Biological Report

for

Canna Organic Farm

Cannabis Cultivation Minor Use Permit
DRC2019-00049

APN 090-051-042
Nipomo, San Luis Obispo County

Prepared for

Cisnero Future, LLC
125 W. Mill St.
Santa Margarita, CA 93458

by

ALTHOUSE AND MEADE, INC.
BIOLOGICAL AND ENVIRONMENTAL SERVICES
1602 Spring Street
Paso Robles, CA 93446
(805) 237-9626

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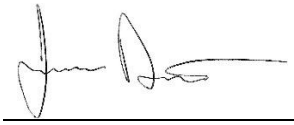
1240.01

Reporting Biologists:

Jason Dart
Principle Biologist
Althouse and Meade, Inc.
1602 Spring Street
Paso Robles, CA 93446
(805) 237-9626
jason@althouseandmeade.com

Kristen Andersen
Biologist III
Althouse and Meade, Inc.
1602 Spring Street
Paso Robles, CA 93446
(805) 237-9626
kristena@althouseandmeade.com

I certify that this Biological Report was prepared according to the Guidelines established by the County of San Luis Obispo Department of Planning and Building and that the statements furnished in the report and associated maps are true and correct to the best of my knowledge and belief.



Jason Dart — March 18, 2020 (Date)

Kristen Andersen — March 18, 2020 (Date)

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Cover Page: Photo of existing cropland habitat with dominant charlock mustard (*Sinapis arvensis*), view west. February 12, 2020.

SYNOPSIS

- This biological report describes the study of biological resources on a 9.0-acre portion (Study Area) of a 36.4-acre property located in Nipomo, San Luis Obispo County, California. The Study Area is within Assessor's Parcel Number (APN) 090-051-042.
- The proposed project (Project) entails installation of an approximately 2.5-acre cannabis cultivation site, including nine greenhouse structures, production nursery, and processing building. Additional ancillary components include a storage facility, compost area, retention pond and parking spaces.
- Three habitat types identified and mapped within the Study Area are cropland, riparian, and ruderal habitat.
- Botanical surveys conducted in February 2020 identified 28 species, subspecies, and varieties of vascular plants in the Study Area. One special status plant species has low potential to occur in the Study Area: Cambria morning glory (*Calystegia subacaulis* subsp. *episcopalis*). No special status plants were observed in the Study Area. A spring botanical survey will be conducted in 2020 and an addendum to this report will be prepared.
- Wildlife surveys performed in the Study Area detected 15 animal species: one invertebrate, one reptile, 11 birds, and two mammals. One special status animal species has low potential to occur foraging in the Study Area: prairie falcon (*Falco mexicanus*). No special status animals were observed in the Study Area and no further wildlife surveys are recommended.
- Biological resources that could be impacted by the Project include cropland and ruderal habitat, special status plants with potential to occur, and nesting birds, and prairie falcon. Mitigation recommendations are provided to reduce potential impacts to sensitive biological resources. Appropriate mitigation measures will be recommended in the Addendum to this report for any special status plants detected during spring 2020 botanical surveys.

1 INTRODUCTION

1.1 Purpose

The purpose of this report is to provide results from the study of biological resources on an approximately 9.0-acre site (Study Area) in San Luis Obispo County, California (Figure 1). This report also provides analysis of potential impacts to biological resources from the proposed cannabis cultivation project (Project). Results include habitat assessment, winter botanical and wildlife inventory, special status species database search, and literature review. Discussion of special status species that have potential to occur within the Study Area, or be affected by the proposed Project, is also included. The effects of the proposed Project on biological resources are evaluated and mitigation recommendations are outlined.

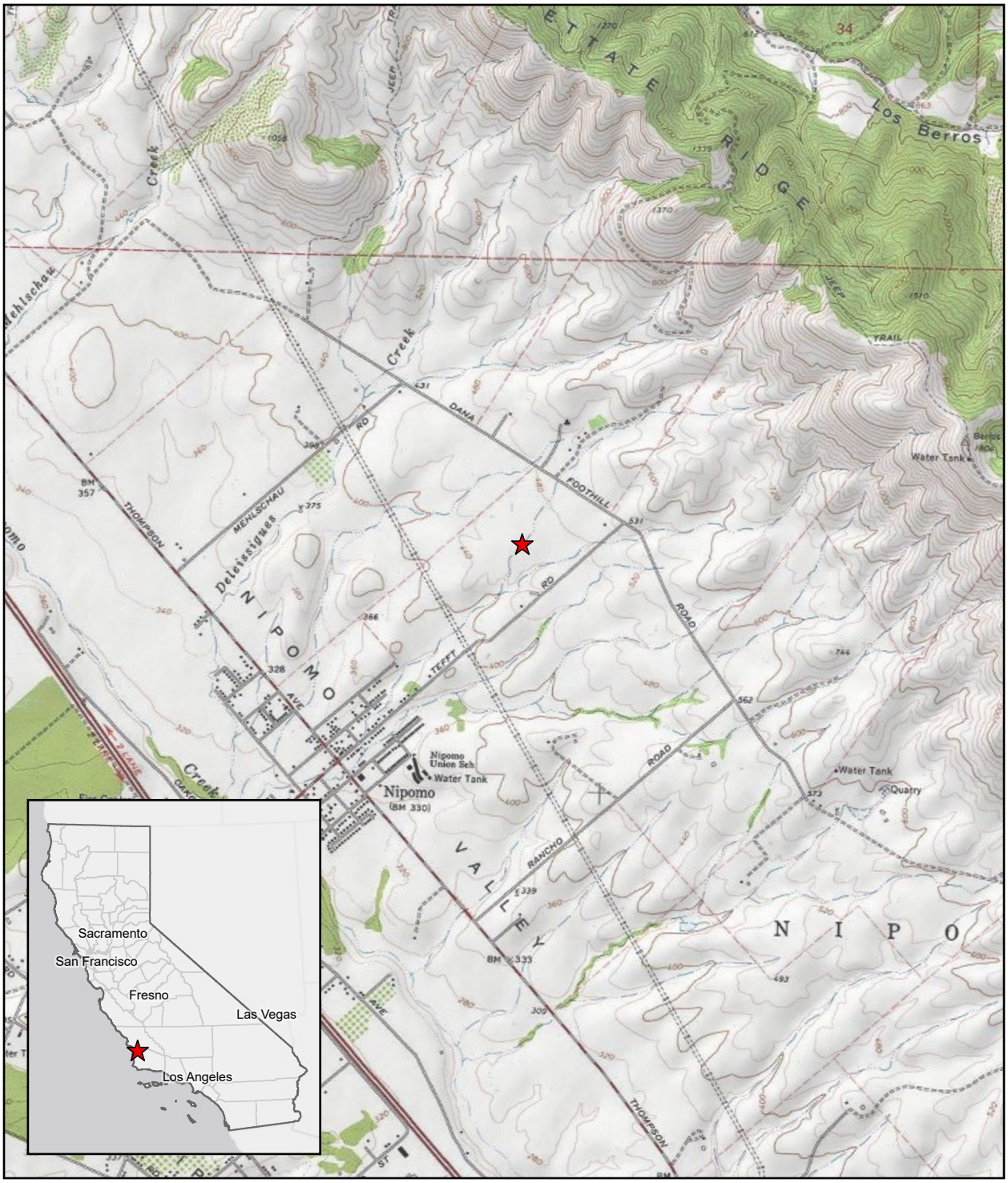
1.2 Location and Regional Context

The Study Area is situated approximately 1.3 miles east of Highway 101 on Tefft Street in Nipomo Valley, just southwest of Temettate Ridge. Approximate coordinates for the center of the Study Area are 35.049323° N, -120.467026° W (WGS84) in the United States Geological Survey (USGS) 7.5-minute topographic quadrangle Nipomo (Figure 1). Elevation ranges from approximately 410 to 465 feet above mean sea level. One ephemeral drainage transects the Study Area that seasonally conveys water from Temettate Ridge southwest to Nipomo Creek (Figure 2). The Study Area is an agriculturally zoned parcel (Assessor's Parcel Number 090-051-042), surrounded by farmland.

1.3 Project Description

The proposed project includes an approximately 2.5-acre cannabis cultivation site that will consist of nine 30- by 101.5-foot greenhouse structures (totaling 27, 405 square feet; approximately 0.6 acres) dedicated for mature cannabis plant cultivation and a 20- by 80-foot ancillary nursery (approximately 0.16 acres) dedicated to seed production and immature plants. A proposed 1,000-square foot processing building will be used for drying and trimming cannabis, in addition to record storage and other distribution activities. An approximately 2,300-square foot area is proposed for composting cannabis waste with organic soils. An approximately 1,400-square foot parking lot is proposed to the west of the compost area and will consist of eight paved concrete spaces. Other subsidiary structures include a storage container (320 square feet), farm supply shed (144 square feet), a 1,000-gallon septic tank and leach field system, and installation of a new chain-link fence with green vinyl slats to surround the cannabis operation area. Expansion of the existing avocado orchard will occur along the southeast portion of the Study Area, parallel with Tefft Street, and into the southwest corner of the property. A retention pond is proposed within the cropland habitat in the southwest portion of the Study Area and will include a concrete drain inlet and rock erosion protection with filter fabric below (refer to site plan in Appendix C).

Figure 1. United States Geological Survey Topographic Map



Legend

★ Project Location

N

0 2,000 4,000 Feet

514 East Tefft Street
Map Center: 120.46571°W 35.05198°N
Nipomo, San Luis Obispo County

USGS Quadrangle: Nipomo

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Map Updated:
March 17, 2020 03:22 PM by JBB

1.4 Regulatory Framework

Standards for environmental protection and restoration, in the form of laws and regulations, are created within three different organizational levels of government: Federal, State, and Local. Entities exist within each level to create and enforce regulations that help ensure protection of specific and pertinent regional issues threatening ecosystems and environments. The following regulations are applicable to the proposed Project.

1.4.1 Federal Law and Regulations

Bald and Golden Eagle Protection Act. The Bald and Golden Eagle Protection Act (BGEPA) prohibits anyone, without a permit issued by the Secretary of the Interior, from taking (pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb) bald or golden eagles, including their parts, nests, or eggs. This includes substantially interfering with normal breeding, feeding, or sheltering behavior. Activities that may result in the take of a bald or golden eagle require permits; the three activities eligible for permits include to remove or relocate an eagle nest; to transport, exhibit, collect, or control eagles or eagle parts, and for incidental take of eagles.

Clean Water Act. The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The purpose of the CWA is to restore and maintain the chemical, physical, and biological integrity of all waters of the U.S. Permitting is required for filling waters of the U.S. (including wetlands). Permits may be issued on an individual basis or may be covered under approved nationwide permits.

Endangered Species Act. The federal Endangered Species Act (FESA) provides the legal framework for the listing and protection of species (and their habitats) identified as being endangered or threatened with extinction. "Critical Habitat" is a term within the FESA designed to guide actions by federal agencies and is defined as "an area occupied by a species listed as threatened or endangered within which are found physical or geographical features essential to the conservation of the species, or an area not currently occupied by the species which is itself essential to the conservation of the species." Actions that jeopardize endangered or threatened species and/or critical habitat are considered a 'take' under the FESA. "Take" under federal definition means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.

Projects that would result in "take" of any federally listed threatened or endangered species, or critical habitats, are required to obtain permits from the USFWS through either Section 7 (interagency consultation with a federal nexus) or Section 10 (Habitat Conservation Plan) of FESA, depending on the involvement by the federal government in permitting and/or funding of the project. Through Section 10, it is required to prepare a Habitat Conservation Plan (HCP) to be approved by the United States Fish and Wildlife Service (USFWS), which results in the issuance of an Incidental Take Permit (ITP). Through Section 7, which can only occur when a separate federal nexus in a project exists (prompting interagency consultation), a consultation by the various federal agencies involved can take place to determine appropriate actions to mitigate negative effects on endangered and threatened species and their habitat.

Migratory Bird Treaty Act. All migratory, non-game bird species that are native to the U.S. or its territories are protected under the federal Migratory Bird Treaty Act (MBTA) of 1918 (50 C.F.R. Section 10.13), as amended under the Migratory Bird Treaty Reform Act of 2004. The

MBTA makes it illegal to purposefully take (pursue, hunt, shoot, wound, kill, trap, capture, or collect) any migratory bird, or the parts, nests, or eggs of such a bird, except under the terms of a valid Federal permit. Migratory non-game native bird species are protected by international treaty under the federal MBTA.

