

Sanders Minor Use Permit (DRC2018-00094)

Old Stage Road

APN 080-041-036

San Luis Obispo County, California

## Biological Resources Survey Report



Prepared for:

Trent Sanders  
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Prepared by:

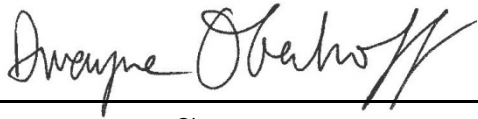


January 21, 2019

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As a County-approved biologist, I hereby certify that this Biological Resources Survey 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.



Signature

1/21/2019

Date

## EXECUTIVE SUMMARY

This Biological Resources Survey Report was prepared for Mr. Trent Sanders on an approximately 6-acre portion (project area) of a 167-acre parcel (APN 080-041-036) located on Old Stage Road in San Luis Obispo County, California. The proposed project would construct mixed light greenhouses, outdoor hoopouses, a propagation building, and an agricultural barn, adjacent to existing mixed light greenhouse and barn in currently undeveloped areas accessed by existing dirt roadways.

This biological resources survey found the proposed project areas within the parcel to contain blue oak woodland and annual grassland habitats. Small areas of disturbed (ruderal) habitat associated with existing dirt roads and structures are also present.

This evaluation is based on one site visit conducted on August 21, 2018, and therefore does not provide a clear determination of presence / absence of special status species within the survey area. The biological investigation did not cover the blooming period for potential special-status plant species, but did include direct observation and evaluation of onsite and adjacent habitat conditions, review of the California Natural Diversity Data Base (CNDDDB) records documenting occurrence data from the surrounding area, and previous biological survey reports conducted in nearby areas.

The survey identified several dry soap plant (*Chlorogalum* spp), within grassland and oak woodland areas. The region is known to contain occurrences of the federally listed purple amole (*Chlorogalum purpureum* var. *purpureum*), and the common soap plant (*Chlorogalum pomeridianum*). Identification of *Chlorogalum* species is based primarily on flower characteristics, and the August site visit occurred well after the blooming period for either species. Additional surveys conducted during the spring blooming period are necessary to determine presence/absence of the federally protected species, and mitigation will be required to avoid and minimize impacts if this species is found within areas proposed for disturbance.

Several bird species protected under the MBTA were observed, and the blue oak woodland and annual grassland habitats present provide opportunities for bird nesting activity. The presence of California ground squirrels also indicates that a suitable prey base for San Joaquin kit fox and American badger is present in the project area. The presence of ground squirrel burrows also provide nesting habitat for Western burrowing owl.

Potential impacts to purple amole, nesting birds, kit fox, badger, burrowing owl, and blue oak trees, and potential sedimentation impacts to adjacent drainages were identified in association with the proposed project. Project construction proposes to remove 14 oak trees, and may impact additional oak trees from ground disturbance and/or pruning. Avoidance, protection and mitigation measures including

performance of a full floristic survey effort have been proposed within this report to avoid and minimize impacts to species and habitats on the site.



## INTRODUCTION

The following Biological Resources Survey Report has been prepared by Ecological Assets Management LLC (EAM), at the request of Mr. Trent Sanders. The survey area consisted of a 6-acre portion of a 167-acre parcel located on Old Stage Road in the extreme northern portion of San Luis Obispo County, California.

This report presents the methods and results of one biological resources survey conducted on the proposed project area in August 2018, and provides current information on the special-status plant and animal species that may be potentially present onsite or in the vicinity. The survey did not cover the blooming period for special-status annual plant species that have a potential to occur within the vicinity, and this report does not provide a complete floristic inventory of the site.

The survey also assessed the potential for special status wildlife species to be present based on observed conditions and habitat types, historical uses, CNDDDB records, and review of biological survey reports conducted on nearby portions of Camp Roberts.

The report assesses whether additional protocol or focused survey efforts are necessary, and whether any biological impacts and effects may occur to federal and state listed species or sensitive or jurisdictional habitats from the proposed action. Avoidance, protection and mitigation measures have been proposed within this report to minimize any potential for impacts to sensitive species and habitats.

## SITE LOCATION

The approximately 6-acre area surveyed for this report is located within APN 080-041-036, on Old Stage Road in San Luis Obispo County, California (refer to Figure 1). An alternate address for the property is 1200 Nacimiento Lake Drive. The site is located near the northern boundary of San Luis Obispo County, approximately 5.4 miles west of Highway 101, and is surrounded by similar rural properties. Camp Roberts is located immediately to the east and south of the subject parcel. Primary access is along an existing ranch road extending from State Route G19 (Nacimiento Lake Drive).

## PROPOSED ACTION

The proposed project would construct mixed light greenhouses, outdoor hoopouses, a propagation building, and an agricultural barn, adjacent to an existing mixed light greenhouse and barn. The new facilities will be accessed by existing dirt roadways and several short new dirt roads. Fencing, gates, lighting, and irrigation apparatus will be installed. Project construction proposes to remove 14 oak trees, and may impact additional oak trees from ground disturbance and pruning. Mitigation for tree impacts will occur onsite per county requirements. Two adjacent seasonal drainages will not be disturbed by the project.



FIGURE 1. Vicinity map.



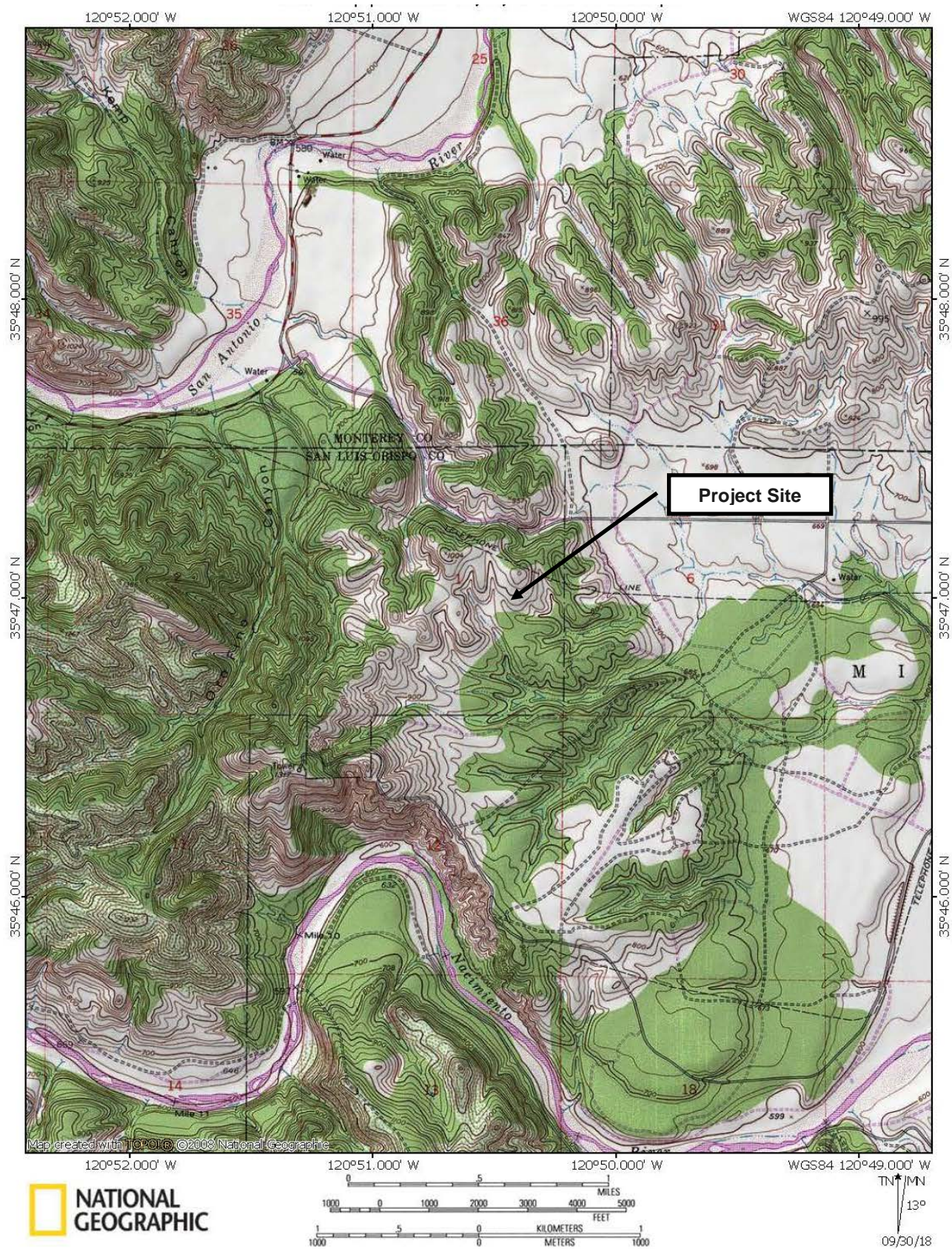


FIGURE 2. Location map of project site.



## SURVEY METHODS

### Literature Review

Prior to visiting the survey area, EAM biologists reviewed the California Natural Diversity Data Base (CNDDB) results for the Bradley, Adelaida, Lime Mtn., and Tierra Redonda Mtn. U.S. Geological Survey (USGS) quadrangles to evaluate the potential for occurrence of special-status plant and animal species, and special-status plant communities. The site is located in the lower southwest corner of the Bradley quadrangle. This review area was deemed appropriate based on the subject parcel's location, limited elevational range, soil conditions, and dominant plant communities, because these features severely limit the potential number of special-status plant and animal species and natural habitat types that could be present. In addition to CNDDB results, EAM reviewed recent environmental documents and reports from nearby areas, including the March 2014 Biological resources characterization for multiple construction projects (SATCOM), Camp Roberts, San Luis Obispo County, California.

### Site Visits

EAM biologist Bob Sloan conducted one survey over the project area, on August 21, 2018, and spent a total of 1.75 person hours walking the site and assessing existing conditions and biological resources. During the survey, plant communities were characterized, identifiable plant species were recorded, and the potential for occurrence of special-status plants and animals listed by the CNDDB were evaluated.

The survey did not cover the blooming period for special-status annual plant species that have a potential to occur within the vicinity, and therefore this report does not provide a complete floristic inventory of the site. The survey assessed the potential for special status wildlife species to be present based on observed conditions and habitat types, historical uses, and CNDDB records.

Vegetation classification generally followed Holland's *Preliminary Descriptions of the Terrestrial Natural Communities of California* (1986) and was cross-referenced with *A Manual of California Vegetation, Second Edition* (Sawyer et al., 2009) for consistency. Plant species observed during the survey were recorded, and are included as an appendix to this report. Plant taxonomy followed the *Jepson Manual, Second Edition* (Baldwin et al., 2012). Photos of notable features were taken, and a photo plate is included as an appendix to this report.

## RESULTS

### Existing Conditions

The area surveyed for this report is located to the south of an existing barn, and consists of a gently sloping ridgetop extending to the south, with small ephemeral drainage

channels on either side (refer to Appendix G: Proposed Site Plan). Site elevations in the project area range from 855 to 865 feet above mean sea level.

The ridgetop project area contains intermixed areas of blue oak woodland and annual grassland, and appears to be grazed lightly by horses. Understory plants are sparse in the oak-dominated areas, and consist of grassland species. No shrub cover is present. The ridge slopes steeply down to small drainage channels on either side that appear to contain water only during rainy periods.

### Soils

The University of California Davis, Soil Resource Laboratory website, SoilWeb (<http://casoilresource.lawr.ucdavis.edu/>), maps the underlying soils in the majority of the project area as the Arbuckle-Positas complex, 30 to 50 percent slopes. This complex consists of loam soils on steep terraces. This deep, well drained soil complex was formed from alluvium from mixed rock sources. Surface runoff is rapid, and the hazard of water erosion is high.

The northern, developed portion of the site, and the location proposed for the new propagation building contains Nacimiento silty clay loam, 30 to 50 percent slopes. This moderately deep, rolling to hilly, well-drained soil formed in material weathered from calcareous sandstone and shale. Surface runoff is rapid, and the hazard of water erosion is high.

Soil conditions observed onsite matched the mapped loamy soil characteristics. Adjacent drainage channels exhibited areas of exposed shale bedrock. No serpentine-influenced soils were observed in the area.

### Observed Habitats

The site visit conducted by EAM thoroughly covered all potential project areas, and identified two natural plant communities: blue oak woodland, and annual grassland. Areas of non-native ruderal habitat are also present along existing dirt roadways and buildings. The observed conditions within these plant communities are discussed below. Refer to Appendix F (Existing Conditions and Habitat Map) for a map of the survey area.

- California Annual Grassland

California annual grassland corresponding to the wild oats and annual brome grasslands described in the Manual of California Vegetation (2009, second edition) and the Non-native Grassland described by Holland (1986), is present in portions of the project area. The annual grassland habitat was dominated by non-native species including wild oat (*Avena* spp.), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), red-stemmed filaree (*Erodium cicutarium*), and yellow star thistle (*Centaurea solstitialis*). Native forbs observed in grassland areas included common



tarweed (*Centromadia pungens*), vinegar weed (*Trichostema lanceolatum*), doveweed (*Croton setigerus*), and yarrow (*Achillea millefolium*). Dried remnant fiddleneck plants observed are likely Menzies' fiddleneck (*Amsinckia menziesii*). Scattered occurrences of native bunchgrass were observed on steeper slope areas along the drainages. No native shrub species were observed.

California grasslands can provide foraging, breeding habitat and movement opportunities for many wildlife species. Botta's pocket gopher (*Thomomys bottae*) and deer mice (*Peromyscus* spp.) are known to occur within this habitat type, and these species can serve as a prey base for predator animals, including snakes, raptors, badger, foxes, and coyote (*Canis latrans*). Numerous invertebrate species which could provide a food source for larger animals such as lizards, birds and small mammals are typically found within grassland communities. A variety of birds rely on open expanses of grasslands for foraging habitat, and several species nest in grasslands.

- Blue Oak Woodland

The oak woodland habitat present corresponds to the Blue Oak-Grassland habitat type described by Sawyer, Keeler-Wolf and Evens (2009). It also corresponds to Holland's (1986) Blue Oak Woodland plant community description. This habitat is characterized by dense to open occurrences of blue oak trees (*Quercus douglasii*). Blue oak woodland is present in portions of the ridgetop project area, and on slopes above and along the small drainages on either side of the project area. No other tree species are present. The wooded areas on the site consisted of widely spaced trees, and did not contain oak leaf litter and the typical oak woodland understory plants that would develop if dense canopy cover was present. Groundcover in and around oak areas consisted of annual grasses similar to the adjacent annual grassland habitat.

The oak trees on the site have potential to provide foraging, roosting, and nesting opportunities for a variety of bird species. Acorns are also a food source for many animal species including scrub jay (*Aphelocoma corulescens*) and western gray squirrel (*Sciurus griseus*). Other species that could potentially occur in the oak forest onsite include western screech owl (*Otus kennicottii*), and the oak titmouse (*Baeolophus inoratus*).

- Ruderal/Disturbed

Ruderal/disturbed conditions are common along roadsides and other areas that are affected by construction, agriculture, ornamental landscaping, or other types of regular disturbance that affect plant growth. If vegetated, these areas are typically dominated by non-native annual grasses and herbaceous plants adapted to the regular cycle of disturbance from traffic, grading, and weed reduction practices such as mowing and herbicide application. Typical plants consist primarily of introduced species and escaped ornamentals that exhibit clinging seeds, adhesive stems, and

rough leaves that assist their colonization of disturbed or unmaintained lands. This is not a native plant community, and is not described in the Manual of California Vegetation or in Holland's (1986) vegetation classification.

Ruderal or disturbed areas within the survey area were present along road edges and buildings. These areas exhibited disturbed and compacted soils, and were either unvegetated or contained patchy occurrences of non-native weedy plants. Plant species observed within ruderal/disturbed areas included wild oat, ripgut brome, and red-stemmed filaree.

### Hydrologic Features

Small, well defined seasonal drainage channels are located to the east and west of the project site. These channels exhibit sinuosity, scour, and sediment deposits, and eventually connect to the Nacimiento River to the south of the site. The active portions of both channels are less than 6 feet wide and 2.5 feet deep, and no evidence of riparian or wetland vegetation was observed. The August survey found no flowing water or moist soils present, and very few areas where even shallow ponding could occur. Both channels appear to flow only intermittently, during and immediately following significant rain events.

Based on the observed conditions, the entire (bank to bank) channel areas would fall under the jurisdiction of the CDFW under California Fish and Game Code Section 1600 et seq, and would also be regulated by RWQCB as waters of the state.

The presence of bed and bank features, and connectivity to downstream water features indicate that the channel areas below the Ordinary High Water Mark (OHWM) could fall within the jurisdiction of the USACE as waters of the U.S. pursuant to Section 404 of the Clean Water Act. Because no impacts are proposed to the drainage channels, a formal wetland delineation or connectivity determination was not conducted for this report.

### SPECIAL-STATUS SPECIES

#### Special-Status Plant Species

The site visit involved walking all portions of the project area and identifying all plant species observed. Plants were identified to species, or sub-species, with dichotomous keys used as necessary (Hoover, 1970; Hickman, ed. 1993). Special-status plant species known to occur in habitats, elevations, and/or soil types similar to those found on the parcel were the focus of the survey effort. During the survey, 13 vascular plant species were found in an identifiable condition. Of the species observed, eight (8) were native and five (5) were non-native. A complete list of all plant species observed during the site visit and survey is provided in Appendix C.

For the purpose of this study, special-status plants are vascular plants listed, proposed for listing, or candidates for listing as Threatened or Endangered by the U.S. Fish and Wildlife Service (USFWS) under the federal Endangered Species Act (ESA); those listed or proposed for listing as Rare, Threatened, or Endangered by the California Department of Fish and Wildlife (CDFW) under the California Endangered Species Act (CESA); and plants occurring on California Rare Plant Rank 1, 2, 3 and 4, as developed by the CDFW and the California Native Plant Society (CNPS). Sensitive natural communities are those plant communities listed as rare in the CNDDDB.

The specific Rare Plant Rank code definitions are as follows:

- Rank 1A = Plants presumed extinct in California;
- Rank 1B.1 = Rare or endangered in California and elsewhere; seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat);
- Rank 1B.2 = Rare or endangered in California and elsewhere; fairly endangered in California (20-80% occurrences threatened);
- Rank 1B.3 = Rare or endangered in California and elsewhere, not very endangered in California (<20% of occurrences threatened or no current threats known);
- Rank 2 = Rare, threatened or endangered in California, but more common elsewhere;
- Rank 3 = Plants needing more information (most are species that are taxonomically unresolved; some species on this list meet the definitions of rarity under CNPS and CESA); and
- Rank 4.2 = Plants of limited distribution (watch list), fairly endangered in California (20-80% occurrences threatened).
- Rank 4.3 = Plants of limited distribution (watch list), not very endangered in California.

