

BIOLOGICAL TECHNICAL REPORT

FOR

PEPPER 210 COMMERCE CENTER PROJECT

LOCATED IN UNINCORPORATED
SAN BERNARDINO COUNTY, CALIFORNIA

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INFORMATION SUMMARY

- A. Report Date:** September 19, 2023 [Revised March 12, 2025]
- B. Report Title:** Biological Technical Report for the
Pepper 210 Commerce Center Project
- C. Project Site
Location:** Unincorporated San Bernardino County, California
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1.0 INTRODUCTION

1.1 Background and Scope of Work

This revised report provides the results of the general biological survey and jurisdictional delineation for the 101.77-acre Pepper 210 Commerce Center Project (the Project) located in Unincorporated San Bernardino County, California. This report identifies and evaluates impacts to biological resources associated with the proposed Project in the context of the California Environmental Quality Act (CEQA), and State and Federal regulations such as the Endangered Species Act (ESA), Clean Water Act (CWA), and the California Fish and Game Code. This report was revised from the September 19, 2023 version to address the minor expansion of the Project site along the southern border adjacent to E Highland Avenue (from 101 acres to 101.77 acres) and to include a broader discussion regarding impacts to designated Critical Habitat for the San Bernardino kangaroo rat as well as updated state and federal regulations.

The scope of this report includes a discussion of existing conditions for the 101.77-acre Project site, all methods employed regarding the general biological survey, the documentation of botanical and wildlife resources identified (including special-status species), jurisdictional delineation, and an analysis of impacts to biological and jurisdictional resources. Methods of the study include a review of relevant literature, field survey, and a Geographic Information System based analysis of vegetation communities. As appropriate, this report is consistent with accepted scientific and technical standards and survey guideline requirements issued by the United States Fish and Wildlife Service (USFWS), the California Department of Fish and Wildlife (CDFW), the California Native Plant Society (CNPS), and other applicable agencies/organizations.

The biological surveys focused on certain primary objectives that comply with CEQA requirements, including (1) general biological surveys and vegetation mapping; (2) habitat assessments for special-status plant species; and (3) habitat assessments for special-status wildlife species. Observations of all plant and wildlife species were recorded during the general biological survey and are included as Appendix A: Floral Compendium and Appendix B: Faunal Compendium.

1.2 Project Location

The Project site comprises 101.77 acres of land in unincorporated San Bernardino County, California [Exhibit 1 – Regional Map] and is located at latitude 34.13814 and longitude - 117.36034 within Section 25 of Township 1 North, Range 5 West of the United States Geological Survey (USGS) 7.5' quadrangle map San Bernardino North, California [Exhibit 2 – Vicinity Map]. The Project site is bounded by State Route 210 (SR-210) to the south, residential development to the west, and undeveloped lands to the north and east.

1.3 Project Description

The Applicant is proposing a Land Use Category Change (General Plan Amendment) from Resource Land Management (RLM) to General Industrial (GI) and a Zoning District Amendment from Resource Conservation (RC) to Regional Industrial (IR), in conjunction with a

Specific Plan Tentative Parcel Map and Conditional Use permit to allow for the placement of a 1,224,487 square-foot warehouse/distribution/logistics building. With consideration of potential mezzanine space for offices and pick modules, the total floor area of the building could be up to 1,859,487 square feet. The Project also provides for the construction of a 2,100 square-foot ancillary yard office building, trailer parking areas, passenger vehicle parking areas, landscaping, exterior lighting, signage, and connections to existing utility infrastructure [Exhibit 3 – Project Site Plan].

As depicted on Exhibit 3, a 200-foot-wide San Bernardino County Flood control easement is located along the entire northern boundary of the Project site. Within this easement area, the Project will include the construction, operation, and maintenance of: 1) a concrete paved drive, 2) prefabricated guard shack, 3) tilt up screen wall, 4) concrete trash enclosure, 5) steel picket gate and perimeter fencing, and 6) irrigation and landscaping.

For this report, the term Project site is defined as that area proposed for direct impact by the proposed Project and totals 101.77 acres.

2.0 METHODOLOGY

In order to adequately identify biological resources in accordance with the requirements of CEQA, Glenn Lukos Associates (GLA) assembled biological data consisting of following main components:

- Performance of vegetation mapping;
- Performance of site-specific habitat assessments and biological surveys to evaluate the potential presence/absence of special-status species (or potentially suitable habitat for such species) to the satisfaction of CEQA and federal and state regulations;
- Delineation of aquatic resources (including wetlands and riparian habitat) subject to the jurisdiction of the U.S. Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), and CDFW;
- Performance of a habitat assessment for San Bernardino kangaroo rat (*Dipodomys merriami parvus*);
- Performance of focused surveys for special-status plants;
- Performance of focused surveys for coastal California gnatcatcher (*Polioptila californica californica*); and
- Performance of focused surveys for burrowing owl (*Athene cunicularia*).

The focus of the biological surveys was determined through initial site reconnaissance, a review of the California Natural Diversity Database (CNDDB, CDFW 2022), CNPS 9th edition online inventory (CNPS 2022), Natural Resource Conservation Service (NRCS) soil data, other pertinent literature, and knowledge of the region. Site-specific general and focused surveys within the Project site were conducted on foot in the proposed development areas as addressed in more detail below.

2.1 Summary of Surveys

GLA conducted biological studies to identify and analyze actual or potential impacts to biological resources associated with development of the Project. Observations of all plant and wildlife species were recorded during each of the above-mentioned survey efforts [Appendix A: Floral Compendium and Appendix B: Faunal Compendium]. Table 2-1 provides a summary list of survey dates, survey types, and personnel.

Table 2-1. Summary of Biological Survey for the Project Site

Survey Type	Survey Date	Biologist(s)
General Biological Survey and Vegetation Mapping	April 29, 2022 February 12, 2025	Christopher Waterston Ian Rhodes
Focused Plant Surveys	April 29, 2022	Christopher Waterston
Focused Burrowing Owl Surveys and Burrow Mapping Survey	April 13, 2022 May 10, 2022 June 14, 2022 July 6, 2022	David Smith
Focused Coastal California Gnatcatcher Surveys	April 22, 2022 May 3, 2022 May 20, 2022 June 3, 2022 June 10, 2022 June 30, 2022	Mikael Romich
Habitat Assessment for San Bernardino Kangaroo Rat	April 22, 2022 May 3, 2022 May 20, 2022	Mikael Romich
Delineation of Federal and State Jurisdictional Waters	December 21, 2022	Joseph Vu
Habitat Assessment for Special-Status Animals	April 7, 2022	Joseph Vu

Individual plants and wildlife species are evaluated in this report based on their special-status. For the purpose of this report, plants were considered special-status based on one or more of the following criteria:

- Listing through the Federal and/or State ESA;
- Occurrence in the CNPS Inventory California Rare Plant Rank (CRPR 1A/1B, 2A/2B, 3, or 4); and/or
- Occurrence in the CNDDB.

Wildlife species were considered special-status based on one or more of the following criteria:

- Listing through the Federal and/or State ESA; and
- Designation by the State as a Species of Special Concern (SSC) or Fully Protected (FP) species.

Vegetation communities and habitats were considered special-status based on one or more of the following criteria:

- State and global ranking per A Manual of California Vegetation, Second Edition (MCVII);
- Occurrence in the CNDDDB inventory; and
- Riparian habitat.

2.2 Botanical Resources

A site-specific survey program was designed to accurately document the botanical resources within the Project site, and consisted of five components: (1) a literature search; (2) preparation of a list of target special-status plant species and sensitive vegetation communities that could occur within the Project site; (3) general field reconnaissance survey; (4) vegetation mapping according to Manual of California Vegetation Second Edition (MCVII) (Sawyer et al. 2009); and (5) habitat assessment and focused survey for special-status plants.

2.1.1 Literature Search

Prior to conducting fieldwork, pertinent literature on the flora of the region was examined. A thorough archival review was conducted using available literature and other historical records. These resources included the following:

- CNPS, Rare Plant Program. Inventory of Rare and Endangered Plants of California (online edition, v9-01 1.5, CNPS 2022); and
- CNDDDB for the USGS 7.5' San Bernardino North quadrangle and surrounding quadrangles (CDFW 2022)).

2.1.2 Vegetation Mapping

Due to highly disturbed site conditions, there are no natural vegetation alliances or associations fitting or approaching criteria for membership rules in A Manual of California Vegetation, Second Edition or MCVII (Baldwin et al. 2012), which is the California expression of the National Vegetation Classification. Vegetation present is relatively sparse overall and consists of ornamental plantings (e.g. non-native trees) or revegetated slopes. Vegetation and land-cover types were mapped directly onto a 300-scale (1"=300') aerial photograph by GLA biologist Christopher Waterston on April 29, 2022. Additional mapping was conducted using ArcGIS Field Maps to assess the updated site boundary by GLA biologist Ian Rhodes on February 12, 2025 [Exhibit 4 – Vegetation Map].

2.1.3 Special-Status Plant Species and Habitats Evaluated for the Project Site

A literature search was conducted to obtain a list of special status plants with the potential to occur within the Project site. The CNDDDB was initially consulted to determine well-known occurrences of plants and habitats of special concern in the region. Other sources used to

develop a list of target species for the survey program included the CNPS online inventory (CNPS 2022).

Based on this information, vegetation profiles and a list of target sensitive plant species and habitats that could occur within the Project site were developed and incorporated into a mapping and survey program to achieve the following goals: (1) characterize the vegetation associations and land use; (2) prepare a detailed floristic compendium; (3) identify the potential for any special status plants that may occur within the Project site; and (4) prepare a map showing the distribution of any sensitive botanical resources associated with the Project site, if applicable.

2.1.4 Botanical Survey

GLA biologists Chris Waterston visited the Project site on April 29, 2022 to conduct a general and focused plant survey. The survey was conducted in accordance with accepted botanical survey guidelines (Nelson, 1984, CNPS 2001, USFWS 2000, CDFW 2018). As applicable, the survey was conducted at appropriate times based on precipitation and flowering periods. An aerial photograph, a soil map, and/or a topographic map were used to determine the community types and other physical features that may support sensitive and uncommon taxa or communities within the Project site. The survey was conducted by following meandering transects within target areas of suitable habitat. All plant species encountered during the field survey were identified and recorded following the above-referenced guidelines. A complete list of the plant species observed is provided in Appendix A. Scientific nomenclature and common names used in this report follow Baldwin et al. (2012) and Munz (1974).

2.2 Wildlife Resources

Wildlife species were evaluated and detected during the biological surveys by sight, call, tracks, and scat. The biological surveys were conducted in such a manner as to allow inspection of the entire Project site by direct observation, including the use of binoculars. Observations of physical evidence and direct sightings of wildlife were recorded in field notes during the visit. A complete list of wildlife species observed within the Project site is provided in Appendix B. Scientific nomenclature and common names for vertebrate species referred to in this report follow the Complete List of Amphibian, Reptile, Bird, and Mammal Species in California (CDFW 2016), Standard Common and Scientific Names for North American Amphibians, Turtles, Reptiles, and Crocodilians 6th Edition (Collins and Taggart 2009) for amphibians and reptiles, and the American Ornithological Society Online Checklist (Chesser et al. 2022) for birds. The methodology (including any applicable survey protocols) utilized to conduct a general survey and habitat assessment for special-status animals are included below.

2.2.1 General Survey

Birds

During the general biological and reconnaissance surveys within the Project site, birds were detected incidentally by direct observation and/or by vocalizations, with identifications recorded in field notes.

Mammals

During the general biological and reconnaissance surveys within the Project site, mammals were identified and detected incidentally by direct observations and/or by the presence of diagnostic sign (i.e., tracks, burrows, scat, etc.).

Reptiles and Amphibians

During the general biological and reconnaissance surveys within the Project site, reptiles and amphibians were identified incidentally during the survey within each habitat type. Habitats were examined for diagnostic reptile sign, which include shed skins, scat, tracks, snake prints, and lizard tail drag marks. All reptiles and amphibian species observed, as well as diagnostic sign, were recorded in field notes.

2.2.2 Special-Status Animal Species Evaluated for the Project Site

A literature search was conducted in order to obtain a list of special-status wildlife species with the potential to occur within the Project site. Species were evaluated based on two factors: 1) species identified by the CNDDDB as occurring (either currently or historically) on or in the vicinity of the Project site, and 2) any other special-status animals that are known to occur within the vicinity of the Project site, or for which potentially suitable habitat occurs on the Project site.

2.2.3 Habitat Assessment for Special-Status Animal Species

GLA biologist Joseph Vu conducted habitat assessments for special-status animal species on April 7, 2022. An aerial photograph and/or topographic map were used to determine the community types and other physical features that may support special-status and uncommon taxa within the Project site.

GLA biologist Mikael Romich, who has state and federal authorization to survey for San Bernardino kangaroo rat (SBKR), conducted a habitat assessment for the species on April 22, May 3, and May 20, 2022. All areas of the Project site were closely inspected on foot for sign and habitat that could be suitable for the species.

2.2.4 Focused Surveys for Special-Status Animals Species

Burrowing Owl

The Project site contains suitable habitat for the burrowing owl. Suitable habitat includes the banks of the settling basins, the bare areas and slopes along the western and southwestern boundary of the Project site, along the flood control berms along the northern boundary of the Project site, and in the bare area in the southeast corner. GLA biologist David Smith conducted focused surveys for the burrowing owl in 2022 in all suitable habitat areas at the Project site. Surveys were conducted in accordance with survey guidelines described in the 2012 California Department of Fish and Wildlife Staff Report on Burrowing Owl Mitigation. The focused burrowing owl surveys were conducted on April 13, May 10, June 14, and July 6, 2022.

Pursuant to the survey protocol, the burrowing owl survey visits were conducted between morning civil twilight and 10:00 AM. The surveys were conducted during weather that was conducive to observing owls outside their burrows and detecting burrowing owl sign, and not during rain, high winds (> 20 kph), dense fog, or temperatures above 68 °F.

Surveys were conducted by walking transects throughout areas of suitable habitat. Exhibit 6 – Burrowing Owl Survey Area Map identifies the burrowing owl survey area at the Project site. Transects were spaced between seven meters to 20 meters apart (22 feet and 65 feet), adjusting for vegetation height and density, in order to provide adequate visual coverage of the survey areas. At the start of each transect, and at least every 100 meters (320 feet) along transects, the survey area was scanned for burrowing owls using binoculars. Potentially suitable burrows were inspected for diagnostic owl sign (e.g., pellets, prey remains, whitewash, feathers, bones, and/or decoration) in order to identify potentially occupied burrows. In addition, where feasible, areas within a 500-foot buffer around the site were scanned with binoculars to evaluate for the burrowing owl in adjacent (offsite) areas. Table 2-2 below lists survey condition details. The results of the burrowing owl surveys are documented in Section 4.0 of this report.

Table 2-2. Summary of Burrowing Owl Surveys

Survey Date	Biologist(s)	Start/End Time	Start/End Temperature (°F)	Start/End Wind Speed (mph)	Cloud Cover (%)
4/13/2022	DS	0630/0815	41/48	0/5	0
5/10/2022	DS	0640/0810	44/50	0/1	0
6/14/2022	DS	0650/0830	64/67	0/1	0
7/6/2022	DS	0645/0820	65/68	0/1	0

DS = David Smith

Coastal California Gnatcatcher

The Project site contains very limited suitable habitat for the coastal California gnatcatcher, most of which is located in the scrub habitat to the southwest and along the flood control berms along the northern boundary of the Project site. GLA biologist Mikael Romich conducted focused surveys for the coastal California gnatcatcher in 2022 within all suitable habitat areas within the Project site. Surveys were conducted in accordance with the 1997 USFWS Coastal California Gnatcatcher Presence/Absence Survey Guidelines (USFWS 1997). The coastal California gnatcatcher surveys were conducted between April 22, 2022 and June 30, 2022. Pursuant to the survey protocol, the coastal California gnatcatcher survey visits were conducted between 6:00 AM and 12:00 PM. The surveys were conducted during weather that was conducive to detecting the coastal California gnatcatcher. The coastal California gnatcatcher report is provided in Appendix C. Table 2-3 below lists the survey condition details. The results of the coastal California gnatcatcher surveys are documented in Section 4.0 of this report.

Table 2-3. Summary of Coastal California Gnatcatcher Surveys

Survey Date	Biologist(s)	Start/End Time	Start/End Temperature (°F)	Start/End Wind Speed (mph)	Cloud Cover (%)
4/22/2022	MR	904/1100	53/59	5/10	100
5/3/2022	MR	750/920	59/61	0/5	0
5/20/2022	MR	605/816	55/57	5/10	0
6/3/2022	MR	1045/1200	69/72	0/5	0
6/10/2022	MR	605/705	68/77	0/5	0
6/30/2022	MR	600/700	67/72	0/5	0

MR = Mikael Romich

3.0 REGULATORY SETTING

The proposed Project is subject to state, federal, and local regulations associated with a number of regulatory programs. These programs often overlap and were developed to protect natural resources, including state- and federally-listed plants and animals; aquatic resources including rivers and creeks, ephemeral streambeds, wetlands, and areas of riparian habitat; other special-status species which are not listed as threatened or endangered by the state or federal governments; and other special-status vegetation communities.

3.1 Endangered Species Act

3.1.1 California Endangered Species Act

California's Endangered Species Act (CESA) defines an endangered species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease." The State defines a threatened species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species." Candidate species are defined as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list." Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission.

Article 3, Sections 2080 through 2085, of the CESA addresses the taking of threatened, endangered, or candidate species by stating "No person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or

attempt any of those acts, except as otherwise provided.” Under the CESA, “take” is defined as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” Exceptions authorized by the state to allow “take” require permits or memoranda of understanding and can be authorized for endangered species, threatened species, or candidate species for scientific, educational, or management purposes and for take incidental to otherwise lawful activities. Section 1913 of the California Fish and Game Code provides that notification is required prior to disturbance.

3.1.2 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 defines an endangered species as “any species that is in danger of extinction throughout all or a significant portion of its range.” A threatened species is defined as “any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” Under provisions of Section 9(a)(1)(B) of the FESA it is unlawful to “take” any listed species. “Take” is defined in Section 3(18) of FESA: “...harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Further, the USFWS, through regulation, has interpreted the terms “harm” and “harass” to include certain types of habitat modification that result in injury to, or death of species as forms of “take.” These interpretations, however, are generally considered and applied on a case-by-case basis and often vary from species to species. In a case where a property owner seeks permission from a Federal agency for an action that could affect a federally listed plant and animal species, the property owner and agency are required to consult with USFWS. Section 9(a)(2)(b) of the FESA addresses the protections afforded to listed plants.

When a species is listed under the FESA, USFWS must designate critical habitat for the species in most cases, unless there are specific reasons for not designating critical habitat (e.g., such designation poses risks for the subject species). Critical habitat designations by USFWS are intended to guide federal agency action, and critical habitat is defined in Section 3 of the FESA as:

- (1) The specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the [FESA], on which [the USFWS believes] are found those physical or biological features
 - (a) Essential to the conservation of the species and
 - (b) Which may require special management considerations or protection; and
- (2) Specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination [by the USFWS] that such areas are essential for the conservation of the species.

The FESA is designed to provide a certain level of protection to USFWS designated critical habitat only in those instances in which a federal agency is considering whether to grant an authorization, fund or take any other federal agency action that may destroy or adversely modify the designated critical habitat. Section 7(a)(2) of FESA requires federal agencies to consult with USFWS (or NMFS, as applicable) on federal agency actions that have the potential to destroy or adversely modify critical habitat. The designation of critical habitat does not affect land

ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. The designation does not place any restrictions on a non-federal agency landowner or on State or local agencies or governments; nor does the designation restrict a non-federal agency landowner from removing or otherwise adversely modifying land containing the critical habitat designation. Such designation does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by private landowners. Where a landowner seeks or requests Federal agency funding or authorization for an activity likely to negatively impact one or more members of a listed species or critical habitat, the consultation requirements of ESA Section 7(a)(2) generally apply.

Critical habitat designations are the USFWS's method of identifying for federal agencies (to the extent known using information available at the time of such designation) those physical or biological features ("PBFs") believed essential to the conservation of the species (such as space, food, cover, and protected habitat), focusing on the principal biological or physical constituent elements (formerly designated as primary constituent elements) within an area considered essential to the conservation of the species (such as roost sites, nesting grounds, seasonal wetlands, water quality, tide, soil type). Primary constituent elements (PCE's), now referred to as PBFs are the elements of physical or biological features which, when laid out in the appropriate quantity and spatial arrangement to provide for a species' life-history processes, the USFWS believes to be essential to the conservation of the species. Critical habitat designations are intended as a tool to be used by the USFWS in helping federal agencies comply with their obligations under Section 7 of the FESA.

3.1.3 State and Federal Take Authorizations

Federal or state authorizations of impacts to or incidental take of a listed species by a private individual or other private entity would be granted in one of the following ways:

- Section 7 of the FESA stipulates that any federal action that may affect a species listed as threatened or endangered requires a formal consultation with USFWS to ensure that the action is not likely to jeopardize the continued existence of the listed species or result in destruction or adverse modification of designated critical habitat. 16 U.S.C. 1536(a)(2).
- In 1982, the FESA was amended to give private landowners the ability to develop Habitat Conservation Plans (HCP) pursuant to Section 10(a) of the FESA. Upon development of an HCP, the USFWS can issue incidental take permits for listed species where the HCP specifies at minimum, the following: (1) the level of impact that will result from the taking, (2) steps that will minimize and mitigate the impacts, (3) funding necessary to implement the plan, (4) alternative actions to the taking considered by the applicant and the reasons why such alternatives were not chosen, and (5) such other measures that the Secretary of the Interior may require as being necessary or appropriate for the plan.
- Sections 2090-2097 of the CESA require that the state lead agency consult with CDFW on projects with potential impacts on state-listed species. These provisions also require CDFW to coordinate consultations with USFWS for actions involving federally listed as well as state-listed species. In certain circumstances, Section 2080.1 of the California Fish and Game Code allows CDFW to adopt the federal incidental take statement or the

10(a) permit as its own based on its findings that the federal permit adequately protects the species under state law.

3.2 California Environmental Quality Act

3.2.1 CEQA Guidelines Section 15380

CEQA requires evaluation of a project's impacts on biological resources and provides guidelines and thresholds for use by lead agencies for evaluating the significance of proposed impacts. Sections 5.1.1 and 5.2.2 below set forth these thresholds and guidelines. Furthermore, pursuant to the CEQA Guidelines Section 15380, CEQA provides protection for non-listed species that could potentially meet the criteria for state listing. For plants, CDFW recognizes that plants assigned a CRPR of 1A, 1B, or 2 of the *CNPS Inventory of Rare and Endangered Plants in California* may meet the criteria for listing and should be considered under CEQA. CDFW also recommends protection of plants that are regionally important, such as locally rare species, disjunct populations of more common plants, or plants CRPR Ranked 3 or 4.

3.2.2 Special-Status Plants, Wildlife and Vegetation Communities Evaluated Under CEQA

Federally Designated Special-Status Species

Within recent years, the USFWS instituted changes in the listing status of candidate species. Former C1 (candidate) species are now referred to simply as candidate species and represent the only candidates for listing. Former C2 species (for which the USFWS had insufficient evidence to warrant listing) and C3 species (either extinct, no longer a valid taxon or more abundant than was formerly believed) are no longer considered as candidate species. Therefore, these species are no longer maintained in list form by the USFWS, nor are they formally protected. This term is employed in this document but carries no official protections. All references to federally protected species in this report (whether listed, proposed for listing, or candidate) include the most current published status or candidate category to which each species has been assigned by USFWS.

For this report the following acronyms are used for federal special-status species:

- FE Federally listed as Endangered
- FT Federally listed as Threatened
- FPE Federally proposed for listing as Endangered
- FPT Federally proposed for listing as Threatened
- FC Federal Candidate Species (former C1 species)

State-Designated Special-Status Species

Some mammals and birds are protected by the state as Fully Protected (FP) Mammals or Fully Protected Birds, as described in the California Fish and Game Code, Sections 4700 and 3511, respectively. California SSC are designated as vulnerable to extinction due to declining

population levels, limited ranges, and/or continuing threats. This list is primarily a working document for the CDFW's CNDDDB project. Informally listed taxa are not protected but warrant consideration in the preparation of biotic assessments. For some species, the CNDDDB is only concerned with specific portions of the life history, such as roosts, rookeries, or nest sites.

For this report the following acronyms are used for State special-status species:

- SE State-listed as Endangered
- ST State-listed as Threatened
- SR State-listed as Rare
- SCE State Candidate for listing as Endangered
- SCT State Candidate for listing as Threatened
- FP State Fully Protected
- SSC State Species of Special Concern

CNDDDB State Rankings

The CNDDDB provides state rankings for species and communities based on a system developed by The Nature Conservancy to measure rarity of a species. The ranking provides a shorthand formula species/community rarity based on the best information available from multiple sources, including state and federal listings, and other groups that recognize species as sensitive (e.g., Bureau of Land Management, Audubon Society, etc.). State rankings are used to prioritize conservation and protection efforts so that the rarest species/communities receive immediate attention. A lower ranking (i.e., S1) indicates extreme rarity. Species or communities with a ranking from 1 to 3 are considered rare and/or under threat. Species with a ranking of 4 or 5 are considered common and not under threat. If the state ranking is undetermined, a range is generally provided. The following are descriptions of global and state rankings:

State Rankings

- S1 – Extremely rare; typically 5 or fewer known occurrences in the state; or only a few remaining individuals; may be especially vulnerable to extirpation.
- S2 – Very rare; typically between 6 and 20 known occurrences; may be susceptible to becoming extirpated.
- S3 – Rare to uncommon; typically 21 to 50 known occurrences; S3 ranked species are not yet susceptible to becoming extirpated in the state but may be if additional populations are destroyed.
- S4 – Uncommon but not rare; some cause for long-term concern due to declines or other factors.
- S5 – Common, widespread, and abundant in the state.

California Native Plant Society

The CNPS is a private plant conservation organization dedicated to the monitoring and protection of sensitive species in California. The CNPS's Eighth Edition of the *California Native Plant Society's Inventory of Rare and Endangered Plants of California* separates plants of

interest into five ranks. CNPS has compiled an inventory comprised of information focusing on geographic distribution and qualitative characterization of Rare, Threatened, or Endangered vascular plant species of California. The list serves as the candidate list for listing as threatened and endangered by CDFW. CNPS has developed five categories of rarity that are summarized in Table 3-1.

Table 3-1. CRPR Ranks 1, 2, 3, & 4, and Threat Code Extensions

CRPR Rank	Comments
Rank 1A – Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere	Thought to be extinct in California based on a lack of observation or detection for many years.
Rank 1B – Plants Rare, Threatened, or Endangered in California and Elsewhere	Species, which are generally rare throughout their range that are also judged to be vulnerable to other threats such as declining habitat.
Rank 2A – Plants presumed Extirpated in California, But Common Elsewhere	Species that are presumed extinct in California but more common outside of California
Rank 2B – Plants Rare, Threatened or Endangered in California, But More Common Elsewhere	Species that are rare in California but more common outside of California
Rank 3 – Plants About Which More Information Is Needed (A Review List)	Species that are thought to be rare or in decline but CNPS lacks the information needed to assign to the appropriate list. In most instances, the extent of surveys for these species is not sufficient to allow CNPS to accurately assess whether these species should be assigned to a specific rank. In addition, many of the Rank 3 species have associated taxonomic problems such that the validity of their current taxonomy is unclear.
Rank 4 – Plants of Limited Distribution (A Watch List)	Species that are currently thought to be limited in distribution or range whose vulnerability or susceptibility to threat is currently low. In some cases, as noted above for Rank 3 species, CNPS lacks survey data to accurately determine status in California. Many species have been placed on Rank 4 in previous editions of the “Inventory” and have been removed as survey data has indicated that the species are more common than previously thought. CNPS recommends that species currently included on this list should be monitored to ensure that future substantial declines are minimized.
Extension	Comments
.1 – Seriously endangered in California	Species with over 80% of occurrences threatened and/or have a high degree and immediacy of threat.
.2 – Fairly endangered in California	Species with 20-80% of occurrences threatened.
.3 – Not very endangered in California	Species with <20% of occurrences threatened or with no current threats known.

