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F29b

April 13, 2016

To: Coastal Commissioners and Interested Persons

From: Mark Delaplaine, Manager, Energy, Ocean Resources and Federal Consistency Division
Joseph Street, Environmental Scientist

Subject: **Addendum to CD-0005-15 – SANDAG Poinsettia Station Improvement Project**

This addendum includes minor revisions to the March 13, 2016 staff report on SANDAG's Poinsettia Station Project in Carlsbad. The changes reflect continuing discussions with SANDAG concerning the offsite mitigation requirements, and the agreed-upon commitment that they should be included in the Resource Enhancement and Mitigation Program (REMP) element of the North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program (NCC PWP/TREP). Correspondence from SANDAG is also attached.

The staff recommendation of **concurrence** remains unchanged.

Revisions to the Staff Report

Additions are shown below in underline and deletions in ~~strikethrough~~.

Page 13 (Wetlands and Coastal Waters – Mitigation), fourth paragraph:

> "In t~~T~~he *Addendum to the Biological Assessment* and subsequent communications with Commission staff, SANDAG ~~for the proposed project~~ concluded~~s~~ that approximately ~~0.225~~ 0.239 acres of permanent impacts to Coastal Act wetland and open water habitats would occur due to project activities. This includes the permanent fill of a 0.015-acre seasonal pond, ~~and~~ 0.210 acres of drainage channels within the railroad right-of-way, and 0.001 acres of riparian scrub vegetation, and the fill or disturbance of 0.013 acres of ephemeral ponds and disturbed wetlands located within or near the site access route (Exhibit 4).

Project construction would also result in the temporary fill or disturbance of 0.209 acres of drainage channel area, mostly in Drainage 2 (0.160 acres). ~~and 0.013 acres of ephemeral ponds located within or near the site access route (Exhibit 4).~~ These temporary impacts are considered permanent for purposes of habitat mitigation requirements because the impacts will last throughout the 18-month project construction period."

Page 18 (Off-Site Mitigation), first paragraph:

"SANDAG proposes to further mitigate for project impacts to wetlands and aquatic features through the purchase of mitigation credits for the creation of 0.014 acres of wetlands at either the Hallmark East or West mitigation sites, located on the northeastern shores of Agua Hedionda Lagoon in the City of Carlsbad, and the rehabilitation of 0.447 acres of wetland habitat at the Foss Lake Compensatory Mitigation Site (**Exhibit 8**)~~,~~. ~~This~~ a 61-acre property located approximately six miles from the coast within the City of Oceanside.~~,~~ Both sites have~~s~~ been used as ~~a~~ wetland mitigation sites for previous rail and highway transportation projects.~~,~~ In particular, the Foss Lake Site was used in ~~including~~ the NCTD O'Neill to Flores Second Track project (reviewed by the Commission as CC-004-05) and the SANDAG San Onofre to Pulgas Double Track project (CC-048-12)."

Page 18, second paragraph, heading:

"Initially Proposed Mitigation at Foss Lake Site"

Page 18, fourth paragraph, lines 4-8:

"The proposed 0.447-acre mitigation area is a westward continuation of the area provided for in the SOP Plan (Exhibit 8, page 4), and would involve ~~new wetland establishment in an area occupied by non-native grassland.~~ the rehabilitation and restoration of wetland functions in areas of severely degraded alkali marsh wetlands."

Page 19, fourth paragraph:

"SANDAG ~~will~~ would submit annual monitoring reports to the Commission in February of each year during five-year monitoring period. This will provide the Commission staff the ability to review any future modifications made to the mitigation program, and determine whether it remains consistent with the wetland habitat findings adopted by the Commission in its concurrence with CC-0005-15. After the mitigation program has been completed, the site ~~will~~ would be placed in a permanent conservation easement and SANDAG ~~will~~ would be responsible for establishing a mechanism for the long-term maintenance of the site. If success criteria are not met at the end of five years, SANDAG would propose remedial action for approval by the Commission."

Page 20, first and second paragraphs:

Proposed Mitigation at Hallmark East and West Sites

Unlike Foss Lake, the Hallmark East and West sites are among a set of mitigation sites included in the Resource Enhancement and Mitigation Program (REMP) element of the North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program (NCC PWP/TREP) approved by the Commission in August 2014 (and as amended in March 2016). The NCC PWP/TREP creates a framework within which identified projects can be analyzed and implemented over the next 30 to 40 years under a coordinated plan. The goal of this process is to optimize the suite of included improvements so that transportation goals are achieved while maximizing protection and enhancement of sensitive coastal resources, including wetlands, within the North Coast Corridor. The REMP designates specific mitigation sites to be used for NCC PWP/TREP transportation projects in order to coordinate and maximize the benefits of wetland and upland restoration required as mitigation for these projects.

SANDAG proposes to create a total of 0.014 acres of wetlands between the Hallmark East and West sites as mitigation for permanent impacts to (a) the 0.001 acre area of riparian scrub located at the northern end of Drainage 1, and (b) the 0.013 acres of ephemeral ponds and disturbed, non-native wetlands located north of Poinsettia Station in or near the site access route (Exhibit 4). As mitigation sites designated under the REMP, wetland creation and restoration at Hallmark East and West is subject to rigorous monitoring and performance standards, as well as a plan for long-term management following the initial monitoring period, that would contribute to a high likelihood of restoration success. More details on the management of these mitigation sites are provided in the NCC PWP/TREP and REMP.

Page 20-21, second, third and fourth paragraphs of Discussion section:

"The mitigation proposed by SANDAG, including both on-site drainage channel restoration and on- and off-site wetland creation, would achieve a 2:1 ratio between mitigation area and impact area (including both permanent and temporary impacts). However, the large majority of the proposed off-site mitigation would occur at the Foss Lake Site, a property that is located outside the Coastal Zone and is not designated in the REMP as a mitigation site for NCC PWP/TREP transportation projects, of which the Poinsettia Station Improvement Project is one. Thus, it is unclear whether the portion of the proposed off-site mitigation to occur at Foss Lake would be consistent with the mitigation provisions of the REMP. In order to ensure that the off-site mitigation for the proposed project conforms to the requirements of the NCC PWP/TREP, as concurred with by the Commission, SANDAG has agreed to the following terms:

> Prior to commencement of construction, SANDAG shall provide evidence, in a form and content acceptable to the Executive Director, that adequate credits have been released from the Resource Enhancement and Mitigation Program (REMP) in order to provide compensatory mitigation for project impacts to wetland habitats at a 1:1 ratio. If adequate credits are not available, the applicant shall provide mitigation at a REMP site, at a future date, using typical ratios required by the Commission, as follows: 4:1 for wetlands, and 3:1 for riparian habitats. Mitigation shall be consistent with the provisions of the REMP.

~~However, this gross mitigation ratio does not distinguish between permanent impacts to higher-functioning habitat areas supporting native wetland species (i.e., vegetated wetlands and Seasonal Pond 1), and permanent and temporary impacts to drainage channels with more limited ecological value. With this distinction in mind, SANDAG's proposal would allow for the mitigation of project impacts to Seasonal Pond 1 (0.015 acres), the vegetated areas of Drainage 1 (0.086 acres) and the small patch of riparian scrub (0.001 acres) at a 4:1 ratio. This calculation includes the creation of a 0.030-acre vernal pool in the open space north of Poinsettia Station, the replacement of the affected vegetated area of Drainage 1 (0.086 acres) with a new vegetated drainage, and the creation of an additional 0.292 acres of wetland habitat at the off-site Foss Lake Mitigation Site. Project impacts to the disturbed ephemeral ponds (0.013 acres), partially vegetated with non-native species, would be mitigated at a ratio of 2:1 by the creation of 0.026 acres of wetland habitat at the Foss Lake Site. Project impacts to the unvegetated drainage ditches (0.333 acres) would be mitigated at a ratio of approximately 1.4:1, encompassing the creation of a new vegetated drainage to the west of the realigned railroad tracks (0.124 acres), the repair/restoration of temporarily affected drainage areas (mostly Drainage 2) (0.209 acres), and the creation of an additional 0.129 acres of high-value wetland habitat off-site at Foss Lake.. The reduced mitigation ratios for impacts to the disturbed ephemeral ponds and unvegetated portions of the drainages is appropriate in recognition of the following: (a) the actual loss of habitat function is less than it would be for natural, undisturbed features; (b) the existing function of the drainages (water conveyance) would be fully restored; (c) the proposed reconstructed drainages would be seeded with native plant species, and would thus provide greater ecological value than the existing features; and (d) the new off-site wetland habitat is already being created (as of September 2015) at the Foss Lake site, and is considered to have a high likelihood of long-term success (which, if successful, would avoid temporal losses that typically lead to the need for higher mitigation ratios).~~

~~In summary,~~ W~~w~~ith implementation of the proposed on- ~~and off-~~site wetland and vernal pool creation and restoration program~~s~~, and with SANDAG's commitment to provide an off-site mitigation program consistent with the provisions of the NCC PWP/TREP and REMP, the Commission finds that the proposed project includes adequate mitigation for project impacts to wetland and aquatic habitat to meet the mitigation test of Section 30233(a).

April 11, 2016

Mr. Joseph Street
California Coastal Commission
45 Fremont Street, Suite 2000
San Francisco, CA 94105-2219

Hard Copy and Via Email

SUBJECT: POINSETTIA STATION IMPROVEMENTS PROJECT – FEDERAL COASTAL CONSISTENCY CERTIFICATION NO CC-00015

Dear Mr. Street:

The San Diego Association of Governments (SANDAG) is in receipt of the staff report for item F29b to be heard on April 15, 2016 by the California Coastal Commission. As always, we appreciate all the hard work Commission staff put into preparing the staff report for this project and for the numerous railroad projects SANDAG has taken before the commission over the past five years. We discussed with you that we inadvertently referred to all biological mitigation for wetlands as "creation of wetlands at the Foss Lake Mitigation site" in our Amended Federal Coastal Consistency Certification Analysis letter of March 24, 2016. We also discussed a Coastal Commission desire to have permanent wetland impacts created at a 1:1 ratio at an approved location in accordance with the I-5 North Coast Corridor Public Works Plan/Transportation Resource Enhancement Program/Resource Enhancement Mitigation Program (PWP/TREP/REMP). This letter states SANDAG revised mitigation proposal that addresses these issues.

With regard to the ephemeral basin onsite that is occupied by the endangered San Diego Fairy Shrimp. There are no changes to our proposed mitigation and this impact and mitigation is not further discussed in this letter. Mitigation will occur on-site at a 2:1 ratio.

With regard to impacts to Drainage Feature 1, SANDAG proposes to create a new drainage feature that will be realigned slightly to the west of the existing drainage feature to replace the storm water drainage function provided by the existing drainage.

With regard to off-site mitigation, the staff report states at the bottom of page 17, "SANDAG proposes to further mitigate for project impacts to wetlands and aquatic features through the purchase of mitigation credits for the creation of 0.447 acres of wetland habitat at the Foss Lake Compensatory Mitigation Site…" This is no longer SANDAG's proposal. SANDAG proposes to

provide 0.014 acre of wetlands creation in accordance with the PWP/TREP/REMP. Wetlands creation would be provided at a combination of the Hallmark East and West REMP wetland mitigation sites. There would remain an additional 1.02 acre of wetland creation credits available at those sites after deducting 0.014 acre for the Poinsettia Project and considering the other SANDAG/Caltrans PWP/TREP projects scheduled to begin construction in 2016. We have attached the table Caltrans uses to track the mitigation needs and available mitigation credits, which demonstrates the availability of credits for the Poinsettia project. This 0.014 acre of mitigation would offset the following impacts:

Impacted Coastal Wetlands	Impact and 1:1 Creation as Partial Mitigation
Riparian Habitat	0.001 ac
Disturbed wetlands	0.004 ac
Army Corps Wetlands not included in Coastal Wetlands	0.009 ac
Total Creation	0.014 ac

SANDAG would offset the remaining mitigation obligation at the Foss Lake Compensatory Mitigation Site. Wetland enhancement at Foss Lake would be 0.433 acre for a total off-site wetland mitigation of 0.447 acre (0.433 + 0.014 = 0.447). This is the total off-site wetland mitigation requirement shown at the bottom of page 17 of the staff report.

With this proposal, SANDAG provides on-site and off-site creation at a 1:1 ratio to ensure no net loss of wetlands due to project-related impacts. Off-site creation would occur at REMP wetland mitigation sites. SANDAG also provides on-site restoration of drainage 2 and off-site enhancement of wetlands at Foss Lake for the remainder of the wetlands mitigation obligation.

Thank you for your consideration. We look forward to the Federal Consistency Certification hearing before the Commission on April 15th. If you have any questions regarding SANDAG's proposed mitigation or need additional information, please contact Cheryle Hodge at (619) 699-6938 or via email at cheryle.hodge@sandag.org, or Erich Lathers at (619) 298-7127 or via email at erich@brginc.net.

Sincerely,

BRG CONSULTING, INC.

Erich R. Lathers
President

ERL/me

Enclosure:
Excel File - NCC Mitigation Release without ACOE

cc: Cheryle Hodge, Angela Anderson and Lauren Esposito – SANDAG Via Email
Mike Porter - Regional Water Quality Control Board Via Email
Meris Guerrero, US Army Corps of Engineers Via Email
Larry Simon - California Coastal Commission Via Email
Gabriel Buhr - California Coastal Commission Via Email

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F29b

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Staff:	J. Street-SF
Staff Report:	3/25/16
Hearing Date:	4/15/16

STAFF REPORT: REGULAR CALENDAR

Consistency Certification No.:	**CC-0005-15**
Applicant:	**San Diego Association of Governments**
Location:	Poinsettia Station, 6511 Avenida Encinas, City of Carlsbad, San Diego County (**Exhibits 1 and 2**)
Project Description:	Shift the existing railroad tracks, install an inter-track safety fence, construct a pedestrian undercrossing and expand the existing platform at Poinsettia Station (between Mile Posts 232.8 and 233.7)
Staff Recommendation:	Concurrence

SUMMARY OF STAFF RECOMMENDATION

The San Diego Association of Governments (SANDAG) has submitted a consistency certification for the construction of several improvements at Poinsettia Station, in the City of Carlsbad, in order to improve passenger safety and rail service along the Los Angeles to San Diego (LOSSAN) railroad corridor. The proposed project would provide safety modifications necessary to eliminate existing restrictions that prevent passenger and freight trains from passing through Poinsettia Station while another train is loading or unloading passengers. Project elements include shifting the existing railroad tracks to the west while increasing inter-track spacing, constructing an inter-track fence and pedestrian underpass, and expanding the station platforms. Construction is scheduled to commence in early 2017 and last approximately 18 months.

The project area contains wetland and other aquatic habitat, including vernal pools, two "seasonal ponds", and several track ditch drainage channels. A portion of the project would involve fill of wetlands, triggering the three-part test of Section 30233(a) of the Coastal Act. Project activities would permanently affect one seasonal pond (0.015 acres) and portions of two drainage channels (0.210 acres), and temporarily affect 0.209 acres of the drainage channels. The project includes on-site mitigation consisting of the creation of a new vernal pool to replace the loss of the seasonal pond, and the reconstruction of the affected drainage channels. The project also includes off-site mitigation by creating and restoring wetland habitat, with associated monitoring, maintenance, success criteria, and reporting requirements. Projects involving wetland fill must satisfy three tests set forth in Section 30233(a) of the Coastal Act. The project is consistent with two of those tests (regarding the availability of alternatives and mitigation) but is not consistent with the allowable use test, because the project would involve fill of wetlands for a purpose that would, cumulatively and over time, increase rail capacity (and thus is not an incidental public service), nor is it one of the other allowable uses. Therefore, the project can only be found consistent with the Coastal Act through the "conflict resolution" provision contained in Section 30007.5, as explained below.

The permanently-affected seasonal pond supports endangered San Diego fairy shrimp, and is thus an environmentally sensitive habitat area, which means that any proposed development of the area may also be regulated by Section 30240 of the Coastal Act. The project is not a use that is allowed under Section 30240(a). Therefore, the project can again only be found consistent with the Coastal Act through the "conflict resolution" provision contained in Section 30007.5.

The project includes adequate measures to protect water quality and would reduce automobile congestion, vehicle miles traveled, energy consumption, and the discharge of air and water pollutants. The project would also maintain and enhance public access by reducing service delays along the LOSSAN corridor, which in turn helps to reduce automobile traffic on I-5 in an area where this freeway supports public access and recreation. Therefore, the project is consistent with the water quality, air quality, energy conservation, and public access and transit policies of the Coastal Act (Sections 30231, 30232, 30253, 30210, and 30252).

This project is similar to past SANDAG projects the Commission has reviewed, in that it provides the above benefits, and denial of the project would be inconsistent with those policies. Moreover, those benefits are inherent in the essence of the project, not independently required by any other law and could not be achieved through any other project that is fully consistent with all Chapter 3 policies. The staff therefore recommends the Commission find the project creates a conflict between the allowable use tests of the wetland and ESHA policies of the Coastal Act, on the one hand, and the public access and transit, water quality, air quality, and energy conservation policies, on the other. Similar to a number of previous SANDAG rail projects that the Commission concurred with using the conflict resolution section of the Coastal Act, staff is recommending that the Commission concur with this consistency certification because, under the conflict resolution policy of the Coastal Act (Section 30007.5) authorization of the project would, on balance, be most protective of significant coastal resources.

Commission staff recommends **concurrence** with CC-0005-15. The motion to implement this recommendation is found on Page 4, below.

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I. APPLICANT'S CONSISTENCY CERTIFICATION

The San Diego Association of Governments (SANDAG) has certified that the proposed activity complies with the California Coastal Management Program and will be conducted in a manner consistent with that program.

II. MOTION AND RESOLUTION

Motion:

*I move that the Commission **concur** with consistency certification CC-0005-15.*

Staff recommends a **YES** vote on the motion. Passage of this motion will result in an agreement with the certification and adoption of the following resolution and findings. An affirmative vote of a majority of the Commissioners present is required to pass the motion.

Resolution:

*The Commission hereby **concurs** with consistency certification CC-0005-15 by SANDAG on the grounds that the project is consistent with the enforceable policies of the California Coastal Management Program.*

III. FINDINGS AND DECLARATIONS

A. PROJECT DESCRIPTION

The San Diego Association of Governments (SANDAG) proposes to construct several railroad improvements at the existing Poinsettia Station, in the city of Carlsbad (**Exhibit 1**), in order to increase public safety and remove constraints on rail service along the Los Angeles-San Diego-San Luis Obispo (LOSSAN) rail corridor in North San Diego County. The proposed project, including the shifting of existing tracks, construction of new station platforms and a pedestrian undercrossing, and installation of an inter-track fence, would extend for approximately 0.9 miles between Mile Post (MP) 232.8 and MP 233.7 (**Exhibits 2, 3**). This portion of the LOSSAN corridor is owned and operated by the North County Transit District (NCTD) and supports Coaster, Amtrak, and freight operations.

Background

The LOSSAN corridor is the second busiest intercity passenger rail line in the United States and the only viable freight rail link between San Diego and the rest of the nation. The SANDAG 2013 Infrastructure Development Plan (IDP) reports that in 2012, on an average weekday, 50 trains passed through the Oceanside to San Diego segment of the LOSSAN corridor. Amtrak and NCTD plan to increase the number of passenger trains serving the North Coast segment of the corridor; further increases in railroad activity in this area are expected as a result of recent efforts to redirect a greater share of freight movement to rail rather than trucks, thereby reducing traffic, roadway maintenance expenditures, accidents, energy and fuel consumption, and

emissions of air pollutants. SANDAG forecasts train operations through this segment of the LOSSAN corridor to increase by an additional 51 trains on an average weekday by the year 2030.

At present, there is a Hold-Out Rule in effect at Poinsettia Station to protect the safety of passengers during loading and unloading of Coaster Commuter Train and all-stop Amtrak trains from other trains that pass through the station. Several times daily, limited-stop Amtrak trains and BNSF and Pacific Sun Railroad freight trains meet Coaster and all-stop Amtrak trains at Poinsettia Station. As required under the Hold-Out Rule, approaching trains must stop outside the station while passengers are being loaded and unloaded, and cannot proceed through the station until the loading process is completed and authorization is given by the loading/unloading locomotive engineer. These safety rules, while necessary to protect pedestrians from being hit by approaching trains at the existing at-grade pedestrian crossings, significantly constrain existing rail capacity through this portion of the LOSSAN corridor, routinely forcing limited-stop Amtrak passenger trains to idle on the tracks outside the station. Occasionally, freight trains are subject to delays outside of the station as well. As this is 90 mile per hour (mph) territory for Amtrak and 55 mph territory for freight, stopping, waiting for authorization to proceed, and accelerating back to top speeds can add 3 to 4 minutes to the trains' headway. Unless addressed, these delays will be exacerbated in the future as train operations increase through this segment of the corridor.

The proposed station safety improvements, in particular the pedestrian underpass and intertrack fence, would remove the existing delays by eliminating the need for the Hold-Out Rule and allowing Amtrak and freight trains to proceed safely through the station while maintaining high speeds.

Project Elements
The proposed project includes the following elements:

Pedestrian Undercrossing: A pedestrian undercrossing would be constructed to replace the existing at-grade track crossings. The undercrossing would consist of a concrete pathway and a set of ADA-compliant ramps connecting the eastern and western station platforms, and several retaining walls. Precast, NCTD standard, single-span bridges would be used to support the tracks above the undercrossing.

Platform Replacement and Expansion: In order to accommodate the proposed pedestrian undercrossing, shifted track alignment, inter-track fence, and planned future rail service, the existing station platforms would be extensively modified. The eastern platform, serving Main Track 1, would be retained but widened approximately 25 feet. The western platform, serving Main Track 2, would be replaced with a new platform constructed approximately 28 feet to the west of the existing platform. The length of both platforms would be extended, from 540 to 1000 feet, in order to accommodate the undercrossing and future 10-car train sets.

Track Realignment: 0.9-mile segments of the existing Main Track 1 (eastern) and Main Track 2 (western) would be shifted west (up to 25 feet and 28 feet, respectively). The proposed track shifts would accommodate the proposed inter-track

fence and would increase the distance between track centers from 15 to 18 feet, as required to meet railroad clearance requirements.

Universal Cross-overs: A set of universal track cross-overs would be constructed approximately to the north and south of the station to allow trains to switch tracks before and after passing through Poinsettia station.

Inter-track Fence: A 0.3 mile long, 6-foot high safety fence would be installed between the realigned tracks, extending from approximately 350 feet north to 300 feet south of the station.

Drainage Improvements: Drainage improvements will be required to accommodate an undercrossing, which would be below the grade of the rest of the station and surrounding terrain. Drainage from rainfall that flows into the underpass will be pumped into a bioswale that will act as a water quality treatment feature. A pump will be installed in order to keep the underpass free of water. Existing drainage ditches ("Drainage Feature 1"; Drainage Feature 2") would be replaced by construction of a new drainage system (see below)

Mitigation Measures. Proposed mitigation for project impacts includes the following: (a) creation of an 0.030-acre vernal pool to mitigate for the fill/removal of an 0.015 acre seasonal pond within the project area; (b) creation and reconstruction of 0.405 acre of ephemeral drainages to replace the existing Drainage Feature 1 and offset impacts to Drainage Feature 2; and (c) Creation of 0.405 acre of wetlands off-site through the use of wetland mitigation credits at the Caltrans-owned Stacco/Timeout Mitigation Site.

SANDAG also proposes to implement a Storm Water Pollution Prevention Plan (SWPPP) containing measures to minimize soil erosion and eliminate or control potential point and nonpoint pollution sources on site during the project's construction phase. The SWPPP identifies specific construction and post-construction best management practices (BMPs) to be implemented as part of the project.

All planned improvements and project activities would occur within the existing railroad right-of-way (ROW). Access to the project site would be provided from Avenida Encinas on the east side of the railroad ROW, as shown in **Exhibit 2**. A temporary railroad crossing will be installed to allow access across the active railroad tracks. Construction staging would occur along the western edge of the ROW; additional staging may also occur in a narrow strip adjacent to and east of the railroad tracks, north of the site accessway (**Exhibit 2**).

SANDAG anticipates beginning construction in February, 2017, and continuing through September, 2018.

Project plans, showing the various project elements, are provided in **Exhibit 3**.

Alternatives

SANDAG evaluated a number of alternatives for achieving the project goals of improving safety and eliminating Hold-Out Rule restrictions at Poinsettia Station, including several track

alignment and off-grade pedestrian crossing structure combinations. The tracking alternatives considered included the following:

- Addition of pass-through track: A new, third track is constructed west of the existing double-track station, allowing for trains to bypass Poinsettia Station without slowing or stopping. No station or pedestrian crossing improvements are necessary.

- Single track shift: No third track is added. Main Track 2 (MT2) is removed and reconstructed approximately six feet to the west, and the existing west platform is removed and reconstructed. The existing east platform retained.

