CALIFORNIA COASTAL COMMISSION
SAN DIEGO AREA
7575 METROPOLITAN DRIVE, SUITE 103
SAN DIEGO, CA 92108-4402
(619) 767-2370

Th22b

ADDENDUM

June 6, 2012

To: Commissioners and Interested Persons

From: California Coastal Commission
San Diego Staff

Subject: Addendum to **Item Th22b**, Coastal Commission Permit Application **#6-11-093 (Caltrans)**, for the Commission Meeting of June 14, 2012.

Changes to Staff Report

Commission staff recommends modifications and additions to Section IV (Findings and Declarations) of the staff report for clarification purposes. Deleted language is shown in strike through and new language to be added is shown in ***bold, underlined, italic***, as shown below:

Page 5 – Modify Section III, Special Condition 3(a), as follows:

a. ***Plans and specifications*** ~~A maintenance plan~~ for the planted area that shall describe the herbicide, pesticide and fertilizer practices as well as list the chemical pesticides and fertilizers that will be used on site, including the expected frequency and volume of each application. ***Additional applications of herbicide to control weeds shall be determined by the contractor as required by the site conditions.*** The selected chemicals shall not be toxic to fish or wildlife or persistent in the environment. Herbicides and pesticides, if used at all, shall be applied by hand application or by other means that will prevent leakage, percolation, or aerial drift into adjacent lagoon, wetland and upland areas;

Page 6 – Modify Section III, Special Condition 3(e), as follows:

e. Seeds or cuttings used for planting materials shall come from within ***20***~~5~~ miles of the coast from Los Angeles, Orange, or San Diego Counties;

Page 6 – Modify Section III, Special Condition 3(f), as follows:

f. A planting schedule that indicates that ***areas of native revegetation shall be planted concurrent with or immediately following completion of the construction project, and that areas completely surrounded by urban uses in***

the interchange shall be planted ~~the planting plan shall be implemented~~ within 60 days of completion of the construction project;

Page 7 – Modify Section III, Special Condition 5(e), as follows:

e. Plan for the management and/or disposal of ***non-hazardous Aerially Deposited Lead (ADL) contaminated*** soils at the project site identified ~~as contaminated with Aerially Deposited Lead (ADL)~~ by the applicant, ~~in conformance with Department of Toxic Substance Control requirements,~~ that:

~~1)~~ ~~specifies that any ADL soil that will be disturbed during site grading operations shall be reported to the California Department of Toxic Substance Control (DTSC) and subject to the requirements of that agency for dealing with hazardous waste;~~

1~~2~~) requires that all ~~soil contaminated with~~ ***ADL soils will either be transported off site with full disclosure to the receiving party, be disposed of at an appropriate landfill facility, or*** ~~that will~~ remain on site ~~in accordance with DTSC regulations~~ ***and*** shall be documented in the as-built plans and a record of ADL sample results and volume of contaminated soil be kept in the Caltrans project file for future reference;

2~~3~~) provides that ~~soils contaminated with~~ ADL soils within ten (10) feet of any drainage features such as an unlined ditch or drain, or structural water quality BMPs such as a bioswale or sand filter, or is within ten (10) feet of ESHA, coastal waters or coastal wetlands, shall be removed and replaced with clean soil for the purpose of preventing movement of ADL to these features;

3~~4~~) provides that any ADL soils that are disturbed during construction shall be managed using construction Best Management Practices ***(BMPs), and that ADL soils remaining on site will use permanent BMPs such as placing the soils above the water table, capping the soils with clean material and/or situating the soil under pavement areas to isolate the soils from coastal waters*** ~~until the subject soils are handled in accordance with DTSC regulations~~;

4~~5~~) ensures that undisturbed ADL soils that remain on site, disturbed ADL soils that have been incorporated into fills or embankments, and impermeable protective material covering these soils will not be subject to erosion.

Page 11 – Modify Section III, Special Condition 8(a), as follows:

a. Acceptable colors shall be limited to colors compatible with the surrounding environment (earth tones) ***such as*** ~~including~~ deep shades of green, brown and gray with no white or light shades and no bright tones;

Page 30 – Modify Section IV, Findings and Declarations, as follows:

Leaded gasoline was banned in California in the 1970's and is the source of Aerially Deposited Lead (ADL) in surface soils adjacent to highly travelled roadways. The proposed project includes the removal of over 300,000 cubic yards of soil. ***Existing studies for ADL indicate that there are non-hazardous concentrations of ADL onsite. As proposed, soil containing non-hazardous ADL may be excavated and reused onsite, disposed at a location approved by the receiving party with full disclosure of the ADL study, or disposed of in a Landfill permitted to accept the non-hazardous ADL soil. Additional lead testing may be performed if the soil is to be placed offsite. If further testing reveals that hazardous ADL exists, it shall be handled and disposed in accordance with a Waiver from the Department of Toxic Substance Control (DTSC).*** ~~As proposed, soil containing Aerially Deposited Lead (ADL) may be excavated and reused onsite (placed beneath new pavement) or disposed of in a Class 1 Landfill in accordance with a Waiver form the Department of Toxic Substance Control.~~ The project description does not include a location of ***off site*** disposal for soils unaffected by ADL or ***ADL soils classified as non-hazardous in accordance with DTSC thresholds***. **Special Condition #5** requires the applicant to identify the disposal site and, if located in the Coastal Zone, show proof of a valid coastal development permit for disposal of the soil.

CALIFORNIA COASTAL COMMISSION
SAN DIEGO AREA
7575 METROPOLITAN DRIVE, SUITE 103
SAN DIEGO, CA 92108-4421
(619) 767-2370

Th22b

Filed:	March 8, 2012
180th Day:	September 4, 2012
Staff:	G. Buhr - SD
Staff Report:	May 31, 2012
Hearing Date:	June 13 -15, 2012

STAFF REPORT: REGULAR CALENDAR

Application No.:	**6-11-093**
Applicant:	**California Department of Transportation (Caltrans)**
Agent:	Kim Smith
Project Description:	Replacement and reconstruction of the Interstate 5/Genesee Avenue overcrossing and associated freeway access ramps, and the widening of Genesee Avenue from four to six lanes as it approaches the interchange from both east and west directions. The proposed project also includes retaining walls, bioswales, and a new 8,000 foot-long pedestrian and bicycle path with overcrossing extending across Genesee Avenue. Habitat impacts from the project are proposed to be mitigated off-site at the Deer Canyon Mitigation Site.
Location:	Interstate 5 (I-5) and Genesee Avenue interchange, San Diego, San Diego County.
Staff Recommendation:	Approval with Conditions

SUMMARY OF STAFF RECOMMENDATION

The applicant proposes to: (1) reconstruct the I-5/Genesee Avenue interchange to accommodate widening of Genesee Avenue and meet vertical clearance requirements for the overcrossing; (2) replace the existing Genesee Avenue four-lane overcrossing with a new six-lane overcrossing that would be wider, longer and higher than the existing structure; (3) widen and lengthen the four access ramps at the interchange to accommodate increased traffic flows and to align the

access ramps with the new overcrossing; (4) construct a new, three-mile long bicycle and pedestrian path and overcrossing structure extending across Genesee Avenue.

The applicant proposes to excavate 772, 613 cubic yards of soil from the surrounding cut and fill slopes. The proposed project includes stabilization of these slopes through the construction of seventeen, separate retaining wall sections. Additionally, the applicant plans to stabilize an ancient landslide located on-site with a large stabilization buttress that would require over 300,000 cubic yards of fill for construction.

The applicant proposes to mitigate the project's impacts to adjacent wetland and upland habitats at an off-site location at the Deer Canyon Mitigation Site. The Commission recently approved the restoration plan for the Deer Canyon Mitigation Site as a part of CDP 6-11-033.

The major Coastal Act issues associated with the proposed project include potential adverse impacts to wetlands and upland habitats, water quality, landform alteration and changes to the visual character surrounding the subject site. These impacts would be caused by the expanding of the footprint of the subject interchange as well as the associated cut and fill of slopes to allow for the proposed roadway improvements. Commission staff is recommending that the Commission **APPROVE** a coastal development permit for the proposed development with **nine (9) special conditions** addressing these potential adverse impacts. **Special Conditions 2, 3 and 4** address biological concerns by requiring appropriate mitigation for impacts at an off-site location within the Coastal Zone of the same watershed; submittal of a final on-site landscaping installation, maintenance and reporting plan; and restrict vegetation clearing to be conducted outside nesting seasons for sensitive bird species. Impacts to water quality are addressed through **Special Conditions 5 and 6** which require submittal of a final water quality plan for permanent treatment of runoff; and restrictions on temporary construction methods and identification of erosion control methods. The proposed project would involve landform alteration in the form of retaining walls and a stabilization buttress; **Special Condition 7** requires conformance with geotechnical recommendations and **Special Condition 8** calls for submittal of a final aesthetic design plan for the structural elements of the proposed project to ensure conformity with the surrounding character of the corridor.

Standard of Review: Portions of the proposed project are located within the City of San Diego's Local Coastal Program and deferred areas of the Coastal Zone on the UCSD campus that are still under the jurisdiction of the Commission. The City of San Diego and the Commission have agreed to process the proposed project as a consolidated permit and therefore the Chapter 3 policies of the Coastal Act are the standard of review for the proposed project.

TABLE OF CONTENTS

APPENDICES

EXHIBITS

I. MOTION AND RESOLUTION

Motion:

I move that the Commission approve Coastal Development Permit No. 6-11-093 pursuant to the staff recommendation.

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS

This permit is granted subject to the following standard conditions:

1. **Notice of Receipt and Acknowledgment**. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. **Interpretation.** Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.

4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

The permit is subject to the following conditions:

1. **Final Plans. PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit to the Executive Director for review and written approval, full-size final plans for the permitted development that are in substantial conformance with the original plans submitted with the permit application dated March 2012 by Caltrans.

   The applicant shall undertake development in accordance with the final approved plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. Such reportable changes include any alteration that could potentially affect the kind, location, intensity or other substantive aspect of the approved development, or any avoidance, minimization or mitigation measure to be employed in conjunction with the approval.

   In the event that the proposed change will require modification of the development approved by this permit, or modification of the mitigation measures required under the terms of this permit, permittee shall submit a timely request for Executive Director review of materiality, as provided by Commission Regulations (Section 13166(b)). If the change is determined to be material, then it shall be reviewed in accordance with the process prescribed for amendments of coastal development permits, as detailed in Commission Regulations, Sections 13164 & 13166.

2. **Mitigation Acreage Accounting. PRIOR TO COMMENCEMENT OF CONSTRUCTION**, in order to provide updated and accurate mitigation acreage amounts already used within the Deer Canyon Mitigation Site, the applicant shall provide an updated accounting of the restored acreage amounts for the mitigation site, specifically identifying available restoration acreage within the site, and acreage amounts totaling no less than 3.36 acres of riparian habitat and 13.84 acres of Coastal Sage Scrub habitat that the applicant will use as mitigation for the proposed Genesee Interchange project. The updated acreage accounting table shall also describe mitigation amounts that have already been deducted as mitigation for separate projects, within or outside of the Coastal Zone, and quantify any acreage amounts that are yet unaccounted for as mitigation for a specific project. This information shall be provided when final permits with required mitigation amounts are issued by the relevant state and federal agencies.

3. **Landscaping/Planting Plan. PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit a final landscaping plan for adjacent highway and interchange slopes for the review and written approval of the Executive Director. The plan shall include the following:

   a. A maintenance plan for the planted area that shall describe the herbicide, pesticide and fertilizer practices as well as list the chemical pesticides and fertilizers that will be used on site, including the expected frequency and volume of each application. The selected chemicals shall not be toxic to fish or wildlife or persistent in the environment. Herbicides and pesticides, if used at all, shall be applied by hand

application or by other means that will prevent leakage, percolation, or aerial drift into adjacent lagoon, wetland and upland areas;

b. A plan showing the type, size, extent and location of all plant materials used; and

c. Specific ecological performance criteria that shall include standards for species diversity and vegetative cover. Success criteria shall insure that the major structure-producing species that characterize the habitat are present and that there is an appropriate diversity of species in both the shrub and herbaceous vegetation layers.

d. Only species native to southern California and typical of Coastal Sage Scrub habitats shall be used, such that the proposed planted slopes will be compatible with surrounding natural and manmade areas, except in areas completely surrounded by urban uses within the interchange. No plant species listed as problematic and/or invasive by the California Native Plant Society (http://www.CNPS.org/), the California Invasive Plant Council (http://www.cal-ipc.org/), or as may be identified from time to time by the State of California shall be employed or allowed to naturalize or persist on the site. No plant species listed as a 'noxious weed' by the State of California or the U.S. Federal Government shall be utilized within the property;

e. Seeds or cuttings used for planting materials shall come from within 5 miles of the coast from Los Angeles, Orange, or San Diego Counties;

f. A planting schedule that indicates that the planting plan shall be implemented within 60 days of completion of the construction project;

g. All required plantings shall be maintained in good growing conditions, and whenever necessary, shall be replaced with new drought-tolerant native or non-invasive plant materials to ensure continued compliance with landscape requirements; and

h. Five years from the date of issuance of the coastal development permit, the applicant shall submit a landscape monitoring report for review and written approval of the Executive Director. The report shall be prepared by a licensed Landscape Architect or qualified Resource Specialist, and certify that the on-site landscaping is in conformance with the landscape/planting plan approved pursuant to this Special Condition. The monitoring report shall include photographic documentation of plant species and plant coverage.

If the landscape monitoring report indicates the landscaping is not in conformance with or has failed to meet the performance standards specified in the landscaping plan approved pursuant to this permit, the applicant, or successors in interest, shall submit a revised or supplemental landscape plan for the review and written approval of the Executive Director. The revised landscaping plan shall be prepared by a licensed Landscape Architect or Resource Specialist and shall specify measures to remediate those portions of the original plan that have failed or are not in conformance with the original approved plan.

The permittee shall undertake the development in accordance with the approved planting plans. Any proposed changes to the approved planting plans shall be reported to the Executive Director. No changes to the planting plans shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

4. **Timing of Construction.** To avoid potential impacts to coastal California gnatcatcher, southwestern willow flycatcher, and least Bell's vireo, during their nesting season, removal of existing vegetation will not be permitted between the dates of February 15th and September 15th of any year; unless written permission from the California Department of Fish and Game and US Fish and Wildlife Service is provided to the Executive Director for review and approval.

5. **Water Quality Management Plan**. **PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit a final detailed water quality plan for review and written approval of the Executive Director. The applicant shall develop the plan to protect post construction water quality in consultation with the Regional Water Quality Control Board (RWQCB). The plan shall be in conformity with the Storm Water Data Report (PS&E Phase, dated May 2012 or later version) and consist of the following:

   a. The applicant shall submit final grading plans for the entire alignment of the proposed road work, clearly delineating existing and proposed contours throughout the project site. All excess graded material (cut) shall be disposed of at a legal disposal site. If the disposal site is located in the coastal zone, a coastal development permit or an amendment to this permit shall be required before disposal can take place unless the Executive Director determines that no amendment or new permit is legally required

   b. The applicant shall submit a Best Management Practices (BMP) Plan addressing post-construction BMPs to protect coastal water quality post construction. This Plan shall include, but is not limited to, final drainage plans delineating bioswales and outlet design, and calculations/evidence that the facilities are designed to treat, infiltrate or filter stormwater from each runoff event, up to and including the 85th percentile, 24-hour runoff event for volume-based BMPs, and/or the 85th percentile, 1-hour runoff event, with a factor of safety of 2X, for flow-based BMPs.

   c. Additional pavement resulting from widening the Genesee overcrossing shall be included in the calculation of added impervious surface and the treatment of storm water runoff.

   d. All opportunities, including Total Maximum Daily Load (TMDL) reducing retrofit opportunities, shall be taken in order to maximize the treatment of runoff from all elements of the highway within the project study area in order to protect water quality. For example, all feasible extensions in the length of the treatment swales and/or increase in the area of pavement drainage that can be routed through the swales in addition to that documented in the May 2012 draft SWDR shall be pursued and reflected in the final SWDR.

e. Plan for the management and/or disposal of soils at the project site identified as contaminated with Aerially Deposited Lead (ADL) by the applicant, in conformance with Department of Toxic Substance Control requirements, that:

1) specifies that any ADL soil that will be disturbed during site grading operations shall be reported to the California Department of Toxic Substance Control (DTSC) and subject to the requirements of that agency for dealing with hazardous waste;

2) requires that all soil contaminated with ADL that will remain on site in accordance with DTSC regulations shall be documented in the as-built plans and a record of ADL sample results and volume of contaminated soil be kept in the Caltrans project file for future reference;

3) provides that soils contaminated with ADL within ten (10) feet of any drainage features such as an unlined ditch or drain, or structural water quality BMPs such as a bioswale or sand filter, or is within 10 feet of ESHA, coastal waters or coastal wetlands, shall be removed and replaced with clean soil for the purpose of preventing movement of ADL to these features ;

4) provides that any ADL soils that are disturbed during construction shall be managed using construction Best Management Practices, until the subject soils are handled in accordance with DTSC regulations;

5) ensures that undisturbed ADL soils that remain on site, disturbed ADL soils that have been incorporated into fills or embankments, and impermeable protective material covering these soils will not be subject to erosion.

The permittee shall undertake development in accordance with the approved final BMP program. Any proposed changes to the approved final program shall be reported to the Executive Director. No changes to the approved water quality plan shall occur without a Coastal Commission-approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

6. Erosion Control and Construction Best Management Practices Plan. PRIOR TO COMMENCEMENT OF SITE CLEARING OR OTHER DEVELOPMENT, a Storm Water Pollution Prevention Plan (SWPPP) that prevents contamination of wetlands and associated damage to sensitive species from storm water runoff during the proposed construction period. The applicant shall develop the SWPPP in consultation with the Regional Water Quality Control Board (RWQCB). The SWPPP shall be in conformity with the draft Storm Water Data Report (PS&E Phase, dated May 2012) and shall specify the following:

Erosion Control Plan

a. The plan shall delineate the areas to be disturbed by grading or construction activities and shall include any temporary access roads, staging areas and stockpile areas. The natural areas to be protected on the site (i.e., the ESAs) shall be clearly delineated on the plan and on-site with fencing or survey flags;

b. Include a narrative report describing all temporary run-off and erosion control measures to be used during construction;

c. The plan shall identify and delineate on a site or grading plan the locations of all temporary erosion control measures;

d. The plan shall specify that should grading take place during the rainy season (November 1 – March 31); the applicant shall install or construct temporary sediment basins (including debris basins, desilting basins or silt traps); temporary drains and swales; sand bag barriers; silt fencing; stabilize any stockpiled fill with geofabric covers or other appropriate cover; install geotextiles or mats on all cut or fill slopes; and close and stabilize open trenches as soon as possible; and

e. The erosion measures shall be required on the project site prior to or concurrent with the initial grading operations and maintained throughout the development process to minimize erosion and sediment from runoff waters during construction. All sediment should be retained on-site unless removed to an appropriate approved dumping location either outside the coastal zone or to a site within the coastal zone permitted to receive fill. If the disposal site is located in the coastal zone, a coastal development permit or an amendment to this permit shall be required before disposal can take place unless the Executive Director determines that no amendment or new permit is legally required.

Construction Best Management Practices

a. No demolition or construction materials, debris, or waste shall be placed or stored where it may enter sensitive habitat, receiving waters or a storm drain, or be subject to wave, wind, rain, or tidal erosion and dispersion;

b. No demolition or construction equipment, materials, or activity shall be placed in or occur in any location that would result in impacts to environmentally sensitive habitat areas, streams, wetlands or their buffers;

c. Any and all debris resulting from demolition or construction activities shall be removed from the project site within 24 hours of completion of the project;

d. Demolition or construction debris and sediment shall be removed from work areas each day that demolition or construction occurs to prevent the accumulation of sediment and other debris that may be discharged into coastal waters;

e. All trash and debris shall be disposed in the proper trash and recycling receptacles at the end of every construction day;

f. The applicant shall provide adequate disposal facilities for solid waste, including excess concrete, produced during demolition or construction;

g. Debris shall be disposed of at a legal disposal site or recycled at a recycling facility. If the disposal site is located in the coastal zone, a coastal development permit or an amendment to this permit shall be required before disposal can take place unless the Executive Director determines that no amendment or new permit is legally required;

h. All stock piles and construction materials shall be covered, enclosed on all sides, shall be located as far away as possible from drain inlets and any waterway, and shall not be stored in contact with the soil;

i. Machinery and equipment shall be maintained and washed in confined areas specifically designed to control runoff. Thinners or solvents shall not be discharged into sanitary or storm sewer systems;

j. The discharge of any hazardous materials into any receiving waters shall be prohibited;

k. Spill prevention and control measures shall be implemented to ensure the proper handling and storage of petroleum products and other construction materials. Measures shall include a designated fueling and vehicle maintenance area with appropriate berms and protection to prevent any spillage of gasoline or related petroleum products or contact with runoff. The area shall be located as far away from the receiving waters and storm drain inlets as possible;

l. Best Management Practices (BMPs) and Good Housekeeping Practices (GHPs) designed to prevent spillage and/or runoff of demolition or construction-related materials, and to contain sediment or contaminants associated with demolition or construction activity, shall be implemented prior to the on-set of such activity; and

m. All BMPs shall be maintained in a functional condition throughout the duration of construction activity.