3.3 Jurisdictional Waters

3.3.1 Army Corps of Engineers

Pursuant to Section 404 of the Clean Water Act, the Corps regulates the discharge of dredged and/or fill material into waters of the United States. The term “waters of the United States” is defined in federal regulations at 33 CFR Part 328.3(a) as:

- (1) Waters which are:
 - (i) Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
 - (ii) The territorial seas; or
 - (iii) Interstate waters;
- (2) Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under paragraph (a)(5) of this section;
- (3) Tributaries of waters identified in paragraphs (a)(1) or (2) of this section that are relatively permanent, standing or continuously flowing bodies of water;
- (4) Wetlands adjacent to the following waters:
 - (i) Waters identified in paragraph (a)(1) of this section; or
 - (ii) Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3) of this section and with a continuous surface connection to those waters;
- (5) Intrastate lakes and ponds not identified in paragraphs (a)(1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3) of this section.

Federal regulations at 33 CFR Part 328.3(b) exclude the following from being “waters of the United States” even where they otherwise meet the terms of paragraphs (a)(2) through (5) above:

- (1) Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act;
- (2) Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. Notwithstanding the determination of an area’s status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA;
- (3) Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;

- (4) Artificially irrigated areas that would revert to dry land if the irrigation ceased;
- (5) Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;
- (6) Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;
- (7) Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States; and
- (8) Swales and erosional features (e.g., gullies, small washes) characterized by low volume, infrequent, or short duration flow.

In the absence of wetlands, the limits of Corps jurisdiction in non-tidal waters, such as intermittent streams, extend to the OHWM which is defined at 33 CFR 328.3(c)(4) as:

...that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

“Adjacent” wetlands are defined by 33 CFR 328.3(c)(2) as having a “continuous surface connection” to other waters of the United States.

3.3.1.1 Wetland Definition Pursuant to Section 404 of the Clean Water Act

The term “wetlands” (a subset of “waters of the United States”) is defined at 33 CFR 328.3(b) as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support...a prevalence of vegetation typically adapted for life in saturated soil conditions.” In 1987 the Corps published the Wetland Manual to guide its field personnel in determining jurisdictional wetland boundaries. The methodology set forth in the Wetland Manual and the Arid West Supplement generally require that, in order to be considered a wetland, the vegetation, soils, and hydrology of an area exhibit at least minimal hydric characteristics. While the Wetland Manual and Arid West Supplement provide great detail in methodology and allow for varying special conditions, a wetland should normally meet each of the following three criteria:

- More than 50 percent of the dominant plant species at the site must be hydrophytic in nature as published in the most current national wetland plant list;
- Soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., a gleyed color, or mottles with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and

- Whereas the Wetland Manual requires that hydrologic characteristics indicate that the ground is saturated to within 12 inches of the surface for at least five percent of the growing season during a normal rainfall year, the Arid West Supplement does not include a quantitative criteria with the exception for areas with “problematic hydrophytic vegetation”, which require a minimum of 14 days of ponding to be considered a wetland.

3.3.2 Regional Water Quality Control Board

The State Water Resource Control Board and each of its nine Regional Boards regulate the discharge of waste (dredged or fill material) into waters of the United States¹ and waters of the state. Waters of the United States are defined above in Section II.A and waters of the state are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (California Water Code 13050[e]).

Section 401 of the CWA requires certification for any federal permit or license authorizing impacts to waters of the U.S. (i.e., waters that are within federal jurisdiction), such as Section 404 of the CWA and Section 10 of the Safe Rivers and Harbors Act, to ensure that the impacts do not violate state water quality standards. When a project could impact waters outside of federal jurisdiction, the Regional Board has the authority under the Porter-Cologne Water Quality Control Act to issue Waste Discharge Requirements (WDRs) to ensure that impacts do not violate state water quality standards. Clean Water Act Section 401 Water Quality Certifications, WDRs, and waivers of WDRs are also referred to as orders or permits.

3.2.2.1 State Wetland Definition

The Water Boards define an area as wetland² as follows: *An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area’s vegetation is dominated by hydrophytes or the area lacks vegetation.*

¹ Therefore, wetlands that meet the current definition, or any historic definition, of waters of the U.S. are waters of the state. In 2000, the State Water Resources Control Board determined that all waters of the U.S. are also waters of the state by regulation, prior to any regulatory or judicial limitations on the federal definition of waters of the U.S. (California Code of Regulations title 23, section 3831(w)). This regulation has remained in effect despite subsequent changes to the federal definition. Therefore, waters of the state includes features that have been determined by the U.S. Environmental Protection Agency (U.S. EPA) or the U.S. Army Corps of Engineers (Corps) to be “waters of the U.S.” in an approved jurisdictional determination; “waters of the U.S.” identified in an aquatic resource report verified by the Corps upon which a permitting decision was based; and features that are consistent with any current or historic final judicial interpretation of “waters of the U.S.” or any current or historic federal regulation defining “waters of the U.S.” under the federal Clean Water Act.

² State Water Resources Control Board. 2019. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. [For Inclusion in the Water Quality Control Plans for Inland Surface Waters and Enclosed Bays and Estuaries and Ocean Waters of California].

The following wetlands are waters of the state:

1. *Natural wetlands;*
2. *Wetlands created by modification of a surface water of the state;³ and*
3. *Artificial wetlands⁴ that meet any of the following criteria:*
 - a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration;*
 - b. Specifically identified in a water quality control plan as a wetland or other water of the state;*
 - c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or*
 - d. Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes (i.e., the following artificial wetlands are not waters of the state unless they also satisfy the criteria set forth in 2, 3a, or 3b):*
 - i. Industrial or municipal wastewater treatment or disposal,*
 - ii. Settling of sediment,*
 - iii. Detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program,*
 - iv. Treatment of surface waters,*
 - v. Agricultural crop irrigation or stock watering,*
 - vi. Fire suppression,*
 - vii. Industrial processing or cooling,*
 - viii. Active surface mining – even if the site is managed for interim wetlands functions and values,*
 - ix. Log storage,*
 - x. Treatment, storage, or distribution of recycled water, or*
 - xi. Maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or*
 - xii. Fields flooded for rice growing.⁵*

³ “Created by modification of a surface water of the state” means that the wetland that is being evaluated was created by modifying an area that was a surface water of the state at the time of such modification. It does not include a wetland that is created in a location where a water of the state had existed historically, but had already been completely eliminated at some time prior to the creation of the wetland. The wetland being evaluated does not become a water of the state due solely to a diversion of water from a different water of the state.

⁴ Artificial wetlands are wetlands that result from human activity.

⁵ Fields used for the cultivation of rice (including wild rice) that have not been abandoned due to five consecutive years of non-use for the cultivation of rice (including wild rice) that are determined to be a water of the state in accordance with these Procedures shall not have beneficial use designations applied to them through the Water Quality Control Plan for the Sacramento and San Joaquin River Basins, except as otherwise required by federal law for fields that are considered to be waters of the United States. Further, agricultural inputs legally applied to fields used for the cultivation of rice (including wild rice) shall not constitute a discharge of waste to a water of the state. Agricultural inputs that migrate to a surface water or groundwater may be considered a discharge of waste and are

All artificial wetlands that are less than an acre in size and do not satisfy the criteria set forth in 2, 3.a, 3.b, or 3.c are not waters of the state. If an aquatic feature meets the wetland definition, the burden is on the applicant to demonstrate that the wetland is not a water of the state.

3.3.3 California Department of Fish and Wildlife

Pursuant to Division 2, Chapter 6, Sections 1600-1603 of the California Fish and Game Code, the CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife.

CDFW defines a stream (including creeks and rivers) as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation.” CDFW's definition of “lake” includes “natural lakes or man-made reservoirs.” CDFW also defines a stream as “a body of water that flows, or has flowed, over a given course during the historic hydrologic regime, and where the width of its course can reasonably be identified by physical or biological indicators.”

It is important to note that the Fish and Game Code defines fish and wildlife to include all wild animals, birds, plants, fish, amphibians, invertebrates, reptiles, and related ecological communities including the habitat upon which they depend for continued viability (FGC Division 5, Chapter 1, section 45 and Division 2, Chapter 1 section 711.2(a) respectively). Furthermore, Division 2, Chapter 5, Article 6, Section 1600 et seq. of the California Fish and Game Code does not limit jurisdiction to areas defined by specific flow events, seasonal changes in water flow, or presence/absence of vegetation types or communities.

3.4 San Bernardino County Chapter 88.01: Plant Protection and Management

The County of San Bernardino Code of Ordinance Chapter 88.01 includes regulations and guidelines for the management of plant resources to preserve and protect certain plants, including regulated desert native plants, regulated trees, and regulated riparian plants. A tree or plant removal permit would be required for the removal of a regulated tree or plant as identified in this ordinance. The following plants and trees are regulated under Chapter 88.01:

- Desert native plants with stems two inches or greater in diameter or six feet or greater in height smoketree (*Dalea spinosa*), mesquites (*Prosopis*), all species of the family Agavaceae (century plants, nolinias, yuccas), creosote rings, ten feet or greater in diameter, all Joshua trees, desert ironwood (*Olneya tesota*), palos verdes (*Cercidium*);
- Regulated trees including native trees with a six inch or greater stem diameter or 19 inches in circumference measured four and one-half feet above natural grade level and three or more palm trees in linear plantings, which are 50 feet or greater in length within established windrows or parkway plantings; or
- Riparian trees within riparian areas or within a stream.

subject to waste discharge requirements or waivers of such requirements pursuant to the Water Board's authority to issue or waive waste discharge requirements or take other actions as applicable.

4.0 RESULTS

This section provides the results of general biological surveys, vegetation mapping, habitat assessments and focused surveys, and a jurisdictional delineation of potential Waters of the United States (including wetlands) subject to the jurisdiction of the Corps and Regional Board, and streams (including riparian vegetation) and lakes subject to the jurisdiction of CDFW.

4.1 Existing Conditions

The Project site is an active sand and gravel mine operated by Vulcan Materials. It is a heavily and regularly disturbed site nearly completely devoid of vegetation and consists of shifting piles of sorted materials, sorting machinery, large equipment (haul trucks, loaders, water trucks etc.), wastewater ponds, access roads, paved areas, and assorted infrastructure such as parking lots and buildings. The Project site exhibits disturbance consistent with long-term mining; therefore, the site exhibits only limited areas of remnant native vegetation at the southwest corner of the site. The site also includes trees planted along the southern boundary as a visual barrier to the adjoining residential development [Exhibit 4 – Vegetation Map]. The Project site is relatively flat and occurs between the elevation of 1,370 feet above mean sea level (AMSL) to 1,300 feet AMSL. Site photographs are provided as Exhibit 5.

The National Cooperative Soil Survey (NCSS) has mapped the following soil types as occurring in the general vicinity of the Project site [Exhibit 7]:

Psamments, Fluvents and Frequently flooded soils

The psamments consists of sandy soils formed in recent water-deposited unconsolidated particles that are deposited on flood plains, fans, and deltas along rivers and small stream courses. These soils are mapped in the southern portion of the Project site but are currently developed and occupied with a paved parking lot and office buildings.

Quarries and Pits soils

The Quarries and Pits series consists of very deep, poorly drained soils that formed in fine-textured alluvium weathered from extrusive and basic igneous rocks. Pit soils are on flood plains and in basins. Slopes range from zero to five percent.

Soboba stony loamy sand, 2 to 9 percent slopes

The Soboba series consists of deep, excessively drained soils that formed in alluvium from predominantly granitic rock sources. Soboba soils are on alluvial fans and flood plains and have slopes of zero to 30 percent.

Tujunga loamy sand, 0 to 5 percent slopes and Tujunga gravelly loamy sand, 0 to 9 percent slopes

The Tujunga series consists of very deep, somewhat excessively drained soils that formed in alluvium from granitic sources. Tujunga soils are on alluvial fans and floodplains, including urban areas. Slopes range from zero to 12 percent.

4.2 Vegetation/Land Use Mapping

The Project site is disturbed from approximately 30 years of mining operations, with most vegetated areas dominated by non-native and ruderal species. All naturally occurring native vegetation was removed in approximately 1999 as part of mining activities. Two areas at the southwest corner and along the western and southern boundary of the Project site are vegetated with native scrub species; however, because these slopes were revegetated in 2001 in accordance mining operation reclamation/revegetation plan 90M-11 (plan approved in July 1990 and revised December 2009 and December 2015) (Vulcan, 2015), these areas are best characterized as Planted Black Sage/California Buckwheat Scrub.

The Project site also supports the following land use-land cover types: Developed, Ornamental, and Settling Basins. Table 4-1 provides a summary of vegetation/land use-land cover types and the corresponding acreage. Descriptions of each vegetation or land use/land cover type follow the table. A Vegetation Map is attached as Exhibit 4. Photographs depicting the various vegetation types and land uses are attached as Exhibit 5.

Table 4-1. Summary of Vegetation/Land Use Types

VEGETATION/LAND USE TYPE	TOTAL (acres)
Planted Black Sage/California Buckwheat Scrub	2.86
Developed	93.99
Ornamental	2.26
Settling Basins	2.66
Total	101.77

4.2.1 Planted California Buckwheat/Black Sage Scrub

The Project site contains approximately 2.86 acres of Planted Black Sage/California Buckwheat Scrub) within the western boundary of the Project site. These slopes were revegetated in accordance with the mining operation reclamation plan 90M-11 with a native scrub seed mix to stabilize the slopes and as an aesthetics/landscaping buffer for the adjacent residences after the area was graded during mining operations. Per the mine's reclamation plan, 90M-11 page 28, "Revegetation of Phase B-4 is directed at stabilizing final pit slopes. The seed mix and planting methods used will be pursuant to the Revegetation Plan." (see Exhibit 5 photographs 3 and 8). This planted vegetation installation was initiated in November 2001 and is regularly irrigated and maintained (see Exhibit 5 photographs 3). This planted vegetation is dominated by monotypic stands of black sage (*Salvia mellifera*) and California buckwheat (*Eriogonum fasciculatum*) with a few eucalyptus trees growing on the southern edge (see Exhibit 5 photograph 1). Other

component species include California sagebrush (*Artemisia californica*), white sage (*Salvia apiana*), deerweed (*Acmispon glaber*), and California croton (*Croton californicus*). The vegetation composition is in stark contrast to the naturally occurring native vegetation located in the nearby Lytle Creek (see Exhibit 5 photograph 4).

4.2.2 Developed

The Project site contains approximately 93.99 acres of Developed areas where human disturbance has resulted in permanent modification of the existing landscape. These include the mining operation, paved areas, parking lots, buildings, concrete walkways, and other structures.

4.2.3 Ornamental

Ornamental vegetation accounts for approximately 2.26 acres and primarily occurs adjacent to existing residential development in the southwestern boundary of the Project site and along the southern boundary along East Highland Avenue. Ornamental vegetation within the Project site is comprised of a variety species including Mexican fan palm (*Washingtonia robusta*), iceplant (*Carpobrotus edulis*), Indian laurel fig (*Ficus macrocarpa*), nasturtium (*Nasturtium* sp.), Peruvian pepper (*Schinus molle*), Oleander (*Nerium oleander*), and several species of eucalyptus (*Eucalyptus* spp.).

4.2.4 Settling Basins

The Project site contains approximately 2.66 acres of Settling Basins. The Settling Basins are man-made and were constructed specifically to contain surface runoff from the mining operation and are generally not vegetated due to regular maintenance.

4.3 Special-Status Natural Communities

The CNDDDB identifies the following special-status natural communities for the San Jacinto, California and surrounding quadrangle maps: Riversidian Alluvial Fan Sage Scrub, Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Mixed Riparian Forest, Southern Riparian Forest, Southern Riparian Scrub, and Southern Sycamore Alder Riparian Woodland. The Project site does not contain any special-status habitats, including those identified in the CNDDDB.

4.4 Special-Status Plants

No special-status plants were detected at the Project site and none are expected to occur due to the disturbed conditions of the site, lack of suitable habitat, and the results of the focused plant survey. The Project site has been an active mining operation for approximately 30 years and exhibits extensive disturbance that has eliminated native soils, seed banks, and vegetation in general from occurring on the site. Table 4-2 provides a list of special-status plants evaluated for the Project site through general biological survey, and habitat assessments. Species were evaluated based on the following factors: 1) species identified by the CNDDDB and CNPS as occurring (either currently or historically) on or in the vicinity of the Project site, and 2) any

other special-status plants that are known to occur within the vicinity of the Project site, or for which potentially suitable habitat occurs within the site.

Table 4-2. Special-Status Plants Evaluated for the Project Site

Species Name	Status	Habitat Requirements	Occurrence
Chaparral sand-verbena <i>Abronia villosa</i> var. <i>aurita</i>	Federal: None State: None CRPR: Rank 1B.1	Sandy soils in chaparral, coastal sage scrub.	Confirmed absent.
Parish's oxytheca <i>Acanthoscyphus parishii</i> var. <i>parishii</i>	Federal: None State: None CRPR: Rank 4.2	Sandy or gravelly soils in chaparral and lower montane coniferous forest.	Does not occur. No Suitable Habitat.
Mount Pinos onion <i>Allium howellii</i> var. <i>clokeyi</i>	Federal: None State: None CRPR: Rank 1B.3	Great basin scrub, Meadows and seeps (edges), Pinyon and juniper woodland	Does not occur. No Suitable Habitat.
Parish's onion <i>Allium parishii</i>	Federal: None State: None CRPR: Rank 4.3	Rocky soils in Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland.	Does not occur. No Suitable Habitat.
Singlewhorl burrobrush <i>Ambrosia monogyra</i>	Federal: None State: None CRPR: Rank 2B.2	Sandy soils in chaparral and Sonoran desert scrub.	Confirmed absent.
California androsace <i>Androsace elongata</i> ssp. <i>acuta</i>	Federal: None State: None CRPR: Rank 4.2	Chaparral, cismontane woodland, coastal scrub, meadows and seeps, pinyon and juniper woodland, valley and foothill grassland.	Does not occur. No Suitable Habitat.
Marsh sandwort <i>Arenaria paludicola</i>	Federal: FE State: SE CRPR: Rank 1B.1	Bogs and fens, freshwater marshes and swamps.	Does not occur. No Suitable Habitat.
San Diego sagewort <i>Artemisia palmeri</i>	Federal: None State: None CRPR: Rank 4.2	Sandy and mesic soils in chaparral, coastal scrub, riparian forest, riparian scrub, and riparian woodland.	Confirmed absent.
Mojave milkweed <i>Asclepias nyctaginifolia</i>	Federal: None State: None CRPR: Rank 2B.1	Mojavean desert scrub and pinyon and juniper woodland.	Does not occur. No Suitable Habitat.
Western spleenwort <i>Asplenium vespertinum</i>	Federal: None State: None CRPR: Rank 4.2	Rocky soils in chaparral, cismontane woodland, and coastal scrub.	Does not occur. No Suitable Habitat.
Horn's milk-vetch <i>Astragalus hornii</i> var. <i>hornii</i>	Federal: None State: None CRPR: Rank 1B.1	Lake margins with alkaline soils, meadows and seeps, and playas.	Does not occur. No Suitable Habitat.
Mexican mosquito fern <i>Azolla microphylla</i>	Federal: None State: None CRPR: Rank 4.2	Marshes and swamps (ponds, slow water)	Does not occur. No Suitable Habitat.

Species Name	Status	Habitat Requirements	Occurrence
Nevin's barberry <i>Berberis nevinii</i>	Federal: FE State: SE CRPR: Rank 1B.1	Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian scrub.	Confirmed absent.
Three-awned grama <i>Bouteloua trifida</i>	Federal: None State: None CRPR: Rank 2B.3	Mojavean desert scrub (carbonate, rocky).	Confirmed absent.
Thread-leaved brodiaea <i>Brodiaea filifolia</i>	Federal: FT State: SE CRPR: Rank 1B.1	Clay soils in chaparral (openings), cismontane woodland, coastal sage scrub, playas, valley and foothill grassland, vernal pools.	Confirmed absent.
Catalina mariposa lily <i>Calochortus catalinae</i>	Federal: None State: None CRPR: Rank 4.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland.	Confirmed absent.
Palmer's mariposa lily <i>Calochortus palmeri</i> var. <i>palmeri</i>	Federal: None State: None CRPR: Rank 1B.2	Mesic soils in chaparral, lower montane coniferous forest, and meadows and seeps.	Does not occur. No Suitable Habitat.
Plummer's mariposa lily <i>Calochortus plummerae</i>	Federal: None State: None CRPR: Rank 4.2	Granitic, rock soils within chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, valley and foothill grassland.	Confirmed absent.
White pygmy-poppy <i>Canbya candida</i>	Federal: None State: None CRPR: Rank 4.2	Gravelly, sandy, and granitic soils in Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland.	Does not occur. No Suitable Habitat.
Bristly sedge <i>Carex comosa</i>	Federal: None State: None CRPR: Rank 2B.1	Coastal prairie, marshes and swamps (lake margins), and valley and foothill grassland.	Does not occur. No Suitable Habitat.
San Bernardino Mountains owl's-clover <i>Castilleja lasiorhyncha</i>	Federal: None State: None CRPR: Rank 1B.2	Mesic soils in chaparral, meadows and seeps, pebble (pavement) plain, riparian woodland, and upper montane coniferous forest.	Does not occur. No Suitable Habitat.
Mojave paintbrush <i>Castilleja plagiotoma</i>	Federal: None State: None CRPR: Rank 4.3	Great basin scrub (alluvial), Joshua tree woodland, Lower montane coniferous forest, Pinyon and juniper woodland	Does not occur. No Suitable Habitat.
Smooth tarplant <i>Centromadia pungens</i> ssp. <i>laevis</i>	Federal: None State: None CRPR: Rank 1B.1	Alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grasslands, disturbed habitats.	Confirmed absent.

Species Name	Status	Habitat Requirements	Occurrence
Salt marsh bird's-beak <i>Chloropyron maritimum</i> ssp. <i>maritimum</i>	Federal: FE State: SE CRPR: Rank 1B.2	Coastal dune, coastal salt marshes and swamps.	Does not occur. No Suitable Habitat.
Peninsular spineflower <i>Chorizanthe leptotheca</i>	Federal: None State: None CRPR: Rank 4.2	Alluvial fan, granitic. Chaparral, coastal scrub, lower montane coniferous forest.	Does not occur. No Suitable Habitat.
Parry's spineflower <i>Chorizanthe parryi</i> var. <i>parryi</i>	Federal: None State: None CRPR: Rank 1B.1	Sandy or rocky soils in open habitats of chaparral and coastal sage scrub.	Confirmed absent.
White-bracted spineflower <i>Chorizanthe xanti</i> var. <i>leucotheca</i>	Federal: None State: None CRPR: Rank 1B.2	Sandy or gravelly soils in Mojavean desert scrub and pinyon and juniper woodland.	Does not occur. No Suitable Habitat.
Small-flowered morning-glory <i>Convolvulus simulans</i>	Federal: None State: None CRPR: Rank 4.2	Chaparral (openings), coastal sage scrub, valley and foothill grassland. Occurring on clay soils and serpentinite seeps.	Confirmed absent.
Peruvian dodder <i>Cuscuta obtusiflora</i> var. <i>glandulosa</i>	Federal: None State: None CRPR: Rank 2B.2	Marshes and swamps (freshwater). Annual vine (parasitic). Blooming period July - October.	Does not occur. No Suitable Habitat.
Mojave tarplant <i>Deinandra mohavensis</i>	Federal: None State: SE CRPR: Rank 1B.3	Chaparral (mesic soils) and riparian scrub.	Confirmed absent.
Paniculate tarplant <i>Deinandra paniculata</i>	Federal: None State: None CRPR: Rank 4.2	Usually in vernal mesic, sometimes sandy soils in coastal scrub, valley and foothill grassland.	Confirmed absent.
Johnston's monkeyflower <i>Diplacus (Mimulus) johnstonii</i>	Federal: None State: None CRPR: Rank 4.3	Lower montane coniferous forest (scree, disturbed areas, rocky or gravelly soil, roadsides)	Does not occur. No Suitable Habitat.
Slender-horned spineflower <i>Dodecahema leptoceras</i>	Federal: FE State: SE CRPR: Rank 1B.1	Sandy soils in alluvial scrub, chaparral, cismontane woodland.	Does not occur. No Suitable Habitat.
San Bernardino Mountains dudleya <i>Dudleya abramsii</i> ssp. <i>affinis</i>	Federal: None State: None CRPR: Rank 1B.2	Granitic, quartzite, or carbonate soils in pebble (pavement) plain, Pinyon and juniper woodland, and upper montane coniferous forest.	Does not occur. No Suitable Habitat.
Booth's evening-primrose <i>Eremothera boothii</i> ssp. <i>boothii</i>	Federal: None State: None CRPR: Rank 2B.3	Joshua tree woodland and pinyon and juniper woodland.	Does not occur. No Suitable Habitat.

Species Name	Status	Habitat Requirements	Occurrence
Santa Ana River woolly star <i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>	Federal: FE State: SE CRPR: Rank 1B.1	Alluvial fan sage scrub, chaparral. Occurring on sandy or rocky soils.	Does not occur. No Suitable Habitat.
Parish's daisy <i>Erigeron parishii</i>	Federal: FT State: None CRPR: Rank 1B.1	Usually carbonate, sometimes granitic soils in Mojavean desert scrub, and Pinyon and juniper woodland.	Does not occur. No Suitable Habitat.
Alpine sulphur-flowered buckwheat <i>Eriogonum umbellatum</i> var. <i>minus</i>	Federal: None State: None CRPR: Rank 4.3	Gravelly soils in subalpine coniferous forest and upper montane coniferous forest.	Does not occur. No Suitable Habitat.
Southern Sierra woolly sunflower <i>Eriophyllum lanatum</i> var. <i>obovatum</i>	Federal: None State: None CRPR: Rank 4.3	Sandy loam in lower and upper montane coniferous forest.	Does not occur. No Suitable Habitat.
Hot springs fimbriatylis <i>Fimbristylis thermalis</i>	Federal: None State: None CRPR: Rank 2B.2	Meadows and seeps (alkaline, near hot springs).	Does not occur. No Suitable Habitat.
Pine green-gentian <i>Frasera neglecta</i>	Federal: None State: None CRPR: Rank 4.3	Lower montane coniferous forest, Pinyon and juniper woodland, Upper montane coniferous forest	Does not occur. No Suitable Habitat.
Pine fritillary <i>Fritillaria pinetorum</i>	Federal: None State: None CRPR: Rank 4.3	Granitic or metamorphic soils in chaparral, lower and upper montane coniferous forests, pinyon and juniper woodland, and subalpine coniferous forest.	Does not occur. No Suitable Habitat.
Alvin Meadow beadstraw <i>Galium californicum</i> ssp. <i>primum</i>	Federal: None State: None CRPR: Rank 1B.2	Granitic and sandy soils in chaparral and lower montane coniferous forest.	Does not occur. No Suitable Habitat.
Jepson's bedstraw <i>Galium jepsonii</i>	Federal: None State: None CRPR: Rank 4.3	Granitic, rocky or gravelly soil. Lower montane coniferous forest, Upper montane coniferous forest	Does not occur. No Suitable Habitat.
Johnston's bedstraw <i>Galium johnstonii</i>	Federal: None State: None CRPR: Rank 4.3	Chaparral, lower montane coniferous forest, pinyon and juniper woodland, riparian woodland.	Does not occur. No Suitable Habitat.
Los Angeles sunflower <i>Helianthus nuttallii</i> ssp. <i>parishii</i>	Federal: None State: None CRPR: Rank 1A	Marshes and swamps (coastal salt and freshwater).	Does not occur. No Suitable Habitat.