- Double track shift: No third track is added. Both MT1 and MT2 are removed and reconstructed some 15 – 30 feet west, depending on the specific alternative. The existing west platform is removed and reconstructed, and the existing east platform is expanded.

SANDAG also examined several pedestrian overpass and underpass alternatives, including crossing structures spanning one or both tracks and accessed by either ADA-compliant ramps or elevators.

The various combinations of tracking and pedestrian crossing alternatives were evaluated based on screening criteria including environmental impacts, visual impacts, user safety and convenience, railroad operational impacts, maintenance requirements, and costs.

As initially proposed, the project consisted of the addition of a third, pass-through track to be located west of the existing tracks, with no station improvements. However, the screening analysis revealed that this alternative would have directly affected two seasonal ponds occupied by the endangered San Diego fairy shrimp. As discussed further in Sections III.D and III.E, below, SANDAG selected the currently-proposed project – comprising a double track shift and double-span pedestrian undercrossing – because it would reduce impacts to San Diego fairy shrimp habitat while better balancing safety, operational, cost and other environmental considerations. The proposed project, though more expensive than the third track option, would preserve the two largest of the three seasonal ponds on site and avoid approximately 87.5% of the fairy shrimp. SANDAG considered, but rejected, a "No Build" alternative because it would not fulfil the project purpose of improving passenger safety and reducing rail service delays at Poinsettia Station.

Related Commission Actions

The subject consistency certification is the latest in a series of consistency certifications submitted by SANDAG and NCTD and concurred with by the Commission for improvements, including railroad bridge replacements and construction of sections of double-tracking, along the LOSSAN Corridor in San Diego County. The Commission previously concurred with: (1) the 2.6-mile-long Pulgas to San Onofre double-tracking at the north end of Camp Pendleton (CC-086-03 & CC-048-12); (2) the 2.7-mile-long O'Neill to Flores double-track project in central Camp Pendleton (CC-004-05); (3) the 2.9-mile-long Santa Margarita River double-tracking project at the south end of Camp Pendleton (CC-052-05); (4) replacement of the railroad bridge over Agua Hedionda Lagoon (CC-055-05); (5) the 1.2-mile-long extension of passing track and

construction of one replacement and one new railroad bridge over Loma Alta Creek in Oceanside (CC-008-07); (6) the replacement of three timber railroad bridges over Los Peñasquitos Lagoon in San Diego (CC-059-09); (7) the construction of a 2.4-mile-long segment of second mainline railroad track and second railroad bridge over Agua Hedionda Lagoon in the City of Carlsbad (CC-075-09); (8) construction of a 1.2-mile-long segment of second mainline railroad track and replacement of a single-track bridge in the Sorrento Valley in San Diego (CC-052-10); (9) construction of a one-mile-long segment of second mainline railroad track and replacement of three single-track bridges in Sorrento Valley in San Diego (CC-056-11); (10) construction of a 4.3-mile-long segment of second mainline railroad track south of San Onofre in San Diego County (CC-009-12); and (11) replacement of the railroad bridge over the San Diego River and construction of a 0.9-mile-long segment of second mainline track (CC-0003-15).

In addition, on August 13, 2014, the Commission concurred with a consistency certification for, and approved, a comprehensive plan and set of procedures for the County-wide upgrading of the I-5/Rail corridor, in the form of a document known as the "North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program" (NCC PWP/TREP - CC-0002-14/PWP-6-NCC-13-0203-1). This plan serves as a single integrated document for comprehensively planning, reviewing, and authorizing the NCC's transportation, community, and resource enhancement projects within the NCC extending from La Jolla to Oceanside along the North San Diego County coastline. The NCC PWP/TREP creates a framework within which identified projects can be analyzed and implemented over the next 30 to 40 years under a coordinated plan. The goal of this process is to optimize the suite of included improvements so that transportation goals are achieved in a manner that maintains and improves public access while also maximizing protection and enhancement of the region's significant sensitive coastal resources. The consistency certification addressed in this current staff report was listed among the projects to be included in the first phase of the rail corridor expansion portion of the NCC PWP/TREP.

B. Coastal Commission Jurisdiction and Standard of Review

The project triggers federal consistency review because it needs a federal Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers and involved federal funding. As with many previous rail projects, the Commission also believes the project is subject to the permitting requirements of the Coastal Act; SANDAG and the North County Transit District (NCTD) have generally not agreed with this position. Nevertheless, the Commission made it clear in its approval of the PWP/TREP that it would be willing to review the subject project as a consistency certification. The standard of review for assessing consistency with the California Coastal Management Program is set forth in Chapter 3 of the Coastal Act ("Chapter 3"), Cal. Pub. Res. Code Sections 30200-30265.5, and employing that standard, the Commission concurs with this consistency certification based on its finding that the project is consistent with the policies set forth in Chapter 3.

C. Other Agency Approvals

U.S. Army Corps of Engineers (USACE)

The USACE received an application from SANDAG for a federal Clean Water Act Section 404 permit. It is anticipated that the project will be covered under Nationwide Permit No. 14 – Linear Transportation Projects.

San Diego Regional Water Quality Control Board (RWQCB)
The RWQCB received an application from SANDAG for a Clean Water Act Section 401 Water Quality Certification.

Federal Transit Administration (FTA)
The FTA will fund the project and will also serve as the lead agency for informal consultation under Section 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act.

D. WETLANDS AND COASTAL WATERS

Coastal Act Section 30233(a) states in part:

> *(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:*
>
> . . .
>
> *(4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines*
> . . .

The proposed project would occur primarily within previously developed and disturbed areas of the Poinsettia Station and the railroad ROW. The *Biological Assessment* (June 2013), *Jurisdictional Delineation Report* (June 2013), *Habitat Mitigation and Monitoring Plan* (June 2013) and *Addendum to the Biological Assessment* (March 2016) for the proposed project document the existing aquatic resources within and adjacent to the railroad corridor (including vernal pools, seasonal ponds, drainage ditches, riparian scrub and wet meadow habitats), the anticipated permanent and temporary impacts to those resources from the project, and the avoidance, minimization, and mitigation measures to be implemented.

As discussed in greater detail in Section III.E, below, the vernal pools, riparian scrub and wet meadow communities located within a designated "conservation area" (discussed on page 23) immediately east of Poinsettia Station provide habitat for an abundant array of native plants and animals, including several rare and sensitive species. However, these sensitive resources lie outside the project footprint and would not be filled or directly affected by project activities. Aquatic features within the project footprint itself include two "seasonal ponds" and four drainage ditches associated with the existing railroad tracks, as well as several small ephemeral basins supporting non-native wetland vegetation. SANDAG's *Jurisdictional Delineation Report*, *Biological Assessment* and *Addendum to the Biological Assessment* for the project identify these features as Coastal Act jurisdictional wetlands.

Seasonal Ponds 1 (0.015 acres) and 2 (0.105 acres) are located immediately west of the existing tracks, at the south end of Poinsettia Station and just to the north of the Poinsettia Lane overpass, respectively (**Exhibit 4**). These features consist of hydrologically-isolated, shallow earthen depressions that become inundated following storm events and retain moisture for relatively long periods of time due to an impermeable subsurface clay layer or compacted soil. SANDAG does not consider the ponds to be vernal pools because they lack vernal pool obligate plant species, and support only sparsely-scattered patches of vegetation (**Exhibit 6**, site photos). However, both seasonal ponds have been observed to support populations of the federally-listed endangered San Diego fairy shrimp (*see* Section III.E, below). In addition to Seasonal Ponds 1 and 2, the project site contains several small ephemeral ponds (total of 0.02 acres) which develop in shallow depressions and road ruts following rain events, clustered in and adjacent to the dirt access roads between the ROW, Avenida Encinas, and the northern end of Poinsettia Station (**Exhibit 4**). Several of the ephemeral ponds support hydrophytic vegetation (primarily non-native curly dock). These features have not been observed to support San Diego fairy shrimp or other sensitive species.

Drainages 1 and 2 are earthen channels running parallel to the existing railroad tracks north of Poinsettia Station (**Exhibits 4, 6**). These features convey runoff from the right-of-way and surrounding urban areas from south to north, discharging into a ditch system that connects to Encinas Creek and, ultimately, the Pacific Ocean. The drainages are predominantly unvegetated, though portions of Drainage 1 support patches of knot-root bristle grass (*Setaria parviflora*) and/or salt grass (*Distichlis spicata*). Both are common native facultative wetland species. The presence of such wetland vegetation provides support for SANDAG's characterization of at least this portion of Drainage 1 as a wetland. In addition, a small area at the extreme northern end of the Drainage supports riparian scrub vegetation (**Exhibit 5**). Test pits dug by SANDAG's consultants did not reveal hydric soil characteristics in Drainage 1. Drainages 3 and 4 are concrete-lined v-ditches located at the bases of the western and eastern concrete abutments beneath the Poinsettia Lane overpass (**Exhibits 4, 6**). These features are unvegetated and have not been observed to support fairy shrimp or other sensitive species.

The *Addendum to the Biological Assessment* indicates that the proposed project will permanently affect 0.225 acres of coastal wetlands and open waters due to the removal/fill of Seasonal Pond 1 (0.015 ac), most of Drainage 1 (0.207 ac), including 0.086 acres covered by wetland vegetation, and a small portion of Drainage 2 (0.003 ac) (**Exhibit 4**). Project activities will result in an additional 0.222 acres of "temporary" impacts to wetlands and coastal waters, including much of Drainage 2 (0.160 ac), a small patch (0.001 acres) of riparian scrub near at the northern end of Drainage 1, and several of the small ephemeral ponds located near the southern end of Drainage 2 (0.013 ac). In a March 16, 2016 e-mail to Commission staff, SANDAG describes these temporary impacts as follows:

> *The contractor will drive over and through the drainage. If temporary fill is needed to provide adequate access, a pipe to pass the storm water would be provided under the fill to covey storm water through the fill. In any event, the ditch would function to carry runoff to the north during storm events … The contractor will regrade Drainage 2 back to pre-construction condition at the end of the project construction.*

However, these impacts are considered permanent for purposes of habitat mitigation because they will last throughout the 18-month project construction period. The project would avoid impacts to the larger Seasonal Pond 2 and Drainages 3 and 4.

In summary, the proposed project would affect multiple aquatic features of varying quality and habitat value, at least some of which constitute Coastal Act wetlands. As noted above, portions of Drainage 1 contain native wetland vegetation and appear to qualify as Coastal Act wetlands, and that entire area (0.086 acres) would be permanently affected. An additional 0.001 acres of riparian scrub vegetation at the northern end of Drainage 1 would be temporarily affected. Seasonal Pond 1, which would be permanently affected, comprises 0.015 acres of San Diego fairy shrimp habitat. In contrast, the small ephemeral ponds located near the southern end of Drainage 2 are highly disturbed, and support only non-native wetland plants. Drainage 2 itself is unvegetated and provides little to no habitat value. In total, though the project would affect a total of 0.447 acres of Coastal Act wetlands and other aquatic habitats, only 0.102 acres of higher-quality habitat would be affected, with the remainder consisting of wetlands of more limited ecological function.

As a result of the impacts to Seasonal Pond 1, Drainages 1 and 2, and the small ephemeral ponds, the proposed project triggers the three-part test of Coastal Act Section 30233(a) because the project includes temporary and permanent fill in wetland and aquatic habitat. The Commission therefore needs to analyze the project's consistency with the allowable use, alternatives, and mitigation tests of Section 30233(a).

Allowable Use

Under the first of these tests, the diking, filling, or dredging element of a project must qualify as being for one of the seven allowable uses listed under Section 30233(a). The only one that could arguably apply here would be the "incidental public service purpose" use in Section 30233(a)(4). The Commission has considered minor expansions of existing roads, an airport runway (City of Santa Barbara, CC-058-02), and NCTD double-tracking projects (CC-086-03, CC-052-05) in certain situations to qualify as "incidental public service purposes," and thus allowable under Section 30233(a)(4), but only where the expansion is necessary to maintain, but not expand, existing traffic capacity.

The Commission accepted the assertion that fill of wetlands and coastal waters for railroad projects constituted fill for an incidental public service purpose in earlier concurrences with SANDAG and NCTD double-track construction projects in northern San Diego County. For example, in acting on consistency certification CC-052-05, the Commission found that fill for a proposed segment of second main line track was an allowable use as an incidental public service because it was necessary to maintain existing passenger service. However, in more recent consistency certifications (e.g., CC-052-10, CC-056-11, CC-0003-15), the Commission has consistently found that double track projects are providing for increased passenger and freight capacity in the LOSSAN corridor. Because the courts have said that roadway expansions are an acceptable incidental public service purpose *only* when necessary to maintain *existing traffic capacity*[1], the Commission has found that the fill for the projects at issue in these previous

[1] *Bolsa Chica Land Trust v. Superior Court* (1999), 71 Cal.App.4th 493, 514-17.

consistency certifications did not qualify as an allowable use under Section 30233(a) as an incidental public service.

Therefore, the only way the Commission could find these projects consistent with the Coastal Act was through the "conflict resolution" provision of Section 30007.5 of the Coastal Act. The Commission found that the impacts on public access, water and air quality, and energy consumption and vehicle miles traveled from not constructing the projects would be inconsistent with the mandates of other policies listed in Chapter 3 of the Coastal Act, thus presenting a conflict among Chapter 3 policies. Having found the existence of such a conflict, the Commission also found that those impacts would be more significant and adverse than the projects' wetland habitat impacts (as mitigated). Using the "conflict resolution" provision of Section 30007.5 of the Coastal Act, the Commission concluded that allowing the project to proceed would resolve the conflict in the manner that would, on balance, be most protective of coastal resources. Thus, the Commission could concur that projects were consistent with Chapter 3 when taken as a whole. The Commission used the "conflict resolution" provision to concur with these railroad improvement projects in San Diego County: CC-008-07, CC-059-09, CC-075-09, CC-052-10, CC-056-11, and CC-0003-15. The Commission reaffirmed this approach on an overarching basis in its recent approval (discussed above) of the PWP/TREP for the rail and I-5 Corridor (NCC PWP/TREP - CC-0002-14/PWP-6-NCC-13-0203-1).

In its subject consistency certification, SANDAG indicated that the Poinsettia Station Improvement Project would, through installing improvements that eliminate the requirement for the current Hold-Out Rule, eliminate a key constrain on rail capacity in the North Coast portion of the LOSSAN Corridor and, in combination with double track projects and other rail corridor improvements, enable the future growth in rail service envisioned in the NCC PWP/TREP. 30233(a) because it will, cumulatively and over time, increase the capacity of the LOSSAN corridor and is therefore not an incidental public service. The Commission agrees that the proposed project is not an allowable use under Section 30233(a) and, as discussed below in Section III.I of this report, the only way the Commission could find this project consistent with the Coastal Act would be through the "conflict resolution" provision of Section 30007.5.

Alternatives

Concerning the alternatives test of Section 30233(a) for the proposed project, SANDAG designed the track realignment, platform expansion and off-grade track crossing in a manner that would achieve project goals, address community concerns and minimize impacts to coastal resources. As discussed in Section III.A, SANDAG evaluated several project alternatives, including the addition of a third pass-through track, a single track shift alignment, and several different overpass and underpass options for the off-grade track crossing.

SANDAG selected the proposed project – consisting of shifting both tracks to the west of their current alignment, expanding the east station platform, and installing a double-span pedestrian undercrossing – as the preferred alternative because it would minimize impacts to federally-listed San Diego fairy shrimp and wetland habitats while balancing safety, operational, cost and other environmental considerations, including local visual impacts. The proposed project would result in approximately 0.447 acres of permanent and temporary impacts to coastal wetlands and aquatic habitat located in the railroad ROW, including the removal of Seasonal Pond 1 (0.015

acre). In comparison, construction of the pass-through track alternative, which would place a third track in the ROW west of the existing tracks, would remove Seasonal Pond 2 (0.105 acre) without avoiding either Seasonal Pond 1 or Drainage 1, resulting in permanent impacts to a larger area of wetlands and coastal waters and destroying eight times more fairy shrimp habitat than the preferred alternative.

SANDAG's *Draft Alternative Analysis Report* indicates that construction of a single track shift, pedestrian overpass alternative would avoid the direct removal of Seasonal Pond 1. However, SANDAG has stated that this alternative, which would shift the western track approximately six feet to the west in order to accommodate the inter-track fence and meet track spacing requirements, would require the construction of a ballast curb at the edge of the pond in order to support the track bed. SANDAG anticipates that the installation of the ballast curb would, at a minimum, result in temporary direct impacts to Seasonal Pond 1 (and possibly "take" of San Diego fairy shrimp) during construction activities, and at worst, cause permanent changes in the topography and hydrology (i.e., due to grading, changed runoff patterns of the site) that would degrade existing fairy shrimp habitat and threaten the long-term viability of the pond. SANDAG also states that the construction of the overpass would lead to increased shading of the conservation area vernal pools and wetlands (with unknown consequences) and increase the visual profile of the development. Based on these considerations, SANDAG has concluded that the proposed project, with the proposed creation of a new on-site vernal pool in a more protected area of the ROW and the transplant of fairy shrimp from Seasonal Pond 1 (see Mitigation, below), is the environmentally-superior alternative.

The Commission finds that the proposed alternative would minimize (and, as discussed below would include mitigation for) adverse impacts to wetland and open water habitats to the maximum extent feasible. The Commission also agrees with SANDAG that there is no feasible, less environmentally damaging alternative available for constructing the proposed double track shift realignment, pedestrian underpass, and platform improvements at Poinsettia Station.

Mitigation

The *Addendum to the Biological Assessment* for the proposed project concludes that approximately 0.225 acres of permanent impacts to Coastal Act wetland and open water habitats would occur due to project activities. This includes the permanent fill of a 0.015-acre seasonal pond and 0.210 acres of drainage channels within the railroad right-of-way. Project construction would also result in the temporary fill or disturbance of 0.209 acres of drainage channel area, mostly in Drainage 2 (0.160 acres), and 0.013 acres of ephemeral ponds located within or near the site access route (**Exhibit 4**). These temporary impacts are considered permanent for purposes of habitat mitigation requirements because the impacts will last throughout the 18-month project construction period.

SANDAG has proposed a mitigation program for project impacts to wetlands and open waters that seeks to maintain and enhance the hydrologic and ecological functions provided by the existing features, and with the inclusion of an off-site mitigation component, would result in a net increase of wetland habitat in the region. The mitigation program would consist of several parts: (1) Creation of an on-site 0.030-acre vernal pool as mitigation for impacts to the 0.015-acre Seasonal Pond 1; (2) Creation of a new drainage channel to replace the existing Drainage 1;

(3) Restoration of temporary impacts to the drainages (chiefly Drainage 2) and small ephemeral ponds; (4) Purchase of wetland mitigation credits for the creation of new wetland habitat at an off-site location.

On-Site Mitigation

Creation of Vernal Pool. SANDAG proposes to create a new, 0.030-acre vernal pool to replace the 0.015-acre Seasonal Pond 1. The proposed vernal pool creation site is located on the east side of the railroad tracks, north of the existing conservation area and immediately adjacent to the southern end of Drainage 2 (**Exhibit 7**). In the *Habitat Mitigation and Monitoring Plan* (HMMP) for the project, SANDAG describes its reasons for selection of the mitigation site:

> *The selected location lies entirely within NCTD ROW and is not constrained by underground utilities … The proposed site for vernal pool creation was selected due to the high likelihood that the soils are appropriate for vernal pool creation, proximity to the seasonal pond to be affected by the project, proximity to existing vernal pools, location within NCTD ROW, and the fact that no special-status flora or fauna would be affected by creating a vernal pool at the proposed site.*

SANDAG would be responsible for the implementation of the on-site HMMP pursuant to regulatory permits issued by the U.S. Army Corps of Engineers (ACOE) and Regional Water Quality Control Board (RWQCB), as well as to this consistency certification. The HMMP contains details on the construction, restoration, revegetation and maintenance activities proposed for the creation of the new vernal pool:

> *The 0.030-acre vernal pool basin will be excavated to the specified elevation, and spoils will be used to create a small earthen berm around the excavated basin. If possible, and if acceptable to the USFWS, topsoil from the* [existing] *seasonal pond to be removed will be salvaged for placement within the created vernal pool basin …*
>
> *SANDAG proposes to commence construction of the created vernal pool following issuance of a biological opinion by the USFWS, a determination of consistency with the Coastal Zone Management Act from the CCC, and prior to commencement of construction. Pool construction will occur outside of the rainy season, and plantings will occur in late fall/early winter, to take advantage of the rainy season for establishment …*
>
> *The long-term source of water to support the created vernal pool will be rainfall. During the first three years following construction, supplemental irrigation may be provided to ensure establishment of the installed native plant species … An upland vegetated buffer comprised of native species will be installed surrounding the created vernal pool …*
>
> *Seed shall be gathered from existing vernal pools within the existing conservation easement from existing vernal pools with the highest densities of San Diego button-celery … Seed shall be installed within the excavated vernal pool basin in conjunction with placement of topsoil salvaged from Seasonal Pond 1. Due to the proximity of existing vernal pools, other obligate vernal pool species are expected to colonize the created vernal*

pool. Monitoring during the first year will determine whether supplemental seeding with other desired vernal pool plant species is required …

Seeding and planting will be completed in the fall before the onset of the rainy season, when precipitation and runoff are expected to provide sufficient moisture for seed germination and plantings. …

Manual weed removal is proposed as the primary method to eradicate nonnative invasive plant species. Manual removal efforts shall be concentrated in late spring and early summer months as directed by the monitoring biologist. All nonnative invasive plant species shall be removed under supervision of the monitoring biologist following germination and initial growth, before the nonnative plants can set seed …

Standard Best Management Practices will be employed to control erosion if needed. Measures may include silt fencing or straw wattles if any erosional damage is encountered.

Additionally, the water supply analysis contained in the HMMP indicates that precipitation and surface runoff during a normal year would be sufficient to sustain the created vernal pool during the wet season months of December, January and February. While the presence of water in the pool will vary considerably in response to climatic variability, this basic seasonal pattern is consistent with the seasonal cycles of the existing vernal pools within the conservation area.

The HMMP lays out a comprehensive five-year maintenance and monitoring program designed to ensure the long-term success and viability of the created vernal pool:

During the five-year maintenance program, the mitigation area will require regular maintenance consisting primarily of weed control, erosion control, pest control, protection from vandalism, trash and debris removal, and supplemental irrigation. Diligent maintenance of the mitigation area until the plants are established is critical to this plan, which was developed to mitigate the loss of biological resources. Maintenance will be conducted by SANDAG's restoration contractor. …

Monitoring of the created vernal pool shall be conducted at least once per month for the first 2 years and up to 8 times per year thereafter until the site has been released from further maintenance and monitoring obligations (anticipated to be after 5 years). Frequent checks are recommended to detect potential problems at the early stages. At a minimum, the project biologist shall monitor the following indices:

- *Success of exotic plant eradication efforts*
- *Plant survival*
- *Presence and density of weeds*
- *Hydrologic conditions within the vernal pool area (as appropriate based on rainfall)*

During each monitoring site visit, the project biologist shall document the general condition of the created vernal pool mitigation site and evaluate it for compliance with the

maintenance specifications and progress toward achieving the success criteria. The results of these visits will be summarized in field memoranda submitted to SANDAG within 4 weeks following each site visit. When finalized, these memoranda will be summarized and incorporated into the annual reports to be submitted to SANDAG and the resource agencies.

The primary goal of this HMMP is to offset impacts to San Diego fairy shrimp. Protocol surveys for fairy shrimp will be conducted annually at the appropriate time of year for the duration of the maintenance period. If no San Diego fairy shrimp are detected by the second round of surveys, the project biologist will contact the USFWS with a request to obtain inoculum from the vernal pools within the existing conservation easement.

The HMMP also contains detailed success criteria against which to measure the maintenance and monitoring efforts and the success of the vernal pool mitigation as a whole. The criteria are summarized below. At the end of the five-year monitoring period, the created vernal pool shall:

- Have achieved a period of inundation similar to the existing conservation area vernal pools (reference sites) in each year of monitoring;
- Be suitable to support native vernal pool invertebrates;
- Show interim increases in percent cover by hydrophytic species, ultimately achieving percent cover similar to the reference sites;
- Show establishment and increases in percent cover by *native* hydrophytic species, ultimately achieving percent cover similar to the reference sites;
- Support at least 80 percent cover of native hydrophytes characteristic of the reference sites;
- Have less than 10% cover by non-native species, and less than 5% cover by invasive exotic plants;
- Support at least 0.030 acre of new vernal pool habitat.

