JURISDICTIONAL DETERMINATION REPORT

For the

OMNI LA COSTA CHAMPIONS COURSE RENOVATION PROJECT

Prepared for:

LC Investment 2010 dba Omni La Costa Resort & Spa
TRT Holdings Inc.
4001 Maple Ave.
Suite 300
Dallas, TX 75219

Prepared by:

PLANNING SYSTEMS
1530 Faraday Ave.
Suite 100
Carlsbad, CA 92008

September 16, 2022

PLANNING SYSTEMS

TABLE OF CONTENTS

FIGURES

TABLES

OMNI LA COSTA GOLF COURSE CHAMPIONS COURSE, CARLSBAD, CA

JURISDICTIONAL DELINEATION REPORT

1.0 INTRODUCTION

This report presents the results of a jurisdictional delineation performed by PLANNING SYSTEMS for the unnamed tributary to San Marcos Creek and any natural water features within the Omni La Costa Golf Course (Champions Course Section) property located between Poinsettia Lane and San Marcos Creek, in the City of Carlsbad, California (*Figure 1; Regional Location Map*). The delineation was conducted to identify and map existing wetlands, habitats, and other resources potentially subject to the regulatory jurisdiction of the of U.S. Army Corps of Engineers ("USACE" used interchangeably with "Corps") pursuant to Section 404 of the Clean Water Act (CWA; 33 USC 1344), the California Department of Fish and Wildlife ("CDFW") pursuant to Sections 1600 et seq. of the California Fish and Game Code, and the Regional Water Quality Control Board ("RWQCB") pursuant to Section 401 of the Clean Water Act, within the subject area. This report summarizes Planning Systems' preliminary findings of the limits of jurisdiction for the Omni La Costa Golf Course, Champions Course property[1]

The Omni La Costa Golf Course Champions Section ("Golf Course") is located within the southeast section of the city of Carlsbad, California. The property is approximately 3 miles from the Pacific Ocean. It contains two blue-line streams, as depicted on the U.S. Geological Survey (USGS) topographic maps, Encinitas Quadrangle. The Golf Course exists almost exclusively in an urbanized state in southeast Carlsbad as an active, operating, full-service course.

Per the request of Mr. Clint Gulick of TRT Holdings, an affiliated entity of LC Investment 2010 LLC, dba Omni La Costa Resort & Spa ("Omni"), Regulatory Specialists from PLANNING SYSTEMS have examined the project site to determine the limits of jurisdiction relative to Section 404 of the Clean Water Act ("CWA"), Section 401 of the CWA, and also CDFW jurisdiction pursuant to Division 2, Chapter 6, Section 1600 of the Fish and Game Code. The area investigated is associated with a northern [unnamed] tributary drainage of San Marcos Creek ("Unnamed Tributary") located within the existing Golf Course from Poinsettia Lane, flowing from north to south to the Unnamed Creek's confluence with San Marcos Creek. The purpose of this analysis is to determine the extent of any federal or state resource agency permits required in order for OMNI to implement a renovation program for the Golf Course.

[1] This report provides Planning Systems' best efforts at estimating federal and state jurisdictional boundaries on the subject property using current regulations and policy guidance from the above-referenced agencies. Final determination of jurisdictional boundaries is typically made by the agencies.

The jurisdictional delineation work was performed by regulatory specialists from Planning Systems on February 19, 2021, March 2, 2021, March 12, 2021 and October 7 and 8, 2021. The report has been prepared for purposes of identifying aquatic resource limits for design consideration, with the intent of minimizing and avoiding impacts to aquatic resources to the greatest extent feasible, and for submittal to the USACE, the CDFW, and the RWQCB as part of their review of applications for permit authorization, if project impacts trigger the need for such permits.

1.1 DELINEATION AND IMPACT SUMMARY

The defined Study Area does contain creeks, drainages and pond areas that are both jurisdictional and non-jurisdictional to the USACE and to the RWQCB and CDFW. One Unnamed Drainage and ten (10) ponds exist within the Study Area. The subject project proposes elimination of two (2) of the ponds, however both of these ponds are artificial wetlands, resulting from human activity including regular domestic filling for aesthetic and irrigation storage purposes, constructed and maintained in a non-jurisdictional upland, and on property that was a prior converted farmland. The project also proposes the construction of two (2) pedestrian bridges and one (1) golf cart bridge all spanning completely over a jurisdictional streambed, resulting in indirect shadow impacts. More specifically, this delineation identified the following;

Potential USACE jurisdiction within the subject area totals approximately 11.51 acres, of which 9.23 acres consist of jurisdictional wetlands. As designed, development of the Golf Course Renovation project avoids all direct USACE jurisdictional areas pursuant to Clean Water Action Section 404 and the bridge shadow impacts are not regulated by the USACE. Thus, implementation of the proposed project will result in no impacts to USACE jurisdictional area and no permitting from the USACE is required.

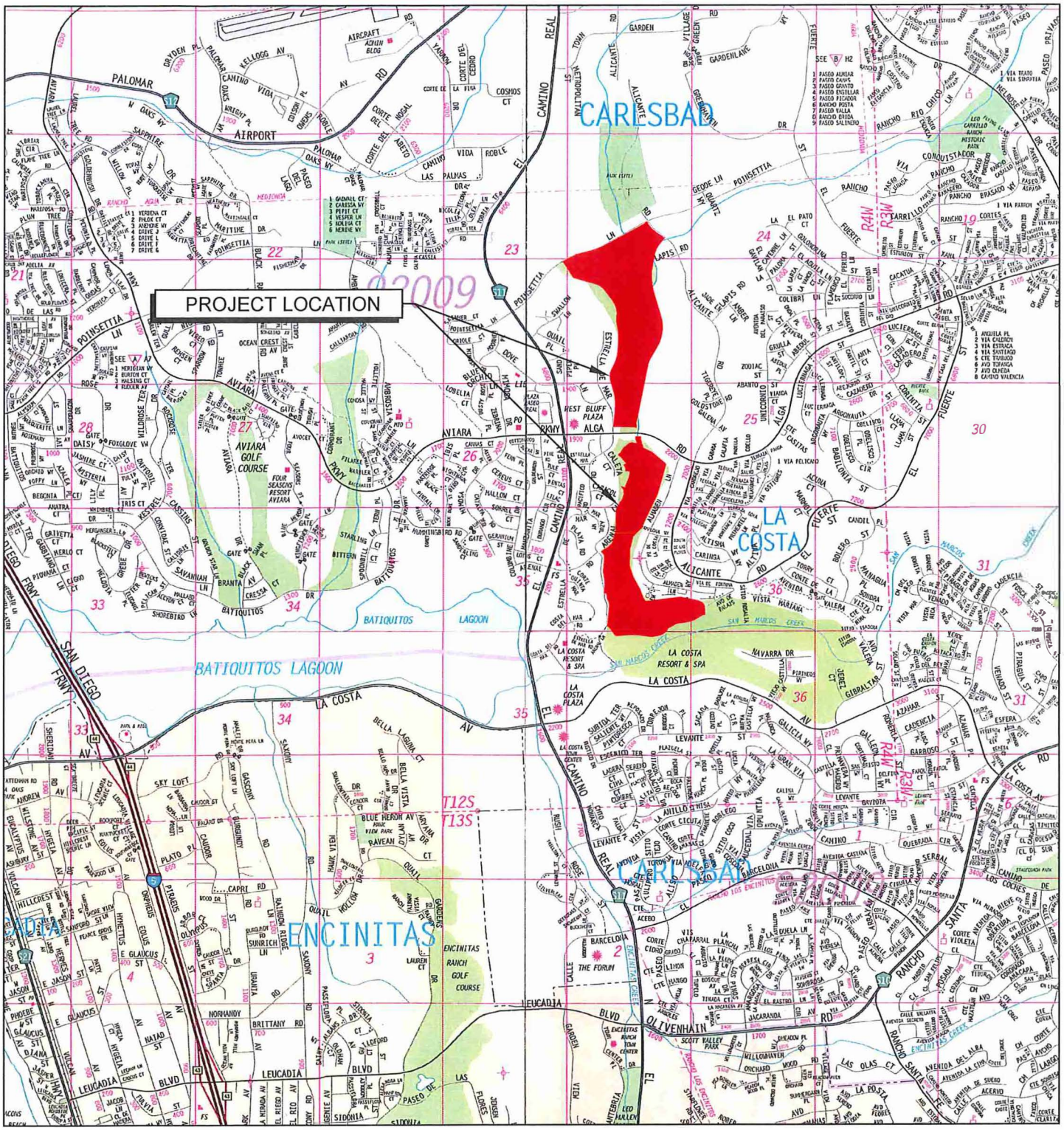
Potential RWQCB jurisdiction within the subject area totals approximately 11.51 acres, of which 9.23 acres consist of jurisdictional wetlands. As designed, development of the Golf Course Renovation project avoids all direct impacts to RWQCB jurisdictional areas per the Clean Water Act Section 401. Indirect impacts associated with the bridge shadows, totaling 0.012 acres could require certification under Clean Water Act ("CWA") Section 401.

Potential CDFW jurisdiction at the site totals approximately 13.10 acres. As designed, development of the Golf Course Renovation project avoids all direct impacts to wetlands and associated CDFW jurisdictional areas per the California Fish & Game Code.

Additionally, the proposed project will eliminate 220 square feet (0.005 acres) of shadow impacts to USACE, RWQCB and CDFW jurisdiction by the removal of an existing golf cart bridge in the same area. This will offset the shadow impacts to a net 0.07 acres.

Upon review of the project, the USACE and the CDFW have indicated that their agencies will not regulate the shadow-casting impacts upon the streambed, since the impacts do not qualify as a dredging, filling, diverting, obstructing or materially impacting activity. While the RWQCB has not completed their review as of the date of this delineation, it is anticipated that the RWQCB will reach a similar conclusion. Thus, it is the conclusion of this analysis that the project does not result in any significant direct or indirect impacts to federal or state jurisdictional area, and will thus not require compensatory mitigation to state or federal jurisdictional lands.

Information and analysis supporting the above is provided in this report.



SOURCE: The Thomas Guide, San Diego County

NORTH

0 1500 3000 6000 FT

Scale: 1" = 3000'

Figure 1

Location Map

Omni Resort - Champions Course

Carlsbad, California

September 15, 2022

PLANNING SYSTEMS

LAND USE/COASTAL PLANNING
LANDSCAPE ARCHITECTURE
POLICY AND PROCESSING
ENVIRONMENTAL MITIGATION

1530 FARADAY AVENUE, SUITE 100, CARLSBAD, CA 92008
(760) 931-0780 FAX (760) 931-5744

2.0 PROJECT INFORMATION

2.1 PROJECT SITE LOCATION

The Omni La Costa Golf Course Champions Section is situated on six adjacent parcels identified as APN's 213-111-15, 213-111-20, 213-112-31, 213-112-32, 216-593-05 and 216-592-01, in Carlsbad, California. These parcels are located at latitude 33.094094 and longitude -117.263098. The Golf Course is located on the USGS Encinitas 7.5 minute quadrangle map, at 20 ft. to 126 ft. elevation above sea level. Surrounding land uses to the west, north and east primarily consist of single family homes. The main facilities associated with the Omni La Costa Resort and Spa are located to the southwest. The South [Legends Section] Course section of the Golf Course is located south of the subject property. See *Figure 2: USGS Map*.

The subject site is located within the Carlsbad Hydrological Unit drainage basin, one of 12 hydrologic units identified in San Diego County by the RWQCB. More specifically, it is located within the San Marcos Creek Hydrologic Sub-area. The San Marcos Creek conveys flows westward from the San Marcos and southeast Carlsbad area, through the Golf Course, on through tidally-influenced downstream Batiquitos Lagoon, and ultimately into the Pacific Ocean.

The property can be accessed via El Camino Real to Costa Del Mar Road, located approximately 1,000 feet north of La Costa Avenue. Costa Del Mar Road provides entry to the Omni La Costa Resort and Spa property, through which access to the Golf Course can be achieved.

2.2 PROJECT SITE DESCRIPTION

The Golf Course is an active, operating, full-service golf course, directly associated with the adjacent Omni Resort Hotel and related resort infrastructure. The course was developed many years ago in the wide floodplain of a lowland valley. Within the Golf Course Champions Section, a well-defined drainage (referenced as "Unnamed Tributary" in this report) flows north-to-south to its confluence with San Marco Creek as a perennial stream, primarily surrounded by standard golf course-related ornamental vegetation (regularly-maintained grasses and turf).

Golf course-related Ornamental-Upland (Urban Developed per Holland) vegetation is, by far, the most prevalent vegetative habitat type within the area. Native coastal Southern California vegetation occurs only in the context of the [primarily offsite of the Golf Course] freshwater marsh associated with the upper reach of the Unnamed Tributary and volunteer plants which have sprung up in and around the course perimeter or near the Golf Course water hazard ponds which are positioned in several locations throughout the course.

Drainage and runoff flows onto the site from the north, through culverts under Poinsettia Lane and Alicante Road at the north end of the Champions Section. As the drainage enters the property, it flows primarily along the eastern boundary of the Golf Course, through a low-lying freshwater marsh habitat in the out-of-bounds area for approximately 4,250 feet (0.8 mile) until it becomes channelized in a 15-foot wide box culvert under Alga Road.

Figure 2

USGS Location Map

Omni Resort - Champions Course

Carlsbad, California

September 15, 2022

PLANNING SYSTEMS

LAND USE/COASTAL PLANNING
LANDSCAPE ARCHITECTURE
POLICY AND PROCESSING
ENVIRONMENTAL MITIGATION

1530 FARADAY AVENUE, SUITE 100, CARLSBAD, CA 92008
(760) 931-0780 FAX (760) 931-5744

As the drainage exits the box culvert on the downstream (south) side of the roadway, it resumes its flow southward, in a narrow (four-feet generally) concrete channel configuration, and into a number of Golf Course water hazard ponds, entering and exiting one, with channelized connection to another, and another (three ponds in total); ultimately to confluence with west-flowing San Marcos Creek in route to downstream Batiquitos Lagoon and ultimately the Pacific Ocean. Much of the channelized sections possess strong natural bed and bank characteristics. The entire length of the Unnamed Tributary from entry to the Golf Course to San Marcos Creek is 9,750 feet (1.8 miles). No other defined drainages into the Unnamed Tributary or separate identified feeder branches exist in the area of the project.

The vegetation across the site is routinely mowed and maintained turf grass with sporadic domestic landscape trees throughout. Wetlands occur in the area, although the majority of the wetlands are located outside of the boundaries of the project area. The site contains a mix of eight (8) vegetation communities and land covers, including; Urban Developed, Coastal and Valley Freshwater Marsh, Open Water [Fresh water Golf Course] Ponds, Chamise chaparral, Eucalyptus woodland, Mulefat scrub, Saltgrass grassland, and Disturbed habitat.

2.3 PROJECT BACKGROUND INFORMATION

The subject site has been historically altered from agricultural fields [row crops] in the 1950's and early 1960's into a golf course, as part of the infant master planned development of the 1,500 acre La Costa planned community. This La Costa community was annexed into the City of Carlsbad in 1974. Since the 1960's, the surrounding land uses have undergone substantial residential and commercial development over the past 50 years.

The course was constructed in 1965, and underwent a single restoration (in 2003) prior to the present time. As described by Omni, the course facilities on the Champions Section are now again of somewhat obsolete design and timeworn condition, and do not possess environmentally sustainable sod and cover, or an efficient or effective planting, irrigation and underdrain system. Omni's Golf Course renovation program involves sand, gravel and grass replacement and reshaping on a number of tee boxes, greens and bunkers within the course. Inefficient golf course ponds will be replaced by "barrancas". Golf course barrancas are a shallow arroyo of native vegetation which act as a golf hazard, performing the same role as a water hazard pond, but minimizing the use of supplemental water. Cart paths will be realigned, retaining walls and foot bridges will be added.

Only the Champions Section of the course is addressed with this renovation program. The eastern half of the course (Legends Section) was the subject of a similar renovation in 2013. The program is intended to upgrade the course to modern standards in order to provide improved play, to drain more efficiently, and be more sustainable in reducing water irrigation use. No substantive change to the overall golf course design, size, play area limits, or drainage pattern of the property will result from implementation of the project. The renovation program is intended to upgrade the course to modern standards in order to provide improved play, to drain more efficiently, and be more sustainable in reducing water irrigation use.

2.4 PROJECT PERSONNEL

This wetland delineation was conducted by Paul Klukas, Senior Regulatory Specialist, and Greg Evans, Senior Biologist, with Planning Systems, on behalf of Omni.

3.0 REGULATORY FRAMEWORK

Both the U.S. federal government and the State of California regulate the filling, dredging or otherwise physical impacting of streams, channels and waterways, including ephemeral drainages, dry streambeds, and wetlands. The federal and state agencies charged with administering these statutes and their responsibilities and the history of documentation of their review criteria and interpretations are described briefly below.

