



Fort Ord Regional Trail and Greenway - Canyon Del Rey/SR 218 Segment Project

Habitat Mitigation and Monitoring Plan

prepared for

Transportation Agency for Monterey County

55-B Plaza Circle

Salinas California 93901

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Attachments

- Attachment A Mitigation Design Plans
- Attachment B Deed for Work Memorial Park

1 Introduction

The Transportation Agency for Monterey County (TAMC) proposes to construct the Canyon Del Rey/State Route (SR) 218 Segment Project (Project) of the Fort Ord Regional Trail and Greenway (FORTAG or Trail) located in the cities of Del Rey Oaks and Seaside, Monterey County, California.

On behalf of TAMC, Rincon Consultants, Inc. (Rincon) has prepared this Habitat Mitigation and Monitoring Plan (HMMP) to compensate for unavoidable impacts to jurisdictional wetlands and waters of the U.S. and State. This HMMP has been prepared to satisfy anticipated requirements of the following agencies that have jurisdiction within the Project area: the United States Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), and Central Coast Regional Water Quality Control Board (RWQCB). Additionally, this HMMP is intended to comply with Mitigation Measure BIO-1(c) of the Mitigation Monitoring and Reporting Program included in the Final Environmental Impact Report (EIR) for the FORTAG Project.

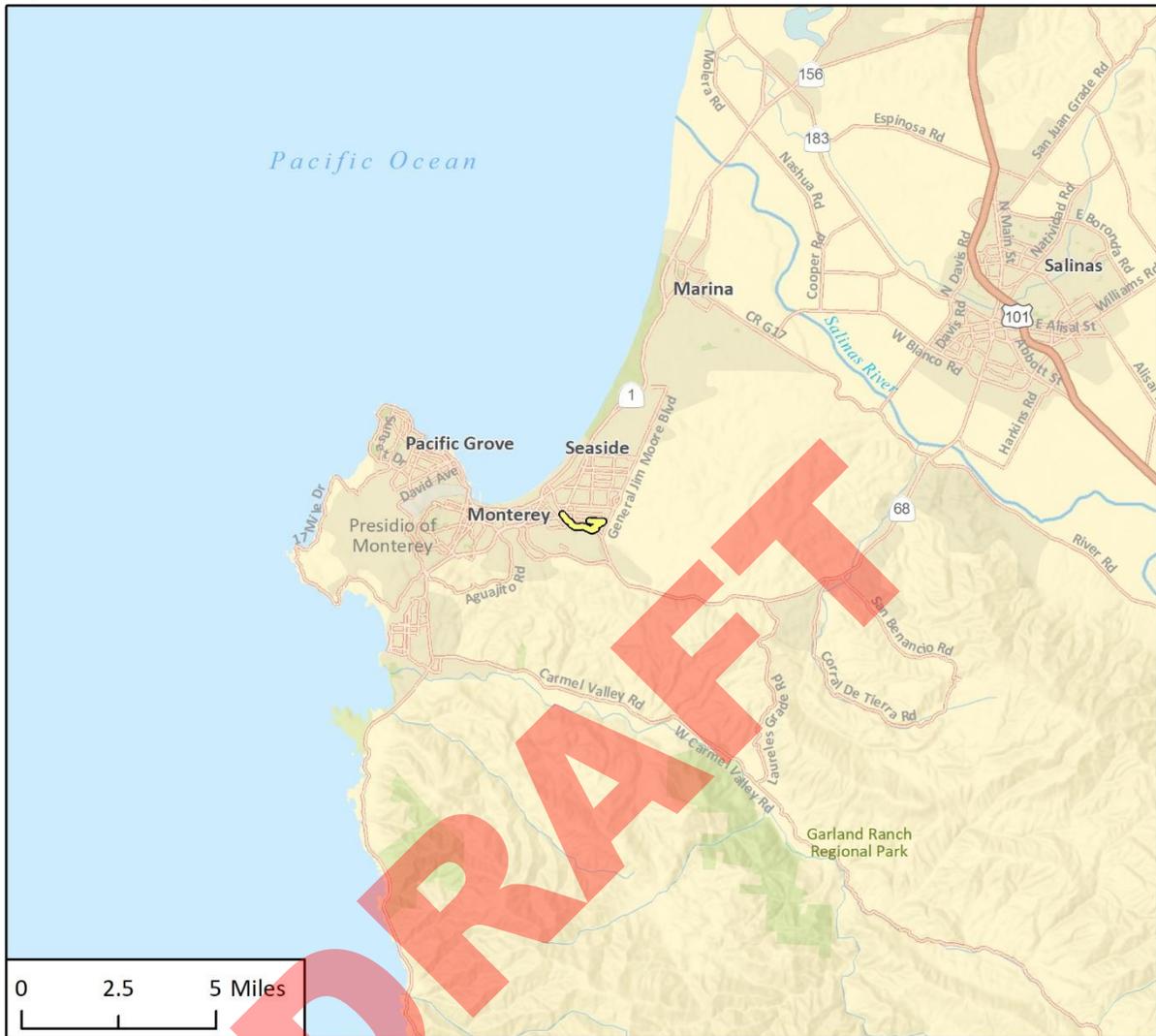
The purpose of this HMMP is to document the current conditions of the mitigation sites, and describe the restoration implementation plan, planting specifications, maintenance activities, monitoring methods, success criteria, and reporting program required to facilitate a successful on-site mitigation program and to comply with anticipated agency restoration requirements for impacts to jurisdictional waters.

1.1 Project Location

Regionally, the Project is located in northwestern Monterey County in the cities of Seaside and Del Rey Oaks, to the north of the Monterey Regional Airport (Figure 1). Locally, the Project is located adjacent to Canyon Del Rey Boulevard (SR 218) between General Jim Moore Boulevard to the east and Fremont Boulevard to the west. The Project site is situated along or directly adjacent to SR 218, Angelus Way, Carlton Drive, and Plumas Avenue. The Project occurs within the *Seaside, California* United States Geological Survey (USGS) 7.5-minute topographic quadrangle and the Public Lands Survey System illustrates the Project site within Township 15S, Range 01E, and Section 27, in the San Bernardino Meridian.

Mitigation for Project-related impacts will occur at the Project site and at adjacent locations at the City of Del Rey Oak's Work Memorial Park, the Monterey Peninsula Regional Park District's (Park District) Frog Pond Wetland Preserve, and along Angelus Way in Del Rey Oaks. Wetland mitigation is proposed at the Work Memorial Park mitigation site, located adjacent to the Trail alignment and impact areas within City-owned property, just south of the Canyon Del Rey Boulevard between Rosita Road and Fremont Boulevard. Riparian mitigation is proposed in three locations within the Frog Pond Wetland Preserve: at a site immediately east of Canyon Del Rey Boulevard, east of the Carlton Drive/Canyon Del Rey Boulevard intersection, and at a site further to the southeast located west of General Jim Moore Boulevard (Figure 2). Riparian mitigation is also proposed at a fourth site located along the south side of Angelus Way, east of Rosita Road, adjacent to Canyon Del Rey Creek.

Figure 1 Regional Location of Project Site



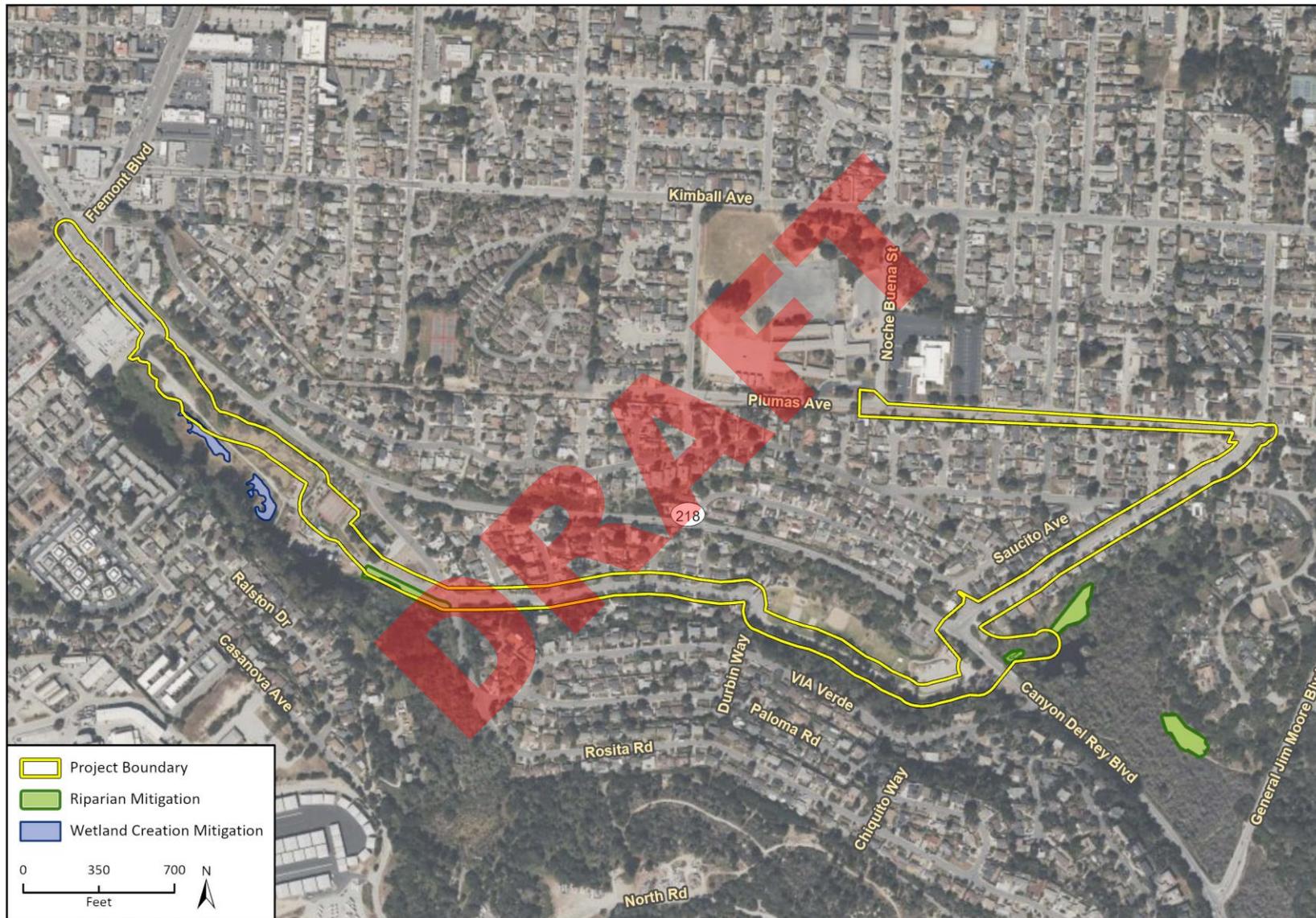
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Additional data provided by Alta Planning + Design, 2019.

— Highway 218 Segment 



Fig X Regional Location NES

Figure 2 Project Location



1.2 Project Summary

The purpose of the Project is to provide an accessible multi-use path (Trail) for recreation and active transportation for residents and visitors in northwestern Monterey County. The Trail would connect the cities of Seaside and Del Rey Oaks to Laguna Grande Park and the Coastal Recreational Trail. The Project is a segment of the larger regionally proposed FORTAG Trail, intended to connect coastal communities of southern Monterey Bay with natural areas and recreational opportunities on the former Fort Ord U.S. Army Post. The proposed Project alignment crosses multiple jurisdictional features within the Frog Pond Wetland Preserve and Work Memorial Park. Five jurisdictional features occur within the impact area at the Frog Pond Wetland Preserve, including Canyon Del Rey Creek, one wetland (Wetland 2), two ephemeral drainages (Ephemeral Drainage 2 and 3), and one riparian woodland (Riparian Woodland 2). Three jurisdictional features occur within the impact area at Work Memorial Park, including one wetland (Wetland 1), one ephemeral drainage (Ephemeral Drainage 1), and one riparian woodland (Riparian Woodland 1).

Overall, construction activities for the Project would include excavation, clearing and grubbing, grading, piling, placement of aggregate base and asphalt concrete, Portland concrete cement (PCC), revegetation, installation of signs, and installation of lighting and other safety related features necessary to meet current design practice. Fencing would be erected to limit construction impacts to sensitive resources, such as existing trees. Most of the Trail would be composed of a 3-inch layer of asphalt concrete or four-inch layer of PCC over a 4-inch aggregate base.

Within the Frog Pond Wetland Preserve, the Trail alignment includes an 8-foot-wide raised pathway approximately 3.25 feet above grade, and a 2-foot-wide shoulder on either side of the pathway for a total width of 12 feet. The raised pathway would be constructed by clearing and grubbing vegetation, excavating the area, and grading and constructing the raised pathway using an aggregate base and concrete. The raised pathway would also include a railing and concrete retaining walls along the perimeter of the pathway. The Trail alignment within the Frog Pond Wetland Preserve also includes the creation of a 5-foot-wide decomposed granite pathway that meanders south from the raised pathway for approximately 68 feet before terminating at the Frog Pond, replacing an existing wooden footbridge. The Trail alignment within the Frog Pond Wetland Preserve includes the re-routing of Ephemeral Drainage 2 into Ephemeral Drainage 3, which will outlet at a new proposed concrete culvert outfall structure which includes a 24-inch reinforced concrete pipe outflowing to an approximately 13-foot-long, 5-foot-wide and 1/8-foot-thick layer of Class II Rock Slope Protection (RSP). An existing 12-inch diameter storm drain pipe that outfalls to Canyon Del Rey Creek on the western side of SR 218 will also be replaced, including installation of 16-foot by 18-foot area of RSP on the creek bank and across the streambed. RSP will be placed during the dry season when water is not present in Canyon Del Rey Creek. From the Frog Pond Wetland Preserve, the Trail traverses northeast onto Carlton Drive, and west through a proposed undercrossing underneath SR 218, which occurs outside of any jurisdictional features.

West of the Frog Pond Wetland Preserve, the Trail alignment crosses through Work Memorial Park. This portion of the Trail alignment includes a 12-foot-wide path and a 2-foot-wide shoulder on either side of the path, for a total width of 16 feet. This portion of the Trail would be approximately 6 feet above grade, with a 3:1 slope down to grade. Within Work Memorial Park, the Trail will be constructed by clearing and grubbing vegetation, excavating the area, and grading and constructing the Trail using fill material, aggregate base, and hot-mix asphalt. The Trail alignment in Work Memorial Park also includes the installation of two 24-inch culverts underneath the Trail to allow for drainage of surface flows from the northern side of the Trail to the southern side of the Trail.

Construction staging areas would be located on existing pavement or disturbed areas adjacent to trails. Staging areas would include existing parking lots adjacent to the Trail, vacant or abandoned parking lots at Work Memorial Park and Del Rey Park, and potentially within the existing PG&E right of way adjacent to Plumas Avenue. Roadway shoulders would be used for construction staging where lots or cleared areas are not available adjacent to the work site. Construction staging areas would be located at least 50 feet from waterways and would include stormwater Best Management Practices, including secondary containment (secondary containment is in addition to spill and drip pans and absorbent material, e.g., an earthen berm covered in visqueen).

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2 Responsible Party

All funding for planning, implementation, maintenance, and monitoring of this restoration and monitoring program will be the responsibility of TAMC. The Project and associated mitigation commitments will be funded by TAMC using Measure X funds, for which TAMC has a total of \$20 million in funding dedicated to the overall FORTAG project, including the mitigation obligations described in this HMMP. TAMC, the Responsible Party, also retains the legal responsibility for implementing and monitoring the restoration on-site as described in this HMMP and shall be responsible for meeting the conditions of the agency permits to obtain final approval of the mitigation by the applicable agencies.

The contact information for the Responsible Party is as follows:

Michael Zeller, Director of Programming & Project Delivery
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Via email: mike@tamcmonterey.org

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3 Baseline Information

3.1 Environmental Setting

The Project is in the Monterey Bay area, approximately 1 mile east of the Pacific Ocean, 0.3 mile southeast of Laguna del Rey Lagoon, and 0.3 mile west of the Fort Ord National Monument. It passes through Work Memorial Park, Del Rey Park, and the Frog Pond Wetland Preserve. Adjacent land uses in the vicinity of the Project include urbanized developments of residential homes, commercial buildings, and roadways. Topography is comprised of coastal alluvial terraces and relatively low-lying rolling hills and manufactured slopes adjacent to SR 218.

Although some revegetation has occurred in Work Memorial Park, the portion of the Project within the park is substantially disturbed due to prior grading activities when the site was utilized as an active golf center/driving range and regularly maintained (prior to 2011) (Google Earth 2007). Aerial imagery from February 2018 shows an unpaved access roadway established through the center of Work Memorial Park connecting the Del Oaks Garden Center, previously used as a golf center, to the paved access road behind an established grocery store (Google Earth 2019). The roadway contains heavily compacted soils elevated from the surrounding landscape. Additionally, storm drains adjacent to SR 218 and the Garden Center convey stormwater to the area during rain events and convey water discharges from the Garden Center.

The 17-acre Frog Pond Wetland Preserve has been maintained and operated by the Park District since 1977 and provides public access via trails around the pond shoreline, though it is largely managed for its wetland and habitat functions. The preserve is bounded by residences to the north, west, and east, General Jim Moore Boulevard to the east, and SR 218 to the west and south. Periodic sediment and vegetation management of the Frog Pond Wetland Preserve help maintain the pond as an aquatic feature.

3.2 Jurisdictional Wetlands, Waters, and Streambeds

Rincon conducted a jurisdictional delineation for the Canyon Del Rey/SR 218 Segment of the FORTAG Project in March of 2020. In July 2023, for the purposes of supporting the wetland mitigation proposed in this HMMP, the delineation was expanded to include wetlands to the southwest of the Trail alignment in Work Memorial Park. The delineation was conducted to determine the location and extent of waters and wetlands that are potentially subject to the jurisdictions of the USACE, RWQCB, and CDFW. The delineation identified several potentially jurisdictional features including a freshwater emergent wetland, forested wetland, and an unnamed ephemeral drainage at Work Memorial Park; Canyon Del Rey Creek and its associated riparian corridor; and the Frog Pond Wetland Preserve with associated riparian woodland. The various jurisdictional acreages often overlap (i.e., USACE acreage is typically included in CDFW and RWQCB acreages). Therefore, they are not additive. Refer to Table 1 for the size and locations of jurisdictional features.

Table 1 Summary of Jurisdictional Features

Feature	USACE/RWQCB Jurisdiction		RWQCB (Porter-Cologn Act ¹)	CDFW Jurisdiction
	Non-wetland Waters (Acres/Linear Feet)	Wetland Waters (Acres)	Waters of the State (Acres/Linear Feet)	Streambed and Associated Riparian (Acres/Linear Feet)
Wetland 1 ²	--/--	0.57	0.57 / --	--/--
Wetland 2	--/--	0.11	0.11 / --	--/--
Wetland 3 ²	--/--	0.004	0.004 / --	--/--
Wetland 4 ²	--/--	0.01	0.01 / --	--/--
Wetland 5 ²	--/--	0.01	0.01 / --	--/--
Wetland 6 ²	--/--	0.01	0.01 / --	--/--
Wetland 7 ²	--/--	0.86	0.86 / --	--/--
Canyon Del Rey Creek	0.23 / 2,342	--	0.97 / 2,905	0.97 / 2,905
Ephemeral Drainage 1	0.01 / 142	--	0.01 / 142	0.01 / 142
Ephemeral Drainage 2	0.004 / 92	--	0.004 / 92	0.004 / 92
Ephemeral Drainage 3	0.003 / 62	--	0.003 / 62	0.003 / 62
Frog Pond	0.1 / 121	--	0.73 / 312	0.73 / 312
Total	0.34 / 2,759	1.57	3.29 / 3,359	1.71 / 3,359

¹includes streambanks, wetland, and edge of riparian or top of bank

²Added as part of the jurisdictional delineation update in July 2023. For Wetland 1, 0.32 acre was added to the existing wetland during the July 2023 delineation update.

3.2.1 Hydrology

The Project and mitigation areas are located within the Canyon Del Rey sub-watershed (Hydrologic Unit Code 12-180600150304). Canyon Del Rey Creek, also referred to as Arroyo del Rey Creek, is a perennial stream that flows to the Pacific Ocean, draining approximately 17 square miles (10,750 acres) of land surface, including portions of the cities of Seaside, Del Rey Oaks, Monterey, and unincorporated areas in Monterey County (Balance Hydrologics 2014).

The headwaters of Canyon Del Rey Creek originate at an elevation of 500 feet near the Laguna Seca Raceway at the eastern end of the watershed (Balance Hydrologics 2014). The creek flows mostly westerly along SR 68 until the junction of SR 68 with SR 218. At the highway junction, the creek follows SR 218 northwest to the Frog Pond Wetland Preserve, eventually draining into Laguna Grande, then Roberts Lake, and finally, the Monterey Bay.

The Frog Pond Wetland Preserve, located approximately 2.2 river miles upstream from Monterey Bay, is within the Canyon Del Rey sub-watershed. The entire preserve is 17 acres in size and sustains a seasonal pond, wetland, and upland habitats. The pond is an isolated remnant of a much larger freshwater ecosystem, but still retains important wetland features and functions. The pond receives water from three general sources: 1) a tributary to Canyon del Rey (South Boundary Tributary); 2) springs at the northern edge of the pond; and 3) runoff from the residential neighborhoods along the northern border of the preserve. The pond typically dries in mid to late summer, and refills after the first significant rains in the fall.

Within 1.2 miles of Monterey Bay, the creek passes through a long culvert downstream of Work Memorial Park and into Laguna Grande. Water from the Laguna Grande and Roberts Lake eventually flows to Monterey Bay at Monterey State Beach through a box culvert outfall.

3.2.2 Existing Plant Community Associations

The Caltrans Natural Environment Study prepared by Rincon for the Project in 2019 identified 11 terrestrial vegetation communities and other land cover types in the Project area. The vegetation community characterizations for this analysis were based on the classification systems presented in *A Manual of California Vegetation, Second Edition* ([MCV2] Sawyer et al. 2009) but have been modified slightly to reflect the existing site conditions more accurately.

The 11 vegetation communities and land cover types in the Project area are shown in Table 2.

Table 2 Vegetation Community/Land Cover Type

Vegetation Community/Land Cover Type	Acreage	Sensitive
Coast Live Oak Woodland	1.09	Yes
Freshwater Emergent Marsh	0.25	Yes
Non-Native Annual Grassland	0.05	No
Salt Grass	0.54	No
Arroyo Willow	0.21	Yes
Riparian Woodland	1.50	Yes
Ice Plant Mat	0.73	No
Monterey Pine	0.13	No
Mixed Monterey Pine Oak Woodland	0.35	Yes
Landscaped	5.88	No
Developed	9.93	No
Ruderal	0.51	No

3.2.3 Sensitive Vegetation Communities

***Quercus agrifolia* Woodland Alliance**

The *Quercus agrifolia* Woodland Alliance (Coast Live Oak Woodland) is found along the hillslopes in Work Memorial Park and is characterized by coast live oak trees found in monotypic stands. Within the Project area this vegetation community is highly variable but is generally dominated by coast live oak (*Quercus agrifolia*) with an understory that ranges from dense scrub to open and underdeveloped. Typical scrub understory constituents include scrub or chaparral species such as black sage (*Salvia mellifera*), chamise (*Adenostoma fasciculatum*), coyote brush (*Baccharis pilularis*), woolly leaf manzanita (*Arctostaphylos tomentosa*), and California sagebrush (*Artemisia californica*). In other areas, the understory was dominated by a tangle of vine herbs such as poison oak (*Toxicodendron diversilobum*) and purple fiestaflower (*Pholistoma auritum*), or annual grasses.

***Schoenoplectus americanus* Herbaceous Alliance**

The *Schoenoplectus americanus* Herbaceous Alliance (Freshwater Emergent Wetland) is found along the basin of Work Memorial Park adjacent to the access roadway through the area and is characterized by hydrophytic perennial monocots. Soils within this vegetation community are typically saturated or inundated for many weeks each year. This vegetation community is comprised

predominately of bulrush (*Schoenoplectus americanus*), broadleaf cattail (*Typha latifolia*), and kikuyu grass (*Pennisetum clandestinum*) with patches of other emergent herbaceous wetland vegetation including pennywort (*Hydrocotyle ranunculoides*), loosestrife (*Lythrum hyssopifolia*), rabbitsfoot grass (*Polypogon monspeliensis*), common duckweed (*Lemna minor*), and water smartweed (*Pennisetum clandestinum*).