CNDDDB records for the Bradley, Adelaida, Lime Mtn., and Tierra Redonda Mtn. USGS quadrangles were examined to identify known occurrences of special-status plant species surrounding the project site. The site is located in the lower southwest corner of the Bradley quadrangle. Please refer to Appendix A for complete discussions of sensitive plant species.

Based on evaluation of existing soils and habitat conditions at the project site, the following plant species identified in the CNDDDB search are considered to have potential to be present within or immediately adjacent to the project area.

- Round-leaved filaree (*California macrophylla*)
- Dwarf calycadenia (*Calycadenia villosa*)
- Lemmon's jewelflower (*Caulanthus coulteri* var. *lemmonii*)
- San Luis Obispo Owl's clover (*Castilleja densiflora* var. *obispoensis*)
- Purple amole (*Chlorogalum purpureum* var. *purpureum*)

- Rattan's cryptantha (*Cryptantha rattanii*)
- Small-flowered gypsum-loving larkspur (*Delphinium gypsophilum* ssp. *parviflorum*)
- Koch's cord moss (*Entosthodon kochii*)
- Pale-yellow layia (*Layia heterotricha*)
- Jared's pepper-grass (*Lepidium jaredii* ssp. *jaredii*)
- California spineflower (*Mucronea californica*)
- Shining navarretia (*Navarretia nigelliformis* ssp. *radians*)
- Hooked popcorn-flower (*Plagiobothrys uncinatus*)

The majority of the special-status plant species identified by the CNDDDB 4-quadrangle search have highly specialized requirements such as serpentine or granitic rock outcrops, other specific soil affinities, restricted elevational ranges, or specific habitat associations such as coniferous forest, freshwater seep, vernal pool, or alkaline flat. The following narrowly endemic plant species were considered unlikely to be present within or adjacent to the project site due to the absence of unique suitable habitat requirements.

- Oval-leaved snapdragon (*Antirrhinum ovatum*)
- Marsh sandwort (*Arenaria paludicola*)
- Indian Valley spineflower (*Aristocapsa insignis*)
- Salinas milk-vetch (*Astragalus macrodon*)
- Santa Cruz Mountains pussypaws (*Calyptidium parryi* var. *hesseae*)
- Camatta Canyon amole (*Chlorogalum purpureum* var. *reductum*)
- Douglas' spineflower (*Chorizanthe douglasii*)
- Straight-awned spineflower (*Chorizanthe rectispina*)
- Umbrella larkspur (*Delphinium umbraculorum*)
- Kern mallow (*Eremalche kernensis*)
- Yellow-flowered eriastrum (*Eriastrum luteum*)
- Mesa horkelia (*Horkelia cuneata* var. *puberula*)
- Santa Lucia rush (*Juncus luciensis*)
- Davidson's bush-mallow (*Malacothamnus davidsonii*)
- Jones' bush mallow (*Malacothamnus jonesii*)
- Santa Lucia bush mallow (*Malacothamnus palmeri* var. *palmeri*)
- One-sided monkeyflower (*Mimulus subsecundus*)
- Spreading navarretia (*Navarretia fossalis*)
- Paso Robles navarretia (*Navarretia jaredii*)
- Prostrate vernal pool navarretia (*Navarretia prostrata*)
- Chaparral ragwort (*Senecio aphanactis*)
- Santa Cruz microseris (*Stebbinsoseris decipiens*)
- Cook's triteleia (*Triteleia ixioides* ssp. *cookii*)

The survey effort identified several dry remnants of soap plant (*Chlorogalum* spp), within the proposed project area. The region is known to contain occurrences of the federally

listed purple amole (*C. purpureum* var. *purpureum*), and the common soap plant (*C. pomeridianum*). Purple amole is a perennial bulbiferous herb that typically occurs in chaparral, cismontane woodland, and valley and foothill grasslands in gravelly and clay soils. The nearest known occurrences of purple amole are at Camp Roberts, the closest of which is located approximately 0.9-mile to the southeast of the project area.

Potentially suitable habitat is present for purple amole in blue oak woodland and annual grasslands of the project area. This species blooms between April and June and was not identifiable during the field visit on August 21, 2018. Due to the nearby occurrences and suitable habitat conditions, this species has potential to be present in the project area.

Due to the late summer survey timeframe, many annual plant species that are likely to be present were not observed, or were unidentifiable. As a result, this report cannot determine presence or absence of the sensitive plant species considered to have potential to be present within the project area. Additional surveys during the spring blooming season will be required to develop a full species list for the site, and to determine whether the federally protected purple amole or other sensitive annual plant species are present.

#### Special-Status Wildlife Species

CNDDDB records for the Bradley, Adelaida, Lime Mtn., and Tierra Redonda Mtn. USGS quadrangles were examined to identify known occurrences of special-status wildlife species surrounding the project site. Please refer to Appendix B for complete discussions of the habitat requirements and potential for presence of sensitive wildlife species, and nesting birds subject to the MBTA. Based on evaluation of soils and habitat conditions at the project site, the following wildlife species identified in the CNDDDB search are considered to have potential to be present within or near the project area.

- Coopers hawk (*Accipiter cooperii*)
- Pallid bat (*Antrozous pallidus*)
- Golden eagle (*Aquila chrysaetos*)
- Western burrowing owl (*Athene cunicularia*)
- Ferruginous hawk (*Buteo regalis*)
- Townsend's (=western) big-eared bat (*Corynorhinus townsendii*)
- California horned lark (*Eremophila alpestris actia*)
- Prairie falcon (*Falco mexicanus*)
- California condor (*Gymnogyps californianus*)
- Loggerhead shrike (*Lanius ludovicianus*)
- San Joaquin whipsnake (*Masticophis flagellum ruddocki*)
- Monterey dusky footed woodrat (*Neotoma macrotis luciana*)
- Salinas pocket mouse (*Perognathus inornatus psammophilus*)



- Coast horned lizard (*Phrynosoma blainvillii*)
- American badger (*Taxidea taxus*)
- San Joaquin kit fox (*Vulpes macrotis mutica*)

Many of the special-status animal species identified by the CNDDDB four-quadrangle search have highly specialized habitat, nesting, or roosting requirements including ponded water, rock outcrops, specific soil textures, or riparian vegetation. The following wildlife species were considered unlikely to be present within or adjacent to the project site due to the absence of suitable habitat requirements.

- Tri-colored blackbird (*Agelaius tricolor*)
- Silvery legless lizard (*Anniella pulchra pulchra*)
- Pallid bat (*Antrozous pallidus*)
- Great blue heron (*Ardea herodias*)
- Vernal pool fairy shrimp (*Branchinecta lynchi*)
- Yellow warbler (*Dendroica petechia brewsteri*)
- White-tailed kite (*Elanus leucurus*)
- Western pond turtle (*Emys marmorata*)
- Bald eagle (*Haliaeetus leucocephalus*)
- Hoary bat (*Lasiurus cinereus*)
- Steelhead – South/Central California ESU (*Oncorhynchus mykiss irideus*)
- San Joaquin pocket mouse (*Perognathus inornatus inornatus*)
- California red-legged frog (*Rana draytonii*)
- Bank swallow (*Riparia riparia*)
- Coast Range newt (*Taricha torosa*)
- Western spadefoot toad (*Spea hammondi*)
- Least Bell's vireo (*Vireo bellii pusillus*)

None of the sensitive wildlife species listed above were observed during the 2018 survey. Based on the lack of suitable habitat and hydrology in the adjacent drainages, no impacts to species associated with riparian, aquatic or semi-aquatic habitats will occur, and no vernal pool habitat is present to support any species of fairy shrimp.

The federal and state listed San Joaquin kit fox (kit fox) could potentially occur onsite since the property is located near known occurrences on Camp Roberts. While kit fox have not been observed on Camp Roberts for over 10 years, and it is currently unknown whether or not the species is still extant on Camp Roberts, the species may still be present in the general area, and could at some point in time utilize the site for movement, foraging and possibly denning activities. No sign of San Joaquin kit fox was observed during the survey. The potential for a kit fox to be harmed during project implementation is considered low, and would likely be associated with an individual kit fox wandering into the work area and taking shelter in materials or being struck by

equipment. Implementing standard avoidance measures would be sufficient to avoid take of San Joaquin kit fox. Standard avoidance measures would likely include implementing pre-disturbance surveys in accordance with the USFWS *Standardized Recommendations for Protection of the San Joaquin kit fox Prior to or During Ground Disturbance* (USFWS 1999). Numerous kit fox avoidance measures as outlined by USFWS (1999) and County standard avoidance measures for construction projects are likely to be required during construction. Recommended kit fox protection and avoidance measures are provided in measure BIO 6 on page 22.

The American badger could forage onsite based on known occurrences on Camp Roberts, but no badger activity or potential den sites were observed during surveys of the area. However, based on the presence of ground squirrel colonies onsite that could provide a suitable prey base for this highly mobile carnivore, American badger could be present onsite in the future and just prior to the start of construction. Recommended American badger protection and avoidance measures are provided in measure BIO 7 on page 24.

The western burrowing owl is known from the general area with known occurrences on Camp Roberts. Suitable burrows (e.g. ground squirrel burrows) were observed in the project area and could provide nesting habitat. No Western burrowing owls were observed during the site visit. Recommended western burrowing owl protection and avoidance measures are provided in measure BIO 8 on page 25.

As discussed in Appendix B, the raptor species identified above, Coopers hawk, golden eagle, ferruginous hawk, prairie falcon, and California condor, are not expected to nest within or adjacent to the project area due to an absence of suitable nesting habitat such as riparian woodland, large rocks/cliffs, and large trees. However, the habitats observed onsite have the potential to provide nesting habitat for a variety of other migratory and resident bird species, including the California horned lark and loggerhead shrike identified above. Mitigation measure BIO-5 on page 21 are recommended to minimize impacts to all nesting birds, not just California horned lark and loggerhead shrike, from project related activities.

The other species considered to have potential to be present within or near the project area identified above, on pages 10 and 11, will not be impacted due to the absence of suitable habitats and/or soils within the project area. These species include, Pallid bat, Townsend's (=western) big-eared bat, San Joaquin whipsnake, Monterey dusky footed woodrat, Salinas pocket mouse, and coast horned lizard. Details of each species habitat requirements and potential for occurrence is located in Appendix B.

The evaluation of special status wildlife species occurrence within the parcel was based on a habitat suitability analysis coupled with direct field observations. It did not include definitive surveys to determine presence or absence following specific protocols. The

conclusions and information contained herein and detailed in Appendix B was based on the review of biological studies from the region and the CNDDDB records coupled with our knowledge of the particular species' biology and ecological requirements.

#### Critical Habitat Identification

Review of designated critical habitat boundaries in northern San Luis Obispo County indicate that the subject parcel is found within critical habitat for vernal pool fairy shrimp (*Branchinecta lynchi*). However, areas of ponded water or vernal pools were observed within the project area of the subject parcel. The proposed project will not result in impacts to vernal pool fairy shrimp or their habitat.

#### Habitat Connectivity

Historically, San Joaquin kit fox located on Camp Roberts were known to move long distances back-and-forth to larger core populations found to the southeast east of Paso Robles between Shandon and California Valley. However, the project area is located to the west of Camp Roberts and is not expected to block or restrict movement of kit fox or other wildlife. In addition, the project area does not appear to be an important wildlife corridor or provide linkage between known important disjunct wildlife habitats, and the topography and habitat conditions present do not provide migration corridor opportunities. The proposed project will not block wildlife from traversing the area. The project site is surrounded by large undeveloped areas, and wildlife will be able to continue to move freely in the vicinity.

### **REGULATORY OVERVIEW**

#### Section 404 of the Clean Water Act Of 1977

Regulatory protection for water resources throughout the United States is under the jurisdiction of the U.S. Army Corps of Engineers (Corps). Section 404 of the Clean Water Act prohibits the discharge of dredged or fill material into Waters of the U. S. without formal consent from the Corps. Waters of the U.S. includes Special Aquatic Sites (e.g., marine waters, tidal areas, stream channels) and wetlands. Under Section 404, actions in Waters of the U.S. may be subject to either an individual permit or a general permit, or may be exempt from regulatory requirements.

The drainages adjacent to the project area may constitute Waters of the U.S., as defined by the Corps, and could contain small seasonal wetland areas. Any impacts to Corps jurisdiction will require issuance of a permit under Section 404. No impacts to jurisdictional areas are currently proposed.

#### Section 401 of the Clean Water Act Of 1977

Section 401 of the Clean Water Act and its provisions ensure that federally permitted activities comply with the federal Clean Water Act and state water quality laws. Section

401 is implemented through a review process that is conducted by the Regional Water Quality Control Board (RWQCB), and is triggered by the Corps permitting process. Specifically, the RWQCB certifies via the 401 process that the proposed project complies with applicable effluent limitations, water quality standards, and other conditions of California law.

The adjacent drainages would be subject to Section 401 of the Clean Water Act. Any impacts to RWQCB jurisdiction will require issuance of a permit under Section 401, or under the Porter-Cologne Act through the State Water Quality Certification Program. No impacts to jurisdictional areas are currently proposed.

#### Federal Endangered Species Act Of 1973

The Federal Endangered Species Act (FESA) provides legislation to protect federally listed plant and animal species. Impacts to listed species resulting from the implementation of a project would require the responsible agency or individual to formally consult with the USFWS or National Marine Fisheries Service (NMFS) to determine the extent of impact to a particular species.

This assessment identified the federally endangered San Joaquin kit fox and the federally threatened plant purple amole as potentially present within the project area.

#### California Endangered Species Act

The State of California Endangered Species Act (CESA) ensures legal protection for plants listed as rare or endangered and species of wildlife formally listed as endangered or threatened. The state also lists "Species of Special Concern" based on limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. Under state law, the California Department of Fish and Game is empowered to review projects for their potential to impact state-listed species and California Special Concern species, and their habitats.

This assessment identified the state endangered San Joaquin kit fox as potentially present within the project area.

#### Section 1602 of the Fish and Game Code

The CDFW is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. To meet this responsibility, the law requires any person, state or local government agency, or public utility proposing a project that may impact a river, stream, or lake to notify the CDFG before beginning the project. If the CDFG determines that the project may adversely affect existing fish and wildlife resources, a Lake or Streambed Alteration Agreement is required.

Any impacts to the adjacent drainages would require a 1602 Streambed Alteration Agreement prior to project implementation. No impacts to jurisdictional areas are currently proposed.

#### Other Sections of the Fish and Game Code

Fully Protected and Protected species may not be taken or possessed without a permit from the Fish and Game Commission and/or the CDFW. Information on these species can be found within section 3511 (birds), section 4700 (mammals), section 5050 (reptiles and amphibians), and section 5515 (fish) of the Fish and Game Code.

No species designated as “Fully Protected” under the Fish and Game Code are likely to occur within the project area.

#### Migratory Bird Treaty Act Of 1918

The Migratory Bird Treaty Act (MBTA) protects all migratory birds, including their eggs, nests, and feathers. The MBTA was originally drafted to put an end to the commercial trade in bird feathers popular in the latter part of the 1800’s.

Implementation of the proposed action is not expected to directly affect any species of bird covered under the MTBA, but pre-activity surveys for active nests of tree and ground-nesting birds should be conducted prior to construction occurring between February 1 and September 15. As discussed earlier, blue oak woodland and grassland habitats on the site provide nesting opportunities for a variety of avian species subject to the MBTA.

### **DISCUSSION**

This biological assessment documents existing conditions and potential impacts to sensitive species and habitats based on current biological and regulatory information. Based on the August 2018 site visit, the project area as proposed has limited potential to support sensitive wildlife species, and does not contain any sensitive habitats other than oak woodland.

As discussed previously, this report cannot determine presence or absence of the sensitive plant species considered to have potential to be present within the project area due to the timing of the survey visit. Additional surveys during the spring blooming season are necessary to develop a full floristic species list for the site, and to determine whether the federally protected purple amole or other sensitive annual plant species are present. The spring survey effort will also provide additional information on wildlife usage and potential for sensitive wildlife to be present in or adjacent to the site. The survey results and associated mitigation requirements should be documented in a supplemental report and submitted to the County and other affected agencies.



## **IMPACT ANALYSIS AND RECOMMENDED MITIGATION MEASURES**

The following impact analysis and recommended mitigation measures are intended to support the California Environmental Quality Act (CEQA) review process conducted by the County of San Luis Obispo acting as the lead agency for the project.

As proposed, the project will impact oak woodland and annual grassland habitats. If purple amole, kit fox, American badger and nesting birds are present, they could be affected during construction activities. Additional floristic surveys must be conducted prior to any ground disturbance on the site, and biological monitoring must be conducted during initial grubbing and grading to check for kit fox and badger presence, document native tree impacts, and ensure that tree protection and erosion control measures are implemented. If construction occurs within the nesting season, additional presence/absence surveys for nesting birds must be conducted prior to grading, and any active nests present must be monitored and documented per the recommended mitigation measures. Mitigation for all oak impacts must be implemented and maintained per County guidelines.

The following avoidance and minimization measures are intended to help reduce project related impacts to biological resources on the site.

### Disturbance of Non-native Habitats

**BIO-1. Development of the project would impact ruderal/disturbed areas and non-native annual grassland habitat. *This is anticipated to be a less-than-significant impact pursuant to CEQA, and no mitigation is required.***

Development of the proposed project would result in grading and disturbance to existing roadways and ruderal/disturbed areas, and approximately 0.75 acres of annual grassland habitat. This habitat is dominated by non-native species, are common in the region, and are not considered sensitive plant communities by the CDFW. Any loss of ruderal/disturbed or annual grassland habitats that do not support special status species would be considered a less than significant impact pursuant to CEQA, and no mitigation would be required.

### Oak Tree Impacts

**BIO-2. Development of the project would remove 14 oak trees, and may impact additional oak trees. This is anticipated to be a significant but mitigable impact pursuant to CEQA.**

Project plans show removal of 14 oak trees, and project activities could result in impacts to additional oak trees. The actual number of tree removals and impacts should be determined during grubbing by a biological monitor, who will document all impacts by

species, size, and severity.