1.4.2 State Law and Regulations

California Endangered Species Act. The California Endangered Species Act (CESA), similar to FESA, contains a process for listing of species and regulating potential impacts to listed species. State threatened and endangered species include both plants and wildlife, but do not include invertebrates. The designation "rare species" applies only to California native plants. State threatened and endangered plant species are regulated largely under the Native Plant Preservation Act in conjunction with the CESA. State threatened and endangered animal species are legally protected against "take." The CESA authorizes the California Department of Fish and Wildlife (CDFW) to enter into a memorandum of agreement for take of listed species to issue an incidental take permit for a state-listed threatened and endangered species only if specific criteria are met. Section 2080 of the CESA prohibits the take of species listed as threatened or endangered pursuant to the Act. Section 2081 allows CDFW to authorize take prohibited under Section 2080 provided that: 1) the taking is incidental to an otherwise lawful activity; 2) the taking will be minimized and fully mitigated; 3) the applicant ensures adequate funding for minimization and mitigation; and 4) the authorization will not jeopardize the continued existence of the listed species.

California Environmental Quality Act (CEQA). CEQA defines a "project" as any action undertaken from public or private entity that requires discretionary governmental review (a non-ministerial permittable action). All "projects" are required to undergo some level of environmental review pursuant to CEQA, unless an exemption applies. CEQA's environmental review process includes an assessment of existing resources, broken up by categories (i.e., air quality, aesthetics, etc.), a catalog of potential impacts to those resources caused by the proposed project, and a quantifiable result determining the level of significance an impact would generate. The goal of environmental review under CEQA is to avoid or mitigate impacts that would lead to a "significant effect" on a given resource; section 15382 of the CEQA Guidelines defines a "significant effect" as

> *a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment, but may be considered in determining whether the physical change is significant.*

Public agencies are required to implement CEQA and execute jurisdiction to determine when applicable activities are or are not subject to CEQA. A public agency with the most prominent nexus and jurisdiction to a project is called the lead agency. The lead agencies determine the scope of what is considered an impact and what constitutes a "significant effect". "Biological resources" is one of the varying categories considered during environmental review through CEQA. A lead agency can require a biological assessment to be prepared to report on existing biological resources and recommended mitigation measures that will reduce or lessen potential negative impacts to those biological resources. The questions listed in CEQA's Appendix G: Biological Resources section, which are used to guide assessment of impacts to biological resources are as follows:

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

The lead agency has the final determination over whether a project is or is not permissible, based upon the environmental review, completed requirements and environmental documentation, and their judgement that the project will not have a significant effect on the environment, or that all significant effects have been mitigated for.

California Fish and Game Code (CFGC). The California Fish and Game Code (CFGC) is one of the 29 legal codes that form the general statutory law of California. A myriad of statutes regarding fish and game are specified in the CFGC; the following codes are specifically relevant to the proposed Project:

California Native Plant Protection Act. Sections 1900-1913 of the California Fish and Game Code contain the regulations of the Native Plant Protection Act of 1977. The intent of this act is to help conserve and protect rare and endangered plants in the state. The act allowed the CFGC to designate plants as rare or endangered.

Lake and Streambed Alteration. Section 1602 of the CFGC requires any person, state, or local governmental agency to provide advance written notification to CDFW prior to initiating any activity that would: 1) divert or obstruct the natural flow of, or substantially change or remove material from the bed, channel, or bank of any river, stream, or lake; or 2) result in the disposal or deposition of debris, waste, or other material into any river, stream, or lake. The state definition of "lakes, rivers, and streams" includes all rivers or streams that flow at least periodically or permanently through a well-defined bed or channel with banks that support fish or other aquatic life, and watercourses with surface or subsurface flows that support or have supported riparian vegetation.

Nesting Birds. Sections 3503, 3503.5 and 3513 of CFGC states that it is "unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto," and "unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird" unless authorized.

Regional Water Quality Control Board. The Regional Water Quality Control Board (RWQCB) not only regulates impacts to water quality in federal waters of the U.S. under Section

401 of the Clean Water Act, but they also regulate any isolated waters that are impacted under the state Porter Cologne Act utilizing a Waste Discharge Requirement. Discharge of fill material into waters of the State not subject to the jurisdiction of the USACE pursuant to Section 401 of the Clean Water Act may require authorization pursuant to the Porter Cologne Act through application for waste discharge requirements or through waiver of waste discharge requirements.

The State Water Board has initiated a Cannabis Cultivation Program to establish principles and guidelines (requirements) for cannabis cultivation activities to protect water quality and instream flows. To implement the program, the Cannabis Cultivation General Order was adopted and provides for a permitting pathway for cultivators. The General Order provides criteria to evaluate the threat to water quality based on site conditions and waterway classification. More information about the State Water Board Cannabis Cultivation can be found at http://www.waterboards.ca.gov/water_issues/programs/cannabis.

1.4.3 Local Policies and Regulations

San Luis Obispo County Land Use Ordinance. Through the adoption of Chapter 22.40 (Cannabis Activities) of the County Land Use Ordinance (LUO), certain commercial cannabis activities may have an impact on the environment, requiring discretionary approval of a County land use permit. The land use permit would establish conditions for the proposed cannabis operation that is consistent with strict State and Federal enforcement guidelines. Approval of a land use permit would entitle the use itself and would require separate associate permits such as grading and/or construction permits.

Setbacks are required as set forth in Section 22.10.140 of the LUO to protect riparian and wetland habitat: *All structures and impervious surfaces shall be setback at least 50 feet from the upland extent of riparian vegetation of a watercourse, and 100 feet from any wetland.*

San Luis Obispo County Oak Tree Ordinance. Chapter 22.58 of the County of San Luis Obispo Land Use Ordinance establishes the Oak Woodland Ordinance, which applies to inland portions of the unincorporated areas of San Luis Obispo County. Under this ordinance a Minor Use Permit is required to remove between 1-3 acres of oak woodland habitat over a ten-year period, and a Conditional Use Permit is required to remove more than 3 acres over a ten-year period. Additionally, a Minor Use Permit is required to remove Heritage Oaks, defined as oak trees with a 48-inch or greater diameter at breast height (DBH) separated from other stands of oak woodland by at least 500 feet.

1.5 Special Status Species and Sensitive Habitat Regulations

For purposes of this Biological Report, special status species are those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the USFWS under the FESA; those listed or proposed for listing as rare, threatened, or endangered by the CDFW under the CESA; animals designated as "Species of Special Concern," "Fully Protected," or "Watch List" by the CDFW; and plants with a California Rare Plant Rank (CRPR) of 1, 2, 3, or 4. In the following sections, further details are provided to highlight the different guidelines and qualifications that are used to help identify special status species in this report.

1.5.1 California Natural Diversity Database (CNDDB)

"Special Plants" and “Special Animals” are broad terms used to refer to all the plant and animal taxa inventoried by the CNDDB, regardless of their legal or protection status (CNDDB 2019a and 2019b). The Special Plants list includes vascular plants, high priority bryophytes (mosses, liverworts, and hornworts), and lichens. The Special Animals list is also referred to by the California Department of Fish and Wildlife (CDFW) as the list of “species at risk” or “special status species.”

According to the CNDDB (2019a, 2019b), Special Plants and Animals lists include: taxa that are officially listed or proposed for listing by California or the Federal Government as Endangered, Threatened, or Rare; taxa which meet the criteria for listing, as described in Section 15380 of CEQA Guidelines; taxa deemed biologically rare, restricted in range, declining in abundance, or otherwise vulnerable; population(s) in California that may be marginal to the taxon’s entire range but are threatened with extirpation in California; and/or taxa closely associated with a habitat that is declining in California at a significant rate. Separately, the Special Plants List includes taxa listed in the California Native Plant Society’s Inventory of Rare and Endangered Plants of California, as well as taxa determined to be Sensitive Species by the Bureau of Land Management, U.S. Fish and Wildlife Service, or U.S. Forest Service. The Special Animals List distinctively includes taxa considered by the CDFW to be a Species of Special Concern (SSC) and taxa designated as a special status, sensitive, or declining species by other state or federal agencies.

1.5.2 Federal and State Endangered Species Listings

The Federal and California Endangered Species Acts are the regulatory documents that govern the listing and protection of species, and their habitats, identified as being endangered or threatened with extinction (see Sections 1.4.1and 1.4.2). Possible listing status under both Federal and California ESA includes Endangered and Threatened (FE, FT, CE, or CT). Species in the process of being listed are given the status of either Proposed Federally Endangered/Threatened, Candidate for California Endangered/Threatened (PE, PT, CCE, or CCT). The CESA has one additional status: Rare (CR).

1.5.3 Global and State Ranks

Global and State Ranks reflect an assessment of the condition of the species (or habitats, see 1.5.6 below) across its entire range. Basic ranks assign a numerical value from 1 to 5, respectively for species with highest risk to most secure. Other ranking variations include rank ranges, rank qualifiers, and infraspecific taxon ranks. All Heritage Programs, such as the CNDDB use the same ranking methodology, originally developed by The Nature Conservancy and now maintained and recently revised by NatureServe. Procedurally, state programs such as the CNDDB develop the State ranks. The Global ranks are determined collaboratively among the Heritage Programs for the states/provinces containing the species. Rank definitions, where G represents Global and S represents State, are as follows:

- **G1/S1:** Critically imperiled globally/in state because of extreme rarity (5 or fewer populations).
- **G2/S2:** Imperiled globally/in state because of rarity (6 to 20 populations).

- **G3/S3:** Vulnerable; rare and local throughout range or in a special habitat or narrowly endemic (on the order of 21 to 100 populations).
- **G4/S4:** Apparently secure globally/in state; uncommon but not rare (of no immediate conservation concern).
- **G5/S5:** Secure; common, widespread, and abundant.
- **G#G#/S#S#:** Rank range - numerical range indicating uncertainty in the status of a species, (e.g., G2G3 more certain than G3, but less certain that G2).
- **G/S#?:** Inexact numeric rank
- **Q:** Questionable taxonomy - Taxonomic distinctiveness of this entity is questionable.
- **T#:** Infraspecific taxa (subspecies or varieties) – indicating an infraspecific taxon that has a lower numerical ranking (rarer) than the given global rank of species.

1.5.4 California Rare Plant Ranks

Plant species are considered rare when their distribution is confined to localized areas, their habitat is threatened, they are declining in abundance, or they are threatened in a portion of their range. The California Rare Plant Rank (CRPR) categories range from species with a low threat (4) to species that are presumed extinct (1A). All but a few species are endemic to California. All of them are judged to be vulnerable under present circumstances, or to have a high potential for becoming vulnerable. Threat ranks are assigned as decimal values to a CRPR to further define the level of threat to a given species. The rare plant ranks and threat levels are defined below.

- **1A:** Plants presumed extirpated in California and either rare or extinct elsewhere.
- **1B:** Plants rare, threatened, or endangered in California and elsewhere.
- **2A:** Plants presumed extirpated in California, but common elsewhere
- **2B:** Plants rare, threatened, or endangered in California, but more common elsewhere
- **4:** Plants of limited distribution - a watch list
- **0.1:** Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
- **0.2:** Moderately threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat)
- **0.3:** Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

1.5.5 California Department of Fish and Wildlife Animal Rank

The California Department of Fish and Wildlife (CDFW) assigns one of three ranks to Special Animals: Watch List (WL), Species of Special Concern (SSC), or Fully Protected (FP). Unranked species are referred to by the term Special Animal (SA).

Animals listed as Watch List (WL) are taxa that were previously designated as SSC, but no longer merit that status, or taxa that which do not yet meet SSC criteria, but for which there is concern and a need for additional information to clarify status.

Animals listed as California Species of Special Concern (SSC) may or may not be listed under California or federal Endangered Species Acts. They are considered rare or declining in abundance in California. The Special Concern designation is intended to provide the CDFW biologists, land planners, and managers with lists of species that require special consideration during the planning process to avert continued population declines and potential costly listing under federal and state endangered species laws. For many species of birds, the primary emphasis is on the breeding population in California. For some species that do not breed in California but winter here, emphasis is on wintering range. The SSC designation thus may include a comment regarding the specific protection provided such as nesting or wintering.

Animals listed as Fully Protected (FP) are those species considered by CDFW as rare or faced with possible extinction. Most, but not all, have subsequently been listed under the CESA or FESA. Fully Protected species may not be taken or possessed at any time and no provision of the California Fish and Game code authorizes the issuance of permits or licenses to take any Fully Protected species.

1.5.6 Sensitive Habitats

Sensitive Natural Community is a state-wide designation given by CDFW to specific vegetation associations of ecological importance. Sensitive Natural Communities rarity and ranking involves the knowledge of range and distribution of a given type of vegetation, and the proportion of occurrences that are of good ecological integrity (CDFW 2018a). Evaluation is conducted at both the Global (G) and State (S) levels, resulting in a rank ranging from 1 for very rare and threatened to 5 for demonstrably secure. Natural Communities with ranks of S1-S3 are considered Sensitive Natural Communities in California and may need to be addressed in the environmental review processes of CEQA and its equivalents.

