SEQUOIA
Ecological Consulting, Inc.

Double T Ranch Project
8325 Quail Canyon Road
Vacaville, California

Biological Constraints Report

March 21, 2022

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1.0 INTRODUCTION

Sequoia Ecological Consulting, Inc. (Sequoia) has prepared this Biological Constraints Report for the proposed Double T Ranch Project (hereafter referred to as "the project") located at parcel number 8325 on Quail Canyon Road (hereafter referred to as "the project site"), in the City of Vacaville, Solano County, California (Figure 1, 2 and 3). Our report provides a description of existing biological resources on the project site and identifies how the project may impact sensitive biological resources.

Biological resources documented include both common and sensitive plant and wildlife species, as designated by the US Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), National Marine Fisheries Service (NMFS), and other resource organizations, including the California Native Plant Society (CNPS). This report also includes mapping of aquatic features that may be regulated by the US Army Corps of Engineers (USACE), California State Water Resources Control Board (SWRCB), and CDFW. Please note that this analysis assesses the potential for impacts to observed aquatic features but does not provide the level of detail required for a formal delineation of "Waters of the United States" suitable for submittal to USACE, the regulatory agency that defines waters of the United States.

2.0 LOCATION AND PROJECT DESCRIPTION

The proposed project encompasses one privately owned parcel at 8325 Quail Canyon Road that totals 47.49 acres. Parcel 8325 is located on the west side of Quail Canyon Road. This property is in Vacaville, California in the County of Solano (Figure 1, 2, and 3). This parcel is currently designated for agricultural use (AG-20 zone) and the project proposes to transform the property back to its intended agricultural roots. The land will be enhanced through the recreational use of a "Public Stable Without Horse Show," allowing Solano County residents to enjoy the property on horseback like other nearby properties. The project includes barns, pens, pastures, agricultural structures, primary and secondary dwelling units, and access drives to support the primary use of the parcel. No work is anticipated in any aquatic features; see the Use Permit with Site Plans in Attachment A.

The project site is characterized as highly disturbed due to recent wildfire, historic agricultural use, and development. Consequently, due to the recent wildfire and the subsequent regular disturbance regime, native habitats on the project site are minimal and denuded.

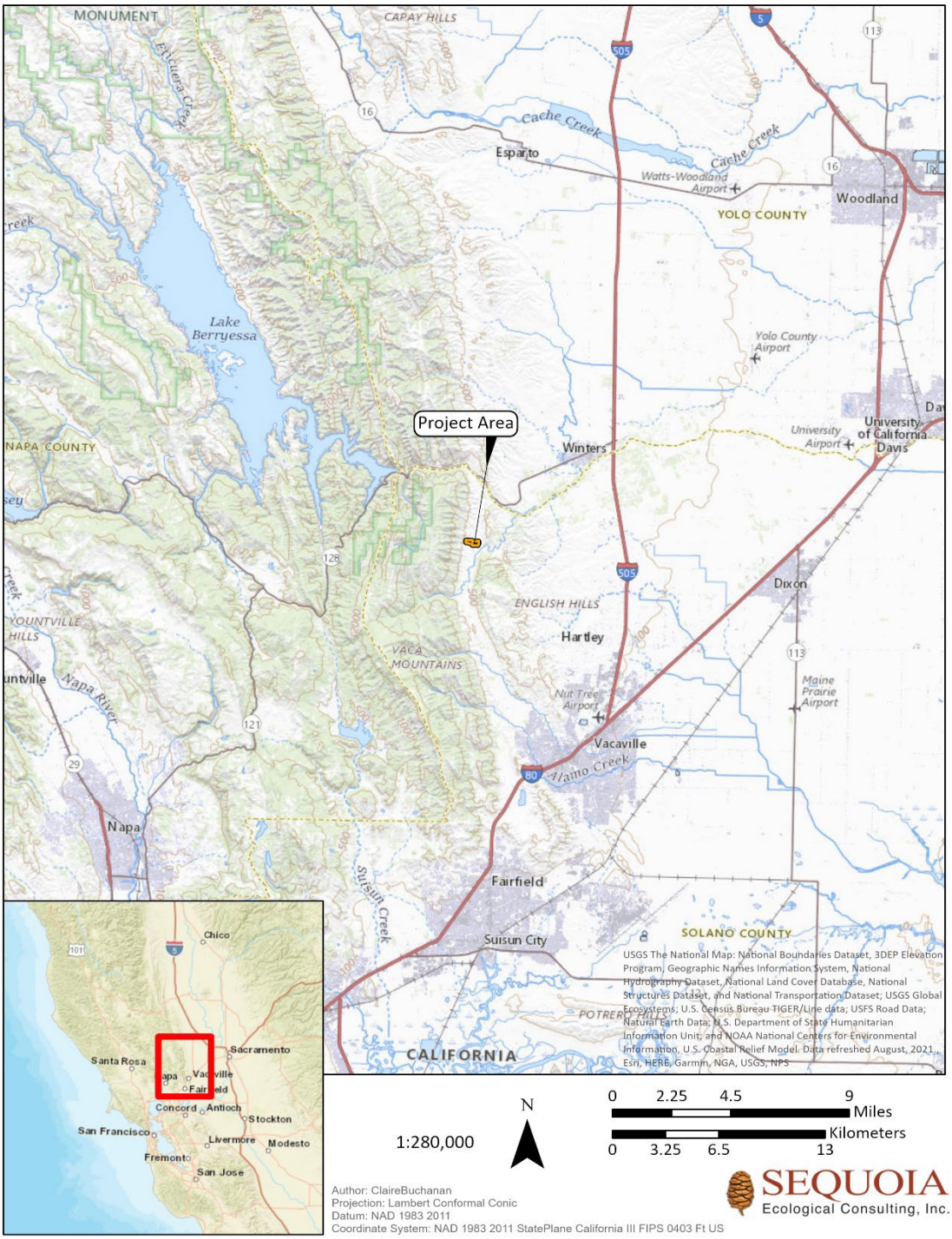

Figure 1. Regional Map of the Project Site.

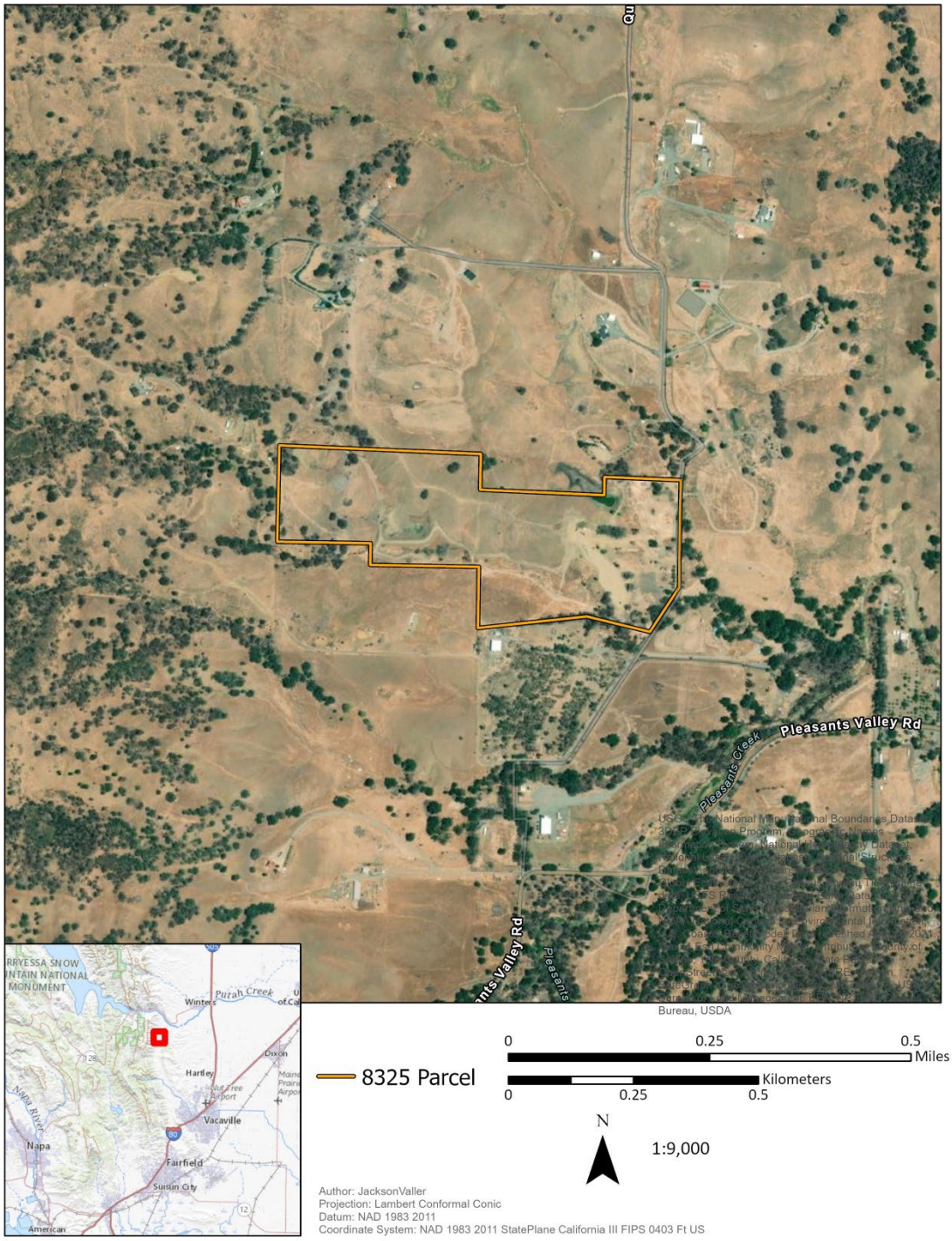

Figure 2. Location Map of the Double T Ranch Project.

Figure 3. Construction Footprint of the Double T Ranch Project.

3.0 REGULATORY SETTING

Regulatory authority over biological resources is shared by federal, state, and local agencies under a variety of laws, ordinances, regulations, and statutes. Primary authority for biological resources lies within the land use control and planning authority of local jurisdictions (in this instance, the County of Solano). Below we provide a summary of these regulatory authorities and a brief discussion on applicability to the proposed project. More in-depth analyses are provided in Section 5 (Results) and Section 6 (Discussion).

3.1 Federal

3.1.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) provides protection for federally listed endangered and threatened species and their habitats. A project may obtain permission to take federally listed species in one of two ways: a Section 10 Habitat Conservation Plan (HCP) issued to a non-federal entity, or a Section 7 Biological Opinion from the USFWS and/or the National Oceanic and Atmospheric Administration (NOAA) issued to another federal agency that funds or permits an action (e.g., USACE). Under either Section of the FESA, adverse impacts to protected species are avoided, minimized, and mitigated. Both cases require consultation with the USFWS and/or NMFS, which ultimately issues a Biological Opinion determining whether the federally listed species may be incidentally taken pursuant to the proposed action and authorizing incidental take.

Section 7 of FESA requires that federal agencies develop a conservation program for listed species (FESA 7(a)(a)) and that they avoid actions that will jeopardize the continued existence of the species or result in the destruction or adverse modification of the species' designated critical habitat (FESA 7(a)(2)). FESA Section 9 prohibits all persons and agencies from take of threatened and endangered species (though the prohibition on taking listed plants only applies to plants taken from "areas under Federal jurisdiction" or plants taken "in knowing violation of any law or regulation of any State or in the course of any violation of a State criminal trespass law"). Those who violate this mandate face civil and criminal penalties, including civil fines of up to $25,000 per violation, as well as criminal penalties of up to $50,000 and imprisonment for one year. Section 10 of FESA regulates a wide range of activities affecting fish and wildlife designated as endangered or threatened and the habitats on which they rely. Section 10 prohibits activities affecting these protected fish and wildlife species and their habitats unless authorized by a permit from USFWS or NMFS. These permits may include incidental take permits, enhancement of survival permits, or recovery and interstate commerce permits. HCPs under Section 10(a)(1)(B) provide for partnerships with non-federal parties to conserve the ecosystems upon which listed species depend.

HCPs are required as part of an application for an incidental take permit under Section 10. They describe the anticipated effects of the proposed take, how those impacts will be minimized or mitigated, and how the HCP will be funded.

3.1.1.1 Responsible Agency

FESA gives regulatory authority to USFWS for federally listed terrestrial species and non-anadromous fish. NMFS has regulatory authority over federally listed marine mammals and anadromous fish.

3.1.1.2 Applicability to the Proposed Project

The project site has no designated critical habitat. There are various federally listed species that are documented within 3 miles of the project area, as discussed in the desktop review. This report discusses potential for occurrence within the project area, as well as the potential for the project to impact those species.

Additionally, private agricultural activities are not included in the draft Solano HCP and therefore this project site will not be covered by the HCP (SCHP 2012).

3.1.2 Migratory Bird Treaty Act of 1918

The Migratory Bird Treaty Act (MBTA) (16 USC §§703–711), as administered by the USFWS, makes it unlawful to "pursue, hunt, take, capture, kill, attempt to take, capture or kill, offer for sale, sell, offer to purchase, purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry, or cause to be carried by any means whatever, receive for shipment, transportation or carriage, or export at any time, or in any manner, any migratory bird, or any part, nest, or egg of any such bird." This includes direct and indirect acts, except for harassment and habitat modification, which are not included unless they result in direct loss of birds, nests, or eggs.

3.1.2.1 Applicability to the Proposed Project

This report includes the results of an assessment of suitable habitat in trees on and in the immediate vicinity of the project site for common passerine (songbird) and raptor (bird of prey) species protected pursuant to the MBTA.

3.1.3 Clean Water Act – Section 404 Migratory Bird Treaty Act of 1918

USACE regulates activities within "waters of the United States" pursuant to congressional acts: Section 404 of the Clean Water Act (CWA; 1977, as amended) and Section 10 of the Rivers and Harbors Act of 1899. Section 404 of the CWA (1977, as amended) requires a permit for discharge of dredged or fill material into waters of the United States. Under Section 404, waters of the United States are defined as all waters that are used currently, or were used in the past, or may be used in the future for interstate or foreign commerce, including waters subject to the ebb and flow of the tide up to the high tide line. Additionally, areas such as wetlands, rivers, and streams (including intermittent streams and tributaries)

are considered waters of the United States. The extent of wetlands is determined by examining the presence of hydrophytic vegetation, hydric soils, and wetland hydrology. Under normal circumstances, all three of these parameters must be satisfied for an area to be considered a jurisdictional wetland under Section 404 of the CWA. Fill within wetlands is regulated under the CWA through a Nationwide Permit Program and an Individual Permit Program.

3.1.3.1 Applicability to the Proposed Project

This report includes a documentation of observed aquatic features within the project area, and their potential applicability to fall under USACE jurisdiction pursuant to Section 404 of the CWA.

3.2 State

3.2.1 California Environmental Quality Act

CEQA requires public agencies in California to analyze and disclose potential environmental impacts associated with a proposed discretionary project that the agency will carry out, fund, or approve. Any significant impact must be mitigated to the extent feasible, below the threshold of significance.

3.2.1.1 Applicability to the Proposed Project

This document is not intended for CEQA review, nor does it include discussion on best approaches for compliance with CEQA. This report does, however, provide an assessment of constraints that the project may have on sensitive biological resources that may be helpful when determining routes for CEQA compliance.

3.2.2 California Endangered Species Act

The CDFW is responsible for administering the California Endangered Species Act (CESA). Section 2080 of the California Fish and Game Code (CFGC) prohibits take of any species that the Fish and Wildlife Commission determines to be an endangered species or a threatened species. However, CESA does allow for take that is incidental to otherwise lawful development projects. Sections 2081(b) and (c) of CESA allow the CDFW to issue an incidental take permit for a state listed threatened and endangered species only if specific criteria are met (i.e., the effects of the authorized take are minimized and fully mitigated). The measures required to meet this obligation shall be roughly proportional in extent to the impact of the authorized taking on the species. Where various measures are available to meet this obligation, the measures required shall maintain the applicant's objectives to the greatest extent possible. All required measures shall be capable of successful implementation.

3.2.2.1 Applicability to the Proposed Project

There are various California listed species that are documented within 3 miles of the project area, as discussed in the desktop review. This report discusses potential for occurrence within the project area, as well as the potential for the project to impact those species.

3.2.3 California Fish and Game Code – Section 1600 – Lake or Streambed Alteration Agreement

CDFW regulates activities within watercourses, lakes, and in-stream reservoirs. Under Section 1602 of the CFGC—often referred to as the Lake or Streambed Alteration Agreement (LSAA)—CDFW regulates activities that would alter the flow or change or use any material from the bed, channel, or bank of any perennial, intermittent, or ephemeral river, stream, or lake. Each of these activities requires a Section 1602 permit. Section 1602 requires the CDFW to be notified of any activity that might affect lakes and streams. It also identifies the process through which an applicant can come to an agreement with the state regarding the protection of these resources, both during and following construction.

3.2.3.1 Applicability to the Proposed Project

This report includes an analysis of possible project impacts to the bed, bank, and/or channel, or associated riparian vegetation of the three unnamed tributaries that may be regulated by the CDFW pursuant to Section 1602 of the CFGC. Further information would be needed to submit a notification to CDFW, such as delineation of sensitive resources, potential impacts, and proposed mitigation.

3.2.4 California Fish and Game Code – Section 3500 – Nesting Bird Protection

CFGC Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by the CFGC or any regulation made pursuant thereto. CFGC Section 3503.5 protects all birds of prey (raptors) and their eggs and nests. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA. These regulations could require that elements of a project (specifically vegetation removal or construction near nest trees) be reduced or eliminated during critical phases of the nesting cycle unless surveys by a qualified biologist demonstrate that nests, eggs, or nesting birds will not be disturbed, which may be subject to approval by the CDFW and/or the USFWS.

3.2.4.1 Applicability to the Proposed Project

This report includes the results of an assessment of suitable habitat in trees on and in the immediate vicinity of the project site for common passerine (songbird) and raptor (bird of prey) species protected pursuant to CFGC Section 3500 and the MBTA. Species protected pursuant to CFGC Section 3500 and the MBTA are documented within 3 miles of the project area, as discussed in the desktop review. This report discusses potential for occurrence within the project area, as well as the potential for the project to impact those species.

3.2.5 California Fish and Game Code – Fully Protected Species

CFGC Sections 3505, 3511, 4700, 5050, and 5515 afford full protection to several specific wildlife species. Fully protected species cannot be taken or possessed under state law, even if federal take authorization is issued, except in connection with a Natural Communities Conservation Plan or for the purpose of scientific research and relocation of bird species for the protection of livestock.

3.2.6 Regional Water Quality Control Board – Clean Water Act – Section 401 and Porter-Cologne Water Quality Control Act

The SWRCB and Regional Water Quality Control Board (RWQCB) regulate activities in "waters of the state" (which includes wetlands) through two sources of legal authority: Section 401 of the CWA and the Porter-Cologne Water Quality Control Act (Porter-Cologne Act) (Wat. Code, Div. 7, §13000 et seq.). The Section 401 water quality certification program allows the state to ensure that activities requiring a federal permit or license comply with state water quality standards. Though similar to Section 404 and 401 requirements, the Porter-Cologne Act applies to all “waters of the state” rather than to the portions thereof below the ordinary high-water mark. “Waters of the state” is defined as any surface water or groundwater, including saline waters, within the boundaries of the state (Water Code §13050(e)).

The Porter-Cologne Act requires any person discharging waste or proposing to discharge waste in any region that could affect the quality of the “waters of the state” to file a report of waste discharge. Pursuant to the Porter-Cologne Act, the RWQCB also regulates “isolated wetlands.” Functionally, the RWQCB typically evaluates whether an additional waste discharge requirement is necessary for the balance between federal and state jurisdictional boundaries during the 401 certification process, or independently if no federal jurisdiction is involved, or if activities in federal jurisdiction are exempt from the CWA. The RWQCB issues a permit or waiver that includes implementing water quality control plans that reflect the beneficial uses to be protected. Waters of the state subject to RWQCB regulation extend to the top of bank, as well as isolated water/wetland features.

On April 2, 2019, the SWRCB adopted Resolution 2019-0015, thereby adopting a document entitled, “State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State” (“Procedures”) for inclusion in the Water Quality Control Plans for Inland Surface Waters, Enclosed Bays, and Estuaries of California.

In taking this action, the SWRCB noted that under the Porter-Cologne Act, discharges of dredged or fill material to waters of the state are subject to waste discharge requirements or waivers thereof. The SWRCB further explained that “although the state has historically relied primarily on requirements in the CWA to protect wetlands, US Supreme Court rulings reducing the jurisdiction of the CWA over wetland areas by limiting the definition of ‘waters of the United States’ have necessitated the use of California’s independent authorities under the Porter-Cologne Act to protect these vital resources.”

The Office of Administrative Law (OAL) approved the Procedures on August 28, 2019. Pursuant to the Procedures, the effective date is nine months upon OAL approval. Accordingly, the Procedures became effective May 28, 2020.

By adopting the Procedures, the SWRCB mandated and standardized the evaluation of impacts and protection of waters of the state from impacts due to dredge and fill activities. The Procedures include: 1) a wetland definition; 2) a jurisdictional framework for determining if a feature that meets the wetland definition is a water of the state; 3) wetland delineation procedures; and 4) procedures for application submittal and the review and approval of dredge or fill activities.

The Procedures define an area as a wetland if it meets three criteria: wetland hydrology, wetland soils, and (if vegetated) wetland plants. An area is a wetland if: (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.

Waters of the state, by definition, includes more aquatic features than waters of the US, which defines the jurisdiction of the federal government. Waters of the state are not so limited. In addition, the federal definition of a wetland requires a prevalence of wetland vegetation under normal circumstances. To account for wetlands in arid portions of the state, the SWRCB's definition differs from the federal definition in that an area may be a wetland even if it does not support vegetation. If vegetation is present, however, the SWRCB's definition requires that the vegetation be wetland vegetation. The SWRCB's definition clarifies that vegetated and unvegetated wetlands will be regulated in the same manner.

The Procedures also include a jurisdictional framework that applies to aquatic features that meet the wetland definition. The jurisdictional framework will guide applicants and staff in determining whether an aquatic feature that meets the wetland definition will be regulated as a water of the state. The jurisdictional framework is intended to exclude from regulation any artificially created, temporary features, such as tire ruts or other transient depressions caused by human activity, while still capturing small, naturally occurring features, such as seasonal wetlands and small vernal pools that may be outside of federal jurisdiction. The Procedures do not expand the SWRCB's jurisdiction beyond areas already under SWRCB jurisdiction.

The Procedures exclude the following agricultural features from the protections accorded to wetlands: (1) ditches with ephemeral flow that are not a relocated water of the state or excavated in a water of the state; (2) ditches with intermittent flow that are not a relocated water of the state or excavated in a water of the state, or that do not drain wetlands other than any wetlands described in (4) or (5) below; (3) ditches that do not flow, either directly or through another water, into another water of the state; (4) artificially irrigated areas that would revert to dry land should application of waters to that area cease; or (5) artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, and settling basins.

The Procedures clarify what information and analysis the applicant needs to submit to have a complete application. The Procedures standardize when an alternative analysis needs to be conducted and set a minimum mitigation ratio for any permanent impacts to waters of the state resulting from dredge and fill activities.

When an alternatives analysis is required, the applicant must demonstrate that the proposed alternative is the Least Environmentally Damaging Practicable Alternative. The term practicable means available and capable of being done after taking into consideration cost, existing technology, and other logistics in light of the overall project purpose.

3.2.6.1 Applicability to the Proposed Project

This report includes a documentation of observed aquatic features within the project area, and their potential applicability to fall under RWQCB/SWRCB jurisdiction.