If any of the following conditions occur, the tree can be considered "impacted" under County of San Luis Obispo guidelines:

1. *More than 10% of the tree mass is removed, or any limb larger than 5", whichever is less;*

2. *New encroachment within the tree's root zone, which is defined as any area within the tree canopy edge/dripline before any oak branch trimming.*

*Encroachment includes:*

- a. Any cutting or trenching into soil (directional boring that is more than 24 inches below surface is exempt)*
- b. Addition of fill material*
- c. Compaction of soil from vehicle travel (one single pass within canopy footprint is exempt) or any other compacting activity*
- d. Any grubbing that involves soil disturbance*
- e. Any storage of materials or equipment*
- f. Paving within dripline*
- g. Irrigation/overspray within tree dripline*
- h. Establishment of non-native, invasive understory plants*

3. *If 50% or more of the root zone is impacted or tree mass is removed, the tree will be considered "lost" and must be replaced at a 4:1 basis.*

4. *Storage of liquids, including washout areas for concrete, etc., within the tree canopy edge/dripline; any spills or leaks of toxic substances within the canopy edge/dripline and 10 feet beyond the canopy edge/dripline would constitute an impacted tree, or potentially lost tree if the spill or leak is extensive.*

Oak tree impacts should be minimized during grading, road improvement activities, fire clearance work, passage of large equipment, and other project activities, by implementing the following measures:

1. Construction plans shall clearly delineate all native trees within 50 feet of areas where soil disturbance will occur, and shall show which trees are to be removed or impacted, and which trees are to remain unharmed.
2. Prior to any grading or grubbing, all trees within 50 feet of construction or grading activities shall be marked for protection and their root zone shall be fenced. The outer edge of the tree root zone to be fenced shall be outside of the canopy 1/2 again the distance as measured between the tree trunk and outer edge of the

- canopy (i.e., 1 1/2 times the distance from the trunk to the drip line of the tree), unless otherwise shown on the approved construction plans.
3. Prior to any grading or grubbing, the Applicant shall retain a certified arborist to identify limbs at risk and perform all necessary trimming of oak tree limbs that could be damaged by project activities. Pruning shall be conducted as needed along the access road and construction area. All pruning shall be conducted prior to construction equipment passage to minimize the potential for inadvertent damage to tree limbs. Removal of larger lower branches shall be minimized to (1) avoid making trees top heavy and more susceptible to “blow-overs,” (2) reduce larger limb cuts that take longer to heal and are more susceptible to disease and infestation, (3) retain wildlife habitat values associated with the lower branches, (4) retain shade to keep summer temperatures cooler, and (5) retain the natural shape of the tree. The certified arborist shall document all pruning impacts in a report submitted to the County San Luis Obispo.
  4. A biologist or certified arborist shall be retained by the Applicant to monitor all grubbing and grading activities in areas containing native trees to minimize disturbance to identified trees and their root zones wherever possible. The monitor will document all construction-related impacts to native trees in an as-built report submitted to the County San Luis Obispo.
  5. Immediately following submittal of the native tree impact as-built report to the County San Luis Obispo, the Applicant shall implement mitigation for all identified construction-related tree impacts per current County of San Luis Obispo ratios and methods for oak and native tree mitigation and replacement. County oak tree replacement standards require a project proponent to prepare and implement an oak tree replacement plan. The plan must provide for in-kind replacement at a 4:1 ratio, of all oak trees removed as a result of the project. In addition, the plan must provide for in-kind planting, at a 2:1 ratio, of all oak trees impacted but not removed. The replacement trees must be monitored for 7 years after planting.

#### Botanical Surveys

**BIO-3. Initial site grubbing and grading could impact purple amole or other special status plants if present on the site. This is anticipated to be a significant but mitigable impact pursuant to CEQA.**

The presence/absence of the federally protected purple amole or other special status plant species could not be determined during preparation of this report. Therefore, additional floristic surveys are necessary to determine if any special status plant species are present before construction can begin. The following measures are required to avoid and minimize potential impacts to special status plant species.

1. Prior to any grading or grubbing, a qualified biologist shall conduct a series of floristic surveys over the proposed project area during the spring blooming season to document and record all plant species present. The biologist shall prepare an addendum to this report that provides a full floristic inventory for the site, identifies the location of any sensitive plants observed, and quantifies the numbers and acreage of proposed impacts to sensitive plants. The report shall also provide recommendations for avoidance and minimization of impacts to any sensitive plants found to be present.
2. If purple amole is found to be present within areas proposed for disturbance, consultation with USFWS shall be initiated immediately to discuss potential mitigation strategies. Mitigation could include preparation of a Rare Plant Habitat Mitigation Program that ensures a no-net-loss of special status plant species and their habitat on the site. The rare plant mitigation plan should be developed by a qualified botanist/restoration ecologist in consultation with the County and USFWS, as appropriate. The rare plant habitat mitigation program should at a minimum include the following details:
  - The overall goal and measurable objectives of a no-net loss of special status species in the mitigation and monitoring plan;
  - Preservation of specific areas in perpetuity to prevent disturbance of the occurrence;
  - Specific measures for salvage and relocation activities, including the collection of seed and/or bulbs prior to grading activities;
  - Specific habitat monitoring and management concepts to be used during the establishment period (i.e., annual population census surveys and habitat assessments; establishment of monitoring reference sites; a seasonally-timed weed abatement program; seasonally-timed seed collection, propagation, and reintroduction of special-status plant species into specified receiver sites); and remedial measures;
  - Success criteria based on the goals and measurable objectives to ensure that a viable population(s) is maintained/established on the project site; and
  - Reporting requirements to ensure consistent data collection and reporting methods are used by monitoring personnel.

## Water Quality

### **BIO-4. Grubbing, grading, and construction activities could affect nearby drainages and water quality. This is anticipated to be a significant but mitigable impact pursuant to CEQA.**

Project construction activities could expose soils and other materials to erosion or transport by rainfall and runoff that could affect the adjacent drainages. Initial grading would expose large areas of soil on the ridgetop above the drainages, and may require the creation of temporary soil and materials stockpiles. Road improvements would require minor grading and creation of an all-weather surface per Cal Fire requirements. Under rainy conditions, soil, fuels, hydraulic fluids, and associated materials could wash into the drainages and cause an increase in suspended sediments, sedimentation, and introduce compounds that could potentially be toxic to aquatic organisms in downstream areas. Ensuring that sediment-laden runoff does not leave the project during construction, and that post-construction runoff is consistent with pre-construction conditions is essential to minimize impacts to adjacent stream habitats. The following measures are recommended to avoid and minimize potential habitat impacts from erosion and sedimentation.

1. Prior to start of construction, the project site boundaries, access routes, and staging areas should be clearly flagged so that contractors are aware of the limits of allowable site access and disturbance. Equipment access should not occur during wet weather or when access would cause ruts or soil compaction due to saturated soil conditions.
2. Prior to start of construction, the applicant should prepare an Erosion Control Plan. The Plan should address both temporary and permanent measures to control erosion and reduce sedimentation. Erosion and soil protection should be provided on all disturbed soil areas prior to the onset of the rainy season (October 15). Project plans should show that sedimentation and erosion control measures must be installed per the engineer's requirements. The Plan should include specific BMP's to minimize impacts to adjacent native habitats. For example, washing of equipment should occur only in designated areas where polluted water and materials can be contained for subsequent removal from the site. Washing of equipment and tools should not be allowed in any location where the tainted water could leave the work area. BMP's for dust abatement should also be included.

The following native seed mix is recommended for application on disturbed soil areas through either direct hand seeding or hydroseeding methods.



**Native Grassland Erosion Control Seed Mix**

<b>Species</b>	<b>Application Rate (lbs/acre)</b>
<i>Bromus carinatus</i> (California brome)	5
<i>Hordeum brachyantherum</i> (meadow barley)	5
<i>Vulpia microstachys</i> (six weeks fescue)	10
<i>Stipa cernua</i> (nodding needlegrass)	3
<i>Trifolium wildenovii</i> (tomcat clover)	5
<b>Total</b>	<b>28</b>

- To avoid disturbance of wet soils, and limit the potential for erosion and downstream sedimentation, grading should occur outside of the rainy season (October 15 through April 15). If grading is proposed during the rainy season, such activities must be authorized under relevant provisions of the County's Grading Ordinance, and must follow approved Erosion and Sedimentation Plans. All project-related spills of hazardous materials should be cleaned up immediately. Spill prevention and cleanup materials should be on-site at all times during construction. Cleaning and refueling of equipment and vehicles should occur only within designated staging areas. The staging areas should conform to standard BMPs applicable to attaining zero discharge of storm water runoff. No maintenance, cleaning or fueling of equipment should occur outside the work area. At a minimum, all equipment and vehicles should be checked and maintained on a daily basis to ensure proper operation and to avoid potential leaks or spills.

Nesting Birds

**BIO-5: Initial site grubbing, grading, and construction could impact nesting birds if construction occurs during the nesting season (February 1st through August 31st). This is anticipated to be significant but mitigable.**

Potential impacts to nesting birds could occur if tree or ground nesting birds are present near construction related activities causing noise generation and ground disturbance. Direct impacts to nesting raptors and other bird species from tree removal could occur if active nests are present within the project area. Impacts to nesting birds are considered temporary, and would be reduced with the incorporation of the following recommended avoidance and minimization measures.

To minimize impacts to nesting bird species, including special-status species and species protected by the Migratory Bird Treaty Act, if work is proposed between February 1 through August 31, a qualified biologist should conduct a pre-construction survey for active bird nests within the limits of the project within one week prior to any disturbance activities. If no nesting activity is observed, project activities can proceed. If nesting activity is identified during the preconstruction survey, the following measures should be implemented:

1. If active nest sites of bird species protected under the Migratory Bird Treaty Act and/or California Fish and Game Code Section 3503 are observed within the project area, then the project should be modified and/or delayed as necessary to avoid direct impacts of the identified nests, eggs, and/or young. Potential project modifications may include establishing appropriate “no activity” buffers around the nest site as determined by the project biologist. Construction activities should not occur in the buffer until the project biologist has determined that the nesting activity has ceased.
2. If active nest sites of raptors and/or bird species of special concern are observed within the vicinity of project related disturbances, a qualified biologist should monitor the nests to determine if construction activities are causing behavioral changes or affecting nesting activities. Monitoring results should then be used to develop an appropriate buffer around the nest site that will minimize disturbance. Construction activities in the buffer zone should be prohibited until the young have fledged the nest and achieved independence.
3. If active nests are present during construction, the biologist shall prepare a letter report for submittal to the CDFW and other appropriate agencies, documenting project compliance with the MBTA and applicable project mitigation measures.

#### San Joaquin Kit Fox

**BIO-6: Initial site grubbing, grading, and construction could impact San Joaquin Kit Fox if active dens are present. This is anticipated to be a significant, but mitigable impact pursuant to CEQA.**

The San Joaquin kit fox is listed as endangered under the Federal Endangered Species Act and as threatened under the California Endangered Species Act. In San Luis Obispo County, kit fox range from the grasslands and oak woodlands of the Salinas Valley in the north-central part of the county to the arid scrub habitat of the San Joaquin Valley and Carrizo Plains in the southeastern part of the county. There are several known historical occurrences of San Joaquin kit fox on Camp Roberts.

San Joaquin kit fox was determined to have the potential to occur within the survey area, due to presence of grassland and oak woodland habitats, loose soils, and

California ground squirrels and pocket gophers. Because of the limited impact area, the degree of habitat diversity in the region, and large areas of open space surrounding the site, potential impacts to kit fox would only be anticipated to occur during initial construction activities, and are not expected to be significant with the incorporation of standard mitigation measures.

The following mitigation measures are standard measures to avoid take and reduce impacts to kit fox habitat to an insignificant level. However, the requirements for individual projects may vary depending on the type of project, extent of disturbance, and other project specifics. The typical measures for cumulative and construction-related impacts are as follows:

1. If required, mitigate for the loss of kit fox habitat either by: a) Establishing a conservation easement on-site or off-site in a suitable San Luis Obispo County location and provide a non-wasting endowment for management and monitoring of the property in perpetuity; b) Depositing funds into an approved in-lieu fee program; c) Purchasing credits in an approved conservation bank in San Luis Obispo County.
2. Retain a qualified biologist to conduct pre-construction surveys of the project site.
3. Retain a qualified biologist to conduct a pre-construction kit fox briefing for construction workers to minimize potential kit fox impacts.
4. Retain a qualified biologist to monitor all initial grubbing and grading within the project area.
5. Include standard kit fox avoidance and protection measures on project plans.
6. Require a maximum 25 mph speed limit at the project site during construction.
7. Stop all construction activities at dusk.
8. Cover excavations deeper than 2 feet at the end of each working day or provide escape ramps for kit fox.
9. Inspect pipes, culverts or similar structures for kit fox before burying, capping, or moving.
10. Remove food-related trash from the project site daily.
11. If pesticides or herbicides are used, they must be used according to local, state, and federal regulations to prevent secondary poisoning of kit foxes.
12. If a kit fox is discovered at any time in the project area, all construction must stop and the CDFW and USFWS must be contacted immediately. The appropriate federal and state permits must be obtained before the project can proceed.

13. Permanent fencing installed as part of the project must allow passage of dispersing kit foxes.

#### American Badger

**BIO-7: Initial site grubbing, grading, and construction could impact American badger if active dens are present. This is anticipated to be significant, but mitigable impact pursuant to CEQA.**

American badger was determined to have the potential to occur within the project area, due to presence of grassland and oak woodland habitats and a prey base of California ground squirrels and pocket gophers. Because of the limited impact area, the degree of habitat diversity in the region, and the amount of open space surrounding the proposed development, potential impacts to American badger would only be anticipated to occur during initial construction activities, and are not expected to be significant with the incorporation of the following mitigation measures.

A pre-construction survey for active badger dens should be conducted within the construction impact footprint and surrounding accessible areas of the property two weeks prior to any ground disturbing activities. The survey should be conducted by a qualified biologist, who will evaluate all dens found to determine if they are active. In order to avoid potential direct impacts to adults and nursing young, no grading should occur within 50 feet of an active badger den as determined by the project biologist. Construction activities occurring between July 1 and February 28 should comply with the following measures to avoid direct take of adult and weaned juvenile badgers through the forced abandonment of dens.

1. A qualified biologist should conduct a biological survey at least two (2) weeks prior to the start of construction to identify any potential badger dens. The survey should cover the entire area proposed for development, including roadways.
2. If dens are too long to see the end, a fiber optic scope (or other acceptable method such as using tracking medium for a consecutive three-night period) should be used to assess the presence of badgers.
3. Inactive dens should be excavated by hand with a shovel to prevent badgers from re-using them during construction.
4. Badgers should be discouraged from using currently active dens prior to the grading of the site by partially blocking the entrance of the den with sticks, debris and soil for 3 to 5 days. Access to the den should be incrementally blocked to a greater degree over this period. This should cause the badger to abandon the den and move elsewhere. After badgers have stopped using any

den(s) within the project boundary, the den(s) should be hand-excavated with a shovel or carefully with the use of an excavator to prevent re-use.

5. The biologist should be present during the initial clearing and grading activity. If additional badger dens are found, all work should cease until the biologist can complete measures described above for inactive and active dens. Once all badger dens have been excavated, work on the site may resume.

### Western Burrowing Owl

#### **BIO-8: Initial site grubbing, grading, and construction could impact Western burrowing owl if active burrows are present. This is anticipated to be significant, but mitigable impact pursuant to CEQA.**

Western burrowing owl was determined to have the potential to occur within the project area, due to presence of grassland and oak woodland habitats and California ground squirrels borrows (which are utilized by burrowing owls). Numerous occurrences are known to Camp Roberts approximately two miles to the east of the project area. Because of the limited impact area, the degree of habitat diversity in the region, and the amount of open space surrounding the proposed development, potential impacts to western burrowing owl would only be anticipated to occur during initial construction activities, and are not expected to be significant with the incorporation of the following mitigation measures.

The following mitigation measures are standard measures to avoid take and reduce impacts to kit fox habitat to an insignificant level. Burrowing Owl Survey Protocol and Mitigation Guidelines, California Burrowing Owl Consortium 1993

1. A qualified biologist shall conduct pre-activity surveys for the presence of western burrowing owl and/or active burrows within the work area and within 250 feet of the work area no less than 14 days and no more than 30 days prior to ground disturbing activities. Surveys will be conducted by qualified biologists by walking straight-line transects spaced 20 feet to 60 feet, adjusting for vegetation height and density.
2. Exclusion zones, or no-disturbance buffers, shall be established around active burrows. No project-related disturbances should occur within 160 feet of occupied burrows during the nonbreeding season of September 1 through January 31 or within 250 feet during the breeding season of February 1 through August 31.
3. If an active burrow is observed within 250 feet of the work area during the breeding season, construction activities shall not continue until a qualified biologist confirms the burrow is no longer active. Proposed adjustments to the

buffer will be through consultation with the California Department of Fish and Wildlife (CDFW).

4. If an active burrow is observed within 160 feet of the work area during the non-breeding season, construction activities shall not continue until a qualified biologist confirms the burrow is no longer active.
5. The qualified biologist, with prior consultation and approval from the CDFW, may institute passive relocation through use of one-way burrow doors that will not allow the owls to reenter the burrow. Then, immediately before the start of construction activities, the biologists shall remove all doors and excavate the burrows to ensure that no animals are present the burrow. The excavated burrows shall then be backfilled.
6. A qualified biologist shall be present during the initial clearing and grading activity. If additional burrowing owl burrows are found, all work should cease until the biologist can complete measures described above for inactive and active burrows. Once all burrowing owl burrows have been excavated, work on the site may resume.

## **CONCLUSION**

As documented by this assessment, the proposed project will impact oak trees, and, if present, has potential to affect purple amole, kit fox, American badger, western burrowing owl and nesting birds during construction activities. Additional floristic surveys are necessary prior to any ground disturbance on the site. Biological monitoring should be conducted prior to and during initial grubbing and grading to check for kit fox, badger, and burrowing owl presence, document native tree impacts, and ensure that erosion control measures are implemented. If construction occurs within the nesting season, additional presence/absence surveys for nesting birds must be conducted prior to grading, and active nests must be monitored and documented per the applicable mitigation measures. Native oak trees will be impacted and removed, and oak mitigation is proposed to occur onsite per County guidelines. Incorporation of the biological avoidance and minimization measures included in this report, and County requirements under the Minor Use Permit process, are expected to provide sufficient protection under CEQA for biological resources during project construction.



## REFERENCES

- Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, editors. 2012. The Jepson Manual: vascular plants of California, second edition. University of California Press, Berkeley.
- Calflora. 2018. Information on wild California plants for conservation, education, and appreciation. Berkeley, CA. Accessed via: <http://www.calflora.org/>.
- California Department of Fish and Wildlife. 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities.
- California Department of Fish and Game. 2003. California Natural Diversity Database, Rarefind V. Queried July 2018.
- California Department of Fish and Wildlife. 2003. Special Animals. Biogeographic Data Branch, California Natural Diversity Database. July 2018.
- California Department of Fish and Game. 2003. Special Vascular Plants, Bryophytes, and Lichens List. Biogeographic Data Branch, California Natural Diversity Database. July 2018.
- California Native Plant Society. 2001. Inventory of Rare and Endangered Plants. Updated online and accessed via: [cnps.web.aplus.net/cgi-bin/inv/inventory.cgi](http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi).
- Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. California Department of Fish and Game, Sacramento.
- Hoover, Robert F. 1970. The Vascular Plants of San Luis Obispo County, California. University of California Press, Berkeley, CA.
- Jameson, E.W. & H. J. Peters. 2004. *Mammals of California, Revised Edition*. University of California Press.
- Sawyer, J. O., T. Keeler-Wolf, and J.M. Evens. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society, Sacramento, CA.
- Sibley, David Allen. 2003. The Sibley Field Guide to Birds of Western North America. Chanticleer Press, Inc.
- University of California Davis, Soil Resource Laboratory website, SoilWeb. 2018. Available at: (<http://casoilresource.lawr.ucdavis.edu/>).
- U.S. Department of the Army. 2015. Draft environmental assessment for multiple construction projects. SATCOM, Camp Roberts, San Luis Obispo County, California. March 2015.

