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STAFF REPORT: REGULAR CALENDAR

Consistency Certification No.: CC-009-12

Applicant: San Diego Association of Governments

Location: South of San Onofre, Mile Post 212.2 to 216.5, within railroad right-of-way adjacent to Interstate 5, Marine Corps Base Camp Pendleton, San Diego Co. (Exhibits 1 and 2)

Project Description: Construction of 4.3 miles of second main railroad track, replacement of timber trestle bridge with soft-bottom concrete box culvert, and extension of existing culverts.

Staff Recommendation: Concurrence

SUMMARY OF STAFF RECOMMENDATION

The San Diego Association of Governments (SANDAG) has submitted a consistency certification for constructing a second mainline railroad track along a 4.3-mile-long segment of railroad right-of-way south of San Onofre on Marine Corps Base Camp Pendleton in northern San Diego County (Exhibits 1-4). The project will assist SANDAG in meeting the projected increase in railroad travel demand between Los Angeles and San Diego, will increase the capacity of the rail system between those two cities, and will reduce delays associated with passenger and freight trains sharing the existing single track in the project area.

The project is designed to prevent significant adverse impacts to ephemeral drainage courses within and immediately adjacent to the double tracking project area, and includes revegetation of

all disturbed areas and creation of new vegetated trackway ditches. The project is consistent with the coastal stream protection policy of the CCMP (Section 30231 of the Coastal Act).

The project would eliminate 6.98 acres and temporarily affect 1.73 acres of coastal sage scrub habitat. This habitat within the construction footprint is not occupied by the coastal California gnatcatcher (or other listed species) and is therefore not environmentally sensitive habitat (ESHA) under the Coastal Act. Because SANDAG will restore 17.42 acres of coastal sage scrub habitat at an off-site location and will adhere to conditions in the U.S. Fish and Wildlife Service's Biological Opinion for the LOSSAN rail corridor and double tracking projects, the project is consistent with the ESHA policy of the CCMP (Coastal Act Section 30240).

The project includes measures to protect water quality during and after construction and is consistent with the water quality protection policies of the CCMP (Coastal Act Sections 30231 and 30232). The project will help to reduce energy consumption, reduce greenhouse gas emissions, and improve air quality, and is consistent with the energy minimization policy of the CCMP (Coastal Act Section 30253(d)). The project would improve public access by expanding passenger rail services, which in turn would reduce automobile traffic on Interstate 5 in an area where this freeway supports public access, and is consistent with the public access and recreation policies of the CCMP (Coastal Act Sections 30120, 30212, and 30252). The project includes measures to protect unknown cultural resources which could be uncovered during construction, and is consistent with the cultural resource policy of the CCMP (Coastal Act Section 30244).

The staff therefore recommends the Commission **concur** with SANDAG's consistency certification and find the project consistent with coastal stream, ESHA, water quality, air quality, energy consumption, public access, recreation, transit, and cultural resources policies of the CCMP (Coastal Act Sections 30233(a), 30240, 30231, 30232, 30253(d), 30210, 30212, 30252, and 30244).

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EXHIBITS

- Exhibit 1 – Project Area Vicinity Map
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- Exhibit 3 – Proposed Improvements
- Exhibit 4 – Typical Track Cross Sections
- Exhibit 5 – Drainage at Mile Post 214.1
- Exhibit 6 – Drainage at Mile Post 215.3
- Exhibit 7 – Typical Coastal Sage Scrub Habitat Within/Adjacent to Project
Right-of-Way
- Exhibit 8 – Stacco/Timeout Mitigation Project Vicinity Map
- Exhibit 9 – Conceptual Diegan Coastal Sage Scrub Restoration Plan
- Exhibit 10 – Conservation Measures

I. APPLICANT'S CONSISTENCY CERTIFICATION

The San Diego Association of Governments 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-009-12 that the project described therein is fully consistent with the enforceable policies of the California Coastal Management Program.*

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-009-12 by the San Diego Association of Governments on the grounds that the project is fully 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 a second mainline railroad track along an approximately 4.3-mile-long segment of railroad right-of-way (Milepost (MP) 212.2 to MP 216.5) between Control Points San Onofre and Pulgas, located south of the San Onofre Nuclear Generating Station and within Marine Corps Base Camp Pendleton in San Diego County (Exhibits 1 and 2). The existing and proposed railroad tracks are directly adjacent and parallel to the Interstate 5 freeway, primarily on the west side of the freeway, except for the southern one-half mile of the project corridor where the railroad passes under the freeway to the east side. The proposed second track would connect into an existing double track section of the railroad at the northern end of the project corridor (Exhibits 3 and 4). (Consistency Certification CC-086-03 for this existing section of double track was concurred with by the Commission in November 2003.)

SANDAG reports that the proposed project includes the following elements:

- Constructing a new track (Main Track [MT] 1) from MP 212.2 to MP 214.9 east of the existing main track. The existing main track would be maintained as the west track, or

MT2. [Note: MT2 refers to the western track and MT1 the eastern track, regardless of existing or proposed track.]

- Shifting the existing main track eastward to become the new MT1 between MP 214.9 and 216.2. Constructing a new west MT2 between MP 214.9 to the project end at MP 216.5.
- Installing two new crossovers between the new MT1 and MT2 tracks between MP 216.3 and MP 216.5.
- Removing the existing turnout at the northern project terminus.
- Connecting new tracks to the existing double track section north of the project.
- Clearing of vegetation over 19.5 acres prior to grading and excavation for railroad embankment widening. In areas of sensitive habitat, work may include hand clearing and vegetation removal that would not disturb root zones and would promote regeneration of native vegetation.
- Grading approximately 65,600 cubic yards of earth to construct new track embankments; 56,000 cu.yds. would be disposed of off-site. Topsoil would be stockpiled for reuse and placement on reconstructed slopes, which would be revegetated.
- Constructing new tracks on a minimum of 12-inch deep ballast, underlain by a six-inch-deep subballast with a two-foot-wide walkway. Cut areas would include a graded track ditch to convey stormwater runoff; cut slopes would vary in steepness with a maximum slope of 1:1. Fill areas underlying the subballast would have a typical slope of 2:1.
- Removing the existing timber trestle railroad bridge at MP 215.3 and replacing it with a soft-bottom concrete box culvert, and extending several existing concrete culverts at unnamed drainages.
- Constructing access and staging areas at several locations within and outside the existing railroad right-of-way to store construction equipment, topsoil, and project materials. SANDAG would use existing access roads and disturbed areas to the greatest extent possible.

Regarding the purpose and need for the proposed double track project, SANDAG states in the consistency certification that:

Double track construction between Orange County and San Diego County is intended to meet the projected increase in travel demand for the 2025 build-out year between the cities of Los Angeles and San Diego. The proposed project developed by SANDAG in coordination with the North County Transit District (NCTD) is part of a larger overall effort to create a double track configuration between the Orange County/San Diego County border and the City of San Diego, a portion of the second-most heavily traveled intercity passenger rail corridor in

the country. The project would increase the attractiveness of passenger rail service for travelers currently using I-5. Specifically, the project would create opportunities for automobile drivers currently using I-5 to begin using passenger rail service, thereby decreasing the impacts associated with highway congestion in the vicinity. The proposed project would increase capacity of the rail system by reducing the number and duration of delays associated with sharing the existing single track with freight rail uses, resulting in more reliable service.

The subject consistency certification is the latest in a series of consistency certifications submitted by SANDAG and NCTD (North County Transit District) for railroad bridge replacement and construction of sections of double tracking along the LOSSAN (Los Angeles to San Diego) 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); (2) the 2.9-mile-long Santa Margarita River double tracking project at the south end of Camp Pendleton (CC-052-05); (3) replacement of the railroad bridge over Agua Hedionda Lagoon (CC-055-05); (4) the 2.7-mile-long O'Neill to Flores double track project in central Camp Pendleton (CC-004-05); (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 Penasquitos 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-079-09), and (8) the construction of a 1.2-mile-long segment of second mainline railroad track and a steel double-track bridge in Sorrento Valley in the City of San Diego (CC-052-10).

SANDAG states that it anticipates advertising for project construction bids in January 2013 and awarding a contract in April 2013. Construction is expected to last approximately 24 months.

B. PROCEDURES AND PERMITTING ISSUES

The project triggers federal consistency review because it needs a U.S. Army Corps of Engineers ("Clean Water Act Section 404") permit. The Commission also believes the project is subject to the permitting requirements of the Coastal Act; however, SANDAG and NCTD disagree with this position. Those agencies believe that based on a decision by the federal Surface Transportation Board, they are not required to obtain coastal development permits for track improvements and are only subject to federal consistency review for such projects. However, the Commission still holds to its long-standing position that railroad projects in the LOSSAN corridor sponsored by SANDAG and NCTD, especially if affecting mass transportation, including the proposed project, are subject to the permitting requirements of the Coastal Act. The Commission further notes that NCTD has previously applied for a number a permits for its rail improvement activities in other sections of the coast, including CDP's No.: 6-03-102-G (Agua Hedionda emergency repairs), 6-02-152 (San Luis Rey River bridge repair), 6-02-151 (Agua Hedionda bridge), 6-02-102 (Del Mar drainage outlets), 6-02-80 (Santa Margarita Bridge repair), 6-01-64 (Balboa Avenue), 6-01-108 (Tecolote Creek), 6-93-60 (Del Mar), 6-94-207 (Solana Beach), 6-93-106 (Carlsbad), and 6-93-105 (Camp Pendleton). Notwithstanding this disagreement about whether a coastal development permit is needed, there is no dispute that the project is subject to the Commission's federal consistency review authority, which involves a

similar standard of review, and employing that standard, the Commission concurs with this consistency certification based on its finding that the project is consistent with the Coastal Act.

C. COASTAL STREAMS

Section 30231 of the Coastal Act states:

The biological productivity and 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.

Most of the proposed project construction activities would occur within previously developed areas in the railroad right-of-way. However, the proposed lengthening of five existing drainage culverts and the replacement of one wooden trestle with a soft-bottom concrete box culvert (all of which are designed to accommodate the widening of the existing railroad trackway with a second mainline track) would result in 0.05 acres (2,178 square-feet) and 296 linear feet of permanent loss of habitat classified as “waters of the United States” by the U.S. Army Corps of Engineers (Exhibits 5 and 6). No wetland plants or soils indicators are present at these culverts and these areas are not Coastal Act wetlands¹, but as they are ephemeral drainage courses that convey water during and after storm events, they do qualify as coastal streams under Coastal Act Section 30231.

