

Appendix B-2

Jurisdictional Delineation for the Proposed Shiloh Medical West Project
and Associated Off-site Street Improvements located in the City of
Victorville, San Bernardino County, California

ELMT Consulting

February 26, 2024



February 26, 2024

MARTINEZ + OKAMOTO ARCHITECTS, INC.

15487 Seneca Road, #203

Victorville, 92392

SUBJECT: Jurisdictional Delineation for the Proposed Shiloh Medical West Project and Associated Off-site Street Improvements located in the City of Victorville, San Bernardino County, California

Introduction

ELMT Consulting (ELMT) conducted a Delineation of State and Federal Jurisdictional Waters for the proposed Shilo Medical West Project and associated off-site street improvements located in the City of Victorville, San Bernardino County, California. This delineation was prepared in order to document the jurisdictional authority of the U.S. Army Corps of Engineers' (Corps), the Regional Water Quality Control Board's (Regional Board), and the California Department of Fish and Wildlife's (CDFW) pursuant to Sections 401 and 404 of the Federal Clean Water Act (CWA), the California Porter-Cologne Water Quality Control Act, and Section 1600 of the Fish and Game Code. The fieldwork for this delineation was conducted on February 22, 2024.

This report explains the methodology utilized throughout the course of the delineation, defines the jurisdictional authority of the regulatory agencies, and documents the findings made by ELMT. This report presents ELMT's determination of jurisdictional boundaries using the most up-to-date regulations, written policy, and guidance provided by the regulatory agencies.

Project Location

The project site and off-site street improvement area are generally located north of State Route 18, east of United States Route 395, West of Interstate 15, and south of George Airforce Base in the City of Victorville, San Bernardino County, California. The site and off-site street improvement area are depicted on the Adelanto quadrangle of the United States Geological Survey's (USGS) 7.5-minute map series within Section 22 of Township 5 North, Range 5 West. Specifically, the project site itself is bounded to the south by Palmdale Road and north by Aster Road and is located within Assessor Parcel Number 3103-561-20, and the proposed off-site street improvement area are located within and along portions of Aster Road that occur between Cantina Street (western limits) and the northeast corner of the project site (eastern limits). Refer to Exhibits 1-3 in Attachment A.

Project Description

The project proposes the development of a medical facility complex comprised of 2-story office/medical building, a family practice building, medical lab, pharmacy, and coffee shop with associated parking and infrastructure. In addition, the project includes off-site street improvements within Aster Road between Cantina Street and the northeast corner of the proposed complex. Refer to Attachment B, *Site Plan*.

Methodology

ELMT field staff conducted a thorough review of relevant literature and materials in order to preliminarily identify potential jurisdictional features occurring on or within the vicinity of the project site. In addition, a field investigation was conducted to verify existing conditions and document the extent of jurisdictional features within the boundaries of the project site.

Literature Review

Prior to conducting the field visit, a review of relevant literature and materials was conducted in order to preliminarily identify potential jurisdictional features occurring on or within the vicinity of the project site. In addition, the following resources were reviewed prior to conducting the field investigation:

- CDFW's *A Review of Stream Processes and Forms in Dryland Watersheds* (2010);
- Corps Arid West Regional Supplement (Version 2.0) to the Corps of Engineers Wetland Delineation Manual (2008);
- Corps Navigable Waters Protection Rule: Definition of "Waters of the United States" (2020)
- Corps Arid West Regional Wetland Plant List (2016);
- Federal Emergency Management Agency Flood Insurance Rate Map;
- Google Earth Aerials (1985 – 2023);
- State Wetland Definition and Procedures for Discharges of Dredge or Fill Material to Waters of the State (2021)
- United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Custom Soil Resource Report for Southwestern San Bernardino County;
- USDA NRCS Hydric Soils List of California;
- United States Fish and Wildlife Service National Wetlands Inventory; and
- Water Quality Control Plan for the Santa Ana River Basin.

Field Investigation

ELMT biologist Jacob H. Lloyd Davies surveyed the project site on February 22, 2024, to verify existing conditions and document the extent of jurisdictional features (e.g., wetlands, streambed, and riparian vegetation) within the boundaries of the project site. While in the field, jurisdictional areas and associated plant communities were mapped onto a base map at a scale of 1" = 50' using topographic contours and visible landmarks as guidelines. Common plant species observed during the field survey were identified by visual characteristics and morphology in the field and recorded in a field notebook. Unusual and less familiar plants were identified in the laboratory using taxonomical guides. Taxonomic nomenclature used in this study follows the 2012 Jepson Manual. Data points were obtained with a Garmin Map 62 Global Positioning System and used to record and identify jurisdictional boundaries, soils samples, and photograph locations. This data was then transferred via USB port as a .shp file and added to the project's jurisdictional map. The jurisdictional map and associated acreage amounts were prepared and quantified in ESRI ArcMap Version 10.

ELMT carefully assessed the site for depressions, inundation, presence of hydrophytic vegetation, staining, cracked soil, ponding, and indicators of active surface flow and corresponding physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of

terrestrial vegetation, the presence of litter and debris. Suspected jurisdictional areas were checked for the presence of definable channels, soils, and hydrology.

Site Conditions

The project site is located near the middle of the southern portion of the Mojave Watershed (HUC 18090208). The Mojave Watershed is a large, closed basin in the western Mojave Desert that occurs within central and western San Bernardino County and drains approximately 4,500 square miles. The primary geographic and hydrologic feature of the Mojave Watershed is the Mojave River, which occurs approximately 9.8 miles to the west of the site. The headwaters of the Mojave River are in the San Bernardino Mountains, which annually receives greater than forty inches of precipitation at its highest elevations. Much of the winter precipitation in the San Bernardino Mountains falls in the form of snow, which provides spring recharge to the Mojave River system. This results in an annual recharge to the Mojave River of approximately 75,000 acre-feet. The Mojave River transects the watershed north and east to its terminus at Silver Lake, just north of the Community of Baker. South of Mojave Forks Dam, the Mojave River is fed by the West Fork Mojave River to the west, which also forms the Mojave River Forks Reservoir, and Deep Creek to the east. Elevations within the watershed range from 8,500 feet above mean sea level at Butler Peak in the San Bernardino Mountains to 1,400 feet above mean sea level at Afton Canyon near the terminus of the Mojave River. There are multiple intermittent or ephemeral waterways in the eastern portion of the watershed which convey surface water runoff to Silver Lake during extreme rain events. Silver Lake remains dry most of the year. Aside from extreme rain events, the Mojave River channel is typically dry downstream of the Mojave Forks Dam, except in certain locations where groundwater is forced to the surface by geologic influences.

