



Appendix B

Biological Resources Assessment

Kimley»»Horn



**SUNRISE ROAD SOLAR PROJECT,
BIOLOGICAL RESOURCES ASSESSMENT**

SAN BERNARDINO COUNTY, CALIFORNIA

**SEPTEMBER 2023
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Biological Resources Assessment
San Bernardino County, California**

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SUNRISE ROAD SOLAR PROJECT BIOLOGICAL RESOURCES ASSESSMENT

SUMMARY

The proposed Sunrise Road Solar Project (Project) is located in a generally undeveloped area of San Bernardino County, one mile east of the town of Boron, California (Figure 1). In January of 2023, Kleinfelder biologists performed a desktop review of the Project vicinity and a field verification survey of the Project Area (Figure 2). The intent of the field verification survey was to identify and characterize existing on-site biological resources, to the extent possible, and determine the potential for special-status species and/or sensitive habitats (as defined by state and federal resource agencies) to occur on the site.

The field survey focused on the approximate 59-acre Project Area and a 50-foot buffer surrounding the Project Area (including the access road). Based on the results of the desktop review and field verification survey, three special-status wildlife species and three special-status plant species have a moderate potential to occur in the Project Area. Joshua trees (*Yucca brevifolia*) are present within the Project Area and buffer; however, no other sensitive plant communities are present. The site does not fall under the limits of mapped critical habitat for any federally listed species, but it is mapped by the state of California as an area for conservation planning linkages.

This report serves to document the methods and results of the January 2023 biological field survey, describes potential biological resource constraints associated with construction of a solar facility at the site, and provides recommendations to address these constraints. This assessment does not provide a comprehensive impact analysis; however, the recommendations provided could be integrated into subsequent environmental documentation to ensure compliance with the California Environmental Quality Act (CEQA).

1 INTRODUCTION

1.1 BACKGROUND AND PROJECT DESCRIPTION

The Sunrise Road Solar Project is a small-scale utility solar generating and energy storage project located on approximately 59 acres spanning two, 40-acre parcels (APN 049-811-105 and APN 049-811-104). Wildcat Renewables, LLC has entered into a long-term lease agreement with the property owners, Pok Kim and Seasons Land Corporation, to facilitate the development and long-term operation of the Project.

The Project will generate approximately 14 megawatts (MW) alternating current (AC) of clean, reliable solar energy when complete. The Project will interconnect to a pre-existing electrical distribution system adjacent to the site and owned by Southern California Edison (SCE). The power generated from this facility will be sold to SCE through a long-term Power Purchase Agreement. Additionally, the Project will be equipped with energy storage technology that will allow onsite renewable energy generation to be stored and dispatched onto the grid when needed.

The Project will utilize solar modules and string inverters to convert energy from the sun into usable, AC power. Single-axis tracking technology will be utilized to allow the modules to efficiently track the sun throughout the day and maximize the efficiency of solar collection. The modules will be mounted on a steel racking system, which will be anchored into the ground using driven steel piers. The overall height of the array will be no more than 15-feet tall.

1.2 OBJECTIVES

The purpose of this analysis is to evaluate the Project Area to assess the potential for special-status plant and wildlife species and sensitive natural communities to occur, and the potential effects to these biological resources due to construction and operation of the Project. This assessment provides the methods and results of the field survey, including vegetation communities and land cover types present within the Project Area, special-status plant and wildlife species detected or with potential to occur within the Project Area, the presence of wildlife movement corridors or federally designated critical habitat within or adjacent to the Project Area, and any additional focused surveys necessary to further evaluate potential effects to biological resources that could occur within the Project Area. Recommendations to avoid and minimize impacts to these resources are provided in Section 5 of this document.

1.3 PROJECT LOCATION

The approximate 59-acre Project Area is adjacent to the south side of California State Route 58, one mile east of the town of Boron, California (Figure 2). The Project Area is situated at an elevation of approximately 2,500 feet above mean sea level and adjacent land uses in the vicinity of the Project Area are primarily undeveloped, although there are some rural residences northwest and west of the Project Area. No structures are present in the Project Area.

The Project Area is situated within Township 11 North, Range 7 West, Sections 32 and 33, and Township 10 North, Range 7 West, Section 4 of the Boron 7.5-minute U.S. Geological Survey (USGS) quadrangles. The corresponding latitude and longitude at the approximate center of the site is 35°00'05.97" north latitude and 117°37'31.13" west longitude.

2 REGULATORY SETTING

2.1 FEDERAL

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) prohibits the taking, possession, sale, or transport of endangered species. Pursuant to the requirements of FESA, a federal agency reviewing a proposed action within its jurisdiction must determine whether any federally listed threatened or endangered species could be present and determine the extent of effects to such species due to the proposed action. In addition, federal agencies are required to determine whether a proposed action is likely to jeopardize the continued existence of any species listed or proposed to be listed under FESA, or result in the destruction or adverse modification of critical habitat designated for such species (16 U.S. Code [USC] 1536[3], [4]). Projects that would result in “take” of any federally listed threatened or endangered species are required to obtain authorization from the National Marine Fisheries Service (NMFS) and/or U.S. Fish and Wildlife Service (USFWS) through either Section 7 (interagency consultation) or Section 10(a) (incidental take permit) of FESA, depending on whether the federal government is involved in permitting or funding the project.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) regulates or prohibits taking, killing, possession of, or harm to migratory bird species listed in Title 50 Code of Federal Regulations (CFR) Section 10.13. The MBTA is an international treaty for the conservation and management of bird species that migrate through more than one country and is enforced in the United States by the USFWS. Hunting of specific migratory game birds is permitted under the regulations listed in Title 50 CFR 20. The MBTA was amended in 1972 to include protection for migratory birds of prey (raptors).

Federal Clean Water Act

Section 404

The objective of the Clean Water Act (CWA) is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. Under Section 404 of the CWA, the U.S. Army Corps of Engineers (ACOE) has the authority to regulate activities that could discharge fill or dredge material or otherwise adversely modify wetlands or other waters of the United States. The ACOE implements the federal policy embodied in Executive Order 11990, which, when implemented, is intended to result in no net loss of wetland values or function.

Section 401

The State Water Resources Control Board (SWRCB) has authority over wetlands through Section 401 of the CWA, as well as the Porter-Cologne Act, California Code of Regulations Section 3831(k), and California Wetlands Conservation Policy. The CWA requires that an applicant for a Section 404 permit (to discharge dredged or fill material into waters of the United States) first obtain certification from the appropriate state agency stating that the fill is consistent with the State's water quality standards and criteria. In California, the authority to either grant certification or waive the requirement for permits is delegated by the SWRCB to the nine regional boards. The Regional Water Quality Control Board (RWQCB) has authority for Section 401 compliance in the Project Area. A request for certification is submitted to the regional board at the same time that an application is filed with the ACOE.

2.2 STATE

California Endangered Species Act (CESA)

Under the CESA, the California Fish and Wildlife Commission (CFWC) has the responsibility of maintaining a list of threatened species and endangered species. The California Department of Fish and Wildlife (CDFW) also maintains lists of species of special concern. A Species of Special Concern (SSC) is a species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

- is extirpated from the State or, in the case of birds, in its primary seasonal or breeding role;
- is listed as Federally listed, but not State-listed, as threatened or endangered;
- meets the State definition of threatened or endangered but has not formally been listed;
- is experiencing, or formerly experienced, serious (nonscyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status;
- has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status.

CESA prohibits the take of state-listed animals and plants in most cases, but CDFW may issue incidental take permits under special conditions. Pursuant to the requirements of CESA, a state agency reviewing a project within its jurisdiction must determine whether any state-listed endangered or threatened species could be present on the property and determine whether the project would have a potentially significant impact on such species.

California Fish and Game Code Sections 3503, 3511, 3513, 4150

Fish and Game Code Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Fish and Game Code Section 3503.5 protects all birds-of-prey (raptors) and their eggs and nests. Section 3511 states fully protected birds or parts thereof may not be taken or possessed at any time. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the Migratory Bird Treaty Act. All nongame mammals, including bats, are protected by California Fish and Game Code 4150.

California Fish and Game Code Sections 1600-1616

Under Sections 1600-1616 of the California Fish and Game Code, the CDFW regulates activities that would alter the flow, bed, channel, or bank of streams and lakes. The limits of CDFW's jurisdiction are defined in the code as the "... bed, channel or bank of any river, stream, or lake designated by the department in which there is at any time an existing fish or wildlife resource or from which these resources derive benefit ..." (Section 1601). In practice, the CDFW usually marks its jurisdictional limit at the top of the stream or bank, or at the outer edge of the riparian vegetation, whichever is wider.

