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ENVIRONMENTAL CONSULTANTS

January 16, 2022
(2018-116.035)

Jennifer Parson
Patton State Hospital
3102 Highland Avenue
Patton, CA 92369

RE: Aquatic Resources Delineation for the Patton State Hospital Water Line Replacement Project

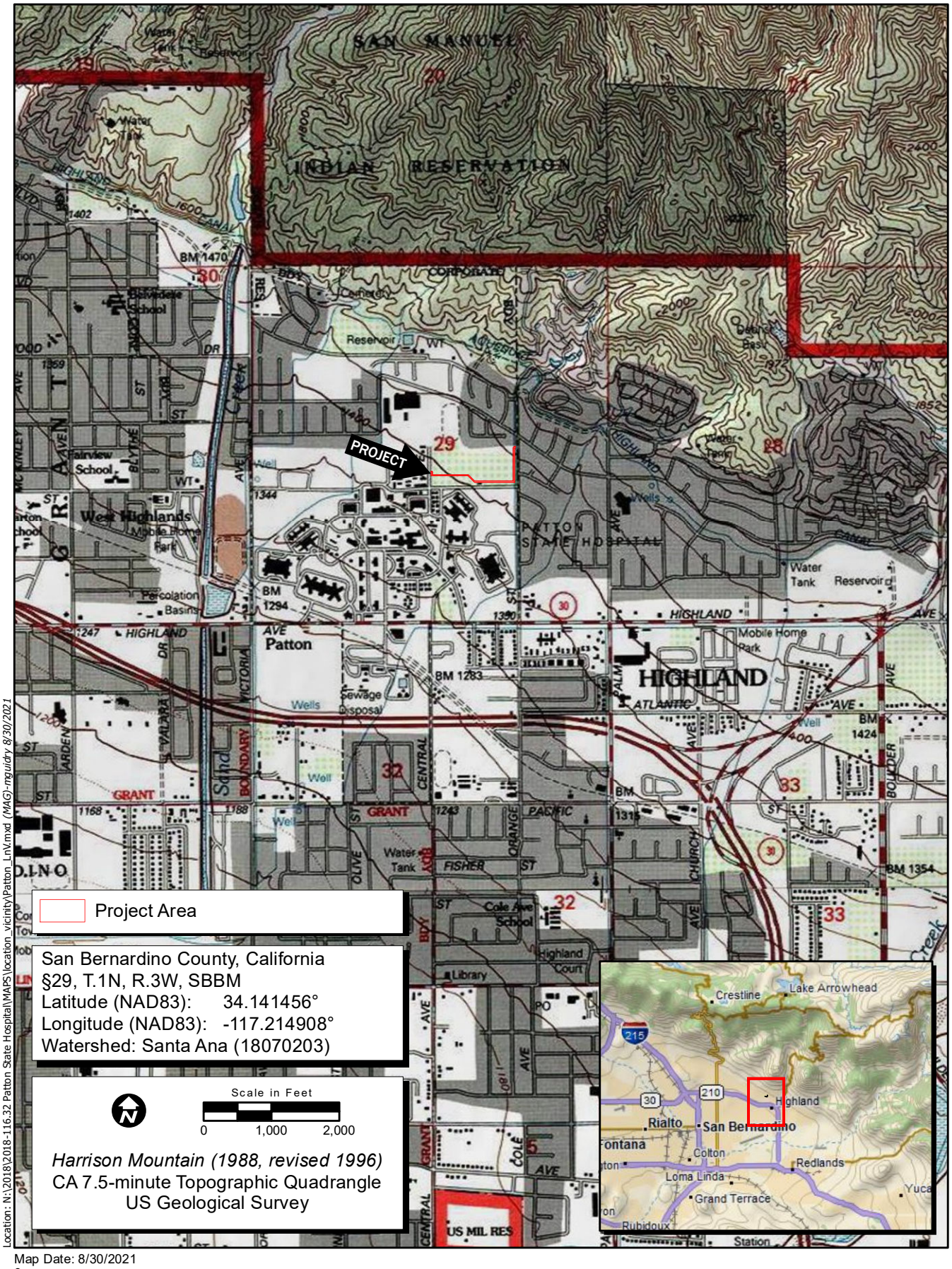
Dear Ms. Parson,

This aquatic resource delineation has been prepared in support of the analysis of the environmental impacts of the Patton State Hospital Waterline Replacement Project (Proposed Project). This document has been prepared to satisfy the California Environmental Quality Act (CEQA) (Pub. Res. Code, Section 21000 *et seq.*) and State CEQA Guidelines (14 CCR 15000 *et seq.*). The delineation identifies resources regulated by the U.S. Army Corps of Engineers (USACE), Santa Ana Regional Water Quality Control Board (RWQCB) and California Department of Fish and Wildlife (CDFW).