3.3 Local

The project site is located in Solano County, and therefore is subject to review for consistency with the Solano County General Plan (found at https://www.solanocounty.com/depts/rm/planning/general_plan.asp). This plan includes programs, policies and goals that concern land use and biological compliance within the plan area. During CEQA review policies including the following may be assessed for consistency by the County, as the CEQA Lead Agency:

- RS.I-2: Use the Resource Conservation Overlay on the Land Use Diagram to identify areas of the county with high-priority needs for biological resource management. Areas covered by the Resource Conservation Overlay are intended to provide options to establish mitigation banks for biological impacts generated outside the overlay district. Land use designations within the Resource Conservation Overlay are restricted to Agriculture, Marsh, Watershed, and Park and Recreation. The Resource Conservation Overlay shall be located within important biological or physical areas and habitats identified by the HCP and deemed suitable by the Solano County Board of Supervisors. Areas contained within the Resource Conservation Overlay include high-priority resources defined in Figure RS-1 or subsequent updates. The Resource Conservation Overlay contains the following resources:
    - California red-legged frog critical habitat and core recovery areas
    - Callippe butterfly priority conservation areas
    - Giant garter snake priority conservation areas
    - Priority habitat corridors
    - Vernal pool conservation areas
    - Suisun Marsh Protection Plan primary management zone Update the zoning ordinance to incorporate provisions of the Resource Conservation Overlay.
- RS.I-3: Develop and adopt an ordinance to protect oak woodlands as defined in Senate Bill (SB) 1334 and heritage oak trees. Define heritage trees as the following: (a) trees with a trunk diameter of 15 inches or more measured at 54 inches above natural grade, (b) any oak tree native to California, with a diameter of 10 inches above natural grade, or (c) any tree or group of trees specifically designated by the County for protection because of its historical significance, special character or community benefit. As regards heritage oak trees, this ordinance should include:
    - Rules regarding the removal, pruning, or disturbance of the critical root zone of a heritage tree
    - Replacement ratio for healthy tree removal;

  - Enforcement mechanisms for unlawful removal of trees. As regards oak woodlands, the ordinance should include:
    - Lists of targeted tree species and age classes;
    - Guidance to minimize the fragmentation of oak woodlands and provide linkages and corridors between stands;
    - Requirements for the preparation of oak woodland management plans, which will be required for all development, agricultural uses (including grazing), and timber/fire wood collection within the county's oak woodlands.
- RS.I-6: Require all discretionary development proposals (with the exception of agricultural uses) within the Resource Conservation Overlay to submit an assessment that evaluates site conditions and potential project-related impacts on the targeted resource(s) of concern. The site assessment shall be prepared by a qualified professional approved by Solano County. The assessment shall be paid for by the applicant. The assessment will be used to (1) determine if the project will create negative impacts on the viability of the targeted resource and (2) determine the appropriate measures to avoid or mitigate such impacts.
- RS.I-7: Require certain findings by the Board of Supervisors to allow General Plan Amendments within the Resource Conservation Overlay that redesignate land from the Agriculture, Marsh, Watershed, or Park and Recreation designations to a use other than those listed above. To approve such redesignation, the Board of Supervisors must make one or more of the following findings:
  - The site conditions (vegetation types, soils, topography) are not suitable as habitat for the target resource(s) identified in the Resource Conservation Overlay;
  - The characteristics and size of the subject property make it unsuitable for conservation of the target resource;
  - No other lands with the requested land use classification are available for the proposed project.
- RS.I-67: Develop an ordinance that establishes a riparian buffer to protect water quality and ecosystem function. The minimum buffer width shall be determined according to existing parcel size. For parcels more than 2 acres in size, a minimum 150-foot development setback shall be provided. For parcels of 0.5–2.0 acres, a minimum 50-foot setback shall be provided. For parcels less than 0.5 acre a minimum 20-foot setback shall be provided. Exceptions to these development setbacks apply to parcels where a parcel is entirely within the riparian buffer setback or development on the parcel entirely outside of the setback is infeasible or would have greater impacts on water quality and wildlife habitat.
- RS.I-69: Protect natural watercourses through acquisition or dedication of adjacent land in fee or less than fee title during the process of reviewing and approving land development proposals
- RS.I-71: Require proposed projects located within the Putah Creek and Ulatis Creek watersheds to minimize project-related stormwater runoff and pollution. Stormwater runoff and pollution loads resulting after development of projects shall not exceed predevelopment conditions

4.0 METHODS

Sequoia performed a desktop review to assess potential sensitive resources within the project site. Using those results, Sequoia assessed the site to evaluate the presence of and/or likelihood of occurrence of sensitive resources on the project site.

4.1 Definitions

4.1.1 Special-Status Species

For the purposes of this document, special-status species include:

- Plant, fish, and wildlife species listed as Threatened or Endangered under FESA (50 CFR 17), and candidates for listing under the statute;
- Species protected by the CFGC, including nesting birds and Fully Protected species;
- Plant, fish, and wildlife species listed as Threatened or Endangered under CESA; and the laws and regulations for implementing CESA as defined in CFGC §2050 et seq. and the California Code of Regulations (CCR) 14 CCR §670.1 et seq., and candidates for listing under the statute (CFGC §2068);
- Species meeting the definition of 'Rare' or 'Endangered' under CEQA Guidelines 14 CCR §15125 (c) and/or 14 CCR §15380, including plants listed on CNPS Lists 1A, 1B, 2A, and 2B, 3, and 4. Plants occurring on CNPS List Ranked 3 and 4 are "plants about which more information is necessary," and "plants of limited distribution" (CNPS 2001). These plants may be included as special-status species on a case-by-case basis due to local significance or recent biological information (see additional definition information below);
- USFWS Birds of Conservation Concern;
- Fully Protected species, as designated by the CDFW (CFGC 3511, 4700, 5050, and 5515);
- Species of Special Concern, as designated by the CDFW and required by 14 CCR §15380; and/or
- Avian species protected under the MBTA of 1918.

Additional information regarding these definitions is provided below.

4.1.1.1 Federally Threatened or Endangered Species

A species listed as Threatened or Endangered under the FESA is protected from unauthorized "take" (that is, harass, harm, pursue, hunt, shoot, trap) of that species. If it is necessary to take a federally listed Threatened or Endangered species as part of an otherwise lawful activity, it would be necessary to receive permission from the USFWS prior to initiating the "take."

4.1.1.2 State Threatened or Endangered Species

A species listed as Threatened or Endangered under the CESA is protected from unauthorized "take" (that is, harass, pursue, hunt, shoot, trap) of that species. If it is necessary to "take" a state Threatened or Endangered species as part of an otherwise lawful activity, it would be necessary to receive permission from CDFW prior to initiating the "take."

4.1.1.3 CDFW Species of Special Concern

California Species of Special Concern are species whose California breeding populations are seriously declining and extirpation from all or a portion of their range is possible. This designation affords no legally mandated protection; however, some of these species could be considered "rare" and must therefore be considered in any project that will undergo, or is currently undergoing, CEQA review and/or that must obtain an environmental permit(s) from a public agency.

4.1.1.4 CNPS Rank Species

The CNPS maintains an inventory of special-status plant species. This inventory has four lists of plants with varying rarity. These lists are: Rank 1, Rank 2, Rank 3, and Rank 4. Although plants on these lists have no formal legal protection (unless they are also state or federally listed species), CDFW requests the inclusion of Rank 1 species in environmental documents. In addition, other state and local agencies may request the inclusion of species on other lists as well. Rank 1 and 2 species are defined below.

- Rank 1A: Presumed extinct in California;
- Rank 1B: Rare, threatened, or endangered in California and elsewhere;
- Rank 2A: Plants presumed extirpated in California, but more common elsewhere;
- Rank 2B: Rare, threatened, or endangered in California, but more common elsewhere.

Under the CEQA review process, only CNPS Rank 1 and 2 species are considered due to meeting CEQA's definition of "rare" or "endangered;" Rank 3 and 4 species are not regarded as significant pursuant to CEQA.

4.1.1.5 Fully Protected Birds

Fully Protected birds are protected under CFGC 3511 and may not be "taken" or possessed (i.e., kept in captivity) at any time.

4.2 Desktop Review

Sequoia reviewed relevant databases and literature for baseline information regarding biological resources occurring and potentially occurring on the project site and the immediate vicinity. The review included the following sources:

- USFWS Information for Planning and Consultation (IPaC) search (USFWS 2022a), and Critical Habitat Portal (USFWS 2022b; Appendix B);
- CNPS Online Inventory of Rare and Endangered Plants of California for the Diablo, California US Geological Survey 7.5-minute quadrangle (CNPS 2022);
- USFWS National Wetlands Inventory (USFWS 2022c; Figure 4);
- CDFW California Natural Diversity Database (CNDDB) for the Project polygon and a 3-mile buffer (CDFW 2022; Figure 5 and Figure 6); and,
- Aerial imagery (Google Earth 2022).

4.3 Site Assessment

Sequoia biologists Claire Buchanan and Jackson Valler conducted surveys on the project site on January 21, 2022, to record biological resources and to assess the limits of areas potentially regulated by resource agencies (i.e., preliminary hydrology analysis). Surveys involved searching all habitats on the site and recording all plant and wildlife species observed. Sequoia cross-referenced the habitats occurring on the project site with the habitat requirements of regional special-status species to determine if the proposed project could directly or indirectly impact these species. Any special-status species or suitable habitat was documented.

Consecutive transects were traversed at approximately 30-foot intervals throughout the project site. During the surveys, biologists scanned for special-status species, including foothill yellow-legged frog (*Rana boylii*), California red-legged frog (*Rana draytonii*), and western pond turtle (*Emys marmorata*), among others, and/or suitable habitat for these species.

Sequoia's site assessment included a preliminary hydrological analysis to determine if there could be potential areas within the proposed site impact areas and within a 200-foot buffer that would be regulated as waters of the United States and/or state. This analysis was primarily based on the presence of hydrology, wetland soils, and/or wetland plant indicators. The level of analysis does not conform to the level of detail typically required for a formal wetland delineation suitable for submittal to the USACE. The results of our literature research and field reconnaissance are provided in the sections below.

4.3.1 Potential to Occur

Following the site assessment, potential for special-status species to occur on the project site was evaluated according to the following criteria:

- *No Potential.* Habitat on and adjacent to the site is clearly unsuitable for the species' requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).
- *Unlikely.* Few of the habitat components meeting the species' requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
- *Moderate Potential.* Some of the habitat components meeting the species' requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- *High Potential.* All of the habitat components meeting the species' requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
- *Present.* Species is observed on the site or has been recorded (i.e., CNDDB, other reports) on the site recently.

5.0 RESULTS

The results of the desktop review and site assessment conducted on January 21, 2022, are presented below.

5.1 Topography and Hydrology

The project site is located in a complex of shallow valleys and rolling foothills along Quail Canyon Road, immediately north of Pleasants Valley Road. The project site is relatively flat near Quail Canyon Road, sloping gradually upward toward the west on the west side of the project site and sloping upward toward the east on the east side of the project site. There are rolling hills and small draws along the center of Parcel 8325. Elevation on the project site ranges from approximately 250 to 310 feet above mean sea level (MSL). The climate of the project site is Mediterranean. Summers are hot and dry, with average highs in the 80s - 90s (°F) and average lows in the 50s (°F). Winters are cool and wet, with average highs in the 60s (°F) and average lows in the 30s - 40s (°F). The average annual precipitation is approximately 24.53 inches, falling primarily between November and March (US Climate Data 2022).

During the site assessment conducted on January 21, 2022, Sequoia performed a preliminary hydrologic analysis that included mapping of wetted features in the project site (Figure 4). In addition, Sequoia biologists compared information ascertained from desktop review with present site conditions,

specifically, USFWS National Wetlands Inventory (NWI). All wetland features from NWI were observed during the site visit. Additional wetted areas, not included in the NWI, were also observed and were roughly mapped by Sequoia (see Figure 4).

One wetted, unnamed tributary to Pleasants Creek flows east through the project site. There two seasonal ponds in Parcel 8325 on the west side of Quail Canyon Road. An approximately 0.25-acre pond is located near the southern property boundary just west of Quail Canyon Road. At the time of the survey, a wet inlet flowed east into the pond and no outlet was present. The second pond is the larger and located immediately south of the unnamed tributary flowing east through the property. This pond is approximately 0.6 acres and was holding a significant amount of water. Based on aerial maps and photos, these ponds are dry at times during the year. Recent significant rain events in northern California are likely the reason these features are present and holding a significant amount of water.

Culverts exist underneath all roads that cross aquatic features t on the project site. It is Sequoia's understanding that no work associated with these culverts will occur during development of the project and will not be impacted as a result of this project.

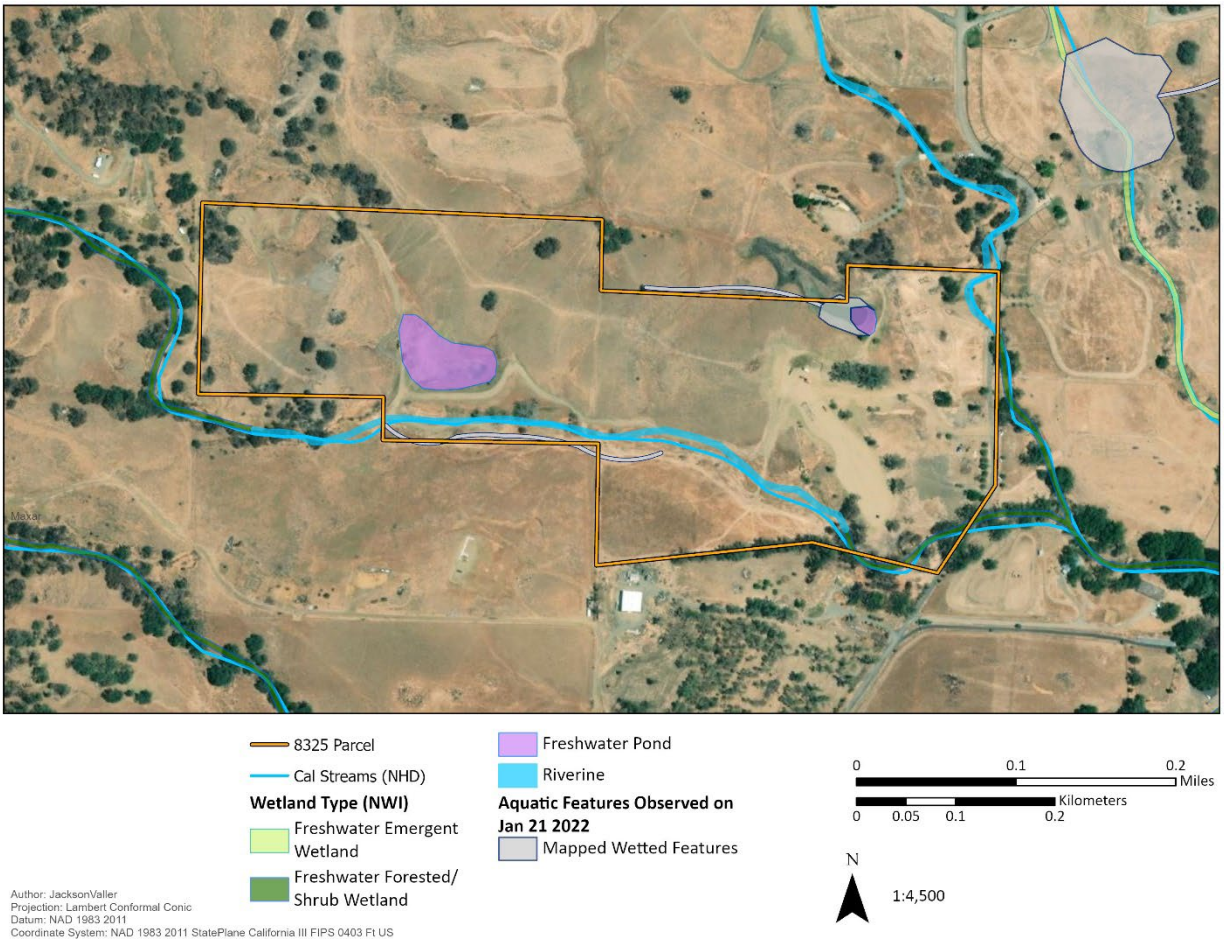

Figure 4. USFWS National Wetlands Inventory and Aquatic Features Observed in the Project Site.

5.2 Plant Communities and Wildlife Habitats

During the site assessment conducted on January 21, 2022, Sequoia characterized vegetation types present. The project site was burned by the Quail Fire in 2020, and due to this large-scale disturbance, the parcel is now dominated by non-native grassland. The disturbance has been further perpetuated by agricultural land uses. Many of the existing trees on-site are burned and either dead or unproductive. Based on historical aerial imagery, the project site appeared to be more dominated by oak woodland before the fire.

Biologists documented plant and wildlife species observed on the project site to help characterize vegetation type and wildlife habitat. Nomenclature used for plant names follows *The Jepson Manual Vascular Plants of California, Second Edition* (Baldwin 2012), while nomenclature used for wildlife follows CDFW's *Complete List of Amphibian, Reptile, Bird, and Mammal Species in California* (2016). Table 3 lists plant species observed on the project site and in the immediate vicinity. Table 4 lists wildlife species observed on the project site and the immediate vicinity.

5.2.1.1 Ruderal

Portions of ruderal herbaceous vegetation communities are found throughout the project site. Ruderal communities are groupings of plants that thrive in areas disturbed by human activity, such as agriculture or ranching. Ruderal vegetation is adapted to high levels of disturbance and endures for long periods of time in areas that have continual disturbance. Dominant grass and forb species observed within ruderal communities on the project site include *Brassica* species, Italian thistle (*Carduus pycnocephalus)*, milk thistle (*Silybum marianum)*, summer mustard (*Hirschfeldia incana)*, and wild radish (*Raphanus sativus)*.

5.2.1.2 Non-native Annual Grassland

The project site is dominated by non-native annual grassland that is regularly used for grazing. Non-native annual grassland communities are comprised primarily of plant species that mature in spring and early summer, before spreading seed and dying in late summer and fall. Non-native annual grassland is found throughout the project site, primarily interspersed with ruderal communities. Dominant grass and forb species observed within non-native annual grassland communities on the project site include dallis grass (*Paspalum dilitatum)*, wild oat (*Avena barbata)*, Italian ryegrass (*Festuca perennis)*, common yarrow (*Achillea millefolium)*, lupine (*Lupinus* spp.*)*, *Erodium* species, and *Geranium* species.

5.2.1.3 Oak Savannah

Oak savannah is a habitat primarily dominated by herbaceous vegetation and grasses, with sparse oak trees throughout. At the project site, this occurs along the hillsides in the western edge and is comprised of a mixture of blue oak (*Quercus douglassii*), valley oak (*Q. wislizenii*), and coast live oak (*Q. agrifolia*). The grasslands in the savannah include a higher percentage of native species, likely due to a lower frequency of disturbance to this plant community.

5.2.1.4 Riparian Woodland

Riparian woodland are forested or wooded areas that are adjacent to bodies of water. The tree and schrub species in these habitats can be highly variable, but frequently contains species such as willows, sycamore, cottonwoods, walnuts, and more. This community is present in small sections along creeks bisecting the project site. Riparian woodland is dominated by a canopy of willow species (*Salix* spp.*)*, California buckeye (*Aesculus californica),* coast live oak, and valley oak. The understory consists of shrubs and herbaceous species, including Italian ryegrass, *Rumex* species, and spring vetch (*Vicia sativa).*

5.2.1.5 Mixed Oak Woodland

Mixed oak woodland is a community found throughout California and is dominated by multiple species of oak trees (*Quercus* spp.). Mixed oak woodland is present in small patches throughout the project site and is dominated by a canopy of coast live oak, valley oak, blue oak, and California buckeye. The understory consists of a mixture of shrubs and herbaceous species, including poison oak (*Toxicodendron diversilobum*) and coyote brush (*Baccharis pilularis*).

Wildlife species observed within the mixed oak woodland communities on the project site include golden crowned sparrow (*Zonotrichia atricapilla)*, dark-eyed junco (*Junco hyemalis),* chestnut-backed chickadee *(Poecile rufescens), and* yellow-rumped warbler *(Setophaga coronate).*

5.2.1.6 Eucalyptus Forest

In California, and specifically in the region of the project site, blue gum eucalyptus (*Eucalyptus globulus*) trees are commonly observed planted in single rows or in clumps, often as windbreaks. Rain on the leaves, branches, and trunks of these trees transport dissolved chemicals that add to a further accrual of substances leached from the fallen litter, producing a significant growth-inhibiting effect on understory vegetation. In effect, very few plant species can grow beneath the overstory of eucalyptus groves. Eucalyptus forest occurs along an access road leading from Quail Canyon Road, west toward a graded area on Parcel 8325. Along a centrally located access road, the blue gum trees occur in a narrow band. Dominant plant species observed within the eucalyptus forest community on the project site include slender wild oat (*Avena* sp.) and ripgut brome (*Bromus diandrus*).

5.2.1.7 Ponds

Pond are small bodies of water that are relatively stagnant, and are considered shallow enough where plants could conceivably grow across the entire surface. Two seasonal, freshwater ponds are present in the project site (Figure 4). The total acreage of the two features is just less than 1 acre.

5.2.1.8 Intermittent Creek

Intermittent creeks flow more often than just after a single precipitation event, and only cease to flow during very dry periods. The flow may occur when the water table is seasonally high; however, no flow will occur when the water table is significantly below the river channel bed level. One intermittent creek feature occurs on the property (Figure 4). This feature was wetted during the January 2022 surveys.

5.2.2 Wildlife Corridors

Wildlife corridors are habitats that provide connectivity between natural communities otherwise separated by urbanization and other development. Wildlife corridors provide access for animals to travel between these communities for seasonal migration, access to overwintering/summering habitat, breeding, etc. They also allow animals a route to move away from natural disasters and other forms of habitat loss, as well as to recolonize habitats previously extirpated. Wildlife corridors provide opportunities to breed, forage, migrate/emigrate, disperse, and forage (Beier and Loe 1992).

The proposed project will not interfere with the movement of native wildlife. Fencing and other structures related to the development of the "Public Stable Without Horse Show" while possibly impeding movement, will not alter the potential for wildlife migration and dispersal across the site as a whole; wildlife will still be able to navigate through the open space surrounding the developed areas and infrastructure. Therefore, construction of the proposed site should not impact wildlife movement as some of the property will remain undeveloped. Although Pleasants Creek functions as a wildlife corridor and is immediately adjacent to the project site, the creek itself, its tributaries, and their collective function will not be blocked or impeded by the proposed project.

5.3 Potential to Occur

Table 1 and Table 2 present the potential for occurrence of special-status plant and wildlife species known to occur in the vicinity of the project site, along with their habitat requirements, occurrence classification, and basis for occurrence classification.

5.3.1 Special-Status Plant Species

Figure 5 provides CNDDB occurrences for special-status plant species within 3 miles of the project site. Table 1 provides an assessment of special-status plant species' potential to occur on the project site. One special-status plant, Keck's checkerbloom (*Sidalcea keckii*), has been previously documented within 3 miles of the project site (CNDDB 2022). The two separate occurrences of Keck's checkerbloom are 1.2

miles (recorded in 1965; CNDDB Occurrence No. 27; Figure 5) and 2.3 miles (recorded in 1977; CNDDB Occurrence No. 10; Figure 5) from the project site. Sequoia analyzed the potential to occur for these plant species, as well as species identified during queries of CNPS and IPaC during the desktop review (Table 1). A number of these species require specialized habitats such as vernal pools, chaparral, and cismontane woodland that are not found on the project site. Due to lack of suitable habitat and/or lack of known/recent occurrences in the project vicinity, coupled with disturbance caused by the recent wildfire, special-status plant species are not expected to occur and are therefore not discussed further in this analysis (see Table 1, Figure 5).

