrum*). Species in this vegetation community were found distributed in higher densities within the open spaced habitat in the western portion of the Study Area.

Figure 1 Regional Project Location



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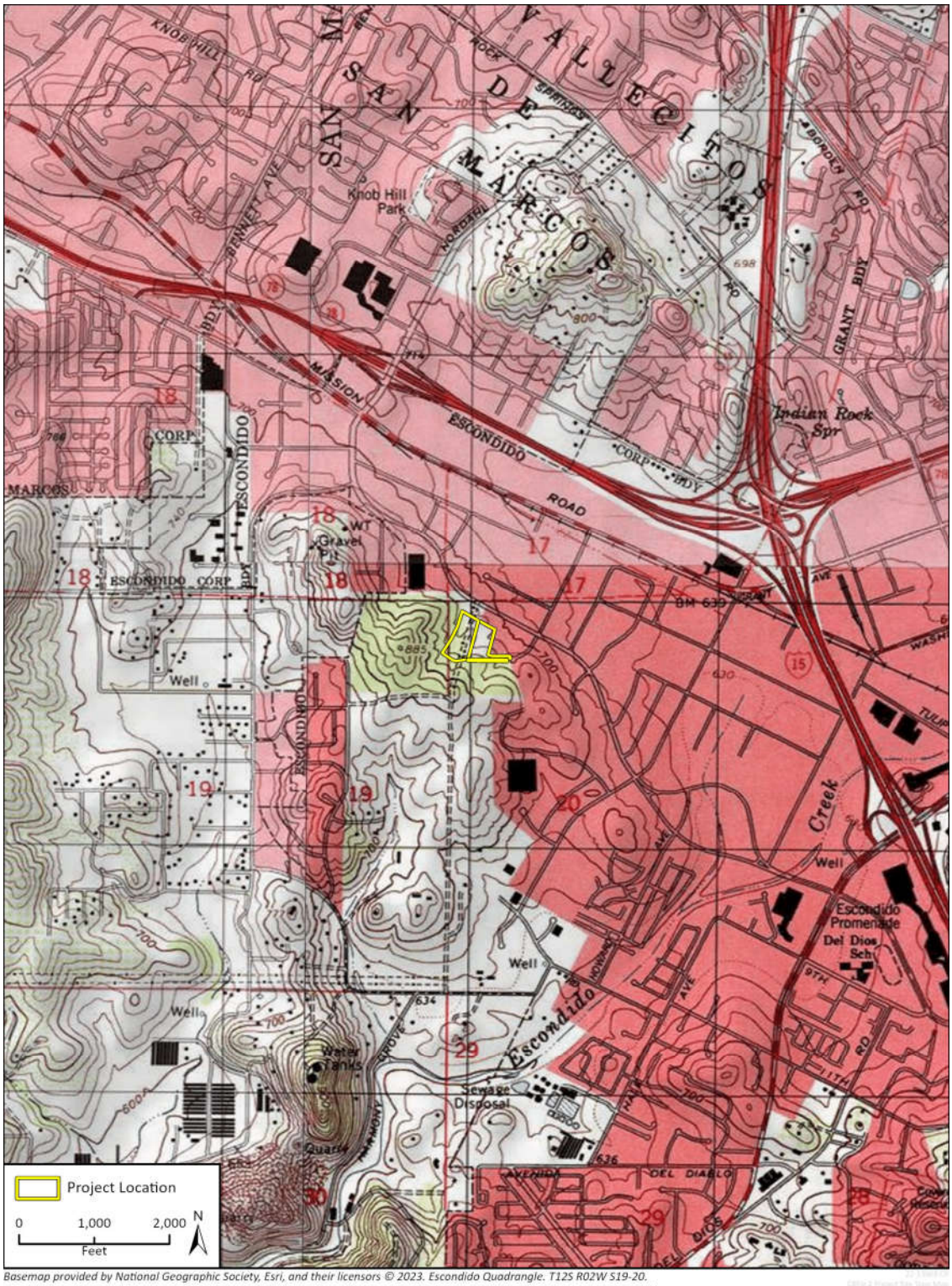
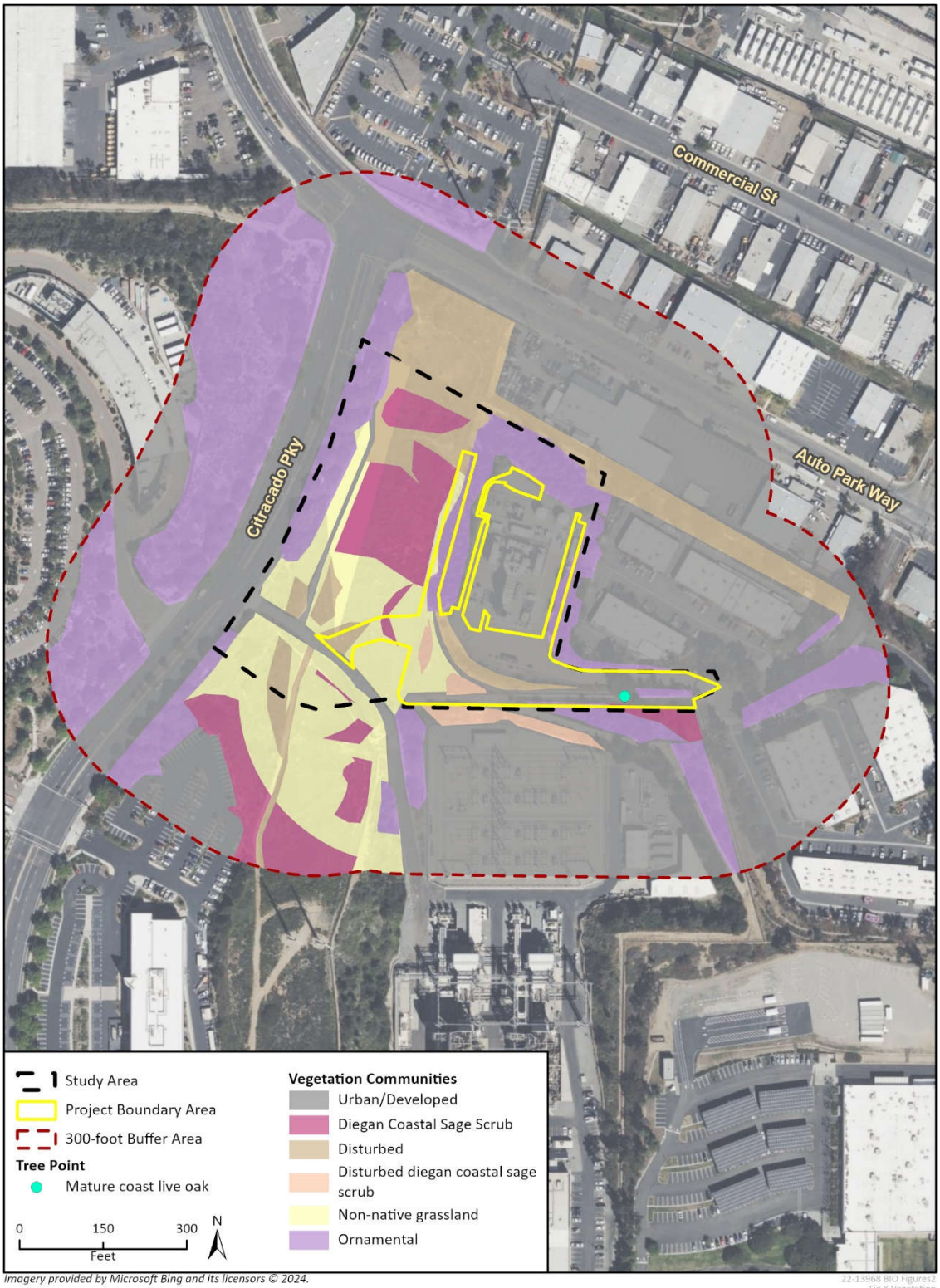
22-13968 BIO Figures
Fig 1 Regional Location

Figure 2 Project Location on USGS 7.5-minute Topographic Quadrangle



Basemap provided by National Geographic Society, Esri, and their licensors © 2023. Escondido Quadrangle. T12S R02W S19-20.
The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

Figure 3 Vegetation Communities and Land Cover within Project Boundary Area and Study Area



Species Background

The CAGN is a non-migratory songbird found on the coastal slopes of southern California. It ranges from Ventura County south to northwestern Baja California, Mexico (Atwood et al. 1999; Jones and Ramirez 1995). The CAGN belongs to the old-world warbler and gnatcatcher family, *Sylviidae*. It is a small blue-gray songbird which measures 4.5 inches (11 cm) and weighs 0.2 ounces (6 grams). It has dark blue-gray feathers on its back and grayish-white feathers on its underside. The wings have a brownish wash. Its long tail is mostly black with white outer tail feathers. The species has a thin, small bill. The males have a black cap during the spring and summer which is absent during the winter. Both males and females have a white ring around their eyes.

The breeding season of the CAGN extends from late February through August with the peak of nesting occurring from mid-March through mid-May. The breeding territory size of the CAGN ranges from 2 to 22 acres (1 to 9 hectares), with home ranges expanding up to 39 acres (16 hectares), during the non-breeding season (Bontrager 1991; USFWS 1993). Nest parasitism by brown-headed cowbirds (*Molothrus ater*) has been documented (Unitt 1984). Typically, there is a high rate of nest failure each breeding season. This is offset by rapid and persistent re-nesting efforts; a breeding pair may attempt to nest as many as ten times in a year, producing up to three successful broods in a season (Atwood and Bontrager 2001). There is evidence that this species is also susceptible to nest predation by various animals such as snakes, coyotes (*Canis latrans*), fox, rodents, and other birds, such as California scrub-jays (*Aphelocoma californica*) (Atwood et al. 1999).

The CAGN are strongly associated with coastal sage scrub habitats below 820 feet in coastal areas and between 820 and 1,640 feet in inland areas (Atwood and Bolsinger 1992); however, not all types of coastal sage scrub communities are used or preferred. This species is reported to be most abundant in areas dominated by California sagebrush and California buckwheat. CAGN numbers are generally low in coastal habitats dominated by black sage, white sage (*Salvia apiana*), or lemonade berry; in inland areas, habitats dominated by black sage may be used more regularly (Atwood and Bontrager 2001).

Population estimates for the CAGN vary. Atwood (1992) estimated that 1,811 to 2,291 pairs of CAGN existed in 1992 throughout its range in southern California. In 1996, the USFWS estimated the population in San Diego County at 3,000 pairs, excluding pairs located on sites where habitat loss had already been approved (Atwood and Bontrager 2001). According to a 1999 population estimate in San Diego and other southern California counties, the USFWS estimated the population in San Diego at 1,917 pairs, Orange County at 643 pairs, Los Angeles County at 144 pairs, San Bernardino County at 27 pairs, and Ventura County at 4 pairs (Atwood and Bontrager 2001).

The CAGN is federally listed as threatened and is a California Department of Fish and Wildlife (CDFW) Species of Special Concern. The USFWS listed the CAGN as threatened (USFWS 1993) pursuant to the federal Endangered Species Act of 1973 as amended on March 30, 1993. Critical habitat was designated for CAGN on October 24, 2000, and the designation was revised in 2007 (USFWS 2007). The CAGN is also the City of Escondido's Multiple Habitat Conservation Plan (MHCP) covered species.

The primary cause of this species' decline is the cumulative loss of its coastal sage scrub vegetation community to urban and agricultural development. The USFWS has estimated that coastal sage scrub vegetation has been reduced by 70 to 90 percent of its historical extent (USFWS 1991) and little of what remains is protected in natural open space.

Survey Methodology

Notification to commence protocol non-breeding season surveys was provided via email correspondence to the USFWS on October 2, 2023. Kelly Rios, permitted Rincon biologist (TE-018090-06), conducted all CAGN surveys in accordance with the survey protocol for CAGN surveys within Multi-Habitat Planning Area (MHPA) areas, titled *Section III of the USFWS Coastal California Gnatcatcher Presence/Absence Survey Protocol*, issued February 28, 1997, and revised July 28, 1997. The protocol requires that between July 1 through March 14, a minimum of nine surveys shall be conducted at least two weeks apart to determine presence/absence of CAGN; whenever possible, additional surveys should be conducted.

In accordance with the USFWS survey protocol, nine non-breeding season surveys were conducted at least two weeks apart from October 17, 2023, through February 13, 2024, prior to the anticipated construction timeline for the Project. The nine surveys occurred between 0800 and 1200 hours each day. Marginally suitable coastal sage scrub habitat occurs in the southwestern corner of the Project site, with more intact, suitable habitat within the western portion of the Project site, consisting of a mix of sage scrub, disturbed sage scrub, non-native grassland, ornamentals, disturbed, and urban/developed vegetation and landcover communities.

A total of approximately one acre was surveyed and did not exceed the maximum of 100 acres per survey day. Surveys were not conducted during periods of excessive or abnormal heat, wind, fog, and other inclement weather. Surveys were conducted with binoculars to aid in bird detection. The surveyor slowly walked the survey area, stopping at approximate 50-foot intervals and used an audio recording of coastal CAGN vocalizations after individuals had been initially located. Recorded CAGN vocalizations were played sparingly and only if other means of detection had failed. If a CAGN was detected before playing recorded vocalizations, the recordings were not played. If CAGN is detected in response to the tape play, use of playback was discontinued immediately. If any CAGN were observed, age, sex, breeding status, and behavioral characteristics were recorded, if possible; the protocol level surveys did not include focused nest searches.

Survey Results

Details on the date, surveyor, time, conditions, and CAGN survey results are provided in Table 1.

Table 1 Coastal California Gnatcatcher Survey Conditions and Results

Date	Surveyor	Survey Conditions	Survey Results
October 17, 2023	Kelly Rios	0915-1120 2-3 Winds - mph 60% Cloud Cover 74-72°F	Negative
October 31, 2023	Kelly Rios	0900-1130 2-3 Winds - mph 0% Cloud Cover 75-82°F	Negative
November 14, 2023	Kelly Rios	800-1040 1.2- Winds - mph 0 % Cloud Cover 64-66°F	Negative

November 28, 2023	Kelly Rios	0800-1000 1-2 Winds - mph 0% Cloud Cover 58-61°F	Negative
December 12, 2023	Kelly Rios	0830-1030 1-2 Winds - mph 0 % Cloud Cover 59-62°F	Negative
January 2, 2024	Kelly Rios	0830-1100 1-2 Winds - mph 0 % Cloud Cover 55-64°F	Negative
January 16, 2024	Kelly Rios	0845-1100 1-2 Winds - mph 0 % Cloud Cover 57-61°F	Negative
January 30, 2024	Kelly Rios	0915-1150 1-2 Winds - mph 0 % Cloud Cover 67-72°F	Negative
February 13, 2024	Kelly Rios	0900-1120 1-2 Winds - mph 10 % Cloud Cover 57-67°F	Negative

During the 2023-2024 protocol non-breeding season surveys, no CAGN (individuals, pairs, or nests) were observed.

Avian activity levels and diversity were generally moderate during the surveys. Common species expected to occur within coastal sage scrub and adjacent disturbed, ornamental, and habitats were observed on a regular basis. A complete list of avian species detected by sight or sound during the protocol level surveys is included in Table 2.

Table 2 Species Observed during Protocol Level Surveys

Scientific Family, Name	Species
Accipitridae	**Hawks, Kites, & Eagles**
Buteo jamaicensis	red-tailed hawk
Columbidae	**Pigeons & Doves**
Zenaida macroura	mourning dove
Trochilidae	**Hummingbirds**
Calypte anna	Anna's hummingbird
Tyrannidae	**Tyrant Flycatchers**
Sayornis nigricans	black phoebe

Scientific Family, Name	Species
Corvidae	**Ravens, Crows, Jays, & Magpies**
Aphelocoma californica	California scrub-jay
Corvus brachyrhynchos	American crow
Corvus corax	common raven
Troglodytidae	**Wrens**
Thryomanes bewickii	Bewick's wren
Troglodytes aedon	house wren
Timaliidae	**Babblers**
Chamaea fasciata	wrentit
Stitidae	**Nuthatches**
Sitta canadensis	red-breasted nuthatch
Mimidae	**Mockingbirds & Thrashers**
Mimus polyglottos	Northern mockingbird
Emberizidae	**Emberizids**
Pipilo crissalis	California towhee
Pipilo maculatus	spotted towhee
Fringillidae	**Finches**
Carduelis psaltria	lesser goldfinch
Haemorhous mexicanus	house finch
Spinus lawrencei	Lawrence's goldfinch
Passerellidae	**Sparrows**
Melospiza melodia	song sparrow
Parulidae	**New World Warblers**
Geothlypis trichas	common yellowthroat
Aegithalidae	**Bushtits**
Psaltriparus minimus	bushtit

Scientific Family, Name	Species
Apodidae	**Swifts**
Aeronautes saxatalis	white-throated swift
Sturnidae	**Starlings, Myna**
Sturnus vulgaris	European starling

Conclusions

During the 2023-2024 CAGN protocol non-breeding season surveys, no CAGN (individuals, pairs or nests) were observed during the nine protocol surveys from October 17, 2023 through February 13, 2024.

Certification

I certify that the information in this survey report and attached exhibits fully and accurately represents my, Kelly Rios', work.

Sincerely,
Rincon Consultants, Inc.

Kelly Rios, TE 018909-06
Permitted Biologist

Grace Myers
Biologist

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Attachment E

Arborist Report (March 2024)

Enterprise Battery Energy Storage System Project

Arborist Report

prepared for

Enterprise BESS LLC
4350 Executive Drive, Suite 320
San Diego, California 92121

prepared by

Rincon Consultants, Inc.
8825 Aero Drive, Suite 120
San Diego, California 92123

March 2024

RINCON CONSULTANTS, INC. SINCE 1994

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Appendices

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1 Project Overview

This report summarizes the methods and results of a tree survey conducted by Rincon Consultants, Inc. (Rincon) for the Enterprise Battery Energy Storage System (BESS) Project (Project) in the city of Escondido, California. The survey included all mature and protected trees (as defined by the City of Escondido's Municipal Regulations Grading Ordinance [Grading Ordinance]) with trunks or driplines located within the approximately 7-acre Project study area, including buffer. In addition, this report provides an impact analysis for the surveyed trees on the Project site, recommended tree protection measures for the trees that will be preserved, and tree replacement requirements for the trees that must be removed.

1.1 Project Location

The Project will be located within the existing CalPeak Power Enterprise Emergency Peaker Plant (EEPP) at 201 Enterprise Street in the city of Escondido, California, and the adjacent undeveloped land to the west (Figure 1). The 7-acre study area is generally bound by Citracado Parkway to the west, undeveloped land and industrial buildings to the north, additional industrial buildings to the east, and undeveloped land and a San Diego Gas & Electric (SDG&E) substation to the south (Figure 2). The CalPeak EEPP is located within Assessor's Parcel Number (APN) 232-410-45-00.

Figure 1 Regional Location

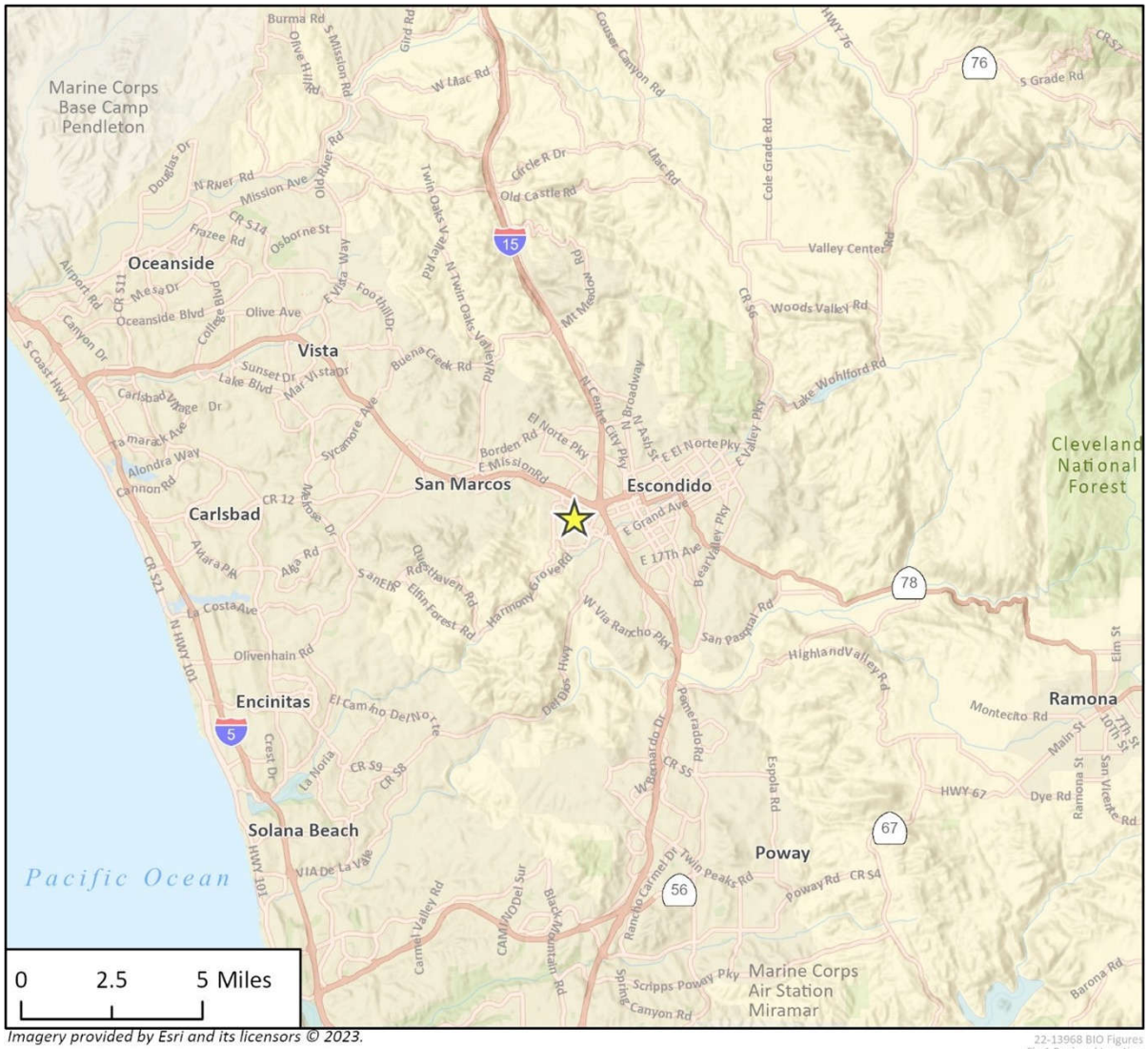

Figure 2 Project Location

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22-13968 BIO Figures
Fig 2 Project Location

1.2 Project Description

Enterprise BESS LLC plans to construct, own, and operate a nominal 52-megawatt (MW) BESS to support California's current need for additional electrical supply capacity during high peak load demand periods. It would utilize approximately 1.22 acres of available open space within the overall 2.94-acre EEPP parcel, plus approximately 0.62 acre of additional land adjacent to the EEPP parcel. The Project will contain stacked containerized battery systems with internal heating ventilation and air conditioning (HVAC) and internal fire detection and fire suppression systems in each container, battery management systems (BMS), stacked power conversion systems (PCS; also called inverters), transformers, and electrical conductors. The Project will also include an approximately 400-foot-long underground 13.8 kilovolt (kV) gen-tie line to connect the BESS to the existing EEPP switchyard generation step-up (GSU) transformer. The Project includes construction of an access road spur to the southwest portion of the BESS site from an existing San Diego Gas & Electric (SDG&E) access road, which connects Citracado Parkway to the existing SDG&E Palomar facility to the south. The Enterprise BESS Project includes the addition of a new offsite stormwater conveyance component consisting of buried pipe adjacent to the western EEPP property on land to be leased by SDG&E (approximately 25 feet wide by 300 feet long with 20 feet of the width on leased SDG&E land and 5 feet on the western boundary of the EEPP parcel). This new stormwater conveyance will be designed to carry stormwater via gravity flow from the southern portion of the EEPP site where the proposed BESS facilities are located to an existing stormwater conveyance which outfalls into an existing detention basin on SDG&E land to the northwest of the EEPP property.

The existing hillside will be removed and a retaining wall will be constructed along the southern site boundary to stabilize the vertical cut and create a level area for the BESS. Sheet piles will be installed along the cut slope prior to installation of the retaining wall. Associated vegetation removal, site grading, and soil and bedrock excavation will be necessary to install the retaining wall along the southern property boundary. It is anticipated that an approximately 20-foot-wide by 600-foot-long temporary work area will be needed on the adjacent SDG&E property to the south associated with construction of the retaining wall.

The BESS will be connected to the electrical grid via the existing GSU at the EEPP, which has a 69 kV connection to the SDG&E Escondido Substation to the north. The Project will not require any high voltage modifications at the EEPP switchyard or the existing offsite 69 kV line. Operation of the BESS facility will be integrated with the existing EEPP, but the BESS will be charged from the electrical grid and not the EEPP.

The Project will require discretionary permitting involving approval of a Petition for Post-Certification Amendment from the California Energy Commission (CEC).

1.3 Regulatory Background

The purpose of Section 33-1068.A of the city's Grading Ordinance (i.e., the Clearing of Land and Vegetation Protection Section) is to safeguard life, limb, property, and the public welfare by regulating grading, clearing, and removal of mature trees on private property. Further, its purpose is to reflect and achieve the goals and policies of the Escondido General Plan, which recognizes oak trees (*Quercus* spp.) and other mature trees as significantly aesthetic and ecological resources (City of Escondido 2001).

Section 33-1069(a) (i.e., the Vegetation Protection and Replacement Standards Section) of the Grading Ordinance states the following in terms of tree protection:

- No person shall destroy or do any clearing of vegetation and mature trees, nor destroy, clear, trim, or cut protected trees, in violation of this chapter, including deliberately damaging a mature or protected tree so that the removal of the tree is necessary to maintain public safety.
- Every feasible effort shall be made to preserve sensitive biological habitat, sensitive biological species, mature trees, and protected trees in-place on the project site through consideration of alternative means of accomplishing the desired action or project, to the satisfaction of the director.
- All feasible measures to avoid damage to existing trees and vegetation to remain shall be taken by the owner or developer during clearing, grading, and construction. A report prepared by a professional and provided at the applicant's expense, which provides recommendations on methods to minimize damage to the tree(s), may be required upon determination of the director.
- Rigid protective barriers of a type acceptable to the director shall be placed around the drip line of all trees and vegetation designated to remain. The barricades or fencing are to remain in place until completion of all grading and construction.

Section 33-1069b states the following for tree replacement standards:

- Required landscaping which is removed shall be replaced with equivalent plant material consistent with the original requirement(s).
- If mature trees cannot be preserved on-site, they shall be replaced at a minimum 1:1 ratio. The preferred replacement is a tree(s) of equal size and caliper. Protected trees shall be replaced at a minimum 2:1 ratio.
- The number, size, and species of replacement trees shall be determined on a case-by-case basis by the director, based on the specific circumstances of each request, the characteristics and condition (size, age, and location) of the individual trees involved, and any professional report.
- The planting location of the replacement trees may be on-site or elsewhere in the City.
- Replacement trees and habitat mitigation sites shall be maintained in a flourishing manner on a continuing basis.

Definitions

Mature tree: is any self-supporting woody perennial plant, native or ornamental, with a single well-defined stem or multiple stems supporting a crown of branches. The single stem, or one of the multiple stems of any mature oak tree, shall have a diameter 4 inches or greater when measured at 4.5 feet above the tree's natural grade (i.e., diameter at breast height [DBH]). All other mature trees shall have a diameter of 8 inches DBH, or greater, for a single stem or one of the multiple stems.

Protected Tree: is any oak which has a 10 inch or greater DBH, or any other species or individual specimen listed on the local historic register or determined to substantially contribute to the historic character of a property or structure listed on the local historic register, pursuant to Article 40 of the Escondido Zoning Code.

2 Methodology

All mature and protected trees within the Study Area were surveyed by Rincon International Society of Arboriculture (ISA) Board Certified Master Arborist Nate Faris (IN-3274B) and ISA Certified Arborist Casey Clark (#WE-12031A) on June 6, 7, and October 16, 2023 (Table 1).