The proposed project consists of a new second track on the east side of the existing track in the northern segment of the project area and on the west side along the southernmost one-half mile of the project. SANDAG reports that the proposed project represents a hybrid of two original project alternatives: (1) a second mainline track solely on the west side of the existing track; and (2) a second mainline track solely on the east side of the existing track. SANDAG states that during its alternatives analysis, the proposed project was developed in order to minimize adverse effects to ephemeral drainages crossing underneath the trackway:

By constructing the proposed track on the east side of the existing track in the northern portion of the alignment, the project would avoid the majority of Drainages 3 and 6, as well as all of Drainages 4 and 8. At approximately MP 214.9, the proposed track would be constructed on the west side of the existing track. The west side of the track in this southern portion of the alignment contains a larger amount of ruderal habitat, as opposed to coastal sage scrub. Laydown and staging areas also were relocated during the design process to minimize impacts to drainages and coastal sage scrub. Accordingly, the project

¹ Section 30121 of the Coastal Act defines a wetland as follows: “Wetland” means lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens.

as currently designed is considered to be the least environmentally damaging practicable alternative.

The proposed project minimizes adverse effects to ephemeral drainages to the maximum extent feasible, and there is no feasible, less environmentally damaging alternative to constructing the proposed second mainline railroad track between MP 212.2 and MP 216.5.

The March 2012 *Biological Assessment* for the project examines the ephemeral drainage courses in the project area:

Drainages were defined by the presence of scoured linear channels that visibly support the conveyance of runoff water from higher to lower elevations in the project area. Water flows in the project area generally move from east to west as runoff from the higher elevation on the coastal plain flows downhill toward the coast where it is tributary to the Pacific Ocean.

The widths of drainage channels vary between two and 48 feet and the substrates vary dramatically depending upon location. Fine sands, medium-sized gravel, and large angular riprap can be observed within the drainages. The main similarity between the drainages includes the presence of a culvert that passes below the grade of the railroad levee, or a structure that allows for the rail line to convey the train over an existing channel. Concrete box culverts, corrugated metal pipes, and trestle structures are used to allow flows beneath the railroad levee.

*Generally, scouring in the seasonal drainages due to rapid water velocity over erosive soils results in many drainages lacking vegetation from the low flow lines up to the top of the bank. Vegetation in the drainages is generally sparse but occasionally mule fat (*Baccharis salicifolia*), Mexican elderberry (*Sambucus mexicana*), and other species tolerant of periodic inundation and scouring conditions were observed growing in very limited numbers, consisting of a solitary plant. Some drainage channels with lower flow velocities support California sage scrub, laurel sumac scrub, or coyote brush scrub vegetation on the banks above the water line.*

The June 2012 *Addendum to the Biological Assessment* documents the expected impacts to five drainages (Nos. 2, 3, 7, 9, and 10a) from the proposed project:

A total of 0.021 acre of impact will occur from the extension of culverts, which is a permanent impact with a permanent loss. A total of 0.029 acre of impact will occur from placement of rip rap, which is considered a permanent impact, although some functions and values still result since groundwater recharge and water quality filtering can still occur in areas with rip rap. It is also noted that some of the rip rap impact involves refurbishing of existing rip rap areas with additional rock, if required, or movement of rock from an old drainage course (where new track embankment replaces old rip rap areas) to the new location. The total acreage of area requiring mitigation is 0.05 acre.

In addition to these permanent impacts, the project would temporarily affect approximately 0.1 acre of ephemeral drainages from the slight relocation by several feet of existing track ditches (parallel to the railroad trackway) to accommodate new fill slopes supporting the proposed second track.

The March 2012 *Biological Assessment*, June 2012 *Biological Assessment Addendum*, and June 2012 supplement to the *Addendum* for the proposed project state that temporary and permanent impacts to ephemeral drainage courses would occur from the extension of existing culverts and require mitigation. SANDAG states in the June 20, 2012, supplement to the *Biological Assessment Addendum* that temporary impacts to drainage courses and track way ditches would occur at several locations in the project area:

Drainage 10a, much of Drainage 3, and small parts of Drainages 2 and 7 involve moving an existing track ditch a few feet to accommodate the toe of a fill slope necessary for the embankment expansion along the side of the track. Drainage 9 is a concrete brow ditch that will be reconstructed a few feet away from its current location . . . The impacts to these areas are not considered a permanent loss since the functions and services they provide will not be substantially changes by moving them over a few feet. They will be replaced and/or revegetated in a location immediately adjacent to and paralleling their current location.

The June 20, 2012, letter next examines the permanent impacts from the extension of culverts on drainage courses passing beneath the railroad trackway:

A total of 0.021 acre of impact will occur from the extension of culverts, which is a permanent impact with a permanent loss. A total of 0.029 acre of impact will occur from placement of rip rap . . . The total acreage of area requiring replacement is 0.05 acres and 296 linear feet

SANDAG is proposing to mitigate the temporary and permanent impacts to drainage courses and trackway ditches in the project area as follows:

The project includes revegetation of all disturbed areas with native hydroseeded mixes (see Appendix D of the BA Addendum). The swale mix, which includes native grasses and annual species, will be applied to all areas located at the base of graded areas – totaling over five miles in length and over 7 acres in area for the entire project. The swale areas range in size from a few feet to over 8 feet in width.

SANDAG will also create new swales running parallel to and along the east side of the trackway. These new track ditches will be created north and south of Drainage 7, extending a distance of 220 feet and 300 feet, respectively, and a new 600-foot-long track ditch will also be constructed south of Drainage 10a. SANDAG states that these new trackway ditches:

. . . include a minimum of 0.07 acre and 1,100 linear feet of new ephemeral streambed topography that are being graded into current upland areas. The new ditches are expected to accommodate flood flow during storm events, as evidenced by the location of the new ditches and the accompanying watershed that will provide runoff. These ditches will be hydroseeded with a native species mix, which will help capture runoff, sedimentation, and pollutants. The new ditches provide opportunities for storage of rainfall, groundwater recharge, and water quality filtration. Creation of new track ditches far exceeds the ephemeral streambed (in terms of linear length and area) that will be lost to construction of culverts and rip rap placement.

In conclusion, the ephemeral drainage courses that will be affected by construction of trackway culvert extensions are properly classified as coastal streams under the Coastal Act. SANDAG has designed the project to minimize permanent and temporary impacts to these drainage courses; the project includes a commitment to revegetate all disturbed areas and create new vegetated trackway ditches. The Commission agrees with SANDAG that with these measures incorporated into the project, combined with environmentally sensitive habitat and water quality protection measures described in other sections of this report, the project is designed to prevent significant adverse impacts to the ephemeral drainage courses within and immediately adjacent to the double tracking project area. The Commission therefore finds the project consistent with the coastal stream protection policies of the CCMP (Section 30231 of the Coastal Act).

D. ENVIRONMENTALLY SENSITIVE HABITAT

Section 30240 of the Coastal Act 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, Section 30107.5 of the Coastal Act 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.

While most of the proposed project construction activities would occur within previously developed areas in the railroad right-of-way, the 2012 *Biological Assessment* and the 2012 *Biological Assessment Addendum* (together referred to in this report as the *Biological Assessment*) for the project confirms the presence of sensitive and non-native upland plant communities in and adjacent to the project corridor. The *Biological Assessment* also examines

the anticipated temporary and permanent impacts to those plant communities, and the avoidance, minimization, and mitigation measures that SANDAG will implement. The *Biological Assessment* states that lands within the project area support the following four habitat types: unvegetated stream channels/drainages (analyzed previously in Section III. C. of this report), coastal sage scrub, non-native grassland, and ruderal. The dominant plant species in coastal sage scrub habitat in the project area is California sagebrush, and associate species include coyote brush, toyon, isocoma, and laurel sumac (Exhibit 7). The project area contains large portions of habitat significantly dominated by coyote brush or laurel sumac, primarily in those project areas previously disturbed and located adjacent to the railroad tracks and Old Pacific Highway. Non-native grassland habitat is comprised of a mixture of introduced weed species, and ruderal habitats are dominated by non-native broadleaf plants.

The *Biological Assessment* documents the presence of the federally threatened coastal California gnatcatcher in the project area:

Coastal California gnatcatchers occur on coastal slopes in southern California, including San Diego County. They typically occur in or near coastal sage scrub habitat, preferably in relatively open stands. The species also uses chaparral, grassland, and riparian habitats where they occur adjacent to sage scrub.

The Programmatic BO [Biological Opinion²] notes that in a study conducted in 2000, gnatcatcher densities on Camp Pendleton were highest and population increases greatest in areas where the majority of the habitat had not been burned from 1984 to 2000. Along the LOSSAN rail corridor, numerous gnatcatchers occupy coastal sage scrub and non-native grassland adjacent to the tracks. Threats to gnatcatcher populations on Camp Pendleton include project construction, military training activities, cowbird parasitism, predation, habitat degradation, and fire.

The project area was most recently surveyed for gnatcatchers in May and June 2010. The majority of high-quality gnatcatcher habitat within the survey area is located on the eastern side of the railroad corridor, between the Interstate 5 overpass and the project's southern terminus. Four gnatcatcher observations were made in this area, but the three paired adults and one lone adult male were observed outside of the project construction zone. Narrow strips of marginal coastal sage scrub occur sporadically along the study area north of the Interstate 5 overpass and no gnatcatchers were observed in these areas. The *Biological Assessment* concludes that the patches of discontinuous coastal sage scrub north of the overpass are unlikely to support breeding gnatcatchers.