3.1 WATERS OF THE UNITED STATES

3.1.1 U. S. Army Corps of Engineers

The discharge (temporary or permanent) of dredged or fill material into "Waters of the United States" ("WOUS"), including wetlands, typically requires prior authorization from the USACE per Section 404, and also certification from the RWQCB per Section 401 of the CWA. The term "waters of the United States" is defined by 33 Code of Federal Regulations (CFR) and includes;

- interstate waters and wetlands;
- "other waters" such as intrastate lakes, rivers, streams, and wetlands;
- impoundments of waters;
- tributaries to the above waters;
- territorial seas; and
- wetlands adjacent to waters.

WOUS is further defined in regulations promulgated by the USACE, and typically includes all navigable waters (including all waters subject to the ebb and flow of the tide); all interstate waters and wetlands; all impoundments of these waters; all tributaries to these waters; the territorial seas; and all wetlands adjacent to these waters.

Therefore, the USACE asserts regulatory jurisdiction over activities affecting wetland and non-wetland WOUS. WOUS generally include "traditional navigable waterways ("TNW"), wetlands adjacent to navigable waterways, non-navigable tributaries to TNW's, and wetlands adjacent to non-navigable waters that are contiguous with TNW's. The USACE has also adopted criteria for determining those areas that constitute wetlands.

Wetlands are defined in USACE regulations at 33 CFR 328.3(b) as; "*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*." In 1987, the USACE published the Corps of Engineers Wetland Delineation Manual[2] to guide its field personnel in determining jurisdictional wetland boundaries. In 2008, the USACE published a manual for wetland delineations in the southwestern United States[3].

[2] Environmental Laboratory, U. S. Army Corps of Engineers Wetland Delineation Manual – Final Report, January 1987.
[3] Environmental Laboratory, U.S. Army Corps of Engineers Regional Supplement to the Wetland Delineation Manual: Arid West Region, September 2008.

Then in June, 2020, the EPA and the USACE published a "Final Rule" or "Navigable Waters Protection Rule" ("NWPR") defining the scope of waters federally regulated under the Clean Water Act. For the purpose of this regulation, these terms are defined as follows:

(a) Jurisdictional waters. *For purposes of the Clean Water Act, 33 U.S.C. 1251 et seq. and its implementing regulations, subject to the exclusions in paragraph (b) of this section, the term "waters of the United States" means:*

(1) The territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters which are subject to the ebb and flow of the tide;

(2) Tributaries;

(3) Lakes and ponds, and impoundments of jurisdictional waters; and

(4) Adjacent wetlands.

(b) Non-jurisdictional waters. *The following are not "waters of the United States":*

(1) Waters or water features that are not identified in paragraph (a)(1), (2), (3), or (4) of this section;

(2) Groundwater, including groundwater drained through subsurface drainage systems;

(3) Ephemeral features, including ephemeral streams, swales, gullies, rills, and pools;

(4) Diffuse stormwater run-off and directional sheet flow over upland;

5) Ditches that are not waters identified in paragraph (a)(1) or (2) of this section, and those portions of ditches constructed in waters identified in paragraph (a)(4) of this section that do not satisfy the conditions of paragraph (c)(1) of this section;

(6) Prior converted cropland;

(7) Artificially irrigated areas, including fields flooded for agricultural production, that would revert to upland should application of irrigation water to that area cease;

(8) Artificial lakes and ponds, including water storage reservoirs and farm, irrigation, stock watering, and log cleaning ponds, constructed or excavated in upland or in non-jurisdictional waters, so long as those artificial lakes and ponds are not impoundments of jurisdictional waters that meet the conditions of paragraph (c)(6) of this section;

(9) Water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel;

(10) Stormwater control features constructed or excavated in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater run-off;

(11) Groundwater recharge, water reuse, and wastewater recycling structures, including detention, retention, and infiltration basins and ponds, constructed or excavated in upland or in non-jurisdictional waters; and

(12) Waste treatment systems.

The methods set forth in the Wetland Delineation Manual and the Arid West Regional

Supplement provide that the delineation of wetlands be based on the presence of three wetland parameters together: a predominance of hydrophytic vegetation; hydric soils; and wetland hydrology. Thus, for an area to qualify as a USACE-jurisdictional wetlands, all three of the above tests must together be determined as positive. This is referred to as the three-parameter wetlands analysis[4] which will be discussed below.

The USACE also however, asserts regulatory jurisdiction over activities affecting specific non-wetland areas. These areas are determined to be potential non-wetland WOUS if there is evidence of regular channeled surface flow (e.g., bed and bank) but either the vegetation or soils criterion is not met. Jurisdictional limits for these areas are measured according to the presence of a discernible Ordinary High Water Mark (OHWM) which is defined as follows:

> *"The term ordinary high water mark means that line on the shore established by the fluctuations of water and indicated by 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, or other appropriate means that consider the characteristics of the surrounding areas."*[5]

Thus, in waters water bodies and streambeds where wetlands are absent, the USACE's jurisdiction extends to the OHWM.

However, over the years, a number of Supreme Court decisions have curtailed CWA jurisdiction. In 2001, the court ruled in *Solid Waste Agency of North Cook County v. United* States *Army Corps of Engineers* ("SWANCC") that the USACE exceeded its statutory authority by asserting CWA jurisdiction over lands that are physically "isolated" (not hydrologically connected) from TNW's. This Supreme Court ruling determined that CWA jurisdiction does not extend to waters that are both non-navigable and isolated.

Although no formal guidance was issued by USACE interpreting the extent to which the SWANCC decision limits jurisdictional determinations, in practice, USACE considers waters where there is an appropriate connection to a navigable water or a clear interstate commerce connection as WOUS. Therefore, WOUS, including jurisdictional wetlands, must show connectivity with (be tributary to) a navigable WOUS to be subject to USACE under Section 404 of the CWA.

Then in 2007, in *Rapanos* v. *United* States and *Carabell v. United* States (consolidated cases), the question posed to the Court was whether CWA jurisdiction extends to wetlands that do not contain, and are not adjacent to, waters traditionally understood as "navigable." The Court issued two controlling opinions in this case, specifying limited conditions under which ephemeral and intermittent tributaries and adjacent wetlands are subject to CWA jurisdiction. In response to the Court's decisions, the EPA and USACE issued final guidance[6] on the scope of regulatory jurisdiction under the CWA, including Section 404. The guidance specifies that, under normal conditions, the USACE will assert jurisdiction over the following features as WOUS:

- *Traditional navigable waterways and their adjacent wetlands.*

[4] U.S. Army Corps of Engineers, "A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States", 2008.
[5] U.S. Government, Department of the Army, Code of Federal Regulations, 33 CFR § 328.3(e).
[6] EPA and USACE 2007.

- *Non-navigable tributaries of traditional navigable waterways that typically flow year-round or have a continuous flow at least seasonally (typically 3 months) and wetlands that directly abut such tributaries.*
- *Non-navigable tributaries that do not typically flow year-round or have continuous flow at least seasonally, wetlands adjacent to such tributaries, and wetlands adjacent to but not directly abutting a relatively permanent non-navigable tributary.*[7]

Alternatively, the USACE will typically not assert jurisdiction over the following features:

- *Swales or erosional features (e.g., gullies and small washes characterized by low volume and infrequent or short-duration flows).*
- *Ditches (including roadside ditches) excavated wholly in uplands and draining only uplands that do not carry a relatively permanent flow of water.*

Thus, the final guidance states that WOUS excludes isolated Waters that are not hydrologically connected to navigable rivers and streams.

However, the guidance states that USACE jurisdiction over wetlands created by artificial means will typically be decided on a case-by-case basis. In practice, the USACE generally does not assume jurisdiction over areas that are; (1) artificially irrigated and would revert to upland habitat if the irrigation ceased; or, (2) artificial lakes and ponds created by excavating and/or diking of dry land to collect and retain water, used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing. Other areas that are not considered jurisdictional Waters of the United States include waste treatment ponds, ponds formed by construction activities including borrow pits until abandoned, and ponds created for aesthetic reasons such as reflecting or ornamental ponds[8] [underlines added for applicability to subject project].

Further, swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent or short-duration flow) and ditches excavated in uplands are generally not USACE-jurisdictional because they are not tributaries or do not have a significant nexus to downstream TNWs. Isolated bodies of water and isolated wetlands without a demonstrated relationship to a TNW would generally not be considered jurisdictional. Additionally, WOUS do not include; (1) waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA, and; (2) prior converted cropland [underline added for applicability].

As mentioned, wetlands are defined in USACE regulations as "*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.*"[9] The methods set forth in the Regional Supplement[10] provide that the delineation of wetlands be based on the presence of three wetland parameters together: a predominance of hydrophytic vegetation; hydric soils; and wetland hydrology. For an area to qualify as a USACE-jurisdictional wetlands, all three of the above tests must be determined as positive. This is referred to as the three-parameter wetlands analysis. These three wetland parameters are discussed below.

---

[7] U.S. Environmental Protection Agency and U.S. Army Corps of Engineers, "Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in Rapanos v. United States & Carabell v. United States", December 2, 2008.
[8] U.S. EPA and U.S. Army Corps of Engineers, Final Rule, 33 CFR Part 328.3.
[9] 33 CFR 328.3(b).
[10] U.S. Army Corps of Engineers, Regional Supplement Arid West Region, 2008.

3.1.1.1 Hydrophytic Vegetation.

Vegetative cover is assessed as an indicator, and is ranked according to its dominance in the study area. Dominant species are the most abundant species for each floral stratum of the community (i.e., tree, shrub, herb, or woody vine) that individually or collectively amount to 50% of the total coverage of vegetation plus any other species that, by itself, accounts for 20% or more of the total vegetation cover (also known as the "50/20 Rule")[11]. A site is considered to have a "predominance of hydrophytic vegetation" at a location if greater than 50% of all the dominant species present within the vegetation unit have a wetland indicator status of obligate ("OBL"), facultative wetland ("FACW"), or facultative ("FAC") (as rated in the Arid West 2016 Regional Wetland Plant List). An OBL indicator status refers to plants that grow virtually exclusively in wetlands under natural conditions. A FACW indicator status refers to plants that usually occur in wetlands but are occasionally found elsewhere. A FAC indicator status refers to plants that are equally likely to occur in wetlands or elsewhere. The wetland indicator status used for this report follows the U.S. Fish and Wildlife List.[12]

3.1.1.2 Hydric Soils

The second parameter for determination of wetlands is whether the soils are considered hydric. Hydric soils are defined as "soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the soil." The hydric soil criterion is satisfied at a location if soils in the area can be observed to have a high groundwater table, if there is evidence of prolonged soil saturation, or if the soils are sufficiently wet in the upper 18 inches of the soil profile. Soil test pits are typically dug within the drainage invert or at the edge of the drainage course. Soil extracted from each soil text pit is then examined for texture and color using the standard plates within the Munsell Soil Color Chart (1994). Any indicators of hydric soils, such as organic accumulation, iron reduction, translocation and accumulation; and sulfate reduction are recorded. The Wetland Delineation Manual and Arid West Regional Supplement describe visual and textural indicators of hydric soils to determine the presence of hydric soils. In most situations, only one of these indicators is required to make a positive hydric determination.

3.1.1.3 Wetland Hydrology.

Wetlands hydrology is represented by either; (1) all of the hydrological elements or characteristics of areas permanently or periodically inundated or; (2) areas containing soils that are saturated for a sufficient duration of time to create hydric soils suitable for the establishment of plant species that are typically adapted to anaerobic soil conditions. The presence of wetland hydrology is evaluated at each intersect by recording the extent of observed surface flows, the depth of inundation, the depth to saturated soils, and the depth to free water in soil test pits. Certain characteristics or indicators have been identified by the USACE which must be present in order to determine sufficient hydrology to qualify as jurisdictional.

Projects which propose activities that within the above criteria must obtain approval from the USACE through the "Nationwide Permit" or the "Individual Permit process, depending upon the scale of the project. Individual permits entail a full public interest review that includes consultation with other federal and state agencies.

---

[11] Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin, Arid West 2016 Regional Wetland Plant List, Published April 28, 2016.

[12] U.S. Fish and Wildlife Service, National List of Plant Species that Occur in Wetlands: California, 1996.

3.2 WATERS OF THE STATE

3.2.1 Regional Water Quality Control Board

The State of California (State) regulates discharge of material into waters of the State pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act[13]. Pursuant to Section 401 of the CWA; *"...any applicant for a federal permit for activities that involve a discharge to waters of the United States shall provide the federal permitting agency a certification from the state in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the federal Clean Water Act."*

Therefore, before USACE will issue a Section 404 permit, applicants must apply for and receive Section 401 water quality certification or a waiver from the RWQCB, as applicable. Under Section 401, the RWQCB regulates at the state level all activities that are regulated at the federal level by USACE. Typically, those areas subject to RWQCB jurisdiction coincide with those of the USACE. However, California's jurisdiction to regulate its water resources is broader than that of the federal government. In order to strengthen protection of and clarify jurisdiction for waters of the state that no longer fall under the purview of the CWA, the State Water Board adopted the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State *("Procedures")*, which went into effect on May 28, 2020. With these Procedures, the SWRCB utilizes a broad definition of regulated areas in order to avoid being subject to changes at the federal level. All current and historic WOUS, including those that fell under a previous regulatory definition of WOUS are regulated by the state RWQCB.

Also, while the Supreme Court's SWANCC decision modified the extent to which the federal government may regulate isolated, intrastate, non-navigable waters under the federal CWA, state law has been unaffected by that decision. The State Water Boards regulate such waters under the authority of the state Porter-Cologne Act. The Porter-Cologne Act extends to WOTS which is broadly defined as "*any surface water or groundwater, including saline waters, within the boundaries of the state*". This definition includes isolated wetlands.

The state Regional Water Quality Control Board defines an area as wetland as follows:

1. *Natural wetlands;*
2. *Wetlands created by modification of a surface water of the state[14]; and*
3. *Artificial wetlands resulting from human activity that meet any of the following criteria:*

    a. Approved by an agency as mitigation for impacts to other waters of the state;
    b. Specifically identified in a water quality control plan as a wetland or other water of the state;
    c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or
    d. Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for [agricultural or industrial] purposes. (Unless they also satisfy the criteria set forth in 2, 3a or 3b above.)

[13] California Water Code, Division 7, §13000 et seq.
[14] Created by "modification of a surface water of the state" means that the wetland that is being evaluated was created by modifying an area that was a surface water of the state at the time of such modification.

All artificial wetlands that are less than an acre in size and do not satisfy the characteristics and criteria set forth in 2, 3(a), 3(b), or 3(c), above, are not considered waters of the state. If an aquatic feature meets the wetland definition, the burden is on the applicant to demonstrate that the wetland is not a water of the state.[15]

Activities or discharges from a project that could affect California's surface, coastal, or ground waters, require a permit from the local RWQCB. Discharging pollutants (or proposing to) into surface water requires the applicant to file a complete National Pollutant Discharge Elimination System permit application form with the RWQCB. Other types of discharges, such as those affecting groundwater or from diffused sources (e.g., erosion from soil disturbance or waste discharges to land) are handled by filing a Report of Waste Discharge with the RWQCB. For specified situations, some permits may be waived and some discharge activities can be handled through enrollment in an existing general permit.

3.2.2 California Department of Fish & Wildlife

The State of California also regulates activities involving rivers, streams, lakes or wetlands or riparian habitats associated with these features. California Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may:

- *Substantially divert or obstruct the natural flow of any river, stream, or lake;*
- *Substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or*
- *Deposit debris, waste or other materials that could pass into any river, stream or lake. A "river, stream or lake" includes those that are episodic (i.e., they are dry for periods of time) as well as those that are perennial.*

This definition includes ephemeral streams, desert washes, and even watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water, the boundary of which may be identified as a topographic feature or as the edge of riparian vegetation. In addition, the CDFW does not distinguish between a "pond" and a "lake," such that relatively small bodies of water, including both natural and artificial features, may be regulated under Section 1602. The CDFW requires a Lake and Streambed Alteration Agreement ("LSA") if it determines that the activity may substantially adversely affect existing fish or wildlife resources. A LSA typically includes measures or conditions necessary to protect fish and wildlife resources. Prior to issuing a LSA, CDFW requires that a project comply with the requirements of the California Environmental Quality Act ("CEQA").

Pursuant to Sections 1600-1603 of the California Fish and Game Code, the CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife. CDFW defines a stream as "*a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation.*" CDFW's definition of "lake" includes "*natural lakes or manmade reservoirs.*" CDFW also defines a stream as "*a body of water that flows, or has flowed, over a given course during the historic hydrologic regime, and where the width of its course can reasonably be identified by physical or biological indicators.*"

[15] California State Water Resources Control Board, "State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State", 2021.