SANDAG will prepare annual monitoring reports to the resource agencies, beginning with an "as-built" baseline report to be prepared following the construction of the new vernal pool and establishment of the planted vegetation. At the end of the five-year monitoring period, SANDAG will prepare and submit a long-term management plan outlining how the vernal pool site will be protected, maintained and monitored in perpetuity. SANDAG will provide copies of the annual monitoring reports and long-term management plain to Commission staff as they become available. This will provide the Commission staff the ability to review any future modifications made to the mitigation site and determine whether it remains consistent with the wetland policy of the Coastal Act (and the findings adopted by the Commission in its concurrence with CC-0005-15).

Creation of Replacement Drainage 1. The replacement track ditch drainage channel would be located immediately west of the existing Drainage 1, which would be removed during the proposed track shift. The proposed created track ditch drainage would offset the fill of the existing feature, and fulfill the function of capturing and conveying runoff from the site to an existing tributary of Encinas Creek. The HMMP describes the creation of the replacement drainage as follows:

The replacement drainage will be excavated and riprap will be strategically placed within the drainage bottom to reduce scour. Excavated spoils, as appropriate, will be stockpiled and used as fill when the existing drainage feature is filled to accommodate the track shift aspect of the project. Excavated spoils not suitable for use as fill will be legally disposed of off site. …

SANDAG proposes to commence implementation of replacement track ditch drainage creation following CWA Section 404 Authorization from the Corps, CWA Section 401 Certification of Water Quality from the RWQCB, a determination of consistency with the Coastal Zone Management Act from the CCC, and concurrent with project grading. …

The long-term source of water to support the created ephemeral drainage will be rainfall and additional water conveyance of runoff from adjacent residential areas …

Manual weed removal is proposed as the primary method to eradicate nonnative invasive plant species. Manual removal efforts shall be concentrated in late spring and early summer months as directed by the monitoring biologist. All nonnative invasive plant species shall be removed under supervision of the monitoring biologist following germination and initial growth, before the nonnative plants can set seed. …

The replacement track ditch drainage has been designed to withstand heavy flows during large storm events. No additional erosion control measures are anticipated to be needed. However, should erosion be observed, then appropriate measures will be implemented in consultation with the project engineer.

The *Addendum to the Biological Assessment* additionally states that the recreated Drainage 1 will by hydroseeded with a native swale riparian seed mix.

Restoration of Drainage 2: SANDAG's contractor will regrade the affected portion of Drainage 2 back to its pre-construction condition and re-establish drainage flow once project construction is complete. The drainage would be hydroseeded with a native riparian plant seed mix as part of a long-term stormwater BMP.

In addition, the consistency certification and *Biological Assessment* include a number of avoidance and minimization measures that will be implemented throughout the project construction period, including but not limited to the designation of a U.S. Fish and Wildlife Service-approved project biologist to oversee compliance with protective measures for biological resources; project worker awareness training conducted by the project biologist; placement of environmentally sensitive area fencing; restrictions on vegetation clearing during bird breeding season; construction impact avoidance measures for listed species in the project area; and best management practices to protect wetland habitat during construction and demolition activities.

Off-Site Mitigation

SANDAG proposes to further mitigate for project impacts to wetlands and aquatic features through the purchase of mitigation credits for the creation of 0.447 acres of wetland habitat at the

Foss Lake Compensatory Mitigation Site (**Exhibit 8**). This 61-acre property, located approximately six miles from the coast within the City of Oceanside, has been used as a wetland mitigation site for previous rail transportation projects, including the NCTD O'Neill to Flores Second Track project (reviewed by the Commission as CC-004-05) and the SANDAG San Onofre to Pulgas Double Track project (CC-048-12). SANDAG has not prepared a separate off-site mitigation plan for the Poinsettia Station project. However, the proposed mitigation work at the Foss Lake Site is occurring concurrently with and directly adjacent to the wetland mitigation included in the San Onofre to Pulgas project. SANDAG supplemented its present consistency certification by submitting the *San Onofre to Pulgas State 2 Project Final Conceptual Wetland Mitigation Plan ("SOP Plan")* (October 2013), which presents relevant information on the on-going wetland restoration activities at the Foss Lake Site, and has confirmed that the restoration goals, methods, monitoring and maintenance program and success criteria outlined in the *SOP Plan* are equally applicable to the wetland establishment work being applied as mitigation for the impacts of the present project.

The Foss Lake Site contains a large wetland complex comprised of disturbed alkali marsh, southern willow scrub, mulefat scrub, freshwater marsh, seasonal open water, *Isocoma* scrub, non-native grassland and disturbed and ruderal areas, and supports sensitive species such as least Bell's vireo. Prior to the San Onofre-to-Pulgas project, the site had already provided 21 acres of compensatory mitigation for habitat impacts resulting from previous public and private development projects; this prior work resulted in the creation or enhancement of several of the native wetland communities found on site (especially alkali and freshwater march and riparian scrub), as well as restoration of upland coastal scrub communities. As a part of the San Onofre to Pulgas project, SANDAG committed to 1.52 acres of wetland mitigation at the Foss Lake Site, including: (a) the creation of 0.4 acres of new wetland habitat (mulefat and riparian scrub) in an area occupied by non-native grassland; and (b) the enhancement of 1.12 acres of highly disturbed alkali marsh along Pilgrim Creek (*see* **Exhibit 8**, page 4).

In a March 24, 2016 e-mail to Commission staff, SANDAG stated that an additional 0.477 acres of wetland habitat at the Foss Lake Site is being restored concurrently with the 1.52 acres pledged to the San Onofre to Pulgas project, and that mitigation credits from this area would be assigned to cover the impacts of the Poinsettia Station program. The proposed 0.447-acre mitigation area is a westward continuation of the area provided for in the *SOP Plan* (**Exhibit 8**, page 4), and would involve new wetland establishment in an area occupied by non-native grassland. The proposed area would provide off-site mitigation for impacts to Drainages 1 and 2 (0.419 ac), the small ephemeral ponds near the southern end of Drainage 2 (0.013 ac), and a patch of riparian scrub at the north end of Drainage 1 (0.001 ac).

The *SOP Plan* describes the proposed mitigation site as follows:

> [An] *area of nonnative grassland* [which] *is higher in elevation than the surrounding floodplain and has no current wetland function. Establishment activities in this area will result in a type conversion to wetlands and an increase in wetland function …*

The mitigation project seeks to convert a disturbed, non-native grassland area to native-dominated, high-value wetland that would provide water quality and habitat functions. The

mitigation activities would enhance these functions by increasing structural and species diversity, dominance of native verses nonnative plants, plant density, extent of vegetation, and potential wildlife at the sites. The mitigation activities would also benefit the overall watershed by beginning to eliminate the potential exotic species threat to other wetlands onsite and within and downstream of the site.

SANDAG reports that mitigation activities at the Foss Lake Site began in September, 2015, with exotic vegetation removal and site grading intended to reduce the elevation of the area and establish a landform that better retains water and is suitable for planting with wetland vegetation. Planting of the site has begun, and includes cuttings, seed mixes and containers of "a compositionally and structural[ly] diverse native riparian and wetland plant palette" (*SOP Plan*, p. 12), such as mulefat, San Diego marsh elder, pickleweed, saltgrass, and willow (among others). All container plants and seed materials are locally propagated and collected, and the source material from cuttings of willows and mulefat are from mature shrubs and trees found on-site. The enhancement areas will be improved through removal of exotic vegetation. SANDAG will be responsible for assuring that natural recruitment occurs once the restoration and enhancement activities have been implemented.

SANDAG will also be responsible for funding and carrying out all installation, maintenance, and monitoring activities. After the implementation phase is completed, the mitigation sites would be maintained and monitored for five years. Maintenance of the site will include weed control, care of container plants, oversight and repair of the irrigation system, erosion control, and trash removal. While artificial irrigation is not anticipated, it would be added if necessary in the creation/restoration areas. Monitoring will occur four times a year and will include qualitative and quantitative assessments. Performance standards have been set for each year and for the end of the 5-year period. The performance standards for year 5 for the creation/restoration areas are 80% cover of native species and exotic cover of less than 5%. The full set of performance standards is provided in **Exhibit 9**.

SANDAG will submit annual monitoring reports to the Commission in February of each year during five-year monitoring period. This will provide the Commission staff the ability to review any future modifications made to the mitigation program, and determine whether it remains consistent with the wetland habitat findings adopted by the Commission in its concurrence with CC-0005-15. After the mitigation program has been completed, the site will be placed in a permanent conservation easement and SANDAG will be responsible for establishing a mechanism for the long-term maintenance of the site. If success criteria are not met at the end of five years, SANDAG would propose remedial action for approval by the Commission.

Discussion

When a proposed project will adversely affect wetland and riparian habitat, and when those impacts have been avoided and minimized to the maximum extent feasible, the Commission then requires mitigation for the unavoidable impacts, typically at an acre-for-acre ratio of 4:1 for wetlands. The subject project, however, is located in an area with unique circumstances that justify flexibility in calculating the appropriate mitigation ratio. The habitats that would be affected by proposed improvements at Poinsettia Station occur in disturbed, degraded areas within the railroad right-of-way. Other than conveying runoff from the ROW and adjacent urban

development to Encinas Creek, Drainages 1 and 2 provide limited hydrologic and ecological functions; the drainages are incised and largely unvegetated, and therefore provide little sediment filtering capacity or suitable habitat for fish, amphibians or invertebrates. Of the 0.405 acres occupied by the drainages, only 0.086 acres (21%) within Drainage 1 support wetland vegetation. Seasonal Pond 1, though also largely unvegetated, provides habitat for the federally-listed endangered San Diego fairy shrimp. The smaller, disturbed ephemeral ponds on the northeastern side of the project area are vegetated, but with non-native species.

The mitigation proposed by SANDAG, including both on-site drainage channel restoration and on- and off-site wetland creation, would achieve a 2:1 ratio between mitigation area and impact area (including both permanent and temporary impacts). However, this gross mitigation ratio does not distinguish between permanent impacts to higher-functioning habitat areas supporting native wetland species (i.e., vegetated wetlands and Seasonal Pond 1), and permanent and temporary impacts to drainage channels with more limited ecological value. With this distinction in mind, SANDAG's proposal would allow for the mitigation of project impacts to Seasonal Pond 1 (0.015 acres), the vegetated areas of Drainage 1 (0.086 acres) and the small patch of riparian scrub (0.001 acres) at a 4:1 ratio. This calculation includes the creation of a 0.030-acre vernal pool in the open space north of Poinsettia Station, the replacement of the affected vegetated area of Drainage 1 (0.086 acres) with a new vegetated drainage, and the creation of an additional 0.292 acres of wetland habitat at the off-site Foss Lake Mitigation Site. Project impacts to the disturbed ephemeral ponds (0.013 acres), partially vegetated with non-native species, would be mitigated at a ratio of 2:1 by the creation of 0.026 acres of wetland habitat at the Foss Lake Site. Project impacts to the unvegetated drainage ditches (0.333 acres) would be mitigated at a ratio of approximately 1.4:1, encompassing the creation of a new vegetated drainage to the west of the realigned railroad tracks (0.124 acres), the repair/restoration of temporarily affected drainage areas (mostly Drainage 2) (0.209 acres), and the creation of an additional 0.129 acres of high-value wetland habitat off-site at Foss Lake.. The reduced mitigation ratios for impacts to the disturbed ephemeral ponds and unvegetated portions of the drainages is appropriate in recognition of the following: (a) the actual loss of habitat function is less than it would be for natural, undisturbed features; (b) the existing function of the drainages (water conveyance) would be fully restored; (c) the proposed reconstructed drainages would be seeded with native plant species, and would thus provide greater ecological value than the existing features; and (d) the new off-site wetland habitat is already being created (as of September 2015) at the Foss Lake site, and is considered to have a high likelihood of long-term success (which, if successful, would avoid temporal losses that typically lead to the need for higher mitigation ratios).

In summary, with implementation of the proposed on- and off-site wetland and vernal pool creation and restoration programs, the Commission finds that the proposed project includes adequate mitigation for project impacts to wetland and aquatic habitat to meet the mitigation test of Section 30233(a).

Conclusion

The Commission finds that the proposed project is consistent with the wetland fill alternatives and mitigation tests, but not consistent with the allowable use test, of Section 30233(a) of the Coastal Act for the reasons described above. Therefore, the only way the Commission could

concur with this consistency certification would be if it finds the project consistent with Chapter 3 of the Coastal Act as a whole through the "conflict resolution" provision contained in Section 30007.5, which is invoked by the first section of Chapter 3 (Section 30200(b)). As discussed in Sections III.F, G and H of this report, not approving the project would be inconsistent with the public access and transit, water quality and air quality/energy consumption policies of the Coastal Act, because it would eliminate benefits to coastal resources that are inherent in the project and mandated by the policies of the Coastal Act. Those benefits include the maximization of existing and future public access, the facilitation of public transit and the minimization of vehicle miles traveled, and the improvement of air and water quality by reducing traffic congestion. Thus, the project creates a conflict between the allowable use test of the wetlands policy of the CCMP (Coastal Act Section 30233(a)) on the one hand, and the public access and transit, and energy conservation policies of the CCMP (Coastal Act Sections 30210, 30252, and 30253) on the other. In the concluding section of this report (Section III.I) the Commission will resolve these conflicts and determine that concurrence with this consistency certification would, on balance, be most protective of significant coastal resources.

E. ENVIRONMENTALLY SENSITIVE HABITAT AREAS

Coastal Act Section 30240 states:

> *(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.*
>
> *(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

In addition, Coastal Act Section 30107.5 defines environmentally sensitive area as follows:

> *"Environmentally sensitive area" means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.*

As documented in the project *Biological Assessment* (June 2013) and *Addendum to the Biological Assessment* (March 2016), the project site, including the railroad ROW, the existing Poinsettia Station and an adjacent conservation area (**Exhibits 5, 6**), supports several sensitive habitats and species that would be affected by the proposed project. In particular, the project area contains vernal pools and seasonal ponds supporting federally-listed, endangered San Diego fairy shrimp.

Vernal Pools, Seasonal Ponds and San Diego Fairy Shrimp

Conservation Area Vernal Pools

The primary ecological resource in the project area consists of a narrow strip of vernal pool habitat and native vegetation located immediately to the east of Poinsettia Station and west of the

station parking lot (**Exhibits 5, 6**). This area, spanned by three pedestrian bridges linking the parking lot and train station, consists of a complex of historical and restored vernal pools located within a conservation easement associated with the development of the Poinsettia Station, which the Commission approved under CDP #6-93-106 in 1993. The conservation area contains five major vernal pools (Vernal Pools A-E, **Exhibits 4, 5, 6**) covering approximately 0.73 acres. The vernal pools consist of standing water (during the wet season) and an abundant array of hydrophytic plant species, most commonly San Diego button-celery (*Eryngium aristulatum* var. *parishii*), slender woolly-heads (*Psilocarphus tenellus*), stonecrop (*Crassula aquatica*), waterwort (*Elatine brachysperma*), hyssop loosestrife (*Lythrum hyssopifolium*), cut-leaf plantain (*Plantago coronopus*), and needle spikerush (*Eleocharis acicularis*). The vernal pools within the conservation area are currently inhabited by the federally-listed endangered San Diego fairy shrimp (*Branchinecta sandiegonensis*), and have in the past been observed to support the federally-listed endangered Riverside fairy shrimp (*Streptocephalus woottoni*). The conservation area also contains several other sensitive vegetation communities, including Diegan coastal sage scrub (0.35 acres), riparian scrub (0.21 acres), and wet meadow (0.36 acres). Special-status rare plant species observed or previously-observed within the conservation area include San Diego button-celery (FE, SE, CRPR 1B), spreading Navarretia (*Navarretia fossalis*) (FT, SP, CRPR 1B), California Orcutt grass (*Orcuttia californica*) (FE, SE, CRPR 1B), and San Diego marsh elder (*Iva hayesiana*) (SP, CRPR 2).[2]

Seasonal Ponds

The railroad ROW and primary project footprint consist largely of developed, disturbed and bare-ground areas, along with areas of planted ornamental vegetation, non-native grassland, a stand of eucalyptus trees, and several small patches of Diegan coastal sage scrub vegetation (see below). However, the project footprint also contains several aquatic features, including four concrete or earthen drainage ditches ("Drainages 1 – 4") and two seasonal ponds ("Seasonal Ponds 1 and 2) (**Exhibit 4**). The drainage ditches, discussed in detail in Section III.D, above, do not support environmentally-sensitive habitat.

Seasonal Ponds 1 and 2 are shallow, ephemeral pools located in the railroad ROW immediately west of and parallel to the existing tracks (**Exhibit 4**). Seasonal Pond 1 is located near the southern end of the Poinsettia Station; Seasonal Pond 2 is located farther south just north of the Poinsettia Lane overpass. SANDAG does not consider the ponds to be vernal pools due to their lack of vernal pool obligate plant species. Rather, these features consist of hydrologically-isolated, shallow earthen depressions that become inundated following storm events and retain moisture for relatively long periods of time due to an impermeable subsurface clay lens or compacted soil (**Exhibit 6**). In the absence of standing water, the pond basins consist largely of bare ground, with only sparsely scattered vegetation comprised of Italian ryegrass, curly dock, and alkali mallow. However, despite their barren appearance, both seasonal ponds are known to support populations of federally-endangered San Diego fairy shrimp.

[2] Species status abbreviations: Federal Endangered (FE); Federal Threatened (FT); State Endangered (SE); California Native Plant Society California Rare Plant Rank (CRPR) 1B and 2 (1B = rare, threatened, or endangered in California and elsewhere, 2 = rare, threatened, or endangered in California, but more common elsewhere); California Department of Fish and Wildlife "Special Plant" (SP).

San Diego fairy shrimp
The San Diego fairy shrimp (henceforth referred to as fairy shrimp) is a small freshwater crustacean that inhabits vernal pools and ephemeral basins in coastal southern California and northwestern Baja California. Fairy shrimp are habitat specialists adapted for survival in shallow, ephemeral ponds with specific water chemistry and temperature conditions. All known occupied localities are below 2,300 feet and are within 40 miles of the Pacific Ocean. In the vernal pools in which they occur, adult San Diego fairy shrimp are usually observed between January and March, hatching and maturing within a one to two week period, and persisting for about a month prior to reproduction and senescence. The length of the hatching period is dependent on hydrologic conditions, and may be extended during rainier winters. Fairy shrimp eggs are either dropped to the pool bottom or remain in the brood sac until the female dies and sinks. Resting eggs, or "cysts," are capable of withstanding temperature extremes and prolonged drying, and may remain dormant in the soil for several years. Studies have shown that vernal pools and ephemeral wetlands that support fairy shrimp, and occur in areas with variable weather conditions or filling periods (such as southern California), may hatch only a fraction of the total cyst bank (organisms in a resting stage) in any given year. Thus, reproductive success is spread over several seasons.

San Diego fairy shrimp has been listed as endangered under the federal Endangered Species Act since 1997 due to extensive loss and degradation of habitat from development and urbanization. At the time of listing, the USFWS estimated that less than 200 of the original 500 acres of vernal pool habitats suitable for fairy shrimp occupation in San Diego County remained.

Due to the rarity, sensitivity and importance of vernal pools as well as the fact that these areas support sensitive species, such as the San Diego fairy shrimp, the Commission has determined on many previous occasions that vernal pools and other aquatic features containing San Diego fairy shrimp and/or characteristic vernal pool plant species meet the Coastal Act definition of environmentally sensitive habitat (ESHA). The vernal pool, riparian scrub and wet meadow habitats within the conservation area support endangered San Diego fairy shrimp, characteristic vernal pool plant communities, and several rare and sensitive plant species. Seasonal Ponds 1 and 2 are distinct from the vernal pools in that they lack vegetation, yet nonetheless support endangered San Diego fairy shrimp. Both the conservation area habitats and the seasonal ponds could be easily disturbed by development associated with Poinsettia Station and the nearby active railroad. The Commission thus finds that these areas constitute ESHA as defined in Section 30107.5 of the Coastal Act.

Direct Project Impacts
The proposed project has been designed to avoid directs impacts to the most significant biological resources within the project area, including the sensitive habitats and species within the conservation area and the larger of the two seasonal ponds (Seasonal Pond 2). The *Biological Assessment* for the project also describes measures SANDAG would undertake to avoid and minimize impacts to ESHA (vernal pools and seasonal ponds) within the project area:

> • *Project design will include avoidance of the vernal pools within the conservation easement, where San Diego fairy shrimp was observed, and where both species* [including Riverside fairy shrimp] *have the potential to occur.*

• The topsoil from Seasonal Pond 1, which is expected to be permanently affected by project-related activities, will be transplanted to a mitigation site located north of the station. Since San Diego fairy shrimp were observed within Seasonal Pond 1, the transplanted topsoil may contain cysts for this species.

• Prior to clearing or construction, highly visible barriers (such as orange construction fencing) will be installed around the limits of work where the limits abut natural habitat. These barriers will designate Environmentally Sensitive Areas (ESAs) to be preserved. No grading, clearing, grubbing, or other construction activities of any type will be permitted within these ESAs. In addition, heavy equipment, including motor vehicles, will not be allowed to operate within the ESAs. All construction equipment will be operated in a manner so as to prevent accidental damage to nearby preserved areas. No personnel, structure of any kind, or incidental storage of equipment or supplies will be allowed within these protected zones. Silt fence barriers will be installed at the ESA boundary to prevent accidental deposition of fill material in areas where vegetation is adjacent to planned grading activities. If the location of silt fence barriers conflicts with areas proposed for construction equipment, the project biologist will determine alternate placing of fences or other exclusionary features, as necessary. A biological monitor shall be present during ESA barrier installation (including silt fence barrier installation) and ground disturbing activities to ensure that impacts to vernal pools are avoided.

…

• Construction crews will be provided with environmental awareness training, which will stress ESA avoidance.

• A biological monitor shall be present during ESA barrier installation (including silt fence barrier installation) and ground disturbing activities to ensure that impacts to vernal pools are avoided.

• Impacts from fugitive dust will be offset through implementation of Caltrans Standard Specifications, including Section 7-1.01F, Air Pollution Control; Section 10, Dust Control; Section 17, Watering; and Section 18, Dust Palliative. The project biologist will periodically monitor the work area to ensure that work activities do not generate excessive amounts of dust or cause other disturbances. Erosion control measures will be regularly checked by the Resident Engineer (RE) or the RE's appointed representative.

Despite SANDAG's efforts to avoid and minimize adverse effects to sensitive habitats, the proposed project, specifically the westward realignment of the railroad tracks, would still be located within and result in the permanent removal of Seasonal Pond 1, an 0.015-acre ephemeral pond supporting endangered San Diego fairy shrimp. As described previously in Section III.D, SANDAG proposes to mitigate for the loss of this pond through the creation of a new vernal pool on the project site, within the railroad ROW to the north of the Poinsettia Station east platform and conservation area (**Exhibit 7**). In addition to transplanting topsoil from the existing Seasonal Pond 1 to the created vernal pool (in an effort establish fairy shrimp in the new pool), SANDAG proposes to seed the pool with a mix of native vernal pool species, monitor the restoration for a minimum of 5 years, and develop a long-term management plan to ensure its protection in perpetuity. The *Habitat Mitigation and Monitoring Plan* for the project includes details on site preparation, schedules, sources of plant materials, maintenance activities and

schedules, monitoring methods and schedules, success criteria, and reporting. SANDAG will submit copies of all mitigation monitoring reports to Commission staff.

Nonetheless, the project would result in the permanent loss of 0.015 acres of an environmentally-sensitive habitat area as defined under the Coastal Act. The project, specifically the track realignment, is not a resource-dependent use of this ESHA. As such, the Commission finds the project is not a use that is allowed under Section 30240(a) of the Coastal Act, which requires that ". . . only uses dependent on those resources shall be allowed within . . . [environmentally sensitive habitat] areas." Therefore, the only way the Commission could concur with this consistency certification would be if it finds the project consistent with the Coastal Act through the "conflict resolution" provision contained in Section 30007.5.

Indirect Project Impacts
In a set of December 2013 e-mails providing comments on the proposed project, the U.S. Fish and Wildlife Service (USFWS) expressed concern that the project could result in indirect hydrologic impacts to the vernal pools within the established conservation area to the east of Poinsettia Station (*see* **Exhibit 5**). The first concern was that the installation of the new pedestrian underpass, specifically the 13-foot deep wall located within the new underpass would penetrate the subsurface clay pan beneath the vernal pools, potentially resulting in their draining and the loss of habitat values in the conservation area. In the *Addendum to the Biological Assessment*, SANDAG's consultant responded to this concern as follows:

> *Merkel & Associates does not believe this will be the case, since this wall itself does not abut the pools but is located approximately 13 feet to the east within the limits of the existing platform and well interior to the existing platform wall and foundation that abuts the pools. This existing platform wall extends well below the pool margin for the pool that M&A constructed at this site many years ago and the pool excavation at that time never exposed the foundation. By virtue of the construction plan retaining this existing wall and proposing the construction of the new deep wall inside of the existing platform structure there is little potential for this element to result in dewater[ing] of the existing pools.*

USFWS' second concern was that the proposed extension and widening of the Poinsettia east platform (**Exhibit 3**) could alter the hydrology of the conservation area vernal pools, by removing the gentler railroad berm slope that may currently drain into the pools and/or by adding an impervious surface that will drop more abruptly into the adjacent pools. SANDAG's consultant responded to this concern as follows:

> *It is assumed that there will be an increase in runoff to the vernal pools from the new platform relative to the existing railroad berm which is capped with a ballast of 6-inch minus rock. An increase in water will increase ponding duration which will likely yield greater seed production from vernal pool plant species. Species which require prolonged saturation to germinate such as California Orcutt's Grass (Orcuttia californica) are expected to especially benefit. It should be noted that there is a 15 to 25 foot buffer between the proposed platform and the vernal pools. This buffer consists of a gentle unvegetated slope that extends from the base of the platform to the vernal pools. M&A has been working on the pools at Poinsettia Station since 1996 and recognizes that historically,*

these southerly pools have been on the drier side of normal and as such would not be expected to be adversely affected by increased watershed runoff by the platform addition.