The *Biological Assessment* reports that the project would eliminate 6.98 acres and temporarily affect 1.73 acres of coastal sage scrub habitat. However, as documented in the *Biological Assessment*, the project construction footprint does not include coastal sage scrub habitat that is actually occupied by the threatened coastal California gnatcatcher due to the project habitat's

² U.S. Department of Interior, Fish and Wildlife Service, 2005, *Programmatic Biological Opinion for the Rail Corridor from the Orange County Border South to Southern Oceanside for Operations and Maintenance, and Six Double-Track Projects in San Diego County, California.*

location between the railroad track and existing highways (Interstate 5 and Old Pacific Highway) and its isolation from larger swaths of habitat on Camp Pendleton east of the transportation corridor. With this specific finding, and in combination with previous Commission determinations on double track projects in the San Diego County coastal zone (CC-052-10 and CC-086-03), the Commission determines the coastal sage scrub habitat that would be affected by the proposed project is not occupied by a listed species and is therefore not an environmentally sensitive habitat area (ESHA) as defined in the Coastal Act. As a result, the project will not affect ESHA.³

While the coastal sage scrub habitat is not Coastal Act ESHA, SANDAG has committed to restore coastal sage scrub habitat adversely affected by the double track project:

The PBO [Programmatic Biological Opinion] requires that permanent impacts to CSS [coastal sage scrub] be mitigated at a 2:1 ratio and that impacts to NNG [non-native grassland] be mitigated at a 0.5:1 ratio with a combination of off-site preservation, creation, or restoration of native habitat. The PBO requires that a project-specific plan, outlining the details and implementation schedule of all enhancement, restoration, and creation to offset permanent impacts to vegetation be prepared by the proponents and submitted to the USFWS for review and approval at least 90 days prior to the start of each project addressed by the biological opinion.

Temporary impacts can be mitigated by revegetation of temporarily disturbed areas. However, due to difficulties implementing five-year restoration projects along the length of a linear rail project, the project proposes to implement erosion control reseeding only for all temporarily disturbed areas, and to include the required mitigation off site.

SANDAG will mitigate at a 2:1 ratio the permanent loss of 6.98 acres and temporary effects on 1.73 acres of coastal sage scrub habitat by restoring 17.42 acres of such habitat at the Caltrans-owned Stacco/Timeout property located east of the City of Oceanside (Exhibits 8 and 9). SANDAG will also revegetate with hydroseeding using a native seed mix all permanently and temporarily disturbed areas in the project construction zone to control erosion on and protect water quality below all newly-engineered embankment slopes. These areas will be maintained to meet storm water pollution prevention requirements but will not be maintained as habitat preservation areas due to their location within an existing and heavily-used railroad right-of-way corridor. To further minimize project impacts to coastal sage scrub habitat, SANDAG agreed to shift the location of the proposed soil stockpile area near the southern terminus of the double track project away from coastal sage scrub habitat to a site mapped as ruderal and/or non-native grassland in the vicinity of Las Pulgas Road.

³ It is important to note that if the coastal sage scrub habitat to be affected by the project was documented in the Biological Assessment as occupied habitat for the listed coastal California gnatcatcher, the Commission would classify this habitat as ESHA and would find the project inconsistent 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.” The only way the Commission could then concur with this consistency certification would be if it found the project consistent with the Coastal Act through the “conflict resolution” provision contained in Section 30007.5.

SANDAG submitted with the consistency certification the July 2012 *Stacco/Timeout Property Conceptual Mitigation Plan* (Exhibit 10). The *Plan* proposes the restoration of 54.85 acres of coastal sage scrub habitat, 8.95 acres of conservation of existing coastal sage scrub habitat, creation of 0.59 acres of wetland habitat, and conservation of 3.65 acres of wetland habitat on the 70.11-acre property. The *Plan* would provide the needed coastal sage scrub habitat mitigation for the subject double tracking project (as well as habitat to meet mitigation requirements associated with future railroad and regional transportation projects). SANDAG is financially responsible for the implementation and success of the *Plan*, which includes the following elements:

- Habitat types to be established, restored, enhanced, and/or preserved.
- Functions and services of habitat types.
- Time lapse between project impacts and mitigation success.
- Estimated implementation costs.
- Description of the mitigation site (location, size, ownership, existing habitats, proposed habitat types).
- Responsible parties.
- Financial assurances.
- Schedule.
- Site preparation.
- Planting and irrigation plans.
- Maintenance activities during the monitoring period.
- Monitoring plan (schedule, methods, performance standards, success criteria, target functions and services).
- Contingency measures (adaptive management, funding mechanism).

The *Plan* includes sufficient details to allow the Commission to determine that temporary and permanent impacts to coastal sage scrub habitat arising from the proposed San Onofre to Pulgas double tracking project will be sufficiently mitigated at the Stacco/Timeout restoration site. Regarding the timing of mitigation of project-related impacts to coastal sage scrub habitat, the *Plan* states that mitigation work would commence:

... no later than immediately following the avian breeding season (generally September 1 of each year) of the year that project impacts are accrued. Implementation of the mitigation project at this time would allow plant and hydroseed establishment to occur during the winter and early spring months (i.e., October – February) and take advantage of high soil moisture and optimal spring and summer plant growth conditions.

In addition to the mitigation that will occur at the Stacco/Timeout property, SANDAG will also adhere during all construction activities to the conditions contained in the Programmatic Biological Opinion for the LOSSAN railroad corridor and proposed double tracking projects. These conditions are designed to protect sensitive habitat and listed species and are grouped into general conservation measures, conservation measures for temporary vegetation impacts,

conservation measures for permanent vegetation impacts, and coastal California gnatcatcher conservation measures (Exhibit 11).

The Commission agrees with SANDAG that with the above measures incorporated into the project, combined with open coastal water and water quality protection measures described in other sections of this report, the project is designed to prevent significant adverse impacts to sensitive coastal sage scrub habitat within and immediately adjacent to the double tracking project area, and to assure that the overall extent of the habitat will not be diminished. The Commission therefore finds the project consistent with the habitat protection policies of the CCMP (Section 30240 of the Coastal Act).

E. WATER QUALITY

Section 30231 of the Coastal Act states:

The biological productivity and 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.

Section 30232 of the Coastal Act 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.

SANDAG included in its consistency certification commitments for water quality protection for the proposed double track project, including development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) and associated best management practices to avoid and minimize the potential for adverse impacts to water quality in and adjacent to the project area. The consistency certification included the following documents:

- Storm Water Pollution Prevention Plan, San Onofre to Pulgas Double Track Phase 1, January 2012
- Preliminary Water Quality Technical Report, San Onofre to Las Pulgas Double Track Phase 1, NCTD R/W within Camp Pendleton, California, October 2011.

The consistency certification states that:

The project requires extending several existing culverts at unnamed drainages to accommodate a second track. Stormwater management elements for track construction, bridges and culverts, and related infrastructure would be designed

according to standards and criteria established by the Clean Water Act and the State Water Resources Control Board. Proposed permanent BMPs would include installing energy dissipaters such as riprap at outlets and channels entering unlined channels, concrete aprons at drainages, and soft bottom culverts. The BMPs associated with the proposed project would result in a benefit to natural systems and coastal waters by controlling and treating flows prior to reaching existing natural drainage systems.

Water quality during construction would be protected by the project SWPPP, which would be kept on site and updated as required to comply with permit conditions. In addition, stormwater management measures used during construction will require frequent maintenance to be effective. As the project proceeds, the construction contractor will relocate, revise and reinstall stormwater controls pursuant to the SWPPP. During construction, BMPs such as silt fences, gravel bags, fiber rolls, erosion control blankets, hydroseed, and other erosion control measures would be used.

In previous reviews of SANDAG and NCTD double tracking projects in San Diego County, the Commission concurred with these agency's determination that:

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.

As noted in a previous section of this report, erosion controls to protect water quality will also include post-construction revegetation activities within the project area. With 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).

F. AIR QUALITY AND ENERGY CONSUMPTION

Section 30253(d) of the Coastal Act states that new development shall “minimize energy consumption and vehicle miles traveled.”

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 in CC-029-02:

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.

The proposed project's air quality benefits include reduced idling time by automobiles on highways and train locomotives in the LOSSAN corridor and will lead to reduced emissions of air pollutants. In addition, the anticipated operational efficiency improvements arising from construction of an additional segment of double track are expected to increase ridership on existing passenger trains in the corridor and to correspondingly reduce automobile trips and vehicle miles traveled in the corridor. These project benefits are also consistent with previous Commission actions (e.g., CC-079-06, BHP Billiton LNG International, Inc., Ventura and Los Angeles Counties) to protect coastal resources that would be directly affected by global climate change resulting from increases in greenhouse gas emissions. 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.

Numerous 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 recently adopted findings in support of these goals when it concurred with consistency certification CC-052-10 by SANDAG for a double tracking project in Sorrento Valley in San Diego County. In conclusion, the Commission finds that SANDAG's proposed San Onofre to Pulgas double tracking 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)).

G. PUBLIC ACCESS, RECREATION, AND TRANSIT

Section 30210 of the Coastal Act states:

In carrying out the requirement 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, the rights of private property owners, and natural resource areas from overuse.

Section 30212 of the Coastal Act states, in part:

(a) *Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development except where: (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources*

Section 30252 of the Coastal Act 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

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 I-5, which is a major coastal access thoroughfare, reduces the ability of the public to attain access to 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 existing public transit is equally important and beneficial to public access.

Concerning access issues in general, SANDAG states in its consistency certification that:

The project site includes an existing ROW [right-of-way] through Marine Corps Base Camp Pendleton and is a rail corridor that has been in continuous operation for more than 110 years. No public access is afforded through the project area. Coastal access is strictly controlled due to military and public safety needs.

Increased use of the passenger rail service as a result of the proposed project would reduce traffic congestion – a recognized constraint on coastal uses. The passenger rail system provides significant coastal access from inland areas including direct connections at San Clemente, Oceanside, Carlsbad, Encinitas, and Solana Beach stations, which are within a few blocks of beach access areas. The proposed project would not interfere with or change existing coastal access and would potentially facilitate increased use and access to beaches by

encouraging more use of passenger rail service to these areas as a result of increased reliability and public acceptance of transit. The proposed project is consistent with this aspect of California Coastal Act policy.

The Commission agrees with SANDAG and finds that the proposed project would not adversely affect any existing public access opportunities and would improve public access by maintaining and expanding the rail line used by SANDAG and other rail services, which in turn helps to reduce automobile traffic on I-5 in an area where this freeway supports public access and recreation. The Commission therefore finds the project consistent with the public access and recreation policies of the CCMP (Coastal Act Sections 30210, 30212, and 30252).

