

FINAL
21st Street Ditch Project Mitigated Negative Declaration

Prepared for:

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1050 Camino Del Mar
Del Mar, California 92014
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ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
ACOE	U.S. Army Corps of Engineers
BMP	best management practice
CCC	California Coastal Commission
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
City	City of Del Mar
CO	carbon monoxide
EIR	environmental impact report
GPS	Global Positioning System
MM	mitigation measure
MND	Mitigated Negative Declaration
MRZ	mineral resources zone
MSCP	Multiple Species Conservation Plan
NCTD	North County Transit District
NO _x	oxides of nitrogen
O ₃	ozone
PM _{2.5}	particulate matter less than or equal to 2.5 microns in diameter
PM ₁₀	particulate matter less than or equal to 10 microns in diameter
project	21st Street Ditch Project
RWQCB	Regional Water Quality Control Board
SDCAPCD	San Diego County Air Pollution Control District
SDRAQS	San Diego Regional Air Quality Strategy
USFWS	U.S. Fish and Wildlife Service
VOC	volatile organic compound

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1 INTRODUCTION

1.1 Background

An unnamed drainage feature carries stormwater flows through the project site from a 4-foot box culvert to the west. Flows are carried through the project site by way of an earthen ditch from west to east, and exits the project site through a 4 foot by 3 foot culvert near the terminus of 21st Street. The feature routinely overtops and floods adjoining areas and vector concerns have increased. The drainage feature receives flows from the surrounding residential development and ultimately flows to the San Dieguito Lagoon and the Pacific Ocean. On December 9, 2015, the 21st Street Ditch Project received a Notification (Notification of Lake or Streambed Alteration No. 1600-2015-0190-R5) for routine vegetation removal and thinning within an approximate 203-foot portion of an unnamed drainage feature for floodwater conveyance purposes. Despite efforts to improve flow rate, flows continue to remain stagnant after proposed channel clearing and routine vegetation management and vector issues have increased. The standing water creates a breeding environment for mosquito populations. In addition, tennis balls from the public tennis facility land in the ditch and ultimately flow into the San Dieguito Lagoon. Thus, the City of Del Mar (City) proposes the permanent placement of a 36-inch solid storm drain pipe (connecting at both existing culvert outlets) and fill materials within the 203-foot portion of the unnamed drainage feature for the purpose of improving floodwater conveyance. This will also help to rectify vector habitat challenges and to remove standing, stagnant surface water.

1.2 California Environmental Quality Act Compliance

The City is the California Environmental Quality Act (CEQA) lead agency responsible for review and approval of the proposed project. Based on the findings of the Initial Study, the City determined that a Mitigated Negative Declaration (MND) is the appropriate environmental document to prepare in compliance with CEQA (14 CCR 15000 et seq.). As stated in CEQA Guidelines, Section 21064.5, an MND may be prepared for a project subject to CEQA when an Initial Study has identified no potentially significant effects on the environment.

This MND was prepared for the City and complies with Section 15070(a) of the CEQA Guidelines (14 CCR 15000 et seq.). The purpose of the MND and the Initial Study checklist is to determine any potentially significant impacts associated with the proposed project, and to incorporate mitigation measures into the project design to reduce or eliminate significant or potentially significant effects of the project.

1.3 Public Review Process

Prior to obtaining final approvals for various entitlements from both State and Federal agencies (as enumerated elsewhere in this MND document), the Project shall require approval of a Coastal Development Permit, Flood Development Permit and Land Conservation Permit by the City of

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Del Mar Planning Commission. A decision by the Planning Commission on these entitlements is subject to appeal to the City Council, and thereafter, the Coastal Development Permit is subject to appeal to the California Coastal Commission.

In accordance with CEQA, a good-faith effort was made during preparation of this MND to contact affected agencies, organizations, and persons who may have an interest in the project. In reviewing this MND, public agencies and the interested public should focus on the sufficiency of the document in identifying and analyzing the project's possible impacts on the environment. A copy of the Draft MND and related documents are available for review at the City of Del Mar (see address below) between 8 a.m. and 5 p.m., Monday through Friday.

City of Del Mar – Public Counter
1050 Camino Del Mar
Del Mar, California 92014

The document is also available on the City's website (<http://www.delmar.ca.us/156/Planning-Community-Development>). Comments on the MND may be made in writing before the end of the public review period. Per Section 15072(a) of the CEQA Guidelines, a 30-day review and comment period from August 3, 2017 to September 4, 2017 has been established. Following the close of the public comment period, the City would consider this MND and comments in determining whether to approve the proposed project. Written comments on the MND should be sent to the following address by 4:00 p.m., September 4, 2017.

City of Del Mar
1050 Camino Del Mar
Del Mar, California 92014
Contact: Mr. Tim Thiele
Telephone: 858.755.9313
E-mail: tthiele@mbakerintl.com

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2 PROJECT DESCRIPTION

2.1 Project Location

The proposed project is located in the northern part of San Diego County (County), in the City of Del Mar, California, as shown in Figure 1, Regional Map. More specifically, the proposed project is located in the City of Del Mar, in the northern part of San Diego County (Figure 2, Vicinity Map). The site is to the west of Jimmy Durante Boulevard, east of Camino Del Mar, and north and west of the tennis courts located along Court Street (Figure 3).

2.2 Environmental Setting

The project site is located within the City of Del Mar. Adjacent land uses include residential properties to the north and west, Jimmy Durante Boulevard and the North County Transit District (NCTD) right-of-way to the west, as well as limited commercial development and governmental buildings to the east. Additionally, there are tennis courts to the south and the Pacific Ocean is less than one-quarter mile west. The project site consists of a maintained flood channel ditch, which has been extensively disturbed and does not support natural plant communities.

2.3 Project Characteristics

2.3.1 Project Description

The proposed project site is to the west of Jimmy Durante Boulevard, east of Camino Del Mar, and north and west of the tennis courts located along Court Street. The 0.22-acre project site includes a 203-foot segment of an unnamed, unlined drainage ditch that is approximately 5 feet in diameter and begins west of the project site at a 4-foot box culvert and terminates at a 4 foot by 3 foot culvert near 21st Street at the east edge of the project site. The depth of the drainage ranges from 0.1 to 5.2 feet. Water flows from west to east through the ditch; flows are intermittent/perennial and are typically from urban runoff and storm events. The proposed project would permanently place a 36-inch solid storm drain pipe (connecting at both existing culvert outlets) and fill materials within the 203-foot portion of the unnamed drainage feature. The proposed project would also involve rehabilitation grading of the existing drainage channel to approximately match the existing surface elevations of the street and tennis facility located south of 21st Street. The purpose of the proposed project is to improve floodwater conveyance, maintain flow rate efficiency, and remove localized nuisance water.

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Project Design Features

Standard best management practices (BMPs) will be implemented to the maximum extent possible by incorporating water pollution control practices for waste management and materials pollution control. Staging and storage equipment will be located outside of jurisdictional or sensitive areas.

2.3.2 Project Construction

Project construction would require approximately 40 working days. The number of construction personnel would be a maximum of 10 workers and a minimum of 4 workers per day. Likely construction equipment would include a backhoe, a skip-loader, and a dump truck.

Scraping and excavation activities would remove the current drainage channel. The amount of excavation that will take place will be minimal, limited to the small amount necessary to smooth out the area within the grading limits. A 36-inch pipe will then be placed below grade at a height equal to the seasonal high ground water elevation. This 36-inch pipe will connect the existing corrugated steel pipe towards Court Street and to the existing 48-inch by 33-inch corrugated metal pipe towards NCTD property. To the extent of the grading limits, fill material and top soil will be placed over this new section of the drainage channel. This portion will then be graded to match the existing surface elevations.

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3 INITIAL STUDY CHECKLIST

1. Project title:

21st Street Ditch Project

2. Lead agency name and address:

City of Del Mar, 1050 Camino Del Mar, Del Mar, California 92014

3. Contact person and phone number:

Tim Thiele, City of Del Mar, City Engineer

858.755.9313

4. Project location:

The proposed project is located in the northern part of San Diego County, in the City of Del Mar, California, as shown in Figure 1, Regional Map. More specifically, the proposed project is located in the City of Del Mar, in the northern part of San Diego County (Figure 2, Vicinity Map). The site is to the west of Jimmy Durante Boulevard, east of Camino Del Mar, and north and west of the tennis courts located along Court Street (Figure 3, Project Site).

5. Project Applicant's name and address:

City of Del Mar, 1050 Camino Del Mar, Del Mar, California 92014

6. General plan designation:

Rail

7. Zoning:

Rail, Duplex-Single Family Mix

8. Description of project. (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary):

Refer to Section 2 of this MND for detailed information on the project description, environmental setting, and surrounding land uses.

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9. Surrounding land uses and setting (Briefly describe the project's surroundings):

Adjacent land uses include residential properties to the west and Jimmy Durante Boulevard, limited commercial development, and governmental buildings to the east.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

The following agencies may be responsible agencies under CEQA. They may need to issue approvals for the project and, thus, rely on this MND:

- San Diego Regional Water Quality Control Board Clean Water Act/Clean Water Act, Section 401 Water Quality Certification and Construction Stormwater Permit
- California Fish and Code Section 1602 Streambed Alteration Agreement
- California Coastal Commission Coastal Development Permit
- Federal Emergency Management Agency (Elevation Certificate)
- U.S. Army Corps of Engineers 404 Permit

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ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact,” as indicated by the checklist on the following pages.

- | | | |
|---|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Air Quality | <input checked="" type="checkbox"/> Biological Resources |
| <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology and Soils | <input type="checkbox"/> Hazards and Hazardous Materials |
| <input type="checkbox"/> Hydrology and Water Quality | <input type="checkbox"/> Land Use and Planning | <input type="checkbox"/> Mineral Resources and Energy |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population and Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation and Traffic | <input type="checkbox"/> Utilities and Service Systems |
| <input type="checkbox"/> Mandatory Findings of Significance | <input type="checkbox"/> <u>Tribal Cultural Resources</u> | |

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DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION would be prepared.
- I find that although the proposed project could have a significant effect on the environment, there would not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION would be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Signature



Date

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EVALUATION OF ENVIRONMENTAL IMPACTS:

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an Environmental Impact Report (EIR) is required.
4. “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less-than-Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less-than-significant level (mitigation measures from “Earlier Analyses,” as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15063(c)(3)(D)). In this case, a brief discussion should identify the following:
 - a. Earlier Analysis Used. Identify and state where they are available for review.
 - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c. Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

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6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
 - a. The significance criteria or threshold, if any, used to evaluate each question; and
 - b. The mitigation measure identified, if any, to reduce the impact to less than significant.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
3.1 AESTHETICS – Would the project:				
a) Affect a scenic vista or highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a demonstrable negative aesthetic effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.2 AIR QUALITY – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Alter air movement, moisture or temperature, or cause any change in climate people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
f) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3.3 BIOLOGICAL RESOURCES – Would the project:				
a) Result in substantial impacts to endangered, threatened or rare species or their habitats (including but not limited to, sensitive plants, fish, insects, animals and birds)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial impacts to any species identified as a candidate, sensitive or special status species in local or regional plans, policies or regulations, or by the CDFG or U.S. Fish and Wildlife Service (USFWS)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in substantial impacts to locally designated species (e.g., heritage trees)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in substantial impacts to any riparian habitat or other sensitive natural community identified in local or regional plans, policies and/or regulations or by the CDFG or USFWS?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Result in substantial impacts to wetland habitat (e.g., marsh, riparian, vernal pool)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Result in substantial impacts to wildlife dispersal or migration corridors?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3.4a CULTURAL RESOURCES – Would the project:				
a) Disturb paleontological resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Disturb archaeological resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Affect historical resources?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Restrict existing religious or sacred uses within the potential impact area, or disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.4b TRIBAL CULTURAL RESOURCES – Would the project:				
a) Result in a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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b) Result in a substantial adverse change in the significance of a tribal cultural resource as determined by the lead agency to be significant pursuant to Public Resources Code 5024.1(c)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3.5 GEOLOGY AND SOILS – Would the project:				
a) Result in or expose people to potential impacts involving fault rupture?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in or expose people to potential impacts involving strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in or expose people to potential impacts involving seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in or expose people to potential impacts involving seiche, tsunami, or volcanic hazard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in or expose people to potential impacts involving landslides or mudflows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Result in or expose people to potential impacts involving erosion, changes in topography or unstable soil conditions from excavation, grading or fill?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Result in or expose people to potential impacts involving subsidence of the land?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Expose people to potential impacts involving expansive soils?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Expose people to potential impacts involving unique geologic or physical features?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Result in or expose people to potential impacts involving soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.6 HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a) Involve a risk of accidental explosion or release of hazardous substances (including, but not limited to, oil, pesticides, chemicals, or radiation) through the routine transport, disposal or other emission of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Involve possible interference with an emergency response or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Involve creation of any health hazard or potential health hazard	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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e) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) involve increased fire hazard in areas with flammable brush, grass, or trees?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3.7 HYDROLOGY AND WATER QUALITY – Would the project:				
a) Result in changes in absorption rates, drainage patterns, or the rate and amount of surface runoff, in a manner which would result in substantial erosion, siltation, or flooding, on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in exposure of people or property to significant water-related hazards such as flooding?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in discharge into surface waters or other alteration of surface water quality (e.g., temperature, dissolved oxygen or turbidity)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in changes in the amount of surface water in any water body?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in changes in currents, or the course or direction of water movements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Result in change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of aquifer by cuts or excavation, or through substantial loss of groundwater recharge capability?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Result in altered direction or rate of flow of groundwater?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Result in impacts to groundwater quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Result in substantial reduction in the amount of groundwater otherwise available for public water supplies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or other flood hazard delineation map, or expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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3.8 LAND USE AND PLANNING – Would the project:				
a) Conflict with any general plan designation or zoning?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be incompatible with any existing land use in the vicinity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Affect agricultural resources or operations e.g., impacts to soils or farmlands, or impacts from incompatible land uses)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Disrupt or divide the physical arrangement of an established community (including a low-income or minority community)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.9 MINERAL RESOURCES and ENERGY – Would the project:				
a) Conflict with adopted energy conservation plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Use non-renewable resources in a wasteful and inefficient manner?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the state, or result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.10 NOISE – Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3.11 POPULATION AND HOUSING – Would the project:				
a) Cumulatively exceed official regional or local population projections?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
b) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace existing housing, especially affordable housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.12 PUBLIC SERVICES				
Would the project have an effect upon, or result in a need for new or altered government services in any of the following areas:				
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.13 RECREATION				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Would the project affect existing recreational opportunities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.14 TRANSPORTATION/TRAFFIC – Would the project:				
a) Result in increases in vehicle trips or traffic congestion that are substantial in relation to the existing traffic load and capacity of the street system?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in exceeding, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in hazards to safety from design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access or access to nearby uses?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in insufficient parking capacity on-site or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
f) Result in hazards or barriers for pedestrians or bicyclists?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Result in conflicts with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Result in rail, waterborne or air traffic impacts?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.15 UTILITIES AND SERVICE SYSTEMS				
Would the project result in a need for new systems or supplies, or substantial alterations to the following utilities:				
a) Power or natural gas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Communication systems?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Local or regional water treatment or distribution facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Sewer or septic tanks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Storm water drainage?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Solid waste disposal, including compliance with federal, state and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Local or regional water supplies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3.16 MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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3.1 Aesthetics

a) *Would the project affect a scenic vista or highway?*

Less-than-Significant Impact. The City of Del Mar proposes the permanent placement of a 36-inch solid storm drain pipe (connecting at both existing culvert outlets) and fill materials within a 203-foot portion of the unnamed drainage feature. During construction, the proposed project would involve rehabilitation grading of the existing drainage channel to approximately match the existing surface elevations of the street and tennis facility located south of 21st Street. Further, the site over the replaced drain would be landscaped. Camino Del Mar is designated as a scenic roadway in the Del Mar Community Plan, and the proposed project may be visible from the road. However, the drainage system would be very limited and would not adversely affect the view from Camino Del Mar.

Project construction would also have the potential to cause short-term impacts to adjacent residential entities. However, due to the temporary nature of these impacts and short duration necessary for pipeline construction, impacts associated with a scenic vista or highway due to construction would be less than significant. Additionally, once operational, the project would not have any components that would affect a scenic vista or highway, and impacts would be less than significant.

b) *Would the project substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

Less-than-Significant Impact. The project site has the potential to be visible from Camino Del Mar, which is designated as a scenic roadway in the Del Mar Community Plan. However, the proposed project would involve rehabilitation grading of the existing drainage channel to approximately match the existing surface elevations of the street and tennis facility located south of 21st Street, and thus would not involve substantial damage to scenic resources such as trees, rock outcroppings or historic buildings. Additionally, the project would not involve the removal of any scenic resources. The proposed project would not result in the demolition of any existing buildings, structures, or landmarks. Construction or maintenance activities would be minimal and would not result in substantial adverse changes to the project site. Construction activities would be short-term in nature, and maintenance activities would be sporadic and temporary. Therefore, impacts to scenic resources within a state scenic highway would be less than significant.

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c) *Would the project have a demonstrable negative aesthetic effect?*

Less-than-Significant Impact. As discussed in response 3.1(a), the proposed project involves the permanent placement of a 36-inch solid storm drain pipe (connecting at both existing culvert outlets) and fill materials within the unnamed drainage feature. The surface above the proposed localized drainage system would be restored using cobblestone to create a dry riverbed appearance that is consistent with the surrounding areas. The project would not degrade the existing visual character of the area, and thus would not create a negative aesthetic effect. The project would have the potential to cause short-term impacts to adjacent residential areas due to construction activities. However, due to the temporary nature of these impacts and short duration for pipeline construction, aesthetic impacts due to construction would be less than significant. Additionally, once operational, the project would not have any components that would have a demonstrable negative aesthetic effect and would, in fact, be landscaped to improve the site and its aesthetic appearance. Thus, operational impacts would be less than significant.

d) *Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

No Impact. No new sources of light or glare would be incorporated as part of the proposed project. The proposed drainage system and pipeline have no potential to create a new source of substantial light or glare that could adversely affect day or nighttime views in the area. Thus, no impacts would occur.

3.2 Air Quality

a) *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

Less-than-Significant Impact. Regional planning efforts to improve air quality include a variety of strategies to reduce emissions from motor vehicles and minimized emissions from stationary sources. The San Diego County Air Pollution Control District (SDCAPCD) is the agency principally responsible for comprehensive air pollution control in the San Diego Air Basin. The SDCAPCD develops rules and regulations, establishes permitting requirements for stationary sources, inspects sources, and enforces such measures through educational programs or fines, when necessary.

The applicable air quality plan for the San Diego Air Basin is the San Diego Regional Air Quality Strategy (SDRAQS). The SDRAQS is based on the population, vehicle, and land use trends developed in the general plans of the County of San Diego and the cities within it. The SDRAQS addresses the state requirements, the San Diego portion of the

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California State Implementation Plan, and federal air quality requirements. The proposed project would not require any alterations or amendments to the existing general plans and designated land use zones. The drainage improvements would not generate growth, would not increase population or long-term vehicle usage, and would be consistent with these existing general plans and land use policies.

Emissions during construction of the project are expected to be less than the SDRAQS thresholds of significance, and maintenance activities would be sporadic and short-term in nature. A backhoe, a skip-loader, and a dump truck would be used for construction activities. The type and quantities of this equipment is typical of the industry and would not be of sufficient magnitude in quantity to exceed the assumptions used in the preparation of the SDRAQS. Therefore, the proposed project would not conflict with the applicable land use plans and would not conflict with or obstruct the implementation of the applicable air quality plan; impacts would be less than significant.

b) *Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

Less-than-Significant Impact. Construction emissions would come from heavy equipment exhaust; construction-related trips by workers; and associated fugitive dust generation from clearing, grading, and potential vehicle travel on unpaved roads. The principal pollutants of construction vehicle emissions would be carbon monoxide (CO), volatile organic compounds (VOCs), oxides of nitrogen (NO_x), and particulate matter less than or equal to 10 microns in diameter (PM₁₀). Both VOC and NO_x are precursors of ozone (O₃). Since construction activities would be temporary and short-term in nature, impacts associated with emissions during construction would be less than significant.

Generally, grading ordinances require that all grading surfaces and materials must be wetted, protected, or contained to reduce nuisance from dust. The Vector Habitat Remediation Program Project EIR recommended wetting of all grading surfaces and materials twice daily (County of San Diego 2009). Additionally, for potential vehicle travel on unpaved roads, speed limits are recommended that would reduce the fugitive dust to a level below significance. Traffic associated with workers commuting to and from the project site would slightly increase CO levels at nearby sensitive receptors or areas immediately adjacent to the project site. However, emissions from these short-term trips would be minimal and would not be anticipated to substantially contribute to an existing or projected air quality violation.

Emissions from other pollutants would be minimal during maintenance activities and would occur for short periods of time. Therefore, it is assumed that emissions would be

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below the County's screening threshold of 250 pounds per day for NO_x and 75 pounds per day of VOCs, and impacts would be less than significant.

- c) *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?*

Less-than-Significant Impact. As described in Section 3.2(a), the proposed construction of the drainage system would be within the San Diego Air Basin and would have to comply with the SDRAQS. The California Air Resources Board has listed San Diego County as a nonattainment zone for ozone (O₃), particulate matter less than or equal to 2.5 microns in diameter (PM_{2.5}), and PM₁₀. The U.S. Environmental Protection Agency has designated the County as a nonattainment zone for 8-hour ozone (CARB 2011). As described in Section 3.2(a) the proposed project would not alter or add to the County of City general plans or land use designations that are the basis of the air quality projections in SDRAQS.

The SDRAQS does not address PM₁₀ or PM_{2.5}, but the proposed project, and other current or future projects within the region, would need to comply with grading and dust control ordinances for grading permitting. Compliance with these documents, as well as the suggested design features for reducing fugitive dust described in the Vector Habitat Remediation Program EIR, would reduce these fugitive dust emissions to below a significant level.

The Vector Habitat Remediation Program EIR also concluded that for a standard drainage project of this size, the greenhouse gas emissions would be well under the proposed threshold by the County for small projects (County of San Diego 2009). Given the limited scale of the project and its consistency with the City's General Plan and SDRAQS, it would not result in a cumulative considerable net increase in air pollutants. Therefore, the proposed project would not violate any air quality standard or significantly contribute to an existing or projected air quality violation either during construction or operation. Impacts would be less than significant.

- d) *Would the project expose sensitive receptors to substantial pollutants?*

Less-than-Significant Impact. The greatest potential for toxic air contaminant emissions for the proposed project would occur during construction from diesel particulate emissions from heavy equipment operations and maintenance operations that would lead to increased vehicle trips to the project site. Sensitive receptors could include residential

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uses, schools, resident care facilities, or daycare facilities, of which the nearby residences adjacent to the project alignment would be the only potential sensitive receptor in the project area. Parks and recreational facilities are not generally designated as sensitive receptors. It is anticipated that maximum daily particulate matter emissions generated by construction equipment operation and haul-truck trips, combined with fugitive dust generated by equipment operation and vehicle travel would be below the SDAPCD significance threshold due to the limited scope of the project and the short construction period. See Section 3.3 for a discussion about the potential effects of the project on sensitive biological receptors.

The number of construction and maintenance vehicle trips generated by the proposed project is anticipated to be minimal because of the short construction phase (approximately 40 working days). In addition, the maintenance trips would be sporadic and short-term in nature and would not result in any permanent increase in the number of vehicle trips, which could contribute to long-term exhaust emissions and result in substantial pollutant concentrations. As noted above, the proposed project would not result in the exposure of sensitive receptors to substantial pollutant emissions or concentrations. Therefore, impacts to sensitive receptors would be less than significant.

e) ***Would the project alter air movement, moisture or temperature, or cause any change in climate people?***

Less-than-Significant Impact. The proposed project is the construction of a drainage system and pipeline that would not include additional above ground structures. The improved drainage system would be designed to decrease the amount of stagnant, standing water at the project site but would not substantially change the amount of moisture in the air. Therefore, the proposed project would not substantially alter air movement, moisture, or temperature. Impacts would be less than significant.

f) ***Would the project create objectionable odors affecting a substantial number of people?***

Less-than-Significant Impact. Land uses and industrial operations that are associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project would not be included in any of those categories, but potential odors would be generated from vehicles and equipment exhaust emissions during construction and maintenance of the proposed project. Odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment. Construction equipment would operate at various locations throughout the construction site, and operation near existing sensitive receptors would be short-term and intermittent. Maintenance activities that use diesel equipment would also generate some

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nuisance odors; however, as mentioned previously, operation near existing sensitive receptors would be sporadic and temporary in nature. Therefore, impacts associated with odors during construction and maintenance would not significantly affect a substantial number of people, and impacts would be less than significant.

3.3 Biological Resources

- a) *Would the project result in substantial impacts to endangered, threatened or rare species or their habitats (including but not limited to, sensitive plants, fish, insects, animals and birds)?*

Less-than-Significant with Mitigation Incorporated. The proposed project would result in the removal of approximately 0.036 acre (245 linear feet) of waters of the United States, consisting of approximately 0.028 acre of open water and 0.008 acre of freshwater marsh. Additionally, approximately 0.063 acre of California Department of Fish and Wildlife (CDFW; previously California Department of Fish and Game (CDFG))-jurisdictional streambed, consisting of disturbed cismontane alkali marsh would be impacted. Five listed bird species have a low or very low potential to occur in the marsh habitat on site (Appendix A). Listed species are defined as plant or wildlife species that are listed as threatened or endangered by either the California or federal Endangered Species Acts. Thus, impacts associated with endangered, threatened or rare species or their habitats would be considered potentially significant. However, with implementation of mitigation measures (MMs) **MM-BIO-1** through **MM-BIO-3**, impacts to endangered, threatened or rare species or their habitats would be mitigated to a less-than-significant level.

MM-BIO-1: To ensure avoidance of listed species, a qualified biologist would monitor ground-disturbing activities to ensure no listed species are present within the disturbance area. The biologist would survey the site and suitable habitat areas for listed bird species in the disturbance area and within 500 feet of the disturbance area immediately prior to construction activities to ensure no listed species are present. The biologist shall monitor all direct habitat-disturbing activities occurring within suitable habitat for listed species. If a listed species is present, construction within 500 feet of the occupied area would be stopped and delayed until either the species has vacated the disturbance area, or the monitoring biologist and project applicant have consulted with the relevant wildlife agency (i.e., either U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), or both) to determine the appropriate course of action to avoid both direct and indirect impacts. Construction activities may resume once the

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monitoring biologist, in coordination with the relevant wildlife agency(ies) as necessary, determines that there is no longer a potential for a listed species to be directly or indirectly affected. If the wildlife agency(ies) determine that take of the species associated with construction activities cannot be avoided, the project activities shall be postponed until the project applicant has obtained the necessary take permits/authorizations from the relevant agency(ies).

MM-BIO-2: Mitigation for impacts to jurisdictional waters would be completed at a minimum 2:1 ratio of in-kind mitigation within the San Dieguito River watershed and would be accomplished through either off-site creation, contribution to a mitigation bank or in-lieu fee program, or collaboration with an existing off-site restoration program. On-site mitigation is not feasible as the goal of the project (removal of stagnant water) is not compatible with wetland creation, which requires inundation. Mitigation for impacts to jurisdictional waters would be coordinated with and approved by U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), CDFW, and California Coastal Commission (CCC).

MM-BIO-3: To avoid impacts to nesting birds, ground-disturbing activities and vegetation removal will be completed outside avian breeding season (between September 1 and January 14). If ground-disturbing activities (including clearing and grubbing) are scheduled to occur between February 1 and August 31, a qualified biologist would conduct a nesting bird survey within 1 week of ground-disturbing activities. The survey shall consist of full coverage of the proposed project footprint and up to a 300-foot buffer. The specific survey buffer would be determined in the field by the project biologist and would take into account the species nesting in the area and the habitat present. If no active nests are found, no additional measures are required. If nests are found, the nest locations shall be mapped by the qualified biologist utilizing Global Positioning System (GPS) equipment, where feasible. The nesting bird species would be documented and, to the degree feasible, the nesting stage (e.g., incubation of eggs, feeding of young, near fledging). The biologist shall establish a no disturbance buffer around each active nest. The buffer would be determined by the qualified biologist based on the biology of the species present and surrounding habitat. No construction or ground-disturbing activities shall be conducted within the buffer until the biologist has

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determined the nest is no longer active and has informed the construction supervisor that activities may resume.

- b) *Would the project result in substantial impacts to any species identified as a candidate, sensitive or special status species in local or regional plans, policies or regulations, or by the CDFG or U.S. Fish and Wildlife Service (USFWS)?*

Less-than-Significant Impact with Mitigation Incorporated. As described in Section 3.3(a), there are five listed bird species that have a low or very low potential to occur on site. In addition, approximately 0.063 acre of CDFW-jurisdictional streambed consisting of disturbed cismontane alkali marsh would be impacted (Appendix B). Cismontane alkali marsh communities are considered sensitive vegetation communities, and thus impacts would be potentially significant. However, with incorporation of mitigation measures **MM-BIO-1** through **MM-BIO-3**, impacts would be reduced to less than significant.

- c) *Would the project result in substantial impacts to locally designated species (e.g., heritage trees)?*

No Impact. Refer to Section 3.3(a) for a description of the vegetation found on the project site. No designated species were identified on the project site, and thus no impact would occur.

- d) *Would the project result in substantial impacts to any riparian habitat or other sensitive natural community identified in local or regional plans, policies and/or regulations or by the CDFG or USFWS?*

Less-than-Significant Impact with Mitigation Incorporated. The proposed project would result in the removal of approximately 0.036 acre (245 linear feet) of waters of the United States, consisting of approximately 0.028 acre of open water and 0.008 acre of freshwater marsh. Additionally, approximately 0.063 acre of CDFW-jurisdictional streambed, consisting of disturbed cismontane alkali marsh would be impacted. The cismontane alkali marsh is riparian wetland vegetation associated with the channel; therefore, CDFW jurisdiction extends to include these communities (Appendix A). As such, impacts would be considered potentially significant. However, with incorporation of **MM-BIO-2**, impacts would be mitigated to a less-than-significant level.

- e) *Would the project result in substantial impacts to wetland habitat (e.g., marsh, riparian, vernal pool)?*

Less-than-Significant Impact with Mitigation Incorporated. See Section 3.3(a), The proposed project would result in the removal of approximately 0.036 acre (245 linear feet) of waters of the United States, consisting of approximately 0.028 acre of open water

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and 0.008 acre of freshwater marsh. Additionally, approximately 0.063 acre of CDFW-jurisdictional streambed consisting of disturbed cismontane alkali marsh would be impacted. The freshwater marsh is the only community that meets all three parameters of wetland waters of the United States under the jurisdiction of ACOE. As such, impacts to wetland habitat would be potentially significant. However, with incorporation of mitigation measure **MM-BIO-2**, impacts to wetland habitat would be reduced to a less-than-significant level.

f) Would the project result in substantial impacts to wildlife dispersal or migration corridors?

Less-than-Significant Impact. Section 3.3(a) describes the potential impacts of the proposed project on avian habitat. The impacts discussed in Section 3.3(a) would be considered potentially significant. However, through the incorporation of mitigation measures **MM-BIO-1** through **MM-BIO-3**, impacts to wildlife dispersal or migration corridors would be reduced to a less-than-significant level.

g) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. The proposed project would not conflict with the City of Del Mar's local policies or ordinances protecting biological resources. Thus, no impact would occur.

h) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?