With regard to the *support of fish or other aquatic life*, it is important to note that the Fish and Game Code defines fish and wildlife to include; *all wild animals, birds, plants, fish, amphibians, invertebrates, reptiles, and related ecological communities including the habitat upon which they depend for continued viability.*[16].

Water features such as vernal pools and other seasonal swales where the defined bed and bank are absent and the feature is not contiguous or closely adjacent to other jurisdictional features are generally not jurisdictional under Section 1602. CDFW generally does not assert jurisdiction over human-made water bodies unless they are located where such natural features were previously located or where they are contiguous with existing or prior natural jurisdictional areas.

The CDFW jurisdiction within altered or artificial waterways is based upon the value of those waterways to fish and other wildlife. Generally:

- Natural waterways that have been subsequently modified and which have the potential to contain fish, aquatic insects and riparian vegetation will be treated like natural waterways;

- Artificial waterways that have acquired the physical attributes of natural stream courses and which have been viewed by the community as natural stream courses should be treated by CDFW as natural waterways;

- Artificial waterways without the attributes of natural waterways should generally not be subject to Fish and Game Code provisions.

Thus, while CDFW's jurisdictional limits frequently closely resemble those of the USACE, they add artificial stock ponds and irrigation ditches constructed on uplands, and add riparian habitat supported by a river, stream, or lake regardless of the riparian area's federal wetland status. In general, the CDFW takes jurisdiction from the top of a stream bank or to the outer limits of any adjacent riparian vegetation, whichever is greater. Riparian vegetation is not defined in the DFG Code, but the section refers to vegetation and habitat associated with a stream. The CDFW jurisdictional habitat includes all riparian shrub or tree canopy that may extend beyond the banks of a stream. In cases where a streambed exists but no riparian vegetation is present within or adjacent to the streamcourse, the top of stream bank demarcates the limits of WOTS.

Notification to CDFW is generally required for any project that will take place within or in the vicinity of a river, stream, lake, or their tributaries.

[16] Fish and Game Code Division 5, Chapter 1, section 45 and Division 2, Chapter 1 section 711.2(a) respectively.

4.0 METHODOLOGY

The jurisdictional delineation was conducted on February 19, 2021, March 2, 2021 and March 12, 2021 by PLANNING SYSTEMS' Regulatory Specialist Paul Klukas and Biologist Greg Evans, with assistance from Technician Eduardo Nava. Prior to beginning fieldwork, aerial photographs (1"=100' scale), topographic maps (1"=100' scale), U.S. Geological Survey (USGS) and quadrangle maps were reviewed to determine the location of potential jurisdictional areas on the subject site. A "Study Area" was identified, which included the entirety of the Golf Course property, and also the adjacent "Unnamed Tributary" drainage located immediately east of the Golf Course property. The Study Area was field-assessed in such a manner as to view all areas as necessary to determine the presence or absence of wetland vegetation and/or otherwise jurisdictional areas.

Prior to conducting the field delineation assessment, the following information sources were reviewed to evaluate potential USACE, RWQCB and CDFW jurisdiction:

- Google Earth aerial photographs;
- Historical aerial photographs;
- United States Geologic Survey (USGS) 7.5-degree minute topographic quadrangle maps;
- U.S. Department of Agriculture Natural Resources Conservation Service soil maps;
- U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory GIS data; and
- USGS National Hydrological Dataset GIS data for modeling of streams.
- Drone photography of candidate jurisdictional areas.

Suspected jurisdictional areas were field checked for evidence of stream activity and/or wetland vegetation, soils and hydrology. Where applicable, reference was made to the OWHM Manual[17] to identify the width of USACE jurisdiction. Suspected wetland habitats on the site were evaluated using the methodology set forth in the Wetland Manual[18] and the Arid West Supplement[19]. CDFW jurisdiction areas were mapped in accordance with information supplied from the CDFW website wildlife.ca.gov/data/vegcamp/natural-communities. While in the field the potential limits of jurisdiction were recorded with a sub-meter Trimble GPS device in conjunction with a color aerial photograph using visible landmarks. Photographs were taken from overhead drone cameras and surface field work. (Please see *Appendix A*.) Wetland Data Sheets were prepared for appropriate areas (*Appendix B*).

[17] U.S. Army Corps of Engineers. 2008. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States.

[18] Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterways Experimental Station, Vicksburg, Mississippi.

[19] U.S. Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

Planning Systems' researchers also reviewed the Soil Survey Database for San Diego County[20], for appropriate soils. Plants were identified according to The Jepson Manual: Vascular Plants of California (Baldwin et al. 2012). Wetland affiliations of plant species follow the Arid West 2016 Regional Wetland Plant List (Lichvar et al. 2016). Soils information was taken from the NRCS (2016) and Bowman (1973). Soil chromas were identified according to Munsell's Soil Color Charts (Kollmorgen 1994).

The potential areas of jurisdiction were walked with a Trimble GeoXH Geoexplorer 2014 handheld GPS unit set to collect positional data. Upon completion of field data collection, jurisdictional boundaries were downloaded from the GPS unit and converted into a GIS shape file using ArcGIS software. Properties such as length, width, and acreage of the drainage were calculated through ArcGIS. Photographs were taken to document site conditions (*Appendix A*).

Thus, the subject site was investigated and observed for both jurisdictional wetlands and qualifying non-wetland WOUS. To determine qualifying wetlands, biological species and characteristics were observed for predominance and secondary character of hydrophytic vegetation. Hydrology was observed through visual observation of the volume of surface flow, and the analysis of the characteristics of small soil pits which were excavated to determine soil type and hydrological characteristics. A total of six (6) sample pit locations were evaluated. For each location, an arid west wetland determination form was completed. Areas in and around the Unnamed Tributary channel were evaluated for the presence of potential wetland and non-wetland WOUS. If an area appeared to support wetland conditions, vegetation and hydrology indicators were noted. An office mapping analysis was subsequently conducted in order to ascertain whether the creek waters identified in the field were isolated, or rather were tributary to navigable waters.

Areas were determined to be potential non-wetland WUS if there was evidence of regular surface flow (e.g., bed and bank) but either the vegetation or soils criterion was not met. Jurisdictional limits for these areas were defined by the ordinary high water mark (OHWM), which is defined in 33 CFR Section 329.11 as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of the soil; destruction of terrestrial vegetation; the presence of litter or debris; or other appropriate means that consider the characteristics of the surrounding areas."

The boundaries of potential WOTS within the project site area were determined based on the presence of regular surface flow, or the presence of riparian vegetation. Potentially jurisdictional streambeds were determined based on the presence of a defined physical bed, banks, and channel within the drainage course. Streambeds within potential CDFW jurisdiction are delineated based on the definition of streambed as "*a body of water that flows at least periodically or intermittently through a bed or channel having banks and supporting fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports riparian vegetation*".[21]

A preliminary identification of the boundaries of jurisdictional wetlands and non-wetland waters pursuant to the regulations promulgated by the USACE, the California RWQCB, and the CDFW, was identified as indicated in this report. A final determination on limits of their jurisdiction is made by the respective agencies.

---

[20] Conservation Biology Institute, Soil Survey Database for San Diego County, California, USA, 2011.

[21] California Fish & Game Code; Title 14, Sect. 1.72.

5.0 RESULTS

5.1 SUMMARY

Two drainages (creeks) are located within the Study Area. An Unnamed Creek ("Drainage A") is tributary to San Vicente Creek, which is tributary to the Pacific Ocean, a TNW. In addition, ten (10) golf course ponds are located within the Study Area, some of which are hydrologically connected to Drainage A, and some of which are isolated from the drainage. These areas have all been analyzed for evidence of federal or state jurisdiction. Potential wetland conditions were observed within Drainage A and on some areas on the periphery of the Golf Course ponds. In those locations, wetland sample points were conducted to determine the presence or absence of wetland indicators; i.e. vegetation, soil and hydrology. The following are our findings:

Potential USACE jurisdiction within the subject area totals approximately 11.51 acres, of which 9.23 acres consist of jurisdictional wetlands. Implementation of the proposed project will result in no impacts to USACE jurisdictional area.

Potential RWQCB jurisdiction within the subject area totals approximately 11.51 acres, of which 9.23 acres consist of jurisdictional wetlands. Implementation of the proposed project will result no impacts to RWQCB jurisdictional area.

Potential CDFW jurisdiction at the site totals approximately 13.10 acres. Implementation of the proposed project will result in no impacts to CDFW jurisdictional area.

5.1 OVERVIEW

The subject site exists as a golf course with almost-totally non-native, regularly maintained turf grasses and landscape trees and shrubs, and several man-made ponds. A natural drainage (Drainage A for purposes of this report) flows from north to south, starting offsite as a slow-moving freshwater marsh, and meandering as a narrow, steep-banked channel prior to its confluence with San Marcos Creek at the southern end of the Study Area. Areas associated with either Drainage A, or the ten (10)) Golf Course Ponds (referenced as GCP's, ascending numerically from north to south for purposes of this report) are the only potential jurisdictional areas within the Study Area. These areas are shown on *Figures 3 and 4* (USACE), *Figures 5 and 6* (RWQCB) *and Figures 7 and 8* (CDFW). The details are analyzed and discussed below.

5.2 DRAINAGES

5.2.1 Drainage A

Drainage A enters the Project site in the northeastern boundary and continues southerly, bisecting the eastern Golf Course property line, almost totally offsite of the Golf Course. It is a perennial blue-line stream which enters the Study Area in the northeast corner, and flows for approximately 9,450 linear feet southerly until it discharges into San Marcos Creek at the southern end of the Study Area. More specifically, it enters the Study area in the north and travels south, just easterly [outside] of the Golf Course as a slow moving marsh wetland. This streambed section is characterized by Coastal and Valley Freshwater Marsh ("FWM") vegetation.

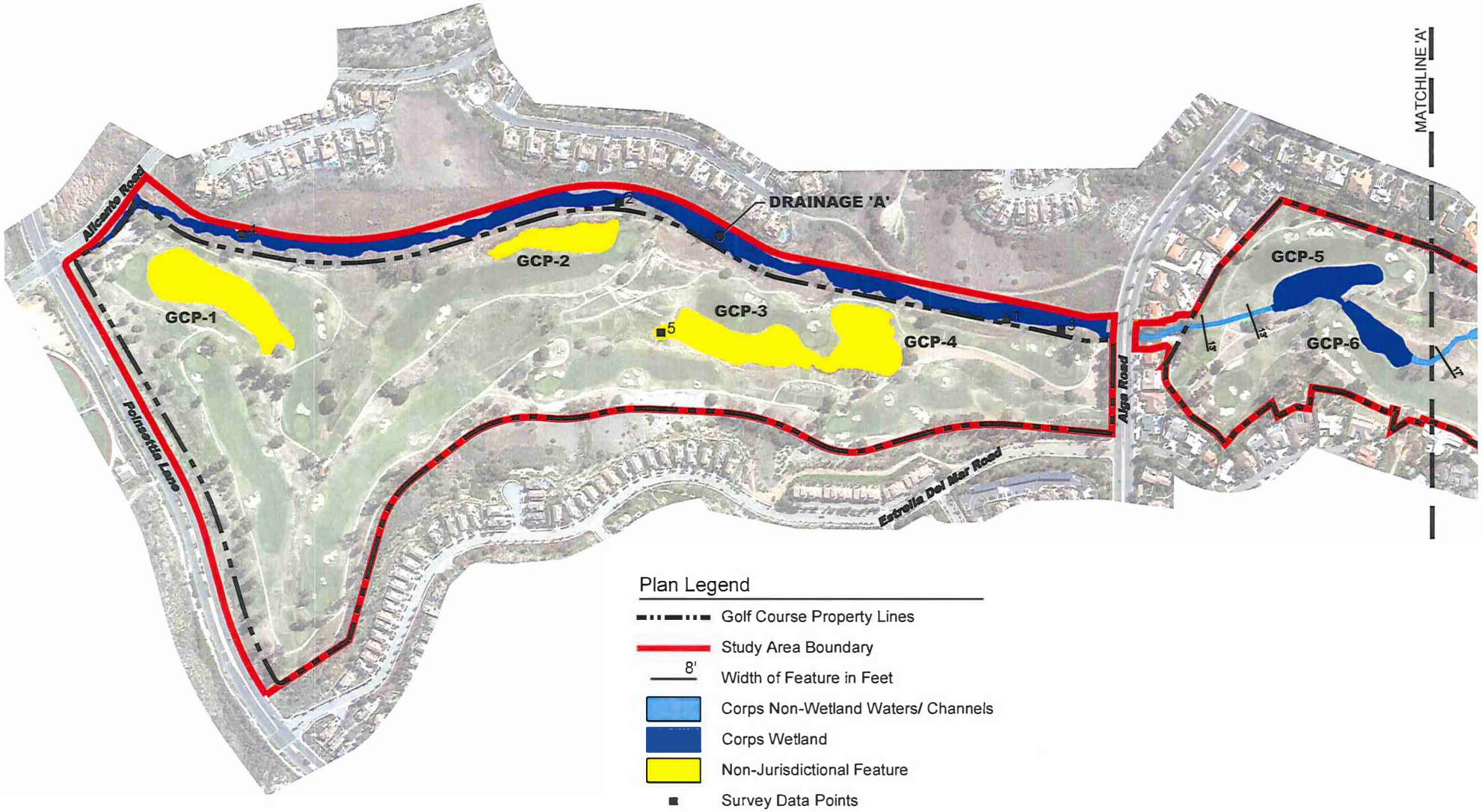


Figure 3

Potential Jurisdictional Waters - USACE

Omni Resort - Champions Course (North Section)

Carlsbad, California

September 15, 2022

PLANNING SYSTEMS
LAND USE/COASTAL PLANNING
LANDSCAPE ARCHITECTURE
POLICY AND PROCESSING
ENVIRONMENTAL MITIGATION
1530 FARADAY AVENUE, SUITE 100, CARLSBAD, CA 92008
(760) 931-0780 FAX (760) 931-5744

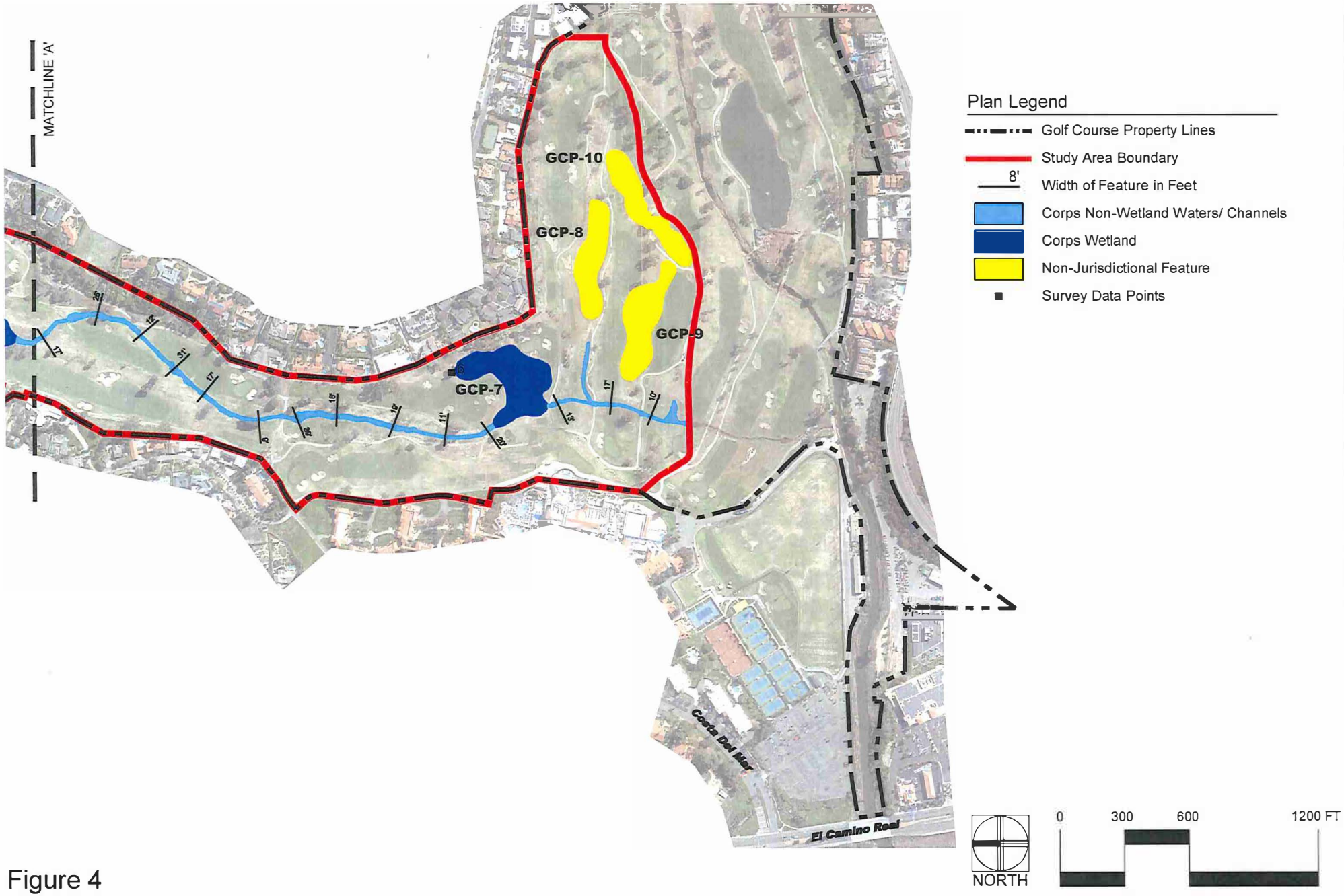


Figure 4

Potential Jurisdictional Waters - USACE

Omni Resort - Champions Course (South Section)