Species Name	Status	Habitat Requirements	Occurrence
Urn-flowered alumroot <i>Heuchera caespitosa</i>	Federal: None State: None CRPR: Rank 4.3	Rocky soils in cismontane woodland, riparian forest (montane), lower and upper montane coniferous forest.	Does not occur. No Suitable Habitat.
Parish's alumroot <i>Heuchera parishii</i>	Federal: None State: None CRPR: Rank 1B.3	Rocky, sometimes carbonate soils in alpine boulder and rock field, lower and upper montane coniferous forest, and subalpine coniferous forest.	Does not occur. No Suitable Habitat.
Mesa horkelia <i>Horkelia cuneata</i> var. <i>puberula</i>	Federal: None State: None CRPR: Rank 1B.1	Sandy or gravelly soils in chaparral (maritime), cismontane woodland, and coastal scrub.	Confirmed absent.
Parry's (sunflower) hulsea <i>Hulsea vestita</i> ssp. <i>parryi</i>	Federal: None State: None CRPR: Rank 4.3	Granitic or carbonate soils, Rocky soils, Openings. Lower montane coniferous forest, Pinyon and juniper woodland, Upper montane coniferous forest	Does not occur. No Suitable Habitat.
California satintail <i>Imperata brevifolia</i>	Federal: None State: None CRPR: Rank 2B.1	Mesic soils in chaparral, coastal scrub, Mojavean desert scrub, meadows and seeps (often alkali), and riparian scrub.	Does not occur. No Suitable Habitat.
Silver-haired ivesia <i>Ivesia argyrocoma</i> var. <i>argyrocoma</i>	Federal: None State: None CRPR: Rank 1B.2	Meadows and seeps (alkaline), pebble (pavement) plain, and upper montane coniferous forest.	Does not occur. No Suitable Habitat.
Southern California black walnut <i>Juglans californica</i>	Federal: None State: None CRPR: Rank 4.2	Chaparral, cismontane woodland, coastal sage scrub, alluvial surfaces.	Confirmed absent.
Duran's rush <i>Juncus duranii</i>	Federal: None State: None CRPR: Rank 4.3	Mesic soils in lower and upper montane coniferous forests, meadows and seeps.	Does not occur. No Suitable Habitat.
Robinson's pepper grass <i>Lepidium virginicum</i> var. <i>robinsonii</i>	Federal: None State: None CRPR: Rank 4.3	Chaparral, coastal sage scrub	Does not occur. No Suitable Habitat.
Ocellated humboldt lily <i>Lilium humboldtii</i> ssp. <i>ocellatum</i>	Federal: None State: None CRPR: Rank 4.2	Chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, riparian woodland. Occurring in openings.	Does not occur. No Suitable Habitat.

Species Name	Status	Habitat Requirements	Occurrence
Lemon lily <i>Lilium parryi</i>	Federal: None State: None CRPR: Rank 1B.2	Mesic soils in lower montane coniferous forest, meadows and seeps, riparian forest, and upper montane coniferous forest.	Does not occur. No Suitable Habitat.
Parish's desert-thorn <i>Lycium parishii</i>	Federal: None State: None CRPR: Rank 2B.3	Coastal sage scrub, Sonoran desert scrub	Confirmed absent.
Parish's bush-mallow <i>Malacothamnus parishii</i>	Federal: None State: None CRPR: Rank 1A	Chaparral and coastal scrub	Confirmed absent.
Hall's monardella <i>Monardella macrantha</i> ssp. <i>hallii</i>	Federal: None State: None CRPR: Rank 1B.3	Occurs on dry slopes and ridges within openings in broadleaved upland forest, chaparral, lower montane coniferous forest, cismontane woodland, and valley and foothill grassland.	Does not occur. No Suitable Habitat.
Pringle's monardella <i>Monardella pringlei</i>	Federal: None State: None CRPR: Rank 1A	Sandy soils in coastal sage scrub.	Does not occur. No Suitable Habitat.
Rock monardella <i>Monardella saxicola</i>	Federal: None State: None CRPR: Rank 4.2	Rocky, usually serpentinite soils in closed-cone coniferous forest, chaparral, and lower montane coniferous forest.	Does not occur. No Suitable Habitat.
California muhly <i>Muhlenbergia californica</i>	Federal: None State: None CRPR: Rank 4.3	Mesic habitats, including seeps and streambanks, in chaparral, coastal scrub, lower montane coniferous forest, and meadows.	Does not occur. No Suitable Habitat.
Gambel's water cress <i>Nasturtium gambelii</i>	Federal: FE State: ST CRPR: Rank 1B.1	Marshes and swamps (freshwater or brackish).	Does not occur. No Suitable Habitat.
Graceful (Slender) nemacladus <i>Nemacladus gracilis</i>	Federal: None State: None CRPR: Rank 4.3	Sandy or gravelly soils in cismontane woodland, valley and foothill grassland.	Confirmed absent.
Short-joint beavertail <i>Opuntia basilaris</i> var. <i>brachyclada</i>	Federal: None State: None CRPR: Rank 1B.2	Chaparral, Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland.	Does not occur. No Suitable Habitat.
Tehachapi ragwort <i>Packera ionophylla</i>	Federal: None State: None CRPR: Rank 4.3	Granitic and rocky soils in lower and upper montane coniferous forest.	Does not occur. No Suitable Habitat.

Species Name	Status	Habitat Requirements	Occurrence
Beaver Dam breadroot <i>Pediomelum castoreum</i>	Federal: None State: None CRPR: Rank 1B.2	Sandy soils in washes and roadcuts, in Joshua tree woodland and Mojavean desert scrub.	Does not occur. No Suitable Habitat.
Golden-rayed pentachaeta <i>Pentachaeta aurea</i> ssp. <i>aurea</i>	Federal: None State: None CRPR: Rank 4.2	Cismontane woodland, coastal sage scrub, lower montane coniferous forest, valley and foothill grassland.	Confirmed absent.
Parish's yampah <i>Perideridia parishii</i> ssp. <i>parishii</i>	Federal: None State: None CRPR: Rank 2B.2	Lower montane coniferous forest, meadows and seeps, upper montane coniferous forest.	Does not occur. No Suitable Habitat.
Transverse range phacelia <i>Phacelia exilis</i>	Federal: None State: None CRPR: Rank 4.3	Sandy or gravelly soils in lower and upper montane coniferous forests, meadows and seeps, and pebble (pavement) plain.	Does not occur. No Suitable Habitat.
Mojave phacelia <i>Phacelia mohavensis</i>	Federal: None State: None CRPR: Rank 4.3	Sandy or gravelly soils in cismontane woodland, lower montane coniferous forests, meadows and seeps, pinyon and juniper woodland.	Does not occur. No Suitable Habitat.
Narrow-petaled rein orchid <i>Piperia leptopetala</i>	Federal: None State: None CRPR: Rank 4.3	Cismontane woodland, lower montane coniferous forest, upper montane coniferous forest.	Does not occur. No Suitable Habitat.
Deep Canyon snapdragon <i>Pseudorontium cyathiferum</i>	Federal: None State: None CRPR: Rank 2B.3	Rocky soils in Sonoran desert scrub.	Does not occur. No Suitable Habitat.
San Gabriel oak <i>Quercus durata</i> var. <i>gabrielensis</i>	Federal: None State: None CRPR: Rank 4.2	Chaparral, cismontane woodland.	Confirmed absent.
Parish's gooseberry <i>Ribes divaricatum</i> var. <i>parishii</i>	Federal: None State: None CRPR: Rank 1A	Riparian woodland	Confirmed absent.
Latimer's woodland-gilia <i>Saltugilia latimeri</i>	Federal: None State: None CRPR: Rank 1B.2	Rocky or sandy, often granitic soils (sometimes washes) in chaparral, Mojavean desert scrub, and Pinyon and juniper woodland.	Does not occur. No Suitable Habitat.
Black bog-rush <i>Schoenus nigricans</i>	Federal: None State: None CRPR: Rank 2B.2	Marshes and swamps (often alkaline).	Does not occur. No Suitable Habitat.

Species Name	Status	Habitat Requirements	Occurrence
Southern mountains skullcap <i>Scutellaria bolanderi</i> ssp. <i>austromontana</i>	Federal: None State: None CRPR: Rank 1B.2	Mesic soils in chaparral, cismontane woodland, lower montane coniferous forest.	Does not occur. No Suitable Habitat.
Bluish spike-moss <i>Selaginella asprella</i>	Federal: None State: None CRPR: Rank 4.3	Granitic and rocky soils in cismontane woodland, lower montane coniferous forest, pinyon and juniper woodland, subalpine coniferous forest, and upper montane coniferous forest.	Does not occur. No Suitable Habitat.
Chaparral ragwort <i>Senecio aphanactis</i>	Federal: None State: None CRPR: Rank 2B.2	Chaparral, cismontane woodland, coastal scrub. Sometimes associated with alkaline soils.	Confirmed absent.
San Gabriel ragwort <i>Senecio astephanus</i>	Federal: None State: None CRPR: Rank 4.3	Rocky slopes, coastal bluff scrub, chaparral.	Confirmed absent.
Bear Valley checkerbloom <i>Sidalcea malviflora</i> ssp. <i>dolosa</i>	Federal: None State: None CRPR: Rank 1B.2	Meadows and seeps, riparian woodland, and lower and upper montane coniferous forest (meadows and seeps).	Does not occur. No Suitable Habitat.
Salt Spring checkerbloom <i>Sidalcea neomexicana</i>	Federal: None State: None CRPR: Rank 2B.2	Mesic, alkaline soils in chaparral, coastal sage scrub, lower montane coniferous forest, Mojavean desert scrub, and playas.	Does not occur. No Suitable Habitat.
Chickweed oxytheca <i>Sidotheca caryophylloides</i>	Federal: None State: None CRPR: Rank 4.3	Sandy soils in lower montane coniferous forest.	Does not occur. No Suitable Habitat.
Prairie wedge grass <i>Sphenopholis obtusata</i>	Federal: None State: None CRPR: Rank 2B.2	Mesic soils in cismontane woodland, meadows and seeps.	Does not occur. No Suitable Habitat.
Laguna Mountains jewelflower <i>Streptanthus bernardinus</i>	Federal: None State: None CRPR: Rank 4.3	Chaparral and lower montane coniferous forest.	Does not occur. No Suitable Habitat.
San Bernardino aster <i>Symphyotrichum defoliatum</i>	Federal: None State: None CRPR: Rank 1B.2	Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic).	Does not occur. No Suitable Habitat.
Greata's aster <i>Symphyotrichum greatae</i>	Federal: None State: None CRPR: Rank 1B.3	Mesic soils in broadleaved upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and riparian woodland.	Does not occur. No Suitable Habitat.

Species Name	Status	Habitat Requirements	Occurrence
Lemmon's syntrichopappus <i>Syntrichopappus lemmonii</i>	Federal: None State: None CRPR: Rank 4.3	Sandy or gravelly soils in chaparral, Joshua tree woodland, and pinyon and juniper woodland.	Does not occur. No Suitable Habitat.
Sonoran maiden fern <i>Thelypteris puberula</i> var. <i>sonorensis</i>	Federal: None State: None CRPR: Rank 2B.2	Meadows and seeps (seeps and streams)	Does not occur. No Suitable Habitat.
Small-flowered bluecurls <i>Trichostema micranthum</i>	Federal: None State: None CRPR: Rank 4.3	Mesic soils in lower montane coniferous forest, meadows, and seeps.	Does not occur. No Suitable Habitat.
<i>Yucca brevifolia</i> Western Joshua Tree	Federal: None State: Candidate Threatened CRPR: None	Chaparral, Joshua tree woodland, Mojavean desert scrub, pinon and juniper woodlands, and Sonoran desert scrub	Does not occur. No Suitable Habitat.

Status

Federal

FE – Federally Endangered
FT – Federally Threatened
FC – Federal Candidate

State

SE – State Endangered
ST – State Threatened

CRPR

Rank 1A – Plants presumed extirpated in California and either rare or extinct elsewhere.
Rank 1B – Plants rare, threatened, or endangered in California and elsewhere.
Rank 2A – Plants presumed extirpated in California, but common elsewhere.
Rank 2B – Plants rare, threatened, or endangered in California, but more common elsewhere.
Rank 3 – Plants about which more information is needed (a review list).
Rank 4 – Plants of limited distribution (a watch list).

CRPR Threat Code extension

.1 – Seriously endangered in California (over 80% occurrences threatened)
.2 – Fairly endangered in California (20-80% occurrences threatened)
.3 – Not very endangered in California (<20% of occurrences threatened or no current threats known)

Occurrence

- Does not occur – The site does not contain habitat for the species and/or the site does not occur within the geographic range of the species.
- Confirmed Absent – The site contains suitable habitat for the species, but the species has been confirmed absent through focused surveys.
- Not expected to occur – The species is not expected to occur onsite due to low habitat quality, however absence cannot be ruled out.
- Potential to occur – The species has a potential to occur onsite based on suitable habitat, however its presence/absence could not be confirmed.
- Present – The species was detected onsite incidentally or through focused surveys.

4.5 Special-Status Animals

No special-status animals were detected at the Project site, and none are expected to occur due to the disturbed conditions of the site, lack of suitable habitat, and the results of the focused wildlife surveys and habitat assessment. The Project site has been an active mining operation for approximately 30 years and the extensive disturbance has limited habitat to support special-status animals. Further discussion of focused survey results and habitat assessments for special-status animals is in Sections 4.5.1 and 4.5.2. Table 4-3 provides a list of special-status animals evaluated for the Project site through a general biological survey and habitat assessment. Species were evaluated based on the following factors, including: 1) species identified by the CNDDDB as occurring (either currently or historically) on or in the vicinity of the Project site, and 2) any other special-status animals that are known to occur within the vicinity of the Project site, for which potentially suitable habitat occurs on the site.

Table 4-3. Special-Status Animals Evaluated for the Project Site

Species Name	Status	Habitat Requirements	Occurrence
Invertebrates			
Crotch's bumble bee <i>Bombus crotchii</i>	Federal: None State: CE	Relatively warm and dry sites, including the inner Coast Range of California and margins of the Mojave Desert.	Does not occur. No Suitable Habitat.
Delhi Sands flower-loving fly <i>Rhaphiomidas terminatus abdominalis</i>	Federal: FE State: None	Restricted to dunes in the Delhi sands and associated soil series.	Does not occur. No Suitable Habitat.
Quino checkerspot butterfly <i>Euphydryas editha quino</i>	Federal: FE State: None	Larval and adult phases each have distinct habitat requirements tied to host plant species and topography. Larval host plants include <i>Plantago erecta</i> and <i>Castilleja exserta</i> . Adults occur on sparsely vegetated rounded hilltops and ridgelines, and are known to disperse through disturbed habitats to reach suitable nectar plants.	Does not occur. No Suitable Habitat.
Fish			
Santa Ana sucker <i>Catostomus santaanae</i>	Federal: FT State: None	Small, shallow streams, less than 7 meters in width, with currents ranging from swift in the canyons to sluggish in the bottom lands. Preferred substrates are generally coarse and consist of gravel, rubble, and boulders with growths of filamentous algae, but occasionally they are found on sand/mud substrates.	Does not occur. No Suitable Habitat.

Species Name	Status	Habitat Requirements	Occurrence
Arroyo chub <i>Gila orcutti</i>	Federal: None State: SSC	Slow-moving or backwater sections of warm to cool streams with substrates of sand or mud.	Does not occur. No Suitable Habitat.
Southern steelhead - southern California DPS <i>Oncorhynchus mykiss irideus</i>	Federal: FE State: None	Clear, swift moving streams with gravel for spawning. Federal listing refers to populations from Santa Maria river south to southern extent of range (San Mateo Creek in San Diego county.)	Does not occur. No Suitable Habitat.
Santa Ana speckled dace <i>Rhinichthys osculus</i> ssp. 3	Federal: None State: SSC	Occurs in the headwaters of the Santa Ana and San Gabriel Rivers. May be extirpated from the Los Angeles River system. Requires permanent flowing streams with summer water temperatures of 17-20 C. Usually inhabits shallow cobble and gravel riffles.	Does not occur. No Suitable Habitat.
Mohave tui chub <i>Siphateles bicolor mohavensis</i>	Federal: FE State: SE, FP	Associated with deep pools and slough-like areas of the Mojave River, in areas with aquatic ditchgrass (<i>Riparia maritima</i>).	Does not occur. No Suitable Habitat.
Amphibians			
Arroyo toad <i>Anaxyrus californicus</i>	Federal: FE State: SSC	Breed, forage, and/or aestivate in aquatic habitats, riparian, coastal sage scrub, oak, and chaparral habitats. Breeding pools must be open and shallow with minimal current, and with a sand or pea gravel substrate overlain with sand or flocculent silt.	Does not occur. No Suitable Habitat.
California red-legged frog <i>Rana draytonii</i>	Federal: FT State: SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby, or emergent riparian vegetation.	Does not occur. No Suitable Habitat.
Southern mountain yellow-legged frog <i>Rana muscosa</i>	Federal: FE State: SE	Streams and small pools in ponderosa pine, montane hardwood-conifer, and montane riparian habitat types.	Does not occur. No Suitable Habitat.
Western spadefoot <i>Spea hammondi</i>	Federal: None State: SSC	Seasonal pools in coastal sage scrub, chaparral, and grassland habitats.	Does not occur. No Suitable Habitat.
Reptiles			
Southern California legless lizard <i>Anniella stebbinsi</i>	Federal: None State: SSC	Broadleaved upland forest, chaparral, coastal dunes, coastal scrub; found in a broader range of habitats than any of the other species in the genus.	Does not occur. No Suitable Habitat.

Species Name	Status	Habitat Requirements	Occurrence
California glossy snake <i>Arizona elegans occidentalis</i>	Federal: None State: SSC	Inhabits arid scrub, rocky washes, grasslands, chaparral.	Does not occur. No Suitable Habitat.
Orangethroat whiptail <i>Aspidoscelis hyperythra</i>	Federal: None State: WL	Coastal sage scrub, chaparral, non-native grassland, oak woodland, and juniper woodland.	Does not occur. No Suitable Habitat.
Coastal whiptail <i>Aspidoscelis tigris stejnegeri</i>	Federal: None State: SSC	Open, often rocky areas with little vegetation, or sunny microhabitats within shrub or grassland associations.	Does not occur. No Suitable Habitat.
Southern rubber boa <i>Charina umbratica</i>	Federal: None State: ST	Restricted to the San Bernardino and San Jacinto Mountain, in a variety of montane forest habitats. Found in vicinity of streams or wet meadows. Requires loose, moist soil for burrowing. Seeks cover in rotting logs.	Does not occur. No Suitable Habitat.
San Diego banded gecko <i>Coleonyx variegatus abbotti</i>	Federal: None State: SSC	Primarily a desert species, but also occurs in cismontane chaparral, desert scrub, and open sand dunes.	Does not occur. No Suitable Habitat.
Red-diamond rattlesnake <i>Crotalus ruber</i>	Federal: None State: SSC	Habitats with heavy brush and rock outcrops, including coastal sage scrub and chaparral.	Does not occur. No Suitable Habitat.
San Bernardino ringneck snake <i>Diadophis punctatus modestus</i>	Federal: None State: None	Moist habitats including woodlands, forest, grasslands, chaparral, farms, and gardens.	Does not occur. No Suitable Habitat.
Western pond turtle <i>Emys marmorata</i>	Federal: None State: SSC	Slow-moving permanent or intermittent streams, small ponds and lakes, reservoirs, abandoned gravel pits, permanent and ephemeral shallow wetlands, stock ponds, and treatment lagoons. Abundant basking sites and cover necessary, including logs, rocks, submerged vegetation, and undercut banks.	Does not occur. No Suitable Habitat.
Coast horned lizard <i>Phrynosoma blainvillii</i>	Federal: None State: SSC	Occurs in a variety of vegetation types including coastal sage scrub, chaparral, annual grassland, oak woodland, and riparian woodlands.	Does not occur. No Suitable Habitat.
Two-striped garter snake <i>Thamnophis hammondi</i>	Federal: None State: SSC	Aquatic snake typically associated with wetland habitats such as streams, creeks, and pools.	Does not occur. No Suitable Habitat.

Species Name	Status	Habitat Requirements	Occurrence
Birds			
Tricolored blackbird <i>Agelaius tricolor</i>	Federal: BCC State: ST, SSC	Breeding colonies require nearby water, a suitable nesting substrate, and open-range foraging habitat of natural grassland, woodland, or agricultural cropland.	Does not occur. No Suitable Habitat.
Southern California rufous-crowned sparrow <i>Aimophila ruficeps canescens</i>	Federal: None State: WL	Grass covered hillsides, coastal sage scrub, and chaparral.	Does not occur. No Suitable Habitat.
Bell's sage sparrow <i>Artemisiospiza belli belli</i>	Federal: BCC State: WL	Chaparral and coastal sage scrub along the coastal lowlands, inland valleys, and in the lower foothills of local mountains.	Does not occur. No Suitable Habitat.
Long-eared owl (nesting) <i>Asio otus</i>	Federal: None State: SSC	Riparian habitats are required by the long-eared owl, but it also uses live-oak thickets and other dense stands of trees.	Does not occur. No Suitable Habitat.
Burrowing owl <i>Athene cunicularia</i>	Federal: BCC State: SCE	Shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), coastal dunes, desert floors, and some artificial, open areas as a year-long resident. Occupies abandoned ground squirrel burrows as well as artificial structures such as culverts and underpasses.	Confirmed absent through focused surveys.
Swainson's hawk <i>Buteo swainsoni</i>	Federal: BCC State: ST	Summer in wide open spaces of the American West. Nest in grasslands, but can use sage flats and agricultural lands. Nests are placed in lone trees.	Does not occur. No Suitable Habitat.
Western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	Federal: FT, BCC State: SE	Dense, wide riparian woodlands with well-developed understories.	Does not occur. No Suitable Habitat.
Southwestern willow flycatcher <i>Empidonax traillii extimus</i>	Federal: FE State: SE	Riparian woodlands along streams and rivers with mature dense thickets of trees and shrubs.	Does not occur. No Suitable Habitat.
California horned lark <i>Eremophila alpestris actia</i>	Federal: None State: WL	Occupies a variety of open habitats, usually where trees and large shrubs are absent.	Does not occur. No Suitable Habitat.
Bald eagle (nesting & wintering) <i>Haliaeetus leucocephalus</i>	Federal: Delisted State: SE, FP	Primarily in or near seacoasts, rivers, swamps, and large lakes. Perching sites consist of large trees or snags with heavy limbs or broken tops.	Does not occur. No Suitable Habitat.

Species Name	Status	Habitat Requirements	Occurrence
Yellow-breasted chat <i>Icteria virens</i>	Federal: None State: SSC	Dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories.	Does not occur. No Suitable Habitat.
Loggerhead shrike <i>Lanius ludovicianus</i>	Federal: BCC State: SSC	Forages over open ground within areas of short vegetation, pastures with fence rows, old orchards, mowed roadsides, cemeteries, golf courses, riparian areas, open woodland, agricultural fields, desert washes, desert scrub, grassland, broken chaparral and beach with scattered shrubs.	Does not occur. No Suitable Habitat.
California black rail <i>Laterallus jamaicensis coturniculus</i>	Federal: BCC State: ST, FP	Nests in high portions of salt marshes, shallow freshwater marshes, wet meadows, and flooded grassy vegetation.	Does not occur. No Suitable Habitat.
Coastal California gnatcatcher <i>Poliophtila californica</i>	Federal: FT State: SSC	Low elevation coastal sage scrub and coastal bluff scrub.	Confirmed absent through focused surveys.
Yellow warbler <i>Setophaga petechia sonorana</i>	Federal: BCC State: SSC	Willow and cottonwood habitats lining the Colorado river.	Does not occur. No Suitable Habitat.
Least Bell's vireo <i>Vireo bellii pusillus</i>	Federal: FE State: SE	Dense riparian habitats with a stratified canopy, including southern willow scrub, mule fat scrub, and riparian forest.	Does not occur. No Suitable Habitat.
Yellow-headed blackbird <i>Xanthocephalus xanthocephalus</i>	Federal: None State: SSC	Breed and roost in freshwater wetlands with dense, emergent vegetation such as cattails. Often forage in fields, typically wintering in large, open agricultural areas.	Does not occur. No Suitable Habitat.
Mammals			
Pallid bat <i>Antrozous pallidus</i>	Federal: None State: SSC WBWG: H	Deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting.	Does not occur. No Suitable Habitat.
Northwestern San Diego pocket mouse <i>Chaetodipus fallax fallax</i>	Federal: None State: SSC	Coastal sage scrub, sage scrub/grassland ecotones, and chaparral.	Does not occur. No Suitable Habitat.
Pallid San Diego pocket mouse <i>Chaetodipus fallax pallidus</i>	Federal: None State: SSC	In desert wash, desert scrub, desert succulent scrub, pinyon-juniper woodland. Sandy herbaceous areas, usually in association with rocks or coarse gravel.	Does not occur. No Suitable Habitat.

Species Name	Status	Habitat Requirements	Occurrence
San Bernardino kangaroo rat <i>Dipodomys merriami parvus</i>	Federal: FE State: CE	Typically found in Riversidean alluvial fan sage scrub and sandy loam soils, alluvial fans and floodplains, and along washes with nearby sage scrub.	Does not occur. No Suitable Habitat.
Stephens' kangaroo rat <i>Dipodomys stephensi</i>	Federal: FE State: ST	Open grasslands or sparse shrublands with less than 50% vegetation cover during the summer.	Does not occur. No Suitable Habitat.
Western mastiff bat <i>Eumops perotis californicus</i>	Federal: None State: SSC WBWG: H	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	Does not occur. No Suitable Habitat.
San Bernardino flying squirrel <i>Glaucomys oregonensis californicus</i>	Federal: None State: SSC	Black oak or white fir dominated woodlands between 5,200 and 8,500 feet in the San Bernardino and San Jacinto Mountain ranges.	Does not occur. No Suitable Habitat.
Western yellow bat <i>Lasiurus xanthinus</i>	Federal: None State: SSC WBWG: H	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	Does not occur. No Suitable Habitat.
San Diego desert woodrat <i>Neotoma lepida intermedia</i>	Federal: None State: SSC	Occurs in a variety of shrub and desert habitats, primarily associated with rock outcrops, boulders, cacti, or areas of dense undergrowth.	Does not occur. No Suitable Habitat.
Pocketed free-tailed bat <i>Nyctinomops femorosaccus</i>	Federal: None State: SSC WBWG: M	Rocky areas with high cliffs in pine-juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian.	Does not occur. No Suitable Habitat.
Southern grasshopper mouse <i>Onychomys torridus ramona</i>	Federal: None State: SSC	Desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover.	Does not occur. No Suitable Habitat.
White-eared pocket mouse <i>Perognathus alticolus alticolus</i>	Federal: None State: SSC	Ponderosa and Jeffrey pine habitats. Also in mixed chaparral and sagebrush habitats in the San Bernardino Mountains. Possible extirpated.	Does not occur. No Suitable Habitat.
Los Angeles pocket mouse <i>Perognathus longimembris brevinasus</i>	Federal: None State: SSC	Fine, sandy soils in coastal sage scrub and grasslands.	Does not occur. No Suitable Habitat.