Less-than-Significant Impact. The proposed project would be located in the City of Del Mar, which is designated as a subarea in the San Diego County Multiple Species Conservation Plan (MSCP) (Appendix A). Although the creation of this subarea MSCP is underway, no document has been submitted to conservation agencies for review. In the event that the City completes and adopts an MSCP Subarea Plan prior to the project obtaining a grading permit, compliance with the Subarea Plan guidelines on avoidance, mitigation, and species-specific coverage would be required. The proposed project site is also not included in any existing Multiple Habitat Conservation Plan that is available for public review. Thus, impacts would be less than significant.

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3.4a Cultural Resources

A cultural resources assessment was conducted in June 2017 by Archaeologist Breana Campbell, MA, RPA, for the 21st Street Ditch Project (Appendix C).

a) *Would the project disturb paleontological resources?*

Less-than-Significant Impact with Mitigation Incorporated. The cultural resources assessment found that no previously recorded or newly identified cultural resources are located within the area of potential effects of the project. The proposed project would involve ground-disturbing activities, but these activities would occur within established wetland areas and stormwater management facilities. As such, these existing facilities have a low potential to contain significant paleontological resources. Additionally, the proposed project site has been previously disturbed and is considered to have a low probability for encountering paleontological resources. However, there still exists the possibility of unearthing paleontological resources below the surface of the project site. In the event that paleontological resources are unearthed during project subsurface activities, mitigation measure **MM-CUL-1** would reduce impacts to less than significant.

MM-CUL-1: If paleontological resources are encountered during ground-disturbing activities, work in the immediate area should be halted and a paleontologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology should be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for the National Register of Historic Places eligibility. If the discovery proves to be significant under the National Historic Preservation Act and cannot be avoided by the project, additional work such as data recovery excavation may be warranted to mitigate any significant impacts to historical resources.

b) *Would the project disturb archaeological resources?*

Less-than-Significant Impact with Mitigation Incorporated. As detailed in Section 3.4(a), the proposed project would have a low potential to contain archaeological resources because of the previously disturbed land and wetland areas where the project construction would take place. However, the proposed project does involve ground-disturbing activities, including grading, which have the potential to disturb archaeological resources. In the event an archaeological resource is discovered, **MM-CUL-2** would reduce impacts to less than significant.

MM-CUL-2: If archaeological resources are encountered during ground-disturbing activities, work in the immediate area should be halted and an

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archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology should be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for the National Register of Historic Places eligibility. If the discovery proves to be significant under the National Historic Preservation Act and cannot be avoided by the project, additional work such as data recovery excavation may be warranted to mitigate any significant impacts to historical resources.

c) *Would the project affect historical resources?*

No Impact. The proposed project site consists of previously disturbed land and wetland habitat. The proposed project site does not contain any historical resources as defined in CEQA under Public Resources Code Section 21084.1 (California Office of Historic Preservation 2012). The only listed historical resource for the area is the Canfield-Wright House (N2240), which is not located on the proposed project site and would not be affected by the proposed project. Therefore, any potential impact to historical resources would not occur.

d) *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

Less-than-Significant with Mitigation Incorporated. The proposed project site involves construction on previously disturbed land and wetland habitat. No cultural resources are known to exist on the project site. However, the discovery of human remains is always a possibility during ground-disturbing activities. Thus, in the event human remains are discovered, mitigation measure **MM-CUL-3** would ensure impacts would be reduced to less than significant.

MM-CUL-3: If human remains are found, State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant. The most likely descendant shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

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- e) *Would the project restrict existing religious or sacred uses within the potential impact area, or disturb any human remains, including those interred outside of formal-dedicated cemeteries?*

Less-than-Significant with Mitigation Incorporated. No known existing religious or sacred uses, or human remains exist on the project site. However, the discovery of human remains is always a possibility during ground-disturbing activities. Thus, in the event human remains are discovered, mitigation measure **MM-CUL-3** would ensure impacts would be reduced to less than significant.

3.4b Tribal Cultural Resources

- a) *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:*

- i) *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or*
- ii) *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*

Less-than-Significant Impact. The proposed project site does not contain any historical resources. The cultural resources assessment found that no previously recorded or newly identified tribal cultural resources are located within the area of potential effects of the project. The proposed project would involve ground-disturbing activities, but these activities would occur within established wetland areas and stormwater management facilities. The proposed project site has been previously disturbed and is considered to have a low probability for encountering tribal cultural resources.

Rincon contacted the NAHC to request a review of the Sacred Lands File on May 5, 2017. The NAHC responded to Rincon's request on May 8, 2017, stating that the Sacred Lands File search was conducted with "negative results." The NAHC provided a list of 16 tribes and individuals who may have knowledge of cultural resources within or near the project's area of potential effects. On May 16, 2017, Rincon mailed letters to the 16

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tribal groups and individuals. On May 22, 2017, Rincon made follow-up phone calls to each of the contacts and left voicemails when possible.

Mr. Clint Linton of the Lipay Nation of Santa Ysabel responded on May 22, 2017, requesting additional information regarding the depth of ground disturbing activities and Rincon emailed Mr. Linton on May 22, 2017 with the requested information. On May 26, 2017, Mr. Linton responded via email and requested that a Kumeyaay monitor be present for any ground disturbance that occurs outside of any documented fill area. However, due to the negative survey results, drastically modified terrain, and low impact potential the City believes the monitoring is not warranted based on the analysis.

Mr. Dave Teller of the San Pasqual Band of Mission Indians did not have any comments but requested to have the consultation letter mailed to him. Rincon followed up on that request on May 22, 2017 and no additional response has been received.

On August 3, 2017 Dudek sent a Notice of Intent to Adopt the MND to the 16 tribes listed on the NAHC letter in a good faith effort to provide notification of the proposed project to groups that are traditionally or culturally affiliated with the geographic area of the proposed project. On August 8, 2017 Viejas Band of Kumeyaay Indians (Viejas) responded with a request for a site visit, active participation in the development of mitigation measures, to be notified of any changes or inadvertent discoveries, and for a qualified monitor to be present. However, as stated above, due to the negative survey results, drastically modified terrain, and low impact potential the City believes the monitoring is not warranted based on the analysis. On August 22, 2017 the City of Del Mar contacted Viejas via e-mail to arrange a site visit and the Viejas never responded.

On August 17, 2017, Dudek, on behalf of the City of Del Mar, formally notified the tribes with AB 52 Consultation letters. On August 23, Viejas responded to the AB52 Consultation letter and requested that a Kumeyaay Cultural Monitor be on site for ground disturbing activities. No other tribes have responded with a request for consultation, however, the City will continue to work with the tribes in consideration of their consultation. As previously stated, the proposed project site has been previously disturbed and is considered to have a low probability for encountering tribal cultural resources. Further, no information regarding the presence of tribal cultural resources has been provided to the City from the contacted tribes. Impacts would be less than significant and no mitigation measures or cultural monitoring are proposed.

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3.5 Geology and Soils

- a) *Would the project result in or expose people to potential impacts involving fault rupture?*

Less-than-Significant Impact. There are no mapped faults on the project site or in the immediate project area (California Geological Survey 2010). The proposed project would not result in the construction of buildings or structures for human occupancy or that would serve, house, entertain, or otherwise accommodate people. The project would also not introduce new uses such as dams, reservoirs, petroleum storage facilities, or civic uses that would expose people or structures to substantial adverse effects should a fault rupture occur. Therefore, the proposed project would not result in or expose people to potential impacts of fault rupture, and impacts would be less than significant.

- b) *Would the project result in or expose people to potential impacts involving strong seismic ground shaking?*

Less-than-Significant Impact. The proposed project site would be subject to potential ground shaking associated with earthquakes that may occur in the region. The development of the improved drainage system would not result in the construction of any buildings or structures for human occupancy. As such, compliance with the California Building Code as well as critical infrastructure design protocols is not applicable. The proposed project would only expose people to potential seismic shaking during limited, short-term construction (approximately 40 working days) and future maintenance of the drainage systems. Thus, potential impacts from ground shaking would be less than significant.

- c) *Would the project result in or expose people to potential impacts involving seismic-related ground failure, including liquefaction?*

Less-than-Significant Impact. The proposed project would not result in the construction of structures or buildings for human occupancy and would only require temporary and intermittent maintenance. Therefore, any exposure of people to ground failure or liquefaction would be less than significant.

- d) *Would the project result in or expose people to potential impacts involving seiche, tsunami, or volcanic hazard?*

Less-than-Significant Impact. The project site is located near the San Dieguito River and Lagoon, and is within approximately one-quarter mile of the Pacific Ocean. A portion of the project site is located within a mapped area of potential tsunami inundation (CalEMA et al. 2009). However, the proposed project would not result in the construction of buildings or

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structures for human occupancy, and people should only be present for the intermittent maintenance and short-term construction of the proposed drainage system. Due to the minimal frequency of human presence on the project site, the potential risk for inundation from a tsunami or seiche is considered low. In addition, the project site is not located near a volcano and would not be subject to a volcanic hazard. Therefore, the project's exposure of people to seiche, tsunami, or volcanic hazard would be less than significant.

- e) ***Would the project result in or expose people to potential impacts involving landslides or mudflows?***

Less-than-Significant Impact. The proposed project would not be subject to hazards from landslides or mudflows because the project site is relatively flat and not located in an area with adequately steep slopes for a landslide or mudflow event to occur. The project site consists of Tujunga Sand and has slopes ranging from 0% to 5% (USDA 2011). The proposed project would not result in the construction of buildings or structures for human occupancy. As previously stated, any human presence would be related to intermittent and short-term construction or maintenance. Therefore, the impacts would be less than significant.

- f) ***Would the project result in or expose people to potential impacts involving erosion, changes in topography or unstable soil conditions from excavation, grading or fill?***

Less-than-Significant Impact. The proposed project would include scraping, excavation, grading, top soil replacement and fill operations, which would have the potential to result in erosion, changes in topography or unstable soil conditions. However, the construction of a nuisance water system would not be subject to the critical infrastructure design protocols due to the limited scale of activities required. The portions of the site that would be graded, would be made to closely match the existing surface elevations and slopes. Therefore, this impact is considered less than significant.

- g) ***Would the project result in or expose people to potential impacts involving subsidence of the land?***

Less-than-Significant Impact. The proposed project would not involve the construction of any buildings for human occupancy, and the construction of the nuisance water drainage system would not be considered a critical infrastructure project. Due to the limited scale and potential hazards associated with the minor construction involved in the proposed project, there is not expected to be any risk of exposing people to land subsidence. Therefore, impacts would be less than significant.

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- h) *Would the project expose people to potential impacts involving expansive soils?*

Less-than-Significant Impact. The proposed project would construct a nuisance water drainage system, and would not involve the construction of structures that would involve the presence of people other than for intermittent and temporary maintenance. Additionally, the limited construction activities involved would not adversely expose people to the hazards of expansive soils. Thus, impacts would be less than significant.

- i) *Would the project expose people to potential impacts involving unique geologic or physical features?*

No Impact. The proposed project would not impact any unique geologic or physical features on the project site or in the immediate vicinity. Therefore, no impact would occur.

- j) *Would the project result in or expose people to potential impacts involving soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

No Impact. The proposed project site would connect to the City sewer system, and the drainage system would not be used for the removal of any occupant waste. Therefore, the project would not utilize septic tanks or other alternative wastewater disposal systems, and no impacts would occur.

3.6 Hazards and Hazardous Materials

- a) *Would the project involve a risk of accidental explosion or release of hazardous substances (including, but not limited to, oil, pesticides, chemicals, or radiation) through the routine transport, disposal or other emission of hazardous materials?*

Less-than-Significant Impact. The proposed project would not involve a substantial risk of accidental explosion or release of hazardous substances, other than those associated with normal construction of drainage projects involving limited grading activities and vehicle refueling. Light grading associated with the proposed project is not expected to expose construction workers or the environment to soils or groundwater with contaminant levels exceeding the applicable federal and state contaminant level thresholds. Additionally, the project would be required to meet the standards set forth in the Del Mar Municipal Code Chapter 11.30 regarding stormwater management and discharge control, which would ensure that the appropriate actions to limit or eliminate exposure would be taken in the event of a contaminant spill. Equipment fuel would be used on site during construction and maintenance activities, but not in excessive quantities, and all refueling would be done in designated areas. Therefore, the risk of accidental release of hazardous substances would be less than significant.

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- b) *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Less-than-Significant Impact. As described in Section 3.6(a), the proposed project does not involve the handling, transportation or excavation of hazardous materials besides those normally associated with construction of drainage projects that involve grading and vehicle refueling. The proposed project would not store fuel or other hazardous materials on-site. Additionally, equipment fuel that would be used during construction and maintenance activities would not be used in quantities that would create a significant hazard to the public or environment. Therefore, impacts would be less than significant.

- c) *Would the project involve possible interference with an emergency response or emergency evacuation plan?*

No Impact. The project would not alter any existing transportation routes as the project would involve the placement of a storm drain pipe, and no transportation routes occur on site. Additionally, the proposed project would not interfere with an emergency response plan or emergency evacuation plan because it would not alter any existing transportation routes utilized by emergency response vehicles. Therefore, no impact would occur.

- d) *Would the project involve creation of any health hazard or potential health hazard?*

Less-than-Significant Impact. Refer to Section 3.6(a) for a detailed discussion on the potential health hazards associated with the proposed project. The proposed project would not create any health hazard or potential hazards other than those typically associated with drainage improvement construction involving light grading and construction vehicle refueling. Additionally, construction activities associated with the project would be required to comply with federal, state, and local regulations governing worker safety, the preparation of emergency response programs, and the use of controls to limit exposure to workers. The proposed project would also comply with the applicable federal, state, and local regulations governing the treatment, storage, and disposal of hazardous wastes if any were encountered. The proposed project would not create a health hazard, and impacts associated with potential health hazards would be less than significant.

- e) *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?*

No Impact. The proposed project involves the construction of a drainage system. It is not within one-quarter mile of an existing or proposed school, and would not handle, store, or excavate any hazardous materials. Therefore, no impact would occur.

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- f) *Would the project be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

No Impact. The proposed project involves the construction of improved drainage systems, and would not create any health hazard or potential hazards other than those typically associated with the construction of drainage channels. The proposed project site is not included on the list of hazardous materials sites pursuant to Government Code Section 65962.5 (DTSC 2012). Therefore, no impacts associated with the proposed project being located on a hazardous materials site would occur.

- g) *Would the project involve increased fire hazard in areas with flammable brush, grass, or trees?*

Less-than-Significant Impact. The proposed project site would not involve activities that would result in an increased fire hazard. In addition, the proposed project would not result in the addition of flammable brush, grass, or trees and may involve the removal of some vegetation that would only decrease the fire hazard from these sources. Thus, impacts associated with an increase in fire hazards would be less than significant.

3.7 Hydrology and Water Quality

- a) *Would the project result in changes in absorption rates, drainage patterns, or the rate and amount of surface runoff, in a manner which would result in substantial erosion, siltation, or flooding, on- or off-site?*

Less-than-Significant Impact. During construction, gasoline, diesel fuel, lubricating oil, and grease could potentially leak from vehicles and construction equipment on the project site. As construction activities may coincide with a storm event, construction of the project could result in impacts to water quality as a result of runoff. Exposed soils from excavation, grading, and trenching activities could erode and be transported to nearby water resources. Sedimentation to drainages in the project area could have adverse effects on water quality. Additionally, accidental spills or disposal of potentially harmful materials used during construction could wash into and pollute surface waters or groundwater. However, these potential impacts would be short-term and limited to the construction phase.

An erosion control plan would be created that includes construction BMPs for containing erosion including silt fencing, fiber rolls, and the use of sandbags to protect stormwater drains. Additionally, the proposed project would be subject to the requirements necessary to obtain a Clean Water Act Section 401 and 404 permit. To reduce the risk of potential

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increased runoff of harmful chemicals into the ecosystem, all equipment and vehicles required for construction, maintenance, and operation shall be refueled or maintained within paved roadways or designated staging areas. All stationary equipment, such as motors or generators, shall be stored on designated staging areas, existing roadways, or previously developed land, and drip pans shall be placed under all potential discharge conduits or leaks. With incorporation of the erosion control plan and construction BMPs, as well as the project's compliance with the Section 401 and 404 permits, impacts would be less than significant.

b) *Would the project result in exposure of people or property to significant water-related hazards such as flooding?*

Less-than-Significant Impact. The proposed project site is located within a 100-year flood hazard area, and within the City's Floodplain Overlay Zone. Potential exposure to a 100-year flood event exists during the limited construction phase of the project (approximately 40 working days). However, due to the short length of construction and the fact that no structures for human use would be built, the risk of exposing people or property to such a flood event is less than significant. The proposed drainage project would not increase the likelihood of a flooding event or the pooling of surface water in the project site, and thus would not be a long-term significant impact after construction. Therefore, impacts would be less than significant.

c) *Would the project result in discharge into surface waters or other alteration of surface water quality (e.g., temperature, dissolved oxygen or turbidity)?*

Less-than-Significant Impact. The proposed project involves the construction of a drainage pipeline under mostly existing disturbed or developed areas. The proposed project would modify the project area from a vegetated channel with standing water to a gravel-lined channel with no standing water. There would be no net increase in runoff associated with the proposed project because it would exclude the use of impervious surfaces in the channel. Nor would the proposed improvements provide substantial sources of polluted runoff. Additionally, an erosion control plan would be implemented that would include silt fencing, fiber rolls, and sandbags which decrease the runoff of sediments into any surrounding surface water bodies. Thus, impacts to water discharge into surface waters and surface water quality would be less than significant.

d) *Would the project result in changes in the amount of surface water in any water body?*

Less-than-Significant Impact. The proposed project would not result in an increase in impervious surfaces on site and thus would not increase runoff from the project site to the nearest receiving water, the San Dieguito River and Lagoon. The proposed project would

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not result in a measurable change in the amount of surface water conveyed to the San Dieguito River and Lagoon. The proposed project would create a below grade water drainage channel that would be covered with gravel. This improved drainage system would eliminate the occasional pooling of stagnant water that can occur in the current vegetated drainage channel. Therefore, impacts would be less than significant.

f) Would the project result in changes in currents, or the course or direction of water movements?

Less-than-Significant Impact. The nearest receiving water to the proposed project site is the San Dieguito River and Lagoon. The proposed project would replace the existing vegetative channel with a gravel-lined channel and perforated pipe system that would reduce the amount of standing water that occasionally exists in the current drainage channel. This would represent a negligible change in the amount of water in the San Dieguito River and Lagoon and would not change their current, course, or direction of water movement. Therefore, impacts would be less than significant.

f) Would the project result in change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of aquifer by cuts or excavation, or through substantial loss of groundwater recharge capability?

Less-than-Significant Impact. The proposed project would not use impervious surfaces and therefore would not result in a reduced quantity of water able to infiltrate and recharge groundwater sources (Appendix D). The below-grade pipes would have perforations located at a height equal to the season high groundwater elevation so that groundwater should not enter the drainage system. These design features would reduce the impact to the quantity of groundwater to a less-than-significant level without any substantial loss of groundwater recharge capability. Thus, impacts would be less than significant.

g) Would the project result in altered direction or rate of flow of groundwater?

Less-than-Significant Impact. The proposed project would not alter the amount of groundwater as detailed in Section 3.7(f) above. Once construction is completed, the stormwater channel would be rehabilitated to its original grade and would not change the direction of groundwater flow. The proposed project would not utilize or otherwise affect groundwater resources at a scale that would significantly alter the direction or rate of flow of groundwater. Therefore, impacts would be less than significant.

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h) *Would the project result in impacts to groundwater quality?*

Less-than-Significant Impact. The proposed project would have the potential to impact groundwater quality during construction excavation, grading, and equipment refueling as described in Section 3.7(a) above. These construction-related activities would be short-term and would not create a lasting or significant effect on groundwater quality. Additionally, no impacts to groundwater quality would occur during operation of the proposed project. Therefore, impacts would be less than significant.

i) *Would the project result in substantial reduction in the amount of groundwater otherwise available for public water supplies?*

Less-than-Significant Impact. The City receives its drinking water directly from the San Diego County Water Authority. The proposed project could potentially use a water truck for the purpose of wetting exposed soils to reduce fugitive dust emissions. However, due to the limited amount of water and the short period of construction, the project would not significantly utilize or increase the use of potable water from the municipal water supply system of the City of Del Mar or the San Diego County Water Authority. Therefore, there would not be a substantial reduction in the amount of groundwater otherwise available for public water supplies, and impacts would be less than significant.

j) *Would the project create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

Less-than-Significant Impact. See Section 3.7(a) for more information on potential impacts to groundwater quality. The proposed project would construct an improved drainage system in place of the open vegetated channel that currently exists on the project site. This new drainage system would not increase the amount of impervious surfaces and would not lead to an increase in water runoff. The new drainage pipeline would connect to existing stormwater drainage systems but would not substantially change the amount of water that is currently conveyed by the existing drainage system.

During the construction phases of the proposed project, there is a possibility for the spilling of fuel or chemicals used for refilling construction equipment. Additionally, scraping, excavating, grading, backfilling, and top soil replacement would occur during construction that could increase the amount of sediment runoff from the project site. These effects would be limited to the short-term construction phase and would not create a long-term or substantial contribution to polluted runoff. Construction BMPs for erosion control would also be used to limit the amount of sediment runoff from the project site. These BMPs would include the creation of an erosion control plan, and the use of silt

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fencing, fiber rolls, and sandbags around stormwater drains. Incorporation of these BMPs ensure that impacts would be reduced to a less-than-significant level.

- j) *Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or other flood hazard delineation map, or expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?*

Less-than-Significant Impact. Although a portion of the project is located within the 100-year floodplain, the project does not involve a housing component or the construction of any large aboveground structures meant to accommodate people. During construction, workers would be present on the project site and potentially be exposed to such a flooding event. Due to the short-term nature of construction, there would not be a significant risk of loss, injury or death involving flooding. Therefore, flooding hazards and risks related to the project are less than significant.

- j) *Would the project place within a 100-year flood hazard area any structures, which would impede or redirect flood flows?*

Less-than-Significant Impact. The proposed project would not include any above-surface structures of sizeable significance, and would not impede or redirect the flow of a flood event. Thus, impacts would be less than significant.

3.8 Land Use and Planning

- a) *Would the project conflict with any general plan designation or zoning?*

No Impact. The City of Del Mar Community Plan, also referred to as the General Plan, land use designation for the proposed project site is Duplex-Single Family Mix (City of Del Mar Community Plan 1976). The project is consistent with this Community Plan/General Plan land use designation. There are no applications requesting Community Plan/General Plan amendments, nor any zone change requests. Thus, no general plan designation or zoning impact would occur.

- b) *Would the project conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project?*

Less-than-Significant Impact. The City of Del Mar Local Coastal Program and Implementing Ordinances are applicable to the proposed development of the project site. By implementing the project in compliance with the City of Del Mar Local Coastal Program and Implementing Ordinances, no conflicts are anticipated to occur. As such, the project is considered consistent with applicable, adopted land use plans, policies, and regulations.

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An earthen drainage channel runs along the backside of the adjacent single-family residences from 21st Street to 28th Street. Each street has a cul-de-sac that drains nuisance runoff into the channel. The channel banks were examined for evidence of an ordinary high water mark, including sediment deposition and water marks. Based on the presence of an ordinary high water mark and connectivity to the San Dieguito River, a navigable water, the channel is a waters of the United States under the jurisdiction of ACOE. The freshwater marsh community is perennially inundated and supports obligate hydrophytic species. Hydric soils are defined as soils that are inundated for a long or very long period; therefore, the freshwater marsh community meets all three parameters for an ACOE wetland. While results of the wetland delineation indicate that freshwater marsh is the only community that meets all three parameters of a wetland waters of the United States under the jurisdiction of ACOE (Appendix A), (Federal) Clean Water Act Section 404 Permit No. SPL-2016-00876 has been obtained from the ACOE, authorizing:

“Discharge of dredged or fill material permanently into 0.032 acres of Waters of the United States (“WUS”) for installation of a 36" diameter solid storm drain pipe (connecting at both existing culvert outlets) and fill materials in order to enhance drainage for construction of a public recreational space and to enhance local vector control efforts. The project will permanently fill 0.028 acres of non-wetland and 0.008 of wetland along 245.74 linear feet of streambed. Individual cumulative impacts will be offset by the purchase of 0.064 credits/acres from the San Luis Rey Mitigation Bank.”

The project also obtained a Clean Water Act Section 401 Water Quality Certification from the California RWQCB. No conflicts are anticipated should the project be approved. As such, the project would not conflict with a federal or state wetland regulations, and impacts would be less than significant.

As discussed in Section 3.3, Biological Resources, the project site includes cismontane alkali marsh habitat (Appendix A). Cismontane alkali marsh meets the CDFW definition of a wetland and as such, is under the jurisdiction of the CDFW, pursuant to Section 1602 of the California Fish and Game Code, the CCC pursuant to the Coastal Act of 1976, and the RWQCB pursuant to Section 401 of the federal Clean Water Act and the Porter-Cologne Act. The ACOE, RWQCB, and CDFW permits have been obtained. The proposed project requires approval of a Coastal Development Permit (CDP) by the City of Del Mar with approval subject to appeal by the CCC. No conflicts are anticipated regarding federal or state wetland regulations. Impacts would be less than significant.

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- c) *Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?*

No Impact. San Diego County has completed several conservation planning efforts with more currently in progress. The long-term goal of these plans is to establish a regional reserve system that would protect native habitat lands and their associated biota. The ultimate goal of these conservation plans is the establishment of biological reserve areas in conformance with State Natural Communities Conservation Planning Act, and to contribute to the preserve system already established by the approved MSCP in San Diego County (Appendix A).

The City of Del Mar is listed as a jurisdictional entity in the process of developing a MSCP Subarea Plan, although no draft has been submitted to the resource agencies for review (Appendix A). In the event that the City completes and adopts an MSCP Subarea Plan prior to obtaining a grading permit, compliance with the Subarea Plan guidelines on avoidance, mitigation, and species-specific coverage would be required. As the City has not adopted an MSCP Subarea Plan, the project is not in conflict with an applicable conservation plan, and no impact would occur.

- d) *Would the project be incompatible with any existing land use in the vicinity?*

No Impact. The adjacent recreational uses (tennis and basketball courts) would remain open to the public during construction of the proposed project. Although construction would take place immediately adjacent to the tennis and basketball courts, the project would not result in permanent physical impacts to these uses. Additionally, the surface above the proposed localized drainage system and pipeline would be restored using cobblestone, in order to create a dry riverbed appearance that is consistent with the areas surrounding the right-of-way. No zoning or land use designations would be altered in the project site vicinity as a result of the project. Thus, no impact would occur.

- e) *Would the project affect agricultural resources or operations (e.g., impacts to soils or farmlands, or impacts from incompatible land uses)?*

No Impact. The proposed project would not affect agricultural resources or operations since there are none on the project site or in the vicinity. Thus, no impact would occur.

- f) *Would the project disrupt or divide the physical arrangement of an established community (including a low-income or minority community)?*

No Impact. As discussed above, the proposed project would be consistent with City zoning and General Plan designations for the site. The proposed project would not disrupt or divide the physical arrangement of an established community. Thus, no impact would occur.

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3.9 Mineral Resources and Energy

a) *Would the project conflict with adopted energy conservation plans?*

No Impact. The proposed project would not conflict with adopted energy conservation plans, and the operation of the drainage channel would not require any external energy input. Therefore, no impact would occur.

b) *Would the project use non-renewable resources in a wasteful and inefficient manner?*

Less-than-Significant Impact. The operation of the proposed project would not involve the use of nonrenewable resources. Nonrenewable energy would be used to power construction equipment but would not result in the wasteful or inefficient use of nonrenewable resources, as construction activities would be temporary. The construction equipment would consist of a backhoe, a skip-loader, and a dump truck. These types of equipment are typical of the equipment used in the industry, and construction would be short-term in nature. The use of nonrenewable resources would be limited and would not be used in a wasteful or inefficient manner. Therefore, impacts would be less than significant.

c) *Would the project result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the state, or result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

No Impact. The proposed project would not result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the state because no mineral resources have been identified on the project site. The project site is in the mineral resource zone MRZ-3 region (City of Del Mar 2009, Figure 4.15-1). MRZ-3 indicates an area containing mineral deposits, the significance of which cannot be evaluated from available data. The project site is also not delineated as a mineral resource recovery site in the Del Mar Community Plan.

The proposed project would involve some grading activities, but these activities would not result in the loss of a significant quantity of a known mineral resource. All construction-related activities would occur on site and would not affect the availability of any known mineral resource on the project site. The drainage improvement project would be consistent with the existing land use for the project site as well as with the surrounding land uses that do not involve the extraction of mineral resources. Therefore, the proposed project would not result in the loss of availability of a known mineral resource. Any impacts to mineral resources would be less than significant.

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3.10 Noise

- a) *Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Less-than-Significant Impact. The project proposed involves the construction of an improved drainage system that may require construction equipment for digging and grading purposes. Although the proposed project would only involve limited mechanical equipment during the short-term construction phase, there is the potential to generate noise levels in excess of local standards. Located to the west and south of the project site are residential buildings that are classified as a noise sensitive land use by the Noise Element of the *County of San Diego General Plan* (County of San Diego 2011). Traffic-generated noise impacts would be negligible because the proposed project would not generate sustained, daily traffic. Additionally, ongoing maintenance of the project site would generate a very small amount of traffic (generally one to two maintenance vehicles). Maintenance activities would be sporadic and would not represent a substantial increase over the existing noise level in the project vicinity. In addition, the proposed project would comply with the noise regulations of the City's Municipal Code. Therefore, impacts would be less than significant.

- b) *Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?*

Less-than-Significant Impact. The most substantial vibration sources associated with construction of proposed project would be equipment utilized during grading activities and compaction. Construction of the proposed drainage system would not involve blasting or pile-driving that are known to generate excessive groundborne vibrations. Maintenance activities of proposed drainage improvements would not generate groundborne vibration. In addition, the proposed project would comply with the noise regulations of the City's Municipal Code. Therefore, impacts would be less than significant.

- c) *Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*

Less-than-Significant Impact. The proposed project would not expose people to a substantial permanent increase in ambient noise levels. An increase in ambient noise levels would occur during the construction phase of the proposed project, but due to the short-term nature of the proposed construction, a permanent increase would not occur. The required maintenance of the drainage system may require the use of construction equipment, but such use would be sporadic and short-term in nature. Furthermore,

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operation of the drainage system would not increase the ambient noise levels in the project vicinity. No substantial permanent increase in ambient noise levels would occur as a result of the proposed project. Therefore, impacts would be less than significant.

- d) ***Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?***

Less-than-Significant Impact. The proposed project would potentially increase existing noise levels during construction activities through the use of construction equipment for grading, excavating, filling, and compacting. Although the construction of the proposed drainage systems would be short-term in nature, it could pose a substantial temporary increase in ambient noise levels in the project vicinity. Additionally, maintenance activities could potentially involve similar construction equipment and may cause a periodic increase in ambient noise above existing levels without the project. These potential elevations in noise levels would be sporadic and temporary in nature. However, the proposed project would comply with the noise regulations set forth by the City's Municipal Code, and impacts would be less than significant.

3.11 Population and Housing

- a) ***Would the project cumulatively exceed official regional or local population projections?***

Less-than-Significant Impact. The proposed project has been developed for vector control and would not alter the capacity of the existing water and wastewater service. Therefore, the project is not anticipated to induce population growth. Impacts would be less than significant.