CDFW Wetlands Protection Regulations

CDFW derives its authority to oversee activities that affect wetlands from state legislation. This authority includes Sections 1600-1616 of the California Fish and Game Code (CFG; lake and streambed alteration agreements), CESA (protection of state listed species and their habitats - which could include wetlands), and the Keene-Nejedly California

Wetlands Preservation Act of 1976 (states a need for an affirmative and sustained public policy program directed at wetlands preservation, restoration, and enhancement). In general, the CDFW asserts authority over wetlands within the state either through review and comment on ACOE Section 404 permits, review and comment on CEQA documents, preservation of state listed species, or through stream and lakebed alteration agreements.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act established the SWRCB and each RWQCB as the principal state agencies responsible for the protection of water quality in California. As noted above, the RWQCB has regulatory authority over the Project Area. The Porter-Cologne Water Quality Control Act provides that, “All discharges of waste into the waters of the State are privileges, not rights.” Waters of the State are defined in Section 13050(e) of the Porter-Cologne Water Quality Control Act as “...any surface water or groundwater, including saline waters, within the boundaries of the state.” All dischargers are subject to regulation under the Porter Cologne Water Quality Control Act, including both point and nonpoint source dischargers. The RWQCB has the authority to implement water quality protection standards through the issuance of permits for discharges to waters at locations within its jurisdiction. As noted above, the RWQCB is the appointed authority for Section 401 compliance in the Project Area.

California Environmental Quality Act

Although threatened and endangered species are protected by specific federal and state statutes, California Environmental Quality Act (CEQA) Guidelines Section 15380(b) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain criteria. These criteria have been modeled after the definition in FESA and the section of the California Fish and Game Code dealing with rare or endangered plants and animals and allows a public agency to undertake a review to determine if a significant effect on a species that has not yet been listed by either the USFWS or CDFW (i.e., species of concern) would occur. Whether a species is rare, threatened, or endangered can be legally significant because, under CEQA Guidelines Section 15065, an agency must find an impact to be significant if a project would “substantially reduce the number or restrict the range of an endangered, rare, or threatened species.” Thus, CEQA provides an agency with the ability to protect a species from a project’s potential impacts until the respective government agencies have an opportunity to designate the species as protected, if warranted.

Western Joshua Tree Conservation Act

Western Joshua tree (*Yucca brevifolia*) is an iconic species in California that is both ecologically and culturally important and occurs across a large portion of California’s desert. The Western Joshua Tree Conservation Act (WJTCA, “act”) was passed in July 2023 to conserve western Joshua tree and its habitat while supporting the state’s renewable energy and housing priorities.

The WJTCA prohibits the importation, exportation, take, possession, purchase, or sale of any western Joshua tree in California unless authorized by CDFW. The act authorizes CDFW to issue permits for the incidental take of one or more western Joshua trees if the permittee meets certain conditions. Permittees may pay specified fees in lieu of conducting mitigation activities. Under the act, all in-lieu fees collected will be deposited into the Western Joshua Tree Conservation Fund for appropriation to CDFW solely for the purposes of acquiring,

conserving, and managing western Joshua tree conservation lands and completing other activities to conserve the western Joshua tree. Some areas within Kern, San Bernardino, and Los Angeles Counties qualify for reduced mitigation fees for impacts to western Joshua trees as defined in the California Department of Fish and Wildlife Code (Section 1927).

Pursuant to the WJTCA, CDFW may enter into an agreement with any county or city to delegate limited authority to permit the taking of a western Joshua tree associated with developing single-family residences, multifamily residences, accessory structures, and public works projects. The WJTCA authorizes the CDFW to:

- Permit the trimming and removal of hazardous or dead western Joshua trees under certain circumstances.
- Permit the incidental take of western Joshua trees provided the permittee meets certain conditions.
- Enter into an agreement with a county or city to delegate limited authority to issue the permits mentioned above, provided certain conditions are met.

Additionally, the WJTCA directs CDFW to develop a conservation plan for western Joshua tree by the end of 2024.

2.3 LOCAL POLICIES AND ORDINANCES

The San Bernardino Countywide Plan Policy Plan (Countywide Plan) includes a Renewable Energy and Conservation Element (RECE), which aims to maintain the natural and scenic values of the landscape while providing safe and reliable renewable energy sources for California. The RECE provides goals, policies, and implementation measures to encourage sustainable energy production and consumption while protecting the environmental resources of San Bernardino County.

In accordance with Chapter 88.01 of the San Bernardino County Development Code (plant protection and management), a permit is required where protected trees or plants are proposed for removal or relocation. Within the Desert Region, protected trees or plants requiring a Tree or Plant Removal permit include the following:

Dalea spinosa (smoketree), with stems 2 inches or greater in diameter or 6 ft or greater in height

All species of the genus *Prosopis* (mesquites), with stems 2 inches or greater in diameter or 6 ft or greater in height

All species of the family Agavaceae (century plants, nolin, yuccas)

Creosote Rings, 10 ft or greater in diameter

All Joshua trees

Any part of any of the following species, whether living or dead:

- a. *Olneya tesota* (desert ironwood)
- b. All species of the genus *Prosopis* (mesquites)
- c. All species of the genus *Cercidium* (palo verdes)

Chapter 88.01 also requires that removal actions of all plants protected or regulated by the Desert Native Plants Act (Food and Agricultural Code Sections 80001 et seq.) shall comply with the provisions of the Act before the issuance of a development permit or approval of a land use application.

2.4 Regional Habitat Conservation Plans

The Project site is located within the broader boundaries of the Desert Renewable Energy Conservation Plan (DRECP), a collaboration between the California Energy Commission, Bureau of Land Management (BLM), USFWS, and CDFW designed to streamline renewable energy development while conserving unique and valuable desert ecosystems and providing outdoor recreation opportunities. A phased approach to implementation of the conservation plan is currently underway. Phase I addresses conservation and development goals on public lands. BLM is responsible for the implementation of this phase through preparation of the Land Use Planning Amendment (LUPA), which was approved in September 2016. During Phase II, counties in the DRECP plan area, through the use of Renewable Energy Conservation Planning Grants, will develop or update rules and policies related to renewable energy resources on private lands. This phase will require agency coordination to develop the best options to protect and conserve desert ecosystems while promoting renewable energy. San Bernardino County has completed Phase II and has revised the Countywide Plan Policy Plan to include a Renewable Energy and Conservation Element as of August 8, 2017. The Project is not subject to the DRECP, as the development occurs on private land only, and the DRECP is implemented exclusively on BLM lands.

The Project is also located within the BLM West Mojave Plan. The West Mojave Plan is a habitat conservation plan and federal land use plan amendment that presents a comprehensive strategy to conserve and protect natural communities and sensitive species such as the desert tortoise and the Mohave ground squirrel. The BLM West Mojave Plan is a collaborative effort of cities, counties, state and federal agencies having jurisdiction over lands within the region. The Project is not subject to the BLM West Mojave Plan, as the development occurs on private land only.

3 METHODS

3.1 DESKTOP REVIEW

Special-status plant and wildlife species present or potentially present within or adjacent to the Project Area were initially identified through a desktop literature review using the following sources: USFWS Information for Planning and Consultation (IPaC) Trust Resource Report (USFWS 2023a); CDFW California Natural Diversity Database (CNDDDB) (CDFW 2023a); and the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Vascular Plants (CNPS 2023). Additionally, the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (WSS) was queried to determine soil types that exist within the boundary of the Project Area (USDA 2023), along with the California Essential Habitat Connectivity Project (CDFW 2023b), and the USFWS National Wetland Inventory (NWI; USFWS 2023b) Wetland Mapper tool. The CNDDDB and CNPS database searches included the 7.5-minute USGS Boron quadrangle and eight surrounding quadrangles. The IPaC search included the Project Area and a two-mile buffer surrounding the Project Area. Following a review of these resources, Kleinfelder also reviewed relevant life history information on those species documented as occurring in the region, including habitat type, soils, and elevation preferences.

3.2 DEFINITION OF SPECIAL-STATUS SPECIES

Special-status plant and wildlife species with state and/or federal protections as described under FESA or CESA in Section 2 above are specifically defined below.

3.2.1 SPECIAL-STATUS WILDLIFE SPECIES

Special-status wildlife species include taxa designated as follows:

- Threatened, endangered, or candidate for listing under the FESA
- Threatened, endangered, or rare under the CESA
- CDFW species of special concern or fully protected species

3.2.2 SPECIAL-STATUS PLANT SPECIES

Special-status plant species include taxa designated as follows:

- Threatened, endangered, or candidate for listing under the FESA
- Threatened, endangered, or rare under the CESA
- Species with California Rare Plant Ranks (CRPRs) as described below (CNPS 2023):
 - 1A – Plants presumed extinct in California
 - 1B – Plants considered rare, threatened, or endangered in California and elsewhere
 - 2 – Plants considered rare, threatened, or endangered in California, but more common elsewhere.

3.3 FIELD SURVEY

A field survey was performed by Kleinfelder biologist Ryan Hilgris and Kleinfelder botanist Miguel Kaminsky on January 17, 2023, to evaluate botanical and wildlife resources within the Project Area and 50-foot buffer, including habitat suitability for special-status species.

The survey consisted of walking throughout the Project Area to map and characterize vegetation communities and land cover types, collect data on the relative quality of, and potential for existing habitats to support the special-status species identified during the preliminary database and resources review discussed previously, and to identify any other sensitive biological resources present or potentially present within the site. An aerial photograph and georeferenced mobile map with an overlay of the survey area boundary was utilized to map vegetation communities and record any special-status or sensitive biological resources while in the field. Protocol-level surveys for special-status plant and wildlife species were not conducted during this time. However, any incidental observations of such species were documented during the field survey. Follow on focused surveys and studies were conducted in 2023 and 2024 for desert tortoise, western Joshua tree, rare plants, and Mohave ground squirrel by Rincon Consultants, Inc (Rincon). Detailed methodologies are described in the resource specific survey reports (Rincon 2024a,b,c,d).