***Quercus agrifolia* - *Alnus rhombifolia* Woodland/Forest Alliance**

The *Quercus agrifolia* - *Alnus rhombifolia* Woodland/Forest Alliance (Riparian Woodland) occurs along Canyon Del Rey Creek and consists of a canopy dominated by several riparian tree species including coast live oak and arroyo willow (*Salix lasiolepis*). The understory typically contains common riparian understory species such as stinging nettle (*Urtica dioica*) and poison oak (*Toxicodendron diversilobum*). Along Angelus Way, this vegetation community includes coast redwood (*Sequoia sempervirens*) in the canopy and contains an understory dominated by invasive species such as English ivy (*Hedera helix*), French broom (*Genista monspessulana*) with occasional native understory herbs and ferns such as wood fern (*Dryopteris arguta*). Infestations of Himalayan blackberry (*Rubus armeniacus*), cape ivy (*Delairea odorata*) and garden nasturtium (*Tropaeolum majus*) are also present in a patchy distribution within the understory. The *Quercus agrifolia* - *Alnus rhombifolia* Woodland/Forest Alliance within the Frog Pond Wetland Preserve includes understory of miner's lettuce (*Calytonia parviflora*), stinging phacelia (*Phacelia malvifolia*), California wood sorrel (*Oxalis californica*), and ripgut brome (*Bromus diandrus*).

Although it is included in this Woodland/Forest Alliance, a monotypic stand of arroyo willow occurs at Work Memorial Park.

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4 Proposed Mitigation

4.1 Summary of Impacts

The Project will have permanent and temporary unavoidable impacts to waters of the U.S. and State, including wetlands, non-wetland waters, and riparian habitat. Table 3 below depicts the total anticipated jurisdictional impacts; Figures 3 and 4 depict impacts by location.

Impacts to several wetlands, ephemeral drainages, and riparian woodlands will result in the temporary and permanent loss of habitat and the alteration of hydrologic and biogeochemical processes. The Trail alignment proposed as a part of the Project will cross multiple jurisdictional features within the Frog Pond Wetland Preserve and Work Memorial Park. Additionally, the Trail alignment within Frog Pond Wetland Preserve includes the re-routing of Ephemeral Drainage 2 into Ephemeral Drainage 3, which will outlet to a new proposed culvert outfall structure. Within Work Memorial Park, the Trail's construction will involve clearing and grubbing of vegetation as well as grading and material fill to wetlands.

Table 3 Jurisdictional Impacts

Type of Jurisdiction	Feature	Permanent Impact			Temporary Impact		
		Acres ¹	Linear feet	Cubic Yards of Fill/Excavation	Acres ¹	Linear feet	Cubic Yards of Fill/Excavation
Wetland Waters of the U.S. State	Wetland 1	0.14	--	213.5	0.02	--	100.3
	Wetland 2	<0.01	--	10.7	<0.01	--	1.8
	Subtotal	0.14	--	224.6	0.02	--	102.1
Non-wetland Waters of the U.S./State	Canyon Del Rey Creek	0.01	11	6.2	--	--	--
	Ephemeral Drainage 1	--	--	--	<0.01	76	--
	Ephemeral Drainage 2	0.01	57	17.3	--	--	--
	Ephemeral Drainage 3	<0.01	34	5.6	--	--	--
Subtotal		0.02	102	29.1	<0.01	76	--
Riparian Waters of the State	Riparian Woodland 1	--	--	--	<0.01	38	9.2
	Riparian Woodland 2	0.13	178	575.6	0.11	171	116.5
Subtotal		0.13	178	575.6	0.11	209	125.7
Total		0.29	573	829.3	0.13	285	227.8

4.2 Identified Mitigation Objective

The objectives of this HMMP are to fulfill the requirements of the EIR to compensate for the loss of sensitive biological resources associated with the Project, and to satisfy anticipated regulatory requirements from USACE, CDFW, and RWQCB, which have jurisdiction over activities affecting jurisdictional waters within the Project site.

As described in Section 4.1, implementation of the Project will result in impacts to jurisdictional resources that must be mitigated. Temporary impacts will be mitigated in-kind at the location of impact and permanent impacts will be mitigated in-kind and at two mitigation sites adjacent to the Project site. See Table 4 for a summary of mitigation requirements; specifically, the mitigation ratios, amounts, and locations by sensitive biological resource type.

Impacts to riparian habitat and non-wetland waters (Canyon Del Rey Creek and ephemeral drainages) will be mitigated together through riparian habitat creation. Although only 0.311 acre of combined riparian habitat and non-wetland water (drainage) mitigation is proposed for permanent and temporary impacts, a total of 0.92 acre of riparian habitat will be created as a contingency. This creation will occur at the Frog Pond Wetland Preserve immediately adjacent to the Frog Pond and at Angelus Way immediately adjacent to Canyon Del Rey Creek. This includes additional mitigation required to account for temporary impacts to 0.11 acre of riparian habitat and 0.003 acre of non-wetland waters beyond the temporary impact areas that will be restored to pre-Project conditions upon Trail completion. A total of 72 native trees, including coast live oak, arroyo willow, California bay, and California buckeye will be planted to mitigate for impacts to existing riparian coast live oak and arroyo willows trees (14 trees removed in total, including one dead tree) as well as impacts to riparian woodland habitat.

Although only 0.422 acre of wetland mitigation is proposed to compensate for permanent and temporary impacts to wetlands, a total of 0.53 acre of wetland creation will be pursued at Work Memorial Park as a contingency. This mitigation will also include additional mitigation to address areas temporarily impacted during Trail construction. This wetland creation will not adversely impact the exchange of water, nutrients, or wildlife to nearby Canyon Del Rey Creek or otherwise adversely impact beneficial uses. Given the surrounding level of development and drainage patterns, the placement of the wetland restoration is anticipated to improve water quality and hydrology in the vicinity of the creek.

When completed, the proposed mitigation would ensure a net gain in the acreage and function of jurisdictional habitats. The wetlands mitigation at Work Memorial Park will result in the creation of diverse seasonal wetland and freshwater emergent wetland habitats that will benefit native wildlife and improve the health of the local ecosystem. Riparian mitigation at the Frog Pond Wetland Preserve aims to expand the extent and functional capacity of the riparian corridor around the Frog Pond and along Canyon Del Rey Creek at Angelus Way by installing native plants and removing non-native plants, thereby allowing for native plant species to better thrive with less competition for resources and by increasing native tree canopy along the pond/creek. The techniques to be employed and the location of these restoration and enhancement efforts are further described in Section 5.

4.3 Determination of Credits

Considering the existing conditions at Frog Pond Wetland Preserve and Work Memorial Park, where permanent and temporary impacts will occur, on-site and adjacent permittee-responsible mitigation is an opportunity to improve and expand these sensitive habitats. The proposed on-site and adjacent mitigation will compensate for the losses described at the beginning of this section by providing the following functional gains:

1. **Habitat Function.** Mitigation activities will create a more continuous riparian corridor and network of functional wetlands in the Frog Pond Wetland Preserve and along Angelus Way, and at Work Memorial Park, respectively. Native riparian vegetation will be established in zones currently occupied by a non-native annual grassland and functioning wetlands will be established in an area heavily fragmented by development and invaded by non-native species. The combination of a continuous canopy layer with shrub and groundcover plantings will provide nesting and foraging habitat for a variety of wildlife species in the mitigation areas. Various invertebrates will occupy the expanded riparian area and created wetlands and their activities in breaking down leaf litter and other dead vegetation will sustain detritus-based food webs, both on-site and downstream. Preserving the surrounding coast live oak and riparian woodland vegetation communities will encourage wildlife movement through this area.
2. **Hydrologic Function.** Construction of wetlands and riparian habitat in nearby upland areas will treat and gradually release flow to receiving waters. The interception and detention of storm runoff will regulate the sharp runoff peaks and slow discharges over a longer period of time. Improvements to the floodplain at Work Memorial Park will also improve stormwater attenuation.

The mitigation will expand the habitat corridors by restoring up to 0.53 acre of wetlands and 0.92 acre of riparian habitat, although only 0.422 acre of wetland establishment and 0.311 acre of riparian habitat is proposed to fully mitigate for permanent and temporary impacts.

Table 4a Proposed Mitigation Requirements (Applicant Provided)

Sensitive Biological Resource		Type and Quantity of Impact				Total Mitigation Required ⁴
Jurisdictional Waters		Permanent Impact	Mitigation Ratio	Temporary Impact	Mitigation Ratio	
Wetland Waters of the U.S./State ¹		0.14 ac	3:1 ac	0.02 ac	1.1:1 ac	0.422 ac
Non-wetland Waters of the U.S./State ²		0.02 ac	2:1 ac	0.003 ac	1.1:1 ac	0.040 ac
Riparian Waters of the State ³		0.13 ac	2:1 ac	0.11 ac	1.1:1 ac	0.271 ac
Total		0.29 ac	--	0.133 ac	--	0.733 ac ⁵

Individual Trees	Scientific Name	Diameter at Breast Height	Number of trees for Removal	Mitigation Ratio	Total Mitigation Required
Coast live oak ⁶	<i>Quercus agrifolia</i>	7	1	0	0
Coast live oak	<i>Quercus agrifolia</i>	18	1	10:1	10
Coast live oak	<i>Quercus agrifolia</i>	29	1	10:1	10
Arroyo willow	<i>Salix lasiolepis</i>	6-12	7	4:1	28
Arroyo willow	<i>Salix lasiolepis</i>	12 +	4	6:1	24
Total	--	--	14	--	72

¹ Represents impacts to freshwater emergent wetlands community type.

² Represents streambed and ephemeral drainage impacts.

³ Represents impacts to riparian habitat.

⁴ Mitigation totals are calculated by adding the permanent impact mitigation at a 3:1 or 2:1 ratio to the temporary impact mitigation at a 0.1:1 ratio, because temporary impact areas will be returned to pre-construction conditions onsite as part of the restoration efforts. This accounts for the other 1:1 ratio of temporary impact mitigation requirements.

⁵ This total includes both the mitigation for impacts to wetlands and riparian habitats. The non-wetland waters impacts will be mitigated for by installing the riparian habitat mitigation and therefore are encompassed in that mitigation acreage.

⁶ This tree is dead but is noted here for removal. No mitigation is required for the existing dead tree.

Table 5b Proposed Mitigation Requirements (Water Board Format)

Total Authorized Project Fill/Excavation Quantity									
Aquatic Resource Type	Temporary Impact			Permanent Impact					
	Acres	CY ^[1]	LF ¹	Physical Loss of Area			Degradation of Ecological Condition		
	Acres	CY ^[1]	LF ¹	Acres	CY	LF	Acres	CY	LF
Riparian Zone	0.11	125.7	209	0.13	575.6	178	0.13	575.6	178
Stream Channel	<0.01	--	76	0.02	29.1	102	0.02	29.1	102
Wetland	0.02	102.1	--	0.14	224.6	--	0.14	224.6	--

Required Project Mitigation Quantity for Temporary Impacts						
Aquatic Resource Type	Units	Est.		Re-est.		Method ^[2]
		Est.	Re-est.	Reh.	Enh.	Pres.
Riparian Zone	Acres	0.01	--	0.11	--	--
	LF	21	--	209	--	--

^[1] Cubic Yards (CY); Linear Feet (LF)

^[2] Methods: establishment (Est.), reestablishment (Re-est.), rehabilitation (Reh.), enhancement (Enh.), preservation (Pres.)

Stream Channel	Acres	-	--	0.003	--	--
	LF	-	--	76	--	--
Wetland	Acres	0.002	--	0.02	--	--
	LF	--	--	--	--	--

Required Project Compensatory Mitigation Quantity for Permanent Physical Loss of Area

Aquatic Resource Type	Mit. Type	Units	Method				
			Est.	Re-est.	Reh.	Enh.	Pres.
Riparian Zone	PR	Acres	0.26	--	--	--	--
		LF	356	--	--	--	--
Stream Channel	PR	Acres	0.04	--	--	--	--
		LF	102	--	--	--	--
Wetland	PR	Acres	0.42	--	--	--	--
		LF	--	--	--	--	--

Required Project Compensatory Mitigation Quantity for Permanent Degradation of Ecological Condition

Aquatic Resource Type	Mit. Type	Units	Method				
			Est.	Re-est.	Reh.	Enh.	Pres.
Riparian Zone	PR	Acres	Same as Permanent Physical Loss Area, thus mitigated through the quantities above				
		LF					
Stream Channel	PR	Acres					
		LF					
Wetland	PR	Acres					

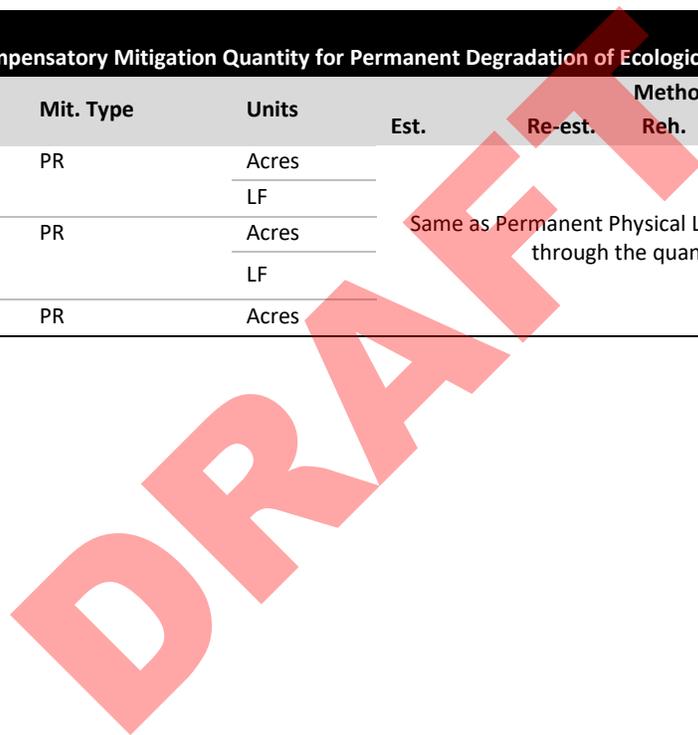
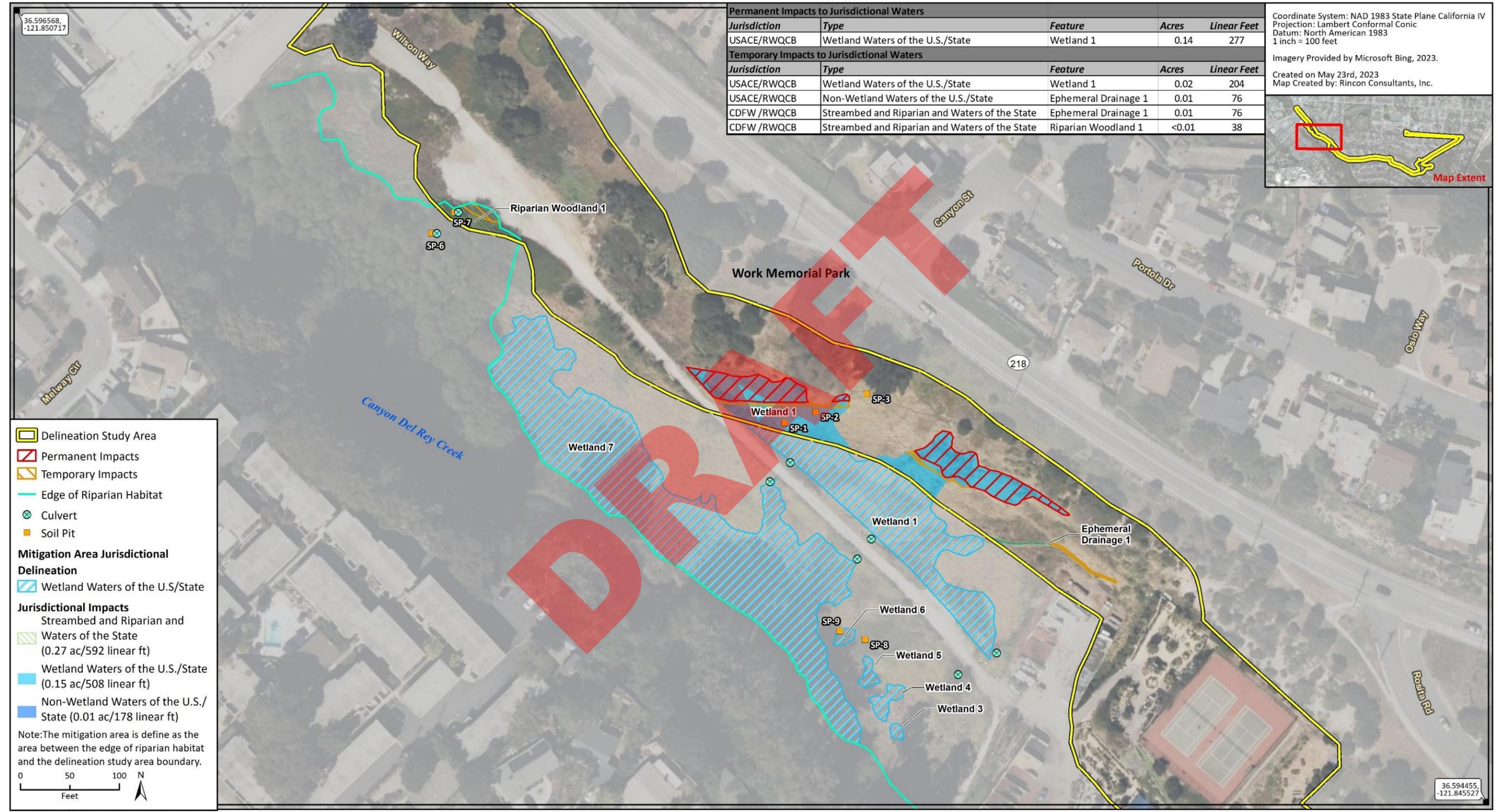
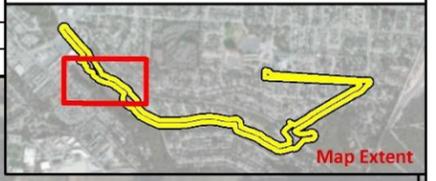


Figure 3 Potential Jurisdictional Impacts at Work Memorial Park



Permanent Impacts to Jurisdictional Waters				
Jurisdiction	Type	Feature	Acres	Linear Feet
USACE/RWQCB	Wetland Waters of the U.S./State	Wetland 1	0.14	277
Temporary Impacts to Jurisdictional Waters				
Jurisdiction	Type	Feature	Acres	Linear Feet
USACE/RWQCB	Wetland Waters of the U.S./State	Wetland 1	0.02	204
USACE/RWQCB	Non-Wetland Waters of the U.S./State	Ephemeral Drainage 1	0.01	76
CDFW /RWQCB	Streambed and Riparian and Waters of the State	Ephemeral Drainage 1	0.01	76
CDFW /RWQCB	Streambed and Riparian and Waters of the State	Riparian Woodland 1	<0.01	38

Coordinate System: NAD 1983 State Plane California IV
 Projection: Lambert Conformal Conic
 Datum: North American 1983
 1 inch = 100 feet
 Imagery Provided by Microsoft Bing, 2023.
 Created on May 23rd, 2023
 Map Created by: Rincon Consultants, Inc.



Legend

- Delineation Study Area
- Permanent Impacts
- Temporary Impacts
- Edge of Riparian Habitat
- Culvert
- Soil Pit

Mitigation Area Jurisdictional Delineation

- Wetland Waters of the U.S./State

Jurisdictional Impacts

- Streambed and Riparian and Waters of the State (0.27 ac/592 linear ft)
- Wetland Waters of the U.S./State (0.15 ac/508 linear ft)
- Non-Wetland Waters of the U.S./State (0.01 ac/178 linear ft)

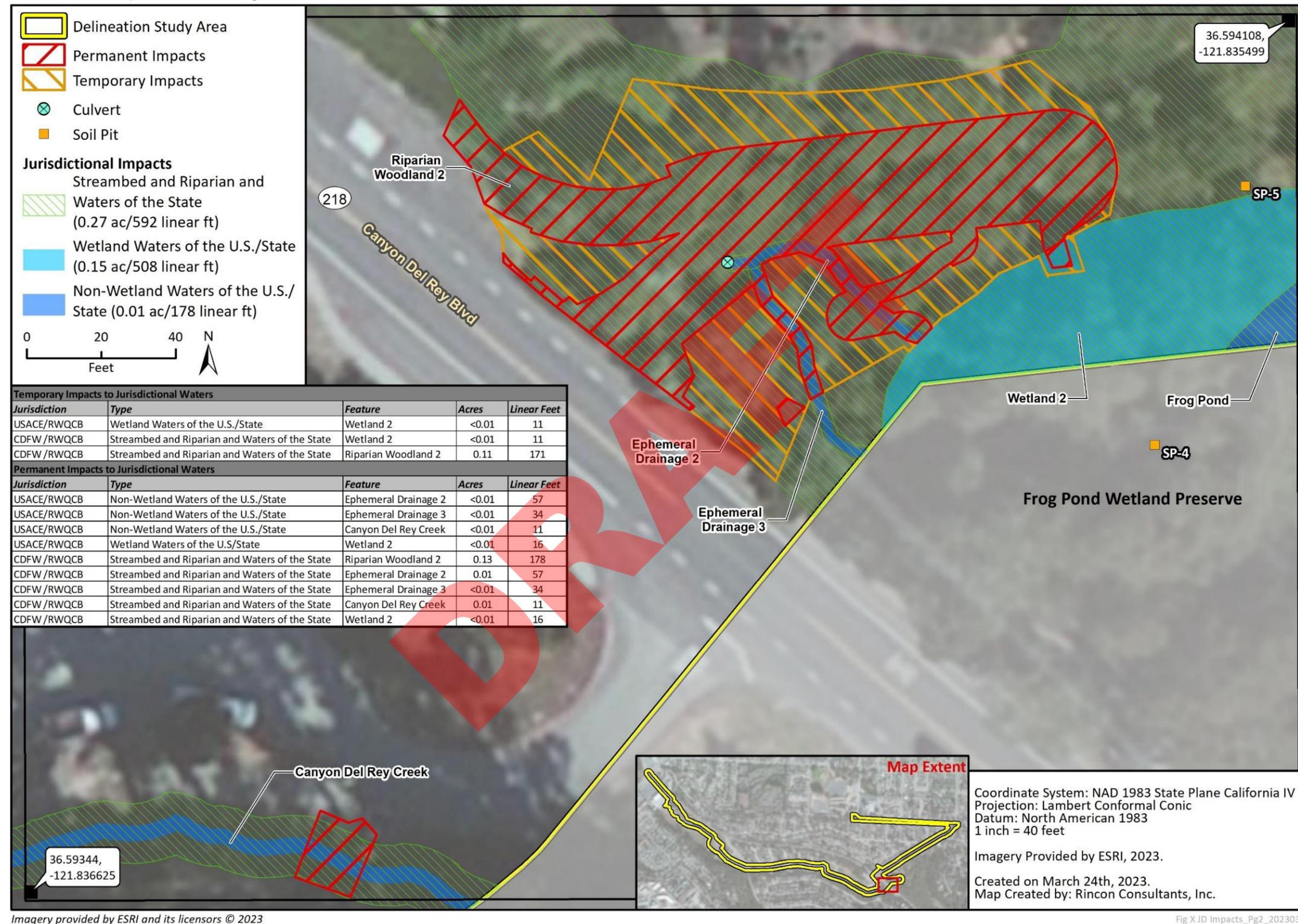
Note: The mitigation area is defined as the area between the edge of riparian habitat and the delineation study area boundary.

0 50 100 Feet N

Imagery provided by Microsoft Bing and its licensors © 2023.

Fig X:JD Impacts Pg1_20230523

Figure 4 Potential Jurisdictional Impacts at the Frog Pond Wetland Preserve



5 Restoration Implementation Plan

This section fulfills the requirements set forth in the EIR and satisfies anticipated requirements of the USACE, CDFW, and RWQCB. As described above, the regulatory agencies will review this HMMP, and TAMC will implement the plan in cooperation with a qualified Restoration Specialist.

Three mitigation sites are proposed along the Project site and within the immediate Project vicinity to address the impacts to sensitive biological resources as further described in Section 5.2. When completed, the proposed mitigation would ensure a net gain in the acreage and function of native jurisdictional habitats. Restoration at the Work Memorial Park site aims to expand the extent and functional capacity of the existing seasonal wetlands network by creating new wetland pools, installing native plants and removing non-native plants, thereby allowing for native wetland plant species to better thrive with less competition for resources. The restoration of riparian habitat at the Frog Pond Wetland Preserve and along Angelus Way will result in the creation of diverse riparian woodland habitats that will benefit native wildlife and improve the health of the local ecosystem.