Species Name	Status	Habitat Requirements	Occurrence
American badger <i>Taxidea taxus</i>	Federal: None State: SSC	Most abundant in drier open stages of most scrub, forest, and herbaceous habitats, with friable soils.	Does not occur. No Suitable Habitat.

Status

Federal

FE – Federally Endangered
FT – Federally Threatened
FPT – Federally Proposed Threatened
FC – Federal Candidate
BCC – Bird of Conservation Concern

State

SE – State Endangered
ST – State Threatened
CE – State Candidate Endangered
FP – California Fully Protected Species
SSC – Species of Special Concern

Western Bat Working Group (WBWG)

H – High Priority
LM – Low-Medium Priority
M – Medium Priority
MH – Medium-High Priority

Occurrence

- Does not occur – The site does not contain habitat for the species and/or the site does not occur within the geographic range of the species.
- Confirmed Absent – The site contains suitable habitat for the species, but the species has been confirmed absent through focused surveys.
- Not expected to occur – The species is not expected to occur onsite due to low habitat quality, however absence cannot be ruled out.
- Potential to occur – The species has a potential to occur onsite based on suitable habitat, however its presence/absence could not be confirmed.
- Present – The species was detected onsite incidentally or through focused surveys.

4.5.1 Special-Status Wildlife Species Confirmed Absent Through Focused Surveys at the Project Site

Burrowing Owl

The burrowing owl is a State Candidate for listing as an endangered species. This species occurs in shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), prairies, coastal dunes, desert floors, and some artificial, open areas as a year-long resident. They require large open expanses of sparsely vegetated areas on gently rolling or level terrain with an abundance of active small mammal burrows. As a habitat feature need, they require the use of rodent or other burrows for roosting and nesting cover.

GLA biologists did not observe burrowing owls, or evidence of burrowing owls (e.g., cast pellets, preened feathers, or whitewash clustered at a burrow) during the focused burrowing owl surveys in 2022; therefore, the species was confirmed absent.

California Coastal Gnatcatcher

The coastal California gnatcatcher is a Federally Threatened and State SSC species. In California, the Coastal California gnatcatcher inhabits low elevation coastal sage scrub and coastal bluff scrub. This species has a moderate potential to occur on the Project site due to suitable habitat and proximity to the Cajon Wash.

GLA biologist Mikael Romich did not observe the coastal California gnatcatcher during the focused coastal California gnatcatcher surveys in 2022; therefore, the species was confirmed absent. The coastal California gnatcatcher report is provided in Appendix C.

4.5.2 Special-Status Wildlife Species Confirmed Absent Through Habitat Assessments at the Project Site

San Bernardino Kangaroo Rat

The SBKR is a Federally Endangered and State Candidate for listing as an endangered species. This species typically is found in Riversidean alluvial fan sage scrub and sandy loam soils, alluvial fans and floodplains, and along washes with nearby sage scrub.

The habitat assessment determined that SBKR are unlikely to occur on the Project site due to the limited extent and poor quality of the suitable habitat, as well as the degree of isolation from any source of San Bernardino kangaroo rat populations, such as from Lytle/Cajon Creek. Although SBKR are known to occur in the adjacent Lytle/Cajon Creek, the active and constant mining operation would preclude any movement of this species onto the Project site. In addition, soils onsite are compacted from the mining operations, whereas SBKR requires friable sandy/sandy loam soils. The SBKR habitat assessment report is provided in Appendix D.

4.6 Nesting Birds

The Project site contains trees, shrubs, and ground cover that provide suitable habitat for nesting native birds. Mortality of native birds (including eggs) is prohibited under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code.⁶

4.7 Wildlife Linkages/ Corridors and Nursery Sites

Habitat linkages are areas which provide a connection between two or more other habitat areas which are often larger or superior in quality to the linkage. Such linkage sites can be quite small or constricted, but can be vital to the long-term health of connected habitats. Linkage values are often addressed in terms of “gene flow” between populations, with movement taking potentially many generations.

⁶ The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 C.F.R. Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 C.F.R.21). In addition, Sections 3505, 3503.5, and 3800 of the California Department of Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs.

Corridors are similar to linkages but provide specific opportunities for individual animals to disperse or migrate between areas, generally extensive but otherwise partially or wholly separated regions. Adequate cover and tolerably low levels of disturbance are common requirements for corridors. Habitat in corridors may be quite different than that in the connected areas, but if used by the wildlife species of interest, the corridor will still function as desired.

Wildlife nurseries are sites where wildlife concentrate for hatching and/or raising young, such as rookeries, spawning areas, and bat colonies. Nurseries can be important to both special-status species as well as commonly occurring species.

The Project site is an active mining operation that is completely disturbed and developed and is surrounded by a chain-link fence that would prevent medium to large mammals from moving through the Project site or using it for live-in habitat. The Project site is located adjacent to Lytle Creek which is depicted on the San Bernardino County General Plan Land Use Element as Open Space (San Bernardino County, 2022). However, the Project site is an active mining operation and there would be no impacts to adjacent wildlife movement in Lytle Creek. Therefore, the Project site does not support migratory wildlife corridors and/or wildlife nursery sites.

4.8 Critical Habitat

The northwestern portion of the Project site comprising 7.59 acres is mapped as Critical Habitat Unit 2 for the SBKR as depicted on Exhibit 8 – Critical Habitat Map. Critical Habitat for SBKR was designated in 2002, at which time mining operations were already in progress, and revised in 2008. Critical Habitat for SBKR in the vicinity of the Project site is mapped primarily within Lytle Creek and avoids the Project site except for the portion that overlaps with it in the northwestern area. The area designated as Critical Habitat within the Project site consists of active mining areas that are disturbed/developed, with little vegetation or native soils present. The configuration of Critical Habitat within Lytle Creek north of the Project site is a straight line along the levee that wraps around the exterior of the Project site as it extends to the southeast, intentionally avoiding the Project site along the northern, eastern, and southern boundary.

The Primary Constituent Elements (PCEs)⁷ for SBKR Critical Habitat are defined as follows:

The primary constituent elements for the San Bernardino kangaroo rat are those habitat components that are essential for the primary biological needs of foraging, reproducing, rearing of young, intra-specific communication, dispersal, genetic exchange, and/or sheltering. The primary constituent elements are found in areas influenced by historic and/or current geomorphological and hydrological processes and areas of wind-blown sand that support alluvial sage scrub vegetation or a mosaic of alluvial sage scrub and associated vegetation types (e.g., coastal sage scrub, chaparral) in San Bernardino and Riverside counties. Primary constituent elements associated with the biological needs of dispersal are also found in areas that provide connectivity or linkage between or within larger core

⁷ The designation of “Primary Constituent Elements” has been changed to “Physical and Biological Features”; in the new critical habitat regulations (81 FR 7214) however, given that the 2002 and 2008 Final Rules for SBKR uses “PCEs,” such usage is noted and retained here.

population areas, including open space and disturbed areas that may contain introduced plant species.

PCEs for SBKR are lacking due to the high degree of disturbance within the Project site from the mining operation. Table 4-4 provides a summary of vegetation/land use-land cover types within the 7.59 acres mapped as Critical Habitat within the Project site. Exhibit 8 depicts those land uses within Critical Habitat.

**Table 4-4. Summary of Vegetation/Land Use Types
Within Critical Habitat**

VEGETATION/LAND USE TYPE	TOTAL (acres)
Planted Black Sage/California Buckwheat Scrub	0.12
Disturbed/Developed	7.47
Total	7.59

The planted vegetation within the Project site is dominated by monotypic stands of black sage and California buckwheat. With only 0.12 acre occurring within Critical Habitat on site, the vegetation is also planted on a slope rather than occurring as part of an alluvial system; both the composition and distribution are in stark contrast to the naturally occurring native vegetation located in the adjacent Lytle Creek, which makes up the majority of Critical Habitat in Unit 2 and is where the PCEs described above for SBKR occur. The remaining 7.47 acres (over 98%) of Critical Habitat on site are comprised of actively disturbed/developed land undergoing mining operations. For these reasons, the 7.59 acres of mapped Critical Habitat within the Project site do not support PCEs or elements of physical or biological features considered to be essential to the conservation of the species.

4.9 Jurisdictional Waters

The Project site does not contain jurisdictional waters that would be regulated by the Corps, CDFW, or Regional Board [Exhibit 9 – Jurisdictional Delineation Map]. The three settling basins in the Project site were created and used by the quarry to collect mining-related surface runoff for water quality purposes. These settling basins operate under a National Pollutant Discharge Elimination System (NPDES Number CAS000001) General Permit for Storm Water Discharges Associated with Industrial Activities (Industrial General Permit 97-03-DWQ). The Jurisdictional Delineation Report [Appendix E] has a detailed discussion of these settling basins.

5.0 IMPACT ANALYSIS

The following discussion examines the potential impacts to plant and wildlife resources that would occur as a result of the proposed project. Impacts (or effects) can occur in two forms, direct and indirect. Direct impacts are considered to be those that involve the loss, modification, or disturbance of plant communities, which in turn, directly affect the flora and fauna of those habitats. Direct impacts also include the destruction of individual plants or animals, which may

also directly affect regional population numbers of a species or result in the physical isolation of populations thereby reducing genetic diversity and population stability.

Indirect impacts pertain to those impacts that result in a change to the physical environment, but are not immediately related to a project. Indirect (or secondary) impacts are those that are reasonably foreseeable and caused by a project but occur at a different time or place. Indirect impacts include the effects of increases in ambient levels of noise or light; predation by domestic pets; competition with exotic plants and animals; introduction of toxics, including pesticides; and other human disturbances such as human access, unauthorized dumping, etc. Indirect impacts are often attributed to the subsequent day-to-day activities associated with project build-out, such as increased noise, the use of artificial light sources, and invasive ornamental plantings that may encroach into native areas. Indirect effects may be both short-term and/or long-term in their duration.

Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. A cumulative impact can occur from multiple individual effects from the same project, or from several projects. The cumulative impact from several projects is the change in the environment resulting from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

5.1 California Environmental Quality Act

5.1.1 CEQA Thresholds of Significance

Environmental impacts relative to biological resources are assessed using impact significance threshold criteria, which reflect the policy statement contained in CEQA, Section 21001(c) of the California Public Resources Code. Accordingly, the State Legislature has established it to be the policy of the State of California:

“Prevent the elimination of fish or wildlife species due to man’s activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities...”

Determining whether a project may have a significant effect, or impact, plays a critical role in the CEQA process. According to CEQA, Section 15064.7 (Thresholds of Significance), each public agency is encouraged to develop and adopt (by ordinance, resolution, rule, or regulation) thresholds of significance that the agency uses in the determination of the significance of environmental effects. A threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant. In the development of thresholds of significance for impacts to biological resources CEQA provides guidance primarily in Section 15065, Mandatory Findings of Significance, and the CEQA Guidelines, Appendix G,

Environmental Checklist Form. Section 15065(a) states that a project may have a significant effect where:

“The project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or wildlife community, reduce the number or restrict the range of an endangered, rare, or threatened species, ...”

Therefore, for the purpose of this analysis, impacts to biological resources are considered potentially significant (before considering offsetting mitigation measures) if one or more of the following criteria discussed below would result from implementation of the proposed Project.

5.1.2 Criteria for Determining Significance Pursuant to CEQA

In accordance with Appendix G (Environmental Checklist Form) to the State CEQA Guidelines, the Project would have a significant biota impact if it would:

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

5.2 Impacts to Special-Status Species

Appendix G(a) of the CEQA guidelines considers whether a project is likely to “have a substantial adverse effect, either directly or through habitat modifications, on any species

identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.”

5.2.1 Impacts to Special-Status Plant Species

As noted in Section 4.4, no special-status plants were detected at the Project site and none are expected to occur due to the disturbed conditions of the site, lack of suitable habitat, and the results of the focused plant survey. The Project site has been an active mining operation for decades and has exhibited extensive disturbance that has eliminated native soils, seed banks, and vegetation in general from existing on the site. Therefore, the proposed Project would have no impacts on special-status plant species.

5.2.2 Impacts to Special-Status Animals

As noted in Section 4.5.1, no special-status animals were detected at the Project site and none are expected to occur due to the disturbed conditions of the site, lack of suitable habitat, and the results of the focused wildlife surveys and habitat assessment. The Project site has been an active mining operation for decades and the extensive disturbance has limited habitat to support special-status animals. Focused surveys conducted for the burrowing owl and coastal California gnatcatcher had negative results and the SBKR habitat assessment determined no suitable habitat within the Project site. Therefore, the proposed Project would have no impact on special-status animals.

Although burrowing owl was confirmed absent during the focused survey, a pre-construction survey should be conducted within 14 days prior to ground disturbance within all areas of the Project site suitable for burrowing owl. This pre-construction survey would confirm that the species has not colonized the Project site prior to the start of construction.

5.3 Impacts to Natural Communities

Appendix G(b) of the CEQA guidelines consider whether a project is likely to “have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.”

The proposed Project would permanently impact all 101.77 acres of the site through grading and construction activities. Permanent impacts will occur to 2.86 acres of Planted Black Sage/California Buckwheat Scrub, 93.99 acres of disturbed/developed areas, 2.26 acres of ornamental vegetation, and 2.66 acres of settling basins. Table 5-1 provides a summary of impacts to vegetation/land use types. No vegetation communities to be impacted by the Project are considered sensitive communities.

Table 5-1. Summary of Vegetation/Land Use Impacts

VEGETATION/LAND USE TYPE	TOTAL (acres)
Planted Black Sage/California Buckwheat Scrub	2.86
Disturbed/Developed	93.99
Ornamental	2.26
Settling Basins	2.66
Total	101.77

As noted in Section 4.3, the Project site does not contain riparian habitat or special-status natural communities. The vast majority (over 97%) of the Project site is disturbed/developed and the remaining less than 3% of native scrub vegetation was planted, regularly maintained and irrigated, and therefore does not comprise a native natural community and is not considered as having special status. Therefore, the Project would have no impact on riparian habitat or special-status natural communities.

5.4 Wetlands

Appendix G(c) of the CEQA guidelines considers whether a project is likely to “have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?”

The Project site does not contain any state or federally protected wetlands. Therefore, the proposed Project would have no impacts on state or federally protected wetlands.

5.5 Wildlife Movement and Native Wildlife Nursery Sites

Appendix G(d) of the CEQA guidelines considers whether a project is likely to “interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.”

5.5.1 Wildlife Movement and Wildlife Nursery Sites

The Project site lacks migratory wildlife corridors and/or wildlife nursery sites since it is an active mining operation. Wildlife movement and nursery sites that may be present within Lytle Creek would not be impacted by the Project. Therefore, the proposed Project would not interfere with or impact (1) the movement of native resident or migratory fish or wildlife species, (2) established native resident or migratory wildlife corridors, or (3) the use of native wildlife nursery sites. The proposed Project would also not impact any local wildlife movement as the existing Project site is completely fenced, undergoes active mining operations, and does not provide for any local wildlife movement through the site.

5.5.2 Nesting Birds and Migratory Bird Treaty Act Considerations

The Project site has the potential to impact active bird nests if vegetation is removed during the nesting season (February 1 to September 15). Impacts to nesting birds are prohibited by the California Fish and Game Code. Although impacts to migratory birds are prohibited by California Fish and Game Code, impacts to migratory birds by the proposed Project would not be a significant impact under CEQA. The migratory birds with potential to nest on the Project site would be those that are extremely common to the region and highly adapted to human landscapes (e.g., killdeer, mourning dove). The number of individuals potentially affected by the Project would not significantly affect regional or local populations of such species. A measure is identified in Section 6.0 of this report to avoid impacts to nesting birds.

5.6 Impacts to Critical Habitat

While mapped Critical Habitat for SBKR avoids the Project site along its northern, eastern, and southern boundary, 7.59 acres at the northwestern portion of the site overlaps with Critical Habitat Unit 2. The Project will impact all 101.77 acres of the site, resulting in 7.59 acres of impact to Critical Habitat Unit 2 for SBKR.

As described above, Critical Habitat for SBKR in the vicinity of the Project site is mapped primarily within Lytle Creek and avoids the entire Project site except for the 7.59-acre portion that overlaps with it in the northwestern area. The configuration of Critical Habitat within Lytle Creek north of the Project site is a straight line along the levee that wraps around the exterior of the Project site as it extends to the southeast, intentionally avoiding the Project site along the northern, eastern, and southern boundary. Within the Project site, PCEs for SBKR are lacking due to the high degree of existing disturbance within the Project site from the mining operation. In addition, the detailed SBKR habitat assessment conducted for the Project determined the site does not contain suitable habitat for this species (Appendix D).

The planted vegetation within the Project site is dominated by monotypic stands of black sage and California buckwheat. With only 0.12 acre occurring within Critical Habitat on site, the vegetation is also planted on a slope rather than occurring as part of an alluvial system; both the composition and distribution are in stark contrast to the naturally occurring native vegetation located in the adjacent Lytle Creek, which makes up the majority of Critical Habitat in Unit 2 and is where the PCEs described for SBKR occur. The remaining 7.47 acres (over 98%) of Critical Habitat on site are comprised of actively disturbed/developed land undergoing mining operations. For these reasons, the 7.59 acres of mapped Critical Habitat within the Project site do not support PCEs or elements of physical or biological features considered to be essential to the conservation of the species.

Critical Habitat designations affect federal agency actions or federally funded or permitted activities, but do not affect activities by private landowners if there is no federal “nexus.” Should a federal nexus exist for the Project, then a Section 7 consultation between the USFWS and federal agency would be carried out to ensure that the actions authorized, funded, or carried out by the federal agency are not likely to jeopardize the continued existence of the SBKR or destroy/adversely modify its designated Critical Habitat.

5.7 Local Policies or Ordinances Plans

Appendix G(e) of the State CEQA guidelines asks if a project is likely to “conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.”

The County of San Bernardino Code of Ordinance Chapter 88.01 preserve and protect certain plants, including regulated desert native plants, regulated trees, and regulated riparian plants. However, the majority of the Project site is disturbed and there are no plants that would be considered regulated desert native plants, native trees, or regulated riparian plants within the Project site under this ordinance. Therefore, there are no protected trees or significant vegetation on the Project site and the Project would have no impact and would not conflict with local policies or ordinances protecting biological resources.

5.8 Habitat Conservation Plans

Appendix G(f) of the State CEQA guidelines considers whether a project is likely to “conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.”

The Project site is not located within the boundary of an HCP/NCCP. Therefore, the Proposed Project would have no impact and would not conflict with an adopted NCCP/HCP, nor would it conflict with other approved local, regional, or state habitat conservation plans.

5.9 Impacts to Jurisdictional Waters

The Project site does not contain any jurisdictional waters and therefore would not impact any waters of the U.S. subject to the jurisdictions of the Corps or Regional Board and will not impact waters of the state subject to the jurisdiction of CDFW. Therefore, there would be no impacts to state or federally protected jurisdictional waters as a result of construction of the proposed Project.

5.10 Cumulative Impacts to Biological Resources

Cumulative impacts are defined as the direct and indirect effects of a proposed project which, when considered alone, would not be deemed a substantial impact, but when considered in addition to the impacts of related projects in the area, would be considered potentially significant. “Related projects” refers to past, present, and reasonably foreseeable probable future projects, which would have similar impacts to the proposed project. The Project will not result in any significant impacts to sensitive biological resources, and therefore the Project will not have any cumulatively significant impacts.

6.0 MITIGATION MEASURES

The following discussion provides project-specific minimization/avoidance measures for actual or potential impacts to special-status resources.

6.1 Burrowing Owl

Although burrowing owls were not detected onsite during focused surveys conducted in 2022, the Project site contains suitable habitat for burrowing owls. The following measure is recommended to confirm the continued absence of burrowing owls as the species has the potential to colonize the Project site before the start of construction.

Pre-Construction Survey: A pre-construction survey for burrowing owls conducted in accordance with the CDFW 2012 Staff Report on Burrowing Owl Mitigation is required prior to future ground-disturbing activities (e.g., vegetation clearing, clearing and grubbing, tree removal, site watering, equipment staging, etc.) to ensure that no owls have colonized the site in the days or weeks preceding the ground-disturbing activities. The take avoidance survey shall be conducted within 30 days but no less than 14 days prior to ground-disturbing activities in all areas with suitable habitat such as the banks of the settling basins, the bare areas and slopes along the western and southwestern boundary of the Project site, along the flood control berms along the northern boundary of the Project site, and in the bare area in the southeast corner. In the event that burrowing owl is discovered during the pre-construction survey, the species may be avoided by delaying ground disturbance until no longer present. However, if delaying ground disturbance is not feasible and the Project or any Project-related activity will result in “take” of burrowing owl(s), then take authorization under CESA will be sought prior to implementing the Project, which may include an application to CDFW for an Incidental Take Permit (ITP). Site-specific avoidance and mitigation measures would be developed and included in an ITP application (if required).

6.2 Nesting Birds

The Project site contains vegetation and bare ground with the potential to support native nesting birds. As discussed above, the California Fish and Game Code prohibits mortality of native birds, including eggs. The following measure is recommended to avoid take of nesting birds. Potential impacts to native birds were not considered a biologically significant impact under CEQA; however, to comply with state law, the following is recommended:

- As feasible, vegetation clearing should be conducted outside of the nesting season, which is generally identified as February 1 through September 15. If avoidance of the nesting season is not feasible, then a qualified biologist shall conduct a nesting bird survey within seven days prior to any disturbance of the site, including disking, vegetation clearing and grubbing, and grading. If active nests are identified, the biologist shall establish suitable buffers around the nests. Typical suitable buffers can include a minimum of 300 feet for non-raptor species and 500 feet for raptors but the buffers can be increased or decreased at the biologist’s discretion based on the nesting bird’s tolerance to project activities. The

buffer areas shall be avoided until the nests are no longer occupied and the juvenile birds can survive independently from the nests.

7.0 REFERENCES

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U.S. Fish and Wildlife Service. 2008. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*).
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8.0 CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

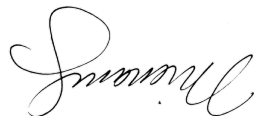
Signed:



Joseph Vu
Senior Wildlife Biologist

Signed:

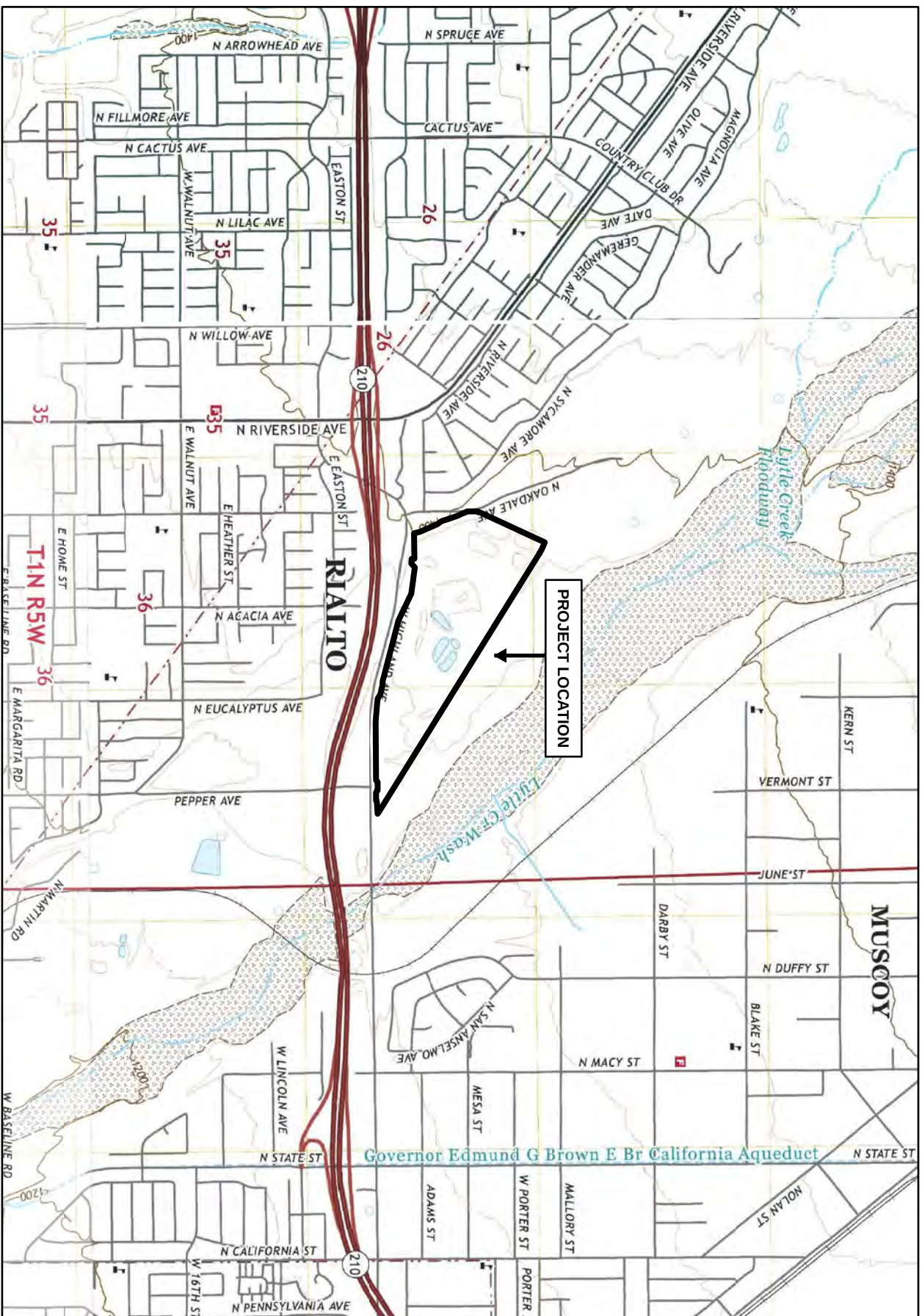
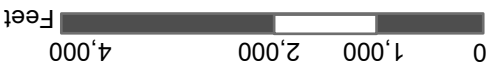
Date: March 12, 2025



Thienan Pfeiffer
President

p: 1583-1b.biotech





**PEPPER 210
COMMERCE CENTER PROJECT**

Vicinity Map

GLENN LUKOS ASSOCIATES

Exhibit 2



TRASH AREA CALCULATION

REQUIRED TRASH AREA: BUILDING AREA	1,981,587 SF
4 CU YD PER 30,000 SF OF GROSS BUILDING AREA	80.4 CU YD BINS OR 1875 SF
TOTAL REQUIRED	
PROVIDED TRASH AREA	1,802 SF

NOTE:
IF BUILDING AREA REDUCES, THE TRASH WILL ALSO REDUCE

KEYNOTES

1. PROPOSED PARKING SHALL BE 100% OF BUILDING AREA (OFFICE / MANUFACTURING FACILITY TENANT IS NOT CURRENTLY IDENTIFIED).
2. SHADOWN AREA PROPOSED LANDSCAPING PER SPECIFIC PLAN AND COUNTY GUIDELINES WITH MIN 4" CONCRETE CURBS AT ALL PRINCIPAL ROUTING PAVED AREAS.
3. CONCRETE TRASH ENCLOSURE MIN 8" IF HIGH SOLID ENCLOSURE PAINTED TO MATCH THE BUILDING. MINOR INCLUSIONS DIMENSIONS ARE 4" MIN 4" IF 4" LONG 1" DEEP (21) 4 CU YD BINS. ALL TRASH AREAS TO HAVE COVER PER COUNTY STANDARDS. SEE ELEVATIONS ON SHEET 21-P.
4. TYPICAL STANDARD PARKING STALL MIN 8' X 18' FOR 17' - 2' OVERHANG - STRIPS PER COUNTY STANDARDS WITH 20" WIDE DRIVE AISLES.
5. ROLLING OR SWINGING 8" HIGH PAINTED STEEL POCKET GATE. PROVIDE AND/OR DOCK AT ALL GATES FOR THE DEPARTMENT ACCESS. PROVIDE DOCK BOX AT ALL GATES FOR FIRE DEPARTMENT ACCESS.
6. 1/4" HIGH PAINTED CONCRETE TILT-UP SCREEN WALL.
7. CONCRETE PAVED DRIVE AISLE 30'-0" MINIMUM WIDTH.
8. CONCRETE TRUCK COURT AND LOADING ZONE.
9. TRANSFORMER SCREEN WITH LANDSCAPING.
10. BIKE RACKS AT EACH OFFICE ENTRY SHALL BE PROVIDED.
11. ACCESSIBLE PATH OF TRAVEL FROM STALLS & PUBLIC WAY TO PRIMARY ENTRANCE. SLOPE NOT TO EXCEED 1:20 EXCEPT AT CURB RAMP AND OTHER DETAIL MAPS. CROSS SLOPE NOT TO EXCEED 1/4" PER FOOT.
12. 4" HIGH TYPICAL STEEL FENCE ALONG INTERIOR PROPERTY LINES ON NORTH, EAST AND WEST SIDES. SEE SHEET 21-P FOR FENCE PLAN.
13. LOADING DOCK DOOR AT BUILDING.
14. NEW CURB CUT PER COUNTY STANDARDS.
15. EXISTING STREET CURB AND SIDEWALK.
16. NEW 6" OF TUBE STEEL FENCE. PAINTED BLACK AROUND BASIN AREAS.
17. GRADE LEVEL ACCESS RAMP.
18. CONCRETE TITLE-UP YARD OFFICE BUILDING WITH OFFICES, RESTROOMS AND BREAK AREA.
19. FIRE FAN GUARDRACK WITH SINKER AND WATER. SEE SHEET 21-3P.
20. PATIO AREA WITH TABLES AND BENCHES. SEE LANDSCAPE PLANS.
21. PROVIDE STORAGE "NO TRUCK ACCESS"

ASSESSOR'S PARCEL NUMBERS

0294-431-15-0000
LEGAL DESCRIPTION
PARCEL 1 OF PARCEL MAP NO. 18900 IN THE UNINCORPORATED AREA OF THE COUNTY OF SAN BERNARDINO, AS PER MAP RECORDED IN BOOK 244, PAGE 15 THROUGH 17 INCLUSIVE OF PARCEL MAPS IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY, CALIFORNIA, LIE WITHIN THE PORTION OF PARCEL 1 CONVEYED TO THE CITY OF RALTO BY DEED RECORDED NOVEMBER 3, 2005 AS INSTRUMENT NO. 2005-00000000 OF OFFICIAL RECORDS.