Including both the project site and off-site street improvement area, on-site elevation ranges from approximately 3,108 to 3,116 feet and the slopes marginally from southwest to northeast. The site and off-site street improvement area are generally flat with the exception of an incised drainage in the western portion of the off-site street improvement area.

Based on the NRCS USDA Web Soil Survey, the project site and off-site street improvement area is underlain by Cajon sand (0 to 2 percent slopes). While some of the soils supported within the site and off-site street improvement area are generally undisturbed, most soils have been mildly to significantly disturbed and compacted due to disturbances associated with off-highway recreational vehicle use, regular vehicle traffic and parking, and surrounding development. Based on the NRCS Hydric Soils List of California, Cajon sand (0 to 2 percent slopes) has been listed as hydric in San Bernardino County, California, Mojave River Area.

The U.S. Fish and Wildlife Service's (USFWS) National Wetland Inventory (NWI) maps and the USGS National Hydrography Dataset were reviewed to determine if any blueline streams or riverine resources have been documented on the project site or off-site street improvement area. Based on this review, no freshwater resources have been mapped within or adjacent to the project site or off-site street improvement area. Refer to Attachment D, *Documentation*.

Drainage Features

A single ephemeral drainage feature (Drainage A) was observed near the middle of the off-site street

improvement area (Aster Road extension), approximately 430 feet east of Cantina Street. No drainage features were observed within the proposed project footprint (refer to Exhibit 4, *Jurisdictional Areas*). Drainage A is an ephemeral drainage feature that only receives flows in direct response to storm events, and generally flows south to north.

Upstream portions of Drainage A, to the south, receive flows from a box culvert beneath Palmdale Road, approximately 560 feet south of the off-site street improvement area. Within the off-site street improvement area, Drainage A conveys flows from south to north for 36 feet across the width of the proposed improvements to Aster Road. Downstream portions of Drainage A (north of the offsite street improvement area) convey flows to the northeast through an array of braided channels until ultimately terminating at the Mojave River.

Drainage A supports the same upland species observed elsewhere in the creosote bush scrub that occurs in the surrounding area, including creosote (*Larrea tridentata*), burrowbush (*Ambrosia dumosa*), fiddleneck (*Amsinckia tessellata*), spiny saltbush (*Atriplex confertiflora*), California mustard (*Caulanthus lasiophyllus*), rubber rabbitbrush (*Ericameria nauseosa*), and paperbag bush (*Scutellaria mexicana*). The bottom of the drainage is generally barren following a storm that passed through the area in the days preceding the field investigation. In addition, considerable trash and discarded items litter the length of the drainage. None of the plant species observed within or adjacent to the drainage during the field investigation are threatened, endangered, or have special status in California.

Findings

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates discharge of dredge and/or fill materials into “waters of the United States” pursuant to Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the Regional Board regulates discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act and the CDFW regulates alterations to streambed and associated plant communities pursuant to Section 1602 of the California Fish and Game Code.

United States Army Corps of Engineers

The on-site drainage feature is not a relatively permanent, standing, or continuously flowing body of water and, therefore, will not qualify as waters of the United States under the regulatory authority of the Corps (*Sackett v. EPA* (2022) 143 S. Ct. 1322, 1336).

Federal Wetlands

In order to qualify as wetland, a feature must exhibit all three wetland parameters (i.e., vegetation, soils, and hydrology) described in the Corps Arid West Regional Supplement. Based on the results of the field investigation, the soils were rocky and sandy with no ponding water, and it was determined that the basin would not support hydric soil conditions. Therefore, no areas on the project site met all three wetland parameters.

Regional Water Quality Control Board

The on-site drainage features exhibit characteristics consistent with the Regional Board’s methodology and

would likely be considered jurisdictional waters of the State. Approximately 0.006 acres (62 linear feet) of non-wetland waters of the State occur on-site.

State Wetlands

Under the State Water Resources Control Board State Wetland Definition, an area is a wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation. Based on the results of the field delineation, it was determined that no areas within the project site or off-site street improvement area meet the State Wetland Definition. Therefore, no state wetland features exist within the project site or off-site street improvement area.

California Department of Fish and Wildlife

Drainage A exhibits characteristics consistent with CDFW's methodology and would be considered CDFW streambed. A total of 0.016 acre (62 linear feet) of CDFW jurisdictional streambed is supported within the project site.

Conclusion and Recommendations

The ephemeral drainage feature within the offsite street improvement area will not qualify as waters of the United States under the regulatory authority of the Corps. However, the drainage feature will qualify as waters of the State and fall under the regulatory authority of the Regional Board and CDFW. Impacts to Drainage A will require the following:

United States Army Corps of Engineers

The Corps regulates discharges of dredged or fill materials into waters of the United States and wetlands pursuant to Section 404 of the CWA. No Corps jurisdictional areas were identified within the project site and a CWA Section 404 permit would not be required for the proposed project. Impacts to Drainage A will likely require a Corps Approved Jurisdictional Determination or Waiver.

Regional Water Quality Control Board

The Regional Board regulates discharges to surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act. Impacts to Drainage A will require a Report of Waste Discharge prior to project implementation. Therefore, it will be necessary for the applicant to acquire a Report of Waste Discharge prior to impacts occurring within Regional Board jurisdictional areas. The Regional Board also requires that California Environmental Quality Act (CEQA) compliance be obtained prior to obtaining the Certification. A Regional Board Application fee is required with the application package and is calculated based on the acreage and linear feet of jurisdictional impacts.