2 METHODS

2.1 Literature Review

Relevant literature and data were reviewed to determine what biological resources may occur near or in the Study Area. Information reviewed included species recovery and restoration plans, published research articles, species accounts, and queries of special status species occurrence records. Research also included review of topographic maps, the National Hydrography Dataset (NHD), and National Wetland Inventory data.

Althouse and Meade reviewed data searches from the California Natural Diversity Database (CNDDB; February 2020 data), the California Native Plant Society (CNPS) On-line Inventory of Rare and Endangered Plants of California, and U.S. Fish and Wildlife Service (USFWS) Critical Habitat prior to conducting site visits. The data search area included the Nipomo USGS 7.5-minute quadrangle and the 8 surrounding quadrangles (Arroyo Grande NE, Tar Spring Ridge, Caldwell Mesa, Oceano, Huasna Peak, Guadalupe, Santa Maria, and Twitchell Dam). Data was compiled for sensitive plant and wildlife species according to each species potential to occur at the Study Area. The compiled list of CNDDB and CNPS records are provided in Appendix A and Appendix B. Additional special status species research consisted of searching online herbarium specimen records maintained by the Consortium of California Herbaria (CCH). Websites such as Californiaherps.com, iNaturalist.org, eBird.org, and IUCNredlist.org were also reviewed as secondary sources of information on special-status species occurrence records. Each special status species that could occur in or near the Study Area is individually discussed per Project in Sections 3.5.2 and 3.6.2.

After review of the literature, and completing site visits, the following criteria were used to determine the potential for special-status species to occur within the Study Area:

- **Present:** The species was observed in the Study Area during field surveys.
- **High Potential:** Highly suitable habitat and CNDDB or CNPS occurrence records indicate the species is likely to occur in the Study Area or the immediate vicinity. Individuals may not have been observed during field surveys; however, the species likely occurs in or immediately adjacent to the Study Area and (for wildlife) could move into the Study Area in the future.
- **Moderate Potential:** Moderately suitable habitat is present in the Study Area and CNDDB occurrences or surveys have recorded the species in the vicinity of the Study Area. Individuals were not observed during field surveys, but the species could be present, at least seasonally or as a transient.
- **Low Potential:** Marginally suitable habitat is present in the Study Area, and there are no occurrence records or other historical (i.e., 50 years or older) records in the vicinity of the Study Area. Individuals were not observed during surveys and are not expected to be present.
- **No Potential:** Suitable habitat for the species is not present in the Study Area, and/or the species is not known to occur in the region.

2.2 Maps

Biological resource data was collected in the field by staff biologists operating a Samsung Galaxy tablet equipped with Garmin GPS receivers and use of a third-party mapping application. Biological resource constraints were mapped in the field while conducting biological surveys. Hand notation of habitats on high resolution aerials were digitized into polygon layers. Maps were created using aerial photo interpretation, field notation, and spatial data imported to Esri ArcGIS, a Geographic Information System (GIS) software program. Data were overlaid on a 2018 National Agriculture Imagery Program (NAIP) aerial of San Luis Obispo County.

2.3 Soils

A custom soil report was created by importing the Study Area as an Area of Interest (AOI) into the Natural Resources Conservation Service (NRCS) Soil Survey Geographic Database (SSURGRO) via their online portal. The resulting custom soils report was reviewed, and a map was created using the U.S. Department of Agriculture NRCS Soil Survey GIS data (USDA 2018). Soils data is summarized in Section 3.2.

2.4 Surveys

The Study Area was surveyed for biological resources on February 12, 2020. Surveys were conducted by Biologist Kristen Andersen (Table 1). The survey was conducted on foot utilizing meandering transects to inventory existing species, special status plants and animals, and habitat types, and to collect photographic documentation of the Study Area. Each habitat type was field inspected and described by species composition, as interpreted in Section 3.3. All plant and animal species observed in the Study Area were identified and documented in Sections 3.5.3 and 3.6.3. The survey focused on potential impact areas shown on the December 16, 2019 site pans (Appendix C).

TABLE 1. BIOLOGICAL SURVEYS

Survey Date	Biologist(s)	Weather Observations	Activities
2/12/2020	Kristen Andersen	57° – 71° F, sunny and clear, no wind.	Winter Biological Survey Habitat Mapping

2.4.1 Botanical

Identification of botanical resources included field observations and laboratory analysis of collected material. All vascular plant species observed in the Study Area on February 12, 2020 were identified and recorded (Table 4). Transects were utilized to map approximate boundaries of different vegetation types, describe general conditions and dominant species, compile species lists, and evaluate potential habitat for special status species. Transects were meandering with an emphasis on locating habitat appropriate for special status plants and animals. Botanical nomenclature used in this document follows the Jepson Flora Project (Regents of the University of California 2018). An appropriately timed (spring) botanical survey will also be conducted in 2020 and the results will be compiled in an addendum to this report.

2.4.2 Wildlife

Identification of wildlife resources were made by direct observations or by visual signs of animal presence such as burrows/dens, vocalization, tracks, and/or scat. Wildlife observations were recorded during Study Area field surveys (refer to Table 6). Birds were identified by sight, using 10-power binoculars, or by vocalizations. Reptiles and amphibians were identified by sight, often using binoculars, and by hand-captures; traps were not used. Mammals recorded in the Study Area were identified by sight, burrow/dens, soil mounds, scat, and vocalizations.

3 RESULTS

3.1 Existing Conditions

The Study Area is comprised of agriculturally zoned farmland that has been most recently used for livestock grazing, where charlock mustard (*Sinapis arvensis*) now dominates the landscape (Photo 1). An existing access road enters the site from the southeast corner at Tefft Street and continues along the eastern perimeter for the length of the parcel. Several dirt roads cut into the resurgent mustard fields, allowing access to an existing avocado orchard and affiliated facilities. An ephemeral drainage with riparian vegetation transects the Study Area at approximately 460 feet northwest from Tefft Street and seasonally conveys water through existing corrugated pipes (30-inch diameter) located at three road crossings. An existing well is located within 50 feet of the drainage to the south and irrigation was observed along the periphery of the Study Area, providing water to landscaped ornamental palms and Peruvian pepper trees (*Schinus molle*). A manmade support wall comprised of wooden logs aligns the drainage along the southeast bank (Photo 2). Overall topography is generally flat across the site.

Photo 1. Charlock mustard in the southern portion of the Study Area, view southwest. February 12, 2020.

Photo 2. Central drainage with manmade support wall, view east. February 12, 2020.

3.2 Soils

One soil map unit is represented in the Study Area: **Diablo clay, 5 to 9 percent slopes (129)** (USDA 2020). The typical soil profile is clay (0 to 53 inches) with a bedrock base (53 to 79 inches). This soil class has a well-drained, very high runoff class that has a general depth to water table of more than 80 inches. Permeability in the Diablo soil is slow, and the available water capacity is moderate to very high. This soil class is a weathered residuum formed from calcareous shale and is considered prime farmland if irrigated.

Figure 2. Aerial Photograph

Legend

- Parcel Boundary (36.4 acres)
- Study Area (9.0 acres)
- Drainages

0 200 400 Feet

514 East Tefft Street
Map Center: 120.4648°W 35.05448°N
Nipomo, San Luis Obispo County

Imagery Source: USDA NAIP, 07/14/2018

Figure 3. USDA Soil Survey

Soil Type	Study Area
129: Diablo clay, 5 to 9 percent slopes	100%

N

0 50 100 150 200 Feet

Legend

Study Area (9.0 acres)

514 East Tefft Street
Map Center: 120.46335°W 35.0531°N
Nipomo, San Luis Obispo County

Source: USDA NRCS Soil Survey

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Map Updated:
March 17, 2020 03:24 PM by JBB

3.3 Habitat Types

Table 2 lists three habitat types described and mapped within the Study Area (Figure 4). Most of the Study Area, approximately 7.6 acres, is mapped as cropland that when fallow is used for rotational grazing. The remaining area consists of approximately 0.8 acres of ruderal habitat which includes the eastern access road and access road along the south side of an ephemeral drainage and 0.7 acres of riparian habitat associated with the drainage.

TABLE 2. HABITAT TYPES

Habitat Type	Approximate Area (Acres)
Cropland	7.6
Ruderal	0.8
Riparian	0.7

3.3.1 Cropland

Cropland habitat comprises approximately 7.6 acres (84 percent) of the Study Area. This habitat was once a lemon orchard but is now dominated by dense charlock mustard and has been recently grazed (Photo 3). Existing avocado orchards are planted in cropland habitat to the northwest of the ephemeral drainage (Photo 4). Vegetation in the aisles between rows of avocado consists of charlock mustard and grasses, including soft chess brome (*Bromus hordeaceus*), Italian ryegrass (*Festuca perennis*), and foxtail barley (*Hordeum murinum*). Cropland in the southern and southeastern portion of the Study Area shows sign of vehicle disturbance, though mustards persist through intermittent patches of exposed soil. The periphery is landscaped with ornamentals, including ornamental palms and Peruvian pepper trees, and irrigation lines were observed in landscaped areas. Farm equipment is currently staged in the southern portion of cropland habitat.

Photo 3. Photo of cropland habitat with resurging charlock mustard in southeast portion of the Study Area, view west. February 12, 2020.

Photo 4. Photo of existing avocado orchard in cropland habitat in northwest portionof the Study Area, view northwest. February 12, 2020.

3.3.2 Ruderal

Ruderal habitat comprises approximately 0.8 acres of the Study Area and consists primarily of the eastern perimeter road that is used to access the Study Area and extends to the north end of the property. Ruderal habitat continues as an access road to cropland habitat, which veers west from the entrance road and runs along the south side of the existing drainage (Photo 5). Ruderal habitat on the site is predominantly bare ground, consisting of compacted soils and little to no vegetation. Resurgent vegetation is present in the western portion of ruderal habitat where vehicle use has decreased.

Photo 5. Access road mapped as ruderal habitat running parallell to drainage, view northwest. February 12, 2020.

3.3.3 Riparian

Riparian habitat comprises approximatley 0.7 acres of the Study Area where it is associated with the ephemeral drainage that transects the Study Area from east to west (Photo 6). Arroyo willow (*Salix lasiolepis*) is the dominant species forming an intermittent tree canopy, while poison hemlock (*Conium maculatum*), Itlaian thistle (*Carduus pycnocephalus*), and stinging nettle (*Urtica dioica*) dominate the mid-story herbaceous stratum. Italian ryegrass and bristly ox-tongue (*Helminthotheca echioides*) are dominant in the understory. A manmade support wall exists along the southern bank of the drainage (Photo 7). Culverts are currently in place at three locations: one at the eastern end of the Study Area where a dirt road crosses the drainage (Photo 8), one at a central location of the drainage to allow for vehicle crossing, and a third outlet culvert conveys water off-site at the western end of the drainage (Photo 9).

Photo 6. Photo of riparian habitat along the ephemeral drainage with cropland habitat in the foreground, view northeast. February 12, 2020.

Photo 7. Ephemeral drainage with intermittent riparian habitat and manmade support wall, view east. February 12, 2020.

Photo 8. Culvert in ephemeral drainage surrounded by riparian habitat, view west. February 12, 2020..

Photo 9. Outflow culvert at west end of epehmeral drainage, view west. February 12, 2020.

Figure 4. Biological Resources

Legend

- Study Area (9.0 acres)
- Drainages

Habitat Type

- Cropland (7.6 acres)
- Riparian (0.7 acre)
- Ruderal (0.8 acre)

0 100 200 Feet

514 East Tefft Street
Map Center: 120.46352°W 35.05327°N
Nipomo, San Luis Obispo County

Biological Survey Date: 02/12/2020
Imagery Source: USDA NAIP, 07/14/2018

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BIOLOGICAL AND ENVIRONMENTAL SERVICES

Map Updated:
March 17, 2020 04:22 PM by JBB

3.4 Potential Jurisdictional Drainages and Wetlands

The California Department of Fish and Wildlife regulates activities that divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or ban of any river, stream, or lake. CDFW has initiated a Cannabis cultivation permitting program that requires all applicants obtaining an Annual License from the California Department of Food and Agriculture to have a Lake and Streambed Alteration Agreement or written verification that one is not needed. If all Project components are set outside the 1600 jurisdiction a Self-Certification can be submitted online. More information about the CDFW Cannabis Program and permitting can be found at https://www.wildlife.ca.gov/Conservation/Cannabis/Permitting.