APPLICATION TYPE

LAND USE PLANNING AREA: WESTERN
CURRENT PROPOSED LAND USE: RC
PROPOSED LAND USE: REGIONAL INDUSTRIAL
MANUFACTURING OFFICE (OFFICE FOR INDUSTRIAL) AND MANUFACTURING AS PERMITTED

LAND OWNER

CARSON BNC LOGISTICS CENTER LLC
100 BAYVIEW CIRCLE, SUITE 3000
NEWPORT BEACH, CA 92660
SAN JUANINO (949) 725-8800

APPLICANT

CARSON COMPANIES
100 BAYVIEW CIRCLE, SUITE 3000
NEWPORT BEACH, CA 92660
SAN JUANINO (949) 725-8800

PLAN PREPARERS

BSA OFFICE OF ARCHITECTURAL DESIGN
210 PROGRESS, SUITE 220
IRVINE, CA 92618
CONTACT: WIRE (949) 341-0920
FAX (949) 341-0922
401 S STREET, SUITE 600
SAN DIEGO, CA 92101
CONTACT: JASON (619) 489-5545

GENERAL NOTES

1. THE PROPOSED PROJECT SHALL COMPLY WITH THE PROVISIONS OF THE COUNTY OF SAN BERNARDINO PLANNING.
2. A LANDSCAPING PLAN SHALL BE SUBMITTED TO THE PLANNING DEPARTMENT FOR APPROVAL PRIOR TO ISSUANCE OF BUILDING PERMITS AND SHALL BE IMPLEMENTED PRIOR TO OCCUPANCY.
3. THE PROJECT DOES NOT PROPOSE ANY TENANT SIGNAGE AT THIS TIME. SIGNAGE MAY BE SUBMITTED IN A LATER DATE.
4. THERE ARE NO PROTECTED OR ENDANGERED PLANTS ON SITE.
5. NO HILLY TERRAIN OR DRAINAGE PROBLEMS EXIST.
6. ALL SITE GATES WILL BE PROVIDED WITH A MINOR BOX PER COUNTY FIRE DEPARTMENT STANDARDS.

UTILITIES & SERVICES

WATER: WEST VALLEY WATER DISTRICT
800 W BASILE ROAD
RALTO, CA 92376
SEWER: RALTO WATER SERVICES
401 S STREET, SUITE 600
SAN DIEGO, CA 92101
GAS: THE GAS COMPANY
401 S STREET, SUITE 600
SAN DIEGO, CA 92101
FIRE PROTECTION: SAN BERNARDINO COUNTY
CENTRAL VALLEY FIRE PROTECTION DISTRICT
600 SOUTH E STREET
SAN BERNARDINO, CA 92415
(909) 386-8465
SCHOOL DISTRICT: UNIFORM

PARKING SPACE ANALYSIS

LAND USE	PARKING RATIO	AREA	REQUIRED	PROVIDED
OFFICE	1/1000 SF	30,000 SF	30 STALLS	100 STALLS
WAREHOUSE	1/1000 SF	40,000 SF	40 STALLS	40 STALLS
WAREHOUSE	1/400 SF	1,731,587 SF	433 STALLS	433 STALLS
TOTALS		1,801,587 SF	513 STALLS	513 STALLS

ACCESSIBLE STALLS	9 STALLS
ADA ACCESSIBLE STALLS	1 STALLS
TRUCK DOCK POSITIONS	275 PROVIDED
TRAILER PARKING STALLS	1,045 PROVIDED

VICINITY MAP

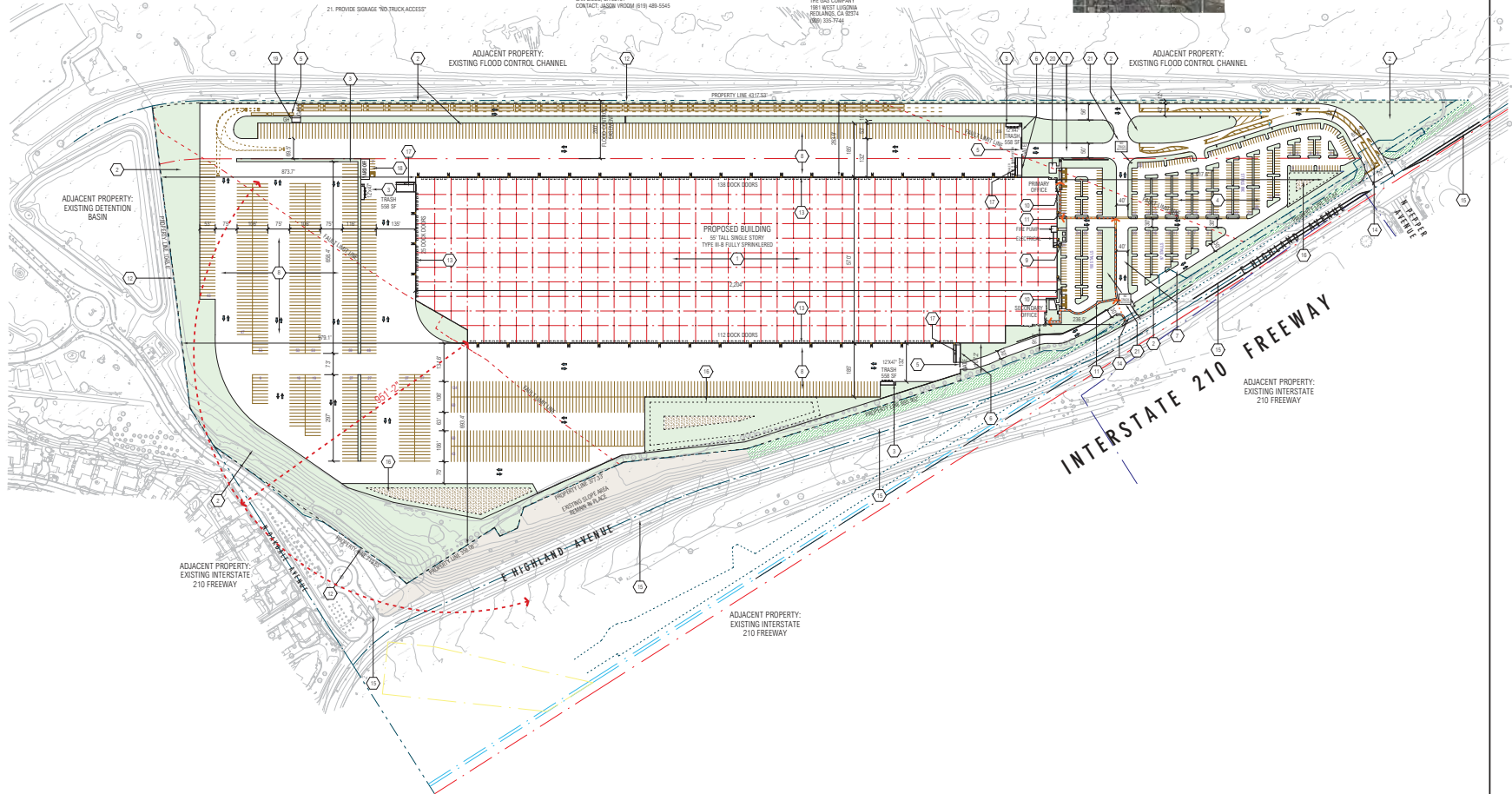


PROJECT DATA

SITE AREA	+/- 4,435,282.32 SF +/- 101.82 AC
BUILDING AREA	1,224,487 SF
FOOTPRINT	63,000 SF
OFFICE MEASUREMENT	63,000 SF
POUL MOORE MEASUREMENT	2,100 SF
VALLEY OFFICE	1,981,587 SF
TOTAL	
LOT COVERAGE	27.86%
FLOOR AREA RATIO	41.97%
LANDSCAPE PROVIDED (10% REQUIRED)	925,640 SF (20.67%)
PAVED SURFACE AREA	2,297,119 SF (51.79%)
PARKING REQUIRED	120 STALLS
30,000 OFFICE (1/1000 SF)	40 STALLS
WAREHOUSE (1/400 SF)	433 STALLS
40,000 SF AND 1/1000 SF	448 STALLS
TOTAL REQUIRED	600 STALLS
PARKING PROVIDED	600 STALLS
STANDARD STALLS	513 STALLS
ACCESSIBLE STALLS	10 STALLS
TOTAL	523 STALLS
DOCK DOOR POSITIONS	275 PROVIDED
TRAILER PARKING STALLS	1,045 PROVIDED
BUILDING CLEAR HEIGHT	42' CLEAR HEIGHT

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF A 1,981,587 SF BUILDING ON 101.82 ACRES. TWO OFFICE AREAS TOTALING 30,000 S.F. IS PROVIDED. THE BUILDING WILL HAVE 275 TRUCK DOCK DOORS ON THE NORTH, SOUTH AND WEST SIDES. ACCESS FOR THIS BUILDING WILL BE FROM TWO CONVEYORS FROM HIGHLAND AVENUE ALONG THE SOUTH THIS PROVIDING CIRCULATION FOR EMERGENCY VEHICLES AROUND THE ENTIRE BUILDING. AUTO PARKING WILL BE PROVIDED ALONG THE EAST. THE PRIMARY OCCUPANCY CLASSIFICATION FOR THIS USE WILL BE "S" OCCUPANCY.



SITE PLAN

SCALE: 1" = 100'-0"



Exhibit 3

OFFICIAL USE ONLY

RG

Office of Architectural Design

210 Progress, Suite 220
Irvine, CA 92618
T 949-341-0920
FX 949-341-0922

PEPPER 210
COMMERCE CENTER
20800 HIGHLAND AVENUE
RALTO, CA 92377

CARSON
COMPANIES

100 BAYVIEW CIRCLE
SUITE 3000
NEWPORT BEACH, CA 92660
949-725-6500
949-725-6500 FAX

RD	211025	SCHEMATIC DESIGN
MARK	DATE	DESCRIPTION
RD	211025	SCHEMATIC DESIGN
OWNER PROJECT NO.	211025	
OWNER PROJECT NO.	000000	
CAD FILE NAME:	211025-00-A1-1P	
DRAWN BY:	MMS	
CHECK BY:	CIS	
COPYRIGHT	BSA, OFFICE OF ARCHITECTURAL DESIGN	
SHEET TITLE	SITE PLAN	

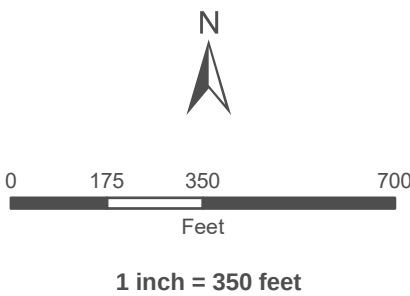
SHEET:

A1-1P



Aerial Source: Nearmap (January 2025)
Coordinate System: State Plane 5 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD 1983-2011
Map Prepared by: B. Gale, GLA
Date Prepared: February 24, 2025

-  Project Site
-  Settling Basin
-  Planted Black Sage / California Buckwheat Scrub
-  Ornamental
-  Disturbed/Developed



**PEPPER 210
COMMERCE CENTER PROJECT**

Vegetation Map

GLENN LUKOS ASSOCIATES



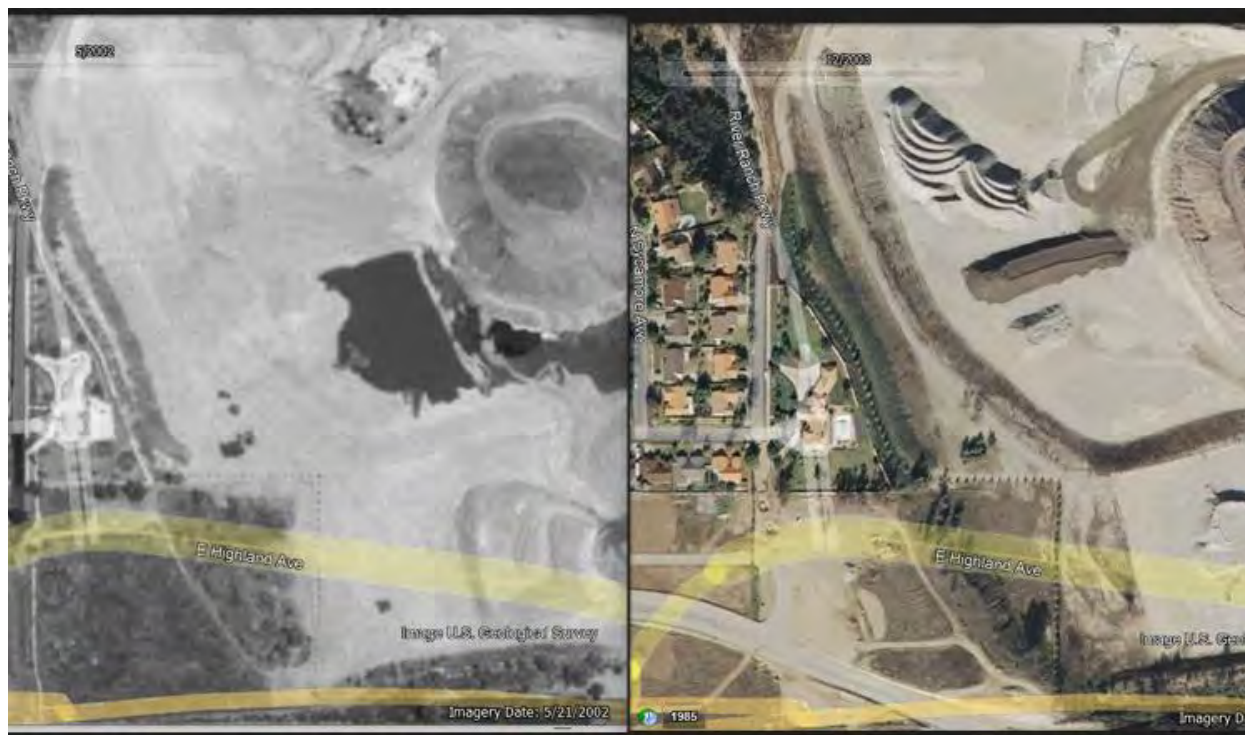
Exhibit 4



Photograph 1: Representative photo of the Planted California Buckwheat/Black Sage Scrub within the southwestern boundary of the Project site. Note the monotypic nature of the vegetation.



Photograph 2: Representative photo of the Planted California Buckwheat/Black Sage Scrub within the western boundary of the Project site. Note the sprinkler irrigation installation.



Photograph 3: Historic aerial photographs documenting the vegetation on the southwestern boundary of the Project site. Replanting was initiated in late 2001 (photographs May 2002 on left and November 2003 on right).



Photograph 4: Representative photo of the vegetation in the adjacent Lytle Creek. Note the diverse composition of the vegetation versus the monotypic composition onsite.





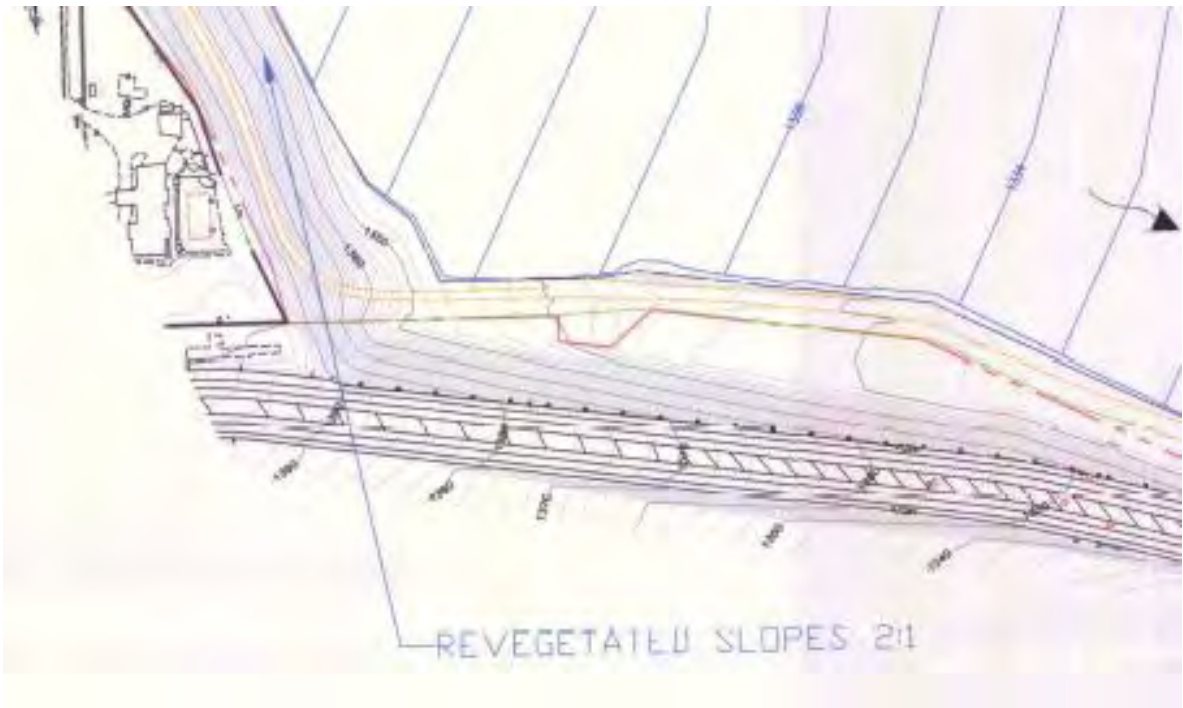
Photograph 5: Representative photo of the earthen levee located outside but adjacent to the northern boundary of the Project site.



Photograph 6: Representative photo of the mining operation within the Project site.



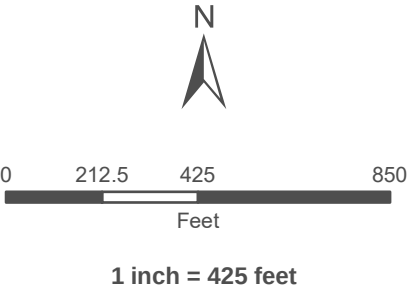
Photograph 7: Representative photo of the mining operation within the Project site. Note the ornamental plantings along the fence line.



Photograph 8: Excerpt taken from reclamation/revegetation plan designating the western slopes for revegetation.



-  Project Site
-  500' Visual Survey Area
-  Suitable Burrow Complex



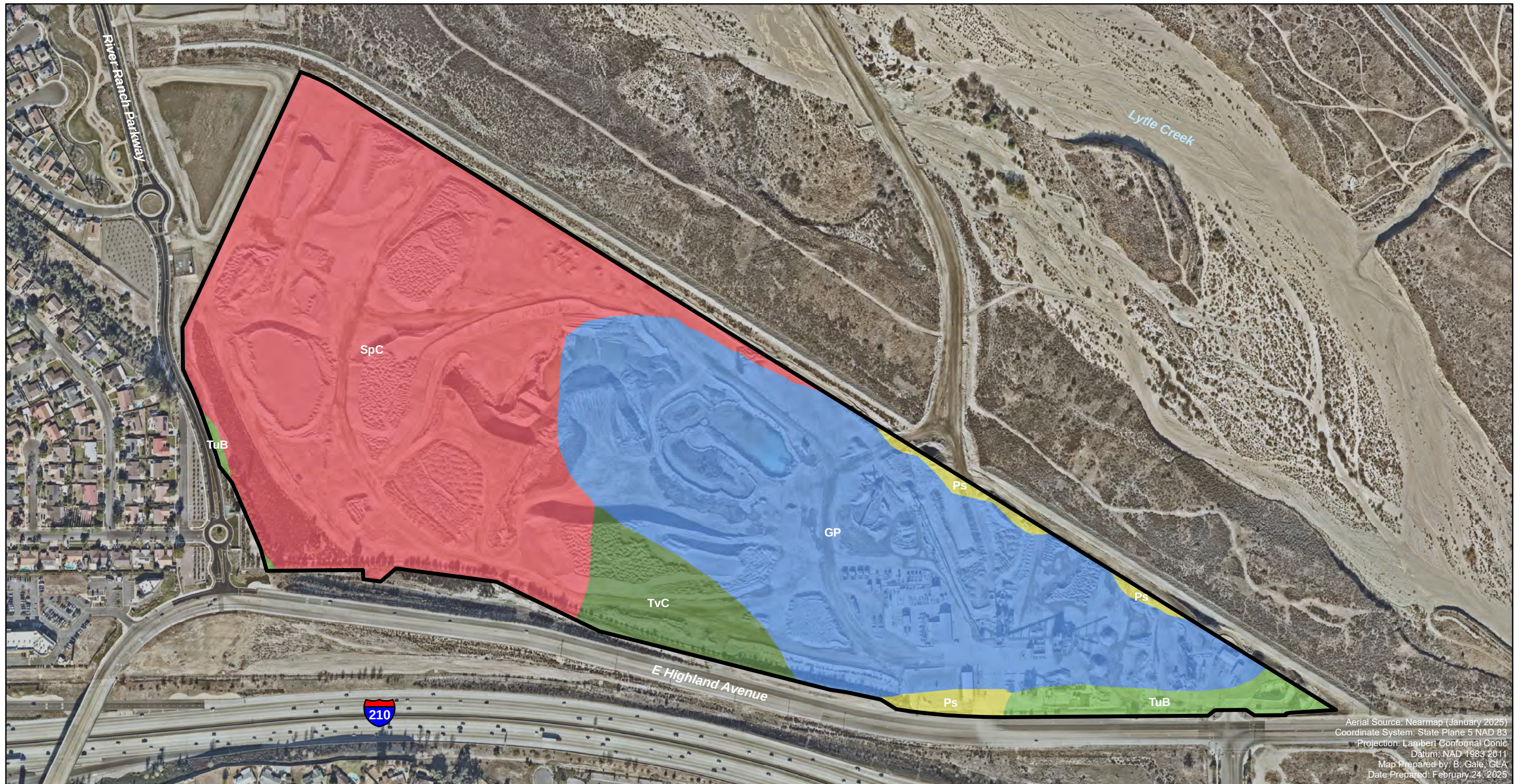
**PEPPER 210
COMMERCE CENTER PROJECT**

Burrowing Owl Survey Area Map

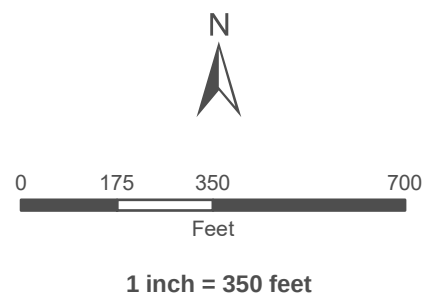
GLENN LUKOS ASSOCIATES



Exhibit 6



- Project Site
- GP Quarries and Pits soils
- Ps Psamments, Fluvents and Frequently flooded soils
- SpC Soboba stony loamy sand, 2 to 9 percent slopes
- TuB Tujunga loamy sand, 0 to 5 percent slopes
- TVC Tujunga gravelly loamy sand, 0 to 9 percent slopes