Based on the available evidence, the Commission agrees with SANDAG that the proposed project would not adversely affect hydrologic conditions within the conservation area; rather, the increased platform area has to potentially to modestly increase runoff to the vernal pools during rain events to the benefit of the existing vernal pool vegetation, which in places suffers from dry conditions. However, it is worth noting that the required Endangered Species Act Section 7 consultation with the USFWS is not yet complete, and that new evidence related to the project's potential effects on runoff and local hydrology may emerge as a part of this process. SANDAG has committed to provide Commission staff with copies of any Biological Opinion, informal consultation letter, and/or other substantive documentation to result from the consultation process. This will provide the Commission staff the ability to review any future modifications made to the mitigation program, and determine whether it remains consistent with the wetland habitat findings adopted by the Commission in its concurrence with CC-0005-15.

Based on this information, the Commission finds that the proposed project would not result in significant indirect adverse effects to environmentally sensitive habitats within the existing conservation area.

Diegan Coastal Sage Scrub

Diegan coastal sage scrub (CSS) is an endangered native plant community occurring in the coastal areas of Orange County, San Diego County and Baja California. Once widespread in coastal Southern California, this plant community has lost between 50 and 85% of its former area to agriculture and urban development, with the remainder highly fragmented (Rubinoff 2001; Taylor 2005). Remaining CSS habitat continues to be threatened by development, grazing pressure, altered fire regimes, and air pollution. CSS can provide vital native habitat for indigenous and sensitive flora and fauna, including the federally-listed Coastal California Gnatcatcher, though this species is not known to inhabit the Poinsettia Station project site. Several small stands of CSS vegetation, totaling approximately 0.63 acres, are scattered across the project site, with the larger patches occurring within the conservation area (see above). Other minor patches of CSS vegetation occur in the railroad ROW west of the existing tracks (**Exhibit 5**).

Proposed project activities, specifically the westward realignment of the existing railroad track, would result in the permanent or temporary disturbance of six small patches (0.284 acres) of CSS vegetation within the railroad ROW, but would avoid the more significant patches within the conservation area. The project would also affect an additional 0.066 acres of other scrub habitats. The other project alternatives considered (e.g., single track shift, third pass-through track) would result in similar impacts. As mitigation for the project's impacts to CSS habitat, SANDAG will purchase mitigation credits for the restoration and preservation of 0.7 acres of native scrub habitats, including 0.568 acres of CSS, at the Caltrans-owned, SANDAG-managed Stacco/Timeout Mitigation Site, located near Oceanside in the San Luis Rey River watershed. SANDAG reports that upland habitat restoration at the site (including the planting and/or rehabilitation of approximately 49 acres of CSS vegetation) is underway, and that sufficient CSS

habitat mitigation credits remain available to accommodate the mitigation needs of the present project.

The Commission's determination as to whether any particular Diegan coastal sage scrub habitat constitutes ESHA has historically been made on a site-specific basis. In a number of past cases (e.g., CC-009-12, CC-051-10, CC-052-05, CC-086-03), the Commission has ruled that small stands of CSS do not constitute ESHA due to their isolation and distance from larger, more contiguous areas, and due to the fact that the stands did not support California gnatcatcher or other rare species. In the present case, the very small areas of CSS within the ROW that would be affected (less than 1/3 of an acre) do not support Coastal California gnatcatchers or any other sensitive plant or animal species. Furthermore, the habitat affected is degraded and isolated from larger, more contiguous stands of CSS by existing development (i.e., railroad tracks, Poinsettia Station, developed areas of Carlsbad). Therefore, the Commission finds that the coastal sage scrub habitat in this location does not meet the definition of an ESHA under Section 30107.5 of the Coastal Act.

Conclusion

The proposed project would avoid significant adverse effects to sensitive habitats and rare plant species occurring within the vernal pool conservation area located to the east of Poinsettia Station, and would preserve the larger of the two seasonal ponds, supporting endangered San Diego fairy shrimp, that occur within the railroad ROW. However, the project would result in the significant disruption of ESHA through the permanent loss of Seasonal Pond 1, and is not a allowable use of this ESHA. As a result, the Commission finds that the project is inconsistent with the environmentally sensitive habitat policy of the CCMP (Coastal Act Section 30240). Therefore, the only way the Commission could concur with this consistency certification would be if it finds the project consistent with the Coastal Act through the "conflict resolution" provision contained in Section 30007.5.

As discussed in Sections III.F, G and H of this report, not approving the project would be inconsistent with the public access and transit, water quality, and air quality/energy consumption policies of the CCMP, because it would eliminate benefits to coastal resources that are inherent in the project and mandated by the policies of the Coastal Act. Those benefits include the maximization of existing and future public access, the facilitation of public transit and the minimization of vehicle miles traveled, and the improvement of air and water quality by reducing traffic congestion. Thus, the project creates a conflict between the allowable use test of the environmentally sensitive habitat policy (Coastal Act Section 30240) on the one hand, and the public access and transit, water quality and energy conservation policies (Coastal Act Sections 30210, 30231, 30232, 30252, and 30253) on the other. In the concluding section of this report (Section III.I) the Commission will resolve these conflicts and determine that concurrence with this consistency certification would, on balance, be most protective of significant coastal resources.

F. WATER QUALITY

Coastal Act Section 30231 states:

> *The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

Coastal Act Section 30232 states:

> *Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.*

Potential impacts to coastal water quality are limited to the construction phase of the project. Pollutants of concern include soil and sediment mobilized due to ground disturbance, grading, erosion and storm water runoff, accidental spills of hazardous materials, and leakage of fuels, engine oils and lubricants from construction vehicles.

SANDAG has included in its consistency certification commitments for the protection of water quality, including the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) and a Spill Prevention Containment and Countermeasure (SPCC) Plan. The draft SWPPP includes measures to control runoff and minimize erosion, and identifies specific pollution prevention measures that would eliminate or control potential point and nonpoint pollution sources on-site during the project's construction phase. Best Management Practices (BMPs) contained in the SWPPP that would be implemented during and following project construction include (but are not limited to) the following:

- avoidance of ground-disturbing activities during storm events;
- protection/preservation of existing vegetation to minimize erosion;
- use of earthern dikes, check dams and drainage swales to redirect/control runoff;
- use of silt fencing, fiber rolls and other low impact erosion control devices
- use of soil cover for inactive areas, finished slopes, etc.;
- use of storm drain inlet protection;
- covering and berming of loose, stockpiled construction materials;
- storage of chemicals in secure watertight containers, with secondary containment;
- no disposal of rinse or wash waters materials on impervious or pervious site surfaces or into the storm drain system;
- no discharge of waste into storm drains or receiving waters;
- post-construction revegetation;

- implementation of a post-construction storm water management plan.

The SPCC Plan would govern the storage and handling of hazardous materials, including construction vehicle maintenance and refueling, in order to minimize the risk of accidental spills and leaks of pollutants onsite and ensure that adequate spill response measures are in place during construction activities. SANDAG has also committed to: (a) testing excavated soils and imported fill for contaminants and disposing any contaminated soils at an appropriate offsite facility; (b) removal of contaminated ballasts and/or railroad ties from the site; and (c) development of a contingency and response plan for any undocumented areas of contamination that may be encountered during construction.

In previous reviews of SANDAG and NCTD rail improvement projects in San Diego County (e.g., CC-0003-15), the Commission concurred with these agencys' determinations that, as a general matter:

> *Passenger rail vehicles are much cleaner than highway vehicles with respect to oil and grease drips. This is partially attributed to the fact that any drips from rail vehicles fall into a ballasted ROW, where gravel and soil act as a filter to prevent runoff from moving contaminants and because rail transportation involves less oil, grease, and other hydrocarbons than automobiles. On the other hand, automobiles are a significant source of hydrocarbons, which are then flushed by runoff from the Interstate 5 area into nearby water bodies. The proposed project will provide improved public transportation service and freight service, which will help reduce automobile congestion and reduce automobile vehicle miles traveled and the corresponding non-point source emissions*

Thus, to the extent that the proposed station improvements increases the efficiency and reliability of passenger rail service in the North County area and reduces automobile usage (*see* Sections III.G and III.H, below), the project would be expected to contribute to reductions in contaminated runoff to coastal waters.

Based on these considerations, and with implementation of the above measures, the Commission finds that the proposed project would not cause significant adverse water quality impacts at and adjacent to the project area and would be consistent with the water quality protection policies of the CCMP (Coastal Act Sections 30231 and 30232).

G. PUBLIC ACCESS AND TRANSIT

Coastal Act Section 30210 states:

> *In carrying out the requirements of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.*

Coastal Act Section 30252 states in part:

> *The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service . . .*

SANDAG states in its consistency certification that the proposed project would replace two existing at-grade track crossings at Poinsettia Station with a pedestrian undercrossing, which would "substantially improve public safety and access in the coastal zone." SANDAG also notes that in reviewing past actions involving mass transit improvements in San Diego County, the Commission has considered traffic congestion to constitute a constraint on public recreation and access to the shoreline. Increased traffic on highways such as Interstate 5, which is a major coastal access thoroughfare, reduces the ability of the public to reach coastal recreation areas and makes it more difficult for the public to get to the beach. Section 30252 of the Coastal Act recognizes the importance of improving public access through, among other things, improvements in public transit. Maintaining and improving existing public transit is equally important and beneficial to public access.

The project would benefit public coastal access in the following ways: (a) enhancing public transit by eliminating delays associated with the Hold-Out Rule that is currently in place, which prevents trains from passing through the station when another train is loading or unloading passengers; and (b) enhancing public safety at Poinsettia Station. Construction of the pedestrian undercrossing and inter-track fence would both increase the overall efficiency and reliability of passenger rail service in the North Coast area (and LOSSAN corridor as a whole) and eliminate safety hazards associated with at-grade crossings at the station.

The Commission agrees with SANDAG and finds that the proposed project would not adversely affect existing public access and would improve public access by eliminating delays and improving the efficiency and reliability of passenger rail service in the coastal zone. This in turn will help to reduce automobile traffic on Interstate 5 in an area where this freeway supports public access and recreation. The Commission therefore finds the project consistent with the public access and public transit policies of the CCMP (Coastal Act Sections 30210 and 30252).

H. AIR QUALITY AND ENERGY CONSUMPTION

Coastal Act Section 30253 states in part:

> *New development shall do all of the following:*
>
> . . .
> *(c) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development*
>
> *(d) Minimize energy consumption and vehicle miles traveled.*

In previous actions, the Commission has consistently found that NCTD and SANDAG rail improvement projects would increase the use of public transportation, reduce automobile emissions and vehicle miles traveled, and benefit regional air quality. For example, during

its review in 2002 of NCTD's proposal for the Oceanside-Escondido Rail Project (CC-029-02), the Commission noted that the public transit project: (a) would reduce auto-related air emissions, thereby contributing to the improvement of regional air quality; (b) as part of a regional public transportation system, including bus service, light-rail and commuter trains, and trolleys, the project would increase acceptance of public transit as a desirable mode of transportation; and (c) as acceptance and use of public transit increases, public agencies may be motivated to further improve the public transit system and these improvements will result in corresponding reductions in traffic congestion. The Commission noted:

> *The air quality benefits [cited in that project's EIR] are partially offset by increased pollution caused by the train's use of diesel fuel. However, as described in the Access Section above, the proposed project will probably have significant VMT reductions as the regional mass transit program expands and as public transit becomes a more accepted mode of transportation. As the percentage of traffic accommodated by mass transit grows, there will be a corresponding reduction in air pollution from automobiles. However, there will not be a corresponding increase in air pollution as ridership of the rail system grows. As ridership grows there will be more reductions in air quality impacts from automobiles.*
>
> *In conclusion, the Commission finds that the proposed project will reduce energy consumption and improve air quality . . . Therefore, the Commission finds that the project is consistent with Section 30253 of the Coastal Act, and thus with the energy consumption and air quality policies of the CCMP.*

In its present consistency certification, SANDAG reports the following:

> *Minor, temporary increases in emissions may occur during construction activities from construction equipment. All construction equipment would be properly maintained to reduce emissions. The Project would not permanently increase air pollutant emissions in the region. Elimination of the Hold-Out Rule would decrease the amount of train idling time, subsequently resulting in a reduction in emissions. Thus, the Project provides an air quality benefit. The Project would be consistent with the Regional Air Quality Strategies (RAQA) developed jointly by the Air Pollution Control District (APCD) and SANDAG.*

In addition, SANDAG states that the project would:

> *… promot[e] energy consumption reduction strategies through the provision of reliable rail service, reducing delays in the vicinity of the Poinsettia Station, and reducing automobile and freight vehicle miles traveled commensurately.*

The proposed project's air quality benefits include reduced idling time by train locomotives outside Poinsettia Station, and through the provision of more efficient and reliable passenger rail service, reduced congestion on area highways, leading to reduced emissions of air pollutants. In addition, the operational efficiency improvements arising from elimination of the Hold-Out Rule have the potential to increase ridership on existing passenger trains in the corridor and to correspondingly reduce automobile trips and vehicle miles traveled in the corridor. While these

benefits would likely be modest when viewed in isolation, the proposed project is but one part of a much larger SANDAG effort to improve and expand rail service in the LOSSAN corridor, which itself is key component of on-going efforts to meet greenhouse gas reduction targets for San Diego County mandated under California's Climate Change Initiative (i.e., AB 32 and other legislation.

Potential adverse effects on coastal resources associated with global climate change include sea level rise, increased coastal flooding and erosion, inundation of developed areas and public access and recreation areas, alterations to existing sensitive habitat areas, ocean warming, changes in marine species diversity, distribution, and productivity, and increased ocean acidification. The Commission has historically found (e.g., CC-079-06, BHP Billiton LNG International, Inc., Ventura and Los Angeles Counties) that coastal resources would be directly affected by global climate change resulting from increases in greenhouse gas emissions.

Coastal Act policies provide a basis for Commission action to reduce greenhouse gases and to protect coastal resources at risk from the adverse effects of global warming, including the air quality and energy minimization policies (Section 30253). The Commission adopted findings in support of these goals when it concurred with consistency certification CC-075-09 by NCTD for a double-tracking project in Carlsbad in northern San Diego County. The Commission has adopted similar findings in its concurrence with subsequent consistency certifications for LOSSAN double-track projects (CC-052-10, CC-056-11, and CC-009-12), as well as its more overarching I-5/Rail Corridor review (NCC PWP/TREP - CC-0002-14/PWP-6-NCC-13-0203-1).

The Commission finds that SANDAG's proposed Poinsettia Station improvement project, and the resulting improvements to public transportation in the LOSSAN corridor, will help to reduce energy consumption, reduce greenhouse gas emissions, and improve air quality, and is therefore consistent with the energy minimization policy of the CCMP (Coastal Act Section 30253(d)).

I. CONFLICT BETWEEN COASTAL ACT POLICIES

As indicated above, the standard of review for assessing consistency with the California Coastal Management Program is set forth in Chapter 3, beginning with Public Resources Code Section 30200. Section 30200(b) states that where a conflict is identified between "the policies of this chapter, Section 30007.5 shall be utilized to resolve the conflict."

Section 30007.5 of the Coastal Act provides for the Commission to resolve conflicts between Coastal Act policies as follows:

> *The Legislature further finds and recognizes that conflicts may occur between one or more policies of the division. The Legislature therefore declares that in carrying out the provisions of this division such conflicts be resolved in a manner that on balance is the most protective of significant coastal resources. In this context, the Legislature declares that broader policies which, for example, serve to concentrate development in close proximity to urban and employment centers may be more protective, overall, than specific wildlife habitat and other similar resource policies.*

1. Conflict. In order for the Commission to consider balancing Chapter 3 policies, it must first establish that there is a conflict between these policies. The fact that a project is consistent with one policy of the Coastal Act and inconsistent with another policy does not necessarily result in a conflict. Rather, to identify a conflict, the Commission must find that to object to the project based on the policy inconsistency would result in coastal zone effects that are inconsistent with some other policy or policies of the Coastal Act.

As described in the wetlands and open coastal waters section (Section III.D), above, because the project would increase railway capacity, it does not qualify as an incidental public service under Section 30233(a)(4), Commission interpretations of which historically only allow transportation projects in wetlands and open coastal waters where they are necessary to maintain *existing* capacity. Therefore, because the project is not an allowable use, the only way the Commission could find the project consistent with the Coastal Act would be through the "conflict resolution" provision (Section 30007.5).

As discussed previously in Section III.E, above, because the proposed railroad track realignment would be routed through a seasonal pond inhabited by federally-endangered San Diego fairy shrimp, the project is located with an environmentally sensitive habitat area but is not consistent with the "allowable use" test of Section 30240(a) of the Coastal Act, which requires that "… only uses dependent on those resources shall be allowed within … [environmentally sensitive habitat] areas." Therefore, the only way the Commission could find the project consistent with the Coastal Act would be through the "conflict resolution" provision (Section 30007.5).

As described in the public access and transit section above (Section III.G), among project purposes/benefits are reduced traffic congestion on area highways and improved public access to the coast by maintaining safe and efficient operations of existing passenger rail service along the San Diego County shoreline. SANDAG and NCTD have provided evidence in previous consistency certifications that LOSSAN corridor rail service improvement projects, such as double-tracking, bridge replacement, station improvements, etc., provide significant public access and recreation benefits, through reducing traffic congestion, reducing delays in rail service, and improving railroad safety along the coast. SANDAG has reiterated these findings in its subject consistency certification. The Commission finds that traffic congestion and rail service delays interfere with access to the coastal recreational opportunities within northern San Diego County (including travelers from Los Angeles and Orange Counties). As traffic congestion and rail service delays increase with expected growth of the region and expansion of rail operations, these access impacts will worsen, and when congestion increases and/or rail service becomes less reliable, non-essential trips such as those for recreational purposes tend to be among the first to be curtailed. Thus, as traffic and/or delays increase, the ability for the public to get to the coast will be curtailed, which would result in a condition that would be inconsistent with the access policies of the Coastal Act. Section 30210 mandates that public access to the coast be maximized.

As discussed in Sections III.F and III.H above, the traffic increases and rail service delays that would occur if this project were not to go forward would also degrade water and air quality, and result in increases in energy consumption and vehicle miles traveled. This would exacerbate conditions that are inconsistent with the water and air quality policies of the Coastal Act, because

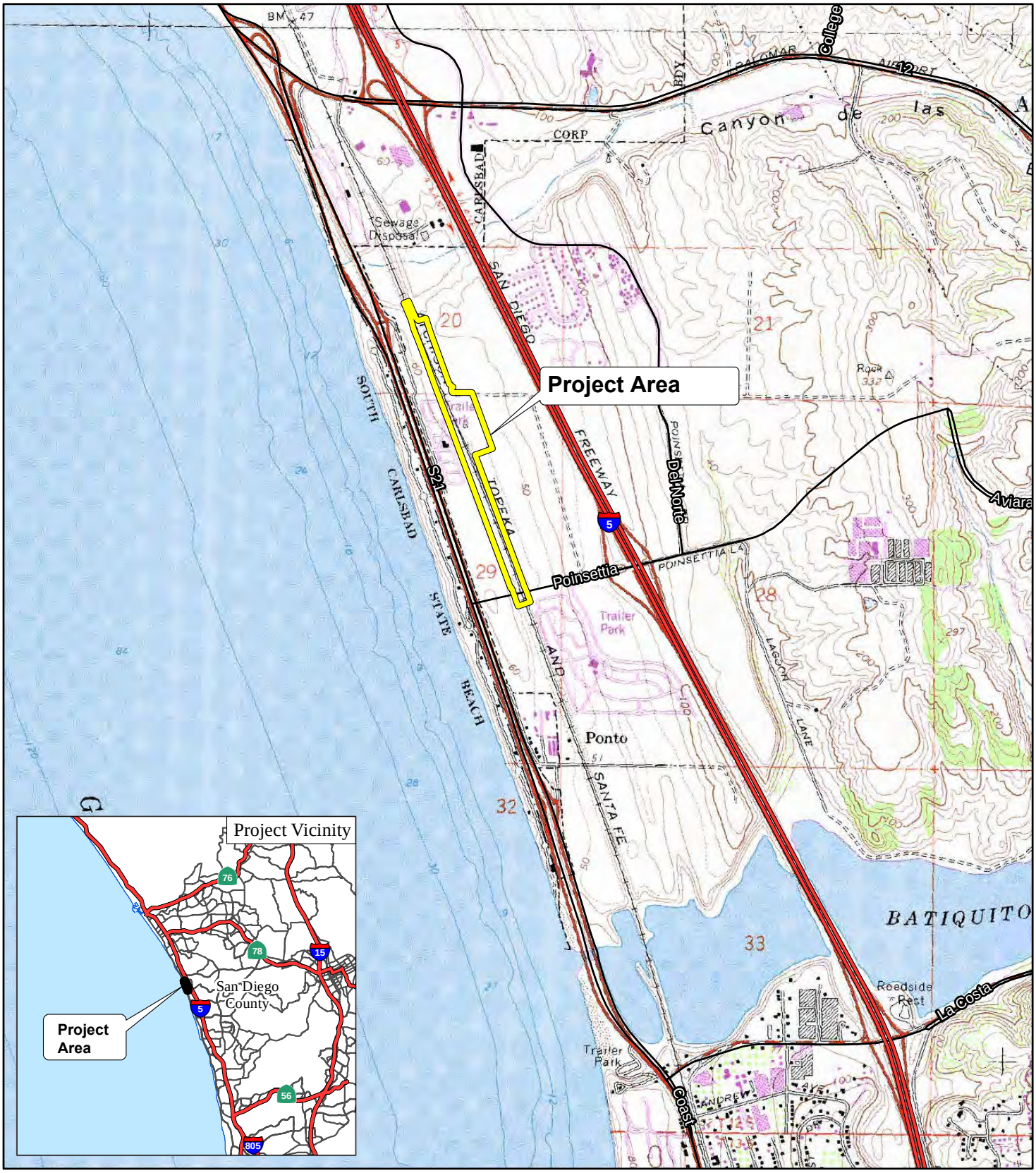
they would adversely affect already impaired coastal water bodies and exacerbate non-attainment status of the coastal air basin. Sections 30231 of the Coastal Act requires the maintenance of coastal water quality, while Section 30232 requires protection against spills of hazardous substances. Section 30253(d) mandates reductions in energy consumption and vehicle miles traveled. Section 30252 articulates that one of the Coastal Act's access goals is encouraging maintenance and enhancement of public access through facilitating the provision or extension of transit service. Thus, not only would objecting to this consistency certification be inconsistent with the access policies, but it would also result in adverse effects to coastal waters and the air basin, and be inconsistent with the achievement of water quality, spill protection, air quality, energy conservation, reductions in vehicle miles traveled, and transit goals expressed in Sections 30231, 30232, 30253(d), and 30252. In addition, the proposed project is fully consistent with those policies, and the benefits that would be provided by the proposed project are a function of the very essence of the project (rather than some ancillary component) and not independently required by some other body of law. Finally, there are no feasible alternatives that would achieve the objectives of the project, including these benefits without violating any Chapter 3 policy. The Commission therefore finds that the proposed project creates a conflict between the wetland and coastal waters policy (Section 30233(a))] and environmentally sensitive habitat policy (Section 30240) on the one hand, and the water quality, air quality, energy conservation, reductions in vehicle miles traveled, and public access and transit policies (Sections 30231, 30253(d), and 30252) on the other.