Carlsbad, California

Scale: 1" = 600'

September 15, 2022

PLANNING SYSTEMS
LAND USE/COASTAL PLANNING
LANDSCAPE ARCHITECTURE
POLICY AND PROCESSING
ENVIRONMENTAL MITIGATION
1530 FARADAY AVENUE, SUITE 100, CARLSBAD, CA 92008
(760) 931-0750 FAX (760) 931-8744

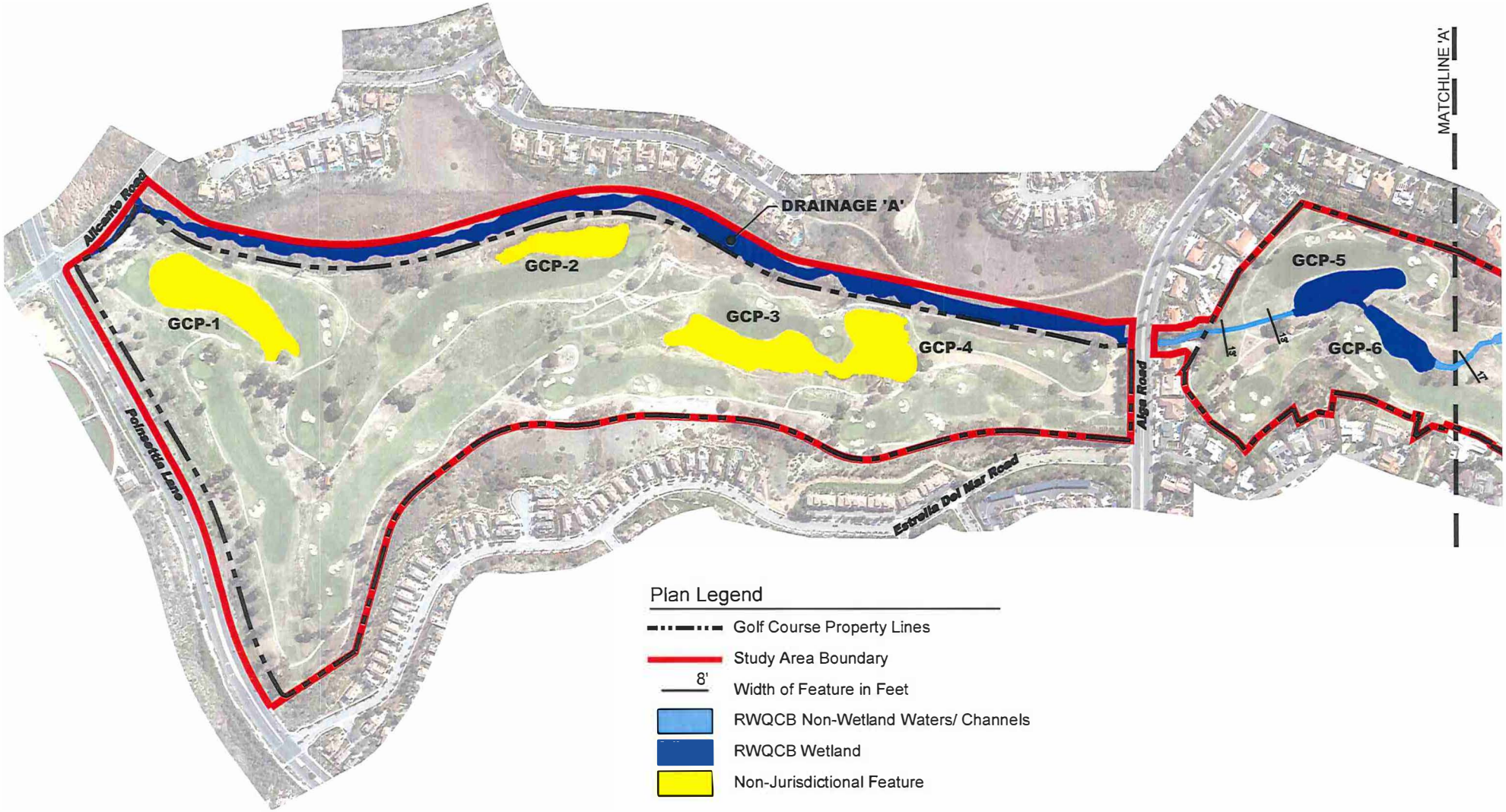


Figure 5

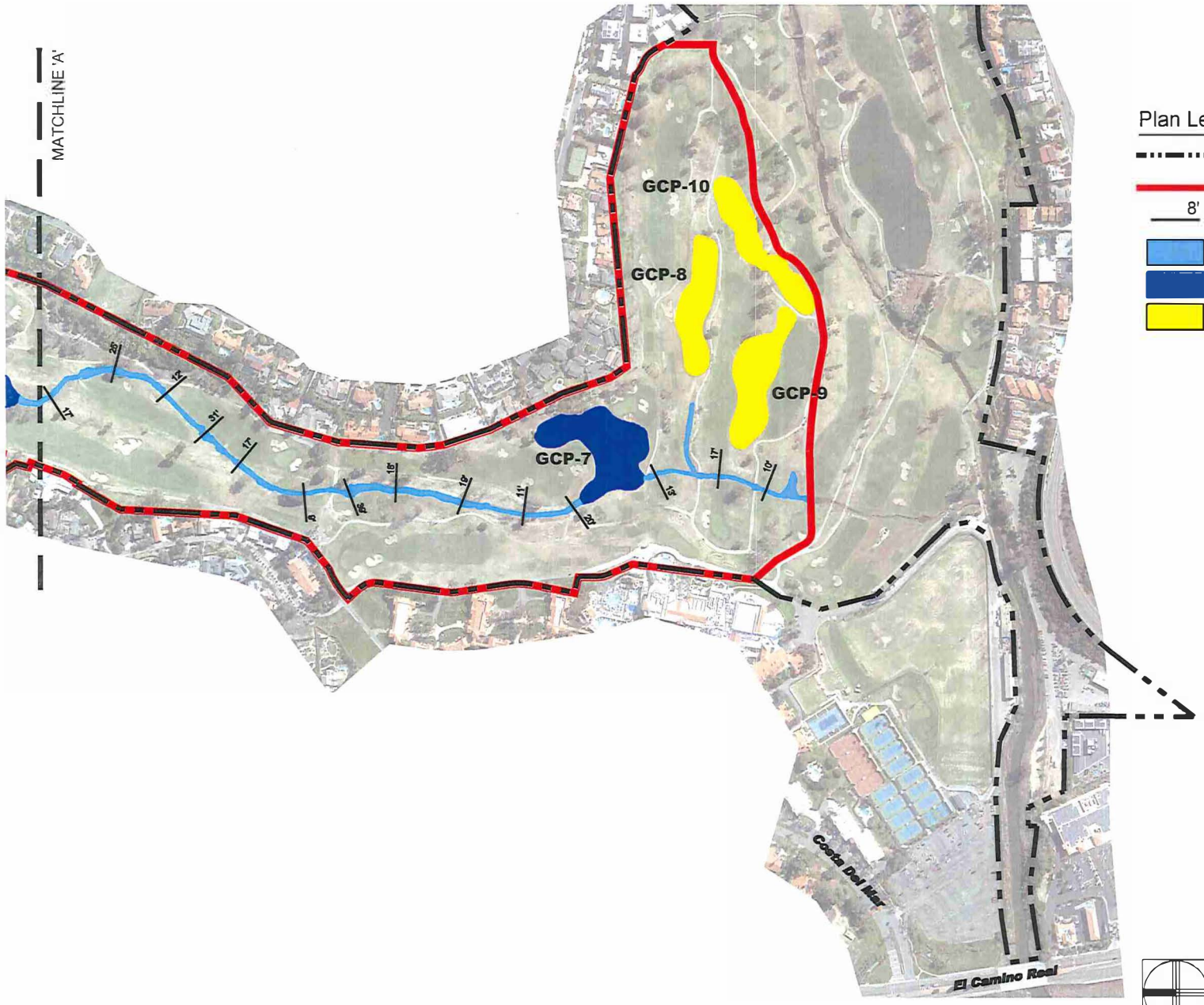
Potential Jurisdictional Waters - RWQCB

Omni Resort - Champions Course (North Section)

Carlsbad, California

September 15, 2022

PLANNING SYSTEMS
LAND USE/COASTAL PLANNING
LANDSCAPE ARCHITECTURE
POLICY AND PROCESSING
ENVIRONMENTAL MITIGATION
1530 FARADAY AVENUE, SUITE 100, CARLSBAD, CA 92008
(760) 931-0780 FAX (760) 931-6744



Plan Legend

- Golf Course Property Lines
- Study Area Boundary
- 8' Width of Feature in Feet
- RWQCB Non-Wetland Waters/ Channels
- RWQCB Wetland
- Non-Jurisdictional Feature

NORTH

0 300 600 1200 FT

Scale: 1" = 600'

September 15, 2022

Figure 6

Potential Jurisdictional Waters - RWQCB

Omni Resort - Champions Course (South Section)

Carlsbad, California

PLANNING SYSTEMS
LAND USE/COASTAL PLANNING
LANDSCAPE ARCHITECTURE
POLICY AND PROCESSING
ENVIRONMENTAL MITIGATION

1530 FARADAY AVENUE, SUITE 100, CARLSBAD, CA 92008
(760) 931-0780 FAX (760) 931-5744

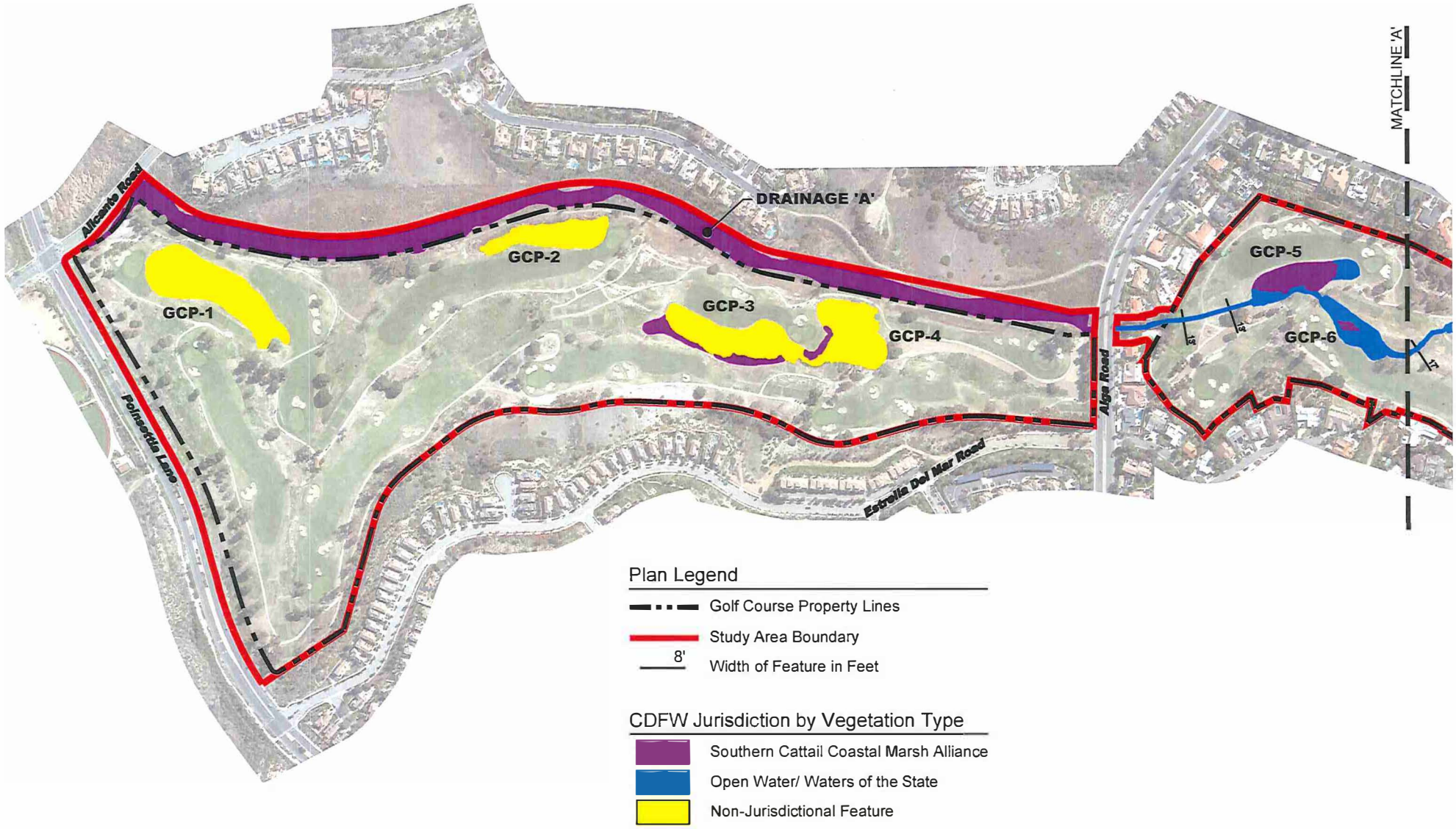


Figure 7

Potential Jurisdictional Waters - CDFW

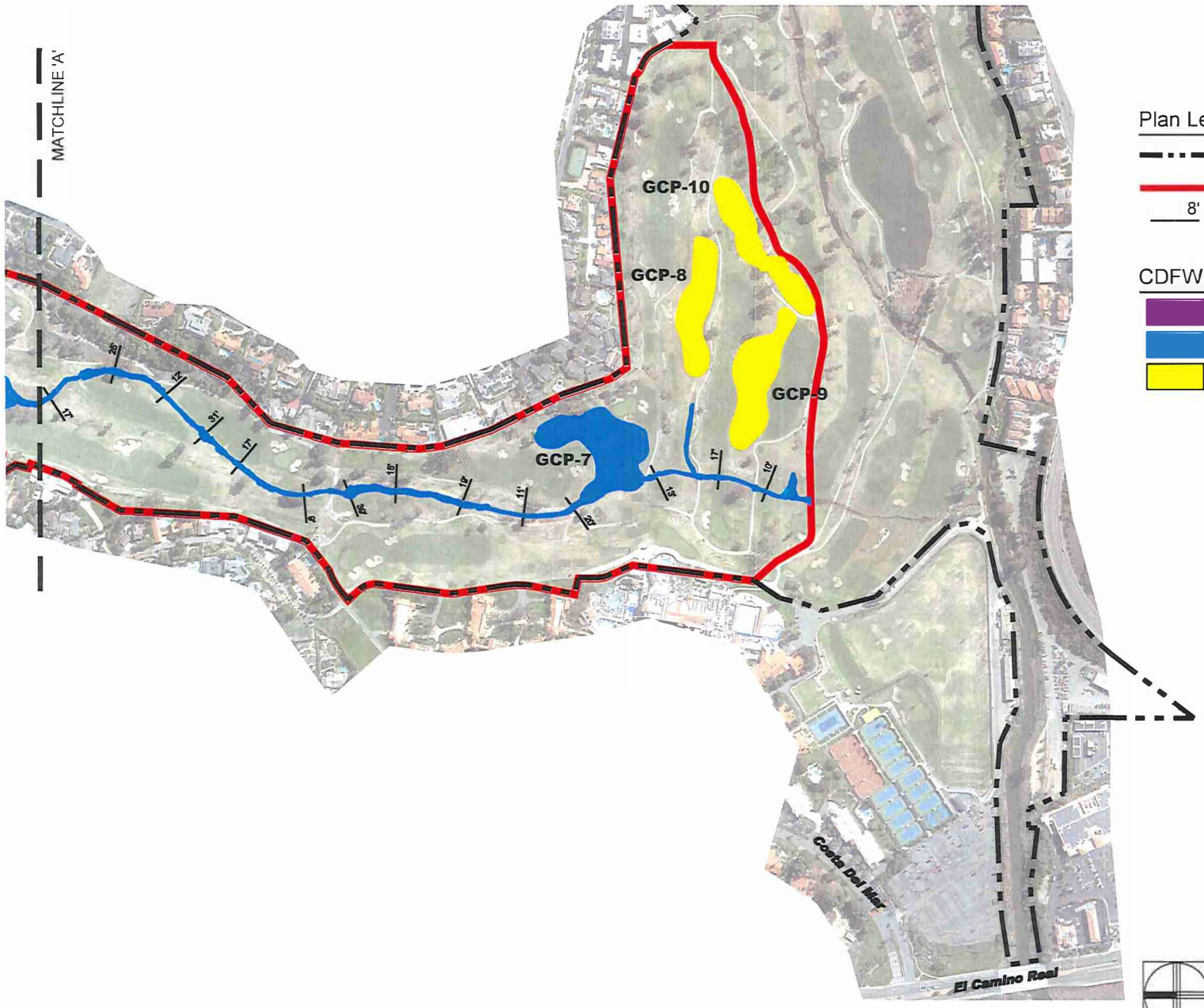
Omni Resort - Champions Course (North Section)