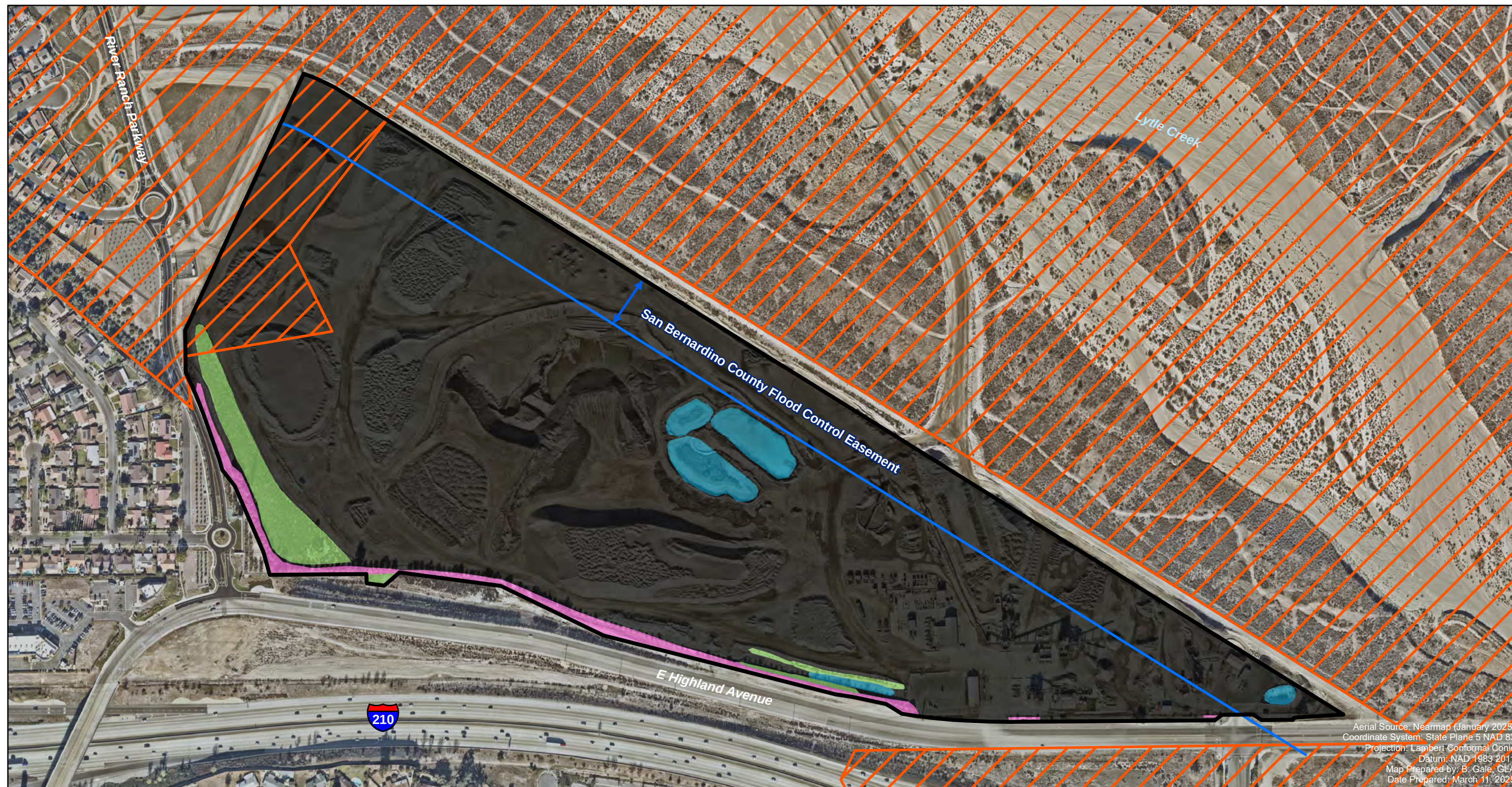


**PEPPER 210
COMMERCE CENTER PROJECT**

Soils Map

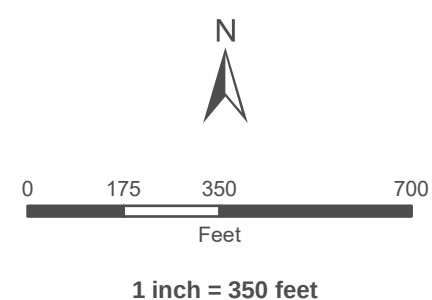
GLENN LUKOS ASSOCIATES

Exhibit 7



Aerial Source: Nearmap (January 2025)
 Coordinate System: State Plane 5 NAD 83
 Projection: Lambert Conformal Conic
 Datum: NAD 1983-2011
 Map Prepared by: B. Gale, GLA
 Date Prepared: March 11, 2025

-  Project Site
-  San Bernardino Kangaroo Rat Critical Habitat
-  200' wide San Bernardino County Flood Control Easement
-  Settling Basin
-  Planted Black Sage / California Buckwheat Scrub
-  Ornamental
-  Disturbed/Developed



PEPPER 210 COMMERCE CENTER PROJECT

Critical Habitat Map

GLENN LUKOS ASSOCIATES



Exhibit 8



Aerial Source: Nearmap (January 2025)
Coordinate System: State Plane 5 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD 1983-2011
Map Prepared by: B. Gale, GLA
Date Prepared: February 24, 2025

 Project Site

 Settling Basins



0 175 350 700
Feet

1 inch = 350 feet

**PEPPER 210
COMMERCE CENTER PROJECT**

Potential Jurisdictional Delineation Map

GLENN LUKOS ASSOCIATES



Exhibit 9

APPENDIX A

FLORAL COMPENDIUM

The floral compendium lists all species identified during floristic level/focused plant surveys conducted for the Project site. Taxonomy typically follows the Angiosperm Phylogeny Group (APG), which in some cases differs from The Jepson Manual (1993). Common plant names are taken from Hickman (1993), Munz (1974), and Roberts et al (2004) and Roberts (2008). An asterisk (*) denotes a non-native species.

SCIENTIFIC NAME

COMMON NAME

MAGNOLIOPHYTA

FLOWERING PLANTS

MONOCOTYLEDONS

MONOCOTS

AGAVACEAE

Yucca whipplei

Agave Family

our lord's candle

POACEAE

- * *Bromus madritensis* subsp. *rubens*
- * *Cynodon dactylon*
- * *Festuca myuros*
- * *Schismus barbatus*

Grass Family

foxtail chess
Bermuda grass
rattail grass
Mediterranean grass

EUDICOTYLEDONS

EUDICOTS

ANACARDIACEAE

- Malosma laurina*
* *Schinus molle*

Sumac Family

laurel sumac
Peruvian pepper tree

ASTERACEAE

- Ambrosia psilostachya*
Artemisia californica
Baccharis salicifolia
* *Centaurea melitensis*
Encelia californica
Isocoma menziesii var. *menziesii*
Lepidospartum squamatum
Zinnia grandiflora

Sunflower Family

western ragweed
California sagebrush
mulefat
tochalote
California brittlebush
Menzies' goldenbush
scale-broom
wild zinnia

BORAGINACEAE

Eriodictyon californicum
Pectocarya recurvata

Borage Family

yerba santa
arch nutted comb bur

BRASSICACEAE

- * *Hirschfeldia incana*
- * *Sisymbrium irio*

CACTACEAE

Opuntia sp.

CONVOLVULACEAE

- * *Convolvulus arvensis*

FABACEAE

Acemisa glaber

GERANIACEAE

- * *Erodium cicutarium*

LAMIACEAE

Salvia apiana
Salvia mellifera

LYTHRACEAE

- * *Punica granatum*

MYRSINACEAE

- * *Anagallis arvensis*

MYRTACEAE

- * *Eucalyptus sp.*

POLYGONACEAE

Eriogonum fasciculatum

ROSACEAE

Adenostoma fasciculatum
Cercocarpus betuloides

SALICACEAE

Salix gooddingii

SOLANACEAE

- * *Nicotiana glauca*

TAMARICACEAE

- * *Tamarix sp.*

Mustard Family

short podded mustard
London rocket

Cactus Family

cactus

Morning-Glory Family

field bindweed

Legume Family

deerweed

Geranium Family

red-stemmed filaree

Mint Family

white sage
black sage

Loosestrife Family

pomegranate

Myrsine Family

scarlet pimpernel

Myrtle Family

eucalyptus

Buckwheat Family

California buckwheat

Rose Family

chamise
mountain mahogany

Willow Family

Goodding's black willow

Nightshade Family

tree tobacco

Tamarisk Family

tamarisk

APPENDIX B

FAUNAL COMPENDIUM

The faunal compendium lists species that were either observed within or adjacent to the Study Area (denoted by a '*'), or that have some potential to occur within or adjacent to the Study Area (denoted by a '+'). Taxonomy and common names are taken from the California Wildlife Habitat Relationships System (CDFW 2016); AOU (2009) and CDFW (2016) for birds; Stebbins (1985), Collins (1990), Jones et al. (1992), and CDFW (2016) for reptiles and amphibians; and CDFW (2016) for mammals.

REPTILIA

PHRYNOSOMATIDAE

Sceloporus occidentalis

AVES

CHARADRIIDAE

Charadrius vociferus

COLUMBIDAE

Zenaida macroura

APODIDAE

Aeronautes saxatilis

TYRANNIDAE

Sayornis nigricans

TROGLODYTIDAE

Thryomanes bewickii

EMBERIZIDAE

Pipilo crissalis

ICTERIDAE

Agelaius phoeniceus

FRINGILLIDAE

Carpodacus mexicanus

Spinus psaltria

REPTILES

Phrynosomatid Lizards

western fence lizard

BIRDS

Plovers And Relatives

killdeer

Pigeons And doves

mourning dove

Swifts

white-throated swift

Tyrant Flycatchers

black phoebe

Wrens

Bewick's wren

Emberizids

California towhee

Blackbirds

red-winged blackbird

Fringilline And Cardueline Finches and Allies

house finch

lesser goldfinch

MAMMALIA

LEPORIDAE

Sylvilagus sp.

CANIDAE

* *Canis lupus familiaris*

PROCYONIDAE

Procyon lotor

MAMMALS

Rabbits And Hares

cottontail rabbit

Foxes, Wolves And Allies

domestic dog

Raccoons And Allies

raccoon

Taxonomy and nomenclature are based on the following.

Amphibians and reptiles: Crother, B.I. et al.(2000. Scientific and standard English names of amphibians and reptiles of North America north of Mexico, with comments regarding confidence in our understanding. *Herpetological Circular* 29; and 2003 update.) for species taxonomy and nomenclature; Stebbins, R.C. (2003. A Field Guide to Western Reptiles and Amphibians, third edition, Houghton Mifflin, Boston.) for sequence and higher order taxonomy.

Birds: American Ornithologists' Union (1998. The A.O.U. Checklist of North American Birds, seventh edition. American Ornithologists' Union, Washington D.C.; and 2000, 2002, 2003, and 2004 supplements.).

Mammals: Grenfell, W.E., Parisi, M.D. and McGriff, D. (2003. Complete list of amphibians, reptiles, birds and mammals in California. California Department of Fish and Game. http://www.dfg.ca.gov/whdab/pdfs/species_list.pdf).

The faunal compendium lists species that were either observed within or adjacent to the Study Area (denoted by a '*'), or that have some potential to occur within or adjacent to the Study Area (denoted by a '+'). Taxonomy and common names are taken from the California Wildlife Habitat Relationships System (CDFG 2003); AOU (1998) and CDFG (1990) for birds; Stebbins (1985), Collins (1990), Jones et al. (1992), and CDFG (1990) for reptiles and amphibians; and CDFG (1990) for mammals.

Special status species are denoted by a !

APPENDIX C



August 17, 2022

Zack West
Glenn Lukos Associates, Inc.

Subject: 2022 Focused Breeding Protocol Survey Results for California Gnatcatcher
at Vulcan Materials Sand and Gravel, San Bernardino, San Bernardino County

INTRODUCTION

This report presents the results of the 2022 breeding season protocol surveys for the federally threatened California gnatcatcher (*Poliophtila californica californica*) ("CAGN") at the Vulcan Materials Sand and Gravel Operation (project site) in Rialto, San Bernardino County. The surveys were conducted by Mikael Romich a permitted U.S. Fish and Wildlife Service (USFWS) biologist in accordance with guidance from USFWS CAGN breeding survey protocol (USFWS 1997).

SITE LOCATION

The project site is located north and northwest of the State Route 210 and Pepper Avenue interchange at 2400 W Highland Avenue, San Bernardino, California (Figures 1 and 2). The project site occurs west and south of Lytle Creek-Cajon Wash (Figure 3).

SITE DESCRIPTION

The project site is an active sand and gravel sorting and retail area operated by Vulcan Materials. It is a heavily and regularly disturbed area nearly completely devoid of vegetation and consists of always shifting piles of sorted materials, sorting machinery, large equipment (haul trucks, loaders, water trucks etc), wastewater ponds, access roads, paved areas, and assorted infrastructure such as parking lots and buildings. There are only a few vegetated portions within the project site that were assessed as being potentially suitable for CAGN (Figure 4-survey area). One is a narrow strip of habitat on the southern portion of the project site where a row of eucalyptus trees with some scattered California buckwheat occur. The second patch of suitable CAGN habitat occurs in the southwestern corner where there is an approximate 3-acre isolated patch of sage scrub that is composed primarily of California buckwheat with some black sage and California sagebrush with scattered white sage, mountain mahogany, deerweed, croton, and chamise. Finally, a narrow strip of potential CAGN habitat occurs along the eastern edge

of the project site on the western slope of a San Bernardino County Flood Control District levee. Here the vegetation consists mostly of California sagebrush, California buckwheat, yerba santa, and deerweed with occasional cholla, prickly pear, and mountain mahogany. In addition, included in the survey area were some buffer areas on the east and south sides where suitable California buckwheat scrub and California sagebrush scrub vegetation was present adjacent to suitable areas within the project site (Figure 4). The total survey area was 6.3 acres.

Land uses surrounding the project site include residential development to the north and west, open space to the east, and a mix of residential and open space to the south past a roadway and a freeway.

METHODOLOGY

Protocol breeding season surveys for CAGN were conducted by permitted biologist Mikael Romich (TE068799-5 and state scientific collecting permit SC-7043). Survey methods for CAGN were in conformance with USFWS Coastal California Gnatcatcher Presence/Absence Survey Guidelines (USFWS 1997). A total of 6 surveys were performed in 2022 spread within the breeding season window of March 15 and June 30 (Table 1). The biologist slowly traversed the survey area, stopping at approximately 100-foot intervals to listen and look for CAGN and as needed playing taped vocalizations.

Table 1. 2022 Survey Dates and Conditions							
Survey	Surveyor	Date	Time		Temp (°F)	Cloud Cover (%)	Wind Speed (mph)
			Begin	End			
1	M. Romich	April 22	0904	1100	53-59	100 overcast	5-10
2	M. Romich	May 3	0750	0920	59-61	0	0-5
3	M. Romich	May 20	0605	0816	55-57	0	5-10
4	M. Romich	June 3	1045	1200	69-72	0	0-5

5	M. Romich	June 10	0605	0705	68-77	0	0-5
6	M. Romich	June 30	0600	0700	67-72	0	0-5

RESULTS AND DISCUSSION

No CAGN were detected within the survey during the six (6) focused protocol breeding surveys. A review of the CNDDDB and the USFWS Carlsbad databases shows only two records of CAGN from the Lytle Creek-Cajon Wash area, from 1991 and 2008, so there presence in this area is not well documented.

Two CDFW watch list species, Bell's sage sparrow (*Artemisiospiza belli belli*) and southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) were observed as breeders, but only in the buffer portion of the survey area to the east of the project site.

A complete list of the 34 bird species observed during the six surveys is presented as Appendix A.

I certify that the information submitted in this report is complete and accurate to the best of my knowledge and belief. Please contact me if you have any questions or comments on the survey results. I can be reached at 909.810.0718 or at mike.romich@gmail.com.

Sincerely,



Mikael Romich
Senior Biologist

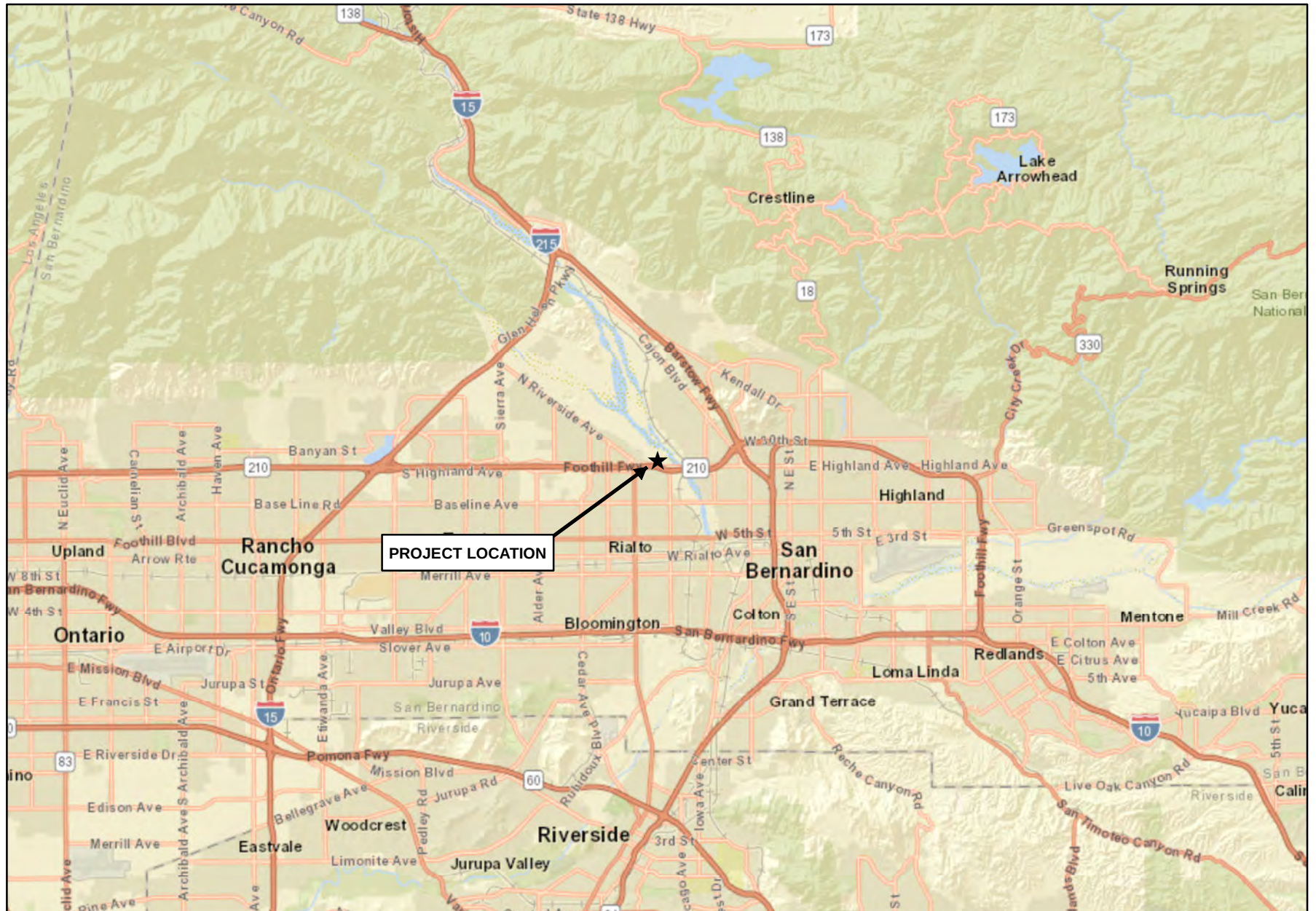


C+1 909.810.0718
romich@originbioloy.com
originbiology.com

Source: ESRI World Street Map



0
2
4
8
Miles



**CITY OF RIALTO
100-ACRE PROPERTY**

Regional Map

GLENN LUKOS ASSOCIATES

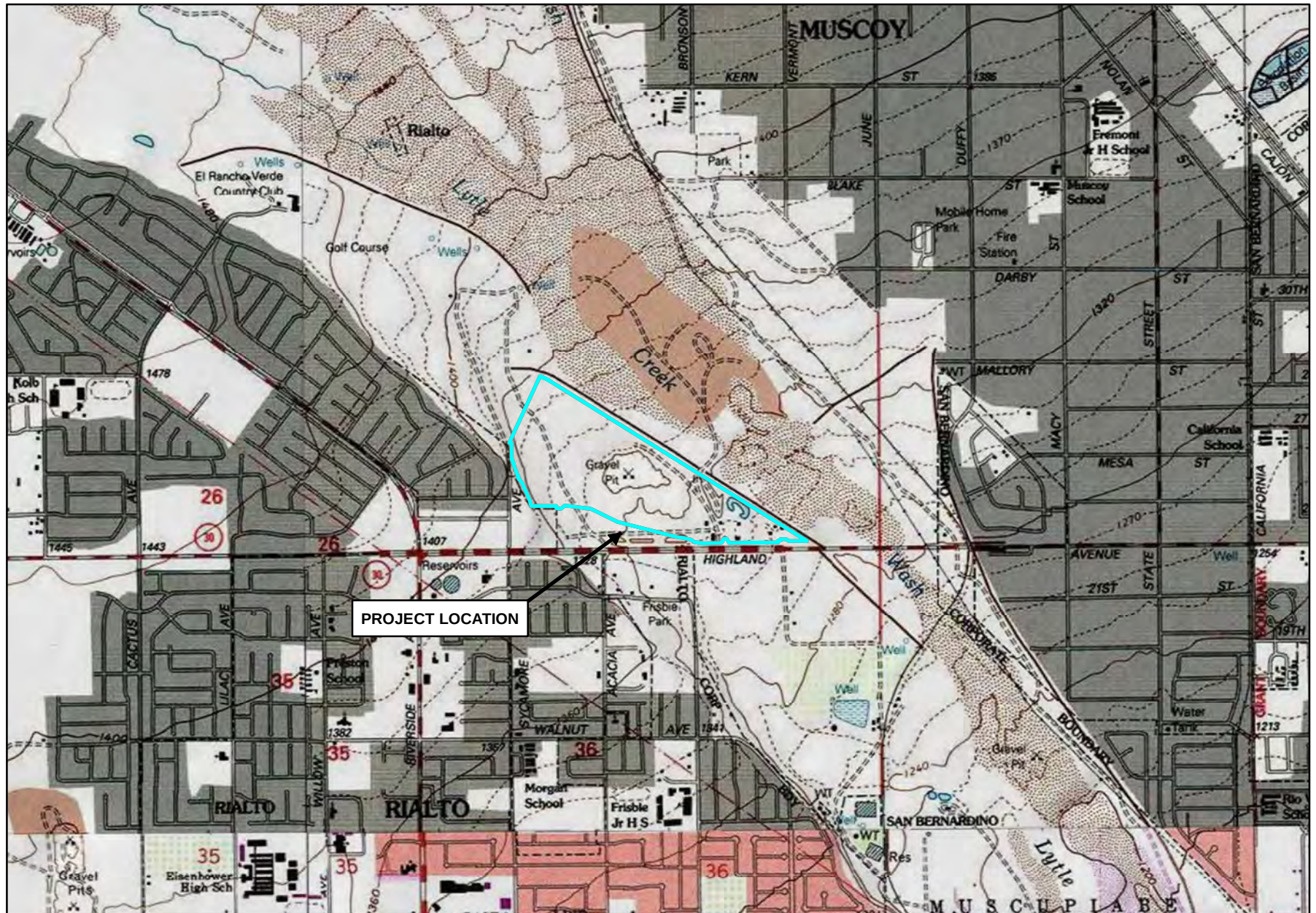
Exhibit 1



Adapted from USGS San Bernardino North, CA quadrangle



0
1,000
2,000
4,000
Feet



CITY OF RIALTO 100-ACRE PROPERTY

Vicinity Map

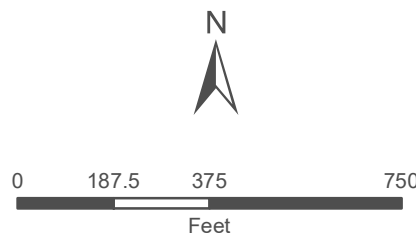
GLENN LUKOS ASSOCIATES



Exhibit 2



 San Bernardino County Parcel



1 inch = 375 feet

Coordinate System: State Plane 5 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD 1983 2011
Map Prepared by: XX, GLA
Date Prepared: April 14, 2022

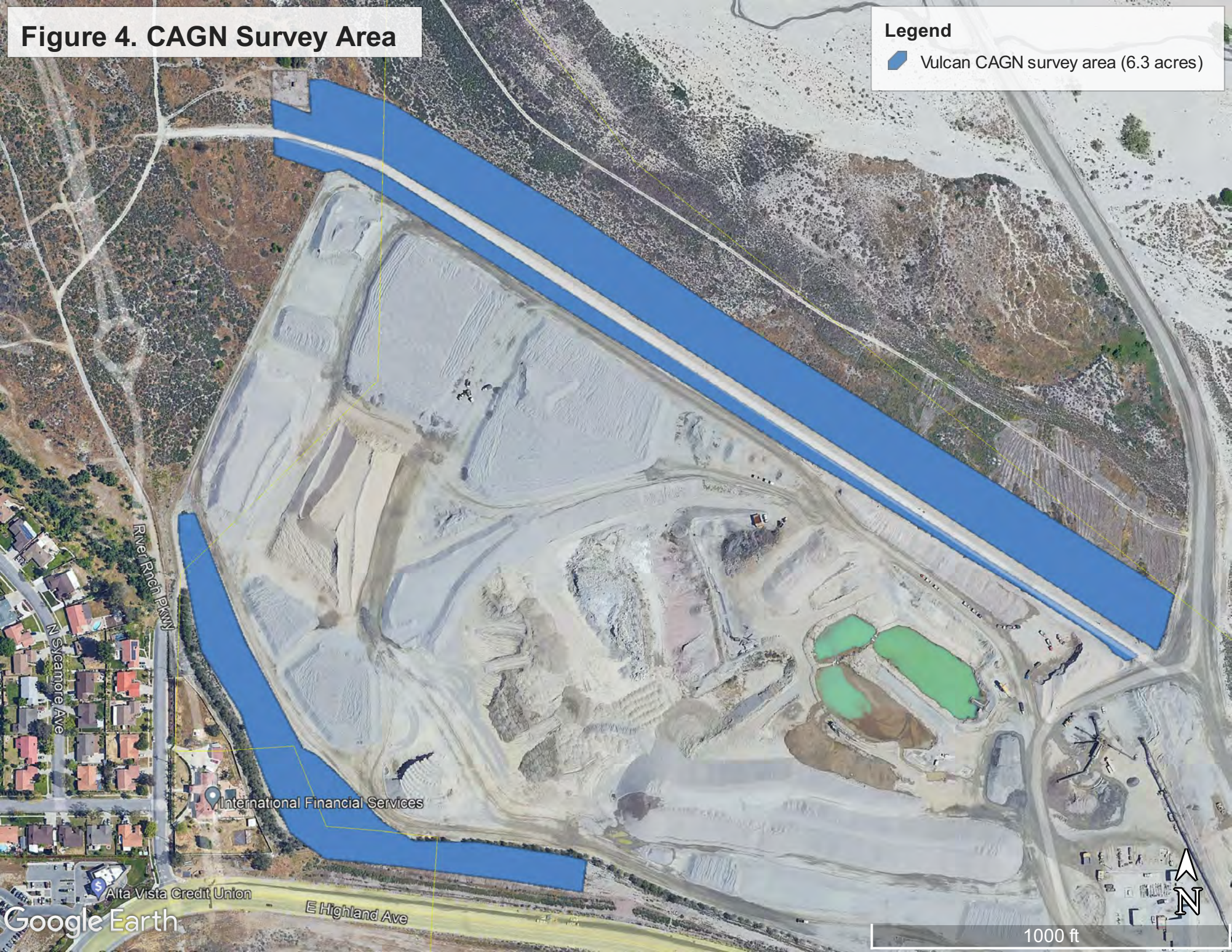
CITY OF RIALTO
100-ACRE PROPERTY
Aerial Map

GLENN LUKOS ASSOCIATES 
Exhibit 3

Figure 4. CAGN Survey Area

Legend

 Vulcan CAGN survey area (6.3 acres)

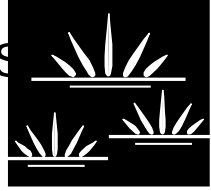


Appendix A. Avian Species Observed

Scientific name	Species
<i>Anas platyrhynchos</i>	Mallard
<i>Callipepla californica</i>	California Quail
<i>Podilymbus podiceps</i>	Pied-billed Grebe
<i>Zenaida macroura</i>	Mourning Dove
<i>Geococcyx californianus</i>	Greater Roadrunner
<i>Aeronautes saxatalis</i>	White-throated Swift
<i>Calypte anna</i>	Anna's Hummingbird
<i>Calypte costae</i>	Costa's Hummingbird
<i>Fulica americana</i>	American Coot
<i>Charadrius vociferus</i>	Killdeer
<i>Buteo jamaicensis</i>	Red-tailed Hawk
<i>Sayornis saya</i>	Say's Phoebe
<i>Tyrannus vociferans</i>	Cassin's Kingbird
<i>Tyrannus verticalis</i>	Western Kingbird
<i>Corvus corax</i>	Common Raven
<i>Stelgidopteryx serripennis</i>	Northern Rough-winged Swallow
<i>Hirundo rustica</i>	Barn Swallow
<i>Petrochelidon pyrrhonota</i>	Cliff Swallow
<i>Psaltiriparus minimus</i>	Bushtit
<i>Thryomanes bewickii</i>	Bewick's Wren
<i>Toxostoma redivivum</i>	California Thrasher
<i>Mimus polyglottos</i>	Northern Mockingbird
<i>Haemorhous mexicanus</i>	House Finch
<i>Spinus psaltria</i>	Lesser Goldfinch
<i>Spinus tristis</i>	American Goldfinch
<i>Artemisiospiza belli</i>	Bell's Sparrow
<i>Melospiza crissalis</i>	California Towhee
<i>Aimophila ruficeps</i>	Rufous-crowned Sparrow
<i>Icterus cucullatus</i>	Hooded Oriole
<i>Icterus bullockii</i>	Bullock's Oriole
<i>Agelaius phoeniceus</i>	Red-winged Blackbird
<i>Setophaga petechia</i>	Yellow Warbler
<i>Cardellina pusilla</i>	Wilson's Warbler

GLENN LUKOS ASSOCIATES

Regulatory Services



December 13, 2022

Dan Darnell
Carson Companies
100 Bayview Circle, Suite 3500
Newport Beach, California 92660

SUBJECT: Results of San Bernardino Kangaroo Rat Habitat Assessment Conducted for the Pepper 210 Commerce Center Project, a 101-Acre Property Located in Unincorporated San Bernardino County, California

Dear Mr. Darnell:

This letter report documents the results of habitat assessment conducted by Glenn Lukos Associates, Inc. (GLA) for the federally endangered and state candidate endangered San Bernardino kangaroo rat (*Dipodomys merriami parvus*) (SBKR) at the above-mentioned property. Habitat assessments were conducted on April 22, May 3, and May 20, 2022 in all areas of the Study area in accordance with U.S. Fish and Wildlife Service (USFWS) guidelines.