2. <u>Conflict Resolution</u>. Having established a conflict among Coastal Act policies, Section 30007.5 requires the Commission to resolve the conflict in a manner that is on balance most protective of coastal resources. In this case, the proposed project will result in a non-allowable use to occur within an environmentally sensitive habitat area. Shifting of the existing railroad tracks in order to meet railroad safety requirements necessary to lift the Hold-Out Rule would result in the permanent loss of a 0.015-acre seasonal pond supporting San Diego fairy shrimp. On-site mitigation is being provided by NCTD to compensate for the habitat loss. On the other hand, as stated above, objecting to this consistency certification would result in conditions that would be inconsistent with the public access policies (Sections 30210 and 30252), would result in adverse effects to coastal waters and the coastal air basin, and would be inconsistent with the achievement of water quality, spill protection, air quality, energy conservation, and reductions in vehicle miles traveled goals expressed in Sections 30231, 30232, and 30253. In resolving the Coastal Act conflict raised, the Commission finds that the impacts on coastal resources from not constructing the project would be more significant and adverse than the project's environmentally sensitive habitat impacts, which would, as designed by SANDAG, be at least partially addressed by mitigation measures. The Commission therefore concludes that the project would, on balance, be most protective of significant coastal resources, consistent with Coastal Act Section 30007.5. As such, it is consistent with Chapter 3 as a whole, and the Commission therefore concurs with this consistency certification.

APPENDIX A

SUBSTANTIVE FILE DOCUMENTS

1. CC-0005-15 (SANDAG, Poinsettia Station Improvement Project, Carlsbad).
2. *Federal Consistency Analysis for the Poinsettia Station Improvements Project*, BRG Consulting, Inc., December 14, 2015, revised March 18, 2016.
3. *Addendum to the Biological Assessment for the Poinsettia Station Improvement Project*, Merkel & Associates, October 29, 2015, revised March 24, 2016.
4. *Storm Water Pollution Prevention Plan (SWPPP) for Construction Activities, Poinsettia Station Improvement* Project, T.Y. Lin International, July 20, 2015.
5. *Biological Assessment, Poinsettia Station Improvement Project*, LSA Associates, June 2013.
6. *Habitat Mitigation and Monitoring Plan, Poinsettia Station Improvement Project*, LSA Associates, June 2013.
7. *Stacco/Timeout Property Draft Mitigation Plan*, California Department of Transportation District 11, February 22, 2013.
8. *Jurisdictional Delineation Report, Poinsettia Station Improvement Project*, LSA Associates, January 2013.
9. *Poinsettia Station Improvements Draft Alternatives Analysis Report*, T.Y. Lin International, March 3, 2011.
10. CC-0003-15 (SANDAG, San Diego River Railroad Bridge Replacement and Double Track Project, San Diego County)
11. CC-048-12 (San Onofre-Pulgas Double Track Project Stage 2, San Diego County).
12. CC-009-12 (SANDAG, San Onofre-Pulgas Double Track Project, San Diego County).
13. CC-056-11 (SANDAG, Sorrento Valley Double Track Project, San Diego County).
14. CC-052-10 (NCTD, San Dieguito River Railroad Bridge Scour Protection, City of Del Mar, San Diego County).
15. CC-075-09 (NCTD, Agua Hedionda Railroad Bridge and Double Track Project, San Diego County).
16. CC-059-09 (NCTD, Replacement of three wood trestle railroad bridges with concrete bridges, Los Peñasquitos Lagoon, San Diego County).
17. CC-079-06 (BHP Billiton LNG International, Inc., Ventura and Los Angeles Counties).
18. CC-055-05 (NCTD, replacement of the railroad bridge over Agua Hedionda Lagoon).
19. CC-052-05 (NCTD, Santa Margarita River double tracking project at the south end of Camp Pendleton).
20. CC-004-05 (NCTD, O'Neill to Flores double track project in central Camp Pendleton).
21. CC-086-03 (NCTD, Pulgas to San Onofre double tracking at the north end of Camp Pendleton).
22. CC-058-02 (City of Santa Barbara, modifications to Santa Barbara Airport).
23. CC-029-02 (NCTD, Oceanside-Escondido Railroad Project, San Diego County).
24. Coastal Development Permit No.: 6-93-106 (NCTD, Carlsbad double-tracking project).
25. Taylor, R.S. (2005). A new look at coastal sage scrub: What 70-year-old VTM plot data tell us about Southern California shrublands. USDA Forest Service General Technical Report PSW-GTR-195.
26. Rubinoff, D. (2001). Evaluating the California gnatcatcher as an umbrella species for conservation of Southern California coastal sage scrub. *Conservation Biology* 15(5): 1374-1383.
27. *Bolsa Chica Land Trust et al., v. The Superior Court of San Diego County* (1999) 71 Cal.App.4th 493, 517



LSA

LEGEND

Project Area

FIGURE 1

Exhibit 1
CC-0005-15

Poinsettia Station Improvement Project

Project Location

0 1000 2000
FEET

SOURCE: USGS 7.5' QUAD - SAN LUIS REY ('75), ENCINITAS ('75); CALIF.

R:\TYL0903\GIS\BA_Fig1_Location.mxd (8/1/2012)

SOURCE: Esri, 2015; T.Y. Lin, 2015

11/5/15

BRG CONSULTING, INC.

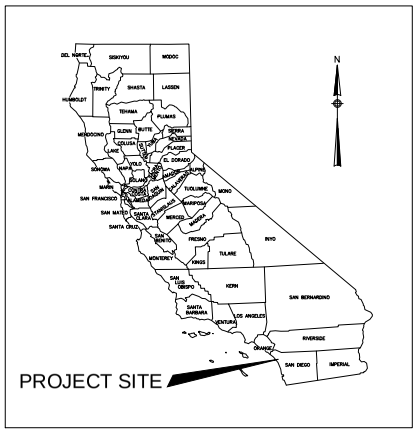
Poinsettia Station Improvement Project

Staging Areas and Access

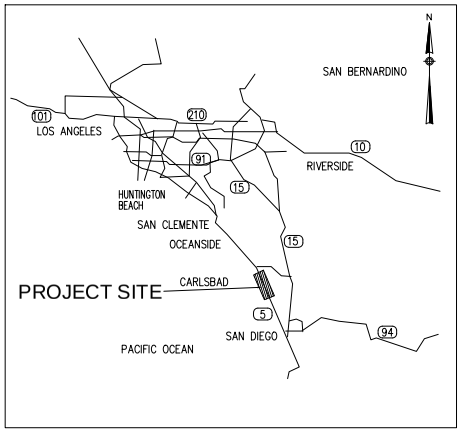
FIGURE 2

Exhibit 2
CC-0005-15
Page 1 of 1

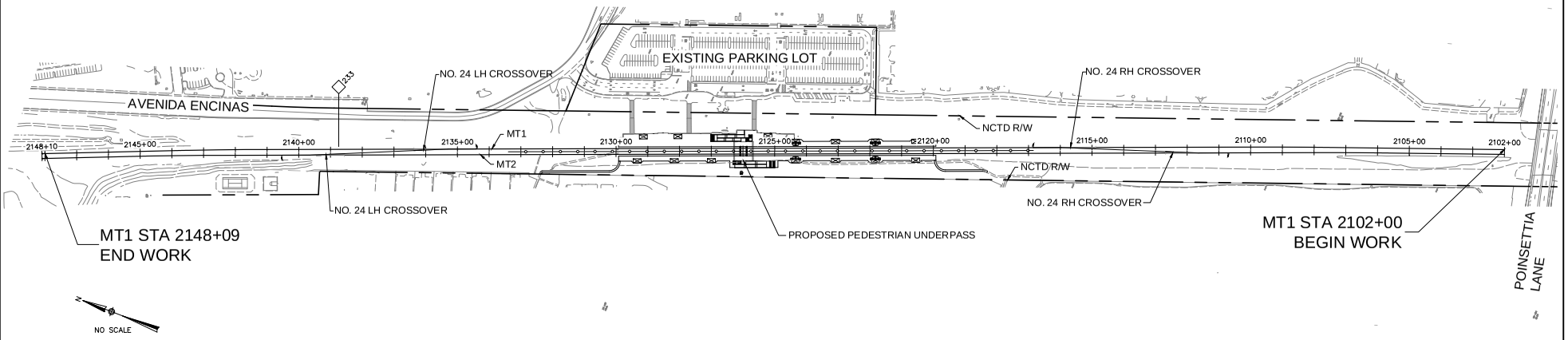
PROJECT PLANS FOR THE CONSTRUCTION OF THE POINSETTIA STATION IMPROVEMENT PROJECT
SAN DIEGO NORTHERN RAILWAY
SAN DIEGO SUBDIVISION
MP 232.8 TO MP 233.7
SAN DIEGO ASSOCIATION OF GOVERNMENTS



LOCATION MAP



VICINITY MAP



NO.	DATE	REVISIONS	BY	CHK	APRV

NCTD

TYLIN INTERNATIONAL
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REGISTERED PROFESSIONAL ENGINEER — No. ____ Exp. ____ CIVIL — STATE OF CALIFORNIA

		DATE
DESIGNED BY	P. Brand	8-15
DRAWN BY	B. Metcalfe	8-15
CHECKED BY	E. Winters	8-15
PRJ. ENG.	J. LaHaye	8-15

SANDAG
San Diego's Regional Planning Agency

POINSETTIA STATION IMPROVEMENT PROJECT

TITLE SHEET

SCALE: AS SHOWN
CONTRACT NO.: 1239805
DRAWING NO.: G-01
SHEET NO.:

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES
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Revised: August 31, 2015
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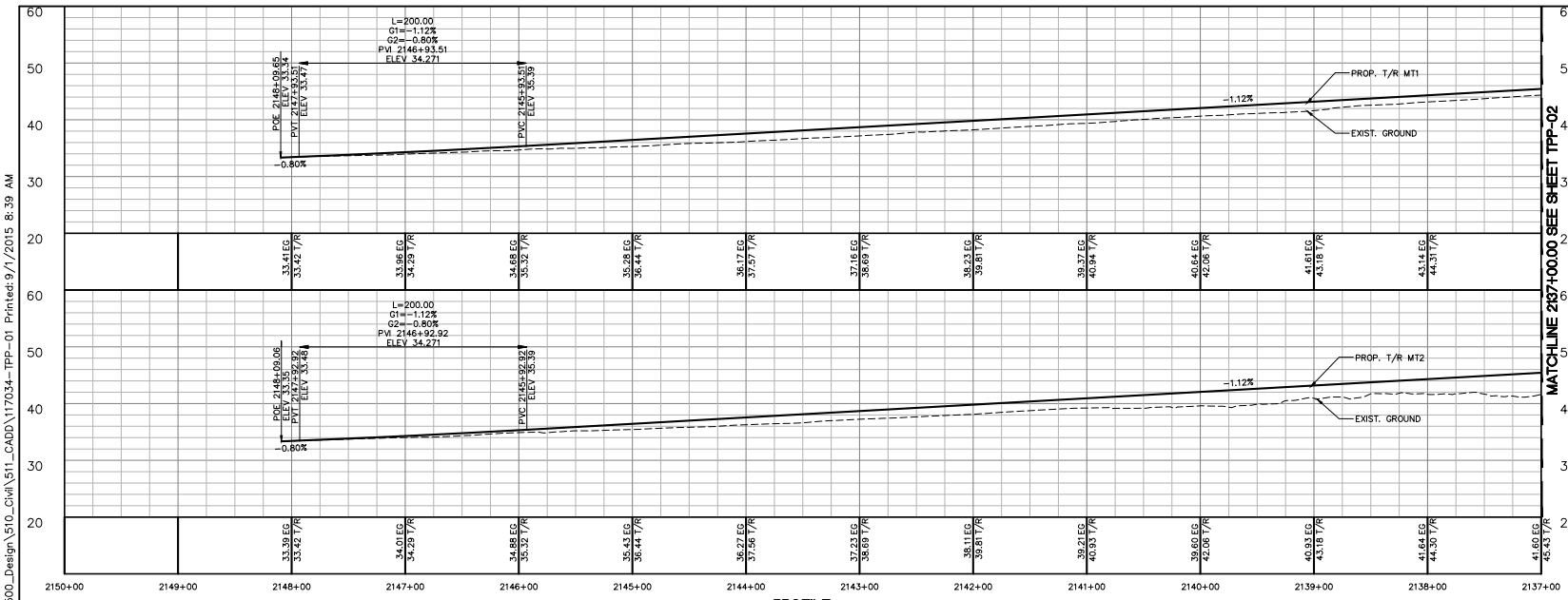
Exhibit 3
CC-0005-15
Project Plans
Page 1 of 6



PROFILE
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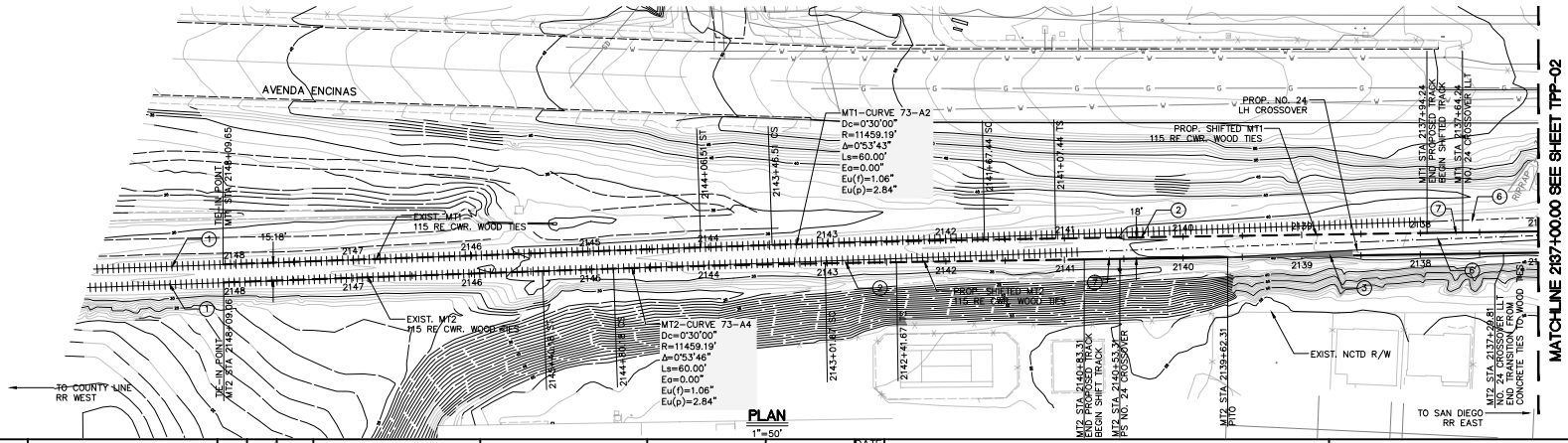
VERTICAL 1"=10'



PLAN
1"=50'

50 25 0 50 100
HORIZONTAL SCALE 1"= 50'
10 5 0 10 20
VERTICAL SCALE 1"= 10'

LEGEND:

- EXISTING TRACK
- SHIFTED TRACK (115# RAIL)
- PROPOSED TRACK (136# RAIL)
- REMOVE TRACK
- EXISTING GROUND
- PROPOSED FENCE
- PROPOSED CROSSOVER
- PROPOSED PLATFORM

GENERAL NOTES:

1. FOR TRACK GEOMETRY, SEE DRAWING DG-01.
2. FOR TYPICAL SECTIONS, SEE DRAWINGS TS-01 THROUGH TS-08.
3. FOR EARTHWORK CROSS-SECTIONS, SEE DRAWINGS XS-01 THROUGH XS-43.
4. FOR SURVEY CONTROL, SEE DRAWING SV-01.
5. FOR UTILITY INFORMATION, SEE DRAWINGS U-01 THROUGH U-04.
6. FOR INSULATED JOINTS, SEE SIGNAL SHEETS.
7. FOR SIGNAL RELOCATION PLANS AND DETAILS SEE SHEETS SC-01 THROUGH SC-05.

CONSTRUCTION NOTES:

1. SURFACE, LINE, AND DRESS EXISTING TRACK.
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   MT2 STA 2148+09.06 TO 2149+09.06
2. SHIFT EXISTING TRACK.
   MT1 STA 2137+94.24 TO 2148+09.65
   MT2 STA 2140+83.31 TO 2148+09.06
3. CONSTRUCT NO. 24 LH PO CROSSOVER PER NCTD STD. PLAN 5800.
   MT1 STA 2137+00.00 TO 2137+64.24
   MT2 STA 2137+29.81 TO 2140+53.31
5. CONSTRUCT NEW TRACK, 136 CWR. CONCRETE TIES.
   MT2 STA 2137+00.00 TO 2137+29.81
6. REMOVE AND SALVAGE EXISTING TRACK (115# CWR).
   MT1 STA 2137+00.00 TO 2137+64.24
   MT2 STA 2137+00.00 TO 2140+53.31
7. INSTALL 115#/136# TRANSITION RAILS ON NEW CONCRETE TIES PER SCRRA STD. PLAN 2372

NO.	DATE	REVISIONS	BY	CHK	APRV

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DRAWN BY	B. Metcalfe	8-15
CHECKED BY	E. Winters	8-15
PRJ. ENG.	J. LaHaye	8-15

SANDAG
San Diego's Regional Planning Agency

POINSETTIA STATION IMPROVEMENT PROJECT

TRACK PLAN AND PROFILE
STA 2137+00 TO STA 2148+09

SCALE: AS SHOWN
CONTRACT NO.: 1239805
DRAWING NO.: TPP-01
SHEET NO.:

FOR REDUCED PLANS
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Revised: August 31, 2015
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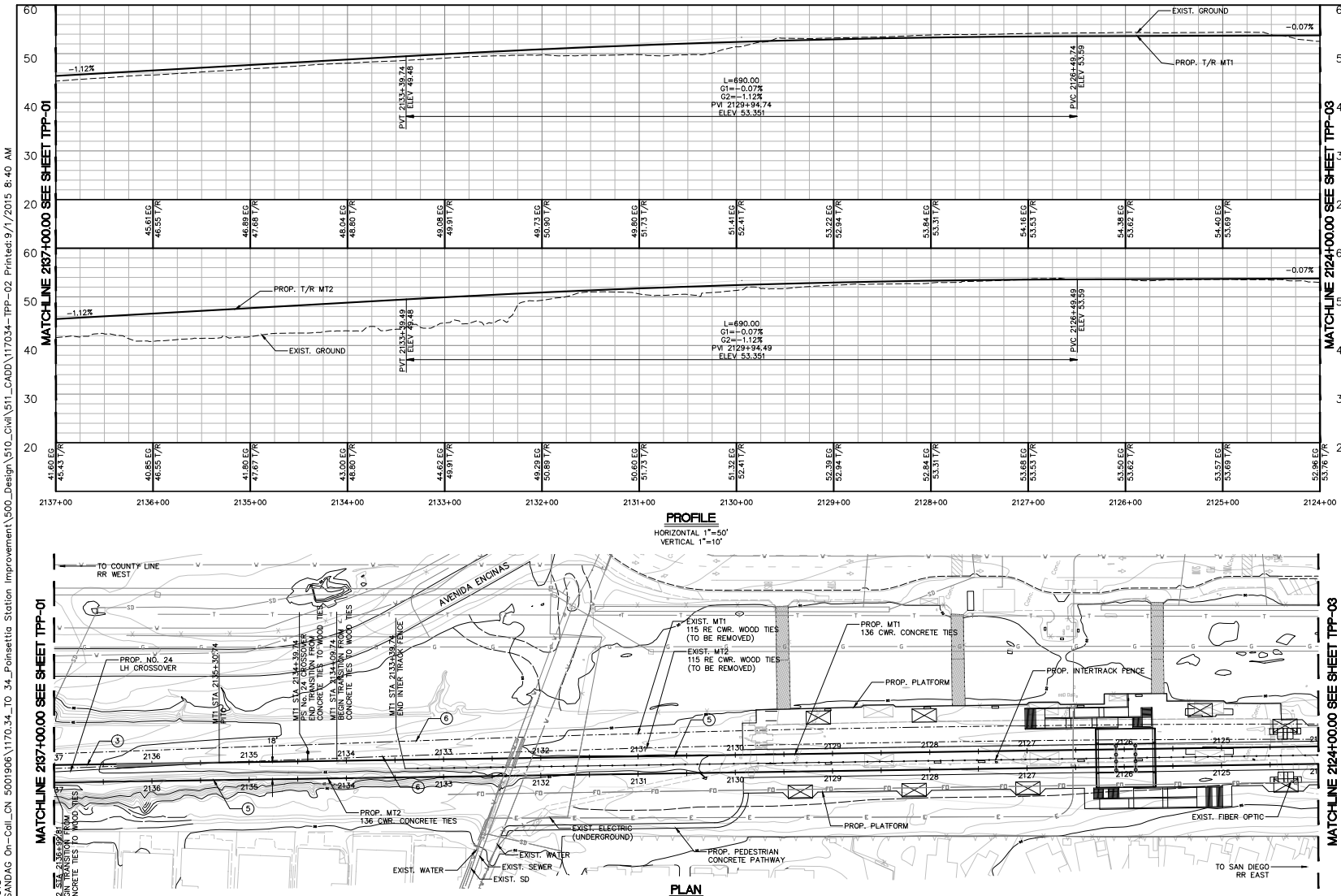
Exhibit 3
CC-0005-15
Project
Plans
Page 2 of 6



PROFILE
HORIZONTAL 1"=50'
VERTICAL 1"=10'

PLAN
1"=50'

HORIZONTAL SCALE 1"= 50'
VERTICAL SCALE 1"= 10'

LEGEND:

- EXISTING TRACK
- SHIFTED TRACK (115# RAIL)
- PROPOSED TRACK (136# RAIL)
- REMOVE TRACK
- EXISTING GROUND
- PROPOSED FENCE
- PROPOSED CROSSOVER
- PROPOSED PLATFORM

GENERAL NOTES:

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4. FOR SURVEY CONTROL, SEE DRAWING SV-01.
5. FOR UTILITY INFORMATION, SEE DRAWINGS U-01 THROUGH U-04.
6. FOR INSULATED JOINTS, SEE SIGNAL SHEETS.
7. FOR SIGNAL RELOCATION PLANS AND DETAILS SEE SHEETS SC-01 THROUGH SC-05.

CONSTRUCTION NOTES:

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MT1 STA 2134+39.74 TO 2137+00.00

(5) CONSTRUCT NEW TRACK, 136 CWR. CONCRETE TIES.
MT1 STA 2124+00.00 TO 2134+39.74
MT2 STA 2124+00.00 TO 2137+00.00

(6) REMOVE AND SALVAGE EXISTING TRACK (115# CWR).
MT1 STA 2124+00.00 TO 2137+00.00
MT2 STA 2124+00.00 TO 2137+00.00

NO.	DATE	REVISIONS	BY	CHK	APRV

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DRAWN BY	B. Metcalfe	8-15
CHECKED BY	E. Winters	8-15
PRJ. ENG.	J. LaHaye	8-15

SANDAG
San Diego's Regional Planning Agency

POINSETTIA STATION IMPROVEMENT PROJECT

TRACK PLAN AND PROFILE
STA 2124+00 TO STA 2137+00

SCALE: AS SHOWN
CONTRACT NO.: 1239805
DRAWING NO.: TPP-02
SHEET NO.:

FOR REDUCED PLANS
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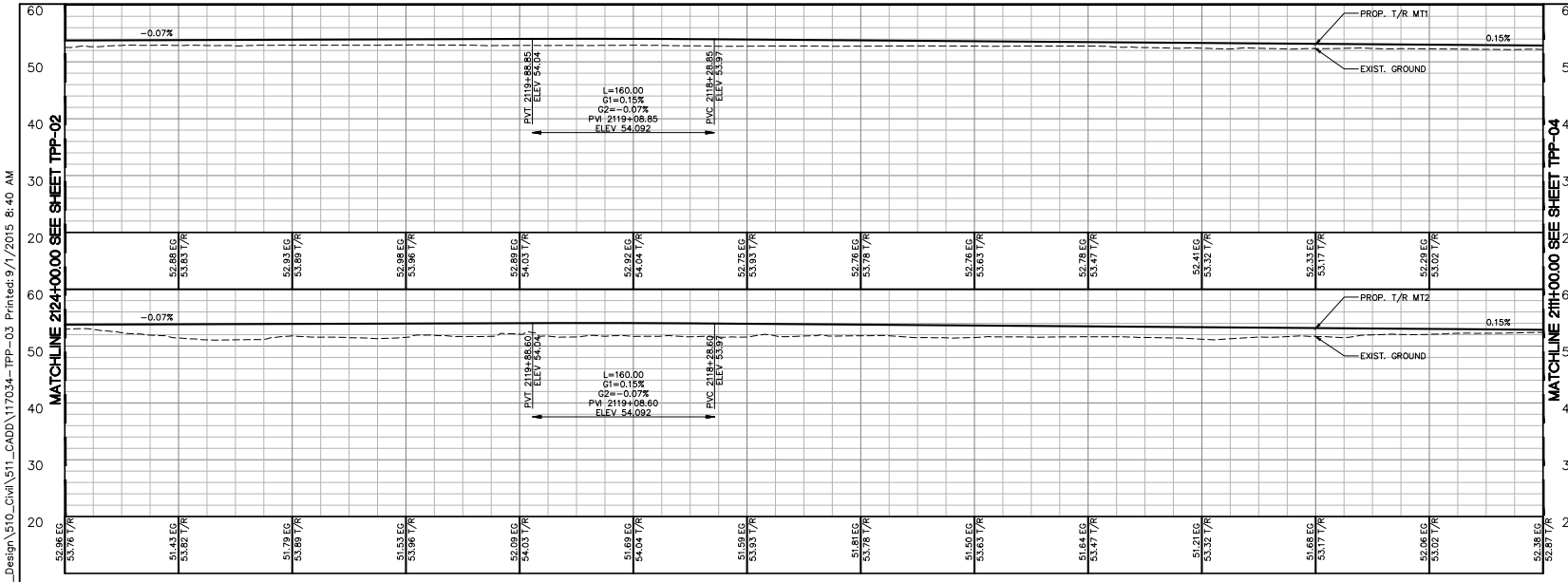
Exhibit 3
CC-0005-15
Project
Plans
Page 3 of 6



PROFILE
HORIZONTAL 1"=50'
VERTICAL 1"=10'

LEGEND:

- EXISTING TRACK
- SHIFTED TRACK (115# RAIL)
- PROPOSED TRACK (136# RAIL)
- REMOVE TRACK
- EXISTING GROUND
- PROPOSED FENCE
- PROPOSED CROSSOVER
- PROPOSED PLATFORM

GENERAL NOTES:

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5. FOR UTILITY INFORMATION, SEE DRAWINGS U-01 THROUGH U-04.
6. FOR INSULATED JOINTS, SEE SIGNAL SHEETS.
7. FOR SIGNAL RELOCATION PLANS AND DETAILS SEE SHEETS SC-01 THROUGH SC-05.