Kleinfelder conducted a constraints-level analysis for potentially jurisdictional wetlands and waters based on current and historic aerial photography signatures and field observations. The analysis was based on criteria provided by the following agencies:

- Waters of the U.S., including wetlands, under the jurisdiction of the ACOE, pursuant to Section 404 of the CWA

- Wetlands and Waters of the State under the jurisdiction of the Regional Water Quality Control Board, pursuant to Section 401 of the CWA and the Porter-Cologne Water Quality Control Act (Porter-Cologne Act)
- Rivers, streams, or lakes under the jurisdiction of CDFW, pursuant to Section 1602 of the CFGC

4 RESULTS

4.1 BIOLOGICAL SETTING

The biological setting surrounding the Project Area is primarily undeveloped desert habitat in relatively close proximity to rural residences west and northwest of the Project Area. Human disturbances are present given the site's adjacency to the nearby town of Boron and SH-58. A moderate degree of off-highway vehicle disturbance is present along and adjacent to the dirt roads that dissect the Project Area. A travel trailer was observed on site along a dirt road in the southwest portion of the site. Trash associated with the travel trailer was restricted to the area immediately around the trailer. Results of the field survey are described in detail below.

4.2 EXISTING HABITATS

4.2.1 SOILS

According to the NRCS (USDA 2023), soil types in the vicinity of the Project Area have not been mapped. The topsoil throughout the Project Area was observed to be gravelly coarse sand that occurs on the relatively flat topography. Available water storage is likely very low, and the runoff class is likely high. The soil does not appear to be prone to flooding or ponding, nor does it appear to be hydric (Rincon 2024c).

4.2.2 VEGETATION COMMUNITIES

Using the classifications described in *A Manual of California Vegetation* (Sawyer et.al., 2009), one vegetation community was mapped during the field survey (Figure 4).

Spinescale (*Atriplex spinifera*) scrub alliance. Spinescale is the dominant shrub in this vegetation community and accounts for the majority of the vegetation cover in the Project Area. Dominant forbs observed during the field survey included common stork's bill (*Erodium cicutarium*), and fiddleneck (*Amsinckia* sp.). Additional shrubs present throughout the Project Area include peach thorn (*Lycium cooperi*), creosote bush (*Larrea tridentata*), cheesebush (*Ambrosia salsola*), and burroweed (*Ambrosia dumosa*). Desert dandelion (*Malacothrix glabrata*) and unknown grass species were also observed.

One-hundred forty-four (144) live and dead western Joshua trees (*Yucca brevifolia*) were mapped within the Project Area and 50-foot buffer (including the access road) during the field survey (Figure 5). The subsequent arborist survey conducted by Rincon identified 150 total western Joshua trees including 137 live trees and 13 dead trees (Rincon 2024d).

4.2.3 WETLANDS AND WATER FEATURES

No potential Waters of the U.S., including wetlands, potential Wetlands or Waters of the State under the jurisdiction of the Regional Water Quality Control Board, or rivers, streams, or lakes under the jurisdiction of CDFW (including ephemeral washes) were observed during the survey.

4.3 SPECIAL-STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE PROJECT AREA

Results of the CNDDDB and IPaC searches, combined with local biologist's knowledge of the area, returned seven special-status wildlife species known to occur within the two-mile/nine-quad search radius of the Project Area (CDFW 2023a; USFWS 2023a). Of these, four have a moderate potential to occur. The remaining three special-status wildlife species are not expected to occur or have a low potential to occur within the Project Area due to a lack of suitable habitat, or the site is outside of the species' known range. As such, these three species were removed from further consideration. The four species with a moderate potential to occur are described in more detail below. Three additional special status species were observed during Mohave ground squirrel trapping surveys (Appendix A) and are also discussed below.

Desert tortoise (*Gopherus agassizii*), federally and state listed as threatened, occurs in arid and semi-arid habitats in the Mojave and Sonoran Deserts, including sandy or gravelly locations along riverbanks, washes, sandy dunes, canyon bottoms, desert oases, rocky hillsides, creosote flats and hillsides. It spends most of its life in underground burrows dug to escape the desert heat. There is suitable habitat for this species in the Project Area and there are documented occurrences of this species within and adjacent to the site. A burrow that could support desert tortoise was observed during the field survey. The approximate dimensions of the entrance were six inches high and ten inches wide. There was debris in the entrance and in the cavity; however, no sign of desert tortoise was observed outside the burrow or in the vicinity of the burrow. Results of fall 2023 desert tortoise surveys are provided in Rincon 2024a along with further details regarding habitat suitability and occurrences in the region. Desert tortoise or sign thereof was not detected on site.

Burrowing owl (*Athene cunicularia*), a candidate for listing under the California Endangered Species Act, utilizes abandoned ground squirrel burrows in open habitats, grasslands, and disturbed areas, typically on levees, mounds, or areas where there are unobstructed views of possible predators such as raptors or foxes. Prey items include insects, small mammals, reptiles and amphibians. There is suitable habitat for this species in the Project Area in the form of fossorial mammal burrows and there are documented occurrences of this species within 10 miles of the site. Burrowing owl or sign thereof was not observed on site during the numerous focused biological surveys conducted by Rincon between fall 2023 and spring 2024 (Rincon 2024a,b,c,d). If present during this time frame, the species would have been detected as surveys focused on burrow dwelling species and included survey transects to achieve 100% site coverage, daytime wildlife observations, as well as day and nighttime camera trapping at burrows.

American badger (*Taxidea taxus*) is a CDFW SSC. This species typically inhabits drier open stages of most shrub, forest, and herbaceous habitats with friable soils suitable for digging burrows. American badgers typically have multiple burrows, which are used for sleeping, hunting, giving birth, and storing food. Their diet primarily consists of burrowing rodents such as squirrels, rats, gophers, and mice. American badger were not documented in the CNDDDB within the search radius of the Project site. However, records of this species are often lacking in this database and they are known to be present in the regional vicinity. There is moderate potential for this species to occur in the due to the presence of suitable foraging and burrowing habitat. Larger fossorial mammal burrows were found on site during the biological surveys although no badgers or sign thereof were observed during focused survey or camera trapping studies.

Mohave ground squirrel (*Xerospermophilus mohavensis*), listed as threatened under the California Endangered Species Act, inhabits the western Mojave Desert in portions of Inyo, Kern, Los Angeles, and San Bernardino counties. It can occupy Joshua tree woodlands, creosote scrub, saltbush scrub and Mojave mixed woody scrub. Typical forage plants are those that meet nutritional and water content requirements, including shrubs such as winterfat (*Krascheninnikovia lanata*), spiny hopsage (*Grayia spinosa*), and boxthorn (*Lycium* spp.). Preferred annuals include calliopsis (*Coreopsis* sp.), desert five-spot (*Eremalche rotundifolia*), milk vetch (*Astragalus* spp.), and lupine (*Lupinus* spp.). There is suitable habitat for this species in the Project Area and there are several documented occurrences of this species within two miles of the site. Results of spring 2024 Mohave ground squirrel trapping surveys are provided in Rincon 2024b along with further details regarding habitat suitability and occurrences in the region. Mohave ground squirrels were not detected although other special-status species were observed on the site including: desert kit fox (*Vulpes macrotis arsipus*), generally protected as a fur-bearing mammal by the California Fish and Game Code Section 4000 et. seq.); loggerhead shrike (*Lanius ludovicianus*), a California Species of Special Concern; and California horned lark (*Eremophila alpestris actia*), a CDFW Watch List species (Rincon 2024b).

The loggerhead shrike is a USFWS BCC and CDFW SSC. This species can be found in lowlands and foothills throughout California. It is absent or rare in California's highest mountain ranges and the north coast. This species is a year-round resident in the southern deserts, parts of the south and central coasts, and the Central Valley. Loggerhead shrike prefer open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches, and require impaling sites, such as thorns, sharp twigs, or barbed wire, for skewering and manipulating their prey. The species nests in densely foliated trees or shrubs and feeds on arthropods, amphibians, small to medium-sized reptiles, small mammals and birds. This species was observed during 2024 focused survey efforts and suitable nesting habitat (desert scrub with shrub heights of 1 to 2 meters or more as well as Joshua trees) is present in the Project Area.

The desert kit fox is generally protected as a fur-bearing mammal by the CFGC Section 4000 et. seq., which limits take of this species. It is a widespread resident of the North American southwest, found in arid climates from southern Oregon and Idaho to Baja California and central Mexico. This species is about the size of a house cat, weighing 4 to 7 pounds and is about 30 inches in length. Its diet consists of black-tailed jackrabbits and desert cottontails, rodents and ground squirrels, insects, reptiles, birds, bird eggs, and vegetation. Desert kit foxes can be found in grasslands, open desert scrub, and occasionally in farmland. The species is locally common in portions of its range and is not listed as a Special Animal by the CDFW. Desert kit fox occurrences are not currently maintained by the CNDDB; however, the Project Area contains suitable habitat for the species. The species was detected during Mohave ground squirrel camera trapping surveys in spring 2024 (Rincon 2024b) and may den within the natural scrub habitat on site although habitation of the burrows on site was not confirmed. Burrows documented on site are of suitable size and shape for the species which also may occur transiently (during dispersal and foraging).