Project Location and Description

Patton State Hospital is located in the City of San Bernardino in the community of Patton in San Bernardino County, California at 3102 Highland Avenue (Figure 1. *Project Location and Vicinity*). The facility includes 243 acres and is located approximately 80 miles east of Los Angeles. The Project Site is bordered by Highland Avenue to the south, Victoria Avenue to the west, and Orange Street to the east. Access to the hospital is provided by Highland Avenue; truck and secondary access is provided on Date Street from Victoria Avenue. The Project Site is surrounded by commercial and residential uses. Land uses north of the hospital include single-family residential uses and Serrano Middle School. Land uses east of the hospital include a City of San Bernardino Fire Station and single-family residential uses. Land uses south of the hospital include commercial uses and multi-family residences. Land uses to the west include a flood control channel and stormwater detention basins owned by the County of San Bernardino and single- and multi-family residential land uses.

For the Proposed Project, Patton State Hospital proposes to replace an existing 14-inch diameter, 115-foot-long waterline due to leakage. The waterline replacement would take place in the northeast one-third of the hospital where a solar field, a collection of multiple solar panels that generate electricity as a system, currently exists. The existing waterline is located just north of the eastern portion of the solar field and runs diagonally across the western portion of the solar field.



Map Date: 8/30/2021

Sources:

Figure 1. Project Location and Vicinity

2018-116.32 Patton State Hospital

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A previous biology study identified three drainage channels that traversed the property, running in a north to south direction. These channels were likely built during previous eras when the property and surrounding lands were covered in citrus orchards. ECORP conducted an updated jurisdictional delineation in 2012 to evaluate the three drainages for the development of the aforementioned solar field. This current delineation provides an update to the previous delineations and an analysis of the impacts in the context of current regulatory standards.

Methods

This wetland delineation was conducted in accordance with the *Corps of Engineers Wetlands Delineation Manual* [USACOE 1987] and the *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Arid West Region Supplement Version 2.0) [USACOE 2008]. The boundaries of potential waters of the U.S. were delineated through field assessment, made in conjunction with research of hydrological connectivity and aerial photograph interpretation. A color aerial photograph was used to assist with mapping and ground-truthing. *The Jepson Manual* [Hickman, *ed*. 1993] was used for plant nomenclature and identification.

This report describes potential waters of the U.S. that may be regulated by the USACE under Section 404 of the Clean Water Act. Other waters are non-tidal, perennial, and intermittent watercourses and tributaries to such watercourses [USACOE 1986 a]. The bank-to-bank extent of the channel that contains the water-flow during a normal rainfall year generally serves as a good first approximation of the lateral limit of USACE jurisdiction. The upstream limits of other waters are defined as the point where the "ordinary high water mark" (OHWM) is no longer perceptible. Generally, the extent of RWQCB jurisdiction mirrors that of the USACE jurisdiction, but the exact criteria are contained withing the State Wetland Definitions and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures; State Water Resources Control Board 2019).