- b) ***Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?***

No Impact. Private residences are located within the direct vicinity of the proposed project to the west. However, the proposed project would not alter or remove these homes, nor would it change any land use zoning or designations. The proposed project would not occur in a previously undeveloped area and would not further extend major infrastructure that would induce population growth. Therefore, no impact would occur.

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- c) *Would the project displace existing housing, especially affordable housing, necessitating the construction of replacement housing elsewhere?*

No Impact. Private housing is located within the direct vicinity of the proposed project. However, the proposed project would not alter or remove any homes and would not change any existing land use zoning or designations. As such, no impact would occur.

- d) *Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

No Impact. The proposed project would not displace existing housing or result in the displacement of existing residents, as there is no housing on-site. The project would not necessitate the construction of any replacement housing elsewhere. As such, no impact would result.

3.12 Public Services

Would the project have an effect upon, or result in a need for new or altered government services in any of the following areas:

- a) *Fire protection?*

No Impact. The proposed project would not require new or altered fire protection to service the improved drainage systems. The project would not involve occupancy by individuals and would not add to the risk or need for fire protection services at the project site. The project location would make the project infill development and would not increase response times. Therefore, no impact would occur.

- b) *Police protection?*

No Impact. The proposed project would not require new or altered police protection to serve the drainage on the project site. Given the scale of the project and because it is an infill project, it is not anticipated that the project would increase response times or require the construction of new police facilities or the addition of police officers or staff members. Therefore, no impact would occur.

- c) *Schools?*

No Impact. The proposed project involves the construction of an improved drainage system, and would not require additional school services. Thus, no impact would occur.

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d) *Maintenance of public facilities, including roads?*

Less-than-Significant Impact. The proposed project would be a relatively small project that would improve the existing drainage systems and would not result in an unusual demand for the maintenance of public facilities. Effects from construction would not require additional maintenance because of the low volume of vehicles that would be used during the short construction period. Sporadic and short-term maintenance may be required to retain the functionality of the drainage systems. This maintenance would not be considered a substantial alteration to the maintenance of the existing public facilities. Therefore, impacts would be less than significant.

e) *Other governmental services?*

No Impact. The proposed project would not result in a need for new or physically altered governmental services because all necessary governmental services are currently available to serve the project site and vicinity. Therefore, no impact would occur.

3.13 Recreation

a) *Would the project increase the demand for neighborhood or regional parks or other recreational facilities, such that substantial physical deterioration of the facilities would occur or be accelerated?*

No Impact. The proposed project involves the construction and operation of a drainage system. No increase in human occupation would occur from the proposed project, and it would not increase the demand for neighborhood or regional parks or recreational facilities. Therefore, no impact would occur.

b) *Would the project affect existing recreational opportunities?*

Less-than-Significant Impact. The proposed project would be near a public tennis court facility. However, construction activities would not block access to the tennis facility or affect opportunities to use this recreational facility. These construction-related activities would also be short-term in nature, and any potential effects would be limited in time and scale. The project would not significantly affect existing or proposed recreational opportunities in the City of Del Mar. Thus, impacts would be less than significant.

c) *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

No Impact. The project does not include any recreational facilities or the expansion of recreational facilities. Thus, no impact would occur.

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3.14 Transportation and Traffic

- a) *Would the project result in increases in vehicle trips or traffic congestion that are substantial in relation to the existing traffic load and capacity of the street system?*

Less-than-Significant Impact. During construction, traffic generated by the project would consist of construction vehicles and worker trucks. The short-term and limited nature of construction-related traffic would not result in a substantial increase in traffic volume. These small volumes of traffic are not anticipated to substantially increase vehicle trips or congestion in relation to the existing street system.

Traffic generated during operation and maintenance of the proposed project would consist of sporadic trips, and would likely consist of a small number of vehicles and equipment accessing the project site. Due to the small number of vehicles and equipment likely to be required for maintenance at the project site, impacts during the operational phase of the project would be less than significant. Additionally, all construction and maintenance equipment would be stored in designated locations that would not substantially impact or close any existing public roadways. As such, implementation of the proposed project would not add a significant amount of traffic to local area road segments such that vehicle trips or congestion would increase substantially, and impacts would be less than significant.

- b) *Would the project result in exceeding, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?*

Less-than-Significant Impact. Section 3.14(a) demonstrates that individually, the small number of vehicles and limited nature of construction, as well as the infrequent vehicle trips associated with operation and maintenance, would not substantially increase congestion on the associated roadways. Cumulative impacts could occur as a result of the traffic generated by past, present, and expected future projects in the project area. However, as discussed above, construction and operation of the proposed project would generate only a temporary, small amount of traffic on the limited project area roadways. Due to the relatively minor activities proposed, increases in traffic on local area roadways would not result in a substantial contribution to cumulative traffic impacts in the region and would not result in sustained amounts of traffic. As such, impacts would be less than significant.

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- c) ***Would the project result in hazards to safety from design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?***

Less-than-Significant Impact. The proposed project would not create hazards to safety from design features. The proposed drainage improvements may require the removal of vegetation, and potentially the creation of access roads for construction of the project and to aid in ongoing maintenance efforts. However, possible construction of access roads would be for purposes of project construction and maintenance only, and would not create roadways that would be open for use by the general public. The proposed project would not change the existing street configuration used by the general public, and any potential access roads would be limited in length. The possible design of access roads are not expected to result in unsafe design features or unsafe configurations. As such, impacts would be less than significant.

- d) ***Would the project result in inadequate emergency access or access to nearby uses?***

No Impact. Section 3.14(c) describes the possible construction of new access roads or the use of existing access roads to the project site. The proposed project would not cause the closure of any lanes on any public roadways during or after construction. Adequate access for the appropriate emergency access would be maintained to the site and the existing emergency access to adjacent properties at all times. Additionally, the construction of the proposed project would only occur for a short period. Therefore, the project would not result in inadequate emergency access or inadequate access to nearby uses, and no impact would occur.

- e) ***Would the project result in insufficient parking capacity on-site or off-site?***

Less-than-Significant Impact. The proposed project is for the creation of an improved drainage system. This would only require vehicle parking during the construction and maintenance of the proposed project. Vehicle parking during construction and operation would temporarily displace several on-street public parking spots. Construction of the proposed project would require a maximum of 10 workers and a minimum of 4 workers per day. As described above, the limited number of vehicles and short-term length of construction would not significantly impact on-site or off-site parking. A construction staging/phasing plan is a standard condition of approval that will be included as part of the approved project. Additionally, maintenance would be sporadic and would likely involve only one or two vehicles that would not significantly affect parking capacity. No off-site parking would be provided or substantially impacted by the proposed project. Therefore, impacts would be less than significant.

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f) *Would the project result in hazards or barriers for pedestrians or bicyclists?*

Less-than-Significant Impact. The project would not affect any existing bicycle lanes or facilities located in the vicinity of the project site. There would be no construction or alterations to existing general public roads, sidewalks, or bike lanes, and construction of the proposed project would be short-term in nature. Therefore, any potential impacts associated with hazards or barriers for pedestrians or bicyclists would be less than significant.

g) *Would the project result in conflicts with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?*

No Impact. The proposed project would not conflict with or alter any adopted policies supporting alternative transportation. The project construction would not alter function of any transportation infrastructure used by the general public. Thus, no impact would occur.

h) *Would the project result in rail, waterborne or air traffic impacts?*

No Impact. The proposed project would not impact the use of the nearby railway and would be constructing an improved drainage system. No waterborne or air traffic facilities are located in proximity to the project area and thus would not be affected by the proposed project. Therefore, no impact would occur.

3.15 Utilities and Service Systems

Would the project result in a need for new systems or supplies, or substantial alterations to the following utilities:

a) *Power or natural gas?*

No Impact. The proposed project would not require the extension of electrical power and natural gas facilities to serve the project site because the project would only encompass the improvement of a drainage system. Therefore, no impact would occur.

b) *Communication systems?*

No Impact. The proposed project would not require the extension of communications systems to serve the project site because the project would not involve the use of communications systems. Thus, no impact would occur.

c) *Local or regional water treatment or distribution facilities?*

Less-than-Significant Impact. The proposed project would improve the existing drainage systems on the project site. The increase in water conveyed to the sewer system would not be substantially more than the amount of water conveyed by the current drainage system

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because it would not increase impervious surfaces and would be placed above groundwater levels. The project would not require the creation of additional sewer systems. Therefore, the project would not require new additions or substantial alterations to water treatment or distribution facilities, and impacts would be less than significant.

d) *Sewer or septic tanks?*

Less-than-Significant Impact. The proposed project would not require the use of a septic system but would connect to the existing sewer system along the NCTD right-of-way to the east. The increase in water conveyed to the sewer system would be negligible and would not require an increase in the current system capacity. The proposed project would make alterations to the drainage ditch located south of 21st Street and the construction of additional drainage connections to the existing municipal sewer system. These additions would not substantially alter the current sewer system. Therefore, impacts would be less than significant.

e) *Storm water drainage?*

No Impact. The proposed project would redesign the existing stormwater drainage systems to reduce the water retention time of these areas and eliminate mosquito-breeding habitat. The drainage improvements would not require the construction of new water or wastewater facilities, because no wastewater would be generated by project-related activities. Additionally, any increase in stormwater conveyance to the drainage system would be negligible. The proposed project would not substantially expand the existing stormwater drainage system, and the improved drainage system would run adjacent to the current drainage channel. The construction of the improved drainage system would not require a substantial alteration to the direction or path of the existing system. Therefore, impacts would be less than significant.

f) *Solid waste disposal, including compliance with federal, state and local statutes and regulations related to solid waste?*

Less-than-Significant Impact. The operation of the improved drainage systems would not generate any solid waste that would need disposal or that would need to comply with existing regulations. The construction of the proposed project could potentially generate solid waste; however, the quantities of waste would be minimal, and much of the waste would be plant materials that could be recycled. In compliance with federal, state, and local statutes and regulations related to solid waste, the proposed project would be required to deposit all solid waste at a permitted solid waste facility. Therefore, no substantial alterations or need for new or expanded solid waste disposal services would occur, and impacts would be less than significant.

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g) *Local or regional water supplies?*

Less-than-Significant Impact. The proposed project would not require water supplies to serve the project site because it would only be constructing improvements to the existing drainage system. There would be no water demand for the project site because it would not involve any increase in human use or inhabitation. If during construction the use of water spraying for dust-control purposes occurs, the impacts to the local water supply would be minimal due to the limited area and short-term nature of construction. The proposed project would not require substantial alterations or new services of the local or regional water supplies. Therefore, impacts would be less than significant.

3.16 Mandatory Findings of Significance

a) *Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?*

Less-than-Significant with Mitigation Incorporated. As discussed in Section 3.3, Biological Resources, the project has the potential to reduce the habitat of a wildlife species, cause a wildlife population to drop below self-sustaining levels, or reduce the number or restrict the range of a rare or endangered plant or animal. However, with implementation of mitigation measures **MM-BIO-1** through **MM-BIO-3**, these potential impacts would be reduced to less than significant. The project also has the potential to eliminate important examples of the major periods of California history or prehistory, due to the potential for discovery of unknown resources. However, with implementation of **MM-CUL-1** through **MM-CUL-3**, impacts would be reduced to less than significant should an important cultural resource be found. Therefore, impacts would be less than significant with mitigation incorporated.

b) *Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?*

Less-than-Significant Impact. The proposed project is consistent with the Del Mar Community Plan/General Plan with respect to existing land use and designations. The proposed project would not have the potential to achieve short-term goals to the disadvantage of long-term environmental goals. Therefore, impacts would be less than significant.

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- c) *Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)*

Less-than-Significant Impact. Section 3.14(a) describes the effects related to cumulative traffic impacts. The proposed project would not involve any permanent impacts that would be considerable individually or when viewed in connection with the effects of past, current, and probable future projects. Therefore, impacts would be less than significant.

- d) *Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?*

Less-than-Significant Impact. All impacts associated with the project were found to be less than significant or less than significant with mitigation incorporated. Therefore, the project would not cause substantial adverse effects on human beings, either directly or indirectly, and impacts would be less than significant.

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4 SUMMARY OF FINDINGS

4.1 Environmental Factors Potentially Affected

The discussion provided in Section 3 of this MND found that no items would be considered potentially significant as a result of the proposed project. The proposed project would have less-than-significant impact or no impact on the follow areas: aesthetics, agriculture and forestry resources, air quality, tribal cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation and traffic, and utilities and service systems. Due to incorporation of the recommended mitigation measures, potentially significant impacts related to biological resources and cultural resources would be reduced to a level below significance.

4.2 Environmental Determination

The City of Del Mar finds that the proposed project would not have a significant adverse effect on the environment. Potentially significant effects have been identified and mitigation measures have been incorporated to ensure that these effects remain at less-than-significant levels. An MND has been prepared to satisfy the requirements of CEQA and the CEQA Guidelines (California Public Resources Code, Section 21000 et seq.; 14 CCR 15000 et seq.).

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5 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Time Frame of Mitigation				Monitoring Reporting Agency	Time Frame for Verification /Frequency to		Date of Completion	Date of Verification
	Planning	Pre-Const.	During Const.	Post Const.		Monitor	Report		
<i>Biological Resources</i>									
MM-BIO-1: To ensure avoidance of listed species, a qualified biologist would monitor ground-disturbing activities to ensure no listed species are present within the disturbance area. The biologist would survey the site and suitable habitat areas for listed bird species in the disturbance area and within 500 feet of the disturbance area immediately prior to construction activities to ensure no listed species are present. The biologist shall monitor all direct habitat-disturbing activities occurring within suitable habitat for listed species. If a listed species is present, construction within 500 feet of the occupied area would be stopped and delayed until either the species has vacated the disturbance area, or the monitoring biologist and project applicant have consulted with the relevant wildlife agency (i.e., either U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), or both) to determine the appropriate course of action to avoid both direct and indirect impacts. Construction activities may resume once the monitoring biologist, in coordination with the relevant wildlife agency(ies) as necessary, determines that there is no longer a potential for a listed species to be directly or indirectly affected. If the wildlife agency(ies) determine that take of the species associated with construction activities cannot be avoided, the project activities shall be postponed until the project applicant has obtained the necessary take permits/authorizations from the relevant agency(ies).	X	X	X		City of Del Mar				
MM-BIO-2: Mitigation for impacts to jurisdictional waters would be completed at a minimum 2:1 ratio of in-kind mitigation within the San Dieguito River watershed and would be accomplished through either off-site creation, contribution to a mitigation bank or in-lieu fee program, or collaboration with an existing off-site restoration program. On-site mitigation is not feasible as the goal of the project (removal of stagnant water)	X	X			City of Del Mar				

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Mitigation Measure	Time Frame of Mitigation				Monitoring Reporting Agency	Time Frame for Verification /Frequency to		Date of Completion	Date of Verification
	Planning	Pre-Const.	During Const.	Post Const.		Monitor	Report		
is not compatible with wetland creation, which requires inundation. Mitigation for impacts to jurisdictional waters would be coordinated with and approved by U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), CDFW, and California Coastal Commission (CCC).									
MM-BIO-3: To avoid impacts to nesting birds, ground-disturbing activities and vegetation removal will be completed outside avian breeding season (between September 1 and January 14). If ground-disturbing activities (including clearing and grubbing) are scheduled to occur between February 1 and August 31, a qualified biologist would conduct a nesting bird survey within 1 week of ground-disturbing activities. The survey shall consist of full coverage of the proposed project footprint and up to a 300-foot buffer. The specific survey buffer would be determined in the field by the project biologist and would take into account the species nesting in the area and the habitat present. If no active nests are found, no additional measures are required. If nests are found, the nest locations shall be mapped by the qualified biologist utilizing Global Positioning System (GPS) equipment, where feasible. The nesting bird species would be documented and, to the degree feasible, the nesting stage (e.g., incubation of eggs, feeding of young, near fledging). The biologist shall establish a no disturbance buffer around each active nest. The buffer would be determined by the qualified biologist based on the biology of the species present and surrounding habitat. No construction or ground-disturbing activities shall be conducted within the buffer until the biologist has determined the nest is no longer active and has informed the construction supervisor that activities may resume.	X	X			City of Del Mar				
<i>Cultural Resources</i>									
MM-CUL-1: If paleontological resources are encountered during ground-disturbing activities, work in the immediate area should be halted and a paleontologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology should be contacted immediately to evaluate the find. If			X		City of Del Mar				

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Mitigation Measure	Time Frame of Mitigation				Monitoring Reporting Agency	Time Frame for Verification /Frequency to		Date of Completion	Date of Verification
	Planning	Pre-Const.	During Const.	Post Const.		Monitor	Report		
necessary, the evaluation may require preparation of a treatment plan and archaeological testing for the National Register of Historic Places eligibility. If the discovery proves to be significant under the National Historic Preservation Act and cannot be avoided by the project, additional work such as data recovery excavation may be warranted to mitigate any significant impacts to historical resources.									
MM-CUL-2: If archaeological resources are encountered during ground-disturbing activities, work in the immediate area should be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology should be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for the National Register of Historic Places eligibility. If the discovery proves to be significant under the National Historic Preservation Act and cannot be avoided by the project, additional work such as data recovery excavation may be warranted to mitigate any significant impacts to historical resources.			X		City of Del Mar				
MM-CUL-3: If human remains are found, State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant. The most likely descendant shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.			X		City of Del Mar				

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6 REFERENCES AND PREPARERS

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FIGURE 1
Regional Map

21st Street Ditch Project

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SOURCE: USGS 7.5-Minute Series Del Mar Quadrangle

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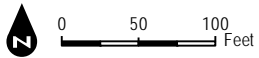
21st Street Ditch Project

FIGURE 2
Vicinity Map

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 Project Site

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SOURCE: NAIP 2014

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FIGURE 3
Project Site

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APPENDIX A
Biological Resources Assessment

February 9, 2012

6451-05

Mr. Eric Minicilli
2240 Jimmy Durante Boulevard
Del Mar, California 92014

Subject: City of Del Mar NCTD Right-of-Way: Biological Resources Assessment and Jurisdictional Waters Delineation

Dear Mr. Minicilli:

This letter report provides the results of a biological resources assessment and delineation of jurisdictional waters for the City of Del Mar (City) North County Transit District (NCTD) Right-Of-Way (ROW) Project (proposed project) located in the northern part of San Diego County, in the City of Del Mar, California.

This letter report is intended to: **(1)** describe the existing conditions of biological resources within the project site in terms of vegetation, flora, wildlife, and wildlife habitats; **(2)** quantify impacts to biological resources that would result from implementation of the proposed project and describe those impacts in terms of biological significance in view of federal, state, and local laws and policies; and **(3)** recommend mitigation measures for impacts to sensitive biological resources, if necessary.

1.0 PROJECT SETTING

Projects Location

The project is located in the northern part of San Diego County, in the City of Del Mar, California (Figure 1; all figures are included as Attachment A). The NCTD ROW project site is located east of Camino del Mar and northwest of Jimmy Durante Boulevard within the NCTD ROW on the west side of the Atchison Topeka and Santa Fe Rail Line tracks spanning from south of 21st Street to 28th Street (Figure 2).

Physical Setting

The City of Del Mar is situated along the Pacific Ocean and is within the California Coastal Commission's (CCC's) mapped Coastal Zone. San Dieguito Lagoon and its associated floodplain are around much of the City's northern and eastern boundaries. To the south, the wetlands of Peñasquitos Lagoon separate Del Mar from developed areas within the City of San Diego (City of Del Mar 1993). The City of Del Mar is largely built out with residential

Mr. Eric Minicilli

Subject: City of Del Mar NCTD Right-of-Way: Biological Resources Assessment and Jurisdictional Waters Delineation

development and contains five open space areas: 1) the San Dieguito Lagoon and Floodway; 2) the beaches, bluffs and accompanying canyons along the ocean; 3) the bluffs and canyons at the south end of the community; 4) Crest Canyon; and 5) the bluffs and slopes along the north and northeast edges of the Del Mar Hills (City of Del Mar 1976). Undeveloped areas of the city consist of coastal scrub, bluffs, steep slopes, and native and ornamental trees.

Land Uses

The project site is located on the west side of the Atchison Topeka and Santa Fe Rail Line tracks and consists of undeveloped areas associated with ROW uses. At the southern end of the site are public tennis courts. To the north of the site are the San Dieguito River, Del Mar Fairgrounds and Racetrack, North Bluff Preserve, and undeveloped land. To the northeast is multi-family residential development, to the east and south are Jimmy Durante Boulevard and single-family residential development, and to the west is single-family residential development. City-designated Open Space 1 (San Dieguito Lagoon and Floodway) is adjacent to the site to the north.

Topography and Hydrology

The San Dieguito River is the primary drainage course for this area with Crest Canyon, located along the City's eastern boundary, serving as a secondary drainage into the river.

The project site is relatively flat at approximately 40 feet above mean sea level (amsl).

Soils

The NCTD ROW project site is mapped with one soil type comprised of the following series: Tujunga sand, 0% to 5% slopes (USDA 2007).

The San Dieguito Drive project site is mapped with two different soil types (USDA 2007) comprised of the following series: Tujunga sand, 0% to 5% slopes, and Terrace escarpments.

Soils in the Tujunga series are derived from granitic alluvium and consist of very deep, excessively drained soils (Bowman 1973) derived from granitic alluvium. They tend to occur on alluvial fans and within floodplains.

The terrace escarpments occur on the nearly even fronts of terraces or alluvial fans. Terrace escarpments consist of steep to very steep escarpments and escarpment-like landscapes that occur between narrow floodplains and adjoining uplands and the very steep sides of drainageways that are entrenching into fairly level uplands. In most places there is 4 to 10 inches of loamy or gravelly soil over soft marine sandstone, shale, or gravelly sediments (Bowman 1973).

2.0 METHODS

Literature Review

For purposes of this report, listed species are those plant or wildlife species that are listed as threatened or endangered by either the California or federal Endangered Species Act. Special-status plants also include candidates for listing and species with a California Rare Plant Rank by the California Department of Fish and Game (CDFG). Special-status wildlife species also include candidates for listing and species with a designation from CDFG of Watch List, Fully Protected, or Species of Concern. Listed and special-status species are referred to collectively as sensitive species.

Other sensitive biological resources include: sensitive habitat; wetlands areas, including riparian lands, wetlands, bays, estuaries, and marshes; and wildlife corridors. Sensitive habitats are those that are considered to support unique vegetation communities, are of particular value to sensitive plant and wildlife species, or have a rank of S1–S3 on the CDFG List of Terrestrial Communities. Unique vegetation communities include habitats found only in the San Diego region, local representatives of species not generally found in San Diego County, or outstanding examples of CDFG sensitive plant communities.

Sensitive biological resources present or potentially present on site were identified through a literature search using the following sources: USFWS (2011), CDFG (2005a–d), and the California Native Plant Society’s (CNPS’s) Inventory of Rare and Endangered Plants of California (CNPS 2011). The California Natural Diversity Database (CNDDDB) (CDFG 2005e) was also reviewed to identify sensitive species possibly occurring within the project limits.

A “nine-quad” query was conducted of the CNDDDB and CNPS Inventory of Rare and Endangered Plants of California of the Del Mar OE W USGS 7.5-minute quadrangles (CDFG 2011; CNPS 2011). A nine-quad query includes the subject quadrangle and the eight USGS quadrangles surrounding the subject quadrangle. Due to the ocean occurring adjacent to the Del Mar OE W quadrangle to the west, six quadrangles were queried, including Del Mar OE W, Encinitas, Rancho Santa Fe, Del Mar, La Jolla OE W, and La Jolla.

General information regarding wildlife species present in the region was obtained from Unitt (1984) for birds, Bond (1977) for mammals, Stebbins (2004) for reptiles and amphibians, and Emmel and Emmel (1973) for butterflies. The *Soil Survey, San Diego Area, California Part 1* (Bowman 1973) also was reviewed to identify potentially occurring sensitive plants based upon known soil associations. General information regarding vegetation communities and plant species was obtained from Holland (1986) and Hickman (1996).

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General Biological Resources Survey

A general biological resources assessment was conducted on October 21, 2011, by Dudek Biologist Tricia Wotipka. The assessment included a general wildlife and botanical survey, a sensitive habitat assessment, and the preparation of a biological resources map.

The general biological resources assessment was conducted on foot and the project site was walked to thoroughly complete the resource inventory. Vegetation communities were mapped directly in the field using a Trimble Global Positioning System (GPS) handheld unit with sub-meter accuracy. Plant community classifications follow Holland (1986) nomenclature with modifications or additions to accommodate the lack of conformity of the observed communities to those of Holland.

Following completion of the field work, all vegetation polygons were transferred to a topographic base and digitized or downloaded into an AutoCAD drawing, and, using ArcCAD, a geographic information system (GIS) coverage was created. Once in ArcCAD, the acreages of each vegetation type present at each site was determined.

Jurisdictional Waters Delineation

A formal delineation of jurisdictional waters was conducted at the project site by Dudek Biologist Callie Ford on December 16, 2011. All areas under the jurisdiction of the U.S. Army Corps of Engineers (ACOE) pursuant to Section 404 of the federal Clean Water Act as waters of the U.S., including wetlands; under the jurisdiction of the California Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the federal Clean Water Act and the Porter-Cologne Act as wetlands or drainages; and under the jurisdiction of CDFG as wetlands pursuant to Section 1602 of the California Fish and Game Code were delineated.

Wetlands and non-wetland waters of the U.S. were delineated in accordance with the methods prescribed in ACOE's *Corps of Engineers Wetland Delineation Manual* (ACOE 1987) and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (ACOE 2008), and the ACOE/Environmental Protection Agency (EPA) Rapanos Guidance (ACOE and EPA 2007). The boundaries of the jurisdictional features were delineated using a GPS handheld unit with sub-meter accuracy. Vegetation, hydrology, and soils were examined at each potential wetland site. The *U.S. Fish and Wildlife Service National List of Plant Species that Occur in Wetlands: California (Region 0)* was used to determine the indicator status of plant species. The channel banks were examined for evidence of an ordinary high water mark (OHWM), including sediment deposition and water marks. Drift lines were noted, where present. Munsell soil color charts were used to determine soil chroma and value. Soil pits were

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dug in areas where the extent of jurisdictional areas was questionable or unclear. Soil pits were dug to depths ranging from 10 to 16 inches. Excavated soils were examined for evidence of hydric conditions, including low chroma values and mottling, vertical streaking, and high organic matter content in the upper horizon. A total of seven data stations were prepared for the project site.

Areas under the jurisdiction of the RWQCB generally coincide with waters of the U.S.; however, isolated waters may be under the jurisdiction of the RWQCB as waters of the state as provided by the state Porter-Cologne Act.

Areas under the jurisdiction of CDFG were mapped based on the presence of hydrophytic vegetation, where associated with a stream channel.

In addition, under the California Coastal Act (CCA), the CCC regulates impacts to wetlands in the Coastal Zone and requires a coastal development permit for almost all development within this zone. From 3 miles seaward, the Coastal Zone generally extends approximately 1,000 yards inland. In less developed areas, it can extend up to 5 miles inland from the mean high-tide line, but can also be considerably less than 1,000 yards inland in developed areas.

The CCA also protects designated sensitive coastal areas by providing additional review and approvals for proposed actions in these areas. Section 30121 of the CCA defines wetlands as "...lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, swamps, mudflats, and fens..." The CCA allows disking, filling, or dredging of wetlands for certain uses, such as restoration. The CCA also directs each city or county within the Coastal Zone to prepare a Local Coastal Program for CCC certification (CCC 2009).

In contrast to ACOE, which uses a three-parameter definition to delineate wetlands, the CCC essentially uses the Cowardin method of wetlands classification, which defines wetland boundaries by a single parameter (i.e., hydric soils, hydrophytic vegetation, or hydrology) (Cowardin et al. 1979).

Survey Limitations

Limitations of the site visit include seasonal constraints, a diurnal bias, and the absence of focused protocol surveys. The survey was completed to assess habitat and the potential for special-status species. The survey was not conducted in a manner to inventory species on site. The project site was surveyed in the fall (October) when botanical resources would have been limited.

3.0 RESULTS

Vegetation Communities

Within the project site, seven vegetation communities or land cover types were identified on site: cismontane alkali marsh, disturbed cismontane alkali marsh, freshwater marsh, open water, ornamental landscaping, disturbed habitat, and developed. These vegetation communities and land cover types are described below, their acreages are presented in *Table 1*, and their spatial distributions are shown on Figure 5a.

Table 1
Vegetation Communities and Land Cover Types

Vegetation Community/Land Cover Type	NCTD ROW Acreage
Cismontane Alkali Marsh	0.002
Disturbed Cismontane Alkali Marsh	0.54
Freshwater Marsh	0.08
Open Water	0.30
Ornamental Landscaping	0.05
Disturbed Habitat	3.12
Developed	2.50
Total	6.59

Cismontane alkali marsh typically occurs in areas that are wet or inundated throughout most to all of the year. Dominant species can include rushes (*Juncus* spp.), salt grass (*Distichlis spicata*), sedges (*Carex* spp.), yerba mansa (*Anemopsis californica*), and alkali heath (*Frankenia grandifolia*). This community occurs at lake beds and floodplains below 1,000 feet, characterized by higher levels of salts than are found in the freshwater marsh habitat. It differs from coastal saltmarsh primarily in that it is not subject to tidal inundation.

This community is a sensitive habitat based on its designation as rare in the Holland classification.

On the NCTD ROW project site, this community occupies less than 1% of the total site. It occurs in a small patch at the end of 23rd Street where runoff from the roadway and adjacent residences is directed to the channel. This community supports more than 50% cover of salt grass, marsh jaumea (*Jaumea carnosa*), triangle orache (*Atriplex triangularis*), common pickleweed (*Salicornia virginica*), and alkali seaheath (*Frankenia salina*), with less than 10% cover of hottentot fig (*Carpobrotus edulis*), a non-native species. This community meets the CDFG and CCC definition of a wetland.

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Disturbed cismontane alkali marsh was mapped along the east and west banks of the drainage channel above areas of standing water. This community is similar in species composition to the native, undisturbed cismontane alkali marsh community but it supports on average anywhere from 30% to 40% cover of non-native species, including wild radish (*Raphanus sativus*), garland chrysanthemum (*Chrysanthemum coronarium*), and hottentot fig. This community meets the CDFG and CCC definition of a wetland.

Freshwater marsh typically occurs in drainages, seeps, and other perennially moist low places where the water table is close to or at the ground surface (Holland 1986). Due to being permanently flooded by fresh water, there is an accumulation of deep, peaty soils. Dominant species include tall, emergent monocots, such as slender cattail (*Typha domingensis*) and bulrush (*Scirpus* sp.), as well as some low-lying herbaceous species, such as yellow nutsedge (*Cyperus esculentus*), curly dock (*Rumex crispus*), marsh fleabane (*Pluchea odorata*), and a variety of hydrophytic grasses and herbs.

At the project site, freshwater marsh occurs within the drainage channel in two segments near the southern terminus of the project. It is perennially inundated and is dominated by cattails (*Typha* sp.), yellow nutsedge, triangle orache, and alkali bulrush. This community is a sensitive habitat based on its designation as rare in the Holland classification. This community meets the CDFG and CCC definition of a wetland.

Open water is not recognized by either the List of Terrestrial Natural Communities (CDFG 2003) or the Natural Communities List (CDFG 2010), but is described by Gray and Bramlet (1992). Open water typically refers to areas containing pools of standing or flowing fresh water with little to no emergent vegetation. Open water provides aquatic habitat for waterfowl, fish, invertebrates, and amphibians. It is also a source of water for various land animals and a source of fish for birds. The majority of the drainage channel (1,633 linear feet) is classified as open water supporting less than 5% vegetative cover with a water depth of 6 to 8 inches on average.