CONSTRUCTION NOTES:

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(4) CONSTRUCT NO. 24 RH PO CROSSOVER PER NCTD STD. PLAN 5800.
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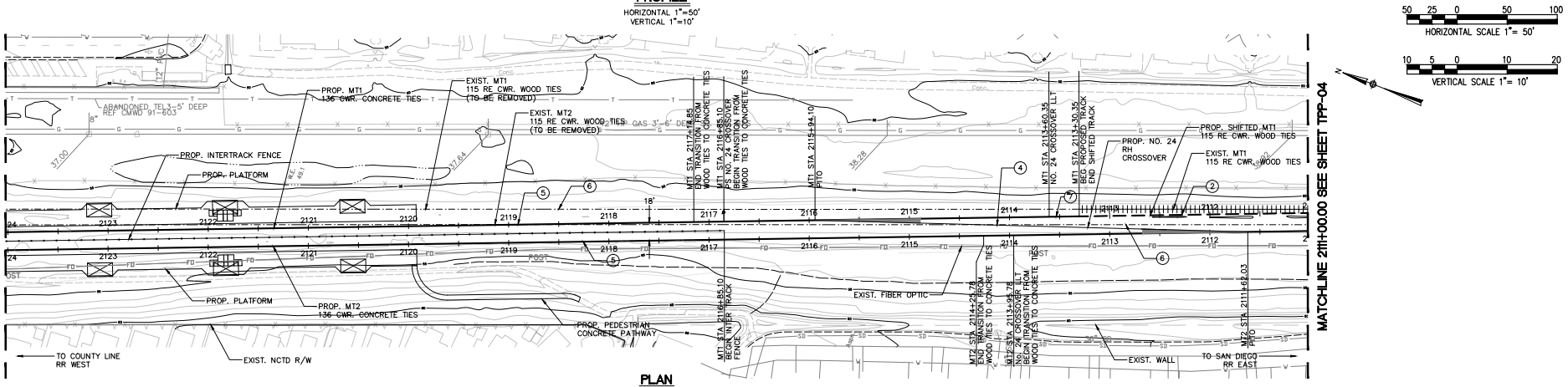
(5) CONSTRUCT NEW TRACK, 136 CWR. CONCRETE TIES.
MT1 STA 2116+84.85 TO 2124+00.00
MT2 STA 2113+95.78 TO 2124+00.00

(6) REMOVE AND SALVAGE EXISTING TRACK (115# CWR).
MT1 STA 2113+60.35 TO 2124+00.00
MT2 STA 2111+00.00 TO 2124+00.00

(7) INSTALL 115#/136# TRANSITION RAILS ON NEW CONCRETE TIES PER SCRRA STD. PLAN 2372.



PLAN
1"=50'

50 25 0 50 100
HORIZONTAL SCALE 1"= 50'

10 5 0 10 20
VERTICAL SCALE 1"= 10'

NO.	DATE	REVISIONS	BY	CHK	APRV

NCTD

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CHECKED BY	E. Winters	8-15
PRJ. ENG.	J. LaHaye	8-15

SANDAG
San Diego's Regional Planning Agency

POINSETTIA STATION IMPROVEMENT PROJECT

TRACK PLAN AND PROFILE
STA 2111+00 TO STA 2124+00

SCALE: AS SHOWN
CONTRACT NO.: 1239805
DRAWING NO.: TPP-03
SHEET NO.:

FOR REDUCED PLANS
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Revised: August 31, 2015
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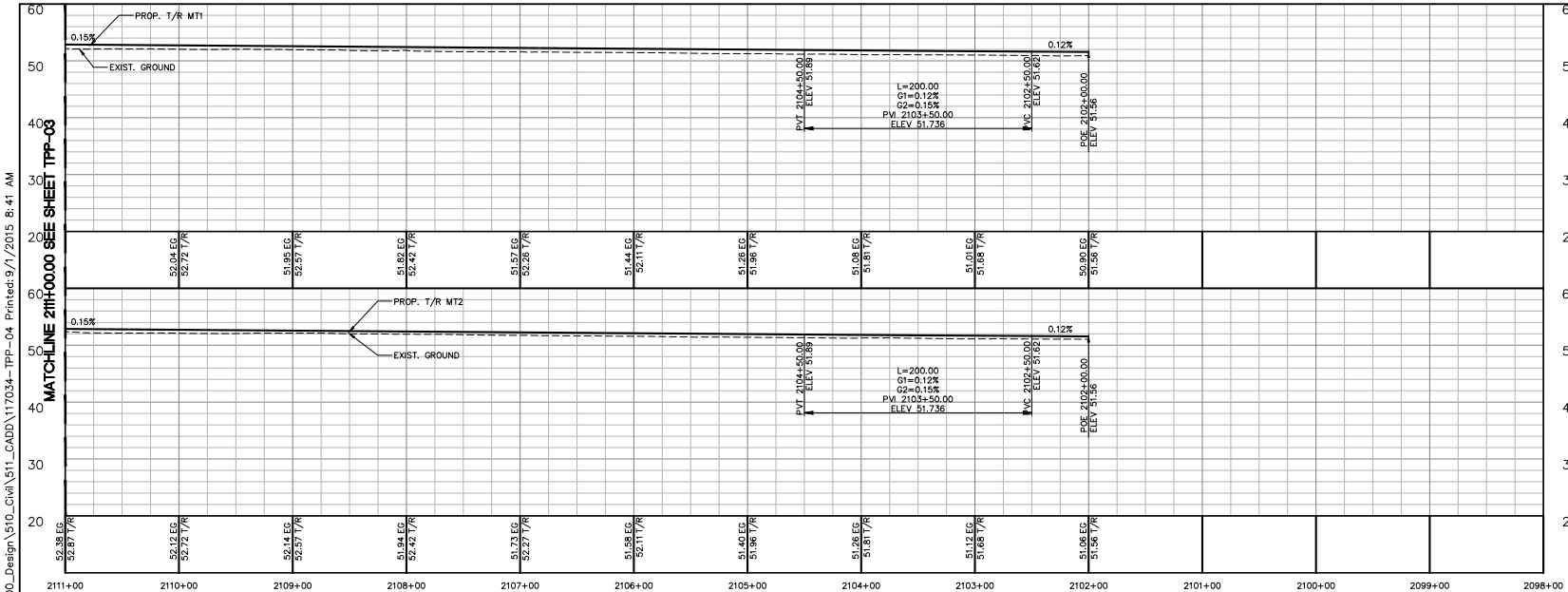
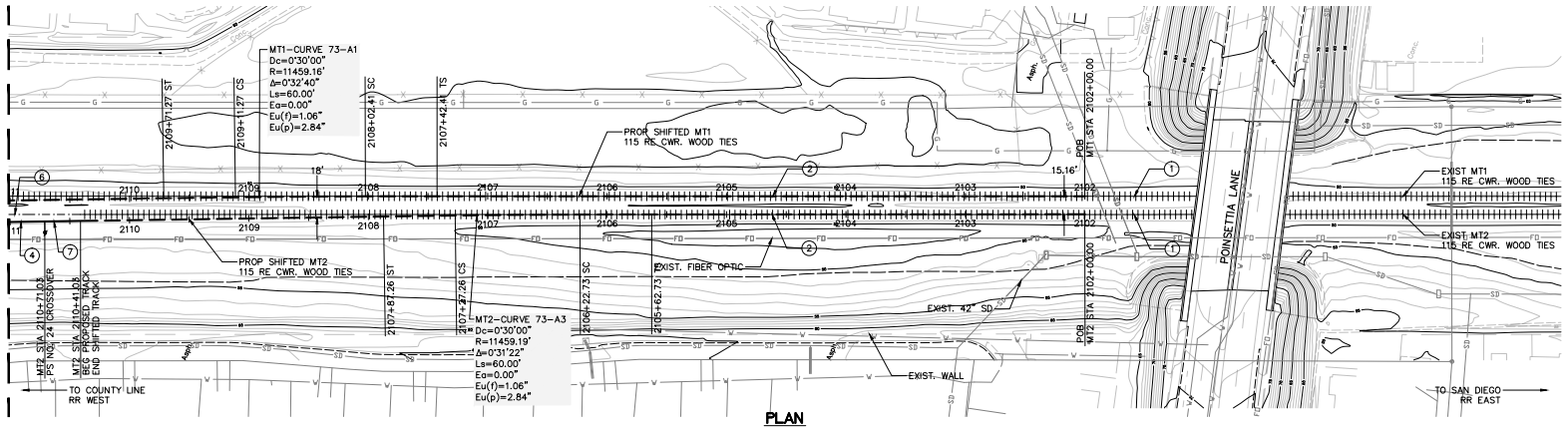
Exhibit 3
CC-0005-15
Project
Plans
Page 4 of 6



PROFILE

HORIZONTAL 1"=50'
VERTICAL 1"=10'



PLAN

1"=50'

LEGEND:

- EXISTING TRACK
- SHIFTED TRACK (115# RAIL)
- PROPOSED TRACK (136# RAIL)
- REMOVE TRACK
- EXISTING GROUND
- PROPOSED FENCE
- PROPOSED CROSSOVER
- PROPOSED PLATFORM

GENERAL NOTES:

1. FOR TRACK GEOMETRY, SEE DRAWING DG-01.
2. FOR TYPICAL SECTIONS, SEE DRAWINGS TS-01 THROUGH TS-08.
3. FOR EARTHWORK CROSS-SECTIONS, SEE DRAWINGS XS-01 THROUGH XS-43.
4. FOR SURVEY CONTROL, SEE DRAWING SV-01.
5. FOR UTILITY INFORMATION, SEE DRAWINGS U-01 THROUGH U-04.
6. FOR INSULATED JOINTS, SEE SIGNAL SHEETS.
7. FOR SIGNAL RELOCATION PLANS AND DETAILS SEE SHEETS SC-01 THROUGH SC-05.

CONSTRUCTION NOTES:

1. SURFACE, LINE, AND DRESS EXISTING TRACK.
   MT1 STA 2101+00.00 TO 2102+00.00
   MT2 STA 2101+00.00 TO 2102+00.00
2. SHIFT EXISTING TRACK.
   MT1 STA 2102+00.00 TO 2111+00.00
   MT2 STA 2102+00.00 TO 2110+41.03
4. CONSTRUCT NO. 24 RH PO CROSSOVER PER NCTD STD. PLAN 5800.
   MT2 STA 2110+71.03 TO 2111+00.00
6. REMOVE AND SALVAGE EXISTING TRACK (115# CWR).
   MT1 STA 2113+60.35 TO 2137+64.24
   MT2 STA 2110+71.03 TO 2140+54.31
7. INSTALL 115#/136# TRANSITION RAILS ON NEW CONCRETE TIES PER SORRA STD. PLAN 2372.

50 25 0 50 100
HORIZONTAL SCALE 1"= 50'

10 5 0 10 20
VERTICAL SCALE 1"= 10'

NO.	DATE	REVISIONS	BY	CHK	APRV

NCTD

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		DATE
DESIGNED BY	P. Brand	8-15
DRAWN BY	B. Metcalfe	8-15
CHECKED BY	E. Winters	8-15
PRJ. ENG.	J. LaHaye	8-15

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POINSETTIA STATION IMPROVEMENT PROJECT

TRACK PLAN AND PROFILE
STA 2102+00 TO STA 2111+00

SCALE: AS SHOWN
CONTRACT NO.: 1239805
DRAWING NO.: TPP-04
SHEET NO.:

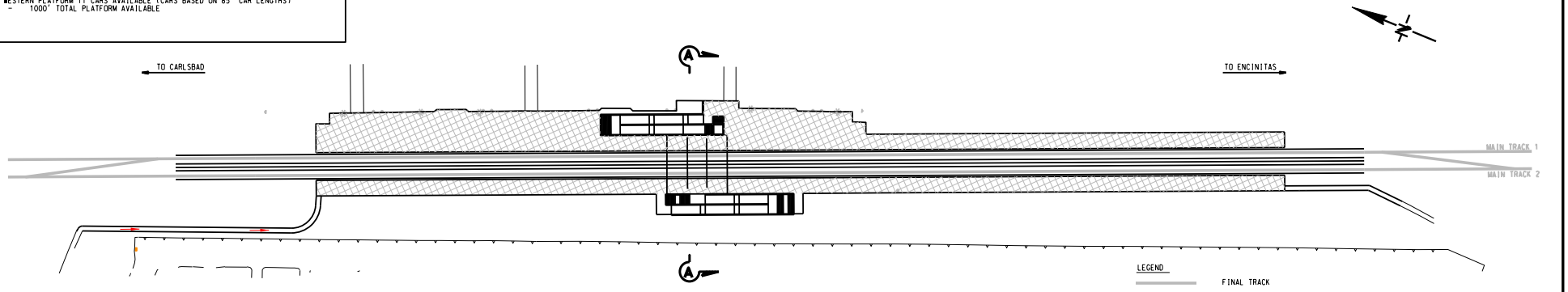
FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES
0 1 2 3

Revised: August 31, 2015
Path: P:\1150\1170_SANDAG On-Call_CN 5001906\1170.34_TO 34_Poinsettia Station Improvement\500_Design\510_Civil\511_CADD\117034-TPP-04 Printed:9/1/2015 8:41 AM

Exhibit 3
CC-0005-15
Project
Plans
Page 5 of 6

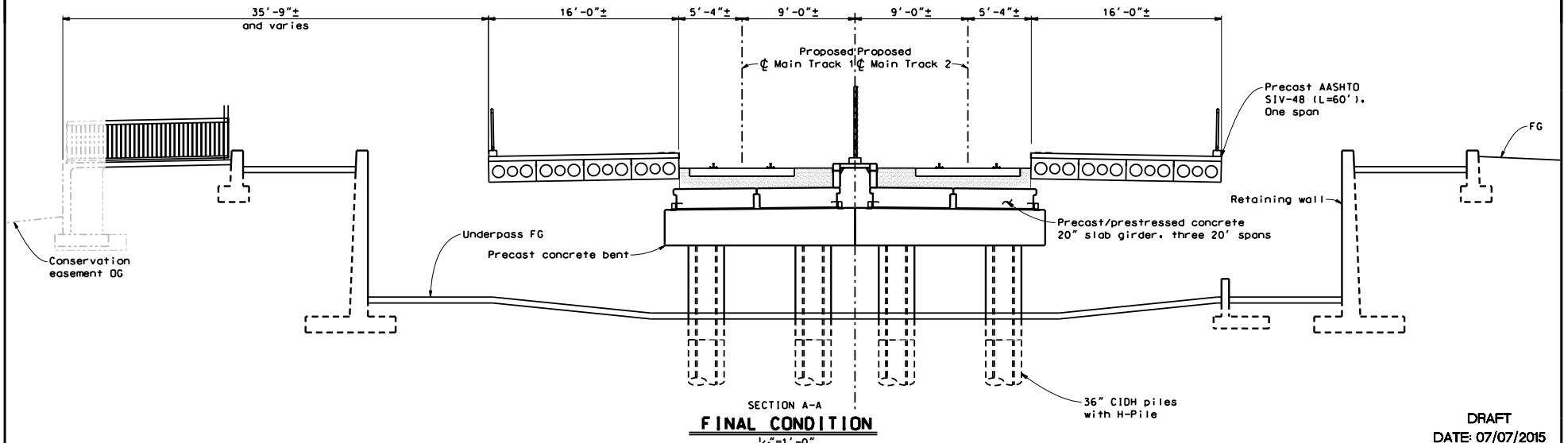
NEW EASTERN PLATFORM 11 CARS AVAILABLE (CARS BASED ON 85' CAR LENGTHS)
- 1000' TOTAL PLATFORM AVAILABLE

NEW WESTERN PLATFORM 11 CARS AVAILABLE (CARS BASED ON 85' CAR LENGTHS)
- 1000' TOTAL PLATFORM AVAILABLE



FINAL CONDITION

SCALE 1"= 50'



SECTION A-A

FINAL CONDITION

1/4"=1'-0"

DRAFT
DATE: 07/07/2015

NO.	DATE	REVISIONS	BY	CHK	APRV

NCTD

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	DATE
DESIGNED BY P. Brand	-
DRAWN BY B. Metcalfe	-
CHECKED BY P.Brand	-
PRJ. ENG. J. LaHaye	-

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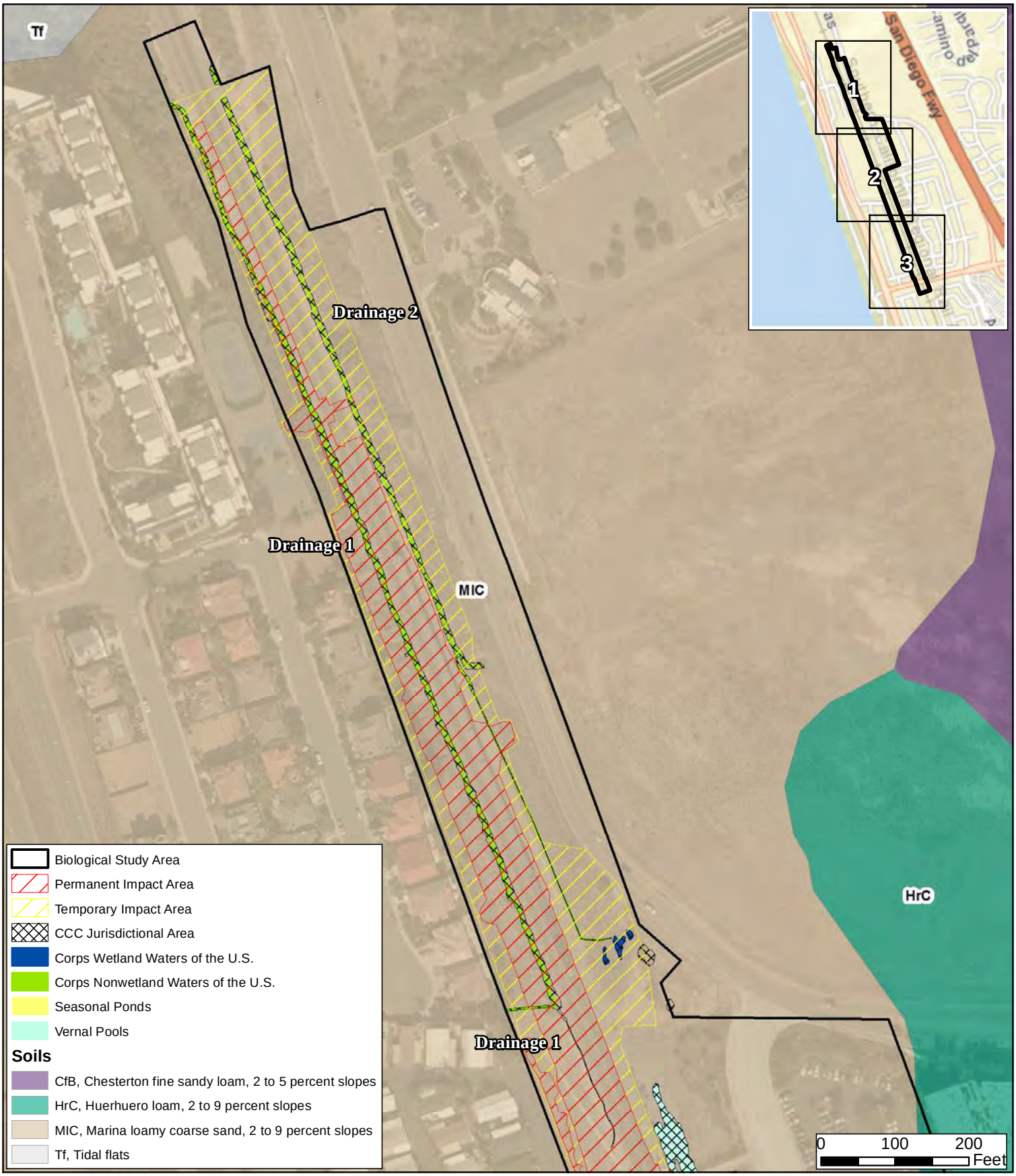
POINSETTIA STATION IMPROVEMENT PROJECT

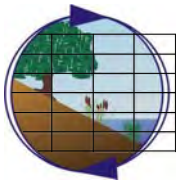
PHASING LAYOUT FINAL

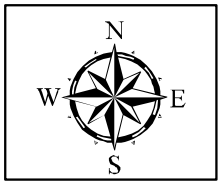
SCALE	
AS SHOWN	
CONTRACT NO. 1239805	
DRAWING NO. PP-11	SHEET NO.