H. CULTURAL RESOURCES

Section 30244 of the Coastal Act states:

Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

The consistency certification includes an examination of potential cultural resources within the project area. The Executive Summary of the *Survey and Evaluation of Cultural Resources for the LOSSAN Control Point San Onofre to Control Point Pulgas Double Track Project, Phase 1, San Diego County, California (October 2011)* states, in part:

Purpose and Scope: SWCA Environmental Consultants (SWCA) was retained by HNTB Corporation to conduct a survey and evaluation of cultural resources in support of Phase 1 of the Los Angeles to San Diego, California (LOSSAN) Control Point (CP) San Onofre to CP Pulgas Double Track Upgrade Project in San Diego County, California (Project). The Project is located within the boundaries of the Marine Corps Base (MCB) Camp Pendleton in Northern San Diego County, on federal land that is part of a long-term lease to the rail operator. SWCA's services entailed a records and literature search, Native American scoping, historical group consultation, intensive pedestrian survey, and National Register of Historic Places (NRHP) eligibility evaluations of six historic built environment resources and one archaeological resource within this 4.3-mile long alignment. This report includes the methods and results of an archaeological survey and evaluation (Phase II) study conducted to evaluate the NRHP eligibility of one archaeological site in the Project's direct area of potential effects (APE). The intent of this report is to achieve compliance with Section 106 of the National Historic Preservation Act (NHPA) for the Project as it relates to cultural resources.

Dates of Investigation: The records search and initial Native American scoping were conducted as part of a previously prepared constraints analysis for the project (Rendon and Hunt 2010). Native American scoping was re-initiated in December 2010 and completed in February 2011 for the current study. Historical group consultation was conducted in January and February 2011. SWCA conducted the field survey between February 1 and 3, 2011. Archaeological testing and NRHP eligibility evaluation of one archaeological site, CA-SDI-14507, was conducted in March 2011. In addition, SWCA updated or recorded and evaluated six historic built resources (P-37-024469, P-37-024470, P-37-024471, P-37-024472, P-37-024473, P-37-024474), and updated one

historic archaeological site (CA-SDI-14517H) in support of the LOSSAN Double Track Upgrade Project using a combination of background research, and pedestrian survey.

Findings of the investigation: SWCA surveyed a total of 4.3 miles staying within the 100-foot-wide railroad right-of-way (50 feet on either side of the existing track centerline) in support of the LOSSAN Double Track Upgrade Project. As a result of the pedestrian survey, SWCA identified two previously undocumented cultural resources within the corridor, both prehistoric archaeological isolates (CS-ISO-01 and CS-ISO-02). Because isolates by definition lack context, they are considered not eligible for listing in the NRHP. Seven historic built environment resources (P-37-024469, P-37-024470, P-37-024471, P-37-024472, P-37-024473, P-37-024474, and CS-Bridge-01) were all found ineligible for listing in the NRHP. Archaeological site CA-SDI-14509 was found to be outside of the project area; site CA-SDI-14517H had been previously recommended ineligible for listing on the National Register and SWCA concurs with that recommendation. One archaeological site (CA-SDI-14507) was tested for NRHP eligibility evaluation through surface artifact collection, controlled excavation, and laboratory analysis.

Research at historic site CA-SDI-14507 revealed that a broad but sparse refuse scatter was present, with a small and highly disturbed subsurface component containing modern refuse and very few artifacts. This historic refuse scatter appears associated with railroad maintenance and the construction of nearby concrete culverts and bridges in the 1920s and 1940s. The right-of-way (ROW) has been disturbed by construction and maintenance of the railroad, bridges, culverts, and military training exercises along the railroad route. Disturbances to the historic ground surface resulting from maintenance of the railroad grade and the installation of various utilities have impacted the integrity of the sites. The archaeological testing program completed at CA-SDI-14507 has exhausted the data potential of this site and it is recommended ineligible for the NRHP. No further work is recommended.

Because of the potential for previously unrecorded archaeological or Native American resources in the Project's APE, archaeological and Native American monitoring is recommended for all Project-related ground disturbance.

Based on these findings, SANDAG concluded in the consistency certification that the proposed double track project would not adversely affect any known cultural resources. However, due to the potential for the project to disturb unknown, buried cultural resources, SANDAG has committed to ensure that all ground-disturbing activities will be overseen by qualified archaeological and Native American monitors. SANDAG also states in the consistency certification that the U.S. Army Corps of Engineers is undertaking consultation regarding the proposed project with the State Historic Preservation Officer (SHPO), in compliance with Section 106 of the National Historic Preservation Act. SANDAG expects that consultation will be completed in August 2012. Upon completion the Corps will require SANDAG to incorporate into the proposed project any additional or modified mitigation measures (beyond those contained in the aforementioned report) required by SHPO before the Corps will issue the Clean Water Act Section 404 permit for the project to SANDAG. SANDAG confirmed with Commission staff that it has agreed to this process and will incorporate into the proposed project and consistency certification any additional and/or modified cultural resource mitigation measures required by SHPO.

The Commission agrees with SANDAG that the double track and bridge replacement project would not adversely affect cultural resources. The resource inventory and evaluation work previously undertaken within the project area and the commitment by SANDAG to protect unknown cultural resources that may be uncovered during project construction demonstrates SANDAG's commitment to protection of cultural resources. With the aforementioned commitments, the Commission therefore determines that the proposed project is consistent with the cultural resource policy of the CCMP (Coastal Act Section 30244).

APPENDIX A: SUBSTANTIVE FILE DOCUMENTS

1. Consistency Certification CC-009-12 (SANDAG, San Onofre to Pulgas Double Track Project) with Attachments, March 15, 2012.
2. Stacco/Timeout Property Conceptual Mitigation Plan (CP San Onofre to CP Pulgas Double Track Project, MP 212.2 to MP 216.5), Merkel & Associates, July 2012.
3. CC-086-03 (NCTD, Pulgas to San Onofre double tracking at the north end of Camp Pendleton)
4. CC-004-05 (NCTD, O'Neill to Flores double track project in central Camp Pendleton)
5. CC-052-05 (NCTD, Santa Margarita River double tracking project at the south end of Camp Pendleton)
6. CC-055-05 (NCTD, replacement of the railroad bridge over Agua Hedionda Lagoon)
7. CC-079-06 (BHP Billiton LNG International Inc., Ventura and Los Angeles Counties)
8. CC-008-07 (NCTD, extension of passing track and construction of one replacement and one new railroad bridge over Loma Alta Creek in Oceanside)
9. CC-059-09 (NCTD, replacement of three railroad bridges over Los Penasquitos Lagoon, San Diego)
10. CC-075-09 (NCTD, construction of second mainline track and second railroad bridge over Agua Hedionda Lagoon, City of Carlsbad, San Diego County)
11. CC-052-10 (SANDAG, construction of second mainline railroad track and double track replacement bridge, Sorrento Valley, City of San Diego)
12. NCTD CDP's No.: 6-03-102-G (Agua Hedionda emergency repairs), 6-02-152 (San Luis Rey River bridge repair), 6-02-151 (Agua Hedionda bridge), 6-02-102 (Del Mar drainage outlets), 6-02-80 (Santa Margarita Bridge repair), 6-01-64 (Balboa Avenue), 6-01-108 (Tecolote Creek), 6-93-60 (Del Mar), 6-94-207 (Solana Beach), 6-93-106 (Carlsbad), and 6-93-105 (Camp Pendleton).
13. *Bolsa Chica Land Trust et al., v. The Superior Court of San Diego County* (1999) 71 Cal.App.4th 493, 517.