Ornamental landscaping refers to those areas where ornamental plant species and landscaping have been installed in place of native plantings for slope stabilization or aesthetic purposes. Ornamental landscaping consists of ornamental trees and shrubs adjacent to a parking lot at the northwest end of the site associated with single-family residences.

Disturbed habitat includes areas that experience or have experienced high levels of human disturbance. Areas mapped as disturbed land may include roads and graded areas. Vegetation in these areas, if present at all, is usually sparse and dominated by weedy herbaceous species. Disturbed habitat occurs across a wide range of elevations, topographic orientations, and soil types. The vegetation present in disturbed areas is often dominated by non-native species, although some disturbance-adapted natives may occur.

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Disturbed habitat within the NCTD ROW project site refers to areas lacking substantive native vegetative cover, including largely bare ground adjacent to the tennis courts and areas adjacent to the railroad tracks. Dominant species include black mustard (*Brassica nigra*), Menzies' goldenbush (*Isocoma menziesii*), wild radish, Ngaio tree (*Myoporum laetum*), blackwood (*Acacia melanoxylon*), and common brassbuttons (*Cotula coronopifolia*).

Developed refers to areas supporting man-made structures, including homes, yards, roadways, and other highly modified lands supporting structures associated with dwellings or other permanent structures. Such structures typically support little to no natural vegetation growth and are not considered sensitive. On site, developed land refers to the existing tennis courts, roads, residences, and areas supporting concrete or rock.

Jurisdictional Delineation Results

An earthen drainage channel runs along the backside of the adjacent single-family residences from 21st Street to 28th Street. Each street has a cul-de-sac that drains nuisance runoff into the channel. The channel is bound to the north by a culvert into the San Dieguito River. The channel enters the site via a culvert at Camino Del Mar at the west side of the tennis courts, continues around the tennis courts, and continues to the east side of the 21st Street cul-de-sac via a storm drain. The channel supports standing water year-round primarily due to unusually high groundwater elevations coupled with nuisance runoff from the adjacent residences to the west. There is little to no slope to facilitate flow to the San Dieguito River, and due to the presence of a tide gate at this location, the chances of river flow "feeding" the channel are slim. The channel is approximately 4 to 6 feet wide at the OHWM and approximately 8 to 10 feet wide at the top of bank. Water within the channel is approximately 6 to 8 inches deep. The channel is deeply incised with a terrace supporting hydrophytic vegetation approximately 1 foot above the OHWM. The channel is mapped by the National Wetlands Inventory as a Riverine wetland.

Based on the presence of an OHWM and connectivity to the San Dieguito River, a navigable water, the channel is a waters of the U.S. under the jurisdiction of ACOE. The freshwater marsh community is perennially inundated and supports obligate hydrophytic species. Hydric soils are defined as soils that are inundated for a long or very long period; therefore, the freshwater marsh community meets all three parameters for an ACOE wetland. Eight data samples were prepared on site to determine the extent of wetland areas under the jurisdiction of ACOE. Results of the wetland delineation indicate that freshwater marsh is the only community that meets all three parameters of a wetland waters of the U.S. under the jurisdiction of ACOE. Figure 6 depicts the locations of the data samples and wetland data sheets are provided in Attachment B.

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Based on the presence of a bed and bank, the channel is a streambed under the jurisdiction of CDFG. Additionally, the cismontane alkali marsh is riparian wetland vegetation associated with the channel; therefore, CDFG jurisdiction extends to include these communities.

The channel is also a water of the state under the jurisdiction of the RWQCB. No additional isolated waters occur within the site. *Table 2* summarizes the acreage of jurisdiction within the site.

Table 2
Jurisdictional Waters

Vegetation Community/Jurisdictional Water Type	ACOE/RWQCB/CDFG Acreage (linear feet)	Additional CDFG-only Jurisdiction
Perennial Channel (Open Water)	0.30 (1,633)	—
Freshwater Marsh	0.08 (409)	—
Cismontane Alkali Marsh	—	0.002
Disturbed Cismontane Alkali Marsh	—	0.54
Total	0.38	0.54

Literature Review Results

The results of the literature review are provided in Attachment C. A total of 50 special-status wildlife species and 88 special-status plant species have been documented in the vicinity of the two project sites. The results of the literature review are summarized below; for details regarding status and habitat, please see Attachment C.

Of the 50 sensitive wildlife species documented in the vicinity, five listed bird species have a low or very low potential to occur:

- The federally listed threatened western snowy plover (*Charadrius alexandrinus nivosus*) has a very low potential to forage
- The state listed threatened California black rail (*Laterallus jamaicensis coturniculus*) has a very low potential to occur on site
- The state listed endangered Belding's savannah sparrow (*Passerculus sandwichensis beldingi*) has a very low potential to occur
- The state and federally listed endangered light-footed clapper rail (*Rallus longirostris levipes*) has a very low potential to occur
- The state and federally listed endangered California least tern (*Sternula antillarum browni*) has a low potential to forage on site.

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One special-status bird species, white-faced ibis (*Plegadis chihi*), has a very low potential to nest or forage within the marsh habitat on site. One additional special-status bird species, least bittern (*Ixobrychus exilis*), has the potential to forage in the marsh area. One special-status reptile species, San Diego ringneck snake (*Diadophis punctatus similis*), has a low potential to occur in the marsh communities.

Two special-status bird species, Cooper's hawk (*Accipiter cooperii*) and California horned lark (*Eremophila alpestris actia*), have a low potential to forage throughout the site. Additionally, special-status bats have the potential to forage on site.

Of the 88 plant species documented in the vicinity, no listed plant species have the potential to occur. Seven special-status plant species have a low potential to occur within the NCTD ROW project site. The chaparral community has the potential to support San Diego sagewort (*Artemisia palmeri*) and long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*). The marsh communities have the potential to support smooth tarplant (*Centromadia pungens* ssp. *laevis*), Palmer's frankenia (*Frankenia palmeri*), southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*), Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*), and south coast branching phacelia (*Phacelia ramosissima*).

Regional Resource Planning Context

In San Diego County, several conservation planning efforts have been completed or are currently in progress with the long-term goal of establishing a regional reserve system that will protect native habitat lands and their associated biota. The ultimate goals of these plans are the establishment of biological reserve areas in conformance with the California Natural Community Conservation Planning Act, and to contribute to the preserve system already established by the approved Multiple Species Conservation Plan (MSCP) in southwestern San Diego County.

The City is listed as a jurisdictional entity in the process of developing an MSCP Subarea Plan, although no draft has been submitted to the resource agencies for review.

Wildlife Corridors

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation; they may be continuous habitat or discrete habitat islands that function as stepping stones for wildlife dispersal.

Both sites are surrounded on three sides by development; therefore, habitat within the sites does not serve as a wildlife corridor, as it does not connect patches of open space or blocks of habitat.

4.0 PROJECT DESCRIPTION AND IMPACTS ANALYSIS

The proposed improvements in the project area will include the installation of a system of perforated HDPE pipe, with perforations located at a height equal to the seasonal high-groundwater elevation observed and measured in March 2011 (Figure 4a). The HDPE pipe will run parallel with the existing channel, terminating at a central collection point anticipated to be located near the end of 25th Street. From the collection point, water will be transmitted through a closed conduit system (12-inch HDPE) to a solar-powered packaged submersible pump lift station located in City-owned property at the easterly end of 28th Street. At the lift station, the collected water will be pumped into an adjacent sewer collection system manhole for transmission to a wastewater treatment plant. Channel improvements in this project area will consist of rehabilitation of the existing stormwater channel to original grade, installation of rip-rap and gravel surface treatments to allow percolation of nuisance water into the perforated pipe drainage system, and a nuisance water collection system at the end of each public street perpendicular to the NCTD ROW. Improvements around the public tennis facility located at 21st Street will include the removal of the existing drainage ditch adjacent to the courts. Transmission of stormwater flows through the ditch will be replaced by a HDPE storm drain pipe, and the ditch will be graded to closely match existing surface elevations for the street and tennis facility.

The project will require temporary dewatering for installation of the drain pipe improvements. It is anticipated that the proposed dewatering techniques will consist of a system of either wells or trenches installed adjacent to the proposed improvements that will allow interception and downstream pumping (after appropriate treatment methods) to unaltered reaches of the drainage channel. Dewatering will be staged, so that only areas under active installation of improvements will require dewatering.

Direct Impacts

Impacts to vegetation communities from the proposed project are summarized in *Table 3*. Improvements to the channel would result in temporary impacts to land covers (disturbed or unvegetated areas) within the grading limits during construction. After construction is complete, the channel would remain as developed and disturbed habitat. As the goal of the project is to remove stagnant water from the channel, it is assumed that existing vegetation communities within the channel would be permanently impacted as they would not be able to revegetate in the absence of water.

Table 3
Impacts to Vegetation Communities and Land Cover Types

Vegetation Community/ Land Cover Type	Direct Permanent Impacts Acreage	Indirect Permanent Impacts Acreage	Total Permanent Impacts Acreage	Temporary Impacts Acreage
Cismontane Alkali Marsh	0.002	—	0.002	—
Disturbed Cismontane Alkali Marsh	0.43	0.11 ¹	0.54	—
Freshwater Marsh	0.08	—	0.08	—
Open Water	0.30	—	0.30	—
Ornamental Landscaping	—	—	—	0.05
Disturbed Habitat	—	—	—	0.58
Developed	—	—	—	0.27
Total	0.81	0.11	0.92	0.9

¹ Although grading would not remove the entire community, it is assumed that, due to the removal of water, the entire community would desiccate over time.

Sensitive Habitats

Implementation of the proposed project would permanently impact 0.54 acre of cismontane alkali marsh (including disturbed forms) and 0.08 acre of freshwater marsh (Figure 7a). Both of these communities are considered sensitive vegetation communities as described above; therefore, impacts to this community would be considered significant.

Sensitive Wildlife Species

Five listed bird species have a low or very low potential to occur in the marsh habitat on site. Impacts to listed species would be significant; measures will be implemented to avoid impacts to listed species.

One special-status reptile species, San Diego ringneck snake, has a low potential to occur in the marsh communities. Due to the small area removed (0.62 acre) and the presence of suitable habitat immediately adjacent to the site in the San Dieguito River and Lagoon, removal of this habitat would not appreciably diminish habitat for the local population of this species and, therefore, would not result in a significant impact. Impacts to individuals of these species during construction would likewise not diminish the local population and would not result in significant impacts.

Two special-status bird species have the potential to forage in the marsh area: least bittern and white-faced ibis. Due to the small area removed (0.62 acre) and the presence of suitable habitat immediately adjacent to the site in the San Dieguito River and Lagoon, removal of this habitat would not appreciably diminish habitat for the local population of these species and, therefore,

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would not result in a significant impact. Individuals of these species would be expected to vacate the site during construction; therefore, impacts to individuals are not anticipated. Should an individual be impacted during construction, it would not diminish the local population and would not result in significant impacts to the species.

One special-status species, white-faced ibis, has a very low potential to nest within the marsh habitat on site. Impacts to nesting individuals are potentially significant.

Two species, Cooper's hawk and California horned lark, have a low potential to forage throughout the site. Additionally, bats have the potential to forage on site. Foraging habitat would not be appreciably altered as a result of the project; therefore, impacts to foraging habitat would be less than significant.

Sensitive Plant Species

The chaparral community has the potential to support San Diego sagewort and long-spined spineflower. No impacts would occur to the chaparral community; therefore, potential impacts to sensitive plants would be less than significant.

The marsh communities on site have the potential to support smooth tarplant, Palmer's frankenia, southwestern spiny rush, Coulter's goldfields, and south coast branching phacelia. Although these species have the potential to occur, due to the small area of suitable habitat present within the site (0.62 acre), the site would not be able to support a substantial population of these species. Impacts to individuals of these species, should they be present, would be a less-than-significant impact.

Jurisdictional Waters

The project would impact jurisdictional waters through recontouring of the channel, placement of rip-rap and gravel surface treatments within the channel, and replacement of the drainage ditch by the tennis courts with an HDPE stormdrain pipe. Additionally, water will be collected from the channel and pumped to a wastewater treatment plant. Due to the placement of rip-rap throughout the channel and the permanent removal of water from the channel, impacts to jurisdictional waters would be permanent, resulting in the removal of 0.38 acre (2,042 linear feet) of waters of the U.S./state and CDFG-jurisdictional streambed, including 0.30 acre of open water and 0.08 acre of freshwater marsh.

Likewise, impacts to CDFG-only jurisdictional streambed would be permanent as the removal of water from the system would preclude the wetland vegetation from returning. Improvements to

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the channel would result in impacts to 0.54 acre of additional jurisdictional streambed consisting of cismontane alkali marsh. Impacts to jurisdictional waters are shown in *Table 5*.

Table 4
Impacts to Jurisdictional Waters

Vegetation Community/ Jurisdictional Water Type	ACOE/RWQCB/CDFG Direct Impacts Acreage (linear feet)	Additional CDFG-only Jurisdiction Direct Impacts Acreage	Additional CDFG-only Jurisdiction Indirect Impacts Acreage
<i>Earthen Channel Improvements</i>			
Perennial Channel	0.30 (1,633)	—	—
Freshwater Marsh	0.06 (252)	—	—
Cismontane Alkali Marsh	—	0.002	—
Disturbed Cismontane Alkali Marsh	—	0.43	0.11
<i>HDPE Pipe Placement</i>			
Freshwater Marsh	0.02 (157)	—	—
Total	0.38	0.43	0.11

Nesting Birds

Both sites support an assemblage of trees and shrubs (native and ornamental in nature), which could serve as potential nesting habitat for migratory and resident birds. If work is to occur during the breeding season (typically February 1 to August 31), breeding birds may be adversely impacted by ground disturbance and/or tree/shrub removal and construction-related noise, which can result in the disruption of foraging, nesting, and reproductive activities. Impacts to nesting birds are potentially significant, requiring mitigation.

Local Ordinances or Conservation Plans

As the City has not adopted an MSCP Subarea Plan, the project is not in conflict with a conservation plan.

The site is within the Lagoon Overlay Zone of the City Land Use Plan and is subject to the Wetland Preservation Regulations outlined under Goal VI-B of the plan. The marsh communities on site meet the definition of wetlands as described in the Wetland Preservation Regulations. The goal of the project is to remove stagnant water for the purposes of vector control. As such, the preservation of the wetlands on site as described by the Land Use Plan is incompatible with the goal of the project.

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Indirect Impacts

Indirect impacts typically refer to either short-term indirect impacts related to construction, or long-term, chronic indirect impacts associated with the location of urban development in proximity to sensitive biological resources within natural open space. During the proposed development, short-term indirect impacts to adjacent residences and development may include dust, noise, and construction-related soil erosion and runoff. However, with respect to the latter indirect impact, all project grading will be subject to the typical restrictions and requirements that address erosion and runoff, including the federal Clean Water Act, National Pollution Discharge Elimination System, and the requirement of a Storm Water Pollution Prevention Plan. Noise impacts will be temporary in nature and will be subject to the City's local ordinance regarding construction-generated noise. However, the site supports an assemblage of trees and shrubs, which could serve as potential nesting habitat for resident and migratory birds. Breeding birds can be significantly affected by short-term construction-related noise, which can result in the disruption of foraging, nesting, and reproductive activities. Therefore, indirect impacts to nesting birds due to construction-related noise may occur as a result of the proposed project. This potential indirect impact is considered significant but will be mitigated to a level below significant.

During construction of the project, dust could temporarily disrupt plant vitality in the short term due to construction-related soil erosion and drainage runoff. However, as described in the following section, typical construction practices, including dust and erosion control, lighting, noise, and water quality best management practices, will be implemented to reduce these effects to less than significant.

5.0 RECOMMENDED MITIGATION MEASURES

The following measures would reduce potentially significant impacts to less-than-significant impacts pursuant to the California Environmental Quality Act.

Sensitive Habitats

The proposed project would permanently impact 0.62 acre of sensitive habitat, including 0.08 acre of freshwater marsh and 0.54 acre of cismontane alkali marsh. Impacts to sensitive habitat are typically mitigated through in-kind creation of or contribution to a mitigation bank. As the sensitive habitats are also jurisdictional waters, mitigation will be completed as described under "Jurisdictional Waters" below and through coordination with ACOE, RWQCB, and CDFG. Implementation of the jurisdictional waters mitigation measure would reduce impacts to sensitive habitats to less than significant.

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Sensitive Wildlife Species

The project site has a low potential to support listed bird species. To ensure avoidance of listed species, a qualified biologist will monitor ground disturbance activities to ensure no listed species are present within the disturbance area. The biologist will survey the site and suitable habitat areas for listed bird species in the disturbance area and within 500 feet of the disturbance area immediately prior to construction activities to ensure no listed species are present. The biologist shall monitor all direct habitat disturbance activities occurring within suitable habitat for listed species. If a listed species is present, construction within 500 feet of the occupied area will be stopped and delayed until the species has either vacated the disturbance area or the monitoring biologist and project applicant have consulted with the relevant wildlife agency (i.e., either USFWS, CDFG, or both) to determine the appropriate course of action to avoid both direct and indirect impacts. Construction activities may resume once the monitoring biologist, in coordination with the relevant wildlife agency(ies) as necessary, determines that there is no longer a potential for a listed species to be directly or indirectly affected. If the wildlife agency(ies) determine that take of the species associated with construction activities cannot be avoided, the project activities shall be postponed until the project applicant has obtained the necessary take permits/authorizations from the relevant agency(ies).

Jurisdictional Waters

The proposed project would result in the removal of 0.38 acre (2,042 linear feet) of waters of the U.S./state and CDFG-jurisdictional streambed consisting of 0.30 acre of open water and 0.08 acre of freshwater marsh. An additional 0.54 acre of CDFG-only jurisdictional streambed, consisting of disturbed cismontane alkali marsh, would also be impacted. Mitigation for impacts to jurisdictional waters will be completed at a minimum 2:1 ratio of in-kind mitigation within the San Dieguito River watershed and will be accomplished through either off-site creation, contribution to a mitigation bank or in-lieu fee program, or collaboration with an existing off-site restoration program. On-site mitigation is not feasible as the goal of the project (removal of stagnant water) is not compatible with wetland creation, which requires inundation. Mitigation for impacts to jurisdictional waters would be coordinated with and approved by ACOE, RWQCB, CDFG, and CCC.

Nesting Birds

To avoid impacts to nesting birds, ground disturbance activities and vegetation removal will be completed outside avian breeding season (between September 1 and January 14).

If ground disturbance activities (including clearing and grubbing) are scheduled to occur between February 1 and August 31, a qualified biologist will conduct a nesting bird survey within 1 week

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of ground disturbance activities. The survey shall consist of full coverage of the proposed project footprint and up to a 300-foot buffer. The specific survey buffer will be determined in the field by the project biologist and will take into account the species nesting in the area and the habitat present. If no active nests are found, no additional measures are required.

If nests are found, the nest locations shall be mapped by the qualified biologist utilizing GPS equipment, where feasible. The nesting bird species will be documented and, to the degree feasible, the nesting stage (e.g., incubation of eggs, feeding of young, near fledging). The biologist shall establish a no-disturbance buffer around each active nest. The buffer will be determined by the qualified biologist based on the biology of the species present and surrounding habitat. No construction or ground disturbance activities shall be conducted within the buffer until the biologist has determined the nest is no longer active and has informed the construction supervisor that activities may resume.

Local Ordinances

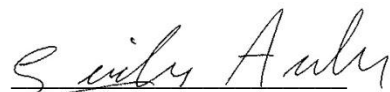
As discussed earlier, the City does not currently have a draft or approved MSCP Subarea Plan. In the event that a Subarea Plan is developed prior to obtaining a grading permit, compliance with the Subarea Plan guidelines on avoidance, mitigation, and species-specific coverage would be required.

6.0 CONCLUSION

With implementation of the recommended mitigation measures, the proposed project would not result in significant impacts to biological resources.

If you have any questions or comments regarding the content of this letter, please do not hesitate to contact me via telephone at 909.677.3775 or via e-mail at larcher@dudek.com.

Sincerely,



Linda Archer
Senior Biologist

Att A: Figures 1–7b

Att B: Wetland Data Forms

Att C: Special-Status Species Potentially Occurring in the Project Area

Att D: Floral Compendium

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7.0 REFERENCES CITED

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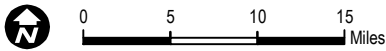
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ATTACHMENT A

Figures 1–7b



DUDEK

6451

**FIGURE 1
Regional Map**

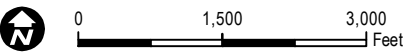
NCTD ROW Drainage Ditch Project- Biological Resources Assessment and Jurisdictional Waters Delineation

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Sola

NCTD - ROW
Project Site



DUDEK

SOURCE: Bing (2011)

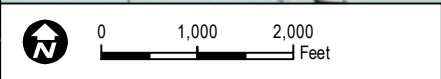
FIGURE 2
Location Map

6451

NCTD ROW Drainage Ditch Project- Biological Resources Assessment and Jurisdictional Waters Delineation



NCTD - ROW
Project Site

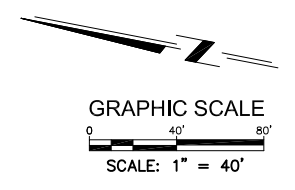
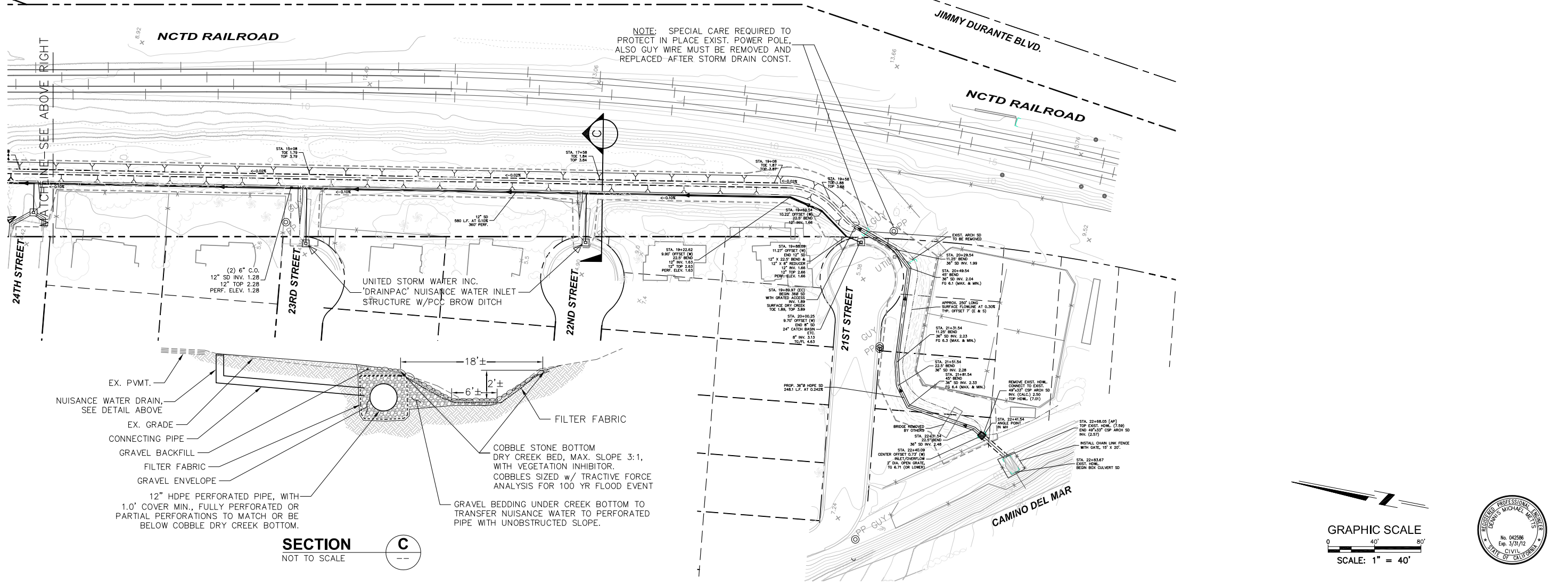
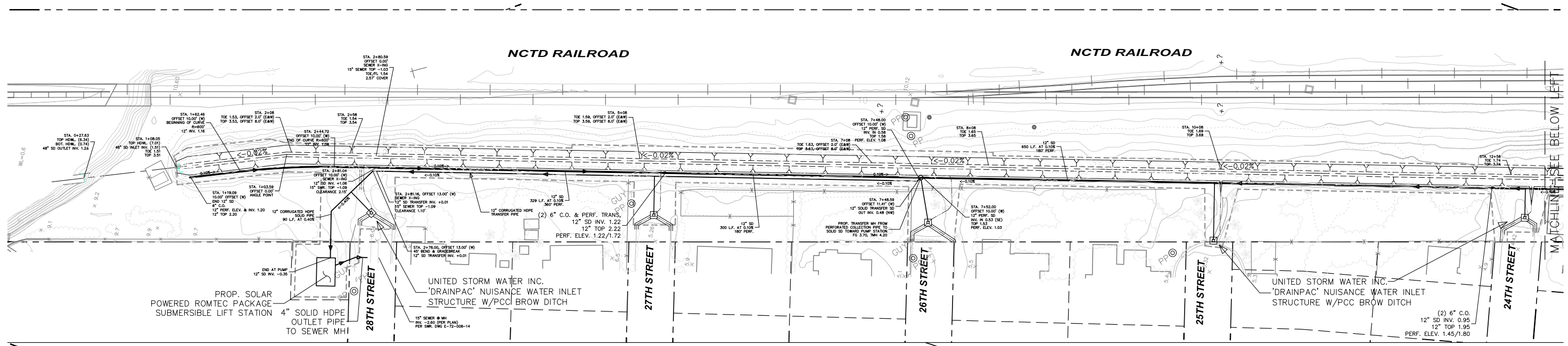


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SOURCE: USGS 7.5-Minute Series Del Mar Quadrangle. **FIGURE 3
USGS Map**

6451

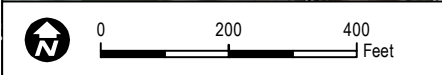
NCTD ROW Drainage Ditch Project- Biological Resources Assessment and Jurisdictional Waters Delineation



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	Project Boundary
Vegetation Community	
	ORN - Ornamental
	OW - Open Water
	FWM - Freshwater Marsh
	CAM - Cismontane Alkali Marsh
	dCAM - disturbed Cismontane Alkali Marsh
	DH - Disturbed Habitat
	DEV - Developed



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SOURCE: Bing (2011)

FIGURE 5
Vegetation Map

NCTD ROW Drainage Ditch Project- Biological Resources Assessment and Jurisdictional Waters Delineation



DUDEK

SOURCE: Bing (2011)

6451

NCTD ROW Drainage Ditch Project- Biological Resources Assessment and Jurisdictional Waters Delineation

FIGURE 6
Jurisdictional Delineation Map



DUDEK

SOURCE: Bing (2011)

6451

**FIGURE 7
Impacts Map**

NCTD ROW Drainage Ditch Project- Biological Resources Assessment and Jurisdictional Waters Delineation

ATTACHMENT B
Wetland Data Forms

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: NCTD ROW City/County: Del Mar, San Diego Sampling Date: 12.16.11
 Applicant/Owner: City of Del Mar State: CA Sampling Point: 1
 Investigator(s): CJF Section, Township, Range: Section 11, Township 14 S, Range 4 West
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 10
 Subregion (LRR): C - Mediterranean California Lat: 32°58'05.12" N Long: 117°15'56.67" W Datum: NAD 83
 Soil Map Unit Name: Tujunga sand, 0 to 5 percent slopes NWI classification: Riverine Wetland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:																																																	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC:	2 (A)																																																
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	3 (B)																																																
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC:	66.7 % (A/B)																																																
4. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%; text-align: center;">Total % Cover of:</td> <td style="width: 10%;"></td> <td style="width: 10%; text-align: center;">Multiply by:</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>OBL species</td> <td style="text-align: center;">25</td> <td>x 1 =</td> <td></td> <td style="text-align: center;">25</td> <td></td> </tr> <tr> <td>FACW species</td> <td style="text-align: center;">65</td> <td>x 2 =</td> <td></td> <td style="text-align: center;">130</td> <td></td> </tr> <tr> <td>FAC species</td> <td style="text-align: center;">_____</td> <td>x 3 =</td> <td></td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td>FACU species</td> <td style="text-align: center;">_____</td> <td>x 4 =</td> <td></td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td>UPL species</td> <td style="text-align: center;">50</td> <td>x 5 =</td> <td></td> <td style="text-align: center;">250</td> <td></td> </tr> <tr> <td>Column Totals:</td> <td style="text-align: center;">140</td> <td>(A)</td> <td></td> <td style="text-align: center;">405</td> <td>(B)</td> </tr> <tr> <td colspan="4" style="text-align: right;">Prevalence Index = B/A =</td> <td colspan="2" style="text-align: center;">2.89</td> </tr> </table>		Total % Cover of:		Multiply by:				OBL species	25	x 1 =		25		FACW species	65	x 2 =		130		FAC species	_____	x 3 =		0		FACU species	_____	x 4 =		0		UPL species	50	x 5 =		250		Column Totals:	140	(A)		405	(B)	Prevalence Index = B/A =				2.89	
Total % Cover of:		Multiply by:																																																			
OBL species	25	x 1 =				25																																															
FACW species	65	x 2 =				130																																															
FAC species	_____	x 3 =				0																																															
FACU species	_____	x 4 =		0																																																	
UPL species	50	x 5 =		250																																																	
Column Totals:	140	(A)		405	(B)																																																
Prevalence Index = B/A =				2.89																																																	
Total Cover: _____ %																																																					
Sapling/Shrub Stratum																																																					
1. _____	_____	_____	_____																																																		
2. _____	_____	_____	_____																																																		
3. _____	_____	_____	_____																																																		
4. _____	_____	_____	_____																																																		
5. _____	_____	_____	_____																																																		
Total Cover: _____ %																																																					
Herb Stratum																																																					
1. <i>Distichlis spicata</i>	50	Yes	Not Listed																																																		
2. <i>Heliotropium curassavicum</i>	20	Yes	OBL																																																		
3. <i>Frankenia salina</i>	60	Yes	FACW*																																																		
4. <i>Salicornia virginica</i>	5	No	OBL																																																		
5. <i>Cressa truxillensis</i>	5	No	FACW																																																		
6. _____	_____	_____	_____																																																		
7. _____	_____	_____	_____																																																		
8. _____	_____	_____	_____																																																		
Total Cover: 140%																																																					
Woody Vine Stratum																																																					
1. _____	_____	_____	_____																																																		
2. _____	_____	_____	_____																																																		
Total Cover: _____ %																																																					
% Bare Ground in Herb Stratum _____ %		% Cover of Biotic Crust _____ %																																																			

Hydrophytic Vegetation Indicators:
 Dominance Test is >50%
 Prevalence Index is ≤3.0¹
 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present? Yes No

Remarks:

SOIL

Sampling Point: 1 _____

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

Depth (inches)	Matrix		Redox Features				Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	2.5Y 3/1	100					Clay loam	Roots present
6-9	2.5Y 4/1	100					Sandy loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.
³Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

<p>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</p> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) (LRR C) <input type="checkbox"/> 1 cm Muck (A9) (LRR D) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input checked="" type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)	<p>Indicators for Problematic Hydric Soils:⁴</p> <input type="checkbox"/> 1 cm Muck (A9) (LRR C) <input type="checkbox"/> 2 cm Muck (A10) (LRR B) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)
--	--	--

⁴Indicators of hydrophytic vegetation and wetland hydrology must be present.