Carlsbad, California

Scale: 1" = 600'

September 15, 2022

PLANNING SYSTEMS
LAND USE/COASTAL PLANNING
LANDSCAPE ARCHITECTURE
POLICY AND PROCESSING
ENVIRONMENTAL MITIGATION
1530 FARADAY AVENUE, SUITE 100, CARLSBAD, CA 92008
(760) 931-0780 FAX (760) 931-8744



Plan Legend

- Golf Course Property Lines
- Study Area Boundary
- 8' Width of Feature in Feet

CDFW Jurisdiction by Vegetation Type

- Southern Cattail Coastal Marsh Alliance
- Open Water/ Waters of the State
- Non-Jurisdictional Feature

NORTH

0 300 600 1200 FT

Scale: 1" = 600'

Figure 8

Potential Jurisdictional Waters - CDFW

Omni Resort - Champions Course (South Section)

Carlsbad, California

September 15, 2022

PLANNING SYSTEMS
LAND USE/COASTAL PLANNING
LANDSCAPE ARCHITECTURE
POLICY AND PROCESSING
ENVIRONMENTAL MITIGATION

1530 FARADAY AVENUE, SUITE 100, CARLSBAD, CA 92008
(760) 931-0780 FAX (760) 931-5744

The FWM associated with Drainage A is a wetland community found in semi- or permanently-flooded areas, yet lacks current speed, and thus growth of native and non-native low-growing, aquatic species, including cattail (*Typha sp.*), Mexican rush (*Juncus mexicanus*), spikerush (*Eleocharis macrostachya*), Wild celery (*Apium graveolens*), Arroyo willow (*Salix lasiolepis*), Western ragweed (*Ambrosia psilostachya*), Coyote bush (*Baccharis pilularis*) and other native species occurs. The non-native Large-flowered water primrose (*Ludwigia grandiflora*) and Giant reed (*Arundo donax*) also flourishes within this FWM. No significant riparian corridor exists along this tributary. The eastern perimeter of the FWM is routinely mowed and maintained, as it is the out-of-bounds limit of the Golf Course.

While Drainage A is located immediately east of the Golf Course on the northern half of the course, it travels within the Golf Course site on the southern half. At the Alga Road crossing, the wetland marsh drainage flows under the road through a 18-foot box culvert, then [southerly of Alga Road, through an open, engineered, gunite-lined culvert channel until it discharges into GCP-5. It then exits GCP-5, into GCP-6, and travels approximately 2,300 linear feet, southerly, in a narrow, steep-banked channel prior to discharging into GCP-7. It then exits the downstream end of Golf Course Pond 7 and again flows as a narrow, steep banked streamcourse to its confluence with San Marcos Creek at the south end of the Study Area. San Marcos Creek is tributary to Batiquitos Lagoon; which is tributary to the Pacific Ocean, which is a TNW. Thus, Drainage A satisfies the significant nexus test.

USACE jurisdictional wetland conditions were observed almost wholly within the northerly half of Drainage A. As a result, to identify wetland boundaries in questionable areas, Wetland Sample Points SP-1 to SP-4 were conducted on the edges of the marsh to determine the presence/absence of wetland indicators. Based on this analysis, large portions of the upstream section of Drainage A met the three-parameter definition of a wetland. Additional wetland areas in the southern half of the Golf Course were mapped based on obvious field conditions, such as clear presence of hydrology indicators, hydrophytic vegetation, and hydrogen sulfide odor.

Non-wetland WOUS are drainage features that transport water on at least a seasonal basis at some point during the year, as evidenced by the presence of an OHWM, but do not satisfy all three criteria to be considered a wetland. Along the mid-stream and downstream length of Drainage A, the streambed snakes through the Golf Course in a narrow, well-defined channel. In this area, it is characterized as perennial flow with bed and steep, eroded banks, in which vegetation is largely Upland grasses, Ruderal shrubs and an occasional palm and other domestic volunteers. Several narrow golf cart bridges cross the streambed along this run. Numerous rocks and pieces of concrete debris lie haphazardly along the bottom and sides of the meandering channel. Assuming the observed OHWM and the extant hydrologic connection with a definable "navigable waters of the United States", this section of Drainage A falls under the jurisdiction of the USACE as a non-wetland WOUS. This jurisdiction is measured to the OHWM on each side of the creek. This length of the creek is determined to be non-wetland WOUS inasmuch as there is evidence of regular surface flow (e.g., clearly-defined bed and bank) but the full, three-parameter criteria for federal determination of wetlands is not met. Evidence of the OHWM in this section of the Study Area includes surface relief, scour line, and a clear break in the bank slope. The OHWM width on the subject section of the Drainage A measured in the field varies from 22 feet to four (4) feet in width. OHWM indicators included destruction of terrestrial vegetation, natural line impressed in bank, scour, and wracking.

Based on the field analysis of Drainage A, it is determined that Drainage A possesses 7.75 acres of USACE-jurisdictional WOUS, of which 5.95 acres are wetlands and 1.80 acres of non-wetland WOUS.

5.2.2 San Marcos Creek

San Marcos Creek parallels the very southern edge of the Study Area, which meanders in and out of the Study Area. San Marcos Creek is a blue-line stream, transporting runoff from much of coastal north San Diego County to Batiquitos Lagoon and the Pacific Ocean. Within the Study Area, San Marcos Creek is characterized as a well-defined channel, approximately 18 feet in depth, and up to 48-feet in width. San Marcos Creek is also a TNW, and thus satisfies the significant nexus test.

Based on the field analysis of San Marcos Creek, the segment within the Study Area totals 0.48 acres of USACE-jurisdictional WOUS between the OHWM line on the clearly-defined banks. Evidence of the OHWM in this section of the creek includes surface relief, scour line, and a clear break in the bank slope. No Corps-jurisdictional wetlands occur in this section of the creek.

5.3 GOLF COURSE PONDS

The man-made golf "water hazard" ponds were excavated with the original course construction to create hazards for course play. The Golf Course ponds are numbered from north to south as GCP-1 through GCP-10.

Under the USACE Final Rule, these ponds are classified as (b)(8) artificial lakes and ponds. Since they are located on an active golf course, the landscape around all of these ponds is routinely mowed and maintained. Artificial ponds such as these are not typically considered a jurisdictional water of the U.S., even if they have wetland characteristics, unless they have a direct connection to a tributary to a navigable TNW, are directly adjacent to a TNW, or constitute an impoundment of a TNW. As mentioned, Drainage A is the only feature on the course with a direct connection to a TNW, so GCP's hydrologically connected to Drainage A are potential WOUS. Thus, the final guidance states that WOUS excludes isolated Waters that are not hydrologically connected to navigable rivers and streams.

Areas subject to the jurisdiction of the USACE and RWQCB is limited to three (3) Golf Course ponds (GCP-5, GCP-6 and GCP-7). Please See *Figures 3 and 4; Potential Jurisdictional Waters – USACE* and *Figures 5 and 6; Potential Jurisdictional Waters – RWQCB*. These three Golf Course ponds are considered an impoundment of a jurisdictional water, hydrologically connected to Drainage A, San Marcos Creek, and the Pacific Ocean. As such, those features are potential WOUS. Two of the three jurisdictional ponds also contain wetland vegetation. A number of earthen, man-made, isolated features including Golf Course Ponds 1, 2, 3, 4, 8, 9 and 10, do not support a surficial connection to a Corps-jurisdictional TNW.

As previously stated, CDFW asserts jurisdiction of a streambed and channel, extending to the top of the bank (rather than to the OHWM as indicated per the USACE above), and to the outward extent of the canopy of riparian vegetation, if a riparian canopy is present. No riparian vegetation exists along this upper stretch of the streamcourse, and therefore no extension of CDFW jurisdictional limits exists beyond the top of the defined channel bank. Further, since evidence of the USACE OHWM exists at the top of the channel bank, the channel bed to the upper reach of the bank (the same location as the OHWM) is regulated by both USACE and CDFW. Please see *Figures 7 and 8 – Potential Jurisdictional Waters – CDFW*.

Areas subject to the jurisdiction of the CDFW is slightly larger, as it includes the fringes of two additional Golf Course Ponds (GCP-3 and GCP-4; in addition to GCP-5, GCP-6 and GCP-7) which possess emerging native marsh vegetation on the fringes of the ponds, even though those ponds are isolated from Drainage A. Each of the ten (10) ponds and their respective potential jurisdictional limits and boundaries are discussed and analyzed pursuant to their physical characteristics and locations and the applicable federal and state jurisdictional policies in greater detail below.

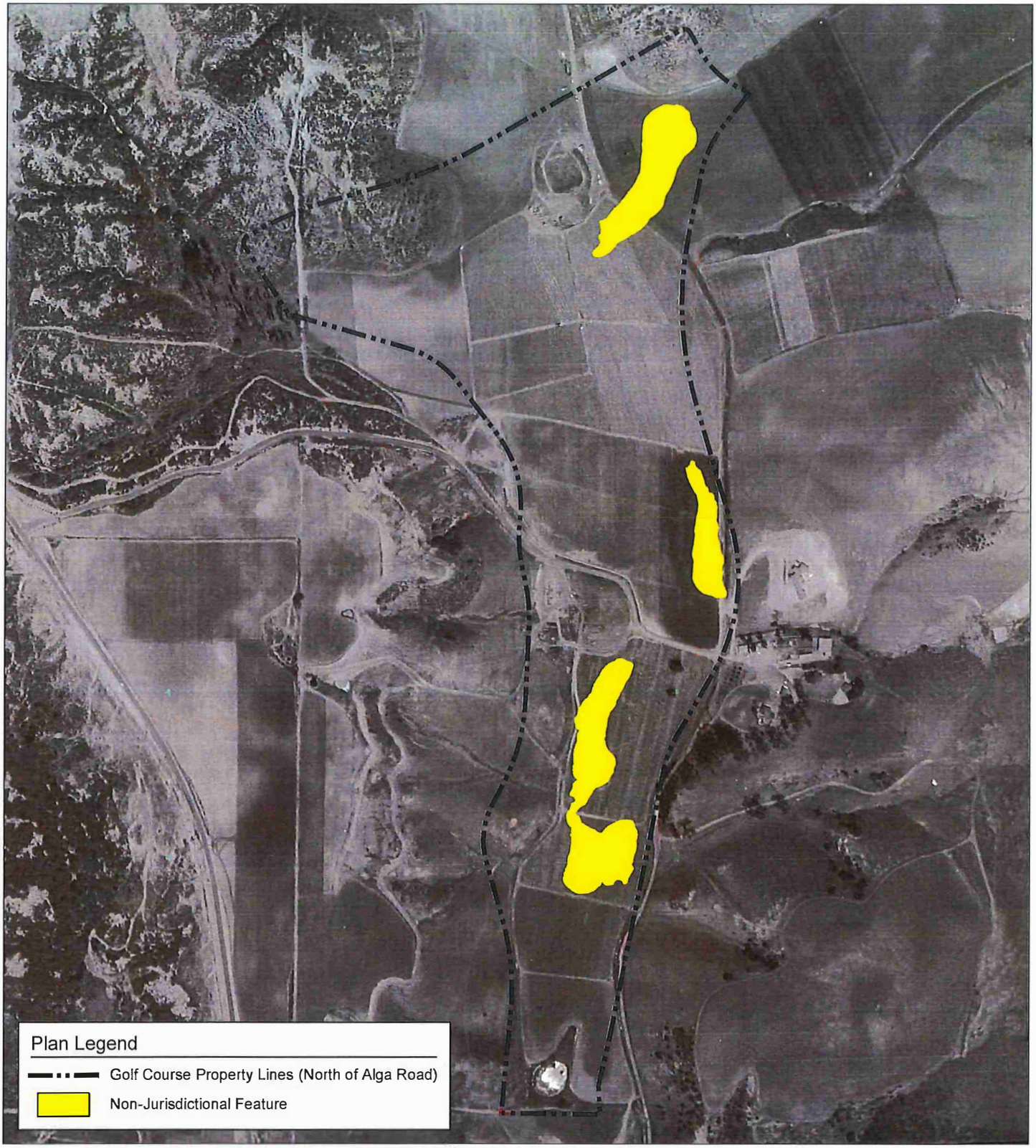
5.3.1 Golf Course Pond 1.

USACE. At the extreme north end of the Golf Course, GCP-1 serves as a golf "water hazard" and irrigation storage reservoir located between golf course green 7 and fairway 8. This pond is separated from Drainage A by a low, permanent earthen berm between the playable area of the course and the Drainage A marsh streambed and thus is not an impoundment of a jurisdictional water and does not have a direct connection to a tributary to a navigable WOUS. This pond is an earthen, man-made feature, constructed and maintained in a non-jurisdictional upland, and not situated within the Drainage A flow or hydrologically connected to Drainage A[22] or to any other wetlands or WOUS. It is therefore, considered "neighboring", but "isolated" pursuant to SWANCC. GCP-1 is not considered a WOUS because it was created for aesthetic reasons (golf water hazard), is artificially filled with water, and would revert to upland habitat if the irrigation ceased. As such, were the filling of irrigation water to cease, it would not be expected to support a prevalence of vegetation typically adapted for life in saturated soil conditions.

Further, GCP-1 is a Golf Course feature maintained almost wholly with City-provided recycled water distributed from the City water valve, and not supplied through natural drainage. Additionally, there is no measurable wetland vegetation in the vicinity beyond the pond Open Water, nor are there hydric soils or indicators of wetland hydrology beyond the Open Water habitat. The pond does not provided for lateral expansion and contraction of Drainage A, do not function alike, or share fish populations, or sediment. As such, GCP-1 is not considered "similarly situated" with the adjacent WOUS, in spite of the fact that both waterbodies are situated within the same 100-year floodplain.

Additionally, Golf Course Pond 1 is excluded as a WOUS per Section b(iv) below. The rationale being that it is a man-made pond, constructed and excavated in an upland or non-jurisdictional water, and is not an impoundment of a jurisdictional water that meets Clean Water Rule (c)(6). It was developed during grading of the valley in 1965 within an agricultural field for the construction of a golf course. This pond is not inundated by flooding in a typical year as evidenced by historical aerial photo review. Thus the pond is considered "prior converted cropland", and excluded from the definition of WOUS by the 2015 Clean Water Rule, Section 328.3: Definitions. Applicable sections are below. Also please see *Figure 9; 1964 Historic Aerial Photograph.* Tables of the accumulated totals are also provided at the end of the narrative section.

[22] Although WOUS Drainage A is nearby, a review of several historical USGS topographic maps (Encinitas, California) and aerial photos (revised 1956 and 1960), and a historical photo dated March 20, 1963 indicated that the area supported dry farming row crops, and no drainage feature existed in the location of GCP-1. Therefore GCP-1 is not considered an impoundment of a historical drainage.



SOURCE: EDR Aerial Photo Decade Package (8/30/2021); Flight Date: April 9, 1964

NORTH

0 300 600 1200 FT

Scale: 1" = 600'

Figure 9

Historic Aerial Photograph

Omni Resort - Champions Course

Carlsbad, California

September 15, 2022

PLANNING SYSTEMS

LAND USE/COASTAL PLANNING
LANDSCAPE ARCHITECTURE
POLICY AND PROCESSING
ENVIRONMENTAL MITIGATION

1630 FARADAY AVENUE, SUITE 100, CARLSBAD, CA 92008
(760) 931-0760 FAX (760) 931-8744

(b) The following are not "waters of the United States" even where they otherwise meet the terms of paragraphs (a)(4) through (8) of this section [underline added].

(2) Prior converted cropland.

(4) The following features:

(i) Artificially irrigated areas that would revert to dry land should application of water to that area cease.

(ii) Artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, settling basins, fields flooded for rice growing, log cleaning ponds, or cooling ponds;

(iii) Artificial reflecting pools or swimming pools created in dry land;

(iv) Small ornamental waters created in dry land. [23]

For these reasons, it is concluded that GCP-1 is not subject to USACE jurisdiction pursuant to Section 404.