Table 1 Survey Personnel and Conditions

Date	Time (24-hour)	Surveyors	Air Temperature (degrees Fahrenheit)	Wind Speed (miles per hour)	Weather Notes
June 6, 2023	0700 to 1700	Nate Faris	60 to 85	0 to 10	Overcast
June 7, 2023	0700 to 1200	Nate Faris	60 to 85	0 to 10	Overcast
October 16, 2023	0800 to 1200	Casey Clark	60 to 70	0 to 5	Sunny

All mature and protected trees that had any portion of their trunk or dripline within the Study Area were surveyed. A tree tag with a unique tree identification number was assigned to each tree surveyed, which was sequential to the survey path, and its location was documented using a Geographic Positioning System (GPS) device capable of submeter accuracy. Trees located within properties with access constraints were surveyed from beyond the properties' fence line and their locations were estimated using aerial photography (Google Earth Pro 2023). The species, number of trunks, DBH, height, canopy spread in eight cardinal directions, general health condition, and any relevant notes (e.g., structural defects, heath issues, if the tree was surveyed from beyond a fence line) were recorded for each tree. DBH measurements were taken with a Forester's diameter tape and an aggregate DBH was calculated for trees with multiple trunks using the following formula: $Aggregate\ DBH = \sqrt{(DBH1^2)+(DBH2^2)+(DBH3^2)}$. Tree height and canopy spread were visually estimated in the field with the assistance of a hypsometer. The health condition of each tree was evaluated by using a basic visual inspection method, and the arborist assigned one of the following general condition ratings to each tree:

- **Good:** Overall good tree vigor, healthy foliage and cambium with no significant defects (e.g., physical abnormality that indicates poor tree health such as exfoliating bark, epicormic growth, and fire scars) or pest infestations. The location is optimal for the tree, and the tree is expected to survive long term.
- **Fair:** Overall moderate tree vigor, moderately healthy foliage and cambium with no serious defects or pest infestations. The tree's location may not be optimal for that species, but further decline is not anticipated.
- **Poor:** Overall poor tree vigor, declining foliage and cambium health due to abiotic and/or biotic factors. Notable defects or pest infestations may be present. Typically, poor vigor results when a tree is outcompeted by other plants, or the tree is in the wrong location.
- **Dead:** The tree is dead or very close to death and will not recover.

To determine whether any trees within the Project site meet the definition of protected, Rincon's cultural resources specialists were consulted to determine if any trees or structures within the Project site were listed as historic on the local historic register.

2.1 Impact Assessment Methodology

The Project's site plan includes permanent and temporary construction impact footprints. Each surveyed tree's trunk, structural root radius (SRR), and canopy dripline were mapped on this site plan using ArcGIS (Geographic Information System). The SRR is the area around a tree in which the roots that physically hold the tree upright are likely to be found and the dripline refers to the area located directly beneath the outer extent of a tree's canopy. The SRR was calculated using the Kim Coder formula: *SRR (in feet) = 0.5([Trunk DBH inches][0.9])* (2010) and field measurements of the canopy extent in eight cardinal directions were used to map each tree's dripline. For each of the mapped features of the trees (SRR and dripline), ArcGIS was used to calculate the percentage by which the construction footprint encroached within them. Based on the percentages of encroachment, tree impacts were categorized into Avoided, Minor, Severe, or Remove:

- **Avoided:** No encroachment into the SRR or dripline.
- **Minor Impact:** Trees in the minor impact category generally possessed minor to moderate impacts (i.e., 0 – 30 percent) within the dripline and trees in this category generally lacked impacts to the SRR. The post-construction health effects for trees in this category are expected to be none to minor, and temporary. Trees in this category are not expected to be structurally destabilized.
- **Severe Impact:** Trees in the severe impact category generally possessed relatively larger impacts to the dripline (i.e., greater than 30 percent) as well as potential impacts to the SRR. The post-construction health effects for trees in this category are expected to be moderate to severe and could be temporary or permanent. Health effects could include branch dieback, health decline, decay, and possibly death. Trees in this category may be at increased risk of failure during atypical weather events that include high winds and saturated soil.
- **Substantial:** Trees in the substantial impact category generally had trunks or the majority of their SRR located within or immediately adjacent to the construction footprint. Removal is required for all trees in this impact category.

3 Results

3.1 Tree Survey Results

Five species of a total of 109 mature or protected trees were documented within the Project Study Area. The highest density of mature or protected trees are located surrounding the inside perimeter of the CalPeak EEPP (100 trees). The second highest density of trees are located along the driveway leading into the CalPeak EEPP (8 trees) and one tree was located within the western undeveloped portion of the Project site. Most of the trees surveyed were in fair health, with no structural abnormalities or hazardous conditions. No trees or structures on the property are listed in the local historic register. Table 2 Table 1provides the total number of each species surveyed along with the species' origin.

Table 2 Trees Documented by Species within the Project Study Area

Tree Species	Origin	Count
Aleppo pine (*Pinus halepensis*)	Introduced	2
Canary island pine (*Pinus canariensis*)	Introduced	101
Coast live oak (*Quercus agrifolia*)	Native	1
Melalecua (*Melaleuca quinquenervia*)	Introduced	4
Red willow (*Salix laevigata*)	Native	1
Total		109

All attribute data collected for the 109 trees is provided in a table in Appendix A, including tree identification number, species, protection status, health condition, number of trunks, DBH(s), aggregate DBH, SRR, height, canopy spread (in eight cardinal directions), and any relevant notes. Figure 3 depicts each mature and/or protected tree within the Project study area overlayed on the Project's site plan. Photographs of each surveyed tree are provided in Appendix B.

Figure 3 Tree Location Map

3.2 Impact Assessment Results

Based on the location of the construction footprint, 73 trees will have no impacts (Avoided), 12 trees will have Minor Impacts, seven trees will have Severe Impacts, and 17 trees will have Substantial Impacts. Table 3 lists each tree with impacts anticipated by identification number and includes its species, protection status, aggregate DBH, anticipated impact severity, if removal is required, and the proposed or potential impact description. Figure 4 depicts the anticipated impacts to the surveyed trees and displays the location of each tree's trunk, SRR, and dripline overlayed on top of the Project's site plans.

Table 3 Tree Impact Summary

Tree Number	Species	Aggregate DBH (in)	Protection Class	Anticipated Impact Severity	Removal Required?	Proposed or Potential Impact Description
1	Melaleuca	11	Mature	Substantial	Yes	Retaining wall installation (EEPP Property)
2	Melaleuca	17	Mature	Substantial	Yes	
3	Melaleuca	13	Mature	Substantial	Yes	
4	Coast live oak	25	Protected	Substantial	Yes	
5	Melaleuca	8	Mature	Substantial	Yes	
6	Canary island pine	11	Mature	Severe	No	Western berm screen trees (EEPP Property)
7	Canary island pine	16	Mature	Minor	No	
8	Canary island pine	16	Mature	Severe	No	
9	Canary island pine	14	Mature	Minor	No	
27	Canary island pine	16	Mature	Severe	No	
43	Canary island pine	14	Mature	Severe	No	
44	Canary island pine	12	Mature	Substantial	Yes	
45	Canary island pine	12	Mature	Substantial	Yes	
46	Canary island pine	10	Mature	Substantial	Yes	
48	Canary island pine	12	Mature	Minor	No	
49	Canary island pine	14	Mature	Substantial	Yes	
50	Canary island pine	10	Mature	Minor	No	
51	Canary island pine	9	Mature	Minor	No	
52	Canary island pine	14	Mature	Substantial	Yes	
54	Canary island pine	11	Mature	Substantial	Yes	
55	Canary island pine	11	Mature	Substantial	Yes	
56	Canary island pine	13	Mature	Minor	No	
58	Canary island pine	11	Mature	Severe	No	
59	Canary island pine	11	Mature	Substantial	Yes	
60	Canary island pine	15	Mature	Substantial	Yes	
61	Canary island pine	14	Mature	Minor	No	
62	Canary island pine	8	Mature	Severe	No	
63	Canary island pine	13	Mature	Minor	No	

65	Canary island pine	11	Mature	Minor	No	
68	Canary island pine	12	Mature	Minor	No	
27	Canary island pine	16	Mature	Severe	No	Limits of disturbance associated with the 13.8 kv gen-tie line installation (EEPP Property)
64	Canary island pine	13	Mature	Minor	No	
66	Canary island pine	11	Mature	Minor	No	
106	Canary island pine	10	Mature	Substantial	Yes	Retaining wall installation (SDG&E Palomar Property)
107	Canary island pine	10	Mature	Substantial	Yes	
108	Canary island pine	8	Mature	Substantial	Yes	

Figure 4a Tree Impact Figure (1/2)

Figure 4b Tree Impact Figure (2/2)

4 Tree Protection Measures

The following tree protection measures shall be implemented, as needed, for all mature and protected trees that have a portion of their dripline within the limits of disturbance that will not be removed (i.e., trees with minor and severe impacts; Table 3).

1. A protective fence located at least six feet outside of the dripline of the tree shall be installed (i.e., a tree protection zone [TPZ]). Fencing shall be at least five feet high, highly visible, staked to prevent collapse, and include signs placed in 15-foot intervals that identify the protection area. Protective fencing may not be removed until construction is complete.
2. Construction activities conducted within the TPZ must be done with hand tools to the maximum extent feasible. If the use of hand tools is infeasible, work may be accomplished with mechanical equipment. If equipment tires or tracks must enter the TPZ, one-inch-thick plywood or steel plates shall be placed down to minimize soil compaction. All work conducted with mechanized equipment within the TPZ shall be overseen by a certified arborist.
3. A certified arborist shall direct and oversee any grading, trenching, or root pruning within the SRR.
4. All tree pruning shall be done in accordance with the American National Standards Institute A300 for tree pruning and safety. Pruning should never exceed 25 percent of the overall canopy and all cuts shall be made at the lateral branch collar.
5. Equipment or materials storage shall not occur within the TRZ.
6. Appropriate best management practices (BMPs) shall be implemented for the handling and storage of fuel, oil, and hazardous waste within the limits of construction.
7. Grading shall be designed to avoid ponding and ensure proper drainage within the dripline of mature and protected trees.
8. Any roots of one inch in diameter or greater encountered during construction must be cleanly cut.

Mature and protected trees with substantial impacts anticipated and any mature or protected tree that receives unanticipated impacts that are likely to result in mortality over time shall be mitigated for as described in Section 5 below.

5 Tree Replacement Requirements

The Project's site plan indicates that 16 mature trees and one protected tree would need to be removed to accommodate the necessary space to construct the Project. Pursuant to the Grading Ordinance, removal of any mature tree shall be replaced at a 1:1 ratio and the removal of any protected tree shall be mitigated at a 2:1 ratio. Therefore, a total of 18 replacement trees would be required. Replacement trees of the same species are recommended along with replanting on-site. The minimum spacing of the replacement trees shall be 20 feet on-center for coast live oaks and 10 feet on-center for all other species and their locations shall be determined by the properties landscape contractor. Table 4 lists each removal tree by identification number and includes its species, aggregate DBH, protection class, the required mitigation ratio for replacement, and the required amount of replacement trees. Replacement with the use of 1 or 5-gallon containers is recommended to ensure a higher chance of establishment success and due to the absence of nursery container stock that matches the removal trees calipers.

Table 4 Tree Replacement Summary

Tree ID	Species	Aggregate DBH (in)	Protection Class	Mitigation Ratio	Required Replacement Trees
1[1]	Melaleuca	11	Mature tree	1:1	1
2[1]	Melaleuca	17	Mature tree		1
3[1]	Melaleuca	13	Mature tree		1
4[1]	Coast live oak	25	Protected tree	2:1	2
5[1]	Melaleuca	8	Mature tree	1:1	1
44[2]	Canary island pine	12	Mature tree		1
45[2]	Canary island pine	12	Mature tree		1
46[2]	Canary island pine	10	Mature tree		1
49[2]	Canary island pine	14	Mature tree		1
52[2]	Canary island pine	14	Mature tree		1
54[2]	Canary island pine	11	Mature tree		1
55[2]	Canary island pine	11	Mature tree		1
59[2]	Canary island pine	11	Mature tree		1
60[2]	Canary island pine	12	Mature tree		1
106[3]	Canary island pine	10	Mature tree		1

107[3]	Canary island pine	10	Mature tree		1
108[3]	Canary island pine	8	Mature tree		1
Total					**17**

[1] Location is south of EEPP entrance driveway.
[2] Location is on the western EEPP berm.
[3] Location is within approximately 20-foot-wide temporary wall construction work area on SDG&E Palomar Substation property to south of EEPP.

If Severe or Substantial Impacts unexpectedly occur to additional mature or protected trees that are likely to result in mortality overtime, additional replacement trees would be required. Replacement trees shall come from at minimum 1-gallon containers, come from locally sourced stock, and be maintained for at least three years. Planting of the replacement trees shall abide by the following guidelines:

- Installation of replacement trees shall be completed in the fall to maximize the potential for successful establishment.
- Planting shall be supervised by a person with expertise in the planting, care, and maintenance of trees. BMPs such as excavating only the soil needed for planting, retaining and reusing the native soil on site, ensuring the root ball is placed at the correct grade, and inspecting the trees to ensure they are healthy prior to installation should be used.
- Weeds shall be removed from the planting locations and within three feet of the locations prior to planting and maintained throughout the monitoring period.
- Decomposable Gopher baskets shall be placed in the planting holes to prevent root predation.
- Each replacement tree shall be protected with 48-inch-high deer fencing and encircle each tree by a 4-foot radius. The galvanized wire fence will be 11 gage wire at the top and bottom and have a 14.5 gage fill. The fencing will be secured at four locations along the circumference with 72-inch metal t-posts driven 18 inches below grade (if planted in a natural area).
- Support stakes shall be installed to prevent trees from falling over.
- Soil amendments (e.g., fertilizer and compost) and mulch shall be applied during planting and maintained throughout the monitoring period, as applicable. No less than a 3 inch layer of mulch should be applied with care to not allow the mulch to contact the tree trunk.
- A mycorrhizae inoculant should be amended to the soil during planting for all replacement oak trees.
- A temporary drip irrigation system will be installed to water the trees for no less than three years. Irrigation needs shall be adjusted in accordance with the precipitation received during each rainy season. A small berm ring approximately two to three feet surrounding each trunk shall be installed to assist in moisture retention.
- Trees shall be pruned back only to remove broken limbs or dead wood. It may be necessary to conduct corrective pruning to help train or balance the individual tree crowns. Otherwise, pruning should not be performed. ISA and approved ANSI pruning specifications should be followed for all pruning activities. Tree pruning shall occur from mid-September to mid-February to prevent stress to the tree and to avoid the nesting bird season (approximately mid-February to mid-September). In no case shall more than 20% of an individual tree crown be trimmed or pruned.

If onsite replanting is proven to not be possible, planting off-site is another feasible alternative along with the purchasing of credit into an off-site mitigation bank such as the Daley Ranch Conservation Bank in the City or the donation of funds into a local agency such as the Resource Conservation District of Greater San Diego County that plants and maintains native trees. The purchased mitigation credit or donated funds should be at the same cost as the estimated total cost of replacement for the removal trees (at the same caliper and species plus installation and maintenance).

6 References

City of Escondido. 2001. Municipal Regulations; Grading Ordinance. Available at: https://www.escondido.org/Data/Sites/1/media/pdfs/Utilities/GradingErosionControlOrdinance.pdf. Accessed January 2024.

Coder, K. 2010. *Tree Conservation During Site Development*. University of Georgia.

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Appendix A

Tree Inventory Table

Tree ID	Species	Protection Class	Health Condition	Number of Trunks	DBH (in)	Aggregate DBH (in)	Structural Root Radius	Height (ft)	Canopy Spread in Eight Cardinal Directions								Notes
									N	NE	E	SE	S	SW	W	NW	
1	Melaleuca	Mature	Good	1	11	11	5	30	10	10	10	10	10	10	5	10	
2	Melaleuca	Mature	Good	3	13, 10, 6	17	8	35	15	5	20	20	10	10	15	15	
3	Melaleuca	Mature	Good	4	9, 6, 6, 3	13	6	27	10	10	10	10	10	10	10	10	
4	Coast live oak	Protected	Good	3	16, 16, 11	25	11	41	20	20	20	20	20	20	25	25	
5	Melaleuca	Mature	Good	2	6, 5	8	4	23	5	5	5	5	5	5	5	5	
6	Canary island pine	Mature	Fair	1	11	11	5	35	5	5	10	10	10	10	5	5	
7	Canary island pine	Mature	Fair	1	16	16	7	38	5	10	10	10	5	20	15	5	
8	Canary island pine	Mature	Fair	2	13, 9	16	7	40	10	10	10	10	10	15	15	15	
9	Canary island pine	Mature	Fair	1	14	14	6	40	10	10	10	10	10	10	10	10	
10	Canary island pine	Mature	Fair	1	9	9	4	38	5	5	5	5	5	5	5	5	
11	Canary island pine	Mature	Fair	1	13	13	6	37	5	5	10	0	10	5	5	5	
12	Canary island pine	Mature	Fair	1	13	13	6	58	5	5	10	10	5	5	5	5	
13	Canary island pine	Mature	Fair	1	9	9	4	51	5	5	5	5	5	5	5	5	
14	Canary island pine	Mature	Fair	1	12	12	5	56	5	5	10	10	5	10	10	5	
15	Canary island pine	Mature	Fair	1	10	10	5	53	5	5	10	10	5	5	5	5	
16	Canary island pine	Mature	Fair	1	11	11	5	49	10	5	10	10	10	10	10	10	
17	Canary island pine	Mature	Fair	1	18	18	8	59	10	10	15	15	10	5	10	10	
18	Canary island pine	Mature	Fair	1	12	12	5	46	10	10	10	10	10	10	10	10	
19	Canary island pine	Mature	Fair	1	11	11	5	44	10	15	10	10	10	10	10	10	
20	Canary island pine	Mature	Fair	1	8	8	4	21	5	5	5	5	5	5	5	5	
21	Canary island pine	Mature	Fair	1	10	10	5	41	5	5	5	5	5	5	5	5	
22	Canary island pine	Mature	Fair	1	14	14	6	46	5	10	10	10	10	10	10	5	
23	Canary island pine	Mature	Fair	1	13	13	6	53	10	10	10	15	10	10	10	10	
24	Canary island pine	Mature	Fair	1	12	12	5	56	15	10	15	15	10	10	10	10	
25	Canary island pine	Mature	Fair	1	10	10	5	45	5	5	5	5	5	5	5	5	
26	Canary island pine	Mature	Fair	1	12	12	5	41	15	15	15	15	15	15	15	15	
27	Canary island pine	Mature	Fair	1	16	16	7	48	15	10	15	15	15	15	15	15	
28	Canary island pine	Mature	Fair	1	16	16	7	49	15	15	15	15	15	15	15	15	
29	Canary island pine	Mature	Fair	1	11	11	5	53	10	10	10	10	10	10	10	10	
30	Canary island pine	Mature	Fair	1	10	10	5	36	10	15	10	10	10	10	10	10	
31	Canary island pine	Mature	Fair	1	13	13	6	34	10	10	15	15	15	15	10	10	
32	Canary island pine	Mature	Fair	1	12	12	5	38	10	10	15	15	15	15	10	10	
33	Canary island pine	Mature	Fair	1	14	14	6	51	5	5	5	5	5	5	5	5	
34	Canary island pine	Mature	Fair	1	10	10	5	34	10	10	10	10	10	10	10	10	
35	Canary island pine	Mature	Fair	1	15	15	7	50	15	15	15	15	15	15	15	15	
36	Canary island pine	Mature	Fair	1	17	17	8	47	15	15	15	15	15	15	15	15	
37	Canary island pine	Mature	Fair	1	8	8	4	47	10	10	5	5	10	5	5	10	
38	Canary island pine	Mature	Fair	1	12	12	5	51	10	10	10	10	15	15	10	10	
39	Canary island pine	Mature	Fair	1	17	17	8	55	10	10	15	15	15	10	10	10	

Tree ID	Species	Protection Class	Health Condition	Number of Trunks	DBH (in)	Aggregate DBH (in)	Structural Root Radius	Height (ft)	Canopy Spread in Eight Cardinal Directions								Notes
									N	NE	E	SE	S	SW	W	NW	
40	Canary island pine	Mature	Fair	1	8	8	4	39	5	5	5	5	5	5	5	5	
41	Canary island pine	Mature	Fair	1	14	14	6	44	10	10	10	15	15	15	15	10	
42	Canary island pine	Mature	Fair	1	15	15	7	55	5	10	10	10	15	15	10	10	
43	Canary island pine	Mature	Fair	1	14	14	6	49	10	10	10	10	10	10	10	10	
44	Canary island pine	Mature	Fair	1	12	12	5	35	10	10	10	10	10	10	10	10	
45	Canary island pine	Mature	Fair	1	12	12	5	45	10	10	10	10	10	10	10	10	
46	Canary island pine	Mature	Fair	1	10	10	5	38	5	5	5	5	5	5	5	5	
47	Canary island pine	Mature	Fair	1	9	9	4	45	5	10	5	5	10	5	5	5	
48	Canary island pine	Mature	Fair	1	12	12	5	46	10	10	10	10	10	10	10	10	
49	Canary island pine	Mature	Fair	1	14	14	6	52	10	10	10	10	10	15	15	15	
50	Canary island pine	Mature	Fair	1	10	10	5	52	5	5	5	5	5	5	5	5	
51	Canary island pine	Mature	Fair	1	9	9	4	50	5	5	5	5	5	5	5	5	
52	Canary island pine	Mature	Fair	1	14	14	6	51	15	10	10	10	15	15	15	15	
53	Canary island pine	Mature	Fair	1	10	10	5	48	5	5	5	5	5	5	5	5	
54	Canary island pine	Mature	Fair	1	11	11	5	42	10	5	10	5	10	5	15	10	
55	Canary island pine	Mature	Fair	1	11	11	5	40	10	5	5	10	10	10	15	15	
56	Canary island pine	Mature	Fair	1	13	13	6	49	15	10	15	10	10	10	15	15	
57	Canary island pine	Mature	Fair	1	14	14	6	47	10	10	10	10	10	10	10	10	
58	Canary island pine	Mature	Fair	1	11	11	5	52	10	10	10	10	10	10	10	10	
59	Canary island pine	Mature	Fair	1	11	11	5	36	5	5	5	5	5	10	10	5	
60	Canary island pine	Mature	Fair	1	15	15	7	31	10	10	10	10	10	10	15	15	
61	Canary island pine	Mature	Fair	1	14	14	6	40	10	10	10	15	15	10	10	10	
62	Canary island pine	Mature	Fair	1	8	8	4	33	5	5	5	5	5	5	5	5	
63	Canary island pine	Mature	Fair	1	13	13	6	33	10	10	10	10	10	10	10	10	
64	Canary island pine	Mature	Fair	1	13	13	6	41	10	10	10	10	10	10	10	10	
65	Canary island pine	Mature	Fair	1	11	11	5	40	10	10	10	10	10	10	10	10	
66	Canary island pine	Mature	Fair	1	11	11	5	40	10	5	10	10	10	10	10	10	
67	Canary island pine	Mature	Fair	1	13	13	6	33	5	10	10	10	10	10	10	10	
68	Canary island pine	Mature	Fair	1	12	12	5	46	15	10	10	5	5	10	15	15	
69	Canary island pine	Mature	Fair	1	10	10	5	49	10	5	5	5	5	5	5	5	
70	Canary island pine	Mature	Fair	1	8	8	4	25	5	5	5	5	5	5	5	5	Previous trunk destabilization, leaning on fence, corrected lean.
71	Canary island pine	Mature	Fair	1	8	8	4	35	5	5	5	5	5	5	5	5	
72	Canary island pine	Mature	Fair	1	11	11	5	37	10	10	10	10	10	10	10	10	
73	Canary island pine	Mature	Fair	1	12	12	5	33	10	10	10	10	10	10	10	10	
74	Canary island pine	Mature	Fair	1	12	12	5	47	15	10	10	10	10	10	10	10	
75	Canary island pine	Mature	Fair	1	13	13	6	35	15	15	10	10	10	10	10	10	
76	Canary island pine	Mature	Fair	1	16	16	7	45	15	10	15	10	15	10	10	15	
77	Canary island pine	Mature	Fair	1	8	8	4	25	5	5	5	5	5	5	5	5	
78	Canary island pine	Mature	Fair	1	16	16	7	42	15	15	15	15	15	15	15	15	

Tree ID	Species	Protection Class	Health Condition	Number of Trunks	DBH (in)	Aggregate DBH (in)	Structural Root Radius	Height (ft)	Canopy Spread in Eight Cardinal Directions								Notes
									N	NE	E	SE	S	SW	W	NW	
79	Canary island pine	Mature	Fair	1	9	9	4	45	5	5	5	5	5	5	5	5	
80	Canary island pine	Mature	Fair	1	11	11	5	40	5	5	5	5	5	5	5	5	
81	Canary island pine	Mature	Fair	1	14	14	6	45	10	10	10	10	10	10	10	10	
82	Canary island pine	Mature	Fair	1	13	13	6	49	10	10	10	10	10	10	10	10	
83	Canary island pine	Mature	Fair	1	20	20	9	65	15	15	20	15	15	15	15	15	
84	Canary island pine	Mature	Fair	1	12	12	5	33	10	10	10	10	10	10	10	10	
85	Canary island pine	Mature	Fair	1	11	11	5	46	10	10	10	10	10	10	10	10	
86	Canary island pine	Mature	Fair	1	13	13	6	33	5	5	5	5	10	10	10	10	
87	Canary island pine	Mature	Poor	1	8	8	4	25	1	1	5	20	25	15	5	1	Tree has destabilized and is being held up by another tree. Likely to fall onto fence. Removal recommended.
88	Canary island pine	Mature	Fair	1	11	11	5	40	10	10	10	10	10	10	10	10	
89	Canary island pine	Mature	Fair	1	12	12	5	49	15	15	10	10	10	5	10	10	
90	Aleppo pine	Mature	Good	1	12	12	5	34	20	20	10	10	10	10	10	15	
91	Canary island pine	Mature	Fair	1	13	13	6	57	15	15	15	15	15	15	15	15	
92	Canary island pine	Mature	Fair	1	10	10	5	47	10	10	10	10	10	10	10	10	
93	Canary island pine	Mature	Fair	1	12	12	5	39	15	15	15	15	15	15	15	15	
94	Canary island pine	Mature	Fair	1	10	10	5	47	5	5	5	5	5	5	5	5	
95	Canary island pine	Mature	Fair	1	19	19	9	57	15	15	15	15	15	15	15	15	
96	Canary island pine	Mature	Fair	1	11	11	5	61	5	5	5	5	5	5	5	5	
97	Canary island pine	Mature	Fair	1	14	14	6	53	15	15	15	15	15	15	15	15	
98	Canary island pine	Mature	Fair	1	10	10	5	48	10	10	10	10	10	10	10	10	
99	Canary island pine	Mature	Fair	1	13	13	6	40	10	10	10	10	10	10	10	10	
100	Canary island pine	Mature	Fair	1	11	11	5	56	10	10	10	10	10	10	10	10	
101	Canary island pine	Mature	Fair	1	10	10	5	36	10	10	10	10	10	10	10	10	
102	Canary island pine	Mature	Fair	1	12	12	5	40	10	10	10	10	10	10	10	10	
103	Canary island pine	Mature	Fair	1	8	8	4	52	10	10	10	10	10	10	10	10	
104	Canary island pine	Mature	Fair	1	13	13	6	50	10	10	10	10	10	10	10	10	
105	Aleppo pine	Mature	Dead	1	22	22	20	40	20	20	20	20	20	20	20	20	Tree could fail and damage adjacent structure downhill to the north. Removal recommended.
106	Canary island pine	Mature	Good	1	10	10	5	35	10	10	10	10	10	10	10	10	Surveyed from beyond the fence.
107	Canary island pine	Mature	Good	1	10	10	5	15	7	7	7	7	7	7	7	7	Surveyed from beyond the fence.
108	Canary island pine	Mature	Good	1	8	8	4	25	7	7	7	7	7	7	7	7	Surveyed from beyond the fence.
109	Red willow	Mature	Good	2	8, 7	11	5	25	10	10	10	10	10	10	10	10	