The State Water Board has also initiated a Cannabis Cultivation Program to establish principles and guidelines (requirements) for cannabis cultivation activities to protect water quality and instream flows. To implement the program, the Cannabis Cultivation General Order was adopted and provides for a permitting pathway for cultivators. The General Order provides criteria to evaluate the threat to water quality based on site conditions and waterway classification. More information about the State Water Board Cannabis Cultivation can be found at http://www.waterboards.ca.gov/water_issues/programs/cannabis.

The drainage that passes through the Study Area is considered an ephemeral watercourse, classified as Class III, according definitions in the State Water Resources Control Board General Oder for Cannabis Cultivation Activities (Order WQ 2017-0023-DWQ). Under the General Order, a minimum 50-foot setback is required from the bank-full stage or incised channel of Class III watercourses. Figure 7 provides a Project footprint overlay on biological resources and indicates an applicant proposed 100-foot setback from the waterway.

3.5 Botanical Resources

Research on special status plant occurrences conducted within the designated search area (see Methods**Error! Reference source not found.**) determined 64 special status plant species are k nown to occur in the region (Appendix A). Figure 5 depicts the current GIS data for special status plants mapped near the Study Area by the CNDDB and CNPS online inventory.

3.5.1 Potential Special Status Plant Species

Based on the habitat types and soils represented on the property, the Study Area has potential to support one special status plant species, Cambria morning glory (*Calystegia subacaulis* subsp. *episcopalis*) (Table 3). Federal and California State status, Global and State rank, CRPR, typical blooming periods, and habitat preference this species are provided (CNPS 2020; CDFW 2020b). No special status plant species were observed during the 2020 winter biological survey. Appropriately timed seasonal botanical surveys are required to determine whether special status plant species occur on the site. Appendix A lists habitat preferences for queried special status plant species known from the region and describes the rationale for no potential to occur on the Project site.

TABLE 3. SPECIAL STATUS PLANT LIST

	Common Name	Scientific Name	Federal/ State Status Global/ State Rank CA Rare Plant Rank	Blooming Period	Habitat Preference	Potential to Occur
1.	**Cambria Morning-Glory**	*Calystegia subacaulis* subsp. *episcopalis*	-/- G3T2?/S2? 4.2	Mar-Jul	Dry, open scrub, woodland	Low. Suitable clay soils are present in the Study Area and a recent occurrence is within 2 miles of the Study Area.

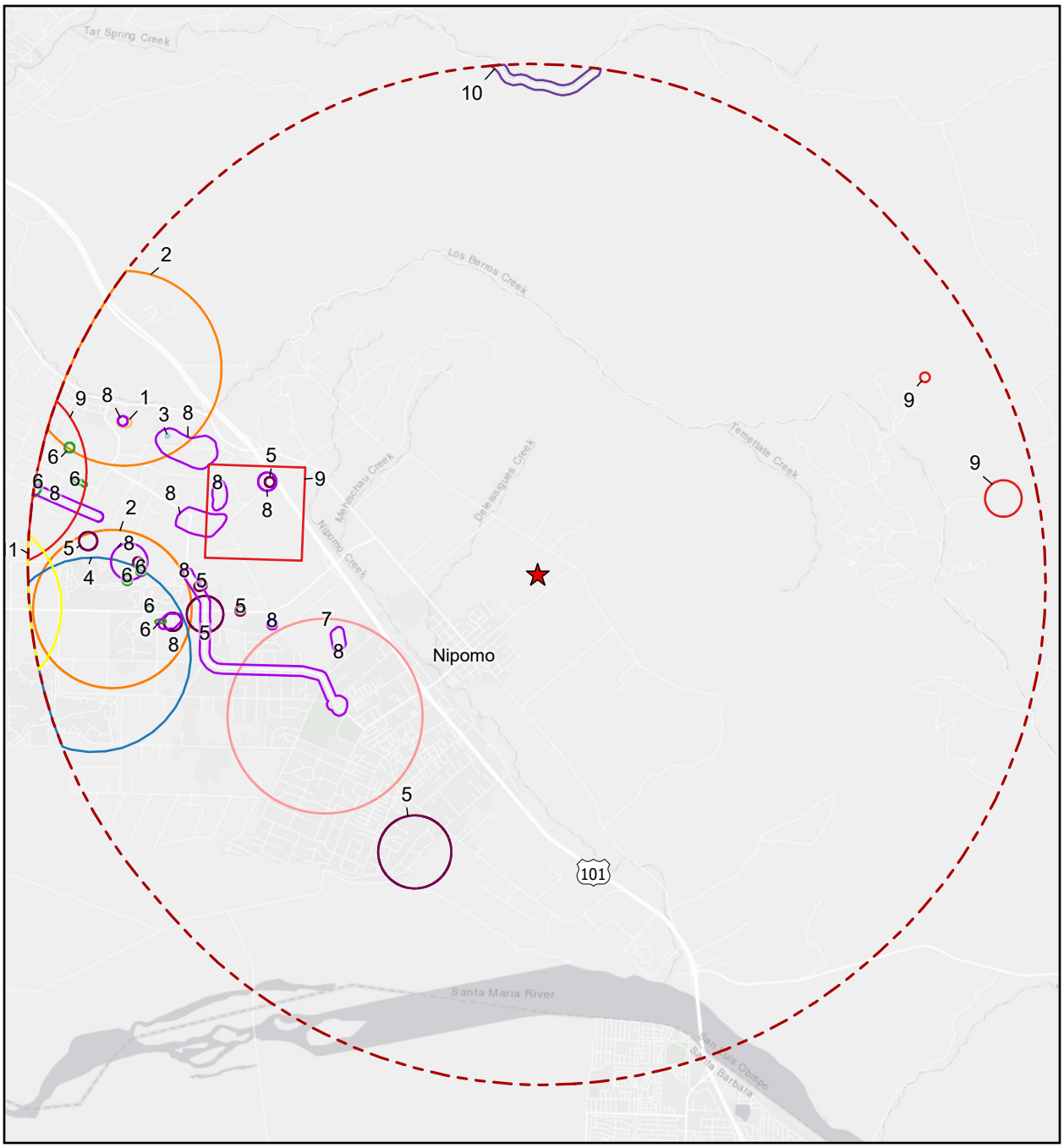
Refer to section 1.5 for status and rank definitions

3.5.2 Special Status Plants Discussion

Based on an analysis of known ecological requirements for the special status plant species reported from the region (Appendix A), and the habitat conditions that were observed in the Study Area, it was determined that one special status plant species, Cambria morning-glory, has low potential to occur within the Study Area. The remaining 63 special status plant species have no potential to occur due to either lack of suitable habitat, appropriate soils, or are were large shrubs that were not detected in the Study Area. We discuss Cambria morning-glory below and include descriptions of habitat, range restrictions, known occurrences, and survey results for the Study Area.

A. Cambria Morning-glory (*Calystegia subacaulis* subsp. *episcopalis*) is a CRPR 4.2 subspecies endemic to California. It is known to occur in chaparral, cismontane woodland, coastal prairie, and valley and foothill grassland or clay soils below 500 meters elevation. It is a perennial rhizomatous herb that typically blooms between April and June. The closest known record is approximately two miles northwest of the Study Area (CCH #OBI125889), observed in remnant grassland patches between large blocks of orchards. Cropland habitat is not a preferred habitat for this species, but it could occur in the unplowed marginal areas of the site or in the weedy areas of the drainage. The clay soil in the Study Area is suitable for this species and Cambria morning-glory has low potential to occur. Cambria morning-glory was not detected in the Study Area during the February 2020 survey. Appropriately timed seasonal botanical surveys are required to determine whether Cambria morning-glory occurs within the Study Area.

Figure 5. California Natural Diversity Database Plant Records



Label	Common Name
1	Black-flowered figwort
2	Dune larkspur
3	Hoover's bent grass
4	Kellogg's horkelia
5	Nipomo Mesa ceanothus
6	Pismo clarkia
7	San Luis Obispo monardella
8	Sand mesa manzanita
9	Santa Margarita manzanita
10	Slender bush-mallow
11	Sourthern curly-leaved monardella

Legend

Project Location

5-Mile Radius

N

0 0.5 1 2 Miles

514 East Tefft Street
Map Center: 120.46565°W 35.05446°N
Nipomo, San Luis Obispo County

CNDDB GIS Data Last Updated: February 2020

3.5.3 Preliminary Botanical Survey Results

A preliminary botanical survey conducted on February 12, 2020 identified 28 species, subspecies, and varieties of vascular plant taxa in the Study Area (Table 4). The list includes five species native to California and 23 introduced (naturalized or planted) species. Native plant species account for approximately 18 percent of the preliminary Study Area flora; introduced species account for approximately 82 percent.

TABLE 4. VASCULAR PLANT LIST

Common Name	Scientific Name	Special Status	Origin
Trees –7 Species			
Avocado	*Persea americana*	None	Introduced
Palm	*Phoenix* sp.	None	Planted
Common plum	*Prunus dometica*	None	Introduced
Chinese plum	*Prunus salicina*	None	Introduced
Coast live oak	*Quercus agrifolia* var. *agrifolia*	None	Native
Arroyo willow	*Salix* lasiolepis	None	Native
Peruvian pepper tree	*Schinus molle*	None	Introduced
Forbs - 16 Species			
Narrow leaf milkweed	*Asclepias fascicularis*	None	Native
Black mustard	*Brassica nigra*	None	Introduced
Italian thistle	*Carduus pycnocephalus*	None	Introduced
Poison hemlock	*Conium maculatum*	None	Introduced
Coastal heron's bill	*Erodium cicutarium*	None	Introduced
Whitestem filaree	*Erodium moschatum*	None	Introduced
Fennel	*Foeniculum vulgare*	None	Introduced
Bristly ox-tongue	*Helminthotheca echioides*	None	Introduced
Mustard	*Hirschfeldia incana*	None	Introduced
Cheeseweed	*Malva parviflora*	None	Introduced
California burclover	*Medicago polymorpha*	None	Introduced
Annual yellow sweetclover	*Melilotus indicus*	None	Introduced
Canarygrass	*Phalaris* sp.	None	Introduced
Milk thistle	*Silybum marianum*	None	Introduced
Stinging nettle	*Urtica dioica*	None	Native
Spring vetch	*Vicia sativa*	None	Introduced

Common Name	Scientific Name	Special Status	Origin
Graminoids - 5 Species			
Slender oat	*Avena barbata*	None	Native
Soft chess	*Bromus hordeaceus*	None	Introduced
Italian rye grass	*Festuca perennis*	None	Introduced
Foxtail barley	*Hordeum murinum*	None	Introduced
Common barley	*Hordeum vulgare*	None	Introduced

3.6 Wildlife Resources

Research on special status animal occurrences conducted within the designated search area (see Methods) determined 36 special status animal species are known to occur in the region (Appendix B). Figure 6 depicts the current GIS data for special status species mapped near the Study Area by the CNDDB and USFWS Critical Habitat.

3.6.1 Potential Special Status Animal Species

Table 5 lists one special status animal species for which appropriate habitat conditions exist, and therefore could potentially occur in the Study Area. Federal and California State status, Global and State rank, and CDFW listing status for each species are given. Typical nesting or breeding period, habitat (from CNDDB) preference, and potential for this species to occur on site are also provided.

TABLE 5. SPECIAL STATUS ANIMAL LIST

	Common Name	Scientific Name	Federal/State Status Global/State Rank CDFW Status	Habitat Preference	Potential to Occur
1.	**Prairie Falcon**	*Falco mexicanus*	-/- G5/S4 WL	Inhabits dry, open terrain. Nests on cliffs near open areas for hunting.	No (nesting). Appropriate cliff nesting habitat is not present in the Study Area. Low (foraging). Marginally suitable open, foraging habitat is present in the Study Area.

See section 1.5 for status and rank definitions.