California Department of Fish and Wildlife

Pursuant to Section 1602 of the California Fish and Game Code, the CDFW regulates any activity that will divert or obstruct the natural flow or alter the bed, channel, or bank (which may include associated biological resources) of a river or stream. Therefore, impacts to the on-site jurisdictional areas will require a Section 1602 Streambed Alteration Agreement from the CDFW prior to project implementation. The

notification will require a processing fee which is based on the term and cost of the proposed Project. It should also be noted that the CDFW requires that the payment of the process fee be paid and CEQA compliance be obtained prior to the issuance of the final Section 1602 Streambed Alteration Agreement.

Please do not hesitate to contact Tom McGill at (951) 285-6014 or tmcgill@elmtconsulting.com or Travis McGill at (909) 816-1646 or travismcgill@elmtconsulting.com should you have any questions or require further information.

Sincerely,



Travis J. McGill | Director



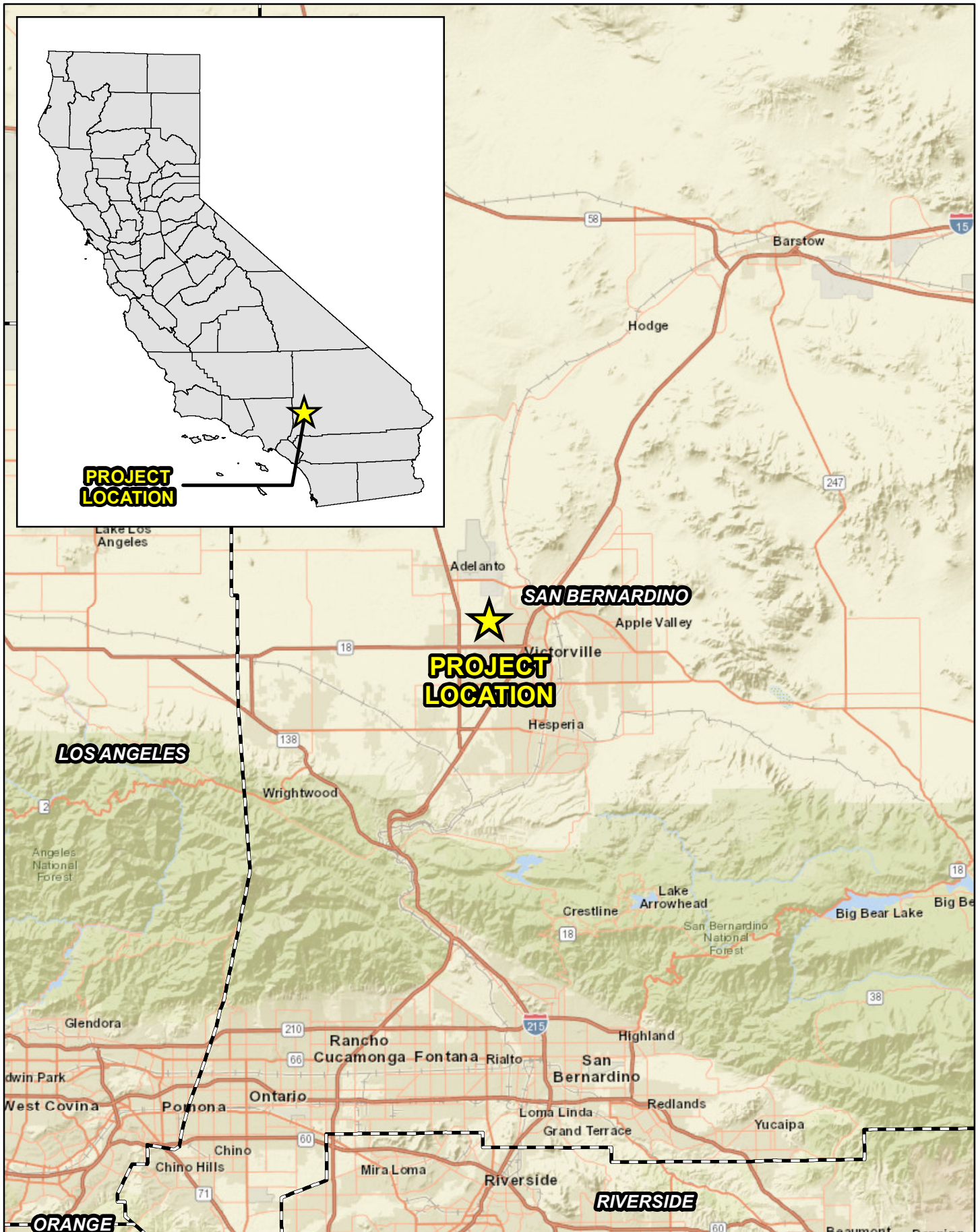
Jacob H. Lloyd Davies | Associate Biologist