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Appendix B

Photographs

Tree #1

Tree #2

Tree #3

Tree #4

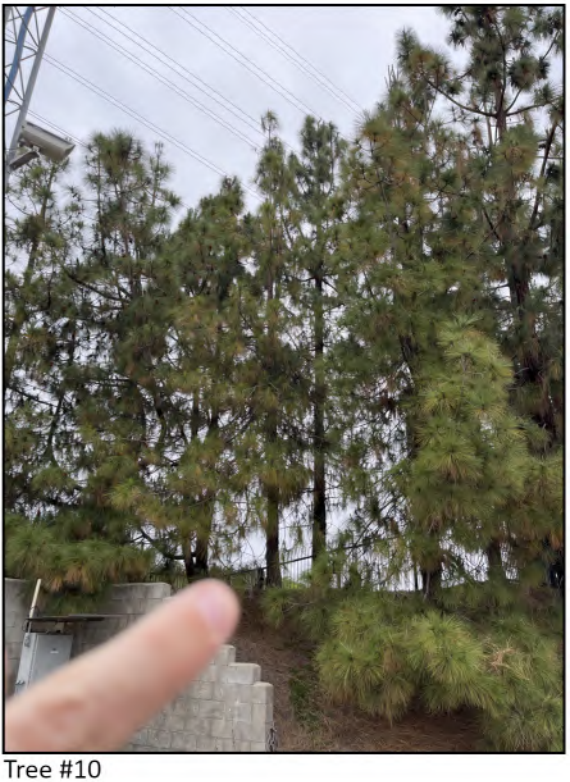
Tree #5

Tree #6

Tree #7

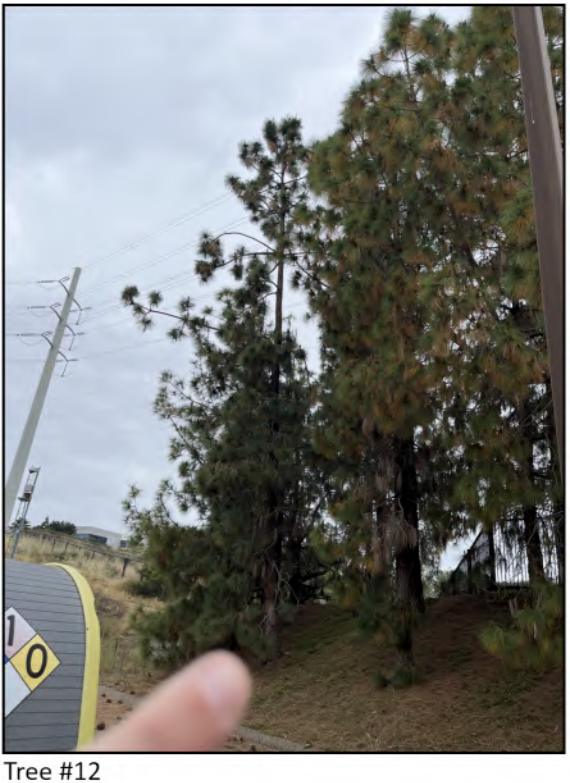
Tree #8

Tree #9



Tree #10

Tree #11



Tree #12

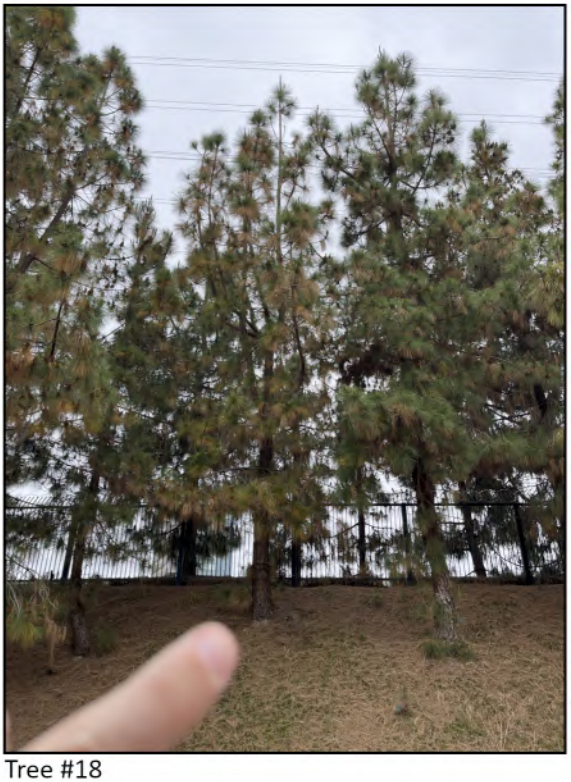
Tree #13

Tree #14

Tree #15

Tree #16

Tree #17



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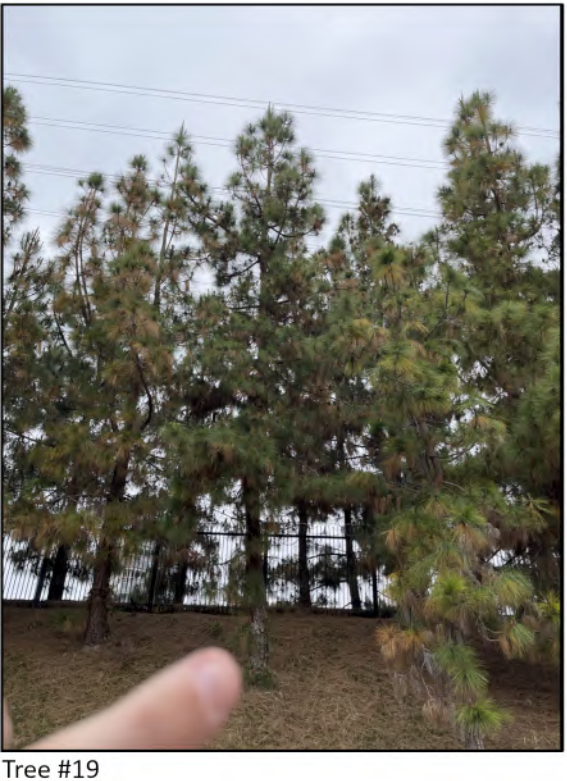

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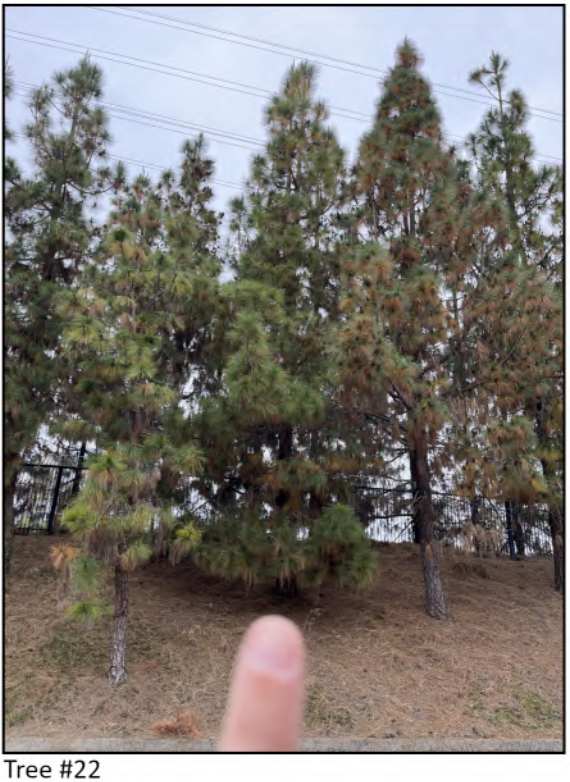
Tree #20

Tree #21



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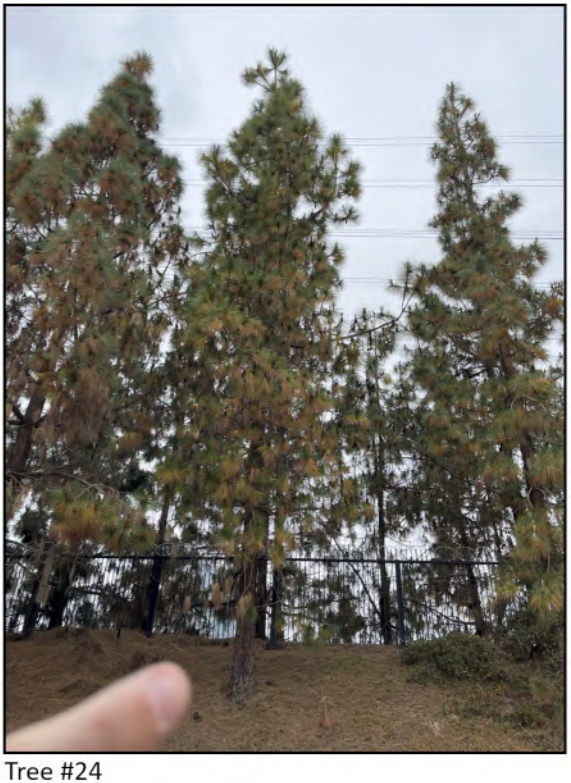
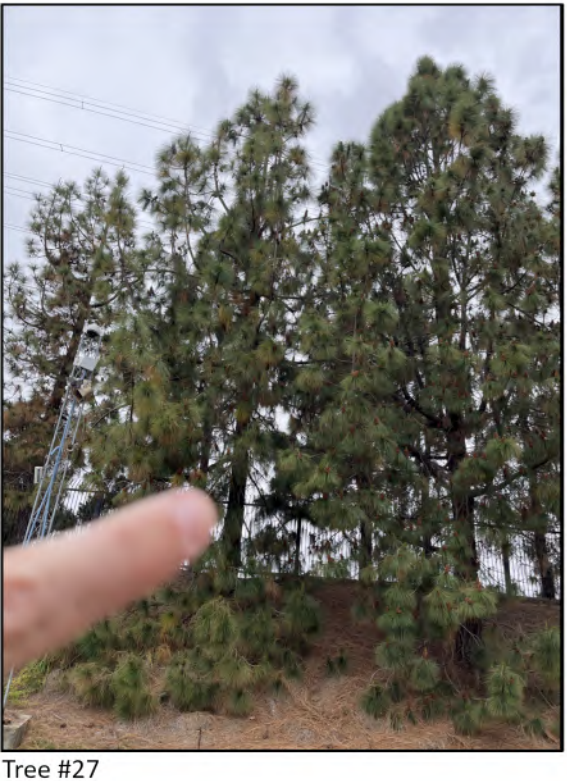
Tree #23



Tree #24

Tree #25

Tree #26



Tree #27

Tree #28

Tree #29

Tree #30

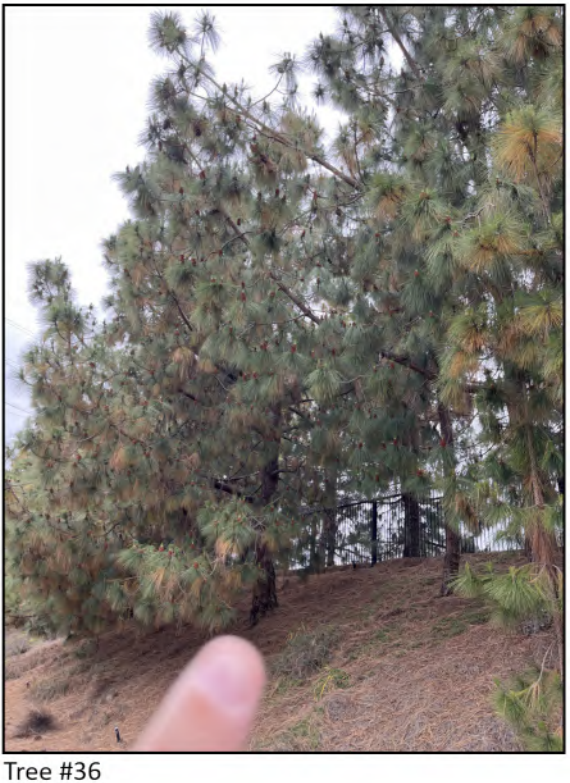
Tree #31

Tree #32

Tree #33

Tree #34

Tree #35



Tree #36

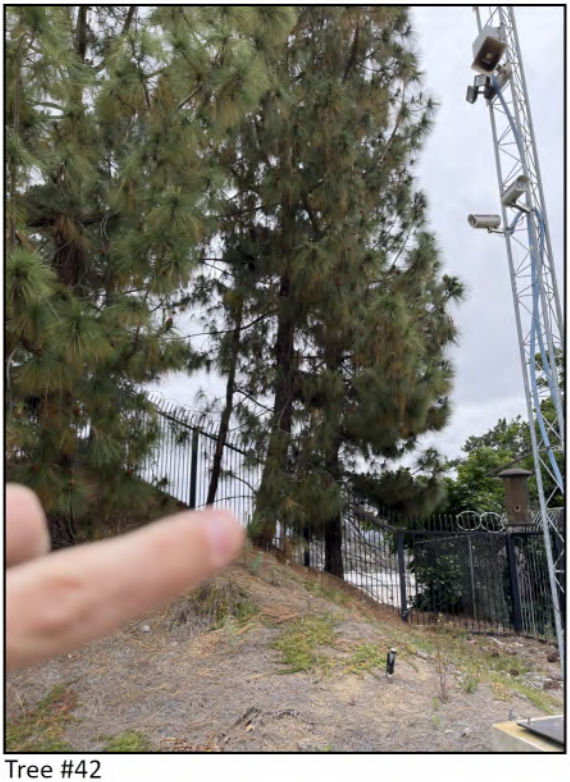
Tree #37

Tree #38

Tree #39

Tree #40

Tree #41



Tree #42

Tree #43

Tree #44

Tree #45

Tree #46

Tree #47

Tree #48

Tree #49

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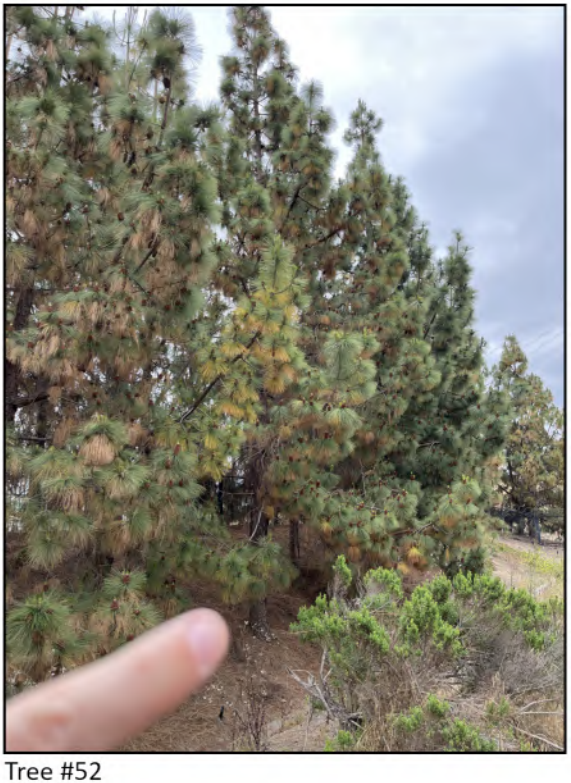

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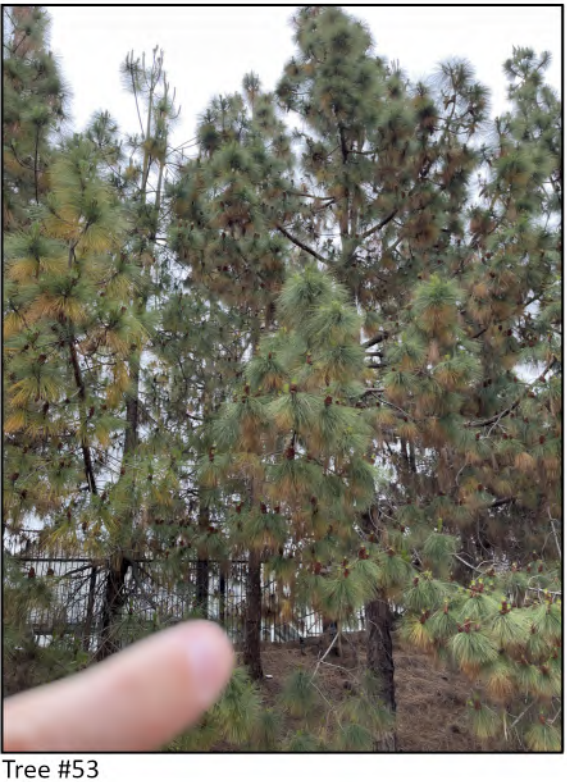

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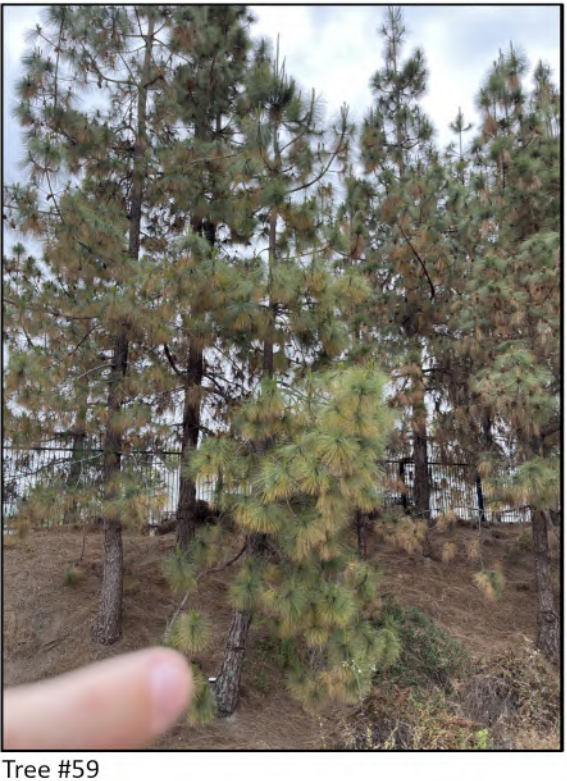

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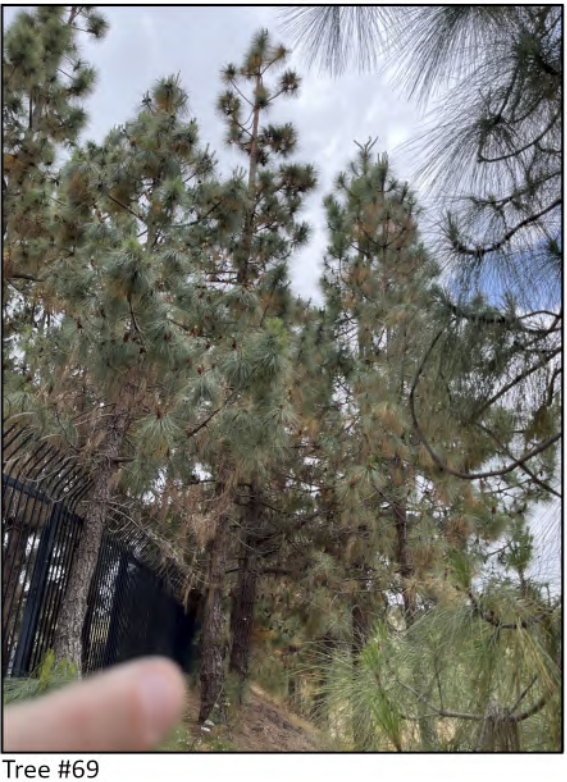

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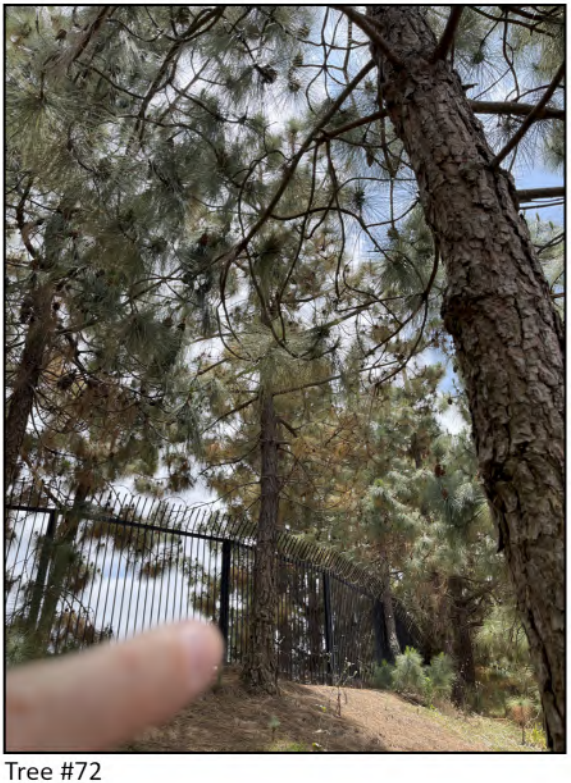

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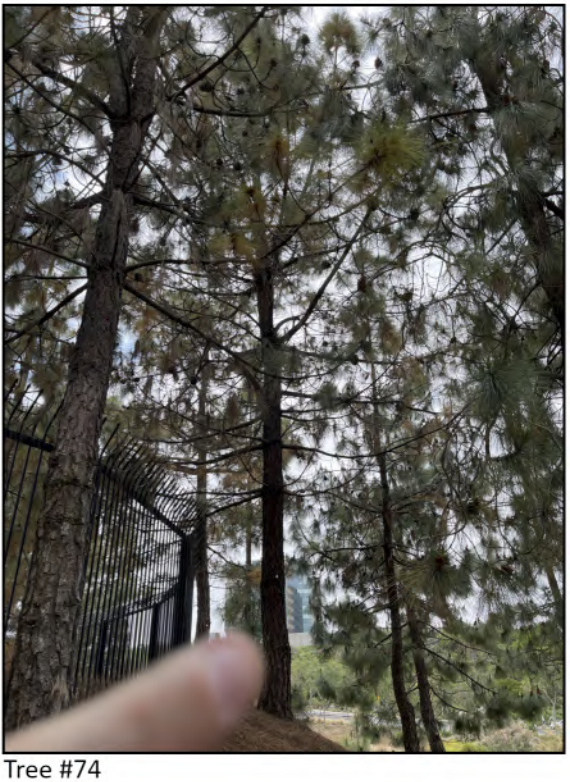

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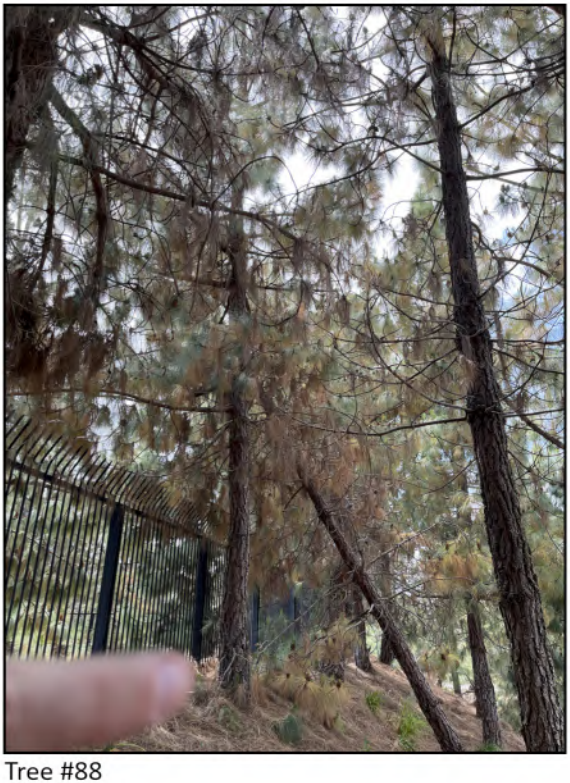

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APPENDIX E

CULTURAL RESOURCES TECHNICAL REPORT

(Public Version)

Enterprise Battery Energy Storage System (BESS) Project

Cultural Resources Technical Report
(Public Version)

prepared for

Enterprise BESS LLC
201 Enterprise Street
Escondido, California 92029

prepared by

Rincon Consultants, Inc.
8825 Aero Drive, Suite 120
San Diego, California 92123

March 2024

RINCON CONSULTANTS, INC.
Environmental Scientists | Planners | Engineers
rinconconsultants.com

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Rincon Consultants, Inc.

2024. *Cultural Resources Technical Report for the Enterprise Battery Energy Storage Systems Project.* Rincon Consultants, Inc., Project No. 22-13968. Report on file at the South Coastal Information Center, San Diego State University, California.

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Executive Summary

Rincon Consultants, Inc. (Rincon) was retained to conduct a cultural resources study and prepare a Cultural Resources Technical Report for the Enterprise Battery Energy Storage System (Enterprise BESS) Project (Project) in Escondido, County of San Diego, California on behalf of Enterprise BESS LLC. Rincon understands that the Project is subject to approval by the California Energy Commission (CEC) and a cultural resources study is needed to support the Post-Certification Amendment for the Project, pursuant to Title 20, California Code of Regulations (CCR), Section 1769 (a)(1) *Post Certification Petition for Changes in Project Design, Operation or Performance and Amendments to the Commission Decision*.

Enterprise BESS LLC plans to construct, own and operate a nominal 52 megawatt (MW) Battery Energy Storage System (BESS) project (Project). The Project is located at 201 Enterprise Street, Escondido, California, on parcel APN 232-410-45-00. The Project will be co-located with the existing CalPeak Power–Enterprise Emergency Peaker Plant (EEPP) that was licensed by the California Energy Commission (CEC) in 2001 (CEC Docket No. 01-EP-10).

The following analysis includes a general description of the proposed site and related facilities, maps of the proposed Project area and related facilities, cultural resources records search, archival research, Sacred Lands File (SLF) search, field survey, desktop historical built environment analysis, and recommendations. Although the CEC's regulatory nexus is exempt from compliance with the California Environmental Quality Act, this report refers to California Register of Historical Resources (CRHR) thresholds for assessing significance of cultural resources. No cultural resources were identified within the Project area as a result of this analysis.

This cultural resources study and Cultural Resources Technical Report was completed according to Title 20, CCR Section 1769 (a)(1) and includes discussion and assessment of the proposed Project changes, cultural resources present, and Project compliance with applicable laws, ordinances, regulations, standards. This report also assesses whether the original Conditions of Certification for cultural resources is applicable to the amendment. The original Conditions of Certification for cultural resources (CUL-1) states:

CUL-1 *The Project certified under this emergency process shall not cause any significant impact to any cultural resources. No on-site cultural resource monitoring is required for this Project. In the event of an inadvertent cultural discovery the following mitigation measures must be followed:*

All work within 100-feet of the suspected cultural material must halt and a qualified Cultural Resource Specialist will be contacted immediately to evaluate the significance of the find. The Project Manager, Construction Manager, and the Compliance Project Manager will be notified if the resource is judged to be potentially significant, and the archaeologist may recommend further study.

In the event that suspected human remains are encountered, work must stop immediately within a radius of 100 feet (30 meters) of the discovery, and the San Diego County Coroner's Office will be notified within 24 hours of the find. If the skeletal remains are determined to be prehistoric, the Coroner's Office will contact the Native American Heritage Commission (NAHC) to identify the Most Likely Descendants (MLD). The MLD will be notified and will determine the most appropriate disposition of the remains and any associated artifacts.

The proposed Project changes have a low potential to affect previously undisturbed cultural resources. Therefore, the Conditions of Certification (CUL-1) for the original certification are considered sufficient for the current amendment. Based on consultation with Enterprise BESS LLC, the applicant has committed to incorporating the measures of CUL-1 into the proposed Project in order to protect potentially present archaeological resources and human remains.