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES 0 1 2 3

Exhibit 3
CC-0005-15
Project
Plans
Page 6 of 6



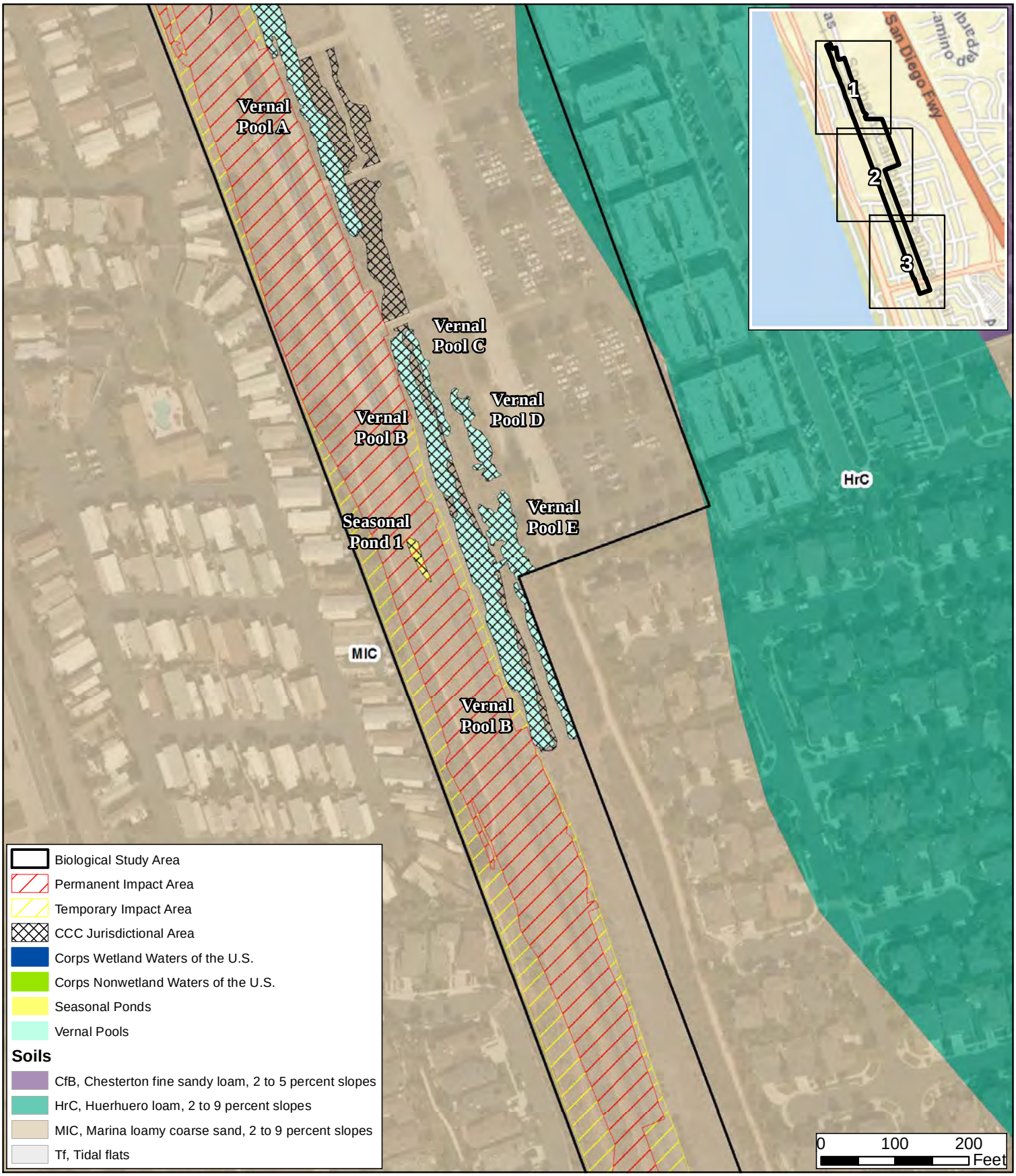


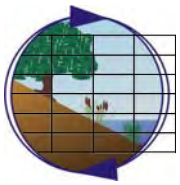


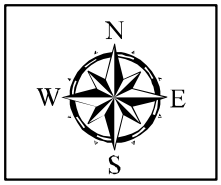
Potentially Jurisdictional Features and Soils

Poinsettia Station Improvements Project

Exhibit 4
CC-0005-15
Sheet 1 of 3
Wetlands



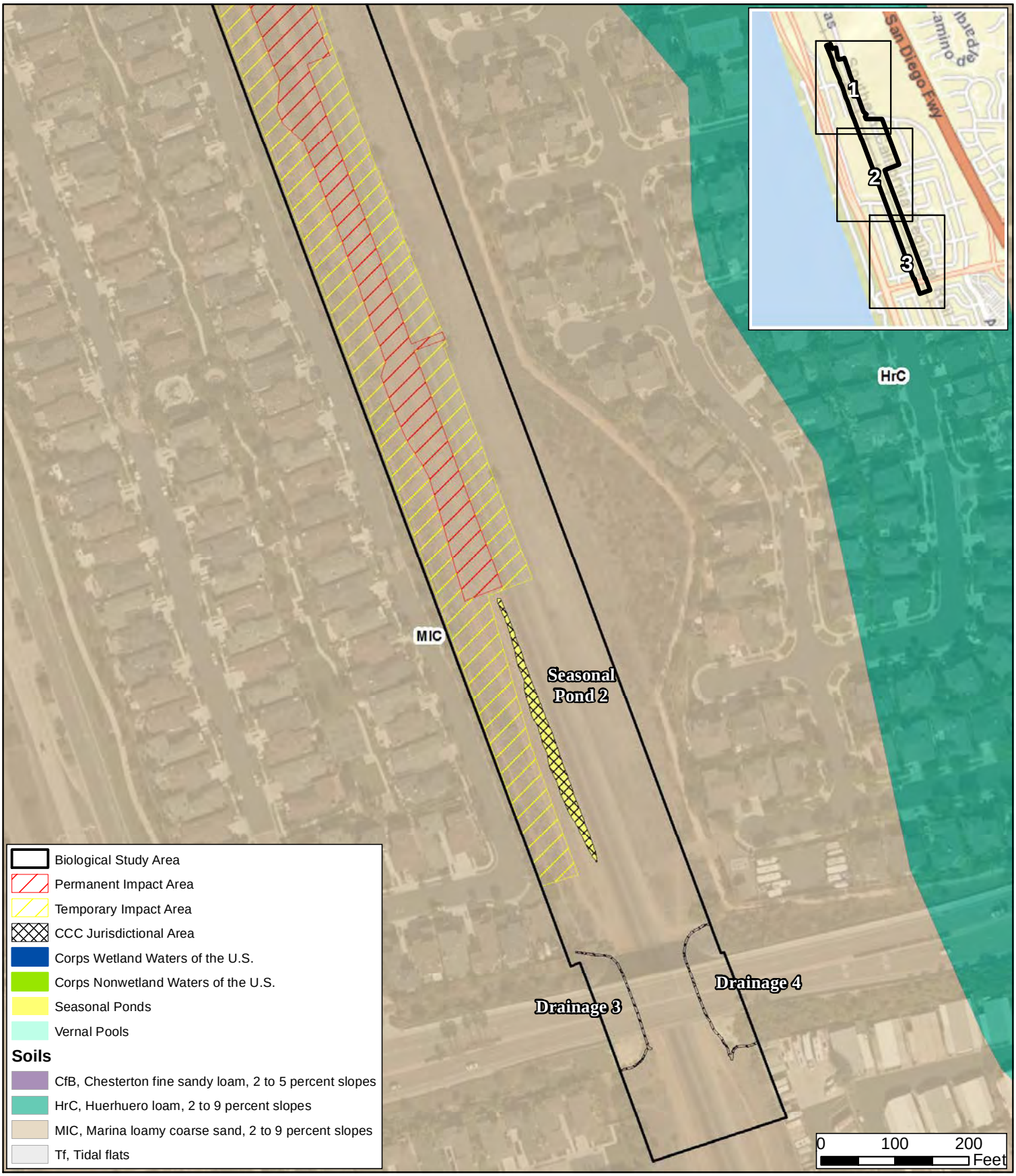


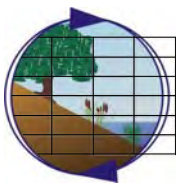


Potentially Jurisdictional Features and Soils

Poinsettia Station Improvements Project

Exhibit 4
CC-0005-15
Sheet 2 of 3
Wetlands





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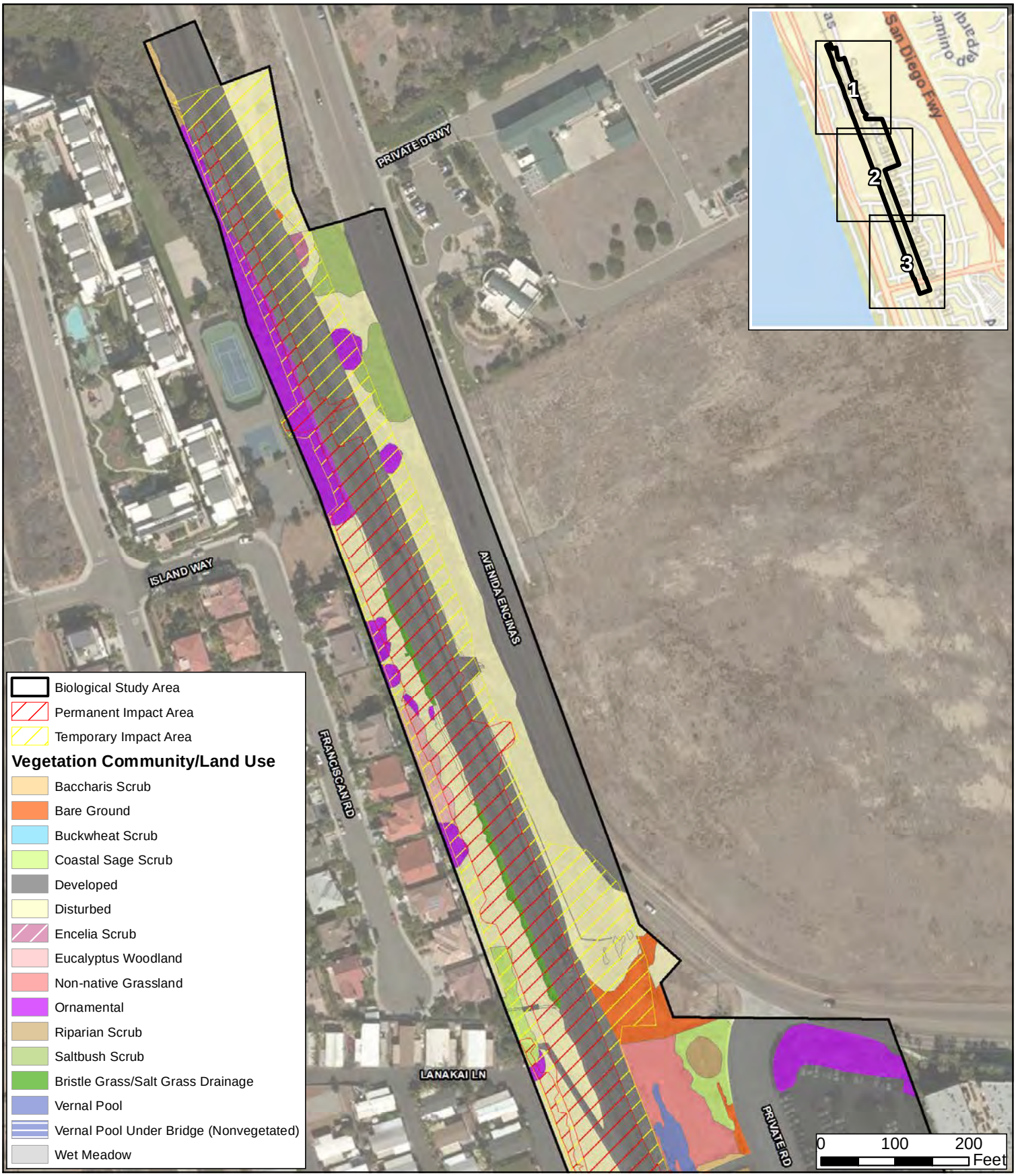
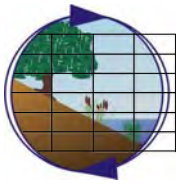
Potentially Jurisdictional Features and Soils

Poinsettia Station Improvements Project

Exhibit 4
CC-0005-15
Sheet 3 of 3
Wetlands





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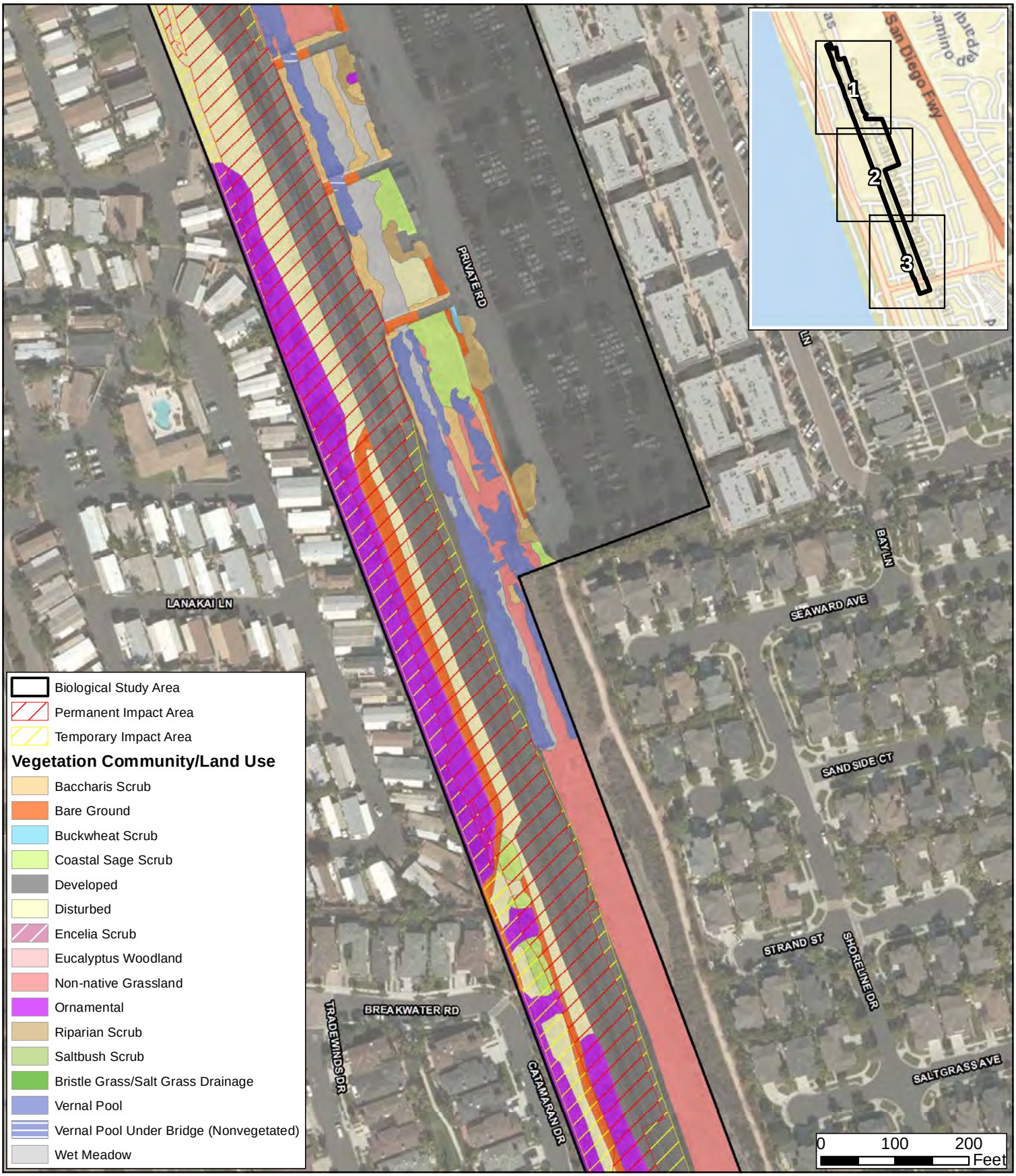
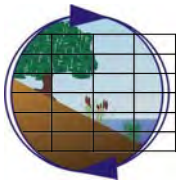
Vegetation Communities within the Biological Study Area

Poinsettia Station Improvements Project

Exhibit 5
CC-0005-15
Sheet 1 of 3





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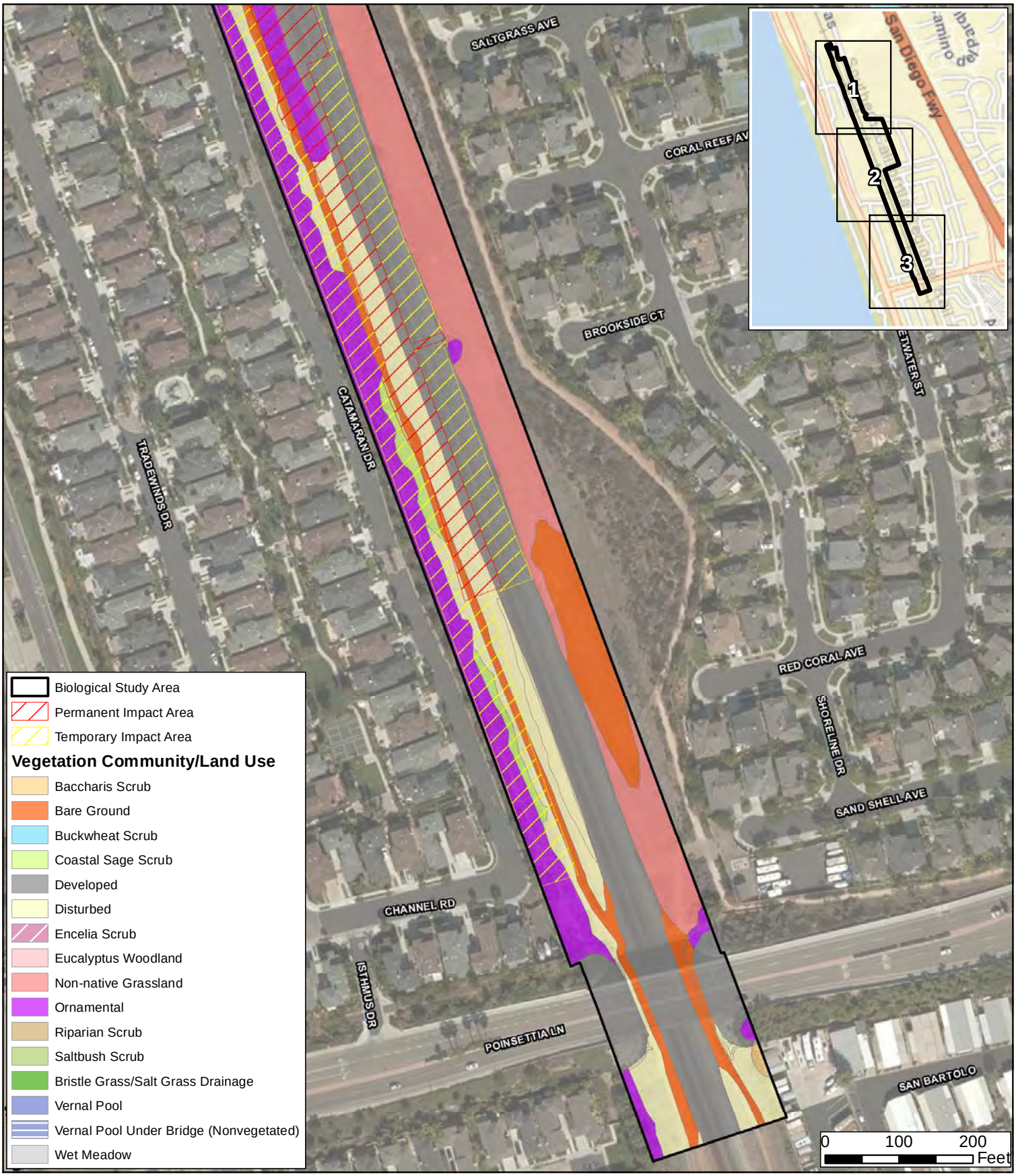
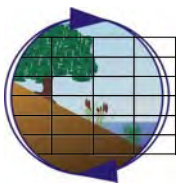
Vegetation Communities within the Biological Study Area

Poinsettia Station Improvements Project

Exhibit 5
CC-0005-15
Sheet 2 of 3





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Vegetation Communities within the Biological Study Area

Poinsettia Station Improvements Project

Exhibit 5
CC-0005-15
Sheet 3 of 3

Photo Point 1. Viewing south at Drainage 1 with bristle grass (*Setaria parviflora*), a facultative wetland species.

Photo Point 2. Viewing north at unvegetated portion of Drainage 1.

Photo Point 3. Viewing north at Drainage 2.

Photo Point 4. Viewing south at Drainage 3, concrete brow ditch located below Poinsettia Lane.

Photo Point 5. Viewing south at Drainage 4, concrete brow ditch located below Poinsettia Lane.

Photo Point 6. Viewing north at Seasonal Pond 1 following recent storm event.

Photo Point 7. Viewing northwest at Seasonal Pond 2 following recent storm event.

Photo Point 8. Viewing northwest at proposed vernal pool mitigation area.

Photograph 9. Vernal Pool A, facing south. January 26, 2010.

Photograph 10. Vernal Pools B and C, facing south. February 2, 2010.

Photograph 11. Vernal Pool D, facing southwest. February 2, 2010.

Photograph 12. Vernal Pools E and F, facing southwest. January 26, 2010.

LSA

FIGURE 3
Sheet 3 of 4

Poinsettia Station
Improvement Project
Site Photographs

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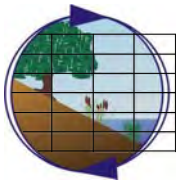
Exhibit 6
CC-0005-15
Site Photos
Page 5 of 5



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Proposed Mitigation Sites

Poinsettia Station Improvements Project

Exhibit 7
CC-0005-15
On-Site Mitigation
Page 1 of 2

VERNAL POOL CREATION SITE NOTES:

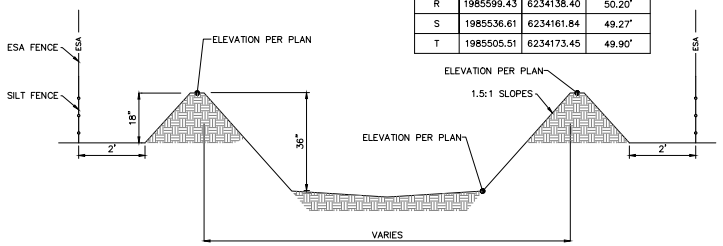
1. Benchmark Establishment: The project biologist will establish a permanent benchmark location for use in construction and monitoring. The benchmark is to be located immediately south of the proposed creation area at a manhole in a utility ROW. All rough and final grading elevations shall be made relative to this elevation.
2. Boundary Marking: The margins of the proposed vernal pool creation site will be staked using GPS equipment (minimum 3 foot accuracy). Soils within the proposed vernal pool will then be evaluated for textural stratigraphy and presence/absence of pockets or locations of highly permeable soils. The boundaries of all other existing natural features to be protected (i.e., adjacent drainages and wetlands) and existing utilities (high pressure gas line, sewer lines, fiber optic cable, etc.) will also be staked and protected with construction fencing or similar materials as needed for the duration of all construction work. No operation or storage of any construction equipment or materials will be allowed outside of the delineated work area.
3. Topsoil Salvage: Existing topsoil (the top 3 to 4 inches) within the vernal pool will be salvaged and stockpiled for placement within the created vernal pool, subject to USFWS approval.
4. Rough Grading. The vernal pool creation site will be excavated to a depth of approximately 2–3 inches below the finish design bottom and side slope elevations. The on-site biologist will make minor grade adjustments as needed to attain the range of variation required by the plans. The biologist will make the final elevation determinations based on measured depths of the existing vernal pools. Additional compaction activities will be conducted as needed to obtain at least 90 percent relative compaction for the bottom of the created vernal pool basin. During the grading process, use of a laser level will regularly ensure that approximate design elevations and slopes are achieved.
5. Water Verification. A minimum of 6 inches of water will be pumped into the graded vernal pool basin after rough grading and prior to the rainy season to test for water retention capacity and duration. If water is lost at a rate in excess of what would be expected under normal pan evaporation rates, then additional clay soils will be added and/or additional compaction will be conducted, and the created vernal pool basin will be subsequently retested.
6. Final Grading. Following spreading of topsoils, site grading will be conducted using light equipment to establish a final micro-topography consistent with designed variations in elevation and depth. Grades will be surveyed to ensure consistency with the design specifications. The biologist will make the final determination as to the acceptability of final grade.
7. Site Clean-up. Following construction, all construction debris and existing trash will be removed from the surface of the mitigation area. Removed material (spoils) will be either properly disposed of within an authorized disposal site or will be hauled off site.