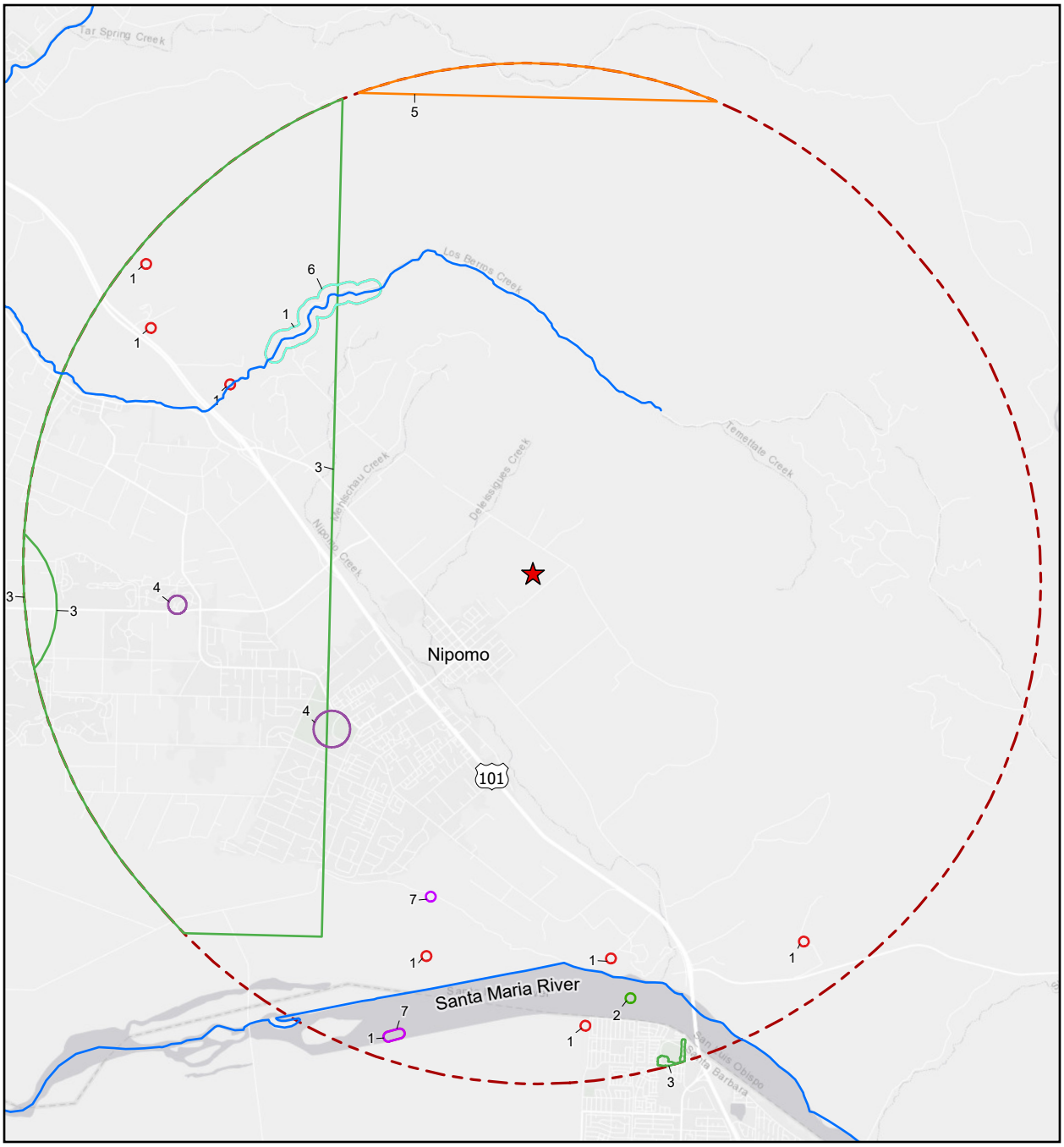
3.6.2 Special Status Animals Discussion

Based on an analysis of known ecological requirements for the special-status wildlife species reported or known from the region (Appendix B), and the habitat conditions that were observed in the Study Area, it was determined that one special status animal species, prairie falcon (*Falco mexicanus*), has low potential to forage within the Study Area. Refer to Appendix B for information regarding the remaining 36 special status animal species with no potential to occur. Prairie falcon is discussed below, including description of habitat, range restrictions, known occurrences, and survey results for the Study Area.

A. Prairie Falcon (*Falco mexicanus*) is a CDFW Watch List species with a Global Rank of G5 and a State Rank of S4. The species range extends throughout most of the western United States, into southern Canada and portions of Mexico. They are year-round residents in most of California, including San Luis Obispo County. Prairie falcons utilize a variety of habitats but are primarily associated with perennial grasslands, savannahs, rangeland, some agricultural fields, and desert scrub areas (CDFW 2019a). Nesting sites are usually in a scrape on a sheltered ledge of a cliff overlooking a large, open area. Occasionally the species will use old raven or raptor nests on a cliff. Prairie falcon nest sites are reported from the region and foraging falcons are expected to be present in the vicinity (CNDDB #299). There is no nesting habitat in the Study Area; however, foraging grassland or cropland habitat with a limited prey base is present and prairie falcons have low potential to fly through or occasionally forage in the Study Area.

The Study Area is located within 5 miles of critical habitat for steelhead trout (*Oncorhynchus mykiss irideus*), a species listed as threatened under the Federal Endangered Species Act. Aquatic features on the site do not retain water for a long enough duration to support steelhead trout and this species has no potential to occur. California red-legged frog (*Rana draytonii*) is also a species listed as threatened under the Federal Endangered Species Act, however the Study Area is not within USFWS critical habitat for red-legged frog. Appropriate water sources are not present, and the Study Area is outside the range for frogs to migrate from known occurrences within the region. California red-legged frogs have no potential to occur in the Study Area. Eleven other special status species with federal or state conservation status have no potential to occur on the site due to lack of suitable aquatic, beach, or foraging habitat. See Appendix B for details on federal and state listed species with no potential to occur.

Figure 6. California Natural Diversity Database Animal Records and United States Fish and Wildlife Service Critical Habitat



Label	Common Name
1	California red-legged frog
2	Coast horned lizard
3	Monarch - California overwintering population
4	Northern California legless lizard
5	Prairie falcon
6	Steelhead - south-central California coast DPS
7	Western spadefoot

Legend

Project Location

5-Mile Radius

NMFS Critical Habitat*

Steelhead

N

0 0.5 1 2 Miles

*USFWS Criticial Habitat Not Present

514 East Tefft Street
Map Center: 120.4648°W 35.05448°N
Nipomo, San Luis Obispo County

CNDDB GIS Data Last Updated: February 2020
USFWS/NMFS Data Last Updated: August 14, 2019

3.6.3 Wildlife Survey Results

Table 6 provides a list of wildlife observed in the Study Area. Wildlife species detected in the Study Area during the February 12, 2020 included one invertebrate, one reptile, 11 birds, and two mammals. Small mammal trapping studies were beyond the scope of this report, and several common species are likely to be present. Many transient bird species are likely to occur, and several common bird species were observed utilizing willows within the riparian habitat. Gopher mounds were observed in cropland habitat in areas of patchy, exposed bare ground.

TABLE 6. WILDLIFE LIST

Common Name	Scientific Name	Special Status	Habitat Type
Invertebrates – 1 Species			
Honeybee	*Apis mellifera*	None	Wide range; variety of habitats
Reptiles – 1 Species			
Coast Range Fence Lizard	*Sceloporus occidentalis bocourtii*	None	Wide range; variety of habitats
Birds – 11 Species			
California Scrub-jay	*Aphelocoma californica*	None	Oak, riparian woodlands
Anna's Hummingbird	*Calypte anna*	None	Many habitats
Turkey Vulture	*Cathartes aura*	None	Open country
American Crow	*Corvus brachyrhynchos*	None	Many habitats, esp. urban
Song Sparrow	*Melospiza melodia*	None	Oak, riparian woodland
California Towhee	*Melozone crissalis*	None	Chaparral scrub, shrubby urban areas
Ruby-crowned Kinglet	*Regulus calendula*	None	Oak, riparian woodlands
Say's Phoebe	*Sayornis saya*	None	Open country, grassland
Eurasian Collared Dove	*Streptopelia decaocto*	None	Urban areas
European Starling	*Sturnus vulgaris*	None	Agricultural, livestock areas
Mourning Dove	*Zenaida macroura*	None	Open and semi-open habitats
Mammals – 2 Species			
California Ground Squirrel	*Otospermophilus beecheyi*	None	Grasslands
Valley Pocket Gopher	*Thomomys bottae*	None	Variety of habitats

3.6.4 Habitat Connectivity and Wildlife Movement

Wildlife corridors and habitat connectivity are important for the movement of wildlife between different populations and habitats. Wildlife movement corridors are defined as areas that connect suitable wildlife habitat areas in a region otherwise fragmented by rugged terrain, changes in vegetation, or human disturbance. Natural features such as canyon drainages, ridgelines, or areas with vegetation cover provide corridors for wildlife travel. Wildlife movement corridors are important because they provide access to mates, food, and water; allow the dispersal of individuals away from high population density areas; and facilitate the exchange of genetic traits between populations (Beier and Loe 1992). Wildlife movement corridors are considered sensitive by resource and conservation agencies. Tributaries forming in Temettate Ridge feed to Nipomo Creek, allowing for connectivity to water sources for wildlife. Nipomo Creek connects with the Santa Maria River to the south, which outlets to the Pacific Ocean. Although it is reasonable to assume that wildlife movement may occur locally within the Study Area, the Study Area does not provide a throughway for wildlife species to off-site areas of habitat and therefore does not function as a significant regional corridor.

4 ENVIRONMENTAL IMPACT ANALYSIS AND MITIGATION

The proposed Project could affect biological resources, including cropland and ruderal habitat, special status plants with potential to occur, nesting birds, and prairie falcon. Mitigation measures are recommended to reduce potential impacts to sensitive biological resources. Table 7 summarizes the potential or present biological resources within the Study Area, the proposed Project's level of effect on biological resources, and the mitigation measure recommended to reduce or offset negative effects from the Project.

TABLE 7. IMPACTS AND MITIGATIONS SUMMARY

Biological Resource	Effect of Proposed Project	Mitigation Measures	Mitigation Type
Cropland	Negligible	--	--
Riparian	No Effect	--	--
Ruderal	Negligible	--	--
Special Status Plants	To Be Determined	Recommendation A	To Be Determined
Nesting Birds	Mitigable	BIO-1	Preconstruction survey
Prairie Falcon (foraging)	Negligible	--	--

4.1 Habitats

There are three habitat types present within the Study Area: cropland, riparian, and ruderal. The proposed Project would permanently affect cropland habitat. A total of 1.8 acres of cropland habitat would be permanently impacted by installation of proposed cultivation area structures (Figure 7). No mitigation is required for permanent impacts to cropland habitat, however mitigation is required for impacts to special status species that occur in cropland habitat (refer to Recommendation A). No other habitat in the Study Area will be permanently impacted by the proposed Project.

Figure 7. Biological Resources Impacts

Legend

- Study Area (9.0 acres)
- Proposed Impacts (1.8 acres)
- Drainages
- 100-Foot Buffer

Habitat Type

- Cropland (7.6 acres)
- Riparian (0.7 acre)
- Ruderal (0.8 acre)

N

0 100 200 Feet

514 East Tefft Street
Map Center: 120.46352°W 35.05327°N
Nipomo, San Luis Obispo County

Biological Survey Date: 02/12/2020

4.2 Potential Jurisdictional Waters

One ephemeral drainage occurs within the Study Area. Activities that may affect this drainage are likely within the permitting jurisdiction of the Clean Water Act (CWA; sections 404 and 401) and Fish and Game Code (sections 1600, 5650, 5652). No impacts to the ephemeral drainage or riparian habitat are proposed by the Project. A formal wetland delineation was not conducted to determine if patches of wetland habitat occur within the drainage banks. An applicant proposed measure to observe a 100-foot setback from the outer edge of riparian habitat was incorporated into proposed site plans (Appendix C). A formal wetland delineation will be necessary if future Project activities are proposed that may result in the fill of aquatic features or if any Project areas are redesigned and are moved to locations that would encroach on any potential waters or their associated setbacks. Wetland delineations, if required, should be conducted according to state and federal standards to determine the extent of Clean Water Act Section 404 wetlands and waters under jurisdiction of the United States Army Corps of Engineers and Section 401 waters and wetlands under jurisdiction of the State Water Resource Control Board.

4.3 Botanical Resources

An appropriately timed spring botanical survey should be conducted to search for special-status plant species within the Study Area that were not detected during the February 2020 survey (see Recommendation A below). The survey report shall include mitigation measures to avoid or reduce impacts to any special status plant species, should they be present. A copy of the survey report (Addendum) shall be provided to the County.

Recommendation:

A. Spring Botanical Survey. A seasonally appropriate botanical survey should be conducted in spring 2020 within the Study Area or within any additional Project features that are outside the Study Area defined in this report. A survey buffer of 100 feet around Project features should be included to ensure all potential impacts are adequately addressed.

4.4 Wildlife Resources

The following section discusses potential impacts and mitigation recommended for common and special status wildlife resources with potential to occur within the Study Area.