1 Introduction

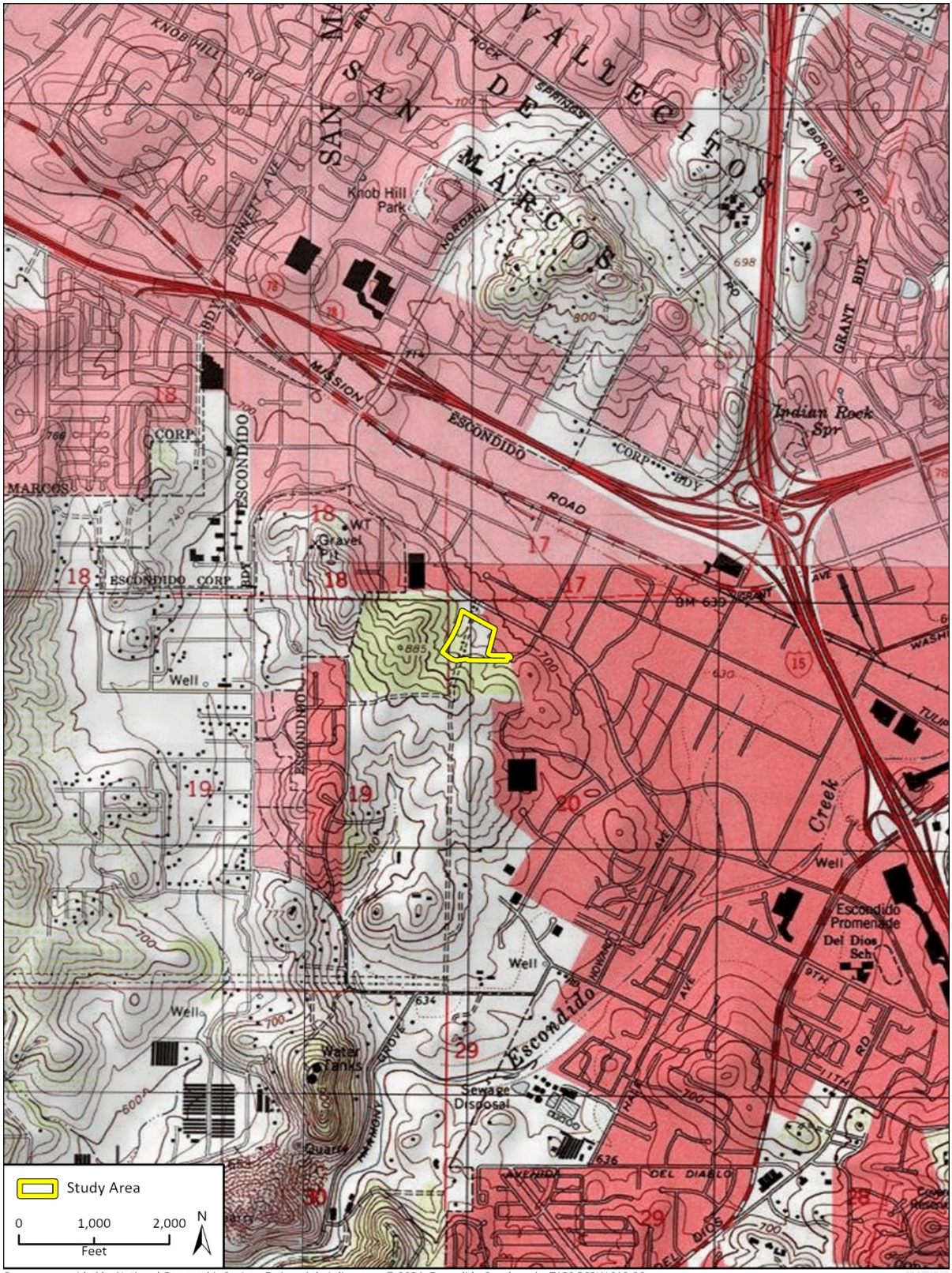
Enterprise BESS LLC retained Rincon Consultants, Inc. (Rincon) to conduct a cultural resources analysis for the Enterprise Battery Energy Storage System (BESS) Project (Project) in Escondido, County of San Diego, California. This analysis was conducted to assist Enterprise BESS LLC in obtaining support for the Post-Certification Amendment for the Project that will be submitted to the California Energy Commission (CEC). This report was prepared to support the assessment of potential impacts to historical resources, unique archaeological resources, and tribal cultural resources as defined by the California Environmental Quality Act (CEQA), but pursuant to Title 20, California Code of Regulations, Section 1769(a)(1) *Post Certification Petition for Changes in Project Design, Operation or Performance and Amendments to the Commission Decision*.

The following analysis includes a general description of the proposed site and related facilities, maps of the proposed Project area and related facilities, cultural resources records search, archival research, Sacred Lands File (SLF) search, field survey, desktop historical built environment analysis, and recommendations.

1.1 Project Location

The proposed Project site is located at 201 Enterprise Street, Escondido, California, on Assessor's Parcel Number (APN) 232-410-45-00, depicted on the *Escondido, California,* United States Geological Survey 7.5-minute topographic quadrangle map, within Township 12 South, Range 02 West, Sections 19 and 20 (Figure 1). The BESS Project will be co-located with the existing CalPeak Power – Enterprise Emergency Peaker Plant (EEPP) and will utilize approximately 1.22 acres within the approximately 2.94-acre EEPP site. The EEPP/BESS Project site is bordered to the north by Auto Art Paint & Body, and beyond to Auto Park Way, to the east and southeast by Enterprise Industrial Park commercial development, to the south by the San Diego Gas and Electric (SDG&E) Escondido Palomar Substation, and to the west by vacant, undeveloped land and associated SDG&E easement, beyond which is Citracado Parkway. The Project is located within a generally urbanized area with mixed commercial use, but is bordered by patches of sage scrub on the undeveloped land to the west. The area analyzed for this study (Study Area, see Figure 2) includes approximately 7.15 acres which includes the EEPP parcel and portions of the southern and western adjacent undeveloped parcels for temporary wall construction work areas, a permanent emergency access road spur connection to the site, and a stormwater pipeline easement adjacent to the western site boundary.

Figure 1 Regional Location Map



Basemap provided by National Geographic Society, Esri, and their licensors © 2024. Escondido Quadrangle. T12S R02W S19-20.
The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

Figure 2 Study Area Map

Imagery provided by Microsoft Bing and its licensors © 2024.

22-13968 BIO Figures
Fig 2 Project Location

1.2 Project Description

Enterprise BESS LLC plans to construct, own and operate a nominal 52 megawatt (MW) BESS located at 201 Enterprise Street, Escondido, California, on parcel APN 232-410-45-00. The Project will be co-located with the existing CalPeak Power–Enterprise Emergency Peaker Plant (EEPP) that was licensed by the California Energy Commission (CEC) in 2001 (CEC Docket No. 01-EP-10).

The proposed BESS Project will support California's current need for additional electrical supply capacity during high peak load demand periods. The proposed BESS Project would utilize approximately 1.22 acres of available open areas within the overall 2.94-acre EEPP parcel, plus approximately 0.62 acre of additional land adjacent to the EEPP parcel. The Project will contain stacked containerized battery systems with internal heating, ventilation and air conditioning (HVAC) and internal fire detection and fire suppression systems in each container, battery management systems (BMS), stacked power conversion systems (PCS) (also called inverters), transformers, and electrical conductors. The Project includes an approximately 400-foot-long underground 13.8 kilovolt (kV) gen-tie line to connect the BESS to the existing EEPP switchyard generation step-up (GSU) transformer. The Project includes construction of an access road spur to southwest portion of the BESS site from an existing San Diego Gas & Electric (SDG&E) access road that connects Citracado Parkway to the existing SDG&E Palomar facility to the south. The Enterprise BESS Project includes the addition of a new offsite stormwater conveyance component consisting of buried pipe adjacent to the western EEPP property on land to be leased by SDG&E (approximately 25 feet wide by 300 feet long with 20 feet of the width on leased SDG&E land and 5 feet on the western boundary of the EEPP parcel). This new stormwater conveyance will be designed to carry stormwater via gravity flow from the southern portion of the EEPP site where the proposed BESS facilities are located to an existing stormwater conveyance which outfalls into an existing detention basin on SDG&E land to the northwest of the EEPP property.

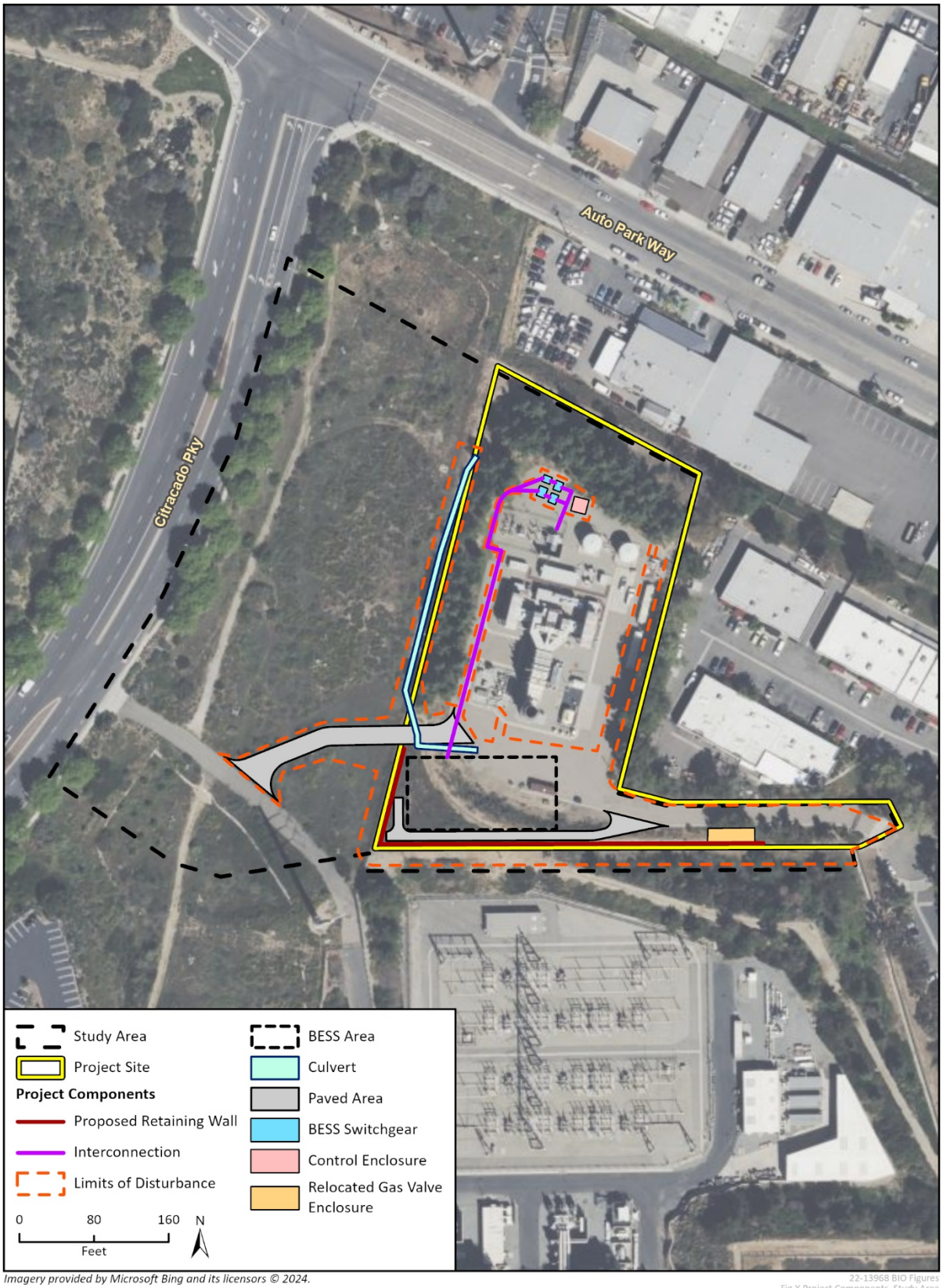
A retaining wall up to approximately 28-feet tall will be constructed along the southern site boundary to stabilize the vertical cut near the property line that is associated with removal of the existing hillside and the needed creation of a level area for the Project. The Project development plan includes the installation of sheet piles along the southern property line to stabilize the cut slope prior to installation of the retaining wall. To do this removal of vegetation, site grading, and excavation of soil and bedrock will be necessary. An approximately 20-foot-wide by 600-foot-long temporary construction work area on the northern portion of the adjacent SDG&E property will be utilized to construct the retaining wall. See a depiction of the various Project components in Figure 3, below.

The Enterprise BESS will be connected to the electrical grid via the existing GSU at the EEPP, which has an existing 69 kV connection to the SDG&E Escondido Substation to the north. The BESS Project will not require any high voltage modifications at the EEPP switchyard or the existing offsite 69 kV line. Operation of the BESS facility will be integrated with the existing EEPP, but the BESS will be charged from the electrical grid and not the EEPP. The BESS and the EEPP may be operated simultaneously in accordance with the market-optimized dispatch instructions received from the California Independent System Operator (CAISO's) Automated Dispatching System (ADS), but the combined output will be control-limited to never exceed the limit of the Generator Interconnection Agreement.

The Enterprise BESS Project will require discretionary permitting involving approval of a Petition for Post-Certification Amendment from the CEC.

The Project's operational life and associated land leases are anticipated to be up to 40 years.

Figure 3 Detailed Project Site Map



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22-13968 BIO Figures
Fig X Project Components_Study Area

1.3 Personnel

Rincon Senior Archaeologist Mark Strother M.A., Registered Professional Archaeologist (RPA), managed this cultural resources study and provided senior oversight. Mark Strother meets the Secretary of the Interior's Professional Qualification Standards for archaeology (National Park Service 1983). Archaeologist Rachel Bilchak, B.A., conducted the archaeological pedestrian survey and authored this report. Rincon Geographic Information Systems Analyst Allysen Valencia, B.A., prepared the figures found in the report. Rincon Cultural Resources Program Manager Breana Campbell-King, M.A., RPA, reviewed this report for quality control and quality assurance.

2 Regulatory Setting

This section includes a discussion of federal, state, and local laws, ordinances, regulations, and standards governing cultural resources, as well as applicable Conditions of Certification and CEC citing guidelines. The CEC has jurisdiction over the proposed Project, therefore the Project should adhere to Title 20, California Code of Regulations (CCR), Section 1769 (a)(1): *Post Certification Petition for Changes in Project Design, Operation or Performance and Amendments to the Commission Decision*.

2.1 Federal Regulations

National Historic Preservation Act

Cultural resources are considered during federal undertakings chiefly under Section 106 (as amended) through one of its implementing regulations, 36 CFR 800 (Protection of Historic Properties), and the National Environmental Policy Act (NEPA). Properties of traditional, religious, and cultural importance to Native Americans are considered under both Section 101 (d)(6)(A) and Section 106 36 CFR 800.3-800.10 of the NHPA (Department of the Interior 2004). Other federal laws include the Archaeological and Historic Preservation Act of 1974, the American Indian Religious Freedom Act of 1978, the Archaeological Resources Protection Act of 1979, and the Native American Graves Protection and Repatriation Act of 1989, among others.

Section 106 (16 United States Code 470f) requires federal agencies to account for the effects of their undertakings on any district, site, building, structure, or object included in or eligible for inclusion in the NRHP and to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings (36 CFR 800.1). Under Section 106, the significance of any adversely affected historic property is assessed and mitigation measures are proposed to reduce any impacts to an acceptable level. Historic properties are those significant cultural resources listed in or eligible for listing in the NRHP per the criteria listed at 36 CFR 60.4.

There is currently no federal regulatory nexus for the Enterprise BESS Project.

2.2 State Regulations

§21.11 A. Exemption from CEQA Documentation Requirements

Certified regulatory programs such as the CEC are exempt from the provisions of CEQA concerning preparation of initial studies, negative declarations, and EIRs contained in CEQA Chapters 3 and 4 (Pub Res C §§21100–21154). The environmental review and public comment procedures required under the CEC's regulatory program are deemed equivalent to review under CEQA. Instead of preparing an environmental review document under CEQA, the CEC follows the environmental review process included in its own regulatory program.

California Environmental Quality Act

Formal findings of importance (for state purposes, eligibility for the California Register of Historic Resources) and Project effects are made by the lead state regulatory agency or, for federal undertakings, in consultation with the federal lead agency, the State Historic Presentation

Officer, and the Advisory Council on Historic Preservation. The administering agency for this authority is the CEC.

A Historical Resource is one listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR) (§21084.1), included in a local register of Historical Resources (§15064.5[a][2]), or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (§15064.5[a][3]). Resources listed in the National Register of Historic Places (NRHP) are automatically listed in the CRHR.

According to CEQA, impacts that adversely alter the significance of a resource listed in or eligible for listing in the CRHR are considered a significant effect. Significant effects or impacts could result from the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired (CEQA Guidelines §15064.5 [b][1]). Material impairment is defined as demolition or alteration in an adverse manner [of] those characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the California Register (CEQA Guidelines §15064.5[b][2][A]).

Although CEC projects are exempt from CEQA, CRHR thresholds were used to assess resource significance for purposes of this study.

California Code of Regulations (CCR) Title 20, § 1769: Post Certification Petition for Changes in Project Design, Operation or Performance and Amendments to the Commission Decision.

(a) Change in Project Design, Operation, or Performance Requirements.

(1) After the final decision is effective under §1720.4, the Project owner shall petition the commission for approval of any change it proposes to the Project design, operation, or performance requirements. The petition must contain the following information:

(A) A complete description of the proposed change, including new language for any conditions of certification that will be affected;

(B) A discussion of the necessity for the proposed change and an explanation of why the change should be permitted;

(C) A description of any new information or change in circumstances that necessitated the change;

(D) An analysis of the effects that the proposed change to the Project may have on the environment and proposed measures to mitigate any significant environmental effects;

(E) An analysis of how the proposed change would affect the Project's compliance with applicable laws, ordinances, regulations, and standards;

(F) A discussion of how the proposed change would affect the public;

(G) A list of current assessor's parcel numbers and owners' names and addresses for all parcels within 500 feet of any affected Project linears and 1000 feet of the Project area;

(H) A discussion of the potential effect of the proposed change on nearby property owners, residents, and the public; and

(I) A discussion of any exemptions from the California Environmental Quality Act, commencing with §21000 of the Public Resources Code, that the Project owner believes may apply to approval of the proposed change.

(2) Within 30 days after a petition is filed and the applicable fee is paid, staff shall review the petition to determine the extent of the proposed change and prepare a summary of the petition. The summary shall be concise and understandable, shall describe the content of the petition using the applicant's own words whenever possible, and shall include a description of the commission's procedures concerning proceedings on the petition, as appropriate. As soon as practicable after preparing the summary, staff shall file the summary and provide a copy to each property owner described in subdivision (a)(1)(G) with instructions on how to receive future filings.

(3) Staff Approval of Proposed Change.

(A) Staff shall approve the change where staff determines:

(i) that there is no possibility that the change may have a significant effect on the environment, or the change is exempt from the California Environmental Quality Act;

(ii) that the change would not cause the Project to fail to comply with any applicable laws, ordinances, regulations, or standards; and

(iii) that the change will not require a change to, or deletion of, a condition of certification adopted by the commission in the final decision or subsequent amendments.

(B) Staff, in consultation with the air pollution control district where the Project is located, may approve any change to a condition of certification regarding air quality, provided:

(i) that the criteria in subdivisions (a)(3)(A)(i) and (ii) are met; and

(ii) that no daily, quarterly, annual or other emission limit will be increased as a result of the change.

(C) Staff shall file a statement summarizing its actions taken pursuant to subdivisions (a)(3)(A) or (B). Any person may file an objection to a staff action taken pursuant to subdivisions (a)(3)(A) or (B) within 14 days of the filing of staff's statement. Any such objection must make a showing supported by facts that the change does not meet the criteria in this subdivision. Speculation, argument, conjecture, and unsupported conclusions or opinions are not sufficient to support an objection to staff approval.

(D) Staff may submit to the commission, for consideration and a decision, a proposed change that could otherwise be approved by staff under subdivisions (a)(3)(A) or (B).

(4) Commission Approval of Proposed Change.

(A) If staff determines that a change does not meet the criteria for staff approval set forth in subdivision (a)(3), or if staff submits the proposed change to the commission for consideration under subdivision (a)(3)(D), or if a person files an objection that complies with subdivision (a)(3)(C), the petition shall be considered by the commission at a noticed business meeting or hearing. The commission shall issue an order approving, rejecting, or modifying the petition or assign the matter for further proceedings before the commission or an assigned committee or hearing officer. The commission may approve such a change only if it can make the findings specified in §1748(b), if applicable.

(B) In any matter assigned for further proceedings pursuant to subdivision (a)(4), the presiding member shall establish the schedule and process for the proceeding.

(5) The petitioner may withdraw its petition from consideration by the commission in the manner described for withdrawal of notices or applications in §1709.8.

2.3 Local Regulations

County of San Diego

The following information on the County of San Diego regulations is provided for informational purposes, the Project falls in the jurisdiction of the City of Escondido. The County of San Diego has guidelines for determining the significance of archaeological and historical resources, as well as mitigation measures to avoid, preserve, and adequately record significant cultural resources. The County of San Diego Guidelines for Determining Significance (County of San Diego 2007) and includes the following goals, policies, and implementation measures as they pertain to the preservation of cultural and historic resources:

If it can be demonstrated that a project will cause damage to a significant cultural resource, reasonable efforts must be made to mitigate the impact to a level below significant. Mitigation measures identified by CEQA (§21083.2) and the State CEQA Guidelines (§15064.5) include the following:

§21083.2

(b) If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. Examples of that treatment, in no order of preference, may include, but are not limited to, any of the following:

(1) Planning construction to avoid cultural resources.

(2) Deeding cultural resources into permanent conservation easements.

(3) Capping or covering cultural resources with a layer of soil before building on the sites.

(4) Planning parks, greenspace, or other open space to incorporate archaeological sites.

(e) Excavation as mitigation shall be restricted to those parts of the unique cultural resource that would be damaged or destroyed by the Project. Excavation as mitigation shall not be required for a unique archaeological resource if the lead agency determines the testing or studies already completed have adequately recovered the scientifically consequential information from and about the resource, if this determination is documented in the environmental impact report.

§15064.5

(b) A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.

(3) Generally, a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Building or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995) shall be considered as mitigated to a level of less than a significant impact on the historical resource.

(4) A lead agency shall identify potentially feasible measures to mitigate significant adverse changes in the significance of a historical resource. The lead agency shall ensure that any adopted measures to mitigate or avoid significant adverse changes are fully enforceable through permit conditions, agreements, or other measures.

(5) When a project will affect state-owned historical resources, as described in Public Resources Code Section 5024, and the lead agency is a state agency, the lead agency shall consult with the State Historic Preservation Officer as provided in Public Resources Code Section 5024.5. Consultation should be coordinated in a timely fashion with the preparation of environmental documents.

Accidental Discovery of Human Remains

(f) In the event of an accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps should be taken:

(1) There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

(A) The coroner of the county in which the remains are discovered must be contacted to determine that no investigation of the cause of death is required, and

(g) If the coroner determines the remains to be Native American:

1. The coroner shall contact the Native American Heritage Commission within 24 hours.
2. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.
3. The Most Likely Descendent may make recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98, or

(2) Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.

(A) The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission.

(B) The descendent identified fails to make a recommendation; or

(C) The landowner or his authorized representative reject the recommendation of the descendent, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.

Accidental Discovery of Historical or Unique Archaeological Resources

(f) As part of the objectives, criteria, and procedures required by Section 21082 of the Public Resources Code, a lead agency should make provisions for historical or unique archaeological resources accidentally discovered during construction. These provisions should include an immediate evaluation of the find by a qualified archaeologist. If the find is determined to be an historical or unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation should be available. Work could continue in other parts of the building site while historical or unique archaeological resource mitigation takes place.

City of Escondido

The City of Escondido's General Plan (City of Escondido 2012) includes the following goals and policies for historic and cultural resources:

5. Historic and Cultural Resources

Goal 5: Preservation of important cultural and paleontological resources that contribute to the unique identity and character of Escondido.

Cultural Resources Policy 5.1: Maintain and update the Escondido Historic Sites Survey to include significant resources that meet local, state, or federal criteria.

Cultural Resources Policy 5.2: Preserve significant cultural and paleontological resources listed on the national, State, or local registers through: maintenance or development of appropriate ordinances that protect, enhance, and perpetuate resources; incentive programs; and/or the development review process.

Cultural Resources Policy 5.3: Consult with appropriate organizations and individual (e.g., South Coastal Information Center of the California Historical Resources Information System, Native American Heritage Commission, Native American groups and individuals, and San Diego Natural History Museum) early in the development process to minimize potential impacts to cultural and paleontological resources.

Cultural Resources Policy 5.4: Recognize the sensitivity of locally significant cultural resources and the need for more detailed assessments through the environmental review process.

Cultural Resources Policy 5.5: Preserve historic buildings, landscapes, and districts with special and recognized historic or architectural value in their original locations through preservation, rehabilitation (including adaptive reuse), and restoration where the use is compatible with the surrounding area.

Cultural Resources Policy 5.6: Review proposed new development and/or remodels for compatibility with the surrounding historic context.

Cultural Resources Policy 5.7: Comply with appropriate local, State, or federal regulations governing historical resources.

Cultural Resources Policy 5.8: Consider providing financial incentives, and educational information on existing incentives provided by the federal government to private owners and development in order to maintain, rehabilitate, and preserve historic resources.

Cultural Resources Policy 5.9: Educate the public on the City's important historic resources in increase awareness for protection (City of Escondido 2012).

3 Natural and Cultural Setting

This section provides background information pertaining to the natural and cultural context of the Project and Study Area. It places the Project in the broader natural environment that has sustained populations throughout history. This section also provides an overview of regional indigenous history, local ethnography, and post-contact history. This background information describes the distribution and type of cultural resources documented in the vicinity of the Project area to inform the cultural resources sensitivity assessment.

3.1 Natural Setting

The Project is located approximately 1 mile northwest of Escondido Creek, 12 miles east of the Pacific Ocean, and approximately 3 miles northeast of the Elfin Forest. Elevations within the Study Area range from approximately 770 feet above mean sea level for the sloped area from the south, 750 feet from the northern boundary, sloping down to 735 feet in the southeastern portion. The Project's vicinity is in a highly industrialized and commercially developed area with established roadways to the north and west. A majority of the Study Area has been graded in the past or is currently developed. Landscaped berm areas, consisting of mainly ornamental trees provide a visual buffer along the northern, northeastern, and northwestern boundaries of the Project area. The southwestern portion of the Project area contains two concentrations of disturbed Diegan coastal sage scrub, with non-native grassland mixing in between the shrub cover. The climate surrounding the Project area varies from an average 56°F in the winter to 76°F in the summer, with an annual average rainfall of 15.2 inches (City of Escondido n.d.).

According to published geologic evaluation prepared by Ninyo & Moore Geotechnical and Environmental Sciences Consultants (2001), the Project area is within the Peninsular Ranges Geomorphic Province. The province consists of rugged mountains underlain by Jurassic metavolcanic and metasedimentary rocks, and Cretaceous igneous rocks of the southern California batholith. The soils within the Project area were first graded prior to 1974, during which the Project area was excavated in the southern and northeastern portions, and 2 feet of fill soil was placed atop the Project area. Reconnaissance and subsurface evaluation found 2 to 22 feet of fill soil and granitic rock are present throughout the Project area (Ninyo & Moore Geotechnical and Environmental Sciences Consultants 2001).

The Project area is not within an alluvial deposit and predates the Holocene (the age of human occupation); therefore, the archaeological sensitivity for the Project area, based on sediments alone, is low. However, this does not preclude the existence of archaeological materials (California Soil Resource Lab 2017).

3.2 Cultural Setting

3.2.1 Indigenous History

The Project area lies in what is described generally as California's Southern Bight (Byrd and Raab 2007). This region extends from the Mexican border to Santa Monica and includes Orange and San Diego counties, western Riverside County, and the Southern Channel Islands. At European contact, the region was occupied by the Tongva, Juaneño, Luiseño, Cupeño, and Kumeyaay (Ipai and Tipai).

For this study, the indigenous cultural chronology for the Southern Bight is presented following Byrd and Raab (2007), who divided it into the Early (9600 - 5600 Before Common Era [BCE]), Middle (5600 - 1650 BCE), and Late (1650 BCE – 1769 Common Era [CE]) Holocene.

Early Holocene (ca. 9600 - 5600 BCE)

Evidence of Paleo-Indian occupation of southern California remains very limited. The earliest accepted dates for human occupation of the California coast are from the Northern Channel Islands, off the Santa Barbara coast. Daisy Cave, on San Miguel Island, dates to as early as 9600 BCE (Erlandson et al. 1996). Human remains found at the Arlington Springs site on Santa Rosa Island have yielded a date of approximately 10,000 BCE (Johnson et al. 2002). San Diego and Orange counties and the Southern Channel Islands have not produced dates as early as these, but radiocarbon evidence has dated early occupation of the coastal region between circa (ca.) 8000 and 7000 BCE (Byrd and Raab 2007).

Traditional models describe California's first inhabitants as big-game hunters roaming North America during the end of the last Ice Age. As the Ice Age ended, warmer and drier climatic conditions are thought to have created wide-spread cultural responses. The pluvial lakes and streams in the desert interior began to wane and cultures dependent on these water sources migrated to areas with moister conditions, such as the southern California coast (Byrd and Raab 2007).

The San Dieguito Complex is a well-defined cultural response to these changing climatic conditions in the southern California coastal region and was named originally for the cultural sequence in western San Diego County (Rogers 1929, 1939). Leaf-shaped points, knives, crescents, and scrapers characterize the artifact assemblages throughout the region (Byrd and Raab 2007). San Dieguito sites show evidence generally of the hunting of various animals, including birds, and gathering of plant resources (Moratto 1984).

Middle Holocene (ca. 5600 – 1650 BCE)

The Middle Holocene is viewed as a time of cultural transition. During this time, the cultural adaptations of the Early Holocene gradually altered. Use of milling stone tools began to appear across most of central and southern California around 6000 - 5000 BCE, indicating a focus on the collection and processing of hard-shelled seeds. Environmental changes in the Southern Bight are thought to have been the key factor in these changing adaptations (Byrd and Raab 2007). Occupation patterns indicated semi-sedentary populations focused on the bays and estuaries of San Diego and Orange counties, with shellfish and plant resources as the most important dietary components (Warren 1968). In the San Diego County area, this adaptive strategy is known as the La Jolla complex.