California horned larks are year-round residents in open habitats. They forage on seeds and insects, nesting on open ground. Horned larks were observed during focused survey efforts and have potential to nest within the open desert habitat present on the site.

A list of special-status wildlife species with potential to occur in the vicinity of the Project Area is included in Appendix A.

4.4 SPECIAL-STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN THE PROJECT AREA

Results of the IPaC, CNDDDB and CNPS searches identified five special-status plant species known to occur within the two-mile/nine-quad search radius of the Project Area (CNDDDB 2023, CNPS 2023). Of these, three have a moderate or greater potential to occur in the Project Area. The remaining two special-status plant species are not expected to occur or have a low potential to occur in the Project Area due to a lack of suitable habitat, or the site is outside of the species' known range. As such, these two species were removed from further consideration and are not discussed further in this document. The three species with a moderate potential to occur are described in more detail below.

Desert cymopterus (*Cymopterus deserticola*), CNPS California Rare Plant Rank (CRPR) 1B.2, is a perennial herb found in Joshua tree woodland and Mojavean desert scrub on fine to coarse, loose, sandy soil or flats in old dune areas with well-drained sand. It occurs at elevations between 2,065-4,920 feet and blooms from March-May. Suitable habitat for this species is present within and adjacent to the Project Area and there are documented occurrences of this species directly adjacent to the parcel.

Barstow woolly sunflower (*Eriophyllum mohavense*), CRPR 1B.2, is an annual herb found in chenopod scrub, Mojavean desert scrub and desert playas, mostly in open, silty or sandy areas with saltbush scrub or creosote bush scrub. It occurs at elevations between 1,640-3,150 feet and blooms from March-May.

Sagebrush loeflingia (*Loeflingia squarrosa* var. *artemisiarum*), CRPR 2B.2, is an annual herb found in Great Basin scrub, Sonoran Desert scrub, and desert dunes (in sandy flats and dunes, and sandy areas around clay slicks). It occurs at elevations between 2,295- 5,300 feet and blooms from April-May. A list of plant species with potential to occur in the vicinity of the Project Area is included in Appendix B.

Follow on focused botanical surveys were conducted by Rincon during the 2024 spring blooming period. None of these species or other potentially occurring rare plants were detected as reported in Rincon 2024c, along with further details regarding habitat suitability and occurrences in the region. Additionally, an arborist survey for western Joshua trees was completed in fall 2023 further evaluating these protected trees present on the site (Rincon 2024d).

4.5 CRITICAL HABITAT

Critical habitat is a term defined and used in the federal Endangered Species Act to specify geographic areas that contain features essential to the conservation of an endangered or threatened species, and that may require special management and protection. Critical habitat may also include areas that are not currently occupied by the species but will be needed for its recovery.

The Project Area is not within critical habitat limits for any federally listed wildlife or plant species; however, critical habitat for desert tortoise has been mapped approximately 0.85 mile southeast of the Project Area.

4.6 WILDLIFE CORRIDORS AND HABITAT LINKAGES

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation; they may be continuous habitat or discrete habitat islands that function as stepping-stones for wildlife dispersal.

The Project Area is mapped as an area for conservation planning linkages and a linkage design area for the California Desert Linkage Network. These conservation planning and linkage design areas are intended to help maintain connectivity with nearby desert habitats that contain sensitive species that are threatened by development (CDFW 2023b). The Project Area is cut off from other areas of native desert habitat by the Burlington Northern and Santa Fe Railroad line, located approximately 300 feet south of the study area, SH-58 located approximately 0.5 mile north of the study area, and the town of Boron, located approximately 0.5 mile west of the study area (Figure 1). A bottleneck occurs approximately 3 miles east of the study area where the distance between SH-58 and the railroad narrows to approximately 650 feet.

Given the physical barriers surrounding the study area (i.e., railroad, SH-58, town of Boron, and bottleneck) the project site is generally cut off from other wildlife populations in the regional vicinity. However, more mobile species could still utilize bridges and culverts under SH-58 to access the project site. Given these potential barriers to movement, the site does not likely provide a key habitat linkage. Similar habitats in the broader region that provide more natural connectivity are likely to be more attractive for wildlife movement. The site may support some level of local wildlife movement and provides food and cover resources for wildlife species that inhabit the site and immediate vicinity.

4.7 COMMON WILDLIFE SPECIES

Several common wildlife species or their sign were observed during the field survey, including desert cottontail (*Sylvilagus audubonii*), common raven (*Corvus corax*), and side-blotched lizard (*Uta stansburiana*). Small mammal burrows were evenly distributed throughout the site. Common wildlife species adapted to life in proximity to human activity like coyotes (*Canis latrans*) are likely to move through the Project Area on a regular basis to find food and cover. Several common native and non-native bird species are likely to use the Project Area for nesting and/or foraging, as there is suitable habitat available throughout the Project Area (Figure 6). Wildlife species observed during the focused surveys are listed in Rincon 2024a,b.

5 RECOMMENDATIONS

This section addresses potential constraints to approval of the proposed Project due to the presence of sensitive biological resources on the site, and potential impacts to those resources that could result from Project activities. Recommendations to address potential biological resource constraints are described below.

- Recommended avoidance measures for desert kit fox include pre-construction surveys and natal den avoidance (MM BIO-6, MM BIO-7) as outlined in the Initial Study-Mitigated Declaration (Kimley Horn 2024).
- **Preconstruction Nesting Bird Survey.** All native birds in California are protected by the federal MBTA, and Section 3503.5 of the CFGC specifically protects raptors. Additionally, loggerhead shrike and California horned lark were observed on site and are considered special-status species. Ground disturbance, noise, or removal of vegetation that would result in destruction of active bird nests or disruption of breeding/nesting activity could be a violation of the MBTA and the CFGC as well as a significant impact under CEQA.

Kleinfelder recommends a nesting bird survey be performed by a qualified biologist no earlier than one week prior to any construction during the nesting season (February 1 – August 31) to determine if any native birds are nesting on or near the site (including a 250-foot buffer for raptors, where accessible). If any active nests are observed during surveys, a suitable avoidance buffer from the nests should be determined by the qualified biologist based on species, location, and extent and type of planned construction activity. These nests would be avoided until the chicks have fledged and the nests are no longer active, as determined by the qualified

biologist. Kleinfelder also recommends removing any suitable nesting habitat (i.e., trees and vegetation) outside of the bird breeding season to avoid impacts to nesting birds.

Western Burrowing Owl. Western burrowing owl occur in the region and although they have not been documented on site, they have some potential to occur as fossorial mammal burrows were observed. The species is a candidate for listing under the state endangered species act and additional measures are recommended to ensure avoidance during construction of the project. A pre-construction survey should be carried out as outlined by MM BIO-6 in the Initial Study-Mitigated Declaration (Kimley Horn 2024). If burrowing owl are found on site acquisition of a 2081 Incidental Take Permit (ITP) from CDFW may be required and additional avoidance and mitigation measures will be necessary (MM BIO-9). These measures may include implementation of non-disturbance buffers, passive relocation during the non-breeding season if occupied burrows cannot be avoided, and compensatory habitat mitigation in consultation with CDFW.

- **Western Joshua Trees.** Joshua trees that occur within the Project Area are protected by the WJTCA and CESA. As such, removal of or impacts to these trees would be considered a significant impact under CEQA. Kleinfelder recommends consultation with CDFW occur several months prior to development of the site to ensure removal of Joshua trees under the Project is authorized by CDFW, and that the appropriate mitigation fees are paid prior to implementation of the Project. The Project Area falls into the reduced mitigation fee area, and fees for removal of Joshua trees are as follows:
 - Trees 5 meters or greater in height - \$1000 each
 - Trees 1 meter or greater but less than 5 meters in height - \$200 each
 - Trees less than 1 meter in height - \$150 each

Prior to consultation with CDFW, Kleinfelder recommends a focused Joshua tree survey be performed to determine the size class of each tree mapped within the Project Area and boundary. The survey should include, at a minimum, the following:

- A map showing the Project site;
 - All areas subject to Project-related ground-disturbing activities and vegetation removal, and survey area;
 - A map showing the location of each individual western Joshua tree (including dead individuals);
 - A table listing each individual western Joshua tree and the corresponding tree's approximate height and impact (i.e., removed, preserved-in-place);
 - A map showing the alliance and/or association-based plant community following the Manual of California Vegetation (MCV), second edition (Sawyer et al. 2009); and,
 - Photographs of the Project site, including a minimum two photographs per acre depicting different aspects, and a photograph documenting each western Joshua tree. The focused Joshua tree survey results and additional mitigation measure recommendations are provided in Rincon 2024d.
- **Desert Tortoise.** To avoid impacts to desert tortoises that may occur in the Project Area, protocol-level surveys should be performed prior to the onset of construction to determine whether desert tortoises are present in the Project Area. Surveys should be performed using the guidance in the document titled *Preparing for Any Action That May Occur within the Range of the Mojave Desert Tortoise (Gopherus agassizii)* for "small projects" (USFWS 2019). Results of the surveys should be submitted to the USFWS Palm Springs field office

for review to determine if an application for a 10(a)1(B) take permit under the federal Endangered Species Act will be necessary for Project approval. The focused desert tortoise survey results and additional mitigation measure recommendations are provided in Rincon 2024a.