<p>Restrictive Layer (if present):</p> Type: _____ Depth (inches): _____ Remarks: _____	<p>Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/></p>
--	--

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators (any one indicator is sufficient)</p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) (Nonriverine) <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) <input type="checkbox"/> Other (Explain in Remarks)	<p><u>Secondary Indicators (2 or more required)</u></p> <input type="checkbox"/> Water Marks (B1) (Riverine) <input type="checkbox"/> Sediment Deposits (B2) (Riverine) <input type="checkbox"/> Drift Deposits (B3) (Riverine) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)
<p>Field Observations:</p> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input checked="" type="radio"/> No <input type="radio"/> Depth (inches): _____	<p>Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/></p>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: _____		

Remarks: This channel is fed by nuisance run-off and although hydric soils and hydrophytic vegetation, the lack of hydrology indicators is based off of the fact that there is no flow. In addition, the channel is deeply incised. Given the lack of flow and topography, this area is not considered to support wetland hydrology indicators.

Saturated soils were present from recent rainfall.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: NTCD ROW City/County: Del Mar, San Diego Sampling Date: 12.16.11
 Applicant/Owner: City of Del Mar State: CA Sampling Point: 2
 Investigator(s): CJF Section, Township, Range: Section 11, Township 14 S, Range 4 West
 Landform (hillslope, terrace, etc.): Flat, Disturbed Local relief (concave, convex, none): None Slope (%): 0
 Subregion (LRR): C - Mediterranean California Lat: 32°58'05.14" N Long: 117°15'56.34" W Datum: NAD 83
 Soil Map Unit Name: Tujunga sand, 0 to 5 percent slopes NWI classification: Riverine Wetland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: <u>Data station taken in upland area top of slope near railroad tracks.</u>	

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																									
1. _____				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <input type="text" value="0"/> (A) Total Number of Dominant Species Across All Strata: <input type="text" value="0"/> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <input type="text" value="0"/> % (A/B)																								
2. _____																												
3. _____																												
4. _____																												
Total Cover: <input type="text" value=""/>				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center">Total % Cover of:</td> <td align="center">Multiply by:</td> <td></td> </tr> <tr> <td>OBL species</td> <td>x 1 =</td> <td><input type="text" value="0"/></td> </tr> <tr> <td>FACW species</td> <td>x 2 =</td> <td><input type="text" value="0"/></td> </tr> <tr> <td>FAC species</td> <td>x 3 =</td> <td><input type="text" value="0"/></td> </tr> <tr> <td>FACU species</td> <td>x 4 =</td> <td><input type="text" value="0"/></td> </tr> <tr> <td>UPL species</td> <td>x 5 =</td> <td><input type="text" value="0"/></td> </tr> <tr> <td>Column Totals:</td> <td>(A)</td> <td><input type="text" value="0"/> (B)</td> </tr> <tr> <td align="center" colspan="3">Prevalence Index = B/A = <input type="text" value=""/></td> </tr> </table>	Total % Cover of:	Multiply by:		OBL species	x 1 =	<input type="text" value="0"/>	FACW species	x 2 =	<input type="text" value="0"/>	FAC species	x 3 =	<input type="text" value="0"/>	FACU species	x 4 =	<input type="text" value="0"/>	UPL species	x 5 =	<input type="text" value="0"/>	Column Totals:	(A)	<input type="text" value="0"/> (B)	Prevalence Index = B/A = <input type="text" value=""/>		
Total % Cover of:	Multiply by:																											
OBL species	x 1 =	<input type="text" value="0"/>																										
FACW species	x 2 =	<input type="text" value="0"/>																										
FAC species	x 3 =	<input type="text" value="0"/>																										
FACU species	x 4 =	<input type="text" value="0"/>																										
UPL species	x 5 =	<input type="text" value="0"/>																										
Column Totals:	(A)	<input type="text" value="0"/> (B)																										
Prevalence Index = B/A = <input type="text" value=""/>																												
Sapling/Shrub Stratum				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)																								
1. _____																												
2. _____																												
3. _____																												
4. _____																												
Total Cover: <input type="text" value=""/>				¹ Indicators of hydric soil and wetland hydrology must be present.																								
Herb Stratum																												
1. _____																												
2. _____																												
3. _____																												
4. _____																												
5. _____																												
6. _____																												
7. _____																												
8. _____																												
Total Cover: <input type="text" value=""/>				Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>																								
Woody Vine Stratum																												
1. _____																												
2. _____																												
Total Cover: <input type="text" value=""/>																												
% Bare Ground in Herb Stratum <u>100%</u>		% Cover of Biotic Crust <u> </u> %																										

Remarks: No plants present within a 10-foot radius. There is some vegetation on slope below, but no vegetation on top of slope.

SOIL

Sampling Point: 2

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

Depth (inches)	Matrix		Redox Features				Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	10YR 3/3	100					Loamy sand	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.
³Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) (LRR C) <input type="checkbox"/> 1 cm Muck (A9) (LRR D) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)		<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)		Indicators for Problematic Hydric Soils:⁴ <input type="checkbox"/> 1 cm Muck (A9) (LRR C) <input type="checkbox"/> 2 cm Muck (A10) (LRR B) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)
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⁴Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present): Type: _____ Depth (inches): _____ Remarks: _____	Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/>
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HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (any one indicator is sufficient) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) (Nonriverine) <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) <input type="checkbox"/> Other (Explain in Remarks)	Secondary Indicators (2 or more required) <input type="checkbox"/> Water Marks (B1) (Riverine) <input type="checkbox"/> Sediment Deposits (B2) (Riverine) <input type="checkbox"/> Drift Deposits (B3) (Riverine) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No signs of hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: NCTD ROW City/County: Del Mar, San Diego Sampling Date: 12.16.11
 Applicant/Owner: City of Del Mar State: CA Sampling Point: 3
 Investigator(s): CJF Section, Township, Range: Section 11, Township 14 S, Range 4 West
 Landform (hillslope, terrace, etc.): Flat, Disturbed Local relief (concave, convex, none): None Slope (%): 0
 Subregion (LRR): C - Mediterranean California Lat: 32°58'10.92" N Long: 117°15'57.54" W Datum: NAD 83
 Soil Map Unit Name: Tujunga sand, 0 to 5 percent slopes NWI classification: Riverine Wetland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: <u>Data station taken in upland area top of slope near railroad tracks.</u>	

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				
2. _____				
3. _____				
4. _____				
Total Cover: _____ %				
Sapling/Shrub Stratum				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
Total Cover: _____ %				
Herb Stratum				
1. <i>Chrysanthemum coronarium</i>	40	Yes	Not Listed	
2. <i>Carpobrotus edulis</i>	10	Yes	Not Listed	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
Total Cover: <u>50</u> %				
Woody Vine Stratum				
1. _____				
2. _____				
Total Cover: _____ %				
% Bare Ground in Herb Stratum <u>50</u> %		% Cover of Biotic Crust _____ %		

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
 Total Number of Dominant Species Across All Strata: 2 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 % (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by: _____
 OBL species _____ x 1 = 0
 FACW species _____ x 2 = 0
 FAC species _____ x 3 = 0
 FACU species _____ x 4 = 0
 UPL species 50 x 5 = 250
 Column Totals: 50 (A) 250 (B)
 Prevalence Index = B/A = 5.00

Hydrophytic Vegetation Indicators:
 Dominance Test is >50%
 Prevalence Index is ≤3.0¹
 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present? Yes No

Remarks:

SOIL

Sampling Point: 3

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

Depth (inches)	Matrix		Redox Features				Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	10YR 3/2	100					Loamy sand	Rocky material

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.
³Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) (LRR C) <input type="checkbox"/> 1 cm Muck (A9) (LRR D) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)		<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)		Indicators for Problematic Hydric Soils:⁴ <input type="checkbox"/> 1 cm Muck (A9) (LRR C) <input type="checkbox"/> 2 cm Muck (A10) (LRR B) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)
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⁴Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present): Type: <u>Rock/Fill</u> Depth (inches): <u>0</u>	Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/>
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Remarks: The area looks like fill with many rocks throughout soil.

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (any one indicator is sufficient) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) (Nonriverine) <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) <input type="checkbox"/> Other (Explain in Remarks)	Secondary Indicators (2 or more required) <input type="checkbox"/> Water Marks (B1) (Riverine) <input type="checkbox"/> Sediment Deposits (B2) (Riverine) <input type="checkbox"/> Drift Deposits (B3) (Riverine) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No signs of hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: NCTD ROW City/County: Del Mar, San Diego Sampling Date: 12.16.11
 Applicant/Owner: City of Del Mar State: CA Sampling Point: 4
 Investigator(s): CJF Section, Township, Range: Section 11, Township 14 S, Range 4 West
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 5
 Subregion (LRR): C - Mediterranean California Lat: 32°58'10.92" N Long: 117°15'57.79" W Datum: NAD 83
 Soil Map Unit Name: Tujunga sand, 0 to 5 percent slopes NWI classification: Riverine Wetland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC:	2 (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	3 (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC:	66.7 % (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet:	
Total Cover: _____ %				Total % Cover of: _____ Multiply by: _____	
Sapling/Shrub Stratum				OBL species	25 x 1 = 25
1. _____	_____	_____	_____	FACW species	35 x 2 = 70
2. _____	_____	_____	_____	FAC species	_____ x 3 = 0
3. _____	_____	_____	_____	FACU species	_____ x 4 = 0
4. _____	_____	_____	_____	UPL species	40 x 5 = 200
Total Cover: _____ %				Column Totals:	100 (A) 295 (B)
Herb Stratum				Prevalence Index = B/A = 2.95	
1. <i>Chrysanthemum coronarium</i>	40	Yes	Not Listed	Hydrophytic Vegetation Indicators:	
2. <i>Salicornia virginica</i>	25	Yes	OBL	<input checked="" type="checkbox"/> Dominance Test is >50%	
3. <i>Frankenia salina</i>	35	Yes	FACW*	<input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹	
4. _____	_____	_____	_____	<input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
5. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)	
6. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present.	
7. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
8. _____	_____	_____	_____		
Total Cover: 100%					
Woody Vine Stratum					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
Total Cover: _____ %					
% Bare Ground in Herb Stratum <u>20 %</u>		% Cover of Biotic Crust _____ %			

Remarks:

SOIL

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-16	5Y 4/1	99	7.5YR 4/6	1	C	PL	Clay loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.
³Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) (LRR C) <input type="checkbox"/> 1 cm Muck (A9) (LRR D) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)		<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input checked="" type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)		Indicators for Problematic Hydric Soils:⁴ <input type="checkbox"/> 1 cm Muck (A9) (LRR C) <input type="checkbox"/> 2 cm Muck (A10) (LRR B) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)	
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⁴Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present): Type: _____ Depth (inches): _____ Remarks: _____	Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/>
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HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) (Nonriverine) <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Water Marks (B1) (Riverine) <input type="checkbox"/> Sediment Deposits (B2) (Riverine) <input type="checkbox"/> Drift Deposits (B3) (Riverine) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)	Depth (inches): _____ Depth (inches): _____ Depth (inches): _____
Field Observations: Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>		Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	

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

Remarks: This channel is fed by nuisance run-off and although hydric soils and hydrophytic vegetation, the lack of hydrology indicators is based off of the fact that there is no flow. In addition, the channel is deeply incised. Given the lack of flow and topography, this area is not considered to support wetland hydrology indicators.

Soils moist from recent rainfall.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: NCTD ROW City/County: Del Mar, San Diego Sampling Date: 12.16.11
 Applicant/Owner: City of Del Mar State: CA Sampling Point: 5
 Investigator(s): CJF Section, Township, Range: Section 11, Township 14 S, Range 4 West
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 5
 Subregion (LRR): C - Mediterranean California Lat: 32°58'10.84" N Long: 117°15'57.98" W Datum: NAD 83
 Soil Map Unit Name: Tujunga sand, 0 to 5 percent slopes NWI classification: Riverine Wetland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				
2. _____				
3. _____				
4. _____				
Total Cover: _____ %				
Sapling/Shrub Stratum				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
Total Cover: _____ %				
Herb Stratum				
1. <i>Chrysanthemum coronarium</i>	30	Yes	Not Listed	
2. <i>Heliogropium curassavicum</i>	20	Yes	OBL	
3. <i>Frankenia salina</i>	60	Yes	FACW*	
4. <i>Salicornia virginica</i>	5	No	OBL	
5. _____				
6. _____				
7. _____				
8. _____				
Total Cover: 115%				
Woody Vine Stratum				
1. _____				
2. _____				
Total Cover: _____ %				
% Bare Ground in Herb Stratum <u>10 %</u>		% Cover of Biotic Crust _____ %		

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
 Total Number of Dominant Species Across All Strata: 3 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7 % (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by: _____
 OBL species 25 x 1 = 25
 FACW species 60 x 2 = 120
 FAC species _____ x 3 = 0
 FACU species _____ x 4 = 0
 UPL species 30 x 5 = 150
 Column Totals: 115 (A) 295 (B)
 Prevalence Index = B/A = 2.57

Hydrophytic Vegetation Indicators:
 Dominance Test is >50%
 Prevalence Index is ≤3.0¹
 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present? Yes No

Remarks:

SOIL

Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth (inches)	Matrix		Redox Features			Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹		
0-16	2.5Y 3/2	100				Sandy loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.
³Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

<p>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</p> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) (LRR C) <input type="checkbox"/> 1 cm Muck (A9) (LRR D) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)	<p>Indicators for Problematic Hydric Soils:⁴</p> <input type="checkbox"/> 1 cm Muck (A9) (LRR C) <input type="checkbox"/> 2 cm Muck (A10) (LRR B) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)
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⁴Indicators of hydrophytic vegetation and wetland hydrology must be present.

<p>Restrictive Layer (if present):</p> Type: _____ Depth (inches): _____ Remarks: _____	<p>Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/></p>
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HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators (any one indicator is sufficient)</p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) (Nonriverine) <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) <input type="checkbox"/> Other (Explain in Remarks)	<p><u>Secondary Indicators (2 or more required)</u></p> <input type="checkbox"/> Water Marks (B1) (Riverine) <input type="checkbox"/> Sediment Deposits (B2) (Riverine) <input type="checkbox"/> Drift Deposits (B3) (Riverine) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)
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<p>Field Observations:</p> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<p>Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/></p>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Moist soils from recent rainfall.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: NCTD ROW City/County: Del Mar, San Diego Sampling Date: 12.16.11
 Applicant/Owner: City of Del Mar State: CA Sampling Point: 6
 Investigator(s): CJF Section, Township, Range: Section 11, Township 14 S, Range 4 West
 Landform (hillslope, terrace, etc.): Flat, Disturbed Local relief (concave, convex, none): None Slope (%): 2
 Subregion (LRR): C - Mediterranean California Lat: 32°58'19.10" N Long: 117°16'00.00" W Datum: NAD 83
 Soil Map Unit Name: Tujunga sand, 0 to 5 percent slopes NWI classification: Riverine Wetland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				
2. _____				
3. _____				
4. _____				
Total Cover: _____ %				
Sapling/Shrub Stratum				
1. <i>Ornamental shrub</i>	10	No	Not Listed	
2. _____				
3. _____				
4. _____				
5. _____				
Total Cover: 10 %				
Herb Stratum				
1. <i>Bromus diandrus</i>	50	Yes	Not Listed	
2. <i>Carpobrotus edulis</i>	60	Yes	Not Listed	
3. <i>Heterotheca grandiflora</i>	2	No	Not Listed	
4. <i>Frankenia salina</i>	10	Yes	FACW*	
5. <i>Distichlis spicata</i>	5	No	FACW	
6. _____				
7. _____				
8. _____				
Total Cover: 127 %				
Woody Vine Stratum				
1. _____				
2. _____				
Total Cover: _____ %				
% Bare Ground in Herb Stratum _____ %	% Cover of Biotic Crust _____ %			

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3 % (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	0
FACW species	x 2 =	30
FAC species	x 3 =	0
FACU species	x 4 =	0
UPL species	x 5 =	610
Column Totals:		137 (A) 640 (B)
Prevalence Index = B/A =		4.67

Hydrophytic Vegetation Indicators:

Dominance Test is >50%

Prevalence Index is ≤3.0¹

Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present? Yes No

Remarks:

SOIL

Sampling Point: 6

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

Depth (inches)	Matrix		Redox Features				Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	10YR 3/2	50					Sandy loam	
0-16	10YR 3/3	50					Sandy loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.
³Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) (LRR C) <input type="checkbox"/> 1 cm Muck (A9) (LRR D) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)		<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)	Indicators for Problematic Hydric Soils:⁴ <input type="checkbox"/> 1 cm Muck (A9) (LRR C) <input type="checkbox"/> 2 cm Muck (A10) (LRR B) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)
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⁴Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present): Type: _____ Depth (inches): _____ Remarks: _____	Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/>
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HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (any one indicator is sufficient) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) (Nonriverine) <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) <input type="checkbox"/> Other (Explain in Remarks)	Secondary Indicators (2 or more required) <input type="checkbox"/> Water Marks (B1) (Riverine) <input type="checkbox"/> Sediment Deposits (B2) (Riverine) <input type="checkbox"/> Drift Deposits (B3) (Riverine) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No signs of hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: NCTD ROW City/County: Del Mar, San Diego Sampling Date: 12.16.11
 Applicant/Owner: City of Del Mar State: CA Sampling Point: 7
 Investigator(s): CJF Section, Township, Range: Section 11, Township 14 S, Range 4 West
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope (%): 0
 Subregion (LRR): C - Mediterranean California Lat: 32°58'19.10" N Long: 117°15'59.91" W Datum: NAD 83
 Soil Map Unit Name: Tujunga sand, 0 to 5 percent slopes NWI classification: Riverine Wetland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)	
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>4</u> (B)	
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75.0 %</u> (A/B)	
4. _____	_____	_____	_____	Total Cover: <u> </u> %	
Sapling/Shrub Stratum				Prevalence Index worksheet:	
1. <i>Ornamental shrub (canopy cover)</i>	<u>15</u>	<u>No</u>	<u>Not Listed</u>	Total % Cover of: _____ Multiply by: _____	
2. _____	_____	_____	_____	OBL species	<u>35</u> x 1 = <u>35</u>
3. _____	_____	_____	_____	FACW species	<u>35</u> x 2 = <u>70</u>
4. _____	_____	_____	_____	FAC species	_____ x 3 = <u>0</u>
5. _____	_____	_____	_____	FACU species	_____ x 4 = <u>0</u>
Total Cover: <u>15 %</u>				UPL species	<u>35</u> x 5 = <u>175</u>
Herb Stratum				Column Totals:	<u>105</u> (A) <u>280</u> (B)
1. <i>Bromus diandrus</i>	<u>5</u>	<u>No</u>	<u>Not Listed</u>	Prevalence Index = B/A = <u>2.67</u>	
2. <i>Carpobrotus edulis</i>	<u>15</u>	<u>Yes</u>	<u>Not Listed</u>	Hydrophytic Vegetation Indicators:	
3. <i>Salicornia virginica</i>	<u>35</u>	<u>Yes</u>	<u>OBL</u>	<input checked="" type="checkbox"/> Dominance Test is >50%	
4. <i>Frankenia salina</i>	<u>25</u>	<u>Yes</u>	<u>FACW*</u>	<input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹	
5. <i>Distichlis spicata</i>	<u>10</u>	<u>Yes</u>	<u>FACW</u>	<input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
6. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)	
7. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present.	
8. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Total Cover: <u>90 %</u>					
Woody Vine Stratum					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
Total Cover: <u> </u> %					
% Bare Ground in Herb Stratum <u> </u> %		% Cover of Biotic Crust <u> </u> %			

Remarks: Adjacent to open water.

SOIL

Sampling Point: 7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth (inches)	Matrix		Redox Features			Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹		
0-16	5Y 3/1	98				Silt loam	
0-16	5Y 6/2	2					Gold flecks throughout soil

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.
³Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) (LRR C) <input type="checkbox"/> 1 cm Muck (A9) (LRR D) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input checked="" type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)	Indicators for Problematic Hydric Soils:⁴ <input type="checkbox"/> 1 cm Muck (A9) (LRR C) <input type="checkbox"/> 2 cm Muck (A10) (LRR B) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)
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⁴Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present): Type: _____ Depth (inches): _____ Remarks: _____	Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/>
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HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (any one indicator is sufficient) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) (Nonriverine) <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) <input type="checkbox"/> Other (Explain in Remarks)	Secondary Indicators (2 or more required) <input type="checkbox"/> Water Marks (B1) (Riverine) <input type="checkbox"/> Sediment Deposits (B2) (Riverine) <input type="checkbox"/> Drift Deposits (B3) (Riverine) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input checked="" type="radio"/> No <input type="radio"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	

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

Remarks: This channel is fed by nuisance run-off and although hydric soils and hydrophytic vegetation, the lack of hydrology indicators is based off of the fact that there is no flow. In addition, the channel is deeply incised. Given the lack of flow and topography, this area is not considered to support wetland hydrology indicators.

Recent rainfall appears to have created saturation in the soil.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: NCTD ROW City/County: Del Mar, San Diego Sampling Date: 12.16.11
 Applicant/Owner: City of Del Mar State: CA Sampling Point: 8
 Investigator(s): CJF Section, Township, Range: Section 11, Township 14 S, Range 4 West
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope (%): 0
 Subregion (LRR): C - Mediterranean California Lat: 32°58'19.00" N Long: 117°15'59.71" W Datum: NAD 83
 Soil Map Unit Name: Tujunga sand, 0 to 5 percent slopes NWI classification: Riverine Wetland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: <u>Data station taken just above open water.</u>	

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				
2. _____				
3. _____				
4. _____				
Total Cover: _____ %				
Sapling/Shrub Stratum				
1. _____			OBL	
2. _____				
3. _____				
4. _____				
5. _____				
Total Cover: _____ %				
Herb Stratum				
1. <i>Bromus diandrus</i>	10	No	Not Listed	
2. <i>Carpobrotus edulis</i>	10	Yes	Not Listed	
3. <i>Salicornia virginica</i>	60	Yes	OBL	
4. <i>Frankenia salina</i>	40	Yes	FACW*	
5. <i>Distichlis spicata</i>	50	Yes	FACW	
6. _____				
7. _____				
8. _____				
Total Cover: 170%				
Woody Vine Stratum				
1. _____				
2. _____				
Total Cover: _____ %				
% Bare Ground in Herb Stratum _____ %	% Cover of Biotic Crust _____ %			

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
 Total Number of Dominant Species Across All Strata: 4 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0 % (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by: _____
 OBL species 60 x 1 = 60
 FACW species 90 x 2 = 180
 FAC species _____ x 3 = 0
 FACU species _____ x 4 = 0
 UPL species 20 x 5 = 100
 Column Totals: 170 (A) 340 (B)
 Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:
 Dominance Test is >50%
 Prevalence Index is ≤3.0¹
 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present? Yes No

Remarks: Adjacent to open water.

SOIL

Sampling Point: 8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-6	10YR 2/1	99	7.5YR 4/6	1	C	PL	Silt loam	Lots of roots present
6-16	5Y 3/1	99					Silt loam	
6-16	5Y 6/2	1						Gold flecks throughout soil

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.
³Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

<p>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</p> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) (LRR C) <input type="checkbox"/> 1 cm Muck (A9) (LRR D) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input checked="" type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)	<p>Indicators for Problematic Hydric Soils:⁴</p> <input type="checkbox"/> 1 cm Muck (A9) (LRR C) <input type="checkbox"/> 2 cm Muck (A10) (LRR B) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)
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⁴Indicators of hydrophytic vegetation and wetland hydrology must be present.

<p>Restrictive Layer (if present):</p> Type: _____ Depth (inches): _____ Remarks: _____	<p>Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/></p>
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HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators (any one indicator is sufficient)</p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) (Nonriverine) <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) <input type="checkbox"/> Other (Explain in Remarks)	<p>Secondary Indicators (2 or more required)</p> <input type="checkbox"/> Water Marks (B1) (Riverine) <input type="checkbox"/> Sediment Deposits (B2) (Riverine) <input type="checkbox"/> Drift Deposits (B3) (Riverine) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)
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<p>Field Observations:</p> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input checked="" type="radio"/> No <input type="radio"/> Depth (inches): _____	<p>Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/></p>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: This channel is fed by nuisance run-off and although hydric soils and hydrophytic vegetation, the lack of hydrology indicators is based off of the fact that there is no flow. In addition, the channel is deeply incised. Given the lack of flow and topography, this area is not considered to support wetland hydrology indicators.

Recent rainfall appears to have created saturation in the soil.

ATTACHMENT C

*Special-Status Species Potentially Occurring
in the Project Area*

Appendix C
Special-Status Species Potentially Occurring in the Project Area

Table C-1
Special-Status Wildlife Species Potentially Occurring in the Project Area

Species Latin Name	Species Common Name	Regulatory Status (Federal/ State/Other) ¹	Habitat	Potential to Occur in NCTD ROW Project Area ²	Potential to Occur in San Dieguito Project Area ²
<i>Amphibians</i>					
<i>Spea hammondi</i>	Western spadefoot	None/SSC/ None	Most common in grasslands, coastal sage scrub near rain pools or vernal pools; riparian habitat.	Not expected to occur. No suitable habitat is present within the Project Area.	Not expected to occur. No suitable habitat is present within the Project Area.
<i>Reptiles</i>					
<i>Aspidoscelis hyperythra</i>	Orangethroat whiptail	None/ SSC/ None	Coastal sage scrub, chaparral, grassland, juniper and oak woodland	Not expected to occur. No suitable habitat is present within the Project Area.	Low potential to occur. Only a small amount of suitable chaparral and coastal scrub habitat (< 0.4 acre) is present within the Project Area.
<i>Aspidoscelis tigris stejnegeri</i>	Coastal whiptail	None/None/ None	Variety of ecosystems, primarily hot and dry open areas with sparse foliage; desert to montane pine forests.	Not expected to occur. No suitable habitat is present within the Project Area.	Not expected to occur. No suitable habitat is present within the Project Area.
<i>Charina trivirgata</i>	Rosy boa	None/ None/None	Rocky chaparral, coastal sage scrub, oak woodlands, desert and semi-desert scrub	Not expected to occur. No suitable habitat is present within the Project Area.	Low potential to occur. Only a small amount of suitable chaparral and coastal scrub habitat (< 0.4 acre) is present within the Project Area.
<i>Crotalus ruber</i>	Red-diamond rattlesnake	None/ SSC/ None	Variety of shrub habitats where there is heavy brush, large rocks, or boulders	Not expected to occur. No suitable habitat is present within the Project Area.	Low potential to occur. Only a small amount of suitable chaparral and coastal scrub habitat (< 0.4 acre) is present within the Project Area.
<i>Diadophis punctatus similis</i>	San Diego ringneck snake	None/ None/ None	Open, rocky areas in moist habitats near intermittent streams: marsh, riparian woodland, sage scrub	Low potential to occur. Only a small amount of suitable habitat is present within the Project Area.	Not expected to occur. No suitable habitat is present within the Project Area.
<i>Emys marmorata</i>	Western pond turtle	None/SSC/ None	Slow-moving permanent or intermittent streams, ponds, small lakes, reservoirs with emergent basking sites; adjacent uplands used during winter	Not expected to occur. Only a small amount of suitable habitat is present within the Project Area and site is isolated from nearest possible populations (e.g., near Lake Hodges in Escondido).	Not expected to occur. No suitable habitat is present within the Project Area.

Appendix C (Continued)

**Table C-1
Special-Status Wildlife Species Potentially Occurring in the Project Area**

Species Latin Name	Species Common Name	Regulatory Status (Federal/State/Other)¹	Habitat	Potential to Occur in NCTD ROW Project Area²	Potential to Occur in San Dieguito Project Area²
<i>Plestiodon skiltonianus interparietalis</i>	Coronado Island skink	None/ SSC/ None	Grassland, riparian and oak woodland; found in litter, rotting logs, under flat stones	Not expected to occur. No suitable habitat is present within the Project Area.	Not expected to occur. No suitable habitat is present within the Project Area.
<i>Phrynosoma blainvillii</i>	Coast horned lizard	None/ SSC/None	Coastal sage scrub, annual grassland, chaparral, oak and riparian woodland, coniferous forest	Not expected to occur. No suitable habitat is present within the Project Area.	Low potential to occur. Only a small amount of suitable chaparral and coastal scrub habitat (< 0.4 acre) is present within the Project Area.
<i>Salvadora hexalepis virgulata</i>	Coast patch-nosed snake	None/ SSC/ None	Chaparral, washes, sandy flats, rocky areas	Not expected to occur. No suitable habitat is present within the Project Area.	Low potential to occur. Only a small amount of suitable chaparral and coastal scrub habitat (< 0.4 acre) is present within the Project Area.
<i>Thamnophis hammondi</i>	Two-striped garter snake	None/ SSC/ None	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools	Not expected to occur. Channel is stagnant and is not expected to support this species.	Not expected to occur due to lack of suitable habitat.
Birds					
<i>Accipiter cooperii</i>	Cooper's hawk	None/ WL/None	Riparian and oak woodlands, montane canyons	Low potential to occur. May forage over the site but no nesting habitat is present.	Low potential to occur. May forage over the site but no nesting habitat is present.
<i>Aimophila ruficeps canescens</i>	Southern California rufous-crowned sparrow	None/ WL/None	Grass-covered hillsides, coastal sage scrub, chaparral with boulders and outcrops	Not expected to occur. No suitable habitat is present within the Project Area.	Low potential to occur. Only a small amount of suitable chaparral and coastal scrub habitat (< 0.4 acre) is present within the Project Area.
<i>Amphispiza belli belli</i>	Bell's sage sparrow	BCC/ WL/ ABC	Coastal sage scrub and dry chaparral along coastal lowlands and inland valleys	Not expected to occur. No suitable habitat is present within the Project Area.	Very low potential to occur. Only a small amount of suitable chaparral and coastal scrub habitat (< 0.4 acre) is present within the Project Area.

Appendix C (Continued)

**Table C-1
Special-Status Wildlife Species Potentially Occurring in the Project Area**

Species Latin Name	Species Common Name	Regulatory Status (Federal/State/Other)¹	Habitat	Potential to Occur in NCTD ROW Project Area²	Potential to Occur in San Dieguito Project Area²
<i>Athene cunicularia</i>	Burrowing owl	BCC/ SSC/ None	Open grasslands, especially prairie, plains, and savanna, sometimes in open areas such as vacant lots near human habitation or airports, nesting and roosting in burrows dug by mammals.	Not expected to occur due to lack of suitable habitat. The disturbed habitat within the ROW is potentially suitable; however, no ground squirrel holes or other potential burrows were observed. Also, habitat areas are small and adjacent to heavily urbanized areas.	Not expected to occur due to lack of suitable habitat. The disturbed habitat is potentially suitable; however, no ground squirrel holes or other potential burrows were observed. Also, habitat areas are small and adjacent to heavily urbanized areas.
<i>Campylorhynchus brunneicapillus sandiegensis</i>	Coastal cactus wren	BCC /SSC/ None	Southern cactus scrub, maritime succulent scrub, cactus thickets in coastal sage scrub	Not expected to occur. No suitable habitat is present within the Project Area.	Not expected to occur. No suitable habitat is present within the Project Area.
<i>Charadrius alexandrinus nivosus</i>	Western snowy plover (coastal population)	FT, BCC/ SSC/None	Nests primarily on coastal beaches, in flat open areas, with sandy or saline substrates; less commonly in salt pans, dredged spoil disposal sites, dry salt ponds and levees	Very low potential to occur. May rarely forage on site but no nesting habitat is present.	Not expected to occur; no suitable habitat present.
<i>Dendroica petechia brewsteri</i>	Yellow warbler	None/SSC/ None	Nests in lowland and foothill riparian woodlands dominated by cottonwoods, alders and willows; winters in a variety of habitats	Not expected to occur. May occasionally forage over the site during migration but no nesting habitat is present.	Not expected to occur. May occasionally forage over the site during migration but no nesting habitat is present.
<i>Elanus leucurus</i>	White-tailed kite (nesting)	None/FP/ None	Herbaceous and open stages of most habitats in cismontane California, near agricultural areas.	Not expected to occur. May occasionally forage over the site but no nesting habitat is present.	Not expected to occur. May occasionally forage over the site but no nesting habitat is present.
<i>Empidonax traillii extimus</i>	Southwestern willow flycatcher	FE/SE/None	Riparian woodlands along streams and rivers with mature, dense stands of willows or alders; may nest in thickets dominated by tamarisk	Not expected to occur. No suitable habitat is present within the Project Area.	Not expected to occur. No suitable habitat is present within the Project Area.