Table 1. Special-Status Plant Species with Potential to Occur.

Scientific Name	Common Name	Listed Status	Habitat Requirements	Potential for Occurrence
Arctostaphylos manzanita ssp. *laevigata*	Contra Costa manzanita	1B.2	Chaparral	Unlikely. Unsuitable chaparral habitat occurs on the project site and no manzanita species were observed.
Astragalus tener var. *tener*	alkali milk-vetch	1B.2	Playas, valley and foothill grassland, vernal pools	Unlikely. Marginally suitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and historic agricultural use, which has resulted in grassland dominated by non-native grasses and invasive species.
Atriplex cordulata var. *cordulata*	heartscale	1B.2	Chenopod scrub, meadows and seeps, valley and foothill grassland	Unlikely. Marginally suitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and historic agricultural use, which has resulted in understory and grassland dominated by non-native grasses and invasive species.
Atriplex depressa	brittlescale	1B.2	Chenopod scrub, meadows and seeps, playas, valley and foothill grassland, vernal pools	Unlikely. Marginally suitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and historic agricultural use, which has resulted in grassland dominated by non-native grasses and invasive species.
Brodiaea leptandra	narrow-anthered brodiaea	1B.2	Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland	Unlikely. Marginally suitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and historic agricultural use, which has resulted in understory and grassland dominated by non-native grasses and invasive species.

Scientific Name	Common Name	Listed Status	Habitat Requirements	Potential for Occurrence
Castilleja ambigua var. *meadii*	Mead's owls-clover	1B.1	Meadows and seeps, vernal pools	Unlikely. Unsuitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and seasonal presence of wetted habitat.
Ceanothus purpureus	holly-leaved ceanothus	1B.2	Chaparral, cismontane woodland	Unlikely. Marginally suitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and historic agricultural use, which has resulted in understory dominated by non-native grasses and invasive species.
Centromadia parryi ssp. *parryi*	pappose tarplant	1B.2	Chaparral, coastal prairie, marshes and swamps, meadows and seeps, valley and foothill grassland	Unlikely. Marginally suitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and historic agricultural use, which has resulted in understory and grassland dominated by non-native grasses and invasive species.
Chloropyron molle ssp. *hispidum*	hispid salty bird's-beak	1B.1	Meadows and seeps, playas, valley and foothill grassland	Unlikely. Unsuitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and historical agricultural use, which has resulted in grassland dominated by non-native grasses and due to the seasonal presence of wetted habitat.
Delphinium recurvatum	recurved larkspur	1B.2	Chenopod scrub, cismontane woodland, valley and foothill grassland	Unlikely. Marginally suitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and historic agricultural use, which has resulted in understory and grassland dominated by non-native grasses and invasive species.
Downingia pusilla	dwarf downingia	2B.2	Valley and foothill grassland, vernal pools	Unlikely. Marginally suitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and historic agricultural use, which has resulted in grassland dominated by non-native grasses and invasive species.
Erigeron greenei	Greene's narrow-leaved daisy	1B.2	Chaparral	Unlikely. Unsuitable chaparral habitat occurs on the project site.

Scientific Name	Common Name	Listed Status	Habitat Requirements	Potential for Occurrence
Extriplex joaquinana	San Joaquin spearscale	1B.2	Chenopod scrub, meadows and seeps, playas, valley and foothill grassland	Unlikely. Unsuitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and historical agricultural use, which has resulted in grassland dominated by non-native grasses. Also unlikely due to the seasonal presence of wetted habitat.
Fritillaria pluriflora	adobe-lily	1B.2	Chaparral, cismontane woodland, valley and foothill grassland	Unlikely. Marginally suitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and historic agricultural use, which has resulted in understory and grassland dominated by non-native grasses and invasive species.
Hesperolinon bicarpellatum	two-carpellate western flax	1B.2	Chaparral	Unlikely. Unsuitable chaparral habitat occurs on the project site.
Hesperolinon breweri	Brewer's western flax	1B.2	Chaparral, cismontane woodland, valley and foothill grassland	Unlikely. Marginally suitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and historic agricultural use, which has resulted in understory and grassland dominated by non-native grasses and invasive species.
Hesperolinon sharsmithiae	Sharsmith's western flax	1B.2	Chaparral	Unlikely. Unsuitable chaparral habitat occurs on the project site.
Isocoma arguta	Carquinez goldenbush	1B.1	Valley and foothill grassland	Unlikely. Marginally suitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and historic agricultural use, which has resulted in grassland dominated by non-native grasses and invasive species.
Lasthenia conjugens	Contra Costa goldfields	1B.1	Cismontane woodland, playas, valley and foothill grassland, vernal pools	Unlikely. Marginally suitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and historic agricultural use, which has resulted in understory and grassland dominated by non-native grasses and invasive species.
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	1B.1	Marshes and swamps, playas, vernal pools	Unlikely. Unsuitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and seasonal presence of wetted habitat.

Scientific Name	Common Name	Listed Status	Habitat Requirements	Potential for Occurrence
Layia septentrionalis	Colusa layia	1B.2	Chaparral, cismontane woodland, valley and foothill grassland	Unlikely. Marginally suitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and historic agricultural use, which has resulted in understory and grassland dominated by non-native grasses and invasive species.
Legenere limosa	legenere	1B.1	Vernal pools	None. No suitable vernal pool habitat occurs on the project site.
Leptosiphon jepsonii	Jepson's leptosiphon	1B.2	Chaparral, cismontane woodland, valley and foothill grassland	Unlikely. Marginally suitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and historic agricultural use, which has resulted in understory and grassland dominated by non-native grasses and invasive species.
Lomatium repostum	Napa lomatium	1B.2	Chaparral, cismontane woodland	Unlikely. Marginally suitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and historic agricultural use, which has resulted in understory dominated by non-native grasses and invasive species.
Navarretia leucocephala ssp. *bakeri*	Baker's navarretia	1B.1	Cismontane woodland, lower montane coniferous forest, meadows and seeps, valley and foothill grassland, vernal pools	Unlikely. Marginally suitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and historic agricultural use, which has resulted in understory and grassland dominated by non-native grasses and invasive species.
Navarretia leucocephala ssp. *pauciflora*	few-flowered navarretia	1B.1	Vernal pools	None. No suitable vernal pool habitat occurs on the project site.
Orcuttia inaequalis	San Joaquin Valley Orcutt grass	1B.1	Vernal pools	None. No suitable vernal pool habitat occurs on the project site.
Plagiobothrys hystriculus	bearded popcornflower	1B.1	Valley and foothill grassland, vernal pools	Unlikely. Marginally suitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and historic agricultural use, which has resulted in grassland dominated by non-native grasses and invasive species.

Scientific Name	Common Name	Listed Status	Habitat Requirements	Potential for Occurrence
Puccinellia simplex	California alkali grass	1B.2	Chenopod scrub, meadows and seeps, valley and foothill grassland, vernal pools	Unlikely. Marginally suitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and historic agricultural use, which has resulted in grassland dominated by non-native grasses and invasive species.
Rhynchospora californica	California beaked-rush	1B.1	Bogs and fens, lower montane coniferous forest, marshes and swamps, meadows and seeps	Unlikely. Unsuitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and seasonal presence of wetted habitat.
Sidalcea hickmanii ssp. *napensis*	Napa checkerbloom	1B.1	Chaparral	Unlikely. Unsuitable chaparral habitat occurs on the project site.
Sidalcea keckii	Keck's checkerbloom	1B.1	Cismontane woodland, valley and foothill grassland	Unlikely. Marginally suitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and historic agricultural use, which has resulted in understory and grassland dominated by non-native grasses and invasive species.
Stuckenia filiformis ssp. *alpina*	northern slender pondweed	2B.2	Marshes and swamps	Unlikely. Unsuitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and seasonal presence of wetted habitat.
Symphyotrichum lentum	Suisun Marsh aster	1B.2	Marshes and swamps	Unlikely. Unsuitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and seasonal presence of wetted habitat.
Trichostema ruygtii	Napa bluecurls	1B.2	Chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland, vernal pools	Unlikely. Marginally suitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and historic agricultural use, which has resulted in understory and grassland dominated by non-native grasses and invasive species.
Trifolium amoenum	two-fork clover	1B.1	Coastal bluff scrub, valley and foothill grassland	Unlikely. Marginally suitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and historic agricultural use, which has resulted in grassland

Scientific Name	Common Name	Listed Status	Habitat Requirements	Potential for Occurrence
				dominated by non-native grasses and invasive species.
Trifolium hydrophilum	saline clover	1B.2	Marshes and swamps, valley and foothill grassland, vernal pools	Unlikely. Unsuitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and historical agricultural use, which has resulted in grassland dominated by non-native grasses. Also unlikely due to the seasonal presence of wetted habitat.
Viburnum ellipticum	oval-leaved viburnum	2B.3	Chaparral, cismontane woodland, lower montane coniferous forest	Unlikely. Marginally suitable habitat occurs on the project site. Unlikely to occur due to habitat disturbance from recent wildfire and historic agricultural use, which has resulted in understory dominated by non-native grasses and invasive species.

Key to status:
CNPS Rare Plant Rank
1A=Plants presumed extirpated in California, and either rare or extinct elsewhere
1B=Pants rare, threatened, or endangered in California, or elsewhere
2A=Plants presumed extirpated in California but common elsewhere
2B=Plants rare, threatened, or endangered in California but more common elsewhere
Note: CNPS ranks 3 and 4 were excluded from this analysis.

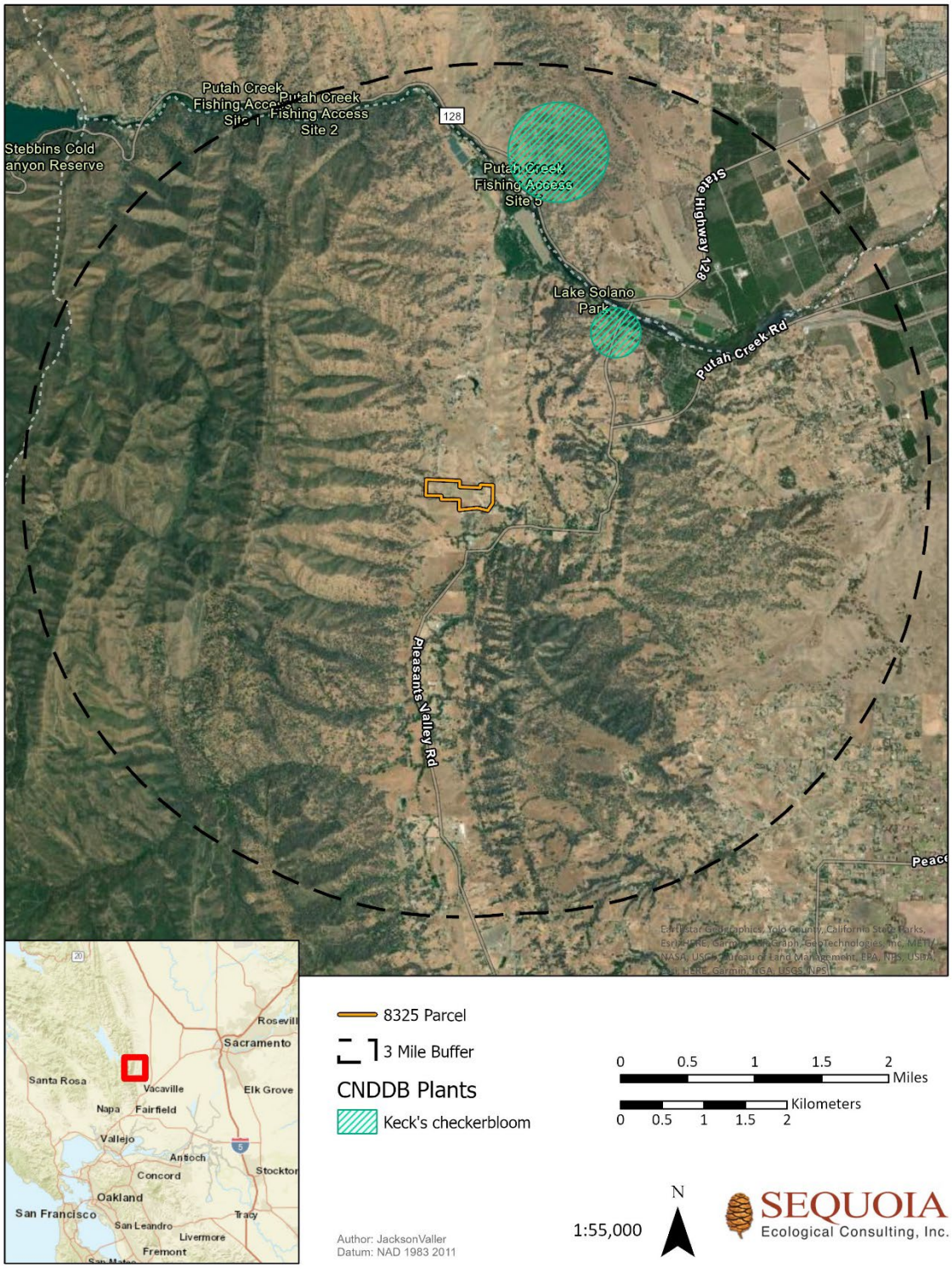

Figure 5. Closest Known Records for Special-Status Plant Species Within 3 Miles of the Double T Ranch Project.

5.3.2 Special-Status Wildlife

Fourteen (14) special-status wildlife species are known to occur within the vicinity of the project site (CNDDB 2022; USFWS 2022a), with CNDDB occurrences of special-status wildlife species within 3 miles of the project site depicted in Figure 6. Sequoia analyzed the potential to occur for these wildlife species, as well as species included in CalFish, NMFS, and IPaC resource lists during the desktop review (Table 2). A number of these species require specialized habitat such as sandy textured soils, vernal pools, rocky streams, and scrub that are not found on the project site.

Due to lack of suitable habitat and/or lack of recent occurrences in the project vicinity, eleven (11) special-status wildlife species are not expected to occur and are therefore not discussed further in this analysis. These species are: American peregrine falcon (*Falco peregrinus anatum*), yellow-breasted chat (*Icteria virens*), northern spotted owl (*Strix occidentalis caurina*), giant garter snake (*Thamnophis gigas*), monarch butterfly (*Danaus plexippus*), valley elderberry longhorn beetle (*Desmocerus californicus dimorphus)*, vernal pool fairy shrimp (*Branchinecta lynchi*), Conservancy fairy shrimp (*Branchinecta conservatio*), vernal pool tadpole shrimp (*Lepidurus packardi),* California freshwater shrimp (*Syncaris pacifica*), and Delta smelt (*Hypomesus transpacificus*). Descriptions and potential for occurrence of the remaining three (3) special-status wildlife species are provided in more detail below (Table 2, Figure 6).

5.3.2.1 Foothill Yellow-legged Frog

The foothill yellow-legged frog is divided into five distinct clades in California based on genetic divergence and conservation concern (CDFW 2022). The northwest/north coast clade is the most intact population and is designated as a California Species of Special Concern. Historically, foothill yellow-legged frog occurred from west of the crest of the Cascade Mountains in Oregon south to the Transverse Ranges in Los Angeles County, and in the Sierra Nevada foothills south to Kern County (Zweifel 1955; Stebbins and McGinnis 2012). The current range now excludes coastal areas south of northern San Luis Obispo County and foothill areas south of Fresno County, where the species is considered extirpated (Jennings and Hayes 1994). In a 1994 report (Fellers 1994), healthy, reproducing populations were reported in suitable habitat throughout the Diablo Range in Alameda, western Stanislaus, Santa Clara, San Benito, and western Fresno counties.

Foothill yellow-legged frog are found in or near rocky streams in a variety of habitats, including valley-foothill hardwood, valley-foothill riparian, coastal scrub, mixed conifer, mixed chaparral, and wet meadows (Zeiner et al. 1988). This species and aquatic habitat are considered sympatric, and foothill yellow-legged frog rarely migrate far from perennial or intermittent streams (Stebbins and McGinnis 2012). The foothill yellow-legged frog requires shallow, flowing water in small- to moderate-sized streams containing some cobble-sized substrate and portions of open canopy important for basking (Hayes and Jennings 1988; Jennings 1988; Bourque 2008). It deposits its egg masses on the downstream side of cobbles and boulders over which a relatively thin, gentle flow of water exists (Storer 1925, Fitch 1936, Zweifel 1955, Kupferberg 1996).

Foothill yellow-legged frog is known from one CNDDB occurrence within 3 miles of the project site. This occurrence is located 1.65 miles to the west of the project site in Cold Canyon Creek (CNDDB Occurrence No. 202; Figure 6); this observation occurred in 2016. The aquatic features on-site are not consistent with the habitat known to occupied by foothill yellow-legged frog. The tributaries on-site do not flow consistently due to their lack of gradient and rainfall being their main source, and they appear to be highly flashy. Furthermore, they lack the rocky and cobble substrate required for breeding, as well as the gradient preferred by foothill yellow-legged frogs. The drainages within the project site could provide dispersal or non-breeding habitat, but the lack of primary and breeding habitat within close proximity to the project site precludes likelihood of use by the species.

Although potentially suitable habitat occurs within 3 miles of the project site, no suitable breeding habitat was observed in or adjacent to the project site, and it is unlikely that the project site serves as a corridor for suitable migration/dispersal habitat. Furthermore, current work plans do not include impacts to aquatic features or their associated banks, which greatly minimizes the chance of impact to the species in the unlikely case they are present within aquatic features on-site. **Accordingly, impacts to foothill yellow-legged frog are unlikely from the proposed project.**

5.3.2.2 California Red-Legged Frog

California red-legged frog was listed as a federally threatened species on May 23, 1996 (USFWS 1996; 61 FR 25813), and is designated as a California Species of Special Concern (CDFW 2016). A recovery plan was published for the California red-legged frog on September 12, 2002 (USFWS 2002). Critical habitat was designated for this species on April 13, 2006, and revisions to the critical habitat designation were published on March 17, 2010. The project site is not located within critical habitat for this species. California red-legged frog is distributed throughout 26 counties in California, but is most abundant in the San Francisco Bay Area (USFWS 2002). Populations have become isolated in the Sierra Nevada, northern coast, and northern Transverse Ranges (Jennings and Hayes 1994, Stebbins and McGinnis 2012). The species is believed to be extinct from the southern Transverse and Peninsular ranges, but is still present in Baja California, Mexico (USFWS 2002).

California red-legged frogs predominantly inhabit permanent water sources such as streams, lakes, marshes, natural and man-made ponds, and ephemeral drainages in valley bottoms and foothills up to 4,900 feet MSL (Jennings and Hayes 1994, Bulger et al. 2003, Stebbins and McGinnis 2012). Adults breed in a variety of aquatic habitats, while larvae and metamorphs use streams, deep pools, backwaters of streams and creeks, ponds, marshes, sag ponds, dune ponds, and lagoons. Stock ponds are frequently used for breeding when they provide a suitable hydroperiod, pond structure, and vegetative cover, and are managed to control non-native predators such as bullfrogs and exotic fish. Breeding occurs between November and April within still or slow-moving water with light to dense, riparian or emergent vegetation, such as cattails (*Typha* spp.), tules (*Scirpus* spp.), or overhanging willows (*Salix* spp.) (Hayes and Jennings 1988). Egg masses are attached to vegetation below the surface and hatch after 6 to 14 days (Storer 1925, Jennings and Hayes 1994). Larvae undergo metamorphosis 3.5 to 7 months following hatching and reach sexual maturity at 2 to 3 years of age (Jennings and Hayes 1984, 1994). During the

dry season, California red-legged frogs may use refugia in upland habitat, such as small mammal burrows or adjacent moist vegetation (USFWS 2002). Most frogs move away from breeding ponds to upland areas. The distance moved is site dependent, though one recent study shows that only a few frogs move farther than the nearest suitable non-breeding habitat (Fellers and Kleeman 2007). In this Marin County study, the farthest distance traveled was 0.87 miles and most dispersing frogs moved through grazed pastures to reach the nearest riparian habitat (Fellers and Kleeman 2007). Bulger et al. (2003) did not observe habitat preferences among frogs moving between ponds. They did note that when breeding ponds dry, California red-legged frogs use moist microhabitats of dense shrubs and herbaceous vegetation within approximately 330 feet of ponds.

The nearest known California red-legged frog occurrence is outside of the project site's 3-mile buffer; the closest occurrence dates to 1983 and is located approximately 5.9 miles southwest of the project site (CNDDB Occurrence No. 401; Figure 6). This occurrence is within the conservation priority area mapped by the draft Solano Habitat CP (SHCP 2012). The border of the draft Solano HCP area is approximately 1.3 miles from the project site on the westside of a 1,900-foot peak. Due to the proximity of the project site to the HCP conservation areas and that there appear to be no major barriers to dispersal from known occurrences, the presence of California red-legged frog is possible.

It is unknown how many biological studies have been conducted in the areas surrounding the project site due to both private land ownership and associated lack of access, and therefore the CNDDB does not well represent the species' local presence. In addition, there appear to be no major barriers to dispersal from known occurrences, although the surrounding ridge and urbanization may act as a potential deterrent to dispersal. Habitat on the project site is mediocre for the species. The pond features have little cover or emergent vegetation and are expansive in size. The tributaries that flow through the project site are highly incised due to both historic grazing and flash flows. There is little to no suitable upland habitat or refugia on-site due the homogenous nature of the grasslands and the lack of burrows observed.

Although it is possible that the species is locally present and suitable habitat occurs adjacent to the project site, the project site provides only mediocre breeding and migration/dispersal habitat and does not provide much upland refugia habitat due to lack of animal burrows. In addition, current work plans do not include impacts to aquatic features or their associated banks, which greatly minimizes the chance of impact to the species if they are present within aquatic features on-site. **Accordingly, impacts to California red-legged frog are unlikely from the proposed project.**

5.3.2.3 Western Pond Turtle

The western pond turtle, a California Species of Special Concern (CDFW 2022), is the only freshwater turtle native to greater California. It is distributed along much of the western coast, from the Puget Sound in Washington south to the Baja Peninsula, Mexico (Storer 1930). Overall, western pond turtles are habitat generalists, and have been observed in slow-moving rivers and streams (e.g., in oxbows), lakes, reservoirs, permanent and ephemeral wetlands, stock ponds, and sewage treatment plants. They

prefer aquatic habitat with refugia, such as undercut banks and submerged vegetation (Holland 1994), and require emergent basking sites, such as mud banks, rocks, logs, and root wads to thermoregulate their body temperature (Holland 1994, Bash 1999). Pond turtles are omnivorous and feed on a variety of aquatic and terrestrial invertebrates, fish, amphibians and aquatic plants. Western pond turtles regularly utilize upland terrestrial habitats, most often during the summer and winter, especially for oviposition (females), overwintering, seasonal terrestrial habitat use, and overland dispersal (Reese 1996, Holland 1994). Females have been reported ranging as far as 1,640 feet from a watercourse to find suitable nesting habitat (Reese and Welsh 1997). Nest sites are most often situated on south- or west-facing slopes, are sparsely vegetated with short grasses or forbs, and are scraped in sands or hard-packed, dry silt or clay soils (Holland 1994, Rathbun et al. 1992, Holte 1998, Reese and Welsh 1997). Western pond turtles exhibit high site fidelity, returning in sequential years to the same terrestrial site to nest or overwinter (Reese 1996).

The western pond turtle is known from one CNDDB occurrence within 3 miles of the project site; this 2006 occurrence is located approximately 1.75 miles to the west (CNDDB Occurrence No. 655; Figure 6). Suitable aquatic habitat exists within the ponds on-site, and potentially within nearby drainages and streams.