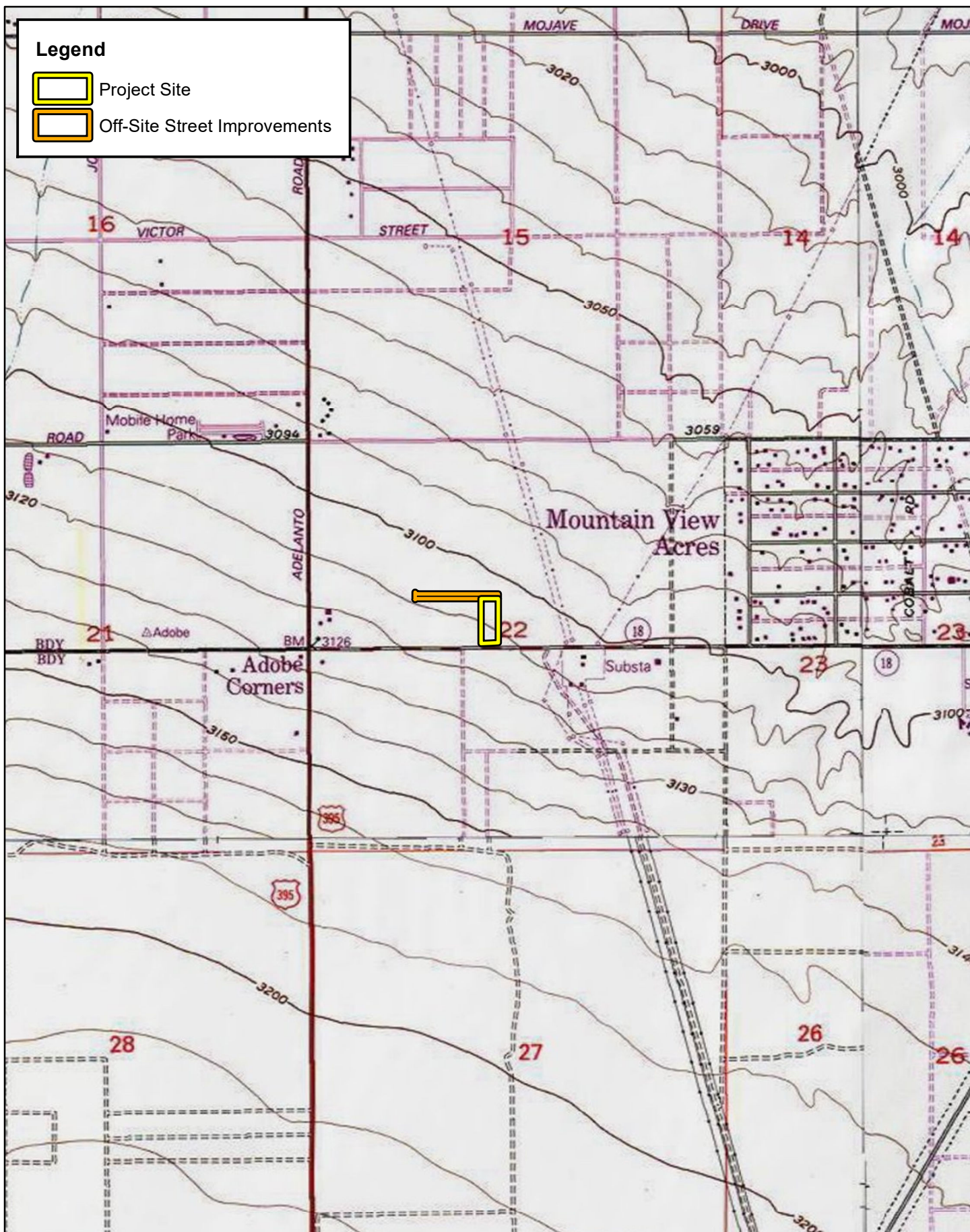
Attachments:

- A. *Project Exhibits*
- B. *Site Plan*
- C. *Site Photographs*
- D. *Methodology*
- E. *Documentation*

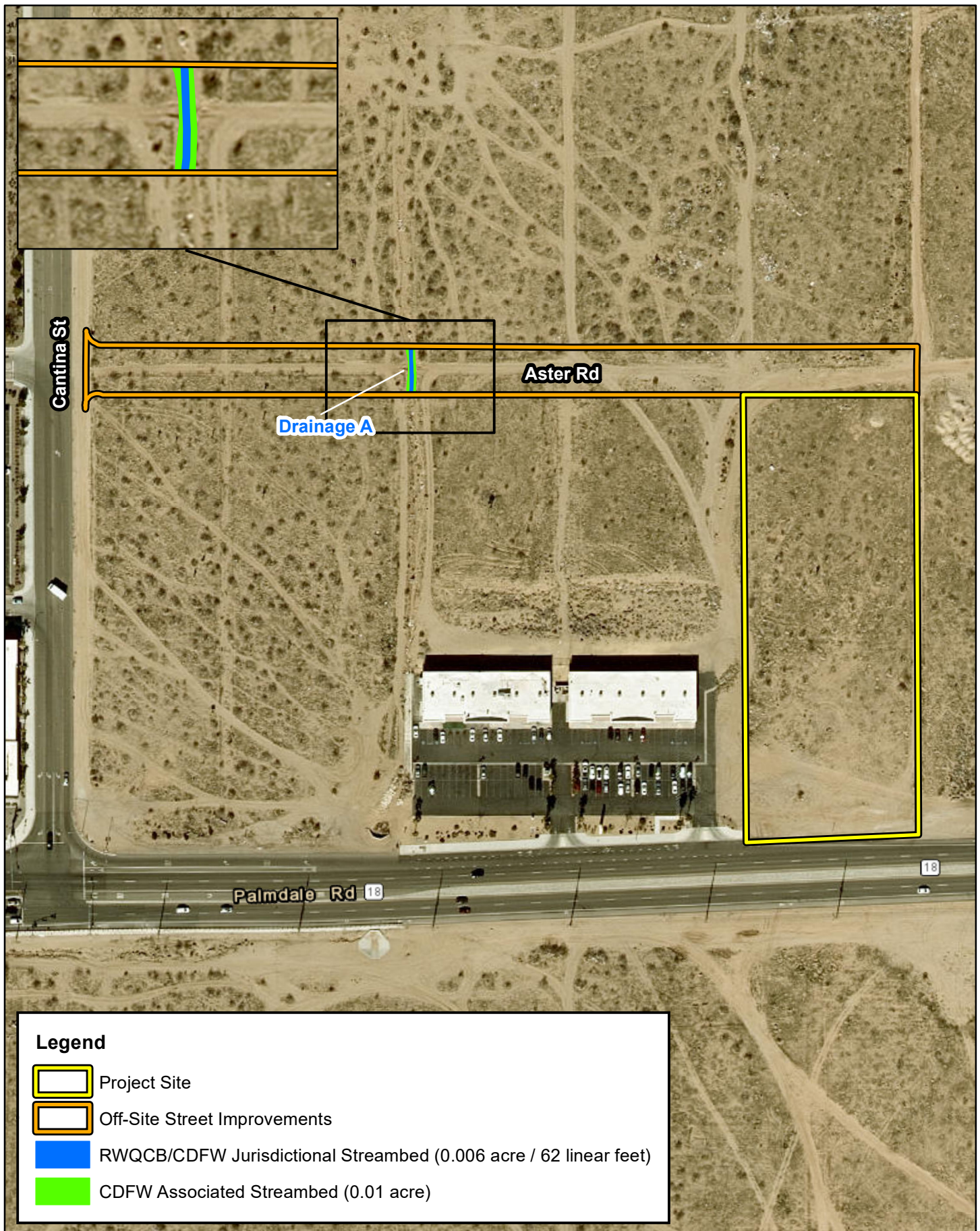
Attachment A

Project Exhibits









Attachment B

Site Plan

SIGNAGE NOTE:

ALL PROPOSED SIGNAGE SHALL COMPLY WITH TITLE 18 AND REQUIRE SEPERATE SUBMITTAL, REVIEW, APPROVAL AND PERMIT OF THE PLANNING DEPARTMENT.

OWNERS SIGN COMPANY TO SUBMIT A MASTER SIGN PLAN FOR ALL SITE SIGNAGE INCLUDING BUT NOT LIMITED TO MONUMENT SIGNS, DIRECTIONS SIGNS, BUILDING SIGNS, AND TENANT SIGNS.

LANDSCAPING TABULATION:

A MINIMUM OF 3% OF PARKING LOT SURFACE AREA, EXCLUSIVE OF 5' WIDE FRONTAGE PLANTINGS SHALL BE LANDSCAPED. ALL LANDSCAPING SHALL CONFORM TO CITY APPROVED DESIGN STANDARDS.

LANDSCAPE REQUIRED:	3% OF 71,485 S.F. = 2,145 S.F.
TOTAL LANDSCAPE PROVIDED:	10,978 S.F.
5' WIDE STREET FRONTAGE PER CITY STANDARD:	2,474 S.F.
INTERIOR LANDSCAPE:	7,993 S.F.
PERIMETER LANDSCAPE:	8,506 S.F.
TOTAL APPLIED TOWARD 3% REQUIREMENT:	16,499 S.F.

PARKING TABULATION

REQUIRED: ONE SPACE PER 200 S.F. OF GROSS BLDG. AREA (COMMERCIAL); ONE SPACE PER 100 S.F. OF GROSS BLDG. AREA (RESTAURANT); CREDIT-1 SPACE PER LINEAL FEET OF DRIVE THRU AREA, MAX CREDIT OF 2 SPACES	
PHASE I-BLDG 'A'	
PROPOSED AREA:	MEDICAL OFFICE - 6,267 S.F. LAB - 1,56 S.F. PHARMACY - 1,260 S.F. COMMON AREA - 149 S.F. (6,267 + 1,56 + 1,260 + 149) = 8,832 S.F. / 200 = 45 SPACES
COFFEE SHOP - 1,274 S.F. / 100 = 13-2 DRIVE THRU CREDIT = 11 SPACES	
TOTAL PARKING REQUIRED:	56 SPACES
PROVIDED:	
STANDARD PARKING:	12 SPACES
ACCESSIBLE PARKING:	6 SPACES
TOTAL PARKING PROVIDED:	18 SPACES
PHASE 2-BLDG 'B'	
PROPOSED AREA:	20,729 S.F. / 200 = 104
TOTAL PARKING REQUIRED:	104 SPACES
PROVIDED:	
STANDARD PARKING:	78 SPACES
ACCESSIBLE PARKING:	5 SPACES
TOTAL PARKING PROVIDED:	83 SPACES
TOTAL PARKING REQUIRED (PHASE 1&2):	160 SPACES
TOTAL PARKING PROVIDED (PHASE 1&2):	161 SPACES

SITE DATA:

GROSS AREA:	9.26 AC. (142,024 S.F.)
NET AREA:	9 AC. (130,714 S.F.)
PROPOSED BLDG. COVERAGE:	(21%) 64 AC. (30,111 S.F.)
BUILDING DATA:	
PHASE I-BLDG 'A'	
BUILDING AREA:	10,111 S.F.
CONSTRUCTION TYPE:	VB
HEIGHT:	28'-0"
FIRE SPRINKLER:	YES
OCCUPANCY:	B - BUSINESS
MAX. ALLOWABLE AREA:	UNLIMITED W/FIRE SPINKLER
BUILDING / LOT F.A.R.	10,111 S.F. / 130,714 S.F. = 0%
PHASE 2-BLDG 'B'	
BUILDING AREA:	20,729 S.F.
CONSTRUCTION TYPE:	VB
HEIGHT:	44'-0"
FIRE SPRINKLER:	YES
OCCUPANCY:	B - BUSINESS
MAX. ALLOWABLE AREA:	UNLIMITED W/FIRE SPINKLER
BUILDING / LOT F.A.R.	30,840 S.F. / 130,714 S.F. = 24%
EXISTING ZONING:	C1 (NEIGHBORHOOD SERVICE COMMERCIAL)
PROPOSED SANITATION:	PUBLIC SEWER

LEGAL DESCRIPTION

APN: 3103-561-20-0-000

PARCEL 4 OF PARCEL MAP 2460, IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 21 PAGE 5 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, EXCEPTING THEREFROM THAT PORTION CONVEYED TO THE STATE OF CALIFORNIA BY GRANT DEED RECORDED AUGUST 13, 1992, AS INSTRUMENT NO. 92-335367, OFFICIAL RECORDS. ALSO EXCEPTING THEREFROM THE MINERALS OIL, GAS, AND OTHER HYDROCARBON SUBSTANCES LYING BELOW THE SURFACE OF SAID LAND.