Appendix C (Continued)

**Table C-1
Special-Status Wildlife Species Potentially Occurring in the Project Area**

Species Latin Name	Species Common Name	Regulatory Status (Federal/State/Other)¹	Habitat	Potential to Occur in NCTD ROW Project Area²	Potential to Occur in San Dieguito Project Area²
<i>Eremophila alpestris actia</i>	California horned lark	None/WL/None	Open habitats, grassland, rangeland, shortgrass prairie, montane meadows, coastal plains, fallow grain fields	Very Low potential to nest in area due to lack of suitable habitat. May rarely forage on site during non-breeding season.	Very low potential to nest in area due to lack of suitable habitat. May rarely forage on site during non-breeding season.
<i>Falco mexicanus</i>	Prairie falcon	BCC/ WL/None	Grassland, savannas, rangeland, agriculture, desert scrub, alpine meadows; nest on cliffs or bluffs	Not expected to occur. No suitable habitat is present within the Project Area.	Not expected to occur. No suitable habitat is present within the Project Area.
<i>Icteria virens</i>	Yellow-breasted chat	None/ SSC/None	Dense, relatively wide riparian woodlands and thickets of willows, vine tangles and dense brush.	Not expected to occur. No suitable habitat is present within the Project Area.	Not expected to occur. No suitable habitat is present within the Project Area.
<i>Ixobrychus exilis</i>	Least bittern	BCC/ SSC	Dense emergent wetland vegetation, sometimes interspersed with woody vegetation and open water	Moderate potential to occasionally forage in suitable habitat present within the Project Area, but low potential to nest on site due to a lack of large patches of suitable nesting habitat.	Not expected to occur. No suitable habitat is present within the Project Area.
<i>Laterallus jamaicensis coturniculus</i>	California black rail	BCC/ ST, FP/None	Saline, brackish, and fresh emergent wetlands	Very low potential to occur due to small amount of suitable habitat present within the Project Area.	Not expected to occur. No suitable habitat is present within the Project Area.
<i>Passerculus sandwichensis beldingi</i>	Belding's savannah sparrow	None/ SE/None	Saltmarsh, pickleweed	Very low potential to occur due small amount suitable habitat present within the Project Area.	Not expected to occur. No suitable habitat is present within the Project Area.
<i>Plegadis chihi</i>	White-faced ibis	SMC/ WL/None	Nests in marsh; winter foraging in shallow lacustrine waters, muddy ground of wet meadows, marshes, ponds, lakes, rivers, flooded fields and estuaries	Very low potential to occur due small amount suitable habitat present within the Project Area.	Not expected to occur. No suitable habitat is present within the Project Area

Appendix C (Continued)

**Table C-1
Special-Status Wildlife Species Potentially Occurring in the Project Area**

Species Latin Name	Species Common Name	Regulatory Status (Federal/State/Other)¹	Habitat	Potential to Occur in NCTD ROW Project Area²	Potential to Occur in San Dieguito Project Area²
<i>Polioptila californica californica</i>	Coastal California gnatcatcher	FT/SSC/None	Coastal sage scrub, coastal sage scrub-chaparral mix, coastal sage scrub-grassland ecotone, riparian in late summer	Not expected to occur. No suitable habitat is present within the Project Area.	Not expected to occur due to small amount (< 0.4 acre) of suitable habitat present within the Project Area.
<i>Rallus longirostris levipes</i>	Light-footed clapper rail	FE/ SE, P/None	Coastal saltmarsh	Very low potential to occur due small amount suitable habitat present within the Project Area.	Not expected to occur. No suitable habitat is present within the Project Area.
<i>Sternula antillarum browni</i>	California least tern	FE/ SE, P/None	Coastal waters, estuaries, large bays and harbors, mudflats; nests on sandy beaches	Low potential to occur. There is no nesting habitat for this species; however, species may occasionally forage in open water on site.	Not expected to occur. No suitable habitat is present within the Project Area.
<i>Vireo bellii pusillus</i>	Least Bell's vireo	FE, BCC/SE/None	Nests in southern willow scrub with dense cover within 1-2 meters of the ground; habitat includes willows, cottonwoods, baccharis, wild blackberry or mesquite on desert areas	Not expected to occur. No suitable habitat is present within the Project Area.	Not expected to occur. No suitable habitat is present within the Project Area.
<i>Mammals</i>					
<i>Antrozous pallidus</i>	Pallid bat	BLMS/SSC/WBWG:H	Rocky outcrops, cliffs, and crevices with access to open habitats for foraging throughout California.	Low potential to occur. No roost habitat is present but could forage on site or overhead.	Low potential to occur. No roost habitat is present but could forage on site or overhead.
<i>Chaetodipus californicus femoralis</i>	Dulzura (California) pocket mouse	None/SSC/None	Coastal sage scrub, chaparral, riparian-scrub ecotone; more mesic areas	Not expected to occur. No suitable habitat is present within the Project Area.	Moderate potential to occur. Suitable chaparral habitat is present within the Project Area.
<i>Chaetodipus fallax fallax</i>	Northwestern San Diego pocket mouse	None/ SSC None	Coastal sage scrub, grassland, sage scrub-grassland ecotones, sparse chaparral; rocky substrates, loams and sandy loams	Not expected to occur. No suitable habitat is present within the Project Area.	Low potential to occur. Only a small amount of suitable chaparral and coastal scrub habitat (< 0.4 acre) is present within the Project Area and site is isolated from large habitat areas.

Appendix C (Continued)

**Table C-1
Special-Status Wildlife Species Potentially Occurring in the Project Area**

Species Latin Name	Species Common Name	Regulatory Status (Federal/State/Other)¹	Habitat	Potential to Occur in NCTD ROW Project Area²	Potential to Occur in San Dieguito Project Area²
<i>Choeronycteris mexicana</i>	Mexican long-tongued bat	None/SSC/WBVG	Desert and montane riparian, desert succulent scrub, desert scrub, and pinyon-juniper woodland. Roosts in caves, mines, and buildings.	Not expected to occur. No suitable habitat is present within the Project Area.	Not expected to occur. No suitable habitat is present within the Project Area.
<i>Euderma maculatum</i>	Spotted bat	None/SSC/WBVG:H	Arid deserts and grasslands through mixed conifer forests; roosts in cliffs, feeds over water and along washes.	Low potential to occur. No roost habitat is present but could forage on site or overhead.	Low potential to occur. No roost habitat is present but could forage on site or overhead.
<i>Eumops perotis californicus</i>	Western mastiff bat	None/SSC/WBVG:H	Roosts in small colonies in cracks and small holes, seeming to prefer man-made structures.	Low potential to occur. No roost habitat is present but could forage on site or overhead.	Low potential to occur. No roost habitat is present but could forage on site or overhead.
<i>Lasionycteris noctivagans</i>	Silver-haired bat	None/None/WBVG:M	Coastal & montane forest, roosts in hollow trees, beneath exfoliating bark, abandoned woodpecker holes, and rarely under rocks.	Low potential to occur. No roost habitat is present but could forage on site or overhead.	Low potential to occur. No roost habitat is present but could forage on site or overhead.
<i>Lasiurus blossevillii</i>	Western red bat	None/SSC/WBVG:H	Prefers edges with trees for roosting and open areas for foraging. Roosts in woodlands and forests. Forages over grasslands, shrublands, woodlands, forests, and croplands.	Low potential to occur. No roost habitat is present but could forage on site or overhead.	Low potential to occur. No roost habitat is present but could forage on site or overhead.
<i>Lasiurus cinereus</i>	Hoary bat	None/None/WBVG:M	Prefers open habitats or habitat mosaics with access to trees for cover and open areas or habitat edges for feeding.	Low potential to occur. No roost habitat is present but could forage on site or overhead.	Low potential to occur. No roost habitat is present but could forage on site or overhead.
<i>Lasiurus xanthinus</i>	Western yellow bat	None/SSC/WBVG:H	Desert and montane riparian, desert succulent scrub, desert scrub, and pinyon-juniper woodland.	Not expected to occur. No suitable habitat is present within the Project Area.	Not expected to occur. No suitable habitat is present within the Project Area.

Appendix C (Continued)

**Table C-1
Special-Status Wildlife Species Potentially Occurring in the Project Area**

Species Latin Name	Species Common Name	Regulatory Status (Federal/State/Other)¹	Habitat	Potential to Occur in NCTD ROW Project Area²	Potential to Occur in San Dieguito Project Area²
<i>Lepus californicus bennettii</i>	San Diego black-tailed jackrabbit	None/ SSC/ None	Arid habitats with open ground; grasslands, coastal sage scrub, agriculture, disturbed areas, rangelands	Not expected to occur. No suitable habitat is present within the Project Area.	Low potential to occur. Only a very small amount of suitable coastal scrub habitat (0.06 acre) is present within the Project Area and site is isolated from large habitat areas.
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	None/ SSC/ None	Coastal sage scrub, chaparral, pinyon-juniper woodland with rock outcrops, cactus thickets, dense undergrowth	Not expected to occur. No suitable habitat is present within the Project Area.	Low potential to occur. Only a small amount of suitable chaparral and coastal scrub habitat (< 0.4 acre) is present within the Project Area and site is isolated from large habitat areas.
<i>Nyctinomops femorosaccus</i>	Pocketed free-tailed bat	None/ SSC/ WBWG:M	Rocky desert areas with high cliffs or rock outcrops	Not expected to occur. No suitable habitat is present within the Project Area.	Not expected to occur. No suitable habitat is present within the Project Area.
<i>Nyctinomops macrotis</i>	Big free-tailed bat	None/ SSC/ WBWG:MH	Rugged, rocky canyons	Not expected to occur. No suitable habitat is present within the Project Area.	Not expected to occur. No suitable habitat is present within the Project Area.
<i>Perognathus longimembris pacificus</i>	Pacific pocket mouse	FE/ SSC/ None	Grassland, coastal sage scrub with sandy soils; along immediate coast	Not expected to occur. No suitable habitat is present within the Project Area.	Not expected to occur. Only a very small amount of suitable coastal scrub habitat (0.06 acre) is present within the Project Area and site is isolated from large habitat areas. Species has not been recorded in vicinity of project site.
<i>Taxidea taxus</i>	American badger	None/SSC/ None	Dry, open treeless areas, grasslands, coastal sage scrub	Not expected to occur. No suitable habitat is present within the Project Area.	Not expected to occur. No suitable habitat is present within the Project Area and site is isolated from suitable habitat areas.
Invertebrates					
<i>Branchinecta sandiegonensis</i>	San Diego fairy shrimp	FE/ None/ None	Small, shallow vernal pools, occasionally ditches and road ruts	Not expected to occur due to lack of suitable habitat.	Not expected to occur due to lack of suitable habitat.

Appendix C (Continued)

**Table C-1
Special-Status Wildlife Species Potentially Occurring in the Project Area**

Species Latin Name	Species Common Name	Regulatory Status (Federal/State/Other) ¹	Habitat	Potential to Occur in NCTD ROW Project Area ²	Potential to Occur in San Dieguito Project Area ²
<i>Euphydryas editha quino</i>	Quino checkerspot butterfly	FE/None/None	Sparsely vegetated hilltops, ridgelines, occasionally rocky outcrops; host plant <i>Plantago erecta</i> and nectar plants must be present	Not expected to occur. No suitable habitat is present within the Project Area.	Not expected to occur. No suitable habitat is present within the Project Area.
<i>Streptocephalus woottoni</i>	Riverside fairy shrimp	FE/None/None	Deep, long-lived vernal pools, vernal pool-like seasonal ponds, stock ponds; warm water pools that have low to moderate dissolved solids	Not expected to occur due to lack of suitable habitat.	Not expected to occur due to lack of suitable habitat.

¹ Regulatory Status (CDFG 2011b-c)

² Vicinity is based on a search of the CNDDDB database for the Del Mar quad and the eight surrounding quads conducted in December 2011 (CDFG 2011a).

Federal Designations

FE: Species listed as endangered by the U.S. Fish and Wildlife Service (USFWS).

FT: Species listed as threatened by the USFWS.

BCC: USFWS Birds of Conservation Concern

State Designations

SE: Species listed as endangered by the California Fish and Game Commission.

ST: Species listed as threatened by the California Fish and Game Commission.

FP: California Department of Fish and Game Protected and Fully Protected Species

SSC: Species of Special Concern Species; considered by CDFG as possibly facing extinction in California due to declining populations or habitat.

WL: CDFG-Watch List

Other

WBWG:M: Western Bat Working Group Medium Priority species

WBWG:MH: Western Bat Working Group Medium-High Priority species

WBWG:H: Western Bat Working Group High Priority species

Appendix C (Continued)

**Table C-2
Special-Status Plant Species Potentially Occurring in the Project Area**

Species Latin Name	Species Common Name	Regulatory Status ¹	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Potential to Occur in NCTD ROW Project Area²	Potential to Occur in San Dieguito Project Area²
<i>Abronia maritima</i>	Red sand-verbena	None/None/CRPR 4.2	Coastal dunes/perennial herb/February-November/0-100 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.
<i>Acanthomintha ilicifolia</i>	San Diego thornmint	FT/ SE/CRPR 1B.1	Chaparral, coastal sage scrub, valley and foothill grassland, vernal pools, clays/annual herb/April-June/10-960 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Not expected to occur. Suitable chaparral habitat is present and the Project Area is within elevation range for this species; however, suitable clay soils are absent.
<i>Acmispon prostratus</i>	Nuttall's lotus	None/None/CRPR 1B.1	Coastal dunes, coastal sage scrub; sandy/annual herb/March-June/0-10 meters	Not expected. Suitable vegetation is absent; however, suitable sandy soils are present. The Project Area is slightly above elevation range for this species.	Not expected. Suitable vegetation is absent; however, suitable sandy soils are present. The Project Area is slightly above elevation range for this species.
<i>Adolphia californica</i>	California adolphia	None/None/CRPR 2.1	Chaparral, coastal sage scrub, valley and foothill grassland, clays/deciduous shrub/December-May/45-740 meters	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.	Low potential to occur. Suitable chaparral habitat is present and the Project Area is within elevation range for this species; however, suitable clay soils are absent.
<i>Agave shawii</i>	Shaw's agave	None/None/CRPR 2.1	Coastal bluff scrub, coastal sage scrub/leaf succulent/September - May/10-75 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.
<i>Ambrosia monogyra</i>	singlewhorl burrobrush	None/None/CRPR 2.2	Chaparral, Sonoran desert scrub, sandy/perennial shrub/Aug-Nov/10-500 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Not expected to occur. Suitable habitat is present and the Project Area is within elevation range for species; however, this species is readily visible year-round and was not observed during the field survey

Appendix C (Continued)

**Table C-2
Special-Status Plant Species Potentially Occurring in the Project Area**

Species Latin Name	Species Common Name	Regulatory Status ¹	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Potential to Occur in NCTD ROW Project Area²	Potential to Occur in San Dieguito Project Area²
<i>Ambrosia pumila</i>	San Diego ambrosia	FE/ None/ CRPR 1B.1	Chaparral, coastal sage scrub, valley and foothill grassland, vernal pools, clays/rhizomatous herb/May–October/20-415 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Not expected to occur. Suitable chaparral habitat is present and the Project Area is within elevation range for this species; however, suitable clay soils are absent.
<i>Aphanisma blitoides</i>	Aphanisma	None/None/ CRPR 1B.2	Coastal bluff scrub, coastal sage scrub, sandy soils/annual herb/March-June/1-305 meters	Not expected. No suitable vegetation is present; however, suitable sandy soils are present and the Project Area is within elevation range for this species.	Not expected. No suitable vegetation is present; however, suitable sandy soils are present and the Project Area is within elevation range for this species.
<i>Arctostaphylos glandulosa ssp. crassifolia</i>	Del Mar manzanita	FE/None/ CRPR 1B.1	Chaparral; maritime, sandy/evergreen shrub/December-June/0-365 meters	Not expected. No suitable vegetation is present; however, suitable sandy soils are present and the Project Area is within elevation range for this species.	Not expected to occur. Suitable habitat is present and the Project Area is within elevation range for species; however, this species is readily visible year-round and was not observed during field survey.
<i>Artemisia palmeri</i>	San Diego sagewort	None/None/ CRPR 4.2	Chaparral, coastal scrub, riparian forest, scrub, and woodland; sandy, mesic/ deciduous shrub/ May-September/15-915 meters	Low potential to occur. Marginal suitable habitat is present and the Project Area is within elevation range for species.	Moderate potential to occur. Suitable habitat is present and the Project Area is within elevation range for species.
<i>Asplenium vespertinum</i>	Western spleenwort	None/None/ CRPR 4.2	Chaparral, cismontane woodland, coastal scrub, rocky soils/rhizomatous herb/February-June/180-1000 meters	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.	Not expected. Suitable habitat is present; however, the Project Area is below elevation range for this species.
<i>Astragalus tener var. titi</i>	Coastal dunes milk-vetch	FE/ SE/CRPR 1B.1	Coastal bluff scrub, coastal dunes, coastal prairie/annual herb/March–May/1-50 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.

Appendix C (Continued)

**Table C-2
Special-Status Plant Species Potentially Occurring in the Project Area**

Species Latin Name	Species Common Name	Regulatory Status ¹	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Potential to Occur in NCTD ROW Project Area²	Potential to Occur in San Dieguito Project Area²
<i>Atriplex coulteri</i>	Coulter's saltbush	None/None/CRPR 1B.2	Coastal bluff scrub, coastal dunes, coastal sage scrub, valley and foothill grassland, alkaline or clay soils/perennial herb/March–October/3-460 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.
<i>Atriplex pacifica</i>	South Coast saltscale	None/None/CRPR 1B.2	Coastal bluff scrub, coastal sage scrub, playas/annual herb/March–October/0-140 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.
<i>Atriplex serenana</i> var. <i> davidsonii</i>	Davidson's saltscale	None/None/CRPR 1B.2	Coastal bluff scrub, coastal scrub; alkaline/annual herb/April–October/10-200 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.
<i>Baccharis vanessae</i>	Encinitas baccharis	FT/SE/CRPR 1B.1	Chaparral, cismontane woodland; sandstone/deciduous shrub/August–November/60-720 meters	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.	Not expected to occur. Suitable chaparral habitat is present and the Project Area is within elevation range for this species; however, suitable sandstone soils are absent. Additionally, this is a shrub species and surveys were conducted during the blooming period when it would have been visible; species was not observed.
<i>Berberis nevini</i>	Nevin's barberry	FE/SE/CRPR 1B.1	Chaparral, cismontane woodland, coastal scrub, riparian scrub; sandy or gravelly/evergreen shrub/ March–June/274-825 meters	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.	Not expected. Suitable habitat is present; however, the Project Area is below elevation range for this species.
<i>Bergerocactus emoryi</i>	Golden-spined cereus	None/None/CRPR 2.2	Closed-cone coniferous forest, chaparral, coastal scrub; sandy/stem succulent/May–June/3-395 meters	Not expected. No suitable vegetation is present; however, suitable sandy soils are present and the Project Area is within elevation range for this species.	Moderate potential to occur. Suitable habitat is present and the Project Area is within elevation range for species.

Appendix C (Continued)

**Table C-2
Special-Status Plant Species Potentially Occurring in the Project Area**

Species Latin Name	Species Common Name	Regulatory Status ¹	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Potential to Occur in NCTD ROW Project Area²	Potential to Occur in San Dieguito Project Area²
<i>Bloomeria (=Muilla) clevelandii</i>	San Diego goldenstar	None/None/CRPR 1B.1	Chaparral, coastal sage scrub, valley and foothill grassland, vernal pools/bulbiferous herb/April–May/50-465 meters	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.	Moderate potential to occur. Suitable habitat is present and the Project Area is within elevation range for species.
<i>Brodiaea filifolia</i>	Thread-leaved brodiaea	FT/SE/CRPR 1B.1	Chaparral, cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools; often clay/bulbiferous herb/March-May/25-1120 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Not expected to occur. Suitable chaparral habitat is present and the Project Area is within elevation range for this species; however, suitable clay soils are absent.
<i>Brodiaea orcuttii</i>	Orcutt's brodiaea	None/None/CRPR 1B.1	Closed-cone conifer forest, chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, vernal pools, clays/bulbiferous herb/May–July/30-1692 meters	Not expected to occur. No suitable habitat, the Project Area is slightly below elevation range for this species, and suitable clay soils are absent.	Not expected to occur. Suitable chaparral habitat is present; however, the Project Area is below elevation range for this species and suitable clay soils are absent.
<i>Calandrinia breweri</i>	Brewer's calandrinia	None/None/4.2	Chaparral, coastal scrub/sandy or loamy soils, disturbed sites and burns/annual herb/March-June/10-1220 meters	Not expected. No suitable vegetation is present; however, the Project Area is within elevation range for this species and suitable soils are present.	Moderate potential to occur. Suitable habitat is present and the Project Area is within elevation range for this species.
<i>Camissoniopsis lewisii</i>	Lewis' evening-primrose	None/none/CRPR 3	Coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, valley and foothill grassland; sandy or clay soils/March-May/0-300 meters	Not expected. No suitable vegetation is present; however, the Project Area is within elevation range for this species and suitable soils are present.	Not expected. No suitable vegetation is present; however, the Project Area is within elevation range for this species and suitable soils are present.
<i>Ceanothus cyaneus</i>	Lakeside ceanothus	None/None/CRPR 1B.2	Closed-cone coniferous forest, chaparral/evergreen shrub/April-June/235-755 meters	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.	Not expected. Suitable habitat is present; however, the Project Area is below elevation range for this species.

Appendix C (Continued)

**Table C-2
Special-Status Plant Species Potentially Occurring in the Project Area**

Species Latin Name	Species Common Name	Regulatory Status ¹	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Potential to Occur in NCTD ROW Project Area²	Potential to Occur in San Dieguito Project Area²
<i>Ceanothus verrucosus</i>	wart-stemmed ceanothus	None/None/CRPR 2.2	Chaparral / shrub /December-May/1-380 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Not expected to occur. Suitable habitat is present and the Project Area is within elevation range for species; however, species is readily visible and was not observed during field survey.
<i>Centromadia parryi ssp. australis</i>	Southern tarplant	None/None/CRPR 1B.1	Marshes and swamps, valley and foothill grassland, vernal pools; vernal mesic/annual herb/May-November/0-425 meters	Not expected to occur. Suitable habitat is present and the Project Area is within elevation range for species; however, field survey was conducted during blooming season and the species was not observed	Not expected to occur. Marginal habitat is present and the Project Area is within elevation range for this species; however, field survey was conducted during blooming season and the species was not observed
<i>Centromadia pungens ssp. laevis</i>	Smooth tarplant	None/None/CRPR 1B.1	Chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland; alkaline/annual herb/April-September/0-640 meters	Low potential to occur. Suitable habitat is present and the Project Area is within elevation range for this species.	Low potential to occur. Marginal habitat is present and the Project Area is within elevation range for this species.
<i>Chaenactis glabriuscula var. orcuttiana</i>	Orcutt's pincushion	None/None/CRPR 1B.1	Coastal bluff and dune scrub / annual herb / January–August/0-100 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.
<i>Chorizanthe orcuttiana</i>	Orcutt's spineflower	FE/ SE/CRPR 1B.1	Chaparral, closed-cone conifer forest, coastal sage scrub/annual herb/March–May/3-125 meters	Not expected. No suitable habitat is present.	Low potential to occur. Suitable marginal habitat is present and the Project Area is within elevation range for species.
<i>Chorizanthe polygonoides var. longispina</i>	Long-spined spineflower	None/None/CRPR 1B.2	Chaparral, coastal sage scrub, meadows and seeps, valley and foothill grassland, often clay/annual herb/April–July/30-1530 meters	Low potential to occur. Suitable vegetation is present and the Project Area is within elevation range for this species; however, clay soils are absent.	Low potential to occur. Suitable vegetation is present and the Project Area is within elevation range for this species; however, clay soils are absent.

Appendix C (Continued)

**Table C-2
Special-Status Plant Species Potentially Occurring in the Project Area**

Species Latin Name	Species Common Name	Regulatory Status ¹	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Potential to Occur in NCTD ROW Project Area²	Potential to Occur in San Dieguito Project Area²
<i>Cistanthe maritima</i>	Seaside cistanthe	None/None/None	Sea bluffs, sandy soils/annual herb/March-April/0-300 meters	Not expected. No suitable vegetation is present; however, the Project Area is within elevation range for this species and suitable sandy soils are present.	Not expected. No suitable vegetation is present; however, the Project Area is within elevation range for this species and suitable sandy soils are present.
<i>Clarkia delicata</i>	Delicate clarkia	None/None/CRPR 1B.2	Chaparral, cismontane woodland/ annual herb/April–June/235-1000 meters	Not expected. No suitable habitat is present and Project Area is below elevation range for this species.	Not expected. Suitable habitat is present; however, Project Area is below elevation range for this species.
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>	Summer-holly	None/None/CRPR 1B.2	Chaparral cismontane woodland/ evergreen shrub /April–June/30-790 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Moderate potential to occur. Suitable habitat is present and the Project Area is within elevation range for species.
<i>Convolvulus simulans</i>	Small-flowered morning-glory	None/None/CRPR 4.2	Chaparral, coastal scrub, valley and foothill grassland; clay, serpentine seeps/annual herb/March-July/30-700 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Low potential to occur. Suitable chaparral habitat is present and the Project Area is within elevation range for this species; however, suitable soils are absent.
<i>Corethrogyne filaginifolia</i> var. <i>incana</i>	San Diego sand aster	None/None/CRPR 1B.1	Chaparral, Coastal sage scrub/perennial herb/June–September/3-115 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Moderate potential to occur. Suitable habitat is present and the Project Area is within elevation range for species.
<i>Corethrogyne filaginifolia</i> var. <i>linifolia</i>	Del Mar Mesa sand aster	None/None/CRPR 1B.1	Coastal bluff scrub, chaparral, coastal sage scrub; sandy/perennial herb/May-September/15-150 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Moderate potential to occur. Suitable habitat is present and the Project Area is within elevation range for species.
<i>Cylindropuntia californica</i>	Snake cholla	None/None/CRPR 1B.1	Chaparral, coastal sage scrub/stem succulent/April–May/30-150 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Moderate potential to occur. Suitable habitat is present and the Project Area is within elevation range for species.

Appendix C (Continued)

**Table C-2
Special-Status Plant Species Potentially Occurring in the Project Area**

Species Latin Name	Species Common Name	Regulatory Status ¹	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Potential to Occur in NCTD ROW Project Area²	Potential to Occur in San Dieguito Project Area²
<i>Dichondra occidentalis</i>	Western dichondra	None/None/4.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland/rhizomatous herb/March-July/50-500 meters	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.	Moderate potential to occur. Suitable habitat is present and the Project Area is within elevation range for this species.
<i>Dudleya blochmaniae</i> ssp. <i>insularis</i>	Santa Rosa Island dudleya	None/none/CRPR 1B.1	Coastal bluffs/perennial herb/March-April/3-3 meters	Not expected. No suitable habitat is present and the Project Area is above elevation range for this species.	Not expected. No suitable habitat is present and the Project Area is above elevation range for this species.
<i>Dudleya brevifolia</i>	Short-leaved dudleya	None/SE/CRPR 1B.1	Chaparral, coastal sage scrub; Torrey sandstone/perennial herb/April-May/30-250 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Not expected to occur. Suitable vegetation is present; however, the Project Area is below elevation range for this species and sandstone soils are absent.
<i>Dudleya variegata</i>	Variiegated dudleya	None/None/CRPR 1B.2	Chaparral, cismontane woodland, coastal sage scrub, valley and foothill grassland, vernal pools/perennial herb/April-June/3-580 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Moderate potential to occur. Suitable habitat is present and the Project Area is within elevation range for species.
<i>Dudleya viscida</i>	Sticky dudleya	None/None/CRPR 1B.2	Coastal bluff scrub, chaparral, coastal sage scrub, rocky areas/perennial herb/May-June/10-550 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Low potential to occur. Suitable habitat is present; however, does not support rocky areas. The Project Area is within elevation range for species.
<i>Ericameria palmeri</i> var. <i>palmeri</i>	Palmer's goldenbush	None/None/CRPR 1B.1	Chaparral, coastal sage scrub/evergreen shrub/September-November/0-600 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Not expected to occur. Suitable habitat is present and the Project Area is within elevation range for species; however, this is a perennial shrub and was not observed during field survey.
<i>Eryngium aristulatum</i> var. <i>hooveri</i>	Hoover's button-celery	None/None/CRPR 1B.1	Vernal pools/annual-perennial herb/July-August/3-45 meters	Not expected to occur. No suitable habitat present.	Not expected to occur. No suitable habitat present.

Appendix C (Continued)

**Table C-2
Special-Status Plant Species Potentially Occurring in the Project Area**

Species Latin Name	Species Common Name	Regulatory Status ¹	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Potential to Occur in NCTD ROW Project Area²	Potential to Occur in San Dieguito Project Area²
<i>Eryngium aristulatum</i> var. <i>parishii</i>	San Diego button-celery	FE/SE/CRPR 1B.1	Coastal sage scrub, valley and foothill grassland, vernal pools, mesic areas/annual-perennial herb/April–June/20-620 meters	Not expected to occur. No suitable habitat present.	Not expected to occur. Marginal habitat is present and the Project Area; however, site is elevation range for this species.
<i>Erysimum ammophilum</i>	sand-loving wallflower	None/None/CRPR 1B.2	Maritime chaparral, coastal dunes and scrub; sandy/perennial herb/February–June/0-60 meters	Not expected. No suitable vegetation is present; however, the Project Area is within elevation range for this species and suitable sandy soils are present.	Moderate potential to occur. Suitable habitat is present and the Project Area is within elevation range for species.
<i>Euphorbia misera</i>	Cliff spurge	None/None/CRPR 2.2	Coastal bluff scrub, coastal sage scrub, Mojavean desert scrub; rocky areas/shrub/December–August/10-500 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.
<i>Ferocactus viridescens</i>	San Diego barrel cactus	None/None/CRPR 2.1	Chaparral, coastal sage scrub, valley and foothill grassland, vernal pools/perennial stem succulent/May-June/3-450 meters	Not expected to occur. Not suitable habitat present; however, the Project Area is within elevation range for this species.	Moderate potential to occur. Suitable habitat is present and the Project Area is within elevation range for species.
<i>Frankenia palmeri</i>	Palmer's frankenia	None/None/CRPR 2.1	Coastal dunes, marshes and swamps, playas/perennial herb/May-July/0-10 meters	Low potential to occur. Suitable habitat is present and the Project Area is within elevation range for this species; however, limited habitat is present.	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.
<i>Geothallus tuberosus</i>	Campbell's liverwort	None/None/CRPR 1B.1	Coastal scrub (mesic), vernal pools and soil / ephemeral liverwort/NA	Not expected. No suitable habitat is present.	Not expected. No suitable habitat is present.
<i>Githopsis diffusa</i> ssp. <i>filicaulis</i>	Mission Canyon bluecup	None/None/CRPR 3.1	Chaparral; mesic, disturbed areas/annual herb/April-June/450-700 meters	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.	Not expected. Suitable habitat is present; however, the Project Area is below elevation range for this species.
<i>Grindelia hallii</i>	San Diego gumplant	None/None/None	Meadows, dry slopes, open pine/oak woodland/perennial herb/July-October/800-1700 meters	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.