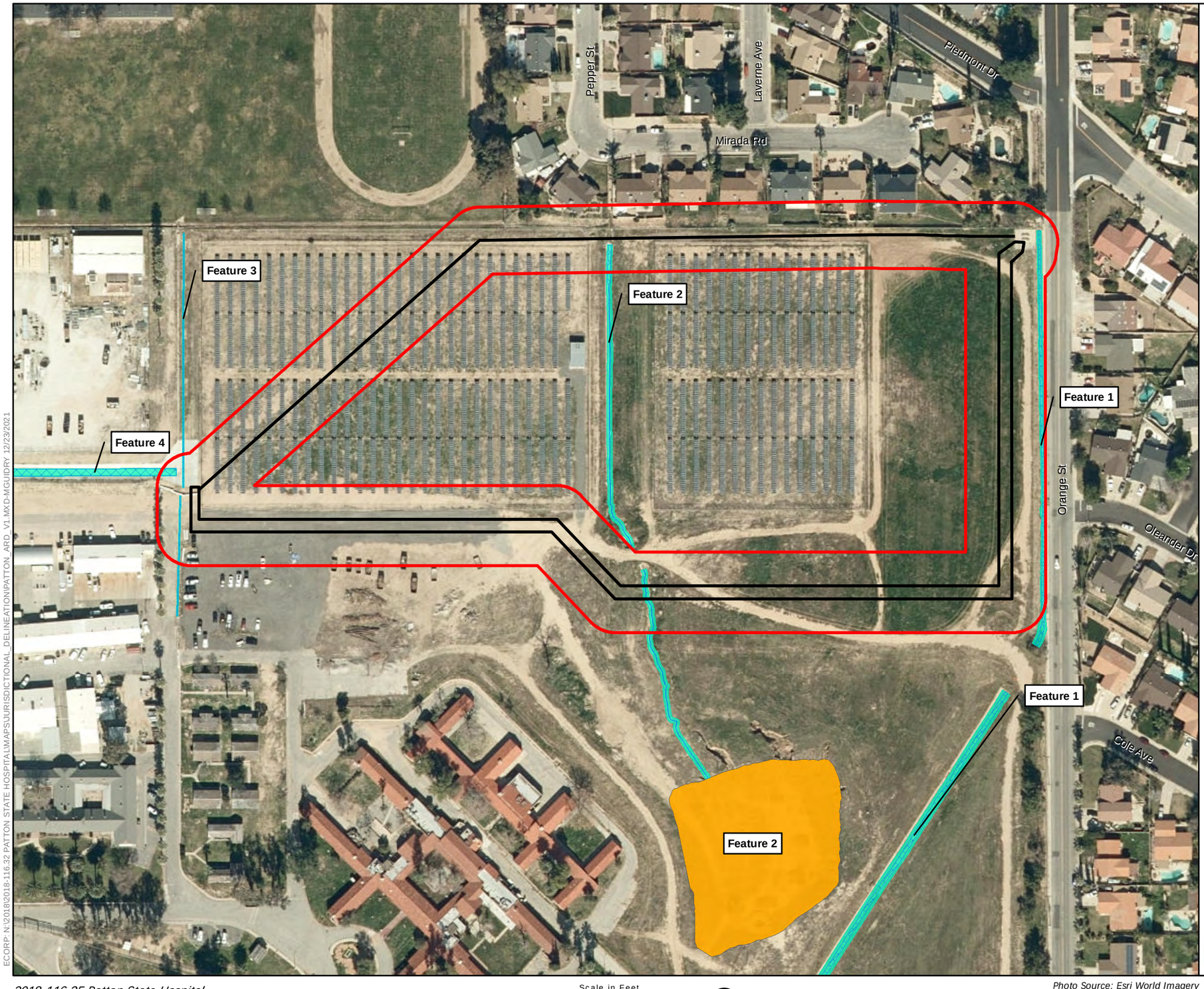
CDFW jurisdiction includes the definable bed, bank, or channel, areas that support periodic or intermittent flows, perennial flows, subsurface flows, support fish or other aquatic life and areas that support riparian or hydrophytic vegetation in association with a streambed.

The field survey was conducted by walking the project limits and taking photos to determine the location and extent of potential waters of the U.S. within the site and the extent of CDFW jurisdiction (Attachment A). The total area of the potentially jurisdictional waters within the site was recorded in the field using a post-processing capable global positioning system (GPS) unit with sub-meter accuracy.

Results

ECORP delineation specialist Scott Taylor conducted an field visit on September 15, 2021, to map the limits of streambeds and other aquatic resources. There were four features identified within or near the Proposed Project (Features 1-4; Figure 2. *Aquatic Resources Delineation*), all of which are artificial drainage ditches created in an upland environment. The features are described in detail below.

Figure 2.
Aquatic Resources Delineation



Map Features

- Project Area

Potential Aquatic Resources

- Drainage
- Detention Basin

CDFW Habitat

- Drainage
- Detention Basin

[1] *Subject to U.S. Army Corps of Engineers verification. This exhibit depicts information and data produced in accord with the wetland delineation methods described in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0 as well as the Updated Map and Drawing Standards for the South Pacific Division Regulatory Program as amended on February 10, 2016, and conforms to Los Angeles District specifications. However, feature boundaries have not been legally surveyed and may be subject to minor adjustments if more accurate locations are required.*

** The acreage value for each feature has been rounded to the nearest 1/1000 decimal. Summation of these values may not equal the total potential Waters of the U.S. acreage reported.*