- **Rare Plant Avoidance.** Impacts to special-status plant species in the form of trampling or removal due to construction activities like grading or digging could be considered significant in the context of CEQA. Prior to the onset of construction and within the blooming period for each species listed in Section 4.4 above, a qualified botanist should perform a focused rare plant survey within the Project Area to determine if any special-status plants are evident and identifiable. The botanical field survey should be floristic in nature, meaning that every plant taxon that occurs in the Project Area is identified to the taxonomic level necessary to determine rarity and listing status. Visits to reference sites may also be warranted to determine whether these rare plants are identifiable at the time(s) of year the botanical field survey takes place, and to obtain a visual image of the special-status plant, associated habitat, and associated natural communities.

Should any special-status plant species be encountered during surveys, consultation with CDFW should be initiated to determine the best way to avoid impacts to the species and determine a permitting and mitigation approach. The focused botanical survey results are provided in Rincon 2024c.

- **Trash Receptacles.** Impacts to special-status species due to increased presence of predators associated with construction activities could be considered a significant impact in the context of CEQA. All trash and waste items generated by construction or crew activities should be properly contained in a covered and locked trash receptacle and/or removed from the Project site daily. This includes biodegradable items, such as apple cores and banana peels, that attract predators such as common ravens that could prey upon sensitive wildlife species.
- **Common and Special-Status Wildlife Awareness.** All Project personnel will visually check for animals in any pipes, culverts, or other open-ended materials and equipment stored on site for one or more overnight periods prior to moving, burying, or capping to ensure that no animals are present within the materials and equipment. To prevent accidental entrapment of wildlife during construction, all excavated holes, ditches, or trenches greater than six (6) inches deep will be covered at the end of each workday by suitable materials that cannot be displaced or escape ramps will be placed in excavations. After opening and before filling, such holes, ditches, and trenches will be thoroughly inspected for trapped animals.
- **Worker Environmental Awareness Training.** A qualified biologist will conduct an environmental education program for all persons working on the Project prior to the onset of construction. A discussion of the biology and general behavior of any sensitive species which may be in the area, how they may be encountered within the work area, and procedures to follow when they are encountered will be included in the training. Special-status species, including legal protection, penalties for violations, and Project-specific protective measures will also be discussed. Interpretation shall be provided for non-English speaking workers, and the same instruction shall be provided for any new workers prior to on-site Project activity. Copies of the training will be maintained at the worksite with the Project supervisor, and a handout containing this information will be distributed for workers to carry on-site. Upon completion of the program, employees shall sign an attendance log stating they attended the program and understand all protective measures.

6 REFERENCES CITED

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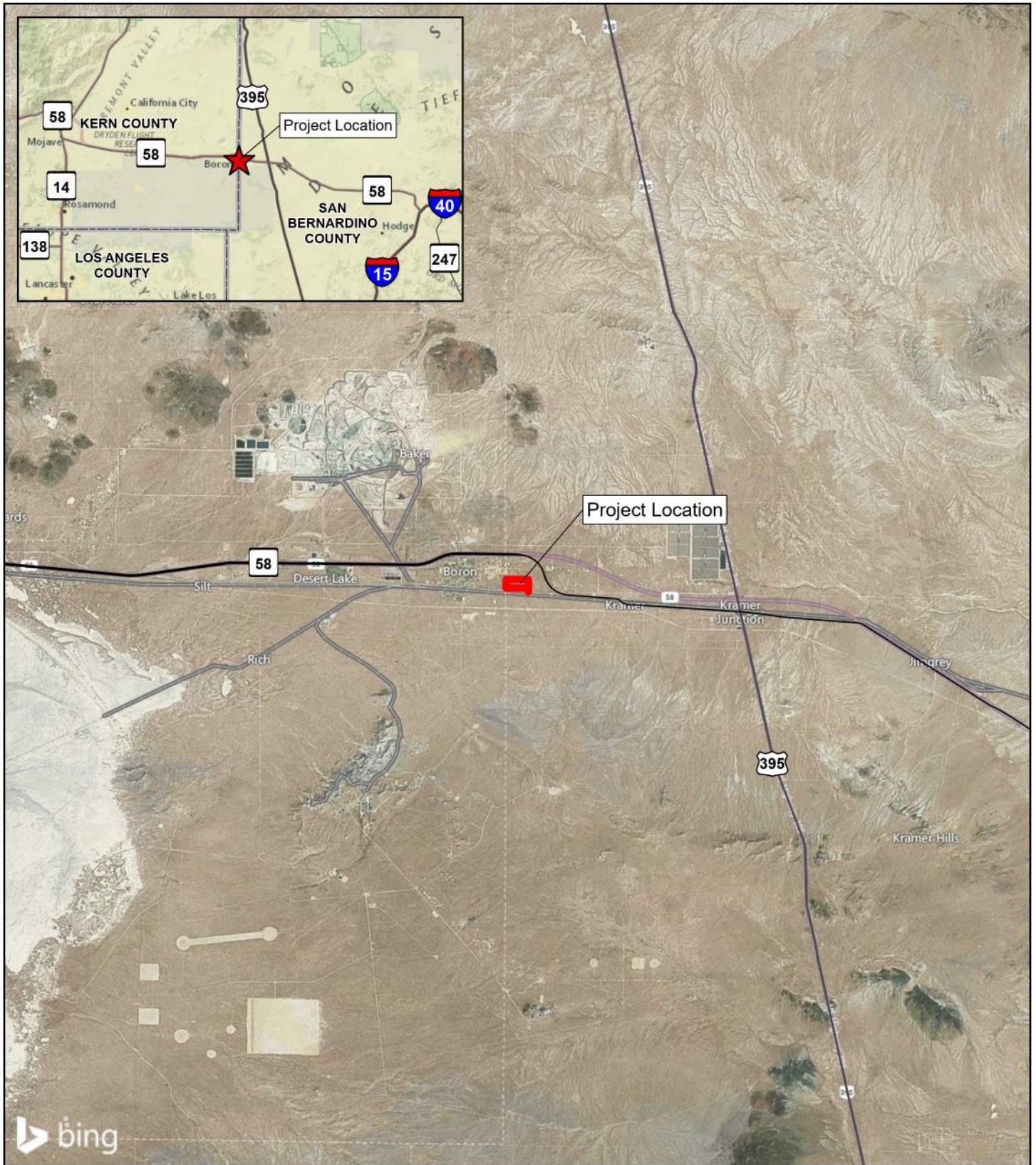
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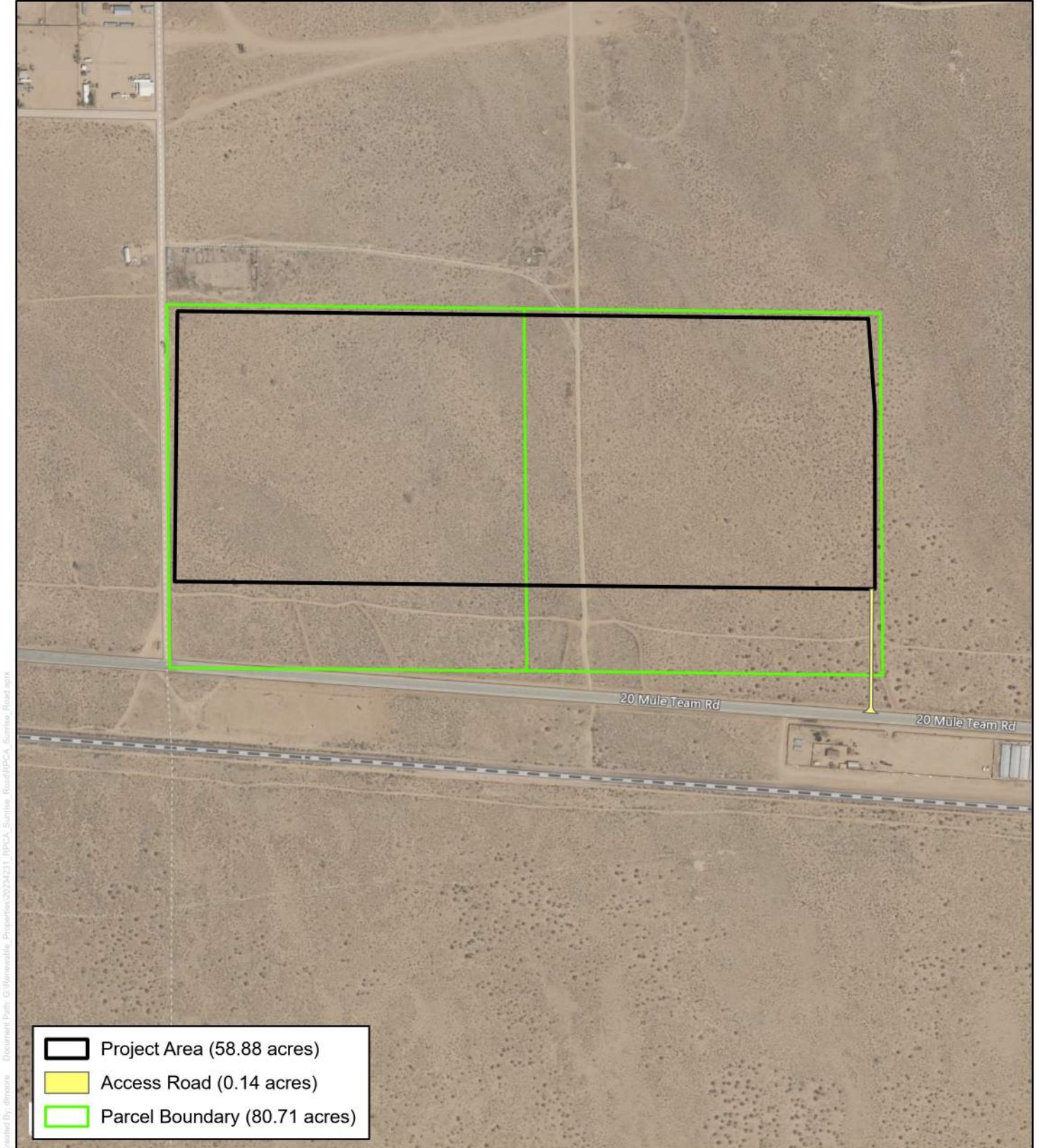
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Kilometers