Appendix C (Continued)

**Table C-2
Special-Status Plant Species Potentially Occurring in the Project Area**

Species Latin Name	Species Common Name	Regulatory Status ¹	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Potential to Occur in NCTD ROW Project Area²	Potential to Occur in San Dieguito Project Area²
<i>Harpagonella palmeri</i>	Palmer's grapplinghook	None/None/CRPR 4.2	Chaparral, coastal scrub, valley and foothill grassland; clay/annual herb/March-May/20-955 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Low potential to occur. Suitable vegetation is present and the Project Area is within elevation range for this species; however, clay soils are absent.
<i>Hazardia orcuttii</i>	Orcutt's hazardia	FC/ST/CRPR 1B.1	Chaparral, coastal scrub; clay/evergreen shrub/August-October/80-85 meters	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.	Not expected to occur. Suitable vegetation is present; however, the Project Area is slightly below elevation range for this species and suitable clay soils are absent. Additionally, this species is readily visible year-round and was not observed during field surveys.
<i>Heterotheca sessiliflora</i> ssp. <i>sessiliflora</i>	Beach goldenaster	None/None/CRPR 1B.1	Chaparral (coastal), Coastal dunes, Coastal scrub/perennial herb/July–November/0-60 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Moderate potential to occur. Suitable habitat is present and the Project Area is within elevation range for species.
<i>Holocarpha virgata</i> ssp. <i>elongata</i>	Graceful tarplant	None/None/4.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland/annual herb/May-November/60-1100 meters	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.	Low potential to occur. Suitable habitat is present and the Project Area is within elevation range for species. Field survey was conducted during blooming period and it was not observed.
<i>Isocoma menziesii</i> var. <i>decumbens</i>	Decumbent goldenbush	None/None/CRPR 1B.2	Chaparral, coastal sage scrub (sandy, often disturbed areas)/shrub/April–November/10-135 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Moderate potential to occur. Suitable habitat is present and the Project Area is within elevation range for species.

Appendix C (Continued)

**Table C-2
Special-Status Plant Species Potentially Occurring in the Project Area**

Species Latin Name	Species Common Name	Regulatory Status ¹	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Potential to Occur in NCTD ROW Project Area²	Potential to Occur in San Dieguito Project Area²
<i>Iva hayesiana</i>	San Diego marsh-elder	None/None/CRPR 2.2	Playas, riparian, floodplain-upland ecotone/perennial herb/April–October/10-500 meters	Not expected to occur. Marginal suitable habitat is present and the Project Area is within elevation range for this species. Field survey was conducted during blooming period and it was not observed	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.
<i>Juncus acutus</i> ssp. <i>leopardii</i>	Southwestern spiny rush	None/None/CRPR 4.2	Costal dunes, meadows and seeps, marshes and swamps/rhizomatous herb/May-June/3-900 meters	Low potential to occur. Small amount of suitable habitat is present and the Project Area is within elevation range for species.	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Coulter's goldfields	None/None/CRPR 1B.1	Saltwater marsh and swamps, playas, vernal pools/annual herb/February–June/1-1220 meters	Low potential to occur. Small amount of marginal habitat is present and the Project Area is within elevation range for species.	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.
<i>Lepidium virginicum</i> var. <i>robinsonii</i>	Robinson's pepper-grass	None/None/CRPR 1B.2	Chaparral, coastal sage scrub/annual herb/January–July/1-885 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Moderate potential to occur. Suitable habitat is present and the Project Area is within elevation range for species.
<i>Leptosyne maritima</i>	Sea dahlia	None/None/None	Seabluffs/perennial/February-June/0-20 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.
<i>Microseris douglasii</i> ssp. <i>platycarpa</i>	Small-flowered microseris	None/None/CRPR 4.2	Cismontane woodland, coastal scrub, valley and foothill grassland, vernal pools; clay soils/annual herb/March-May/15-1070 meters	Not expected to occur. No suitable habitat is present. The Project Area is within elevation range for this species; however, suitable clay soils are absent.	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.
<i>Mimulus palmeri</i>	Palomar monkeyflower	None/None/CRPR 4.3	Chaparral, lower montane coniferous forest; sandy or gravelly soils/annual herb/April-June/1220-1830 meters	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.	Not expected. Suitable habitat is present; however, the Project Area is below elevation range for this species.

Appendix C (Continued)

**Table C-2
Special-Status Plant Species Potentially Occurring in the Project Area**

Species Latin Name	Species Common Name	Regulatory Status ¹	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Potential to Occur in NCTD ROW Project Area²	Potential to Occur in San Dieguito Project Area²
<i>Monardella hypoleuca</i> ssp. <i>lanata</i>	Felt-leaved monardella	None/None/CRPR 1B.2	Chaparral, cismontane woodland/ rhizomatous herb/June–August/300-1575 meters	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.	Not expected. Suitable habitat is present; however, the Project Area is below elevation range for this species.
<i>Monardella viminea</i>	willow monardella	FE/SE/CRPR 1B.1	Chaparral, coastal scrub, riparian forest, woodland, and scrub; alluvial ephemeral washes/ perennial herb/ June–August/50-225 meters	Not expected. Marginal suitable habitat is present; however, the Project Area is below elevation range for this species.	Not expected to occur. Suitable habitat is present; however, the Project Area is well below elevation range for species.
<i>Myosurus minimus</i> ssp. <i>apus</i>	Little mousetail	None/None/CRPR 3.1	Vernal pools, valley and foothill grassland; alkaline/ annual herb/ March–June/20-640 meters	Not expected to occur; no suitable habitat is present.	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.
<i>Navarretia fossalis</i>	Moran's nosegay (Spreading navarretia)	FT/ None/CRPR 1B.1	Chenopod scrub, shallow freshwater marshes and swamps, playas, hard pan and claypan vernal pools/ annual herb/ April–June/30-655 meters	Not expected to occur. Hardpan and claypan microhabitat required for this species is not present.	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.
<i>Navarretia prostrata</i>	Prostrate (vernal pool) navarretia	None/None/CRPR 1B.1	Coastal scrub, meadows and seeps, valley and foothill grassland (alkaline), Vernal pools, mesic / annual herb / April–July/15-1210 meters	Not expected to occur. No suitable habitat is present.	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.
<i>Nemacaulis denudata</i> var. <i>denudata</i>	Coast woolly-heads	None/None/CRPR 1B.2	Coastal dunes/annual herb/April–September/0-100 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.
<i>Nemacaulis denudata</i> var. <i>gracilis</i>	Slender cottonheads	None/None/CRPR 2.2	Coastal dunes, desert dunes, Sonoran Desert scrub/annual herb/April–May/-50-400 meters	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.
<i>Orcuttia californica</i>	California Orcutt grass	FE/SE/CRPR 1B.1	Vernal pools/annual herb/April–August/15-660 meters	Not expected to occur. No suitable habitat is present.	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.

Appendix C (Continued)

**Table C-2
Special-Status Plant Species Potentially Occurring in the Project Area**

Species Latin Name	Species Common Name	Regulatory Status ¹	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Potential to Occur in NCTD ROW Project Area²	Potential to Occur in San Dieguito Project Area²
<i>Orobanche parishii</i> ssp. <i>brachyloba</i>	Short-lobed broomrape	None/None/CRPR 4.2	Coastal bluff scrub, coastal dunes, coastal scrub; sandy/perennial herb parasitic/April-October/3-305 meters	Not expected. No suitable vegetation is present; however, the Project Area is within elevation range for this species and suitable sandy soils are present.	Not expected. No suitable vegetation is present; however, the Project Area is within elevation range for this species and suitable sandy soils are present.
<i>Phacelia ramosissima</i>	South coast branching phacelia	None/None/CRPR 3.2	Chaparral, coastal dunes, coastal scrub, marshes and swamps; sandy sometimes rocky soils/March-August/5-300 meters	Low potential to occur. Small amount of suitable habitat is present and the Project Area is within elevation range for species.	Moderate potential to occur. Suitable habitat is present and the Project Area is within elevation range for species.
<i>Phacelia stellaris</i>	Brand's star phacelia	FC/None/CRPR 1B.1	Coastal dunes, coastal sage scrub/annual herb/March-June/1-400 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.
<i>Pinus torreyana</i> ssp. <i>torreyana</i>	Torrey pine	None/None/CRPR 1B.2	Closed-cone coniferous forest, chaparral; sandstone/evergreen tree/75-160 meters	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.	Not expected to occur. Suitable vegetation is present; however, the Project Area is slightly below elevation range for this species and suitable sandstone soils are absent. Additionally, this species is readily visible year-round and was not observed during field survey.
<i>Piperia cooperi</i>	Chaparral rein orchid	None/None/CRPR 4.2	Chaparral, cismontane woodland, valley and foothill grassland/perennial herb/March-June/15-1585 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Low potential to occur. Suitable habitat is present; however, the Project Area is slightly below elevation range for species.
<i>Pogogyne abramsii</i>	San Diego mesa mint	FE/SE/CRPR 1B.1	Vernal pools/annual herb/March-July/90-200 meters	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.

Appendix C (Continued)

**Table C-2
Special-Status Plant Species Potentially Occurring in the Project Area**

Species Latin Name	Species Common Name	Regulatory Status ¹	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Potential to Occur in NCTD ROW Project Area²	Potential to Occur in San Dieguito Project Area²
<i>Pogogyne nudiuscula</i>	Otay Mesa mint	FE/SE/CRPR 1B.1	Vernal pools/annual herb/May-July/90-250 meters	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.
<i>Quercus dumosa</i>	Nuttall's scrub oak	None/None/CRPR 1B.1	Close-cone coniferous forest, chaparral, coastal scrub; sandy, clay loam/evergreen shrub/February-April/15-400 meters	Not expected. No suitable vegetation is present; however, the Project Area is within elevation range for this species and suitable sandy soils are present.	Not expected to occur. Suitable habitat is present and the Project Area is within elevation range for species; however, this species is readily visible year-round and was not observed during field surveys
<i>Quercus engelmannii</i>	Englemann oak	None/None/CRPR 4.2	Chaparral, cismontane woodland, riparian woodland, valley and foothill grassland/deciduous tree/March-June/50-1300 meters	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.	Not expected to occur. Suitable habitat is present and Project Area is within elevation range for this species; however, this species is readily visible year-round and was not observed during field surveys
<i>Senecio aphanactis</i>	rayless (Chaparral) ragwort	None/None/CRPR 2.2	Chaparral, cismontane woodland, coastal sage scrub, alkaline soils/annual herb/ January–April/15-800 meters	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.	Low potential to occur. Suitable chaparral habitat is present and the Project Area is within elevation range for species.
<i>Sphaerocarpos drewei</i>	Bottle liverwort	None/None/CRPR 1B.1	Coastal sage scrub/90-600 meters	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.	Not expected. Suitable habitat is present; however, the Project Area is below elevation range for this species.
<i>Stemodia durantifolia</i>	Purple stemodia	None/None/CRPR 2.1	Sonoran desert scrub (often mesic, sandy) / perennial herb / January–December/180-300 meters	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.
<i>Stylocline citroleum</i>	oil neststraw	None/None/CRPR 1B.1	Chenopod scrub, coastal scrub, valley and foothill grassland. Clay soils/ Annual herb / March–April/50-400 meters	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.	Not expected. No suitable habitat is present; however, the Project Area is within elevation range for this species.

Appendix C (Continued)

**Table C-2
Special-Status Plant Species Potentially Occurring in the Project Area**

Species Latin Name	Species Common Name	Regulatory Status ¹	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Potential to Occur in NCTD ROW Project Area ²	Potential to Occur in San Dieguito Project Area ²
<i>Suaeda esteroa</i>	estuary seablite	None/None/CRPR 1B.2	Saltmarsh and swamps/perennial herb/May–October/0-5 meters	Not expected to occur. Suitable habitat is present; however, the Project Area is slightly above elevation range for species. Field survey was conducted during blooming period and the species was not observed.	Not expected. No suitable habitat is present and the Project Area is above elevation range for this species.
<i>Viguiera laciniata</i>	San Diego County viguiera	None/None/CRPR 4.2	Chaparral, coastal scrub/shrub/February-June/60-750 meters	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.	Not expected to occur. Suitable habitat is present; however, Project Area is well below elevation range for this species.
<i>Xanthisma junceum</i>	Rush-like bristleweed	None/None/CRPR 4.3	Chaparral, coastal sage scrub/perennial herb/June-January/240-1000 meters	Not expected. No suitable habitat is present and the Project Area is below elevation range for this species.	Not expected. Suitable habitat is present; however, the Project Area is below elevation range for this species.

¹ Regulatory Status (CDFG 2011b; CNPS 2011a)

² Vicinity is based on a search of the CNDDDB and CNPS databases for the Del Mar quad and the eight surrounding quads conducted in December 2011.

State Designations

ST: State threatened

SE: State endangered

SSC: Species of special concern species; considered by CDFG as possibly facing extinction in California due to declining populations or habitat

WL: CDFG watch list

Federal Designations

FE: Species listed as endangered by USFWS

FT: Species listed as threatened by USFWS

CNPS

Rare Plant Rank (RPR)

1A: Plants presumed extinct in California

1B: Plants rare, threatened, or endangered in California and elsewhere

2: Plants rare, threatened, or endangered in California, but more common elsewhere

3: Plants about which we need more information—a review list

4: Plants of limited distribution—a watch list

Threat Ranks

0.1: Seriously threatened in California (high degree/immediacy of threat)

0.2: Fairly threatened in California (moderate degree/immediacy of threat)

0.3: Not very threatened in California (low degree/immediacy of threats or no current threats known)

ATTACHMENT D
Floral Compendium

APPENDIX D Floral Compendium

VASCULAR SPECIES

DICOTS

***ASTERACEAE* – SUNFLOWER FAMILY**

Jaumea carnosa – marsh jaumea

***APIACEAE* – CARROT FAMILY**

* *Apium graveolens* – wild celery

* *Conium maculatum* – poison hemlock

***AIZOACEAE* – FIG-MARIGOLD FAMILY**

Carpobrotus edulis – hottentot fig

***CHENOPODIACEAE* – GOOSEFOOT FAMILY**

Atriplex triangularis – triangle orache

***ANACARDIACEAE* – SUMAC OR CASHEW FAMILY**

Rhus integrifolia – lemonade sumac

MONOCOTS

***POACEAE* – GRASS FAMILY**

Distichlis spicata – saltgrass

***JUNCACEAE* – RUSH FAMILY**

Juncus acutus – spiny rush

***CYPERACEAE* – SEDGE FAMILY**

Bolboschoenus maritimus – cosmopolitan bulrush

APPENDIX D (Continued)

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APPENDIX B

Streambed Alteration Agreement Notification

21ST STREET DITCH PROJECT

City of Del Mar, California

Streambed Alteration Agreement Notification Package

Prepared For:

**California Department of Fish and Wildlife
South Coast Region**

3883 Ruffin Road

San Diego, CA 92123

Contact: Ms. Marilyn Fluharty

(858) 467-4201

Prepared By:

Michael Baker International

14725 Alton Parkway

Irvine, California 92618

Contact: Richard Beck

949.855.3687

November 21, 2016

November 21, 2016

**California Department of Fish and Wildlife
South Coast Region**

Attn: Ms. Marilyn Fluharty
3883 Ruffin Road
San Diego, California 92123

SUBJECT: Notification under Section 1602 of the California Fish and Game Code for Routine Maintenance Activities for the 21st Street Ditch Project, City of Del Mar, County of San Diego, California

Dear Ms. Fluharty:

On behalf of the City of Del Mar (Applicant), Michael Baker International (Michael Baker) is submitting this notification package to the California Department of Fish and Wildlife (CDFW) in accordance with Section 1602 of the California Fish and Game Code. The 21st Street Ditch Project, herein referred to as the project site, is located within the City of Del Mar, County of San Diego, California. Please refer to Section 2; Exhibit 1 *Regional Vicinity*, Exhibit 2 *Site Vicinity*, and Exhibit 3 *Project Site* of this application package.

An unnamed drainage feature carries floodwater flows through the project site from a 4-foot box culvert to the west. Flows are carried through the project site by way of a concrete ditch from west to east, and exits the project site through a 5-foot culvert near the terminus of 21st Street. The feature routinely overtops and floods adjoining areas and vector concerns have increased. The drainage feature receives flows from the surrounding residential development and ultimately flows to the San Dieguito Lagoon and the Pacific Ocean

On December 9, 2015, the 21st Street Ditch Project received a Notification (Notification of Lake or Streambed Alteration No. 1600-2015-0190-R5) for routine vegetation removal and thinning within an approximate 203-foot portion of an unnamed drainage feature for flood waters conveyance purposes. Despite efforts to improve flow rate, flows continue to remain stagnant after proposed channel clearing and routine vegetation management and vector issues have increased.

Thus, the City of Del Mar proposes the permanent placement of a 36-inch solid storm drain pipe (connecting at both existing culvert outlets) and fill materials within the 203-foot portion of the unnamed drainage feature for the purpose of improving flood water conveyance.

The proposed project will result in approximately 0.063-acre of permanent impacts to CDFW associated jurisdictional vegetation.

The Applicant is seeking a CDFW Streambed Alteration Agreement to perform construction within the unnamed drainage for continued conveyance of flood waters. Per your fee schedule for a standard agreement (5 years or less), a check in the amount of \$2,109.00 is enclosed. Also enclosed please find the following:

- Section 1.0 CDFW 1602 Streambed Alteration Agreement Notification
- Section 2.0 Project Exhibits
- Section 3.0 Preliminary Jurisdictional Delineation
- Section 4.0 Environmental Assessment Checklist
- Section 5.0 Notice of Exemption

Please contact me at (949) 855-3687 or at RBECK@mbakerintl.com with any questions you may have regarding this project.

Sincerely,

A handwritten signature in black ink that reads "Richard Beck". The signature is written in a cursive, flowing style.

Richard Beck, PWS, CEP, CPESC
Vice President
Planning and Environmental Sciences





FOR DEPARTMENT USE ONLY				
Date Received	Amount Received	Amount Due	Date Complete	Notification No.
	\$	\$		
Assigned to:				

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

Complete EACH field, unless otherwise indicated, following the enclosed instructions and submit ALL required enclosures. Attach additional pages, if necessary.

1. APPLICANT PROPOSING PROJECT

Name	Eric Minicilli			
Business/Agency	City of Del Mar			
Mailing Address	1050 Camino del Mar			
City, State, Zip	Del Mar, California, 92014			
Telephone	858-704-3680	Fax		
Email	publicworks@delmar.ca.us			

2. CONTACT PERSON *(Complete only if different from applicant)*

Name	Richard Beck			
Street Address	14725 Alton Parkway			
City, State, Zip	Irvine, California 92618			
Telephone	949.855.3687	Fax		
Email	rbeck@mbakerintl.com			

3. PROPERTY OWNER *(Complete only if different from applicant)*

Name	Same as Applicant			
Street Address				
City, State, Zip				
Telephone		Fax		
Email				

4. PROJECT NAME AND AGREEMENT TERM

A. Project Name		21st Street Ditch Project		
B. Agreement Term Requested		<input checked="" type="checkbox"/> Regular (5 years or less) <input type="checkbox"/> Long-term (greater than 5 years)		
C. Project Term		D. Seasonal Work Period		E. Number of Work Days
Beginning (year)	Ending (year)	Start Date (month/day)	End Date (month/day)	
2017	2022	September 15	September 15	
				365



5. AGREEMENT TYPE

Check the applicable box. If box B, C, D, E, or F is checked, complete the specified attachment.	
A.	<input checked="" type="checkbox"/> Standard (Most construction projects, excluding the categories listed below)
B.	<input type="checkbox"/> Gravel/Sand/Rock Extraction (Attachment A) Mine I.D. Number: _____
C.	<input type="checkbox"/> Timber Harvesting (Attachment B) THP Number: _____
D.	<input type="checkbox"/> Water Diversion/Extraction/Impoundment (Attachment C) SWRCB Number: _____
E.	<input type="checkbox"/> Routine Maintenance (Attachment D)
F.	<input type="checkbox"/> Remediation of Marijuana Cultivation Sites (Attachment E)
G.	<input type="checkbox"/> Department Grant Programs Agreement Number: _____
H.	<input type="checkbox"/> Master
I.	<input type="checkbox"/> Master Timber Operations

6. FEES

See the current fee schedule to determine the appropriate notification fee. Itemize each project's estimated cost and corresponding fee. Note: The Department may not process this notification until the correct fee has been received.			
	A. Project	B. Project Cost	C. Project Fee
1	21st Street Ditch Project	\$99,500.00	\$2,109.00
2			
3			
4			
5			
6			
7			
8			
9			
10			
		D. Base Fee (if applicable)	N/A
		E. TOTAL FEE*	\$2,109.00

* Check, money order, and Visa or MasterCard payments are accepted. When payment is made by credit card, CDFW shall assess a separate credit card processing fee of 1.6% to the Total Fee. Credit card payment must be submitted with a completed Credit Card Payment Authorization Form (DFW 1443b (Rev. 8/15)) available online at: <https://www.wildlife.ca.gov/Conservation/LSA/Forms> or at a Department regional office.



7. PRIOR NOTIFICATION AND ORDERS

A. Has a notification previously been submitted to, or a Lake or Streambed Alteration Agreement previously been issued by, the Department for the project described in this notification?		
<input type="checkbox"/> Yes (<i>Provide the information below</i>) <input checked="" type="checkbox"/> No		
Applicant	Notification Number	Date
B. Is this notification being submitted in response to a court or administrative order or notice, or a notice of violation (NOV) issued by the Department?		
<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (<i>Enclose a copy of the order, notice, or NOV. If the applicant was directed to notify the Department verbally rather than in writing, identify the person who directed the applicant to submit this notification and the agency he or she represents, and describe the circumstances relating to the order.</i>)		
<input type="checkbox"/> Continued on additional page(s)		

8. PROJECT LOCATION

A. Address or description of project location. <i>(Include a map that marks the location of the project with a reference to the nearest city or town, and provide driving directions from a major road or highway)</i>				
<p>The 21st Street Ditch Project is site is located in the City of Del Mar, San Diego County, State of California. The project site is located west of Interstate 5 (I-5), west of Jimmy Durante Boulevard, east of Camino Del Mar, south of 21st Street, and north of the intersection of Camino Del Mar and Jimmy Durante Boulevard in the central portion of the City of Del Mar. Please refer to Section 2; Exhibit 1, 2, and 3 for project location.</p>				
<input type="checkbox"/> Continued on additional page(s)				
B. River, stream, or lake affected by the project.		Unnamed drainage feature		
C. What water body is the river, stream, or lake tributary to?		San Dieguito Lagoon, Pacific Ocean		
D. Is the river or stream segment affected by the project listed in the state or federal Wild and Scenic Rivers Acts?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown		
E. County	San Diego			
F. USGS 7.5 Minute Quad Map Name	G. Township	H. Range	I. Section	J. ¼ Section
Del Mar, California	14 South	4 West	11	N/A
<input type="checkbox"/> Continued on additional page(s)				
K. Meridian (<i>check one</i>)	<input type="checkbox"/> Humboldt <input type="checkbox"/> Mt. Diablo <input checked="" type="checkbox"/> San Bernardino			
L. Assessor's Parcel Number(s)				
<p>The project site is located within Assessor's Parcel Numbers (APN): 299-133-01-00.</p>				
<input type="checkbox"/> Continued on additional page(s)				



M. Coordinates (If available, provide at least latitude/longitude or UTM coordinates and check appropriate boxes)			
Latitude/Longitude	Latitude: 32.967012° N		Longitude: -117.266266° W
	<input type="checkbox"/> Degrees/Minutes/Seconds	<input checked="" type="checkbox"/> Decimal Degrees	<input type="checkbox"/> Decimal Minutes
UTM	Easting:	Northing:	<input type="checkbox"/> Zone 10 <input checked="" type="checkbox"/> Zone 11
Datum used for Latitude/Longitude or UTM		<input type="checkbox"/> NAD 27	<input checked="" type="checkbox"/> NAD 83 or WGS 84

9. PROJECT CATEGORY

WORK TYPE	NEW CONSTRUCTION	REPLACE EXISTING STRUCTURE	REPAIR-MAINTAIN-OPERATE EXISTING STRUCTURE
Bank stabilization – bioengineering/recontouring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bank stabilization – rip-rap/retaining wall/gabion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boat dock/pier	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boat ramp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bridge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Channel clearing/vegetation management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Culvert	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Debris basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Filling of wetland, river, stream, or lake	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Geotechnical survey	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Habitat enhancement – revegetation/mitigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Levee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Low water crossing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Road/trail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sediment removal: pond, stream, or marina	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
flood control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Storm drain outfall structure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Temporary stream crossing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Utility crossing: horizontal directional drilling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
jack/bore	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
open trench	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water diversion without facility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water diversion with facility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify):	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



10. PROJECT DESCRIPTION

- A. Describe the project in detail. Include photographs of the project location and immediate surrounding area.
- Written description of all project activities with detailed step-by-step description of project implementation.
 - Include any structures (e.g., rip-rap, culverts) that will be placed or modified in or near the stream, river, or lake, and any channel clearing.
 - Specify volume, and dimensions of all materials and features (e.g., rip rap fields) that will be used or installed.
 - If water will be diverted or drafted, specify the purpose or use.
 - Enclose diagrams, drawings, plans, and maps that provide all of the following: site specific construction details; dimensions of each structure and/or extent of each activity in the bed, channel, bank or floodplain; overview of the entire project area (i.e., “bird’s-eye view”) showing the location of each structure and/or activity, significant area features, stockpile areas, areas of temporary disturbance, and where the equipment/machinery will access the project area.

An unnamed drainage feature carries flood water flows through the project site from a 4-foot box culvert to the west. Flows are carried through the project site from west to east and exits the project site through a 5-foot culvert near the terminus of 21st Street. The drainage feature receives flows from the surrounding residential development and ultimately flows to the San Dieguito Lagoon and the Pacific Ocean. Please refer to Section 2, Exhibit 4 On-Site Photographs.

On December 14, 2015 the City of Del Mar received a Notification (Notification of Lake or Streambed Alteration No. 1600-2015-0190-R5) for the approval of routine vegetation removal and thinning within an approximate 203-foot portion of the unnamed drainage feature for flood waters conveyance purposes. However flood water flows continue to remain stagnant and vector issues have increased after proposed channel clearing and routine vegetation management.

Thus, the City of Del Mar proposes the permanent placement of a 36-inch solid storm drain pipe (connecting at both existing culvert outlets) and fill materials within the 203-foot portion of the unnamed drainage feature for the purpose of improving flood water conveyance and maintaining flow rate efficiency. Please refer to Section 2, Exhibit 6 Project Designs.

The proposed project will result in approximately 0.063-acres of impacts to CDFW associated jurisdictional vegetation.

Continued on additional page(s)

- B. Specify the equipment and machinery that will be used to complete the project.

Equipment related to construction activities will be utilized. Staging and storage areas for all equipment and related materials will be located outside of jurisdictional areas.

Continued on additional page(s)

- C. Will water be present during the proposed work period (specified in box 4.D) in the stream, river, or lake (specified in box 8.B).

Yes No (Skip to box 11)

- D. Will the proposed project require work in the wetted portion of the channel?

Yes (Enclose a plan to divert water around work site)
 No



11. PROJECT IMPACTS

A. Describe impacts to the bed, channel, and bank of the river, stream, or lake, and the associated riparian habitat. Specify the dimensions of the modifications in length (linear feet) and area (square feet or acres) and the type and volume of material (cubic yards) that will be moved, displaced, or otherwise disturbed, if applicable.

Approximately 0.063-acres of riparian vegetation will be removed for the installment of the 36-inch pipe and fill material to allow for continued conveyance of flood waters and flow rate efficiency. Please refer to Section 2 Exhibit 5, CDFW/CCC Wetland Preliminary Delineation and the Preliminary Jurisdictional Report located in Section 3 of this permit package.



Continued on additional page(s)

B. Will the project affect any vegetation? Yes (Complete the tables below) No (Include aerial photo with date supporting this determination)

Vegetation Type	Temporary Impact	Permanent Impact
CDFW associated riparian vegetation	Linear feet: _____ Total area: _____	Linear feet: <u>203</u> Total area: <u>0.063-acres</u>
	Linear feet: _____ Total area: _____	Linear feet: _____ Total area: _____

Tree Species	Number of Trees to be Removed	Trunk Diameter (range)
No tree species will be impacted	N/A	N/A

Continued on additional page(s)

C. Are any special status animal or plant species, or habitat that could support such species, known to be present on or near the project site?

Yes (List each species and/or describe the habitat below) No Unknown

The project site consists of a maintained flood control ditch surrounded by urban residential, transportation and landscaped areas which have been extensively disturbed, and thus does not support natural plant communities.

Continued on additional page(s)

D. Identify the source(s) of information that supports a “yes” or “no” answer above in Box 11.C.

Please refer to the Environmental Assessment Checklist in Section 4.

Continued on additional page(s)

E. Has a biological study been completed for the project site?

Yes (Enclose the biological study) No Please refer to Section 4 Environmental Assessment Checklist

Note: A biological assessment or study may be required to evaluate potential project impacts on biological resources.



F. Has a hydrological study been completed for the project or project site?

- Yes (*Enclose the hydrological study*) No

Note: A hydrological study or other information on site hydraulics (e.g., flows, channel characteristics, and/or flood recurrence intervals) may be required to evaluate potential project impacts on hydrology.

G. Have fish or wildlife resources or waters of the state been mapped or delineated on the project site?

- Yes (*Enclose the mapped results*) No

Note: Check “yes” if fish and wildlife resources or waters of the state on the project site have been mapped or delineated. “Wildlife” means and includes all wild animals, birds, plants, fish, amphibians, reptiles and related ecological communities, including the habitat upon which the wildlife depends.” (Fish & G. Code, § 89.5.) If “yes” is checked, submit the mapping or delineation. If the mapping or delineation is in digital format (e.g., GIS shape files or KMZ), you must submit the information in this format for the Department to deem your notification complete. If “no” is checked, or the resolution of the mapping or delineation is insufficient, the Department may request mapping or delineation (in digital or non-digital format), or higher resolution mapping or delineation for the Department to deem the notification complete.

12. MEASURES TO PROTECT FISH, WILDLIFE, AND PLANT RESOURCES

A. Describe the techniques that will be used to prevent sediment from entering watercourses during and after construction.