Figure 1: Project Area Vicinity Map

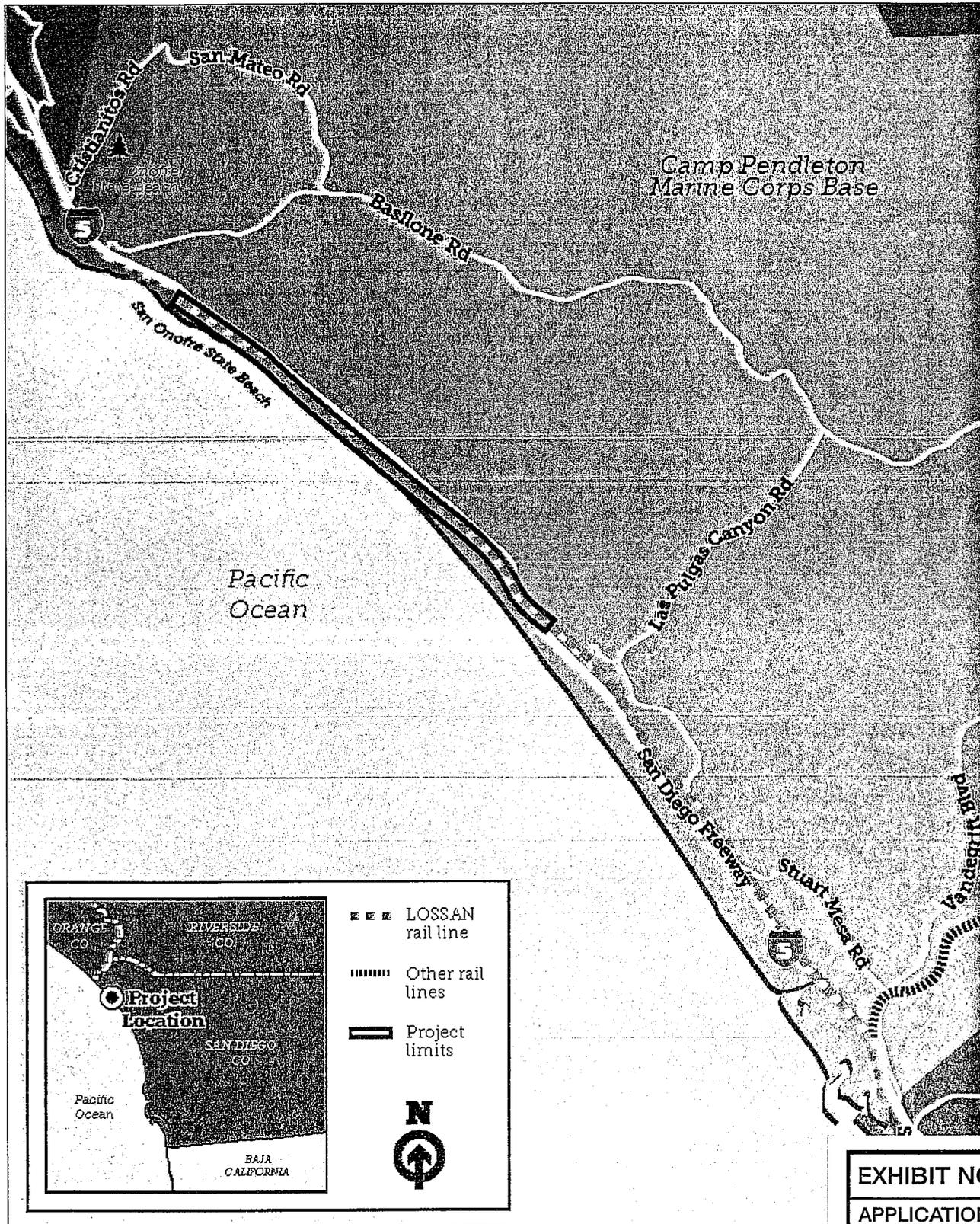


EXHIBIT NO. 1
APPLICATION NO.
CC-009-12



Figure 2: Aerial View of Project Limits

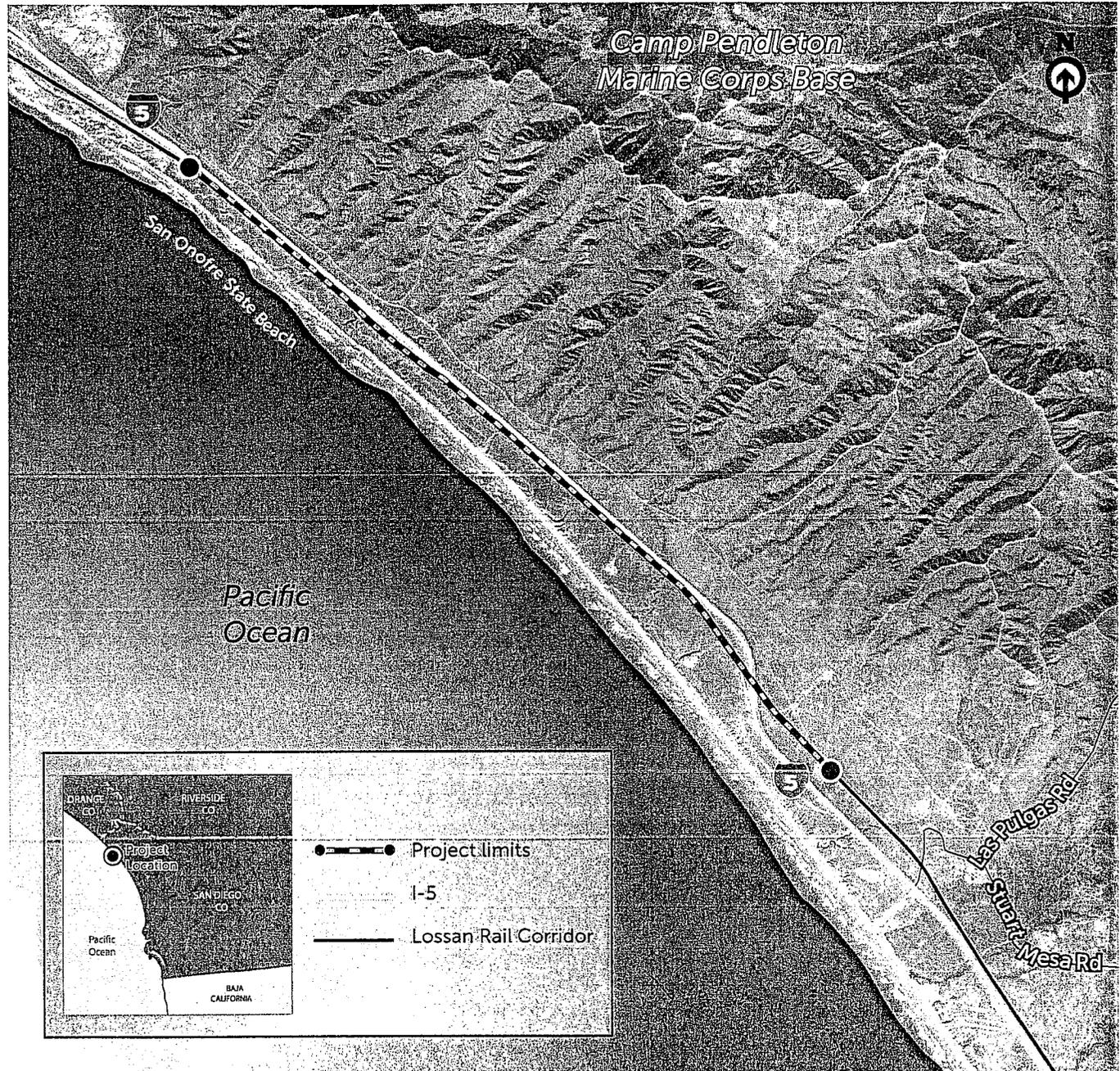


EXHIBIT NO. 2
APPLICATION NO.
CC-009-12

Figure 6: Proposed Improvements

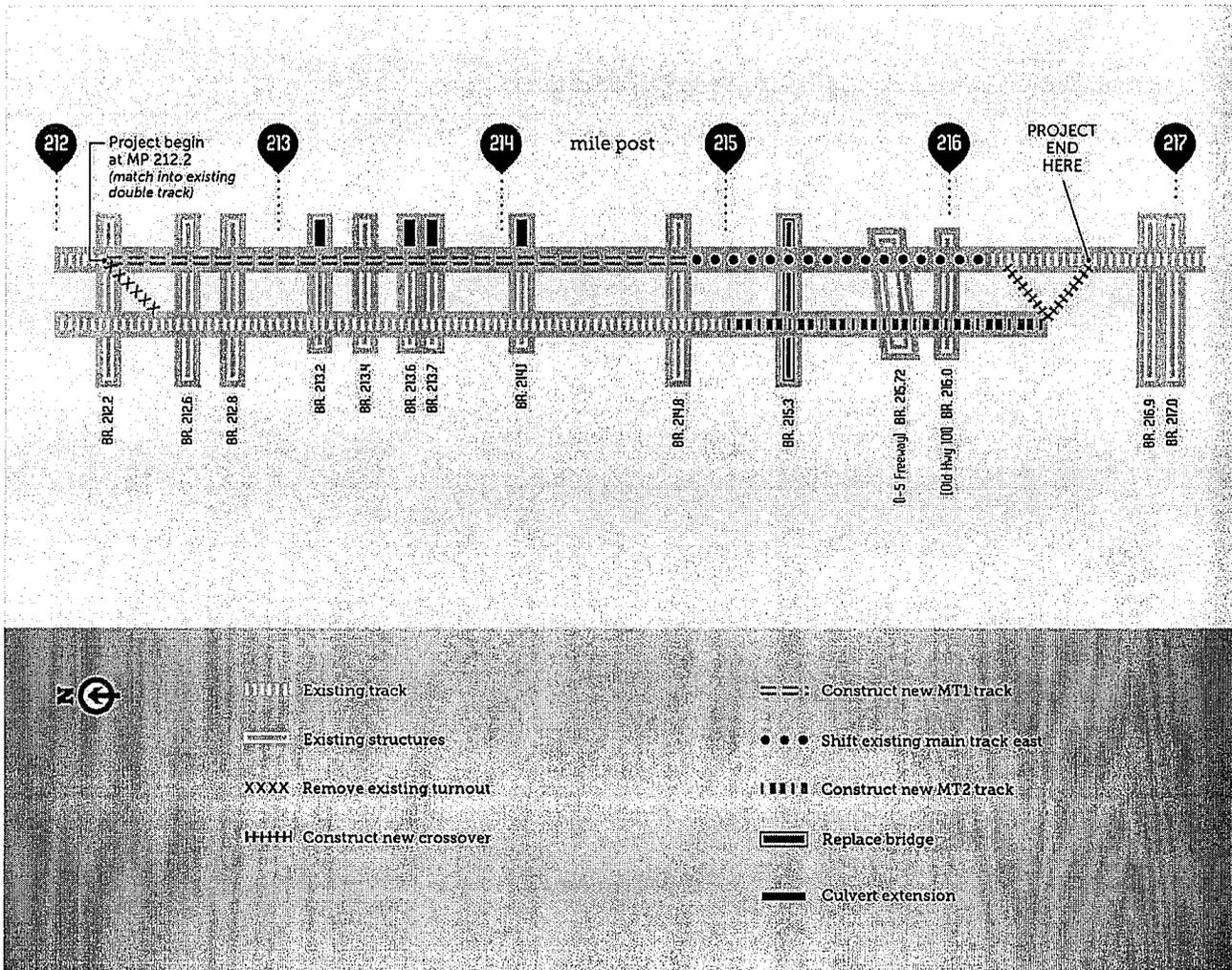
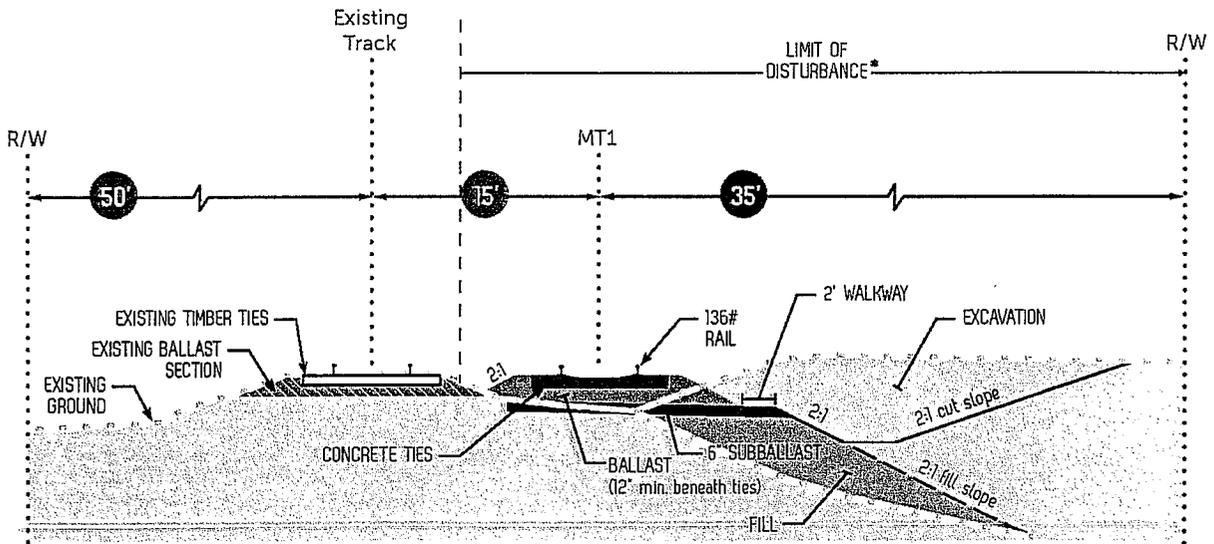