LEGEND:

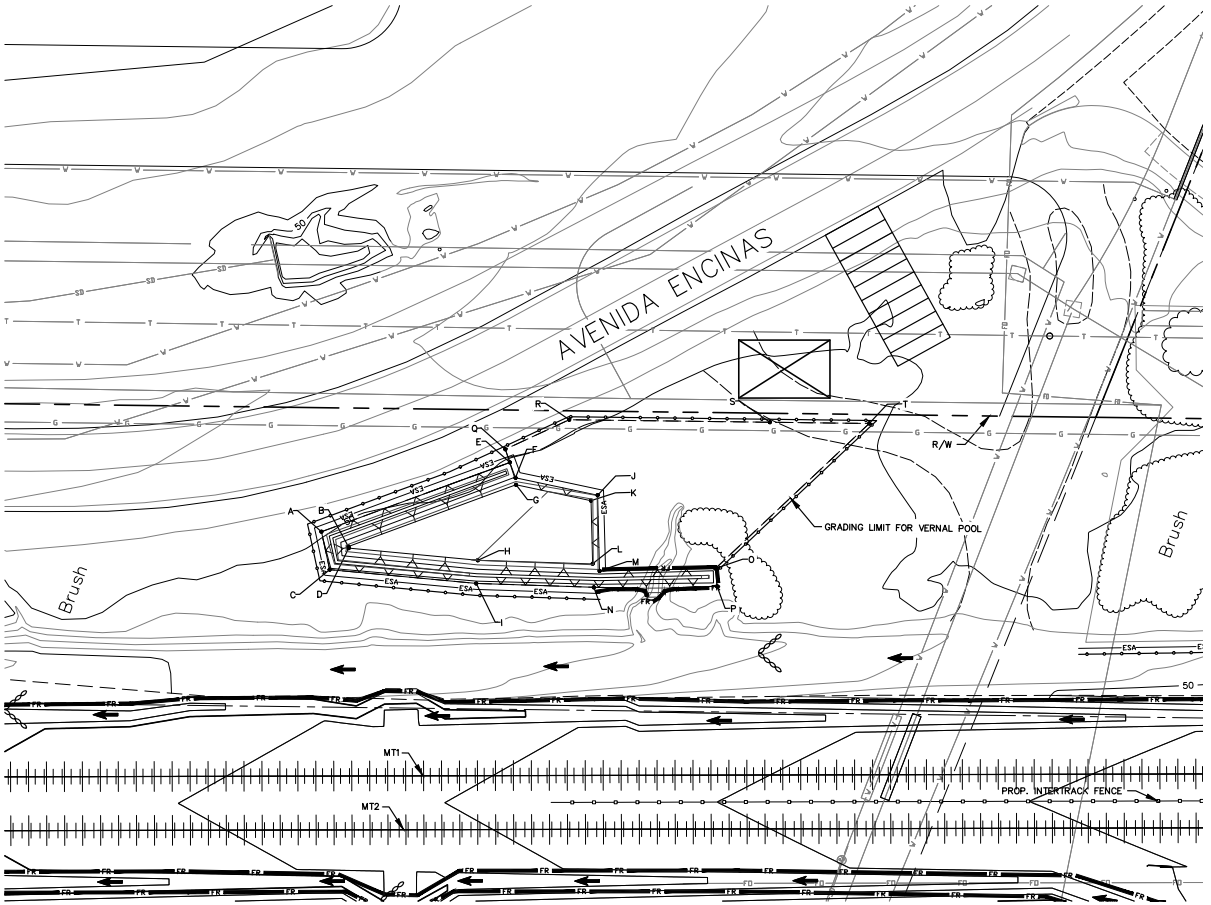
- SURFACE FLOW DIRECTION
- GRAVEL BAG BERM/CHECK DAM
- FIBER ROLLS
- SILT FENCE
- ESA FENCE
- ON GRADE TEMPORARY WASHOUT FACILITY
- TEMPORARY CONSTRUCTION ENTRANCE
- RAILROAD TRACKS
- EXISTING VERNAL POOL
- RIGHT-OF-WAY
- GRADING LIMIT

Point Table

Point	Northing	Easting	Elevation
A	1985663.12	6234073.62	50.05'
B	1985652.93	6234072.26	48.55'
C	1985655.97	6234062.79	49.69'
D	1985652.63	6234071.79	48.19
E	1985612.79	6234117.96	49.96'
F	1985609.15	6234113.84	49.82'
G	1985608.15	6234111.72	48.30'
H	1985610.97	6234083.58	48.00'
I	1985608.63	6234076.19	49.49'
J	1985581.47	6234118.33	49.10'
K	1985582.87	6234115.83	47.60'
L	1985574.73	6234096.30	47.84'
M	1985571.74	6234094.96	49.31'
N	1985571.55	6234089.16	49.34
O	1985535.93	6234109.69	49.52'
P	1985533.28	6234104.37	49.23'
Q	1985615.77	6234121.48	50.20'
R	1985599.43	6234138.40	50.20'
S	1985536.61	6234161.84	49.27'
T	1985505.51	6234173.45	49.90'



VERNAL POOL TYPICAL SECTION



VERNAL POOL PLAN

1"=20'

20 10 0 20 40

SCALE 1"= 20'

NO.	DATE	REVISIONS	BY	CHK	APRV

NCTD

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CHECKED BY	E. Winters	8-15
PRJ. ENG.	J. LaHaye	8-15

SANDAG
San Diego's Regional Planning Agency

POINSETTIA STATION IMPROVEMENT PROJECT

VERNAL POOL PLAN

SCALE: AS SHOWN
CONTRACT NO.: 1239805
DRAWING NO.: E-01
SHEET NO.:

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES
0 1 2 3

Revised: July 30, 2015
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Exhibit 7
CC-0005-15
On-Site
Mitigation
Page 2 of 2

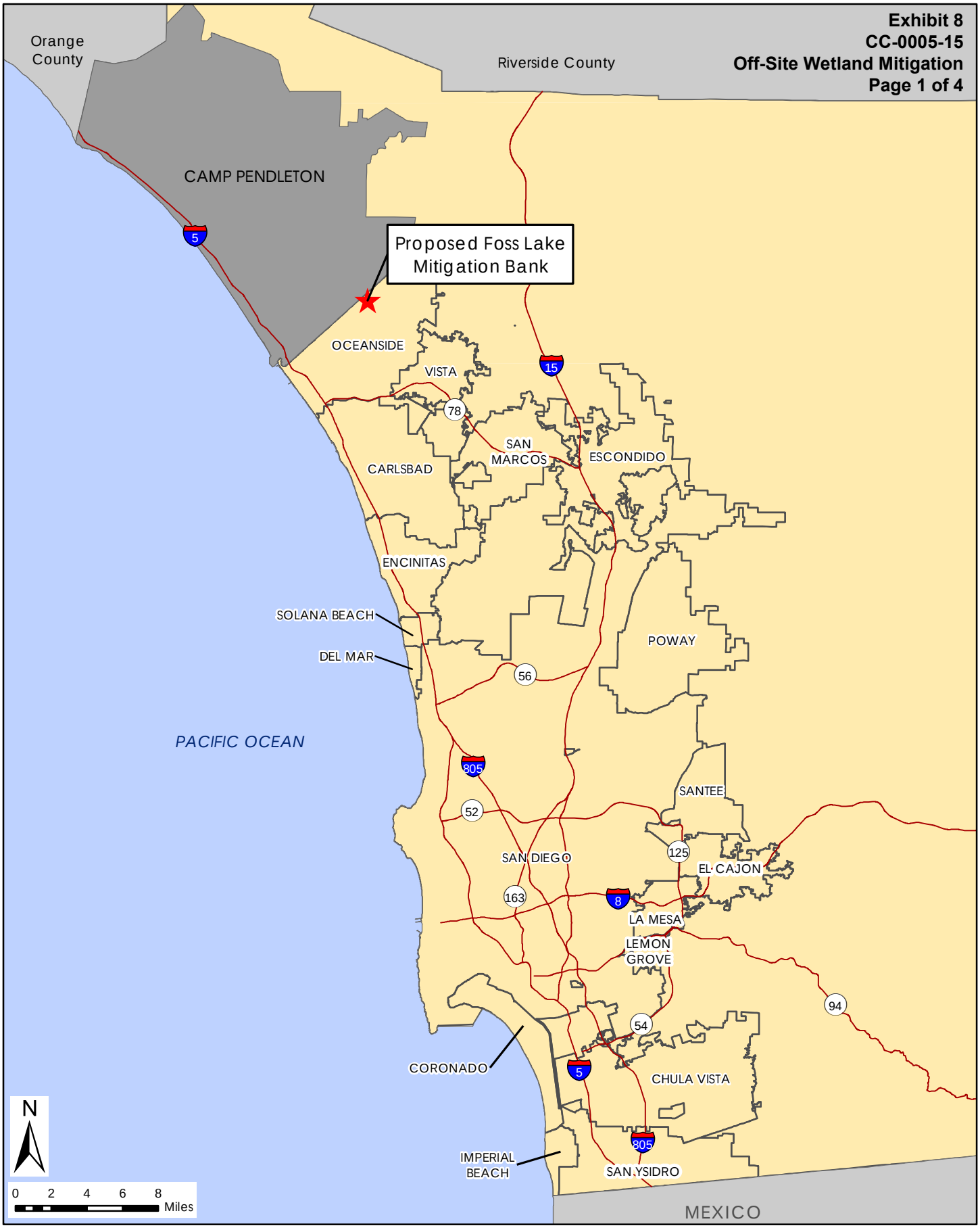

Figure 1

Regional Location

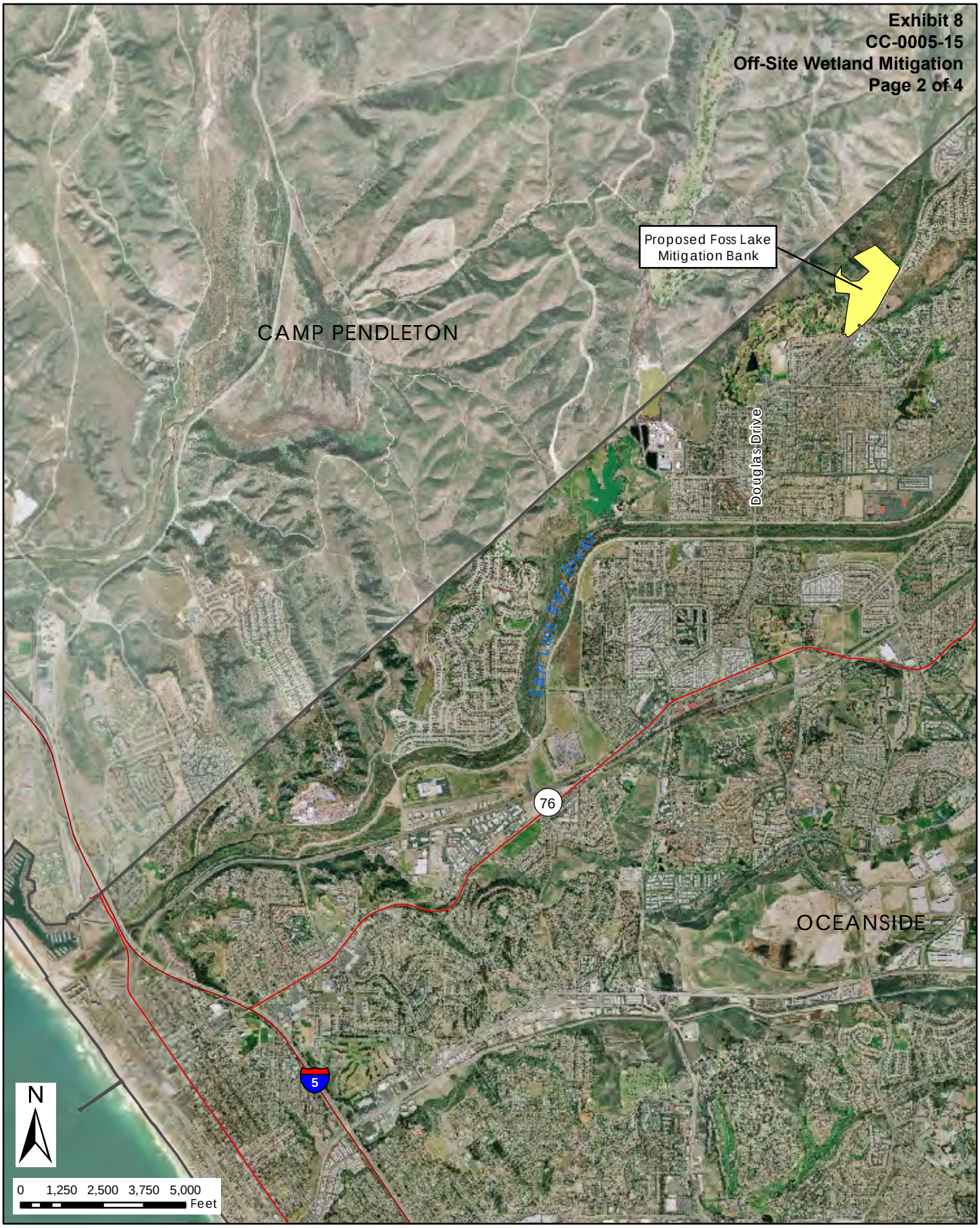

Figure 2

Project Vicinity

Foss Lake

Figure 3

Parcel Map

Foss Lake

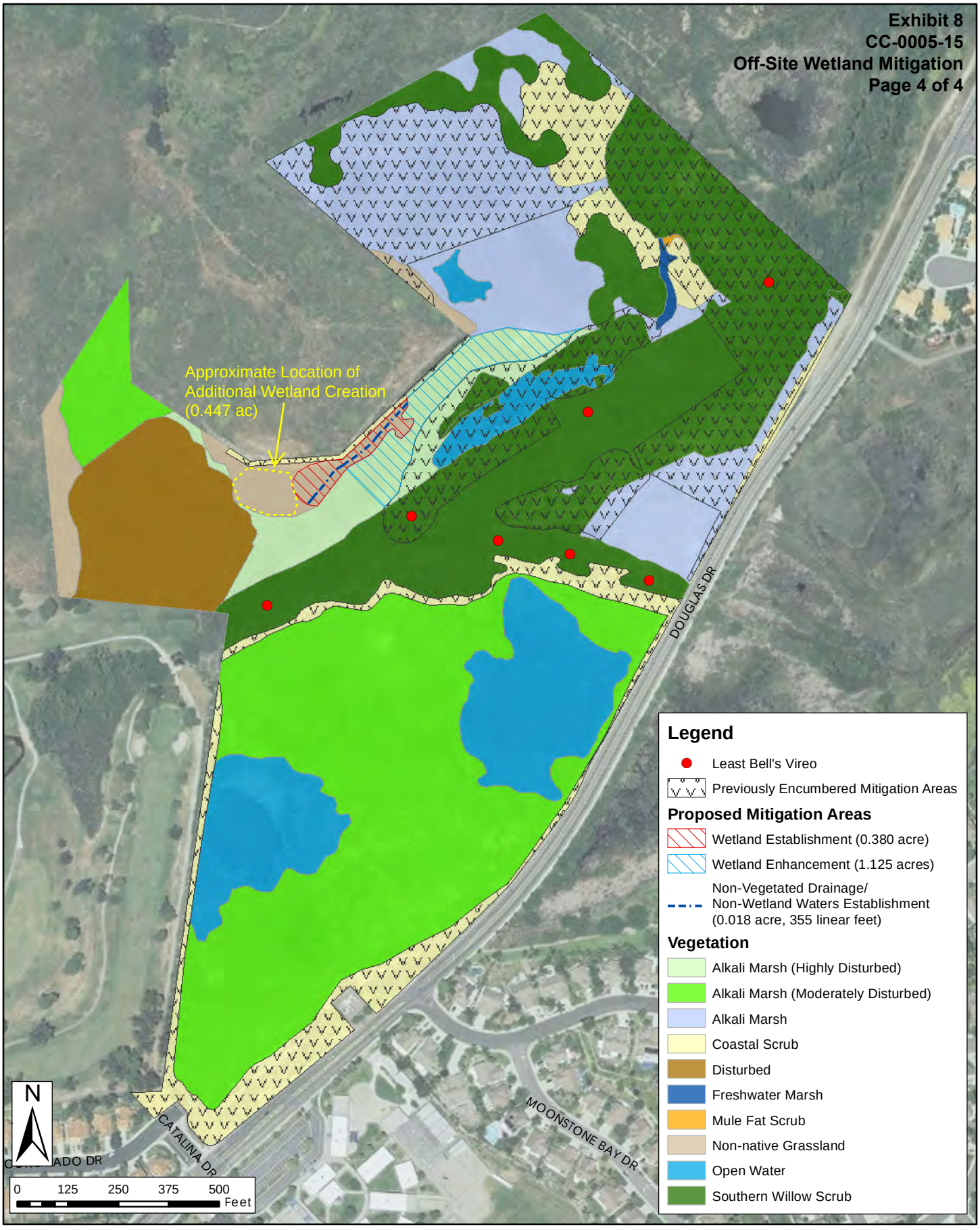

Figure 4

Existing Vegetation, Sensitive Species, and Proposed Mitigation Areas

Foss Lake

5.0 MAINTENANCE ACTIVITIES DURING THE MONITORING PERIOD

5.1 Maintenance Activities

The intent of this program is to ensure the success of the proposed wetland mitigation described in this mitigation plan. Primary maintenance activities include weed control, care of container plants, oversight and repair (if necessary) of the irrigation system (if used), erosion control, and trash removal. The maintenance contractor will provide routine maintenance of the mitigation area during the 120-day plant establishment period, and as needed throughout the 5-year monitoring period for the mitigation area, as directed by the restoration ecologist. The goal of this plan is to create functioning, self-sufficient habitats that fulfill specified performance standards during and after the monitoring period.

Invasive plant species will be controlled within the mitigation site throughout the duration of the monitoring period. The goals of the weed eradication program are to (1) comply with project and permit conditions; (2) ensure early achievement of wetland mitigation performance standards; and (3) reduce maintenance costs. At a minimum, the following weed removal methods should be included in the implementation specifications:

- Weed removal shall be performed predominantly by hand, but herbicides can be utilized under certain conditions to eradicate noxious weeds. The herbicide Aquamaster® should be acceptable in most situations and shall be applied by a licensed applicator.
- All weeds shall be removed prior to planting within the mitigation areas. Pulled weeds shall be transported off-site immediately to prevent on-site seed dispersal.
- Weed eradication shall continue during planting and seeding and during the post implementation and monitoring periods within the mitigation area, as necessary.
- Weed seedlings and sprouts within the mitigation area shall be continually removed before they attain 12 inches in height or before they produce seed, whichever is first.
- The restoration ecologist shall monitor weed eradication and exotic species removal at all times throughout the year.

Nonnative (weed) species are divided between aggressive, invasive exotics that can outcompete desirable native species if not controlled, and more benign weed species, which tend to fade away as native species become established. Invasive exotics will be eradicated wherever they occur within the mitigation areas. The restoration ecologist will coordinate with the maintenance contractor to identify weed species that must be eradicated. A licensed Pest Control Advisor will supervise the use of herbicide (e.g., for certain invasive exotics).

Maintenance of any container plants is an important aspect of the overall program. The maintenance of container plants includes maintaining weed-free planting basins until the plants are adequately established (e.g., over 4 feet high for shrubs), maintaining a proper mulch layer around the plants (when necessary), applying appropriate amounts of irrigation water if needed, and addressing disease or pest problems. All dead container plants will be replaced “in-kind” at a 1:1 ratio at 3 months, 6 months, and yearly thereafter in the fall during the monitoring period.

While not anticipated to be necessary, any temporary irrigation system will be tested by the maintenance contractor on a monthly basis throughout the first 1-year. Irrigation is not scheduled to be used beyond year 3. All necessary repairs and replacement of drip or micro-spray heads will be made in a timely manner. The irrigation schedule will provide adequate water to maximize the establishment of container plants and seeded species without creating conditions that promote

nonnative species dependent upon constant moist soil conditions. The restoration ecologist will determine the need for changes in irrigation schedules in consultation with the maintenance contractor. An accurate record of these activities will be maintained during the maintenance and monitoring period.

The maintenance contractor will control erosion within and immediately adjacent to the planting areas during the 5-year maintenance period. The restoration ecologist and maintenance contractor will determine the most effective and least damaging application of erosion control materials to address the identified problem. Appropriate erosion control materials include, but are not limited to, rice straw wattles, rolled erosion control products (e.g., jute fabric, coconut husk fabric, etc.), and/or supplemental container planting or seed application.

5.2 Schedule

Task	Occurs in/Completed by
Initial On-site Meeting after Installation	December 2003
Begin 5-Year Maintenance/Monitoring Period	January 2014
Begin 120-Day Establishment Period	January 2014
Replacement Planting (120-day)	April 2014
End 120-Day Establishment Period	April 2014
Replacement Planting (Year 1)	November 2014
Replacement Planting (Year 2)	November 2015
Shut-Off Artificial Irrigation (if applicable)	May 2016
Replacement Planting (Year 3)	November 2016
Replacement Planting (Year 4)	November 2017
Replacement Planting (Year 5)	November 2018
End of 5-Year Maintenance/Monitoring Period	December 2018

Note: Dates assume use of EMP funds for mitigation prior to construction of the rail project.

6.0 MONITORING PLAN FOR THE COMPENSATORY MITIGATION SITE

Once the restoration ecologist confirms implementation work is complete, the 5-year maintenance and monitoring program will commence. Following implementation and establishment, performance standards are expected to be achieved at the mitigation areas by the end of the first, second, third, fourth, and fifth monitoring periods. The site must be off artificial irrigation (if installed and used) for 2 years and meet all 5-year performance standards to qualify for final approval. If 5-year performance standards are met earlier and the supply of all artificial water to the site has ceased for a minimum of 2 years, the site may be considered for early approval. The restoration ecologist will determine whether these final performance standards have been met and make recommendations to the agencies for release of liability. At the end of the fifth year, a final report will be submitted that will make a recommendation as to whether the requirements of this plan have been achieved.

6.1 Performance Standards

First Year Performance Standards	
Establishment	• 30 percent absolute cover of native species • Absolute cover of exotics will not exceed 5 percent.
Enhancement	• Absolute cover of exotics will not exceed 5 percent.
Second Year Performance Standards	
Establishment	• 45 percent absolute cover of native species • Absolute cover of exotics will not exceed 5 percent.
Enhancement	• Absolute cover of exotics will not exceed 5 percent.
Third Year Performance Standards	
Establishment	• 60 percent absolute cover of native species • Absolute cover of exotics will not exceed 5 percent.
Enhancement	• Absolute cover of exotics will not exceed 5 percent.
Fourth Year Performance Standards	
Establishment	• 70 percent absolute cover of native species • Absolute cover of exotics will not exceed 5 percent.
Enhancement	• Absolute cover of exotics will not exceed 5 percent.
Fifth Year Performance Standards	
Establishment	• 80 percent absolute cover of native species • Absolute cover of exotics will not exceed 5 percent.
Enhancement	• Absolute cover of exotics will not exceed 5 percent.

Note: The absolute cover of arundo, pampas grass, tamarisk, perennial pepperweed, and palm species will be 0 (zero) percent.

6.2 Target Functions and Values

The primary objective of the wetland mitigation is to convert non-wetland and native-dominated, highly functional wetland habitat. The target functions of the wetland establishment/restoration include the increase and maintenance of hydrologic (e.g., dynamic water storage and energy dissipation), biogeochemical (e.g., nutrient cycling, detention of imported elements and compounds, organic carbon export), and habitat (e.g., characteristic plant community, spatial

structure, interspersion and connectivity) functions. The proposed mitigation is expected to provide water quality and wildlife habitat functions. Recreational values in both habitat types will be limited because the mitigation site is surrounded by private land and is not open to public use. The site will be fenced to discourage damage by trespassers, which will further limit access and recreation.

6.3 Target Hydrological Regime

The hydrologic regime of the enhancement areas will not be changed from the existing condition. The establishment areas will have a reduced depth to groundwater and longer inundation period than currently exists.

6.4 Monitoring Methods

Qualitative- Qualitative surveys will occur in March, June, September, and December of the monitoring year. Qualitative surveys comprise a general site walkover and written characterization of the mitigation planting. The restoration ecologist will make general observations of the status of any mitigation plantings and the extent of natural recruitment of native and exotic species. The restoration ecologist will also record signs of wildlife use (e.g., nesting sites, roosting sites, animal burrows, tracks, scat, birds, and other animals detected) within the mitigation areas.

During the qualitative surveys the restoration ecologist will (1) visually estimate composition and overall cover, (2) document evidence of natural recruitment, and (3) estimate container plant and cutting mortality and survivorship. The restoration ecologist will identify potential soil erosion, flood damage, vandalism, weeds, and pest problems. Plant and irrigation (if installed) maintenance needs will be recorded on standard maintenance checklists and sent to the maintenance contractor and SANDAG. The restoration ecologist must retain copies of all checklists and field notes in order to compile monitoring reports. Any problems identified by the restoration ecologist will be immediately brought to the attention of the maintenance contractor and SANDAG, with corrective measures taken within 2 weeks of identifying the problem.

Quantitative- Quantitative monitoring will occur in September of the monitoring year in the alkali marsh restoration area only. The restoration ecologist will determine the maximum number, size, and location of transects necessary to obtain a vegetation sample that provides good spatial coverage and unbiased samples of all mitigation areas and habitats; however, stratified random sampling is recommended. The restoration ecologist will establish the equivalent coverage of two 2-meter by 50-meter belt transects per acre within the mitigation site (number and position of permanent transects will be placed at the discretion of the restoration ecologist to ensure an unbiased sample). Each permanent transect must be identified on a map, staked in the field, and photographed, in order to reestablish transects should the stakes be removed. During quantitative monitoring, the restoration ecologist will record percent cover, species composition, mortality, and number of natural recruits.

Each quantitative monitoring visit will include photo documentation of each transect. Photos will be taken from the same vantage point in the same direction. All photo documentation points and directions will be mapped and included in the monitoring reports.

6.5 Monitoring Schedule and Reporting

A monitoring year begins on January 1. Quarterly visits for qualitative monitoring will occur in March, June, September, and December of each monitoring year. Quantitative monitoring will occur in September of each monitoring year. Annual monitoring reports will be submitted annually to the reviewing agencies. Annual reports will be submitted to the agencies in February of the year following the monitoring year (e.g., the report for monitoring year 2014 would be submitted in February 2015) or as otherwise required by any permits issued to SANDAG for the project.

The annual monitoring reports will be prepared in accordance with the Corps' Mitigation and Monitoring Requirements and all other permit requirements. The annual reports will include both qualitative and quantitative data, along with photos from established photo points. The annual monitoring reports will also include the following:

- A list of names, titles, and companies of all persons who participated in monitoring activities and contributed to report preparation.
- A copy of any relevant communications and/or subsequent letters of modification pertaining to the mitigation project attached as an appendix.
- General observations, analysis of quantitative monitoring data (e.g., success, failure, remedial actions), assessment of vegetation growth in meeting the success criteria, comparisons of current vegetation growth to the previously documented monitoring period, and progress toward final acceptance.
- Photographs.
- Maps identifying monitoring areas, transects, quadrates, planting zones, and habitat types, as appropriate.
- A final comprehensive report summarizing results over the 5-year monitoring period will be submitted to the agencies upon completion of the monitoring program.