PROJECT APPLICANT / OWNER

PAUL EARLE
12484 HESPERIA ROAD
VICTORVILLE, CA 92345
PHONE: (760) 810-2224
EMAIL: PEARLE@SHILOHMC.COM

PLANS PREPARED BY & AGENT

MARTINEZ + OKAMOTO ARCHITECTS, INC.
ROBERT A. MARTINEZ AIA, C.A.S.P.
14467 PARK AVE
VICTORVILLE, CA 92342
OFFICE: (760) 241-7858
FAX: (760) 241-7854

UTILITY COMPANIES

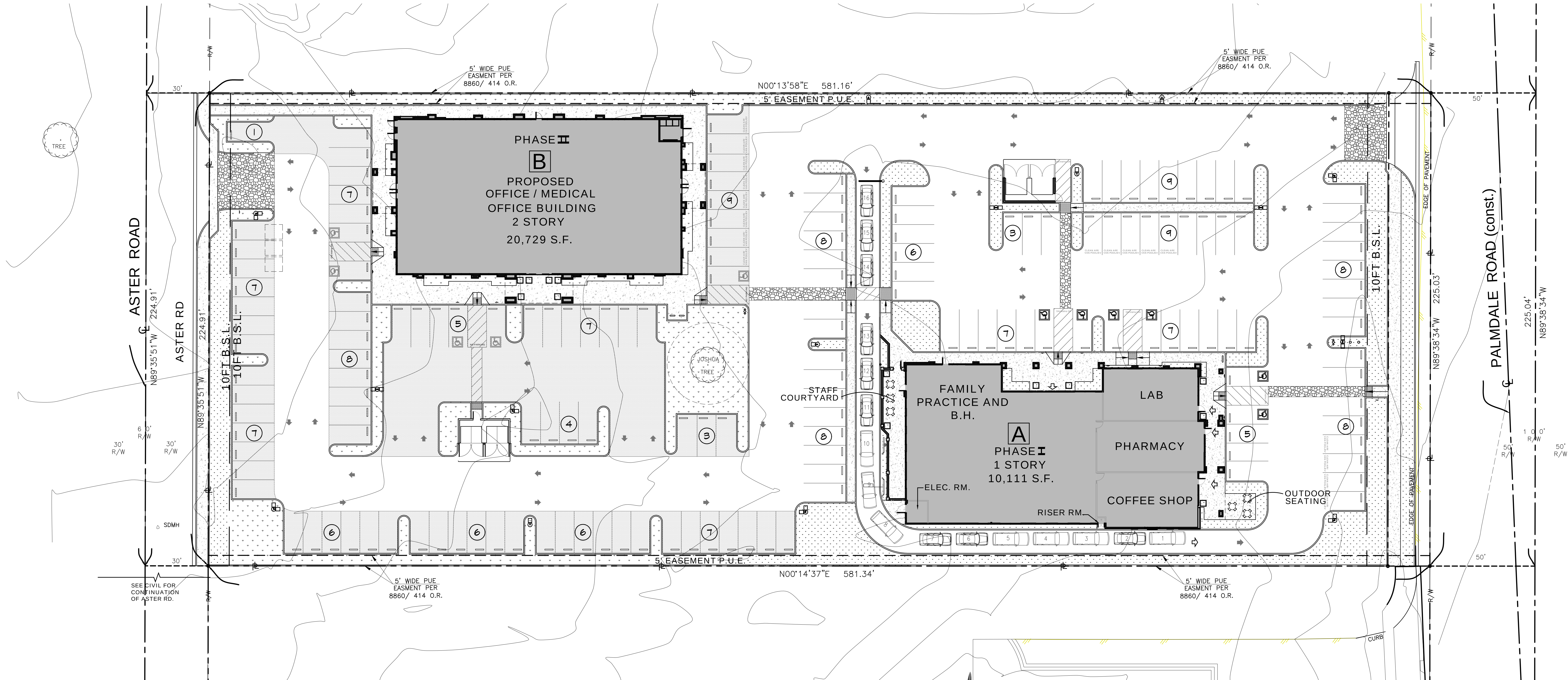
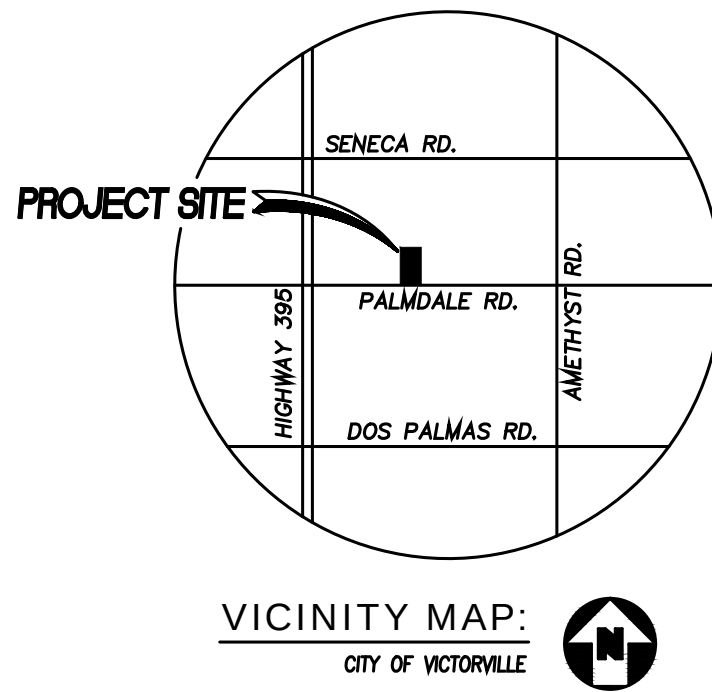
ELECTRIC	TELEPHONE
SO. CALIFORNIA EDISON (EDISON INTERNATIONAL) (800) 655-4555	FRONTIER COMMUNICATIONS 16478 MOJAVE DR VICTORVILLE, CA (760) 264-4307
GAS	WATER
SOUTHWEST GAS CORP. 18471 MARIPOSA ROAD VICTORVILLE, CA (800) 427-2220	CITY OF VICTORVILLE 14345 CIVIC DR VICTORVILLE, CA (760) 455-5000
TRASH	TV
VICTORVILLE DISPOSAL 14345 CIVIC DR VICTORVILLE, CA (760) 245-8607	CHARTER COMMUNICATIONS 16461 MOJAVE DRIVE VICTORVILLE, CA (760) 241-7848