The final SWPPP shall be in conformance with the site/development plans approved by the Coastal Commission. Any changes to the SWPPP shall be reported to the Executive Director and no changes shall occur without an amendment to the coastal development permit, unless the Executive Director determines that no amendment is required.

7. Plans Conforming to Geotechnical Engineer's Recommendations. By acceptance of this permit, the applicant agrees to comply with the recommendations contained in all of the geology, geotechnical, and/or soils reports referenced as Substantive File Documents. These recommendations, including recommendations concerning foundations, sewage disposal, and drainage, shall be incorporated into all final design and construction plans, which must be reviewed and approved by a Certified Engineering Geologist or licensed Geotechnical Engineer prior to commencement of development.

The final plans approved by the consultant shall be in substantial conformance with the plans approved by the Commission relative to construction, grading, and drainage. Any substantial changes in the proposed development approved by the Commission that may be required by the consultant shall require amendment(s) to the permit(s) or new Coastal Development Permit(s).

8. **Structural Appearance. PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit for the review and approval of the Executive Director, a color palette, design, and material specifications for the outer surface of all structures authorized by the approval of this Coastal Development Permit (including but not limited to retaining walls, overcrossings, etc.) and shall be subject to the following requirements:

   a. Acceptable colors shall be limited to colors compatible with the surrounding environment (earth tones) including deep shades of green, brown and gray with no white or light shades and no bright tones;

   b. Incorporation of drought tolerant and sustainable landscape palettes;

   c. Trees or other vegetated buffers planted between the highway traveler's viewpoint and retaining walls taller than 3 meters tall, where feasible, to soften views of walls;

   d. Architectural features, textures, and integral concrete color shall be used to mitigate the appearance of visible sections of retaining walls. Walls shall incorporate architectural features such as pilasters and caps to provide shadow lines, provide relief from monolithic appearance, and reduce their apparent scale;

   e. Retaining walls shall be designed to visibly blend with graded slopes using techniques such as slope rounding, slope sculpting and variable gradients to mimic the appearance of natural topography when feasible; and

   f. Where site conditions are favorable, retaining walls should be divided into separate structures sufficiently offset from one another to create a planting area.

   The approved structures shall be finished with only the colors and design features authorized pursuant to this special condition. Alternative colors or materials for future repainting or resurfacing may only be applied to the structures authorized by this Coastal Development Permit if such changes are specifically authorized by the Executive Director as complying with this special condition.

9. **Other Permits. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION**, the permittee shall provide to the Executive Director copies of all other required state or federal discretionary permits for the development authorized by CDP #6-11-093. The applicant shall inform the Executive Director of any changes to the project required by other state or federal agencies. Such changes shall not be incorporated into the project until the applicant obtains a Commission amendment to this permit, unless the Executive Director determines that no amendment is legally required.

IV. FINDINGS AND DECLARATIONS

A. DETAILED PROJECT DESCRIPTION/HISTORY

Project Location and Land Use Context
The subject site is located in western San Diego County, within the City of San Diego's University City Community Plan area in the central western portion of the City. The subject site is approximately 1.5 miles east of the Pacific Ocean (**Exhibit 1 and 2**). The subject area includes a portion of I-5, a major north-south freeway, and the I-5/Genesee Avenue overcrossing and interchange. The I-5/Genesee Avenue interchange provides access to several high volume user centers including the University of California, San Diego, numerous biotech and research facilities and hospitals. The subject interchange also provides access to coastal areas along the La Jolla and Torrey Pines coastline.

Within the subject area, I-5 is an eight-lane divided freeway with four lanes in each direction. The horizontal alignment of I-5 is relatively straight between La Jolla Village Drive and Genesee Avenue and then curves gently to the east, north of Genesee Avenue The vertical alignment of the freeway slopes upward at a 1.6-percent grade from La Jolla Village Drive to just south of the Voigt Drive overcrossing, and then slopes downward at a 3-percent grade to the north end of the subject area. The topography surrounding the subject site is largely represented by coastal hills, with steep cut slopes directly adjacent to the I-5 corridor. The adjacent land uses are characterized primarily by urban development including residential, commercial, office, industrial, and institutional structures. To the north and west of the Genesee Avenue interchange is a large undeveloped area of open space comprised primarily of upland habitats including coastal sage scrub and non-native grasslands. Sorrento Valley Road exists just south of the subject site and provides access to large commercial centers and transit centers.

Project Description
The purpose of the proposed project is to accommodate both existing and increased future traffic flows and meet vertical clearance requirements for the Genesee Avenue interchange/overcrossing, and includes the Phase I components of the Genesee Avenue Interchange Project described below. The applicant proposes to reconstruct the existing 4-lane overcrossing with a 6-lane overcrossing structure. The new overcrossing structure would be wider, longer, and higher than the existing structure, and would be shifted slightly to the north (the centerline would shift approximately 53 feet) so that the existing overcrossing could continue to carry traffic during construction of the new overcrossing. The new overcrossing would include three lanes in each direction, two left-turn lanes in each direction, bike lanes in each direction, and sidewalks (**Exhibit 3 and 4**). In order to accommodate the additional traffic lanes, bike lanes, and sidewalk, the new overcrossing is proposed to be increased from 76.1 feet to 154.9 feet in width.

The existing Genesee Avenue overcrossing structure has a vertical clearance of 15.2 feet and does not meet the current Caltrans' standards which require a vertical clearance of at least 16.5 feet. Due to this existing vertical deficit, any widening of the existing structure also would not meet vertical clearance standards. Therefore, the applicant proposes to replace the existing bridge with a wider structure that conforms to Caltrans' vertical clearance standards. The vertical clearance of the proposed bridge structure would be 22.2 feet. Additionally, the

existing overcrossing structure is not long enough to span the ultimate width of the planned I-5 widening improvements. Such freeway widening improvements would not occur as part of the proposed project, but are planned by Caltrans as a separate future project. Therefore, the proposed structure would be lengthened from 240.5 feet to 301.2 feet, which would accommodate future expansion of the I-5 freeway beneath the proposed bridge structure. The vertical clearance of the proposed bridge would also be somewhat reduced after completion of future proposed freeway widening, but would continue to meet vertical clearance requirements.

The four ramps at the Genesee Avenue interchange also would be widened and lengthened to accommodate existing and increased (future year 2030) traffic flows at the proposed overcrossing structure (**Exhibit 3 and 4**). The Genesee Avenue off-ramps would be expanded to two lanes to improve traffic flow in the ramp junction areas at exiting and forecast higher future year volumes. The off-ramps at the ramp terminals would be widened from two to four lanes (two left-turn and two right-turn lanes) allowing sufficient length to store expected queuing. The Genesee Avenue on-ramps would be increased to three lanes (two general purpose and one HOV) with the northbound on-ramp tapering down to two lanes, and the southbound on-ramp tapering down to one lane.

Given the close proximity between the Sorrento Valley Road on and off-ramps and the Genesee Avenue interchange, coupled with high usage rates, there is considerable traffic congestion due to the high volume of cars merging to and from the freeway system. A ramp meter would be installed at the Sorrento Valley Road southbound on-ramp to control the volume of potential weaving traffic coming from Sorrento Valley Road during peak periods. Along with the ramp meter, two additional lanes would be added, including an HOV bypass. This improvement would help reduce and improve the operation of weaving maneuvers for traffic exiting at Genesee Avenue. One additional lane would be added to the Sorrento Valley Road northbound off-ramp, which, combined with the northbound auxiliary lane, would improve the operation of weaving maneuvers for traffic entering from Genesee Avenue and exiting at Sorrento Valley Road.

In order to be consistent with the proposed overcrossing and interchange improvements, as well as Genesee Avenue outside of the project area, the Genesee Avenue approach would also be widened to six lanes (three lanes in each direction) directly east and west of the overcrossing. Also, the proposed project would include the construction of two dedicated right-turn lanes for the westbound to northbound on-ramp and the eastbound to southbound on-ramp, and two left-turn lanes for the eastbound to northbound on-ramp and the westbound to southbound on-ramp.

Auxiliary lanes on I-5 are proposed to the north and south of the interchange to improve traffic flow where vehicles are entering and exiting the freeway at Genesee Avenue. The proposed project includes the addition of one auxiliary lane in both directions between the Genesee Avenue ramps and the adjacent ramps for La Jolla Village Drive and Sorrento Valley Road. The proposed auxiliary lanes are not designed or included as new main line traffic lanes designed to accommodate increased facility capacity, but are being proposed to accommodate projected future year (2030) increases in traffic volumes entering and exiting the freeway at Genesee Avenue. Future year entering/exiting traffic volumes would exceed the capacity of the existing direct merge/diverge ramp junction configurations, which would cause increased congestion on I-5 and increased queuing on Genesee Avenue.

Under existing conditions (2012), the Genesee Avenue and northbound I-5 ramps intersection operates below acceptable levels in the AM and PM peak hours. On the Genesee Avenue overcrossing, queued vehicles occur during the AM, midday, and PM peak periods. These queues have been observed to spill back past the overcrossing causing backups to overcrossing approaches on Genesee Avenue and onto the exit ramps. These traffic queues create unsafe travel conditions on both the roadway and freeway. Traffic volumes on the section of I-5 within the project area in the year 2030 are expected to increase congestion on I-5 and increase queuing on Genesee Avenue. The proposed project is designed to improve congestion for both existing and future conditions as they pertain to the I-5/Genesee Avenue interchange.

The proposed project would be designed to accommodate pedestrian and bicycle traffic, as well as vehicular traffic, within the subject site. The Community Plan and the City of San Diego Bikeway Master Plan identify Genesee Avenue as a Class II bike lane facility from North Torrey Pines Road to State Route 52. This facility has been implemented except for the portion across I-5 because the existing overcrossing structure is not wide enough to accommodate bike lanes. The proposed overcrossing structure would include a Class II bike lane that is 6 ft wide in each direction. The proposed overcrossing would also include sidewalks, striped/signalized pedestrian crossings, and Americans with Disabilities Act (ADA) compliant pedestrian ramps at each intersection.

The City of San Diego Bicycle Master Plan also identifies an existing Class III bike route along the shoulders of I-5 connecting Genesee Avenue and Sorrento Valley Road. This current alignment creates a hazardous condition where bicyclists are placed directly adjacent to freeway traffic without any barrier or separation. In order to remedy this situation, the proposed project includes a new, 2-way, Class I bike path located west of I-5 and extending from Sorrento Valley Road to Voigt Drive (highlighted in yellow on **Exhibit 4**). The proposed 12-foot wide bike path would be over 8,000 feet in length and would parallel the freeway, within the Caltrans right-of-way but would be physically separated from traffic lanes. The bike path would also include a pedestrian/bicycle overcrossing that would extend across Genesee Avenue in order to reduce conflicts between existing traffic and bike path users. The pedestrian/bicycle overcrossing would be located approximately 650 feet west of the center of I-5 and would be 20 feet in height (highlighted in yellow on **Exhibit 4**).

The I-5 corridor in the proposed project area is bordered by undulating topography comprised of coastal hills and valleys that have already undergone significant alteration to accommodate the original freeway construction. Due to the landscape constraints surrounding the subject site, seventeen retaining walls are proposed at various locations along the proposed project corridor. The maximum heights of the walls range from approximately 3 to 60 feet in height (**Exhibit 5 and 6**). Proposed earthwork consists of approximately 772,613 cubic yards of excavation and 381,461 cubic yards of fill the excess balance would be deposited at an off-site facility located outside of the Coastal Zone.

There is also an ancient landslide identified within the proposed project area located under the northwest portion of the interchange. The applicant proposes to stabilize the ancient landslide embankment through the construction of a large stabilization buttress that would be placed just northwest and under portions of the I-5/Genesee Avenue interchange. The size and weight of the buttress would counteract the driving force along the potential slip plane of the ancient landslide (**Exhibit 5**).

Highway landscaping dominates much of the I-5 right-of-way in the proposed project area, and includes trees (primarily eucalyptus) either solitary or in stands, ground cover (ice plant - Carpobrotus edulis), and shrubs. Some of the steep manufactured slopes along I-5 also contain a variety of disturbed and/or native biological resources. The proposed project would result in permanent impacts to 6.92 acres of native upland habitats (1.18 acres of Coyote Brush Scrub, 4.36 acres of Coastal Sage Scrub, and 1.38 acres of disturbed Coastal Sage Scrub), 8.58 acres of non-native grasslands, and 1.12 acres of riparian/State jurisdictional wetland habitats (1.01 acres of Southern Willow Scrub and 0.11 acres of unvegetated channel).

All habitat impacts are proposed to be mitigated offsite at the Deer Canyon Mitigation Site. The Deer Canyon Mitigation Site is in the Coastal Zone and within the same watershed as the subject site (**Exhibit 8**). A Coastal Development Permit (#6-11-033) for this mitigation site was approved by the Commission in July of 2011; as a part of this approval, the Genesee Avenue interchange project was identified as a likely project that would utilize the restoration undertaken at the Deer Canyon site for mitigation of potential impacts associated with the project. The Deer Canyon Mitigation Site was designed to establish a natural riparian community along an existing non-wetland drainage channel that would provide enhanced functions for flood relief, water quality, groundwater recharge and high quality habitat. The Deer Canyon Mitigation Site once completed will create 11.62 acres of riparian habitat on-site as well as an additional 0.68 acres of alkali marsh. This riparian corridor will be surrounded by the restoration of 15.46 acres of coastal sage scrub and 2.1 acres of native grassland, as well as the preservation of another 18.54 acres of non-native grassland already present on the upslope portions of the site.

Alternatives Analysis

As a part of the environmental review process, Caltrans conducted an analysis of several different design alternatives for the proposed project. Alternatives other than the No Project Alternative primarily focused on different interchanges and ramp design configurations. Analyzed changes in design included keeping the center line of the existing overcrossing in place, or the implementation of loop on and off-ramps in place of the direct ramps currently existing at the interchange. Design alternatives that altered the layout of the interchange were rejected as a preferred alternative for a variety of reasons including increased impacts and footprint requiring additional habitat losses and encroachment onto adjacent properties, inability to meet project goals for traffic relief, and significantly enhanced impacts to traffic during construction of the project.

Secondly, the applicant investigated alternatives to the proposed landslide stabilization buttress that would remove or minimize impacts to the existing riparian habitat located northwest of the interchange along the southbound offramp from the freeway. The applicant examined the potential construction of a large retaining wall or other support structure that would stabilize the proposed ancient landslide area as an alternative to the proposed earthen stabilization buttress design. Based on the available technical information, it was concluded by Caltrans engineers that any typical application of retaining wall (structural concrete, steel, soldier pile with lagging, soil-nail, or tie-back wall) would not adequately provide the required factor of safety for supporting the off-ramp and stabilizing the landslide.

Consolidated CDP: Local Coastal Program jurisdictions & standard of review

Portions of the subject site are located within the jurisdiction of the City of San Diego's Local Coastal Program, while other areas of the proposed project are located in areas of deferred

certification where the Commission still has jurisdiction. Section 30601.3 authorizes the Commission to process a consolidated coastal development permit application when requested by the local government and the applicant and approved by the Executive Director for projects that would otherwise require coastal development permits from both the Commission and from a local government with a certified LCP. The policies of Chapter 3 of the Coastal Act provide the legal standard of review for a consolidated coastal development permit application submitted pursuant to Section 30601.3, with the local government's certified LCP used as guidance.

Caltrans and the City of San Diego have requested the Commission handle the proposed project as a consolidated coastal development permit application in order to assure that the entirety of the proposed development receives all necessary Coastal Act review and approvals. Accordingly, this consolidated CDP covers all of the proposed development, and no separate CDP will be required from the City.

B. PUBLIC ACCESS

The following Coastal Act policies related to public access are most applicable to the proposed development, and state, in part:

> **Section 30210**
>
> *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, rights of private property owners, and natural resource areas from overuse.*
>
> **Section 30213**
>
> *Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred. …*

The subject site is located approximately 1.5 miles from the Pacific Ocean in the University City community of the City of San Diego. Genesee Avenue is a primary east-west arterial link and as such provides access from the residential, educational and commercial developments to the coastline. To the west of the subject interchange are the Torrey Pines and La Jolla coastal areas that provide various coastal recreational opportunities for visitors to experience including the Torrey Pines State Natural Reserve and Torrey Pines State Beach. Genesee Avenue is designated as a Regionally Significant Arterial by SANDAG and is part of the Regionally Significant Transportation Network, which consists of interstate freeways, state highways, arterial corridors, and regional transit services, as well as arterial streets that accommodate larger volumes of traffic. All of these multi-modal facilities and services are considered essential to meeting the mobility and accessibility goals of the region.

Vehicular Access

Currently, Genesee Avenue is a six-lane road to both the east and west of I-5; however, at the freeway overcrossing, the Genesee Avenue bridge narrows to a four-lane bridge with no bike

lanes or sidewalks. This constriction creates significant congestion and delay for travelers going in both directions as well as those that need to access the freeway, as well as creating an unsafe travel corridor for non-motorized travelers. In 2008, the applicant conducted a Traffic Operational Analysis to evaluate existing traffic conditions as well as to forecast future traffic scenarios for the subject site.

The I-5/Genesee Avenue interchange currently experiences considerable congestion during peak-hour periods, resulting in unacceptable levels of service (LOS) and congested conditions. The terminology "level of service" is used to provide a "qualitative" evaluation based on certain "quantitative" calculations that are related to empirical values associated with the roadway or intersection capacity. LOS is a measure developed in the Highway Capacity Manual as a means for documenting the performance of roadways and intersections and is a measurement of actual traffic conditions combined with the perception of such conditions by motorists. There are six levels of service, ranging from LOS A (defined as excellent) where traffic flows freely with little or no restrictions on maneuverability; to LOS F (defined as poor or unacceptable) where traffic flow is unstable with brief periods of movement followed by forced stops. The Mobility Element of the City of San Diego General Plan identifies LOS E and F as unacceptable levels of service for roadways in the City. Vehicle queues at both I-5 ramp intersections with Genesee Avenue currently exceed storage lengths of lanes during morning, midday, and evening peak hours. These queues impede traffic flows and contribute to congestion within the subject site. Additionally, the Genesee Avenue overcrossing between the southbound I-5 ramps and the northbound I-5 ramps also currently operates at an unacceptable LOS F.

Existing operations at the Genesee Avenue interchange are not up to current Caltrans and City performance standards and will worsen over time as a result of growth and associated traffic volume increases in the Project area. The Traffic Operational Analysis (2008) completed by the applicant forecasts that conditions will worsen by the year 2030 to LOS F levels at both I-5/Genesee Avenue intersections, along Genesee Avenue, and all of the on and off ramps for the interchange. Mainline (main traffic lanes) and weaving (merging lane) volumes for I-5 through the subject site are also predicted to be over capacity by the forecast year 2030. Vehicle queues at the I-5 southbound and northbound ramps at Genesee Avenue under 2030 conditions would continue to impede traffic flows along Genesee Avenue and the I-5 ramps at Genesee Avenue, and would spill over into the I-5 mainlines.

The proposed project would widen the Genesee Avenue overcrossing structure to increase the roadway LOS to current City standards as described in the Mobility Element of the City's General Plan. The existing Genesee Avenue overcrossing would be replaced to accommodate six travel lanes, which would then connect to the existing six-lane segment of Genesee Avenue to the west and the six-lane segment of Genesee Avenue east of the overcrossing, thereby eliminating the current chokepoint that occurs under existing conditions. This improvement would facilitate traffic circulation between the east and west sides of the I-5 (**Exhibit 9**).

With implementation of the proposed project, the Genesee Avenue and southbound I-5 ramps intersection, and the Genesee Avenue and the northbound I-5 ramps intersection would operate at acceptable levels for the City under 2012 conditions. Comparatively, if the proposed project were not constructed, existing traffic conditions for the Genesee Avenue intersections with the southbound and northbound I-5 ramps would continue to operate at LOS F whereas, if Caltrans constructs the proposed development, the traffic conditions would be improved to LOS C and LOS B with completion of the proposed project. The majority of the storage lanes at these

intersections have queue length issues under current conditions. The proposed project would eliminate all storage capacity issues associated with present day queue volumes. Additionally, all segments along Genesee Avenue between these intersections would operate at LOS C with implementation of the proposed project. In 2012, without the proposed improvements, the Genesee Avenue overcrossing between the southbound I-5 ramps and the northbound I-5 ramps would operate at LOS F. Implementation of the proposed project would result in an acceptable level of service, LOS C, along this segment.