4.4.1 Nesting Birds

Impacts to or take of nesting birds could occur if proposed work activities are conducted during nesting season (March 15 through August 15). To reduce potential adverse effects of the proposed Project on nesting birds, the following mitigation measure is recommended.

BIO-1 Within one week of ground disturbance activities, if work occurs between February 1 and September 15, nesting bird surveys shall be conducted. If surveys do not locate nesting birds, construction activities may be conducted. If nesting birds are located, no construction activities shall occur within 100 feet of nests until chicks are fledged. A pre-construction survey report shall be submitted to the lead agency immediately upon completion of the survey. The report shall detail appropriate fencing or flagging of the buffer zone and make recommendations on additional monitoring requirements. A map

of the Project site and nest locations shall be included with the report. The Project biologist conducting the nesting survey shall have the authority to reduce or increase the recommended buffer depending upon site conditions and bird conservation status.

4.4.2 Birds

Prairie falcons have potential to forage in the cropland habitat within the Study Area. No nesting habitat is present in or near the Study Area for these species. The loss of 1.8-acres of low-quality foraging habitat in the Study Area would present a negligible effect on local prairie falcons. No further surveys for this species are recommended.

4.4.3 Habitat Connectivity and Wildlife Movement

Impacts to wildlife movement corridors are not anticipated from the proposed project because the project will not create a barrier to regional or local wildlife movement corridors (i.e. ridgelines or drainages); therefore, no mitigation is required.

5 REFERENCES

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6 APPENDICES

- **Appendix A. Special Status Plants Reported from the Region**
- **Appendix B. Special Status Animals Reported from the Region**
- **Appendix C. Site Plan for 514 E. Tefft Street**

ATTACHMENT A. TABLE 1. SPECIAL STATUS PLANTS REPORTED FROM THE REGION

	Common Name	Scientific Name	Federal/ State Status Global/ State Rank CA Rare Plant Rank	Blooming Period	Habitat Preference	Potential to Occur
1.	**Red Sand-Verbena**	*Abronia maritima*	-/- G4/S3? 4.2	Feb-Nov	Coastal dunes	No. Appropriate coastal dune habitat does not occur in the Study Area.
2.	**Hoover's Bent Grass**	*Agrostis hooveri*	-/- G2/S2 1B.2	Apr-Jul	Dry sandy soils, open chaparral, oak woodland	No. Appropriate sandy soils are not present in the Study Area.
3.	**Douglas' Fiddleneck**	*Amsinckia douglasiana*	-/- G4/S4 4.2	Mar-May	Unstable shaly sedimentary slopes	No. Appropriate shaly substrate is not present in the Study Area.
4.	**Santa Lucia Manzanita**	*Arctostaphylos luciana*	-/- G2/S2 1B.2	Dec-Mar	Shale outcrops, slopes, upland chaparral near coast	No. Appropriate shale substrate is not present in the Study Area.
5.	**Bishop Manzanita**	*Arctostaphylos obispoensis*	-/- G3/S3 4.3	Feb-Jun	Rocky, generally serpentine soils, chaparral, open closed-cone forest near coast	No. Appropriate rock or serpentine substrate is not present in the Study Area.
6.	**Santa Margarita Manzanita**	*Arctostaphylos pilosula*	-/- G2?/S2? 1B.2	Dec-May	Shale outcrops, slopes, chaparral	No. Appropriate shale substrate is not present in the Study Area.
7.	**La Purisima Manzanita**	*Arctostaphylos purissima*	-/- G2/S2 1B.1	Nov-May	Sandstone outcrops, sandy soils, chaparral	No. Appropriate sandstone or sandy soil is not present in the Study Area.
8.	**Sand Mesa Manzanita**	*Arctostaphylos rudis*	-/- G2/S2 1B.2	Nov-Feb	Sandy soils, chaparral	No. Appropriate sandy soils are not rpesent in the Study Area.
9.	**Marsh Sandwort**	*Arenaria paludicola*	FE/CE G1/S1 1B.1	May-Aug	Wet meadows, marshes	No. Appropriate mesic condtions are not present in the Study Area.

	Common Name	Scientific Name	Federal/ State Status Global/ State Rank CA Rare Plant Rank	Blooming Period	Habitat Preference	Potential to Occur
10.	**Miles' Milk-Vetch**	*Astragalus didymocarpus* var. *milesianus*	-/- G5T2/S2 1B.2	Mar-Jun	Grassy areas near coast	No. Appropriate coastal grassland habitat is not present in the Study Area.
11.	**Ocean Bluff Milk-Vetch**	*Astragalus nuttallii* var. *nuttallii*	-/- G4T4/S4 4.2	Jan-Nov	Rock, sandy areas, bluffs	No. Appropriate rock or sandy substrate is not present in the Study Area.
12.	**Davidson's Saltscale**	*Atriplex serenana* var. *davidsonii*	-/- G5T1/S1 1B.2	Apr-Oct	Bluffs	No. Appropriate bluff habitat is not present in the Study Area.
13.	**San Luis Mariposa Lily**	*Calochortus obispoensis*	-/- G2/S2 1B.2	May-Jul	Dry serpentine, generally open chaparral	No. Appropriate serpentine substrate is not present in the Study Area.
14.	**Palmer's Mariposa Lily**	*Calochortus palmeri* var. *palmeri*	-/- G3T2/S2 1B.2	Apr-Jul	Meadows, vernally moist places in yellow-pine forest, chaparral	No. Appropriate mesic condtions and habitat are not present in the Study Area.
15.	**La Panza Mariposa Lily**	*Calochortus simulans*	-/- G2/S2 1B.3	Apr-Jun	Sand (often granitic), grassland to yellow-pine forest	No. Appropriate sand or granitic substrate is not present in the Study Area.
16.	**Cambria Morning-Glory**	*Calystegia subacaulis* subsp. *episcopalis*	-/- G3T2?/S2? 4.2	Mar-Jul	Dry, open scrub, woodland	Low. Suitable clay soils are present in the Study Area and a recent occurrence is within 2 miles of the Study Area.
17.	**San Luis Obispo Owl's-Clover**	*Castilleja densiflora* var. *obispoensis*	-/- G5T2/S2 1B.2	Mar-May	sometimes serpentinite	No. Appropriate serpentinite substrate is not present and the Study Area is outside the known range for this species.
18.	**Lompoc Ceanothus**	*Ceanothus cuneatus* var. *fascicularis*	-/- G5T4/S4 4.2	Feb-Apr	Sandy substrates, coastal chaparral	No. Appropriate sandy substrate with coastal habitat is not present in the Study Area.

	Common Name	Scientific Name	Federal/ State Status Global/ State Rank CA Rare Plant Rank	Blooming Period	Habitat Preference	Potential to Occur
19.	**Point Reyes Ceanothus**	*Ceanothus gloriosus* var. *gloriosus*	-/- G4T4/S4 4.3	Mar-May	Sandy places, coastal bluffs, closed-cone-pine forest	No. Appropriate sandy soils are not present in the Study Area.
20.	**Santa Barbara Ceanothus**	*Ceanothus impressus* var. *impressus*	-/- G3T2/S2 1B.2	Feb-Apr	Sandy substrates, flats, canyons	No. Appropriate sandy substrate is not present in the Study Area.
21.	**Santa Barbara Ceanothus**	*Ceanothus impressus* var. *impressus*	-/- G3T2/S2 1B.2	Feb-Apr	Sandy substrates, flats, canyons	No. Appropriate sandy substrate is not present in the Study Area.
22.	**Nipomo Mesa Ceanothus**	*Ceanothus impressus* var. *nipomensis*	-/- G3T2/S2 1B.2	Feb-Apr	Sandy substrates, flats, canyons	No. Appropriate sandy substrate is not present in the Study Area.
23.	**Congdon's Tarplant**	*Centromadia parryi* subsp. *congdonii*	-/- G3T1T2/S1S2 1B.1	May-Nov	Terraces, swales, floodplains, grassland, disturbed sites	No. Appropriate habitat is not present and the Study Area is outside the known range for this species.
24.	**Coastal Goosefoot**	*Chenopodium littoreum*	-/- G1/S1 1B.2	Apr-Aug	Generally sandy soils, dunes	No. Appropriate sandy soils are not present in the Study Area.
25.	**Brewer's Spineflower**	*Chorizanthe breweri*	-/- G3/S3 1B.3	Apr-Aug	Gravel or rocks serpentine	No. Appropriate rock or gravel substrate is not present in the Study Area.
26.	**Palmer's Spineflower**	*Chorizanthe palmeri*	-/- G4/S4 4.2	Apr-Aug	Serpentine	No. Appropriate serpentine soil is not present in the Study Area.
27.	**Straight-Awned Spineflower**	*Chorizanthe rectispina*	-/- G2/S2 1B.3	Apr-Jul	Sand or gravel	No. Appropriate sand or gravel substrate is not present in the Study Area.

	Common Name	Scientific Name	Federal/ State Status Global/ State Rank CA Rare Plant Rank	Blooming Period	Habitat Preference	Potential to Occur
28.	**Surf Thistle**	*Cirsium rhothophilum*	-/CT G1/S1 1B.2	Apr-Jun	Dunes, bluffs	No. Appropriate coastal habitat is not present in the Study Area.
29.	**La Graciosa Thistle**	*Cirsium scariosum* var. *loncholepis*	FE/CT G5T1/S1 1B.1	May-Aug	Marshes, dune wetlands	No. Appropriate wetland habitat is not present in the Study Area.
30.	**California Sawgrass**	*Cladium californicum*	-/- G4/S2 2B.2	Jun-Sep	Generally alkaline marshes, swamps	No. Appropriate alkaline conditions are ot present in the Study Area.
31.	**Pismo Clarkia**	*Clarkia speciosa* subsp. *immaculata*	FE/CR G4T1/S1 1B.1	May-Jul	Sandy coastal hills	No. Appropriate sandy soils are not present in the Study Area.
32.	**Small-Flowered Morning-Glory**	*Convolvulus simulans*	-/- G4/S4 4.2	Mar-Jul	Clay substrates, occasionally serpentine, annual grassland, coastal-sage scrub, chaparral	No. Suitable clay soils are present, but appropriate habitats are not and the Study Area is outside the known range for this species.
33.	**Gaviota Tarplant**	*Deinandra increscens* subsp. *villosa*	FE/CE G4G5T2/S2 1B.1	May-Oct	Coastal bluffs, fields	No. Appropriate coastal habitat is not present and the Study Area is outside the known range for this species.
34.	**Paniculate Tarplant**	*Deinandra paniculata*	-/- G4/S4 4.2	Mar-Dec	Grassland, open chaparral and woodland, disturbed areas, often in sandy soils	No. Appropriate open habitat with snady soils is not present in the Study Area.
35.	**Dune Larkspur**	*Delphinium parryi* subsp. *blochmaniae*	-/- G4T2/S2 1B.2	Apr-Jun	Coastal chaparral, sand	No. Appropriate coastal habitat with sandy soils is not present in the Study Area.

	Common Name	Scientific Name	Federal/ State Status Global/ State Rank CA Rare Plant Rank	Blooming Period	Habitat Preference	Potential to Occur
36.	**Eastwood?S Larkspur**	*Delphinium parryi* subsp. *eastwoodiae*	-/- G4T2/S2 1B.2	Feb-Mar	Uncommon. Coastal chaparral, grassland, on serpentine	No. Appropriate serpentine soils are not present in the Study Area.
37.	**Umbrella Larkspur**	*Delphinium umbraculorum*	-/- G3/S3 1B.3	Apr-Jun	Moist oak forest	No. Appropriate mesic conditions in oak forest habitat are not present in the Study Area.
38.	**Beach Spectaclepod**	*Dithyrea maritima*	-/CT G1/S1 1B.1	Mar-May	Seashores, coastal sand dunes	No. Appropriate coastal dune habitat is not present in the Study Area.
39.	**Mouse-Gray Dudleya**	*Dudleya abramsii* subsp. *murina*	-/- G4T2/S2 1B.3	May-Jun	Serpentine outcrops	No. Appropriate serpentine outcrops are not present in the Study Area.
40.	**Blochman's Dudleya**	*Dudleya blochmaniae* subsp. *blochmaniae*	-/- G3T2/S2 1B.1	Apr-Jun	Open, rocky slopes, often serpentine or clay-dominated	No. Appropriate rock or serpentine substrate is not present in the Study Area.
41.	**Blochman's Leafy Daisy**	*Erigeron blochmaniae*	-/- G2/S2 1B.2	Jun-Aug	Sand dunes and hills	No. Appropriate sandy soils are not present in the Study Area.
42.	**Suffrutescent Wallflower**	*Erysimum suffrutescens*	-/- G3/S3 4.2	Jan-Aug	Stabilized coastal sand dunes, coastal scrub	No. Appropriate stabilized dune or coastal habitat is not present in the Study Area.
43.	**Mesa Horkelia**	*Horkelia cuneata* var. *puberula*	-/- G4T1/S1 1B.1	Feb-Sep	Dry, sandy, coastal chaparral	No. Appropriate sandy soils are not present in the Study Area.
44.	**Kellogg's Horkelia**	*Horkelia cuneata* var. *sericea*	-/- G4T1?/S1? 1B.1	Apr-Sep	Old dunes, coastal sandhills	No. Appropriate coastal habitat is not present in the Study Area.