- USFWS. 2002. Endangered and Threatened Wildlife and Plants; Final Designation of Critical Habitat for *Chlorogalum purpureum*, a Plant From the South Coast Ranges of California; Final Rule. October 2002.
- USFWS. 1999. U.S. Fish and Wildlife Service standardized recommendations for protection of the San Joaquin kit fox prior to or during ground disturbance. Sacramento Fish and Wildlife Office. June 1999.
- USFWS. 2010. San Joaquin kit fox (*Vulpes macrotis mutica*) 5-Year Review: Summary and Evaluation. U.S. Fish and Wildlife Service.

## **Appendix A: Habitat Requirements and Potential for Occurrence of Special-Status Plants in the Vicinity of the Project Site**

**Appendix A. Habitat Requirements and Potential for Occurrence of Special-Status Plants in the Vicinity of the Project Site (Information from the Bradley, Adelaida, Lime Mtn., and Tierra Redonda Mtn. USGS quadrangles)**

Species	Status* Fed/CA/CDF W	Habitat Requirements	Blooming Period	Project Site Suitability/Observations
<i>Bristlecone fir</i> <i>Abies bracteata</i>	--/--/1B.3	Found on slopes and bottoms of rocky canyons in the Santa Lucia Mountains on the central coast of California	n/a	<b>Species not present.</b> This perennial species is not present within the project area.
Hoover's bentgrass <i>Agrostis hooverii</i>	--/--/1B.2	Stoloniferous perennial herb; on sandy soils in chaparral, cismontane woodland, and valley and foothill grassland. Elevation 60 to 600 meters.	April - July	<b>Species potentially present.</b> Suitable grassland habitats and loose soils observed in the project area.
<i>Oval-leaved snapdragon</i> <i>Antirrhinum ovatum</i>	--/--/4.2	Annual herb; chaparral, cismontane woodland, pinyon & juniper woodlands, valley & foothill grassland; 200-1000 meters; blooms May to November.	May - November	<b>Species not observed during flower season surveys.</b> Not expected to occur within study area or be affected by the project.
Santa Lucia manzanita <i>Arctostaphylos luciana</i>	--/--/1B.2	Perennial shrub; occurs on shale outcrops in chaparral and cismontane woodland habitats; ranges from 350 to 850 meters in elevation.	February - March	<b>Species not present.</b> Site lacks shale outcrops. This perennial species is not present within the project area.
Marsh sandwort <i>Arenaria paludicola</i>	E/E/1B.1	Stoloniferous, perennial herb; occurs in freshwater marshes and swamps, bogs and fens, and some coastal scrub, ranging from 3 to 170 meters in elevation; common associates include Typha, Juncus, and Scirpus.	May - August	<b>Species not present.</b> No permanent freshwater marsh habitat is present in the project area or adjacent seasonal drainages.
Indian Valley spineflower <i>Aristocapsa insignis</i>	--/--/1B.2	Found in foothill woodland habitats on sand soils in eastern San Luis Obispo and southern Monterey Counties, ranging from 300--600 meters in elevation.	May - September	<b>Species not observed during flower season surveys.</b> Not expected to occur within study area or be affected by the project.
Salinas milk-vetch <i>Astragalus macrodon</i>	4.3	Annual herb; chaparral, grassland and openings in oak woodland habitats on eroded pale shales or sandstone, or serpentine alluvium ranging from 300-950 meters in elevation.	April - July	<b>Species unlikely to be present.</b> No suitable soils are present in the study area. Not expected to occur within or be affected by the project.
Round-leaved filaree <i>California macrophylla</i>	--/--/1B.1	Open sites, dry grasslands, and shrublands below 4,000 feet.	March - May	<b>Species potentially present.</b> Suitable dry grassland habitats observed in the project area.
La Panza mariposa lily <i>Calochortus simulans</i>	--/--/1B.3	Annual herb. Chaparral, cismontane woodland, coniferous forest, valley and foothill grassland, on sandy, granitic or serpentine soils. Elevation 395 – 1100 meters.	April - May	<b>Species unlikely to be present.</b> No suitable soils are present in the study area. Not expected to occur within or be affected by the project.

**Appendix A. Habitat Requirements and Potential for Occurrence of Special-Status Plants in the Vicinity of the Project Site (Information from the Bradley, Adelaida, Lime Mtn., and Tierra Redonda Mtn. USGS quadrangles)**

Species	Status* Fed/CA/CDF W	Habitat Requirements	Blooming Period	Project Site Suitability/Observations
Dwarf calycadenia <i>Calycadenia villosa</i>	--/--/1B.1	Rocky sites in chaparral, oak woodland, juniper woodland, grasslands, open dry flats and hillsides, alluvial fans; below 4,200 feet.	May – October	<b>Species not observed during flower season surveys.</b> Suitable rocky grassland habitats are present along adjacent drainages, but not within the project area. Species is present on Camp Roberts.
Santa Cruz Mountains pussypaws <i>Calyptidium parryi</i> var. <i>hesseae</i>	--/--/1B.1	Annual herb; Chaparral, cismontane woodland on sandy or gravelly openings; 305-1530 meters in elevation.	May - August	<b>Species not observed during flower season surveys.</b> The site lacks sandy or gravelly soils. Not expected to occur within or be affected by the project.
San Luis Obispo Owl's clover <i>Castilleja densiflora</i> var. <i>obispoensis</i>	--/--/1B.2	Annual herb; ranges from 10 to 400 meters in elevation and occurs in meadows, seeps, and valley and foothill grassland.	March - May	<b>Species potentially present.</b> Suitable grassland habitats observed in the project area. Species is present at Camp Roberts.
Lemmon's jewelflower <i>Caulanthus coulteri</i> var. <i>lemmonii</i>	--/--/1B.2	Valley and foothill grassland, pinyon and juniper woodland; 260-4,000 feet.	March - May	<b>Species potentially present.</b> Suitable grassland habitats observed in the project area. Species is present at Camp Roberts.
Camatta Canyon amole <i>Chlorogalum purpureum</i> var. <i>reductum</i>	T/R/1B.1	Found in annual grassland and blue oak savanna, typically co- occurring with cryptogamic crusts. Elevations range from 570 to 633 meters.	April -May	<b>Species unlikely to be present.</b> The only known occurrences are from the La Panza Range in central San Luis Obispo County.
Purple amole <i>Chlorogalum purpureum</i> var. <i>purpureum</i>	T/--/1B.1	Gravelly or clay soils in cismontane woodland, chaparral, and valley and foothill grassland; 672–1,148 feet.	April - June	<b>Species potentially present.</b> Unidentified <i>Chlorogalum</i> spp. present on site, suitable grassland habitats observed in the project area. Species present at Camp Roberts
Douglas' spineflower <i>Chorizanthe douglasii</i>	4.3	Annual herb; foothill woodland, pine forest, chaparral on sandy or gravelly soils; ranges from 200-1600 meters in elevation.	April – July	<b>Species unlikely to be present.</b> Suitable soils and habitats not present. Species considered unlikely to occur.
Straight-awned spineflower <i>Chorizanthe rectispina</i>	-- / -- / 1B.3	Annual herb; occurs in chaparral, cismontane woodland, and coastal scrub habitats on granite sand or disintegrating shale. Elevation 200 to 1035 meters.	May - July	<b>Species unlikely to be present.</b> Suitable soils and habitats not present. Species considered unlikely to occur.
Rattan's cryptantha <i>Cryptantha rattanii</i>	--/--/4.3	Cismontane woodland, valley and foothill grassland; 800–3,000 feet.	April - July	<b>Species potentially present.</b> Suitable grassland habitats observed in the project area.

**Appendix A. Habitat Requirements and Potential for Occurrence of Special-Status Plants in the Vicinity of the Project Site (Information from the Bradley, Adelaida, Lime Mtn., and Tierra Redonda Mtn. USGS quadrangles)**

Species	Status* Fed/CA/CDF W	Habitat Requirements	Blooming Period	Project Site Suitability/Observations
Small-flowered gypsum-loving larkspur <i>Delphinium gypsophilum ssp. parviflorum</i>	--/--/3.2	Cismontane woodland, valley and foothill grassland, occasionally vernal pools; elevations 250–3,300 feet.	April - July	<b>Species potentially present.</b> Suitable grassland habitats observed in the project area.
Umbrella larkspur <i>Delphinium umbraculorum</i>	-- / -- / 1B.3	Perennial herb. Occurs in cismontane woodland. Elevation 400 – 1600 meters.	April – June	<b>Species unlikely to be present.</b> Site is outside species elevation range.
Koch's cord moss <i>Entosthodon kochii</i>	--/--/1B.3	On cryptogamic soil in cismontane woodland; 590– 3,281 feet.	n/a	<b>Species unlikely to be present.</b> No mosses or cryptogamic crusts were observed during the survey.
Kern mallow <i>Eremalche kernensis</i>	E/--/--	Eroded hillsides, alkali flats, shadscale scrub, and valley grassland habitats, ranging from 100--1000 meters.	March - May	<b>Species unlikely to be present.</b> Suitable soils and habitats not present. Species considered unlikely to occur.
Yellow-flowered eriastrum <i>Eriastrum luteum</i>	--/--/1B.2	Annual herb, found in broadleaved upland forest, chaparral, cismontane woodland in sandy or gravelly soils; 290- 1000 meters in elevation.	May - June	<b>Species unlikely to be present.</b> Suitable soils and habitats not present. Species considered unlikely to occur.
Santa Lucia Monkeyflower <i>Erythranthe hardhamiae</i>	--/--/1B.1	Annual herb, found on sandy soils, sandstone outcrops, sometimes serpentinite soils, in chaparral habitat; 300 - 730 meters elevation.	March - May	<b>Species unlikely to be present.</b> Suitable soils and habitats not present. Species considered unlikely to occur.
Mesa horkelia <i>Horkelia cuneata</i> ssp. <i>puberula</i>	--/--/1B.1	Perennial herb. Chaparral, cismontane woodland, coastal scrub on sandy/gravelly soils. Elevation 70 – 810 meters.	February – July	<b>Species unlikely to be present.</b> Suitable soils and habitats not present. Species considered unlikely to occur.
Santa Lucia rush <i>Juncus luciensis</i>	--/--/1B.2	Annual herb; chaparral, Great Basin scrub, lower montane coniferous forest, meadows and seeps, vernal pools from 300- 2,040 meters in elevation.	April - July	<b>Species unlikely to be present.</b> Suitable soils and habitats not present. Species considered unlikely to occur.
Pale-yellow layia <i>Layia heterotricha</i>	--/--/1B.1	Alkaline or clay soils in coastal scrub, cismontane woodland, pinyon-juniper woodland, valley and foothill grassland in open areas; 984–5,594 feet.	March - June	<b>Species potentially present.</b> Suitable grassland habitats observed in the project area. Species is present at Camp Roberts.
Jared's pepper- grass <i>Lepidium jaredii ssp. jaredii</i>	--/--/1B.2	Valley and foothill grassland in alkaline or adobe soil; 1,100– 3,300 feet.	April -May	<b>Species potentially present.</b> Suitable grassland habitats observed in the project area.
Abbott's bush-mallow <i>Malacothamnus abbottii</i>	--/--/1B.1	Perennial shrub, found in riparian scrub and other wetland and riparian habitats on sandy soils; 240 to 500 meters.	May - October	<b>Species not present.</b> This perennial species is not present within or adjacent to the project area.
Davidson's bush-mallow <i>Malacothamnus davidsonii</i>	--/--/1B.2	Perennial deciduous shrub; chaparral, cismontane woodland, coastal scrub, riparian woodland; 185 to 855 meters in elevation.	June - January	<b>Species not present.</b> This perennial species is not present within or adjacent to the project area.



**Appendix A. Habitat Requirements and Potential for Occurrence of Special-Status Plants in the Vicinity of the Project Site (Information from the Bradley, Adelaida, Lime Mtn., and Tierra Redonda Mtn. USGS quadrangles)**

Species	Status* Fed/CA/CDF W	Habitat Requirements	Blooming Period	Project Site Suitability/Observations
Jones' bush mallow <i>Malacothamnus jonesii</i>	--/--/4.3	Perennial shrub; chaparral and foothill woodland; 25 – 830 meters in elevation.	May – July	<b>Species not present.</b> This perennial species is not present within or adjacent to the project area.
One-sided monkeyflower <i>Mimulus subsecundus</i>	--/--/4.3	Annual herb; found in chaparral, lower montane coniferous forest; 450 to 915 meters.	May – July	<b>Species unlikely to be present.</b> Suitable soils and habitats not present. Species considered unlikely to occur.
Woodland Woollythreads <i>Monolopia gracilis</i>	--/--/1B.2	Annual herb; openings of broad- leaved upland forest, chaparral, cismontane woodland, north coast coniferous forest and valley and foothill grassland typically on serpentine; 100 to 1,200 meters in elevation.	February - July	<b>Species unlikely to be present.</b> Suitable soils and habitats not present. Species considered unlikely to occur.
California spineflower <i>Mucronea californica</i>	--/--/4.3	Sandy soils in chaparral, cismontane woodland, valley and foothill grassland, coastal dunes, and coastal scrub; 0–4,600 feet.	March - July	<b>Species potentially present.</b> Suitable grassland habitats observed in the project area.
Spreading navarretia <i>Navarretia fossalis</i>	T/--/1B.1	Annual herb; vernal pools, chenopod scrub, marshes and swamps, playas. Occurs in San Diego hardpan & San Diego claypan vernal pools and swales often surrounded by other habitat types; 30-665 meters elevation.	April - June	<b>Species unlikely to be present.</b> Suitable soils and habitats not present. Species considered unlikely to occur.
Paso Robles navarretia <i>Navarretia jaredii</i>	--/--/4.3	Annual herb; open grassy areas, often in clay or serpentine; 200 – 500 meters elevation.	April – July	<b>Species unlikely to be present.</b> Suitable soils and habitats not present. Species considered unlikely to occur.
Shining navarretia <i>Navarretia nigelliformis ssp. radians</i>	--/--/1B.2	Cismontane woodland, valley and foothill grassland, occasionally vernal pools; elevations 250–3,300 feet.	April - July	<b>Species potentially present.</b> Suitable grassland habitats observed in the project area.
Prostrate vernal pool navarretia <i>Navarretia prostrata</i>	--/--/1B.1	Annual herb; coastal scrub, valley & foothill grassland, vernal pool, wetland; 15-700 meters in elevation.	April - July	<b>Species unlikely to be present.</b> Suitable soils and habitats not present. Species considered unlikely to occur.
Hooked popcorn-flower <i>Plagiobothrys uncinatus</i>	--/--/1B.2	Chaparral, cismontane woodland, valley and foothill grassland on sandy soils ; 984– 2,493 feet.	April -May	<b>Species potentially present.</b> Suitable grassland habitats observed in the project area, species present at Camp Roberts.
Chaparral ragwort <i>Senecio aphanactis</i>	--/--/2B.2	Annual herb; chaparral, cismontane woodland, coastal scrub in drying alkaline flats; 15- 800 meters in elevation.	January - April	<b>Species unlikely to be present.</b> No alkaline flats are present in the study area. Species unlikely to occur.

**Appendix A. Habitat Requirements and Potential for Occurrence of Special-Status Plants in the Vicinity of the Project Site (Information from the Bradley, Adelaida, Lime Mtn., and Tierra Redonda Mtn. USGS quadrangles)**

Species	Status* Fed/CA/CDF W	Habitat Requirements	Blooming Period	Project Site Suitability/Observations
Santa Cruz microseris <i>Stebbinsoseris decipiens</i>	--/--/1B.2	Annual herb; broadleaved upland forest, chaparral, closed-cone coniferous forest, coastal prairie, coastal scrub; 10-500 meters in elevation.	April - May	<b>Species unlikely to be present.</b> Suitable soils and habitats not present. Species considered unlikely to occur.
Mason's Neststraw <i>Stylocline masonii</i>	--/--/1B.1	Annual herb; open loose sand of washes and flats chenopod scrub, pinyon-juniper woodland; 100-1,200 meters in elevation.	March - May	<b>Species unlikely to be present.</b> Suitable soils and habitats not present. Species considered unlikely to occur.
Cook's triteleia <i>Triteleia ixioides ssp. cookii</i>	--/--/1B.3	Perennial bulbiferous herb; cismontane woodland, closed-cone coniferous forest in moist places; 150-700 meters in elevation.	May - June	<b>Species unlikely to be present.</b> Suitable soils and habitats not present. Species considered unlikely to occur.

\*E = Endangered; T = Threatened; R = Rare CE = Candidate for Endangered Status; '—' = no status; List 1B – Rare, threatened, or endangered in California and elsewhere; List 2 – Rare, threatened or endangered in California, but more common elsewhere; List 4 – Limited distribution (Watch List). Source: California Natural Diversity Database (California Department of Fish and Wildlife 2018); California Native Plant Society Online Inventory of Rare Plants, accessed July 2018 (online at [www.cnps.org](http://www.cnps.org)); Special Vascular Plants, Bryophytes, and Lichens List (California Department of Fish and Wildlife 2018).