All activities herein shall be overseen by a qualified Restoration Specialist familiar with habitat restoration implementation, monitoring, and reporting. To increase the likelihood of success of the mitigation, it is recommended that installation and maintenance activities be performed by a licensed Restoration Contractor with experience in habitat restoration and enhancement.

The mitigation design plans are included in **Attachment A**.

5.1 Restoration Terms

Ecological restoration is a general term for the rehabilitation of natural systems. More specifically, it has been defined by the Society of Ecological Restoration (SER) as “the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed.” Ecological restoration is undertaken for many reasons including to recover ecosystem integrity, and to satisfy personal, cultural, social-economic, and ecological values. Ecosystem integrity is described as the ability of an ecosystem to support and sustain characteristic ecological functioning and biodiversity (i.e., species composition and community structure). Ecological integrity can be measured as the extent that a community of native organisms is maintained (Gann et al. 2019). For this report, environmental establishment, re-establishment, rehabilitation, enhancement, and preservation are terms that will describe the different type of restoration activities to take place.

- **Establishment (or Creation)** – the manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area and functions.
- **Re-establishment** – the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.
- **Rehabilitation** – the manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function but does not result in a gain in aquatic resource area.

- **Enhancement** – the manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s) but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.
- **Preservation** – the removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

5.2 Site Selection

5.2.1 Proposed Location for Wetland Creation

Permanent and temporary impacts to wetlands at both Work Memorial Park (Wetland 1) and the Frog Pond Wetland Preserve (Wetland 2) caused by construction of the Project will be mitigated at Work Memorial Park, south of the Trail alignment and on the south side of the existing access road (Figure 5).

5.2.2 Proposed Location for Riparian Creation

Riparian creation is proposed at two locations in the Frog Pond Wetland Preserve, near or adjacent to the location of impacts, adjacent to the pond and Canyon Del Rey Creek. The riparian creation sites will connect to the existing riparian habitat along the pond and Canyon Del Rey Creek (Figure 6). A third area at the Frog Pond Wetland Preserve, adjacent to the new trail nearest to Canyon Del Rey Boulevard (SR 218), would be used to plant willow trees. This third area is within the footprint of the temporary riparian impact restoration area, but would include planting of willow trees to help the Project meet the tree mitigation requirements requested by the Water Board and CDFW.

A fourth location outside the Frog Pond Wetland Preserve is proposed south of Angelus Way, east of Rosita Road, adjacent to Canyon Del Rey Creek (Figure 7). Riparian creation at this location would expand the riparian corridor along Canyon Del Rey Creek through planting of 10 coast live oak trees to help meet the required tree mitigation while maintaining an adequate fuelbreak at the Frog Pond Wetland Preserve, as required by the Parks District.

5.3 Site Protection Instrument and Long-Term Management Plan

The Project site and associated mitigation will remain the property of the City of Del Rey Oaks (Work Memorial Park) and the Park District (Frog Pond Wetland Preserve). The proposed mitigation would occur in areas currently zoned and/or dedicated as public-open space/habitat and as such will remain protected from development. The parcels proposed for wetland mitigation within Work Memorial Park were a gift to the City of Del Rey Oaks from T. A. Work and the Saucito Land Company in 1953 for the purpose of park, school, and other municipal purposes. The deed for Work Memorial Park is included in **Attachment B**.

The Project, including mitigation commitments, is funded through the State Active Transportation Program, as well as local funds through Measure X. Measure X was approved in 2016 and establishes a Transportation Safety and Investment Plan administered by TAMC that imposes a retail transactions and use tax of three-eighths of one percent for the purposes of improving safety on local roads and highways, repairing potholes, maintaining streets and roads, reducing traffic congestion, improving transportation for seniors, young people, and people with disabilities, and making walking and biking safer. Forty (40) percent of the Measure X funds are to be dedicated to regional safety and mobility Projects, such as this Project. A total of \$20 million has been dedicated to the overall FORTAG Project, including the mitigation described in this HMMP. As such, the Project will have adequate funding to ensure Project and mitigation success.

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Figure 5 Created Wetland Mitigation at Work Memorial Park



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20-10054 Bio
Fig 2 Wetland Mitigation

Figure 6 Riparian Mitigation at the Frog Pond Wetland Preserve



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20-10054 Bio
Fig 3 Riparian Mitigation

Figure 7 Riparian Mitigation at Angelus Way



Mitigation Work Plan

This section discusses the proposed mitigation work plan, including site preparation, plantings, and schedule.

5.4 Wetland Creation

To mitigate for impacts to wetlands of the U.S./State as a result of the Project, up to 0.53 acre of wetland establishment is planned at the Work Memorial Park site. All temporarily impacted wetlands will be returned to pre-Project conditions. Permanent impacts will be mitigated by wetland creation to ensure “no-net-loss” of wetlands. Although it is located adjacent to the floodplain of Canyon Del Rey Creek and other existing wetlands, this will qualify as wetland “creation” as the site lacks all three criteria that define a wetland (hydric soil, hydrophytic vegetation, and wetland hydrology). Wetland hydrology will be achieved by grading this upland area down to a level ranging from approximately 1 to 2 feet below the surface of the adjacent (non-wetland) floodplain. Lowering the ground elevation will increase the hydroperiod by intercepting the seasonal high-water table and connect the created wetlands to existing wetlands onsite. Additional hydrology sources include potential seepage from the adjacent uplands, connectivity to adjacent wetlands in the floodplain, and retention of waters from Canyon Del Rey Creek.

5.4.1 Invasive Species Removal

Prior to construction of the seasonal wetlands at Work Memorial Park, these sites will be managed to remove weed populations, particularly invasive kikuyu grass. Consistent with the Invasive Plant Council’s guidance in the Weed Control Handbook, the initial phase of kikuyu grass removal will occur by hand removal. As kikuyu grass is generally spread by mowing, construction equipment, and contaminated soils, following hand removal it is necessary to remove the top three inches of soil from the areas where wetlands are planned. After wetland construction is completed, it is likely that some kikuyu grass will reestablish which justifies a continued weed control routine throughout the wetlands. Please see Section 6.1.1 for further information on weed maintenance within the created wetlands. If invasive species control through these methods proves unsuccessful, alternative approaches will be explored in coordination with the agencies through the adaptive management process.

5.4.2 Wetland Plantings

The wetland mitigation planting palette for the Work Memorial Park site will include native wetland species that mimic existing wetland communities on site. The recommended wetland planting palette is shown below in Table 6. Adjustments to plant lists may be required during mitigation implementation due to seed or planting availability. Modifications must be approved by a qualified biologist familiar with appropriate restoration materials and techniques in the region. Where possible, plantings will be obtained from local (Monterey County) sources or native plant nurseries.

Two wetlands will be placed adjacent to the existing seasonal wetlands at the Work Memorial Park mitigation site. Wetland hydrology will be achieved by grading these areas down by 1 to 2 feet, including either an over excavation of 3 inches to accommodate the reapplication of stockpiled topsoil or amendment of existing soil at the depth of excavation. These new wetlands would have a

relatively flat bottom with shelves that drop in elevation following the grade of the groundwater elevation, based on the geotechnical data. The wetlands will be graded such that the surface elevation is between 0.5 feet and 1.5 feet above the summer groundwater elevation. Emergent vegetation such as native bulrush (*Schoenoplectus* sp.) species would be planted in areas where the depth to summer groundwater is closer to 0.5 feet and where depressions that have the potential to hold water for longer periods are created. Native rush (*Juncus* sp.) and sedge (*Carex* sp.) species would occur in the areas where the depth to summer groundwater is greater.

Planting of chairmaker's bulrush (*Schoenoplectus americanus*) and California bulrush (*Schoenoplectus californicus*) will be conducted using Deepot 40 containers at a spacing of 1 foot on center within the lowest parts of the wetland. Surrounding the deeper emergent depressions plug plantings of rush and sedge species will be installed in patches, placed 18 inches on center. The patches will cover approximately 20 to 30 percent of the wetland area. The remainder of the shallower seasonal wetland area will be seeded with seasonal wetland species (rush and sedge). The seeded portions of the created wetlands will be covered with bonded fiber matrix after seeding to improve retention of the seeds during seasonal flow periods. The outer edges of the wetland will be seeded with the riparian restoration seed mix from Table 8.

Table 6 Wetland Mitigation Planting Palette

Plant Species	Plant Spacing (Plugs)
Chairmaker's bulrush (<i>Schoenoplectus americanus</i>)	1 foot on center
California bulrush (<i>Schoenoplectus californicus</i>)	1 foot on center
Common bog rush (<i>Juncus effusus</i>)	18 inches on center/seeded
Baltic rush (<i>Juncus balticus</i>)	18 inches on center/seeded
Field sedge (<i>Carex praegracilis</i>)	18 inches on center/seeded

5.5 Riparian Creation

To mitigate for impacts to riparian habitats and non-wetland waters of the U.S./State, up to 0.92 acre of riparian establishment including the planting of 72 native trees, is planned in three areas at the Frog Pond Wetland Preserve site just north of Canyon Del Rey Creek, as well as one area along Canyon Del Rey Creek adjacent to Angelus Way. All temporarily impacted riparian habitat will be returned to pre-Project conditions, and replacement plantings will be installed in all areas where temporary riparian habitat impacts occur. Restoration to offset permanent impacts to riparian habitat will include planting of riparian species.

5.5.1 Riparian Plantings

The riparian mitigation planting palette for the Frog Pond Wetland Preserve site will include both herbaceous riparian species and riparian trees that mimic the existing riparian habitats on-site. The mitigation planting palette for the Angelus Way site includes riparian coast live oak trees. The recommended riparian mitigation planting palette is shown below in Table 7. Adjustments to plant lists may be required during mitigation implementation due to seed or planting availability. Modifications must be approved by a qualified biologist familiar with appropriate restoration

materials and techniques in the region. Where possible, plantings will be obtained from local (Monterey County) sources or native plant nurseries that employ Best Management Practices (BMPs) that control or eliminate the diseases caused by *Phytophthora ramorum*, as outlined by the California Oak Mortality Task Force.

Table 7 Riparian Tree/Shrub Mitigation Planting Palette

Plant Species	Plant Spacing	Quantity	Container
Frog Pond Wetland Preserve			
Coast live oak (<i>Quercus agrifolia</i>)	20 feet on center	10	5 gallon
California bay (<i>Umbellularia californica</i>)	20 feet on center	21	5 gallon
California buckeye (<i>Aesculus californica</i>)	15 feet on center	19	5 gallon
Arroyo willow (<i>Salix lasiolepis</i>)	10 feet on center	12	5 gallon
Spreading gooseberry (<i>Ribes divaricatum</i>)	6 feet on center	8	1 gallon
California blackberry (<i>Rubus ursinus</i>)	3 – 6 feet on center	16	1 gallon
California wild rose (<i>Rosa californica</i>)	3 – 6 feet on center	10	1 gallon
Angelus Way			
Coast live oak (<i>Quercus agrifolia</i>)	20 feet on center	10	5 gallon

Container plants shall be installed using industry-standard best management practices (BMPs) for planting from containers. Planting holes will be dug to 1.5 times the width of the container. Plants shall be placed, and holes backfilled, with native soil so that the container plant soil and the surrounding soil are level with the ground. The soil level from the container may be up to 0.5 inch above grade to allow for settling. A small berm ring two to three feet around each plant on the downslope side will be established to assist in retaining moisture to each plant. A 4-inch layer of weed and debris free bark mulch shall be placed in the cleared areas around the installed plants, making sure to leave a three-inch space between the trunk and the bark mulch. Above-ground wire enclosures (browse cages) will be installed to protect trees from herbivory.

All container stock plants shall be thoroughly watered immediately following planting. A temporary drip irrigation system with a timer may be installed to provide adequate moisture to each plant. Alternatively, the restoration contractor may elect to regularly water trees from a truck-mounted tank, hand-carried jugs, or similar apparatus. If the temporary drip irrigation system is chosen, it shall be installed prior to or during installation of container plants.

5.6 Soil Stabilization

If bare soils associated with temporary Project-related disturbance are present within the mixed riparian forest habitat after construction or between seasons, the soils will be stabilized. To stabilize soils and promote recovery of native vegetation, area(s) may be seeded with a native seed mix immediately following construction activities that require soil and vegetation disturbance in the riparian habitat or provide an equivalent method of soil stabilization such as hydromulch or fiber rolls. A suggested stabilization seed mix is provided in Table 7.

If bare soils associated with temporary Project-related disturbance are present within riparian habitats after construction or between seasons, the soil will be stabilized. To stabilize soils and promote recovery of native vegetation, the Contractor may seed the areas with a native seed mix immediately following construction activities that require soil and vegetation disturbance in the riparian habitat or provide an equivalent method of soil stabilization such as hydromulch or fiber rolls. The on-site seed mix in Table 8 is recommended for the understory at the Frog Pond Wetland Preserve site and for the upland areas surrounding the created wetlands at the Work Memorial Park site.

Table 8 Seed Mix for Temporary Disturbed Riparian Areas

Plant Species	Recommended Application Rate (lbs/acre) per PM
California brome (<i>Bromus carinatus</i>)	15
Meadow barley (<i>Hordum brachyantherum</i> ssp. <i>californicum</i>)	15
Blue wildrye (<i>Elymus glaucus</i>)	15
Beardless wildrye (<i>Elymus triticoides</i>)	15
Purple needlegrass (<i>Stipa pulchra</i>)	15
Arroyo lupin (<i>Lupinus succulentus</i>)	10
Tomcat clover (<i>Trifolium willdenovii</i>)	10

5.7 Access Routes and Staging

For the Frog Pond Wetland Preserve, Angelus Way, and Work Memorial Park mitigation sites, access and staging for vehicles and equipment, such as light and heavy-duty pickup trucks, is anticipated during maintenance efforts. Vehicle access and staging will largely be contained within existing developed areas. Only pedestrian access will occur within natural lands (e.g., outside the mitigation and Project disturbance footprint).

5.8 Schedule

Mitigation for temporary impacts to wetlands, non-wetland waters, and riparian habitats will occur after construction has been completed, and will be initiated within 12 months of completion of work. Soil stabilization seeding shall be implemented immediately upon completion of construction.

Container stock plantings shall occur between September and May, avoiding the driest part of the year. All mitigation plantings for impacts to native will occur at the soonest possible appropriate planting period following construction completion, but not longer than twelve months after construction completion. This timeline is to allow for fall plantings, which increase survival rate.

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6 Management Program

Diligent, pro-active maintenance of the restoration site is essential to achieving restoration objectives and success criteria. After initial restoration installation has been completed, the 5-year maintenance and monitoring period will commence. The Restoration Specialist will direct and oversee the work performed by the Restoration Contractor. The restoration sites shall be adequately maintained for the duration of the 5-year maintenance and monitoring period to progress the site toward the success criteria specified in Section 7.3. If the Restoration Specialist and the agencies determine that the restoration site meets the mandated success criteria five years from the end of the installation period, the maintenance and monitoring period will end. If criteria are not met, the maintenance and monitoring period will extend until success criteria are met.

6.1 Maintenance Plan

The maintenance period on-site for the created wetlands at Work Memorial Park and the established riparian habitat at the Frog Pond Wetland Preserve and Angelus Way will be for a minimum of five years. Maintenance activities may include hand, or other appropriate, weed removal around the installed trees, monitoring and repair of a temporary irrigation system, if used, and re-establishment plantings, if necessary. Maintenance must be conducted at least once per month for the first two years, and quarterly for the remaining years. TAMC is responsible for all maintenance, monitoring, and repair or replacement of irrigation systems.

For five years, weeds will be routinely removed from a 3-foot radius around each installed tree or shrub to reduce the negative impact of weeds on the growth of planted trees. Weeding will be conducted primarily during the growing season in winter and springs, but weeds should be removed in summer and fall as needed. Weeds will be removed by hand; however, care should be taken to avoid impacts to tree roots. If necessary, weeds may be removed by carefully applying an approved herbicide (safe for use near aquatic habitats). Weed whacking should be avoided. After five years, maintenance will cease if success criteria for the wetlands and riparian trees have been met (see Section 7.3).

If necessary, based on the results of ongoing monitoring, trees will be watered on a temporary drip irrigation system with a timer or watered by hand from a truck-mounted water tank or water jugs carried in by hand. The irrigation schedule may need to be adjusted throughout the year to supply sufficient water and not over-water the trees, depending on the amount of rainfall received.

6.1.1 Weeding Maintenance

Before initiation of restoration maintenance activities each year, the Restoration Specialist will meet with the Restoration Contractor on the Project site for a kick-off meeting to review weed removal needs, techniques, and schedules, as required by site conditions. Kick-off meetings are to be coordinated by TAMC and will occur at the beginning of each restoration year.

Work Memorial Park – Wetland Mitigation

The Restoration Contractor will conduct weed removal at the mitigation site for five years. The initial removal of kikuyu grass will occur during wetland creation activities as a separate and targeted event. In general, approximately two visits are expected for Year 1 and five visits per year

are expected for Years 2 to 5 for regular weed removal events. It is anticipated that the weed removal visits will occur twice in either March or April (the other month will have one visit), and once each in May and June. It is expected that the latter two years of the five-year maintenance period will require considerably reduced weeding effort due to the establishment of natives in areas where intensive weeding occurred during the preceding three years. During Years 4 and Year 5, weeding will occur on an as needed basis dependent upon site conditions.

Maintenance of restoration areas will include regular removal of non-native plants using a combination of hand-removal technique and herbicide application (graminicides such as Sethoxydim and Fluazifop-P-butyl to target grass species). Techniques to be employed will be at the direction of the Restoration Specialist in coordination with the Restoration Contractor, and with advance written notice to MPRPD.

Adaptive management will be employed to respond to unforeseen circumstances and adjustments to these strategies will be made as needed and as determined by the Restoration Specialist.

Frog Pond Wetland Preserve and Angelus Way – Riparian Mitigation

The Restoration Contractor will conduct weed removal at the mitigation sites for five years, at five visits per year. It is anticipated that the weed removal visits will occur twice in March and April, and once each in May and June.

Maintenance of restoration areas will include regular removal of non-native plants mainly using hand-removal techniques and selective herbicide application for particularly problematic non-native plant species. Techniques to be employed will be at the direction of the Restoration Specialist in coordination with the Restoration Contractor.

Adaptive management will be employed to respond to unforeseen circumstances and adjustments to these strategies will be made as needed and as determined by the Restoration Specialist.

6.2 Supplemental Irrigation

Work Memorial Park – Wetland Mitigation

Wetland plants in the created wetlands at Work Memorial Park will be watered at installation. They will continue to be irrigated at regular intervals until it has been determined that they have successfully taken root and exhibit growth. In the long-term, the plants will rely on natural rainfall, subsurface flows, and water flowing from the culverts that feed the existing wetlands at the site. In the event natural rainfall is not sufficient to ensure growth, supplemental irrigation will occur as needed. Supplemental irrigation will be done by hand, using a backpack sprayer or water truck and hose (or similar set up) as conditions allow.

Frog Pond Wetland Preserve and Angelus Way – Riparian Mitigation

The installed trees and shrubs at the Frog Pond Wetland Preserve and Angelus Way will rely on natural rainfall, with supplemental irrigation by a temporary above ground drip irrigation system, hand watering via a water truck and hose, water truck with side sprayers, or similar set up. Irrigation will be scheduled to maximize growth of native species and will account for natural rainfall, while minimizing growth of invasive non-native plants. Generally, if irrigation is needed, more irrigation will be provided during the growing season (winter and spring) to mimic seasonal weather patterns, and minimal irrigation will be provided during the summer and fall as needed to keep plants alive.

The Restoration Contractor will manage the irrigation schedule to ensure sufficient water is supplied to the native plants to maintain their health and vigor in coordination with the Restoration Specialist.

It is assumed that irrigation will be used for a minimum of three years, mainly between May and October. Towards the end of spring of the third year, the irrigation schedule will be gradually reduced over several weeks to wean the plants to adapt to a reduced watering schedule over the summer and fall.

6.3 Replacement Plantings and Seeding

The Restoration Specialist will determine if replacement plantings will be needed during the fall/winter following initial plant installation. If warranted, the Restoration Contractor will install replacement plants each fall of the 5-year maintenance and monitoring period to ensure the site meets the success criteria for each year. Techniques to be employed will be at the direction of the Restoration Specialist in coordination with the Restoration Contractor. During the replacement planting effort, the Restoration Specialist will be present to help guide the work. The source of the replacement plant materials will be the same as described in Sections 5.4.2 and 5.5.1.

6.4 General Site Maintenance

The Restoration Contractor shall remove all trash and other unnatural debris from the mitigation sites during regular long-term maintenance visits. The sites will be kept neat, clean, and free of non-vegetative debris and trash, as well as vegetative waste produced during weeding activities, which shall be removed from the sites.

6.5 Signage

Signage will be installed along the perimeter of both the Work Memorial Park, Angelus Way, and the Frog Pond Wetland Preserve mitigation sites to inform the public of the presence of the restored areas. TAMC or its contractor will be responsible for the design, installation, maintenance, and replacement of signage.

7 Monitoring and Reporting Program

The Restoration Specialist will be the representative for the Responsible Party (TAMC) who will monitor the restoration site according to the guidelines set forth in this HMMP during the five-year maintenance and monitoring period, which begins immediately after installation is complete. The Restoration Specialist will direct and oversee the work performed by the Restoration Contractor. In addition, the Restoration Specialist will be responsible for documenting and reporting the progress of the Project to the agencies as well as making on-going recommendations for meeting the required success criteria outlined in Section 7.3. As needed, the Restoration Specialist will prescribe remedial measures and develop adaptive management strategies. The Restoration Contractor shall be responsible for maintenance activities at the site. The Restoration Specialist will regularly monitor the mitigation areas and annual reports will be submitted to the applicable regulatory agencies.

7.1 Monitoring Schedule

The Restoration Specialist, or a qualified biologist under their direct supervision, will conduct qualitative restoration monitoring visits every month during Year 1 and every other month during Year 2 through Year 5. In addition, the Restoration Specialist and one qualified biologist will conduct two quantitative restoration monitoring visits per year, one in spring (April/May) and one in fall (September/October). Data to be collected during each monitoring visit are described in Section 7.2 below. The Restoration Specialist will provide recommendations for plant survival, weed removal, irrigation repair and schedule, and general housekeeping to TAMC and Restoration Contractor in the form of a brief email after each site visit as needed.

The monitoring visits shall be conducted just prior to or during the Restoration Contractor maintenance visits, when feasible. Additional monitoring visits may be required if the site is not meeting success criteria and remedial actions are required.

7.2 Monitoring Procedures

The Restoration Specialist shall assess site conditions relative to the required success criteria outlined in Section 7.3 below. The Restoration Specialist may determine that more visits may be necessary, particularly during the growing season.

Qualitative Assessments

During each qualitative monitoring visit, the Restoration Specialist shall perform a qualitative assessment of the restoration site consisting of an evaluation of the following:

- General ecological conditions.
- Site photographs will be collected from established photo points (established prior to or during planting) to document site conditions and assist in tracking the success of the restoration program.
- Establishment and health of native plants, to be determined by walking the site and observing the status.
- Naturally recruiting native plant species.

- The presence of non-native weeds and the effectiveness of weed control efforts.
- Erosional issues.
- The presence of any pest infestations, including rodents and insects.
- General site conditions including the presence of trash, unnatural debris, unauthorized access, vandalism, theft, etc.
- Damage caused by natural events including fire, floods, wind, and climate extremes.

In addition to collecting information for inclusion in annual reports, monitoring visits will enable the identification of any potential problems or negative trends at the site. The Restoration Specialist shall promptly communicate the need for any remedial actions (replacement seeding and/or additional required maintenance activities) to the TAMC and Restoration Contractor via email and/or verbally.

Results of the qualitative monitoring will be submitted to the Responsible Party and Restoration Contractor, as described in Section 7.4 below.

Quantitative Assessments

The Restoration Specialist will be responsible for conducting quantitative monitoring to document the progress of the restoration until the success criteria have been achieved. The restoration assessment shall be conducted using transects and the point-intercept method.

Data collected during quantitative assessments will include information collected during qualitative assessments described above, as well as:

- Fixed transects (established in Year 1) quantifying percent cover of native, non-native, and invasive non-native plant species.
- Calculation of survivorship of installed plants.

Results of the annual quantitative monitoring will be presented in annual reports and submitted to the regulatory agencies and MPRPD, as described in Section 7.4 below.

7.3 Performance Standards and Success Criteria

Restoration success criteria provide a reliable and objective means of evaluating the success of a restoration Project over time and will be used to determine if the Project is successful during the 5-year maintenance and monitoring period. The following success criteria have been established for each of the mitigation sites based on similar Projects in the region and what was presented in the EIR.