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Figure 1: Regional Vicinity
 Sunrise Road Solar
 Project – Biological
 Resources Assessment
 San Bernardino County, California



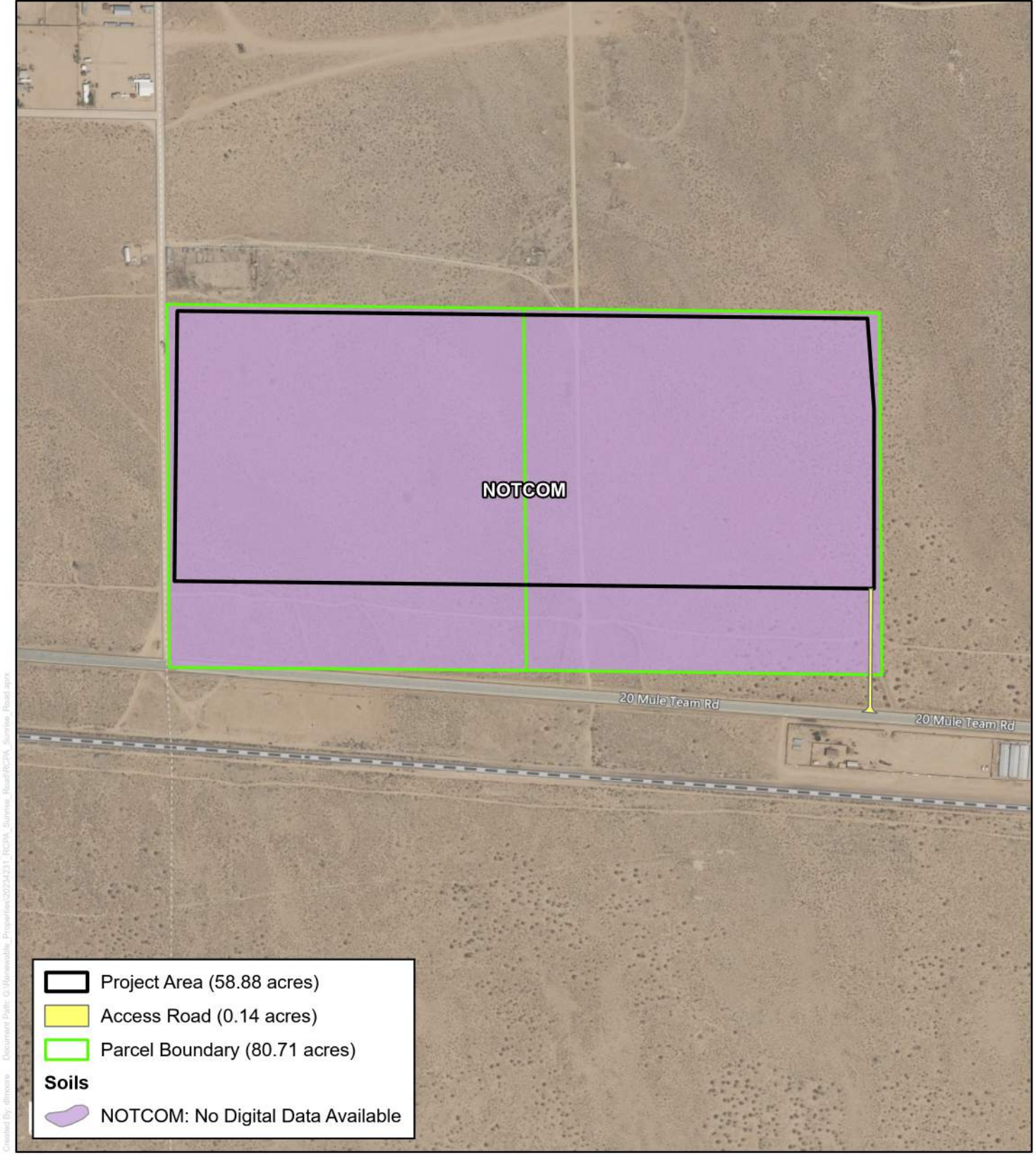


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Scale 1:6,000
1 inch = 500 feet

Figure 2: Project Area
Sunrise Road Solar Project –
Biological Resources Assessment
San Bernardino County, California



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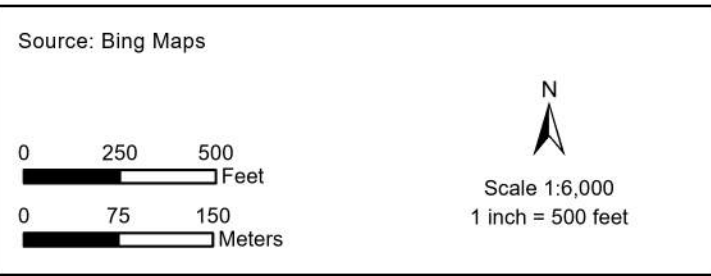
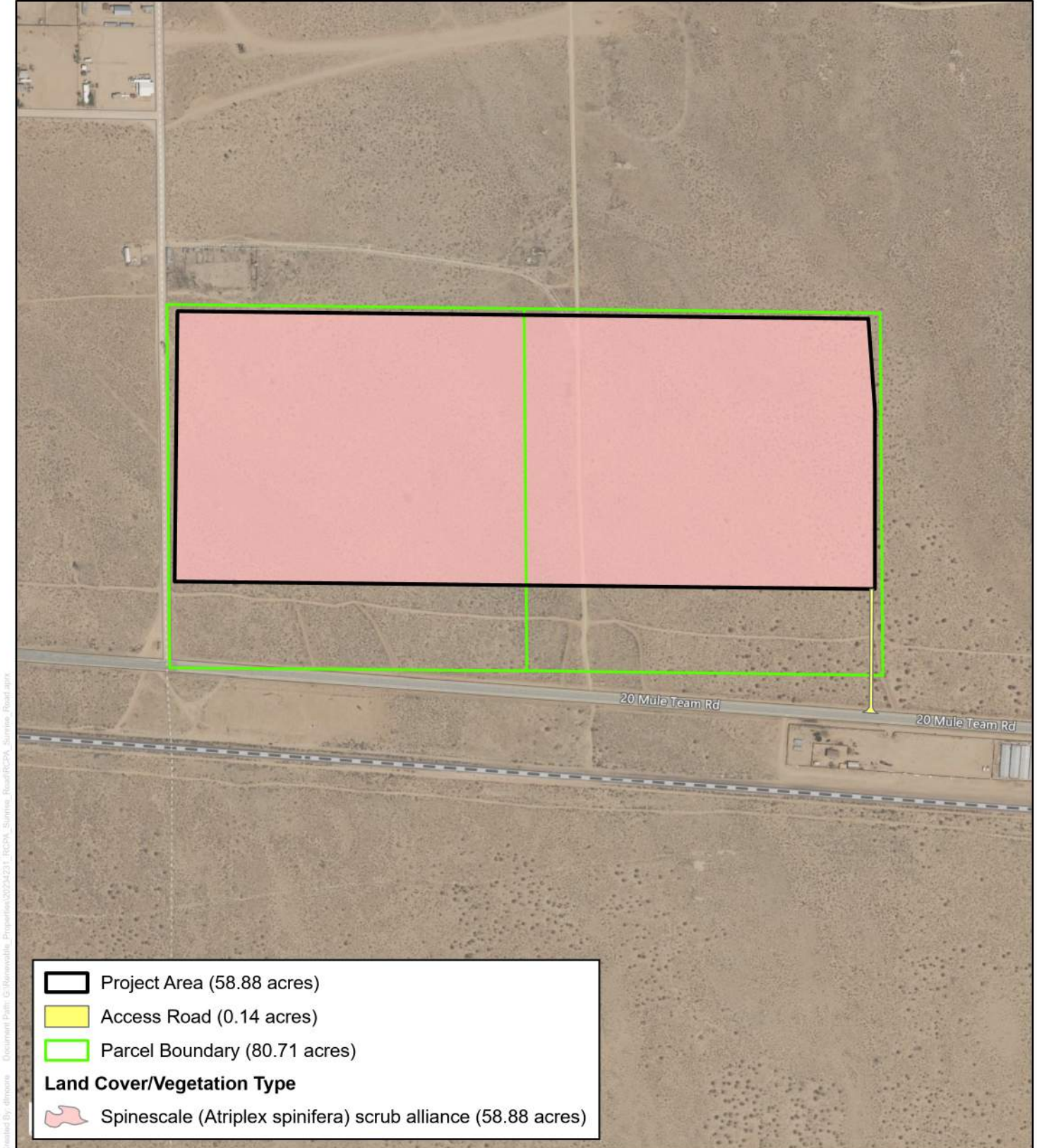


Figure 3: Soils
Sunrise Road Solar Project –
Biological Resources Assessment
San Bernardino County, California



Bright People. Right Solutions.