Under 2030 forecast conditions evaluated in the Traffic Operational Analysis (2008), both analyzed intersections (Genesee Avenue and southbound I-5 ramps, and Genesee Avenue and northbound I-5 ramps) would operate at unacceptable levels of service (LOS F) without implementation of the proposed project. Conditions at both intersections would improve to operate at LOS E or better during all three peak hours with construction of the proposed project. Future traffic congestion conditions along Genesee Avenue are forecast to be at LOS F without the proposed project, but would improve to LOS C if the proposed project is completed.

The Traffic Operational Analysis identifies that all of the storage lanes associated with Genesee Avenue and the I-5 ramps have queue lengths that currently exceed their storage capacity. This results in a hazardous condition where queued vehicles extend into travel lanes. The four ramps at the Genesee Avenue interchange would be widened and lengthened to accommodate existing traffic flows and to align with the proposed overcrossing structure. The proposed ramp improvements would reduce queue storage levels for existing traffic thereby removing the dangerous conditions currently caused by the queued vehicles.

Traffic volumes on the section of I-5 within the proposed project area are expected to grow, leading to increased congestion on I-5 and increased queuing on Genesee Avenue. To further reduce I-5 traffic congestion where vehicles are entering and exiting the freeway, the proposed project includes the addition of auxiliary lanes in both directions between the Genesee Avenue ramps and the adjacent ramps for La Jolla Village Drive and Sorrento Valley Road.

Under 2030 conditions without the proposed project, all analyzed freeway ramp merge/diverge locations along I-5 would operate at LOS F during one or both peak periods. Construction of the proposed project would improve the operations at the Genesee Avenue off-ramps during both the AM peak hour (LOS D) and PM peak hour (LOS C). The forecast year 2030 conditions for the I-5 show all weave segments during both peak periods to be overcapacity. This is primarily due to through traffic travelling from outside the subject site area. The proposed auxiliary lanes associated with the proposed project would provide some improvement to future conditions due to reduced weaving and merging strain on the mainline traffic lanes. In general, based on the traffic analysis provided by the applicant, the proposed project indicates an improvement for the short freeway segments between Genesee Avenue and Sorrento Valley Road derived from the proposed auxiliary lanes.

Non-Vehicular Access

Genesee Avenue is an identified link in the University Community Plan and the City of San Diego Bikeway Master Plan. Class II bike lanes[1] are designated along Genesee Avenue, within the proposed improvements area. This bike facility has been implemented except for the portion across I-5 because the existing overcrossing structure is not wide enough to

[1] A Class II bike lane shares the right-of-way with a roadway or walkway. It is indicated by a bikeway pictograph on the pavement and a continuous stripe on the pavement or separated by a continuous or intermittent curb or other low barrier.

accommodate bike lanes. The proposed overcrossing structure would include a Class II bike lane that is 6 ft wide in each direction. Additionally, the proposed overcrossing would include a sidewalk in each direction, striped/signalized pedestrian crossings, and Americans with Disabilities Act (ADA) compliant pedestrian ramps at each intersection; currently, the overcrossing does not include any sidewalks to allow for pedestrian access.

Bike access from Sorrento Valley to the north of the subject site is currently provided along I-5 between Genesee Avenue and Sorrento Valley Road, and is designated as a Class III bike route[2]. There is currently no barrier separating this bike facility from adjacent freeway traffic lanes, and no pedestrian access is provided as well. The proposed project includes the construction of a two-way Class I bike path[3] along the southbound I-5 shoulder from Sorrento Valley Road in the north to Voigt Drive in the south. The proposed 12-foot wide bike path would be over 8,000 feet in length and would parallel the freeway, within the Caltrans right-of-way but would be physically separated from traffic lanes. The bike path would also include a pedestrian/bicycle overcrossing that would extend across Genesee Avenue in order to reduce conflicts between existing traffic and bike path users. This new bike path would provide enhanced non-vehicular access and transit routes through the subject site while also linking up with bikeways that cross the subject site on Genesee Avenue. Together these new linkages would not only enhance the connectivity of the bike network in the area, but also improve access to the nearby coastal resources available via westward travel along Genesee Avenue for bicyclists and pedestrians. This linkage would provide a much needed connection for non-vehicular travelers from the existing residential, educational, and commercial developments located within the University City area to the Sorrento Valley transit station located just north of the subject site. These multimodal transportation connections would provide increased transit options for commuters and travelers while also reducing demand on the adjacent freeway system, thereby combining to result in enhanced public access options through the subject site.

Summary

The proposed project would result in the elimination of an existing constriction point along Genesee Avenue thereby improving east/west traffic operations along a primary arterial street that currently provides access to nearby coastal areas. The proposed improvements would also improve intersection operations, further reducing congestion patterns both along Genesee Avenue and from and onto the I-5 freeway as well. These improvements would not only result in decreased travel times under 2012 conditions, but would also improve forecast travel conditions for the year 2030.

The proposed project also includes significant enhancement to the pedestrian and bicycle travel network within the subject site. New bicycle lanes and sidewalks along the Genesee Avenue bridge would complete adjacent components of the City of San Diego's Bikeway Master Plan providing for a safer and improved connection. The proposed project also includes a new north/south pedestrian and bicycle connection from transit centers in the north to the surrounding University Community Plan Area that would facilitate safer and more convenient non-vehicular transportation through the subject site.

[2] A Class III bike route shares the right-of-way with a roadway or walkway. It is not indicated by a continuous stripe on the pavement or separated by any type of barrier, but it is identified as a bikeway with signs.

[3] A Class I bike path provides a completely separated right of way for the exclusive use of bicycles and pedestrians with crossflow by motorists minimized.

The public access and recreation policies of the Coastal Act support projects that incorporate improved and enhanced roadways to achieve maximum public access to coastal areas. The proposed project not only improves existing connectivity across the subject site, but also creates new public access routes through the project area allowing for safer transport while also providing for enhanced multimodal connectivity. Therefore, the Commission finds the proposed project, as conditioned, consistent with the cited public access and recreation policies of Chapter 3 of the Coastal Act.

C. BIOLOGICAL RESOURCES

The following Coastal Act policies related to biological resources are most applicable to the proposed development, and state, in part:

Section 30230

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231

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

Section 30233

(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: (emphasis added)

…

(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.

…

Section 30240

(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.

Section 30250

(a) New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources…

Section 30607.1

Where any dike and fill development is permitted in wetlands in conformity with Section 30233 or other applicable policies set forth in this division, mitigation measures shall include, at a minimum, either acquisition of equivalent areas of equal or greater biological productivity or opening up equivalent areas to tidal action;…

Wetlands

Wetlands presently exist in drainage areas within the overall project area (**Exhibit 7**). Permanent impacts to wetlands from the proposed project would occur to the northwest of the interchange, adjacent to both the southbound I-5 offramp and the location of the ancient landslide identified onsite. The proposed landslide stabilization buttress necessary to support the offramp would result in impacts to approximately 1.12 acres of wetlands. In this location, a natural drainage channel that parallels Genesee Avenue takes a 90 degree turn to the north most likely due to the original construction of the freeway. This turn has caused the drainage channel to slow and some seasonal ponding has occurred, resulting in the recruitment of riparian vegetation. This vegetation has become well-established, and includes riparian species such as willows, providing avian nesting habitat, wildlife cover, and other habitat benefits for a variety of species. Therefore, the proposed I-5/Genesee Avenue interchange project and, more specifically, the southbound offramp and associated landslide stabilization constitute the dredging and filling of wetlands as defined by the Coastal Act; and, thus, the project is subject to review by the Commission for consistency with the requirements of Coastal Act Section 30233 and other applicable policies and provisions of the Coastal Act.

The above policies set forth a number of limitations on what development projects may be allowed in coastal wetlands, sensitive habitat areas, and coastal waters, or that may affect coastal resources. In situations, as here, where the impacts occur in a wetland area that may

also be ESHA, the more specific provisions of Section 30233 control over the more general provisions of Section 30240. For analysis of whether a project is allowable under the Coastal Act, there are four general tests:

- that the purpose of the filling, diking, or dredging is for one of the specific uses allowed (Section 30233);

- that the project has no feasible less environmentally damaging alternative (Section 30233);

- that feasible mitigation measures have been provided for all remaining unavoidable impacts to minimize adverse environmental effects (Section 30233); and

- that the biological productivity and functional capacity of the habitat shall be maintained, enhanced and restored (Sections 30230, 30231).

Allowable Use

Under the first of these tests, a project must qualify as one of the eight stated uses allowed under Section 30233(a). The Commission has considered minor expansions of existing roads, railroad lines, and airport runways in certain situations to qualify as "incidental public service purposes," and thus allowable under Section 30233(a)(4), but only where no other feasible less damaging alternative exists and the expansion is necessary to maintain existing traffic capacity. The Court of Appeal has recognized this definition of incidental public service as a permissible interpretation of the Coastal Act. In the case of Bolsa Chica Land Trust et al., v. The Superior Court of San Diego County (1999) 71 Cal.App.4th 493, 517, the court found that:

> … we accept Commission's interpretation of sections 30233 and 30240… In particular we note that under Commission's interpretation, incidental public services are limited to temporary disruptions and do not usually include permanent roadway expansions. Roadway expansions are permitted only when no other alternative exists and the expansion is necessary to maintain existing traffic capacity.

Thus, the Commission examines whether the fill associated with the proposed project is for a use allowable under Section 30233(a)(4), i.e., that it is for a public purpose, and in addition, that it is for an "incidental public service" purpose.

The Commission has in the past determined that the fill for certain highway improvement projects that was necessary to maintain existing capacity was considered to be for an "incidental public service" pursuant to the requirements of Coastal Act Section 30233(a)(4). This finding can be supported for this coastal development permit application on the basis that the proposed project, an interchange and associated freeway improvements, is not part of a new route or highway expansion. In particular, this interchange project does not expand the capacity of the roadway system because it simply is a short juncture that connects two adjacent segments of Genesee Avenue that already have a roadway capacity of six lanes, three in each direction. Hence, the throughway road capacity of Genesee Avenue is already six lanes and this interchange merely connects and corrects a minor bottleneck to the existing overall roadway capacity. In addition and more importantly, the specific impacts to the adjacent wetlands are the direct result of fill for a stabilization buttress that is needed to support improvements to the

southbound offramp. Caltrans has verified that this offramp will not increase I-5 highway capacity and that it likewise will not function to expand the capacity of Genesee Avenue. Thus, the new southbound offramp does not constitute an expansion of the existing highway capacity in the project area, which is consistent with the determination that the construction proposed in the subject project is "incidental" to the overall existing highway and roadway facilities. For the reasons set forth above, the Commission finds that the proposed fill is for an incidental public service purpose, and thus **is an allowable use** for placement of fill within a wetland, pursuant to Section 30233(a)(4) of the Coastal Act.

Feasible, Less Environmentally Damaging Alternatives
The second test of Section 30233(a) is whether there are feasible less environmentally damaging alternatives to the proposed project. Coastal Act Section 30108 set forth above defines "feasible" as follows:

> 'Feasible' means capable of being accomplished in a successful manner within a reasonable time, taking into account economic, environmental, social, and technological factors.

The Coastal Act requires that adverse impacts on the environment be avoided if possible as a first priority when considering a proposed project. In cases where thorough analysis and review determine that adverse impacts on the environment posed by the proposed project cannot be feasibly avoided through the selection of a different alternative, the Coastal Act further requires the consideration of alternatives that would reduce the unavoidable adverse impacts on the environment posed by the subject project. Only after determining that a proposed project's adverse impacts on the environment cannot be feasibly avoided or further reduced through the selection of feasible alternatives to the project does the consideration of mitigation for adverse impacts become possible.

If the Commission cannot, through such analysis, conclude that the proposed project is one for which "there is no feasible less environmentally damaging alternative" then the subject coastal development permit is inconsistent with Coastal Act Section 30233. If, however, the Commission analyzes the alternatives to the project and determines that there is no feasible less environmentally damaging alternative, then the Commission review of the subject project proceeds through the remaining tests of Section 30233 and the other applicable policies and provisions of the Coastal Act.

The proposed project occurs almost entirely within the Caltrans right-of-way, and has been designed to align with the existing transportation corridors located within the subject site. As described previously, an ancient landslide exists within the subject site and is located adjacent to and under the southbound offramp from the I-5 to Genesee Avenue. The proposed project includes an expansion of the existing stabilization buttress alongside the identified landslide area to support the improved off-ramp and prevent future land movement or erosion. The expansion of the stabilization buttress would impact approximately 1.12 acres of riparian wetland habitat situated nearby that has developed through ponding of the artificially-created ninety degree angle of the adjacent natural drainage. The applicant's project analysis included the review of proposed alternatives to the stabilization buttress for protecting the offramp area through the installation of a large mechanized fill or retaining wall. However, Caltrans engineers concluded that any of the potential retaining walls (structural concrete, steel, soldier pile with lagging, soil nails, or tieback wall) would not provide the required level of safety

necessary to achieve critical design performance standards for the interchange. The Commission's staff geologist has reviewed this information concerning the project and alternatives analysis and concurs that no others are feasible given the geology of the site.

Therefore, as discussed above, the Commission has considered alternatives, including the no-project alternative and the proposed project. The Commission finds for the reasons set forth above that an alternative retaining structure to the proposed stabilization buttress that would provide a smaller footprint is not a feasible, less environmentally damaging alternative to the proposed amendment.

Feasible Mitigation Measures

The third test set forth by Section 30233 is whether feasible mitigation measures have been provided to minimize significant adverse environmental impacts. The applicant proposes to reroute and connect the existing drainage channel along the northwestern boundary of the subject site along the toe of the proposed stabilization buttress. This connection would allow for the general continuation of drainage patterns currently present within the site and surrounding areas. Additionally, habitat areas on-site impacted temporarily due to construction efforts would be revegetated with an approved landscaping palette comprised of appropriate native plant species. **Special Condition # 3** requires for submittal and approval of final landscaping plans by the Executive Director prior to issuance of the subject coastal development permit to verify the conformance of these plans to Coastal Act habitat protection policies, including the use of appropriate local native plant species.

Furthermore, in order to ensure that installation of the proposed project would not negatively impact the adjacent watershed and associated habitat, **Special Condition #6** requires adherence to Best Management Practices for construction activities. Additionally, **Special Condition #4** restricts the timing of vegetation removal and grading activities so that they would only occur outside of the nesting season for the coastal California gnatcatcher, southwestern willow flycatcher and least Bell's vireo. Similarly, in support of these watershed and habitat protection objectives, any other required discretionary permits (Regional Water Quality Control Board, U.S. Army Corps of Engineers, etc.) are to be submitted to the Commission for review as described in **Special Condition #9**.

Caltrans also recently processed an application to the Commission for the Deer Canyon Mitigation Site plan within the Coastal Zone and the proposed project's watershed. Coastal Development Permit (#6-11-033) for this mitigation site was approved by the Commission in July of 2011; and, as a part of this approval, the subject Genesee Avenue interchange project was identified as a likely candidate for utilizing the restoration undertaken at the Deer Canyon site as mitigation for potential allowable and unavoidable impacts associated with the project. As examined in that review, the Deer Canyon Mitigation Site was designed to establish a natural riparian community along an existing non-wetland drainage channel that would provide enhanced functions for flood relief, water quality, groundwater recharge and high quality habitat. Once completed, the Deer Canyon Mitigation Site will create 11.62 acres of riparian habitat on-site as well as an additional 0.68 acres of alkali marsh. This riparian corridor will be surrounded by the restoration of 15.46 acres of coastal sage scrub and 2.1 acres of native grassland; another 18.54 acres of non-native grassland already present on the upslope portions of the site will be preserved.

The period of time between when the proposed interchange project reconstruction would first affect the wetland habitat on-site and when wetland values are fully restored by the proposed mitigation off-site is relatively long, and the temporal loss of habitat values meanwhile is significant. In approving coastal development permits for riparian wetland fill projects in recent years, the Commission has often required a mitigation ratio of at least 3:1, in part to account for temporal loss, and in part to account for the uncertainty of whether or not the mitigation will be fully successful in establishing the wetland values at the acreage and performance standards targeted. Caltrans has agreed to provide sufficient mitigation acreage to achieve these ratios at the Deer Canyon Mitigation Site and will create 3.36 acres of riparian habitat to offset these unavoidable project impacts resulting in a 3:1 ratio of mitigation to impact. **Special Condition #2** requires that an updated accounting table for the acreages within the Deer Canyon site be submitted to ensure that adequate and uncredited habitat acreages still remain available within the mitigation site for application to this particular project.

Biological Productivity and Functional Capacity
The riparian habitats located within the subject site are isolated from other wetland features within the watershed that come together to eventually drain into Los Penasquitos Lagoon via Sorrento Valley Creek. The drainage channel where wetland impacts would occur on-site flows under the I-5 via a culvert north of the interchange and again under Sorrento Valley Road before reaching the larger Sorrento Valley Creek channel.

The Deer Canyon Mitigation Site is located within a larger open space area directly adjacent to other restored sites along Carmel Valley Creek that also feeds into Los Penasquitos Lagoon. This landscape scale connectivity to the created and restored habitat types within the Carmel Creek drainage and the surrounding natural habitats provides added benefit to biological resources. The goals of the Deer Canyon mitigation plan include the creation, restoration and preservation of sensitive coastal riparian and upland plant communities in order to provide high quality habitat for rare, threatened and endangered animal species and therefore meet the mitigation requirements for the unavoidable wetland impacts.

Upland Habitats
The topography surrounding the subject site is largely represented by coastal hills, with steep cut slopes directly adjacent to the I-5 corridor. The adjacent land uses are characterized primarily by urban development including residential, commercial, office, industrial, and institutional structures. To the north and west of the Genesee Avenue interchange is a large undeveloped area of open space comprised of upland habitats including Coastal Sage Scrub and non-native grasslands.

Highway landscaping dominates much of the I-5 right-of-way in the proposed project area, and includes trees (primarily eucalyptus) either solitary or in stands, ground cover (ice plant - Carpobrotus edulis), and shrubs. Some of the steep manufactured slopes along I-5 also contain a variety of disturbed and/or native biological resources (**Exhibit 7**). The proposed project would result in permanent impacts to 6.92 acres of native upland habitats (1.18 acres of Coyote Brush Scrub, 4.36 acres of Coastal Sage Scrub, and 1.38 acres of disturbed Coastal Sage Scrub), and 8.58 acres of non-native grasslands.

The proposed interchange reconstruction along with associated ramp improvements and auxiliary lane additions would result in direct and permanent impacts to degraded coastal sage scrub habitats located on the freeway slopes within the freeway right of way. These areas

directly adjacent to the freeway are comprised of manufactured slopes formed when the freeway was first constructed through the University area of the City in the mid 1960's. At that time, the applicant planted the slope with coastal sage scrub vegetation as an erosion control measure. The slope was not intended to remain intact over the long term, as future widening of the freeway and other freeway improvement projects were planned for the long term. In the interim, the habitat has persisted and flourished in some locations, while being more degraded in other areas.

As noted above, although the majority of the impacts within the proposed project area, 8.58 acres, are to non-native grassland, the proposed project would include impacts to 6.92 acres of native upland habitats that were previously planted by Caltrans and that are in various degrees of healthy productivity within the freeway right-of-way. The Natural Environmental Survey conducted for the project identified a pair of California gnatcatchers within this area of the proposed project footprint. The gnatcatchers were found on the constructed fill slope supporting the I-5 to Genesee Avenue southbound offramp that was built as a component of the original freeway construction in the 1960's. The area where this gnatcatcher pair was identified is in relative close proximity to the current travel lanes and is integral to the proposed interchange project, providing underlying support to the southbound off-ramp.

The Commission notes that when I-5 was constructed, it was anticipated that future improvements to the interchange were likely to occur. Nonetheless, Caltrans revegetated the fill slope adjacent to other stands of native upland habitats with local plant species typically found in Coastal Sage Scrub habitats in order to provide erosion control during the ongoing operation of the freeway.

The Commission acknowledges that Caltrans' erosion control plantings on the manufactured slopes associated with the Genesee Avenue/I-5 interchange have developed into a stand of vegetation over the years that is now accurately described as degraded Coastal Sage Scrub and that this habitat has been used by a nesting pair of California gnatcatchers[4]. Under other circumstances, the Commission has found that degraded Coastal Sage Scrub that supports nesting gnatcatchers is an Environmentally Sensitive Habitat Area (ESHA), because the habitat is especially valuable due to its role in the ecosystem.