Sometime around 4,000 years ago, extensive estuarine silting began to cause a decline in shellfish resulting in a depopulation of the coastal zone. Settlement shifted to river valleys, and resource exploitation focused on hunting small game and gathering plant resources (Warren 1968; Byrd and Raab 2007).

Late Holocene (ca. 1650 BCE - 1769 CE)

The Late Holocene witnessed numerous cultural adaptations. The bow and arrow were adopted sometime after 500 CE, and ceramics are found with frequency in sites dating to ca. 1200 CE. Food surpluses, especially of acorns, sustained populations (Byrd and Raab 2007; Kroeber 1925). Other

exploited food resources include shellfish, fish, small terrestrial mammals, and small-seeded plants. Settlement patterns of the Late Holocene are characterized by large residential camps linked to smaller specialized camps for resource procurement (Byrd and Raab 2007).

3.2.2 Ethnographic Overview

The Project area occurs in an area that has been traditionally occupied by the Luiseño and the Kumeyaay/Diegueño (Ipai).

Luiseño

The traditional territory of the Luiseño extends along the coast of modern-day Southern California in San Diego and Riverside Counties, spanning between Aliso Creek in the north down to Agua Hedionda Creek in the south. The territory is recorded as far inland as Palomar Mountain in the south and Lake Elsinore in the north (Kroeber 1925; Bean and Shipek 1978). The population of the Luiseño prior to the arrival of Europeans is believed to be approximately 3,500 (O'Neil 2002). Linguists classify the Luiseño language as part of the Cupan group of the Takic languages, which falls under the larger Uto-Aztecan language family with origins in the Great Basin (Bean and Shipek 1978; Mithun 2001). Linguistic studies suggest that Takic-speaking immigrants from the Great Basin displaced Hokan speakers sometime after 500 BCE (Bean and Shipek 1978). The modern names of the Native American Tribes in San Diego County are derived from the Spanish mission period as well as rivers that were present in the tribal territory at the time of European contact. The Spanish applied the term Luiseño to Native Americans enslaved by the Spanish at Mission San Luis Rey, which included the Gheecham, Kheecham, and Aguas Calientes Indians. Prior to missionization, the Luiseño living in the area referred to themselves as the Payomkawichum (Bean and Shipek 1978; Mithun 2001; Rincon Band of Luiseno Indians 2020).

Prior to European contact, the Luiseño lived in permanent, politically autonomous villages with associated seasonal camps for subsistence exploitation. Villages ranged in size from 50 to 400 people. Each village controlled a larger resource territory and maintained ties to other villages through trade and social networks. Trespassing in the resource area of another village was cause for war (Bean and Shipek 1978). Village structures consisted of dome-shaped dwellings (kish), sweat lodges, and a ceremonial enclosure (vamkech). Leadership in the villages focused on the chief, or Nota, and a council of elders or puuplem. The chief controlled religious, economic, and war-related activities. Religious leaders would have their own patrilineal clan along with other chief-less clans and individuals broken from other clans (Kroeber 1925; Bean and Shipek 1978).

Traditional Luiseño subsistence was focused on the acorn and supplemented by the gathering of other plant resources and shellfish, as well as fishing and hunting. Plant foods typically include pine nuts, seeds from various grasses, manzanita, sunflower, sage, chia, lemonade berry, prickly pear, and lamb's-quarter. Common animal resources include deer, antelope, rabbit, quail, ducks and other birds. Fish were exploited from nearby rivers and creeks. Marine fish and sea mammals were caught from the shore and dugout canoes. Shellfish collected from the shore included abalone, turbans, mussels, clams, scallops, and other species (Bean and Shipek 1978). Traditional Luiseño pottery can be distinguished from other groups in the area and includes but is not limited to, an earthen vessel called narungrush, a wide mouth vessel called a wiwlish, a small mouth vessel called nadungdamal, and a vessel with two small mouths called a papakamal. The narungrush was utilized for keeping water cool and storing seeds. Wiwlish vessels were used for cooking food. The nadungdamal and papakamal vessels were used for carrying water (Sparkman 1908).

The traditional Luiseño religion is known as Chinigchinich, the last of a series of heroic mythological figures. The heroes were originally from the stars and their sagas formed Luiseño religious beliefs. Ethnographers recorded that religious rituals took place in a brush enclosure that housed a representation of Chinigchinich. Recorded ritual ceremonies include puberty initiation rites, burial and cremation ceremonies, hunting rituals, and peace rituals (Kroeber 1925, Bean and Shipek 1978). Puberty ceremonies for both girls and boys would include painting pictographs and petroglyphs, categorized by archaeologist as the San Luis Rey style or "Luiseño Rectilinear Abstract." It is characterized by zigzags, chevrons, straight lines, and diamond chains (DuBois and Kroeber 1908: 96, Hedges 2002).

Today there are seven bands of Luiseño people including the San Luis Rey, Pala, Pauma, La Jolla, Rincón, Pechanga, and Sobóba. While the effects of Mission San Luis Rey since 1798 contributed heavily to a decline in traditional practices (White 1953), the Luiseño today have maintained a majority of their traditional customs and ceremonies with many Luiseño people continue to speak their native language, sing traditional songs, and utilize oral history through story-telling (NativeTalk 2022).

Kumeyaay/Diegueño (Ipai)

The Project area is located in the traditional territory of the Kumeyaay or Diegueño, which includes the region along the Pacific coast from central San Diego County southward into Baja California and eastward into Imperial County (Zepeda 2020). European settlers in the area referred to them as the Diegueño or Diegueno due to the nearby Mission San Diego de Alcala (Gifford 1931). They refer to themselves as "Kumeyaay," which refers to both the Ipai and Tipai groups. Linguistic studies support the division of the Kumeyaay people into northern (Ipai) and southern (Tipai) dialect groups (Gifford 1931, Luomala 1978). Ipai territory includes the area north of La Jolla to Agua Hedionda Lagoon with tremendous environmental variation and resource zones. The Tipai territory includes the Pacific coast from La Jolla south to below Ensenada and Todos Santos Bay in Baja California, Mexico. The Kamia, or Desert Kumeyaay, are Tipai located in parts of eastern San Diego County, portions of northeastern Baja California, and the majority of the western portion of Imperial County (Gifford 1931, Luomala 1978). Neighboring groups included the Luiseño and Cupeño to the northwest, the Cahuilla to the northeast, the Quechan to the east, and the Paipai to the south (Kroeber 1925).

Kumeyaay bands typically controlled 10 to 30 linear miles in a drainage system. Each band's territory contained a primary village and a number of secondary homesteads located along tributary creeks (Shipek 1982). Each band was composed of 5 to 15 kinship groups (sibs or shiimul), some of which were divided among more than one band (Kroeber 1925). Approximately 50 to 75 named kinship groups were located throughout the entire Kumeyaay territory. Political organization varied between bands. Basic structure included a patrilineal band leader, or a Kwaaypaay, and at least one assistant who acted as a messenger (Luomala 1978, Shipek 1982). The primary roles of the Kwaaypaay were to direct ceremonies, act as a disciplinary head, advise on marriages and family differences, make war decisions, and to organize hunting and foraging expeditions.

The Kwaaypaay counseled with shaman on many important decisions. Ceremonies among the Kumeyaay are similar to those of other Southern California Native groups (Kroeber 1925). The ceremonial leader was an inherited religious position. Rituals conducted by ceremonial leaders included puberty rites, marriage, naming ceremonies, cremation of the dead, and the annual mourning ceremony (keruk) for all those of the sib who had died the previous year. Kumeyaay groups shared religious mythologies and belief in a higher creator-god (Shipek 1985). Kuuchama, or Tecate Peak, was the most sacred landmark, designated by the Kumeyaay god as the location for

acquiring power for good, healing, and peace. Other holy places recognized by all Kumeyaay include Wee'ishpa or Signal Mountain, Jacumba Peak, Mt. Woodson, Viejas Mountain, and other mountains near the Colorado River in the Desert Kumeyaay region (Shipek 1985, 1987).

Entire bands moved to winter villages in sheltered valleys near known sources of water. Dwellings in the relatively permanent winter villages were semi-subterranean and roughly circular with a wooden pole framework covered in brush thatch and a mat covering. They faced east to keep out the wind and ensure privacy (Luomala 1978). Other structures in the village consisted of family-owned platform granaries, a village-owned brush ceremonial enclosure, and sweat lodges. A semi-circular enclosure was used for the keruk mourning ceremony, and rock walls sometimes surrounded ceremonial and dance areas. At summer camps, ramadas and windbreaks were common and built into trees or rock shelters. Granaries and more permanent housing would sometimes be constructed in frequently visited oak groves in the hills and in the mountains of Kumeyaay territory.

Many Kumeyaay camped in coastal valleys at certain times of the year to gather coastal resources. Fish were caught with hooks, nets, and bows from tule boats. Shellfish were gathered from the sandy beaches (e.g., Chione, scallops, and Donax) and rocky shores (e.g., mussels and abalone). Common game birds included doves and quail; migratory birds included geese. A primary source of protein came from rabbits, woodrats, and other small game living along the mesas and foothills. Small mammals were caught using throwing sticks, bow and arrow, or in nets on community drives. Hunting large game such as deer and mountain sheep was the role of expert hunters trained in specialized hunting folklore (Luomala 1978). Land resources generally belonged to the bands with only a few areas considered "tribal" land and open to anyone (Shipek 1982). Water and stored foods were communally available to all band members on a reciprocal basis (Luomala 1978).

During the winter season, perennial herbs were collected in the valleys. Greens included miner's lettuce (claytonia perfoliata), clover, pigweed (aramanthus), and other grasses. Seeds were harvested from buckwheat, chia and other salvias, and a variety of grasses. In the mountains and foothills, yucca was gathered for its stalks, flowers, and leaves. Elderberry, manzanita, cholla, prickly-pear opuntia cactus, and juniper shrubs provided berries and fruit. The acorns from several species of oak were a subsistence staple gathered during the late summer and stored in family and village granaries. At least six species of oaks provided acorns for the Kumeyaay in San Diego County (Luomala 1978).

Production of baskets, nets, and pottery were and remain a highly integral part of traditional lifeways. Their main use was tied to food procurement, production, and processing (Wallace 1978). High-quality baskets with a weave similar to other Southern California groups were unique on local and regional levels. The regional unity in basketry traditions is linked to the prominence of acorn processing. Beyond baskets, carrying nets and sacks were also used for food collection. Regularly manufactured ceramic vessels were used as water jars, for cooking and storage, and as cremation urns (Kroeber 1925).

Men and children wore utilitarian belt sashes and pouches designed to hold tools and small game. Women wore a one- or two-piece apron made of shredded bark and a round, twined cap. Robes of rabbit fur, willow bark, or deerskin were worn in the winter and also served as bedding. For long distance travel, sandals woven from agave fibers protected their feet (Luomala 1978). Special ceremonial costumes and adornment were worn during ceremonies. With the exception of boys and mourners, hair was worn long with bangs cut at the forehead.

Accounts by Spanish missionaries and Kumeyaay elders suggest that status differentiation was established during the Late Holocene but could possibly have been earlier (Shipek 1982). Socio-political structure was drastically disrupted by the introduction of Spanish, Mexican, and American policies and the subsequent depopulation from disease and drought (Shipek 1982).

3.2.3 Post-Contact Setting

The post-Contact history of California is divided into three periods: the Spanish period (1769 – 1822), the Mexican period (1822 – 1848), and the American period (1848 – present). These historical periods are described below.

Spanish Period (1769-1822)

The city of Escondido land was utilized by the local tribal communities for many years, they referred to the area as “Mixéelum Pompáwvo”(Kahn 2020). Juan Rodriguez Cabrillo, in 1542, led the first European expedition to observe present day southern California. For more than 200 years, Cabrillo and other Spanish, Portuguese, British, and Russian explorers sailed the Alta (upper) California coast and made limited inland expeditions, but they did not establish permanent settlements (Bean 1968; Rolle 2003).

Gaspar de Portolá and Franciscan Father Junipero Serra established the first Spanish settlement in Alta California at Mission San Diego de Alcalá in 1769 which is located approximately 23 miles south of the Project area. This was the first of 21 missions erected by the Spanish between 1769 and 1823. The area of modern day Escondido was colonized by Juan Bautista de Anza in 1776. Juan Bautista de Anza referred to the area as “Rancho Rincon del Diablo”(City of Escondido n.d.).The Mission San Antonio de Pala (also known as San Antonio de Pala Asistencia or the Pala Mission) was founded in 1816 and is located approximately 17 miles northeast of the Project area. The Mission San Diego de Alcalá and its associated presidio were built initially near the Kumeyaay village of Cosoy, near the present site of Old Town San Diego. However, the water supply at this location was low and the soil was not very fertile. Thus the Mission San Diego de Alcalá was moved in 1774 to its present location, near the Kumeyaay village of *Nipaguay* (Mission San Diego 2013; City of San Diego 2006). The Franciscan fathers similarly chose the site for the Mission San Antonio de Pala because it was a traditional gathering place and village for the Native American residents. The missions were responsible for administering to the local tribes and converting the population (Engelhardt 1927a). In 1775, a force of Kumeyaay surrounded Mission de Alcala and set fire to the structure and fought against the small contingent of Spanish guards (Carrico 1997). The revolt against the Spanish was likely the result of increased forced conversions, rape, theft of land, and forced imprisonment of Kumeyaay by the Spanish (Carrico 1997).

During the Mission period, Spain deeded ranchos to prominent citizens and soldiers, though very few in comparison to the following Mexican Period. Presidio commandants were given the authority to grant house lots and garden plots to soldiers and sometime after 1800, soldiers and their families began to move towards the base of Presidio Hill to receive land grants from the presidio commandants (City of San Diego 2006). Colonists used Native Americans as indentured servants to manage and expand their herds of cattle on these large ranchos (Engelhardt 1927b).

Mexican Period (1822-1848)

The Mexican period commenced when news of the success of the Mexican Revolution (1810-1821) against the Spanish crown reached California in 1822. This period was an era of extensive interior

land grant development and exploration by American fur trappers west of the Sierra Nevada Mountains. The California missions declined in power and were ultimately secularized in 1834. By 1835, the presidio and Mission San Diego de Alcala had been abandoned and lay in ruins (City of San Diego 2006). Mission San Antonio de Pala was utilized as a chapel and granary until 1835 at which point government commissioners took control of the mission and associated buildings. Presently, Mission San Antonio de Pala is the only historic mission facility still serving a Mission Indian tribe (Hidden San Diego 2023). The hallmark of the Mexican period was large ranchos deeded to prominent Mexican citizens, frequently soldiers, by the governor.

The Mexican government recognized the newly established Pueblo of San Diego in 1834. The pueblo did not fare as well as other California towns during the Mexican Period. Secularization of the missions caused increased hostilities by Native Americans against the *Californios* living in San Diego County during the late 1830s. Attacks on outlying ranchos and an unstable political and economic climate caused the pueblo's population to drop from approximately 500 to 150 permanent residents by 1840. In 1838, San Diego was demoted from pueblo status and made a subprefecture of the Los Angeles Pueblo (City of San Diego 2006).

American Period (1848-Present)

The American period in San Diego County began as early as 1846 when the United States (US) military occupied San Diego and effectively ended *Californio* resistance in 1847. The American government assumed formal control of Alta California with the signing of the Treaty of Guadalupe Hidalgo in 1848, in which the US agreed to pay Mexico $15 million for the territory that included California, Nevada, Utah, and parts of Colorado, Arizona, New Mexico, and Wyoming.

During the early American Period, cattle ranches dominated much of Southern California, although droughts and population growth resulted in farming and urban professions supplanting ranching through the late nineteenth century. After the US took control of San Diego County in 1846, the political and economic situation stabilized, and population increased. The discovery of gold in northern California in 1848 led to the California Gold Rush, which resulted in a massive population increase (Guinn 1977). By 1853, the population of California exceeded 300,000. Thousands of settlers and immigrants continued to pour into the state, particularly after the completion of the transcontinental railroad in 1869. By the 1880s, the railroads had established networks throughout southern California, resulting in fast and affordable shipment of goods, as well as means to transport new residents (Dumke 1994).

Escondido

In 1886, the Escondido Land and Town Company acquired the land grant from Juan Bautista de Anza. The Escondido Land and Town company then developed the land into small farms to produce grapes and citrus. Escondido was officially incorporated in 1888 (City of Escondido n.d.).

During the late 19th century, Escondido witnessed the establishment of its first businesses and institutions. The arrival of the California Southern Railroad in 1883 facilitated trade and transportation, connecting Escondido to neighboring towns and cities. Agriculture, particularly citrus and avocados, became the backbone of the local economy, leading to the establishment of packing houses and canneries that processed and shipped produce across the country (Escondido History Center 2019). In the early 20th century, Escondido continued to flourish. The construction of the Lake Hodges Dam in 1918 provided a reliable water supply, fostering further agricultural expansion. The city's population grew, and essential infrastructure such as schools, hospitals, and parks were established to meet the needs of the community (Escondido History Center 2019).The mid-20th

century brought significant changes to Escondido. The post-World War II boom, coupled with the expansion of transportation networks, led to urbanization and the development of residential neighborhoods. The city's strategic location along Interstate 15 provided convenient access to San Diego and other major metropolitan areas, attracting businesses and industries.

In recent decades, Escondido has embraced its identity as a diverse and culturally vibrant city. Efforts to preserve its historical landmarks and promote community engagement have been central to Escondido's growth. The California Center for the Arts, a cultural hub featuring theater, art galleries, and educational programs, has become a focal point for arts and entertainment in the region (Escondido History Center 2019). The city's commitment to sustainable development is evident in the Escondido General Plan, which outlines a vision for the future. The plan emphasizes responsible growth, environmental stewardship, and the preservation of open spaces (City of Escondido 2012). As Escondido moves forward, it remains grounded in its past, acknowledging the contributions of its indigenous people, early settlers, and the many individuals who have shaped its vibrant community.

4 Methods

This section presents the methods for each task completed during the preparation of this assessment.

4.1 Background and Archival Research

4.1.1 California Historical Resources Information System

Rincon conducted a cultural resources records search of the California Historical Resources Information System (CHRIS) records utilizing information obtained from the South Coast Information Center (SCIC) at the University of San Diego, San Diego in May 2023. The search was performed to identify previously conducted cultural resources studies and previously recorded cultural resources within the Project area and a 1.0-mile radius surrounding it. Results from the records search can be found in Appendix A of this report.

4.1.2 Background Research

As part of the background research for this Project, Rincon also reviewed the State Built Environment Resources Directory, NRHP, CRHR, California Historical Landmarks, California Points of Historic Interest, and the California Office of Historic Preservation Archaeological Determinations of Eligibility.

Additionally, the following resources were reviewed:

- Google Earth imagery
- USGS topographic quadrangles
- Aerial photographs dating to 1947, 1953, 1964, 1967, 1978, 1980-1991, 1993-2003, 2005, 2009, 2010, 2012, 2014, 2016, 2018, and 2020.

4.1.3 Native American Outreach

Rincon contacted the Native American Heritage Commission (NAHC) on April 18, 2023, to request a search of the SLF and a contact list of Native Americans culturally affiliated with the Project vicinity. Appendix B provides documentation of Rincon's outreach effort to locally affiliated Native American tribes.

4.2 Field Survey

On May 10, 2023 and October 16, 2023, Rincon archaeologist Rachel Bilchak, B.A., conducted a pedestrian field survey of the entire 7.22-acre Project area using transect intervals of 10-meters. Exposed ground surfaces were examined for artifacts (e.g., flaked stone tools, tool-making debris, ground stone milling tools), ecofacts (marine shell and bone), soil discoloration that might indicate the presence of a cultural midden, and historic-period debris (e.g., metal, glass, ceramics). Surface scrapes were conducted to improve ground surface visibility and survey reliability, particularly within the area of direct impact and vicinity. Ground disturbances such as rodent burrows and drainages were also visually inspected. Survey accuracy was maintained using a handheld Global

Positioning Satellite unit and a georeferenced map of the Project area. Site characteristics and survey conditions were documented using field records and a digital camera. Copies of the survey notes and digital photographs are maintained at Rincon's San Diego office.

Permission to access areas within the Project buffer, which are privately owned, has not been granted and no on-the-ground surveys of properties adjacent to the Project site were able to be conducted. A visual survey was conducted of the areas in which access was restricted (Figure 4).

5 Results

5.1 Known Cultural Resources Studies

The SCIC records search identified 82 previous cultural studies within the 1 mile records search radius, 3 of which included portions of the Study Area. Of the three previously conducted studies, two are archaeological monitoring reports (SD-09250 and SD-11187), and one is an environmental impact report (SD-08588). These are discussed in further detail below.

5.1.1 SD-08588

In 1980, the City of Escondido prepared *Draft Program Environmental Impact Report (EIR) for the Expansion of Wastewater Treatment Facility.* The study was completed to examine the wastewater treatment and disposal for the City of Escondido. An archaeological site was discovered within the water treatment facility, but no further details were provided within the EIR (City of Escondido 1980). The study completely encompasses the current Project area. No cultural resources were identified in the proposed Enterprise BESS Project area.

5.1.2 SD-09250

In 2004, Brian F. Smith and Associates prepared a *Mitigation and Monitoring Report for the Escondido Research and Technology Center Project*. In addition to background research, the study included testing and evaluation of four prehistoric sites (SDI-16,988, -16,989, -16,990, -17,058). Resources SDI-16,990 and SDI-17,058 were recommended not significant with no adverse effect from the Project. Resources SDI-16,988 and SDI-16,989 were recommended as significant and data recovery was considered an acceptable way to mitigate adverse effects of the Project. Artifacts recovered during the monitoring and testing phases of the Project were transferred to the San Luis Ray Band of Indians for permanent curations (Brian F. Smith and Associate 2004). None of the identified resources are located within the current Project area.

5.1.3 SD-11187

In 2007, Brian F. Smith and Associates prepared *Results of the Cultural Resources Mitigation Monitoring Program for the Palomar Energy Project, Escondido, California*. At the time of this report, the information center could not provide a digitized copy, therefore the findings of the report remain unknown (Pierson 2007).

5.2 Known Cultural Resources

The CHRIS records search and background research identified 56 previously recorded cultural resources within 1 mile of the Project area (Table 1). None of the 56 resources are located within the Project area.

Table 1 Previously Recorded Cultural Resources within 1-Mile Records Search Area

Primary Number	Trinomial/ Temporary No.	Resource Type	Description	Recorder(s) and Year(s)	NRHP/CRHR Eligibility Status	Relation to Project Area
P-37-000153	CA-SDI-000153	Insufficient data	Insufficient data	Insufficient data	Unknown	Outside
P-37-001035	CA-SDI-001035	Native American	Bedrock outcrop with oval metate	1962 (Unknown Author)	Unknown	Outside
P-37-005501	CA-SDI-005501	Native American	Bedrock milling slicks, fire affected rock, manos, cores, and flakes	1978 (Roth)	Unknown	Outside
P-37-005502	CA-SDI-005502	Native American	Milling slicks, oval basin, and mortar	1978 (Flower, Ike, and Roth)	Unknown	Outside
P-37-005503	CA-SDI-005503	Native American	Milling slicks, oval basins, and mortar	1978 (Flower, Ike, and Roth)	Unknown	Outside
P-37-005504	CA-SDI-005504	Native American	Milling slick and flake	1978 (Flower, Ike, and Roth)	Unknown	Outside
P-37-005505	CA-SDI-005505	Native American	Milling slicks, fire affected rock, and lithic flakes	1978 (Flower, Ike, and Roth)	Unknown	Outside
P-37-012209	CA-SDI-012209	Multi-Component Site	Prehistoric milling features, pictographs, and associated lithic material. Historic reservoir and residences.	1978 (Lenker) 1991 (Gallegos and Associates) 2001 (EDAW, Inc.) 2010 (Morgan and Clowery) 2016 (Stropes) 2018 (Brian F. Smith and Associates, Inc. and Stropes) 2018 (Accardy)	Determined eligible for CRHR	Outside
P-37-012528	CA-SDI-012528	Historic	Glass and ceramic fragments	1991 (ERCE)	Unknown	Outside
P-37-015576	CA-SDI-014325	Native American	Bedrock milling feature	1996 (Delman James, Rich Bark, Brian Glenn, Jerry Sabio, Ted Cooley, Ogden Environmental Services, Inc.); 2007 (D. Gallegos, M. Guerrero, Gallegos & Associates)	Recommended ineligible for CRHR	Outside
P-37-017512	CA-SDI-015351	Native American	Bedrock milling features and lithic flake	1999 (Tierra Environmental)	Unknown	Outside

Primary Number	Trinomial/ Temporary No.	Resource Type	Description	Recorder(s) and Year(s)	NRHP/CRHR Eligibility Status	Relation to Project Area
P-37-017513	CA-SDI-015352	Multi-Component Site	Bedrock milling feature with historic glass and ceramic fragments	1999 (Tierra Environmental)	Unknown	Outside
P-37-017514		Native American Isolate	Quartz fragment	1999 (Tierra Environmental)	Unknown	Outside
P-37-017515		Native American Isolate	Metavolcanic flake	1999 (Tierra Environmental)	Unknown	Outside
P-37-017516		Historic Structure	1942 residence	1999 (Tierra Environmental)	Unknown	Outside
P-37-017517		Historic Structure	1928 structure	1999 (Tierra Environmental)	Unknown	Outside
P-37-017518		Historic Structure	Historic-era well and associated artifacts	1999 (Tierra Environmental)	Unknown	Outside
P-37-019436		Historic Structure	1930 commercial storefront	1983 (Donald A. Cotton Associates)	Unknown	Outside
P-37-019438		Historic Structure	1920 residence	1983 (Donald A. Cotton Associates)	7N: Needs to be reevaluated	Outside
P-37-019439		Historic Structure	1920 residence	1983 (Donald A. Cotton Associates)	7N: Needs to be reevaluated	Outside
P-37-019454		Historic Structure	1930 residence	1983 (Donald A. Cotton Associates)	7N: Needs to be reevaluated	Outside
P-37-019526		Historic Structure	1900 barn	1983 (Donald A. Cotton Associates)	Unknown	Outside
P-37-019527		Historic Structure	1890 residence	1983 (Donald A. Cotton Associates)	Unknown	Outside
P-37-019528		Historic Structure	1920 commercial building	1983 (Donald A. Cotton Associates)	3D: Appears eligible for NRHP as a contributor to a NRHP eligible district through survey evaluation.	Outside
P-37-019529		Historic Structure	1890 residence	1983 (Donald A. Cotton Associates)	3D: Appears eligible for NRHP as a contributor to a NRHP eligible district through survey evaluation	Outside

Primary Number	Trinomial/ Temporary No.	Resource Type	Description	Recorder(s) and Year(s)	NRHP/CRHR Eligibility Status	Relation to Project Area
P-37-019560		Historic Structure	1920 residence	1983 (Donald A. Cotton Associates)	3D: Appears eligible for NRHP as a contributor to a NRHP eligible district through survey evaluation	Outside
P-37-019561		Historic Structure	1930 commercial building and ancillary building	1983 (Donald A. Cotton Associates) 2002 (EDAW, Inc.)	7N: Needs to be reevaluated	Outside
P-37-019562		Historic Structure	1920 commercial building	1983 (Donald A. Cotton Associates)	7N: Needs to be reevaluated	Outside
P-37-019563		Historic Structure	1930 industrial building	1983 (Donald A. Cotton Associates)	7N: Needs to be reevaluated	Outside
P-37-019564		Historic Structure	1941 residence	1983 (Donald A. Cotton Associates)	7N: Needs to be reevaluated	Outside
P-37-019565		Historic Structure	1941 residence	1983 (Donald A. Cotton Associates)	7N: Needs to be reevaluated	Outside
P-37-019566		Historic Structure	1934 industrial building	1983 (Donald A. Cotton Associates)	7N: Needs to be reevaluated	Outside
P-37-019567		Historic Structure	1920 commercial building	1983 (Donald A. Cotton Associates)	7N: Needs to be reevaluated	Outside
P-37-019700		Historic Structure	1940 barn	1983 (Donald A. Cotton Associates)	Not eligible	Outside
P-37-024452	CA-SDI-016222	Native American	Bedrock milling feature	2001 (EDAW, Inc.)	Unknown	Outside
P-37-024453	CA-SDI-016223	Native American	Bedrock milling feature	2001 (EDAW, Inc.)	Unknown	Outside
P-37-024454	CA-SDI-016224	Native American	Bedrock milling feature	2001 (EDAW, Inc.)	Unknown	Outside
P-37-024455	CA-SDI-016225	Native American	Bedrock milling feature	2001 (EDAW, Inc.)	Unknown	Outside
P-37-024456	CA-SDI-016226	Native American	Bedrock milling feature	2001 (EDAW, Inc.)	Unknown	Outside
P-37-024457		Historic Isolate	Historic-era machinery, farming equipment	2001 (EDAW, Inc.)	Unknown	Outside
P-37-024458		Historic Isolate	Historic-era machinery, farming equipment	2001 (EDAW, Inc.)	Unknown	Outside
P-37-024546		Historic Structure	1961 steel radio transmitting tower	2002 (EDAW, Inc)	Unknown	Outside

Primary Number	Trinomial/ Temporary No.	Resource Type	Description	Recorder(s) and Year(s)	NRHP/CRHR Eligibility Status	Relation to Project Area
P-37-025575	CA-SDI-016988	Native American	Bedrock milling features and lithic scatter	2004 (Brian F. Smith & Associates)	Not evaluated for NRHP or CRHR	Outside
P-37-025576	CA-SDI-016989	Native American	Bedrock milling features and lithic scatter	2004 (Brian F. Smith & Associates)	Not Evaluated for NRHP or CRHR	Outside
P-37-025577	CA-SDI-016990	Native American	Lithic scatter	2004 (Brian F. Smith & Associates)	Not Evaluated for NRHP or CRHR	Outside
P-37-027269	CA-SDI-017838	Native American	Bedrock milling feature	2006 (Brian F. Smith & Associates)	Unknown	Outside
P-37-027270	CA-SDI-017839	Native American	Bedrock milling feature	2006 (Brian F. Smith & Associates)	Unknown	Outside
P-37-033557		Historic Site	Highway 395	2013 (Larry Tift, ASM Affiliates, Inc.); 2015 (Kent Manchen, Matt DeCarlo, ASM Affiliates, Inc.); 2017 (Haley Chateene, PanGIS); 2017 (A. Foglia, K. Keckeisen, PanGIS, Inc.); 2018 (Sarah Stringer-Bowsher, ASM Affiliates, Inc.)	Recommended ineligible	Outside
P-37-035964	CA-SDI-021907	Native American	Bedrock milling feature with associated artifacts	2016 (RECON)	Unknown	Outside
P-37-035965	CA-SDI-021908	Native American	Bedrock milling feature with associated artifacts	2016 (Price, RECON); 2018 (McLean, DeGiovine, RECON)	Unknown	Outside
P-37-039453		Historic Site	1948 historic-era road, Leora Lane	2020 (ECORP Consulting, Inc)	Recommended ineligible for NRHP	Outside
P-37-039454		Historic Site	1904 historic-era road, Montiel Road	2020 (ECORP Consulting, Inc)	Recommended ineligible for NRHP and CRHR	Outside
P-37-039455		Historic Site	1904 historic-era road, Nordahl Road	2020 (ECORP Consulting, Inc)	Recommended ineligible for NRHP and CRHR	Outside
P-37-039621		Historic Structure	1959 residence	2019 (RECON)	Recommended ineligible for NRHP and CRHR	Outside
P-37-039941		Historic Structure	1934 residence	2008 (EDAW AECOM)	Found ineligible for NRHP, CRHR or Local	Outside

Primary Number	Trinomial/ Temporary No.	Resource Type	Description	Recorder(s) and Year(s)	NRHP/CRHR Eligibility Status	Relation to Project Area
					designation through survey evaluation.	
P-37-039942		Historic Structure	1957 residence	2008 (EDAW AECOM)	Found ineligible for NRHP, CRHR or Local designation through survey evaluation	Outside

CRHR = California Register of Historical Resources; NRHP = National Register of Historic Places

Source: South Coastal Information Center 2023

5.2.1 Background Research

Review of the Built Environment Resource Directory (BERD) for San Diego County did not identify any properties within 1 mile of the Project area which are designated in the NRHP or CRHR. A review of the NRHP/CRHR and other local historical databases was negative for listings within the 1-mile search radius of the Project area.