1.0 SITE LOCATION AND DESCRIPTION

The Study area comprises approximately 101 acres of land in Unincorporated San Bernardino County, California [Exhibit 1 – Regional Map] and is located within Section 25 of Township 1 North Range 5 West of the United States Geological Survey (USGS) 7.5” quadrangle map San Bernardino North, California [Exhibit 2 – Vicinity Map]. The Study area is located at latitude 34.13814 and longitude -117.36034 (center reading). The Study area is bounded by State Route 210 (SR-210) to the south, residential development to the west, and undeveloped lands to the north and east. An aerial map is included as Exhibit 3.

The Study area is an active sand and gravel mine operated by Vulcan Materials. It is a heavily and regularly disturbed area nearly completely devoid of vegetation and consists of always shifting piles of sorted materials, sorting machinery, large equipment (haul trucks, loaders, water trucks etc), wastewater ponds, access roads, paved areas, and assorted infrastructure such as parking lots and buildings. The Study area is relatively flat and occurs between the elevation of 1,370 feet above mean sea level (msl) to 1,300 feet msl. An aerial map is included as Exhibit 3. Site photographs are provided as Exhibit 4.

There are only a few vegetated portions within the Study area. One is a narrow strip of habitat on the southern portion of the Study area that appears to function as a detention basin. Along the southwestern edge of the Study area there is a row of eucalyptus trees (*Eucalyptus* sp.) with some scattered California buckwheat (*Eriogonum fasciculatum*) in the understory. In the southwestern corner of the Study area there is an approximately 3-acre isolated patch of coastal sage scrub that is composed primarily of California buckwheat with some black sage (*Salvia mellifera*) and California sagebrush (*Artemisia californica*) with scattered white sage (*Salvia apiana*), mountain mahogany (*Cercocarpus betuloides*), deerweed (*Acmispon glaber*), California croton (*Croton californicus*), and chamise (*Adenostoma fasciculatum*).

A San Bernardino County Flood Control District levee is located near the eastern edge of the Study area. It is grouted rip-rap on the east-facing slope and is earthen on the west-facing slope and has vegetation consisting mostly of California sagebrush, California buckwheat, yerba santa (*Eriodictyon trichocalyx*), and deerweed with occasional cholla (*Cylindropuntia* sp.), prickly pear (*Opuntia littoralis*), and mountain mahogany. The northeastern Study area boundary is located at the toe of this west-facing levee slope except where the haul road connects the mining areas with the processing area. An aerial map is included as Exhibit 3. Site photographs are provided as Exhibit 4.

1.1 SITE HISTORY

A review of historical aerials shows that the mining operation has been present in some form since at least 1959, with a general westward growth over the years to its current extent. Previous to the mining operation, as shown on 1938 aerials, the Study area overlapped a large braid of Cajon Wash, which at times contained the low flow of Lytle Creek. Remnants of this braid are still present south of the Study area and south of Interstate 210. The levee on the east side provides flood protection from current day Cajon Wash/Lytle Creek. Adjacent areas to the north of the Study area remained in a natural condition up until about 2020-2021 when it was cleared, grubbed, and graded for a residential subdivision, which is currently under construction.

2.0 METHODOLOGY

A review was completed of the California Natural Diversity Database (CNDDB) and the Carlsbad United States Fish and Wildlife office GIS layer for historical and recent SBKR records near the Study area. Historical aerials of the Study area were reviewed on historicalaerials.com and Google Earth. A habitat assessment was completed by GLA biologist Mikael Romich, who has state and federal authorization to survey for SBKR, on April 22, May 3, and May 20, 2022. All areas of the Study area were closely inspected on-foot for SBKR sign and habitat that could be suitable for the species.

3.0 SAN BERNARDINO KANGAROO RAT HABITAT DESCRIPTION

SBKR are restricted to burrowing in friable alluvial deposits predominantly of sand, loamy sand, sandy loam, or loam. They prefer open, fairly flat areas with low vegetative cover as bare soil surface is needed for dust-bathing, efficient seed collection (Price 2007 as cited in USFWS 2008), and locomotion.

High levels of vegetative cover, such as shrubs and grass, are thought to interfere with SBKR movement by reducing the ease of travel that is necessary for predator avoidance (Reynolds 1958, Romich personal observation). Furthermore, previous studies suggest a negative relationship between perennial canopy cover and kangaroo rat abundance (Price 1978), especially when canopy cover exceeds 30-50% (Stamp and Omhart 1978, Braden and McKernan 2000, Shier et al. 2018, Chock et al. 2020). The presence of non-native grasses has been shown to be the best negative predictor of SBKR occupancy where they declined substantially once percentage annual grass cover exceeded 20%–30%, and greater than 50% cover may preclude them (USFWS 2010). Braden and McKernan (2000) reported that SBKR captures were greater in areas where annual vegetative cover was < 20%. Shier et al. (2018) found negative relationships between SBKR and high shrub (40-65%) and grass (45-81%) cover. They also found positive relationships between SBKR and low shrub cover (6-15%), low and medium grass cover (1-28%), and high sand/bare ground cover (59-71%). Finally, the Western Riverside Multiple Species Habitat Conservation Plan Biological Monitoring Program (2016) found SBKR presence was negatively affected by herbaceous/grass cover and soil compactness and were positively affected by bare ground. They readily occur in previously disturbed areas where it is open and flat with some opportunities for burrowing.

The connectedness to a source population is an important consideration when determining the suitability of habitat for SBKR because the expected persistence of a metapopulation is sensitive to the extent of dispersal that is occurring. Although the ability of SBKR to disperse across particular landscape features is not well documented, the following may constrain movement and dispersal: paved roads; railroad tracks; wide barren levees; boulder piles or riprap; wide, unvegetated, active wash areas; and unsuitable vegetation or land cover types. Maintained earthen access roads have been documented supporting SBKR (SJM 2009). High vegetative cover surrounding small islands of suitable habitat may act as a natural barrier and isolate it from immigration. When these patches are too small to support a viable population, micro-extinctions can be expected.

4.0 SAN BERNARDINO KANGAROO RAT SUITABILITY RESULTS

The closest known SBKR populations to the Study area are located to the northeast on the northeastern side of the levee where the Wildlands Inc. Lytle Creek Conservation Bank occurs. There are also records to the south of the Study area, but these are separated by Highland Avenue and State Route 210.

The habitat assessment determined that SBKR are unlikely to occur on the Study area due to the limited extent and poor quality of the suitable habitat, as well as the degree of isolation from any source SBKR populations, such as from Lytle/Cajon Creek. There are only a few vegetated areas within the Study area that needed to be evaluated for SBKR. Near the southern boundary is a detention basin that contains silts and gravel materials, which are not appropriate substrates for SBKR (see Appendix A-photo 1). Along the southwestern edge of the Study area there is a row of eucalyptus trees with some scattered California buckwheat in the understory (Appendix A-photo 2), which also does not provide suitable SBKR habitat. A 3-acre remnant patch of habitat in the western portion of the Study area has some small openings in one area that is considered low quality habitat for SBKR (see Appendix A-photos 3 and 4). The remainder of this patch does not have open sandy soils, is densely vegetated, is located on a slope, and occurs immediately adjacent to active gravel operations that has caused spill-over of gravel materials. In addition, no sign of kangaroo rats was observed here. Finally, this vegetated patch appears largely barren on a 2002 aerial so has been impacted in the past. The toe of the west-facing levee slope on the eastern part of the Study area appears to collect some flows and fines from the slope and the adjacent active sand and gravel operations, as well as water truck activities, and the substrate does not appear suitable to SBKR (see Appendix A-photo 5).

Just north of the haul road, the toe of this slope has some spill-over of sandy material from some of the nearby sand piles and is considered poor quality habitat and no sign of SBKR was present here. In very close proximity of the toe of the slope is the active sand and gravel operation that results in almost daily shifting of the adjacent sand pile. It is also very narrow, approximately 3' feet wide, which makes it unlikely to be occupied by SBKR (Appendix A-photo 6). Overall, the Study area is lacking the typical habitat associated with SBKR, such as an alluvial fan terrace. While SBKR are known to inhabit disturbed areas once they have become re-established, this requires a colonizing population and a patch of habitat or several interconnected patches of habitat that are large enough to support a self-sustaining population. These elements are lacking within the Study area and for these reasons, SBKR are not expected to occur.

Dan Darnell
Carson Companies
December 13, 2022
Page 5

Please feel free to contact me via email (jvu@wetlandpermitting.com) or at (949) 837-0404 should you have any questions or concerns regarding the results of the habitat assessment.

Sincerely,

GLENN LUKOS ASSOCIATES, INC.

A handwritten signature in black ink, appearing to read 'Joseph Vu', written in a cursive style.

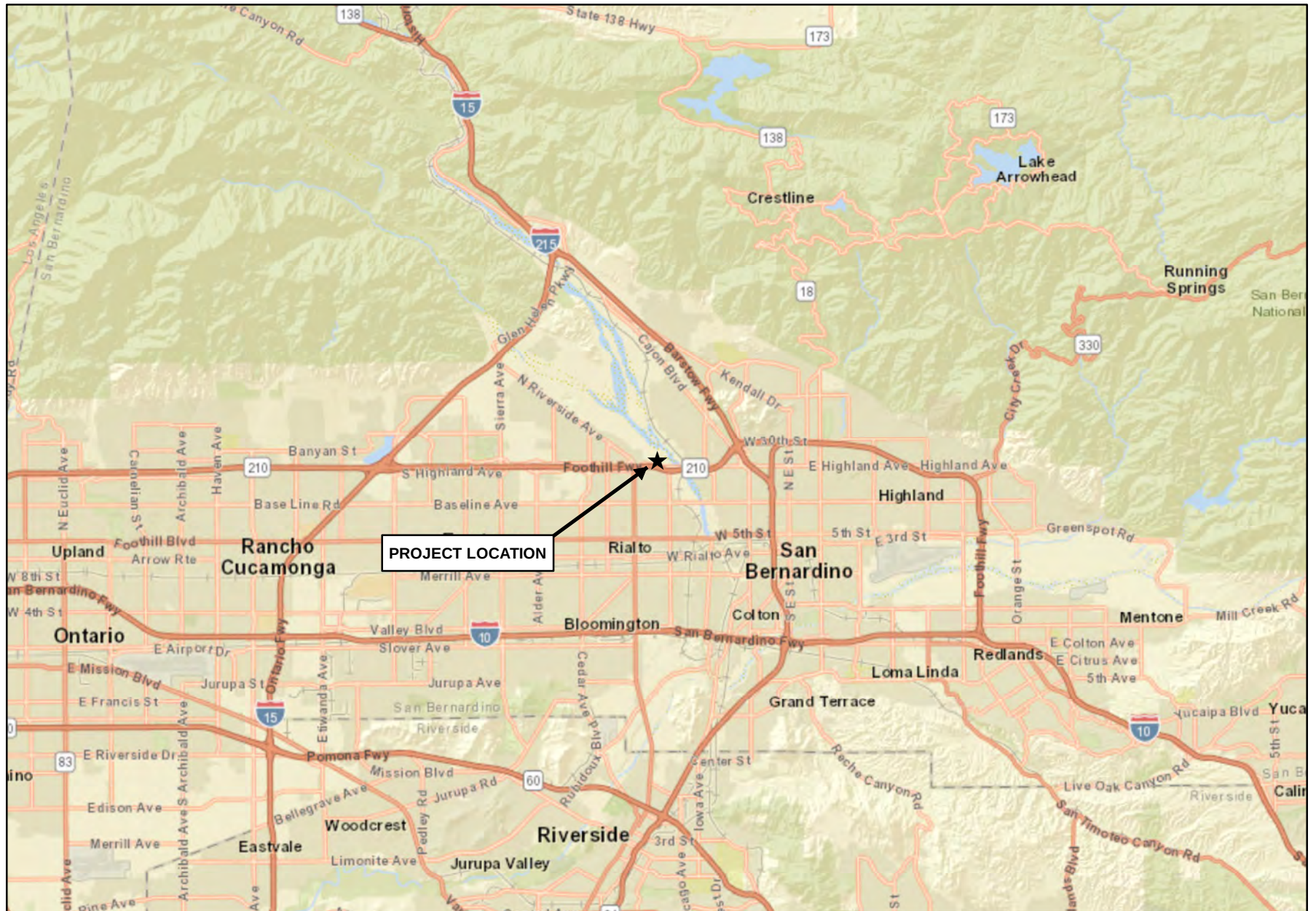
Joseph Vu
Biologist

P: 1583-018RLAL

Source: ESRI World Street Map



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2
4
8
Miles



PEPPER 210 COMMERCE CENTER PROJECT

Regional Map

GLENN LUKOS ASSOCIATES

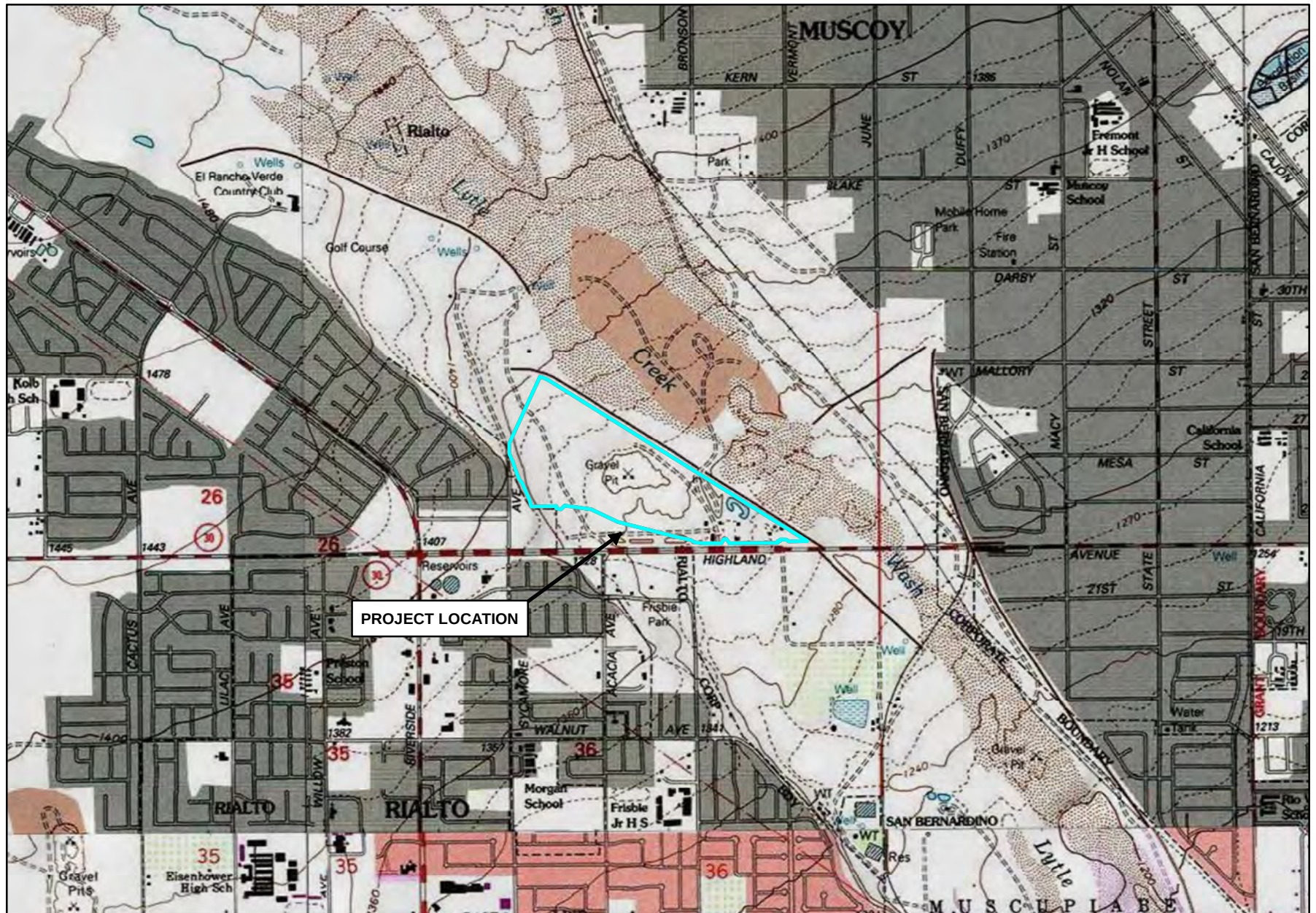
Exhibit 1



Adapted from USGS San Bernardino North, CA quadrangle



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Feet



PEPPER 210 COMMERCE CENTER PROJECT

Vicinity Map

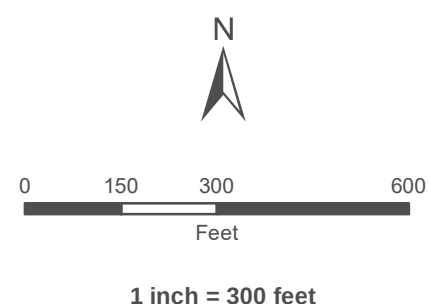
GLENN LUKOS ASSOCIATES



Exhibit 2



-  Project Site
-  Project Site Plan



Coordinate System: State Plane 5 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD 1983 2011
Map Prepared by: K. Kartunen, GLA
Date Prepared: December 21, 2022

PEPPER 210 COMMERCE CENTER PROJECT

Project Site Map

GLENN LUKOS ASSOCIATES



Exhibit 3



Photograph 1: View of the water detention basin in the southern part of the study area determined not to have suitable habitat for SBKR..



Photograph 2: View of the eucalyptus windrow in the southern part of the study area, which was determined not to be suitable for SBKR.



Photograph 3: View of the open areas in the southwestern part of the study area that has some qualities of low quality SBKR habitat but is small and fragmented and SBKR are not expected.



Photograph 4: Another view of the open areas in the southwestern part of the study area that has some qualities of low quality SBKR habitat but is small and fragmented and SBKR are not expected.





Photograph 5: View of the western toe of the eastern levee showing fine surface materials, which was determined not to be suitable for SBKR.



Photograph 6: View of the western toe of the eastern levee showing a narrow band of constantly shifting sandy materials, which was determined not to be suitable for SBKR.



GLENN LUKOS ASSOCIATES

Regulatory Services



January 10, 2023

Dan Darnell
Carson Companies
100 Bayview Circle, Suite 3500
Newport Beach, California 92660

SUBJECT: Jurisdictional Delineation of the Pepper 210 Commerce Center Project, an Approximately 101-Acre Site Located in Unincorporated San Bernardino County, California

Dear Mr. Darnell:

This letter report summarizes our preliminary findings of United States Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), and California Department of Fish and Wildlife (CDFW) jurisdiction for the above-referenced property.¹

The above-referenced property (Property) in San Bernardino County [Exhibit 1] comprises approximately 101 acres and does not contain any blue-line streams as depicted on the U.S. Geological Survey (USGS) topographic map San Bernardino North California [Exhibit 2]. On November 21, 2022, a senior regulatory specialist of Glenn Lukos Associates, Inc. (GLA) examined the Property to determine the presence and limits of (1) Corps jurisdiction pursuant to Section 404 of the Clean Water Act (CWA), (2) Regional Board jurisdiction pursuant to Section 401 of the CWA and Section 13260 of the California Water Code (CWC), and (3) CDFW jurisdiction pursuant to Division 2, Chapter 6, Section 1600 of the Fish and Game Code. Enclosed is a 300-scale map [Exhibit 3] that depicts the areas of potential Corps, Regional Board and CDFW jurisdiction. Photographs to document the topography, vegetative communities, and general widths of each of the waters are provided as Exhibit 4.

No Corps, Regional Board, or CDFW jurisdiction is located within the Project site. The Property is an active quarry operating under a National Pollutant Discharge Elimination System (NPDES) (NPDES Number CAS000001) General Permit for Storm Water Discharges Associated with Industrial Activities (Industrial General Permit 97-03-DWQ).

¹ This report presents our best effort at estimating the subject jurisdictional boundaries using the most up-to-date regulations and written policy and guidance from the regulatory agencies. Only the regulatory agencies can make a final determination of jurisdictional boundaries.

I. METHODOLOGY

Prior to beginning the field delineation, a color aerial photograph, a topographic base map of the property, the previously cited USGS topographic map, and a soils map were examined to determine the locations of potential areas of Corps, Regional Board, and CDFW jurisdiction. Suspected jurisdictional areas were field checked for evidence of stream activity and/or wetland vegetation, soils and hydrology. Where applicable, reference was made to the 2008 Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (OWHM Manual)² to identify the width of Corps jurisdiction, and suspected federal wetland habitats on the site were evaluated using the methodology set forth in the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual³ (Wetland Manual) and the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Supplement (Arid West Supplement).⁴ Reference was also made to the 2019 State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (State Board Wetland Definition and Procedures) to identify suspected State wetland habitats.⁵ While in the field, the potential limits of jurisdiction were recorded with a sub-meter Trimble GPS device in conjunction with a color aerial photograph using visible landmarks. Other data were recorded onto wetland data sheets and are attached as Appendix A.

The National Cooperative Soil Survey (NCSS) has mapped the following soil types as occurring in the general vicinity of the Property [Exhibit 5]:

Psamments and Fluvents, Frequently flooded

The psamments consists of sandy soils formed in recent water-deposited unconsolidated particles that are deposited on flood plains, fans, and deltas along rivers and small stream courses. These soils are mapped in the southern portion of the Project site, but these areas are currently developed and occupied with a paved parking lot and office buildings.

² U.S. Army Corps of Engineers. 2008. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States

³ Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterways Experimental Station, Vicksburg, Mississippi.

⁴ U.S. Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

⁵ State Water Resources Control Board. 2019. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State.

Quarries and Pits soils

The Quarries and Pits series consists of very deep, poorly drained soils that formed in fine-textured alluvium weathered from extrusive and basic igneous rocks. Pit soils are on flood plains and in basins. Slopes range from zero to five percent.

Soboba stony loamy sand, 2 to 9 percent slopes

The Soboba series consists of deep, excessively drained soils that formed in alluvium from predominantly granitic rock sources. Soboba soils are on alluvial fans and flood plains and have slopes of zero to 30 percent.

Tujunga loamy sand, 0 to 5 percent slopes and Tujunga gravelly loamy sand, 0 to 9 percent slopes

The Tujunga series consists of very deep, somewhat excessively drained soils that formed in alluvium from granitic sources. Tujunga soils are on alluvial fans and floodplains, including urban areas. Slopes range from zero to 12 percent.

II. JURISDICTION

A. Army Corps of Engineers

Pursuant to Section 404 of the Clean Water Act, the Corps regulates the discharge of dredged and/or fill material into waters of the United States. The term "waters of the United States" is defined in Corps regulations at 33 CFR Part 328.3(a) as:

- (1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;*
- (2) All interstate waters including interstate wetlands;*
- (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect foreign commerce including any such waters:*
 - (i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or*

- (ii) *From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or*
 - (iii) *Which are used or could be used for industrial purpose by industries in interstate commerce...*
- (4) *All impoundments of waters otherwise defined as waters of the United States under the definition;*
- (5) *Tributaries of waters identified in paragraphs (a) (1)-(4) of this section;*
- (6) *The territorial seas;*
- (7) *Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1)-(6) of this section.*
- (8) *Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with the EPA.*

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 123.11(m) which also meet the criteria of this definition) are not waters of the United States.

In the absence of wetlands, the limits of Corps jurisdiction in non-tidal waters, such as intermittent streams, extend to the OHWM which is defined at 33 CFR 328.3(e) as:

...that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

1. Wetland Definition Pursuant to Section 404 of the Clean Water Act

The term “wetlands” (a subset of “waters of the United States”) is defined at 33 CFR 328.3(b) as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support...a prevalence of vegetation typically adapted for life in saturated soil conditions.” In 1987 the Corps published the Wetland Manual to guide its field personnel in determining jurisdictional wetland boundaries. The methodology set forth in the Wetland Manual and the Arid West Supplement generally require that, in order to be considered a wetland, the vegetation, soils, and hydrology of an area exhibit at least minimal hydric characteristics. While the Wetland Manual and Arid West Supplement provide great detail in methodology and allow for varying special conditions, a wetland should normally meet each of the following three criteria:

- More than 50 percent of the dominant plant species at the site must be hydrophytic in nature as published in the most current national wetland plant list;
- Soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., a gleyed color, or mottles with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and;
- Whereas the Wetland Manual requires that hydrologic characteristics indicate that the ground is saturated to within 12 inches of the surface for at least five percent of the growing season during a normal rainfall year, the Arid West Supplement does not include a quantitative criteria with the exception for areas with “problematic hydrophytic vegetation”, which require a minimum of 14 days of ponding to be considered a wetland.

2. Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et al.