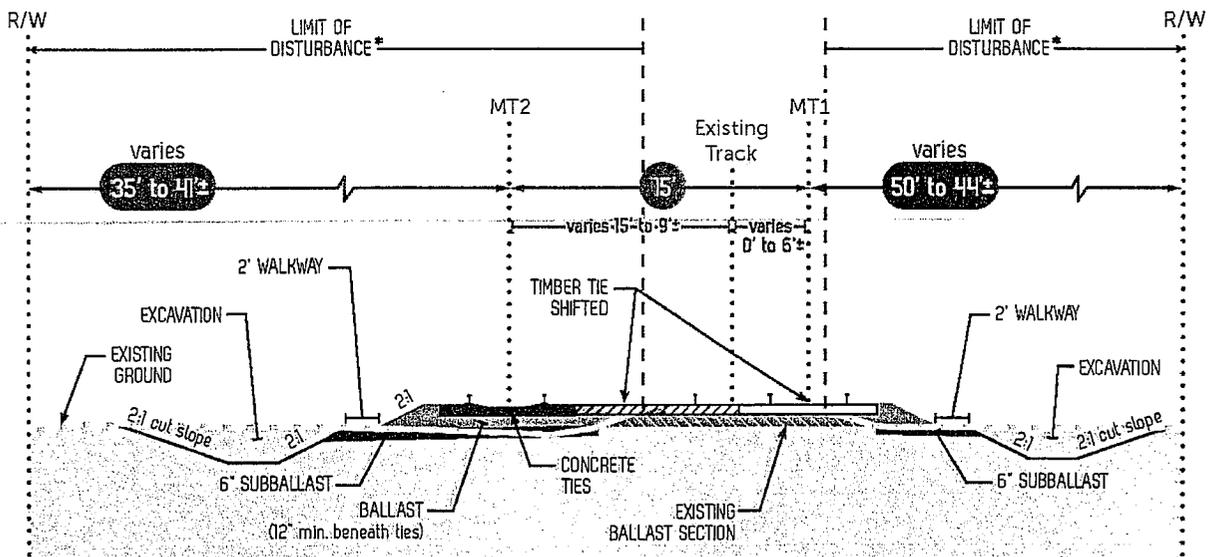
Figure 3: Track Typical Cross Sections



NEW EAST (MT1) TRACK

NOTE: Represents approx. MP 212.3 to MP 214.8

* The limit of disturbance begins 9 feet from existing track centerline.



EXISTING (MT1) TRACK, SHIFTED EAST

NOTE: Represents approx. MP 214.8 to MP 216.5

* The limit of disturbance begins 9 feet from existing track centerline.

EXHIBIT NO. 4
APPLICATION NO.
CC-009-12

Figure 6: Drainage 7 at MP 214.1



Figure 9: Drainage 10b at MP 215.3



SANDAG

EXHIBIT NO. 6

APPLICATION NO.

CC-009-12

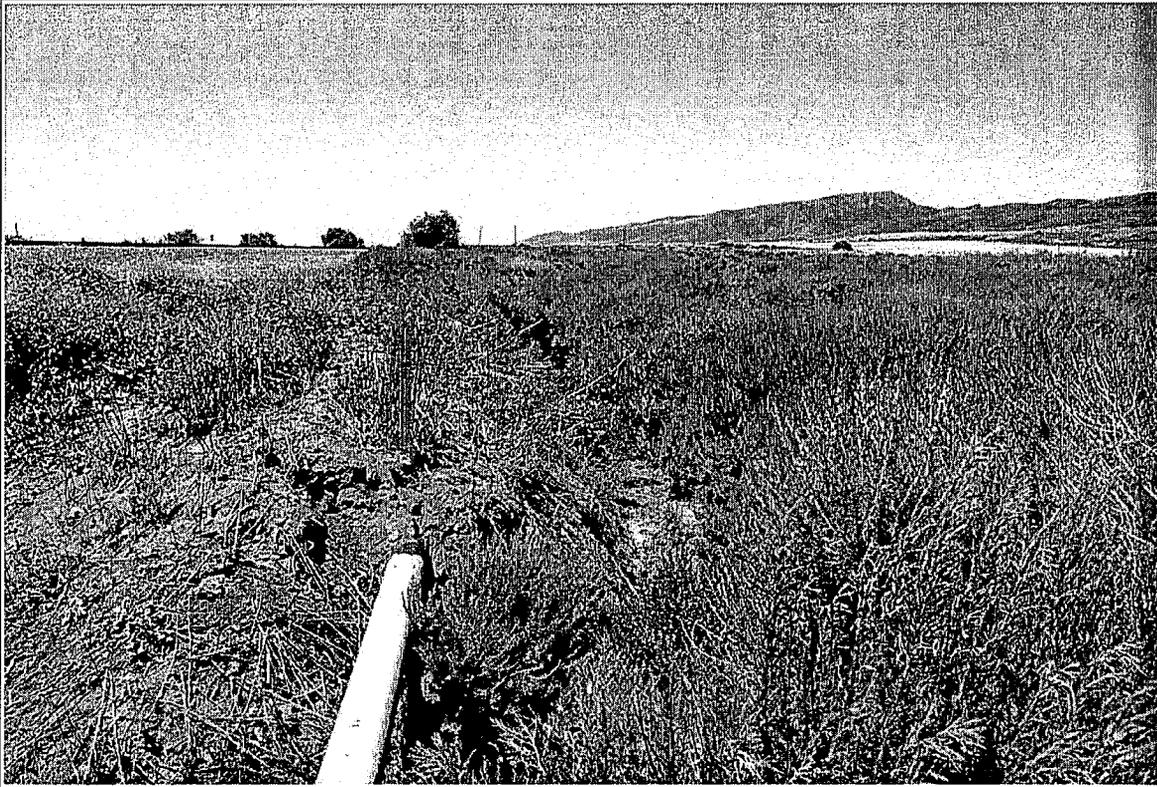


Photo No. 1: Typical coastal sage scrub habitat that occurs within and adjacent to the project right-of-way.

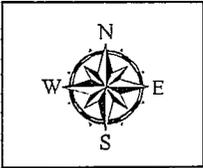
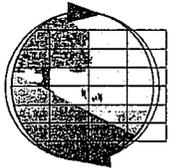
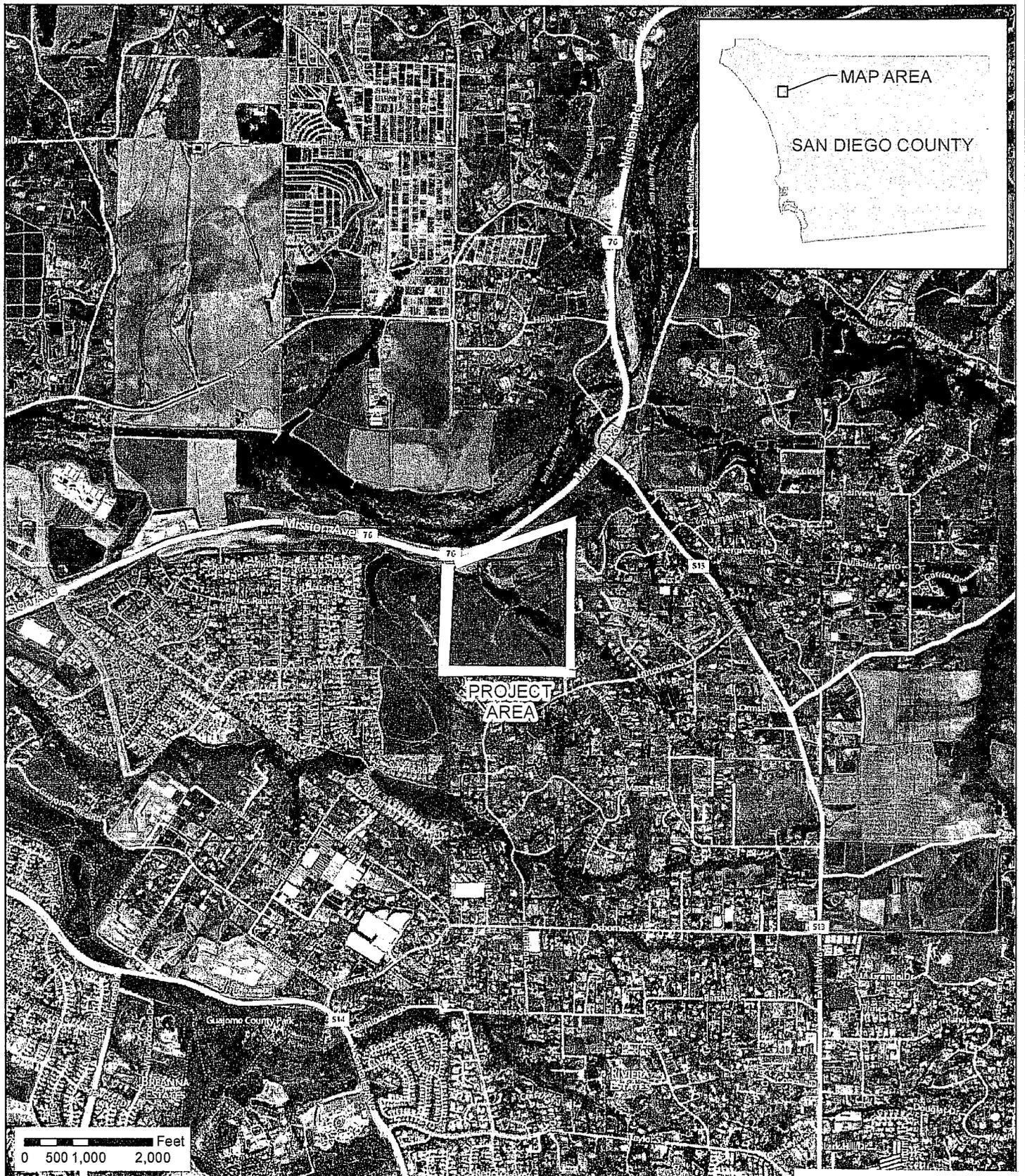


Photo No. 2: Typical coyote brush scrub that occurs within and adjacent to the project right-of-way.