## **Appendix B: Habitat Requirements and Potential for Occurrence of Special-Status Animals in the Vicinity of the Project Site**

**Appendix B. Habitat Requirements and Potential for Occurrence of Special-Status Animals in the Vicinity of the Project Site (Information from the Bradley, Adelaida, Lime Mtn., and Tierra Redonda Mtn. USGS quadrangles)**

Species	Status* Fed/CA/CDFW	Habitat Requirements	Project Site Suitability/Observations
<b>FISH</b>			
Steelhead – South/Central California ESU <i>Oncorhynchus mykiss irideus</i>	T/--/SSC	Fresh water, fast flowing, highly oxygenated, clear, cool stream where riffles tend to predominate pools.	<b>Species not present.</b> No suitable hydrology is present within or adjacent to the survey area.
<b>AMPHIBIANS/REPTILES</b>			
Silvery/Black legless lizard <i>Anniella pulchra</i>	--/SSC/--	Sandy or loamy soils in valley and foothill woodlands, chaparral, coastal scrub and coastal dunes.	<b>Species not observed.</b> The sparse woodland and grassland habitats with little duff accumulation do not provide suitable conditions. Not expected to occur within survey area or be affected by the project.
Southern Pacific (western) pond turtle <i>Emys marmorata</i>	--/--/SSC	Basking sites such as partially submerged logs, vegetation mats, or open mud banks.	<b>Species not present.</b> No suitable hydrology is present within or adjacent to the survey area.
San Joaquin whipsnake <i>Masticophis flagellum ruddocki</i>	--/--/SSC	Occurs in open, dry, vegetative associations with little or no tree cover; valley grassland and saltbush scrub associations; often occurs in association with mammal burrows.	<b>Species not observed.</b> The sparse woodland and grassland habitats do not provide suitable habitat. No scrub habitat is present on site. Unlikely to be impacted by the project.
Coast horned lizard <i>Phrynosoma blainvillii</i>	--/--/SSC	Found in grasslands, brushlands, woodlands, and open coniferous forest with sandy soil. Requires an abundant supply of ants and other insects for foraging.	<b>Species not observed.</b> The woodland, grassland, and drainage habitats present do not provide suitable shrub cover or sandy soils. Unlikely to be impacted by the project.
Foothill yellow-legged frog <i>Rana boylei</i>	--/--/SSC	Occurs in partly shaded, shallow streams in the upper mountainous reaches of drainages in the outer coast ranges. Requires cobble-sized substrate and 15 weeks of aquatic habitat to breed.	<b>Species not present.</b> No suitable hydrology is present within or adjacent to the survey area.
California red-legged frog <i>Rana draytonii</i>	FT/--/SSC	Lowland and foothills with permanent or semi-permanent water (> 0.5 meter) with emergent wetland vegetation. Uses adjacent upland habitats for refugia and dispersal.	<b>Species not present.</b> No suitable hydrology is present within or adjacent to the survey area.
Western spadefoot <i>Spea hammondi</i>	--/--/SSC	Inhabits vernal pools primarily in grassland, but also in valley and foothill hardwood woodlands. Requires seasonal pools for breeding and egg-laying.	<b>Species not present.</b> No suitable hydrology is present within or adjacent to the survey area.
Coast Range newt <i>Taricha torosa torosa</i>	--/--/SSC	Coastal drainages from Mendocino to San Diego Counties in riparian woodlands, migrates up to 1 km to breed in slow moving streams, ponds, and reservoirs.	<b>Species not present.</b> No suitable hydrology is present within or adjacent to the survey area.
<b>BIRDS</b>			
Coopers hawk <i>Accipiter cooperii</i>	--/--/WL	Nests in a wide variety of habitat types, from riparian woodlands and gray pine-oak woodlands through mixed conifer forests.	<b>Species not observed.</b> Species may forage in the vicinity of the project area. Not expected to nest within the project area or be affected by the project.



**Appendix B. Habitat Requirements and Potential for Occurrence of Special-Status Animals in the Vicinity of the Project Site (Information from the Bradley, Adelaida, Lime Mtn., and Tierra Redonda Mtn. USGS quadrangles)**

Species	Status* Fed/CA/CDFW	Habitat Requirements	Project Site Suitability/Observations
Tri-colored blackbird <i>Agelaius tricolor</i>	--/--/SSC	Nests in freshwater marshes with tules or cattails, or other dense vegetation such as thistle, blackberry, thickets, etc., in close proximity to open water. Forages in a variety of habitats including pastures, agricultural fields, rice fields, and feedlots.	<b>Species not present.</b> No suitable marsh nesting habitat is present within or adjacent to the survey area. Unlikely to be impacted by the project.
Great blue heron <i>Ardea herodias</i>	--/--/WL	Marshes, lake margins, tide-flats, rivers, and wet meadows. Nests communally in large trees and cliff sides, typically adjacent to marshes and water bodies. Rookery site are in close proximity to foraging areas.	<b>Species not present.</b> No suitable marsh habitat or large trees are present within or adjacent to the survey area.
long-eared owl <i>Asio otus</i>	--/--/SSC	Nests mainly in coniferous trees, often using existing abandoned stick nests built by crows or hawks. Forages over open country.	<b>No suitable nesting habitat present.</b> Species may forage in the vicinity of the project area. Not expected to nest within the project area or be affected by the project.
Western burrowing owl <i>Athene cunicularia</i>	MBTA/-- /SSC	Preferred habitat is generally typified by short, sparse vegetation with few shrubs, level to gentle topography and well-drained soils, nests in burrows typically constructed by ground squirrels.	<b>Suitable habitat present.</b> Grasslands are present, but oak habitats and moderate slopes reduces habitat suitability. However, ground squirrel burrows are present on site and there are numerous nearby CNDDDB occurrences at Camp Roberts approximately 2 miles east of the project site.
Golden eagle <i>Aquila chrysaetos</i>	--/--/FP	Nests on cliffs and escarpments or in tall trees overlooking open country. Forages in annual grasslands, chaparral, and oak woodlands with plentiful medium and large-sized mammals.	<b>No suitable nesting habitat present.</b> Species may forage in the vicinity of the project area. Not expected to nest within the project area or be affected by the project.
Ferruginous hawk <i>Buteo regalis</i>	--/--/WL	Prefers open terrain in plains and foothills where ground squirrels, lagomorphs and other prey are available.	<b>No suitable nesting habitat present.</b> Species may forage in the vicinity of the project area. Not expected to nest within the project area or be affected by the project.
Yellow warbler <i>Dendroica petechia brewsteri</i>	--/--/SSC	Riparian plants; prefers willows, cottonwoods, aspens, sycamores and alders for resting and foraging; resident, winter/breeding migrant.	<b>No suitable nesting habitat present.</b> Not expected to nest or forage within the project area or be affected by the project.
White-tailed kite <i>Elanus leucurus</i>	--/--/FP (nesting)	Riparian woodlands near agricultural fields; forages over open grasslands and scrub.	<b>No suitable nesting habitat present.</b> Species may forage in the vicinity of the project area. Not expected to nest within the project area or be affected by the project.
California horned lark <i>Eremophila alpestris actia</i>	--/--/WL	Found in sparse coastal sage scrub, grasslands, coastal plains and fallow grain fields.	<b>Species not observed.</b> Grasslands and open oak habitats onsite could support this species. CNDDDB reports several occurrences at Camp Roberts, in annual grassland habitat.
Merlin <i>Falco columbarius</i>	--/--/WL (nonbreeding/ wintering)	Nests outside of California in abandoned corvid or hawk nests; forages in a variety of open habitats.	<b>No suitable nesting habitat present.</b> Not expected to nest within the project area or be affected by the project.
Prairie falcon <i>Falco mexicanus</i>	MBTA/--/--	Occurs in dry, open terrain that is level or hilly and breeds on cliffs.	<b>No suitable breeding habitat present.</b> Species could forage in the vicinity. Not expected to nest within the project area or be affected by the project.

**Appendix B. Habitat Requirements and Potential for Occurrence of Special-Status Animals in the Vicinity of the Project Site (Information from the Bradley, Adelaida, Lime Mtn., and Tierra Redonda Mtn. USGS quadrangles)**

Species	Status* Fed/CA/CDFW	Habitat Requirements	Project Site Suitability/Observations
California condor <i>Gymnogyps californianus</i>	E/E/FP	Requires large blocks of open savanna, grasslands, and foothill chaparral with large trees, cliffs, and snags for roosting and nesting	<b>No suitable nesting habitat present.</b> Species may forage in the vicinity of the project area. Not expected to nest within the project area or be affected by the project.
Bald eagle <i>Haliaeetus leucocephalus</i>	--/E/FP	Nests in mature open canopies of large trees within 1 mile of a large water source.	<b>No suitable nesting habitat present.</b> Not expected to nest or forage within the project area or be affected by the project.
Osprey <i>Pandion haliaetus</i>	--/--/WL	Breeds near freshwater lakes and rivers, using large nests in forks of trees, rocky outcrops, and utility poles. Diet consists almost exclusively of fish.	<b>No suitable nesting habitat present.</b> Not expected to nest or forage within the project area or be affected by the project.
Loggerhead shrike <i>Lanius ludovicianus</i>	--/--/SSC	Prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches.	<b>Species not observed.</b> Grasslands and open oak habitats onsite could support this species. CNDDDB reports several occurrences at Camp Roberts.
Bank swallow <i>Riparia riparia</i>	--/T/--	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	<b>No suitable nesting habitat present.</b> Not expected to nest or forage within the project area or be affected by the project.
Least Bell's vireo <i>Vireo bellii pusillus</i> (nesting)	FE MBTA /SE/--	Summer resident of southern California in low riparian areas near water or river bottoms. Nests placed along margins of bushes, usually <i>Salix</i> , <i>Baccharis</i> , and mesquite.	<b>No suitable nesting habitat present.</b> Not expected to nest or forage within the project area or be affected by the project.
<b>Other migratory bird species (nesting)</b>	<b>MBTA/--/--</b>	<b>Woodlands, grasslands, and other native habitats provide nesting opportunities for a variety of migratory bird species protected under the MBTA.</b>	<b>Potential migratory bird nesting habitat occurs within and adjacent to the project area. Refer to mitigation measures.</b>
<b>INVERTEBRATES</b>			
San Luis Obispo pyrg <i>Pyrgulopsis taylori</i>	--/SA/--	Freshwater habitats in San Luis Obispo County.	<b>Species not present.</b> The small drainages adjacent to the project area do not provide suitable hydrology to support this species.
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	T/-- /--	Endemic to grasslands of central coast mountains; inhabits small clear-water sandstone depression pools and grassland swales.	<b>Species not present.</b> No suitable habitat present that could support the species.
<b>MAMMALS</b>			
Pallid bat <i>Antrozous pallidus</i>	--/--/SSC	Occurs in a variety of habitats from desert to coniferous forest; most closely associated with oak woodland, grassland, and desert scrub in southern California. Roosts in trees, rocky outcrops and crevices in mines and caves.	<b>No suitable roosting habitat present.</b> Species could forage in grasslands in and near the project area. Not expected to roost within the project area or be affected by the project. One historic occurrence recorded at Camp Roberts.
Townsend's (=western) big-eared bat <i>Corynorhinus townsendii</i>	--/--/SSC	Requires caves, tunnels, mines, or similar man-made structures for roosting. This bat feeds primarily on moths, but will eat a variety of soft-bodied insects.	<b>No suitable roosting habitat present.</b> Species could forage in grasslands in and near the project area. Not expected to roost within the project area or be affected by the project.
Hoary bat <i>Lasiurus cinereus</i>	--/--/SSC	Roosts in dense foliage of large trees. Requires water. Prefers open habitats or habitat mosaics with access to trees for cover and open areas of habitat edge for feeding.	<b>No suitable roosting habitat present.</b> Species could forage in grasslands in and near the project area. Not expected to roost within the project area or be affected by the project.

**Appendix B. Habitat Requirements and Potential for Occurrence of Special-Status Animals in the Vicinity of the Project Site (Information from the Bradley, Adelaida, Lime Mtn., and Tierra Redonda Mtn. USGS quadrangles)**

Species	Status* Fed/CA/CDFW	Habitat Requirements	Project Site Suitability/Observations
Monterey dusky-footed woodrat <i>Neotoma fuscipes luciana</i>	--/--/SSC	Occurs in coastal central California in habitats that exhibit a moderate vegetative canopy, with a brushy understory. Builds nests of sticks and leaves near or within a tree or shrub, or at the base of a hill.	<b>Species not present.</b> No woodrat nests were observed, and oak woodland areas onsite are too sparse to provide suitable canopy cover.
Salinas pocket mouse <i>Perognathus inornatus psammophilus</i>	--/--/SSC	Found in annual grassland, desert scrub (e.g., Atriplex, Ephedra, and Haplopappus), and oak savannah communities on sandy soils along valley floor.	<b>Species not observed.</b> The CNDDDB reports six occurrences from the 1990s at Camp Roberts, but all are located on sandy/loose soils. Project area contains soils with high amounts of clay.
American badger <i>Taxidea taxus</i>	--/--/SSC	Needs friable soils and open, uncultivated ground for denning. Preys on burrowing rodents such as ground squirrels.	<b>Suitable foraging habitat present in the area.</b> No dens were observed during surveys, but ground squirrel colonies are present. Species could occur as a transient. CNDDDB reports numerous occurrences at Camp Roberts.
San Joaquin kit fox <i>Vulpes macrotis mutica</i>	E/E/--	Found in grassland, open shrubby areas, and some agricultural settings. Needs loose textured sandy-soils for burrowing, and suitable prey base consisting of ground squirrels, other small mammals, birds and insects.	<b>Suitable foraging habitat present in the area.</b> No dens were observed during surveys, but ground squirrel colonies are present. Species could occur as a transient. CNDDDB reports numerous historical occurrences at Camp Roberts.

\*E = Endangered; T = Threatened; R = Rare CE = Candidate for Endangered Status; SSC = California Species of Special Concern; FP = Fully Protected; WL = Watch List; SA = Special Animal; '—' = no status. Source: California Natural Diversity Database (California Department of Fish and Wildlife 2018); Special Animals List (California Department of Fish and Wildlife 2018).

## **Appendix C: List of Plant Species Observed on the Project Site**



**Appendix C – List of Plant Species Observed within the Project Area**

Scientific Name	Common Name
<i>Achillea millefolium</i>	Common yarrow
<i>Amsinckia menziesii</i>	Fiddleneck
<i>Avena barbata</i> *	Slender wild oats
<i>Bromus diandrus</i> *	Ripgut brome
<i>Bromus hordeaceus</i> *	Soft chess
<i>Centaurea solstitialis</i> *	Yellow star thistle
<i>Centromadia pungens</i>	Common tarweed
<i>Chlorogalum sp.</i>	Soap plant
<i>Croton setigerus</i>	Turkey-mullein
<i>Erodium cicutarium</i> *	Red-stemmed filaree
<i>Quercus douglasii</i>	Blue oak
<i>Stipa cernua</i>	Nodding needlegrass
<i>Tricostema lanceolatum</i>	Vinegar weed

\* indicates non-native species

## **Appendix D: List of Animal Species Observed on the Project Site**

**Appendix D – List of Animal Species Observed within the Project Area**

Scientific Name	Common Name
<b>Birds</b>	
<i>Aphelocoma californica</i>	Western scrub jay
<i>Buteo jamaicensis</i>	Red-tailed hawk
<i>Cathartes aura</i>	Turkey vulture
<i>Corvus brachyrhynchos</i>	America crow
<i>Zenaida macroura</i>	Mourning dove
<b>Reptiles</b>	
<i>Sceloporus occidentalis bocourtii</i>	Coast range fence lizard
<b>Mammals</b>	
<i>Canis latrans</i>	Coyote
<i>Cervus elaphus nannodes</i>	Tule elk
<i>Sciurus griseus</i>	Western gray squirrel
<i>Spermophilus beecheyi</i>	California ground squirrel
<i>Thomomys bottae</i>	Botta's pocket gopher

## Appendix E: Photo Documentation

- 6 Photos

## Photo 1

View of the existing barn, looking north from the northern portion of the proposed project area.

August 21, 2018





## Photo 2

View of the existing barn, looking north from the middle portion of the proposed project area.

August 21, 2018





## Photo 3

View toward the existing barn, looking north from the southern portion of the proposed project area.

August 21, 2018





## Photo 4

View of the proposed project area, looking north from the existing barn.

August 21, 2018



## **Photo 5**

View of the drainage channel to the west of the proposed project area, looking south.

August 21, 2018





## **Photo 6**

View of the drainage channel to the east of the proposed project area, looking south.

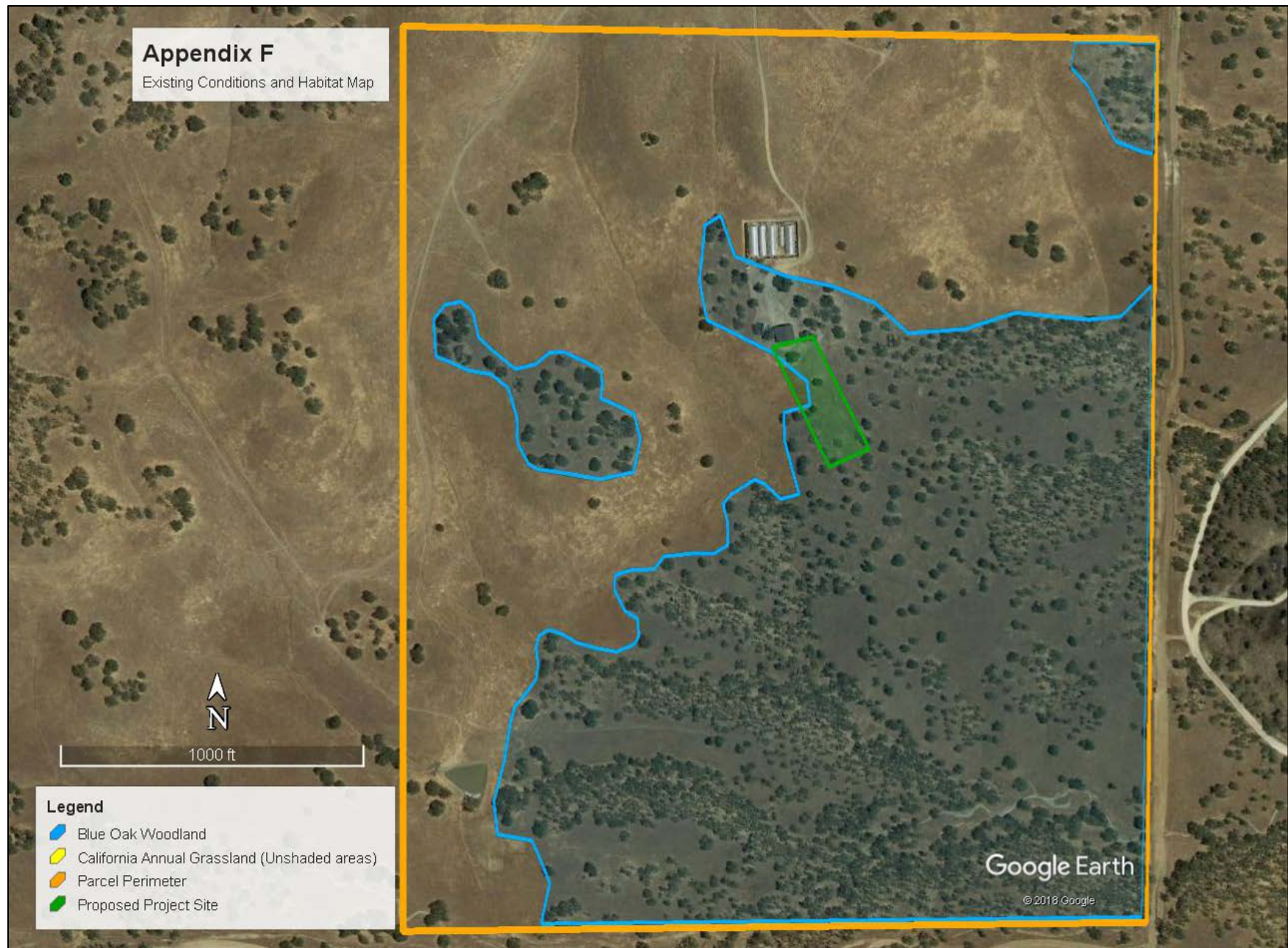
August 21, 2018



## **Appendix F: Existing Conditions and Habitat Map**

\*Locations are approximate







## **Appendix G: Proposed Site Plan**

GENERAL NOTES

- 1. THESE NOTES SHALL APPLY TO ALL DRAWINGS UNLESS OTHERWISE NOTED OR SHOWN.
- 2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE 2013 CALIFORNIA BUILDING CODE (CBC), AND CORRESPONDING EDITIONS OF THE FOLLOWING CALIFORNIA CODES: MECHANICAL (CMC), ELECTRICAL (CEC), & PLUMBING (CPC).
- 3. DRAWING SCALES AS NOTED. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS.
- 4. ALL SUBSIDING SHALL BE MIN. 1/2" CDX PLYWOOD UNLESS OTHERWISE SPECIFIED. ROOF SHEATHING SHALL BE MIN. 1/2" CDX PLYWOOD.