Pursuant to Article I, Section 8 of the U.S. Constitution, federal regulatory authority extends only to activities that affect interstate commerce. In the early 1980s the Corps interpreted the interstate commerce requirement in a manner that restricted Corps jurisdiction on isolated (intrastate) waters. On September 12, 1985, the U.S. Environmental Protection Agency (EPA) asserted that Corps jurisdiction extended to isolated waters that are used or could be used by migratory birds or endangered species, and the definition of “waters of the United States” in Corps regulations was modified as quoted above from 33 CFR 328.3(a).

On January 9, 2001, the Supreme Court of the United States issued a ruling on *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et al.* (SWANCC). In this case the Court was asked whether use of an isolated, intrastate pond by migratory birds is a sufficient interstate commerce connection to bring the pond into federal jurisdiction of Section 404 of the Clean Water Act.

The written opinion notes that the court’s previous support of the Corps’ expansion of jurisdiction beyond navigable waters (*United States v. Riverside Bayview Homes, Inc.*) was for a wetland that abutted a navigable water and that the court did not express any opinion on the question of the authority of the Corps to regulate wetlands that are not adjacent to bodies of open water. The current opinion goes on to state:

In order to rule for the respondents here, we would have to hold that the jurisdiction of the Corps extends to ponds that are not adjacent to open water. We conclude that the text of the statute will not allow this.

Therefore, we believe that the court's opinion goes beyond the migratory bird issue and says that no isolated, intrastate water is subject to the provisions of Section 404(a) of the Clean Water Act (regardless of any interstate commerce connection). However, the Corps and EPA have issued a joint memorandum which states that they are interpreting the ruling to address only the migratory bird issue and leaving the other interstate commerce clause nexuses intact.

3. Rapanos v. United States and Carabell v. United States

On June 5, 2007, the EPA and Corps issued joint guidance that addresses the scope of jurisdiction pursuant to the Clean Water Act in light of the Supreme Court's decision in the consolidated cases *Rapanos v. United States* and *Carabell v. United States* ("Rapanos"). The chart below was provided in the joint EPA/Corps guidance.

For sites that include waters other than Traditional Navigable Waters (TNWs) and/or their adjacent wetlands or Relatively Permanent Waters (RPWs) tributary to TNWs and/or their adjacent wetlands, as set forth below, the Corps must apply the "significant nexus" standard.

For "isolated" waters or wetlands, the joint guidance also requires an evaluation by the Corps and EPA to determine whether other interstate commerce clause nexuses, not addressed in the SWANCC decision are associated with isolated features on properties for which a jurisdictional determination is being sought from the Corps.

The Corps and EPA will assert jurisdiction over the following waters:

- Traditional navigable waters.
- Wetlands adjacent to traditional navigable waters.
- Non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months).
- Wetlands that directly abut such tributaries.

The Corps and EPA will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a TNW:

- Non-navigable tributaries that are not relatively permanent.
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent.
- Wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary.

The agencies generally will not assert jurisdiction over the following features:

- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent or short duration flow).
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

The agencies will apply the significant nexus standard as follows:

- A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters.
- Significant nexus includes consideration of hydrologic and ecologic factors.

B. Regional Water Quality Control Board

The State Water Resource Control Board and each of its nine Regional Boards regulate the discharge of waste (dredged or fill material) into waters of the United States⁶ and waters of the State. Waters of the United States are defined above in Section II.A and waters of the State are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (California Water Code 13050[e]).

Section 401 of the CWA requires certification for any federal permit or license authorizing impacts to waters of the U.S. (i.e., waters that are within federal jurisdiction), such as Section 404 of the CWA and Section 10 of the Safe Rivers and Harbors Act, to ensure that the impacts do not violate state water quality standards. When a project could impact waters outside of federal jurisdiction, the Regional Board has the authority under the Porter-Cologne Water Quality Control Act to issue Waste Discharge Requirements (WDRs) to ensure that impacts do not violate state water quality standards. Clean Water Act Section 401 Water Quality Certifications, WDRs, and waivers of WDRs are also referred to as orders or permits.

⁶ Therefore, wetlands that meet the current definition, or any historic definition, of waters of the U.S. are waters of the state. In 2000, the State Water Resources Control Board determined that all waters of the U.S. are also waters of the state by regulation, prior to any regulatory or judicial limitations on the federal definition of waters of the U.S. (California Code of Regulations title 23, section 3831(w)). This regulation has remained in effect despite subsequent changes to the federal definition. Therefore, waters of the state includes features that have been determined by the U.S. Environmental Protection Agency (U.S. EPA) or the U.S. Army Corps of Engineers (Corps) to be “waters of the U.S.” in an approved jurisdictional determination; “waters of the U.S.” identified in an aquatic resource report verified by the Corps upon which a permitting decision was based; and features that are consistent with any current or historic final judicial interpretation of “waters of the U.S.” or any current or historic federal regulation defining “waters of the U.S.” under the federal Clean Water Act.

1. State Wetland Definition

The State Board Wetland Definition and Procedures define an area as wetland as follows: *An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.*

The following wetlands are waters of the State:

1. *Natural wetlands;*
2. *Wetlands created by modification of a surface water of the state;⁷ and*
3. *Artificial wetlands⁸ that meet any of the following criteria:*
 - a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration;*
 - b. Specifically identified in a water quality control plan as a wetland or other water of the state;*
 - c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or*
 - d. Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes (i.e., the following artificial wetlands are not waters of the state unless they also satisfy the criteria set forth in 2, 3a, or 3b):*
 - i. Industrial or municipal wastewater treatment or disposal,*
 - ii. Settling of sediment,*
 - iii. Detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program,*
 - iv. Treatment of surface waters,*
 - v. Agricultural crop irrigation or stock watering,*
 - vi. Fire suppression,*
 - vii. Industrial processing or cooling,*

⁷ "Created by modification of a surface water of the state" means that the wetland that is being evaluated was created by modifying an area that was a surface water of the state at the time of such modification. It does not include a wetland that is created in a location where a water of the state had existed historically, but had already been completely eliminated at some time prior to the creation of the wetland. The wetland being evaluated does not become a water of the state due solely to a diversion of water from a different water of the state.

⁸ Artificial wetlands are wetlands that result from human activity.

- viii. Active surface mining – even if the site is managed for interim wetlands functions and values,*
- ix. Log storage,*
- x. Treatment, storage, or distribution of recycled water, or*
- xi. Maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or*
- xii. Fields flooded for rice growing.⁹*

All artificial wetlands that are less than an acre in size and do not satisfy the criteria set forth in 2, 3.a, 3.b, or 3.c are not waters of the state. If an aquatic feature meets the wetland definition, the burden is on the applicant to demonstrate that the wetland is not a water of the state.

C. California Department of Fish and Wildlife

Pursuant to Division 2, Chapter 6, Sections 1600-1603 of the California Fish and Game Code, the CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife.

CDFW defines a stream (including creeks and rivers) as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation.” CDFW’s definition of “lake” includes “natural lakes or man-made reservoirs.” CDFW also defines a stream as “a body of water that flows, or has flowed, over a given course during the historic hydrologic regime, and where the width of its course can reasonably be identified by physical or biological indicators.”

It is important to note that the Fish and Game Code defines fish and wildlife to include all wild animals, birds, plants, fish, amphibians, invertebrates, reptiles, and related ecological communities including the habitat upon which they depend for continued viability (FGC Division 5, Chapter 1, section 45 and Division 2, Chapter 1 section 711.2(a) respectively). Furthermore, Division 2, Chapter 5, Article 6, Section 1600 et seq. of the California Fish and

⁹ Fields used for the cultivation of rice (including wild rice) that have not been abandoned due to five consecutive years of non-use for the cultivation of rice (including wild rice) that are determined to be a water of the state in accordance with these Procedures shall not have beneficial use designations applied to them through the Water Quality Control Plan for the Sacramento and San Joaquin River Basins, except as otherwise required by federal law for fields that are considered to be waters of the United States. Further, agricultural inputs legally applied to fields used for the cultivation of rice (including wild rice) shall not constitute a discharge of waste to a water of the state. Agricultural inputs that migrate to a surface water or groundwater may be considered a discharge of waste and are subject to waste discharge requirements or waivers of such requirements pursuant to the Water Board’s authority to issue or waive waste discharge requirements or take other actions as applicable.

Game Code does not limit jurisdiction to areas defined by specific flow events, seasonal changes in water flow, or presence/absence of vegetation types or communities.

III. RESULTS

Three features occur within the Property, referred to herein as Settling Basins A, B, and C. Settling Basins A and C are singular whereas Settling Basin B consists of three interconnected basins. No wetland or riparian areas are associated with the features. These basins are part of the active quarry operating under the aforementioned NPDES General Permit for Storm Water Discharges Associated with Industrial Activities.

The settling basins are located in the center, south, and southeast portions of the Project site. The basins are man-made and were constructed specifically to contain surface runoff from the mining operation. All of the basins are regularly maintained as part of quarry activities, including dredging of excess or accumulated aggregate materials. The settling basins dissipate and/or percolate onsite and have no downstream surface connection to any other jurisdictional feature. They also do not contain riparian or wetland vegetation due to the regular maintenance activities. Elevations on site range from approximately 1,293 to 1,360 feet above mean sea level. All features are depicted in Exhibit 3 and further described below in Table 1, followed by a summary of Corps, Regional Board, and CDFW jurisdiction. Site photographs are provided as Exhibit 4.

Settling Basin A

Settling Basin A is a man-made linear basin that originates near the southern border of the Property. This basin collects surface runoff from the mining operation and allows the runoff to dissipate and percolate into the ground. Settling Basin A extends for approximately 323 linear feet on the Property. Surface water was present during the delineation; however, the basin is unvegetated except for a clump of non-native tamarisk shrubs located at the eastern end, and upland scrub plants such as coyote bush on the slopes. Settling Basin A supports a coarse sandy bottom with larger rocks underneath. The width of the basin ranges between 25 and 27 feet.

Settling Basin B

Settling Basin B consists of three interconnected man-made basins that originate in the center of the Property. The basins store tailings and collect surface runoff from the mining operation, and allow for percolation and settling of sediments. These basins are regularly maintained and dredged. Surface water was present during the delineation. Collectively, they comprise approximately 967 linear feet within the Property with widths ranging between 99 and 148 feet.

Settling Basin C

Settling Basin C is a man-made basin that originates near the southeastern corner of the Property. This basin collects surface runoff from the mining operation and allows the runoff to dissipate and percolate into the ground. Settling Basin C is approximately 115 feet wide. Surface water was present during the delineation; however, the basin is unvegetated except for several non-native tree tobacco plants along the edge and upland plants on the slopes. A few mulefat plants also occurred at the edge but not enough to be considered a riparian plant community. Access to this basin was not provided because of the unstable eroded slopes, so a visual survey was conducted from pavement areas at the top.

Table 3 below summarizes the acreage and linear feet of each basin and the locations of each basin are depicted on the enclosed jurisdictional delineation map [Exhibit 3C]. Site photographs are provided as Exhibit 4.

Table 3: Summary of Delineated Features

Feature	Non-Wetland/ Non-Riparian (acres)	Length (linear feet)
Settling Basin A	0.20	323
Settling Basin B*	2.30	967
Settling Basin C	0.15	115
Total	2.65	1,405

*includes B1, B2, B3 collectively

A. Corps Jurisdiction

No Corps jurisdiction is located within the Project site. Settling Basins A, B, and C terminate onsite and do not have a surface connection to a TNW or a tributary to a TNW. These basins dissipate and percolate within the Property and are non-navigable. As a result, Settling Basins A, B, and C are isolated and would not be considered waters of the U.S. that would be subject to Corps jurisdiction pursuant to Section 404 of the CWA.

B. Regional Water Quality Control Board Jurisdiction

No Regional Board jurisdiction is located within the Project site. Under the State Board Wetland Definition and Procedures, the settling basins would be excluded from regulation by the Regional Board based on the following:

IV.D.1.d: “Routine operation and maintenance activities that result in discharge of dredged or fill material to artificially-created waters currently used and maintained primarily for one or more of the purposes listed in section II.3.d. (i), (ii), (iii), (vi), (vii), (x), or (xi).”

Specifically, the settling basins are used for section II.3.d.ii: settling of sediment and section II.3.d.iii: detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program.

The quarry operates under the aforementioned NPDES General Permit for Storm Water Discharges Associated with Industrial Activities. As such, the quarry operates under an approved Regional Board permit and per section II.3.d.ii, the settling basins would be excluded from jurisdiction by the Regional Board under Section 401 of the CWA and Section 13260 of the CWC.

C. CDFW Jurisdiction

No CDFW jurisdiction is located within the Project site. The CDFW regulates impacts to “rivers,” “streams,” and “lakes” under the California Fish and Game Code for the primary purpose of protecting aquatic habitats for fish and wildlife resources. Settling Basins A, B, and C were created/constructed as part of the stormwater prevention activities associated with the quarry and persist as mining-related stormwater features. These features would not meet CDFW’s definition for a river, stream, or lake because they do not support habitat for fish and wildlife resources and would not generally require notification under Section 1602. As a result, all three settling basins would not be subject to CDFW jurisdiction pursuant to Division 2, Chapter 6, Sections 1600-1603 of the California Fish and Game Code.

Dan Darnell
Carson Companies
January 10, 2023
Page 13

If you have any questions about this letter report, please contact Joseph Vu at (949) 340-6775 or at jvu@wetlandpermitting.com.

Sincerely,

GLENN LUKOS ASSOCIATES, INC.

A handwritten signature in black ink, appearing to read 'Joseph Vu', written in a cursive style.

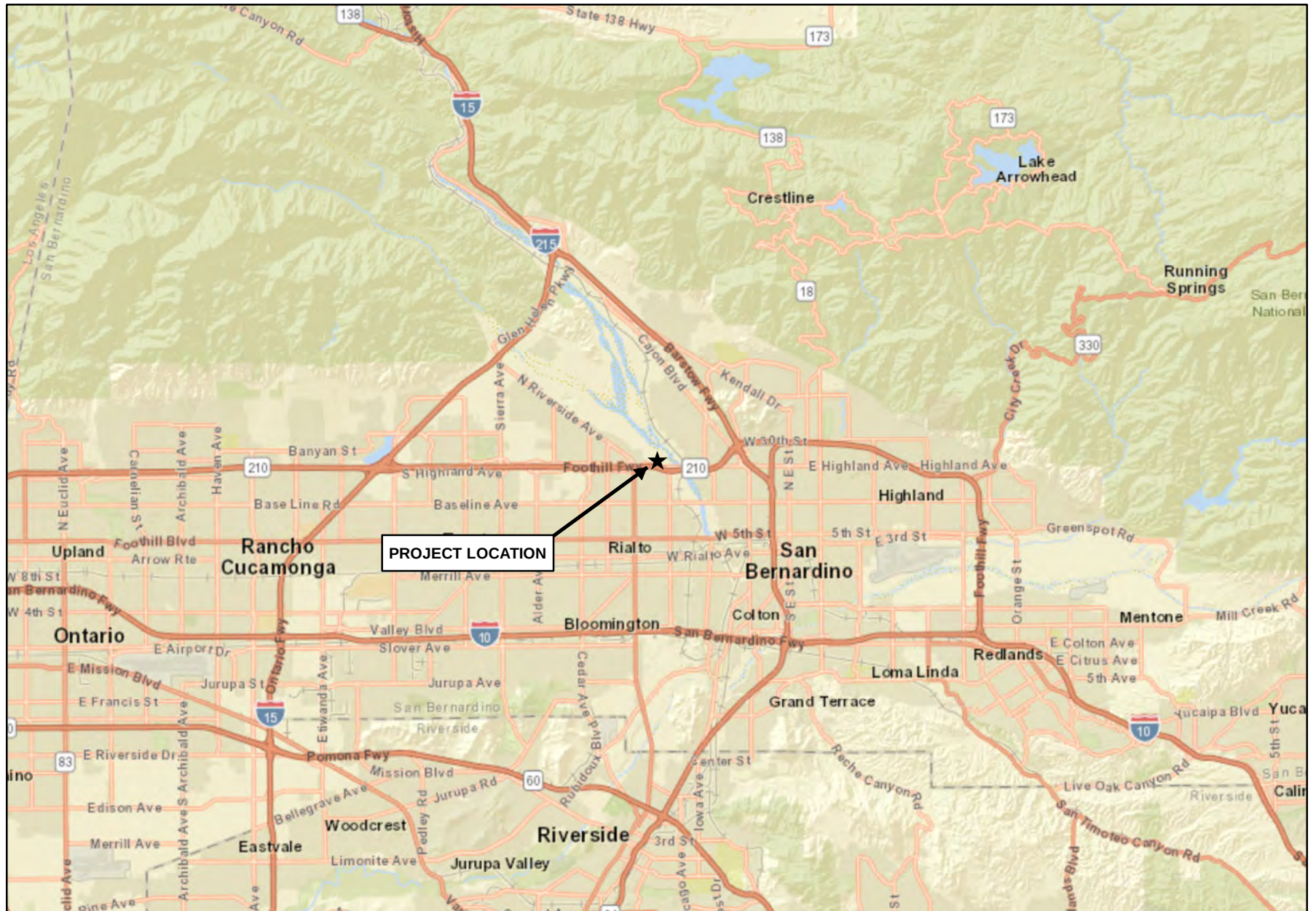
Joseph Vu
Regulatory Specialist

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Source: ESRI World Street Map



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PEPPER 210 COMMERCE CENTER PROJECT

Regional Map

GLENN LUKOS ASSOCIATES

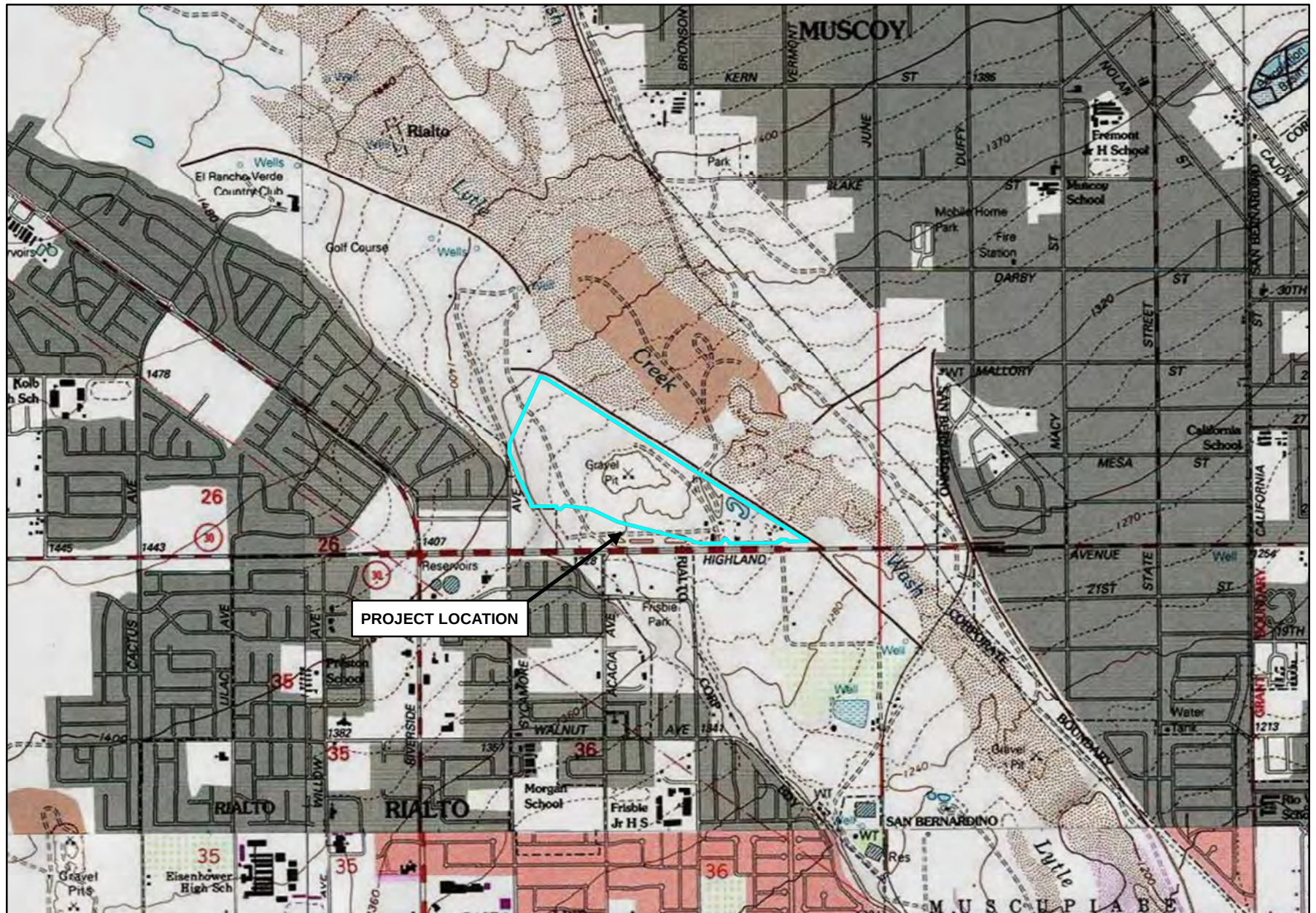
Exhibit 1



Adapted from USGS San Bernardino North, CA quadrangle



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1,000
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4,000
Feet



PEPPER 210 COMMERCE CENTER PROJECT

Vicinity Map

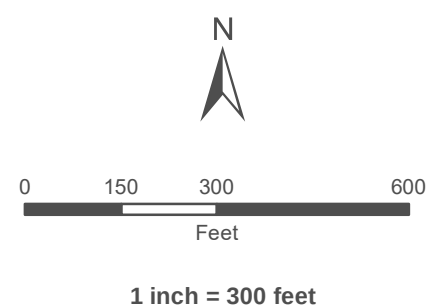
GLENN LUKOS ASSOCIATES



Exhibit 2



- Project Site
- Settling Basins



Coordinate System: State Plane 5 NAD 83
 Projection: Lambert Conformal Conic
 Datum: NAD 1983 2011
 Map Prepared by: K. Kartunen, GLA
 Date Prepared: December 21, 2022

**PEPPER 210 COMMERCE
CENTER PROJECT**

Potential Jurisdictional Delineation Map

GLENN LUKOS ASSOCIATES

Exhibit 3

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Photograph 1: Representative photo of Settling Basin A within the Project site.

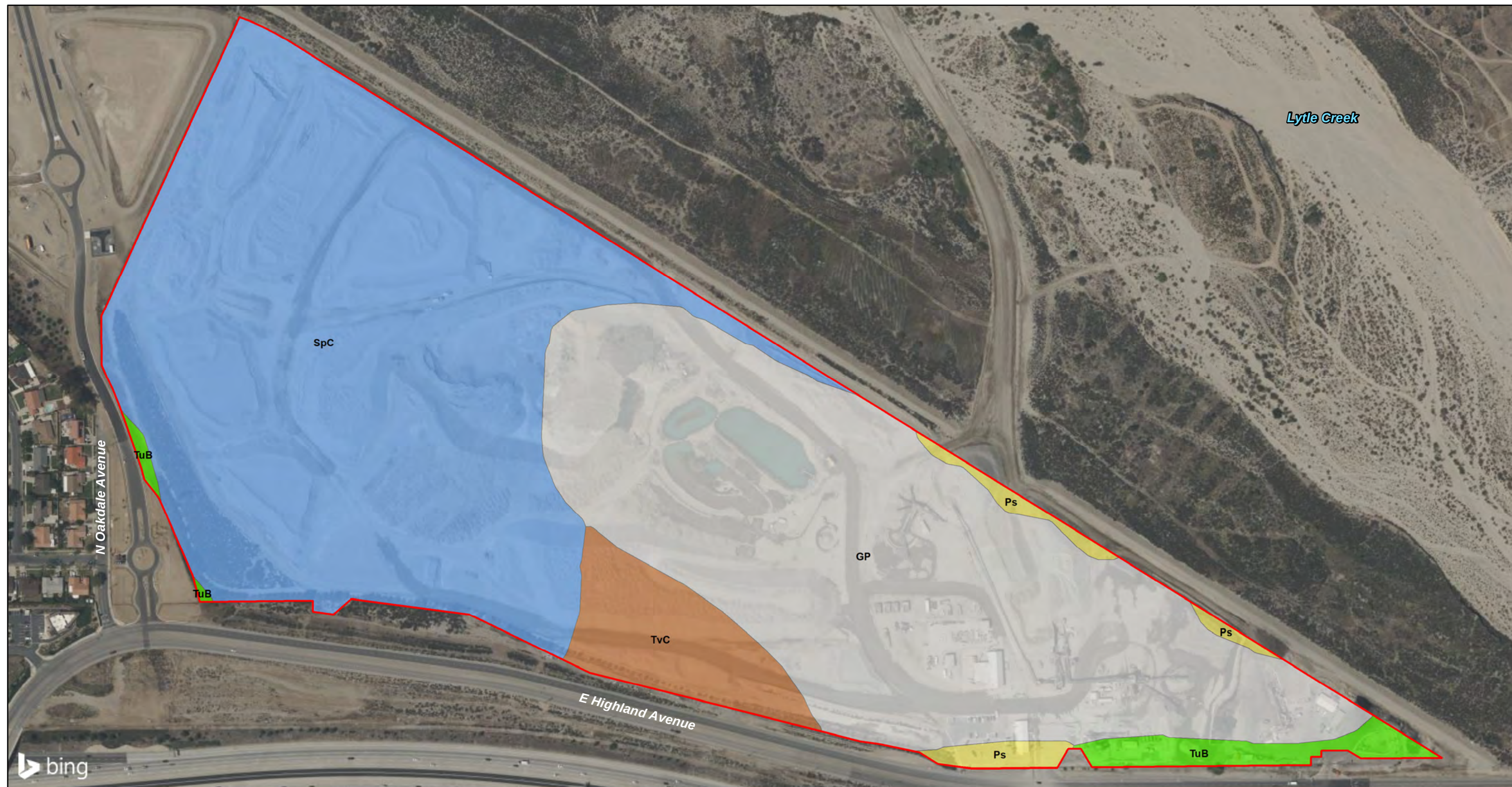


Photograph 2: Representative photo of Settling Basin B within the Project site. Settling Basin B includes three interconnected basins.

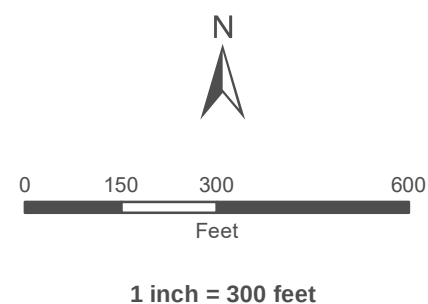


Photograph 3: Representative photo of the Settling Basin C within the Project site.





- Project Site
- GP - Quarries And Pits
- Ps - Psamments And Fluvents, Frequently Flooded
- SpC - Soboba Stony Loamy Sand, 2 To 9 Percent Slopes
- TuB - Soboba Stony Loamy Sand, 2 To 9 Percent Slopes
- TvC - Tujunga Gravelly Loamy Sand, 0 To 9 Percent Slopes



Coordinate System: State Plane 5 NAD 83
 Projection: Lambert Conformal Conic
 Datum: NAD 1983 2011
 Map Prepared by: K. Kartunen, GLA
 Date Prepared: December 21, 2022

**PEPPER 210 COMMERCE
CENTER PROJECT**

Soils Map

GLENN LUKOS ASSOCIATES

Exhibit 5

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