	Common Name	Scientific Name	Federal/ State Status Global/ State Rank CA Rare Plant Rank	Blooming Period	Habitat Preference	Potential to Occur
45.	**San Luis Obispo County Lupine**	*Lupinus ludovicianus*	-/- G1/S1 1B.2	Apr-Jul	Open, grassy areas, on limestone, in oak woodland	No. Appropriate limestone substrate is not present in the Study Area.
46.	**Nipomo Mesa Lupine**	*Lupinus nipomensis*	FE/CE G1/S1 1B.1	Dec-May	Stable dunes	No. Appropriate dune habitat is not present in the Study Area.
47.	**Slender Bush-Mallow**	*Malacothamnus gracilis*	-/- G1Q/S1 1B.1	May-Oct	Usually rocky	No. Appropriate rocky substrate is not present in the Study Area.
48.	**Jones' Bush-Mallow**	*Malacothamnus jonesii*	-/- G4/S4 4.3	Mar-Oct	Open chaparral in foothill woodland	No. Appropriate chaparral habitat is not present in the Study Area.
49.	**Dunedelion**	*Malacothrix incana*	-/- G3G4/S3S4 4.3	Apr-Oct	Dunes	No. Appropriate dune habitat is not present in the Study Area.
50.	**Southern Curly-Leaved Monardella**	*Monardella sinuata* subsp. *sinuata*	-/- G3T2/S2 1B.2	Apr-Sep	Sandy soils, coastal strand, dune and sagebrush scrub, coastal chaparral and oak woodland	No. Appropriate coastal habitat is not present in the Study Area.
51.	**Crisp Monardella**	*Monardella undulata* subsp. *crispa*	-/- G3T2/S2 1B.2	Apr-Aug	Active dunes	No. Appropriate dune habitat is not present in the Study Area.
52.	**San Luis Obispo Monardella**	*Monardella undulata* subsp. *undulata*	-/- G2/S2 1B.2	May-Sep	Stabilized dunes, coastal scrub, stabilized sandy soils	No. Appropriate coastal habitat with sandy soils is not present in the Study Area.
53.	**California Spineflower**	*Mucronea californica*	-/- G3/S3 4.2	Mar-Aug	Sand	No. Appropriate sandy soil is not present in the Study Area.

	Common Name	Scientific Name	Federal/ State Status Global/ State Rank CA Rare Plant Rank	Blooming Period	Habitat Preference	Potential to Occur
54.	**Gambel's Water Cress**	*Nasturtium gambelii*	FE/CT G1/S1 1B.1	Apr-Oct	Marshes, streambanks, lake margins	No. Appropriate mesic condtions are not present in the Study Area.
55.	**Coast Woolly-Heads**	*Nemacaulis denudata* var. *denudata*	-/- G3G4T2/S2 1B.2	Apr-Sep	Beaches	No. Appropriate beach habitat is not present in the Study Area.
56.	**Robbins' Nemacladus**	*Nemacladus secundiflorus* var. *robbinsii*	-/- G3T2/S2 1B.2	Apr-Jun	Dry, gravelly slopes	No. Appropriate gravelly substrate is not present in the Study Area.
57.	**Short-Lobed Broomrape**	*Orobanche parishii* subsp. *brachyloba*	-/- G4?T4/S3 4.2	Apr-Oct	sandy	No. Appropriate sandy soils are not present in the Study Area.
58.	**Hubby's Phacelia**	*Phacelia hubbyi*	-/- G4/S4 4.2	Apr-Jul	Generally open gravelly or rocky slopes, chaparral, grassland	No. Appropriate rocky substrate is not present in the Study Area.
59.	**Sand Almond**	*Prunus fasciculata* var. *punctata*	-/- G5T4/S4 4.3	Mar-Apr	Sandy soils, scrubland, oak woodland	No. Appropriate sandy soils are not present in the Study Area.
60.	**Black-Flowered Figwort**	*Scrophularia atrata*	-/- G2?/S2? 1B.2	Mar-Jul	Calcium-, diatom-rich soils	No. Appropriate calcium or diatom-rich soils are not present in the Study Area.
61.	**Chaparral Ragwort**	*Senecio aphanactis*	-/- G3/S2 2B.2	Jan-May	Alkaline flats, dry open rocky areas	No. Appropriate alkaline condtions are not present in the Study Area.
62.	**San Gabriel Ragwort**	*Senecio astephanus*	-/- G3/S3 4.3	May-Jul	Steep rocky slopes in chaparral/coastal-sage scrub and oak woodland	No. Appropriate rocky slopes are not present in the Study Area.
63.	**Blochman's Ragwort**	*Senecio blochmaniae*	-/- G3/S3 4.2	May-Oct	Coastal sand dunes, sandy floodplains	No. Appropriate sandy soils and/or coastal habitat are not present in the Study Area.

	Common Name	Scientific Name	Federal/ State Status Global/ State Rank CA Rare Plant Rank	Blooming Period	Habitat Preference	Potential to Occur
64.	**San Bernardino Aster**	*Symphyotrichum defoliatum*	-/- G2/S2 1B.2	Jul-Dec	Grassland, disturbed places	No. Appropriate grassland habitat is not present and the Study Area is outside the known range for this species.

ATTACHMENT B. TABLE 1. SPECIAL STATUS ANIMALS REPORTED FROM THE REGION

	Common Name	Scientific Name	Fed/State Status Global/ State Rank CDFW Status	Habitat Preference	Potential to Occur
1.	**Oso Flaco Robber Fly**	*Ablautus schlingeri*	-/- G1/S1 SA	Sand dunes.	No. Appropriate dune habitat is not present in the Study Area.
2.	**Sharp-Shinned Hawk**	*Accipiter striatus*	-/- G5/S4 WL	Riparian, coniferous, and deciduous woodlands near water.	No. Appropriate riparian or woodkland habitat is not present in the Study Area.
3.	**Tricolored Blackbird**	*Agelaius tricolor*	-/CT G2G3/S1S2 SSC	Requires open water, protected nesting substrate, & foraging area with insect prey near nesting colony.	No. Appropriate water sources and/or suitable nesting habitat are not present in the Study Area and there are no known occurrences in the vicinity.
4.	**California Tiger Salamander**	*Ambystoma californiense*	FT/CT G2G3/S2S3 WL	Need underground refuges, ground squirrel burrows & vernal pools or other seasonal water for breeding.	No. Appropriate refugia is not present in the Study Area and the onsite drainages are dry most of the year. Nearest occurrence is >13 miles from the Study Area.
5.	**Arroyo Toad**	*Anaxyrus californicus*	FE/- G2G3/S2S3 SSC	Rivers with sandy banks, willows, cottonwoods, and sycamores. Prefers loose gravelly soils in drier portions of their range.	No. Appropriate sandy or gravelly soils are not present in the Study Area and there are no known occurrences within the vicinity.
6.	**Northern California Legless Lizard**	*Anniella pulchra*	-/- G3/S3 SSC	Sandy or loose loamy soils under coastal scrub or oak trees. Soil moisture essential.	No. The clay soils in the Study Area are not suitable for legless lizard and there is minimal to no leaf litter present.
7.	**Pallid Bat**	*Antrozous pallidus*	-/- G5/S3 SSC	Rock crevices, caves, tree hollows, mines, old buildings, and bridges.	No. Appropriate roosting habitat is not present in the Study Area.
8.	**Oso Flaco Flightless Moth**	*Areniscythris brachypteris*	-/- G1/S1 SA	Open, coastal sand dune slopes in San Luis Obispo County.	No. Appropriate open dune habitat is not present in the Study Area.

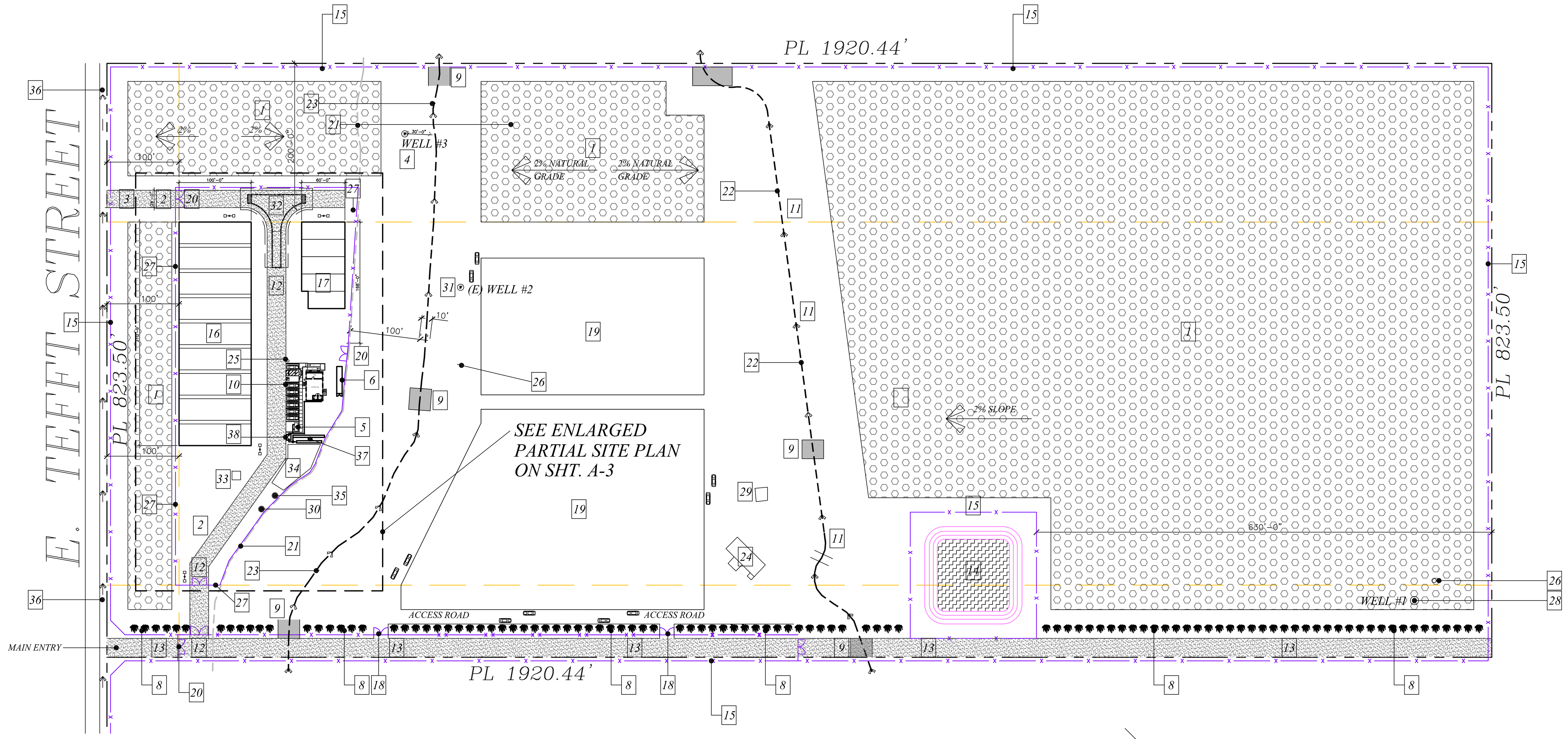
	Common Name	Scientific Name	Fed/State Status Global/ State Rank CDFW Status	Habitat Preference	Potential to Occur
9.	**Burrowing Owl**	*Athene cunicularia*	-/- G4/S3 SSC	Burrows in squirrel holes in open habitats with low vegetation.	No. Appropriate burrows are not present in the Study Ara and there are no known occurrences in the vicinity.
10.	**Obscure Bumble Bee**	*Bombus caliginosus*	-/- G4?/S1S2 SA	Food plant genera include Baccharis, Cirsium, Lupinus, Lotus, Grindelia and Phacelia.	No. Appropriate coastal habitat and host plant species are not present in the Study Area.
11.	**Vernal Pool Fairy Shrimp**	*Branchinecta lynchi*	FT/- G3/S3 SA	Clear water sandstone depression pools, grassed swale, earth slump, or basalt flow depression pools.	No. Appropriate vernal pool habitat is not present in the Study Area.
12.	**Swainson's Hawk**	*Buteo swainsoni*	-/CT G5/S3 SA	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, agricultural fields.	No. The disturbed quality of cropland and anthropogenic habitat is not suitable to support Swainson's hawk and the nearest occurrence is from a preseumed extirpated population from over 100 years ago in Guadalupe, CA.
13.	**Western Snowy Plover**	*Charadrius alexandrinus nivosus*	FT/- G3T3/S2S3 SSC	Sandy beaches, salt pond levees, & shorelines of large alkali lakes. Needs friable soils for nesting.	No. Appropriate coastal habitat and friable soils are not present in the Study Area.
14.	**Oso Flaco Patch Butterfly**	*Chlosyne leanira elegans*	-/- G4G5T1T2/S1S2 SA	Sand dune habitat around Oso Flaco Lake, SLO County. Larval food plant is Castilleja affinis.	No. Appropriate dune habitat and/or host plant species are not present in the Study Area.
15.	**Sandy Beach Tiger Beetle**	*Cicindela hirticollis gravida*	-/- G5T2/S2 SA	Adjacent to non-brackish water near the coast from San Francisco to N. Mexico. Clean, dry, light-colored sand in the upper zone.	No. Appropriate water conditions and coastal sandy soils are not present in the Study Area.
16.	**Globose Dune Beetle**	*Coelus globosus*	-/- G1G2/S1S2 SA	Coastal sand dune habitat. Inhabits foredunes and sand hummocks.	No. Appropriate dune habitat is not present in the Study Area.