RWQCB. Under Section 401, the RWQCB regulates at the state level all activities that are regulated at the federal level by USACE. Typically, those areas subject to RWQCB jurisdiction coincide with those of the USACE. With adoption of the 2020 Procedures[24], the SWRCB utilizes a somewhat broader definition of regulated areas than that of the Corps. The State Water Boards regulate waters under the authority of the state Porter-Cologne Act. The Porter-Cologne Act extends to WOTS which is broadly defined as:

1. *Natural wetlands;*
2. *Wetlands created by modification of a surface water of the state*[25]*; and*
3. *Artificial wetlands resulting from human activity that meet any of the following criteria:*
   a. *Approved by an agency as mitigation for impacts to other waters of the state;*
   b. *Specifically identified in a water quality control plan as a wetland or other water of the state;*
   c. *Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or*
   d. *Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for [agricultural or industrial] purposes. (Unless they also satisfy the criteria set forth in 2, 3a or 3b above.)*

All artificial wetlands that are less than an acre in size and do not satisfy the characteristics and criteria set forth in 2, 3(a), 3(b), or 3(c), above, are not considered waters of the state. If an aquatic feature meets the wetland definition, the burden is on the applicant to demonstrate that the wetland is not a water of the state.[26]

---

[23] Department of the Army, Corps of Engineers and Environmental Protection Agency, June 29, 2015, Clean Water Rule: Definition of "Waters of the United States", Final Rule. Federal Register, Vol. 90, No 24, pp. 37054-37127.

[24] State of California Water Quality Control Board, State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State, May 28, 2020.

[25] Created by "modification of a surface water of the state" means that the wetland that is being evaluated was created by modifying an area that was a surface water of the state at the time of such modification.

[26] California State Water Resources Control Board, "State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State", 2021.

As mentioned, GCP-1 is an artificial wetlands resulting from human activity. However, it does not qualify as a WOTS because although it contains conditions in which the duration of saturation is sufficient to cause anaerobic conditions, and a small portion of the pond is contains aquatic plants, the soil saturation is not from groundwater or surface water, but rather is from artificial filling as a result of golf course operations for aesthetic and sporting (commercial) reasons.

In consideration of these factors, it is determined that GCP-1 is not regulated by the RWQCB, was not created by modification of a surface water of the state, was not created as mitigation for impacts elsewhere, and has historically been subject to ongoing operation and maintenance. Therefore, GCP-1 is not subject to RWQCB jurisdiction pursuant to Section 401.

CDFW. CDFW's jurisdictional limits frequently closely resemble those of the USACE, however the Fish & Game Code adds artificial stock ponds and irrigation ditches constructed on uplands, and adds riparian habitat adjacent to or supported by a river, stream, or lake regardless of the riparian area's federal wetland status.

Thus, CDFW generally requires a Streambed Alteration Agreement (SAA) for projects proposing dredging or filling of streams or lakes that support of fish or other aquatic wildlife. However, they commonly do not assert jurisdiction over human-made water bodies unless they are located where such natural features were previously located or where they are contiguous with existing or prior natural jurisdictional areas. Therefore, CDFW typically does not assert jurisdiction over artificial ponds which do not possess the attributes of natural waterways and does not possess riparian vegetation.

As an artificially-created golf water hazard which was constructed in an upland agricultural field, GCP-1 is considered an artificial pond which was not located in an area where natural ponds or lakes were previously known to exist, and does not possess the attributes of a natural waterway. Therefore, GCP-1 is not subject to CDFW jurisdiction pursuant to Section 1602.

The Omni La Costa Golf Course Revitalization plans propose that GCP-1 is slated to be removed and replaced by a natural-landscaped, dry barranca.

5.3.2 Golf Course Pond 2

USACE. GCP-2 is located several hundred feet south of GCP-1, parallel and adjacent to fairway 10. GCP-2 is also a man-made pond feature, not situated within the Drainage A with circumstances virtually identical to GCP-1. It is not hydrologically connected to Drainage A, and therefore, is isolated. Golf Course Pond 2 is also maintained with City-provided recycled water. The pond does however possess a growth of California bulrush around the south and east perimeter of the waterbody. As such, were the filling for irrigation storage to cease, the pond would not be expected to support a prevalence of this vegetation, adapted for life in saturated soil conditions. GCP-2 is also not an impoundment of a jurisdictional water. It was constructed at the time that the course was built, on land that had been previously been farmed, and is thus considered prior-converted cropland. While GCP-2 supports some emergent bulrush on the margin of the pond, it does not possess hydric soils and does not meet the requirements for consideration as a wetland due to its overall location in the valley. Further, the aquatic plants in these fringe areas of the pond would be excluded based on Section (b)(4)(i) which excludes: *(i) Artificially irrigated areas that would revert to dry land should application of water to that area cease.*

Thus Golf Course Pond 2 is not considered USACE jurisdiction for the same reasons as Golf Course Pond 1.

RWQCB. As with GCP-1, GCP-2 is an artificial wetlands resulting from human activity. However, it does not qualify as a WOTS because although it contains conditions in which the duration of saturation is sufficient to cause anaerobic conditions, and a portion of the pond perimeter contains aquatic plants, the aquatic saturation is not from groundwater or surface water, but rather from artificial filling as a result of golf course operations for aesthetic and sporting (commercial) reasons.

GCP-2 also was not created by modification of a surface water of the state, was not created as mitigation for impacts elsewhere, and has historically been subject to ongoing golf operations and maintenance. Therefore, GCP-2 is not subject to RWQCB jurisdiction pursuant to Section 401.

CDFW. As with GCP-1, GCP-2 is also an artificially-created water hazard, not located in an area where natural ponds or lakes were previously known to exist, and does not possess the attributes of a natural waterway. Therefore, GCP-2 is not subject to CDFW jurisdiction pursuant to Fish and Game Code Section 1602.

The Omni La Costa Golf Course Revitalization plans propose that GCP-2 is slated to be removed and replaced by a natural-landscaped, dry barranca.

5.3.3 Golf Course Pond 3

USACE. GCP-3 is situated between fairway 5 and fairway 11. This water hazard pond is connected to adjacent GCP-4 via a short channel and artificial weir. GCP-3 is also a man-made feature, not situated within the Drainage a flow limits, not connected in any substantive way to Drainage A, and therefore, is isolated. GCP-3 is also maintained with City-provided recycled water and does not utilize natural runoff or drainage. Thus GCP-3 would not be considered USACE jurisdiction for the same reasons as GCP-1 and GCP-2.

RWQCB. GCP-3 is also not regulated by the USACE, was not created by modification of a surface water of the state, was not created as mitigation for impacts elsewhere, and has historically been subject to ongoing golf operations and maintenance. Therefore, GCP-3 is not subject to RWQCB jurisdiction pursuant to Section 401.

CDFW. As with GCP-1 and GCP-2, GCP-3 is an artificially-created water hazard, not located in an area where natural ponds or lakes were previously known to exist, and does not possess the attributes of a natural waterway. However, this feature supports 0.34 acres of emerging, fringing cattails and bulrush along the northern and western edge of the water feature which are supported by the artificial hydrology of the pond. This fringing vegetation community is considered a marsh, and is beneficial to and supports natural wildlife, and thus is beginning to resemble a natural marsh, under which circumstances it becomes jurisdictional to CDFW. Thus, 0.34 acres of GCP-3 is considered subject to CDFW jurisdiction pursuant to Section 1602.

No development of GCP-3 is proposed.

5.3.4 Golf Course Pond 4

USACE. GCP-4 is located immediately south of GCP-3, located between fairway 4 and the tee boxes for hole 12. GCP-4 is also a man-made pond feature, not situated within the Drainage A

with circumstances virtually identical to GCP-1, GCP-2 and GCP-3. It is not hydrologically connected to Drainage A, and therefore, is isolated. GCP is also maintained with City-recycled water. GCP-4 is a holding pond for recycled water used to irrigate the course. At the southern edge of GCP-4, a pumphouse exists, which pumps irrigation water throughout the course irrigation system. GCP-4 was also constructed at the time that the course was built, on land that had been previously been farmed, and is thus, prior-converted cropland. GCP-2 also supports an insignificant amount of emergent cattails on the margin of the pond, but does not possess hydric soils and does not meet the requirements for consideration as a USACE wetland. Thus GCP-4 is not considered USACE jurisdiction for the same reasons as GCP-1, GCP-2 and GCP-3.

RWQCB. GCP-4 is also not regulated by the USACE, was not created by modification of a surface water of the state, was not created as mitigation for impacts elsewhere, and has historically been subject to ongoing golf operations and maintenance. Therefore, GCP-4 is not subject to RWQCB jurisdiction pursuant to Section 401.

CDFW. As with GCP-1, GCP-2 and GCP-3, GCP-4 is an artificially-created water hazard, not located in an area where natural ponds or lakes were previously known to exist, and does not possess the attributes of a natural waterway. However, this feature supports 0.10 acres of emerging, fringing cattails along the northern edge of the water feature which are supported by the artificial hydrology of the pond. This fringing vegetation community is considered a marsh, and is beneficial to and supports natural wildlife, and thus is beginning to resemble a natural marsh, under which circumstances it becomes jurisdictional to CDFW. Thus, 0.10 acres of GCP-4 is considered subject to CDFW jurisdiction pursuant to Section 1602.

No development of GCP-4 is proposed.

5.3.5 Golf Course Pond 5

USACE. GCP-5 is located between fairway 2 and fairway 13. It is a linear, earthen, man-made pond that originates at the end of the short concrete culvert section of Drainage A, some 500-feet south of the Alga Road box culvert. It is situated within the hydrologic flow-line of Drainage A. GCP-5 also supports a large area of emerging hydrophytic vegetation in a shallow island of Southern Cattail Coastal Marsh vegetation alliance in the middle of the pond. This vegetation is primarily cattail (*Typhus latifolia*, OBL) and California bulrush (*Schoenoplectus californicus*, OBL). Wetland area limits were determined without soil pits based on the limits of hydrophytic vegetation since the vegetation is growing within the water and there is an obvious break between the wetland upland (turf grass) areas.

Further, the fact that GCP-5 is a functional part of the Drainage A stream drainage system indicates that the pond is Corps-jurisdictional under the USACE Final Rule, as it is an active part of a system with direct connection to a navigable TNW. The pond also possesses a visible OHWM. USACE jurisdiction includes the entirety of the pond from OHWM. USACE jurisdiction associated with GCP-5 possesses 1.03 acres of Corps-jurisdictional WOUS, the entirety of which are wetlands.

RWQCB. GCP-5 Corps-jurisdictional. As such, it is considered subject to the jurisdiction of the RWQCB under Porter-Cologne and is considered WOUS. Thus, 1.03 acres of GCP-5 is considered subject to RWQCB jurisdiction pursuant to Section 401.

CDFW. CDFW jurisdiction includes the areas identified as WOUS and the areas containing the Southern Cattail Coastal Marsh vegetation alliance. CDFW jurisdiction of GCP-5 totals 1.03 acres.

No development of GCP-5 is proposed.

5.3.6 Golf Course Pond 6

USACE. GCP-6 is situated between fairway 2 and tee 14. It is also an earthen, man-made Golf Course feature that originates only 20 feet downstream of the discharge point of Golf Course Pond 5. The two ponds are connected by a short, narrow culvert channel which transports the Drainage A runoff. Together, these three features constitute the flow line of WOUS Drainage A through this mid-section of the Study Area. GCP-6 supports a small area of Southern Cattail Coastal Marsh vegetation alliance in the middle of the pond.

USACE jurisdiction associated with Golf Course Pond 6 under Section 404 totals approximately 0.74 acres, the entirety consists of wetlands, for the same reasons as GCP-5. Wetland areas were determined without soil pits based on the limits of hydrophytic vegetation since the vegetation is growing within the water and there is an obvious break between the wetland and upland (turf grass) areas.

RWQCB. GCP-6 Corps-jurisdictional. As such, it is considered subject to the jurisdiction of the RWQCB under Porter-Cologne and is considered WOUS. Thus, 0.74 acres of GCP-6 is considered subject to RWQCB jurisdiction pursuant to Section 401.

CDFW. CDFW jurisdiction includes the areas identified as WOUS and the areas containing the Southern Cattail Coastal Marsh vegetation alliance. CDFW jurisdiction of GCP-5 totals 0.74 acres.

No development of GCP-6 is proposed.

5.3.7 Golf Course Pond 7

USACE. GCP-7 is a U-shaped pond feature, situated between green 15 and tee 16. It is characterized almost totally by open water. It is directly connected to a navigable TNW (Drainage A). The pond also possesses a visible OHWM. USACE jurisdiction includes the entirety of the pond from OHWM. USACE jurisdiction associated with GCP-5 under Section 404 totals 1.51 acres of USACE-jurisdictional WOUS, all of which are wetlands.

RWQCB. GCP-6 USACE-jurisdictional. As such, it is considered subject to the jurisdiction of the RWQCB under Porter-Cologne and is considered WOUS. Thus, 1.51 acres of GCP-7 is considered subject to RWQCB jurisdiction pursuant to Section 401.

CDFW. A total of 1.51 acres of GCP-7 is subject to CDFW jurisdiction pursuant to Section 1602.

No development of GCP-7 is proposed.

5.3.8 Golf Course Pond 8

USACE. GCP-8 is situated between fairway 17 and fairway 18. It is a man-made feature, not connection hydrologically with Drainage A, and therefore, is isolated. Golf Course Pond 8 is also maintained with City-recycled water. The pond is mostly unvegetated except for the surrounding turf grasses. Thus GCP-8 would not be considered USACE jurisdiction for the same reasons as GCP-1, GCP-2, GCP-3, and GCP-4. GCP-2 also supports little to no vegetation, and does not meet the requirements for consideration as a wetland.

Thus GCP-8 is not considered USACE jurisdiction for the same reasons as GCP-1, GCP-2, GCP-3 and GCP-4 are not jurisdictional.

RWQCB. GCP-8 is also not regulated by the USACE, was not created by modification of a surface water of the state, was not created as mitigation for impacts elsewhere, and has historically been subject to ongoing golf operations and maintenance. Therefore, GCP-8 is not subject to RWQCB jurisdiction pursuant to Section 401.

CDFW. GCP-8 is an artificially-created water hazard, not located in an area where natural ponds or lakes were previously known to exist, and does not possess the attributes of a natural waterway. Therefore, GCP-8 is not subject to CDFW jurisdiction pursuant to Section 1602.

No development of GCP-8 is proposed.

5.3.9 Golf Course Pond 9

USACE. GCP-9 is located along the southern edge of fairway 18. It is a man-made feature, not connection hydrologically with Drainage A, and therefore, is isolated. GCP-9 is also maintained with City-recycled water. The pond is mostly unvegetated except for the surrounding turf grasses. Thus GCP-9 would not be considered USACE jurisdiction for the same reasons as GCP-1, GCP-2, GCP-3, GCP-4 and GCP-8. GCP-9 also supports little to no vegetation, and does not meet the requirements for consideration as a wetland.

Thus Golf Course Pond 9 is not considered USACE jurisdictional.

RWQCB. GCP-9 is also not regulated by the USACE, was not created by modification of a surface water of the state, was not created as mitigation for impacts elsewhere, and has historically been subject to ongoing golf operations and maintenance. Therefore, GCP-9 is not subject to RWQCB jurisdiction pursuant to Section 401.

CDFW. GCP-9 is an artificially-created water hazard, not located in an area where natural ponds or lakes were previously known to exist, and does not possess the attributes of a natural waterway. Therefore, GCP-9 is not subject to CDFW jurisdiction pursuant to Section 1602.

No development of GCP-9 is proposed.

5.3.10 Golf Course Pond 10.

USACE. GCP-10 is also located along the southern edge of fairway 18. It is a man-made feature, not connection hydrologically with Drainage A, and therefore, is isolated. GCP-10 is also maintained with City-recycled water. The pond is mostly unvegetated except for the surrounding turf grasses. Thus GCP-10 would not be considered USACE jurisdiction for the same reasons as GCP-1, GCP-2, GCP-3, GCP-4, GCP-8, and GCP-9. GCP-10 also supports little to no vegetation, and does not meet the requirements for consideration as a wetland. Thus Golf Course Pond 10 is not considered USACE jurisdictional.

RWQCB. GCP-10 is also not regulated by the USACE, was not created by modification of a surface water of the state, was not created as mitigation for impacts elsewhere, and has historically been subject to ongoing golf operations and maintenance. Therefore, GCP-10 is not subject to RWQCB jurisdiction pursuant to Section 401.

CDFW. GCP-10 is an artificially-created water hazard, not located in an area where natural ponds or lakes were previously known to exist, and as a result of the fact that for many years it is an integral part of an active golf course and maintenance operation, does not possess the attributes of a natural waterway. Therefore, GCP-10 is not subject to CDFW jurisdiction pursuant to Section 1602.