Current work plans do not include impacts to aquatic features, which greatly reduces the chance of impact to the species if they are present. The upland habitat adjacent to aquatic features, especially nearby the perennial and season ponds, may support nesting western pond turtle. Employing focused biological surveys or exclusion fence may be required to avoid impacts to the species. **Accordingly, with implementation of focused surveys or exclusion fencing. the proposed project is unlikely to impact western pond turtle**

Table 2. Special-Status Wildlife Species with Potential to Occur.

Scientific Name	Common Name	Listed Status	Habitat Requirements	Potential for Occurrences
Birds				
Falco peregrinus anatum	American peregrine falcon	FP	Occurs in habitats ranging from wetland, coastal shorelines, and islands to deserts, forests, urban areas. Nest on cliffs, rock outcrops, or prominent manmade structures.	Unlikely. Habitat is burned and denuded by recent wildfire and site does not provide suitable habitat for nesting.
Icteria virens	yellow-breasted chat	SSC	Occurs as a summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of	Unlikely. Riparian habitat disturbed by recent fire. Trees and understory denuded and burned and provide unsuitable nesting opportunity.

Scientific Name	Common Name	Listed Status	Habitat Requirements	Potential for Occurrences
			willow, blackberry, wild grape; forages and nests within 10 feet of ground.	
Strix occidentalis caurina	northern spotted owl	FT, CT	Occurs in dense canopies of mature and old-growth forests. Nests in tree hollows.	Unlikely. Mature and dense old-growth forest habitat not present. Trees on-site burned and provide unsuitable nesting opportunity.
Amphibians/Reptiles				
Emys marmorata	western pond turtle	SSC	Occurs in rivers, ponds, and freshwater marshes, and nests in upland areas (sandy banks or grassy open fields) up to 1,640 feet from water.	Moderate. Potential breeding or basking, foraging, or migration/dispersal habitat occurs on the project site.
Rana boylii	foothill yellow-legged frog	Northeast/North Coast clade, SSC	Found in rocky streams and rivers with rocky substrate and open, sunny banks in forests, woodlands, and chaparral. May also occur in isolated pools and vegetated backwaters.	Unlikely to Moderate. Stream and habitat substrate is not ideal and habitat adjacent to the site is poor quality.
Rana draytonii	California red-legged frog	FT, SSC	Occurs in semi-permanent or permanent water at least 2 feet deep, bordered by emergent or riparian vegetation, and upland grassland, forest, or scrub habitats for aestivation and dispersal.	Moderate. Low-quality breeding, over-summering, or migration/dispersal habitat occurs on the project site.
Thamnophis gigas	giant garter snake	FT, CT	Inhabits freshwater marshes, low-gradient streams, drainage canals, and irrigation ditches from Butte to Fresno counties. Requires upland burrows and soil crevices above the floodplain in winter.	Unlikely. Unsuitable aquatic habitat and upland habitat occurs on the project site.
Fishes				
Hypomesus transpacificus	Delta smelt	FT, CE	Endemic to Sacramento-San Joaquin Delta and its tributaries extending west	None. No suitable habitat occurs on the project site.

Scientific Name	Common Name	Listed Status	Habitat Requirements	Potential for Occurrences
			to Suisun and San Pablo bays.	
Invertebrates				
Danaus plexippus	monarch butterfly	FC	Occurs in grassland and woodland.	Unlikely. Habitat is marginally suitable with no host plants observed, and frequent disturbance likely would cause species to disperse.
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	FT	Endemic to moist valley oak woodlands in the lower Sacramento and San Joaquin valleys where elderberry bushes grow.	None. No host plants were observed on the project site.
Branchinecta lynchi	vernal pool fairy shrimp	FT	Occurs in vernal pools. Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains.	None. No suitable vernal pool habitat occurs on the project site.
Branchinecta conservatio	Conservancy fairy shrimp	FE	Inhabits moderately to highly turbid, medium- to large-sized vernal pools, lakes, and grassy swales in eight service approved populations throughout California, including Solano County.	Unlikely. No suitable habitat occurs on the project site.
Lepidurus packardi	vernal pool tadpole shrimp	FE	Majority of populations occur in the Sacramento Valley. Found in vernal pools, clay flats, alkaline pools, roadside ditches, and stock tanks deeper than 5 inches and wetted for 15 to 30 days.	Unlikely. No suitable vernal pool habitat occurs on the project site and wetted features on-site.
Syncaris pacifica	California freshwater shrimp	FE	Perennial freshwater streams with submerged undercut banks, overhanging plants, and exposed live roots of willow or alder.	None. No suitable habitat occurs on the project site.

Key to status:

FE=Federally listed as endangered species
FT=Federally listed as threatened species
FC=Federally listed as a candidate species for listing
CE=California listed as endangered species
CT=California listed as threatened species
FP=California listed as fully protected
SSC=California species of special concern

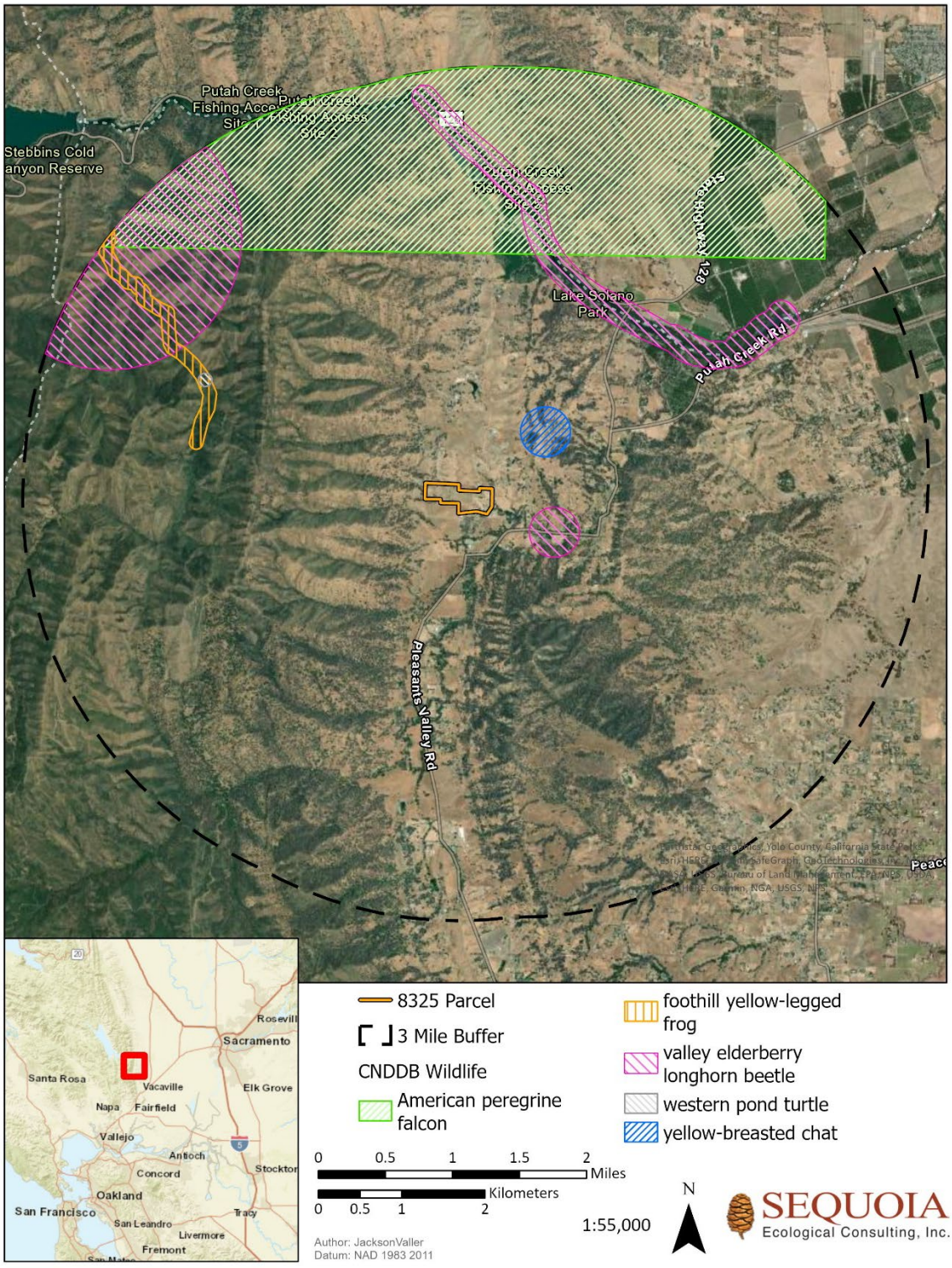

Figure 6. Closest Known Records for Special-Status Wildlife Species Within 3 Miles of the Double T Ranch Project.

Table 3. Plant Species Observed During the January 21, 2022 Site Assessment.

Scientific Name	Common Name	Family Name	Native?
Aesculus californica	California buckeye	Aesculus	Yes
Achillea millefolium	common yarrow	Asteraceae	Yes
Avena barbata	wild oat	Poaceae	No
Baccharis pilularis	coyote brush	Asteraceae	Yes
Brassica nigra	black mustard	Brassicaceae	No
Brassica rapa	common mustard	Brassicaceae	No
Bromus diandrus	ripgut brome	Poaceae	No
Carduus pycnocephalus	Italian thistle	Asteraceae	No
Centaurea solstitialis	yellow star thistle	Asteraceae	No
Cirsium vulgare	bull thistle	Asteraceae	No
Chlorogalum pomeridianum	soaproot	Agavaceae	Yes
Cynodon dactylon	Bermuda grass	Poaceae	No
Erodium botrys	broad leaf filaree	Geraniaceae	No
Erodium cicutarium	red stemmed filaree	Geraniaceae	No
Eleocharis spp.	spikerush	Cyperaceae	Yes
Eucalyptus globulus	blue gum	Myrtaceae	No
Festuca perennis	Italian ryegrass	Poaceae	No
Geranium dissectum	cutleaf geranium	Geraniaceae	No
Geranium molle	crane's bill geranium	Geraniaceae	No
Helminthotheca echioides	bristly oxtongue	Asteraceae	No
Hirschfeldia incana	summer mustard	Brassicaceae	No
Lactuca serriola	prickly lettuce	Asteraceae	No
Lupinus spp.	lupine	Fabaceae	Yes
Malva parviflora	cheeseweed	Malvaceae	No
Paspalum dilitatum	dallis grass	Poaceae	No
Pinus sp.	pine	Pinaceae	Yes
Quercus agrifolia	coast live oak	Fagaceae	Yes
Quercus douglasii	blue oak	Fagaceae	Yes
Quercus lobata	valley oak	Fagaceae	Yes

Scientific Name	Common Name	Family Name	Native?
Raphanus sativus	wild radish	Brassicaceae	No
Rumex crispus	curly dock	Polygonaceae	No
Rumex pulcher	fiddle dock	Polygonaceae	No
Sequoia sempervirens	coast redwood	Cupressaceae	Yes
Salix laevigata	red willow	Salicaceae	Yes
Salix lasiolepis	arroyo willow	Salicaceae	Yes
Silybum marianum	milk thistle	Asteraceae	No
Sonchus spp.	sow thistle	Asteraceae	No
Toxicodendron diversilobum	poison oak	Anacardiaceae	Yes
Trifolium sp.	clover	Fabaceae	-
Typha latifolia	cattail	Typhaceae	Yes
Vicia villosa	hairy vetch	Fabaceae	No
Vicia sativa	spring vetch	Fabaceae	Yes

Table 4. Wildlife Species Observed During the January 21, 2022 Site Assessment .

Scientific Name	Common Name
Birds	
Agelaius phoeniceus	American crow
Anas platyrhynchos	mallard duck
Aphelocoma californica	California scrub-jay
Branta canadensis	Canada goose
Bucephala albeola	bufflehead
Calypte anna	Anna's hummingbird
Cathartes aura	turkey vulture
Colaptes aura	northern flicker
Corvus corax	common raven
Dryobates scalaris	ladder-backed woodpecker
Junco hyemalis	dark-eyed junco
Melanerpes formicivorus	acorn woodpecker
Poecile rufescens	chestnut-backed chickadee
Sayornis nigricans	black phoebe
Setophaga coronata	yellow-rumped warbler
Sialia mexicana	western bluebird
Zonotrichia atricapilla	golden crowned sparrows
Mammals	
Bos taurus	cow
Equus caballus	horse
Amphibians/Reptiles	
Taricha torosa	California newt

6.0 DISCUSSION AND RECOMMENDATIONS

6.1 Review of Relevant Issues

Based on Sequoia's preliminary hydrological assessment, there are likely to be jurisdictional aquatic features present on the project site; however, current work plans and discussions with project proponents indicate that all aquatic features and culverts observed will be avoided and not impacted. If works plan change and aquatic features will be impacted, an aquatic resource delineation is likely to be required as impacts to aquatic features may require permitting and authorization from USACE, RWQCB, and CDFW. In addition, impacts to riparian vegetation are not currently included in work plans, but impacts to riparian habitat associated with streams and drainages present on-site may require compliance with a CDFW LSAA.

Foothill yellow-legged frog, California red-legged frog, and western pond turtle have potential to occur on the project site but are unlikely to be impacted due to the current project plan's avoidance of all aquatic features during development.

Suitable habitat exists for nesting birds on site. Nesting birds are protected by the MBTA; therefore, Sequoia recommends that a qualified biologist conduct a nesting bird survey during nesting bird season (approximately February 1 through September 30) if vegetation removal is required for project development and cannot be completed outside the nesting season.

6.2 Recommendations and Conclusions

- Impacts to special status species would be potentially significant under CEQA environmental review and may involve permitting from one or more resource agencies. Sequoia recommends the following actions to reduce significant impacts:
    - Nesting Birds
        - Plan work outside of nesting bird season or include nesting bird surveys in project planning prior to commencing work, including vegetation removal and initial grading.
    - Western Pond Turtle
        - Avoid working in aquatic habitat to minimize likelihood of impacting the species and triggering additional permitting requirements.
        - If project activities occur in the upland nearby suitable aquatic habitat for western pond turtle, employing focused biological surveys or exclusion fencing may be required to avoid impacts to the species.
    - California red-legged frog
        - Avoid working in aquatic habitat to minimize likelihood of impacting the species and triggering additional permitting requirements.

- Riparian habitat impacts would be potentially significant under CEQA and may involve permitting from one or more resource agencies. Sequoia recommends the following actions to reduce impact significance:
    - Maintain project plans to avoid impacting riparian habitat.
- Work in federally- and state-jurisdictional aquatic features (e.g., streams, creeks, ponds, and wetlands) would be potentially significant under CEQA and may involve permitting from one or more resource agencies. Sequoia recommends the following actions to reduce impact significance:
    - Maintain project plans to avoid impacting ponds, creeks, culverts, etc.
- Any project that interferes with the movement of native fish or wildlife, or with wildlife corridors, would be potentially significant under CEQA.
    - As designed, this does not appear to be a constraint for the project nor is it apparent that any proposed changes could rise to the level of significance under CEQA. No further recommendations are necessary.
- Any project that conflicts with local policies or ordinances that protect biological resources, such as a tree preservation policy or ordinance, would be potentially significant under CEQA. Recommend the following actions to reduce impact significance:
    - Work with Solano County to ensure the project complies with General Plan guidance, goals, and objectives, including tree protection.
- Projects reviewed under CEQA must identify if they conflict with the provisions of an adopted HCP, NCCP, or other approved conservation plan.
    - Currently there are no such adopted plans that would cover the project area, so this does not appear to be a constraint. If the Draft Solano HCP is approved prior to project review, this factor will be evaluated during CEQA. Solano County is not a participating entity therefore the project will not be subject to HCP conditions and fees. It is also not expected that the project will conflict with the HCP's ability to meet habitat conservation and mitigation requirements. Accordingly, this is not anticipated to be a project constraint.

Overall, the project site does not provide suitable habitat for a majority of species identified during the desktop review, largely due to the frequent disturbance regime from agricultural activities combined with recent fire. Biological constraints for this project will be minimal if development occurs as planned and all work in and near aquatic features are avoided.

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Appendix A

Draft Use Permit

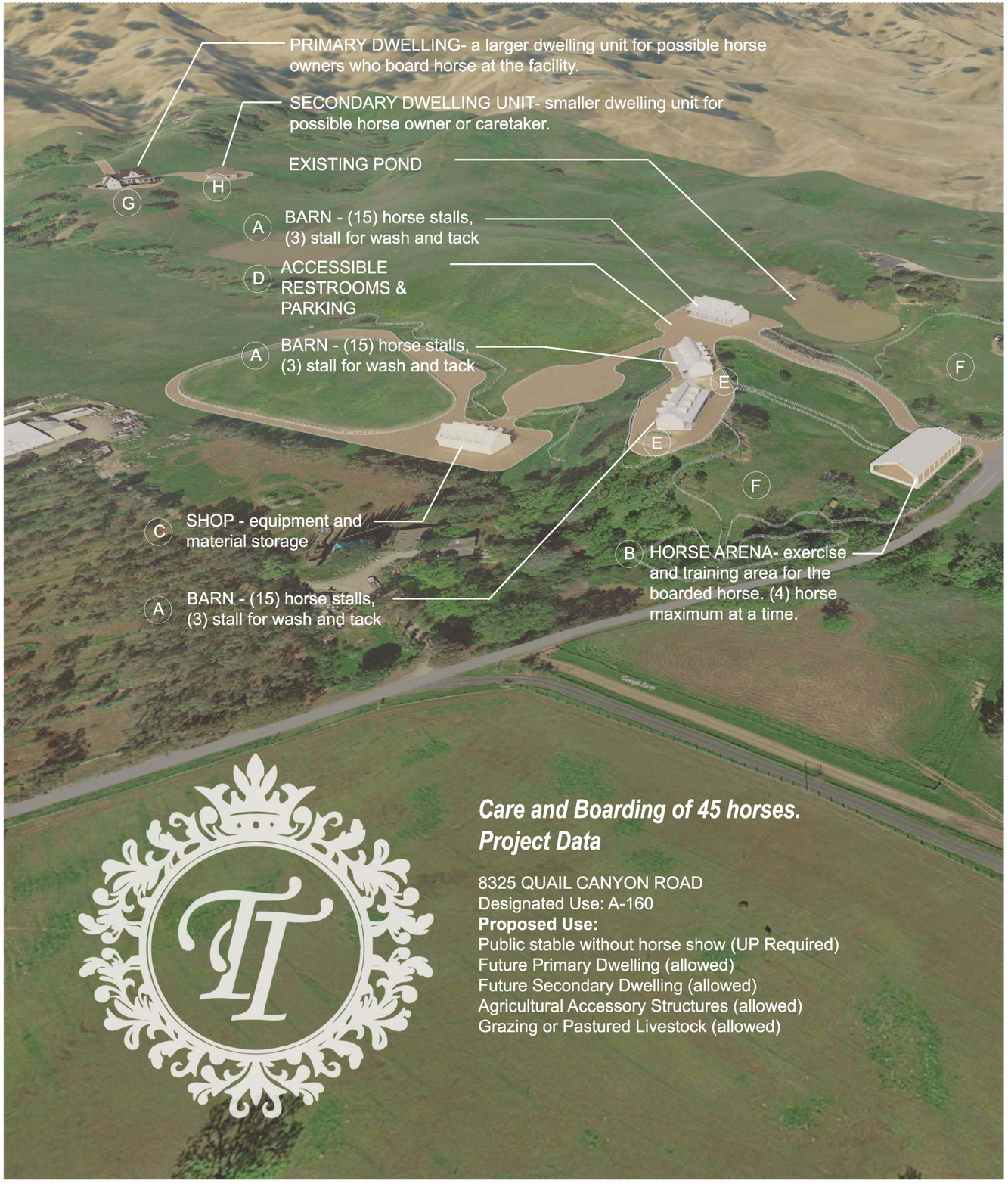
Appendix B

USFWS Information for Planning and Consultation System Report

DOUBLE T RANCH
Quail Canyon Road

USE PERMIT SUBMITTAL
8325 Quail Canyon Road

DRAWING INDEX:



Care and Boarding of 45 horses.
Project Data

8325 QUAIL CANYON ROAD
Designated Use: A-160
Proposed Use:
Public stable without horse show (UP Required)
Future Primary Dwelling (allowed)
Future Secondary Dwelling (allowed)
Agricultural Accessory Structures (allowed)
Grazing or Pastured Livestock (allowed)

PROJECT DESCRIPTION:

Project proposes to transform a fire ravaged rural site back to its agricultural roots. The land will be enhanced through the recreational use of "Public Stable Without Horse Show", allowing the county residents to enjoy the property on horseback similar to other nearby properties. The project includes barns, pens, pastures, accessory agricultural structures, primary and secondary dwelling units and access drives to support the primary use. The owners are proposing the care and boarding of a maximum of 45 horses. The care and boarding of the horse are all the activities to maintain the health of the horse while it stays on the property. This includes sleeping, feeding, waste removal ,and general equestrian care for an extended period of time. Out of the ashes of the fire that devastated the community, the owners want to create a picturesque setting for the care of horses. They are committed to being gracious members in the community. They will not hold any events of any kind, including an assembly of horse owners or the general public. They will limit the hours of the horse owner's visits to one hour before sunrise and one hour after sunset. They will also limit the exterior lighting to the architectural points of entry, and the areas where common tasks associated to the care of horses will take place.

PROJECT SUMMARY:

- Project proposes a total of 45 horses on the property.
- The Care and Boarding of horses are all the activities required for the health and wellbeing of horses. This includes shelter, exercising, feeding and waste removal. Other activies may include veterinarian care and farrier services to be preformed by outside vendors that may travel to the site.
- The proposed arena is to hold no more than (4) horses at any given time. The arena is to be used temporary for training and exerciser by the horses boarded within the facility. It is not intended to hold horse shows or any outside events other than the training of the horse with boarding agreements with the facility.
- No roadside store is planned for this facility.
- The property is proposing one shop that will by utilized for the storage of equipment and materials to run a facility of this size. This may include tractors, U.T.V's, tools and material for the general maintenance and upkeep of the grounds and buildings.

ARCHITECTURAL ASSETS:

See image left and A4 Series for more information.

A. (3) Proposed horse Barns.
B. (1) Covered riding Arena (4 horses)
C. (1) Equipment shop
D. (1) Office and restroom facility
E. (2) fenced round pins (1 horse)
F. pasture fencing throughout
G. (1) Primary Dwelling Unit.
H. (1) Secondary Dwelling Unit.

PARKING:

Parking will be screened from view with the use of the site topography, architectural assets and landscaping.

Suggested 1/4 space per Horse
(45) total Horses

1 space for each employee.
(4) total

Suggested parking: (16) total
Suggested trailer parking/ storage: (16) trailers

ACCESS/ CIRCULATION:

Ingress and Egress to the site will be provided via the existing driveway off Quail Canyon Road. Access throughout property will utilize existing culverts. No new culverts, bridges or over crossings are proposed.

DOMESTIC WATER SUPPLY:

The project will utilize the existing on-site wells and existing water service.

WASTEWATER:

Wastewater will be treated by the on-site septic system.

GRADING:

No Grading is proposed at this time. New buildings will utilizing exisitng pads and drives.