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
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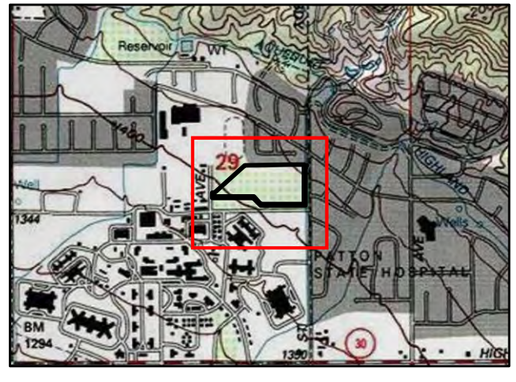

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2018-116.35 Patton State Hospital

Scale in Feet
0 150

Photo Source: Esri World Imagery
Boundary Source: RESD
Delineator(s): Scott Taylor
Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet

Map Date: 12/23/2021

Feature 1 is located just to the east of the Proposed Project along Orange Street and collects runoff from the surrounding residential areas. This feature is an artificially manufactured drainage ditch that receives intermittent flows from surface runoff due to irrigation as well as natural storm water flows. Based on the National Wetlands Inventory Mapping (Figure 3. *National Wetland Inventory*), this drainage ditch corresponds to a relocated natural drainage course. The channel runs parallel to Orange Street in a southerly direction, crosses underneath a dirt road on Patton State Hospital property and then flows southwest until it empties into a large culvert and continues underground through the hospital property.

The gradient of this stream is low, and the substrate of the channel is founded by cement with a rock lining. Channel depth ranges from four to six feet. Soils have built up in various locations along the channel, allowing for hydrophytic vegetation to grow along portions of its length. There are potential wetlands along the length of the channel that met the definitions of wetlands under the USACE criteria. Vegetation within the channel consists of willows (*Salix* sp.) and cattails (*Typha latifolia*), along with weedy herbaceous species. This feature is likely to be jurisdictional to the USACE, RWQCB and CDFW, because it is a relocated natural drainage feature.

Feature 2 is located within the Proposed Project area, and runs south between the solar field area, crossing under a dirt road on the Patton State Hospital property, and then continues south until it empties into a large detention basin. This feature is an artificial drainage ditch, created in uplands for the purpose of agricultural use originally, that receives ephemeral flows from surface runoff due to irrigation as well as natural storm water flows. The basin it flows into contains an outlet pipe, but the pipe is filled with sediment and no longer conveys flows. For this reason, the flows within Feature 2 are considered to be isolated, do not flow into any downstream tributary.

The upper part of this feature, north of where the Proposed Project occurs, is partially lined by concrete that has been worn and broken over time. The drainage flows into twin culverts underneath a dirt access road, after which it empties into an eroded, earthen channel whose depth ranges from three to five feet. To the south the feature becomes deeper, as it approaches the detention basin. The vegetation within the channel consists of non-native herbaceous species. This feature is unlikely to be jurisdictional to the USACE, RWQCB or CDFW because it is an agricultural drainage ditch with ephemeral flows that is not a relocated water of the state or excavated in a water of the state.

Feature 3 is located just west of the Proposed Project area and is an abandoned channel that was created in uplands for the purpose of agricultural use originally and whose flows used to continue to the south but now have now been largely diverted to the west into Feature 4. This channel is unvegetated. This feature is unlikely to be jurisdictional to the USACE, RWQCB or CDFW because it is an agricultural drainage ditch with ephemeral flows that is not a relocated water of the state or excavated in a water of the state.

Figure 3
National Wetland Inventory and USGS Watersheds

Map Features

- Project Area
- Project Buffer (50')
- HUC 12 Watershed

NWI Type

- Freshwater Pond
- Riverine

East Twin Creek (180702030505)

Warm Creek-Santa Anna River (180702030508)

Yuma Dr
Cactus Cir
Shauna Dr
Lakeview Dr
Amber Hill Dr
Los Felix Dr
Havasu Ct
Pinon Ct
Mojave Ct
Indian Canyon Ct
Piedmont Dr
Central Ave
Villa Ct
Lynwood Dr
Pepper St
Orange Ave
Holly Circle
Palm Crest Dr
Palm Ave
Holly Vista Dr
29Th St
Michelle Ln
Citrus St
Oleta Ln
Bangor Ave
Mirada Rd
Overland Ct
Oakridge Ct
28Th St
28 Th St
Date St
Victoria Ave
A.T.&S.F.Rr
Unnamed Rd
Orange St
Frye Ln
Cole Ave
Baldridge Canyon Dr
Spring Meadow Ln
Oleander Dr
Pumalo St
Bonita Dr
Center St
Bradford Ave
Pleasant Hill Dr
Orchid Dr
E Highland Ave
Highland Ave
Pepper Dr
La Verne Ave
N Orange St
N Palm Ave