However, in light of the particulars of the present instance, the Commission finds that the habitat area affected by the proposed project cannot reasonably be categorized as a part of the naturally-functioning Coastal Sage Scrub ecosystem that is considered especially rare or valuable. This distinction is made because Section 30107.5 of the Coastal Act defines an "environmentally sensitive area" to mean "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." Not only was the manufactured slope buttressing the existing I-5 facilities created for the sole purpose of supporting the freeway offramp, it was anticipated that this particular slope would be altered or destroyed in the future in order to accommodate future highway maintenance and improvement needs. Moreover, the fact that a gnatcatcher pair was found on this section of the highway fill slope in close proximity to the travel lanes demonstrates that the area functioning with habitat values is not easily disturbed or degraded by

[4] Coastal Commission staff ecologists Dr. John Dixon and Dr. Jonna Engel along with other Commission staff met to discuss and review these project findings on May 16, 2012.

human activities and that it has the potential to be successfully replicated by the future restoration of the new fill slope and buttress.

The Commission notes that the important habitat functions that this area does provide, however, should not be dismissed. Caltrans is committed to providing equal or better Coastal Sage Scrub habitat on the re-manufactured filled slope buttresses of the highway as an element of this proposed project and should not be deterred from creating a beneficial resource for species such as the gnatcatcher that depend upon this habitat type. The habitat revegetation on the manufactured slope along this segment of the I-5, however, is secondary to the purpose of the manufactured slope, which is to structurally support the Genesee Avenue/I-5 Interchange and any future modification to this interchange. Thus, the Commission does not foresee the creation of a permanent revegetated area within the manufactured slopes given the function of the slopes as integral components of the interchange's engineering which may be further altered if Caltrans pursues any future expansion of this segment of I-5.

Furthermore, the slope was planted with native vegetation primarily for erosion control as opposed to native habitat creation for the purpose of mitigation for any environmental impacts. The Commission views habitats created for required mitigation purposes as requiring protection from disruption and degradation. Therefore, the Commission finds that, in this particular case, the manufactured slope that supports the roadbed for the I-5 is not a pre-existing mitigation site and does not meet the definition of Environmentally Sensitive Habitat Area under the Coastal Act because it is not rare and is not especially valuable because of its special nature or role in of the ecosystem. The Commission made a similar finding in 2003 that the Coastal Sage Scrub habitat existing on the I-5 manufactured slope in the nearby community of Del Mar did not constitute ESHA when it approved the addition of an auxiliary lane under CDP #6-02-153.

Therefore, although the impacted Coastal Sage Scrub habitat does host a pair of gnatcatchers, given the location of the habitat on a constructed component of the interchange facility, it does not rise to the standard definition of ESHA as typically described by the Commission. Although not ESHA, the upland areas that are impacted do hold value and the permanent impacts to 5.74 acres of Coastal Sage Scrub and 1.18 acres of Coyote Brush Scrub within the subject site must be mitigated. Additionally, Caltrans is responsible for revegetation of the constructed cut and fill slopes post construction of the project, and the landscape palette for these slopes must be comprised of representative Coastal Sage Scrub species. **Special Condition #3** requires the applicant submit a final landscaping and monitoring plan prior to issuance of the permit to ensure that an appropriate plan is developed that would ensure reestablishment of Coastal Sage Scrub vegetation post project construction, and that it includes appropriate monitoring and adaptive management measures in the case that the original plantings do not succeed. The applicant intends to replant the impacted acres of new slope with a coastal sage scrub planting palette (**Exhibit 10**). **Special Condition #3** addresses the revegetation and maintenance of this area. However, Caltrans does not want this considered mitigation, since its long-range plans call for additional road widening through the project area in the future. If this occurs, any viable habitat on this slope could conceivably be disturbed repeatedly, removing any ability for it to ever function as long-term nesting habitat for the gnatcatcher or any other listed species.

Special Condition #4 restricts the timing of vegetation removal so that they would only occur outside of the nesting season for coastal California gnatcatcher, southwestern willow flycatcher, and least Bell's vireo unless it is documented, in writing, that the California Department of Fish

and Game and/or the U.S. Fish and Wildlife Service has determined that such vegetation removal will not impact nesting birds. The applicant also proposes to mitigate all upland habitat impacts (including those on the freeway slopes) at an off-site mitigation site where restoration and creation of native habitats was previously approved by the Commission as a part of the Deer Canton Mitigation Site (CDP 6-11-033). The applicant will provide mitigation for upland impacts at a 2:1 ratio within the mitigation site resulting in a total of 13.84 acres of Coastal Sage Scrub habitat mitigation. **Special Condition #2** requires the applicant to submit an updated accounting table for the mitigation site to ensure that appropriate mitigation acreages are available and assigned as mitigation for impacts emanating from the Genesee Avenue/I-5 interchange reconstruction project. In addition, the coastal development permit approved for the restoration of the Deer Canyon Mitigation Site (CDP# 6-11-033) includes a special condition requiring that any mitigation credits utilized at the restoration site for any project be reported to the Commission in order for the mitigation acreage accounting be appropriately tracked.

In summary, the Commission finds that the proposed project and construction activities are consistent with Sections 30233 and 30240 of the Coastal Act. The proposed impacts to wetlands are the result of an incidental public service purpose associated with operations of the freeway system, and that the improvements to the interchange and off-ramp do not serve to directly increase capacity of the freeway. The project is the least environmentally damaging alternative, impacts have been minimized to the maximum extent feasible through project design, and adequate mitigation is provided. In addition, the existing, degraded Coastal Sage Scrub on the manufactured highway slope does not constitute ESHA, as it is not rare and is not especially valuable because of it special nature or role in the natural ecosystem of the surrounding upland habitat. The Deer Canyon Mitigation Site is located adjacent to contiguous areas of riparian and Coastal Sage Scrub habitats within the same watershed, making it likely that the site will be successful and also provide significant landscape wide benefits. The proposed development would not have significant adverse impacts on the quality and quantity of ESHA in the area, as this does not include the existing manufactured highway slopes along I-5. The Commission finds that only as conditioned and described above, can the proposed development be found consistent with Sections 30233 and 30240 of the Coastal Act which require biological resources be protected, and where possible, enhanced.

D. WATER QUALITY AND FLOODPLAINS

The following Coastal Act policy related to water quality and watersheds are most applicable to the proposed development, and state, in part:

Section 30231

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.

The subject site generally slopes from south to north. The subject site's watershed is bounded on the north by Sorrento Valley Road and on the south by Voigt Drive. It consists of canyons and steep hillsides draining towards the I-5 corridor and also several developed areas on the mesas east and west of the freeway. Natural drainage paths flow from south to north while collecting the high mesa areas from the east and west which are primarily developed by urban uses.

The total existing impervious area within Caltrans right-of-way within the subject site is 38.12 acres. The proposed added impervious area from the proposed project is 14.79 acres which would result in a total impervious area after project construction of 52.91 acres. Pollutants such as petroleum hydrocarbons and heavy metals are associated with highway runoff. These pollutants can have adverse impacts on coastal resources. Currently, all runoff drains from the lanes of traffic to either the median or the outside shoulder. The outside shoulders provide some form of informal filtration as they consist of vegetated soil.

Permanent Treatment BMPs

The proposed improvements would result in an increase of impervious area which would increase the velocity and volume of run off within the project limits. This increase has been accounted for in the proposed project design and mitigated through the use of BMPs. The applicant proposes to offset these increases in onsite flow through the installation of bioswales that would slow the runoff and promote infiltration prior to entering the storm drain system. These bioswales would be vegetated and include check dams to further slow flow velocity and promote infiltration of run off.

The applicant proposes treatment for this project to the maximum extent practicable (MEP) which is a condition of the current Caltrans Statewide Storm Water permit from the State Water Resources Control Board. Treatment of run off from the proposed project would be provided by three biofiltration swales. The proposed bioswales would be located on the southwest side of Genesee between I-5 and the southbound on-ramp, on the northbound off ramp to Sorrento Valley Road, and southbound on-ramp from Sorrento Valley Road (**Exhibit 3**). The proposed bioswales would treat 18.27 acres of impervious surfaces, while the net added impervious area for the proposed project is 14.79 acres, thereby resulting in treatment of 123.5% of the net added impervious area. Under existing conditions, there are no BMPs that treat runoff generated from the subject site. The addition of the proposed bioswales would function to treat 34.5% of the post project runoff generated from the entire impervious surfaces within the subject area resulting in some improvement over current conditions.

The proposed BMPs are adequately located so that the facilities may be utilized in conjunction with future projects on the I-5 corridor. The Genesee Avenue Interchange project would be constructed prior to another planned Caltrans project that would result in the addition of I-5 HOV lanes through the subject site. Treatment BMPs are not proposed in locations that would be impacted by the future construction of HOV lanes.

Special Condition #5 requires the applicant to submit a final water quality plan for the project that includes drainage plans delineating these BMPs as well as calculations to show the BMP program facilities are designed to treat the amount of runoff produced by an 85th percentile storm event. Critical to the successful function of post-construction structural BMPs in removing pollutants in stormwater to the Maximum Extent Practicable (MEP) is the application of appropriate design standards for sizing BMPs. The majority of runoff is generated from

small storms because most storms are small. Additionally, storm water runoff typically conveys a disproportionate amount of pollutants in the initial period that runoff is generated during a storm event. Designing BMPs for the small, more frequent storms, rather than for the large infrequent storms, results in improved BMP performance at lower overall cost. The Commission finds that sizing post-construction structural BMPs to accommodate (infiltrate, filter or treat) the amount of stormwater produced by all storms up to and including the 85th percentile storm event, in this case, is equivalent to sizing BMPs based on the point of diminishing returns (i.e. the BMP capacity beyond which, insignificant increases in pollutants removal (and hence water quality protection) will occur, relative to the additional costs.

Although the project would treat storm water from a roughly equivalent pavement surface area as that being added by the project, a much larger area of the highway is currently untreated. This untreated storm water flows to Soledad Canyon Creek which, in turn, flows to Penasquitos Lagoon. Therefore, **Special Condition #5** requires the applicant to treat as much existing highway surface as is feasible while planning the project. Pollutants found in highway runoff degrade coastal waters and negatively impact wetland habitats. These pollutants commonly include: sediment eroded from surrounding lands, highway embankments and cut slopes, and receiving streambeds and banks, nutrients from plant debris, organic soils, fertilizer, vehicle exhaust, emulsifiers and surfactants, pesticides, dissolved and particulate metals, and trash. Moreover, the Regional Water Quality Control Boards (RWQCB) produce bi-annual qualitative assessments of statewide water quality conditions. These assessments are focused on CWA Section 303(d) impaired water listings and scheduling for assignment of Total Maximum Daily Load (TMDL) requirements. States are required to identify and document any and all polluted surface water bodies, with the resulting documentation referred to as the Clean Water Act Section 303(d) List of Water Quality Limited Segments, or more commonly the 303(d) list. The 303(d) lists Soledad Canyon Creek as impaired for sediment toxicity and selenium, and the 303(d) lists Los Peñasquitos Creek as impaired for total dissolved solids, total nitrogen, toxicity, enterococcus, selenium, and fecal coliform. The 303(d) lists Los Penasquitos Lagoon for sedimentation/siltation. Additional treatment of highway runoff in specific portions of the project area would improve the water quality in these TMDL-targeted coastal water bodies.

The applicant's analysis of increased impervious surfaces created by the proposed project and associated increased potential for polluted runoff failed to identify the widened areas of the Genesee Avenue overcrossing that would span over the existing freeway (impervious surfaces). While the wider overcrossing does not result in additional increased impervious surfaces directly over bare soil, it does still represent an increase in roadway surface which will introduce increased pollutant loading into runoff from the subject site. In order to account for this increase in polluted runoff, **Special Condition #5** identifies the need to include this evaluation as a part of a final water quality plan.

Leaded gasoline was banned in California in the 1970's and is the source of Aerially Deposited Lead (ADL) in surface soils adjacent to highly travelled roadways. The proposed project includes the removal of over 300,000 cubic yards of soil. As proposed, soil containing Aerially Deposited Lead (ADL) may be excavated and reused onsite (placed beneath new pavement) or disposed of in a Class 1 Landfill in accordance with a Waiver form the Department of Toxic Substance Control. The project description does not include a location of disposal for soils unaffected by ADL. **Special Condition #5** requires the applicant to identify the disposal site and, if located in the Coastal Zone, show proof of a valid coastal development permit for disposal of the soil.

Therefore, the Commission requires the selected post-construction structural BMPs be sized based on design criteria specified in **Special Condition #5** and finds this will ensure the proposed development will be designed to minimize adverse impacts to coastal resources, in a manner consistent with the Chapter 3 policies of the Coastal Act.

Construction BMPs

During the construction phase, due to grading, the main potential pollutant of concern would be sediment. Other potential pollutant sources are slurries from mortar mixing and paving as well as the temporary storage of construction material and equipment on site. While proposed work is located primarily within the I-5 right–of-way, indirect impacts to water quality from runoff over the proposed impervious surfaces during construction is a concern. Such runoff can carry sediments and urban pollutants and deposit them in downstream sensitive receiving waters. To the north of the subject site is Sorrento Valley Creek which eventually drains into Los Penasquitos Lagoon. Given the close proximity to the lagoon, further measures need to be taken to ensure all water quality impacts to these regions will be minimized, and to the extent possible, eliminated.

Standard erosion control practices are proposed to minimize soil erosion following construction activities. Temporary BMPs anticipated for this project include fiber rolls, controlled construction entrances, sweeping, temporary drainage inlet protection, and portable concrete washouts. To ensure that water quality remains a priority during construction, the project will utilize non-stormwater BMPs, including material storage BMPs, thorough inspection and non-visible pollutant monitoring. In order to minimize the potential for such adverse impacts to water quality and aquatic resources resulting from runoff both during construction and in the post-development stage, the Commission requires the incorporation of Best Management Practices designed to control the volume, velocity and pollutant load of stormwater and dry weather flows leaving the developed site, including: 1) site design, source control and/or treatment control measures; 2) implementing erosion sediment control measures during construction and post construction; and 3) revegetating all graded and disturbed areas with primarily native landscaping.

Special Condition #6 requires the applicant to include erosion control/water quality management measures specific to any proposed staging areas and a detailed plan for the storage and containment of construction-related chemicals and materials. **Special Condition #6** also requires the applicant to include trash and debris disposal and accidental spills within their water quality program.

The Commission finds that only as conditioned as described above, can the proposed development be found consistent with Section 30231 of the Coastal Act which requires hydrological resources and floodplains be protected, and where possible, enhanced.

E. HAZARDS AND GEOLOGIC STABILITY

The following Coastal Act policy related to hazards and geologic stability is most applicable to the proposed development, and state; in part:

> **Section 30253**
>
> *New development shall do all of the following:*
>
> *(1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
>
> *(2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.*

The proposed project includes the construction of seventeen retaining walls, cut and fill slopes, and a large stabilization buttress. An ancient landslide exists within the project limits, located beneath the Genesee Avenue southbound off-ramp and a portion of the freeway lanes. In 1986, a landslide stabilization buttress was constructed to halt the downward progression of the highway embankment. A new buttress is proposed as a part of this project to stabilize the landslide. The buttress would be placed just northwest of the I-5/Genesee Avenue interchange. The size and weight of the buttress would counteract the driving force along the potential slip plane of the ancient landslide.

The Commission's staff geologist has reviewed both the proposed stabilization buttress as well as other potential stabilization measures investigated by the applicant and concurs with the applicant's assessment that the proposed stabilization buttress would provide the required factor of safety required to ensure stability within the project site. Other reviewed alternatives included a large retaining wall structure or a mechanically-stabilized earth buttress, both of which would have a smaller footprint than the stabilization buttress, thereby reducing impacts to adjacent wetlands. After review, it was concluded that the alternative stabilization measures would not provide the necessary factor of safety to support the freeway and off ramp, and therefore they were rejected as infeasible alternatives.

Retaining walls are proposed in locations where the planned roadway widening and ramp reconfigurations are constrained by limited right-of-way or severe topography. The project will incorporate a total of seventeen retaining walls which would function to stabilize the steeper slopes surrounding the subject site. Permanent cut slopes are proposed to be no steeper than 1.5:1 (horizontal to vertical) for a maximum of 50 feet in height. Slopes greater than 50 feet high will incorporate a bench to minimize erosion. Fill slopes are to be at a maximum gradient of 2:1 (horizontal to vertical). Proposed slopes would be stabilized by using permanent erosion control measures.

The proposed development is located in an area subject to significant natural hazards including, but not limited to, landslides, erosion, and flooding. The submitted geotechnical and soils reports referenced as Substantive File Documents conclude that the project site is suitable for the proposed project based on the evaluation of the site's geology in relation to the proposed

development. The reports contain recommendations to be incorporated into the project plans to ensure the stability and geologic safety of the proposed project, the project site, and the adjacent properties. To ensure stability and structural integrity and to protect the site and the surrounding sites, **Special Condition #7** requires the applicant to comply with the recommendations contained in the applicable reports, to incorporate those recommendations into all final design and construction plans, and to obtain the geotechnical consultant's approval of those plans prior to the commencement of construction.

Additionally, to minimize erosion and ensure stability of the project site, the project must include adequate drainage and erosion control measures. In order to achieve these goals, **Special Condition #6** requires the applicant to submit drainage and interim erosion control plans certified by a Certified Engineering Geologist or licensed Geotechnical Engineer.

Further, the Commission finds that, for the project to ensure stability and avoid contributing significantly to erosion, areas disturbed by construction must be stabilized. **Special Condition #3** requires that all slopes and disturbed areas of the subject site be landscaped, primarily with native plants, to stabilize disturbed soils and reduce erosion resulting from the development. The Commission finds that only as conditioned as described above, can the proposed development be found consistent with Section 30253 of the Coastal Act regarding the siting of development in hazardous locations.

F. VISUAL RESOURCES

The following Coastal Act policy related to visual coastal resources is most applicable to the proposed development, and state, in part:

Section 30251

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural landforms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas…

The I-5 corridor in the proposed project area is bordered by undulating topography comprised of coastal hills and valleys that have already undergone significant alteration to accommodate the original freeway construction, with steep cut slopes directly adjacent to the freeway in many locations. The adjacent land uses are characterized primarily by urban development including residential, commercial, office, industrial, and institutional structures. Most of the surrounding buildings are located on the tops of coastal mesas and can be viewed throughout the subject site. Significant stands of vegetation, both native and ornamental exist throughout the subject site creating a vegetated landscape buffering the freeway from the surrounding urban developments in many locations. To the north and west of the Genesee Avenue interchange is a large undeveloped area of open space comprised primarily of upland habitats including coastal sage scrub and non-native grasslands. The project site is located well inland from the coast, and no direct ocean views are present from anywhere within the subject site.

The proposed project features would create varying levels of change within the I-5 corridor and the surrounding area. The features that would be most visible include new retaining walls, increased pavement, and the removal of vegetation. The scale of the bridge would be larger than existing, as would the on and off ramps from the interchange. Due to the topographical constraints surrounding the subject site, seventeen retaining walls are proposed at various locations along the proposed project corridor. The maximum heights of the walls range from approximately 3 to 60 feet in height. The proposed retaining walls would be designed to be subordinate to the surrounding environment as much as possible.

The proposed retaining walls will be visible to travelers along I-5 in both directions, and should be colored and textured to be subordinate to the natural setting. To further reduce the visibility of the proposed walls, **Special Condition #8** requires that, where it is feasible, walls should be screened with landscaping. In addition, **Special Condition #3** requires that areas disturbed by construction and newly constructed freeway slopes should be revegetated with native, drought tolerant plant materials to minimize adverse impacts associated with the proposed project to the extent possible.

It will be necessary to verify that the applicant's selected landscape treatment will be compatible with the visual qualities of the I-5 corridor, as exemplified by the preliminary landscaping and revegetation plan submitted by Caltrans (**Exhibit 10**). Therefore, it is appropriate to condition this permit to require that the applicant submit a final Landscaping and Revegetation Plan for Executive Director review and approval prior to issuance of this coastal development permit (**Special Condition #3**).

In summary, while the proposed project will result in a more "hardened" landscape through this stretch of I-5 with the installation of additional road surface and retaining walls, the proposed and required color treatments and landscape improvements will help to soften views and reduce impacts by screening, where feasible. In addition, no public views of the coastline are currently available or will be affected by the proposed development. The Commission finds that only as conditioned as described above, can the proposed development be found consistent with Section 30251 of the Coastal Act which require visual resources be protected.

G. LOCAL COASTAL PROGRAM

The Commission has certified a LUP for the University Community planning area of the North City LCP segment, and the City of San Diego has assumed coastal development permit authority for the majority of the community. However, the University of San Diego, California campus, which includes the southwestern quadrant of the subject site is an area of deferred certification within which the Coastal Commission still retains permitting authority. Thus, a portion of the Genesee Avenue interchange project is in the City of San Diego coastal development permit jurisdiction and a portion is in the Commission's permit jurisdiction. The City and applicant have requested that the Coastal Commission review the project proposal as a whole, and process the entire development as a consolidated coastal development permit. Under Coastal Act Section 30601.3, Chapter 3 of the Coastal Act is the legal standard of review for the entire project, and the certified LCP has been used as guidance. The proposed project has been found consistent with all applicable Chapter 3 policies of the Coastal Act. Therefore, the Commission finds that approval of the project will not prejudice the ability of the City of San Diego to continue implementation of its LCP in the University Community Plan area of the North City LCP segment.