No development of GCP-10 is proposed.

5.4 CALCULATION TABLES OF JURISDICTION

5.4.1 Total U.S. Army Corps of Engineers Jurisdiction

U.S. Army USACE of Engineers jurisdictional features include those determined to be WOUS, including Drainage A, San Marcos Creek and Golf Course Ponds 5, 6 and 7. The remaining Golf Course pond features were determined to be isolated and not considered as jurisdiction, including Golf Course Ponds 1, 2, 3, 4, 8, 9 and 10, pursuant to Section 404 of the Clean Water Act. See above for descriptions of these features which information is listed, calculated and totaled for the overall Study Area in *Table 1; USACE Jurisdiction within the Study Area,* below.

Table 1: USACE Jurisdiction within the Study Area

Drainage/Pond	Non-Wetland WOUS	Wetland WOUS	Total USACE Jurisdiction (Ac.)	Linear Feet
Drainage A	1.80	5.95	7.75	9,450
San Marcos Creek	0.48	0.00	0.48	820
Golf Course Pond 1	0.00	0.00	0.00	N/A
Golf Course Pond 2	0.00	0.00	0.00	N/A
Golf Course Pond 3	0.00	0.00	0.00	N/A
Golf Course Pond 4	0.00	0.00	0.00	N/A
Golf Course Pond 5	0.00	1.03	1.03	N/A
Golf Course Pond 6	0.00	0.74	0.74	N/A
Golf Course Pond 7	0.00	1.51	1.51	N/A
Golf Course Pond 8	0.00	0.00	0.00	N/A
Golf Course Pond 9	0.00	0.00	0.00	N/A

Golf Course Pond 10	0.00	0.00	0.00	N/A
Total	2.28	9.23	11.51	10,270

5.4.2 Total RWQCB Jurisdiction

Regional Board jurisdictional features include those determined to be WOUS, including Drainage A, San Marcos Creek and Golf Course Ponds 5, 6 and 7. The remaining Golf Course pond features were determined to be isolated and not considered USACE jurisdiction, including Golf Course Ponds 1, 2, 3, 4, 8, 9 and 10. Those features are subject to the jurisdiction of the Regional Board under Porter-Cologne and are considered waters/wetlands of the State (WOUS). See above for descriptions of these features and *Table 2; RWQCB Jurisdiction within the Study Area* below for acreage and linear feet totals.

Table 2: RWQCB Jurisdiction within the Study Area

Drainage/Pond	Non-Wetland WOUS	Wetland WOUS	Total RWQCB Jurisdiction (Acres)	Linear Feet
Drainage A	1.80	5.95	7.75	9,450
San Marcos Creek	0.48	0.00	0.48	820
Golf Course Pond 1	0.00	0.00	0.00	N/A
Golf Course Pond 2	0.00	0.00	0.00	N/A
Golf Course Pond 3	0.00	0.00	0.00	N/A
Golf Course Pond 4	0.00	0.00	0.00	N/A
Golf Course Pond 5	0.00	1.03	1.03	N/A
Golf Course Pond 6	0.00	0.74	0.74	N/A
Golf Course Pond 7	0.00	1.51	1.51	N/A
Golf Course Pond 8	0.00	0.00	0.00	N/A
Golf Course Pond 9	0.00	0.00	0.00	N/A
Golf Course Pond 10	0.00	0.00	0.00	N/A
Total	2.28	9.23	11.51	10,270

5.4.3 Total CDFW Jurisdiction

California Dept. of Fish and Wildlife jurisdictional features include those determined to be WOTS, including Drainage A, San Marcos Creek, the Southern Cattail Marsh areas of GCP 3 and GCP-4 and GCP's 5, 6 and 7. The remaining features were determined to be isolated and/or not vegetated with appropriate wetland or riparian vegetation, and thus were not considered as CDFW jurisdiction, including Golf Course Ponds 1, 2, most of GCP-3,most of GCP-4, and 8, 9 and 10. See above for descriptions of these features and *Table 3; CDFW Jurisdiction within the Study Area* below for acreage and linear feet totals.

Table 3: CDFW Jurisdiction within the Study Area

Drainage/Pond	Jurisdictional WOUS	Southern Cattail Marsh	Total CDFW Jurisdiction (Acres)	Linear Feet
Drainage A	1.80	7.10	8.90	9,450
San Marcos Creek	0.48	0.00	0.48	820
Golf Course Pond 1	0.00	0.00	0.00	N/A
Golf Course Pond 2	0.00	0.00	0.00	N/A

Golf Course Pond 3	0.00	0.34	0.34	N/A
Golf Course Pond 4	0.00	0.10	0.10	N/A
Golf Course Pond 5	0.38	0.65	1.03	N/A
Golf Course Pond 6	0.70	0.04	0.74	N/A
Golf Course Pond 7	1.51	0.00	1.51	N/A
Golf Course Pond 8	0.00	0.00	0.00	N/A
Golf Course Pond 9	0.00	0.00	0.00	N/A
Golf Course Pond 10	0.00	0.00	0.00	N/A
	4.87	8.23	13.10	10,270

5.5 SAMPLING POINTS

In locations where potential wetland conditions were observed but the boundaries were questioned, Wetland Sample Points were conducted to determine the presence/absence of wetland indicators. Six Wetland Sample Points were identified, dug and documented with USACE Wetland Determination Data Forms within the Study Area. Based on the information gathered in these analyses, the wetland boundaries were identified and mapped based on the field conditions of clear presence of hydrophytic vegetation, hydrology indicators and hydric soils (particularly hydrogen sulfide odors).

5.5.1 Hydric Vegetation

The vast majority of the Study Area acreage is covered with ornamental grasses and turf, primarily Bermuda grass (*Cynodon dactylon*), and Zoysia grass (*Zoysia*). These are grasses that are typically utilized for golf play in southern California. However in locations where the FWM and the Golf Course interfaced, or in locations on the perimeter of ponds, Sample Points were dug. The following is a summary of the information gathered from these Sample Points.

Table 4: Plant Species Observed in Sampling Point Locations

SCIENTIFIC NAME	COMMON NAME	WETLAND INDICATOR STATUS
Aneniopsis californica	Yerba mansa	OBL
*Apium graveolens**	Wild celery	FACW
Artemisia douglasiana	Mugwort	FAC
Atriplex prostrata	Spearscale	FACW
Arundo donzx	Giant reed	FACW
Baccharis pilularis	Coyote bush	UPL
Baccharjs salicifolia	Mule fat	FAC
Bolboschoenus maritimus	Prairie bulrush	FACW
Cyperus eragrostis	Flat sedge	FACW
Cyperus sp.	Sedge	FACW
Eleocharis macrostachya	Spikerush	FACW
Epilobium cililatum	Willow herb	FACW
Erigeron canadensis	Horseweed	FACU
*Eucalyptus sp.**	Eucalyptus	UPL
*Euphorbia peplus**	Petty spurge	UPL
*Helminthotheca echioides**	Bristly ox-tongue	FAC
Juncus acutus ssp. leopoldii	Southwestern spiny rush	FACW

Juncus mexicanus	Mexican rush	FACW
*Ludwigia grandjfiora**	Large-flowered water primrose	OBL
*Medicago polymorpha **	Bur-clover	FACU
*Melilotus albul**	White sweetclover	UPL
Oenothera elata	Evening primrose	FACW
Plantago major	Common plantain	FAC
Platanus racemosa	Western sycamore	FAC
*Polypogon monspeliensis**	Annual beard grass	FACW
Quercus agrifolia	Coast live oak	UPL
*Raphanus sativus**	Wild radish	UPL
Rosa caljfornica	Wild rose	FAC
Salix gooddingii	Black willow	FACW
Salix lasiolepis	Arroyo willow	FACW
Typha sp.	Cattail	OBL
*Washingtonia robusta**	Mexican fan palm	FACW

OBL=obligate wetland species, FACW=facultative wetland species, FAC=facultative species, FACU=facultative upland species, UPL=upland species. *Non-native species

5.5.2 Hydric Soils

In order to pass the USACE hydric soils test, soils must exhibit physical and/or chemical characteristics indicative of at least periodic saturation. During the Sampling Point effort, soils are closely examined for hydric soil indicators, including a list of characteristics indicating saturation, flooding or ponding for a period long enough to develop anaerobic conditions in the upper 12 inches.

To accomplish this analysis, soil within the Study Area was sampled the six (6) locations. The analysis concluded that hydric soil indicators were observed at two of the three sampling point locations. The following hydric soil indicator was identified at four of the six locations within the Study Area:

- Hydrogen sulfide (A4)
- Saturation (A3)
- Biotic Crust (B12)
- Muck (A9)

5.5.3 Wetland Hydrology

The following wetland hydrology indicators, as defined by the USACE (2008), were observed at the several locations in the Study Area:

- Surface water;
- Drift deposits;
- Soil water saturation;
- Hydrogen sulfide odor;
- FAC-neutral test;
- Inundation visible on aerial images.

6.0 PROPOSED IMPACTS

The architect and engineering designers of the Golf Course Renovation project has provided AutoCad files of the limits of the proposed repairs and maintenance areas. This AutoCad information was overlaid onto the limits of jurisdictional area identified per the conclusions of this jurisdictional delineation. The proposed project is anticipated to result in "shadow" impacts to the southern portion of Drainage A for purposes of installation of two footbridges and one golf cart bridge. Construction of these three bridges result in the following indirect "shadow" impacts:

Table 5: Potential Impacts to Jurisdictional Areas

	USACE and RWQCB Jurisdiction Impacts		**CDFW Jurisdiction Impacts**	
PROPOSED JURISDICTIONAL IMPACT AREAS FROM OMNI RENOVATION PROJECT	Area: 0.012 Acres	Linear Footage: 44 feet	Area: 0.012 Acres	Linear Footage: 44 feet

This jurisdictional delineation report concludes that the proposed Golf Course repair and maintenance project will result in 0.012 acres of permanent indirect impacts to WOUS and WOTS and thus the project could be subject to the USACE permitting authority under Section 404 of the Clean Water Act It is also subject to certification approval by the RWQCB under Section 401 of the Clean Water Act, and is subject to the permitting authority of the CDFW under Section 1602 of the California Fish and Game Code. No direct impact to jurisdictional area will result.

Additionally, the proposed project will eliminate 220 square feet (0.005 acres) of shadow impacts to USACE, RWQCB and CDFW jurisdiction by the removal of an existing golf cart bridge in the same area. This offset results in a total net impact of 0.007 acres of jurisdictional area.

Upon review of the project however, the USACE and the CDFW have indicated that their offices will not regulate the shadow impacts as a qualifying dredging, filling, diverting, obstructing or materially impacting activity requiring permit or authorization. While the RWQCB has not completed their review, it is anticipated that the RWQCB will reach the same conclusion.

Thus, it is the conclusion of this analysis that the project will not result in direct or indirect impacts to federal or state jurisdictional area. No compensatory mitigation is required.

If you have any questions about this letter report, please contact Paul Klukas at (760) 931-0780 x104.

Sincerely,

Paul J. Klukas
Senior Regulatory Specialist

Attached: Appendix A – Photographs of Study Area
Appendix B – Wetland Determination Data Forms

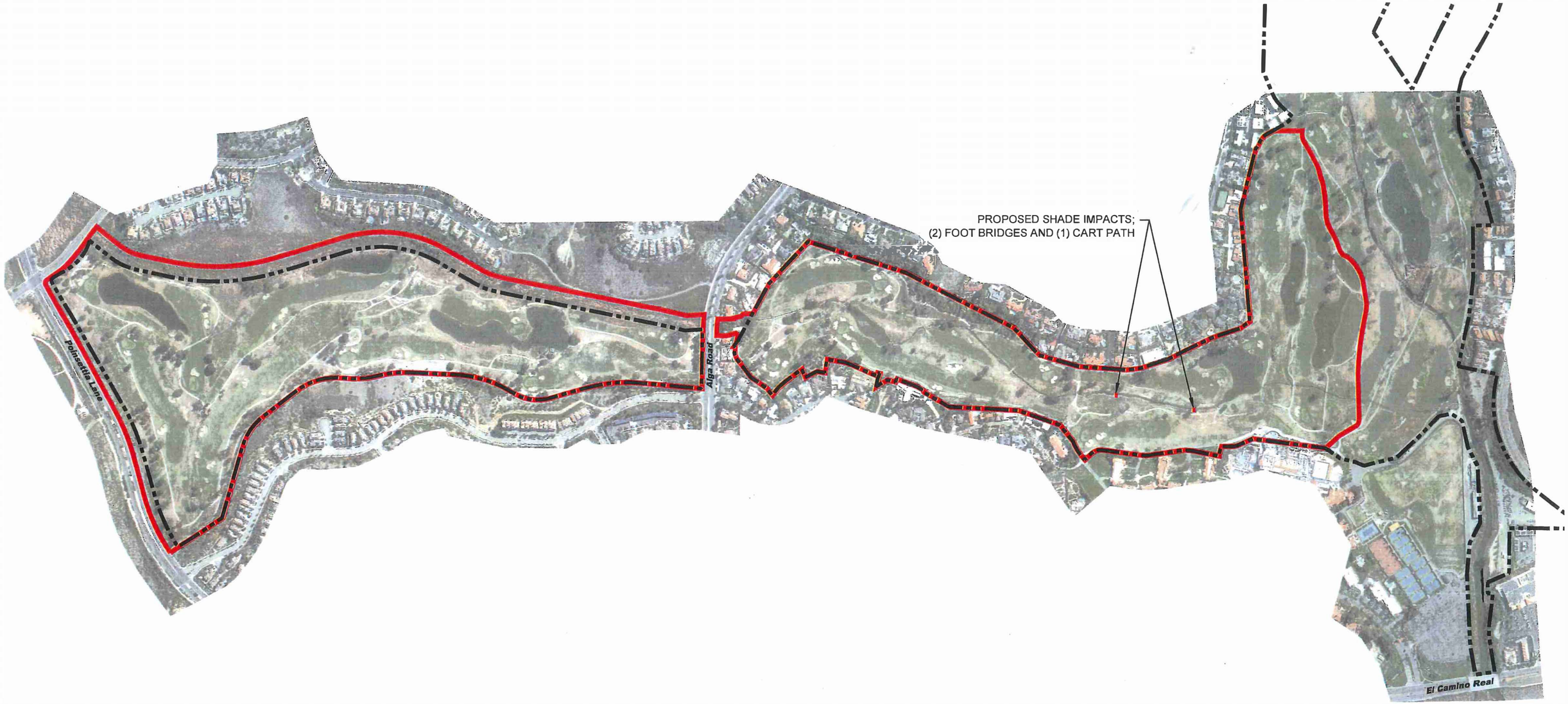


Figure 10

Description of the USACE, RWQCB & CDFW Jurisdictional Permit Activity

Omni Resort - Champions Course

Carlsbad, California

September 15, 2022

PLANNING SYSTEMS
LAND USE/COASTAL PLANNING
LANDSCAPE ARCHITECTURE
POLICY AND PROCESSING
ENVIRONMENTAL MITIGATION
1650 FARADAY AVENUE, SUITE 100, CARLSBAD, CA 92008
(760) 931-0780 FAX (760) 931-8744

7.0 REFERENCES

California Department of Fish and Game (CDFW) Environmental Services Division, A Field Guide to Lake and Streambed Alteration Agreements, Sections 1600-1607, 1994.

California State Water Resources Control Board, "State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State", 2021.

Data Basin, Soil Survey Database for San Diego County, California, USA, Conservation Biology Institute, 2011.

Environmental Laboratory, U. S. Army Corps of Engineers Wetland Delineation Manual – Final Report, January 1987.

Jepson, Willis Linn, The Jepson Manual: Vascular Plants of California, 2012.

Krollmorgen Corporation, Munsell Soil Color Charts, Macbeth Division of Krollmorgen Corporation, Baltimore, MD, 1994.

Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin, Arid West 2016 Regional Wetland Plant List, Published April 28, 2016.

Natural Resources Conservation Service, Web Soil Survey, U.S. Department of Agriculture, http://websoilsurvey.nrcs.usda.gov/app/.

U.S. Army Corps of Engineers, A Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States. A Delineation Manual, 2008.

U.S. Army Corps of Engineers, Regulatory Guidance Letter No. 08-02, Subject: Jurisdictional Delineations, 2008.

U.S. Army Corps of Engineers, Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, Ed. J.S. Wakely, R.W. Lichvar, and C.V. Noble, U.S. Army Engineer Research and Development Center, Vicksburg, Mississippi, 2008.

U.S. Department of Agriculture, Hydric Soils of the United States, Department of the Interior, U.S. Government Printing Office, Washington D.C., 1987.

U.S. Fish & Wildlife Service, National List of Plant Species that Occur in Wetlands, Natural Summary, Washington D.C., 1996.