5.2.2 Review of Historical Topographic Maps and Aerial Imagery

Rincon completed a review of historical topographic maps and aerial imagery to ascertain the development history of the Project area. Topographic maps from 1947 to 1980 and historic aerial imagery show the Project area as generally undeveloped, bordered by agricultural land and dirt roads. The proposed Project area appears to have been subject to ground disturbances including land clearing, plowing, and tilling, as well as development of adjacent land and construction of roads since the 1950s. Development appears to have increased to the north in the late 1970s and early 1980s, with the construction of Auto Parkway (NETR 2023). Historical aerial imagery indicates that the footprint of the present-day Enterprise BESS Facility Project area was cleared and graded by 1989 and appears to have been paved by 2002 (NETR 2023). The entire eastern Project area appears to have been fully developed and has remained generally unaltered since 2003 (NETR 2023). The western portion of the Project area remained undeveloped except for a network of dirt roads and the installation of the eastern drainage in 2001. Development of roads, infrastructure, and commercial and industrial properties have continued to present; however, no buildings or structures were depicted within the Project area other than the existing facility.

5.2.3 Native American Outreach

A response from the NAHC was received on May 17, 2023, stating that the results of the SLF search were *negative*, meaning no tribal heritage resources are noted in the Project vicinity (the SLF search is conducted by USGS quadrangle map, an approximately 50 to 70 square mile area). A list of 23 individuals from fifteen tribal groups in the region was provided (see Appendix B).

5.3 Field Survey

Rincon conducted a cultural resources pedestrian survey of the Project area on May 10, 2023, and October 16, 2023. (Figure 4).

An initial survey was conducted on May 10, 2023, that encompassed the EEPP parcel. Approximately 90 percent of the EEPP parcel is developed and landscaped with imported gravels and pine trees (Figure 5, Figure 6, and Figure 7).The southeastern boundary of the Project area is located on a 70 degree slope and contains a concrete drainage channel; the exposed ground is covered in grasses (Figure 8). Where surface visibility exists, sandy gravel with light tan coloring was noted. The presence of paved roads, facility buildings, landscaping, and irrigation, as well as imported soils, gravel, and fallen leaves and pine duff were seen throughout the facility and contributed to reduced ground surface visibility (Figure 9 and Figure 10).

Following the initial survey, the Study Area was expanded to include additional acreage to the West of the EEPP. An additional survey was conducted on October 16, 2023. The western portion of the Study Area consists patches of non-native grassland and native coastal sage scrub, with a dirt roadway winding through the area (Figure 11, Figure 12, and Figure 13). Rock outcrops throughout the western portion of the Study Area were examined (Figure 14).

No cultural materials were identified in the Study Area during the pedestrian surveys completed for the Project.

Figure 4 Survey Location Map

Imagery provided by Microsoft Bing and its licensors © 2024.

22-13968 CR
CRFig 2 Project Site

Figure 5 Overview of Northern Portion of Project Area within EEPP Switchyard, Facing South

Figure 6 Northwest Portion of EEPP Facility (BESS Gen-tie Route), Facing North

Figure 7 View of Entrance Gate at Southern Boundary of the Project Area, Facing East

Figure 8 Overview of Southwestern Corner of Project Area, Facing Southwest

Figure 9 View of Southern Slope Within the Project Area, Facing West

Figure 10 Overview of EEPP/BESS Project Area, Facing Northeast

Figure 11 View of Undeveloped Western Portion of Study Area, Facing East

Figure 12 View of Undeveloped Western Portion of Study Area, Facing West

Figure 13 Unpaved Roadway within Western Portion of Study Area, Facing South

Figure 14 Rock Outcrop in Western Portion of the Study Area, Facing Northeast

6 Findings and Recommendations

The cultural resources records search identified 56 previously recorded cultural resources within the 1 mile records search radius. None of the cultural resources were located within or adjacent to the Project area.

A review of historical aerial photographs and assessor data indicates that a majority of the proposed Project area has been subject to ground disturbances including land clearing, plowing, and tilling, as well as development of adjacent land and construction of roads since the 1950s. Soils in the Project area have been previously disturbed as a result of previous grading activities associated with the construction of the existing facility, as well as from the construction of the adjacent commercial and industrial buildings, and access roads.

The pedestrian survey conducted for the Project identified no cultural resources within the Project area. Due to the disturbed nature of the Project area and the non-alluvial soils, there is a ***low risk*** of encountering subsurface archaeological deposits.

Therefore, the Conditions of Certification (CUL-1) for the original certification is considered sufficient for the current amendment. Based on consultation with Enterprise BESS LLC, the applicant has committed to incorporating the CUL-1 measures into the proposed Project in order to protect potentially present archaeological resources and human remains as presented below.

6.1 CUL-1

The Project certified under this emergency process shall not cause any significant impact to any cultural resources. No on-site cultural resource monitoring is required for this Project. In the event of an inadvertent cultural discovery the following mitigation measure must be followed:

All work within 100-feet of the suspected cultural material must halt and a qualified Cultural Resource Specialist will be contacted immediately to evaluate the significance of the find. The Project Manager, Construction Manager, and the Compliance Project Manager will be notified if the resource is judged to be potentially significant, and the archaeologist may recommend further study.

In the event that suspected human remains are encountered, work must stop immediately within a radius of 100 feet (30 meters) of the discovery, and the San Diego County Coroner's Office will be notified within 24 hours of the find. If the skeletal remains are determined to be prehistoric, the Coroner's Office will contact the Native American Heritage Commission (NAHC) to identify the Most Likely Descendants (MLD). The MLD will be notified and will determine the most appropriate disposition of the remains and any associated artifacts.

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~~Appendix A~~

Appendix A has been redacted from this version of the report for confidentiality purposes

Appendix B

Native American Heritage Commission Sacred Land Files Search

NATIVE AMERICAN HERITAGE COMMISSION

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

May 17, 2023

Mark Strother
Rincon Consultants, Inc.

Via Email to: mstrother@rinconconsultants.com

Re: BESS Project, San Diego County

Dear Mr. Strother:

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 me. 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: Pricilla.Torres-Fuentes@nahc.ca.gov.

Sincerely,

Pricilla Torres-Fuentes

Pricilla Torres-Fuentes
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
San Diego County
5/17/2023

Barona Group of the Capitan Grande
Raymond Welch, Chairperson
1095 Barona Road Diegueno
Lakeside, CA, 92040
Phone: (619) 443 - 6612
Fax: (619) 443-0681
counciloffice@barona-nsn.gov

Campo Band of Diegueno Mission Indians
Ralph Goff, Chairperson
36190 Church Road, Suite 1 Diegueno
Campo, CA, 91906
Phone: (619) 478 - 9046
Fax: (619) 478-5818
rgoff@campo-nsn.gov

Ewiiaapaayp Band of Kumeyaay Indians
Michael Garcia, Vice Chairperson
4054 Willows Road Diegueno
Alpine, CA, 91901
Phone: (619) 933 - 2200
Fax: (619) 445-9126
michaelg@leaningrock.net

Ewiiaapaayp Band of Kumeyaay Indians
Robert Pinto, Chairperson
4054 Willows Road Diegueno
Alpine, CA, 91901
Phone: (619) 368 - 4382
Fax: (619) 445-9126
ceo@ebki-nsn.gov

Iipay Nation of Santa Ysabel
Clint Linton, Director of Cultural Resources
P.O. Box 507 Diegueno
Santa Ysabel, CA, 92070
Phone: (760) 803 - 5694
clint@redtailenvironmental.com

Iipay Nation of Santa Ysabel
Virgil Perez, Chairperson
P.O. Box 130 Diegueno
Santa Ysabel, CA, 92070
Phone: (760) 765 - 0845
Fax: (760) 765-0320

Inaja-Cosmit Band of Indians
Rebecca Osuna, Chairperson
2005 S. Escondido Blvd. Diegueno
Escondido, CA, 92025
Phone: (760) 737 - 7628
Fax: (760) 747-8568

Jamul Indian Village
Erica Pinto, Chairperson
P.O. Box 612 Diegueno
Jamul, CA, 91935
Phone: (619) 669 - 4785
Fax: (619) 669-4817
epinto@jiv-nsn.gov

Jamul Indian Village
Lisa Cumper, Tribal Historic Preservation Officer
P.O. Box 612 Diegueno
Jamul, CA, 91935
Phone: (619) 669 - 4855
lcumper@jiv-nsn.gov

Kwaaymii Laguna Band of Mission Indians
Carmen Lucas,
P.O. Box 775 Kwaaymii
Pine Valley, CA, 91962 Diegueno
Phone: (619) 709 - 4207

La Posta Band of Diegueno Mission Indians
Gwendolyn Parada, Chairperson
8 Crestwood Road Diegueno
Boulevard, CA, 91905
Phone: (619) 478 - 2113
Fax: (619) 478-2125
LP13boots@aol.com

La Posta Band of Diegueno Mission Indians
Javaughn Miller, Tribal Administrator
8 Crestwood Road Diegueno
Boulevard, CA, 91905
Phone: (619) 478 - 2113
Fax: (619) 478-2125
jmiller@LPtribe.net

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 BESS Project, San Diego County.

Native American Heritage Commission
Native American Contact List
San Diego County
5/17/2023

Manzanita Band of Kumeyaay Nation
Angela Elliott Santos, Chairperson
P.O. Box 1302 — Diegueno
Boulevard, CA, 91905
Phone: (619) 766 - 4930
Fax: (619) 766-4957

Mesa Grande Band of Diegueno Mission Indians
Michael Linton, Chairperson
P.O Box 270 — Diegueno
Santa Ysabel, CA, 92070
Phone: (760) 782 - 3818
Fax: (760) 782-9092
mesagrandeband@msn.com

Pala Band of Mission Indians
Alexis Wallick, Assistant THPO
PMB 50, 35008 Pala Temecula Road — Cupeno, Luiseno
Pala, CA, 92059
Phone: (760) 891 - 3537
awallick@palatribe.com

Pala Band of Mission Indians
Shasta Gaughen, Tribal Historic Preservation Officer
PMB 50, 35008 Pala Temecula Road — Cupeno, Luiseno
Pala, CA, 92059
Phone: (760) 891 - 3515
Fax: (760) 742-3189
sgaughen@palatribe.com

Pechanga Band of Indians
Mark Macarro, Chairperson
P.O. Box 1477 — Luiseno
Temecula, CA, 92593
Phone: (951) 770 - 6000
Fax: (951) 695-1778
epreston@pechanga-nsn.gov

Pechanga Band of Indians
Paul Macarro, Cultural Resources Coordinator
P.O. Box 1477 — Luiseno
Temecula, CA, 92593
Phone: (951) 770 - 6306
Fax: (951) 506-9491
pmacarro@pechanga-nsn.gov

Rincon Band of Luiseno Indians
Bo Mazzetti, Chairperson
One Government Center Lane — Luiseno
Valley Center, CA, 92082
Phone: (760) 749 - 1051
Fax: (760) 749-5144
bomazzetti@aol.com

Rincon Band of Luiseno Indians
Cheryl Madrigal, Tribal Historic Preservation Officer
One Government Center Lane — Luiseno
Valley Center, CA, 92082
Phone: (760) 297 - 2635
crd@rincon-nsn.gov

San Luis Rey Band of Mission Indians
San Luis Rey, Tribal Council
1889 Sunset Drive — Luiseno
Vista, CA, 92081
Phone: (760) 724 - 8505
Fax: (760) 724-2172
cjmojado@slrmissionindians.org

San Luis Rey Band of Mission Indians
1889 Sunset Drive — Luiseno
Vista, CA, 92081
Phone: (760) 724 - 8505
Fax: (760) 724-2172
cjmojado@slrmissionindians.org

San Pasqual Band of Diegueno Mission Indians
John Flores, Environmental Coordinator
P. O. Box 365 — Diegueno
Valley Center, CA, 92082
Phone: (760) 749 - 3200
Fax: (760) 749-3876
johnf@sanpasqualtribe.org

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 BESS Project, San Diego County.

Native American Heritage Commission
Native American Contact List
San Diego County
5/17/2023

San Pasqual Band of Diegueno Mission Indians
Allen Lawson, Chairperson
P.O. Box 365 — Diegueno
Valley Center, CA, 92082
Phone: (760) 749 - 3200
Fax: (760) 749-3876
allenl@sanpasqualtribe.org

Soboba Band of Luiseno Indians
Isaiah Vivanco, Chairperson
P. O. Box 487 — Cahuilla
San Jacinto, CA, 92581 — Luiseno
Phone: (951) 654 - 5544
Fax: (951) 654-4198
ivivanco@soboba-nsn.gov

Soboba Band of Luiseno Indians
Joseph Ontiveros, Cultural Resource Department
P.O. BOX 487 — Cahuilla
San Jacinto, CA, 92581 — Luiseno
Phone: (951) 663 - 5279
Fax: (951) 654-4198
jontiveros@soboba-nsn.gov

Sycuan Band of the Kumeyaay Nation
Cody Martinez, Chairperson
1 Kwaaypaay Court — Kumeyaay
El Cajon, CA, 92019
Phone: (619) 445 - 2613
Fax: (619) 445-1927
ssilva@sycuan-nsn.gov

Sycuan Band of the Kumeyaay Nation
Kristie Orosco, Kumeyaay Resource Specialist
1 Kwaaypaay Court — Kumeyaay
El Cajon, CA, 92019
Phone: (619) 445 - 6917

Viejas Band of Kumeyaay Indians
John Christman, Chairperson
1 Viejas Grade Road — Diegueno
Alpine, CA, 91901
Phone: (619) 445 - 3810
Fax: (619) 445-5337

Viejas Band of Kumeyaay Indians
Ernest Pingleton, Tribal Historic Officer, Resource Management
1 Viejas Grade Road — Diegueno
Alpine, CA, 91901
Phone: (619) 659 - 2314
epingleton@viejas-nsn.gov

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 BESS Project, San Diego County.

APPENDIX F

NOISE AND VIBRATION STUDY

Enterprise Battery Energy Storage System (BESS) Project

Noise and Vibration Study

prepared for

Enterprise BESS LLC
201 Enterprise Street
Escondido, California 92029

prepared by

Rincon Consultants, Inc.
2215 Faraday Avenue, Suite A
Carlsbad, California 92008

March 2024

RINCON CONSULTANTS, INC.
Environmental Scientists | Planners | Engineers
rinconconsultants.com

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1 Project Description and Impact Summary

1.1 Introduction

This study analyzes the potential noise and vibration impacts associated with the construction, and operation of the Enterprise Battery Energy Storage System (BESS) Project in the City of Escondido within San Diego County, California. The purpose of this study is to analyze the noise and vibration levels related to both temporary construction activity and long-term operation of the Project. Table 1 provides a summary of Project impacts.

Table 1 Summary of Impacts

Issue	Proposed Project's Level of Significance	Applicable Recommendations
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 (Construction) Less than significant impact (Operation)	None
Would the project result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	Less than significant impact (Construction) Less than significant impact (Operation)	None
For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	No impact	None

1.2 Project Summary

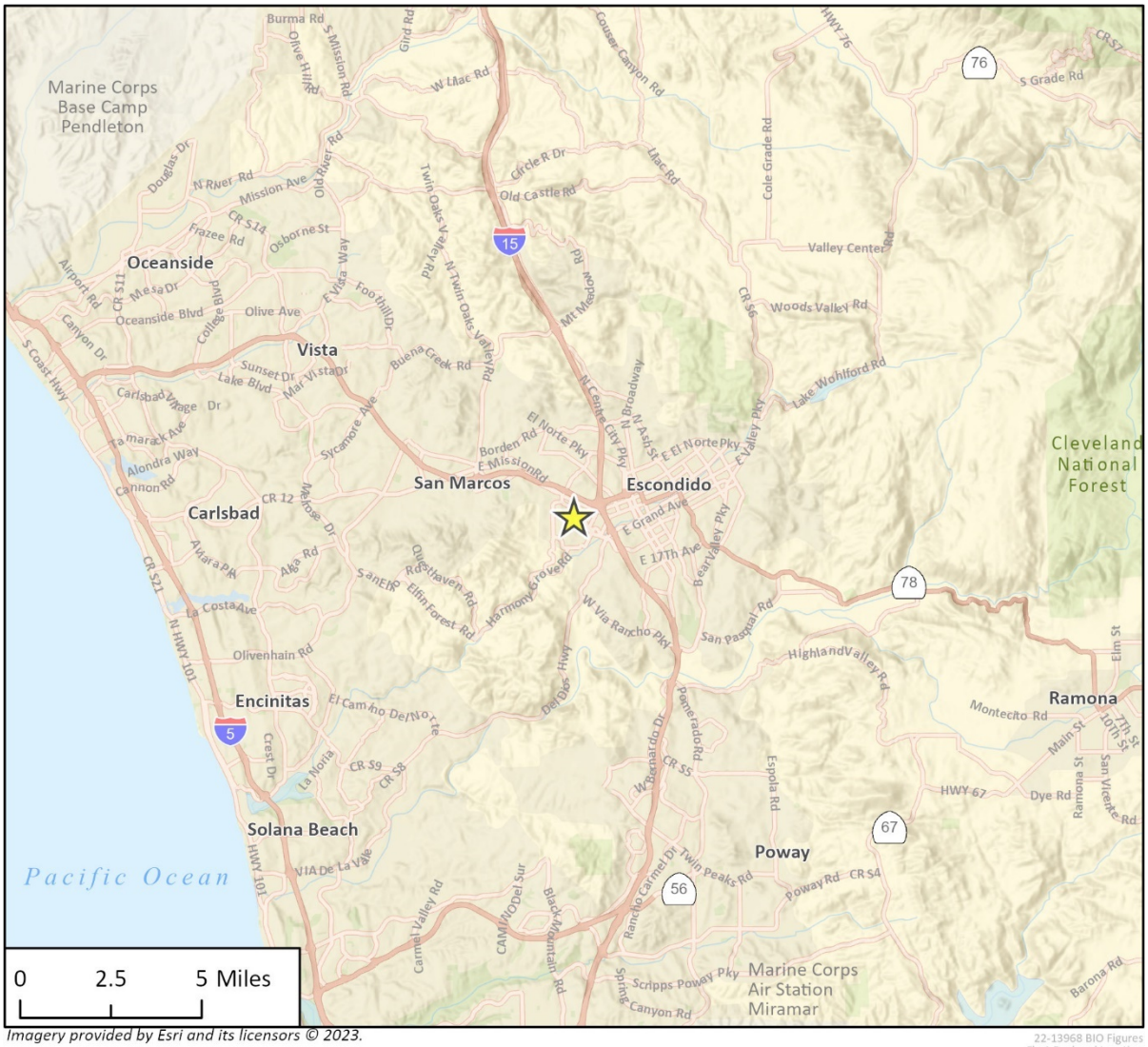
Project Location

The proposed Enterprise BESS Project would be located at 201 Enterprise Street, Escondido, California, at Assessor's Parcel Number (APN) APN 232-410-45-00, co-located with the existing CalPeak Power Enterprise Emergency Peaker Plant (EEPP). The Project site is located generally west of Interstate 15 (I-15) and south of Ronald Packard Parkway [State Route (SR) 78] in Escondido, California (Figure 1 and Figure 2). The EEPP property is located approximately 300 feet east of Citracado Parkway and 400 feet south of Auto Park Way, and is bound by industrial land uses to the north, east, south, and west. Other land uses in the area include single-family residential approximately 0.6 mile to the northeast and 1,100 feet to the northwest.

Project Description

The Project includes the development of a nominal 52-megawatt (MW) BESS at the existing EEPP site. See Figure 2 and Figure 3 for the Study Area analyzed within this report and a detailed Project plan, respectively. The Project will be constructed to support California's current need for additional electrical energy supply capacity during high peak load demand periods. The key components of the Project are listed below:

Figure 1 Regional Location



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22-13968 BIO Figures
Fig 1 Regional Location

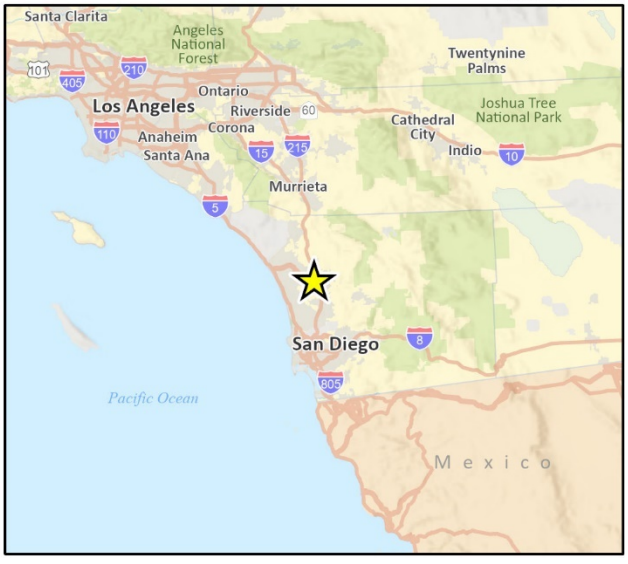

Figure 2 Study Area Map

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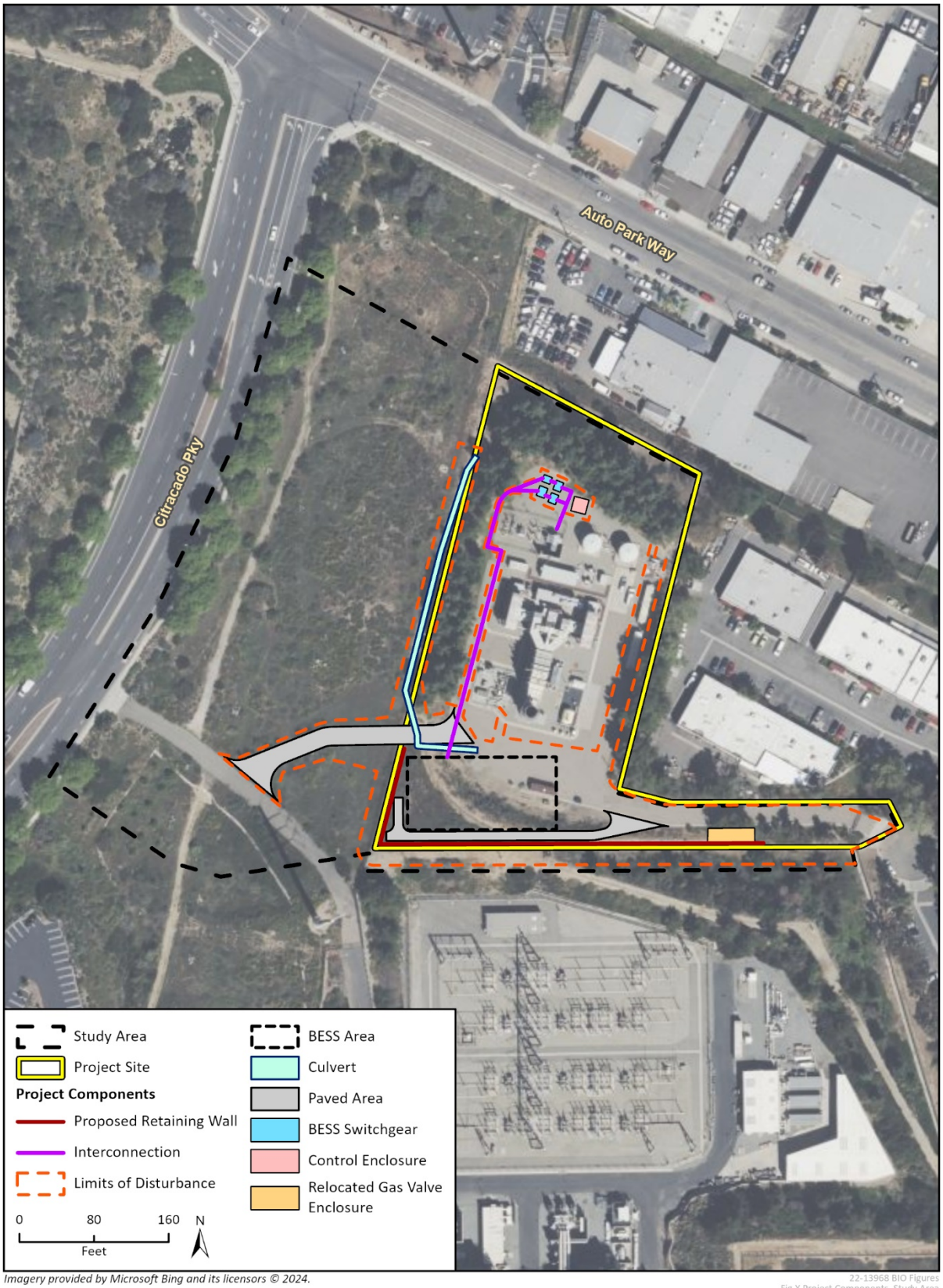
22-13968 BIO Figures
Fig 2 Project Location

Figure 3 Proposed Site Plan



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22-13968 BIO Figures
Fig X Project Components_Study Area

- BESS plant comprising approximately 1.22 acres, to include 19 modular, containerized battery systems with internal heating, ventilation, and air conditioning (HVAC) and internal fire detection and suppression systems, battery management systems (BMS), and 19 power conversion system shelters (PCS) (also called inverters), transformers, and electrical conductors; the BESS site will also include an onsite BESS switchgear, auxiliary switchgear, meter enclosures, and a control enclosure.
- Connection from the Enterprise BESS to the San Diego Gas & Electric (SDG&E) Escondido Substation to the north via an onsite, underground 13.8 kilovolt (kV) cable connection to the existing generator step-up transformer (GSU) at the EEPP.
- Construction of an access road spur to the southwest portion of the BESS site from an existing SDG&E access road that connects Citracado Parkway to the existing SDG&E Palomar facility.
- Addition of an offsite stormwater conveyance component adjacent to the western EEPP property, designed to carry stormwater via gravity flow from the southern portion of the EEPP site where the proposed BESS facilities are located to an existing stormwater conveyance which outfalls into an existing detention basin on SDG&E land to the northwest of the EEPP property.
- Removal of vegetation, site grading, and excavation of soil and bedrock to create a level BESS development area on the southern portion of the EEPP where there is an existing hillside.
- A retaining wall up to approximately 28-feet tall will be constructed along the southern site boundary to stabilize the vertical cut near the property line that is associated with the needed creation of a level area for the Project. The Project development plan includes the installation of sheet piles along the southern property line to stabilize the cut slope prior to installation of the retaining wall.