Source: Bing Maps

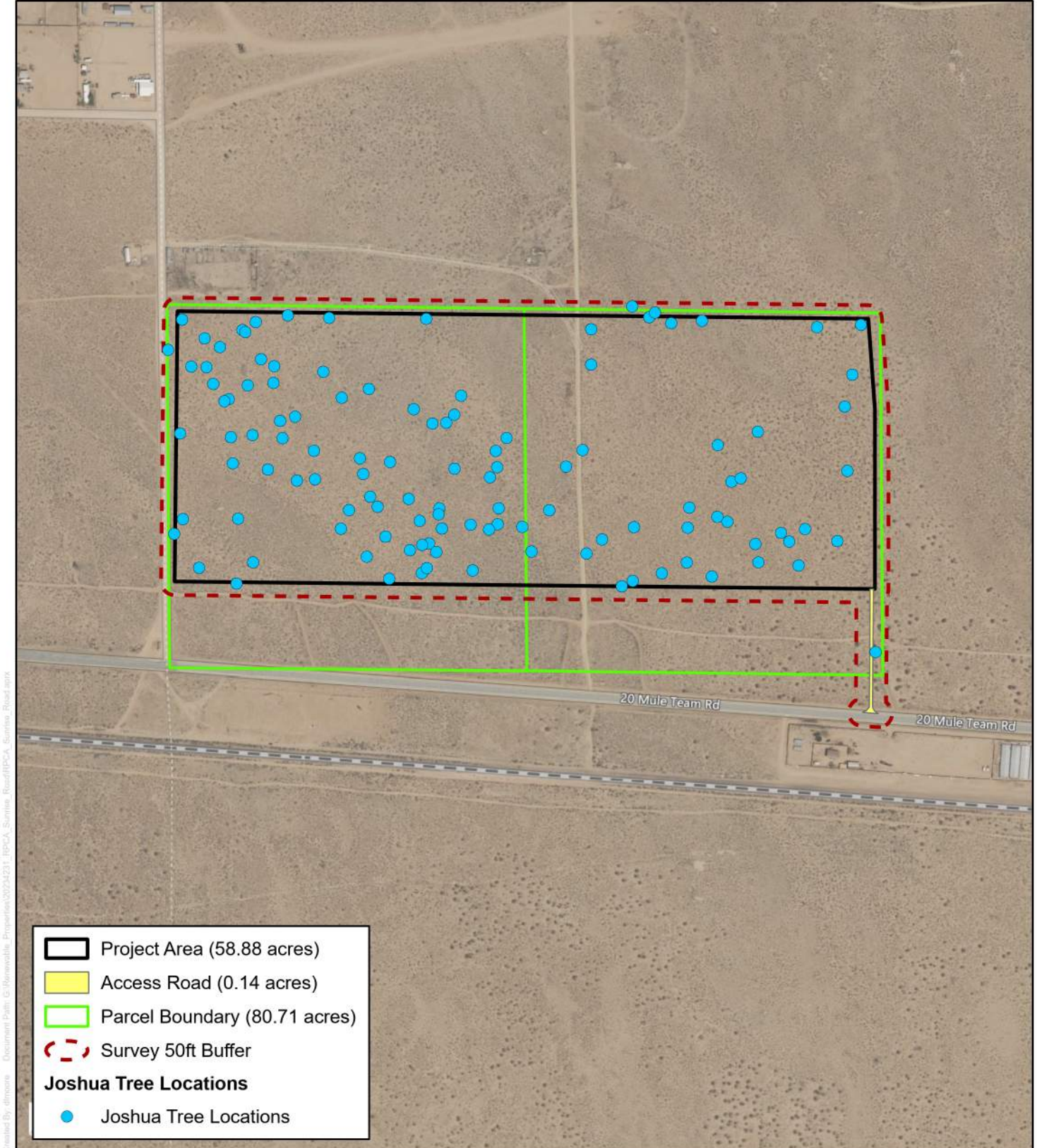
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1 inch = 500 feet

Figure 4: Vegetation Communities
 Sunrise Road Solar Project –
 Biological Resources Assessment
 San Bernardino County, California



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	Project Area (58.88 acres)
	Access Road (0.14 acres)
	Parcel Boundary (80.71 acres)
	Survey 50ft Buffer
Joshua Tree Locations	
	Joshua Tree Locations



Source: Bing Maps

0 250 500 Feet

0 75 150 Meters

N

Scale 1:6,000
1 inch = 500 feet

Figure 5: Western Joshua Tree Sunrise Road Solar Project – Biological Resources Assessment San Bernardino County, California



Photo 1. Looking southeast from northwest corner

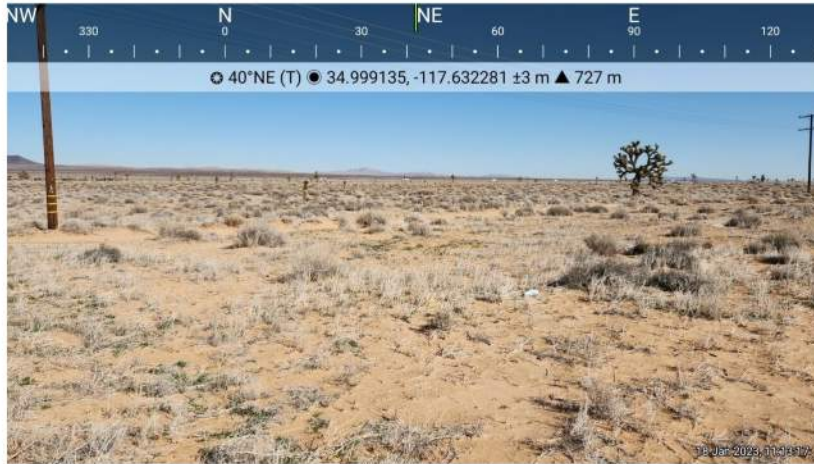


Photo 2. Looking northeast from southwest corner



Photo 3. Looking south from northern boundary

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Project Location

Figure 6: Photos Page 1 of 3
 Sunrise Road Solar Project –
 Biological Resources Assessment
 San Bernardino County, California





Photo 4. Looking northwest from southeast corner



Photo 5. Looking north from southern boundary



Photo 6. Looking west from northeast corner

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Figure 6: Photos Page 2 of 3
 Sunrise Road Solar Project –
 Biological Resources Assessment
 San Bernardino County, California





Photo 7. Proposed entrance facing north



Photo 8. Possible desert tortoise burrow facing southeast

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Figure 6: Photos Page 3 of 3
 Sunrise Road Solar Project –
 Biological Resources Assessment
 San Bernardino County, California



APPENDIX A

Special-Status Wildlife Species with Known or Potential Occurrence in the Vicinity of the Sunrise Road Solar Project in San Bernardino County, California

Common Name	Scientific Name	Federal/State Status ¹	Habitat Associations	Potential to Occur in the Project Area ²
Invertebrates				
monarch – California overwintering population	<i>Danaus plexippus</i> (pop. 1)	None/None	Monarch adults make massive, multi-generation migrations from August-October, flying south thousands of miles to hibernate along the California coast and in central Mexico. Monarchs stop to feed on flower nectar and to roost together at night. During warm winter days, the butterflies may take moisture and flower nectar. Most mating happens before they journey north in the spring, when females lay single eggs along the way under host plant leaves (<i>Asclepias</i> sp.); caterpillars eat flowers and leaves. Overwintering sites along the California coast are important for conservation of this species.	Low potential to occur. Suitable floral resources are sparse in the Project Area, and there are no documented occurrences within the 9-quad search area.
crotch bumblebee	<i>Bombus crotchii</i>	None/Candidate Endangered	Crotch bumble bee was historically common throughout much of the southern two-thirds of California, but now appears to be absent from most of the state. Most bumble bees are primitively eusocial insects that live in colonies composed of a queen, workers, and, near the end of the season, reproductive members of the colony (new queens, or gynes, and males). Habitat requirements include availability of suitable colony nesting sites, floral resources to obtain nectar and pollen throughout the duration of the colony period (spring, summer and fall), and suitable overwintering sites for queens.	Low potential to occur. Suitable floral resources are sparse in the Project Area, and the nearest documented occurrence is approximately 7 miles southeast of the Project Area from the 1960's.
Amphibians and Reptiles				
desert tortoise	<i>Gopherus agassizii</i>	Threatened/Threatened	Desert tortoise occurs in arid and semi-arid habitats in the Mojave and Sonoran Deserts, including sandy or gravelly locations along riverbanks, washes, sandy dunes, canyon bottoms, desert oases, rocky hillsides, creosote flats and hillsides. It spends most of its life in underground burrows dug to escape the desert heat.	Moderate potential to occur. There is suitable habitat for this species in the Project Area and there are documented occurrences of this species within and adjacent to the site. A burrow that could support desert tortoise was observed during the field survey.
Birds				
burrowing owl	<i>Athene cunicularia</i>	None/ SSC	Burrowing owl utilizes abandoned ground squirrel burrows in open habitats, grasslands, and disturbed areas, typically on levees, mounds or areas where there are unobstructed views of possible predators such as raptors or foxes. Prey items include insects, small mammals, reptiles and amphibians.	Moderate potential to occur. There is suitable habitat for this species in the Project Area and there are documented occurrences of this species within 10 miles of the site.