Location: N:\2018\2018-116.32 Patton State Hospital\MAPS\jurisdictional_delineation\Patton_NWI_HUC_V1.mxd (MAG)-mguidry 12/23/2021

2018-116.35 Patton State Hospital

Scale in Feet
0
500

Photo Source: NAIP 2018

Map Date: 12/23/2021

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Feature 4 is an artificial drainage ditch located just west of the Proposed Project area and flows in a westward direction. This feature is an artificial drainage ditch, created in uplands for the purpose of agricultural use originally, that receives perennial flows from surface runoff due to irrigation as well as natural storm water flows. This channel is unvegetated. This feature is unlikely to be jurisdictional to the USACE, RWQCB or CDFW because it is an agricultural drainage ditch with ephemeral flows that is not a relocated water of the state or excavated in a water of the state.

Impacts

The new waterline would be buried in a new approximately 5-6-foot-deep trench beginning at the west side of Orange Avenue and extending west to the facility water system manifold. Fencing, concrete, and asphalt along the new water line alignment would be removed and replaced as needed. The new pipe would be covered with sand and the trenching would be backfilled with compacted soil (some of the topsoil would not be used as its typically organic material; not suitable for backfill.) Ground disturbing activities would consist of less than 0.5 acre. Therefore, coverage under the General Permit for Stormwater Discharges Associated with Construction Activity (commonly referred to as the Construction General Permit) would not be required.

During construction, the existing 14-inch waterline would remain in service and would be disconnected and abandoned in place once the new water line is installed. The abandoned waterline would be filled with grout. During the connection process, the water system would be shut down. It is anticipated that this shutdown would be less than four hours.

Construction of the Proposed Project is estimated to begin in Spring of 2023 and last approximately 13 months. It is estimated that one crew of 4 to 8 people would be responsible for working on pipe fittings and installations while another crew of 4 to 8 would be responsible for excavating the trench for the waterline to be placed. An existing contractor lay down area and dumpster area located southwest of the solar field would be used during construction of the Proposed Project.

Below is a description of impacts due to the Proposed Project on mapped features, by feature.

Feature 1 is not impacted by the Proposed Project. This is the only feature observed during the field survey that was considered potentially jurisdictional to the USACE, CDFW and RWQCB, due to wetland characteristics, correspondence with an historical natural drainage, and riparian vegetation contained within the feature, but is located outside of the Proposed Project area, so there will be no proposed impacts to this drainage. However, since it is in somewhat close proximity to the construction limits, we recommend measures to prevent unintentional impacts to this feature.

Feature 2 is crossed/impacted by the Proposed Project but is not considered to be potentially jurisdictional, due to being artificially created in uplands and being isolated from downstream waters. Within the Procedures, the feature appears to qualify as an excluded category

Features 3 and 4 are not impacted by the Proposed Project.

Conclusions and Recommendations

Four drainage channels were identified in the vicinity, with only one channel occurring within the Proposed Project area (Feature 2). Since this channel is not considered to be potentially jurisdictional, the Project is not anticipated to have effects on any jurisdictional resources. The only potentially jurisdictional feature located in the vicinity of the property is east of the Proposed Project limits.

During implementation of the Proposed Project, Feature 1 should be protected from impacts by being clearly demarcated and avoided by construction crews. We recommend use of silt fencing or other temporary barriers placed at a distance of 10 feet from the boundary of this drainage channel to ensure avoidance of impacts.

Please contact me at (909) 307-0046 with any questions.

Sincerely,
ECORP Consulting, Inc.

Scott Taylor
Senior Biological Program Manager

Attachments Photographs

Attachment 1 - Photographs

Photo 1 – West End of Proposed Project

Photo 2 – Heavily Disturbed Portion of Project West of Feature 2

Photo 3 – Water Line Crossing Point along Feature 2

Photo 4 – Water Line just West of Orange Street

Photo 5 – Feature 2 at Proposed Project Crossing Point

Photo 6 – Feature 2 Point of Origin North of Proposed Project

Photo 7 – Feature 1 Along Orange Street