	Common Name	Scientific Name	Fed/State Status Global/ State Rank CDFW Status	Habitat Preference	Potential to Occur
17.	**Monarch Butterfly**	*Danaus plexippus*	-/- G4T2T3/S2S3 SA	Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	No. Appropriate roosting habitat is not present in the Study Area, though monarchs may pass through to nearby eucalyptus grove sites.
18.	**Western Pond Turtle**	*Emys marmorata*	-/- G3G4/S3 SSC	Permanent or semi-permanent streams, ponds, lakes.	No. The onsite drainages are predominantly dry year-round and the nearest occurrences are >8 miles east and west of the Study Area.
19.	**Tidewater Goby**	*Eucyclogobius newberryi*	FE/- G3/S3 SSC	Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	No. Appropriate water sources are not present in the Study Area.
20.	**Prairie Falcon**	*Falco mexicanus*	-/- G5/S4 WL	Inhabits dry, open terrain. Nests on cliffs near open areas for hunting.	No (nesting). Appropriate cliff nesting habitat is not present in the Study Area. Low (foraging). Marginally suitable open, foraging habitat is present in the Study Area.
21.	**Arroyo Chub**	*Gila orcuttii*	-/- G2/S2 SSC	Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	No. Appropriate mesic conditions and aquatic food sources are not present in the Study Area.
22.	**California Condor**	*Gymnogyps californianus*	FE/CE G1/S1 FP	Deep canyons containing clefts in the rocky walls provide nesting sites. Forages up to 100 miles from roost/nest.	No. Appropriate nesting habitat is not present and there are no known occurrences of foraging in the vicinity of the Study Area.
23.	**California Black Rail**	*Laterallus jamaicensis coturniculus*	-/CT G3G4T1/S1 FP	Occurs in tidal salt marsh heavily grown to pickleweed, also in freshwater and brackish marshes near the coast.	No. Appropriate marsh habitat is not present in the Study Area.

	Common Name	Scientific Name	Fed/State Status Global/ State Rank CDFW Status	Habitat Preference	Potential to Occur
24.	**White Sand Bear Scarab Beetle**	*Lichnanthe albipilosa*	-/- G1/S1 SA	Found only in coastal sand dunes of SLO County, near Dune Lake, some distance from the surf.	No. Appropriate dune habitat is not present in the Study Area.
25.	**Steelhead Trout**	*Oncorhynchus mykiss irideus*	FT/- G5T2Q/S2 SA	Federal listing refers to runs in coastal basins from the Pajaro River south to, but not including, the Santa Maria River.	No. The Study Area is within USFWS critical habitat for steelhead trout; however, there are no appropriate water sources in the Study Area or directly connecting the Study Area to a known population.
26.	**Coast Horned Lizard**	*Phrynosoma blainvillii*	-/- G3G4/S3S4 SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	No. Appropriate dry, wash habitat is not present in the Study Area.
27.	**Morro Bay Blue Butterfly**	*Plebejus icarioides moroensis*	-/- G5T2/S2 SA	Inhabits stabilized dunes and surrounding areas in coastal SLO County (Morro Bay) and nw SB County. Dependent on dune lupine (*Lupinus chamissonis*).	No. Appropriate dune habitat with host plant species is not present in the Study Area.
28.	**Foothill Yellow-Legged Frog**	*Rana boylii*	-/CCT G3/S3 SSC	Partly shaded, shallow streams and riffles with rocky substrate. Min. 15 weeks for larval development.	No. Appropriate stream habitat with rocky substrate is not present in the Study Area.
29.	**California Red-Legged Frog**	*Rana draytonii*	FT/- G2G3/S2S3 SSC	Lowlands and foothills in or near sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks for larval development.	No. Appropriate water sourcers are not present and the Study Area is outside of the range for migrating frogs. The Study Area is not within USFWS critical habitat for red-legged frog..
30.	**Western Spadefoot**	*Spea hammondii*	-/- G3/S3 SSC	Vernal pools in grassland and woodland habitats	No. Appropriate pooled water sources are not present in the Study Area to support spadefoot toads.

	Common Name	Scientific Name	Fed/State Status Global/ State Rank CDFW Status	Habitat Preference	Potential to Occur
31.	**California Least Tern**	*Sternula antillarum browni*	FE/CE G4T2T3Q/S2 FP	Nests on sand beaches, alkali flats, bare flat ground from San Francisco Bay to N. Baja California. Colonial breeder.	No. Appropriate beach or alkali flats habitat are not present in the Study Area.
32.	**California Spotted Owl**	*Strix occidentalis occidentalis*	-/- G3G4T2T3/S3 SSC	Most often found in deep-shaded canyons, on north-facing slopes, and within 300 meters of water.	No. Appropriate canyon habitat or water sources are not present in the Study Area.
33.	**Coast Range Newt**	*Taricha torosa*	-/- G4/S4 SSC	Lives in terrestrial habitats & will migrate over 1 km to breed in ponds, reservoirs & slow moving streams.	No. Appropriate breeding habitat is not present and the nearest occurrence is >9.5 miles north of the Study Area, outside the migrating range for this species.
34.	**American Badger**	*Taxidea taxus*	-/- G5/S3 SSC	Needs friable soils in open ground with abundant food source such as California ground squirrels.	No. Appropriate friable soils are not present and very few burrows were observed in the Study Area.
35.	**Two-Striped Gartersnake**	*Thamnophis hammondii*	-/- G4/S3S4 SSC	Coastal California from Salinas to Baja, sea level to 7000', aquatic, in or near permanent water, streams with rocky beds and riparian growth	No. Appropriate permanent water sources are not present in the Study Area.
36.	**Mimic Tryonia**	*Tryonia imitator*	-/- G2/S2 SA	Inhabits coastal lagoons, estuaries, salt marshes from Sonoma to San Diego Counties.	No. Appropriate aquatic habitat is not present in the Study Area.

APPENDIX C. SITE PLAN FOR 514 E. TEFFT STREET



SITE PLAN

SCALE: 1"=100'

REFERENCE NOTES

1	EXISTING AVOCADO ORCHARD
2	NEW 22'-0" WIDE FIRE DEPT ACCESS ROAD W/CLASS II BASE
3	NEW 24'-0" WIDE TURN OUT DRIVE APPROACH 100'-0" DISTANCE TO GATED AREA W/CLASS II BASE
4	EXISTING AG WATER WELL #3 .LOCATION W/100 AMP ELECTRICAL PANEL AND METER
5	NEW ACCESSIBLE PORTABLE RESTROOM TO BE CONNECTED TO NEW SEPTIC SYSTEM
6	NEW 8'X40' STORAGE CONTAINER
7	PROPOSED 1000 SF MODULAR OFFICE USED FOR PROCESSING AND DISTRIBUTION. PROVIDE ODOR MITIGATION CLOSED LOOP 500 CM CAP CHARCOAL FILTERS TYP OF (2)
8	EXISTING PALM TREES TO REMAIN
9	EXISTING BEIDGE W/30" DIA. CORRUGATED PIPE TO REMAIN
10	NEW 8 SPACE PARKING AREA W/ CONCRETE PAVED ACCESSIBLE PARKING SPACE AND PATH OF TRAVEL TO OFFICE BUILDING.
11	EXISTING 10'-0" WIDE WATER FLOW LINE
12	NEW ENTRANCE GATE PROVIDE 6'-6" HT X16'-0" WIDE SLATTED CHAIN LINK FENCE DOUBLE GATE ENTRANCE WITH SECURITY LOCK.
13	EXISTING 16'-0" WIDE MIN CLASS II BASE ACCESS ROAD
14	(E) 100'X100'X4' DEEP AG RESERVOIR 40,000 CU FT
15	EXISTING 6'-0" HT METAL WIRE DEER FENCE TYP. @ PERIMETER
16	NEW 27,500 SF GREENHOUSE WITH 22,000 SF CANNABIS CANOPY AND ODOR MITIGATION CLOSED LOOP 1000 CFM CAP. CHARCOAL FILTERS 3 TYPICAL EA GREENHOUSE
17	NEW 6875 SF ANCILLARY GREENHOUSE NURSERY WITH CLOSED LOOP 1000 CFM CAP. CHARCOAL FILTERS 2 TYP. AT EACH 20'X80' GREENHOUSE NURSERY STRUCTURE
18	EXISTING ROW CROP AND AVOCADO ORCHARD ACCESS 5'-0" HT X 16'-0" WIDE METAL GATES.
19	EXISTING ROW CROP FIELD
20	MAIN PROPERTY ENTRANCE 5'-0" HT. X 16'-0" WIDE METAL GATE ENTRANCE WITH SECURITY LOCK AND CHAIN.
21	NEW 100'-0" SETBACK FROM RIPARIAN EDGE
22	EXISTING 18" DEEP NATURAL WATER FLOW LINE
23	EXISTING 10' WIDE CREEK
24	EXISTING RESIDENCE TO REMAIN
25	NEW FIRE HYDRANT LOCATION PER FIRE DEPARTMENT APPROVAL.
26	EXISTING POWER POLE
27	NEW 6'-6" HT CHAINLINK FENCE WITH GREEN VINYL SLATS SURROINDING CANNABIS OPERATION AREA.
28	EXISTING AG WELL #1 LOCATION WITH 100 AMP ELECTRICAL PANEL AND METER.
29	NEW 20'-0" HT. POLE WITH SECURITY LIGHTING AND AND CAMERAS.
30	NEW 10,000 GAL CAP STEEL TANK STORED FIRE WATER
31	EXISTING AG WELL #2 LOCATION WITH 100 AMP ELECTRICAL PANEL AND METER.
32	NEW FIRE DEPARTMENT HAMMER HEAD TURNAROUND AREA.
33	NEW 12'X12' FARM SUPPLY STORAGE SHED WITH SECURED DOOR.
34	NEW LOCATION OF CANNABIS 50/50 MIXING AND COMPOSTING AREA.
35	NEW 5,000 GAL FARM IRRIGATION WATER SUPPLY TANK.
36	NEW 1,200 GAL CAP SEPTIC TANK AND LEACH FIELD SYSTEM.
37	ODOR MITIGATION CLOSED LOOP 1000 CFM CAP. CHARCOAL FILTERS

GRDC
DESIGN + PERMITS+CONSTRUCTION MANAGEMENT
LICENSE # B 941843
2325 SKYWAY DR. STE. G SANTA MARIA, CA 93455
PH(805) 478-1674 FAX(805) 623-8574

REVISIONS

REV.	DATE	DESCRIPTION
1		
2		
3		

PROJECT NAME: GROW AREAS SITE PLAN

ADDRESS: 514 E. TEFFT STREET NIPOMO CALIFORNIA 93444

OWNER NAME: CANNA ORGANIC FARMS INC

ADDRESS: 514 E. TEFFT STREET NIPOMO CALIFORNIA 93444

SHEET TITLE: GROW AREAS SITE PLAN

DATE: 12/16/19

PCR-JOB-# 1100

SHEET OF:

SHEET NO. A-2