Work Memorial Park –Wetland Mitigation

The following success criteria will apply to the created wetlands at the Work Memorial Park Site.

- All areas where native wetland plants are installed shall attain 30% native cover after three years and 85% cover by Year 5.
- No woody invasive species shall be present within the created wetlands.

- Wetland species diversity shall be representative of the native plants onsite and nearby when complete and shall not represent a monoculture (e.g., more than 70% abundance of any one wetland species).
- No substantial erosion problems occur in created wetlands onsite.
- No invasive plant species rated high or moderate by California Invasive Plant Council (Cal-IPC 2020) are present within the reestablished and enhancement areas unless these species are common in areas surrounding the Project under baseline conditions. Invasive species common in the surrounding landscape will be infeasible to permanently eradicate from the Project; however, these species will be controlled to 5% absolute cover or less, as estimated by the Restoration Specialist.
- The mitigation site, including any replacement plantings, shall be entirely without supplemental irrigation by year three of the five-year maintenance and monitoring period at a minimum.
- For wetland success criteria to be achieved, all wetlands must meet the definition of a wetland pursuant to the federal Clean Water Act and the State Policy for Water Quality Control (State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State, State Water Resources Control Board, adopted April 2, 2019 and revised April 6, 2021). A jurisdictional delineation report shall be prepared to support this determination, approved by the USACE and RWQCB.

Frog Pond Wetland Preserve and Angelus Way – Riparian Mitigation

The following success criteria will apply to the riparian tree and understory plantings at the Frog Pond Wetland Preserve site.

- Successful establishment of 50 riparian trees at the Frog Pond Wetland Preserve and 8 at Angelus Way (58 total, or 80% of the 72 planted trees) by the end of the five-year monitoring period.
- Herbaceous invasive plant species, as defined by the Cal-IPC for the southwest region, shall not exceed 5% cover, excluding non-native annual grasses.
- No woody invasive species shall be present (except for the existing mature non-native trees at the Frog Pond Wetland Preserve that cannot be removed without causing harm to the surrounding native plants).
- The mitigation site shall be entirely without supplemental irrigation for the final two years of the five-year maintenance and monitoring period at a minimum.

If the performance criteria standards are not achieved after five years of monitoring, adaptive management strategies will be developed in consultation with the regulatory agencies and implemented by the Restoration Contractor.

7.4 Reporting

The Restoration Specialist shall document conditions in emails, qualitative monitoring memos, and annual monitoring reports as described below in order to satisfy agency reporting requirements.

Quarterly Status Reports

In Year 1 of the 5-Year maintenance and monitoring period, the Restoration Specialist will provide a quarterly status report (summary memo) to TAMC regarding the success of the mitigation site

within two weeks of the end of each quarter. The summary memo will include as-built maps and a table with plant counts (following quantitative data collection only), as well as a summary of the methods, results, conclusions of the monitoring visits. The status report will also briefly evaluate the mitigation sites in relation to Project success criteria, and outline corrective actions for the Restoration Contractor to employ to help ensure achievement of Project success criteria, as necessary. Photographs from the fixed photo points will be included to document current site conditions in relation to conditions at the time of installation. The Restoration Specialist will also provide recommendations for plant survival, weed removal, irrigation repair and schedule, and general housekeeping to TAMC and Restoration Contractor in the form of a brief email after each site visit to ensure timely corrective action and increase the odds of mitigation success. These reports are intended to inform TAMC and the Restoration Contractor of the interim mitigation success during the monitoring period and ensure that corrective action is taken quickly. They will not be submitted to permitting agencies.

Mid-Year Status Memorandum

In Years 2 through 5 of the 5-year maintenance and monitoring period, the Restoration Specialist will submit a mid-year status memorandum (status memo) to TAMC within two weeks of the completion of each year's spring monitoring event (one per year). The status memo will summarize the conclusions of the monitoring visits, analyze the mitigation sites in relation to Project success criteria, and outline the corrective actions for the Restoration Contractor to employ to help ensure achievement of Project success criteria, as needed. Photographs from the fixed photo points will be included to document current site conditions in relation to conditions at the time of installation. These reports are intended to inform TAMC and the Restoration Contractor of the interim mitigation success during the monitoring period and ensure that corrective action is taken quickly. They will not be submitted to permitting agencies.

Annual Mitigation Monitoring Reports

An Annual Mitigation Monitoring Report will be prepared one year from the completion of installation/initiation and every year thereafter during the 5-year maintenance and monitoring period or until restoration has been deemed successful and approved by the applicable regulatory agencies. The report will summarize the methods, results, and conclusions of the monitoring visits and analyze the restoration site in relation to Project success criteria across all monitoring years.

The annual monitoring report shall include, at a minimum, documentation of the following:

- Location and extent of the mitigation site, including a map.
- Plant installation techniques employed (Year 1 only).
- Replacement planting installation techniques employed, if applicable.
- An overview of the maintenance activities performed during the year, including weed control and any erosion control/stabilization efforts.
- A summary of any significant issues that may affect the ultimate success of the restoration Project and how those issues are being addressed.
- A summary of remedial actions taken during the year (if any) and a discussion of any adaptive management strategies that have been implemented.
- Monitoring methodology.
- Percentage cover of native and non-native species.

- Percent survival.
- Photographs from fixed photo points.
- A discussion of the monitoring results in relation to success criteria.
- Summary of significant issues that may affect restoration success, and pertinent recommendations/remedial actions required to meet success criteria.

The Annual Mitigation Monitoring Reports will be submitted to TAMC for review within one month of the conclusion of each monitoring year (one per year). The reports will then be submitted to the USACE, CDFW, RWQCB, and MPRPD. The final Annual Mitigation Monitoring Report which demonstrates completion of all mitigation obligations should be accompanied by a jurisdictional delineation report that demonstrates the wetland mitigation meets the definition of waters of the U.S. and State under the federal Clean Water Act and the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (see Section 7.3).

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8 Adaptive Management and Contingency Measures

Adaptive management and contingency measures will be employed to respond to unforeseen circumstances and adjust restoration strategies as needed. Specific time-sensitive maintenance and Project management activities may be identified based on the results of each monitoring visit. As part of each annual monitoring report, maintenance and management activities implemented during the previous year will be described and the results will be evaluated under the framework of adaptive management. If management and maintenance methods are not successful in addressing negative environmental stressors identified in monitoring memos and/or annual monitoring reports, the methods will be examined and altered to increase the potential for success based on the Restoration Specialist's best professional judgment and management methods that are shown to be successful based on scientific research. In some cases, the effectiveness of management and maintenance activities may not be evident over the course of only one year. This will be accounted for in annual monitoring reports through evaluation of whether or not management actions are contributing to progress towards the success criteria. In some cases, it may be necessary to wait for two years or more before altering methods as part of an adaptive management strategy.

The Responsible Party acknowledges and agrees that there are always unforeseen effects on a restoration Project in the event that a fire, flood, or other natural disaster should have a significantly negative impact on the restoration areas during the maintenance period. The Responsible Party and Restoration Specialist will coordinate with the applicable regulatory agencies in the event of any such unforeseen event, and contingency measures will be developed in coordination with the applicable regulatory agencies. Modifications to this HMMP may be required and additional remedial actions may need to be implemented.

9 Notification of Restoration Completion

Once restoration criteria are complete, the Responsible Party's selected individual or firm will submit a final report to the regulatory agencies, summarizing restoration work completed and documenting post-Project site conditions. Once the TAMC and applicable agencies have agreed that success criteria defined in this HMMP have been met, no additional work will be required.

DRAFT

10 References

- Balance Hydrologics. 2014. Canyon del Rey Master Drainage Plan. Prepared for the Monterey Peninsula Water Management District, Monterey County Water Resources Agency, and the City of Seaside. April 2014. Berkeley, CA.
- California Invasive Plant Council (Cal-IPC). 2020. The Cal-IPC Inventory: Southwest Jepson Region. <https://www.cal-ipc.org/plants/inventory/> (accessed August 2020).
- Gann, G. D., McDonald, T., Walder, B., Aronson, J., Nelson, C. R., Jonson, J., Hallett, J.G., Eisenberg, C., Guariguata, M.R., Liu J., Hua, F., Echeverria, C., Gonzales, E.K., Shaw, N., Decler, K., & Dixon, K. 2019. International principles and standards for the practice of ecological restoration. *Restoration Ecology*, 27(S1), S1-S46.
- Sawyer, J.O., T. Keeler-Wolf, and J. M. Evens. 2009. A Manual of California Vegetation. (Second ed). California Native Plant Society, Sacramento, CA.
- United States Geological Survey (USGS). 2020. *Seaside, California* USGS 7.5-minute topographic quadrangle. Accessed via The National Map. <https://viewer.nationalmap.gov/advanced-viewer> (accessed May 2023).

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Attachment A

Mitigation Design Plans

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TRANSPORTATION AGENCY FOR MONTEREY COUNTY

FORTAG CDR TRAIL: WETLAND AND RIPARIAN ESTABLISHMENT

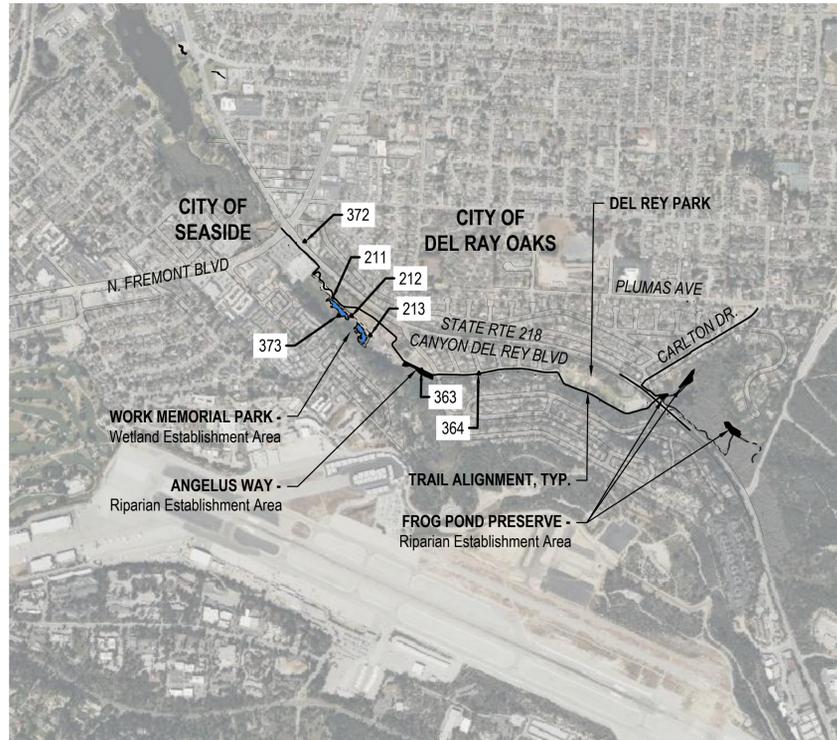
DEL REY OAKS, CALIFORNIA



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VICINITY MAP / SITE MAP
NTS

SURVEY CONTROL NOTES

- THIS MAP REPRESENTS A COMBINED TOPOGRAPHIC AND AERIAL SURVEY PERFORMED BY WHITSON ENGINEERS IN OCTOBER OF 2020. AERIAL SURVEY COMPLETED AT A SCALE OF 1"=20'; 1-FOOT CONTOUR INTERVAL.
- THIS MAP PORTRAYS THE SITE AT THE TIME OF THE SURVEY AND DOES NOT SHOW SOILS OR GEOLOGIC INFORMATION, UNDERGROUND CONDITIONS, EASEMENTS, ZONING OR REGULATORY INFORMATION OR ANY OTHER ITEMS NOT SPECIFICALLY REQUESTED BY THE CLIENT.
- BOUNDARY LOCATIONS SHOWN HEREON WERE DETERMINED WITH THE BENEFIT OF A FIELD SURVEY SUPPLEMENTED BY RECORD DATA. ALL BOUNDARY SHOWN IS FROM RECORD DATA. THIS TOPOGRAPHIC MAP DOES NOT CONSTITUTE A BOUNDARY SURVEY. THERE MAY BE EASEMENTS OR OTHER RIGHTS, RECORDED OR UNRECORDED, AFFECTING THE SUBJECT PROPERTY, WHICH ARE NOT SHOWN HEREON. NO LIABILITY IS ASSUMED BY GHD FOR THE EXISTENCE OF ANY EASEMENT, ENCUMBRANCES, DISCREPANCIES IN BOUNDARY OF TITLE DEFECTS NOT SHOWN ON THIS DRAWING.
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- DISTANCES AND DIMENSIONS SHOWN ARE EXPRESSED IN FEET AND DECIMALS THEREOF, UNLESS OTHERWISE NOTED.
- BENCHMARK: TIDAL BENCHMARK DESIGNATION "941 3450 M TIDAL", (GU4116) ELEVATION: 11.70 (NAVD88).
- COORDINATES: CALIFORNIA COORDINATE SYSTEM '83, ZONE 4, US SURVEY FEET. HORIZONTAL CONTROL VALUES WERE ESTABLISHED USING A LEAST SQUARES ADJUSTMENT AMONG THREE NGS CONTROL POINTS (100, 102, 604), LISTED UNDER PROJECT SURVEY CONTROL.
- THE UTILITIES SHOWN ON THIS PLAN ARE A COMPILATION OF A FIELD SURVEYING INFORMATION, RECORD INFORMATION AND SCHEMATICS PROVIDED BY THE UTILITY OWNERS.

- THE TYPES, LOCATIONS AND SIZES OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS CONSTRUCTION DOCUMENTS SET WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. THE CONTRACTOR IS CAUTIONED THAT ONLY ACTUAL EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATION AND DEPTH OF SUCH UNDERGROUND UTILITIES. (A REASONABLE EFFORT HAS BEEN MADE TO LOCATION AND DELINEATE ALL UNKNOWN UNDERGROUND UTILITIES.) HOWEVER, THE ENGINEER CAN ASSUME NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF ITS DELINEATION OF SUCH UNDERGROUND UTILITIES WHICH MAY BE ENCOUNTERED, BUT WHICH ARE NOT SHOWN ON THESE DRAWINGS.

- THE EXISTENCE, LOCATION AND DEPTH OF ALL UTILITIES MUST BE VERIFIED BY POSITIVE LOCATION (POTHOLING) BY THE CONSTRUCTION CONTRACTOR PRIOR TO EXCAVATION OR ANY CONSTRUCTION WHICH MAY BE AFFECTED BY THE LOCATION OR ELEVATION OF THE UTILITY.
- DIAMETERS OF TREES ARE SHOWN IN INCHES MEASURED AT BREAST HEIGHT. TREES SMALLER THAN 6" WERE NOT NECESSARILY LOCATED AS PART OF THIS SURVEY.

PROJECT SURVEY CONTROL				
POINT ID	NORTHING	EASTING	ELEVATION	DESCRIPTION
211	2112752.1910	5725495.3710	28.3100	CP SET SPK
212	2112544.9230	5725708.4750	30.0100	CP SET SPK
213	2112324.5390	5725923.5240	35.3200	CP SET SPK
363	2111924.080	5726514.940	50.660	CP SET MAG & SHNR
364	2111886.810	5727171.770	60.160	CP SET MAG & SHNR AP
372	2113397.240	5725171.620	52.950	CP SET MAG & WSHR
373	2112545.580	5725559.220	24.320	CP SET RBR & CAP

GENERAL NOTES:

- PRIOR TO BID:** THE CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO BIDDING TO DETERMINE THE EXACT EXTENT OF THE WORK LIMIT, EXISTING CONDITIONS AND ALL SITE DEMOLITION ITEMS.
- SITE WORK:** THE CONTRACTOR SHALL PERFORM ALL CLEARING, DEMOLITION, REMOVAL OF OBSTRUCTIONS AND SITE PREPARATIONS NECESSARY FOR THE PROPER EXECUTION OF ALL WORK SHOWN AND NOTED ON THESE DRAWINGS.
- STANDARDS:** ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, STANDARD DETAILS AND SUBSEQUENT ADDENDA AS ADOPTED BY TRANSPORTATION AGENCY FOR MONTEREY COUNTY, CITY OF DEL REY OAKS, CITY OF SEASIDE, OR THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION. WHERE APPLICABLE AND ALSO THE SPECIAL PROVISIONS FOR THIS PROJECT.
- REFERENCE PLANS AND DOCUMENTS:** THE CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH, AND HAVE, A COPY OF THE TRAIL PROJECT DRAWINGS TITLED: "TRANSPORTATION AGENCY FOR MONTEREY COUNTY - FORTAG CDR TRAIL - N. FREMONT BOULEVARD TO PLUMAS AVENUE" (FORTAG TRAIL PROJECT).
- SITE ACCESS / PROJECT COORDINATION:** THE CONTRACTOR SHALL COORDINATE WITH THE CITY, TRANSPORTATION AGENCY FOR MONTEREY COUNTY (TAMC) AND THE FORTAG TRAIL PROJECT FOR CONSTRUCTION ACCESS AND STORAGE OF CONTRACTOR'S EQUIPMENT, AND MATERIALS AREAS.
- TRAINING SESSION FOR PERSONNEL:** 5 DAYS PRIOR TO ANY WORK, FORTAG TRAIL PROJECT PROVIDED PROJECT BIOLOGIST SHALL PROVIDE A TRAINING SESSION FOR ALL WORK PERSONNEL TO IDENTIFY ANY SENSITIVE SPECIES WHICH MAY BE IN THE AREA, THEIR BASIC HABITS, HOW THEY MAY BE ENCOUNTERED IN THEIR WORK AREA, AND PROCEDURES TO FOLLOW WHEN THEY ARE ENCOUNTERED. ANY PERSONNEL JOINING THE WORK CREW LATER SHALL RECEIVE THE SAME TRAINING PRIOR TO WORK.
- FIELD VERIFICATION:** FIELD VERIFY ALL EXISTING SITE INFORMATION, INCLUDING EXISTING GRADES AND CONTROLS, PROPERTY LINES, EASEMENTS, UTILITIES, AND OTHER INFORMATION AFFECTING THE SCOPE OF WORK INCLUDED ON THESE DRAWINGS. IF ACTUAL SITE CONDITIONS VARY FROM WHAT IS SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL CONTACT THE DISTRICT FOR DIRECTION ON HOW TO PROCEED.
- LIMITS OF WORK:** NO WORK SHALL BE PERFORMED OUTSIDE OF THE DESIGNATED AREAS WITHOUT THE APPROVAL OF THE CONSTRUCTION MANAGER.
- UNDERGROUND UTILITIES AND EXCAVATION:** CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (USA 1-800-227-2600) 48 HOURS PRIOR TO ANY EXCAVATION. EXCAVATION IN THE VICINITY OF UTILITIES AND EXISTING MATERIALS SHALL BE UNDERTAKEN WITH CARE. THE CONTRACTOR BEARS FULL RESPONSIBILITY FOR THIS WORK. ANY DAMAGE CAUSED BY ANY PERSON, VEHICLE, EQUIPMENT, OR TOOL RELATED TO THE EXECUTION OF THE CONTRACT SHALL BE REPAIRED IMMEDIATELY AT NO EXPENSE TO TAMC, THE CITY, OR THE LANDOWNERS.
- DUE DILIGENCE:** CONTRACTOR SHALL NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHEN IT IS OBVIOUS THAT UNKNOWN OBSTRUCTIONS, AREA DISCREPANCIES AND/OR GRADE DIFFERENCES EXIST THAT MAY NOT HAVE BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF TAMC. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATIONS.
- MATERIAL DAMAGE:** CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING STRUCTURES, ROADS, AND UTILITIES DURING CONSTRUCTION. ALL DAMAGE SHALL BE RESTORED TO EQUAL OR BETTER CONDITION AT THE CONTRACTOR'S EXPENSE.
- RESPONSIBILITY AND LIABILITY:** CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD TAMC, THE CITY, GHD, AND THEIR REPRESENTATIVES HARMLESS FROM ANY AND ALL LIABILITY, REAL AND/OR ALLEGED, IN CONJUNCTION WITH THE PERFORMANCE OF THIS PROJECT.
- STANDARDS:** CONTRACTOR SHALL FURNISH WORK AND MATERIALS MEETING THE REQUIREMENTS OF THE DRAWINGS, SPECIFICATIONS, AND INDUSTRY STANDARDS. IT IS NOT THE INTENT OF THE PLANS AND SPECIFICATIONS TO OUTLINE ALL THE TECHNICAL REQUIREMENTS OR TO SET FORTH THOSE REQUIREMENTS ADEQUATELY COVERED BY THE APPLICABLE CODES AND STANDARDS.
- AGENCY COMPLIANCE:** THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, CITY, AND COUNTY LAWS AND REGULATIONS AND PROJECT PERMITS NECESSARY TO COMPLETE THE WORK. TAMC HAS OBTAINED CERTAIN PERMITS FOR PERFORMANCE OF THE WORK. PRIOR TO THE START OF WORK, ALL NATURAL RESOURCE AGENCY PERMITS SHALL BE ACQUIRED FROM TAMC AND KEPT ONSITE FOR THE DURATION OF WORK.
- ADHERENCE:** THE CONTRACTOR SHALL REFER TO AND ADHERE TO ALL REQUIREMENTS OF THE PLAN. A COMPLETE COPY OF THE PLAN SHALL BE KEPT ON SITE AT ALL TIMES DURING CONSTRUCTION.
- LICENSE AND QUALIFICATIONS:** PROJECT REQUIRES A CLASS A GENERAL ENGINEERING CONTRACTOR'S LICENSE IN THE STATE OF CALIFORNIA AND EXAMPLES OF THREE COMPLETED FRESHWATER WETLAND AND RIPARIAN WOODLAND RESTORATION PROJECTS WITHIN PAST FIVE YEARS.
- FIELD MODIFICATIONS:** FIELD MODIFICATIONS TO THE HABITAT RESTORATION DESIGN MAY BE ALLOWED AS SITE CONDITIONS WARRANT AND ONLY AT THE DISCRETION OF TAMC. ALL APPLICABLE REGULATIONS, TERMS, AND CONDITIONS PERTAINING TO THE CONTRACT SHALL BE SATISFIED WITH ANY AND ALL CHANGES TO THE DESIGN.
- QUANTITIES AND MEASUREMENTS:** QUANTITIES OF ITEMS, LENGTH OF PROJECT, AND SITE CONDITIONS SHOWN IN THE PLANS ARE APPROXIMATE. ALL MATERIALS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR UNLESS OTHERWISE NOTED.
- REVIEWS AND APPROVALS:** CONTRACTOR SHALL MAINTAIN DAILY COMMUNICATIONS WITH TAMC TO DISCUSS DETAILS OF IMPLEMENTATION, ORDER OF WORK, METHODS OF MINIMIZING ENVIRONMENTAL IMPACTS AND OTHER RELEVANT COMPONENTS OF CONSTRUCTION. CONTRACTOR AND TAMC OR THEIR REPRESENTATIVE SHALL MEET DAILY (OR AS OFTEN AS MUTUALLY AGREED UPON) ON-SITE TO DISCUSS PROJECT DETAILS.
- DELAY / STOP OF WORK:** NO SHUTDOWN OF THE PROJECT SITE IS ANTICIPATED. HOWEVER, UNFORESEEABLE CONDITIONS INCLUDING BUT NOT LIMITED TO: FIRE, GEO-HAZARD CONDITIONS, NESTING BIRDS, OR RAINS COULD REQUIRE THE SUSPENSION CONSTRUCTION ACTIVITIES AT ALL OR PART OF THE SITE FOR SAFETY REASONS AT NO COST TO TAMC OR THEIR REPRESENTATIVES.
- DEBRIS DISPOSAL:** EXISTING SITE DEBRIS AND DEBRIS CREATED BY CONSTRUCTION OPERATIONS SHALL BE REMOVED BY THE CONTRACTOR AND LEGALLY DISPOSED OF OFF-SITE.
- COMPLETION OF WORK:** UPON COMPLETION OF THE CONSTRUCTION PROJECT, THE CONTRACTOR SHALL LEAVE THE PROJECT AREA FREE OF DEBRIS AND UNUSED MATERIAL. ALL DAMAGE CAUSED BY THE CONTRACTOR SHALL BE RESTORED TO AN "AS GOOD OR BETTER" CONDITION.
- AS-BUILT RECORDS:** THE CONTRACTOR SHALL SUBMIT TO TAMC "AS-BUILT" DRAWINGS IN PAPER (3 COPIES) AND IN REPRODUCIBLE DIGITAL FORM THAT SHALL SHOW ALL DEVIATIONS FROM THE BID DOCUMENTS MADE DURING CONSTRUCTION. THESE DEVIATIONS SHALL BE RECORDED USING GPS EQUIPMENT AND REPRESENTED ON A SET OF BASE PLANS PROVIDED BY TAMC. ALL HORIZONTAL AND VERTICAL GRADE DEVIATIONS GREATER THAN THE ALLOWED GRADING TOLERANCE (SEE GRADING NOTES, SHEET L-002) SHALL BE RECORDED BY A PROFESSIONAL LAND SURVEYOR. THE RAW DATA SHOWING ALL FINAL ELEVATIONS AND LINWORK OF AS-CONSTRUCTED FEATURES SHALL BE SUBMITTED TO TAMC FOR USE IN FUTURE MONITORING AND MAINTENANCE.