H. CONSISTENCY WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Caltrans, as lead agency for the project conducted a Mitigated Negative Declaration/Initial Study for this project, and, following public review has determined that the proposed project would not have a significant effect on the environment.

Section 13096 of the Commission's Code of Regulations requires Commission approval of Coastal Development Permits, or permit amendments, to be supported by a finding showing the permit or amendment, as conditioned, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

The proposed project has been conditioned in order to be found consistent with the Chapter 3 policies of the Coastal Act. As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the Commission finds that the proposed project is the least environmentally-damaging feasible alternative and is consistent with the requirements of the Coastal Act to conform to CEQA.

APPENDIX A

SUBSTANTIVE FILE DOCUMENTS

1. Interstate 5/Genesee Avenue Interchange Reconstruction Project Initial Study/Environmental Assessment, Caltrans District 11, dated June 2011.
2. Interstate 5/Genesee Avenue Interchange Reconstruction Project Jurisdictional Delineation Report, HELIX Environmental Planning Inc, dated November 11, 2008.
3. Formal Section 7 Consultation for the Interstate 5/Genessee Avenue Interchange Reconstruction Project (FWS-SDG-08B0205-11F0246), San Diego County, California, USFWS, dated March 23, 2011.
4. Amendment to Formal Section 7 Consultation for the Interstate 5/Genessee Avenue Interchange Reconstruction Project (FWS-SDG-08B0205-11F0246), San Diego County, California, USFWS, dated February 6, 2012.
5. Interstate 5/Genesee Avenue Interchange Reconstruction Project Natural Environment Study, Caltrans District 11, dated December 2008.
6. Geotechnical Design Report Interstate 5/Genesee Avenue Interchange Improvement Project, Office of Geotechnical Design-South 2 Branch D, dated February 29, 2012.
7. Federal Interstate 5/Genesee Avenue Interchange Reconstruction Project Preliminary Drainage Report, Kimley-Horn and Associates Inc, dated March 2008.
8. Storm Water Data Report I-5/Genesee Avenue Interchange Reconstruction PR/ED Phase, Caltrans District 11, dated May 2008.
9. Storm Water Data Report I-5/Genesee Avenue Interchange Reconstruction PS&E Phase, Caltrans District 11, dated May 2012.
10. Visual Impact Analysis Interstate 5/Genesee Avenue Interchange Reconstruction Project, Caltrans District 11, June 2008.
11. Coastal Development Permit # 6-11-033 (Caltrans), Deer Canyon Mitigation Site, approved July 2011.
12. Coastal Development Permit #6-02-153 (Caltrans), Revised Conditions and Findings, approved August 2003.

I:\ArcGIS\KWIIA-101-5 Genesee Interchange\Map\ISEA\Fig1-1_Regional.mxd -JP

Regional Location Map

INTERSTATE 5/GENESEE AVENUE INTERCHANGE RECONSTRUCTION

ATTACHMENT 1

EXHIBIT NO. 1
APPLICATION NO. **6-11-093**
Location Map
California Coastal Commission

Project Vicinity Map

INTERSTATE 5/GENESEE AVENUE INTERCHANGE RECONSTRUCTION

ATTA[illegible]

EXHIBIT NO. 2
APPLICATION NO.
6-11-093
Vicinity Map
California Coastal Commission

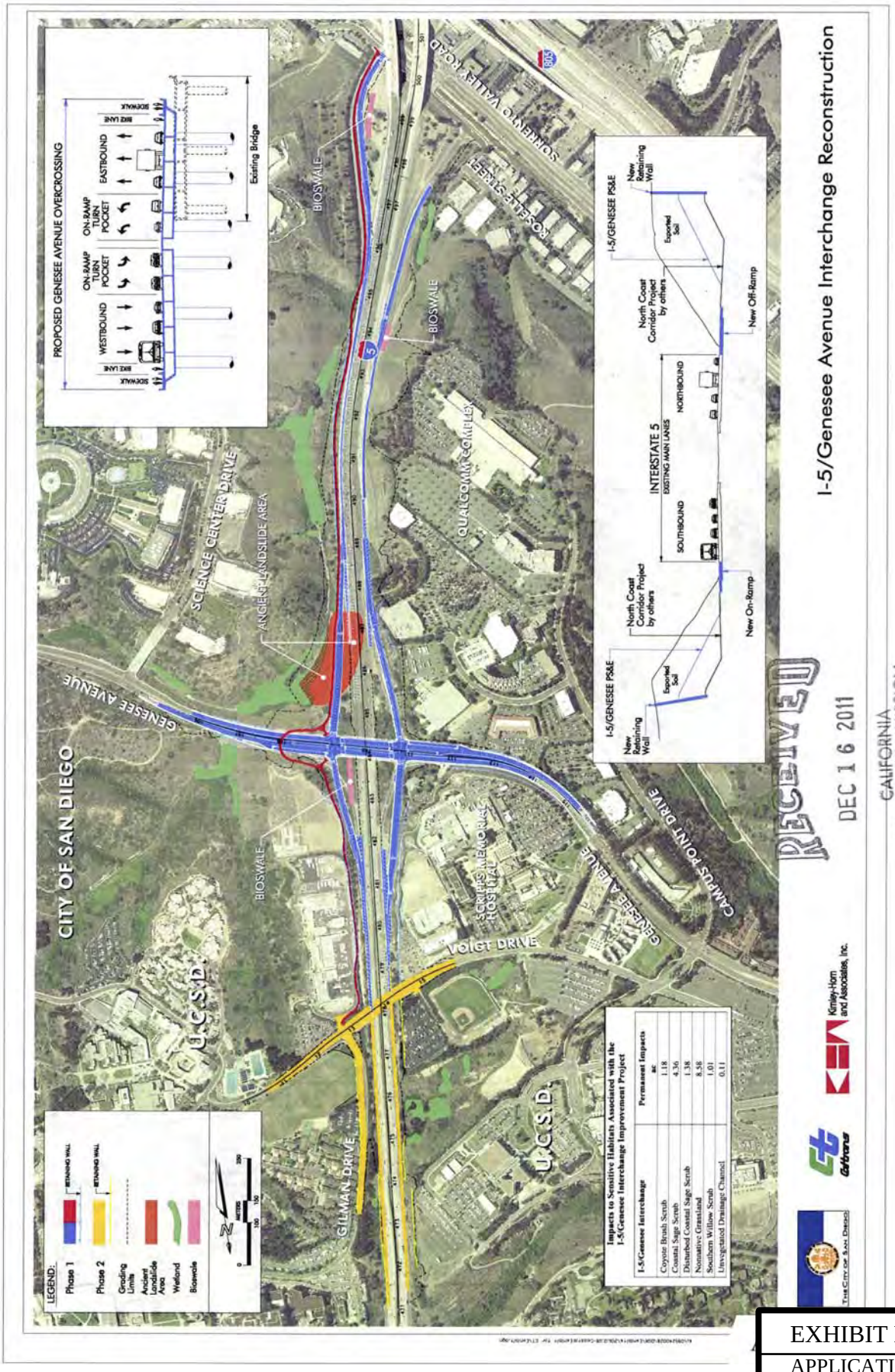


EXHIBIT NO. 3
APPLICATION NO. **6-11-093**
Project Component Map
California Coastal Commission

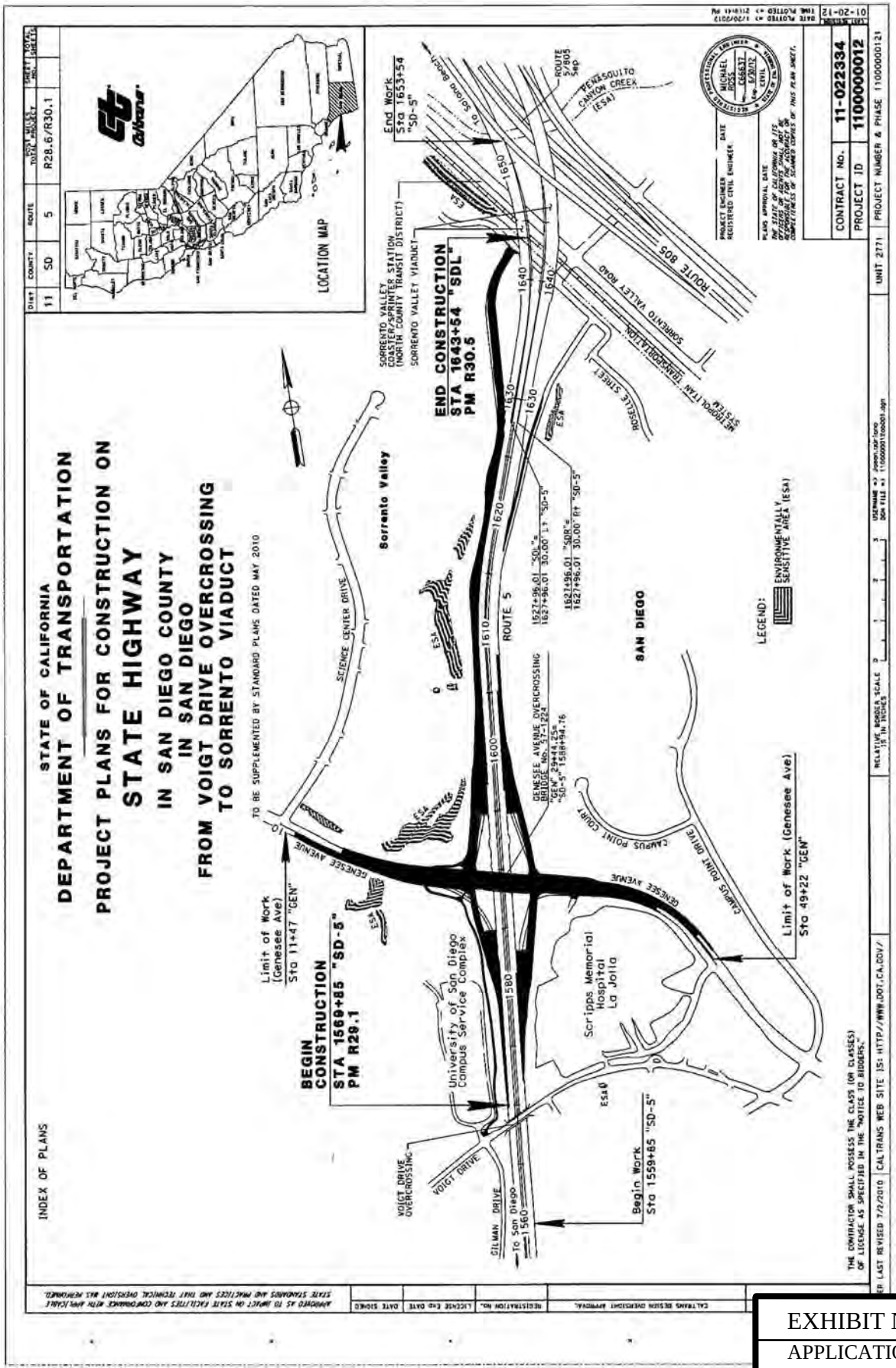


EXHIBIT NO. 4

APPLICATION NO.
6-11-093

Site Plans

California Coastal Commission

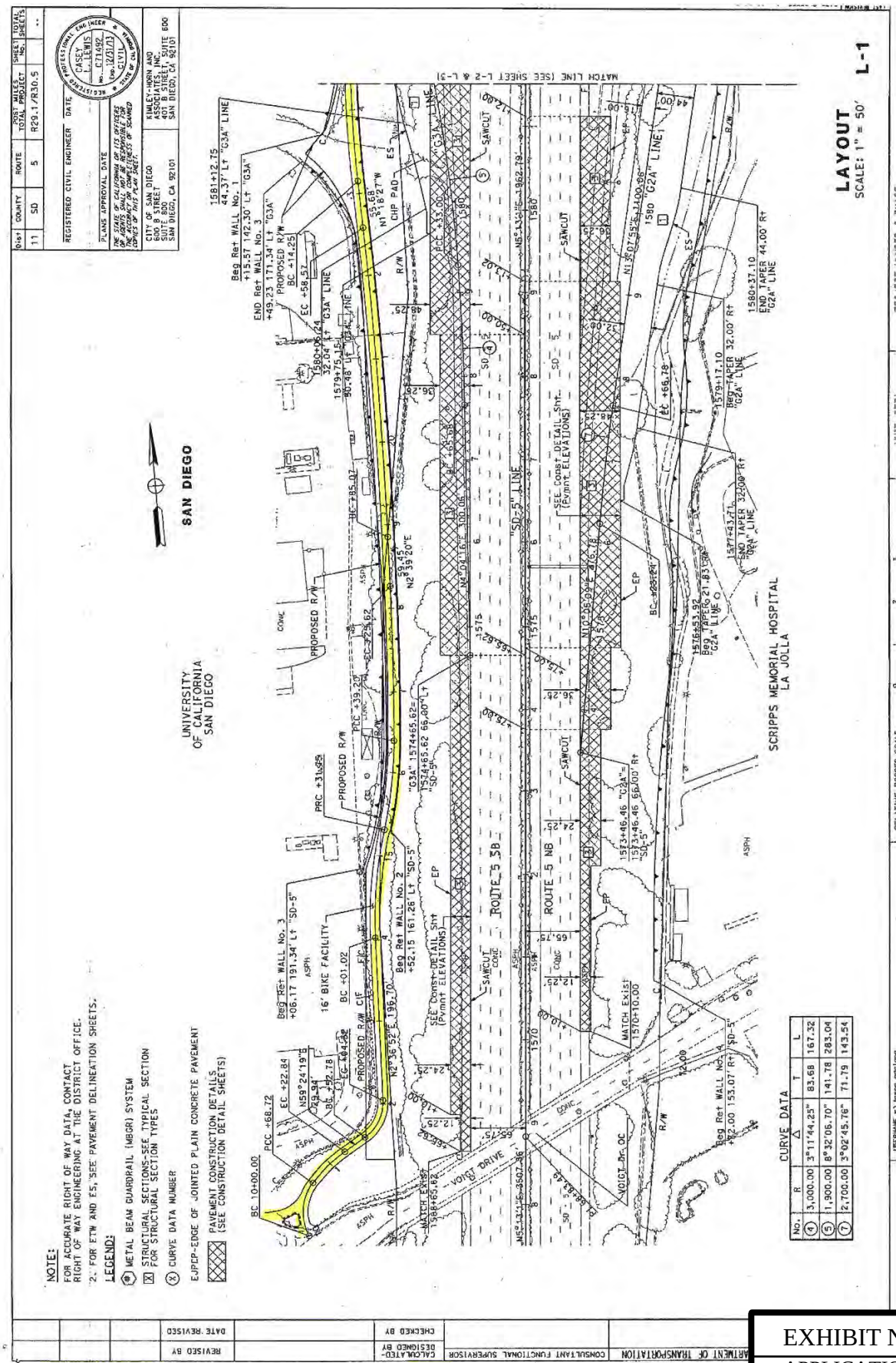
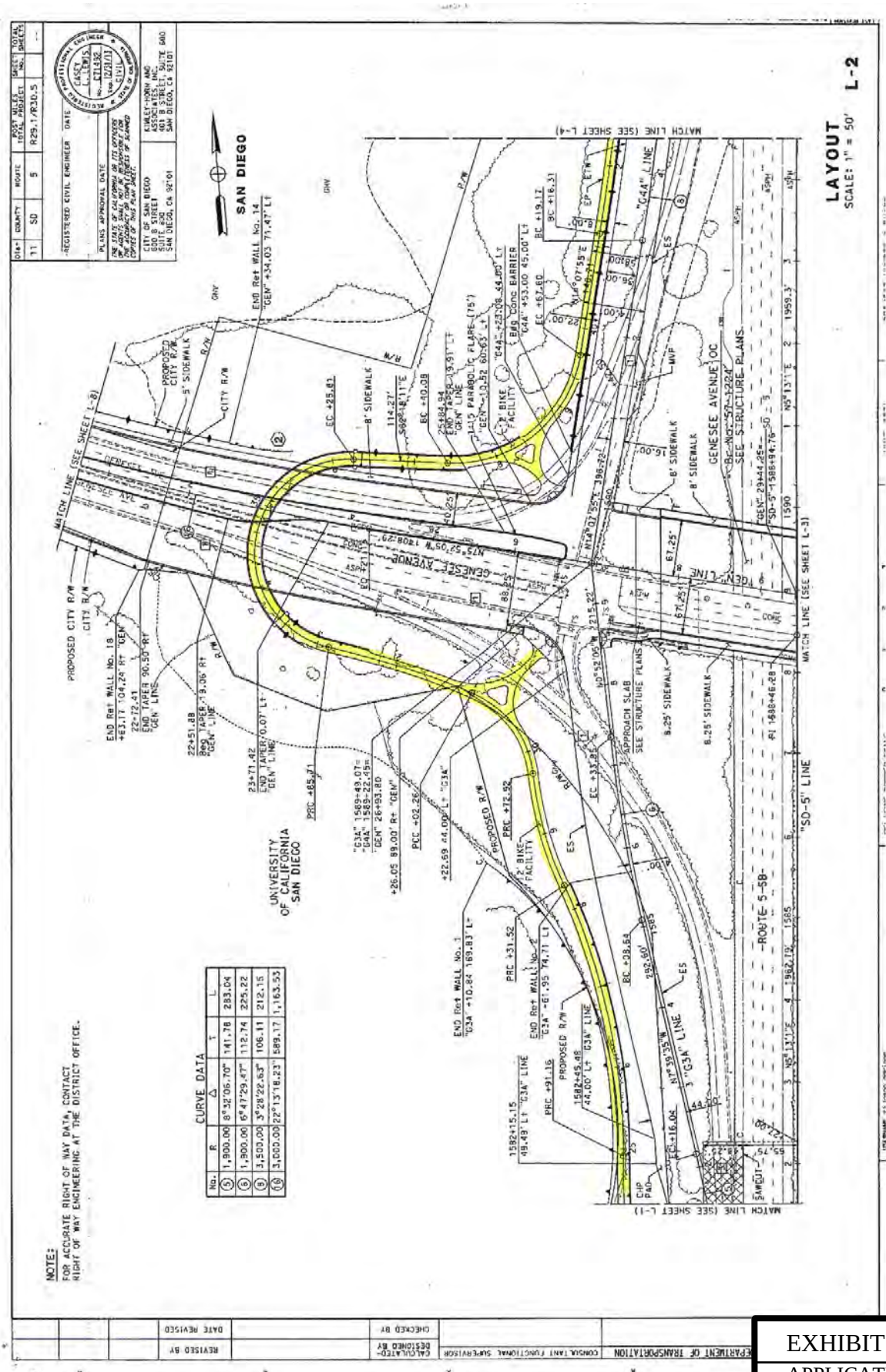