FRAMING NOTES

- 1. ALL WOOD FRAMING MEMBERS SHALL BE DOUGLAS FIR #2 OR BETTER, UNLESS NOTED OTHERWISE.
- 2. ALL NAILED CONNECTIONS SHALL COMPLY WITH CBC TABLE 2304.9.1, UNLESS NOTED OTHERWISE.
- 3. ALL WOOD MEMBERS EXPOSED TO WEATHER, IN DIRECT CONTACT WITH CONCRETE, OR LOCATED WITHIN 6" OF EARTHEN MATERIALS SHALL BE PRESSURE TREATED DOUGLAS FIR OR REDWOOD.
- 4. ALL NAILS AND OTHER FASTENERS FOR PRESSURE TREATED WOOD SHALL BE STAINLESS STEEL, HOT DIPPED GALVANIZED, ZINC-COATED (Z-MAX) OR EQUAL AS DICTATED BY COMPATIBILITY WITH THE METHOD OF PRESSURE TREATMENT.
- 5. ANY WOOD STUD SHALL NOT BE CUT OR NOTCHED TO A DEPTH GREATER THAN 25% OF ITS WIDTH IN BEARING AND EXTERIOR WALLS, OR 40% OF ITS WIDTH IN NON-BEARING WALLS.
- 6. A BORED HOLE SHALL NOT EXCEED 40% OF THE STUD WIDTH IN BEARING AND EXTERIOR WALLS, OR 60% OF THE STUD WIDTH IN NON-BEARING WALLS.

SANDERS PERMITTING  
OLD STAGE ROAD  
(A.K.A. ARMY TANK ROAD)  
APN 080-041-036



VICINITY MAP

OWNER:

TRENT SANDERS  
P.O. BOX 1126  
REDWAY, CA 95560  
(707) 986-7068

SHEET INDEX:

- A0 -- COVER SHEET
- P1 -- PLOT PLAN
- P2 -- IMPROVEMENTS PLAN
- A1 -- WASHROOM FLOOR PLAN & ELEVATIONS
- A2 -- ROOF MOUNTED SOLAR ARRAY LAYOUT
- S1 -- BATHROOM FOUNDATION & FRAMING PLAN
- S2 -- BARN SECTION & DETAILS
- S3 -- GREENHOUSE ELEVATIONS



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COVER SHEET

CULTIVATION PERMITTING

SANDERS NACIMIENTO LAKE DR. PASO ROBLES, CA 93446

APN 080-041-036

Date:

Revision No.:

Date: 5/21/18

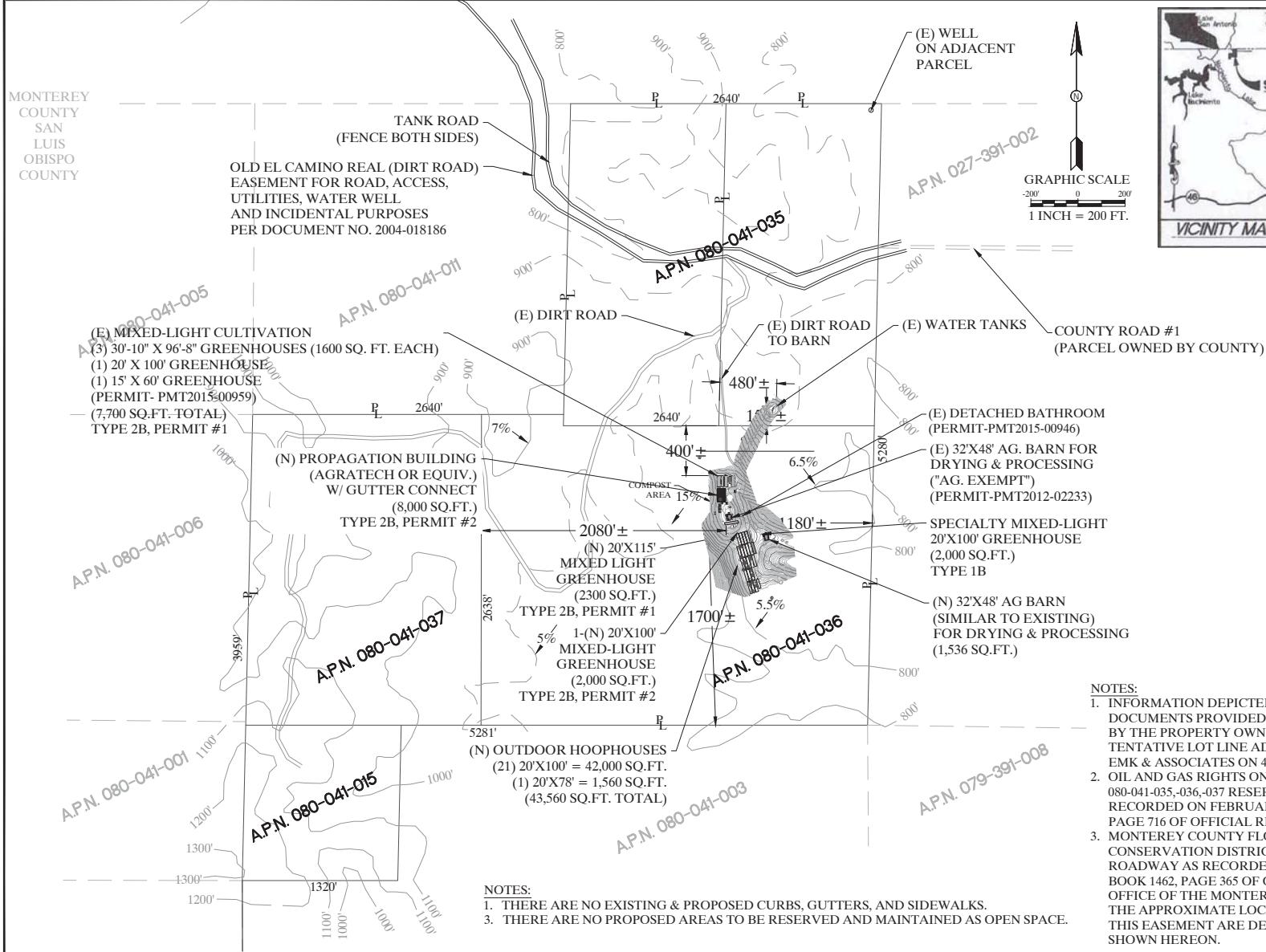
Project #: 17006

Drawn by: KCB

Scale: As Noted

Sheet No.

A0



#### NOTES:

1. INFORMATION DEPICTED HEREON IS BASED ON DOCUMENTS PROVIDED TO ATLAS ENGINEERING BY THE PROPERTY OWNER, INCLUDING A TENTATIVE LOT LINE ADJUSTMENT PRODUCED BY EMK & ASSOCIATES ON 4-17-2008.
2. OIL AND GAS RIGHTS ON PARCELS 080-041-035, -036, -037 RESERVED BY SHELL OIL CO. AS RECORDED ON FEBRUARY 27, 1969 IN BOOK 1508 PAGE 716 OF OFFICIAL RECORDS.
3. MONTEREY COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT HAS OWNERSHIP OF THE ROADWAY AS RECORDED IN JANUARY 19 1968 IN BOOK 1462, PAGE 365 OF OFFICIAL RECORDS IN THE OFFICE OF THE MONTEREY COUNTY RECORDER. THE APPROXIMATE LOCATION AND EXTENTS OF THIS EASEMENT ARE DEMARKATED BY THE ROAD SHOWN HEREON.



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**PLOT PLAN**

**CULTIVATION PERMITTING**

**SANDERS NACIMIENTO LAKE DR. PASO ROBLES, CA 93446**

**APN 080-041-036**

Date:

Revision No.:

Date: 5/21/18

Project #: 17006

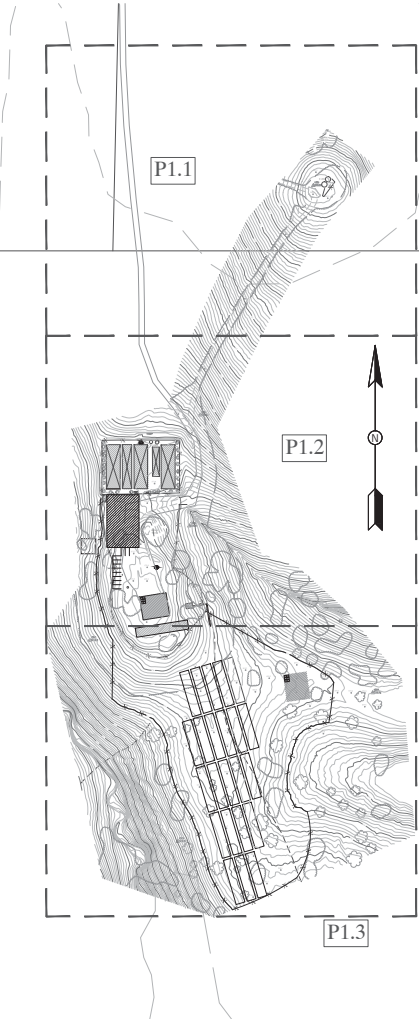
Drawn by: KCB

Scale: As Noted

Sheet No.

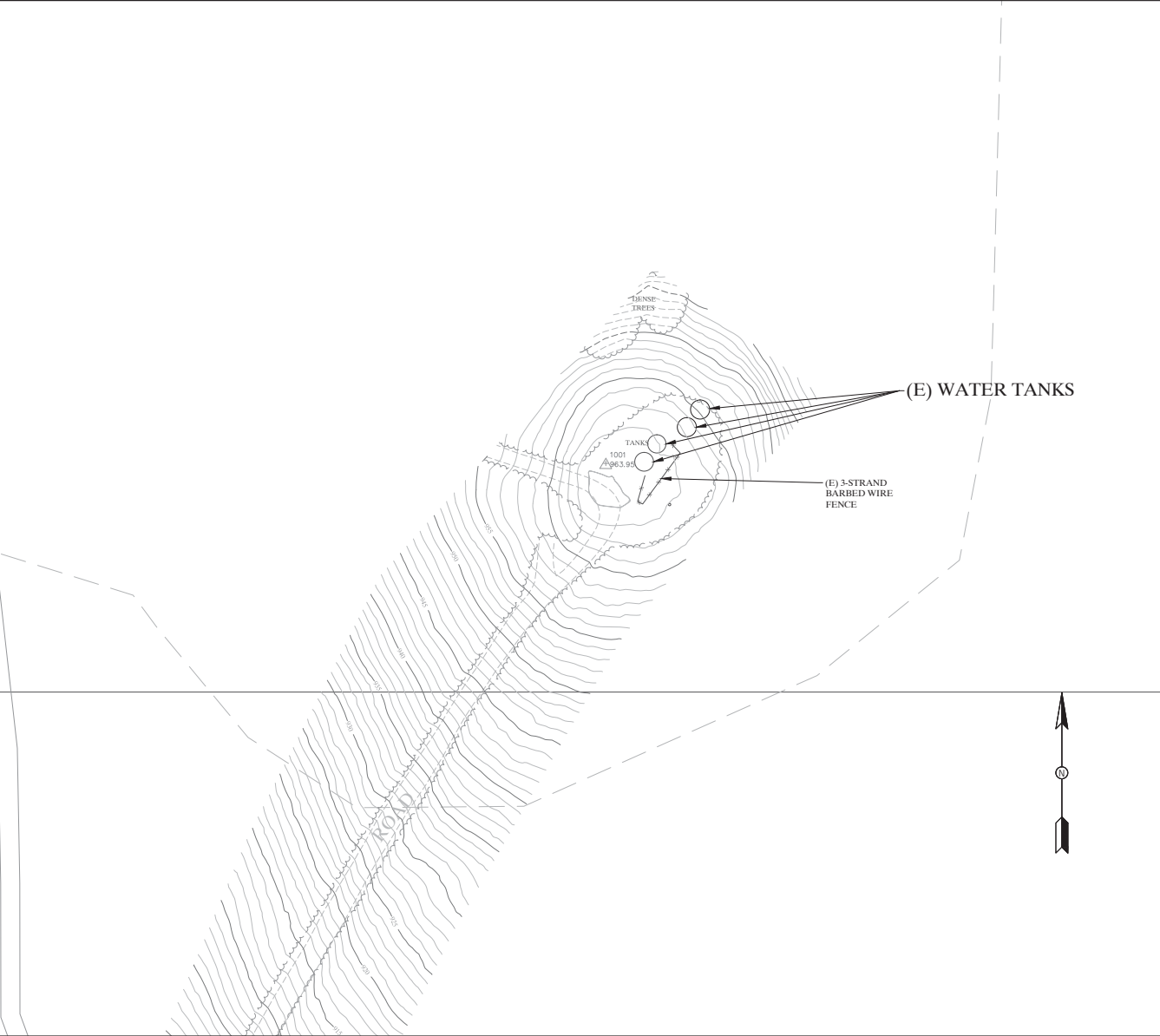
**P1**

- NOTES:
1. THERE ARE NO EXISTING OR PROPOSED CURBS, GUTTERS, AND SIDEWALKS.
  2. PROPOSED TREES TO BE REMOVED. AS NOTED ON PLANS.



PARCEL OVERVIEW

1/128" = 1'-0"



NORTH PORTION OF PARCEL

1/32" = 1'-0"



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200 GATE  
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**PLOT PLAN**

**CULTIVATION PERMITTING**

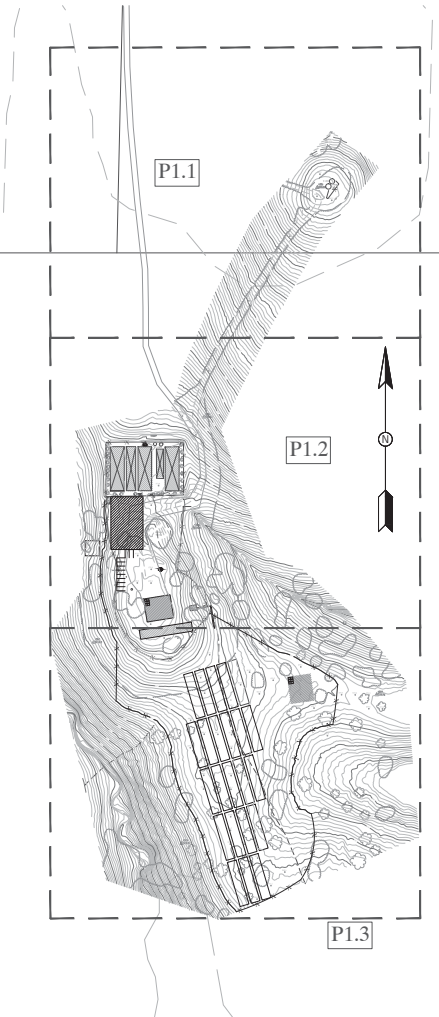
**SANDERS NACIMIENTO LAKE DR. PASO ROBLES, CA 93446**

**APN 080-041-036**

Date:	
Revision No.:	
Date: 5/21/18	
Project #: 17006	
Drawn by: KCB	
Scale: As Noted	
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**P1.1**

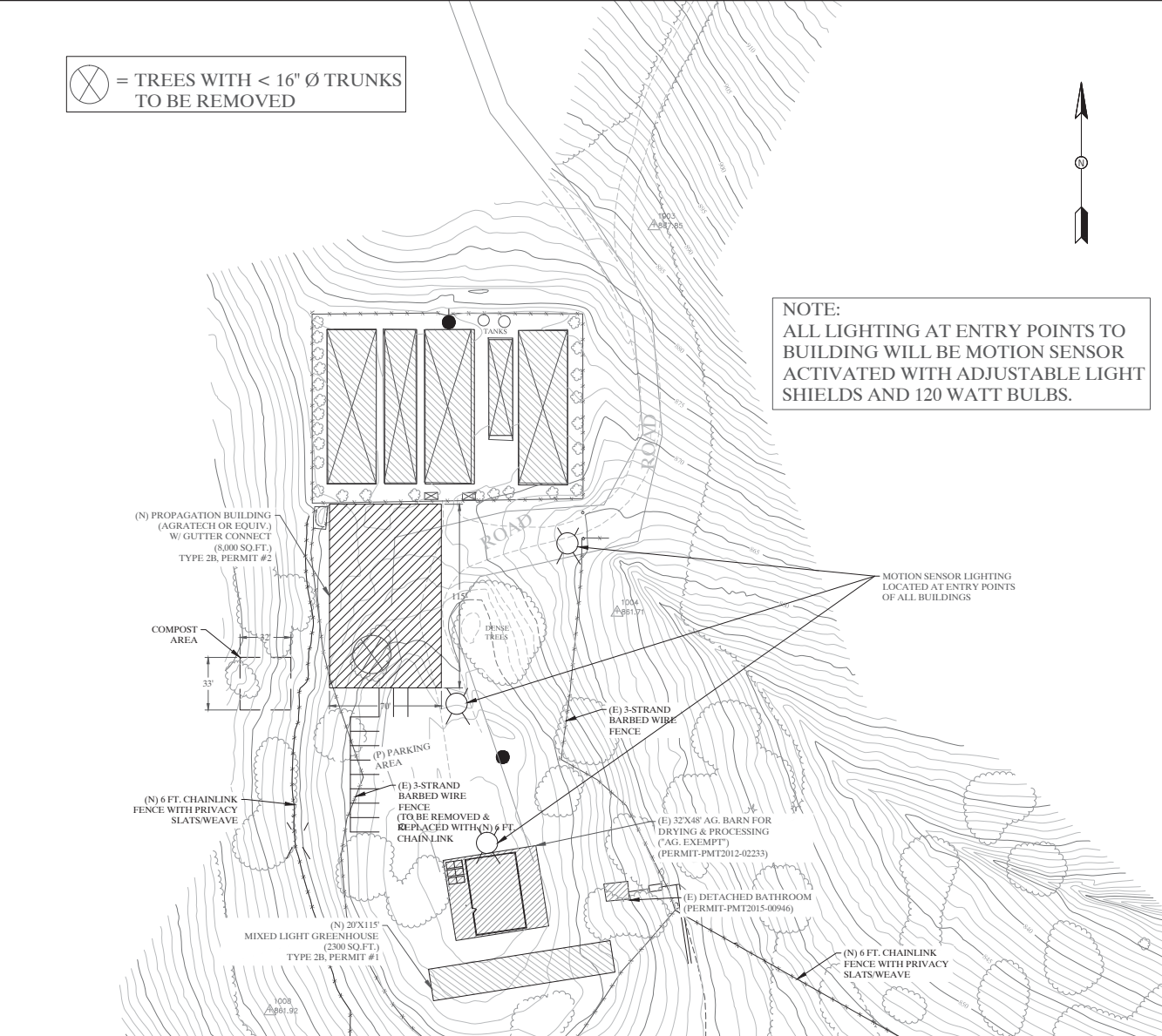
- NOTES:
1. THERE ARE NO EXISTING OR PROPOSED CURBS, GUTTERS, AND SIDEWALKS.
  2. PROPOSED TREES TO BE REMOVED. AS NOTED ON PLANS.