SHEET INDEX	
SHEET NUMBER	SHEET TITLE
L-001	COVER SHEET
L-002	NOTES
L-003	OVERVIEW PLAN
L-101	RESOURCE PROTECTION AND SITE BMPs - WETLAND
L-102	RESOURCE PROTECTION AND SITE BMPs - RIPARIAN
L-103	HABITAT DEVELOPMENT PLAN - WETLAND
L-104	HABITAT DEVELOPMENT PLAN - RIPARIAN
L-105	GRADING PLAN - WETLAND
L-301	WETLAND GRADING SECTIONS (FULL WETLAND COMPLEX)
L-302	WETLAND GRADING SECTIONS (WEST WETLAND)
L-303	WETLAND GRADING SECTIONS (EAST WETLAND)
L-501	BMP, SEEDING DETAILS, NOTES & SCHEDULES
L-502	RIPARIAN PLANTING NOTES AND DETAILS

Client
TRANSPORTATION AGENCY FOR MONTEREY COUNTY

Project
FORTAG TRAIL WETLAND AND RIPARIAN MITIGATION PROJECT

No.	Issue	Drawn	Approved	Date

No.	Issue	Drawn	Approved	Date

Drawn	TB	Designer	JH / LP
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Drafting Check	JH	Design Check	JH
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Project Manager	HA	Date	MAY 07, 2021
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This document shall not be used for construction unless signed and sealed for construction.		Scale	AS SHOWN
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Project No. **11220281**

Title

COVER SHEET

Sheet No.

L-001

Sheet of

BMP/ SWPPP NOTES:

GENERAL BMPs, SEDIMENT & EROSION CONTROL, AND POST CONSTRUCTION STORMWATER MANAGEMENT COMPLIANCE: IT IS NOT THE INTENT OF THIS SECTION TO OUTLINE ALL THE TECHNICAL REQUIREMENTS FOR THE PROJECT BMPs AND SEDIMENT AND EROSION CONTROLS. AT A MINIMUM, THE CONTRACTOR SHALL COMPLY WITH ALL BMPs OUTLINED IN THESE DRAWINGS, STATE, COUNTY, LOCAL CODES AND REGULATIONS, AND, IF APPLICABLE, PROJECT SPECIFIC CONSTRUCTION GENERAL PERMIT STORM WATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS.

1. **GENERAL SWPPP REQUIREMENTS (IF NOT COVERED UNDER A SEPARATE SWPPP):**
 - 1.1. A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE PREPARED BY A STATE QUALIFIED SWPPP DEVELOPER TO OBTAIN PROJECT COVERAGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) CONSTRUCTION GENERAL PERMIT (CGP) STATE WATER RESOURCES CONTROL BOARD (SWRCB) ORDER NO. 2009-009-DW. THE LEGALLY RESPONSIBLE PERSON (LRP) SHALL BE RESPONSIBLE FOR OBTAINING PERMIT COVERAGE AND ENSURING PROJECT ADHERENCE TO ALL SWPPP REQUIREMENTS.
 - 1.2. THE CONTRACTOR SHALL OBTAIN A COPY OF THE PROJECT SWPPP PRIOR TO COMMENCEMENT OF WORK AND SHALL KEEP A COPY OF THE SWPPP ONSITE FOR THE DURATION OF CONSTRUCTION. THE CONTRACTOR SHALL COMPLY WITH ALL CONSTRUCTION BMP REQUIREMENTS SET FORTH IN THE APPROVED DOCUMENT.
 - 1.3. POST CONSTRUCTION MONITORING, REPORTING, AND NOTICE OF TERMINATION SHALL BE THE RESPONSIBILITY OF THE LRP.
 - 1.4. BEST MANAGEMENT PRACTICES (BMPs) MEASURES SHALL BE IN PLACE PRIOR TO THE ONSET OF THE FALL RAINY SEASON (NO LATER THAN OCTOBER 15) OR ANY ANTICIPATED STORM EVENT.
2. **GENERAL BMP CONTRACTOR REQUIREMENTS**
 - 2.1. GENERALLY, SEDIMENTATION CONTROL BMPs SHALL CONSIST OF FILTRATION AND BARRIER DEVICES AT THE DOWN-SLOPE SITE PERIMETER AND AT ALL INLETS TO ANY EXISTING WATER CONVEYANCE SYSTEM. SEDIMENTATION CONTROL IS NECESSARY WHEN THE INITIAL MOBILIZATION OF SOIL PARTICLES DURING A RAIN EVENT NECESSITATES BMPs TO PREVENT A DISCHARGE INTO A PROTECTED BODY OF WATER. UNTIL PERMANENT VEGETATION IS ESTABLISHED, TEMPORARY SEDIMENTATION CONTROL BMPs MUST BE INSTALLED.
 - 2.1. STRAW WATTLES WILL BE INSTALLED AROUND ALL EDGES OF THE PROJECT THAT ARE DOWN-SLOPE OF CONSTRUCTION WHERE MOBILIZED PARTICLES HAVE DIRECT PATHS OF FLOW TO BODIES OF WATER. THE CONTRACTOR SHALL IMPLEMENT BMP MEASURES AROUND ALL WORK AREAS SO THAT ANY EROSION WILL NOT IMPACT ANY WATER FEATURES OR SURROUNDING PROTECTED AREA. STRAW WATTLES OR SIMILAR LINEAR SEDIMENT CONTROL DEVICE SHALL ALSO BE PLACED AROUND THE PERIMETER OF ANY EXISTING PROTECTED WETLANDS, WATER COURSES, OR WATER BODIES SITUATED 50 FT FROM AND DOWN SLOPE OF ANY CONSTRUCTION ZONES.
 - 2.2. EXPOSED DISTURBED SOIL SHALL BE STABILIZED BY APPROPRIATE SEED MIXES AND PROTECTED WITH CERTIFIED WEED FREE STRAW OR WOOD MULCH.
 - 2.3. IMPLEMENT GENERAL SITE AND MATERIAL MANAGEMENT BMPs FOR MATERIAL AND EQUIPMENT THAT ARE IMPORTED TO THE SITE. PREVENTION OF LEAKS FROM EQUIPMENT, FUEL, HYDRAULIC FLUID, AND TRANSMISSION FLUID, AND IMPORTED MATERIAL (BOTH HAZARDOUS AND NON-HAZARDOUS) SHALL BE PROPERLY STORED IN A PROTECTED STORAGE AREA WITH SECONDARY CONTAINMENTS. THE CONTRACTOR SHALL DEVELOP AND MAINTAIN A SPILL CONTAINMENT PLAN ONSITE AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR SHALL ALSO MAINTAIN AND INSPECT PORTABLE TOILETS AND ENSURING ALL WASTE CONTAINERS OR DUMPSTERS HAVE COVERS.
 - 2.4. DOCUMENT ALL MATERIALS BEING IMPORTED TO THE SITE TO DETERMINE APPLICABLE GENERAL SITE AND MATERIAL MANAGEMENT BMPs, AND IDENTIFY SPILL CONTAINMENT PLANS, AND ANY ADDITIONAL MANAGEMENT PRACTICES.
 3. **SEDIMENT AND EROSION CONTROL CONTRACTOR REQUIREMENTS**
 - 3.1. EROSION CONTROL - SOIL STABILIZATION SHALL BE USED TO PREVENT THE INITIAL MOBILIZATION OF SOIL PARTICLES DURING A RAIN EVENT. THE MOST EFFICIENT WAY TO ADDRESS EROSION CONTROL IS TO PRESERVE EXISTING VEGETATION WHERE FEASIBLE, TO LIMIT DISTURBANCES, AND TO STABILIZE AND REVEGETATE DISTURBED AREAS AS SOON AS POSSIBLE AFTER GRADING OR CONSTRUCTION OPERATIONS.
 - 3.2. A WATER TRUCK OR HOSE CONNECTED TO APPROVED WATER POINT OF CONNECTION SHALL BE USED ON-SITE DURING CONSTRUCTION IN ORDER TO TOP DAMPEN THE SOIL TO PREVENT WIND EROSION AND FOR DUST CONTROL.
 - 3.3. ALL FINISH GRADED SHALL RECEIVE TEMPORARY EROSION CONTROL SEEDING OR SEEDING AS SPECIFIED ON THESE PLANS PRIOR TO THE ONSET OF THE FALL RAINY SEASON (OCTOBER 15TH) AND /OR PRIOR TO ANTICIPATED QUALIFYING RAIN EVENT.
 4. **POST-CONSTRUCTION STORMWATER MANAGEMENT CONTRACTOR REQUIREMENTS**
 - 4.1. THE GOAL OF THIS PROJECT IS TO CREATE A FULLY VEGETATED LANDSCAPE, INCLUDING NATIVE VEGETATION ACROSS ALL DISTURBED AREAS IMPACTED DURING WETLAND CONSTRUCTION ACTIVITIES. IF PLANT GROWTH PROCEEDS AS EXPECTED, POST CONSTRUCTION EROSION WILL BE MINIMAL.
 - 4.2. SILT FENCES, IF USED, SHALL BE REMOVED AFTER CONSTRUCTION, PRIOR TO NOVEMBER 1ST. STRAW WATTLES SHALL AT A MINIMUM REMAIN IN PLACE UNTIL APRIL 15 OF THE FOLLOWING YEAR TO REDUCE SEDIMENT MOVEMENT DURING THE RAINY SEASON. POST-CONSTRUCTION STORM WATER MANAGEMENT SHALL CONSIST OF INSPECTING THE SITE, ASSESSING THE REVEGETATION PROCESS, AND OBSERVING EROSION CONTROL FABRIC AND STRAW WATTLES AND REPLACING IF NEEDED.
 - 4.3. IN ADDITION TO THE VEGETATION INSPECTION AND RECORD KEEPING, THE CONTRACTOR SHALL ALSO INSPECT FOR ANY POTENTIAL RISK FOR STORM WATER POLLUTION. ADAPTIVE MANAGEMENT TO SOLVE ANY PROBLEMS IS REQUIRED IF ANY DEFICIENCY IS DISCOVERED DURING THIS INSPECTION. ADAPTIVE MANAGEMENT PLANS SHALL BE APPROVED BY THE PROJECT BIOLOGIST AND/OR TAMC PRIOR TO IMPLEMENTATION.

GRADING NOTES

1. **REGULATIONS:** PERFORM GRADING IN ACCORDANCE WITH THE LATEST EDITION OF THE CALIFORNIA BUILDING CODE AND APPLICABLE COUNTY REGULATIONS.
2. **DESIGN FILES:** CAD SURFACE FILES FOR THE EXISTING AND PROPOSED GRADES (INCLUDING POINT LOCATIONS OF EXISTING CONTROL POINTS AND MONUMENTS) WILL BE MADE AVAILABLE UPON REQUEST.
3. **TOLERANCE:** THE ALLOWED GRADE TOLERANCE BETWEEN THE PROPOSED ELEVATIONS AS SHOWN ON THESE PLANS AND WHAT IS CONSTRUCTED SHALL BE NO GREATER THAN 0.25 FEET HORIZONTAL OR VERTICAL. THE CONTRACTOR SHALL PROVIDE A PROFESSIONAL LAND SURVEYOR TO RECORD FINAL GRADES FOR INCLUSION IN THE PROJECT AS-BUILTS. IF SITE CONDITIONS WARRANT DESIGN CHANGES IN HORIZONTAL OR VERTICAL GRADING GREATER THAN THE ALLOWED TOLERANCE, THE CONTRACTOR SHALL ALERT TAMC OF THIS PROPOSED DEVIATION FROM THE PLANS AND MAY NOT COMMENCE WITH THE DESIGN CHANGE UNTIL WRITTEN APPROVAL IS PROVIDED BY TAMC.
4. **SOIL CONDITION:** THE CONTRACTOR SHALL BE AWARE OF THE SOFT AND SATURATED SOIL CONDITION THAT MAY BE ENCOUNTERED DURING THE CONSTRUCTION.
5. **SOIL EXPORT:** EXPORTATION OF SOIL, WHICH MAY BE NECESSARY TO MEET THE GRADES SHOWN ON THIS PLAN, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE PART OF THIS CONTRACT. CONTRACTOR SHALL BE RESPONSIBLE FOR TESTING ANY SOIL THAT IS TO BE EXPORTED FROM THE PROJECT SITE. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH SOIL TESTING. IF THE EXISTING SOIL IS FOUND TO BE HAZARDOUS, IT SHALL BE TAKEN TO AN APPROVED FACILITY (CLASS I/II OR III). CONTRACTOR TO COORDINATE WITH FORTAG TRAIL PROJECT CONSTRUCTION TO DETERMINE IF SOIL MAY BE STOCKPILED, USED, OR REQUIRE OFF HAUL. FOR BIDDING PURPOSES, CONTRACTOR TO ASSUME ALL SOIL WILL NEED TO BE OFF HAULED AND DISPOSED OF LEGALLY.
6. **CULTURAL RESOURCES:** IN THE EVENT CULTURAL RESOURCES (I.E., HISTORICAL, ARCHAEOLOGICAL, AND PALEONTOLOGICAL RESOURCES, AND HUMAN REMAINS) ARE DISCOVERED DURING CONSTRUCTION ACTIVITIES, WORK SHALL BE HALTED. A QUALIFIED ARCHEOLOGIST SHALL BE CONSULTED FOR AN ON-SITE EVALUATION. IN THE EVENT THAT HUMAN REMAINS AND/OR CULTURAL MATERIALS ARE FOUND, ALL PROJECT-RELATED CONSTRUCTION SHOULD CEASE WITHIN A 100-FOOT RADIUS. THE CONTRACTOR SHALL, PURSUANT TO SECTION 7050.5 OF THE HEALTH AND SAFETY CODE AND SECTION 5097.94 OF THE PUBLIC RESOURCES CODE OF THE STATE OF CALIFORNIA, NOTIFY THE MONTEREY COUNTY CORONER IMMEDIATELY.
7. **HAZARDOUS MATERIAL:** SHOULD GRADING OPERATIONS ENCOUNTER HAZARDOUS MATERIALS, OR WHAT APPEAR TO BE HAZARDOUS MATERIALS, STOP WORK IN THE AFFECTED AREA IMMEDIATELY AND CONTACT THE CONSTRUCTION MANAGER OR THE APPROPRIATE AGENCY FOR FURTHER INSTRUCTION.
8. **HAUL ROUTES:** ALL CONSTRUCTION SITES AND HAUL ROADS SHALL BE MAINTAINED, AS NECESSARY, TO MINIMIZE THE EMISSION OF DUST AND PREVENT CREATION OF NUISANCE TO ADJACENT PROPERTIES.
9. **SHORING AND BRACING:** CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF ALL CONSTRUCTION. ADEQUATE SHORING, BRACING, TIES, AND SUPPORTS SHALL BE USED TO PROVIDE PROPER TEMPORARY INTEGRITY DURING ALL PHASES OF CONSTRUCTION.
10. **SITE REHABILITATION AND SOIL PREPARATION:** ALL EXISTING SURFACES WHICH ARE DISTURBED BY CONSTRUCTION OR EARTHWORK OPERATIONS SHALL BE RETURNED TO ORIGINAL EXISTING ELEVATIONS AND CONDITIONS UNLESS OTHERWISE SPECIFIED AND IDENTIFIED ON THE PLANS. 12' WIDE MAIN ACCESS ROUTES AS IDENTIFIED ON THE PLANS SHALL BE RETURNED TO PRE-CONSTRUCTION CONDITIONS AT THE END OF CONSTRUCTION WORK. ALL ADJACENT GRADED AREAS TRANSITIONING FROM WETLAND TO EXISTING UPLANDS WILL BE DECOMPACTED PRIOR TO SEEDING THROUGH A PROCESS OF RIPPING AND SCARIFYING TO CREATE A LOOSE FRIABLE SOIL SURFACE TO A MINIMUM DEPTH OF 3" THAT IS FREE OF CLODS LARGER THAN 1" IN SIZE. SEE SEED BED PREPARATION NOTES SHEET L-501.
11. **WET WEATHER:** DURING WET WEATHER PERIODS, CONTRACTOR IS RESPONSIBLE FOR SEQUENCING CONSTRUCTION IN A MANNER TO MINIMIZE IMPACT ON OPEN EARTHWORK AND COMPACTION OPERATIONS.
12. **ADHERENCE:** GRADING SHALL BE CONDUCTED IN ACCORDANCE WITH THESE DRAWINGS AND SHALL MEET THE GRADES AND SLOPES SPECIFIED HEREIN. MAXIMUM FINISHED SLOPES SHALL NOT EXCEED 4H:1V.
13. **GRADE TRANSITIONS:** ALL HIGH POINTS, LOW POINTS, OR GRADE BREAKS ON GRADED SURFACES SHALL HAVE A SMOOTH CURVE. THE CONTRACTOR SHALL MATCH THE NEW GRADES WITHIN THE LIMITS OF WORK TO THE EXISTING GRADES WITHOUT DAMAGING THE EXISTING NATIVE GRASSES, FENCE LINE, TREES, OR EXISTING PROTECTED RESOURCES TO REMAIN, ALONG THE LIMIT LINE. ANY DAMAGE TO THESE AREAS SHALL BE REPAIRED AT THE CONTRACTOR'S OWN EXPENSE.
14. **CLEAN AND PROFESSIONAL SITE CONDITIONS:** THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ALL OTHER PUBLIC RIGHTS-OF-WAY IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC, SHALL BE MAINTAINED IN A CLEAN, SAFE AND USABLE CONDITION.
15. **ADDITIONAL INFORMATION:** SEE GRADING SHEETS, CONTAINED IN THESE DRAWINGS, FOR ADDITIONAL GRADING INFORMATION FOR THE GRADING OF THE WETLANDS.

EQUIPMENT, VEHICLE, AND HAUL ROUTE MAINTENANCE

1. APPROPRIATE VEHICLE STORAGE, FUELING, MAINTENANCE AND CLEANING AREAS SHALL BE DESIGNATED AND MAINTAINED TO PREVENT DISCHARGE OF POLLUTANTS.
2. ENTRANCE(S) TO THE CONSTRUCTION SITE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF POTENTIAL POLLUTANTS OFFSITE. POTENTIAL POLLUTANTS DEPOSITED ON PAVED AREAS WITHIN THE COUNTY RIGHT-OF-WAY, SUCH AS ROADWAYS AND SIDEWALKS, SHALL BE PROPERLY DISPOSED OF EACH WORKING DAY OR MORE FREQUENTLY AS NECESSARY.
3. THE CONTRACTOR SHALL INSPECT, ON A DAILY BASIS, ALL PAVED SURFACES ON WHICH EQUIPMENT OR VEHICLES ACCESS. THIS INCLUDES, BUT IS NOT LIMITED TO, THE STAGING AREAS, ACCESS ROADS, AND ANY TRAIL CONSTRUCTION SURFACES. AT A MINIMUM DAILY (WHEN NECESSARY) AND PRIOR TO ANY RAIN EVENT, THE CONTRACTOR SHALL REMOVE ANY SEDIMENT OR OTHER CONSTRUCTION ACTIVITY-RELATED MATERIALS THAT ARE DEPOSITED ON THE ROADS (BY VACUUMING OR SWEEPING). ADDITIONAL ROAD MAINTENANCE MAY BE REQUIRED BY TAMC. CONTRACTOR SHALL CONSULT WITH TAMC PRIOR TO COMMENCEMENT OF WORK TO VERIFY STAGING, PARKING, AND ACCESS LOCATIONS.
4. OPERATORS OF HEAVY EQUIPMENT, VEHICLES, AND CONSTRUCTION WORK WILL BE INSTRUCTED TO AVOID SENSITIVE HABITAT AREAS. TO ENSURE CONSTRUCTION OCCURS IN THE DESIGNATED AREAS AND DOES NOT IMPACT ENVIRONMENTALLY SENSITIVE AREAS, THE BOUNDARIES OF THE WORK AREA WILL BE FENCED OR MARKED WITH FLAGGING.
5. EQUIPMENT WHEN NOT IN USE WILL BE STORED OUTSIDE OF THE FORTAG TRAIL LIMIT OF WORK (UNLESS NEGOTIATED AND APPROVED) AND OUTSIDE OF ANY PROTECTED RESOURCES.
6. THE CONTRACTOR SHALL OBSERVE ALL TRAFFIC CONTROL REQUIREMENTS WHEN OPERATING WITHIN THE PUBLIC ROAD WAY. IF TEMPORARY LANE CLOSURES OR OTHER TRAFFIC CONTROL MEASURES ARE NEEDED, THE CONTRACTOR SHALL PREPARE A TRAFFIC CONTROL PLAN THAT IS CONSISTENT WITH THE CURRENT ADDITION OF CALTRANS MANUAL OF TRAFFIC CONTROLS AND/OR TO THE SATISFACTION AND AGREED UPON CONDITIONS AS DETERMINED AND APPROVED BY TAMC.

SEEDING AND MULCHING NOTES

1. WOOD MULCH SHALL BE COMPOSED OF WOOD FIBER DERIVED FROM WHOLE WOOD CHIPS WITH NO GROWTH OR GERMINATION INHIBITING SUBSTANCES. IT SHALL BE MANUFACTURED IN SUCH A MANNER THAT WHEN THOROUGHLY MIXED IT WILL FORM A HOMOGENEOUS SLURRY WHICH IS CAPABLE OF BEING SPRAYED TO FORM A UNIFORM MAT.
2. THE MULCH FIBERS SHALL CONTAIN NO MORE THAN 15% BY WEIGHT OF WATER IN ITS AIR-DRY STATE.
3. TACKIFIER/SOIL STABILIZER SHALL BE "M-BINDER TACKIFIER SOIL STABILIZER" MANUFACTURED BY ECOLOGY CONTROLS, OR EQUAL. IT SHALL BE A PSILUM-BASED ORGANIC SUBSTANCE SUPPLIED IN POWDER FORM AND PACKED IN CLEARLY MARKED BAGS STATING THE CONTENTS OF EACH PACKAGE. THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE SHALL CERTIFY THE MATERIAL AS AN AUXILIARY SOIL CHEMICAL.
4. ALL SEED SHALL BE IN CONFORMANCE WITH THE CALIFORNIA STATE SEED LAW OF THE DEPARTMENT OF AGRICULTURE. EACH SEED BAG SHALL BE DELIVERED TO THE SITE SEALED AND CLEARLY MARKED AS TO SPECIES, PURITY, PERCENT GERMINATION, DEALER'S GUARANTEE, AND DATES OF TEST. IN ADDITION, THE CONTAINER SHALL BE LABELED TO CLEARLY REFLECT THE AMOUNT OF PURE LIVE SEED (PLS) CONTAINED.
5. ALL SEED SHALL BE SOURCED FROM SIMILAR BIO-REGION WITHIN MONTEREY COUNTY. CONTRACTOR SHALL PROVIDE SOURCING DOCUMENTATION TO TAMC PRIOR TO PURCHASE FOR APPROVAL.
6. ALL SEED SHALL BE AT LEAST 95% PURE, WEED-FREE, AND SHALL ATTAIN 85% MINIMUM GERMINATION.
7. SEED MAY BE AVAILABLE FROM PACIFIC COAST SEED OR APPROVED EQUAL.
8. **INSPECTION:** SEED SHALL BE INSPECTED BY TAMC INSPECTOR UPON DELIVERY TO SITE.
9. CONTRACTOR TO NOTIFY TAMC INSPECTOR TEN (10) WORKING DAYS IN ADVANCE, MINIMUM, PRIOR TO HYDROSEEDING.
10. **PRIOR TO HYDROSEEDING APPLICATION CONTRACTOR SHALL:**
 - 10.1. VERIFY THAT ALL AREAS TO RECEIVE HYDROSEEDING TREATMENTS ARE FREE OF VEGETATION AND OTHER OBJECTIONABLE MATERIAL;
 - 10.2. ALL GRADES ARE FINAL FOR PERMANENTLY TREATED AREAS AND WITHIN REASONABLE STANDARD FOR TEMPORARY TREATMENTS; AND
 - 10.3. ANY REQUIRED SOIL AMENDMENTS HAVE BEEN FULLY APPLIED.
11. **SLURRY PREPARATION**
 - 11.1. ALL SLURRY PREPARATION SHALL BE DONE AT THE JOB SITE AND IN THE PRESENCE OF TAMC INSPECTOR. ALL SPECIFIED INGREDIENTS EXCEPT SEED SHALL BE ADDED TO THE TANK SIMULTANEOUSLY SO THAT THE FINISHED LOAD IS A HOMOGENOUS MIX.
 - 11.2. SEED SHALL BE ADDED TO THE SLURRY MIXTURE LAST AND SHALL BE DISCHARGED WITHIN 2 HOURS. LOADS HELD OVER 2 HOURS WILL BE RECHARGED WITH 1/2 THE SEED RATE BEFORE APPLICATION.
 - 11.3. ONCE FULLY LOADED, THE COMPLETE SLURRY SHALL BE AGITATED FOR 3-5 MINUTES TO ALLOW FOR UNIFORM MIXING.
12. CONTRACTOR SHALL SPRAY ALL AREAS TO BE SEEDED WITH A UNIFORM, VISIBLE COAT, BY USING THE COLOR OF THE MULCH AS A GUIDE. THE SLURRY SHALL BE APPLIED IN A SWEEPING MOTION AND THE MATERIAL IS SPREAD AT THE REQUIRED RATE PER ACRE.
13. **OVERSPRAY:** CONTRACTOR IS RESPONSIBLE FOR WASHING OR OTHERWISE CLEANING EXCESS MATERIAL OFF ALL PAVEMENTS, FURNISHINGS, AND AREAS NOT INTENDED TO RECEIVE TREATMENT.
14. SEE SHEET SEED BED PREPARATION AND SEEDING NOTES ON SHEET L-501 FOR ADDITIONAL INSTRUCTIONS.