EXHIBIT NO. 4

APPLICATION NO. **6-11-093**

Site Plans

California Coastal Commission



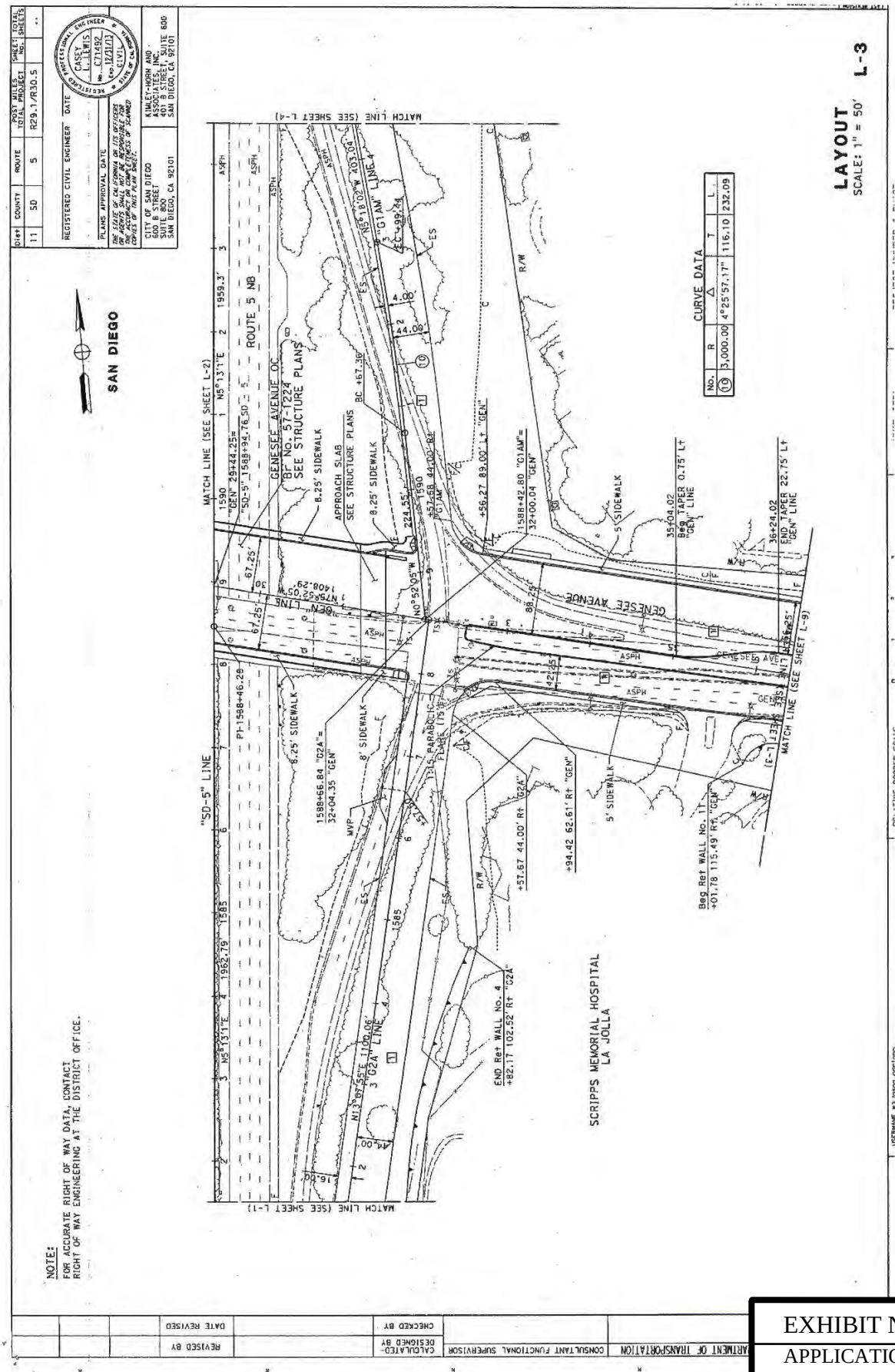


EXHIBIT NO. 4
APPLICATION NO.
6-11-093
Site Plans
California Coastal Commission

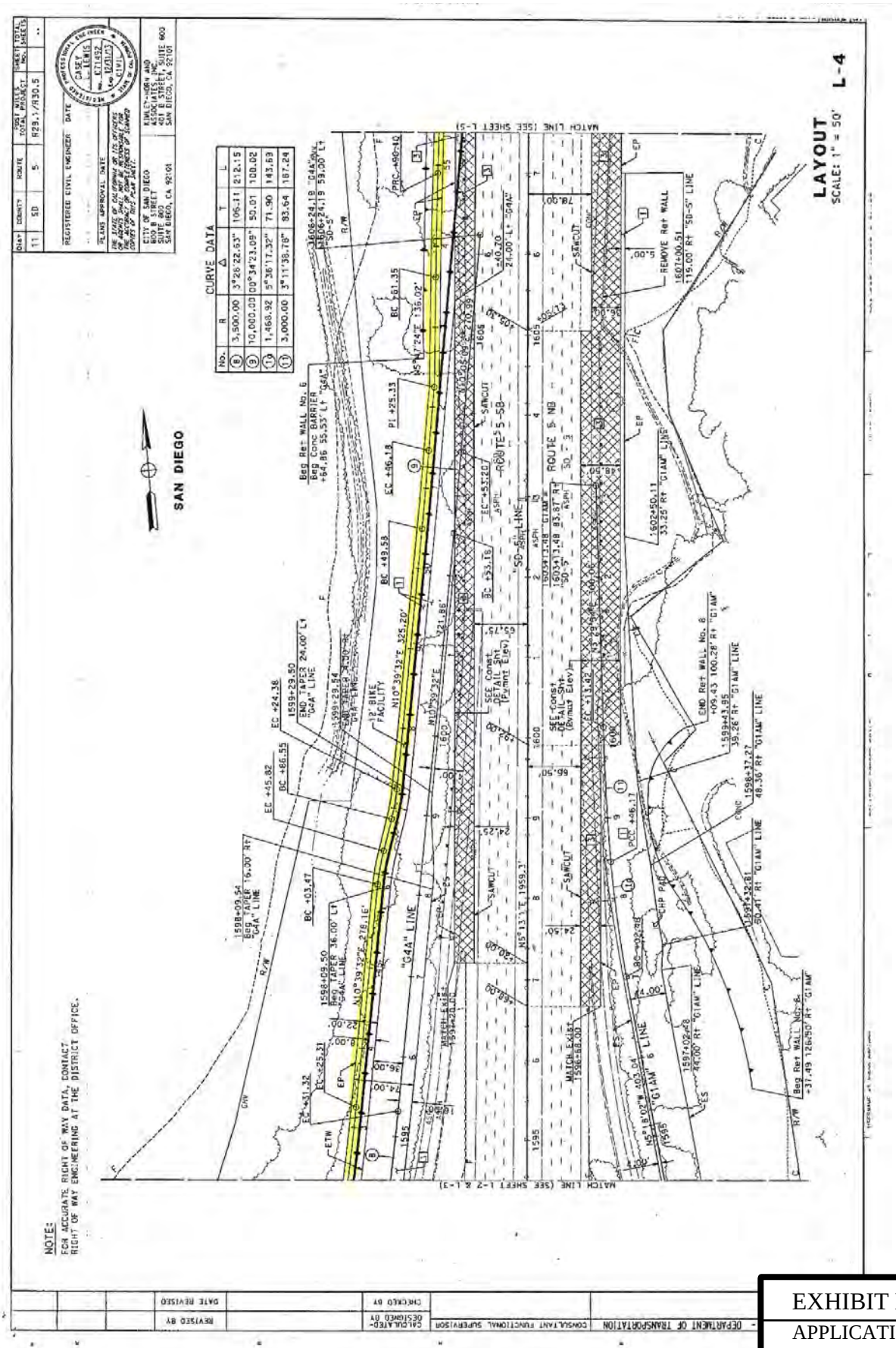


EXHIBIT NO. 4

APPLICATION NO.
6-11-093

Site Plans

California Coastal Commission

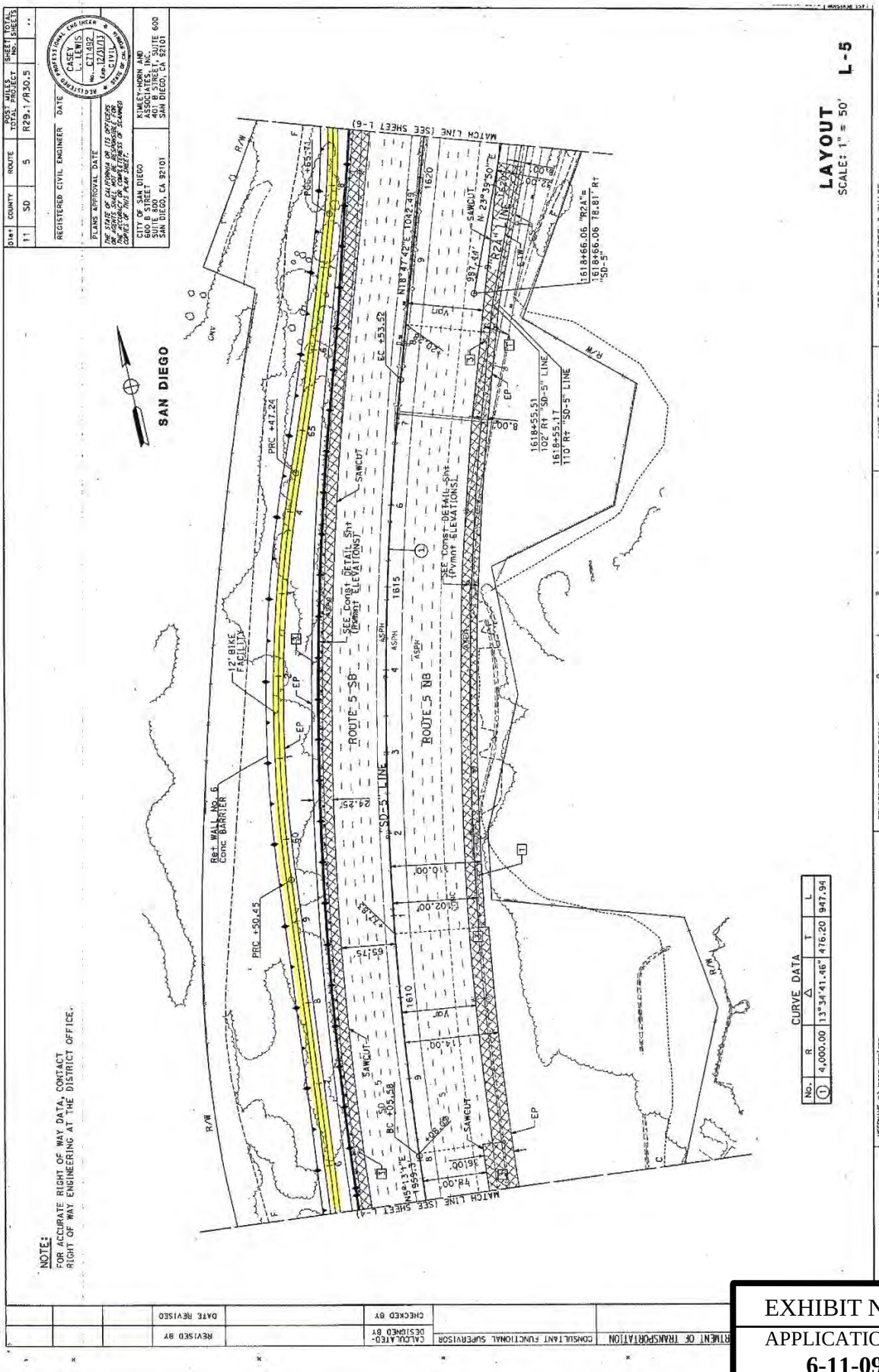


EXHIBIT NO. 4

APPLICATION NO.
6-11-093

Site Plans

California Coastal Commission

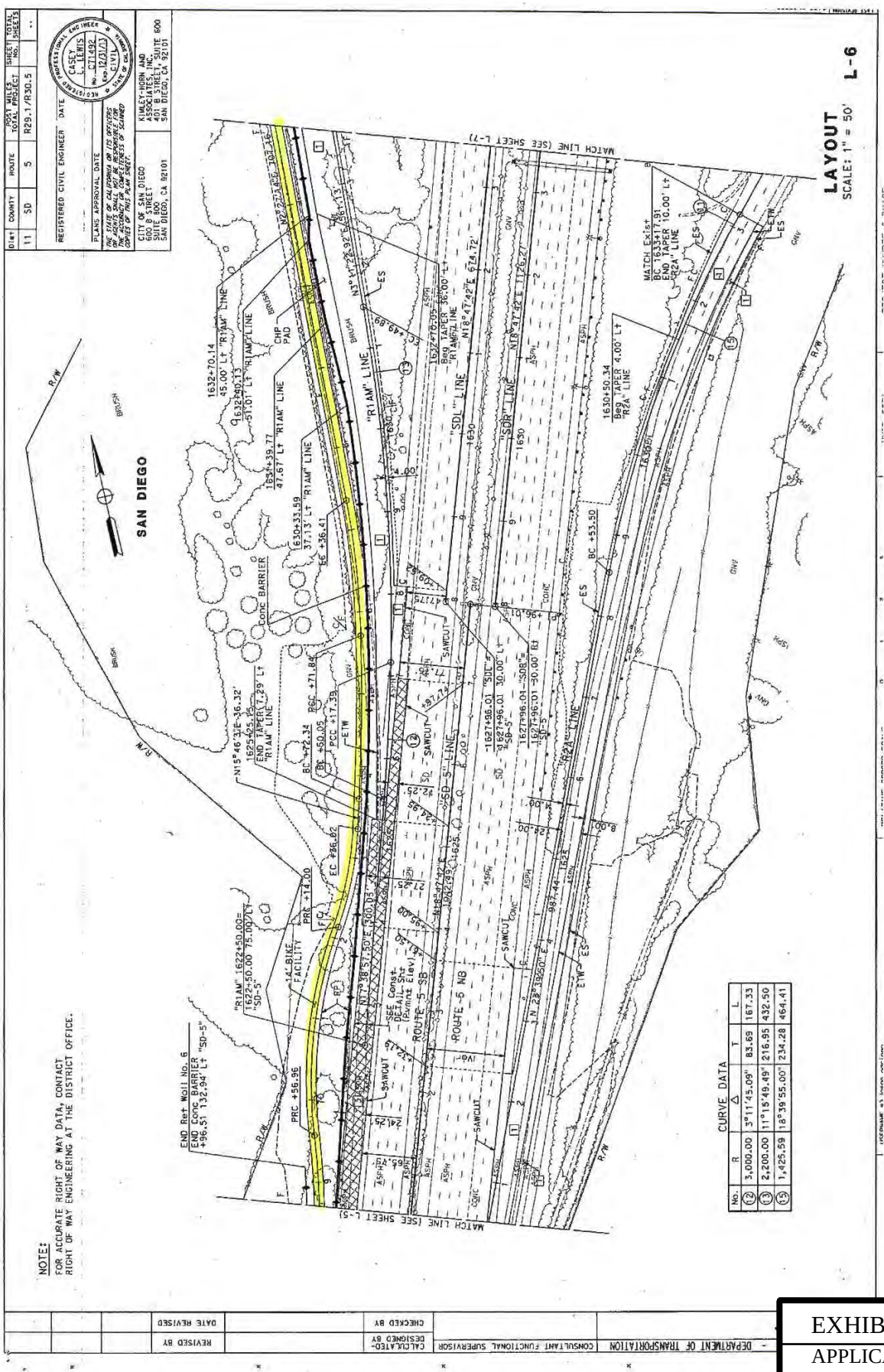
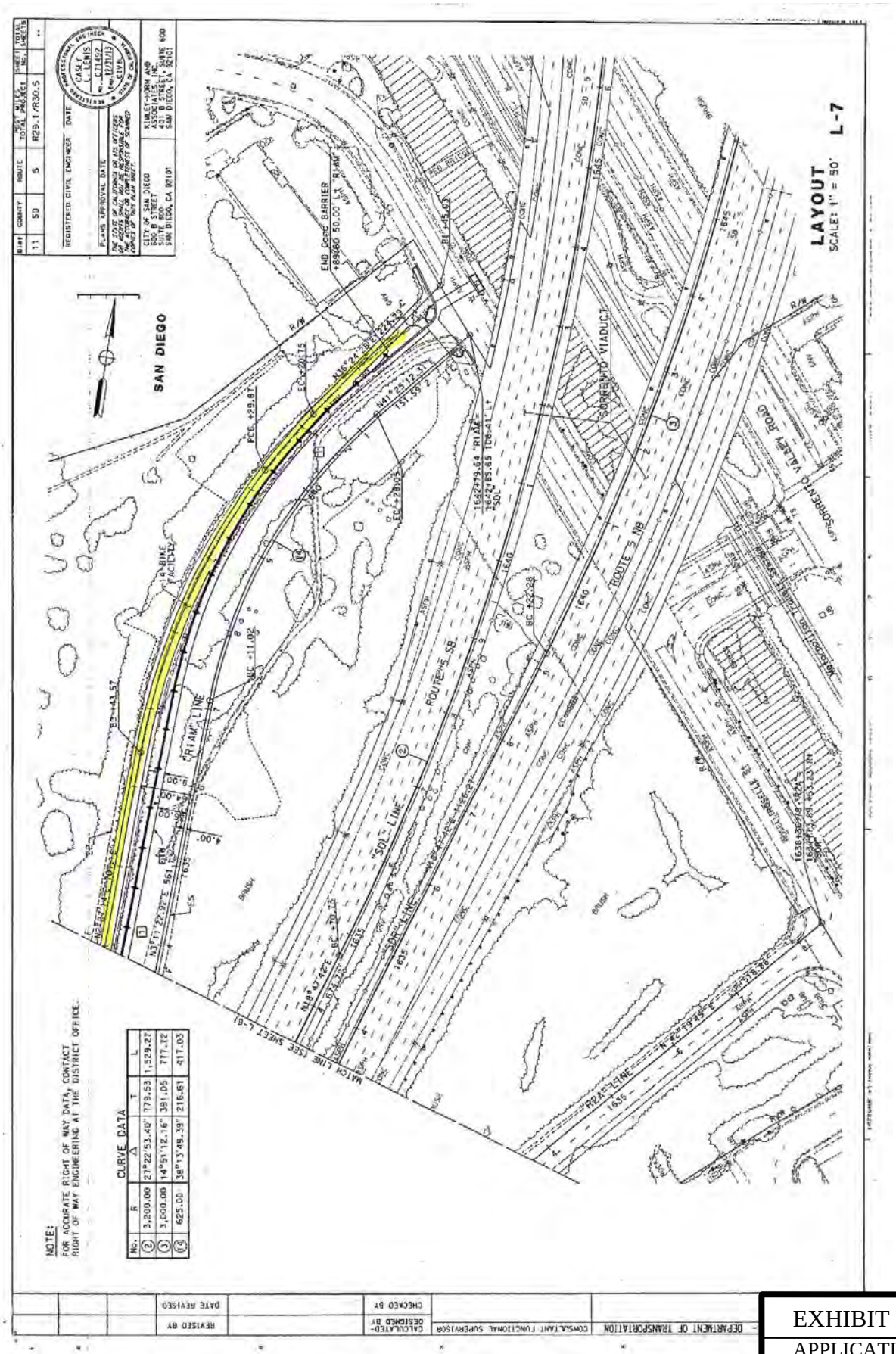


EXHIBIT NO. 4
APPLICATION NO.
6-11-093
Site Plans
California Coastal Commission



No.	R	Δ	T	L
②	3,200.00	27°22'53.40"	779.53	1,529.27
③	3,000.00	14°51'12.16"	391.05	777.12
⑭	625.00	38°13'49.39"	216.61	417.03