GREEN BUILDING NOTES:

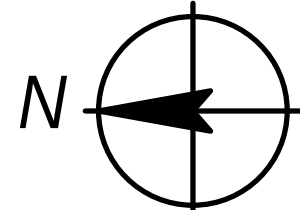
1. BUILDING IS TO HAVE SOLAR PANELS THROUGHOUT ROOF (SEPARATE SUBMITTAL)
2. TWO ELECTRIC VEHICLE CHARGING STATIONS
3. BICYCLE PARKING
4. DROUGHT TOLERANT LANDSCAPE
5. DRIP SYSTEM IRRIGATION
6. LOW FLOW WATER CLOSETS
7. LED LIGHTING
8. RECYCLING TRASH RECEPTACLE
9. SUN SHADES AT SOUTH STOREFRONT
10. WIND SCREENS AT FRONT ENTRY POINTS
11. SKYLIGHT FOR 1ST FLOOR TENANT

LEGEND:

---	PROPERTY LINE
---	STREET CENTER LINE
---	(E) PUBLIC UTILITY EASEMENT
---	PUBLIC ACCESSIBLE PATH OF TRAVEL
[Pattern]	LANDSCAPED AREA SEE NOTES
[Pattern]	CONCRETE
[Pattern]	STAMPED COLOR CONCRETE



OVERALL COMPLETED
PHASING SITE PLAN
SCALE: 1"=20'-0"



REVISION BY

SHILOH WEST MEDICAL
NEW CONSTRUCTION
PALMDALE RD.
VICTORVILLE, CA.



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architects, inc.
15487 SENECA ROAD, SUITE 203
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FAX (760) 241-7854
BUS. (760) 241-7858

M:OA
architects

OVERALL COMPLETED
PHASING SITE PLAN

DATE: 11/18/22
SCALE: AS SHOWN
DRAWN BY: LH
JOB: 21-23
SHEET: SP1.0

Attachment C

Site Photographs



Photograph 1: From the origin of on-site portions of Drainage A looking north (downstream).



Photograph 2: From the terminus of on-site portions of Drainage A looking south (upstream).



Photograph 3: Upstream (south) of the off-site street improvement area, Drainage A originates at a box culvert beneath Palmdale Road.



Photograph 4: Downstream (north) of the off-site street improvement area, Drainage A conveys to the northeast until terminating at the Mojave River.

Attachment D

Documentation



U.S. Fish and Wildlife Service

National Wetlands Inventory

Shilo Medical West



U.S. Fish and Wildlife Service, National Standards and Support Team,
wetlands_team@fws.gov

April 17, 2024

Wetlands

	Estuarine and Marine Deepwater		Freshwater Emergent Wetland		Lake
	Estuarine and Marine Wetland		Freshwater Forested/Shrub Wetland		Other
			Freshwater Pond		Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Attachment E

Methodology

WATERS OF THE UNITED STATES

Section 404 of the Clean Water Act

In accordance with the Revised Definition of “Waters of the United States”; Conforming (September 8, 2023), “waters of the United States” are defined as follows:

(a) *Waters of the United States* means:

(1) Waters which are:

- (i) Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- (ii) The territorial seas; or
- (iii) Interstate waters;

(2) Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under [paragraph \(a\)\(5\)](#) of this section;

(3) Tributaries of waters identified in paragraph (a)(1) or (2) of this section that are relatively permanent, standing or continuously flowing bodies of water;

(4) Wetlands adjacent to the following waters:

- (i) Waters identified in [paragraph \(a\)\(1\)](#) of this section; or
- (ii) Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3) of this section and with a continuous surface connection to those waters;

(5) Intrastate lakes and ponds not identified in paragraphs (a)(1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3) of this section

(b) The following are not “waters of the United States” even where they otherwise meet the terms of [paragraphs \(a\)\(2\)](#) through [\(5\)](#) of this section:

(1) Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act;

(2) Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA;

(3) Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;

- (4) Artificially irrigated areas that would revert to dry land if the irrigation ceased;
- (5) Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;
- (6) Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;

(7) Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States; and

(8) Swales and erosional features (*e.g.*, gullies, small washes) characterized by low volume, infrequent, or short duration flow.

(c) In this section, the following definitions apply:

(1) **Wetlands** means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

(2) **Adjacent** means having a continuous surface connection

(3) **High tide line** means the line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

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

(5) **Tidal waters** means those waters that rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by hydrologic, wind, or other effects.

WETLANDS

For this project location, Corps jurisdictional wetlands are delineated using the methods outlined in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, Version 2.0* (Corps 2008). This document is one of a series of Regional Supplements to the Corps Wetland Delineation Manual (Corps 1987). The identification of wetlands is based on a three-parameter approach involving indicators of hydrophytic vegetation, hydric soil, and wetland hydrology. In order to be considered a wetland, an area must exhibit at least minimal characteristics within these three (3) parameters. The Regional Supplement presents wetland indicators, delineation guidance, and other information that is specific to the Arid West Region. In the field, vegetation, soils, and evidence of hydrology are examined using the methodology listed below and documented on Corps wetland data sheets, when applicable. It should be noted that both the Regional Board and the CDFW jurisdictional wetlands encompass those of the Corps.

Vegetation

Nearly 5,000 plant types in the United States may occur in wetlands. These plants, often referred to as hydrophytic vegetation, are listed in regional publications by the U.S. Fish and Wildlife Service (USFWS). In general, hydrophytic vegetation is present when the plant community is dominated by species that can tolerate prolonged inundation or soil saturation during growing season. Hydrophytic vegetation decisions are based on the assemblage of plant species growing on a site, rather than the presence or absence of particular indicator species. Vegetation strata are sampled separately when evaluating indicators of hydrophytic vegetation. A stratum for sampling purposes is defined as having 5 percent or more total plant cover. The following vegetation strata are recommended for use across the Arid West:

- ◆ *Tree Stratum:* Consists of woody plants 3 inches or more in diameter at breast height (DBH), regardless of height;
- ◆ *Sapling/shrub stratum:* Consists of woody plants less than 3 inches DBH, regardless of height;
- ◆ *Herb stratum:* Consists of all herbaceous (non-woody) plants, including herbaceous vines, regardless of size; and,
- ◆ *Woody vines:* Consists of all woody vines, regardless of size.