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Client
TRANSPORTATION AGENCY FOR MONTEREY COUNTY

Project
FORTAG TRAIL WETLAND AND RIPARIAN MITIGATION PROJECT

No.	Issue	Drawn	Approved	Date
Drawn	TB	Designer	JH / LP	
Drafting Check	JH	Design Check	JH	
Project Manager	HA	Date	MAY 07, 2021	

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Title

NOTES

Sheet No.

L-002

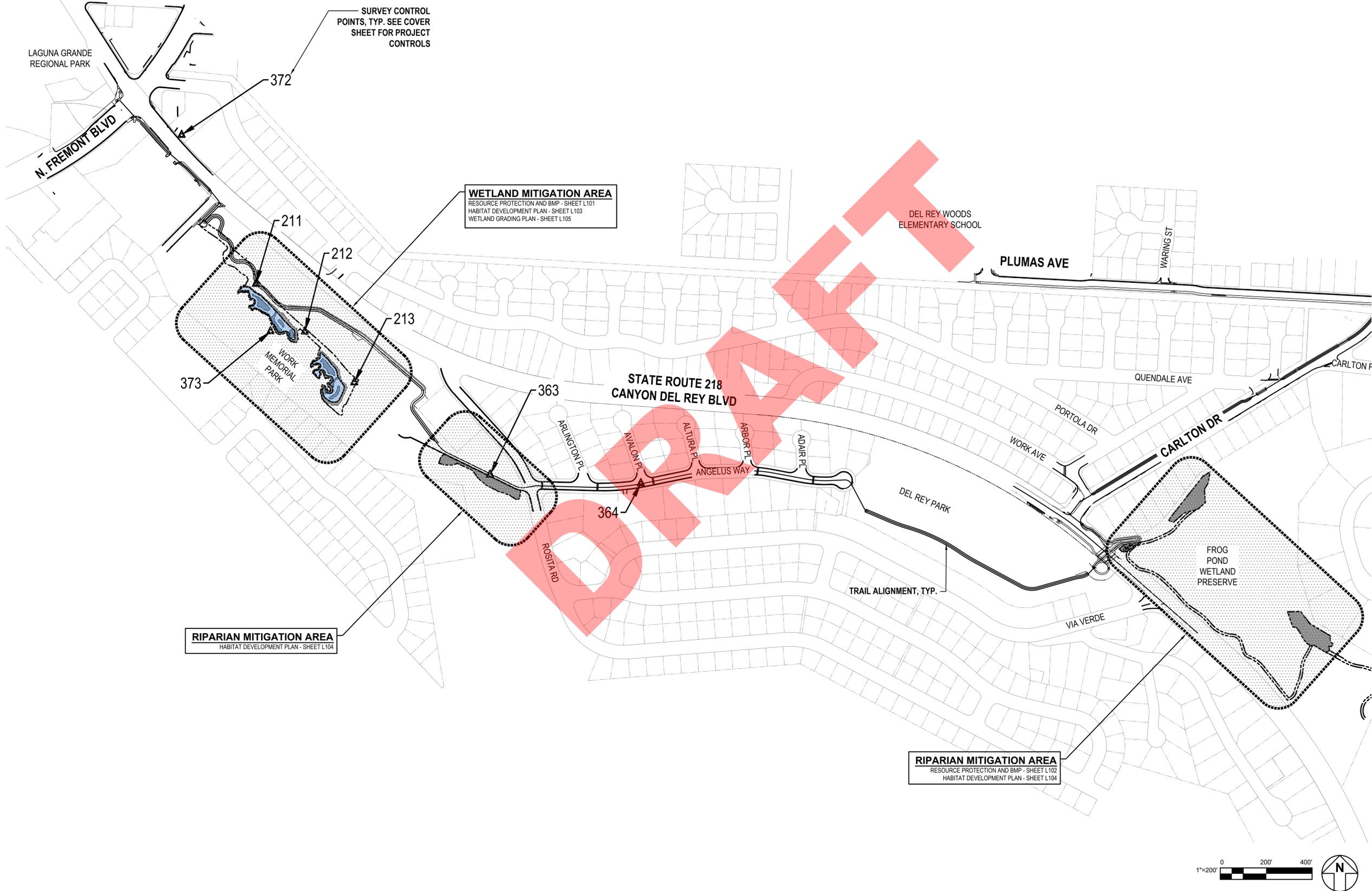
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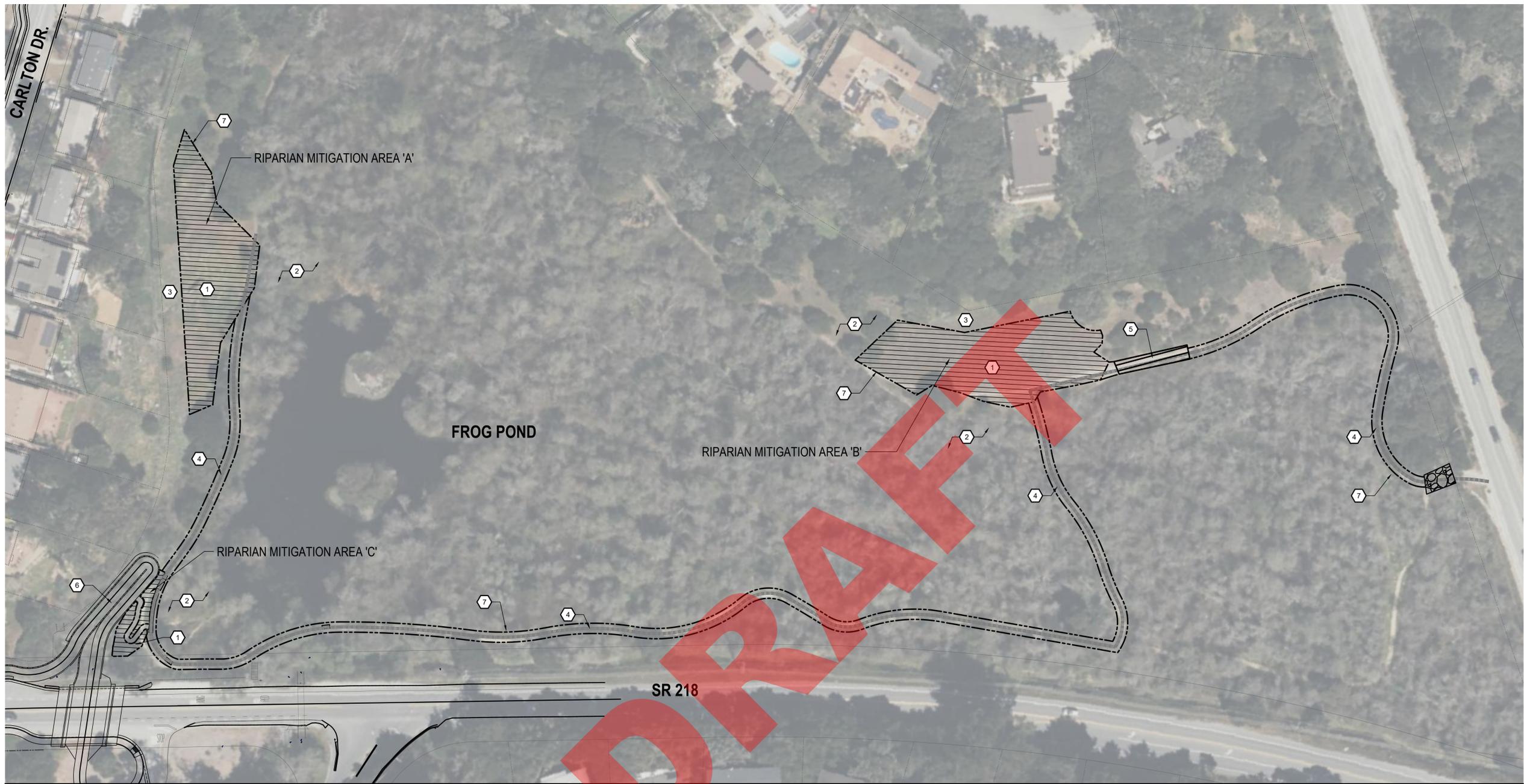
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OVERVIEW PLAN

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L-003
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Project No. **11220281**

Title
RESOURCE PROTECTION AND SITE BMPs - RIPARIAN MITIGATION

Sheet No.

L-102

Sheet of

SITE PREPARATION AND RESOURCE PROTECTION BMPs

- INITIAL SITE PREPARATION: PRIOR TO GRADING, THE CONTRACTOR SHALL STAKE THE PROJECT LIMIT OF WORK AND THEN MOW THE ENTIRE AREA WITHIN THE STAKED LIMITS TO PILE HEIGHT OF NO GREATER THAN 2 INCHES. ANY NON-VEGETATED MATERIAL / DEBRIS SHALL BE DISPOSED OFF SITE IN A LEGAL MANNER AT THE CONTRACTOR'S EXPENSE. ALL WOODY VEGETATION SHALL BE REMOVED AND DISPOSED OF OFF SITE UNLESS APPROVED BY THE DISTRICT TO CHIP AND PLACE ONSITE AT AN APPROVED LOCATION.
- SITE STAKING: FOLLOWING SITE MOWING AND NON-VEGETATION CLEARING, THE CONTRACTOR SHALL IDENTIFY AND STAKE THE STAGING AREAS, ACCESS/HAUL ROUTES, AND CONSTRUCTION SITE ENTRANCE. STAKING SHALL BE PLACED NO MORE THAN FIVE FEET OUTSIDE THE LIMIT BOUNDARIES AS SHOWN THE DRAWINGS. STAKING SHALL BE APPROVED BY TAMC OR THEIR REPRESENTATIVE PRIOR TO PROCEEDING WITH WORK.
- STAGING AREA, SITE ACCESS, AND STABILIZED CONSTRUCTION ENTRANCE: IF WORK IS TO BE DONE PRIOR TO OR AFTER TRAIL CONSTRUCTION, THE PRIMARY STAGING AREA, SITE ACCESS, AND STABILIZED CONSTRUCTION ENTRANCE, SHALL BE AT LOCATION SHOWN ON THESE PLANS - FOLLOWING APPROVAL FROM TAMC OR THEIR REPRESENTATIVE. AS A SECONDARY STAGING OPTION, (DEPENDING ON TIMING OF CONSTRUCTION, CONCURRENCE WITH TRAIL CONSTRUCTION, AND AFTER COORDINATION WITH THE FORTAG TRAIL PROJECT CONSTRUCTION) THE CONTRACTOR MAY USE AN ALTERNATIVE LOCATION, ONLY AFTER NEGOTIATING A LOCATION WITH THE TRAIL CONTRACTOR AND WRITTEN APPROVAL FROM TAMC OR THEIR REPRESENTATIVE. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING SECURITY FENCING AND SHALL PLACE STRAW WATTLES AROUND THREE SIDES AND AT THE BASE OF SLOPES OF THE STAGING AREAS.
- LIMIT OF WORK FLAGGING AND PROTECTION OF ADJACENT NATURAL RESOURCES: THE CONTRACTOR SHALL INSTALL LATH WITH ORANGE FLAGGING ALONG THE STAKED LIMIT OF WORK ALONG LENGTHS OF THE LIMIT OF WORK. FLAGGING SHALL BE SPACED EVERY 50 FEET.
- SEE SHEET L-501 FOR EROSION AND SEDIMENT CONTROL DETAILS.
- MATERIAL RESTRICTIONS: THE CONTRACTOR SHALL ONLY USE APPROVED MATERIALS AS OUTLINED IN THESE PLANS AND APPLICABLE PROJECT PERMITS. THE USE OF TEMPORARY OR PERMANENT EROSION CONTROL DEVICES CONTAINING PLASTIC NETTING, INCLUDING PHOTO- OR BIO-DEGRADABLE PLASTIC 'MONOFILAMENT' NETTING IS PROHIBITED.
- FUELING AND EQUIPMENT MAINTENANCE: THE CONTRACTOR SHALL IMPLEMENT GENERAL SITE AND MATERIAL MANAGEMENT BMPs FOR MATERIAL AND EQUIPMENT THAT ARE IMPORTED TO THE SITE, SUCH AS PREVENTION OF LUBRICATION LEAKS FROM EQUIPMENT, FUEL, HYDRAULIC FLUID, AND TRANSMISSION FLUID. ALL EQUIPMENT FUELING SHALL BE DONE WITHIN THE STAGING AREA. THE CONTRACTOR SHALL HAVE A SPILL CONTROL PLAN APPROVED BY TAMC.
- EQUIPMENT AND MATERIAL DOCUMENTATION: THE CONTRACTOR SHALL DOCUMENT ALL MATERIALS BEING IMPORTED TO THE SITE TO DETERMINE APPLICABLE GENERAL SITE AND MATERIAL MANAGEMENT BMPs. THE CONTRACTOR SHALL PROPERLY STORE IMPORTED MATERIAL (BOTH HAZARDOUS AND NON-HAZARDOUS) IN A PROTECTED STORAGE AREA WITH SECONDARY CONTAINMENTS AND SHALL MAINTAIN AND INSPECT PORTABLE TOILETS AND ENSURING ALL WASTE CONTAINERS OR DUMPSTERS HAVE COVERS.

SHEET KEYNOTES

- 1 (N) RIPARIAN ESTABLISHMENT AREA
- 2 ALL EXISTING TREES SHALL BE PROTECTED IN PLACE
- 3 FIRE PROTECTION BUFFER (20')
- 4 ACCESS ROUTE / HAUL ROUTE - TO MAINTAIN EXISTING ACCESS ROUTE FOOTPRINT WIDTH
- 5 PRIMARY STAGING AREA
- 6 FORTAG TRAIL (BY OTHERS)
- 7 LIMIT OF WORK

BMP LEGEND

- PRIMARY STAGING AREA
- STABILIZED CONSTRUCTION ENTRANCE
- LIMIT OF WORK (ORANGE PROTECTIVE FLAGGING SEE NOTE 4)
- CONSTRUCTION ACCESS ROUTE
- (N) RIPARIAN ESTABLISHMENT AREA





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Drawn	TB	Designer	JH / LP
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Drafting Check	JH	Design Check	JH
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Project Manager	HA	Date	MAY 07, 2021
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Project No. **11220281**

Title

HABITAT DEVELOPMENT PLAN WETLAND

Sheet No.

L-103

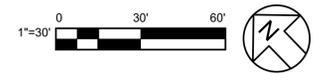
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SEASONAL WETLAND PLUG PLANTING SCHEDULE			
	DEEP WETLAND BULRUSH PATCH Schoenoplectus americanus / Three-square Bulrush Schoenoplectus californicus / California Bulrush	3,394 sf 1,764 1,764	Deepot 40 (D-40) 50% @ 12" oc Deepot 40 (D-40) 50% @ 12" oc
	SHALLOW WETLAND RUSH AND SEDGE PATCH Carex praegracilis / California Field Sedge Juncus balticus / Baltic Rush Juncus effusus / Soft Rush	3,187 sf 736 368 368	PLUGS 50% @ 18" oc PLUGS 25% @ 18" oc PLUGS 25% @ 18" oc

SHEET KEYNOTES	
1	(N) SEASONAL WETLAND ESTABLISHMENT AREA
2	DEEP WETLAND - BULRUSH PLANTING PATCH
3	SHALLOW WETLAND - RUSH AND SEDGE PLANTING PATCH
4	UPLAND TRANSITIONAL ZONE
5	ALL EXISTING TREES SHALL BE PROTECTED IN PLACE
6	EXISTING WETLAND SHALL BE PROTECTED IN PLACE
7	FORTAG TRAIL (BY OTHERS)

RESTORATION NOTES	
1.	SEE SHEET L-501 FOR PLANT AND SEED MIX SCHEDULES, DETAILS, AND NOTES.
2.	PLANT PLUGS AND DEEPTOT 40 CONTAINER PLANTING PATCHES PRIOR TO SEEDING.
3.	SOIL SHALL BE AMENDED PER SOIL PREPARATION NOTES, SHEET L-105.
4.	CONTRACTOR SHALL DEMARCATÉ PLANTING AND SEEDING ZONE BOUNDARIES (HIGH MARSH AND TRANSITIONAL ZONE) IN THE FIELD PRIOR PLANTING AND SEEDING OPERATIONS. PLANTING MAY NOT PROCEED UNTIL REVIEW AND APPROVAL.
5.	PRIOR TO SEEDING, ALL SEEDING AREAS SHALL BE DE-COMPACTED IN ACCORDANCE WITH SOIL BED PREPARATION AND SEEDING NOTES, SHEET L-105 & L-501.

LEGEND	
	SEASONAL WETLAND - (Wetland Seeding Area)
	DEEP WETLAND - (Bulrush Planting Patches)
	SHALLOW WETLAND - (Rush and Sedge Planting Patches)
	UPLAND TRANSITIONAL ZONE (Riparian Area Seed Mix)
	LIMIT OF WORK



PLANT SCHEDULE

RIPARIAN MITIGATION TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT
	19	AESCULUS CALIFORNICA	CALIFORNIA BUCKEYE	5 GAL
	20	QUERCUS AGRIFOLIA	COAST LIVE OAK	5 GAL
	12	SALIX LASIOLEPIS	ARROYO WILLOW	5 GAL
	21	UMBELLULARIA CALIFORNICA	BAY LAUREL	5 GAL
RIPARIAN MITIGATION SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	CONT
	8	RIBES DIVARICATUM	SPREADING GOOSEBERRY	1 GAL
	10	ROSA CALIFORNICA	CALIFORNIA WILD ROSE	1 GAL
	16	RUBUS URSINUS	CALIFORNIA BLACKBERRY	1 GAL

SHEET KEYNOTES

- 1 (N) RIPARIAN ESTABLISHMENT AREA
- 2 ALL EXISTING TREES SHALL BE PROTECTED IN PLACE
- 3 FIRE PROTECTION BUFFER (20')
- 4 ACCESS ROUTE
- 5 FORTAG TRAIL (BY OTHERS)

LEGEND

- ACCESS ROUTE
- (N) RIPARIAN ESTABLISHMENT AREA

RESTORATION NOTES

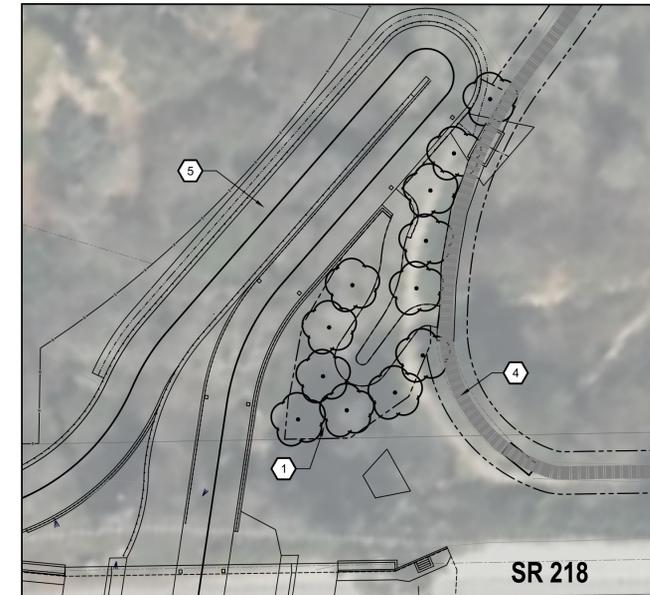
- SEE SHEET L-502 FOR ADDITIONAL PLANTING NOTES AND DETAILS.
- ALL DISTURBED SOIL OUTSIDE OF THE PLANTING BASIN AND BERM AS A RESULT FROM PLANT INSTALLATION SHALL BE BROADCAST SEEDED AND STRAW MULCHED IN ACCORDANCE WITH THE FOLLOWING PROCESS:
 - DECOMPACT ANY COMPACTED SOILS BY RIPPING AND/OR SCARIFYING THE SURFACE WITH A HARD-TINE HARROW OR RAKE TO A MINIMUM DEPTH OF 3". SOIL SHALL BE FREE OF DEBRIS AND DIRT CLODS LARGER THAN 1" IN SIZE.
 - BROADCAST WITH THE RIPARIAN AREA SEED MIX AT RATES SHOWN ON SHEET L-501 WITH MYCORRHIZAL INOCULUM MIXED IN BROADCASTER AT A RATE OF 15 LBS PER ACRE. FOLLOWING SEEDING HARROW ENTIRE SEEDED AREA TO ENSURE PROPER SEED TO SOIL CONTACT WITHIN THE TOP 1 - 2 INCHES OF SOIL.
 - FOLLOWING SEEDING, THE CONTRACTOR SHALL HAND BROADCAST STRAW AT A RATE OF TWO (2) TONS PER ACRE ALLOWING FOR A UNIFORM DEPTH OF 2-3 INCHES. STRAW SHALL BE WEED-FREE STALKS FROM WHEAT, RICE, OR BARLEY FURNISHED IN AIR-DRY CONDITION. STRAW MUST BE FREE OF PLASTIC, GLASS, METAL, ROCKS, AND REFUSE OR OTHER DELETERIOUS MATERIAL.
 - ONCE AREA IS COVERED IN STRAW, THE CONTRACTOR SHALL ANCHOR THE STRAW INTO THE SOIL USING ONE OF THE FOLLOWING TECHNIQUES:
 - HAND PUNCHING:
 - A SPADE OR SHOVEL IS USED TO PUNCH STRAW INTO THE SOIL UNTIL ALL AREAS HAVE STRAW STANDING PERPENDICULARLY TO THE GROUND AND EMBEDDED AT LEAST 4 INCHES. PUNCH ABOUT 12 INCHES APART.
 - ROLLER PUNCHING:
 - A ROLLER EQUIPPED WITH STRAIGHT STUDS NOT LESS THAN 6 INCHES LONG, FROM 4 - 6 INCHES WIDE AND APPROXIMATELY ONE INCH THICK.
 - CRIMPER PUNCHING:
 - USE A CRIMPER WITH SERRATED DISK BLADES ABOUT 4 - 8 INCHES APART, FORCING STRAW MULCH INTO THE SOIL. CRIMPING SHOULD BE DONE IN TWO DIRECTIONS WITH THE FINAL PASS ACROSS THE SLOPE.
- CONTRACTOR SHALL SEED TEMPORARY DISTURBED AREAS USING THE "RIPARIAN AREA SEED MIX" ON SHEET L-501



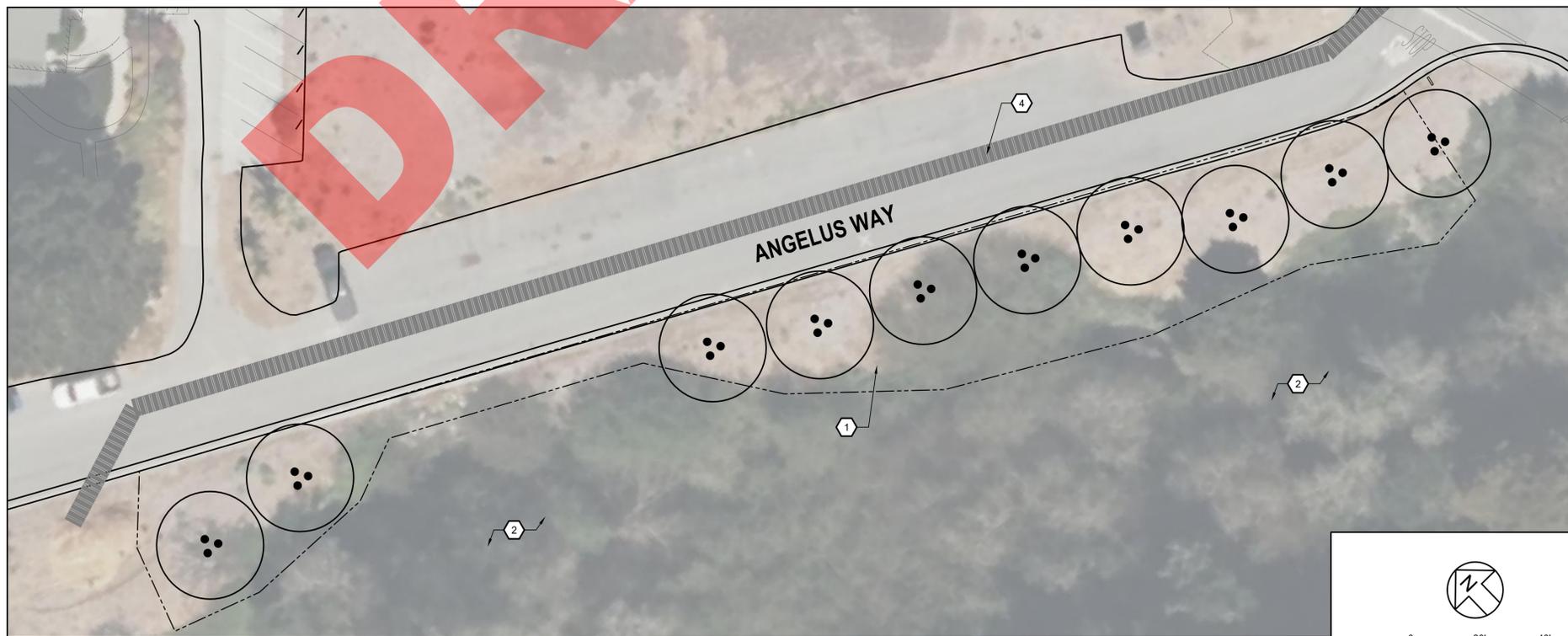
RIPARIAN MITIGATION AREA A
TOTAL AREA: 12,243 SF TOTAL # OF TREE: 19 TOTAL # OF SHRUBS: 15



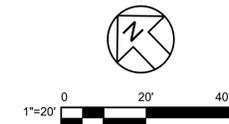
RIPARIAN MITIGATION AREA B TOTAL AREA: 14,800 SF TOTAL # OF TREE: 31 TOTAL # OF SHRUBS: 19



RIPARIAN MITIGATION AREA C
TOTAL AREA: 1,286 SF TOTAL # OF TREE: 12 TOTAL # OF SHRUBS: 0



RIPARIAN MITIGATION AREA D TOTAL AREA: 11,760 SF TOTAL # OF TREE: 10 TOTAL # OF SHRUBS: 0



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Project
FORTAG TRAIL WETLAND AND RIPARIAN MITIGATION PROJECT

No.	Issue	Drawn	Approved	Date

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Drafting Check	JH	Design Check	JH
Project Manager	HA	Date	MAY 07, 2021

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Project No. 11220281

Title
HABITAT DEVELOPMENT PLAN RIPARIAN

Sheet No.