EXHIBIT NO. 7

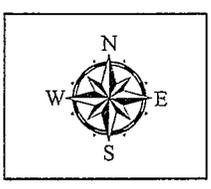
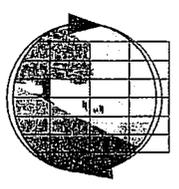
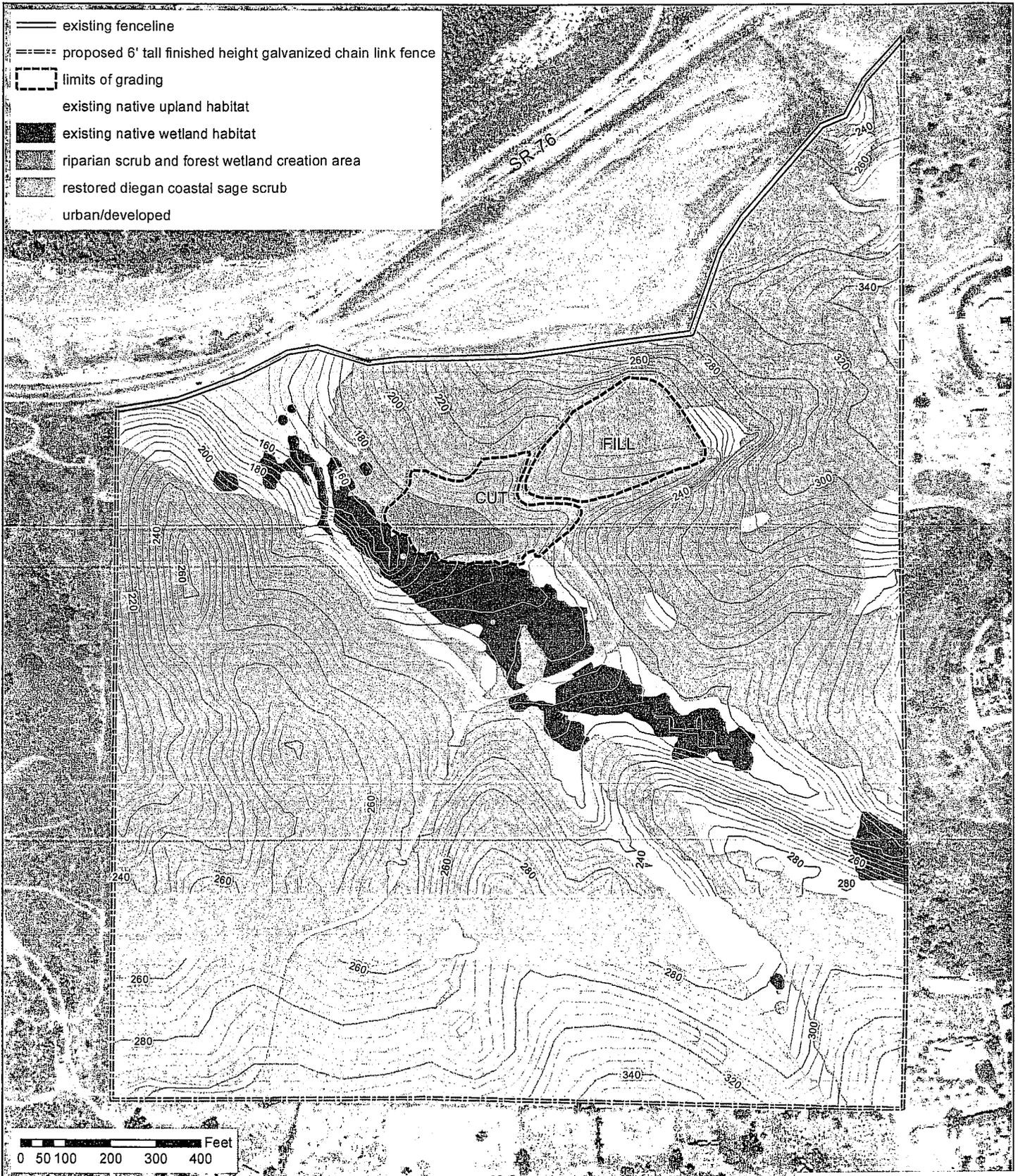
APPLICATION NO.

CC-009-12



Project Vicinity Map
Stacco/Timeout Mitigation Project

EXHIBIT NO. 8
APPLICATION NO.
CC-009-12



**Conceptual Diegan Coastal Sage Scrub
Restoration Plan**
Stacco/Timeout Mitigation Project

EXHIBIT NO. 9
APPLICATION NO.
CC-009-12

Merkel

**STACCO/TIMEOUT PROPERTY
CONCEPTUAL MITIGATION PLAN**

**CP SAN ONOFRE TO CP PULGAS
DOUBLE TRACK PROJECT
MP 212.2 TO MP 216.5**

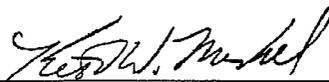
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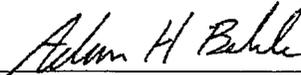
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July 2012



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EXHIBIT NO. 10
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Appendix 1. Cost Proposal

Table 1: General Conservation Measures

Measure #	Issue	Action	Schedule
GEN1	Migratory birds and raptors	All vegetation within the project footprint will be cleared between September 16 and February 14 to avoid and minimize impacts to migratory birds and raptors. If clearing activities must occur during the migratory bird and raptor breeding season, then preconstruction surveys will be conducted to ensure that no breeding migratory birds or raptors are present within, or immediately adjacent to the proposed clearing area. Should a breeding migratory bird or raptor or nest be located, then clearing will be postponed until two weeks after the young have fledged or the project biologist (approved by USFWS) determines that the nest has failed.	September 16 – February 14
GEN2	Project biologist monitoring	SANDAG and NCTD will designate a USFWS-approved biologist (project biologist) who will be responsible for overseeing compliance with protective measures for the biological resources during clearing and work activities within areas of native habitat and adjacent to areas known to be occupied by sensitive habitats and species. The project biologist will be familiar with the habitats, plants, and wildlife on Camp Pendleton and maintain communications with the Resident Engineer (RE) to ensure that issues relating to biological resources are appropriately and lawfully managed. The project biologist will review final plans, designate areas that need temporary fencing, and monitor construction. The project biologist will be made available to review grading plans, address protection of sensitive biological resources, and monitor ongoing activities. The biologist will monitor activities within designated areas during critical times such as vegetation removal, the installation of Best Management Practices (BMPs) and fencing to protect native species, and ensure that all avoidance and minimization measures are properly constructed and followed. The project biologist will immediately notify the RE to halt all associated activities that may be in violation of this biological opinion. In such an event, the RE will halt all such activities and contact the USFWS within 24 hours. The project biologist will submit weekly reports to the USFWS during initial grading and clearing, and when in the opinion of the biologist, work occurs near sensitive biological resources. The project biologist will provide a final report documenting compliance with avoidance and minimization measures within 60 days of the completion of work. For projects lasting more than one year, an annual report will be submitted.	Submit weekly reports As needed when work occurs in sensitive areas Final report within 60 days of work completion Annual report for projects lasting more than a year

EXHIBIT NO. 11
APPLICATION NO.
CC-009-12

GA

Measure #	Issue	Action	Schedule
GEN3	Employee education program	<p>An employee education program will be developed. Each employee (including temporary contractors and subcontractors) will receive a training/awareness program prior to conducting physical activities related to the work addressed by this biological opinion. The program will advise workers of potential impacts to the sensitive habitats and species and the potential penalties for impacts to such habitat and species. At a minimum, the program will include the following topics: occurrence of the listed and sensitive species in the area, a physical description and their general ecology, sensitivity of the species to human activities, legal protection afforded these species, penalties for violations of Federal and State laws, reporting requirements, and work features designed to reduce the impacts to these species; and to the extent practicable, promote continued successful occupation of areas adjacent to the work footprint. Included in this program will be color photos of the listed species, which will be shown to the employees. Following the education program, the photos will be posted in the contractor's and RE's office, where they will remain through the duration of the work. The proponent of the work and the project biologist will be responsible for ensuring that employees are aware of the listed species. Photos of the habitat in which sensitive species are found will be posted on site.</p>	Continuous
GEN4	Hazardous substances in designated places	<p>The changing of oil, refueling, and other actions that could result in a release of a hazardous substance will be restricted to designated areas that are sited as far as is practicable from any sensitive plant populations, sensitive habitats, or drainages. Such designated areas will be surrounded with berms, sandbags, or other barriers to further prevent accidental spill of fuel, oil, or chemicals. Any accidental spills will be immediately contained, cleaned up, and properly disposed.</p>	Continuous
GEN5	Storage and staging away from sensitive areas	<p>During the migratory bird and raptor breeding season, storage and staging areas will be placed as far from sensitive areas as practicable. To the maximum extent practicable, staging areas will be located within previously disturbed sites and no closer than 100 feet from sensitive habitat. Prior written approval from the USFWS is required for staging within native habitat areas or within 100 feet during the migratory bird and raptor breeding season.</p>	During the migratory bird and raptor breeding season (February 15 – September 15)

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Measure #	Issue	Action	Schedule
GEN6	Dust control	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 RE or the RE's appointed representative.	Project biologist will periodically monitor the work area
GEN7	Work site cleaning	To avoid attracting predators of migratory birds, the work site will be kept as clean of debris as possible. All food-related trash items will be placed in sealed containers and regularly removed from the site.	Continuous
GEN8	Pets of personnel	Pets of personnel will not be allowed on the work site.	Continuous
GEN9	Night lighting	Night lighting in the vicinity of native habitat areas will not occur to the maximum extent practicable. Any night lighting will be selectively placed, shielded, and directed away from all areas of native habitat to the maximum extent practicable.	Continuous
GEN10	Environmentally Sensitive Area protection	Environmentally Sensitive Areas (ESAs) include areas of native vegetation and habitat for listed species. ESAs along the edge of the project footprint will be delineated by the proponent. All parties associated with the work will strictly avoid these areas. No work activities, materials, or equipment storage or access will be permitted in an ESA. The boundaries of the ESA will be fenced with orange plastic snow fencing. Work areas will be marked clearly in the field and confirmed by the project biologist prior to habitat clearing, and the marked boundaries will be maintained throughout the duration of the work.	Continuous