PARCEL OVERVIEW

1/128" = 1'-0"

⊗ = TREES WITH < 16" Ø TRUNKS TO BE REMOVED



CENTRAL PORTION OF PARCEL

1/32" = 1'-0"



PLOT PLAN

CULTIVATION PERMITTING  
SANDERS NACIMIENTO LAKE DR. PASO ROBLES, CA 93446

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Date: 5/21/18

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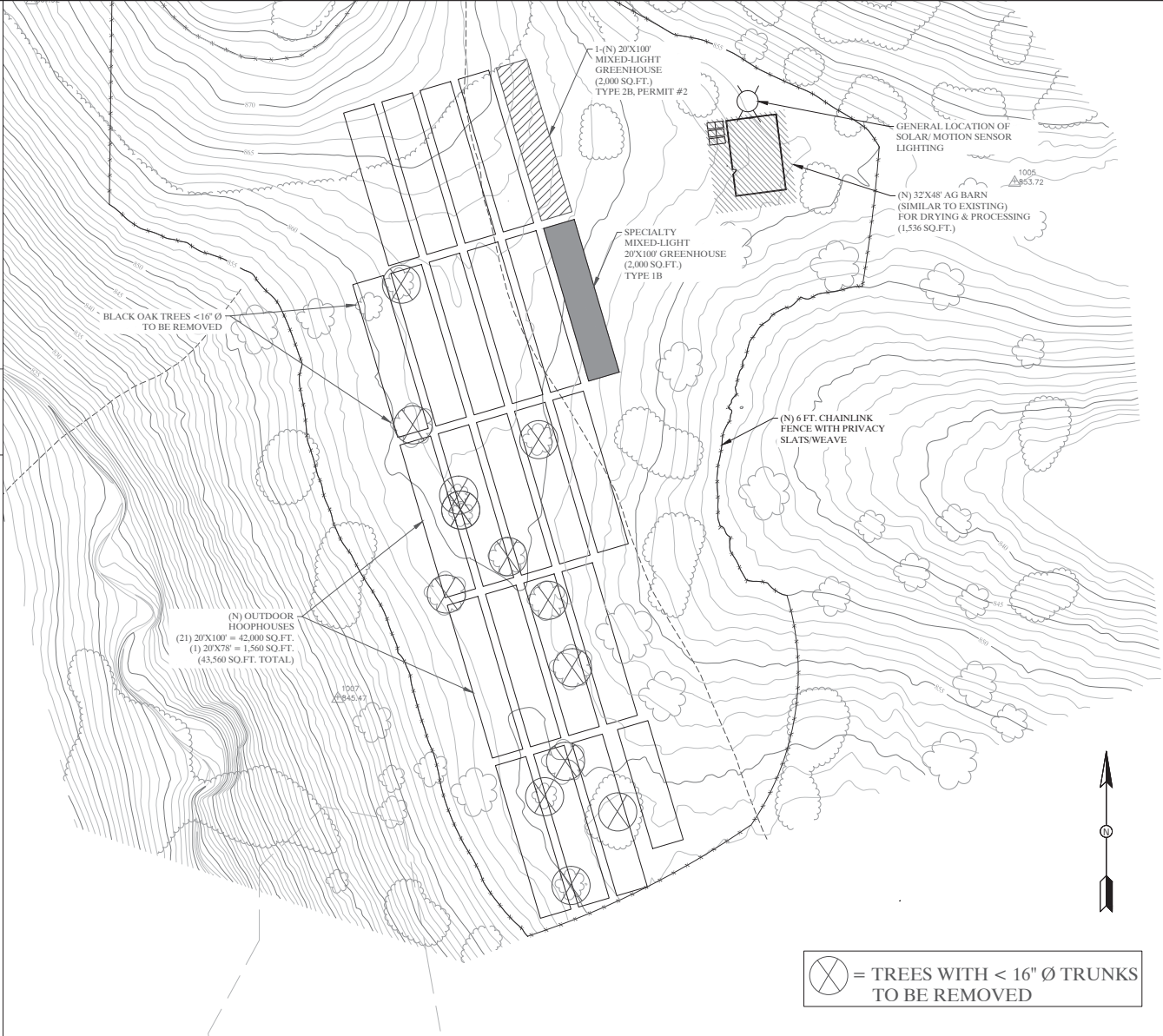
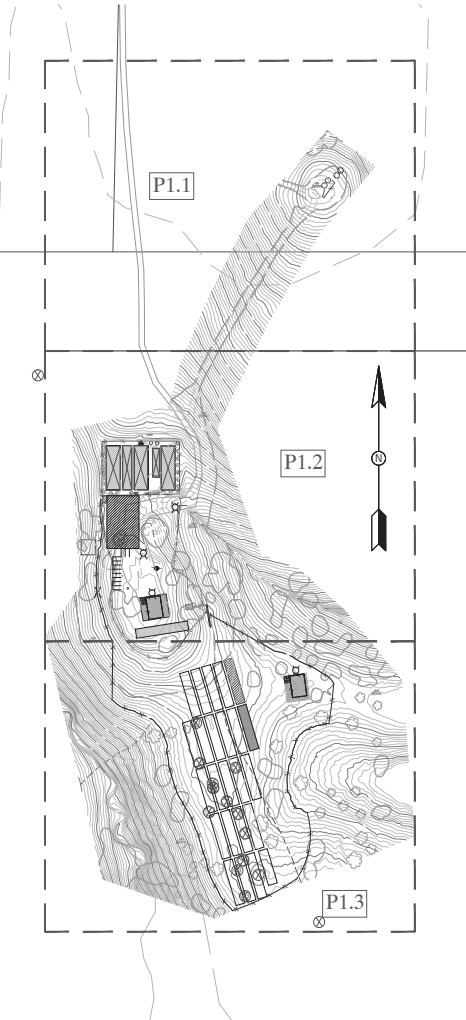
Scale: As Noted

Sheet No.

P1.2



- NOTES:  
 1. THERE ARE NO EXISTING OR PROPOSED CURBS, GUTTERS, AND SIDEWALKS.  
 2. PROPOSED TREES TO BE REMOVED. AS NOTED ON PLANS.



⊗ = TREES WITH < 16" Ø TRUNKS TO BE REMOVED



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**PLOT PLAN**  
**CULTIVATION PERMITTING**  
**SANDERS NACIMIENTO LAKE DR. PASO ROBLES, CA 93446**  
**APN 080-041-036**

Date:	
Revision No.:	
Date: 5/21/18	
Project #: 17006	
Drawn by: KCB	
Scale: As Noted	
Sheet No.	

**P1.3**

PARCEL OVERVIEW

1/128" = 1'-0"

SOUTH PORTION OF PARCEL

1/32" = 1'-0"





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**PLOT PLAN WITH AERIAL IMAGERY**

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APN 080-041-036

Date:

Revision No.:

Date: 5/21/18

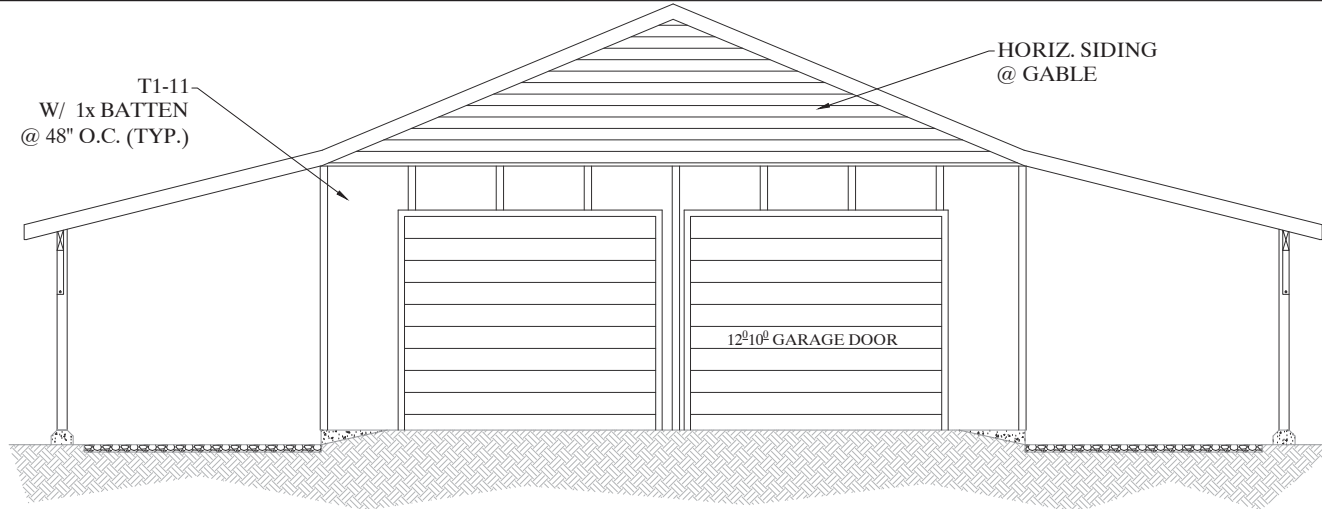
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Scale: 1/128" = 1'-0"

Sheet No.

**P2**



AG BARN ELEVATIONS  
CULTIVATION PERMITTING  
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APN 080-041-036

Date:

Revision No.:

Date: 5/21/18

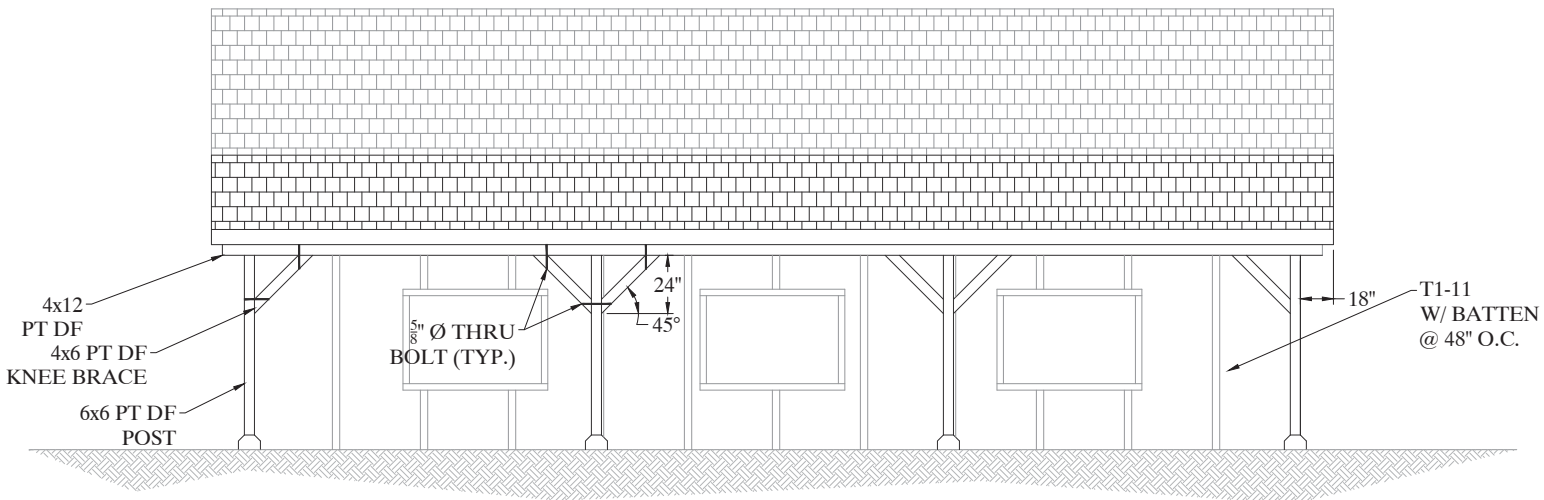
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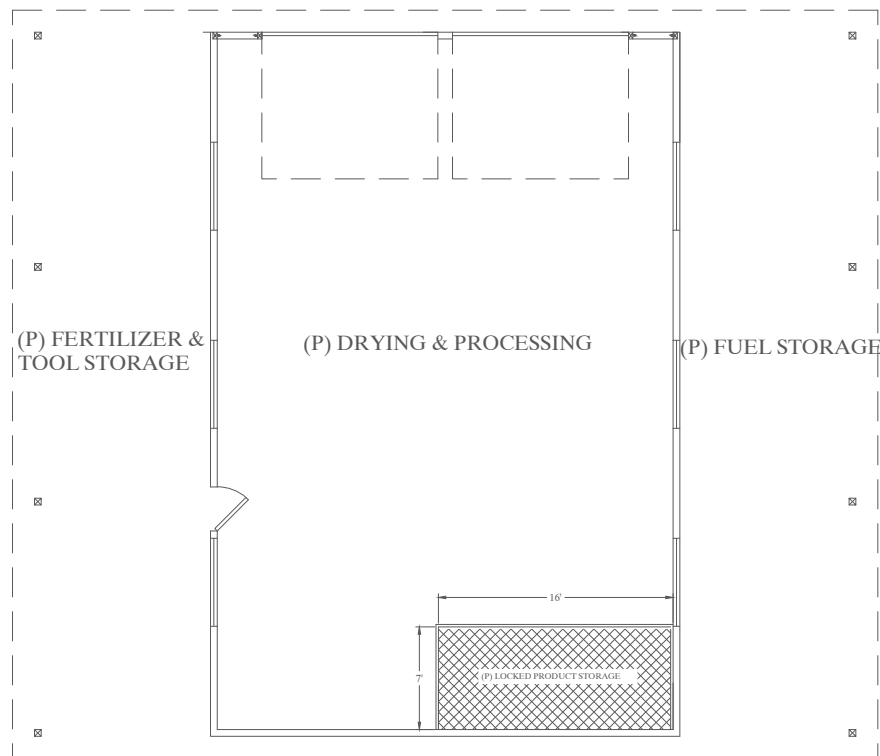
Drawn by: KCB

Scale: As Noted

Sheet No.

**A1**







252 G ST.  
ALBUQUERQUE, NM 87102  
(505) 822-2822 FAX & FAX  
800-896-4378 445-8000-30

AG BARNS ROOF PLAN

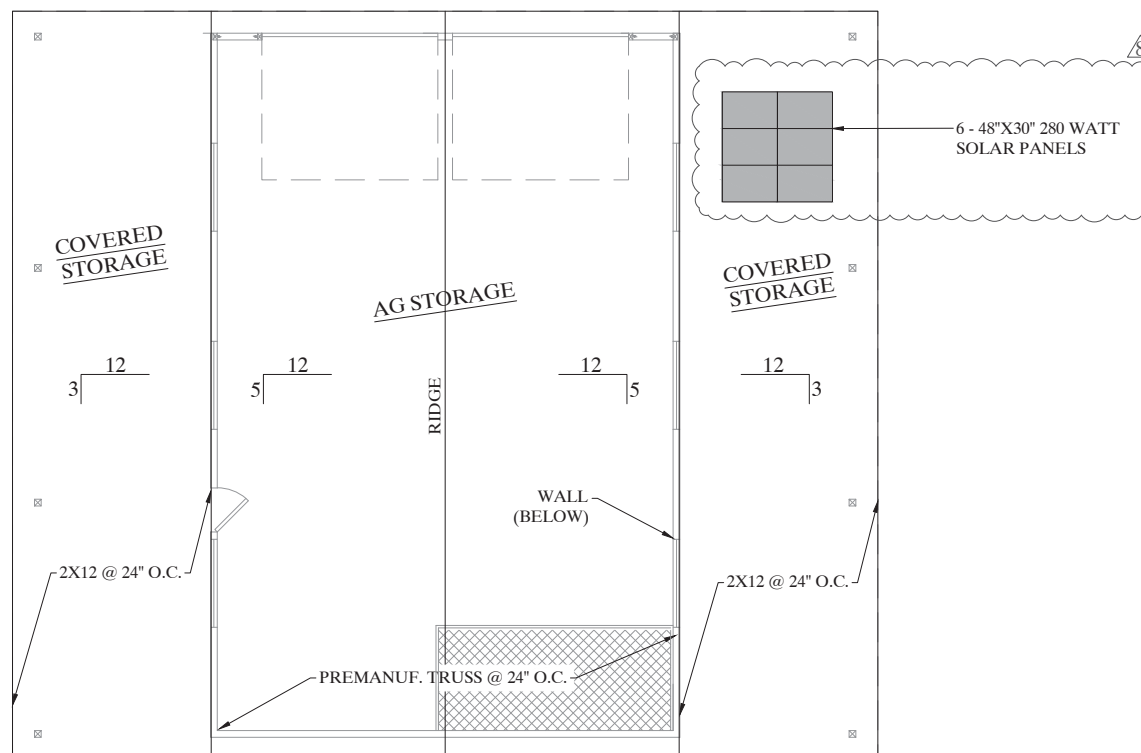
CULTIVATION PERMITTING

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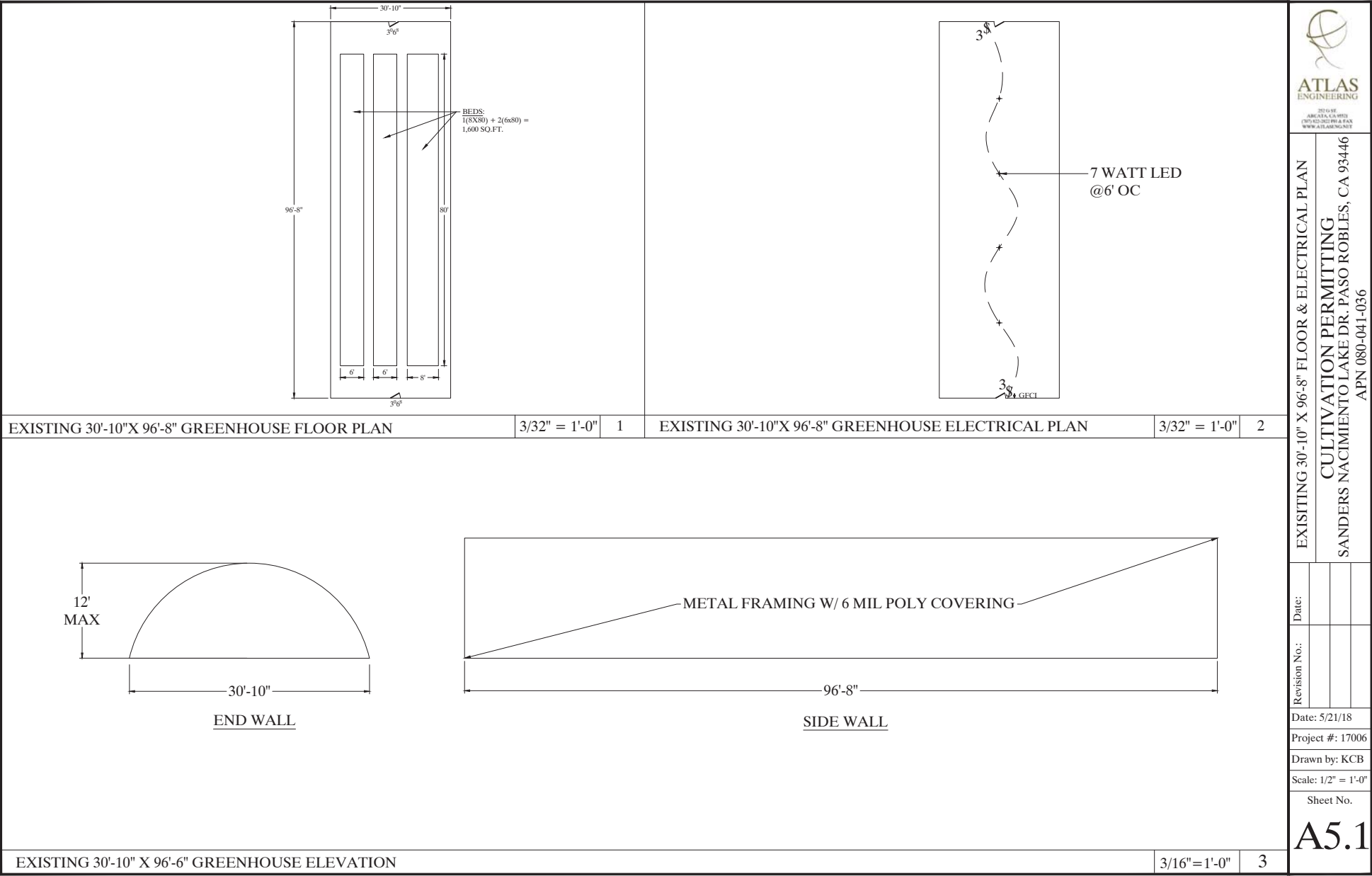
APN 080-041-036

Sheet No.