L-104

Sheet of



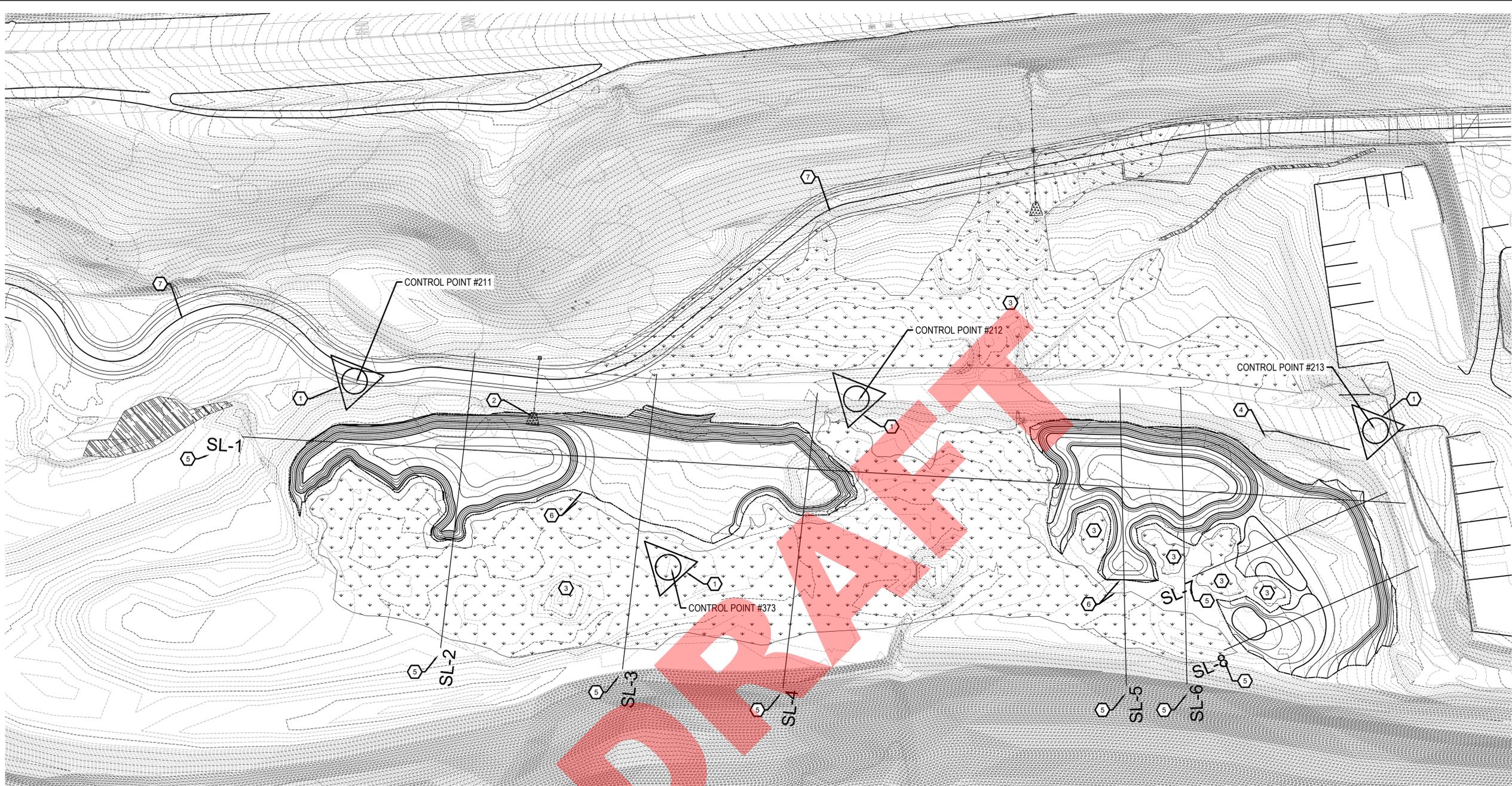
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GRADING NOTES

- SURVEY CONTROL:
 - COORDINATES: CALIFORNIA COORDINATE SYSTEM '83, ZONE 4, US SURVEY FEET. HORIZONTAL CONTROL VALUES WERE ESTABLISHED USING A LEAST SQUARES ADJUSTMENT AMONG THREE NGS CONTROL POINTS (100, 102, 604), LISTED UNDER PROJECT SURVEY CONTROL.
 - BENCHMARK: TIDAL BENCHMARK DESIGNATION "941 3450 M TIDAL", (GU4116) ELEVATION: 11.70 (NAVD88).
 - HIS MAP REPRESENTS A COMBINED TOPOGRAPHIC AND AERIAL SURVEY PERFORMED BY WHITSON ENGINEERS IN OCTOBER OF 2020. AERIAL SURVEY COMPLETED AT A SCALE OF 1"=20'; 1-FOOT CONTOUR INTERVAL.
 - THIS MAP PORTRAYS THE SITE AT THE TIME OF THE SURVEY AND DOES NOT SHOW SOILS OR GEOLOGIC INFORMATION, UNDERGROUND CONDITIONS, EASEMENTS, ZONING OR REGULATORY INFORMATION OR ANY OTHER ITEMS NOT SPECIFICALLY REQUESTED BY THE CLIENT.
 - SEE SHEET L-001 FOR ADDITIONAL CONTROL POINTS NOT SHOWN ON THIS PLAN SHEET.
- EARTHWORK TOTALS:
 - MAXIMUM EXCAVATION DEPTH - 3.0 FEET | TOTAL CUT VOLUME - 1,421 CUBIC YARDS
- SEQUENCE:
 - PRIOR TO WETLAND GRADING, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE INVASIVE WEEDS AND SOIL AS DESCRIBED ON SHEET L-101 "SITE PREPARATION AND RESOURCE PROTECTION BMPs" NOTE 1.
 - ROUGH GRADE WETLAND TO 2" BELOW THE FINISH CONTOURS SHOWN WHILE LEAVING A MIN. 5' WIDE "BUFFER" OF UNDISTURBED GROUND EXTENDING FROM THE EDGE OF THE EXISTING SEASONAL WETLAND TO INTO THE LIMIT OF NEW WETLAND GRADING.
 - CONTRACTOR SHALL COORDINATE WITH TRAIL CONTRACTOR TO DETERMINE IF EXCAVATED SOIL CAN BE USED ONSITE. IF SOIL IS NOT NEEDED FOR TRAIL CONSTRUCTION, THE CONTRACTOR SHALL LEGALLY DISPOSE OF THE EXCAVATED SOIL OFF-SITE AT AN APPROVED DISPOSAL LOCATION. THE TOP 3" OF EXCAVATED MATERIAL SHALL NOT BE USED ON SITE AND MUST BE DISPOSED OF LEGALLY OFFSITE.
 - AMEND SOILS IN ACCORDANCE WITH SOIL PREPARATION NOTE BELOW AND FINE GRADE TO FINISH CONTOURS AND GRADES AS SHOWN ON THE PLANS.
 - FOLLOWING TAMC'S APPROVAL OF INTERIOR BASIN FINISH GRADING, CONTRACTOR SHALL REMOVE THE TEMPORARY SILT FENCE AND SEED IN ACCORDANCE WITH THE SEASONAL WETLAND ESTABLISHMENT SEEDING NOTES ON SHEET L-501.
- SOIL PREPARATION:
 - RIP AND CROSS RIP ALL DISTURBED AREAS TO A DEPTH OF 3 INCHES. CONTRACTOR SHALL ENSURE THAT THE TOP 3 INCHES OF SOIL IS LOOSE AND FRIABLE WITH NO CLODS LARGER THAN 1 INCH IN DIAMETER.
 - NEXT, THE CONTRACTOR SHALL APPLY A 2 INCH LAYER OF ORGANIC WEED FREE COMPOST ACROSS THE WETLAND GRADED AREA AND INCORPORATE THE COMPOST INTO THE TOP 3 INCHES OF THE SOIL. ONCE FULLY INCORPORATED, THE SOIL SHALL BE COMPACTED TO APPROXIMATELY 85% RELATIVE COMPACTION. SEEDING AND MULCHING TO FOLLOW.

SHEET KEYNOTES

- CONTROL POINT - SEE SHEET L-001 FOR CONTROL POINT NORTHING, EASTING, ELEVATION, AND DESCRIPTION. ADDITIONAL CONTROL POINT NOT SHOWN ON THIS SHEET ARE SHOWN ON SHEET L-001.
- CULVERT OUTFALL, INSTALLED AS PART OF TRAIL CONSTRUCTION. COORDINATE WITH TRAIL CONTRACTOR TO ENSURE CORRECT PLACEMENT AND FLOW DISSIPATION INTO CREATED WETLAND.
- EXISTING SEASONAL WETLAND - NO CONSTRUCTION ACTIVITIES SHALL OCCUR WITHIN THE EXISTING WETLAND LIMITS. SEE CONSTRUCTION SEQUENCING NOTE THIS SHEET FOR ADDITIONAL DIRECTION.
- EXISTING TREE TO PROTECT IN PLACE
- GRADING SECTION LINES. SEE SHEET L-301 FOR SECTIONS.
- 5 FOOT BUFFER TO BE MAINTAINED BETWEEN EXISTING WETLANDS AND NEW WETLAND GRADING
- FORTAG TRAIL (BY OTHERS)

LEGEND

- EXISTING MINOR CONTOUR INTERVAL (0.25')
- EXISTING MAJOR CONTOUR INTERVAL (1.00')
- PROPOSED MINOR CONTOUR INTERVAL (0.25')
- PROPOSED MAJOR CONTOUR INTERVAL (1.00')
- LIMIT OF GRADING
- EXISTING WETLAND

1"=20'

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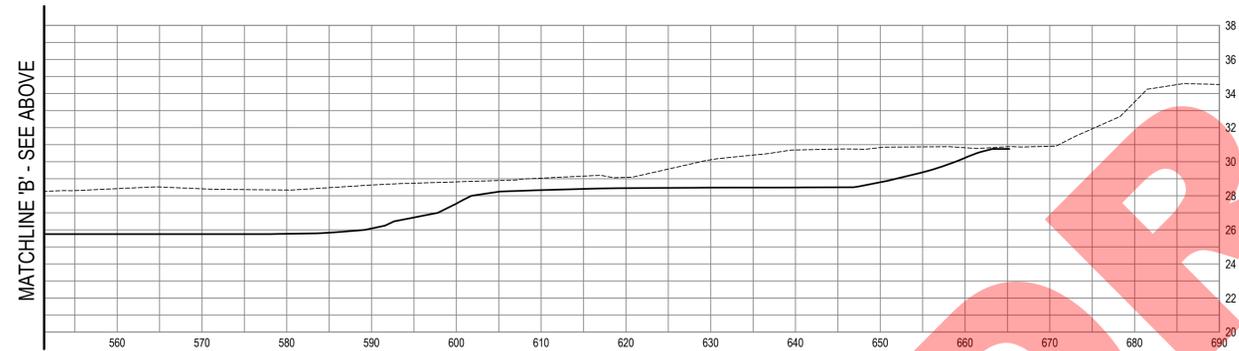
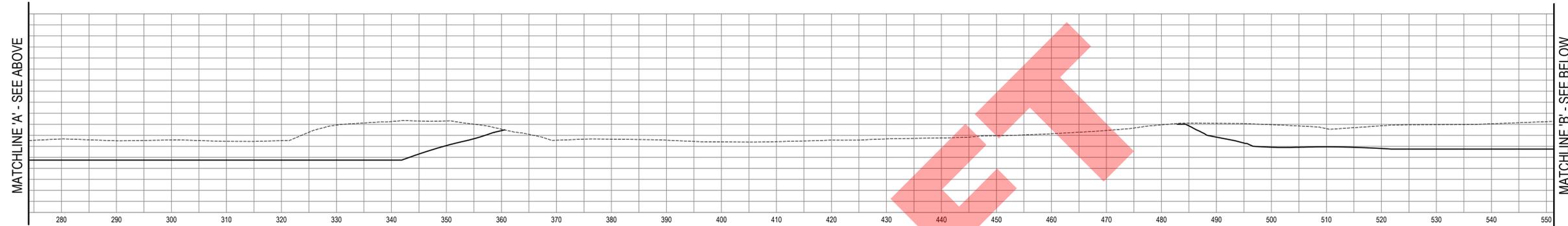
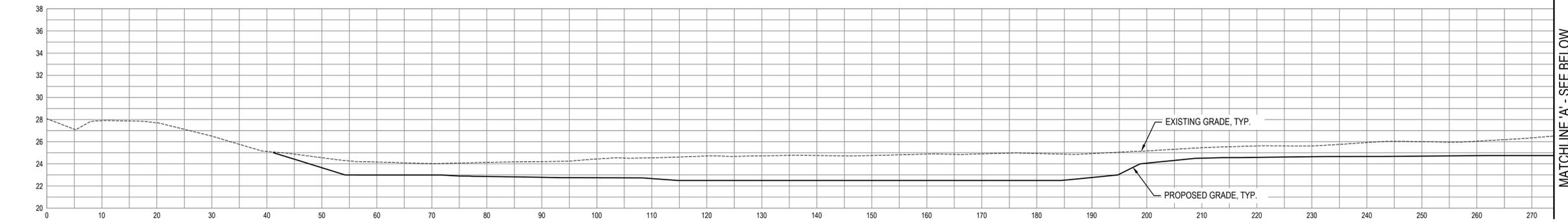
Project No. **11220281**

Title
GRADING PLAN WETLAND

Sheet No.
L-105

Sheet of

FULL WETLAND COMPLEX
STATION -0+32.76



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Project
**FORTAG TRAIL WETLAND AND
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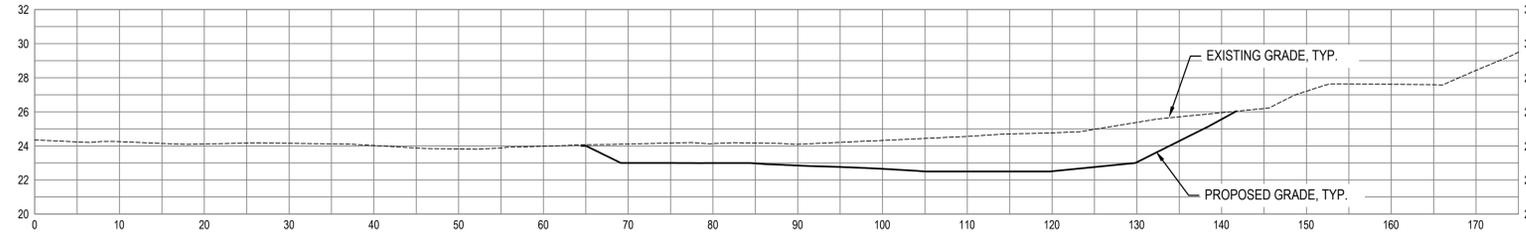
Title
**WETLAND GRADING SECTIONS
(FULL WETLAND COMPLEX)**

Sheet No.
L-301

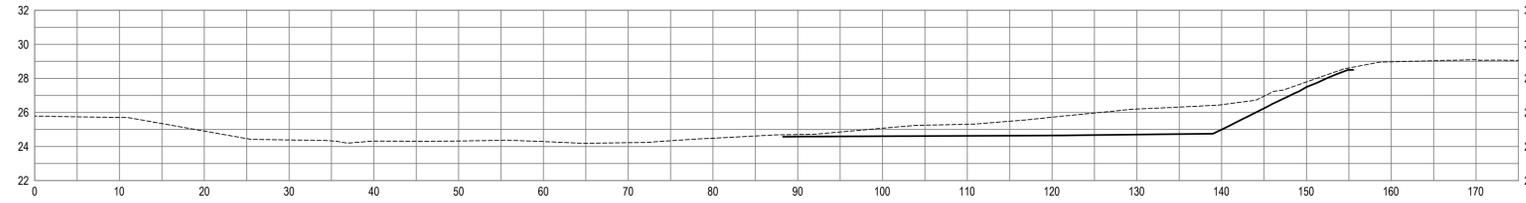
Sheet of

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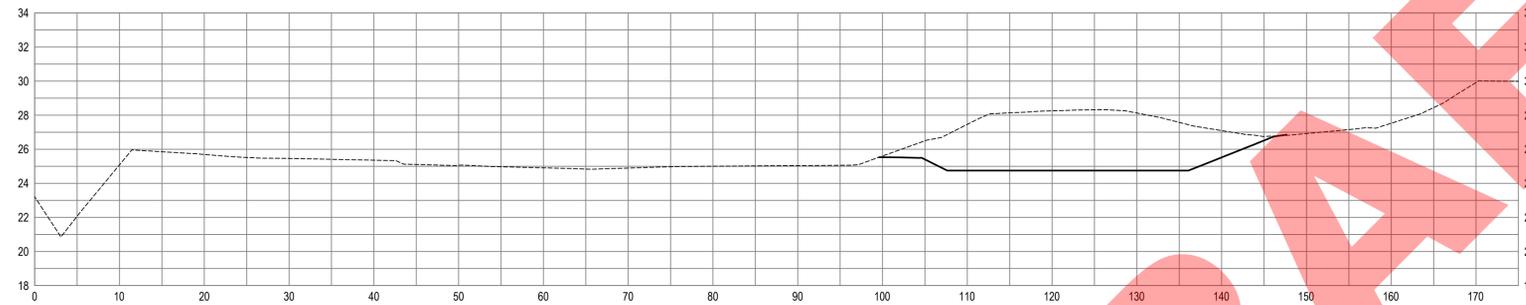
WEST WETLAND
STATION -0+93.10



WEST WETLAND
STATION -2+01.50



WEST WETLAND
STATION -2+97.25



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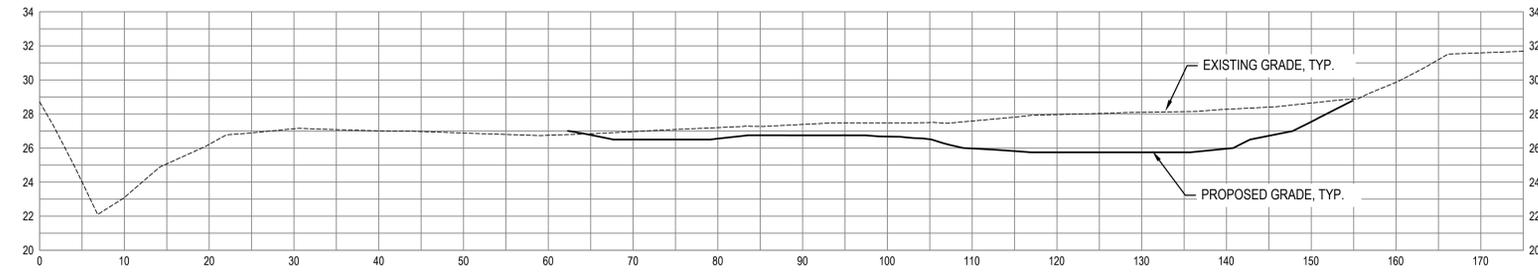
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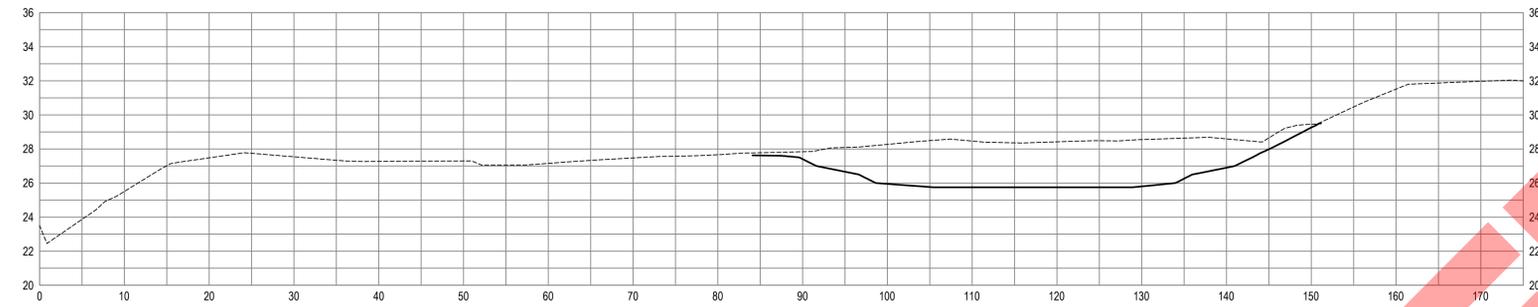
Title
**WETLAND GRADING SECTIONS
(WEST WETLAND)**

Sheet No.
L-302

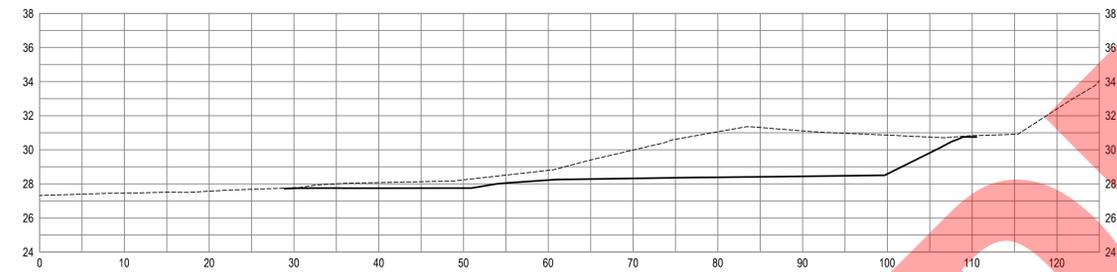
EAST WETLAND - 1
STATION -0+18.99



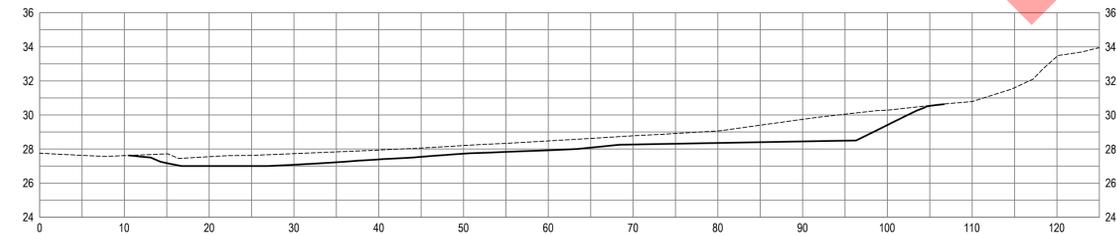
EAST WETLAND - 1
STATION -0+54.93



EAST WETLAND - 2
STATION -0+08.97



EAST WETLAND - 2
STATION -0+56.21



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**WETLAND GRADING SECTIONS
(EAST WETLAND)**

Sheet No.