APPENDIX A

Special-Status Wildlife Species with Known or Potential Occurrence in the Vicinity of the Sunrise Road Solar Project in San Bernardino County, California

Common Name	Scientific Name	Federal/State Status ¹	Habitat Associations	Potential to Occur in the Project Area ²
golden eagle	<i>Aquila chrysaetos</i>	BGEPA/FP	Golden eagle is found in open country, including mountains, foothills, and plains. In the west, they are found over prairie, rangeland, or desert. They are very wide-ranging in winter, and more restricted to areas with good nest sites in summer, which consist of cliff ledges or large trees.	Low potential to occur. Although golden eagle could potentially forage in the Project Area, suitable nesting habitat is not present within or in the vicinity of the site. The nearest documented occurrence is approximately 16 miles northwest of the site.
Loggerhead shrike	<i>Lanius ludovicianus</i>	BCC/SSC	Year-round resident in the southern deserts. Prefer open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches, and require impaling sites, such as thorns, sharp twigs, or barbed wire, for skewering and manipulating their prey.	Present. Suitable habitat on site. Observed during focused survey efforts. Potential for nesting.
California horned lark	<i>Eremophila alpestris alpestris</i>	None/CDFW WL	Year-round resident in open habitats. Forages on seeds and insects. Nests on open ground.	Present. Suitable habitat on site. Observed during focused survey efforts. Potential for nesting.
Mammals				
Mohave ground squirrel	<i>Xerospermophilus mohavensis</i>	None/Threatened	Mohave ground squirrel inhabits the western Mojave Desert in portions of Inyo, Kern, Los Angeles, and San Bernardino counties. It can occupy Joshua tree woodlands, creosote scrub, saltbush scrub and Mojave mixed woody scrub. Typical forage plants are those that meet nutritional and water content requirements, including shrubs such as winterfat (<i>Krascheninnikovia lanata</i>), spiny hopsage (<i>Grayia spinosa</i>), and boxthorn (<i>Lycium</i> spp.). Preferred annuals include calliopsis (<i>Coreopsis</i> sp.), desert five-spot (<i>Eremalche rotundifolia</i>), milk vetch (<i>Astragalus</i> spp.) and lupine (<i>Lupinus</i> spp.).	Moderate potential to occur. There is suitable habitat for this species in the Project Area and there are several documented occurrences of this species within two miles of the site.
American badger	<i>Taxidea taxus</i>	None/SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Moderate. Preferred habitat is present although not observed during camera trapping or other focused surveys.
Desert kit fox	<i>Vulpes macrotis arsipus</i>	None/Protected Fur Bearer	Occurs in open desert habitats of the southwest. Needs sufficient prey source and friable soils. Preys on burrowing rodents, lagomorphs, insects, reptiles, birds, bird eggs, and vegetation. Digs burrows/dens.	Present. Observed during camera trapping surveys. Potential burrows on site.

¹Status Legend:

SSC: Species of Special Concern (CDFW)

FP: Fully Protected (CDFW)

APPENDIX A

Special-Status Wildlife Species with Known or Potential Occurrence in the Vicinity of the Sunrise Road Solar Project in San Bernardino County, California

BGEPA: Bald and Golden Eagle Protection Act (USFWS)

WL: Watch List

BCC: Bird of Conservation Concern (USFWS)

² Definitions Regarding Potential for Occurrence

- Not expected to occur – Habitat on and adjacent to the Project Area is unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, and disturbance regime).
- Low – Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of poor quality. The species is not likely to be found on the site.
- Moderate – Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- High – All of the habitat components meeting the species requirements are present, and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
- Present – Species is observed on the site or has been recorded (i.e., CNDDDB, or other reports) on the site recently.

Sources:

California Department of Fish and Wildlife (CDFW). 2023. California Natural Diversity Database (CNDDDB). Rarefind, Version 5 (Commercial Subscription). Accessed January 2023. Sacramento, California. Website <https://apps.wildlife.ca.gov/rarefind/view/RareFind.aspx#>.

United States Fish and Wildlife Service (USFWS). 2023. Information for Planning and Consultation (IPaC). The Environmental Conservation Online System. Accessed January 2023. Sacramento, California. Website <https://ecos.fws.gov/ipac/>.

APPENDIX B

Special-Status Plant Species with Known or Potential Occurrence in the Vicinity of the Sunrise Road Solar Project in San Bernardino County, California

Scientific Name	Common Name	Status (Federal/State, CRPR) ¹	Life Form, Primary Habitat Associations, Elevation Range (feet), Blooming Period	Potential to Occur ²
<i>Cymopterus deserticola</i>	desert cymopterus	None/None, CRPR 1B.2	Perennial herb found in Joshua tree woodland, Mojavean desert scrub on fine to coarse, loose, sandy soil or flats in old dune areas with well-drained sand. Elevation 2,065-4,920 feet. Blooms March-May.	Moderate potential to occur. Suitable habitat for this species is present within and adjacent to the Project Area and there are documented occurrences of this species adjacent to the parcel.
<i>Delphinium recurvatum</i>	recurved larkspur	None/None, CRPR 1B.2	Perennial herb found in chenopod scrub, valley and foothill grassland, and cismontane woodland on alkaline soils; often in valley saltbush or valley chenopod scrub. Elevation 10-2,590 feet. Blooms March-June.	Not expected to occur. Suitable habitat for this species is not present within or adjacent to the Project Area.
<i>Eremothera boothii</i> ssp. <i>boothii</i>	Booth's evening-primrose	None/None, CRPR 2B.3	Annual herb found in Joshua tree woodland and Pinyon and juniper woodland. Elevation 2,675-7,875 feet. Blooms April-September.	Low potential to occur. Although potentially suitable habitat for this species is present within and adjacent to the Project Area, the nearest documented occurrence is approximately 8 miles north of the site and is from the 1980's.
<i>Eriophyllum mohavense</i>	Barstow woolly sunflower	None/None, CRPR 1B.2	Annual herb found in chenopod scrub, Mojavean desert scrub, and desert playas, mostly in open, silty or sandy areas with saltbush scrub or creosote bush scrub. Elevation 1,640-3,150 feet. Blooms March-May.	Moderate potential to occur. Potentially suitable habitat for this species may be present within some portions of the Project Area, and there are documented occurrences of this species within 1.5 miles of the site.
<i>Loeflingia squarrosa</i> var. <i>artemisiarum</i>	sagebrush loeflingia	None/None, CRPR 2B.2	Annual herb found in Great Basin scrub, Sonoran Desert scrub, and desert dunes (sandy flats and dunes, sandy areas around clay slicks). Elevation 2,295- 5,300 feet. Blooms April-May.	Moderate potential to occur. Potentially suitable habitat for this species may be present within some portions of the Project Area, and there are documented occurrences of this species within 3 miles of the site.

¹ **Status Legend:**

CRPR 1A: Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere

CRPR 1B: Plants Rare, Threatened, or Endangered in California and Elsewhere

APPENDIX B (Continued)

CRPR 2A: Plants Presumed Extirpated in California, But More Common Elsewhere

CRPR 2B: Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

² Definitions Regarding Potential for Occurrence

- Not expected to occur – Habitat on and adjacent to the site is unsuitable for the species life history requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, soils, site history, and disturbance regime).
- Low – Few of the habitat components meeting the species life history requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of poor quality. The species is not likely to be found on the site.
- Moderate – Some of the habitat components meeting the species life history requirements are present, there may be documented occurrences of the species in the vicinity of the site, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- High – All of the habitat components meeting the species life history requirements are present, there may be documented occurrences of the species on or adjacent to the site and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
- Present – Species was observed on the site.

Sources:

California Native Plant Society (CNPS). 2023. Inventory of Rare and Endangered Plants online edition, v9.5). California Native Plant Society. Sacramento, CA. Accessed January 2023.

California Department of Fish and Wildlife (CDFW). 2023. California Natural Diversity Database (CNDDDB). Rarefind, Version 5 (Commercial Subscription). Accessed January 2023. Sacramento, California. Website <https://apps.wildlife.ca.gov/rarefind/view/RareFind.aspx#>.