The Enterprise BESS Project will interconnect to the SDG&E grid by connecting to the existing GSU at the EEPP, which is connected to the SDG&E Escondido Substation to the north via an existing underground 69 kilovolt (kV), 834-foot-long transmission line. The BESS Project will not require any high voltage modifications at the EEPP switchyard of the offsite 69 kV line. Operation of the BESS facility will be integrated with the existing EEPP, but the BESS will be charged from the electrical grid and not the EEPP. The BESS and the EEPP may be operated simultaneously in accordance with the market-optimized dispatch instructions received from the California Independent System Operator (CAISO's) Automated Dispatching System ("ADS"), but the combined output will be control-limited to never exceed a net of 52 MW per the Generator Interconnection Agreement.

Construction

Construction site mobilization is currently anticipated to begin in the first quarter of 2025 and construction activities with associated noise generation are planned to end in the fourth quarter of 2025. Typical construction hours are expected to be from 7 AM to 6 PM on Mondays through Fridays and 9 AM to 5 PM on Saturdays. Grading activity is expected to occur between 7 AM and 6 PM on Mondays through Fridays and 10 AM and 5 PM on Saturdays. Construction equipment to be utilized include the following: backhoes, bore/drill rigs, compactors, compressors, cranes, dozers, graders, excavators, forklifts, loaders (front-end, rubber-tired, and skid steer), pavers, portable electric generators, rough terrain forklifts, sweepers, welders, dump trucks, and water trucks. A percussion pile driver will also be needed for construction of the retaining wall.

Operation

Operation of the Enterprise BESS facility will be integrated with the existing EEPP, but the BESS will be charged from the electrical grid and not the EEPP. Commercial operation is currently anticipated for the fourth quarter of 2025. The facilities would be expected to require regular maintenance visits by two workers up to twice per week on average. The planned Project life is 40 years.

Enterprise Emergency Peaker Project Noise Conditions of Certification

The EEPP was licensed by the California Energy Commission (CEC) in 2001 (CEC Docket No. 01-EP-10), and the Commission Decision included Conditions of Certification to minimize or avoid noise impacts from the EEPP. The following CEC Conditions related to noise that are in place for the existing EEPP shall also apply for the proposed Enterprise BESS Project, as applicable.

NOISE-1: The Project permitted under this emergency process shall be required to comply with applicable community noise standards.

Verification: Within 30 days of the Project first achieving a sustained output of 80 percent or greater of rated capacity, the Project owner shall conduct a 25-hour community noise survey, utilizing the same monitoring sites employed in the pre-Project ambient noise survey as a minimum. No single piece of equipment shall be allowed to stand out as a source of noise that draws legitimate complaints. Steam relief valves shall be adequately muffled to preclude noise that draws legitimate complaints. If the results from the survey indicate that the Project noise levels at the closest sensitive receptor are in excess of 45 dBA between the hours of 10 PM and 7 AM, additional mitigation measures shall be implemented to reduce noise to a level of compliance with this limit.

NOISE-2: Prior to the start of rough grading, the Project owner shall notify all residents within one mile of the site of the start of construction and will provide a complaint resolution process.

Verification: The Project owner shall provide the CPM with a statement, attesting that the above notification has been performed.

NOISE-3: Throughout the construction and operation of the Project, the Project owner shall document, investigate, evaluate, and attempt to resolve all Project related noise complaints.

Verification: Within 30 days of receiving a noise complaint, the Project owner shall file a copy of the Noise Complaint Resolution Form, or similar instrument approved by the CPM, with the County Environmental Health Department, and with the CPM, documenting the resolution of the complaint. If mitigation is required to resolve a complaint, and the complaint is not resolved within a 30-day period, the Project owner shall submit an updated Noise Complaint Resolution Form when the mitigation is finally implemented.

NOISE-4: Night construction activities may be authorized by the CPM if they are consistent with local noise ordinances. Night construction, or specific night construction activities may be disallowed by the CPM if it results in significant impact to the surrounding community.

Verification: Noise monitoring and surveys may be conducted if complaints are reported by residence in the surrounding area of the Project site.

2 Background

2.1 Overview of Sound Measurement

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (California Department of Transportation [Caltrans] 2013).

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response, which is most sensitive to frequencies around 4,000 Hertz and less sensitive to frequencies around and below 100 Hertz (Kinsler, et. al. 1999). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; dividing the energy in half would result in a 3 dB decrease (Crocker 2007).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not “sound twice as loud” as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease (i.e., twice the sound energy); that a change of 5 dBA is readily perceptible (8 times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (half) as loud (Crocker 2007).

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in level as the distance from the source increases. The manner by which noise reduces with distance depends on factors such as the type of sources (e.g., point or line, the path the sound will travel, site conditions, and obstructions). Noise levels from a point source typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance (e.g., construction, industrial machinery, ventilation units). Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013). The propagation of noise is also affected by the intervening ground, known as ground absorption. A hard site, such as a parking lot or smooth body of water, receives no additional ground attenuation and the changes in noise levels with distance (drop-off rate) result from simply the geometric spreading of the source. An additional ground attenuation value of 1.5 dBA per doubling of distance applies to a soft site (e.g., soft dirt, grass, or scattered bushes and trees) (Caltrans 2013). Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this “shielding” depends on the size of the object and the frequencies of the noise levels. Natural terrain features such as hills and dense woods, and man-made features such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5-dBA reduction in source noise levels at the receiver (Federal Highway Administration [FHWA] 2011). Structures can substantially reduce exposure to noise as well. The FHWA’s guidelines indicate that modern building construction generally provides an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows.

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important factors of Project noise impacts. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. One of the most frequently used noise metrics is the equivalent noise level (L_{eq}); it considers both duration and sound power level. L_{eq} is defined as the single steady A-weighted level equivalent to the same amount of energy as that contained in the actual fluctuating levels over time.

The sound level that is exceeded "n" percent of time during a given sample period. For example, the L_{50} level is the statistical indicator of the time-varying noise signal that is exceeded 50 percent of the time (during each sampling period); that is, half of the sampling time, the changing noise levels are above this value and half of the time they are below it. This is called the "median sound level." The L_{10} level, likewise, is the value that is exceeded 10 percent of the time (i.e., near the maximum) and this is often known as the "intrusive sound level." The L_{90} is the sound level exceeded 90 percent of the time and is often considered the "effective background level" or "residual noise level."

Noise that occurs at night tends to be more disturbing than that occurring during the day. Community noise is usually measured using Day-Night Average Level (L_{dn}), which is the 24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime (10:00 PM to 7:00 AM) hours. It is also measured using CNEL, which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 PM to 7:00 AM (Caltrans 2013). Noise levels described by L_{dn} and CNEL usually differ by about 1 dBA. The relationship between the peak-hour L_{eq} value and the L_{dn}/CNEL depends on the distribution of traffic during the day, evening, and night.

2.2 Vibration

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent structures. The number of cycles per second of oscillation makes up the vibration frequency, described in terms of Hz. The frequency of a vibrating object describes how rapidly it oscillates. The normal frequency range of most groundborne vibration that can be felt by the human body starts from a low frequency of less than 1 Hz and goes to a high of about 200 Hz (Crocker 2007).

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise. Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hz), or when foundations or utilities, such as sewer and water pipes, physically connect the structure and the vibration source (FTA 2018). Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern of vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses.

Vibration amplitudes are usually expressed in peak particle velocity (PPV) or root mean squared (RMS) vibration velocity. The PPV and RMS velocity are normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration

signal. PPV is often used in monitoring of blasting vibration because it is related to the stresses that are experienced by buildings (Caltrans 2020a).

2.3 Sensitive Receivers

Noise-sensitive receivers are land uses that may be subject to stress and/or interference from excessive noise, such as residential dwellings, schools, transient lodging (hotels), hospitals, educational facilities, and libraries. Industrial and commercial land uses are generally not considered sensitive to noise.

Vibration-sensitive receivers, which are similar to noise-sensitive receivers, include residences and institutional uses, such as schools, churches, and hospitals. However, vibration-sensitive receivers also include buildings where vibrations may interfere with vibration-sensitive equipment that is affected by vibration levels that may be well below those associated with human annoyance (e.g., recording studies or medical facilities with sensitive equipment).

The nearest noise-sensitive receivers include the residential communities located approximately 0.6 mile northeast and 1,100 feet northwest of the Project site. The nearest vibration-sensitive receivers include the Arch Health Medical Group facility, the Palomar Health Rehabilitation Institute, and the Rady Children's Urgent Care Escondido located approximately 0.15, 0.2, and 0.25 mile to the southwest of the Project site, respectively.

2.4 Project Noise Setting

The Project site is located in the City of Escondido, which is an urban, incorporated area of San Diego County that includes industrial and residential development in the surrounding area. The major noise sources in the vicinity of the site are freeways and roadways located near the Project, including SR 78 and Auto Park Way to the north, I-15 to the east, and Citracado Parkway to the west. To characterize ambient noise levels at and near the EEPP and the Enterprise BESS portions of the parcel, two short term 15-minute sound level measurements were conducted on June 2, 2023, and one long-term 25-hour measurement was conducted on June 1–2, 2023. An Extech, Model 407780A, ANSI Type 2 integrating sound level meter was used to conduct the measurements. The sound meter was calibrated prior to measurements. Short-Term measurement 1 (ST1) was conducted at the southeastern edge of the Project site boundary at the cul-de-sac of Enterprise Street; Short-Term measurement 2 (ST2) was conducted offsite at the residential area approximately 0.3 miles from the edge of the western Project site boundary. The long-term measurement (LT1) was conducted in a northwestern portion of the Project site near the intersection of Auto Park Way and Citracado Parkway. Figure 4 shows the measurement locations, Table 2 summarizes the results of the short-term noise measurements, and Table 3 summarizes the results of the long-term noise measurements.

Figure 4 Noise Measurement Locations

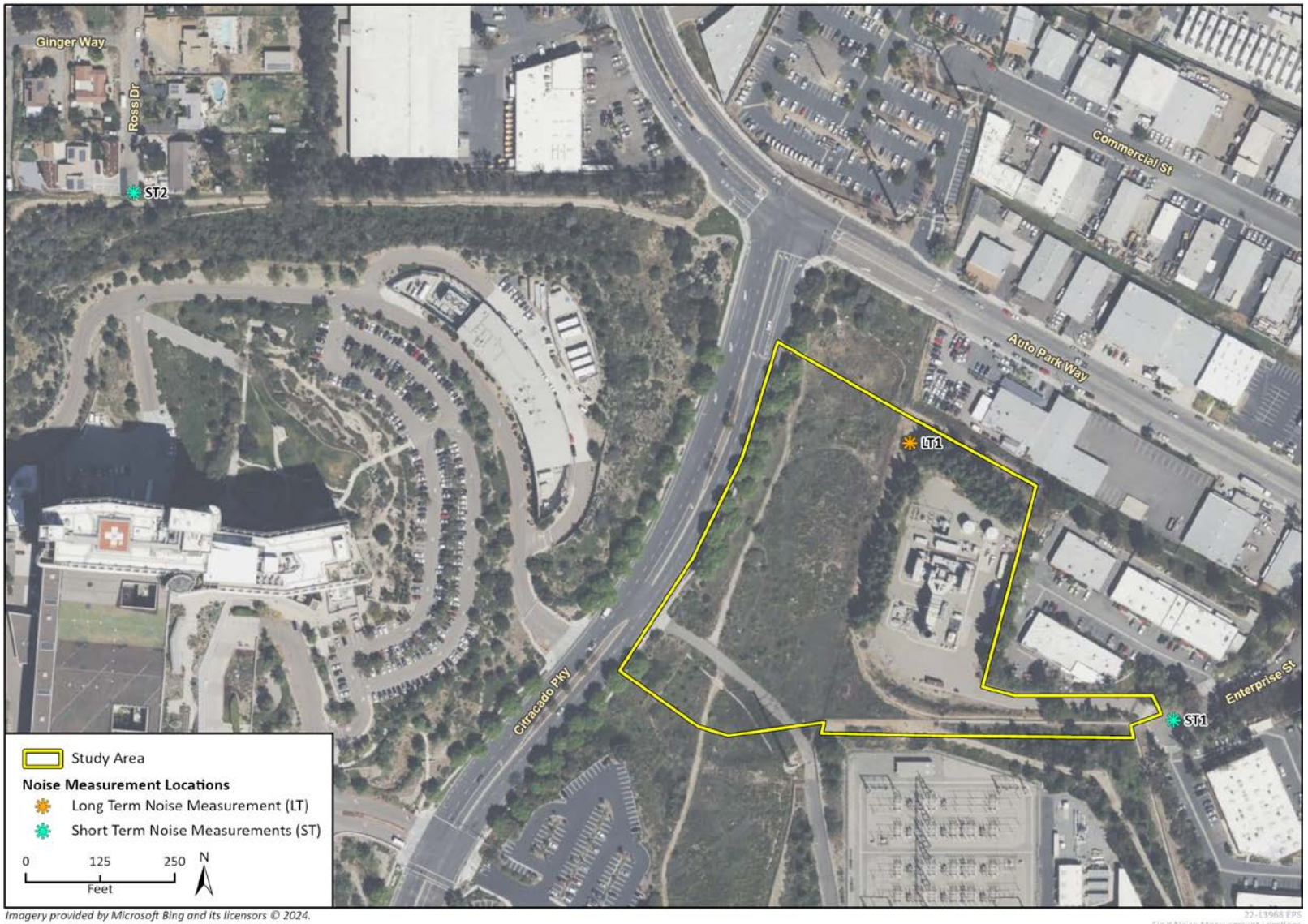


Table 2 Project Site Noise Monitoring Results – Short Term

Measurement Name	Measurement Location	Sample Times	Primary Noise Sources	L_{eq} (dBA)	L_{min} (dBA)	L_{max} (dBA)	L_{10} (dBA)	L_{50} (dBA)	L_{90} (dBA)
ST1	Southeastern portion of Project site	11:35 – 11:50 a.m.	Auto Park Way	55.8	46.9	69.5	57.6	53.5	51.5
ST2	Offsite at closest residences northwest of Project site	11:58 a.m. – 12:13 p.m.	Auto Park Way, Citracado Pkwy	51.6	44.2	81.1	54.4	48.4	44.5

Detailed sound level measurement data are included in Appendix A; measurement locations are shown on Figure 4.

Table 3 Project Site Noise Monitoring Results – Long Term

Sample Time	dBA L_{eq}	Sample Time	dBA L_{eq}
LT1 – Northwestern Portion of Project Site, June 1–2, 2023			
10:22 a.m.	59	11:22 p.m.	54
11:22 a.m.	60	12:22 a.m.	53
12:22 p.m.	60	1:22 a.m.	52
1:22 p.m.	60	2:22 a.m.	52
2:22 p.m.	58	3:22 a.m.	56
3:22 p.m.	57	4:22 a.m.	57
4:22 p.m.	58	5:22 a.m.	57
5:22 p.m.	57	6:22 a.m.	66
6:22 p.m.	58	7:22 a.m.	62
7:22 p.m.	58	8:22 a.m.	59
8:22 p.m.	56	9:22 a.m.	60
9:22 p.m.	55	10:22 a.m.	58
10:22 p.m.	54		
			25-hour Noise Level
		CNEL	65.2
		L_{eq}	58.8
		L_{min}	50.3
		L_{max}	87.9
		L_{10}	60.7
		L_{50}	56.8
		L_{90}	51.8

Source: Rincon Consultants, field measurements conducted on June 1–2, 2023, using ANSI Type II Integrating sound level meter. See Appendix A for measurement data.

2.5 Regulatory Setting

State

The California Code of Regulations, Title 20, Division 2, Chapter 5, Appendix B includes the following noise regulations applicable to the Project:

(4) Noise

(A) A land use map which identifies residences, hospitals, libraries, schools, places of worship, or other facilities where quiet is an important attribute of the environment within the area impacted by the proposed Project. The area potentially impacted by the proposed Project is that area where, during either construction or operation, there is a potential increase of 5 dBA or more, over existing background levels.

(B) A description of the ambient noise levels at those sites identified under subsection (g)(4)(A) which the applicant believes provide a representative characterization of the ambient noise levels in the Project vicinity, and a discussion of the general atmospheric conditions, including temperature, humidity, and the presence of wind and rain at the time of the measurements. The existing noise levels shall be determined by taking noise measurements for a minimum of 25 consecutive hours at a minimum of one site. Other sites may be monitored for a lesser duration at the applicant's discretion, preferably during the same 25-hour period. The results of the noise level measurements shall be reported as hourly averages in L_{eq} (equivalent sound or noise level), L_{dn} (day-night sound or noise level) or CNEL (Community Noise Equivalent Level) in units of dB(A). The L_{10}, L_{50}, and L_{90} values (noise levels exceeded 10 percent, 50 percent, and 90 percent of the time, respectively) shall also be reported in units of dBA.

(C) A description of the major noise sources of the Project, including the range of noise levels and the tonal and frequency characteristics of the noise emitted.

(D) An estimate of the Project noise levels, during both construction and operation, at residences, hospitals, libraries, schools, places of worship, or other facilities where quiet is an important attribute of the environment, within the area impacted by the proposed Project.

(E) An estimate of the Project noise levels within the Project site boundary during both construction and operation and the impact to the workers at the site due to the estimated noise levels.

(F) The audible noise from existing switchyards and overhead transmission lines that would be affected by the Project and estimates of the future audible noise levels that would result from existing and proposed switchyards and transmission lines. Noise levels shall be calculated at the property boundary for switchyards and at the edge of the rights-of-way for transmission lines.

Local

The Enterprise BESS Project site is located in Escondido (San Diego County). Applicable noise standards are codified in the following City regulations:

City of Escondido Municipal Code

Section 17-229 of the City of Escondido Municipal Codes specifies noise level limits for various land use types, shown in Table 4. The Municipal Code prohibits the creation of any noise so as to exceed the one-hour average sound level, at any point on or beyond the boundaries of the property on which the sound is produced, shown in Table 4.

Table 4 Applicable Sound Level Limits by Zoning

Zone	Time	Applicable Limit One-hour Average Sound Level (dB)
Residential zones	7 AM to 10 PM	50
	10 PM to 7AM	45
Multi-residential zones	7 AM to 10 PM	55
	10 PM to 7 AM	50
Commercial zones	7 AM to 10 PM	60
	10 PM to 7 AM	55
Light industrial/industrial park zones	Anytime	70
General industrial zones	Anytime	75

Source: *City of Escondido Municipal Code*, Section 17-229, Sound level limits.

The Project site is located in a light industrial zone and is surrounded by other light industrial and industrial park zones; therefore, an average hourly noise level of 70 dB will be the maximum threshold not to be exceeded at or beyond the Project property line.

Section 17-234 of the City's Municipal Code defines time and noise limits on construction activity, prohibiting operation of construction equipment at any time except on Mondays through Fridays between 7 AM and 6 PM, and on Saturdays between 9 AM and 5 PM. It is not permitted for construction equipment to be operated at any time on Sundays and on public holidays. Additionally, Section 17-238 specifies limits on grading of a construction site (defined as, but not limited to, compacting, drilling, rock crushing or splitting, bulldozing, clearing, dredging, digging, filling, and blasting). Grading of a construction site cannot occur unless performed on Mondays through Fridays between 7 AM and 6 PM or on Saturdays between 10 AM and 5 PM. Performing construction work outside of these hours would require a variance to be obtained in advance from the City manager.

Section 17-234 also places a noise level limit on operation of construction equipment, specifying it is unlawful for construction equipment or any combination of equipment to be operated so as to exceed a one-hour average noise level of 75 dB. While not explicitly stated, it is assumed that this standard applies to the noise level at a receiving noise-sensitive property line.

3 Methodology

3.1 Construction Noise

Construction activity would result in temporary noise in the Project site vicinity, exposing surrounding nearby receivers to increased noise levels. Construction noise associated with the Project would be generated by heavy-duty diesel construction equipment used for site preparation, grading, foundation and retaining wall installation, off-site access road, loading, unloading, placing materials, and installing battery enclosures, switchgear, and on-site electrical interconnection. Each phase of construction has a specific equipment mix, depending on the work to be accomplished during that phase. Construction noise would typically be higher during the more equipment-intensive phases of initial construction (i.e., site preparation and grading) and would be lower during the later construction phases (i.e., material placement, components installation, commissioning, and testing).

During construction, equipment goes through varying load cycles and is operated intermittently to allow for non-equipment tasks such as measurement. Power variation is accounted for by describing the noise at a reference distance from the equipment operating at full power and adjusting it based on the duty cycle of the activity to determine the L_{eq} of the operation (FTA 2018). Reference noise levels for heavy-duty construction equipment were estimated using the FHWA Roadway Construction Noise Model (RCNM) (FHWA 2006). Due to the size of the Project site, a likely construction scenario includes simultaneous operation of a backhoe, dozer, and front-end loader during grading activities. As discussed above, a pile driver will be needed during construction of the retaining wall that will run along the Project's southern boundary line. A reasonable worst-case scenario consisting of an excavator, a dozer, a grader, and an impact pile driver was analyzed. At a distance of 50 feet, an excavator, a dozer, a grader, and an impact pile driver would generate a noise level of 95 dBA L_{eq} (RCNM calculations are included in Appendix B).

Construction equipment would operate as close as approximately 1,100 feet to the nearest residential property line to the northwest and as close as 550 feet to the nearest medical center to the southwest.

3.2 Groundborne Vibration

The Project does not include any substantial vibration sources associated with operation. Thus, the most substantial vibration sources with the potential to affect nearby receivers will be associated with activity during construction of the Project, especially during grading and excavation of the site. The greatest vibratory source during construction in the vicinity of the BESS site would be pile driving along the southern Project site boundary during construction of the retaining wall. Blasting would not be required for construction of the Project. Construction vibration estimates are based on vibration levels reported by the FTA (FTA 2018). Table 5 shows typical vibration levels for various pieces of construction equipment used in the assessment of construction vibration (FTA 2018).

Table 5 Vibration Levels Measured during Construction Activities

Equipment	PPV at 25 ft. (in/sec)
Impact Pile Driver	1.518
Roller	0.032
Large Bulldozer	0.089
Loaded Trucks	0.076

Source: FTA 2018

Vibration limits used in this analysis to determine a potential impact to local land uses from construction activities, such pile-driving, vibratory compaction, demolition, drilling, or excavation, are based on information contained in Caltrans' *Transportation and Construction Vibration Guidance Manual* and the Federal Transit Administration and the FTA *Transit Noise and Vibration Impact Assessment Manual* (Caltrans 2020a; FTA 2018). Maximum recommended vibration limits by the American Association of State Highway and Transportation Officials (AASHTO) are identified in Table 6.

Table 6 AASHTO Maximum Vibration Levels for Preventing Damage

Type of Situation	Limiting Velocity (in/sec)
Historic sites or other critical locations	0.1
Residential buildings, plastered walls	0.2–0.3
Residential buildings in good repair with gypsum board walls	0.4–0.5
Engineered structures, without plaster	1.0–1.5

Source: Caltrans 2020a

Based on AASHTO recommendations, limiting vibration levels to below 0.2 in/sec PPV at residential structures would prevent structural damage regardless of building construction type. These limits are applicable regardless of the frequency of the source.

3.3 Operational Noise

Under normal operation, the BESS site would be remotely monitored with no personnel on-site except for periodic maintenance (provided by two workers up to twice per week) and battery augmentation activities. Maintenance and battery augmentation activities would not generate substantial noise. The noise sources on the Project site after completion of construction would include stationary outdoor equipment such as transformers, inverters, and individual BESS units.

Noise level modeling for the BESS Project's combined worst case operational sources was developed using SoundPLAN noise modeling software, Version 9.0. SoundPLAN incorporates noise propagation algorithms and reference sound levels published by various government agencies and the scientific community. Noise sources and receivers are input using three-dimensional coordinates. The majority of buildings and other structures in the vicinity of the Project site were conservatively not modeled; only the Palomar Health Data Center was included in the model, as this acts as an intervening structure between the Project site and the nearest noise-sensitive residential receiver. In all cases, receivers were modeled at the average height of the human ear, which is five feet above ground elevation.

Propagation of modeled stationary noise sources was based on ISO Standard 9613-2, "Attenuation of Sound during Propagation Outdoors, Part 2: General Method of Calculation." The assessment methodology assumes that all receivers would be downwind of stationary sources. This is a worst-case assumption for total noise impacts since only some receivers would be downwind at any one time.

On-site noise sources were modeled based on information provided by the Project applicant. Inverters would be Power Electronics units (or similar) and generate a noise level of 79 dBA at 1 meter based on manufacturer's specifications. BESS battery enclosures would be CATL units (or similar) and generate a noise level of 75 dBA at 1 meter based on manufacturer's specifications. Transformers would be Power Electronics units (or similar) and generate a noise level of 72 dBA at 1 meter based on manufacturer's specifications. For a conservative scenario, all equipment was assumed to operate at 100 percent of an hour for 24 hours.

3.4 Traffic Noise

It is assumed that construction traffic will access the Project site via Auto Park Way and/or Citracado Parkway. Existing traffic volumes are compared with proposed construction traffic along these roadways logarithmically to estimate the potential Project-related traffic noise increase. The California Department of Transportation (Caltrans) does not publish traffic volumes for non-highway roadways in the vicinity of the Project site; therefore, traffic volumes were based on most recent forecasted volumes published in the San Diego Association of Governments (SANDAG) Transportation Forecast Information Center (TFIC) (SANDAG 2019). All forecasted volumes were from the year 2016, taken from SANDAG's activity based regional transportation model (ABM2) for the 2019 Regional Transportation Plan (RTP).

All roadway vehicle trips generated by Project construction activities are based on estimates provided by the Project applicant. It is estimated that up to 50 worker trips and 30 haul truck trips per day would occur during peak construction periods. A vehicle trip is defined as a one-direction vehicle movement. The total number of trips generated by the Project includes both inbound and outbound trips. Therefore, Project construction would generate a maximum of 160 one-way trips per day. Table 7 shows the estimated number of existing and construction-generated vehicle trips on the roadway segments. All construction trips were conservatively assumed to occur on Auto Park Way and Citracado Parkway, which are both located near the existing residences and the Palomar Health Rehabilitation Institute closest to the Project site.

To assess the increase in ambient noise levels at the nearby residences, per California Code of Regulations requirements, a version of the FHWA traffic noise prediction model (FHWA-RD-77-108) is used. Appendix C contains the traffic noise modeling inputs and outputs.

Table 7 Estimated Existing and Construction Vehicle Trips

Roadway Segment	Existing Daily Vehicle Trips[1]	Construction Daily Vehicle Trips	Existing + Construction Daily Vehicle Trips
Auto Park Way – Alpine Way to Citracado Pkwy	15,300	160	15,460
Auto Park Way – Citracado Pkwy to Enterprise St	12,535	160	12,695
Citracado Pkwy – Auto Park Way to Palomar Health Rehabilitation Institute Entrance	9,911	160	10,071

[1] Existing average daily vehicle trips obtained from SANDAG TFIC ABM2 2019 RTP forecasts (SANDAG 2019).