L-303

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Project Manager **HA** Date **MAY 07, 2021**
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Project No. **11220281**
Title

BMP SEEDING DETAILS, NOTES AND SCHEDULES

Sheet No.

L-501

Sheet of

SEASONAL WETLAND ESTABLISHMENT SEEDING NOTES

FOLLOWING PLANTING, AS A LAST STEP BEFORE CONTRACT CLOSEOUT, THE CONTRACTOR SHALL HYDROSEED AND MULCH ACCORDING TO THE FOLLOWING 2-STEP METHOD:

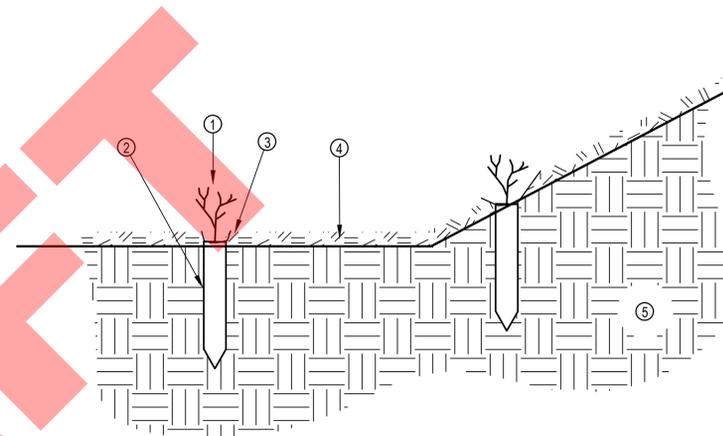
- HYDROSEED THE SEASONAL WETLAND ESTABLISHMENT AREA (WETLAND AREA SEED MIX) AT RATES SHOWN. IN ADDITION TO THE SEED MIX, THE CONTRACTOR SHALL MIX IN MYCORRHIZAL INOCULUM AT A RATE OF 15 LBS PER ACRE AND GREEN DYED CELLULOSE FIBER MULCH AT A RATE OF 500 LBS/ACRE. SEED AND ADDITIVES SHALL BE MIXED WITH CLEAN WATER TO CREATE A SLURRY FOR EVEN HYDRAULIC APPLICATION.
- FOLLOWING HYDROSEEDING, THE CONTRACTOR SHALL HYDRO-MULCH THE ENTIRE SEEDED AREA. HYDRO SLURRY SHALL CONTAIN THE FOLLOWING COMPONENTS AND MINIMUM RATES:
 - COMMERCIALY AVAILABLE WEED FREE HYDRO-WOOD FIBER MULCH (MUST BE APPROVED BY TAMC) AT A RATE OF 2,000 LBS / ACRE.
 - GREEN DYED CELLULOSE FIBER MULCH AT A RATE OF 500 LBS/ACRE (UNLESS INCLUDED IN WOOD FIBER MULCH)
 - ORGANIC TACKIFIER AT 125 LBS/ACRE
 - CLEAN WATER (TO CREATE AN ADEQUATE SLURRY FOR HYDRAULIC APPLICATION)

HABITAT TYPE: WETLAND AREA SEED MIX		AREA: 0.53 AC	
BOTANICAL NAME / COMMON NAME	BROADCAST RATES (#LBS. PLS/ACRE)	SEED REQUIRED (#LBS. PLS/ACRE)	
CAREX BARBARAE / SANTA BARBARA SEDGE	2.50	1.30	
CAREX PRAEGRACILIS / FIELD SEDGE	2.50	1.30	
ELEOCHARIS MACROSTACHYA / COMMON SPIKERUSH	1.00	0.50	
JUNCUS EFFUSUS / COMMON RUSH	0.50	0.25	
DANTHONIA CALIFORNICA / CALIFORNIA OATGRASS	11.00	5.80	
DESCHAMPSIA CESPITOSA / TUFTED HAIRGRASS	0.50	0.25	
DISTICHLIS SPICATA / SALTGRASS	2.00	1.00	
TOTAL	20.00	10.40	

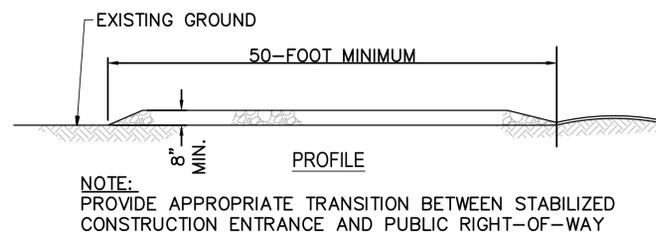
HABITAT TYPE: RIPARIAN AREA SEED MIX		AREA: 0.50 AC	
BOTANICAL NAME / COMMON NAME	BROADCAST RATES (#LBS. PLS/ACRE)	SEED REQUIRED (#LBS. PLS/ACRE)	
BROMUS CARINATUS / CALIFORNIA BROME	15.00	7.50	
HORDUM BRACHYANTHERUM SSP. CALIFORNICUM / MEADOW BARLEY	10.00	5.00	
ELYMUS GLAUCUS / BLUE WILDRIE	10.00	5.00	
ELYMUS TRITICOIDES / BEARDLESS WILDRIE	10.00	5.00	
STIPA PULCHRA / PURPLE NEEDLEGRASS	5.00	2.50	
LUPINUS SUCCULENTUS / ARROYO LUPIN	5.00	2.50	
TRIFOLIUM WILLDENOVII / TOMCAT CLOVER	2.00	1.00	
TOTAL	57.00	28.50	

KEYNOTES

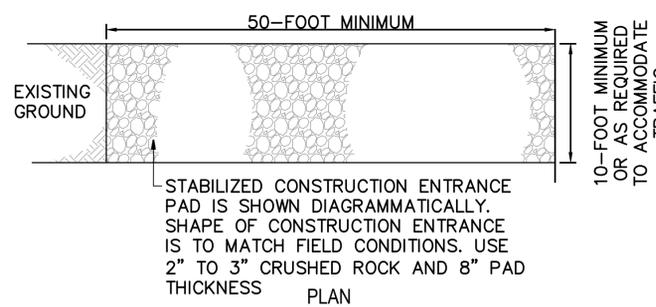
- PLANT GROWN IN RESTORATION CONTAINER (E.G. DEEPOP).
- PLANT HOLE, EQUAL DIA. TO CONTAINER. CREATE WITH DIBBLE. PINCH NATIVE SOIL CLOSED AGAINST ROOTS.
- KEEP STEMS AND LEAVES FREE OF MULCH / HYDROSEED.
- MULCH / SEEDING IF APPLICABLE, SEE PLANS AND SPECS
- SUBGRADE



TYPICAL PLUG PLANTING NOT TO SCALE

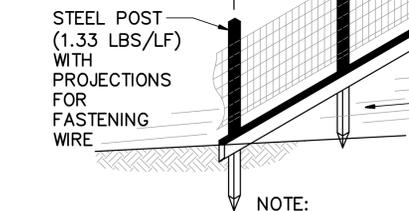


NOTE: PROVIDE APPROPRIATE TRANSITION BETWEEN STABILIZED CONSTRUCTION ENTRANCE AND PUBLIC RIGHT-OF-WAY



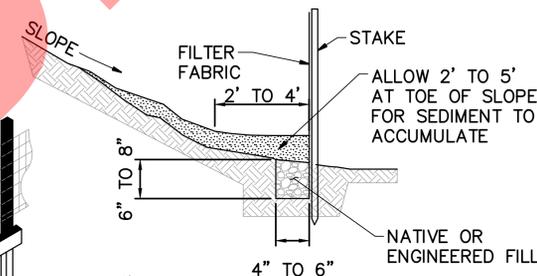
STABILIZED ACCESS ROAD ENTRANCE NOT TO SCALE

FILTER FABRIC WITH WIRE MESH SUPPORT
10 FT MAXIMUM SPACING WITH WIRE SUPPORT FENCE 6 FT MAX SPACING WITHOUT WIRE SUPPORT FENCE



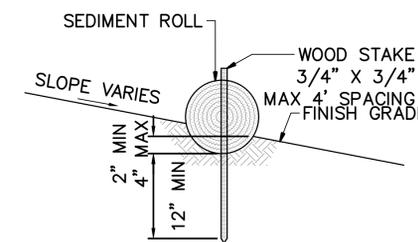
NOTE: KEY IN FILTER FABRIC A MINIMUM OF 6" BELOW THE GROUND SURFACE AND 6" ACROSS, THEN BACKFILL WITH DIRT OR GRAVEL.

SILT FENCE INSTALLATION NOT TO SCALE



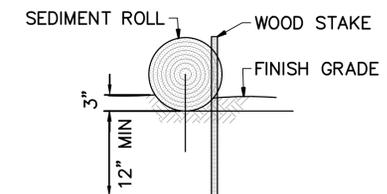
NOTES:

- STRAW FIBER ROLLS WRAPPED IN TUBULAR, BIODEGRADABLE NETTING SUPPLIED IN 20'-25' ROLLS.
- FIBER ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE FIBER ROLL IN A TRENCH, 2" TO 4" DEEP, DUG ON A CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND FIBER ROLL.



SLOPED AREA

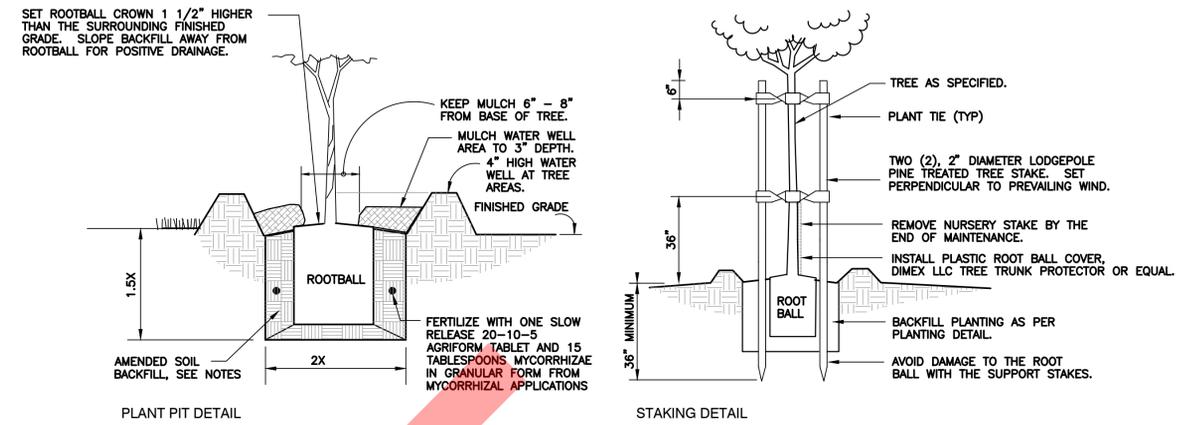
FIBER ROLL ENTRENCHMENT IN SLOPED AREA NOT TO SCALE



FLAT AREA

PLANTING NOTES

- FIELD VERIFY:** CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF ALL EXISTING CONDITIONS. IF ANY PART OF THIS PLAN CANNOT BE FOLLOWED DUE TO SITE CONDITIONS, CONTACT THE CLIENT'S REPRESENTATIVE FOR DIRECTION AS TO HOW TO PROCEED.
- SOIL BACKFILL:** AMEND EXISTING NATIVE SOIL WITH ORGANIC WEED-FREE COMPOST AT A RATIO OF 1 PART COMPOST TO 3 PARTS NATIVE SOIL.
- PLANTING PITS:** IF PLANTING PITS ARE EXCAVATED USING A POWER AUGER, BREAK VERTICAL SIDES WITH A METAL ROD OR SPADE TO INTERRUPT CONTINUOUS CURVE INFLUENCE IN ROOT DEVELOPMENT.
- COMPLIANCE:** CONTRACTOR SHALL COMPLY WITH FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS PERTAINING TO THE INSPECTION FOR PLANT DISEASES AND INSECT INFESTATION.
- IDENTIFICATION:** CONTRACTOR SHALL VERIFY CORRECT SPECIES OF ALL PLANT MATERIAL. ALL CONTAINERIZED PLANTS SHALL HAVE WELL-DEVELOPED BRANCH AND/OR ROOT SYSTEMS.
- INSPECTION:** PLANTS ARE SUBJECT TO PROJECT BIOLOGIST AND CLIENT'S INSPECTION AND APPROVAL FOR SIZE, VARIETY, CONDITION, ROOT DEVELOPMENT DEFECTS, AND INJURY UPON DELIVERY TO THE PROJECT SITE OR AT ANY TIME BEFORE AND DURING PROGRESS OF WORK.
- REJECTION:** CONTRACTOR SHALL REMOVE REJECTED PLANTS FROM THE SITE IMMEDIATELY AND REPLACE WITH ACCEPTABLE MATERIALS AS SPECIFIED.
- SUBSTITUTION:** PLANT SIZE, SEED QUANTITIES, AND/OR SPECIES SUBSTITUTIONS WILL NOT BE PERMITTED WITHOUT THE CLIENT'S AND THE DESIGNATED REPRESENTATIVE'S WRITTEN APPROVAL.
- TAG REMOVAL:** CONTRACTOR SHALL REMOVE TAGS, LABELS, NURSERY STAKES AND TIES FROM ALL PLANTS AFTER DELIVERY INSPECTION AND LOCATION APPROVAL BY THE PROJECT BIOLOGIST AND PRIOR TO INSTALLATION.
- INSTALLATION OF CONTAINER PLANTS:** THE CONTRACTOR SHALL EXCAVATE PLANT HOLES TO A MINIMUM 2X THE CONTAINER WIDTH AND 1.5X THE CONTAINER DEEP. THE SIDES OF THE HOLES SHALL BE SCARIFIED TO ELIMINATE SMOOTH SURFACES PRIOR TO PLANT INSTALLATION. SOIL AMENDMENTS SHALL BE THOROUGHLY MIXED WITH EXCAVATED MATERIAL PRIOR TO BACKFILLING OF THE HOLES. BACKFILL SOIL SHALL BE IN ACCORDANCE WITH THE ABOVE LISTED SPECIFICATIONS. THE PLANT HOLES SHALL BE BACKFILLED AND IRRIGATED TO SETTLE LOOSE SOIL. BEFORE THE PLANTS ARE SET IN, A SHALLOW WATER RETENTION BASIN 36" IN DIAMETER SHALL BE CONSTRUCTED AROUND EACH WOODY PLANTING SUCH THAT IRRIGATION WATER MAY FILL AROUND THE PLANT BUT NOT SUBMERGE THE CROWN OF THE ROOT AREA. THE BASIN WILL BE FILLED WITH WOOD MULCH TO A DEPTH OF 3". AFTER INSTALLATION ALL CONTAINER PLANTS SHALL BE IMMEDIATELY WATERED-IN TO AVOID TRANSPLANT SHOCK AND SETTLING.
- INSTALLATION INSPECTION:** CONTRACTOR SHALL PROVIDE A MINIMUM OF 24 HOURS AFTER PLANTING PIT CREATION, BACKFILL, AND WATERING IN, TO ALLOW FOR TAMC'S REPRESENTATIVE TO INSPECT PLANTING PITS PRIOR TO PLANT INSTALLATION. CONTRACTOR SHALL NOTIFY TAMC 48 HOURS PRIOR TO INSPECTION.
- PLANT SETTING AND AMENDMENT:** WOODY CONTAINER PLANTS SHALL BE PLACED SO THAT THE CROWN IS SET $\frac{1}{2}$ " TO 1" ABOVE EXISTING GRADE TO ENSURE POSITIVE DRAINAGE FROM THE CROWN TO THE WATERING BASIN AND ALLOW FOR SETTLING. A SLOW-RELEASE 20-10-5 AGRIFORM FERTILIZER TABLET SHALL BE SET ADJACENT TO THE ROOT BALL APPROXIMATELY HALFWAY UP FROM THE BOTTOM OF THE ROOT BALL. THREE TABLESPOONS OF MYCORRHIZAE IN GRANULAR FORM SHALL BE SPRINKLED INTO THE PLANTING PIT AFTER ENOUGH BACKFILL HAS BEEN ADDED TO MAKE THE PIT READY TO ACCEPT THE PLANT. THE WATERING BERM IS A RIM OF SOIL DESIGNED TO HOLD WATER NEAR THE PLANT WITHIN THE WATERING BASIN. PLANTS THAT SETTLE BELOW THE BASIN BOTTOMS SHALL BE RAISED BACK TO REQUIRED LEVEL, WITH ADDITIONAL SOIL ADDED IF NECESSARY AT NO ADDITIONAL COST TO THE CLIENT.



1 TREE PLANTING DETAIL

1" = 1'-0"

P-4TAG-329343-45

DRAFT



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Client
**TRANSPORTATION AGENCY
FOR MONTEREY COUNTY**

Project
**FORTAG TRAIL WETLAND AND
RIPARIAN MITIGATION PROJECT**

No.	Issue	Drawn	Approved	Date
Drawn	TB	Designer	JH / LP	
Drafting Check	JH	Design Check	JH	
Project Manager	HA	Date	MAY 07, 2021	

This document shall not be used for construction unless signed and sealed for construction.

Original Size
Arch D
Bar is one inch on original size sheet
0 1"

Project No. **11220281**

Title
**RIPARIAN PLANTING NOTES
AND DETAILS**

Sheet No.
L-502

Sheet of

Attachment B

Work Memorial Park Deed

DRAFT

Handwritten initials

MONTEREY COUNTY
OFFICIAL RECORDS
RECORDED AT REQUEST OF
COAST COUNTIES LAND-TITLE COMPANY

1955 DEC 31 06:37 57

BOOK 1499 PAGE 449

RESOLUTION 53-11

RECORDED *J. K.*

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A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF

DEL REY OAKS ACCEPTING A GIFT OF LAND

WHEREAS , the City of Del Rey Oaks has been given
a 12.2 acre parcel of land adjoining Canyon Del Rey,
commencing approximately 400 feet southwest of Fremont
and terminating at the Ro its Road and Canyon Del Rey
intersection as described in the deed attached, and

WHEREAS, said parcel of land has been contributed
by T. A. Work and the Saucito Land Company,

NOW THEREFORE BE IT RESOLVED THAT THE CITY OF DEL
REY OAKS accepts said parcel of land.

PASSED AND ADOPTED this 28th day of December, 1953
by the following vote:

AYES, and in favor thereof, Councilmen:

Benson, De Mello, Loan
Kavanaugh, Wilson.

NOES, Councilmen:

None

ABSENT,

None

Jim DeLoach
Mayor of the City of Del Rey Oaks

ATTEST:

Carl E. Thomas

City Clerk of the City of Del Rey Oaks.

52108

DRAFT

T. A. WORK AND SAUCITO LAND CO., a partnership, composed of STUART A. WORK, also known as STUART ALBERT WORK, THOMAS ALBERT WORK, JR., ALSO KNOWN AS THOMAS A. WORK, JR., MAUD ELIZABETH WORK KIRBY, also known as MAUD ELIZABETH KIRBY and JOHN FRANKLIN WORK; said MAUD ELIZABETH WORK KIRBY being formerly MAUD ELIZABETH WORK; grant to City of Del Rey Oaks, a municipal corporation, For Park, School and other municipal purposes. Part of the property may be used for Church purposes in the discretion of the City Council.

BEGINNING at the most southerly corner of that certain tract of land conveyed by T. A. Work, et ux, to Martin Girotti by deed dated 11-10-25 and recorded in Volume 79 of Official Records of Monterey County, Calif., at page 116 therein, on the Northeasterly line of First Addition to Del Monte Grove; thence N. 43° 14' E., along the Southeasterly line of said tract, and the Northeasterly prolongation thereof, 377.14 feet to a point on the Southwesterly line of Canyon Del Rey Road (80. feet wide) as said Road is shown on Map of Del Rey Woods, recorded in Volume 4 of Cities and Towns at page 56, Monterey County Records; running thence along said line of said road, Southeasterly curving to the left, 198.08 feet on the arc of a circle of 3040. feet radius (long chord bears S. 50° 18' E., 198.05 feet); thence tangent S. 52° 10' E., 497.97 feet; thence tangentially, Southeasterly curving to the left, 518.05 feet on the arc of a circle of 2040. feet radius (long chord bears S. 59° 26' 30" E., 616.66 feet to a point of reverse curvature on the Southwesterly line of Rosita Road; thence leaving said line of Canyon Del Rey Road and running S. 51° 46' W., 537.50 feet to a point on said line of First Addition to Del Monte Grove, recorded in Volume 1 of "Cities and Towns", at page 15, Monterey County Records, distant S. 52° 41' E., 250.0 feet from a fence post marked "D.J.C.5"; thence N. 52° 41' W., 250.0 feet to said fence post on said Northeasterly line of First Addition to Del Monte Grove; thence along said line of First Addition to Del Monte Grove, the following three courses and distances: N. 52° 04' W., 673.20 feet to a fence post marked D. J. C. 4"; thence N. 26° 00' W., 200.0 feet to a 4" x 4" post marked "D.J.C.3"; thence N. 52° 00' W., 11.76 feet to the point of beginning, containing 12.2 acres of land, more or less, and being a part of Lot 5, Rancho Noche Buena, Monterey County, Calif.

DATED: December 28, 1953

DRIFT

T.A. Work

T.A. Work

Saucito Land Co.

Stuart A. Work

Stuart A. Work

Thomas Albert Work, Jr.

Thomas Albert Work, Jr.

Maud Elizabeth Work Kirby

Maud Elizabeth Work Kirby

John Franklin Work

John Franklin Work

STATE OF CALIFORNIA

County of Monterey

On this 28th day of December

before me, Sally McGreevy

State of California, duly commissioned and sworn, personally appeared EDITH L. CARTER, known to me to be the person whose name is subscribed to the within instrument as the attorney in fact of MAUD ELIZABETH WORK, formerly MAUD ELIZABETH WORK,

and acknowledged to me that she subscribed the name MAUD ELIZABETH WORK KIRBY, formerly MAUD ELIZABETH WORK,

therein as principal, and that I am a Notary Public in and for the County of Monterey, State of California.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal in the County of Monterey, State of California, the day and year in this certificate first above written.

Sally McGreevy

Notary Public in and for the County of Monterey, State of California. My Commission Expires April 13, 1956

Cowdery's Form No. 28 - Acknowledgment - Attorney in Fact (C. C. S. 1182)

STATE OF CALIFORNIA

County of Monterey

On this 28th day of December

before me, Sally McGreevy

County of Monterey, State of California, residing therein, duly commissioned and sworn, personally appeared T. A. WORK, STUART A. WORK, THOMAS ALBERT WORK, JR., and JOHN FRANKLIN WORK,

known to me to be the persons whose names are subscribed to the within instrument and acknowledged to me that they executed the same.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal in the County of Monterey, State of California, the day and year in this certificate first above written.

Sally McGreevy

Notary Public in and for the County of Monterey, State of California. My Commission Expires April 13, 1955

Cowdery's Form No. 32 - Acknowledgment - General (C. C. Sec. 1189)

DRAFT

Floodplain Hazard

Zone A