LCA ARCHITECTS

WWW. LCA - ARCHITECTS .COM

CARL E. CAMPOS
DAVID BOGSTAD
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WALNUT CREEK, CALIFORNIA 94598
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(510) 272-1060

DOUBLE T RANCH

8325 QUAIL CANYON ROAD,
VACAVILLE, CA 95688

LICENSED ARCHITECT
DAVID CHARLES BOGSTAD
No. 21378
STATE OF CALIFORNIA

PROJECT DATA & DESCRIPTION

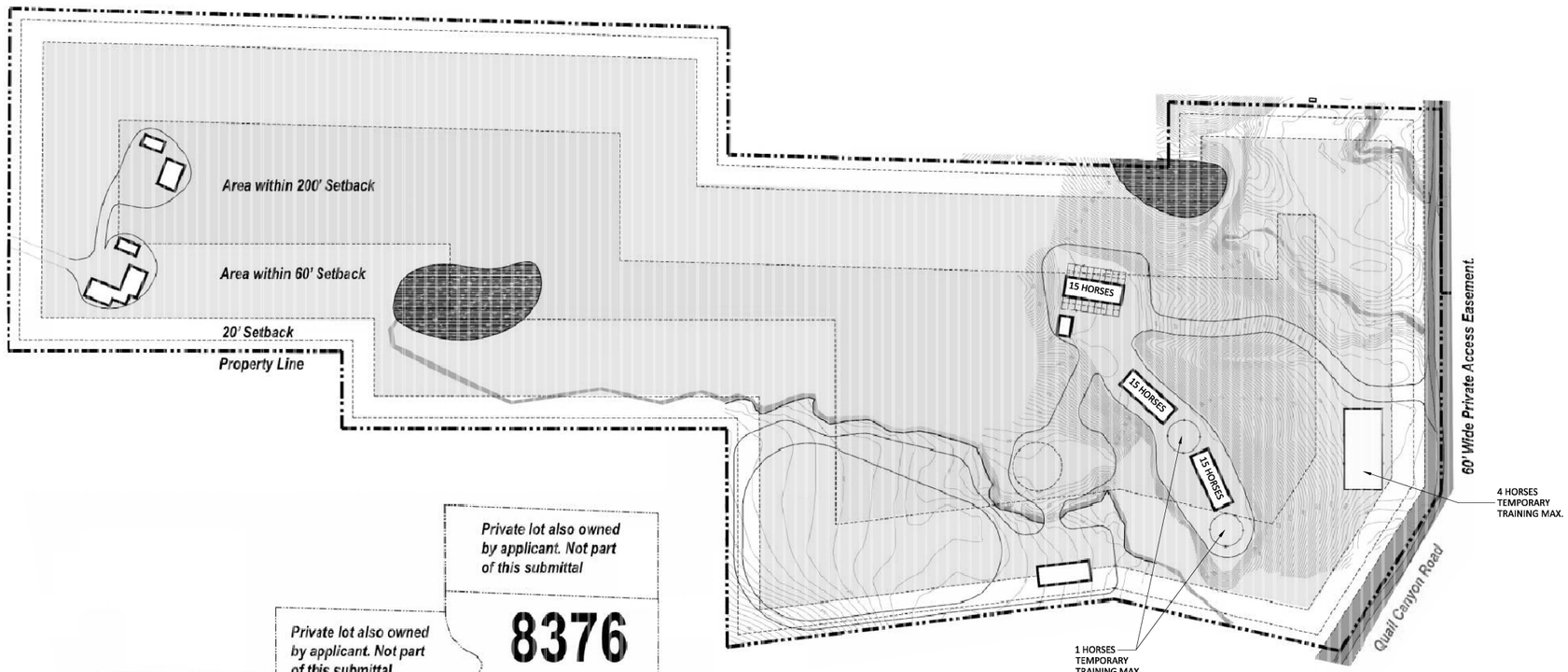
SCALE: NTS
DATE: 3/23/22

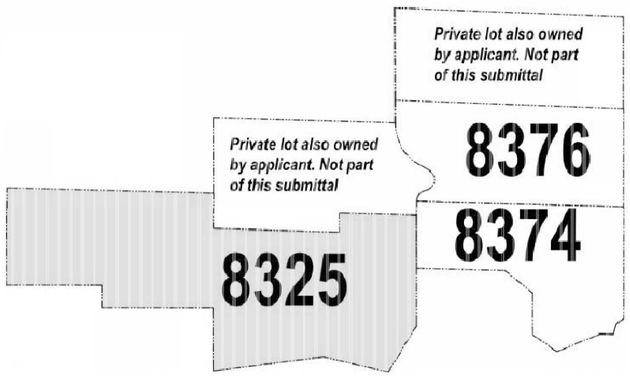
REVISIONS:

PROJECT NO. 21048

A0.1

SHEET OF





SETBACKS

LCA ARCHITECTS

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PETER STACKPOLE

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(925) 944-1626

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(510) 272-1060

DOUBLE T RANCH

8325 QUAIL CANYON ROAD,
VACAVILLE, CA 95688

LICENSED ARCHITECT
DAVID CHARLES BOGSTAD
STATE OF CALIFORNIA

SETBACK DIAGRAMS

SCALE: NTS
DATE: 3/23/22

REVISIONS:

PROJECT NO. 21048

A0.2

SHEET OF

FIRE DEPARTMENT NOTES:

WIDTH & SURFACES:

- ROADS WITHIN A PROPOSED SUBDIVISION SHALL BE A MINIMUM OF 20' IN WIDTH. ROAD WHICH PROVIDES THE PRIMARY ROUTE OF ACCESS TO THE PROPERTY BEING SUBDIVIDED OR DEVELOPED SHALL BE A MINIMUM OF 20' IN WIDTH.
- DRIVEWAYS SHALL BE A MINIMUM OF 10' IN WIDTH WITH 14' OF UNOBSTRUCTED HORIZONTAL CLEARANCE.
- ROAD SURFACES. ROADS SHALL BE DESIGNED AND MAINTAINED TO SUPPORT AN IMPOSED LOAD OF AT LEAST 75,000 POUNDS AND PROVIDE AN AGGREGATE BASE.
- DRIVEWAYS AND ROAD OR DRIVEWAY STRUCTURES (BRIDGES, CULVERTS, ETC.) SHALL BE DESIGNED AND MAINTAINED TO SUPPORT AT LEAST 40,000 POUNDS.

MAXIMUM GRADE. MAXIMUM GRADE. THE GRADE FOR ALL ROADS AND DRIVEWAYS SHALL NOT EXCEED 16%.

RADIUS. NO ROAD SHALL HAVE A HORIZONTAL INSIDE RADIUS OF CURVATURE OF LESS THAN 50 FEET.

TURNOUTS AND TURNAROUNDS: TURNOUTS AND TURNAROUNDS ARE REQUIRED ON DRIVEWAYS AND DEAD-END ROADS, AS FOLLOWS:

- DRIVEWAYS EXCEEDING 150' IN LENGTH, BUT LESS THAN 800' IN LENGTH, SHALL PROVIDE A TURNOUT NEAR THE MIDPOINT OF THE DRIVEWAY. WHERE THE DRIVEWAY EXCEEDS 800', TURNOUTS SHALL BE PROVIDED NO MORE THAN 400' APART.
- A TURNAROUND SHALL BE PROVIDED ON DRIVEWAYS OVER 300' IN LENGTH AND SHALL BE WITHIN 50' OF THE BUILDING OR BUILDING PAD.
- THE MINIMUM TURNING RADIUS FOR A TURNAROUND SHALL BE 40', NOT INCLUDING PARKING. IF A HAMMERHEAD/T IS USED, THE TOP OF THE "T" SHALL BE A MINIMUM OF 60' IN LENGTH.
- A DEAD-END ROAD SHALL HAVE A TURNAROUND CONSTRUCTED AT ITS TERMINUS. IN THE RR-5, RR-10, A-20, ASV 20,AND W-160 ZONING DISTRICTS, TURNAROUNDS SHALL BE PROVIDED ALONG DEAD-END ROAD AT A MAXIMUM OF 1,320' INTERVALS.
- A BRIDGE WITH ONLY ONE TRAFFIC LANE SHALL PROVIDE TURNOUTS AT BOTH ENDS.

GATES . GATES SHALL BE AT LEAST 2' WIDER THAN THE ROAD OR DRIVEWAY ON WHICH IT IS LOCATED. GATES PROVIDING ACCESS FROM A ROAD TO A DRIVEWAY SHALL BE LOCATED AT LEAST 30' FROM THE ROADWAY. SECURITY GATES SHALL HAVE AN APPROVED MEANS OF EMERGENCY OPERATION.

SETBACKS AND DEFENSIBLE SPACE

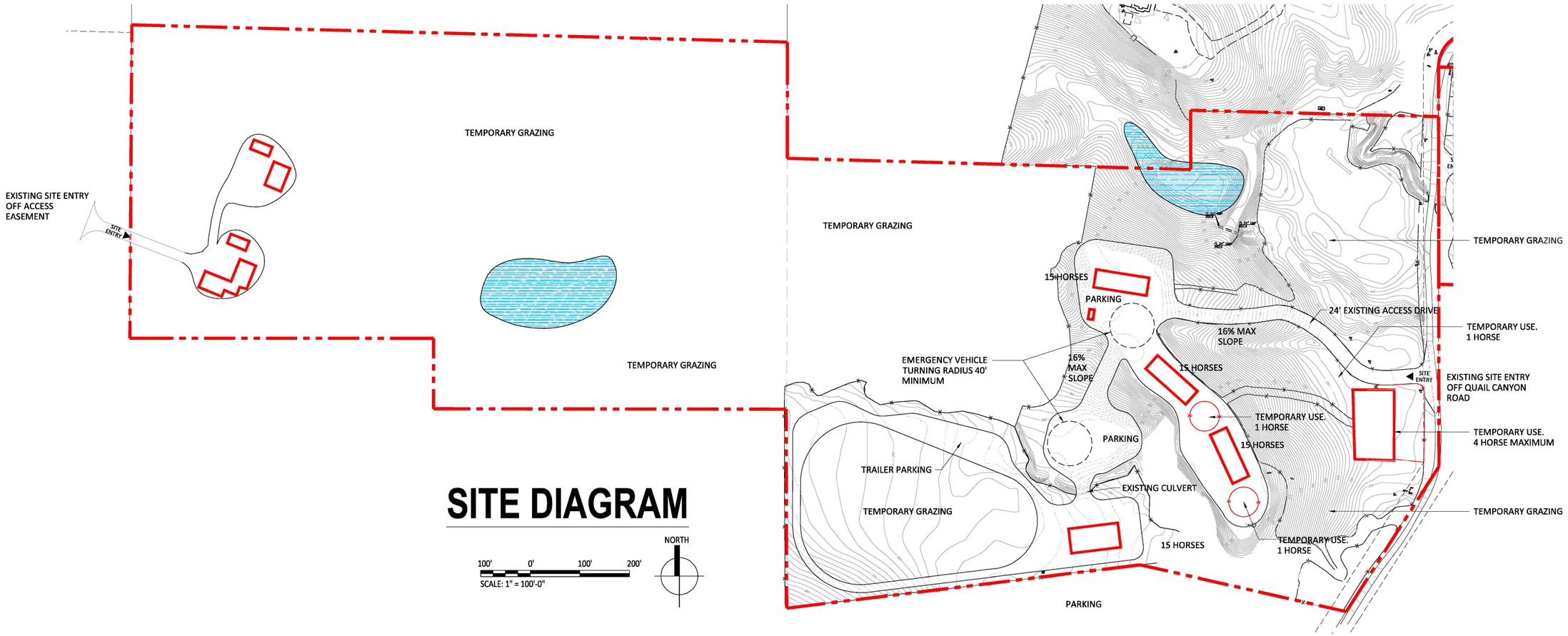
- SETBACKS. ALL PARCELS 1 ACRE OR LARGER SHALL PROVIDE A MINIMUM 30-FOOT SETBACK FOR BUILDINGS AND ACCESSORY BUILDINGS FROM ALL PROPERTY LINES AND/OR THE CENTER OF THE ROAD.
- DEFENSIBLE SPACE. 100' OF DEFENSIBLE SPACE SHALL BE MAINTAINED AROUND ALL BUILDINGS UNLESS THE BUILDING IS LOCATED LESS THAN 100' FROM A PROPERTY LINE, IN WHICH CASE THE AREA BETWEEN THE BUILDING AND THE PROPERTY LINE SHALL BE MAINTAINED AS DEFENSIBLE SPACE. 10' OF DEFENSIBLE SPACE SHALL BE MAINTAINED ON EACH SIDE OF ROADS AND DRIVEWAYS.

BUILDING NUMBERING

- BUILDING ADDRESSES. ALL BUILDINGS, OTHER THAN UTILITY AND MISCELLANEOUS GROUP U BUILDINGS, WILL BE ISSUED AN ADDRESS. THIS ADDRESS SHALL BE POSTED ON THE ROAD FRONTING PROPERTY AT THE DRIVEWAY ENTRANCE, VISIBLE FROM BOTH DIRECTIONS OF TRAVEL, IN NUMBERS A MINIMUM 3" HEIGHT AND 3/8" STROKE, REFLECTORIZED, AND CONTRASTING WITH THE BACKGROUND COLOR.
- WHERE MULTIPLE ADDRESSES ARE SERVED BY A DRIVEWAY, THEY SHALL BE ON A SINGLE SIGN OR POST. ADDRESSES SHALL BE POSTED AT THE START OF CONSTRUCTION AND SHALL BE MAINTAINED THEREAFTER.

FIRE SUPPRESSION/EMERGENCY WATER STANDARDS:

- WATER SUPPLY. ON PARCELS NOT SERVED BY A PUBLIC WATER SYSTEM, ON-SITE WATER STORAGE FOR WILDFIRE PROTECTION SHALL BE PROVIDED IN ADDITION TO AMOUNTS REQUIRED FOR DOMESTIC USE AND AUTOMATIC SPRINKLER SYSTEMS. THE AMOUNT OF STORAGE REQUIRED FOR WILDFIRE PROTECTION SHALL EQUAL OR EXCEED THE AMOUNT SPECIFIED BY NFPA 1142.
- HYDRANTS. THE LOCATION OF A HYDRANT IN RELATION TO THE ROAD OR DRIVEWAY AND TO THE BUILDING(S) OR STRUCTURE(S) IT SERVES SHALL COMPLY WITH CALIFORNIA FIRE CODE, CALIFORNIA CODE OF REGULATIONS TITLE 24, PART 9, CHAPTER 5, AND APPENDIX C. A BLUE DOT REFLECTOR, WITH A MINIMUM DIMENSION OF 3", SHALL BE ADJACENT TO THE HYDRANT.
- TIME OF INSTALLATION. WATER SUPPLIES FOR WILDFIRE PROTECTION AND FOR STRUCTURE DEFENSE SHALL BE INSTALLED AND MADE SERVICEABLE PRIOR TO AND DURING THE TIME OF CONSTRUCTION, EXCEPT WHEN AN ALTERNATIVE METHOD OF PROTECTION IS PROVIDED AND APPROVED BY THE BUILDING OFFICIAL OR FIRE PROTECTION DISTRICT.



SITE DIAGRAM

100' 0' 100' 200'

SCALE: 1" = 100'-0"

NORTH

LCA ARCHITECTS

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PETER STACKPOLE

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DOUBLE T RANCH

8325 QUAIL CANYON ROAD,
VACAVILLE, CA 95688

LICENSED ARCHITECT
DAVID CHARLES BOOSTAD
REN. 31/21
STATE OF CALIFORNIA

SITE DIAGRAMS

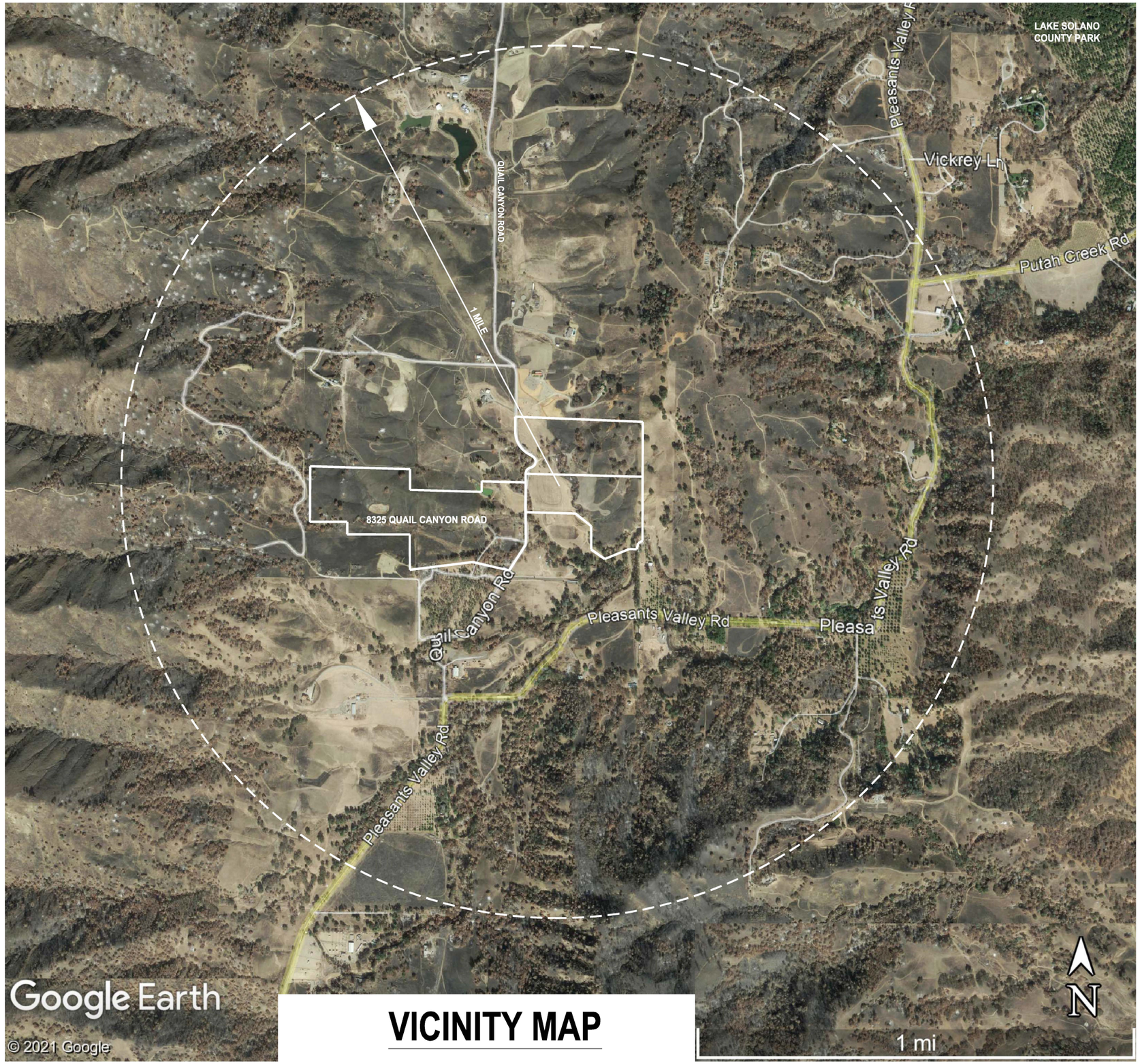
SCALE: NTS
DATE: 3/23/22

REVISIONS:

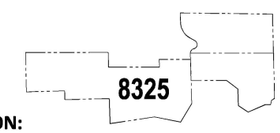
PROJECT NO. 21048

A0.3

SHEET OF



VICINITY MAP



SITES INFORMATION:

ADDRESS: 8325 QUAIL CANYON ROAD
APN: 0101-120-450
ACRES: 47.49

ZONING INFORMATION:
A-160 AGRICULTURE

LCA ARCHITECTS

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DOUBLE T RANCH

8325 QUAIL CANYON ROAD,
VACAVILLE, CA 95688

LICENSED ARCHITECT
DAVID CHARLES BOOSTAD
STATE OF CALIFORNIA

VICINITY MAP,
DRAWING INDEX

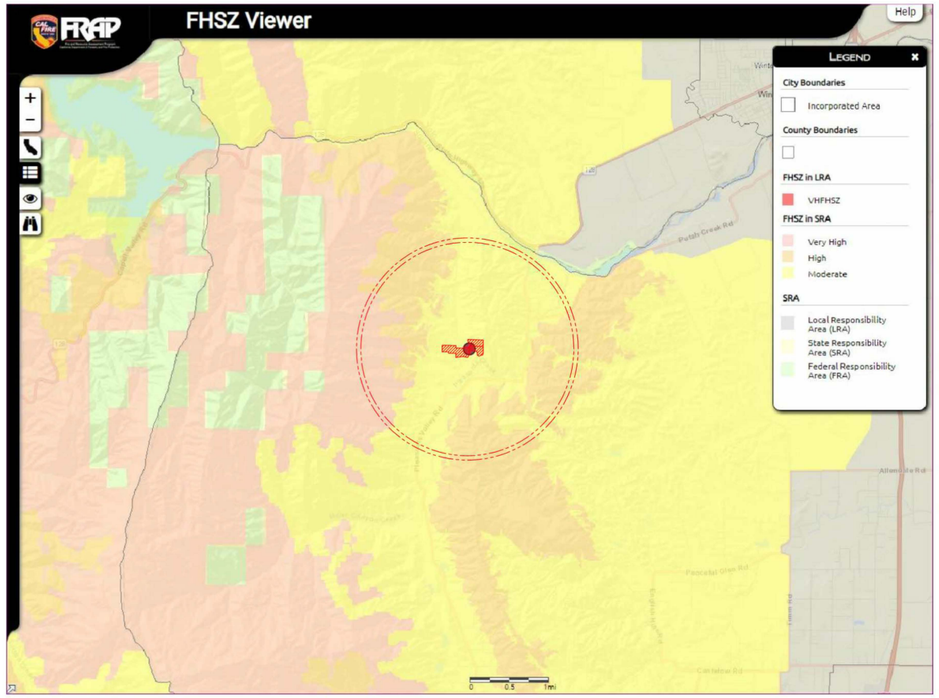
SCALE: NTS
DATE: 3/23/22

REVISIONS:

PROJECT NO. 21048

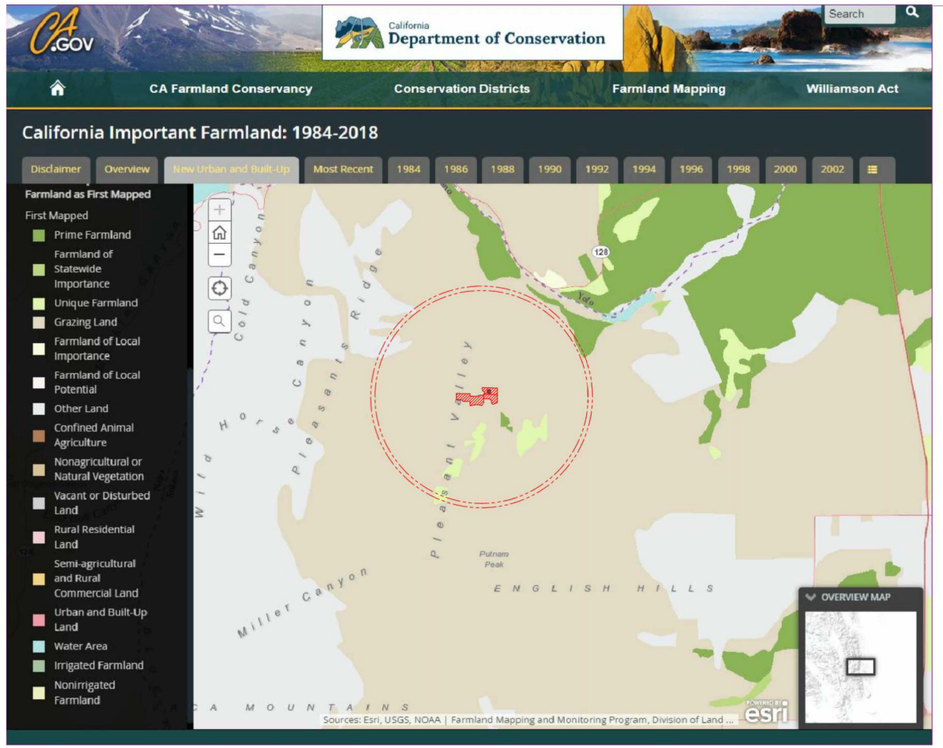
A0.4

SHEET OF



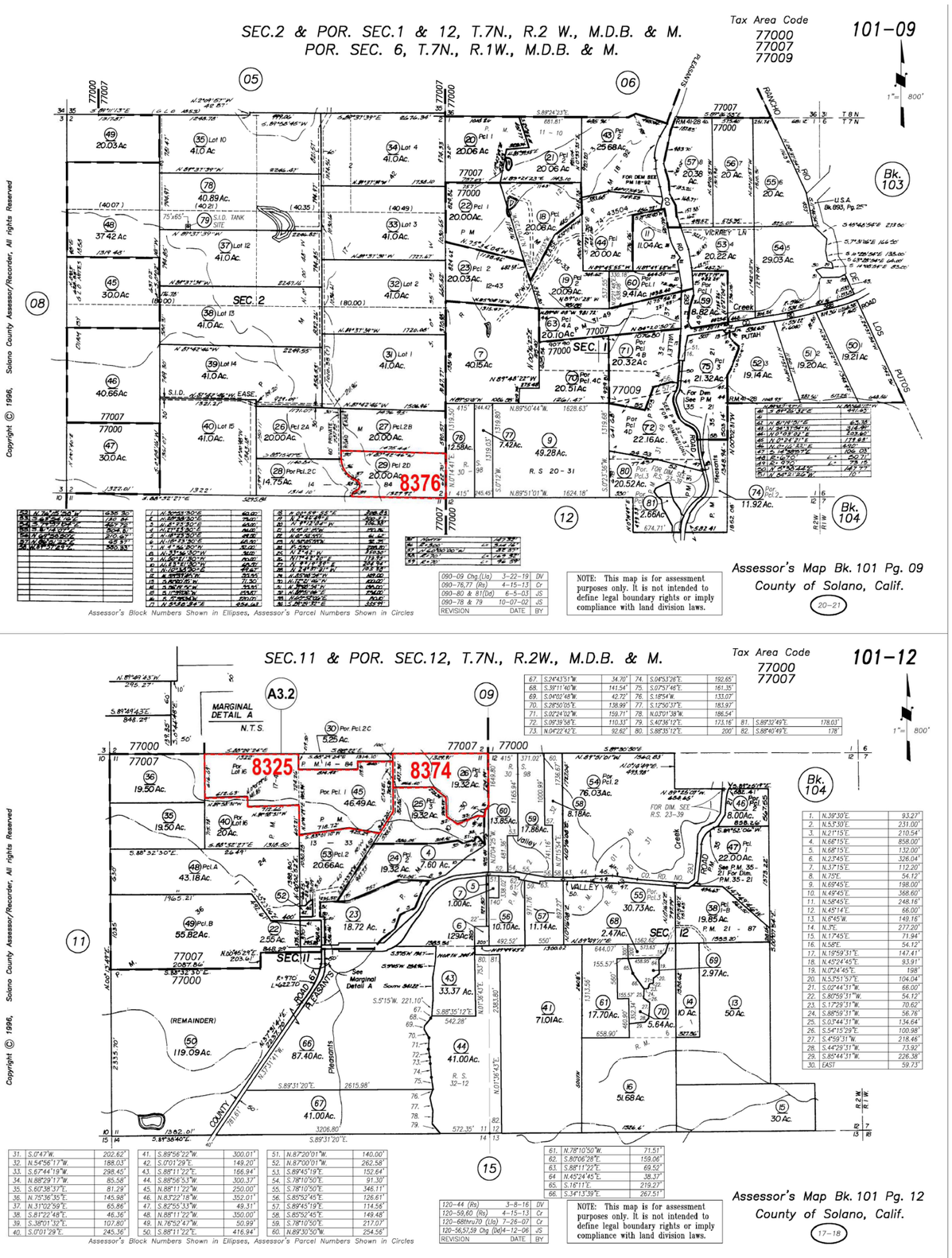
CALIFORNIA FIRE HAZARD SEVERITY ZONES MAP

SCALE AS NOTED ON MAP



CALIFORNIA IMPORTANT FARMLAND MAP

NOT TO SCALE



LCA ARCHITECTS

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DOUBLE T RANCH

8325 QUAIL CANYON ROAD,
VACAVILLE, CA 95688

LICENSED ARCHITECT
DAVID CHARLES BOGSTAD
MAY 31, 2022
STATE OF CALIFORNIA

LCA ARCHITECTS

RESTRICTED ARCHITECTURAL DRAWINGS

ASSESSOR'S PARCEL MAP

SCALE: NTS
DATE: 3/23/22

REVISIONS:

PROJECT NO. 21048

A0.5

SHEET OF

6 EXISTING SITE IMAGE
NORTH AT 8325 QUAIL CANYON ROAD

5 EXISTING SITE IMAGE
NORTH-WEST AT 8325 QUAIL CANYON ROAD

4 EXISTING SITE IMAGE
EAST AT 8325 QUAIL CANYON ROAD

3 EXISTING SITE IMAGE
WEST AT 8374 QUAIL CANYON ROAD

2 EXISTING SITE IMAGE
WEST AT 8325 QUAIL CANYON ROAD

1 EXISTING SITE IMAGE
WEST AT 8376 QUAIL CANYON ROAD

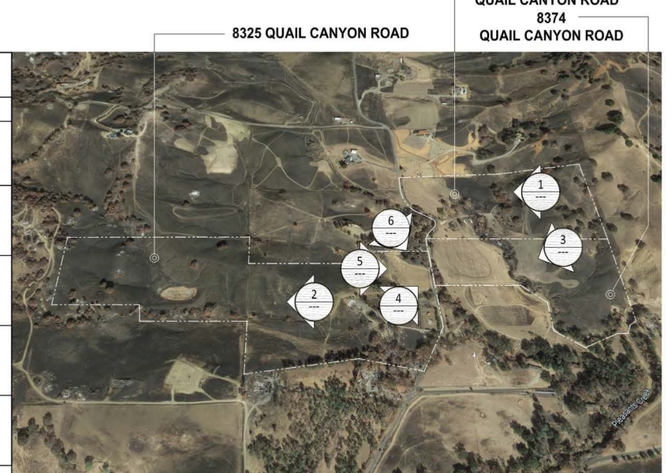
SLOPES LEGEND

FLAT OR SLOPING 0-6% SLOPE
ROLLIING 7-15% SLOPE
HILLY 16-24% SLOPE
STEEP > 24% SLOPE

SITES SLOPES INFORMATION:

SLOPE OF PROPERTY	SLOPE AREA PER SITE (ACRES) SITE 8325	SITE 8374	SITE 8376
FLAT	**9.36**	5.00	4.83
ROLLING	**18.76**	3.80	4.96
HILLY	**19.37**	3.81	7.71
STEEP		6.71	2.50
SITE AREA (ACRES)	**47.49**	19.32	20.0

4 EXISTING SITE SLOPES MAP
SCALE: 1" = 300'



1 EXISTING SITE AERIAL IMAGE

LCA ARCHITECTS

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PETER STACKPOLE

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DOUBLE T RANCH

8325 QUAIL CANYON ROAD,
VACAVILLE, CA 95688

LICENSED ARCHITECT
DAVID CHARLES BOGSTAD
No. 21178
STATE OF CALIFORNIA

EXISTING SITE IMAGES AND SITE SLOPES MAP

SCALE: NTS
DATE: 3/23/22

REVISIONS:

PROJECT NO. 21048

A0.6

SHEET OF

SITE PLAN KEYNOTES:

- (A) 36'X108' ANIMAL BARN WITH 1 WASH STALL, 1 TACK ROOM, 15 STALLS. SEE SHEET A4.1 - SIMILAR
- (B) 60' SINGLE OCCUPANCY ROUND PEN.
- (C) AGRICULTURAL ACCESSORY STRUCTURE, SHOP AND EQUIPMENT STORAGE, SEE SHEET A4.5
- (D) ACCESSIBLE RESTROOMS. SEE SHEET A4.4
- (E) COVERED RIDING ARENA, SEE SHEET A4.3
- (F) EXISTING DRIVEWAY
- (G) EXISTING 4FT HIGH FENCE
- (H) NEW GATES AT SITE ENTRY
- (I) EXISTING CULVERT TO REMAIN

PARTIAL SITE PLAN
8325 QUAIL CANYON ROAD

50' 0' 50' 100'

SCALE: 1" = 50'-0"

NORTH

8376
8374
8325

LCA ARCHITECTS

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DOUBLE T RANCH

8325 QUAIL CANYON ROAD,
VACAVILLE, CA 95688

LICENSED ARCHITECT DAVID CHARLES BOGSTAD STATE OF CALIFORNIA

PARTIAL SITE 8325
PROPOSED
PLAN

SCALE: AS SHOWN
DATE: 3/23/22
REVISIONS:

PROJECT NO. 21048

A3.1

SHEET OF

SITE PLAN KEYNOTES:

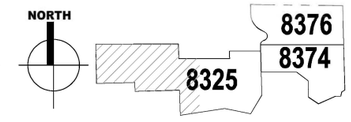
- (A) FUTURE PRIMARY DWELLING UNIT, SEE SHEET A4.6
- (B) FUTURE SECONDARY DWELLING UNIT 1,000 SQ.FT. MAX. SEE SHEET A4.7
- (C) EXISTING 4FT HIGH FENCE

PARTIAL SITE PLAN
8325 QUAIL CANYON ROAD

50' 0' 50' 100'

SCALE: 1" = 50'-0"

NORTH



LCA ARCHITECTS

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DOUBLE T RANCH

8325 QUAIL CANYON ROAD,
VACAVILLE, CA 95688

LICENSED ARCHITECT
DAVID CHARLES BOGSTAD
No. 21139
STATE OF CALIFORNIA

PARTIAL SITE 8325 PROPOSED PLAN

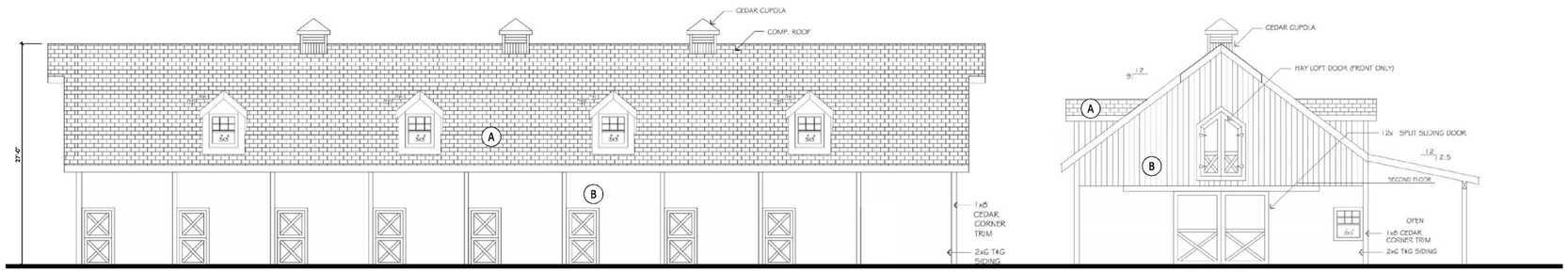
SCALE: AS SHOWN
DATE: 3/23/22
REVISIONS:

PROJECT NO. 21048

A3.2

SHEET OF

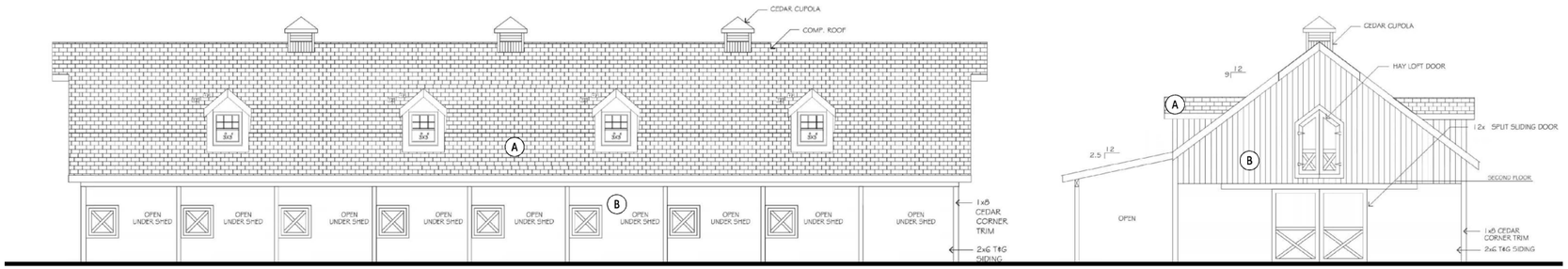
8 ANIMAL BARN EXTERIOR FINISHES



6 ANIMAL BARN REAR ELEVATION
SCALE: 1/8" = 1'-0"

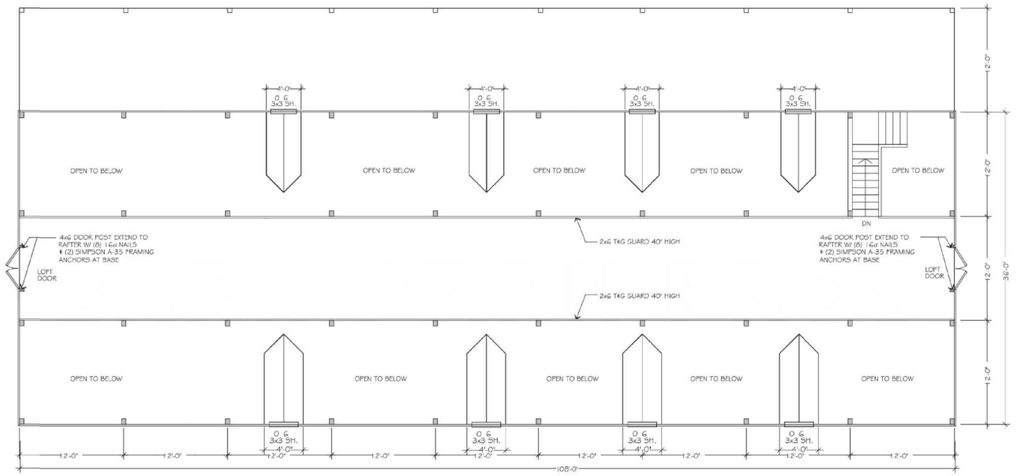
5 ANIMAL BARN SIDE ELEVATION
SCALE: 1/8" = 1'-0"

7 ANIMAL BARN INTERIOR FINISHES

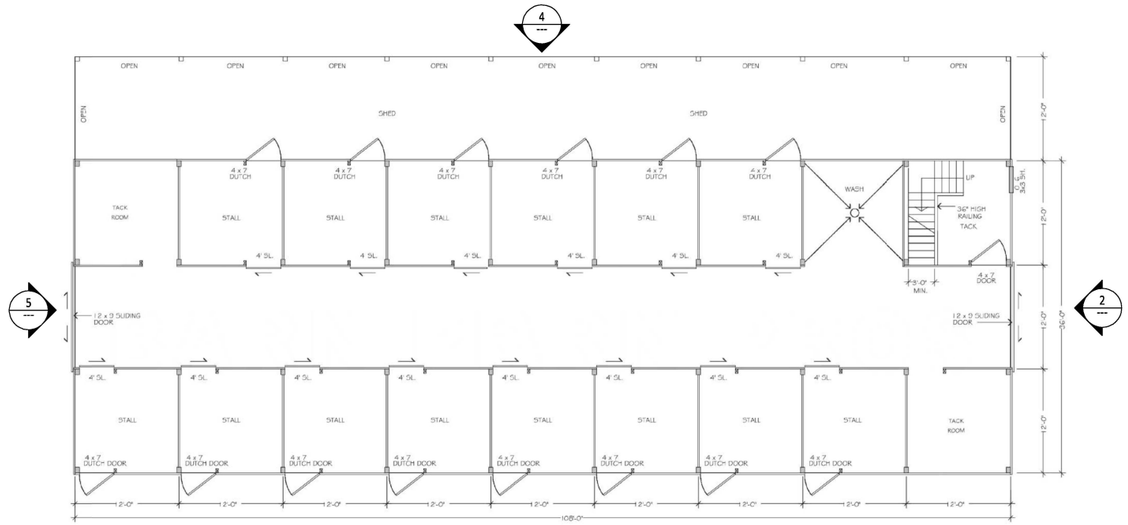


4 ANIMAL BARN FRONT ELEVATION
SCALE: 1/8" = 1'-0"

3 ANIMAL BARN SIDE ELEVATION
SCALE: 1/8" = 1'-0"



2 ANIMAL BARN UPPER PLAN
SCALE: 1/8" = 1'-0"



1 ANIMAL BARN LOWER FLOOR PLAN
SCALE: 1/8" = 1'-0"

EXTERIOR FINISH LEGEND

A	METAL ROOFING	- COLOR TBD
B	FIBER CEMENT SIDING	- COLOR TBD

8' 0' 8' 16'
SCALE: 1/8" = 1'-0"

FLOOR AREA
5,328 SQ.FT.

LCA ARCHITECTS

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DOUBLE T RANCH

8325 QUAIL CANYON ROAD,
VACAVILLE, CA 95688

LICENSED ARCHITECT
DAVID CHARLES BOGSTAD
No. C-21170
STATE OF CALIFORNIA

A2 OLYMPIC ANIMAL BARN PLANS AND ELEVATIONS

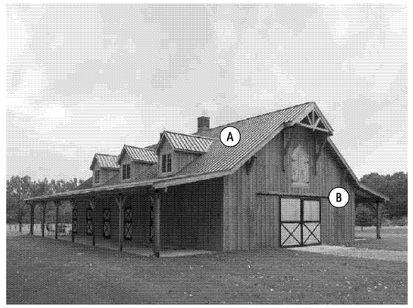
SCALE: AS NOTED
DATE: 3/23/22

REVISIONS:

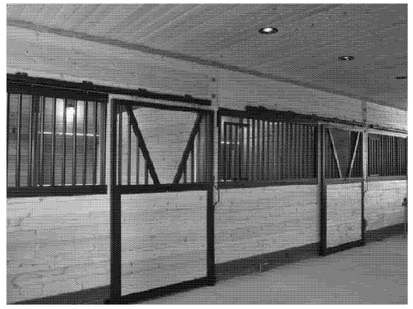
PROJECT NO. 21048

A4.1

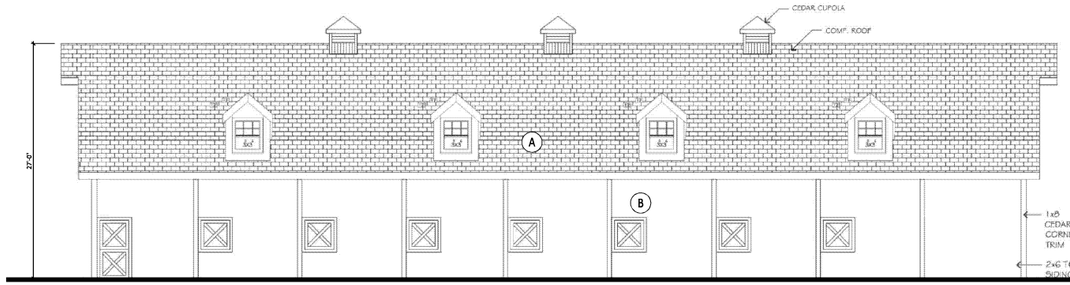
SHEET OF



8 ANIMAL BARN EXTERIOR FINISHES

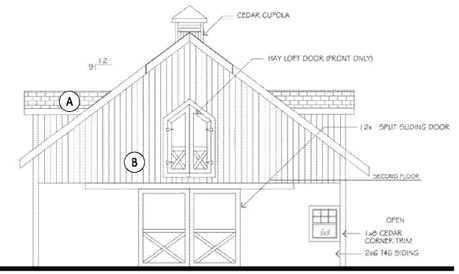


7 ANIMAL BARN INTERIOR FINISHES



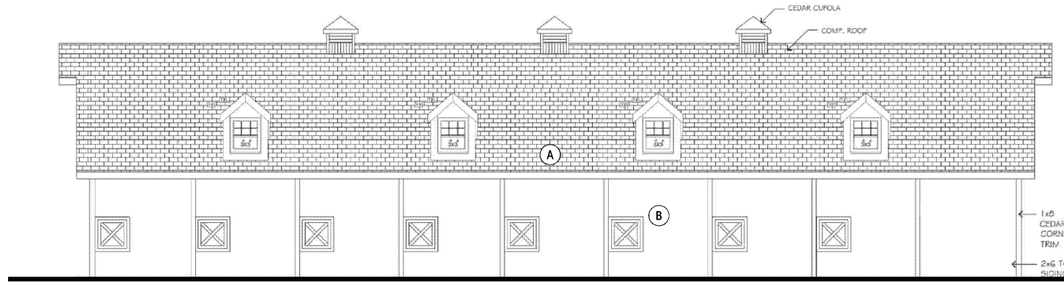
6 ANIMAL BARN REAR ELEVATION

SCALE: 1/8" = 1'-0"



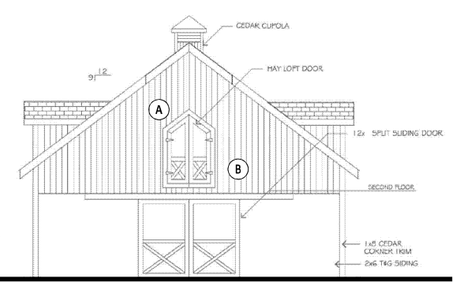
5 ANIMAL BARN SIDE ELEVATION

SCALE: 1/8" = 1'-0"



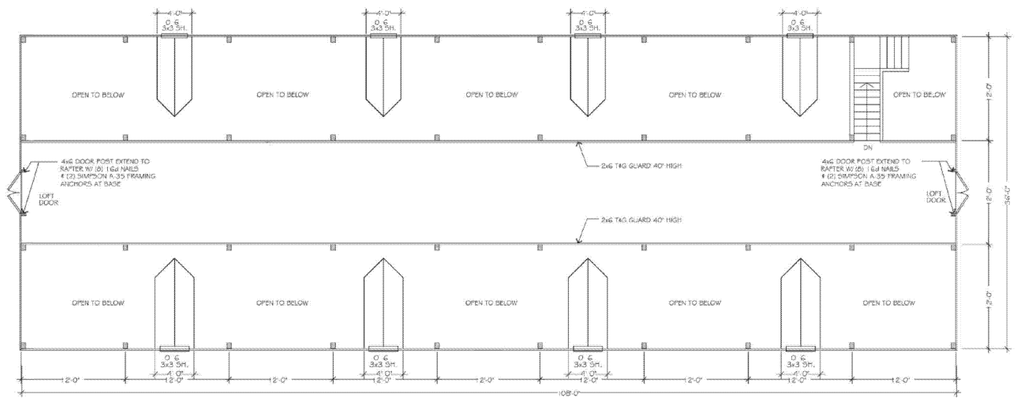
4 ANIMAL BARN FRONT ELEVATION

SCALE: 1/8" = 1'-0"



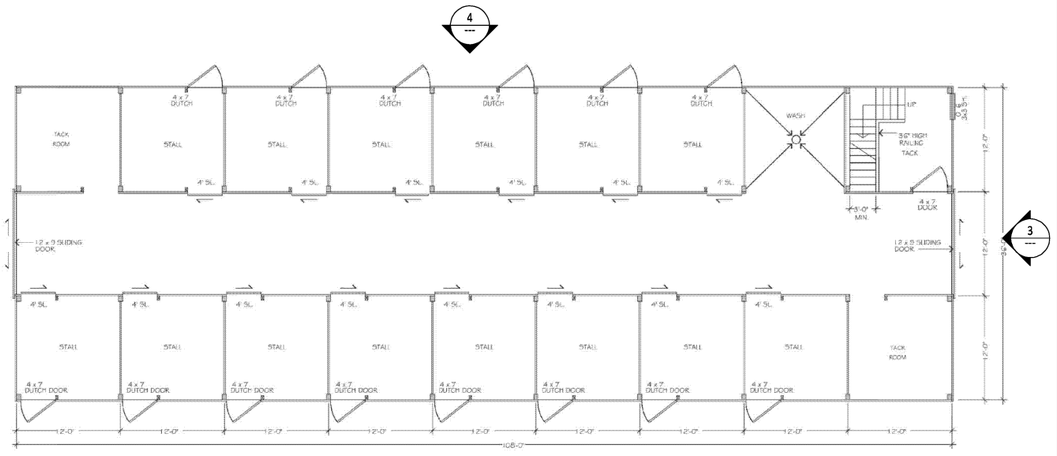
3 ANIMAL BARN SIDE ELEVATION

SCALE: 1/8" = 1'-0"



2 ANIMAL BARN UPPER PLAN

SCALE: 1/8" = 1'-0"



1 ANIMAL BARN LOWER PLAN

SCALE: 1/8" = 1'-0"

EXTERIOR FINISH LEGEND	
(A) METAL ROOFING	- COLOR TBD
(B) FIBER CEMENT SIDING	- COLOR TBD

8' 0' 8' 16'

SCALE: 1/8" = 1'-0"

FLOOR AREA
5,328 SQ.FT.