The following indicator is applied per the test method below.¹ Hydrophytic vegetation is present if any of the indicators are satisfied.

¹ Although the Dominance Test is utilized in the majority of wetland delineations, other indicator tests may be employed. If one indicator of hydric soil and one primary or two secondary indicators of wetland hydrology are present, then the Prevalence Test (Indicator 2) may be performed. If the plant community satisfies the Prevalence Test, then the vegetation is hydric. If the Prevalence Test fails, then the Morphological Adaptation Test may be performed, where the delineator analyzes the vegetation for potential morphological features.

Indicator 1 – Dominance Test

Cover of vegetation is estimated and is ranked according to their dominance. Species that contribute to a cumulative total of 50% of the total dominant coverage, plus any species that comprise at least 20% (also known as the “50/20 rule”) of the total dominant coverage, are recorded on a wetland data sheet. Wetland indicator status in California (Region 0) is assigned to each species using the *National Wetland Plant List, version 2.4.0* (Corps 2012). If greater than 50% of the dominant species from all strata were Obligate, Facultative-wetland, or Facultative species, the criteria for wetland vegetation is considered to be met. Plant indicator status categories are described below:

- ◆ *Obligate Wetland (OBL)*: Plants that almost always occur in wetlands;
- ◆ *Facultative Wetland (FACW)*: Plants that usually occur in wetlands, but may occur in non-wetlands;
- ◆ *Facultative (FAC)*: Plants that occur in wetlands and non-wetlands;
- ◆ *Facultative Upland (FACU)*: Plants that usually occur in non-wetlands, but may occur in wetlands; and,
- ◆ *Obligate Upland (UPL)*: Plants that almost never occur in wetlands.

Hydrology

Wetland hydrology indicators are presented in four (4) groups, which include:

Group A – Observation of Surface Water or Saturated Soils

Group A is based on the direct observation of surface water or groundwater during the site visit.

Group B – Evidence of Recent Inundation

Group B consists of evidence that the site is subject to flooding or ponding, although it may not be inundated currently. These indicators include water marks, drift deposits, sediment deposits, and similar features.

Group C – Evidence of Recent Soil Saturation

Group C consists of indirect evidence that the soil was saturated recently. Some of these indicators, such as oxidized rhizospheres surrounding living roots and the presence of reduced iron or sulfur in the soil profile, indicate that the soil has been saturated for an extended period.

Group D – Evidence from Other Site Conditions or Data

Group D consists of vegetation and soil features that indicate contemporary rather than historical wet conditions, and include shallow aquitard and the FAC-neutral test.

If wetland vegetation criteria is met, the presence of wetland hydrology is evaluated at each transect by recording the extent of observed surface flows, depth of inundation, depth to saturated soils, and depth to free water in the soil test pits. The lateral extent of the hydrology indicators are used as a guide for locating soil pits for evaluation of hydric soils and jurisdictional areas. In portions of the stream where the flow is divided by multiple channels with intermediate sand bars, the entire area between the channels is considered within the OHWM and the wetland hydrology indicator is considered met for the entire area.

Soils

A hydric soil is a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper 16-20 inches.² The concept of hydric soils includes soils developed under sufficiently wet conditions to support the growth and regeneration of hydrophytic vegetation. Soils that are sufficiently wet because of artificial measures are included in the concept of hydric soils. It should also be noted that the limits of wetland hydrology indicators are used as a guide for locating soil pits. If any hydric soil features are located, progressive pits are dug moving laterally away from the active channel until hydric features are no longer present within the top 20 inches of the soil profile.

Once in the field, soil characteristics are verified by digging soil pits along each transect to an excavation depth of 20 inches; in areas of high sediment deposition, soil pit depth may be increased. Soil pit locations are usually placed within the drainage invert or within adjoining vegetation. At each soil pit, the soil texture and color are recorded by comparison with standard plates within a *Munsell Soil Chart* (2009). Munsell Soil Charts aid in designating color labels to soils, based by degrees of three simple variables – hue, value, and chroma. Any indicators of hydric soils, such as organic accumulation, iron reduction, translocation, and accumulation, and sulfate reduction, are also recorded.

Hydric soil indicators are present in three groups, which include:

All Soils

“All soils” refers to soils with any United States Department of Agriculture (USDA) soil texture. Hydric soil indicators within this group include histosol, histic epipedon, black histic, hydrogen sulfide, stratified layers, 1 cm muck, depleted below dark surface, and thick dark surface.

Sandy Soils

“Sandy soils” refers to soil materials with a USDA soil texture of loamy fine sand and coarser. Hydric soil indicators within this group include sandy mucky mineral, sandy gleyed matrix, sandy redox, and stripped matrix.

² According to the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, Version 2.0 (Corps 2008), growing season dates are determined through on-site observations of the following indicators of biological activity in a given year: (1) above-ground growth and development of vascular plants, and/or (2) soil temperature.

Loamy and Clayey Soils

“Loamy and clayey soils” refers to soil materials with a USDA soil texture of loamy very fine sand and finer. Hydric soil indicators within this group include loamy mucky mineral, loamy gleyed matrix, depleted matrix, redox dark surface, depleted dark surface, redox depressions, and vernal pools.

SWANCC WATERS

The term “isolated waters” is generally applied to waters/wetlands that are not connected by surface water to a river, lake, ocean, or other body of water. In the presence of isolated conditions, the Regional Board and CDFW take jurisdiction through the application of the OHWM/streambed and/or the 3 parameter wetland methodology utilized by the Corps.