EXHIBIT NO. 4
APPLICATION NO.
6-11-093
Site Plans
California Coastal Commission

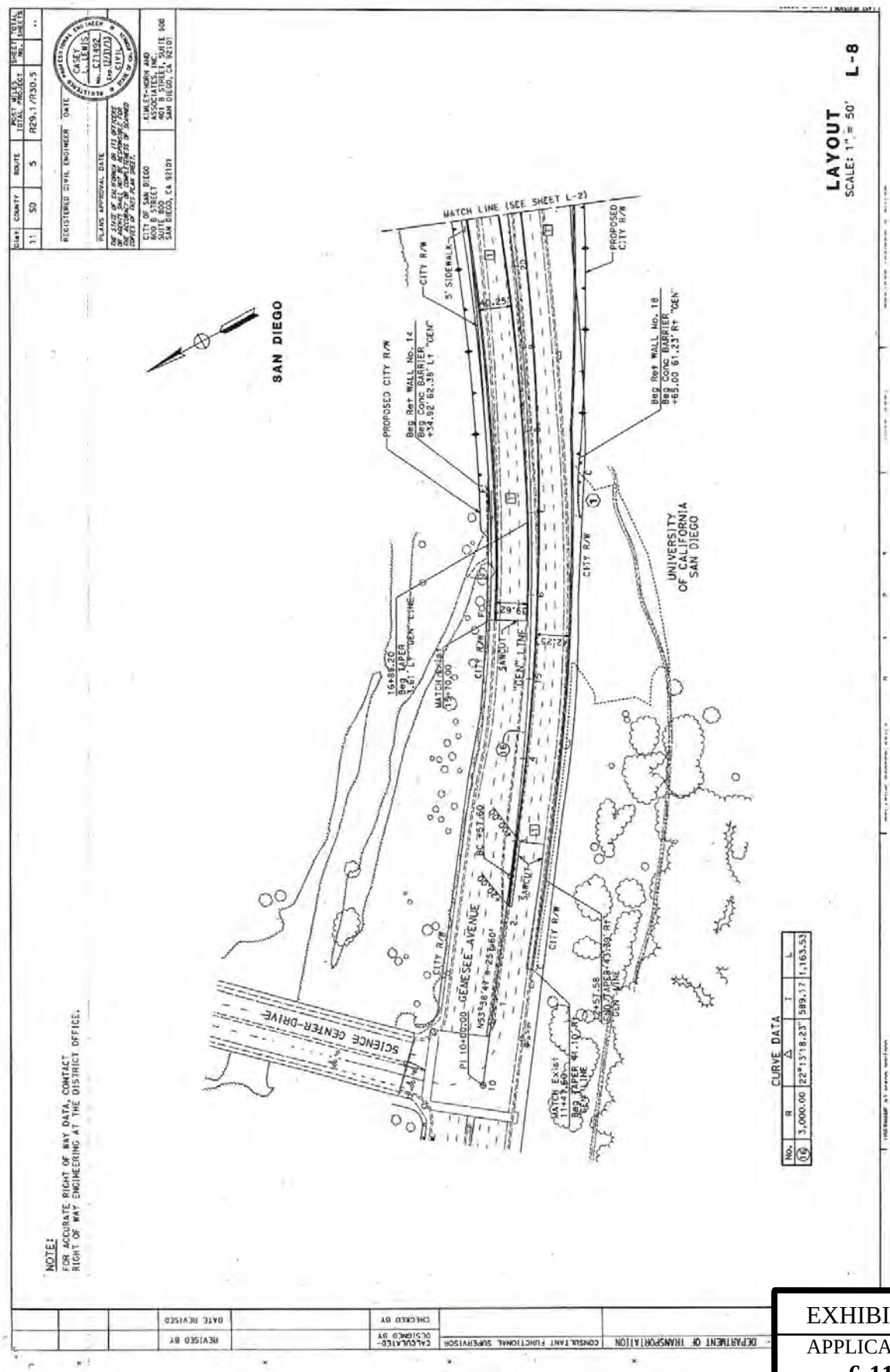


EXHIBIT NO. 4
APPLICATION NO.
6-11-093
Site Plans
California Coastal Commission

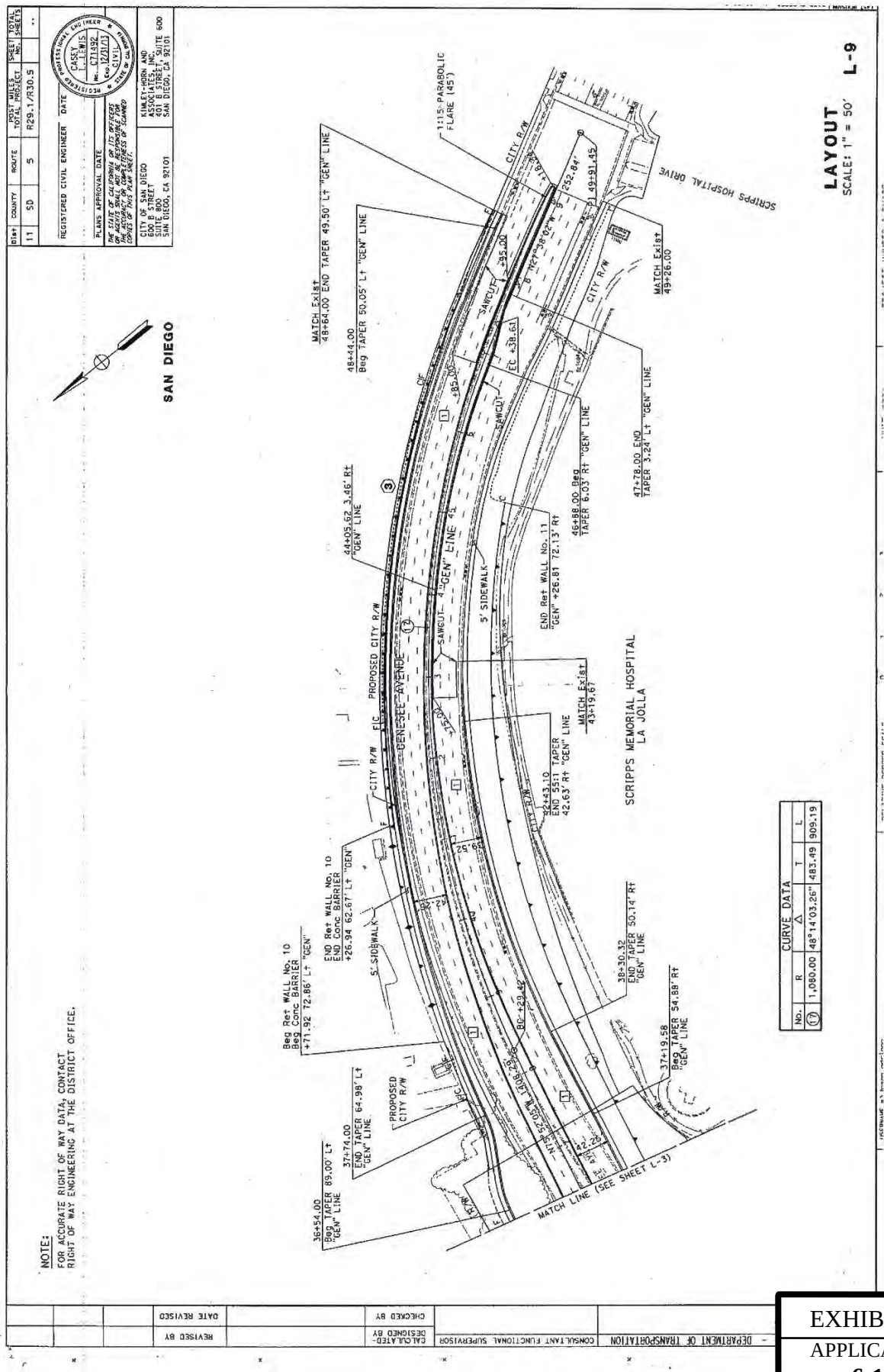
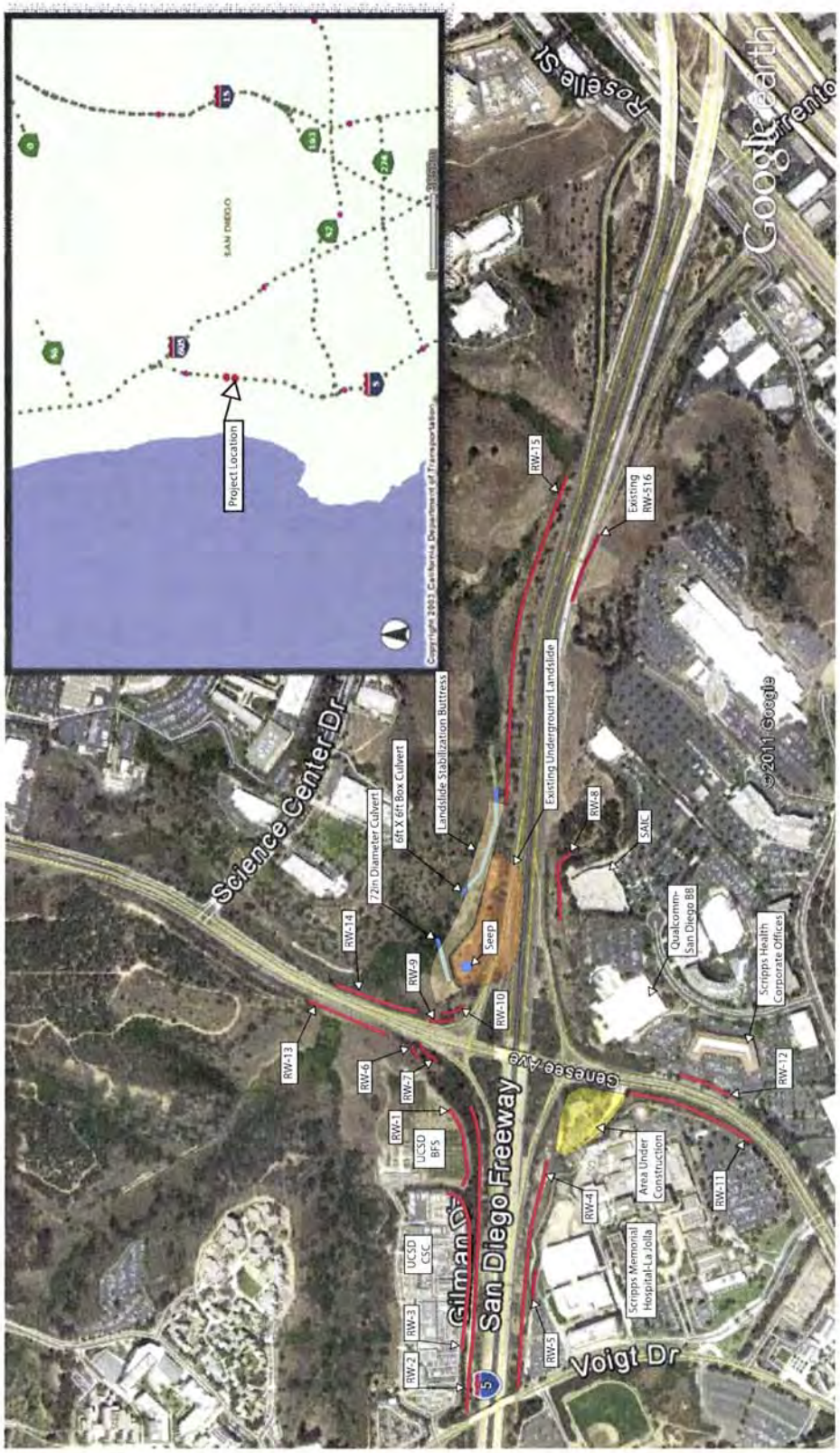


EXHIBIT NO. 4
APPLICATION NO.
6-11-093
Site Plans
California Coastal Commission



Note: The locations, alignments, and lengths of the retaining walls; the location of the seep; the location, length, and alignment of the landslide stabilization buttress, the location and area of the landslide are approximated.

FIGURE 1: PROJECT LOCATION MAP AND AERIAL PHOTOGRAPH

Geotechnical Design Report
Interstate-5/Genesee Avenue Interchange Improvement Project
EA 11-022331/EFIS 1100000012

EXHIBIT NO. 5
APPLICATION NO.
6-11-093
Retaining Wall Map
California Coastal Commission

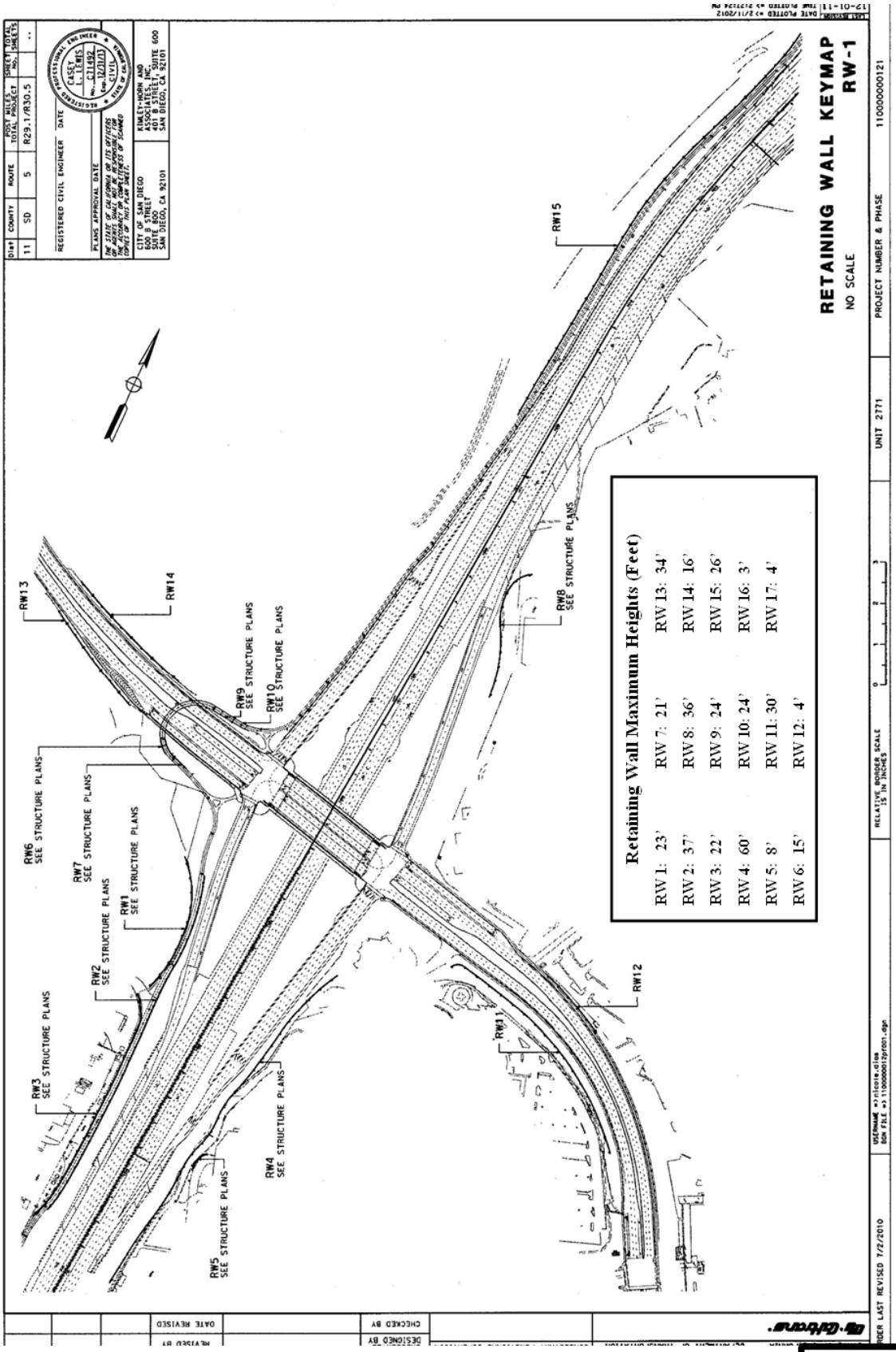


EXHIBIT NO. 5

APPLICATION NO.
6-11-093

Retaining Wall Map

California Coastal Commission

EXHIBIT NO. 6
APPLICATION NO.
6-11-093
Example Retaining Wall Section
California Coastal Commission

Cross-section C

INTERSTATE 5/GENESEE AVENUE INTERCHANGE RECONSTRUCTION

Figure 2.6-6

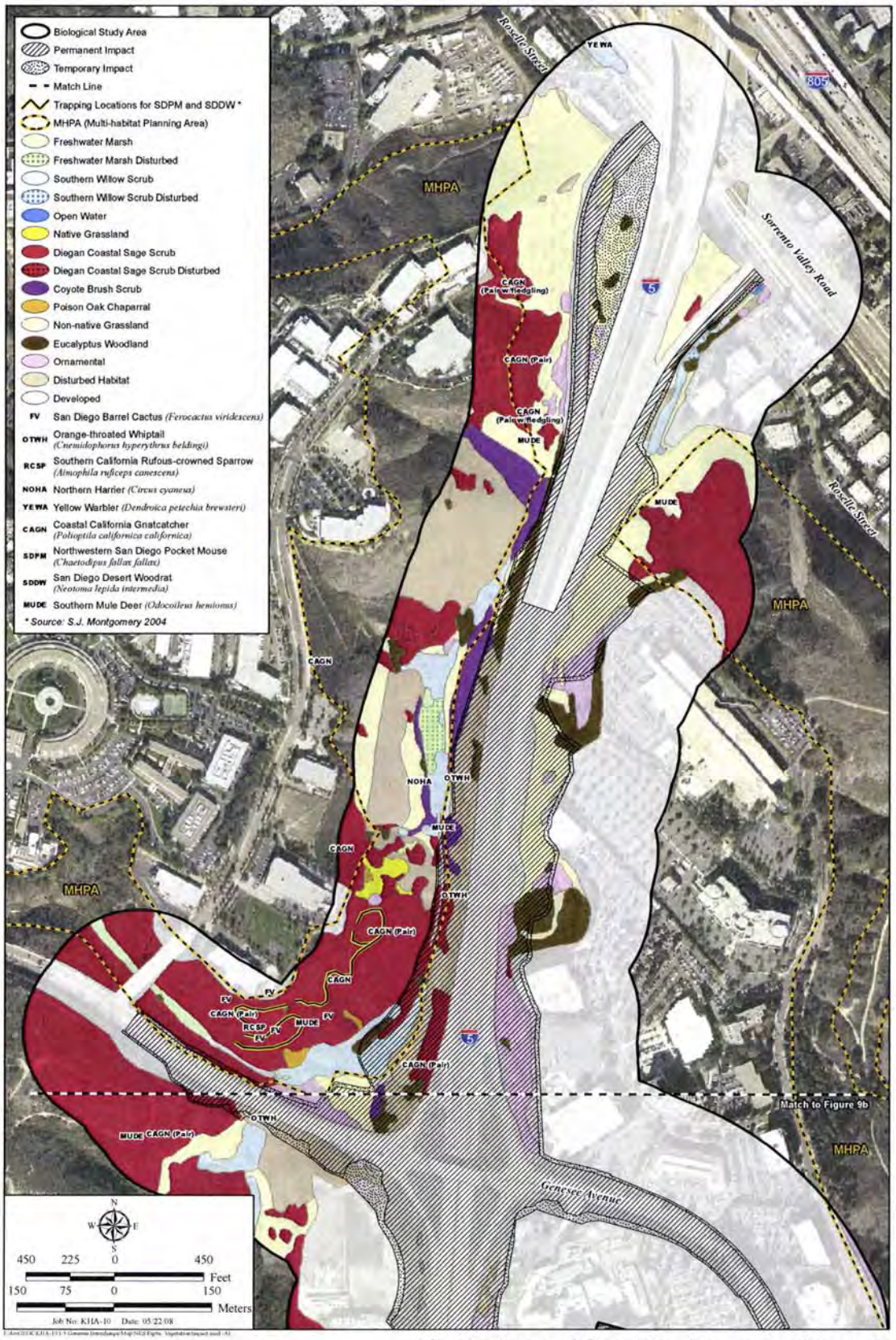
EXHIBIT NO. 6

APPLICATION NO.
6-11-093

Example Retaining Wall Section

California Coastal Commission

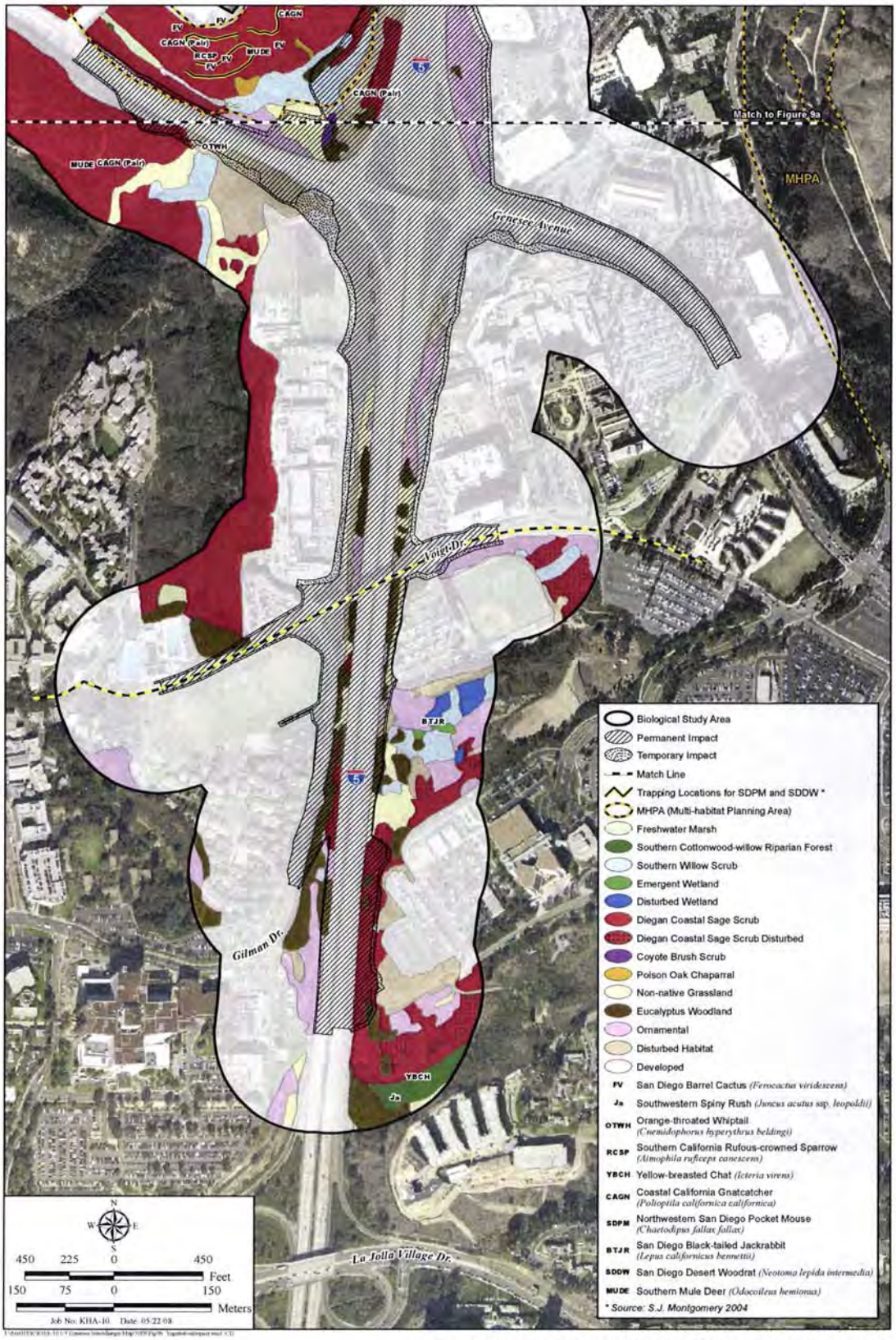
EXHIBIT NO. 6
APPLICATION NO.
6-11-093
Example Retaining Wall Section
California Coastal Commission