U.S. Geological Survey, Encinitas, CA, 7.5 Minute Topographic Maps, Department of the Interior, U.S. Government Printing office, Washington D.C.

Western Regional Climate Center, online at http://www.ncdc.noaa.gov/oa/climate/regionalclimatecenters.html.

APPENDIX A

PHOTOGRAPHS

APPENDIX A
PHOTOGRAPHS

Photo of GCP-7 from air, looking north, showing entry and discharge of Drainage A.

Photo of well defined channel of Drainage A from air, north of DGP-7.

Photo of well-defined channel from air of Drainage A between GCP-6 and GCP-7.

Photo of well-defined channel from air of Drainage A between GCP-6 and GCP-7.

Photo of well-defined channel from air of Drainage A between GCP-6 and GCP-7.

Photo of well-defined channel from air of Drainage A between GCP-6 and GCP-7.

Photo of Drainage A channel from air south of Alga Road.

Photo of Drainage A channel south of Alga Road and GCP 6.

Photo of Drainage A channel south of Alga Road and GCP 6.

Photo of well-defined channel of Drainage A as it enters GCP-6.

Photo from air of Freshwater Marsh north of Alga Road. Soil berm exists between service road and marsh.

Photo from air of Freshwater Marsh north of Alga Road. Soil berm exists between service road and marsh.

Photo from air of Freshwater Marsh on right and GCP-4 on left. GCP-3 in distance.

Photo from air of GCP-4, looking north.

Photo of Freshwater Marsh on right. Golf course on left. Mexican fan palms invading marsh.

Photo from air of offsite freshwater marsh on right, Golf Course on left. Property line approximately between the two.

Photo from air of narrow area of freshwater marsh with GCP-2 in upper portion of frame.

Photo of offsite freshwater marsh and GCP-2.

Photo from air of upper reach of Drainage A in northern section of Study Area.

Photo of origin of Drainage A onto Study Area at north end of Golf Course.

Photo of GCP-1 from air with service road and freshwater marsh in upper right.

Photo of concrete channel portion of Drainage A, looking south from just south of Alga Road crossing.

Photo of Golf Course fairway 2 from ground level.

Photo of sand trap and green with GCP-3 in the distance from ground level.

Photo of western edge of freshwater marsh at interface with Golf Course north of Alga Road crossing.

Photo of GCP-4 looking south. Pumphouse for irrigation water can be seen on right shore of pond.

Photo of Golf Course cart path adjacent to freshwater marsh on left. Edge of GCP-2 on right.

Photo of Drainage A channel looking south, south of Alga Road.

APPENDIX B

WETLAND DETERMINATION DATA FORMS

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Omni La Costa Golf Course Revitalization City/County: San Diego Sampling Date: 3/12/21

Applicant/Owner: TRT Holdings/LCI 2021 State: CA Sampling Point: 1

Investigator(s): Paul Klukas Section, Township, Range: S24, T12 South, R4 West

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): N/A

Subregion (LRR): C Lat: 33.11291 Long: -117.26027 Datum:

Soil Map Unit Name: Riverwash (Soil Map Symbol RM NWI classification: PSS/EM1C

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No	**Is the Sampled Area within a Wetland?** **Yes X No**
Hydric Soil Present? Yes X No	
Wetland Hydrology Present? Yes X No	

Remarks:

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer negundo	20	X	FACW
2. Platanus racemosa	10		FAC
3. Salix gooddingii	2		FACW
4.			
Total Cover:	32		
Sapling/Shrub Stratum			
1. Acer negundo	5	X	FACW
2. Salix gooddingii	4		FACW
3.			
4.			
5.			
Total Cover:	9		
Herb Stratum			
1. Oenothera elata	8	X	FACW
2. Plantago major	4		FAC
3. Artemesia douglasiana	3		FAC
4. Euhorbia peplus	2		UPL
5. Apium graveolens	2		FACW
6.			
7.			
8.			
Total Cover:	19		
Woody Vine Stratum			
1.			
2.			
Total Cover:			

% Bare Ground in Herb Stratum % Cover of Biotic Crust

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? **Yes X No**

Remarks:

Hydrophytic vegetation is present.

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features					
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
1-6	Beige/yellow	100	N/A				loamy	
6-12	Light brown	100	N/A				sandy	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
_X_ Hydrogen Sulfide (A4)
___ Stratified Layers (A5) (**LRR C**)
___ 1 cm Muck (A9) (**LRR D**)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
_X_ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)
___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

___1 cm Muck (A9) (**LRR C**)
___ 2 cm Muck (A10) (**LRR B**)
___ Reduced Vertic (F18)
___ Red Parent Material (TF2)
___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:
Depth (inches):

Hydric Soil Present? Yes _X_ **No** ___

Remarks:

Hydric soil is present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: check all that apply)

___ Surface Water (A1)
_X_ High Water Table (A2)
_X_ Saturation (A3)
___ Water Marks (B1) (**Nonriverine**)
___ Sediment Deposits (B2) (**Nonriverine**)
___ Drift Deposits (B3) (**Nonriverine**)
___ Surface Soil Cracks (B6)
___ Inundation Visible on Aerial Imagery (B7)
___ Water-Stained Leaves (B9)
___ Salt Crust (B11)
_X_ Biotic Crust (B12)
___ Aquatic Invertebrates (B13)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres along Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Plowed Soils (C6)
___ Thin Muck Surface (C7)
___ Other (Explain in Remarks)

Secondary Indicators (2 or more required))

___ Water Marks (B1) (**Riverine**)
___ Sediment Deposits (B2) (**Riverine**)
___ Drift Deposits (B3) (**Riverine**)
___ Drainage Patterns (B10)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
___ Saturation Visible on Aerial Imagery (C9)
___ Shallow Aquitard (D3)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No _X_ Depth (inches):
Water Table Present? Yes _X_ No ___ Depth (inches): 4
Saturation Present? (includes capillary fringe) Yes _X_ No ___ Depth (inches):

Wetland Hydrology Present? Yes _X_ **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology is met.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Omni La Costa Golf Course Revitalization City/County: San Diego Sampling Date: 3/12/21

Applicant/Owner: TRT Holdings/LCI 2021 State: CA Sampling Point: 2

Investigator(s): Paul Klukas Section, Township, Range: S24, T12 South, R4 West

Landform (hillslope, terrace, etc.): Basin Local relief (concave, convex, none): Concave Slope (%): 0

Subregion (LRR): LRRC Lat: 33.458974 Long: -117.572342 Datum: WGS84

Soil Map Unit Name: 134 (Calleguas clay loam) 50-75% slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____ No X	**Is the Sampled Area within a Wetland?** **Yes ____ No X**
Hydric Soil Present?	Yes X No ____	
Wetland Hydrology Present?	Yes ____ No X	

Remarks:

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Lolium Perenne	80	Y	FAC
2. Avena fatua	30	Y	UPL
3. Picris echoiides	15	N	FAC
4. Sonchus asper	1	N	FAC
5.			
6.			
7.			
8.			
Total Cover:	126		
Woody Vine Stratum			
1.			
2.			
Total Cover:	126		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? **Yes ____ No X**

Remarks:

Only two species in sample area, but both are OBL wetland.

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features					
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X **No** _____

Remarks:

* No soil pits - Assumed

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required))

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes_____No_____Depth (inches): _____

Water Table Present? Yes_____No_____Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes_____No_____Depth (inches): _____

Wetland Hydrology Present? Yes_____No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Omni La Costa Golf Course Revitalization City/County: San Diego Sampling Date: 3/12/21

Applicant/Owner: TRT Holdings/LCI 2021 State: CA Sampling Point: 3

Investigator(s): Paul Klukas Section, Township, Range: S24, T12 South, R4 West

Landform (hillslope, terrace, etc.): channel bottom Local relief (concave, convex, none): concave Slope (%):

Subregion (LRR): C Lat: 32.986859 Long: 117.084177 Datum: WGS 84

Soil Map Unit Name: Diablo clay, 2 to 9 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No X	**Is the Sampled Area within a Wetland?** **Yes No X**
Hydric Soil Present?	Yes No X	
Wetland Hydrology Present?	Yes No X	

Remarks:

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:	0		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:	0		
Herb Stratum (Plot size: 5' x 20')			
1. Cynodon dactylon	50	X	FACU
2. Paspalum dilatatum	15		FAC
3. Cyperus eragrostis	10		FACW
4. Ambrosia psilostachya	5		FACU
5. Sonchus asper	5		FAC
6.			
7.			
8.			
Total Cover:	85		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
Total Cover:	0		

% Bare Ground in Herb Stratum 5 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? **Yes No X**

Remarks:

Upland vegetation is dominant, hydrophytic vegetation criterion not met

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features					
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 2/2	100	—	—	—	—	Clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5) (**LRR C**)
___ 1 cm Muck (A9) (**LRR D**)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)
___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

___ 1 cm Muck (A9) (**LRR C**)
___ 2 cm Muck (A10) (**LRR B**)
___ Reduced Vertic (F18)
___ Red Parent Material (TF2)
___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes_____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1) (**Nonriverine**)
___ Sediment Deposits (B2) (**Nonriverine**)
___ Drift Deposits (B3) (**Nonriverine**)
___ Surface Soil Cracks (B6)
___ Inundation Visible on Aerial Imagery (B7)
___ Water-Stained Leaves (B9)
___ Salt Crust (B11)
___ Biotic Crust (B12)
___ Aquatic Invertebrates (B13)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres along Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Plowed Soils (C6)
___ Thin Muck Surface (C7)
___ Other (Explain in Remarks)

Secondary Indicators (2 or more required))

___ Water Marks (B1) (**Riverine**)
___ Sediment Deposits (B2) (**Riverine**)
___ Drift Deposits (B3) (**Riverine**)
___ Drainage Patterns (B10)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
___ Saturation Visible on Aerial Imagery (C9)
___ Shallow Aquitard (D3)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes_____ No X Depth (inches): _____
Water Table Present? Yes_____ No X Depth (inches): _____
Saturation Present? (includes capillary fringe) Yes_____ No X Depth (inches): _____

Wetland Hydrology Present? Yes_____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No primary indicators and only one secondary indicator, wetland hydrology criterion not met.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Omni La Costa Golf Course Revitalization City/County: San Diego Sampling Date: 3/12/21

Applicant/Owner: TRT Holdings/LCI 2021 State: CA Sampling Point: 4

Investigator(s): Paul Klukas Section, Township, Range: S24, T12 South, R4 West

Landform (hillslope, terrace, etc.): stream Local relief (concave, convex, none): none Slope (%): 5

Subregion(LRR): LRR C Lat: 34.4097 Long: 119.0744 Datum:

Soil Map Unit Name: Agueda silty clay loam NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No	**Is the Sampled Area within a Wetland?** Yes X No
Hydric Soil Present?	Yes X No	
Wetland Hydrology Present?	Yes X No	

Remarks:

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix lasiolepis	60	Y	FACW
2. Fraxinus latifolia	20	Y	FACW
3.			
4.			
Total Cover:	80		
Sapling/Shrub Stratum			
1. Salix lasiolepis	20	Y	FACW
2.			
3.			
4.			
5.			
Total Cover:	20		
Herb Stratum			
1. Arundo donax	10	N	FACW
2. Typha latifolia	10	N	OBL
3. Rorippa sp	20	Y	OBL
4. Equisetum fluviatile	20	Y	OBL
5.			
6.			
7.			
8.			
Total Cover:	60		
Woody Vine Stratum			
1.			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 40 % Cover of Biotic Crust

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

__ Prevalence Index is ≤3.0[1]

__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No

Remarks:

Willow and ash riparian with wetland communities in base of channel.

SOIL

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features					
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 2/1	100					sc	silty clay
6-12	10YR 4/1	100					sc	silt

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- X Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X **No** _____

Remarks:

Dark clay soils with strong H2S odor.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required))

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No _____ Depth (inches): 4

Water Table Present? Yes X No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes X No _____ Depth (inches): _____

Wetland Hydrology Present? Yes X **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Site at base of perennial stream channel approximately 20 feet wide with willow riparian overstory and wetland plant understory.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Omni La Costa Golf Course Revitalization City/County: San Diego Sampling Date: 3/12/21

Applicant/Owner: TRT Holdings/LCI 2021 State: CA Sampling Point: 5

Investigator(s): Paul Klukas Section, Township, Range: S24, T12 South, R4 West

Landform (hillslope, terrace, etc.): creek terrace Local relief (concave, convex, none): concave Slope (%):

Subregion (LRR): C Lat: 32.83725481030 Long: -117.01569162600 Datum:

Soil Map Unit Name: Riverwash (Soil Map Symboll Rm) NWI classification: PFOC-frshwtr/frstd scrb

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No	**Is the Sampled Area within a Wetland?** **Yes X No**
Hydric Soil Present?	Yes No X	
Wetland Hydrology Present?	Yes X No	

Remarks:

VEGETATION

Tree Stratum (Plot size: 10' x 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:	12		
Herb Stratum			
1. Typhus latifolia	80		OBL
2. Schoenoplectus californicus	20		OBL
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	100		
Woody Vine Stratum			
1.			
2.			
Total Cover:	0		

% Bare Ground in Herb Stratum 2 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

__ Prevalence Index is ≤3.0[1]

__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? **Yes X No**

Remarks:

Hydrophytic vegetation present

Photos 24-25.

SOIL

Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-10	10YR 3/2	100	n/a	n/a	n/a	n/a	loam	
10-16	10YR 3/2	100	n/a	n/a	n/a	n/a	silty clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- X Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- X 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X **No** _____

Remarks:

Hydric soil present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required))

- ___ Water Marks (B1) (**Riverine**)
- X Sediment Deposits (B2) (**Riverine**)
- X Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes_____ No X Depth (inches): _____

Water Table Present? Yes_____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes_____ No X Depth (inches): _____

Wetland Hydrology Present? Yes X **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Two secondary indicators of wetland hydrology observed, criterion met.

FAC-Neutral test = 4:5 / not met

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Omni La Costa Golf Course Revitalization City/County: San Diego Sampling Date: 3/12/21

Applicant/Owner: TRT Holdings/LCI 2021 State: CA Sampling Point: 6

Investigator(s): Paul Klukas Section, Township, Range: S24, T12 South, R4 West

Landform (hillslope, terrace, etc.): creek bank/slope Local relief (concave, convex, none): concave Slope (%):

Subregion (LRR): C Lat: 32.83779488340 Long: -117.00780058600 Datum:

Soil Map Unit Name: Riverwash (Soil Map Symbol Rm) NWI classification: PFOC-frshwtr/frstd scrb

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No	**Is the Sampled Area within a Wetland?** Yes No X
Hydric Soil Present?	Yes No X	
Wetland Hydrology Present?	Yes X No	

Remarks:

VEGETATION

Tree Stratum (Plot size: 4' x 20')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:	0		
Sapling/Shrub Stratum			
1. Acer negundo	5	X	FACW
2.			
3.			
4.			
5.			
Total Cover:	5		
Herb Stratum			
1. Oenothera elata	10	X	FACW
2. Plantago major	7	X	FAC
3. Cyperus eregrostis	5		FACW
4. Apium graveolens	5		FACW
5. Erigeron canadensis	3		FACU
6.			
7.			
8.			
Total Cover:	30		
Woody Vine Stratum			
1.			
2.			
Total Cover:	0		

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

__ Prevalence Index is ≤3.0[1]

__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No

Remarks:

SOIL

Sampling Point: 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-5	10YR 3/2	100	n/a	n/a	n/a	n/a	loam	
5-13	10YR 3/2	98	10YR 5/6	2	C	M	loam	Does not meet any criterion

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5) (**LRR C**)
___ 1 cm Muck (A9) (**LRR D**)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)
___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

___ 1 cm Muck (A9) (**LRR C**)
___ 2 cm Muck (A10) (**LRR B**)
___ Reduced Vertic (F18)
___ Red Parent Material (TF2)
___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No hydric soil indicator met / hydric soil absent.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1) (**Nonriverine**)
___ Sediment Deposits (B2) (**Nonriverine**)
___ Drift Deposits (B3) (**Nonriverine**)
___ Surface Soil Cracks (B6)
___ Inundation Visible on Aerial Imagery (B7)
___ Water-Stained Leaves (B9)
___ Salt Crust (B11)
___ Biotic Crust (B12)
___ Aquatic Invertebrates (B13)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres along Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Plowed Soils (C6)
___ Thin Muck Surface (C7)
___ Other (Explain in Remarks)

Secondary Indicators (2 or more required))

___ Water Marks (B1) (**Riverine**)
X Sediment Deposits (B2) (**Riverine**)
X Drift Deposits (B3) (**Riverine**)
___ Drainage Patterns (B10)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
___ Saturation Visible on Aerial Imagery (C9)
___ Shallow Aquitard (D3)
X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
Water Table Present? Yes _____ No X Depth (inches): _____
Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Three secondary indicators of wetland hydrology present / wetland hydrology criterion met.

FAC-Neutral test = 4:1 / met