LCA ARCHITECTS

WWW . LCA - ARCHITECTS . COM

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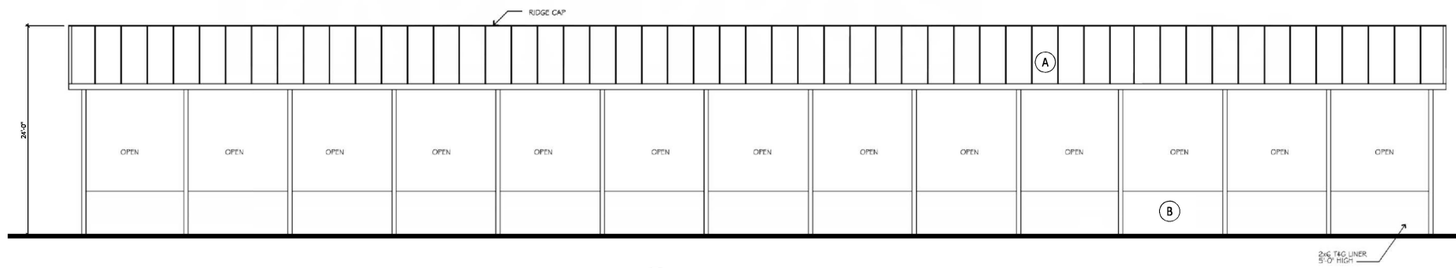
LICENSED ARCHITECT
DAVID CHARLES BOOSTAD
C-21370
STATE OF CALIFORNIA

A3 OLYMPIC ANIMAL BARN PLANS AND ELEVATIONS

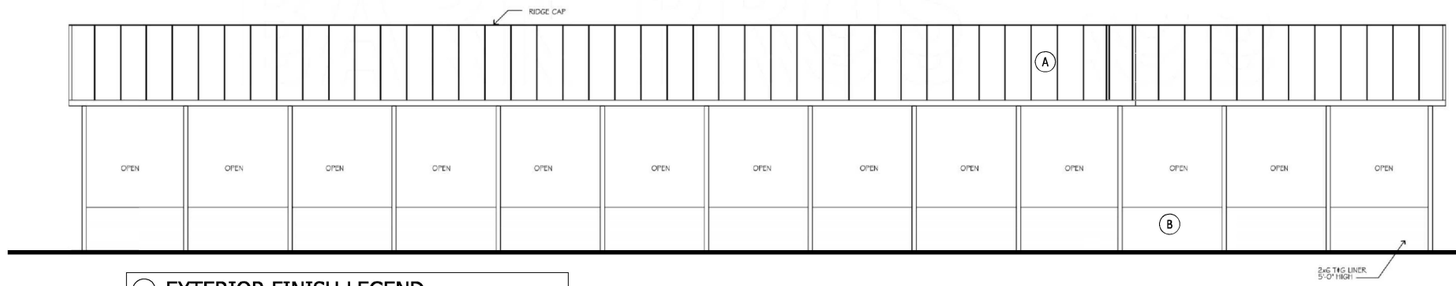
SCALE:	AS NOTED
DATE:	3/23/22
REVISIONS:	
PROJECT NO.	21048

A4.2

SHEET OF

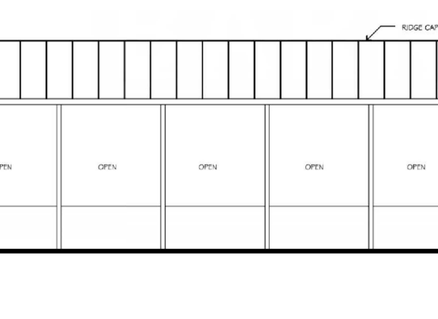


5 MEDOW ARENA FRONT ELEVATION
SCALE: 1/8" = 1'-0"



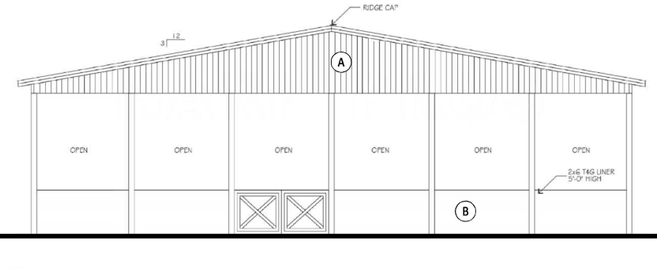
4 MEDOW ARENA REAR ELEVATION
SCALE: 1/8" = 1'-0"

EXTERIOR FINISH LEGEND	
(A) METAL ROOFING	- COLOR TBD
(B) FIBER CEMENT SIDING	- COLOR TBD

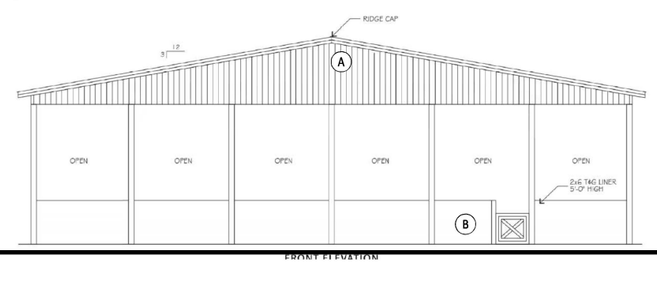


7 MEDOW ARENA EXTERIOR FINISHES

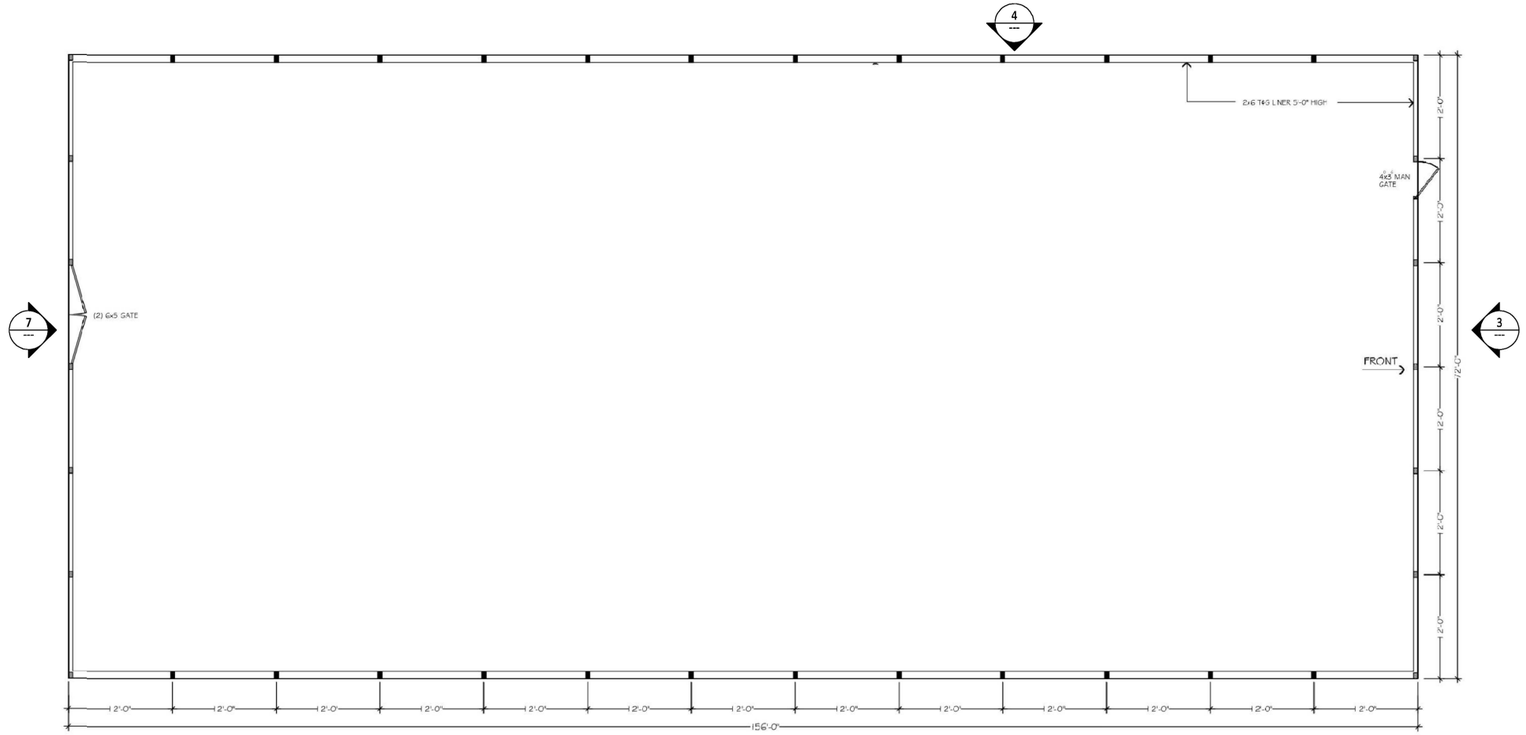
6 MEDOW ARENA INTERIOR FINISHES



3 SIDE ELEVATION
SCALE: 1/8" = 1'-0"



2 SIDE ELEVATION
SCALE: 1/8" = 1'-0"



1 MEDOW ARENA FLOOR PLAN
SCALE: 1/8" = 1'-0"

8' 0' 8' 16'
SCALE: 1/8" = 1'-0"

FLOOR AREA
11,232 SQ.FT.

LCA ARCHITECTS
WWW . LCA - ARCHITECTS . COM
CARL E. CAMPOS
DAVID BOGSTAD
PETER STACKPOLE
590 YGNACIO VALLEY ROAD, SUITE 310
WALNUT CREEK, CALIFORNIA 94598
(925) 944-1626
1970 BROADWAY, SUITE 800
OAKLAND, CALIFORNIA 94612
(510) 272-1060

DOUBLE T RANCH
8325 QUAIL CANYON ROAD,
VACAVILLE, CA 95688

LICENSED ARCHITECT
DAVID CHARLES BOGSTAD
No. C-21378
STATE OF CALIFORNIA

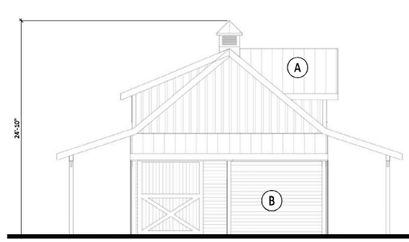
B1 MEDOW ARENA FLOOR AND ELEVATION PLANS

SCALE:	AS NOTED
DATE:	3/23/22
REVISIONS:	
PROJECT NO.	21048

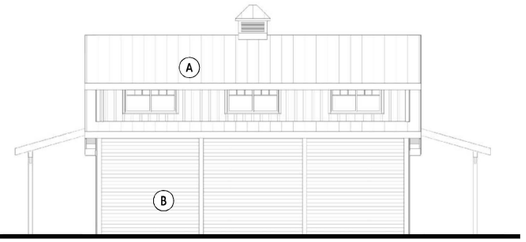
A4.3

SHEET OF

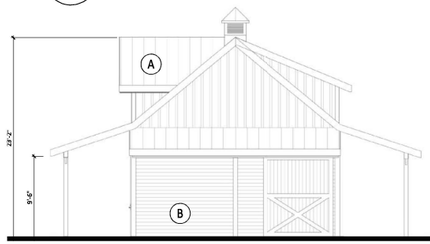
EXTERIOR FINISH LEGEND		
A	METAL ROOFING	- COLOR TBD
B	FIBER CEMENT SIDING	- COLOR TBD



6 OFFICE FRONT ELEVATION
SCALE: 1/8" = 1'-0"

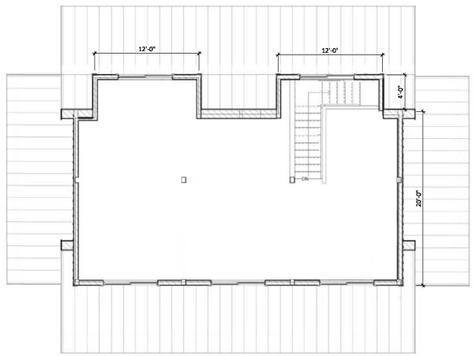


5 OFFICE LEFT ELEVATION
SCALE: 1/8" = 1'-0"

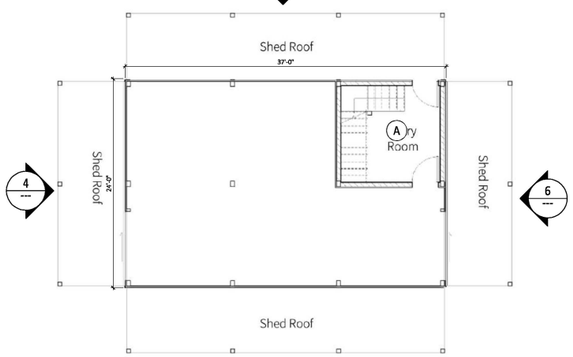


4 OFFICE REAR ELEVATION
SCALE: 1/8" = 1'-0"

3 OFFICE RIGHT ELEVATION
SCALE: 1/8" = 1'-0"



2 OFFICE UPPER FLOOR PLAN
SCALE: 1/8" = 1'-0"



1 OFFICE LOWER FLOOR PLAN
SCALE: 1/8" = 1'-0"

8' 0' 8' 16'
SCALE: 1/8" = 1'-0"

FLOOR AREA
1,689 SQ.FT.

LCA ARCHITECTS

WWW . LCA - ARCHITECTS . COM

CARL E. CAMPOS
DAVID BOOSTAD
PETER STACKPOLE

590 YGNACIO VALLEY ROAD, SUITE 310
WALNUT CREEK, CALIFORNIA 94596
(925) 944-1626

1970 BROADWAY, SUITE 800
OAKLAND, CALIFORNIA 94612
(510) 272-1060

DOUBLE T RANCH

8325 QUAIL CANYON ROAD,
VACAVILLE, CA 95688

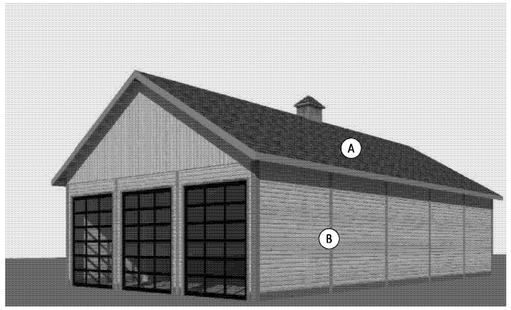
LICENSED ARCHITECT
DAVID CHARLES BOOSTAD
No. 21439
STATE OF CALIFORNIA

C2 - HUNTINGTON A OFFICE FLOOR AND ELEVAION PLANS

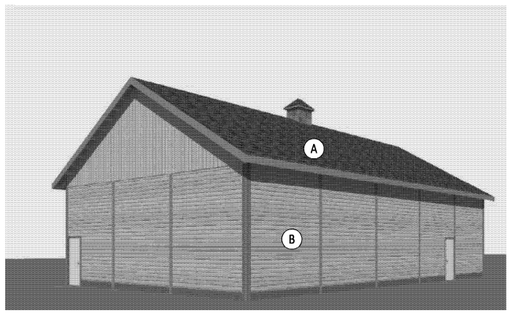
SCALE:	AS NOTED
DATE:	3/23/22
REVISIONS:	
PROJECT NO.	21048

A4.4

SHEET OF



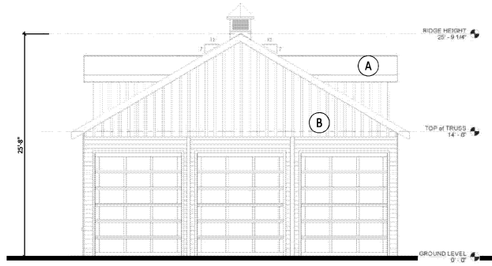
8 SHOP FRONT PERSPECTIVE
SCALE: 1/8" = 1'-0"



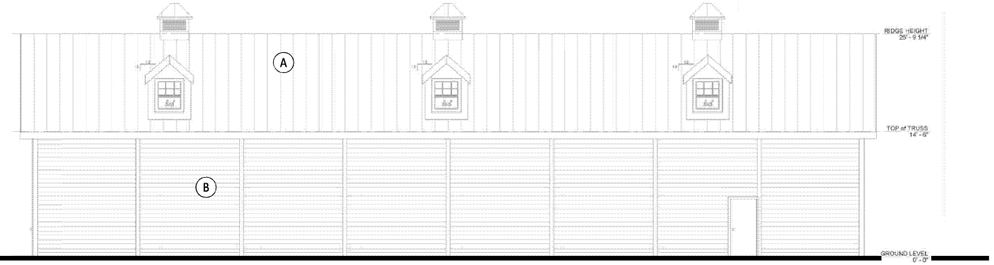
7 SHOP BACK PERSPECTIVE
SCALE: 1/8" = 1'-0"

EXTERIOR FINISH LEGEND		
A	METAL ROOFING	- COLOR TBD
B	FIBER CEMENT SIDING	- COLOR TBD

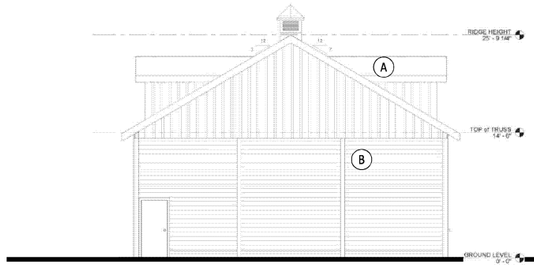
6 SHOP INTERIOR PERSPECTIVE
SCALE: 1/8" = 1'-0"



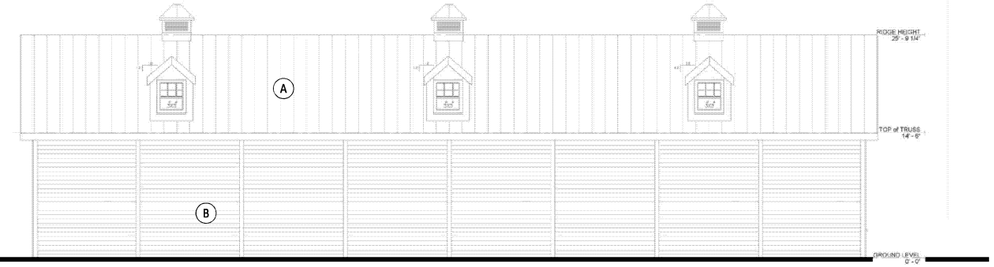
5 SHOP FRONT ELEVATION
SCALE: 1/8" = 1'-0"



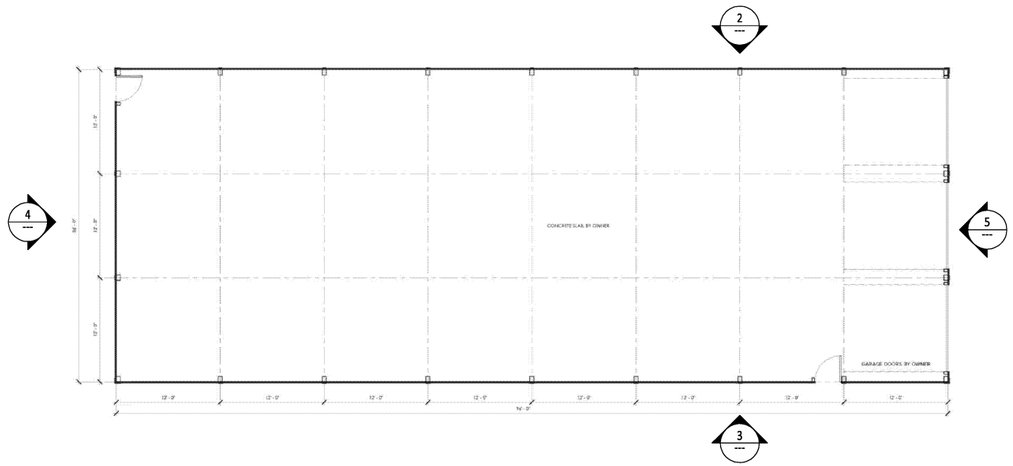
3 SHOP LEFT ELEVATION
SCALE: 1/8" = 1'-0"



4 SHOP REAR ELEVATION
SCALE: 1/8" = 1'-0"



2 SHOP RIGHT ELEVATION
SCALE: 1/8" = 1'-0"



1 SHOP FLOOR PLAN
SCALE: 1/8" = 1'-0"

8' 0' 8' 16'
SCALE: 1/8" = 1'-0"

FLOOR AREA
3,456 SQ.FT.