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Table 2: Conservation Measures for Temporary Vegetation Impacts

Measure #	Issue	Action	Schedule
TVG1	Native vegetation maintenance	Native vegetation in the temporary impact footprint shall be trimmed at the surface rather than uprooted to the maximum extent practicable.	Continuous
TVG2	Re-vegetation of work areas	All generally native areas, as opposed to generally developed areas, temporarily impacted by work activities will be revegetated with native plant species using a standardized restoration plan submitted to the USFWS at least 90 days prior to planting. The restoration plan will describe revegetating all temporarily disturbed areas within the scope of this Opinion. All native seed and plant stock will be from seed and propagules collected within a five-mile radius of the work area to the extent practicable. Seed sources outside of the five-mile radius will be approved by the USFWS to determine whether the source is acceptable. All seeding will occur during the first winter or fall following completion of the work.	Seeding to occur during the first winter or fall following completion of work
TVG3	Invasive exotic plant species in impacted areas	No invasive exotic plant species will be seeded or planted adjacent to or near sensitive vegetation communities or waters of the U.S. In compliance with Executive Order 13112, impacted areas will be reseeded with plant species native to local habitat types, and will avoid the use of species listed in Lists A and B of the California Exotic Pest Plant Council's (Cal-EPPC) List of Exotic Pest Plants of Greatest Ecological Concern in California as of October 1999 to the greatest extent practicable. Areas hydroseeded for temporary erosion control measures will use native plant species.	Continuous
TVG4	Restoration of temporary impact areas	Temporary impact areas will be restored in kind, except temporary impacts to disturbed habitat and non-native grassland in generally native areas will be revegetated with the most appropriate native plant palette following completion of the work. Any areas of disturbed habitat or non-native grassland revegetated with a native palette will not be counted as native habitat for any future transportation-related activity.	Continuous

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Table 3: Conservation Measures for Permanent Vegetation Impacts

Measure #	Issue	Action	Schedule
PVG1	Off-site conservation area	<p>The following measures apply to the off-site conservation area:</p> <ol style="list-style-type: none"> Coastal sage scrub, southern coastal bluff scrub, maritime succulent scrub, and native grass communities will be offset at a 2:1 ratio with any combination of off-site preservation, creation, or restoration of native habitat; Non-native annual grasslands will be offset at a 0.5:1 ratio with any combination of off-site preservation, creation, or restoration of native habitat; Riparian areas will be offset at a 3:1 ratio with any combination of off-site preservation, creation, or restoration of native habitat; and All Federal waters will be offset following the requirements of the Regional Water Control Board and the U.S. Army Corps of Engineers. 	Continuous
PVG2	Project-specific plan	<p>A project-specific plan outlining the details and implementation schedule of all enhancement, restoration, and creation to offset permanent impacts to vegetation will be prepared by SANDAG and NCTD and submitted to the USFWS for review and approval at least 90 days prior to the start of the project addressed by the biological opinion. All enhancement, restoration, and creation activities to offset permanent vegetation impacts will commence the first fall/winter season prior to or concurrently with the start of the work. The plan should also include:</p> <ol style="list-style-type: none"> A five-year maintenance and monitoring program that will be implemented for the created, enhanced, and/or restored habitats. If a performance criterion is not met, the proponent will prepare an analysis of the cause(s) of failure and, if deemed necessary by the USFWS, propose remedial actions. If any of the enhanced/restored/created habitats have not met a performance criterion during the initial five-year period, the work proponent's maintenance and monitoring obligations will continue until the USFWS deems the enhancement/restoration successful, or contingency measures will be implemented. Annual reports will be submitted to the USFWS by August 1 of each year. These reports will assess both the attainment of yearly success criteria and progress toward the final success criteria. The reports will also summarize compliance with the conservation measures, reasonable and prudent measures, and terms and conditions of this Opinion. 	<p>Plan submitted for approval at least 90 days prior to the start of the project</p> <p>All activities to offset permanent vegetation impacts will commence the first fall/winter season prior to or concurrently with the start of the work</p> <p>Annual reports submitted to the USFWS by August 1 of each year</p>

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Measure #	Issue	Action	Schedule
PVG3	Measures to minimize effects to migratory birds at conservation sites	<p>The following measures will be implemented at all off-site enhancement, restoration, and creation sites to avoid and minimize effects to migratory birds during the five-year restoration period:</p> <ol style="list-style-type: none"> 1. When maintenance and monitoring activities are conducted during the general migratory bird breeding season of February 15 to September 15 of each year, a qualified biologist will conduct a habitat assessment of the possibility for nesting birds no more than one week prior to the start of proposed activities. 2. If nesting birds are observed on site, no maintenance activities will be conducted within 100 feet of a nest (exclusion zone), except to repair broken irrigation lines. If an irrigation line is broken and workers need to encroach into the 100-foot exclusion zone, then SANDAG, NCTD, and USFWS will be notified immediately. Prior to maintenance workers accessing the 100-foot exclusion zone, SANDAG, NCTD, and USFWS will determine the most appropriate timing and method of repair without causing harm to the nest and/or the nesting pair. 3. Herbicide application will occur outside of the 100-foot exclusion zone to avoid drift towards the nest. Only hand spraying downwind of the nest will be allowed. Herbicides will be applied strictly according to label instructions. 4. An education program will be implemented by the project proponent to ensure that all enhancement, restoration, and creation site maintenance workers understand the work restrictions during the general bird breeding season and are aware of the above described conservation measures. 	<p>General breeding season, February 15 – September 15 of each year</p> <p>Education program-ongoing</p>
PVG4	Financing conservation measures	<p>The work proponent will establish an appropriate financial mechanism (determined using a program such as the Property Analysis Report (PAR) system) to fully implement all appropriate conservation measures.</p>	Continuous
PVG5	Long-term management plan for conservation sites	<p>SANDAG and NCTD will ensure that long-term management of the conservation sites will occur. Within three months of the acquisition of the conservation parcels or easement, a draft management plan will be developed in coordination with the USFWS. The plan should be finalized within six months and implemented immediately following final sign off of all restoration activities for each parcel. If the conservation sites are transferred to a third party for long-term management, then an endowment with sufficient funds (determined using the PAR system or a PAR-like system) will be established subject to availability of funds, unless otherwise negotiated with the receiving party.</p>	<p>Draft management plan within three months of parcel acquisition or easement. Finalized plan within six months. Implementation immediately after sign off of restoration activities.</p>

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Measure #	Issue	Action	Schedule
PVG6	Habitat restoration, enhancement, creation, and preservation	All habitats to be restored, enhanced, created and/or preserved outside of the ROW, as stated above, will be managed and preserved in perpetuity. SANDAG and NCTD will ensure there is a perpetual biological conservation easement over all properties used to offset impacts addressed in this Opinion and these lands will be managed according to a USFWS-approved Long-Term Management Plan. The perpetual conservation easement and Long-Term Management Plan will be submitted to the USFWS prior to the start of work.	Conservation easement and Long-Term Management Plan submitted to the USFWS prior to the start of work Conservation area preserved in perpetuity

Because the NCTD ROW is a transportation corridor, it is recognized that NCTD cannot commit the ROW to long-term habitat preservation. Permanent impacts to vegetation associated with work within the ROW will be offset in an area outside of the ROW (off-site conservation area).

Table 4: Coastal California Gnatcatcher Conservation Measures

Measure #	Issue	Action	Schedule
CGN1	Work in vegetation communities	Work in vegetation communities that support the gnatcatcher will be timed to avoid the breeding season (February 15 to August 30) to the extent practicable, unless SANDAG and NCTD document that the habitat to be affected is not occupied by the gnatcatcher. Occupancy surveys will be conducted during the breeding season to determine and document the presence/absence of breeding gnatcatchers. Immediately prior to clearing vegetation outside of the gnatcatcher breeding season, the biologist will survey the work area for gnatcatchers. If gnatcatchers are found within the work footprint, the biologist will direct workers to begin initial vegetation clearing/grubbing in an area away from gnatcatchers. In addition, the biologist will walk ahead of clearing/grubbing equipment to flush birds toward areas of appropriate vegetation that are to be avoided. It will be the responsibility of the biologist to ensure that gnatcatchers will not be injured or killed by initial vegetation clearing/grubbing. The biologist will record the number and map the location of gnatcatchers disturbed by initial vegetation clearing/grubbing or construction and report these numbers and locations to the USFWS within 24 hours.	Work avoids the breeding season (February 15 – August 30) Survey prior to clearing Reporting to the USFWS within 24 hours of ground-disturbing activities

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Measure #	Issue	Action	Schedule
CGN2	Noise levels	For construction activities adjacent to occupied gnatcatcher habitat in which noise in excess of 60 dB(A)L is produced or noise in excess of ambient noise levels if ambient noise levels exceed 60 dB(A)L. Noise attenuation structures will be placed prior to the beginning of breeding season to reduce noise levels to 60 dB(A)L or to ambient noise levels if ambient noise levels exceed 60 dB(A)L, except as necessary for emergency activities. During construction adjacent to these areas, noise monitoring shall occur during the gnatcatcher nesting season and be reported daily to the USFWS. Those construction activities that are creating noise in excess of the aforementioned levels will cease operation until effective noise attenuation structures or devices are in place to the extent practicable.	Noise attenuation structures placed prior to breeding season Noise monitoring during nesting season and reported daily to the USFWS
CGN3	Gnatcatcher surveys	Prior to initiating construction during the gnatcatcher breeding season (February 15 through August 30), focused surveys will be conducted to determine whether gnatcatchers are nesting in the area. If gnatcatchers are nesting within 100 feet of the site where the turnout will be constructed, all activities associated with constructing and replacing the turnout will be postponed until a week after the gnatcatchers fledge or immediately after the nest is abandoned.	During the gnatcatcher breeding season (February 15 through August 30) Postpone activities until a week after the gnatcatchers fledge or immediately after the nest is abandoned

EX-11, CONT.