Vegetation and Sensitive Resources/Impacts

INTERSTATE 5/GENESEE AVENUE INTERCHANGE REC

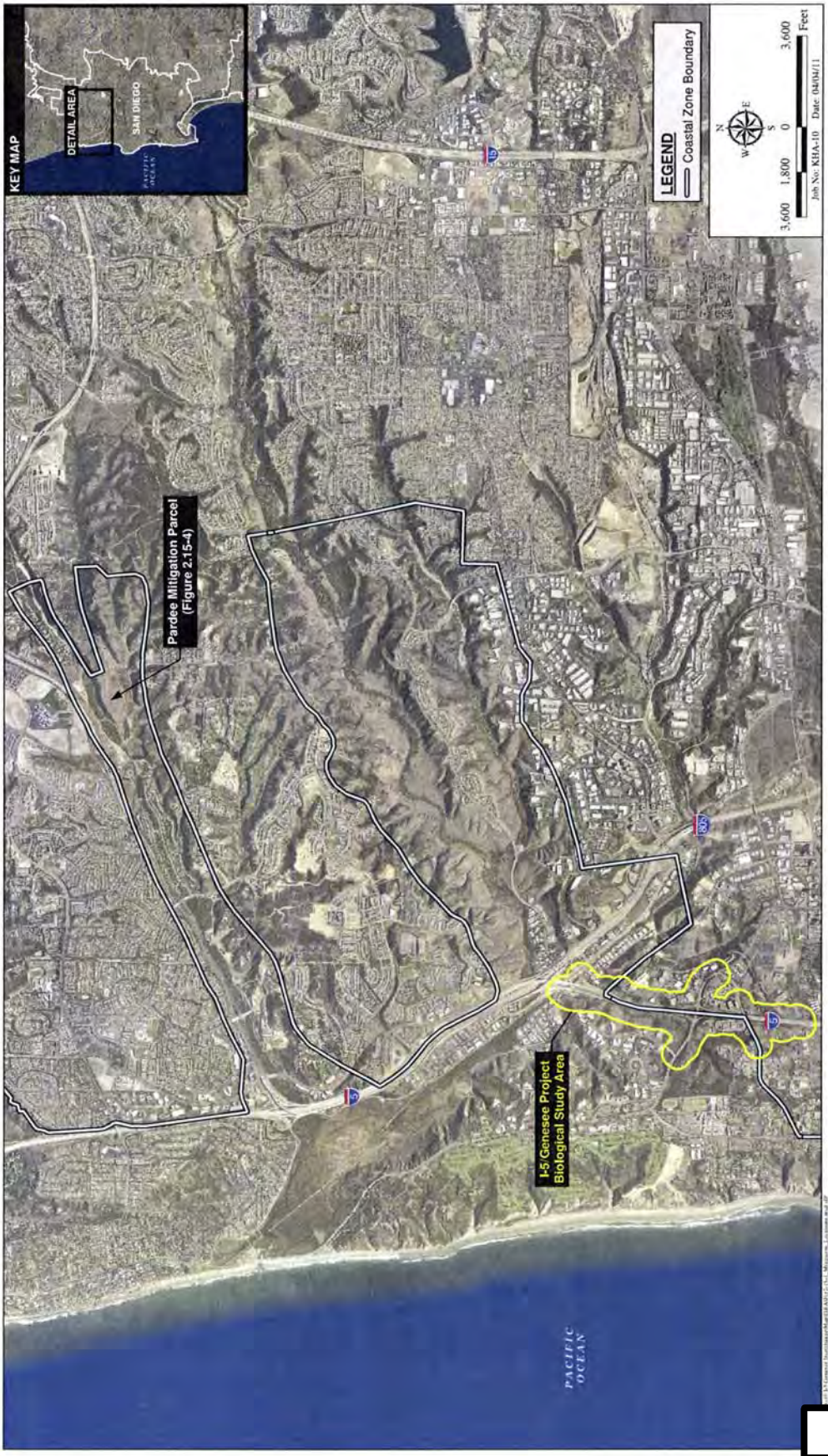
EXHIBIT NO. 7
APPLICATION NO. **6-11-093**
Vegetation Map
California Coastal Commission



Vegetation and Sensitive Resources/Impacts

INTERSTATE 5/GENESEE AVENUE INTERCHANGE RECON

EXHIBIT NO. 7
APPLICATION NO.
6-11-093
Vegetation Map
California Coastal Commission



Potential Mitigation Site Locations

INTERSTATE 5/GENESEE AVENUE INTERCHANGE RECONSTRUCTION

Figure 2.15-3

EXHIBIT NO. 8

APPLICATION NO. **6-11-093**

Deer Canyon Mitigation Site

California Coastal Commission

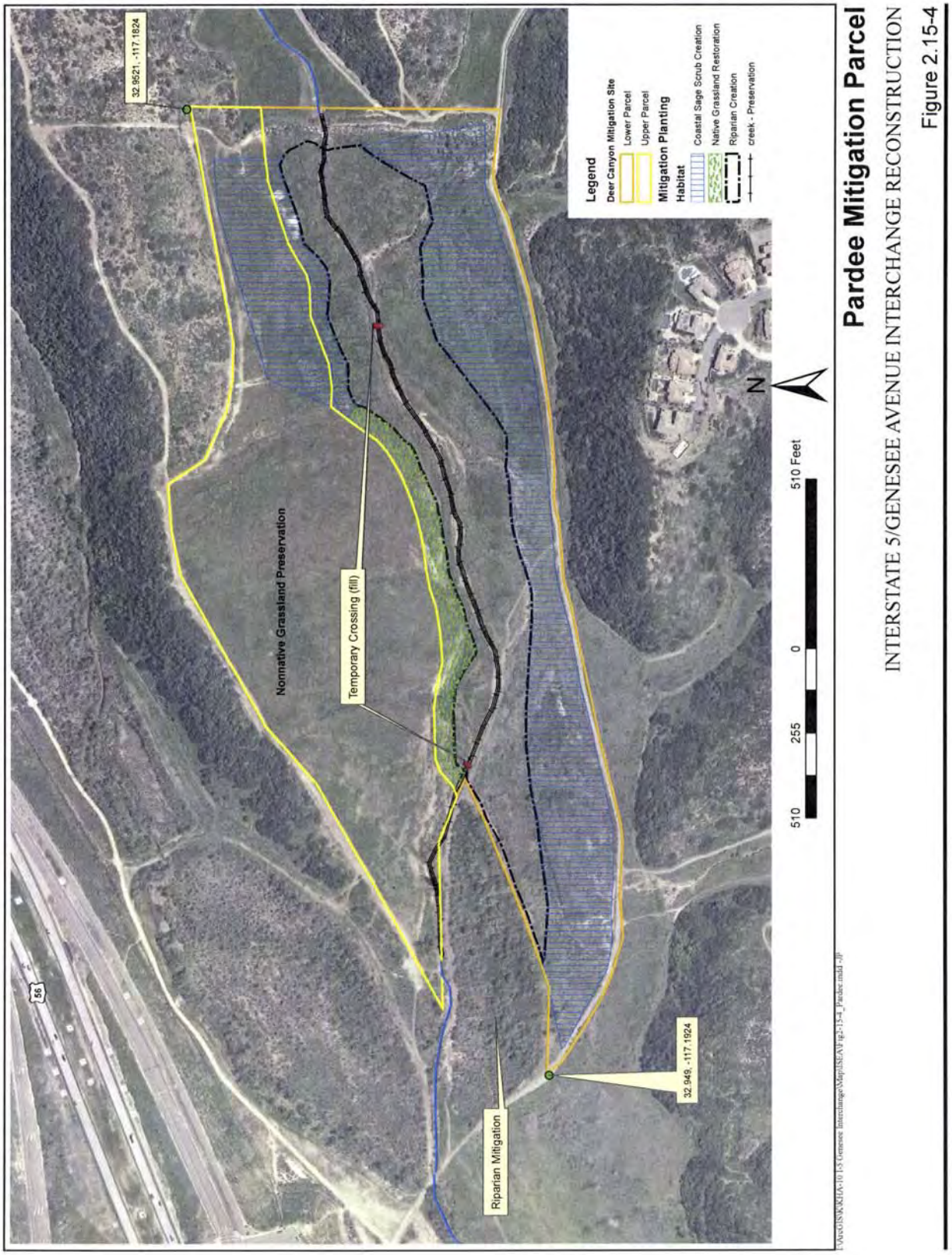
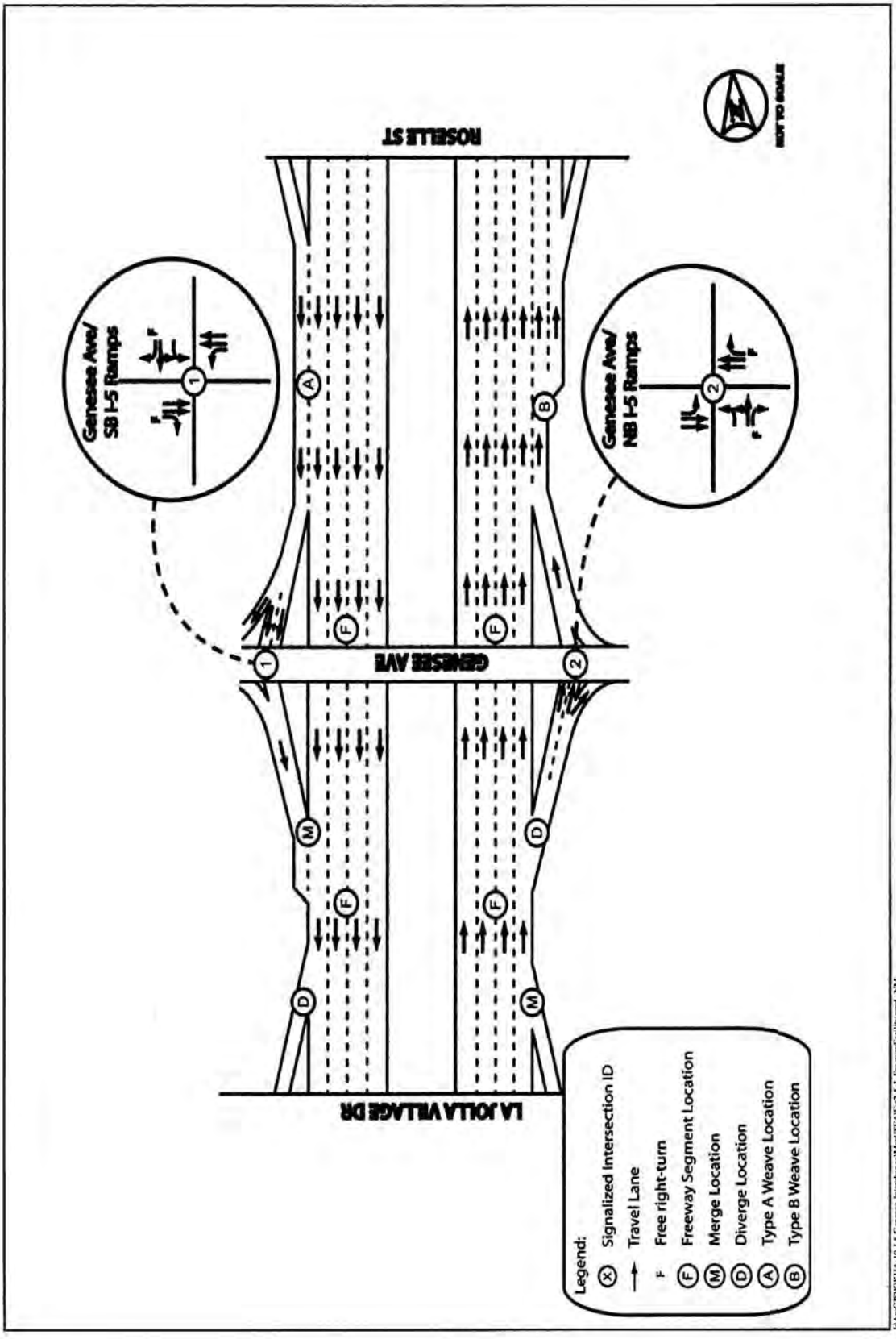


EXHIBIT NO. 8
APPLICATION NO.
6-11-093
Deer Canyon Mitigation Site
California Coastal Commission

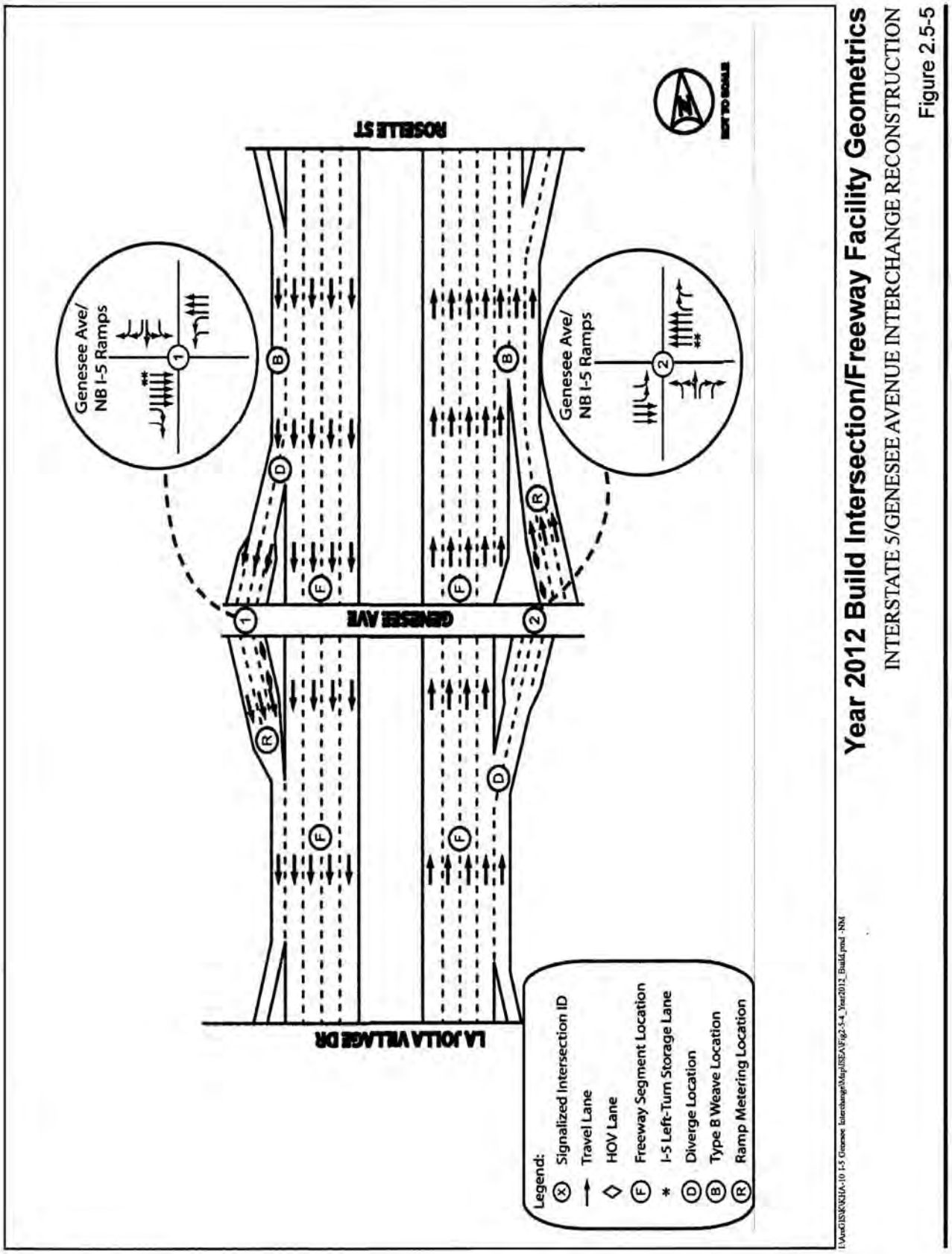


Existing Intersection/Freeway Facility Geometrics

INTERSTATE 5/GENESEE AVENUE INTERCHANGE RECONSTRUCTION

Figure 2.5-2

EXHIBIT NO. 9
APPLICATION NO. **6-11-093**
Current Interchange Configuration
California Coastal Commission



Year 2012 Build Intersection/Freeway Facility Geometrics

INTERSTATE 5/GENESEE AVENUE INTERCHANGE RECONSTRUCTION

Figure 2.5-5

EXHIBIT NO. 9

APPLICATION NO.
6-11-093

Future Interchange Configuration

California Coastal Commission

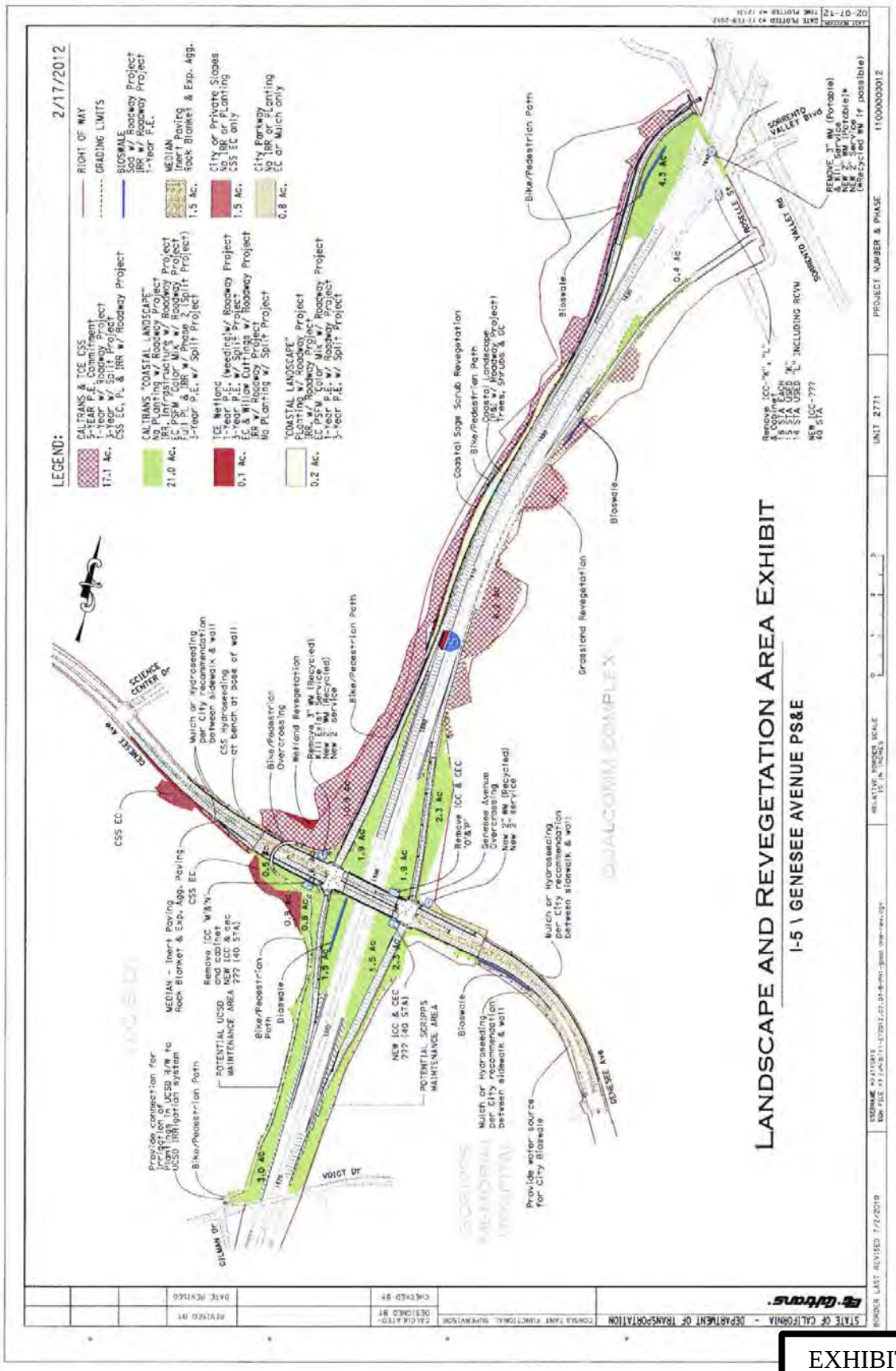


EXHIBIT NO. 10
APPLICATION NO.
6-11-093
Prelim. Landscaping Plan
California Coastal Commission