3.5 Significance Thresholds

To determine whether a project would have a significant noise impact, Appendix G of the CEQA Guidelines requires consideration of whether a project would result in:

1. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; or,
2. Generation of excessive groundborne vibration or groundborne noise levels; or,
3. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.

Construction Noise

As stated previously, the City of Escondido Municipal Code specifies time limits for construction equipment operation, stating that it is unlawful for operation of any construction equipment except on Monday through Friday between 7 AM and 6 PM and on Saturdays between 9 AM and 5 PM. Furthermore, no construction activity may occur on Sundays and on public holidays.

Additionally, the Municipal Code places an operational noise limit for construction noise, prohibiting the operation of any construction equipment or combination of equipment to exceed a one-hour average sound level of 75 dB, assumed to be assessed at a noise-sensitive receiving property line. Therefore, if noise levels from construction activity associated with the Enterprise BESS Project exceed an hourly L_{eq} of 75 dBA at the property line of nearby noise-sensitive receivers, a significant noise impact would occur.

On-site Operational Noise

The Project site is located in an industrial area of the County with the closest residential property approximately 1,100 feet to the northwest. The City of Escondido County Municipal Code does not have quantified limits for operational stationary noise. Per the NOISE-1 requirement from the Enterprise Emergency Project Noise Conditions of Certification, Project operational noise shall not exceed 45 dBA at the closest sensitive receiver between the hours of 10 PM and 7 AM. Therefore, on-site operational noise could be significant if it exceeds this threshold at the nearest single-family residences.

Additionally, per the City of Escondido Municipal Code's noise limit for industrial uses, the Project must not generate noise levels that exceed 70 dBA L_{eq} at the property line.

Off-site Traffic Noise

A project will normally have a significant effect on the environment related to noise if it will substantially increase the ambient noise levels for adjoining areas. Most people can detect changes in sound levels of approximately 3 dBA under normal, quiet conditions, and changes of 1 to 3 dBA are detectable under quiet, controlled conditions. Changes of less than 1 dBA are usually indiscernible. A change of 5 dBA is readily discernible to most people in an exterior environment. Based on this, the following thresholds of significance similar to those recommended by the Federal Aviation Administration (FAA) are used to assess traffic noise impacts at sensitive receptor locations

(FAA 2020). A significant impact would occur if Project-related traffic noise increases the existing noise environment by the following:

- Greater than 1.5 dBA for ambient noise environments of 65 dBA CNEL and higher;
- Greater than 3 dBA for ambient noise environments of 60 to 64 dBA CNEL; or
- Greater than 5 dBA for ambient noise environments of less than 60 dBA CNEL.

Construction Vibration

The City of Escondido has not adopted standards to assess vibration impacts during construction and operation. Therefore, vibration limits used in this analysis are based on those outlined in Caltrans *Transportation and Construction Vibration Guidance Manual* (2020) to evaluate potential construction vibration impacts related to both potential building damage and human annoyance. Based on the Caltrans criteria shown above in Table 6, construction vibration impacts would be significant if vibration levels exceed 0.2 in./sec. PPV for residential structures, which are the limits where minor cosmetic, i.e., non-structural, damage may occur to these buildings.

4 Impact Analysis

4.1 Issue 1

Issue:	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**

Construction

Construction Equipment

General construction activities are expected to typically occur between 7 AM and 6 PM on Mondays through Fridays and between 9 AM and 5 PM on Saturdays, with grading activity expected to occur between 7 AM and 6 PM on Mondays through Fridays and between 10 AM and 5 PM on Saturdays, which is in compliance with the City's time restrictions on construction activity. Additionally, prior to and during the construction period, the existing CEC Noise Conditions of Certification NOISE-2, NOISE-3, and NOISE-4 will apply.

Over the course of a typical construction day, construction equipment would be located as close as 1,100 feet to the nearest noise-sensitive uses to the northwest (single-family residences) and 550 feet to those to the southwest (Palomar Health Rehabilitation Institute). When accounting for simultaneous dozing, excavating, grading, and impact pile driving at the southwest corner of the Project site, construction activity would generate noise levels up to 68 dBA L_{eq} at the nearest residential property line located to the northwest and up to 74 dBA L_{eq} at the Palomar Health Rehabilitation Institute to the southwest. This conservatively does not take into account shielding from any intervening buildings, terrain, or features. Therefore, construction noise levels would not exceed the construction noise threshold of 75 dBA L_{eq} at nearby noise-sensitive receivers, and construction noise impacts would be less than significant.

The California Code of Regulations, Title 20, Division 2, Chapter 5, Article 6, Section B, Appendix B requires an estimate of worker noise exposure during Project construction. As discussed in Section 3.1, construction noise could reach as high as 95 dBA L_{eq}. The federal government regulates occupational noise exposure common in the workplace through the Occupational Health and Safety Administration (OSHA) under the US EPA. Noise limitations would apply to the operation of construction equipment. Noise exposure of this type is addressed through a facility's Health and Safety Plan, as required under OSHA.

Construction Vehicles

The Project would generate new vehicle trips that would increase noise levels on nearby roadways during construction. The Project is anticipated to generate a maximum of 160 daily vehicle trips between workers and deliveries of equipment during the peak phases of construction. The Project would not make alterations to roadway alignments or substantially change the vehicle classifications mix on local roadways. Therefore, the primary factor affecting off-site noise levels would be increased traffic volumes. A temporary increase of 160 daily vehicle trips would result in a daily traffic noise level increase of less than 0.1 dBA CNEL on both Auto Park Way and Citracado Parkway.

As a result, noise increases due to Project construction traffic would not exceed the 1.5 dBA CNEL impact criterion for off-site traffic noise. Therefore, impacts would be less than significant.

Operation

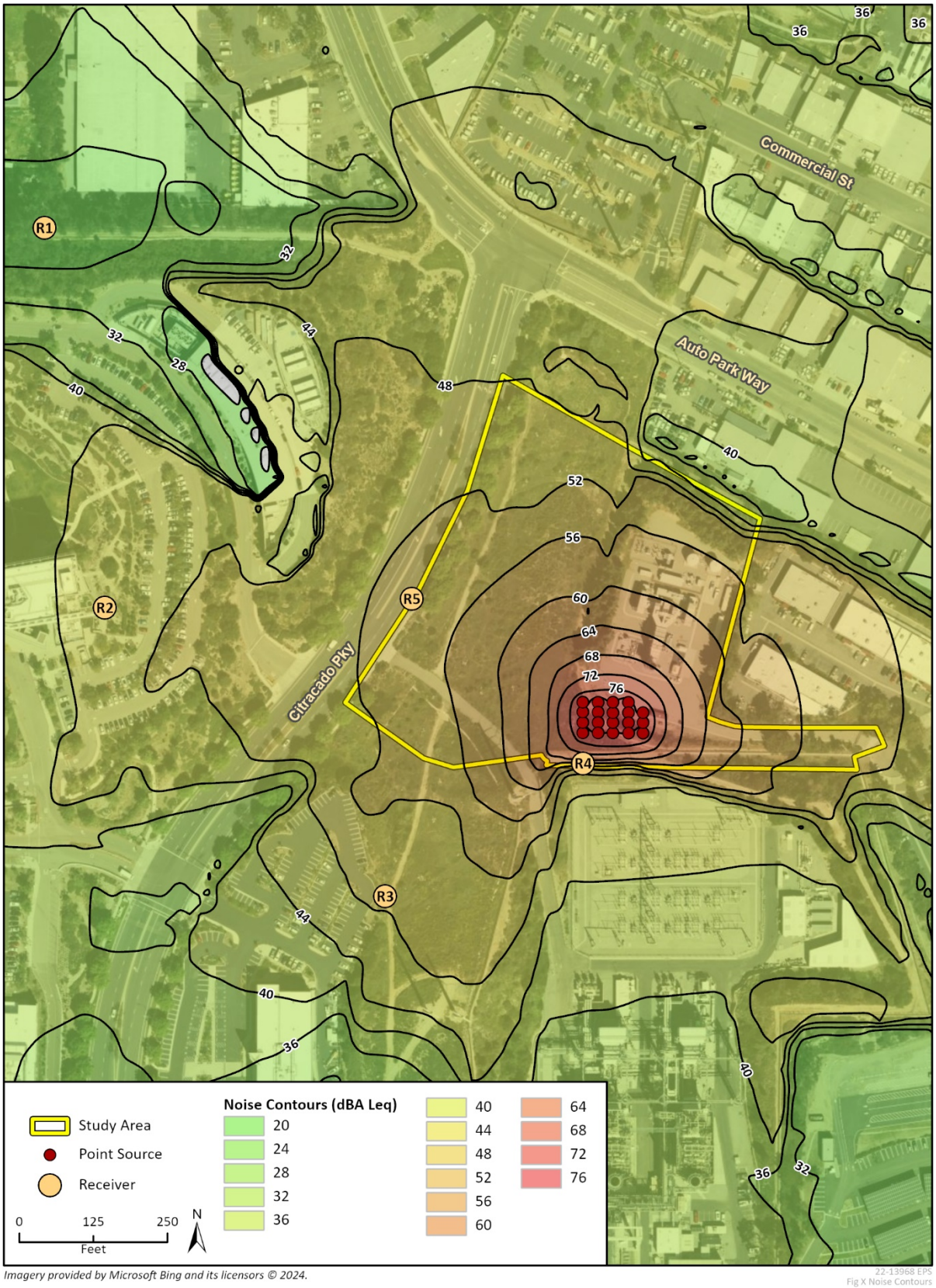
Following the methodology discussed in Section 3.3, Project operational noise levels were modeled, and noise contours were calculated throughout the Project site and surroundings. Project operation noise contours are shown on Figure 5. As shown on Figure 5, noise levels at the nearest residential receiver to the northwest (represented as R1) would be 22 dBA L_{eq}, noise levels at the Palomar Health Rehabilitation Institute to the west (represented as R2) would be 42 dBA L_{eq}, and noise levels at the Arch Health Medical Group facility to the southwest (represented as R3) would be 44 dBA L_{eq}. In addition, noise levels at the southern property line (represented as R4) and western property line (represented as R5) would be maintained below 70 dBA L_{eq}, reaching 63 dBA L_{eq} and 50 dBA L_{eq} at the southern and western property lines, respectively. Note that once operational, the Project applicant will be required to comply with Noise CoC NOISE-1.

The California Code of Regulations, Title 20, Division 2, Chapter 5, Article 6, Section B, Appendix B requires an estimate of worker noise exposure during Project operation. Operational noise levels at the site could reach up to 76 dBA L_{eq}. The federal government regulates occupational noise exposure common in the workplace through the Occupational Health and Safety Administration (OSHA) under the EPA. Noise limitations would apply to the operation of industrial equipment as part of the Project. Noise exposure of this type is addressed through a facility's Health and Safety Plan, as required under OSHA.

Off-site Traffic Noise

The Project would be expected to require regular maintenance visits by two workers, twice per week on average. However, when compared with the existing daily traffic volumes of 12,535–15,300 on Auto Park Way and 9,911 on Citracado Parkway, these maintenance worker trips would cause a negligible traffic noise increase (less than 0.1 dBA CNEL) along these roadways. Therefore, impacts would be less than significant as this increase is below the threshold of impact (1.5 dBA CNEL increase) for ambient noise environments of 65 dBA CNEL. Similarly, infrequent battery augmentation activities involving addition of new batteries on existing foundations would result in negligible, less-than-significant traffic noise increases.

Figure 5 Enterprise BESS Project Operational Noise Contours



Imagery provided by Microsoft Bing and its licensors © 2024.

22-13968 EPS
Fig X Noise Contours

4.2 Issue 2

Issue:	Would the project result in generation of excessive ground-borne vibration or ground-borne noise levels? **LESS THAN SIGNIFICANT**

Construction activities known to generate excessive ground-borne vibration, such as pile driving, will be conducted during construction of the Project. Pile driving construction equipment may be used as close as 500 feet of the nearest off-site structures i.e., the Palomar Health Medical Group doctor's office southwest of the Enterprise BESS site. Impact pile driving generates a vibration level of approximately 1.518 in/sec PPV at a distance of 25 feet (FTA 2018). This vibration level would attenuate to 0.016 in/sec PPV for a pile driver at a distance of 500 feet and would therefore not exceed the threshold of 0.2 in/sec PPV at this vibration-sensitive receiver. Furthermore, vibration levels would be even less at the nearest residences to the northwest (located approximately 1,100 feet from the nearest pile driving activity at the Project site), reaching a level of 0.005 in/sec PPV. Therefore, temporary impacts associated with construction would be less than significant.

Operation of the Project would not include any substantial vibration sources. Therefore, operational vibration impacts would also be less than significant.

4.3 Issue 3

Issue:	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? **NO IMPACT**

The closest airport to the Project site is the McClellan-Palomar Airport, located approximately nine miles to the west. The Project site is located well outside of the 60 dBA CNEL noise contour of the airport, according to Figure 7-1 of the McClellan-Palomar Airport Federal Aviation Regulation Part 150 Study Update (McClellan-Palomar Airport 2005). In addition, the Enterprise BESS is a utility-use project and does not include any noise-sensitive outdoor use areas (e.g., courtyards, outdoor recreation areas) and the Project would not include any interior spaces. Therefore, no substantial noise exposure from airport noise would occur to users of the Project, and no impacts would occur.

5 Conclusion

The proposed Enterprise BESS Project would generate both temporary construction-related noise and long-term noise associated with operation. However, construction noise would not exceed noise standards at the nearby land uses and impacts from construction noise would be less than significant.

The Project's stationary noise sources (BESS units and inverters) would not exceed applicable exterior noise standards at the nearest land uses. Therefore, stationary noise impacts would be less than significant.

Project-generated traffic would result in an increase of less than 0.1 dBA CNEL on Auto Park Way and Citracado Parkway near noise-sensitive receivers during construction of the Project, and less during Project operation. This is below the threshold of 1.5 dBA CNEL; therefore, the off-site traffic noise increase would be less than significant.

The Project would generate groundborne vibration during construction, but vibration would not exceed the applicable thresholds at adjacent structures to the Project site. Therefore, construction-related vibration impacts would be less than significant.

Due to the large distance between the Project site and nearest airport, no substantial noise exposure from airport noise would occur to construction workers, maintenance workers, or infrequent visitors to the facility, and no impacts would occur.

6 References

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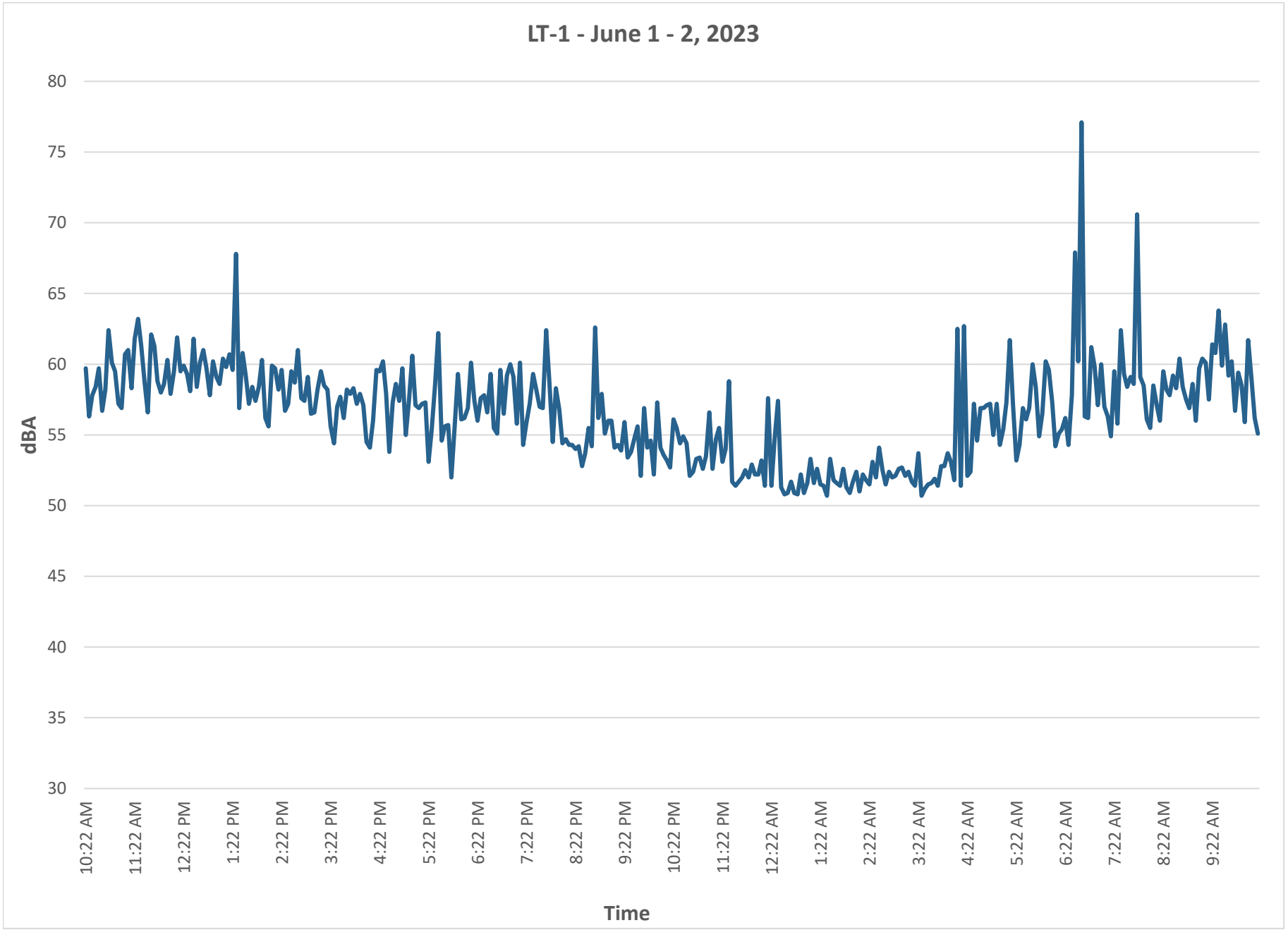
Appendix A

Noise Measurement Data


LT-1 - June 1 - 2, 2023
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Appendix B

Construction Noise Modeling Results

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/23/2023
Case Description: Palladium BESS Construction Noise

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Construction	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40	85.0		50.0	0.0
Excavator	No	40	85.0		50.0	0.0
Grader	No	40	85.0		50.0	0.0
Impact Pile Driver	Yes	20		101.3	50.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Calculated (dBA)

Equipment	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Dozer	85.0	81.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	85.0	81.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	85.0	81.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Impact Pile Driver	101.3	94.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	101.3	94.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Appendix C

Traffic Modeling Results

Traffic Noise Calculator: FHWA 77-108 **Project Number: 22-13968**

	Output						Inputs													Auto Inputs	
	dBA at 50 feet			Distance to CNEL Contour																	
ID	$L_{eq\text{-}24hr}$	L_{dn}	CNEL	70 dBA	65 dBA	60 dBA	Roadway	Segment	ADT	Posted Speed Limit	Grade	% Autos	% Med Trucks	% Heavy Trucks	% Daytime	% Evening	% Night	Number of Lanes	Site Condition	Distance to Reciever	Ground Absorption	Lane Distance
1	59.7	63.4	63.8	139	440	1393	Auto Park Way	rk Way to Citraca	15,300	40	8.0%	90.0%	4.0%	6.0%	75.0%	10.0%	15.0%	4	Hard	582	0	44
2	59.7	63.5	63.8	141	445	1407	Auto Park Way	rk Way to Citraca	15,460	40	8.0%	90.0%	4.0%	6.0%	75.0%	10.0%	15.0%	4	Hard	582	0	44
3	57.0	60.7	61.1	112	354	1119	Auto Park Way	ıdo Pkwy to Enter	12,535	40	8.0%	90.0%	4.0%	6.0%	75.0%	10.0%	15.0%	2	Hard	868	0	20
4	57.1	60.8	61.2	113	358	1133	Auto Park Way	ıdo Pkwy to Enter	12,695	40	8.0%	90.0%	4.0%	6.0%	75.0%	10.0%	15.0%	2	Hard	868	0	20
5	56.9	60.6	60.9	90	285	902	Citracado Pkwy	ar Health Rehabil	9,911	40	8.0%	90.0%	4.0%	6.0%	75.0%	10.0%	15.0%	4	Hard	726	0	44
6	56.9	60.6	61.0	92	290	917	Citracado Pkwy	ar Health Rehabil	10,071	40	8.0%	90.0%	4.0%	6.0%	75.0%	10.0%	15.0%	4	Hard	726	0	44

APPENDIX G

VEHICLE MILES TRAVELED (VMT) TECHNICAL MEMORANDUM

Rincon Consultants, Inc.

8825 Aero Drive
Suite 120
San Diego, California 92123

760 918 9444

info@rinconconsultants.com
www.rinconconsultants.com

March 5, 2024
Rincon Project No. 22-13968

Enterprise BESS LLC
201 Enterprise Street
Escondido, California 92029

Subject: VMT Technical Memorandum for the Enterprise Battery Energy Storage System Project in City of Escondido, San Diego County, California

Dear Enterprise BESS LLC:

Rincon Consultants, Inc. (Rincon) is pleased to provide you with this vehicle miles traveled (VMT) technical memorandum for the Enterprise Battery Energy Storage System Project (project) in the City of Escondido (City), California. The purpose of this memorandum is to analyze the potential for the project to screen out of the requirement to prepare a detailed transportation VMT analysis, as identified by the applicability of VMT screening criteria adopted by the City of Escondido in their "Escondido: Transportation Impact Analysis Guidelines," dated April 2021. This memorandum is not intended to support a California Environmental Quality Act (CEQA) analysis; rather, this memorandum and its findings will serve to support an assumed California Energy Commission (CEC) post-certification amendment for the project.

Project Description

The project proposes to install a Battery Energy Storage System (BESS) project at the existing nominal 49.5 MW Enterprise Emergency Peaker Project (EEPP) property in the City of Escondido in San Diego County, California. The project will be constructed in part to support California's current need for additional electrical supply capacity during peak load demand time periods. The proposed BESS facilities project would utilize approximately 1.2 acres of available open areas within the overall 2.94-acre EEPP parcel, plus approximately 0.6 acre of additional land adjacent to the EEPP parcel. New development at the previously disturbed project site would consist of stacked containerized battery systems with internal heating, ventilation and air conditioning and internal fire detection and fire suppression systems, battery management systems, stacked power conversion systems (i.e., inverters), transformers, and electrical conductors. The Project includes an approximately 400-foot-long, onsite underground 13.8 kilovolt (kV) connection to the existing EEPP switchyard transformer, which would connect the Enterprise BESS to the electrical grid.

The Project also includes construction of an emergency access road spur to southwest portion of the BESS site from an existing San Diego Gas & Electric (SDG&E) access road that connects Citracado Parkway to the existing SDG&E Palomar facility to the south, and the addition of a new offsite stormwater conveyance component consisting of buried pipe adjacent to the western EEPP property on land to be leased by SDG&E. This new stormwater conveyance will be designed to carry stormwater via gravity flow from the southern portion of the EEPP site where the proposed BESS facilities are located to an existing stormwater conveyance which outfalls into an existing detention basin on SDG&E land to the

northwest of the EEPP property. A retaining wall will be constructed along the southern site boundary to stabilize the vertical cut near the property line that is associated with removal of the existing hillside and the needed creation of a level area for the Project. The Project development plan includes the installation of sheet piles along the southern property line to stabilize the cut slope prior to installation of the retaining wall. An approximately 20-foot-wide by 600-foot-long temporary construction work area on the northern portion of the adjacent SDG&E property will be utilized to construct the retaining wall.

The licensing for EEPP in 2001 (CEC Docket No. 01-EP-10) did not include a VMT analysis. The CEC has requested that a VMT analysis be provided as part of the post-certification amendment for the Enterprise BESS project. The discussion of VMT screening thresholds presented herein is consistent with City of Escondido requirements, although the City of Escondido does not have lead agency jurisdiction for the project given the CEC's jurisdiction.

Regulatory Setting

Senate Bill 743 (SB 743) was signed into law by Governor Jerry Brown in 2013 and tasked the State Office of Planning and Research (OPR) with establishing new criteria and metrics for identifying and mitigating transportation impacts under CEQA. SB 743 changed the way that public agencies evaluate transportation, recognizing that roadway congestion, while an inconvenience to drivers, is not itself an environmental impact. Under SB 743, the OPR established VMT as the preferred metric for measuring transportation impacts of most projects in place of vehicle level of service (LOS) or related measures of congestion as the primary metric. The use of VMT for determining significance of transportation impacts has become commonplace since the certification of this provision and the release of OPR's Technical Advisory on Evaluating Transportation Impacts in CEQA in December 2018.

CEQA Guidelines Section 15064.3 implements SB 743 and establishes VMT as the most appropriate measure of transportation impacts for environmental analysis. CEQA lead agencies were required to comply with CEQA Guidelines Section 15064.3 no later than July 1, 2020. In response, the City of Escondido adopted specific guidance and thresholds for evaluating VMT impacts of projects within their jurisdiction in the Escondido: Transportation Impact Analysis Guidelines, published in April 2021. The Transportation Impact Analysis Guidelines contain metrics and methodologies for calculating VMT, screening criteria for VMT analysis, and suggested mitigation measures for projects that are found to have a significant VMT impact. The City's guidelines and screening criteria contained in the Transportation Impact Analysis Guidelines are used as the basis for discussion herein related to the Enterprise BESS project.

VMT Screening Thresholds

For land use projects, SB 743 provides opportunities to streamline transportation analysis under CEQA based on specific screening thresholds adopted by each individual jurisdiction. As described above, the City of Escondido's 2021 Transportation Impact Analysis Guidelines contain screening criteria specific to the City. The requirement to prepare a detailed transportation VMT analysis applies to all land development projects in Escondido, except for those that meet at least one screening criterion provided in the City's Transportation Impact Analysis Guidelines. A project that meets one of the screening criteria would be presumed to have a less than significant VMT impact due to project characteristics

and/or location (City of Escondido 2021). The following screening criteria are identified in the City's Transportation Impact Analysis Guidelines:

1. **Small Residential and Employment Projects.** Projects generating 200 or fewer net new daily vehicle trips may be presumed to have a less-than-significant impact absent substantial evidence to the contrary. Trips are based on the number of vehicle trips calculated using SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region or ITE trip generation rates with any alternative modes/location-based adjustments applied.
2. **Projects Located in a Transit-Accessible Area.** Projects located within a half-mile walking distance of an existing major transit stop or an existing stop along a high-quality transit corridor may be presumed to have a less-than-significant impact absent substantial evidence to the contrary. Distance to transit should be determined along an ADA-accessible path of travel, not "as the crow flies" measurements.
3. **Projects in a VMT-Efficient Area:** A VMT-efficient area is any area within the City with an average VMT/capita or VMT/employee below the thresholds as compared to the baseline regional average for the census tract it is located within, as provided on the SANDAG website.
4. **Locally-Serving Retail Projects:** Local serving retail projects less than 50,000 square feet that are expected to draw at least 75% of customers from the local area (based on a market study and/or qualitative information provided by the applicant) may be presumed to have a less than significant impact absent substantial evidence to the contrary. Local serving retail generally improves the convenience of shopping close to home and has the effect of reducing vehicle travel.
5. **Locally-Serving Public Facility:** Public facilities that serve the surrounding community or public facilities that are passive use may be presumed to have a less-than-significant impact absent substantial evidence to the contrary.
6. **Redevelopment Projects with Lower Total VMT:** A redevelopment project may be presumed to have a less-than-significant impact absent substantial evidence to the contrary if the proposed project's total project VMT is less than the existing land use's total VMT and the CEQA action includes closing the existing land use.

VMT Analysis

The project would function as an unmanned utilities facility and would be controlled remotely from an off-site location. Therefore, no daily operational trips would be generated by the project. Required maintenance of the Enterprise BESS project would be expected to require two maintenance workers to visit the site on one day of each week, resulting in approximately two round trips per week on average during the operational lifespan of the project.

The Enterprise BESS project can be categorized as a public utility with passive use. Therefore, the project would qualify for a streamlined transportation analysis without being subject to the detailed transportation VMT analysis requirements under the City of Escondido's "Locally Serving Public Facility" screening criteria.

Conclusion

As described above, the Enterprise BESS project would screen out of the requirement to prepare a detailed transportation VMT analysis based under both the "Locally Serving Public Facility" screening criteria, as identified in the City of Escondido's "Escondido Transportation Impact Analysis Guidelines" (2021).

Sincerely,
Rincon Consultants, Inc.

Taylor Freeman
Project Manager

Rich Daulton, MURP
Principial-in-Charge

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