LCA ARCHITECTS

WWW . LCA - ARCHITECTS . COM

CARL E. CAMPOS
DAVID BOGSTAD
PETER STACKPOLE

590 YGNACIO VALLEY ROAD, SUITE 310
WALNUT CREEK, CALIFORNIA 94598
(925) 944-1626

1970 BROADWAY, SUITE 800
OAKLAND, CALIFORNIA 94612
(510) 272-1060

DOUBLE T RANCH

8325 QUAIL CANYON ROAD,
VACAVILLE, CA 95688

LICENSED ARCHITECT
DAVID CHARLES BOGSTAD
REG. NO. C-21758
STATE OF CALIFORNIA

D2 - TRADESMEN SHOP FLOOR AND ELEVATION PLANS

SCALE:	AS NOTED
DATE:	3/23/22
REVISIONS:	
PROJECT NO.	21048

A4.5

SHEET OF

6 PRIMARY DWELLING UNIT SIDE ELEVATION
SCALE: 1/8" = 1'-0"

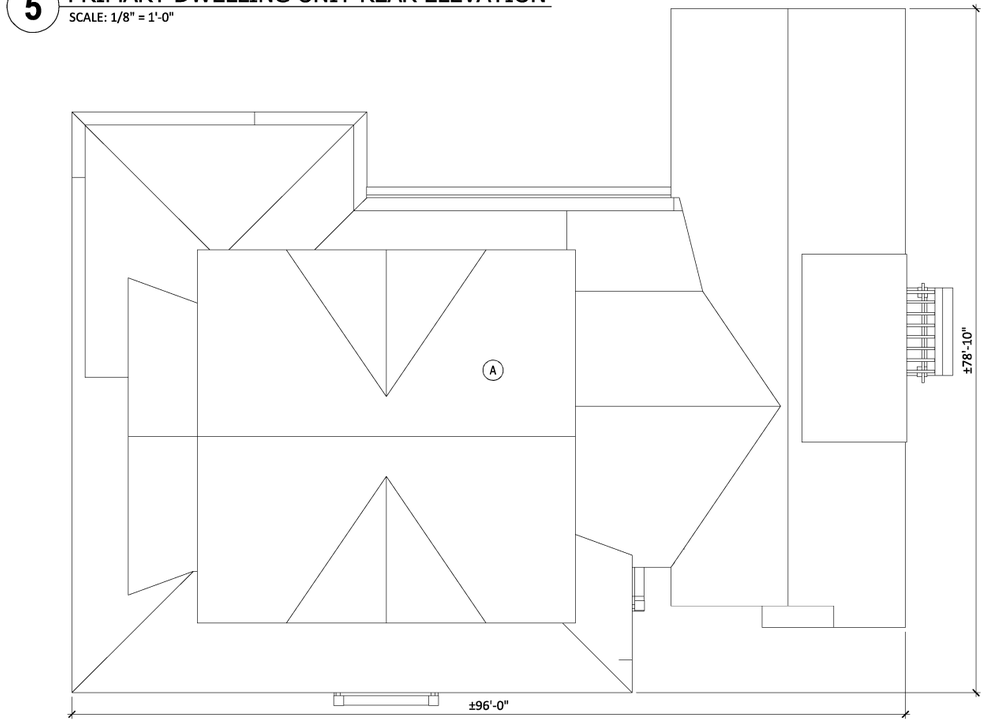
EXTERIOR FINISH LEGEND

- (A) METAL ROOFING - COLOR TBD
- (B) FIBER CEMENT SIDING - COLOR TBD

3 PRIMARY DWELLING UNIT EXTERIOR FINISHES

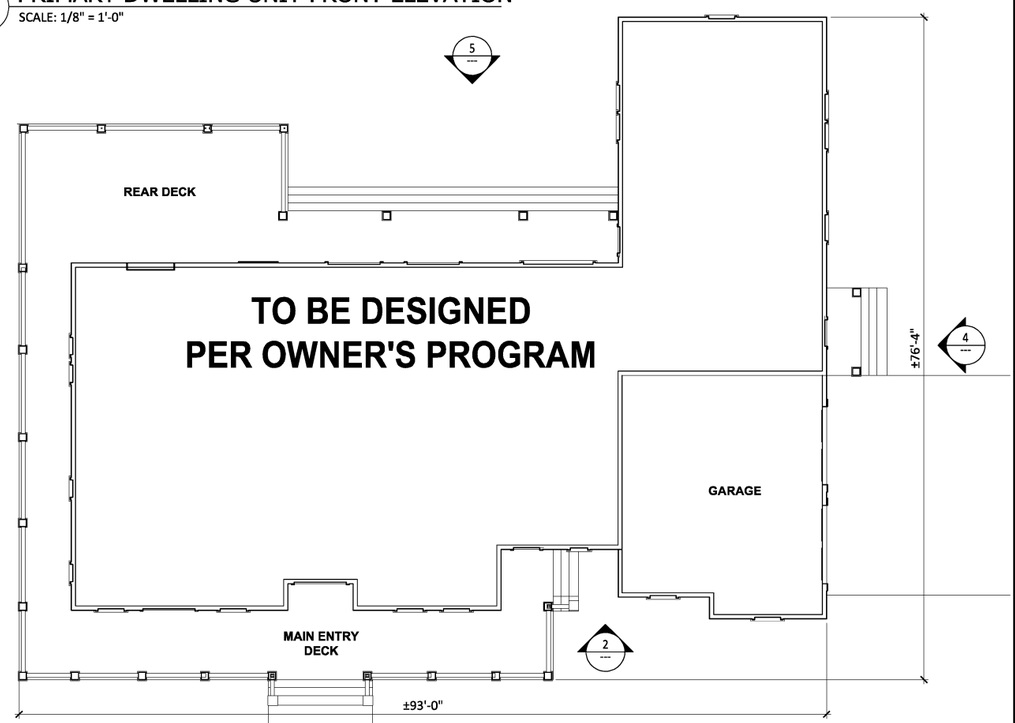
5 PRIMARY DWELLING UNIT REAR ELEVATION
SCALE: 1/8" = 1'-0"

2 PRIMARY DWELLING UNIT FRONT ELEVATION
SCALE: 1/8" = 1'-0"



4 PRIMARY DWELLING UNIT ROOF PLAN
SCALE: 1/8" = 1'-0"

8' 0' 8' 16'
SCALE: 1/8" = 1'-0"



1 PRIMARY DWELLING UNIT FLOOR PLAN
SCALE: 1/8" = 1'-0"

FLOOR AREA

±7,600 SQ.FT.

LCA ARCHITECTS

WWW . LCA - ARCHITECTS . COM

CARL E. CAMPOS
DAVID BOOSTAD
PETER STACKPOLE

590 YGNACIO VALLEY ROAD, SUITE 310
WALNUT CREEK, CALIFORNIA 94598
(925) 944-1626

1970 BROADWAY, SUITE 800
OAKLAND, CALIFORNIA 94612
(510) 272-1060

DOUBLE T RANCH

8325 QUAIL CANYON ROAD,
VACAVILLE, CA 95688

LICENSED ARCHITECT
DAVID CHARLES BOOSTAD
No. 21179
STATE OF CALIFORNIA

PRIMARY DWELLING UNIT

SCALE:	AS NOTED
DATE:	2/22/22

REVISIONS:

PROJECT NO. 21048

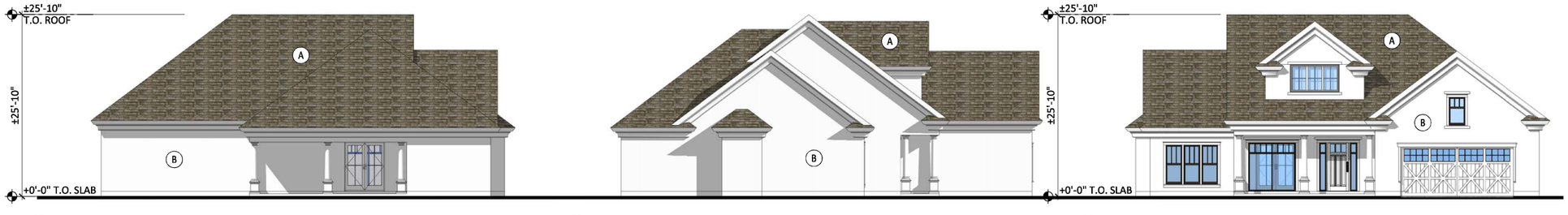
A4.6

SHEET OF

EXTERIOR FINISH LEGEND

A	ASPHALT SHINGLES ROOF - COLOR AS SHOWN
B	CEMENT PLASTER WALL FINISH - COLOR AS SHOWN

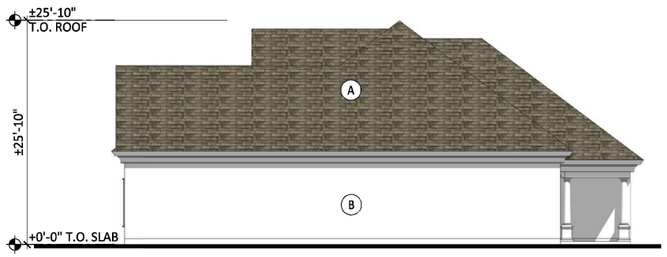
7 SECONDARY DWELLING UNIT EXTERIOR FINISHES



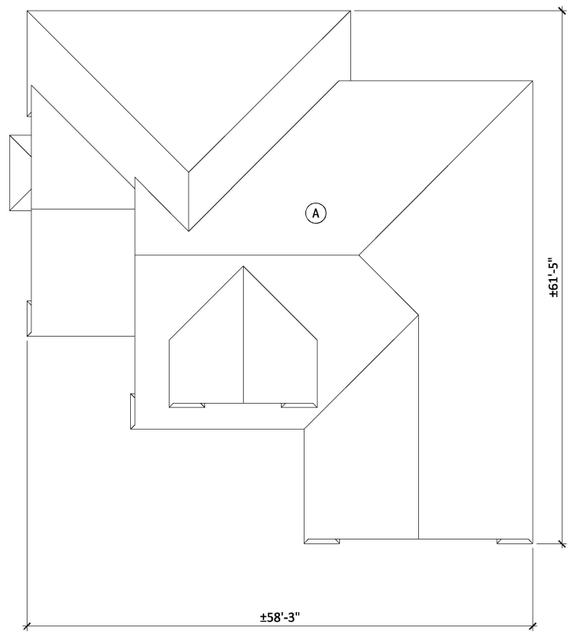
6 SECONDARY DWELLING UNIT REAR ELEVATION
SCALE: 1/8" = 1'-0"

4 SECONDARY DWELLING UNIT SIDE ELEVATION
SCALE: 1/8" = 1'-0"

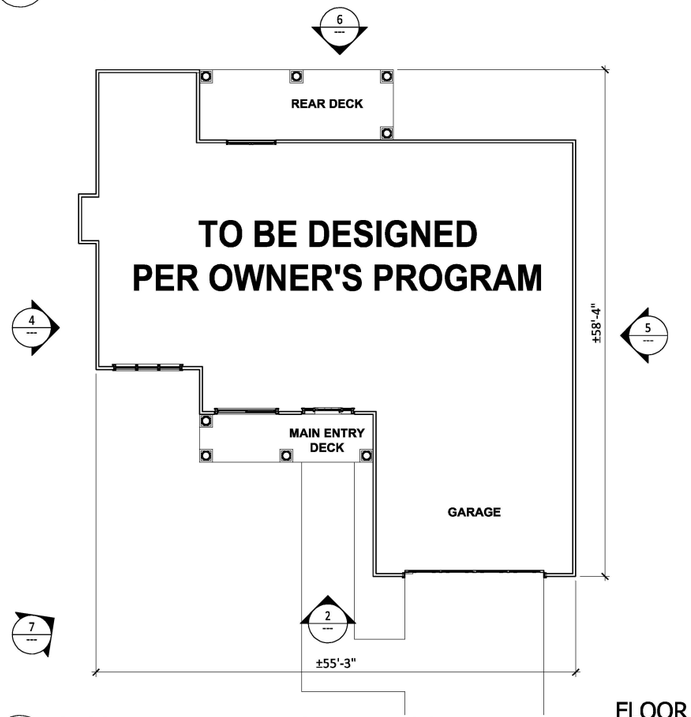
2 SECONDARY DWELLING UNIT FRONT ELEVATION
SCALE: 1/8" = 1'-0"



5 SECONDARY DWELLING UNIT SIDE ELEVATION
SCALE: 1/8" = 1'-0"



3 SECONDARY DWELLING UNIT ROOF PLAN
SCALE: 1/8" = 1'-0"



1 SECONDARY DWELLING UNIT FLOOR PLAN
SCALE: 1/8" = 1'-0"

8' 0' 8' 16'
SCALE: 1/8" = 1'-0"

FLOOR AREA
±1,800 SQ.FT.

LCA ARCHITECTS

WWW . LCA - ARCHITECTS . COM

CARL E. CAMPOS
DAVID BOOSTAD
PETER STACKPOLE

500 YGNACIO VALLEY ROAD, SUITE 310
WALNUT CREEK, CALIFORNIA 94598
(925) 944-1626

1970 BROADWAY, SUITE 800
OAKLAND, CALIFORNIA 94612
(510) 272-1060

DOUBLE T RANCH

8325 QUAIL CANYON ROAD,
VACAVILLE, CA 95688

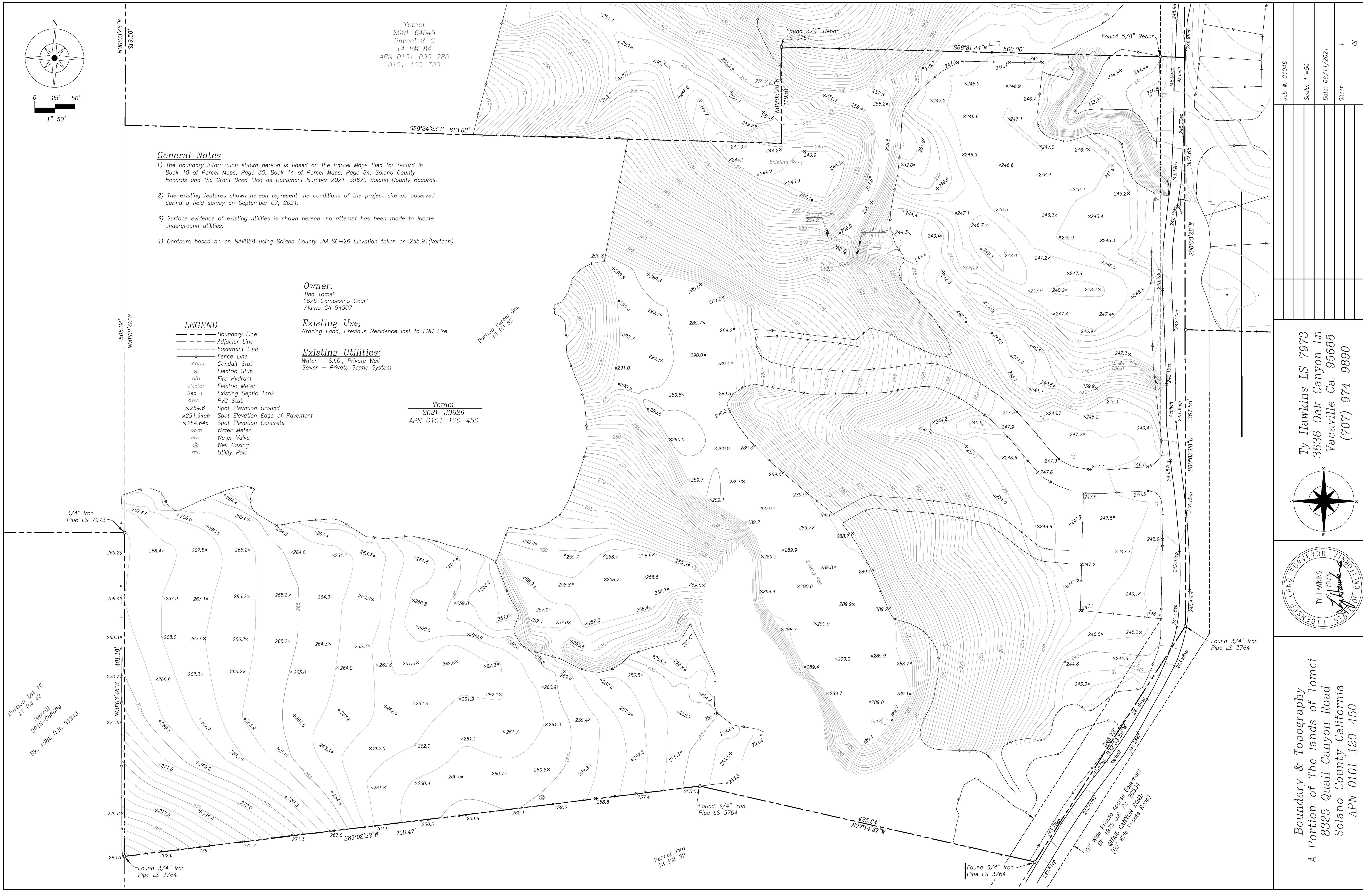
LICENSED ARCHITECT
DAVID CHARLES BOOSTAD
STATE OF CALIFORNIA

SECONDARY DWELLING UNIT

SCALE:	AS NOTED
DATE:	2/22/22
REVISIONS:	
PROJECT NO.	21048

A4.7

SHEET OF



Tomei
2021-64545
Parcel 2-C
14 PM 84
APN 0101-090-280
0101-120-300
1"=50'
General Notes
1) The boundary information shown hereon is based on the Parcel Maps filed for record in Book 10 of Parcel Maps, Page 30, Book 14 of Parcel Maps, Page 84, Solano County Records and the Grant Deed filed as Document Number 2021-39629 Solano County Records.
2) The existing features shown hereon represent the conditions of the project site as observed during a field survey on September 07, 2021.
3) Surface evidence of existing utilities is shown hereon, no attempt has been made to locate underground utilities.
4) Contours based on on NAVD88 using Solano County BM SC-26 Elevation taken as 255.91(Vertcon)
Owner:
Tina Tomei
1625 Campesino Court
Alamo CA 94507
Existing Use:
Grazing Land, Previous Residence lost to LNU Fire
Existing Utilities:
Water – S.I.D., Private Well
Sewer – Private Septic System
LEGEND
Boundary Line
Adjoiner Line
Easement Line
Fence Line
Conduit Stub
Electric Stub
Fire Hydrant
Electric Meter
Existing Septic Tank
PVC Stub
×254.6 Spot Elevation Ground
×254.64ep Spot Elevation Edge of Pavement
×254.64c Spot Elevation Concrete
Water Meter
Water Valve
Well Casing
Utility Pole
Tomei
2021-39629
APN 0101-120-450
Portion Parcel One
13 PM 33
Existing Pond
Existing Pad
Tank
Found 3/4" Rebar LS 3764
Found 5/8" Rebar
S88°31'44"E 500.00'
S88°24'23"E 813.83'
N00°03'28"W 119.51'
N00°03'46"E 219.50'
N00°03'46"E 505.34'
N00°03'46"E 401.18'
S00°03'28"E 337.65'
S00°03'28"E 367.55'
S83°02'22"W 718.47'
N77°14'37"W 425.64'
3/4" Iron Pipe LS 7973
Found 3/4" Iron Pipe LS 3764
Portion Lot 16
17 PM 42
Merrill
2013-066669
Bk. 1982 O.R. 31913
Parcel Two
13 PM 33
60' Wide Private Access Easement
Bk. 1975 O.R. Pg. 20534
QUAIL CANYON ROAD
(60' Wide Private Road)
Asphalt
Ty Hawkins LS 7973
3636 Oak Canyon Ln.
Vacaville Ca. 95688
(707) 974-9890
LICENSED LAND SURVEYOR
TY HAWKINS
LS 7973
STATE OF CALIFORNIA
Boundary & Topography
A Portion of The lands of Tomei
8325 Quail Canyon Road
Solano County California
APN 0101-120-450
Job #: 21046
Scale: 1"=50'
Date: 09/14/2021
Sheet 1 of 1

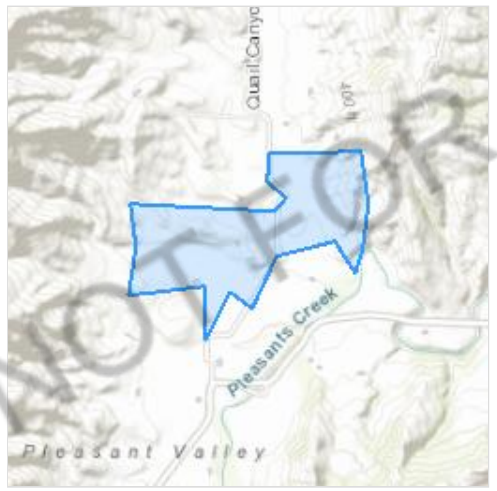
IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Solano County, California



Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

---

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
Northern Spotted Owl Strix occidentalis caurina Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/1123	Threatened

Reptiles

NAME	STATUS
Giant Garter Snake Thamnophis gigas Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4482	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog Rana draytonii Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander Ambystoma californiense There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

NAME	STATUS
Delta Smelt Hypomesus transpacificus Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/321	Threatened

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

NAME	STATUS
Valley Elderberry Longhorn Beetle Desmocerus californicus dimorphus Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/7850	Threatened

Crustaceans

NAME	STATUS
California Freshwater Shrimp Syncaris pacifica Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7903	Endangered
Conservancy Fairy Shrimp Branchinecta conservatio Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/8246	Endangered
Vernal Pool Fairy Shrimp Branchinecta lynchi Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp Lepidurus packardi Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/2246	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES

	THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
California Thrasher Toxostoma redivivum This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Jul 31
Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31
Nuttall's Woodpecker Picoides nuttallii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20
Oak Titmouse Baeolophus inornatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15
Wrentit Chamaea fasciata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 10
Yellow-billed Magpie Pica nuttalli This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9726	Breeds Apr 1 to Jul 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

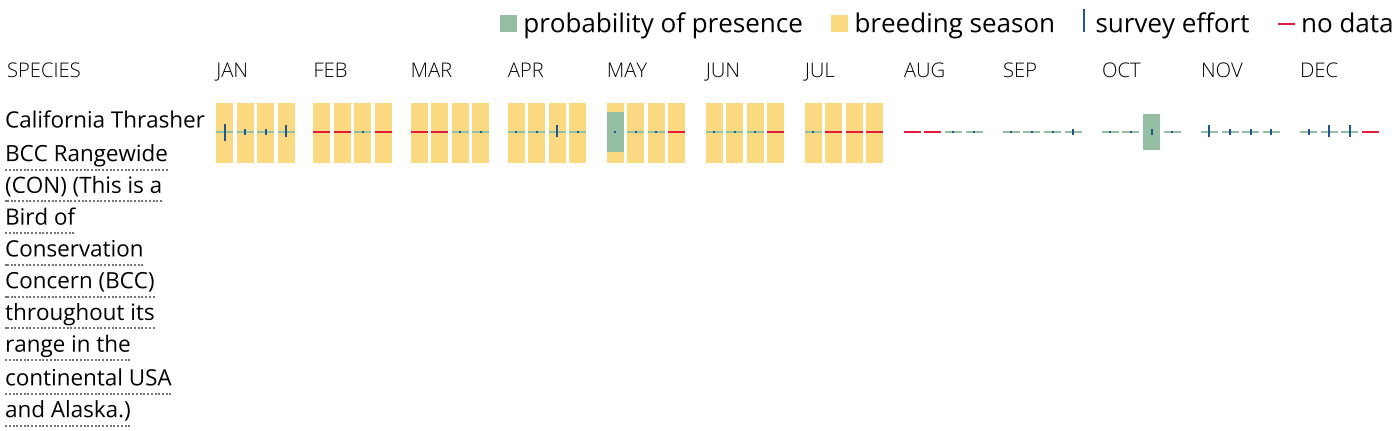
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

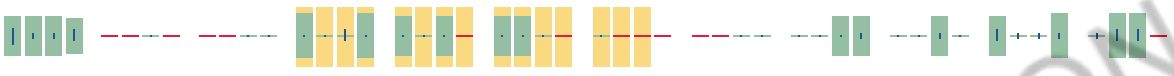
No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

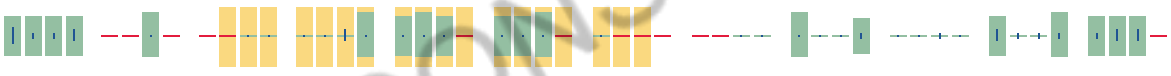


Golden Eagle Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

Nuttall's Woodpecker BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Oak Titmouse BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Wrentit BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Yellow-billed Magpie BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds

guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid

or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER EMERGENT WETLAND

PEM1A

FRESHWATER FORESTED/SHRUB WETLAND

PFOA

FRESHWATER POND

PUBHh

RIVERINE

R4SBC

A full description for each wetland code can be found at the National Wetlands Inventory website

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.