## A3









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EXISTING 30'-10" X 96'-8" FLOOR & ELECTRICAL PLAN

CULTIVATION PERMITTING

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APN 080-041-036

Revision No.:	Date:

Date: 5/21/18

Project #: 17006

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Scale: 1/2" = 1'-0"

Sheet No.

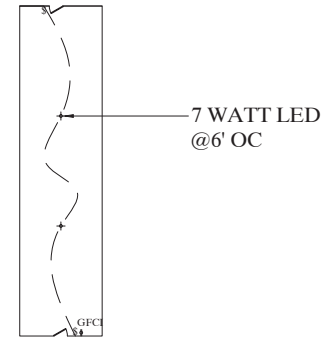
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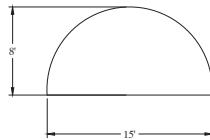
EXISTING 15'-10"X 60' GREENHOUSE FLOOR PLAN

3/32" = 1'-0" 1

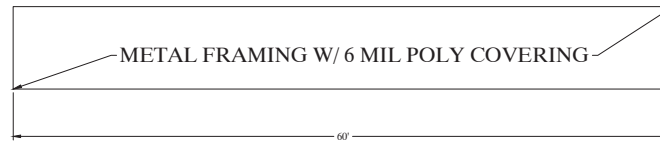


EXISTING 15'-10"X 60' GREENHOUSE ELECTRICAL PLAN

3/32" = 1'-0" 2



END WALL



SIDE WALL

EXISTING 15'-10"X 60' GREENHOUSE ELEVATION

3/16"=1'-0" 3



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SAN ANTONIO, TEXAS 78207  
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EXISTING 15'-10" X 60' FLOOR & ELECTRICAL PLAN

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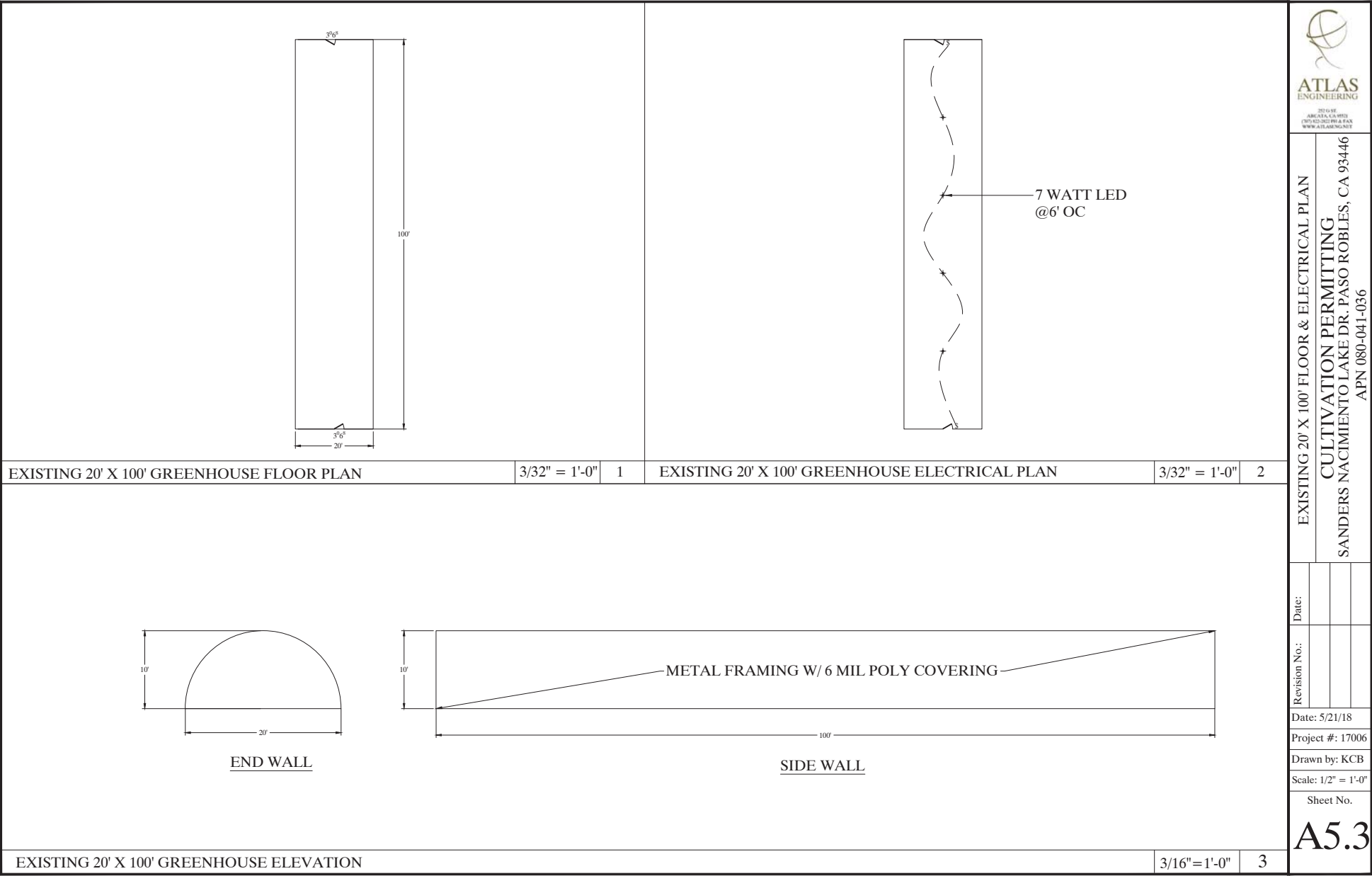
Project #: 17006

Drawn by: KCB

Scale: 1/2" = 1'-0"

Sheet No.

**A5.2**



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EXISTING 20' X 100' FLOOR & ELECTRICAL PLAN

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APN 080-041-036

Date:	
Revision No.:	

Date: 5/21/18

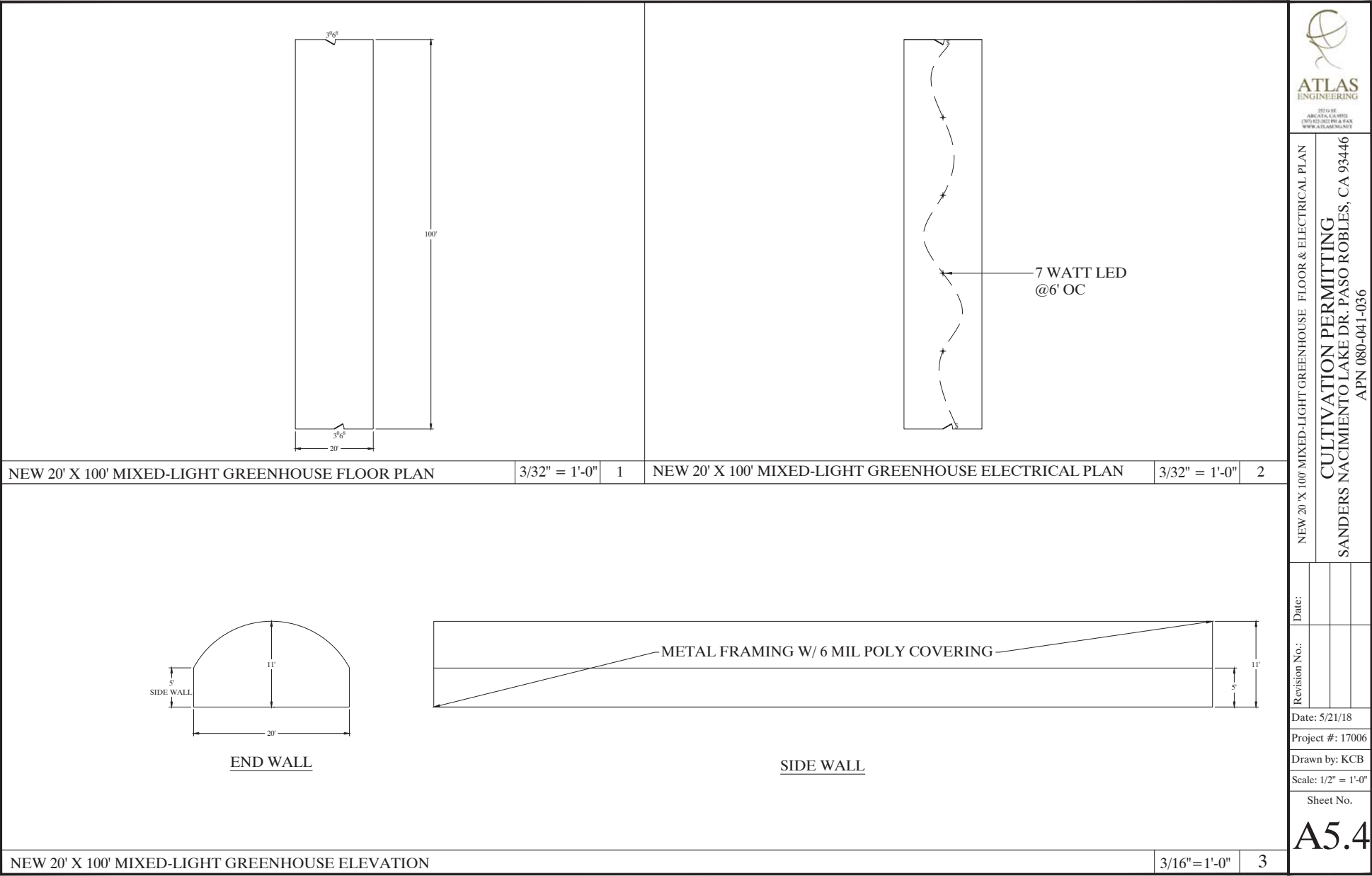
Project #: 17006

Drawn by: KCB

Scale: 1/2" = 1'-0"

Sheet No.

A5.3





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NEW 20' X 100' MIXED-LIGHT GREENHOUSE FLOOR & ELECTRICAL PLAN

**CULTIVATION PERMITTING**

SANDERS NACIMIENTO LAKE DR. PASO ROBLES, CA 93446

APN 080-041-036

Date:			
Revision No.:			

Date: 5/21/18

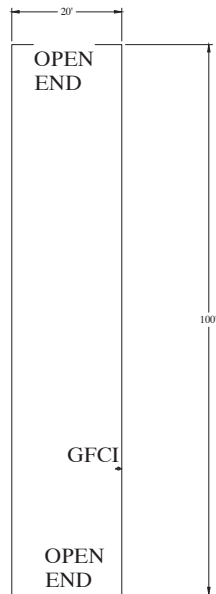
Project #: 17006

Drawn by: KCB

Scale: 1/2" = 1'-0"

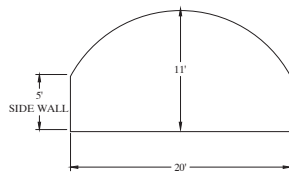
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**A5.4**

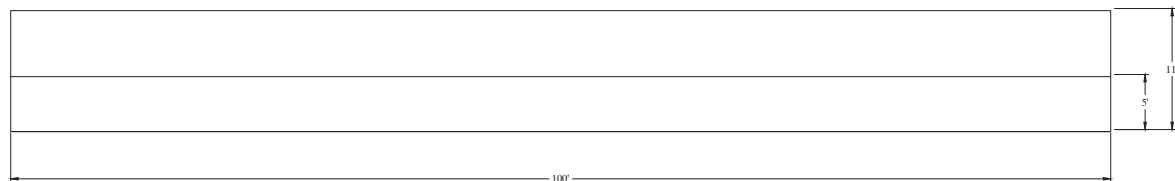


NEW 20' X 100' OUTDOOR HOOP HOUSE FLOOR & ELECTRICAL PLAN	3/32" = 1'-0"	1	NOT USED	2
-----------------------------------------------------------	---------------	---	----------	---

NOTE:  
 - NO LIGHTS/SWITCHES  
 - OPEN ENDS



END WALL



SIDE WALL

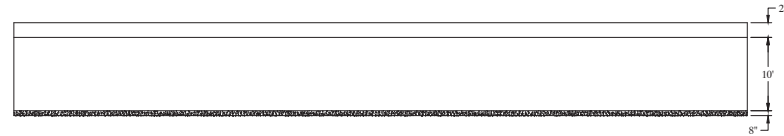
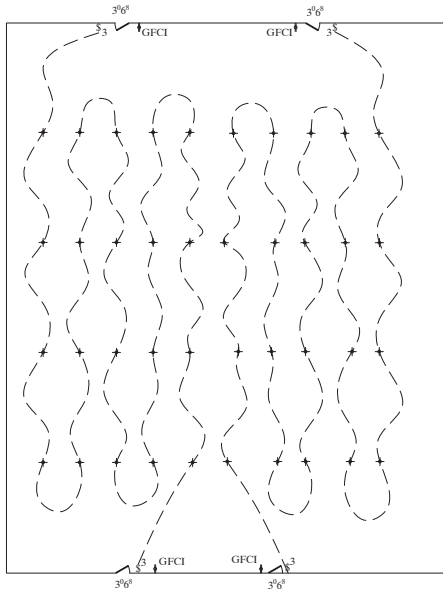
NEW 20' X 100' OUTDOOR HOOP HOUSE FLOOR PLAN	3/16"=1'-0"	3
----------------------------------------------	-------------	---



NEW 20' X 100' OUTDOOR HOOP HOUSE FLOOR PLAN  
 CULTIVATION PERMITTING  
 SANDERS NACIMIENTO LAKE DR. PASO ROBLES, CA 93446  
 APN 080-041-036

Date:			
Revision No.:			
Date: 5/21/18			
Project #: 17006			
Drawn by: KCB			
Scale: 1/2" = 1'-0"			
Sheet No.			

**A5.5**

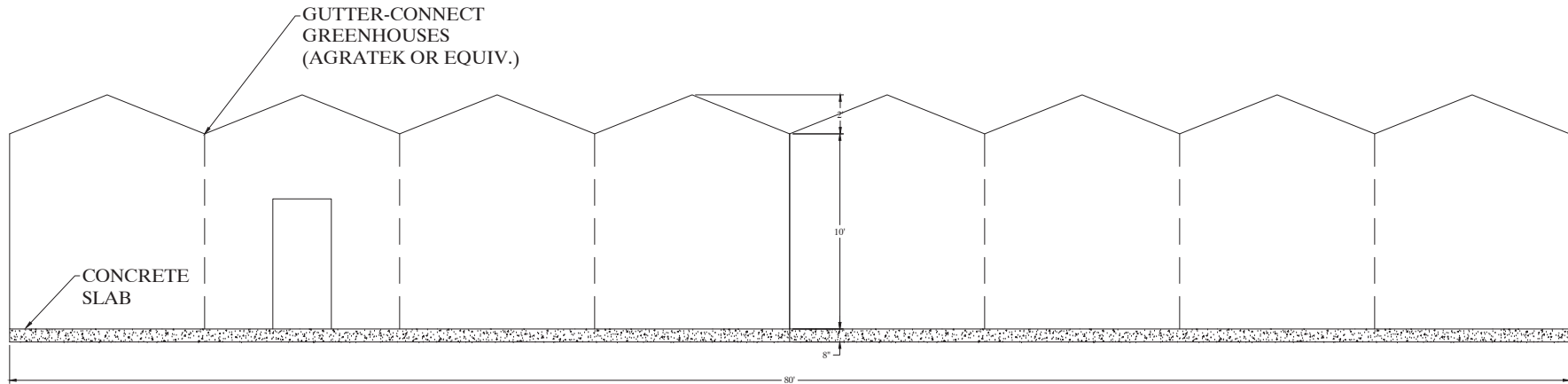


NEW 80' X 100' PROPAGATION BLDG. FLOOR & ELECTRICAL PLAN

3/32" = 1'-0" 1

NEW 80' X 100' PROPAGATION BLDG. SIDE ELEVATION

1/8" = 1'-0" 2



NEW 80' X 100' NEW PROPAGATION BLDG. FRONT ELEVATION

3/8" = 1'-0" 3



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NEW PROPAGATION BUILDING

CULTIVATION PERMITTING  
SANDERS NACIMIENTO LAKE DR., PASO ROBLES, CA 93446

APN 080-041-036

Date:

Revision No.:

Date: 5/21/18

Project #: 17006

Drawn by: KCB

Scale: 1/2" = 1'-0"

Sheet No.

A5.6