Standard Best Management Practices (BMPs) will be implemented to the maximum extent possible by incorporating water pollution control practices in the following categories: waste management and materials pollution control. Staging and storage areas for all equipment and related materials will be located outside of jurisdictional areas.

Continued on additional page(s)

B. Describe project avoidance and/or minimization measures to protect fish, wildlife, and plant resources.

Storage and staging of equipment will be located outside of the unnamed drainage feature. Maintenance has been minimized to the amount necessary to remove hydrology and vector issues.

Continued on additional page(s)

C. Describe any project mitigation and/or compensation measures to protect fish, wildlife, and plant resources.

The applicant will participate in the San Luis Rey Bank's in-lieu fee program to off-set impacts to jurisdictional areas.

Continued on additional page(s)



13. PERMITS

List any local, State, and federal permits required for the project and check the corresponding box(es). Enclose a copy of each permit that has been issued.

A. <u>Clean Water Act Section 404 Nationwide Permit</u>	<input checked="" type="checkbox"/> Applied	<input type="checkbox"/> Issued
B. <u>Clean Water Act Section 401 Certification Application</u>	<input checked="" type="checkbox"/> Applied	<input type="checkbox"/> Issued
C. <u>CCC Coastal Development Compliance through LCP</u>	<input checked="" type="checkbox"/> Applied	<input type="checkbox"/> Issued
D. Unknown whether <input type="checkbox"/> local, <input type="checkbox"/> State, or <input type="checkbox"/> federal permit is needed for the project. <i>(Check each box that applies)</i>		

Continued on additional page(s)

14. ENVIRONMENTAL REVIEW

A. Has a draft or final document been prepared for the project pursuant to the California Environmental Quality Act (CEQA) and/or National Environmental Protection Act (NEPA)?

Yes *(Check the box for each CEQA or NEPA document that has been prepared and enclose a copy of each.)*
 No *(Check the box for each CEQA or NEPA document listed below that will be or is being prepared.)*

<input checked="" type="checkbox"/> Notice of Exemption	<input type="checkbox"/> Mitigated Negative Declaration	<input type="checkbox"/> NEPA document (type): _____
<input type="checkbox"/> Initial Study	<input type="checkbox"/> Environmental Impact Report	
<input type="checkbox"/> Negative Declaration	<input type="checkbox"/> Notice of Determination <i>(Enclose)</i>	
<input type="checkbox"/> THP/ NTMP	<input type="checkbox"/> Mitigation, Monitoring, Reporting Plan	

B. State Clearinghouse Number *(if applicable)* | N/A

C. Has a CEQA lead agency been determined? Yes *(Complete boxes D, E, and F)* No *(Skip to box 14.G)*

D. CEQA Lead Agency	City of Del Mar		
E. Contact Person	Eric Minicilli	F. Telephone Number	858-704-3680

G. If the project described in this notification is not the “whole project” or action pursuant to CEQA, briefly describe the entire project (Cal. Code Regs., tit. 14, § 15378).

The proposed project is not part of a larger project or plan.

Continued on additional page(s)

H. Has a CEQA filing fee been paid pursuant to Fish and Game Code section 711.4?

Yes *(Enclose proof of payment)* No *(Briefly explain below the reason a CEQA filing fee has not been paid)*

The Notice of Exemption has been filed, please see attached Section 5

Note: If a CEQA filing fee is required, the Lake or Streambed Alteration Agreement may not be finalized until paid.



15. SITE INSPECTION

Check one box only.

In the event the Department determines that a site inspection is necessary, I hereby authorize a Department representative to enter the property where the project described in this notification will take place at any reasonable time, and hereby certify that I am authorized to grant the Department such entry.

I request the Department to first contact (*insert name*) Richard Beck at rbeck@mbakerintl.com
 at (*insert telephone number*) 949.855.3687 to schedule a date and time to enter the property where the project described in this notification will take place. I understand that this may delay the Department's determination as to whether a Lake or Streambed Alteration Agreement is required and/or the Department's issuance of a draft agreement pursuant to this notification.

16. DIGITAL FORMAT


Is any of the information included as part of the notification available in digital format (i.e., CD, DVD, etc.)?

Yes (Please enclose the information via digital media with the completed notification form)

No

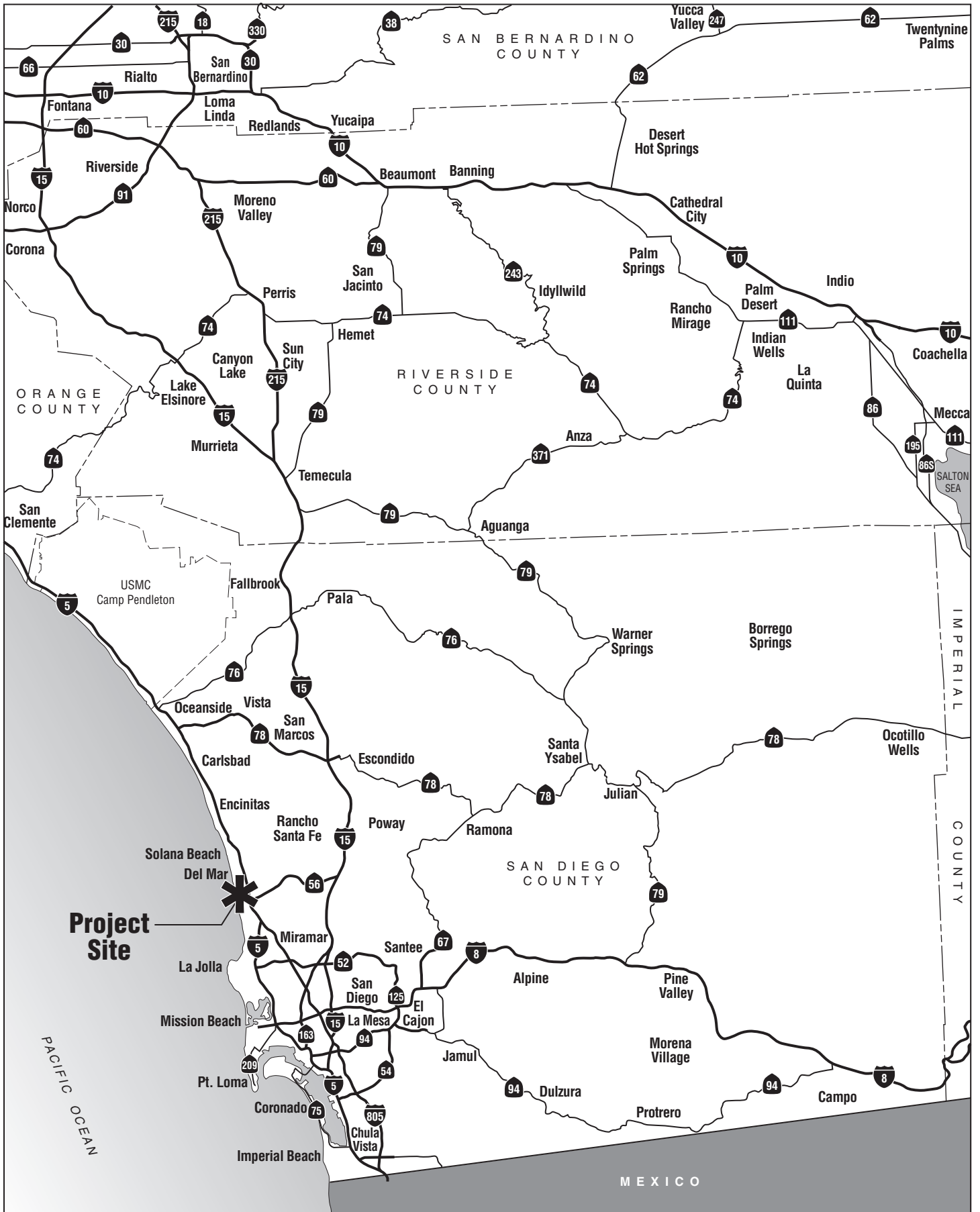
17. SIGNATURE

I hereby certify that to the best of my knowledge the information in this notification is true and correct and that I am authorized to sign this notification as, or on behalf of, the applicant. I understand that if any information in this notification is found to be untrue or incorrect, the Department may suspend processing this notification or suspend or revoke any draft or final Lake or Streambed Alteration Agreement issued pursuant to this notification. I understand also that if any information in this notification is found to be untrue or incorrect and the project described in this notification has already begun, I and/or the applicant may be subject to civil or criminal prosecution. I understand that this notification applies only to the project(s) described herein and that I and/or the applicant may be subject to civil or criminal prosecution for undertaking any project not described herein unless the Department has been separately notified of that project in accordance with Fish and Game Code section 1602 or 1611.

 12/11/2016
 Signature of Applicant or Applicant's Authorized Representative Date

Eric Minicilli
 Print Name





117°17.000' W

117°16.000' W

WGS84 117°15.000' W

32°59.000' N

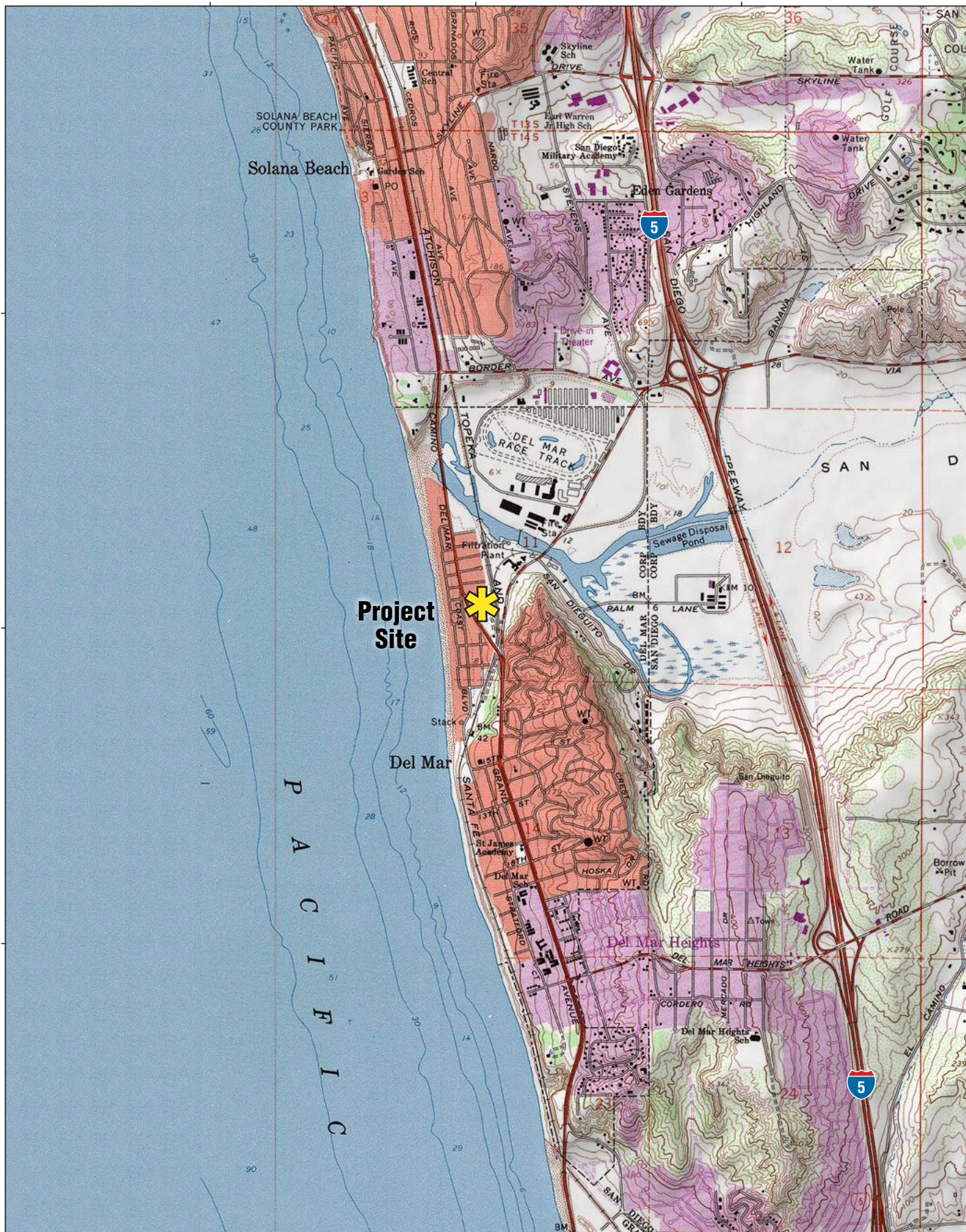
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32°58.000' N

32°58.000' N

32°57.000' N

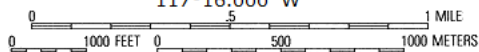
32°57.000' N



117°17.000' W

117°16.000' W

WGS84 117°15.000' W



Michael Baker
INTERNATIONAL



08/19/15 JN142250-21225 MAS

21ST STREET DITCH PROJECT • JURISDICTIONAL DELINEATION

Site Vicinity

Exhibit 2





View looking north (downstream) from upstream limits of project site.



View looking south-southwest (upstream) at the upstream limits of the project site.

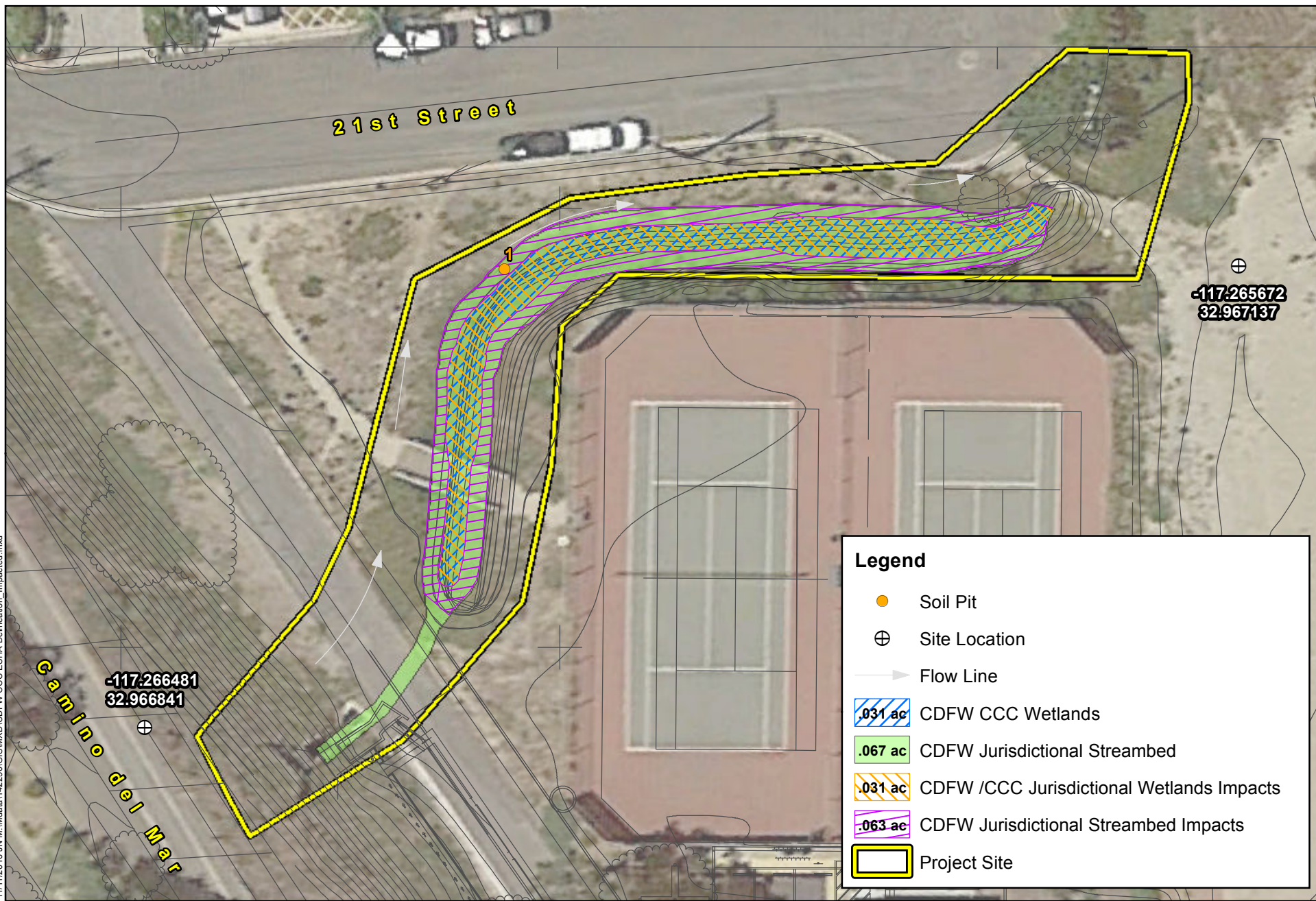


View of drainage feature looking east. Note ornamental juniper along the right bank, chairmaker's bulrush in the middle, and coastal goldenbush along the left bank.



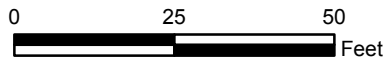
View looking northwest (downstream) at the culvert outlet.

11/17/2016 JN.M:\Mraba\142250\GIS\MXD\CDFW CCC ESHA Delineation_ Impacted.mxd

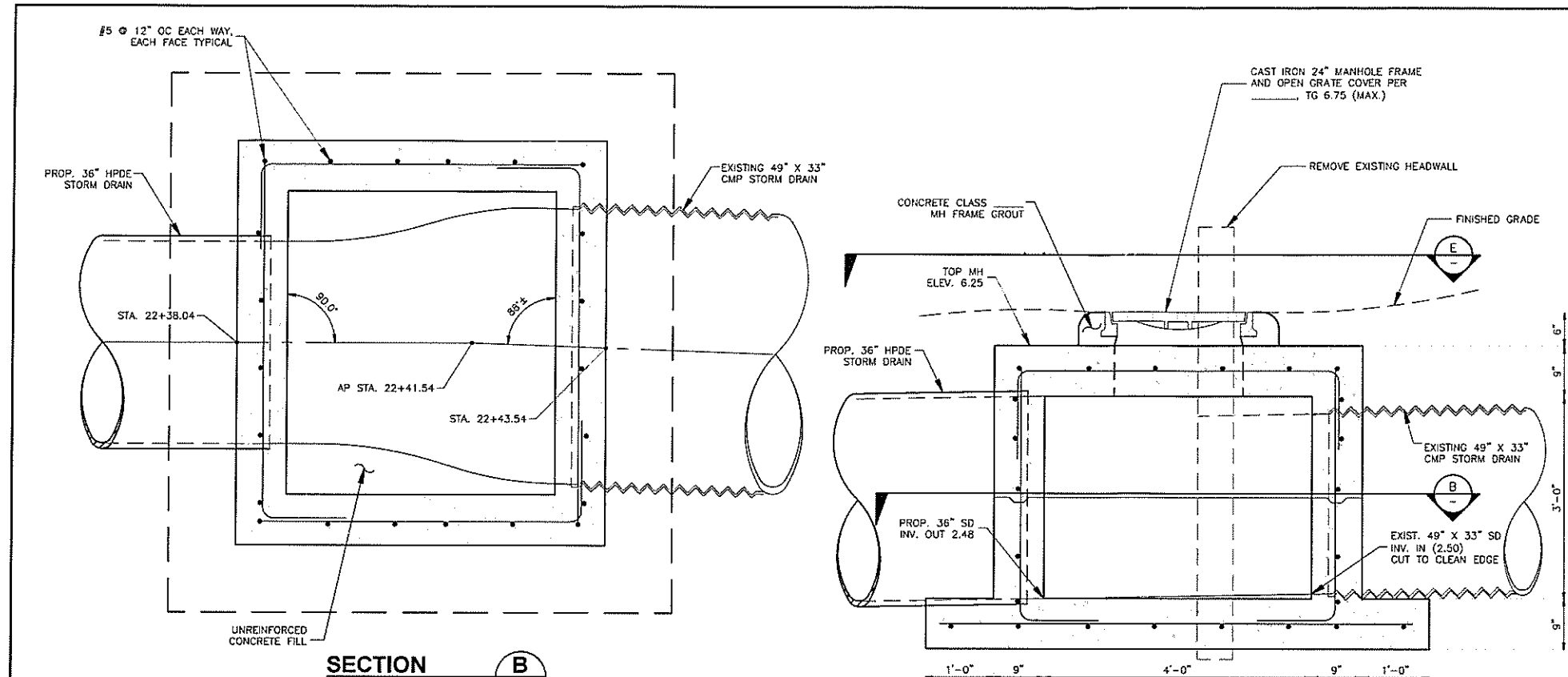


Legend

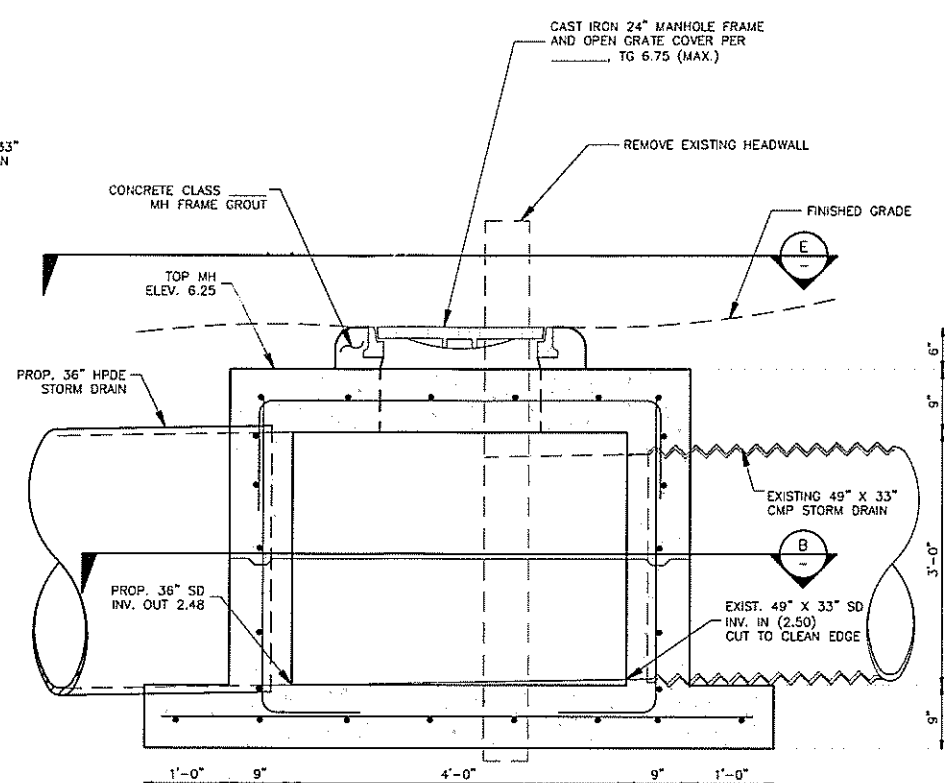
- Soil Pit
- ⊕ Site Location
- Flow Line
- .031 ac CDFW CCC Wetlands
- .067 ac CDFW Jurisdictional Streambed
- .031 ac CDFW /CCC Jurisdictional Wetlands Impacts
- .063 ac CDFW Jurisdictional Streambed Impacts
- Project Site



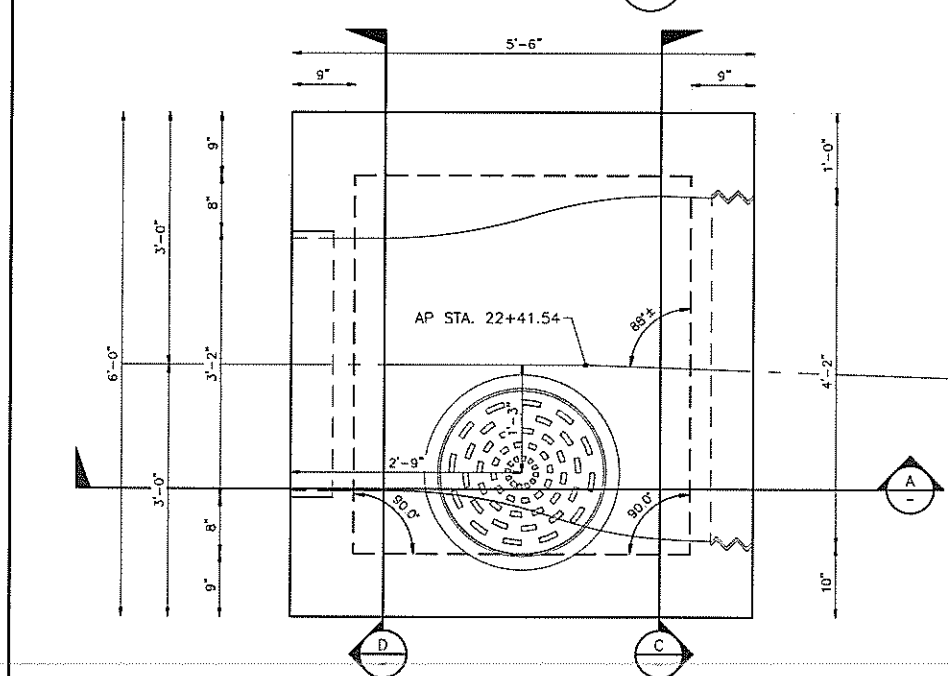
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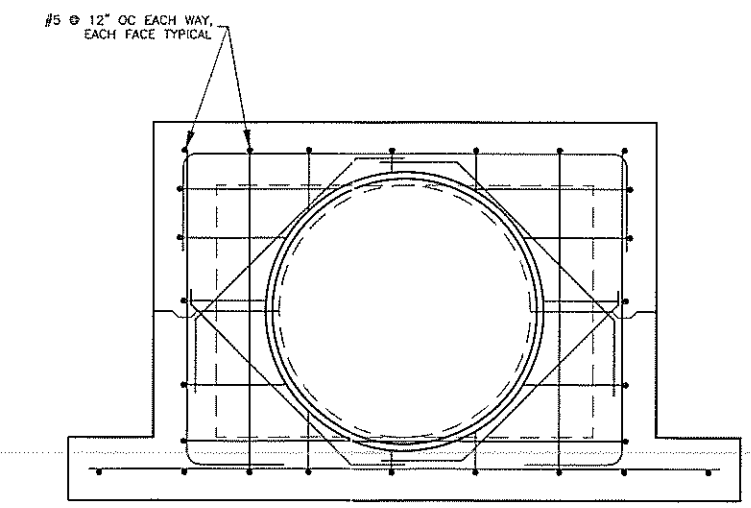
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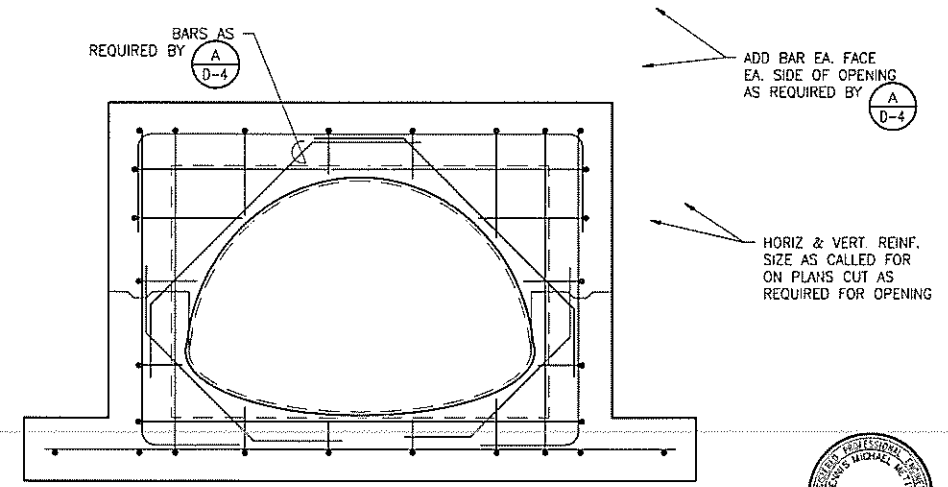
SECTION A
SCALE: 1" = 1'



JUNCTION STRUCTURE DETAIL - PLAN VIEW
SCALE: 1" = 1'



SECTION D - OUTLET PIPE OPENING
SCALE: 1" = 1'



SECTION C - INLET PIPE OPENING
SCALE: 1" = 1'

JUNCTION STRUCTURE GENERAL NOTES:

- DESIGN CRITERIA: ACI 318-95, AASHTO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 15TH EDITION" DESIGN LIVE LOAD IS AASHTO HS20-44 TRUCK LOADING
- PORTLAND CEMENT SHALL CONFORM TO ASTM C-150, TYPE V
- AGGREGATE SHALL CONFORM TO ASTM C-33.
- ALL STRUCTURAL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 4500 PSI AT 28 DAYS.
- ALL REINFORCEMENT STEEL SHALL BE ASTM DESIGNATION A615 GRADE 60.
- COVERAGE FOR REINFORCING BARS, EXCEPT WHERE OTHERWISE SHOWN, SHALL BE: 3" FOR CONCRETE PLACED AGAINST EARTH; 2" FOR OTHERS AND 3" FOR CONCRETE WITH EARTH BACKFILL.
- ALL KEYWAYS AND CONSTRUCTION JOINTS IN CONCRETE SHALL BE CLEAN FOR BOND. CONSTRUCTION JOINTS BETWEEN FOOTINGS AND WALLS SHALL BE COVERED WITH POLYETHYLENE-COATED BURLAP MATS WHICH SHALL BE KEPT WET WITH WATER UNTIL CONCRETE IN WALLS IS PLACED. NO CURING COMPOUND SHALL BE APPLIED IN CONSTRUCTION JOINTS BETWEEN FOOTINGS AND WALLS.
- USE 3/4" CHAMFER ON ALL EXPOSED CORNERS.
- REINFORCING BARS AND ACCESSORIES SHALL NOT BE IN CONTACT WITH ANY PIPE, PIPE FLANGE OR METAL PART EMBEDDED IN CONCRETE.
- ALL REINFORCING BAR LAP SPLICES SHALL CONFORM TO THE SCHEDULE ON SHEET S-1 UNLESS NOTED OTHERWISE ON PLANS OR DETAILS.
- CONTRACTOR SHALL COAT SHELF AND CHANNEL WITH CONCRETE COATING PER SPECIFICATIONS.
- CONTRACTOR SHALL FURNISH AND INSTALL 24-INCH MANHOLE FRAME AND COVER PER CITY OF

CONSTRUCTION SEQUENCE NOTES:

- CONTRACTOR SHALL SUBMIT TO THE CITY FOR APPROVAL, A DETAILED CONSTRUCTION PLAN SHALL INCLUDE APPROVED CONSTRUCTION MATERIAL SUBMITTALS INCLUDING STRUCTURAL CONCRETE, WATERSTOP, REINFORCING STEEL, CONCRETE COATING, FORMWORK, AND MANHOLE FRAME AND COVERS. PLAN SHALL ALSO INCLUDE SHORING PLAN, AND HIGH STORM FLOW EMERGENCY CONTINGENCY PLAN.
- CONTRACTOR SHALL PLACE CHANNELS IN THE STRUCTURE PER THE DRAWINGS.
- CONTRACTOR SHALL REMOVE HEADWALL AND CUT A CLEAN END OF THE EXISTING 49" X 33" CMP PIPE.
- CONTRACTOR SHALL USE APPROVED GROUT MATERIAL TO FINISH TRANSITION CHANNELS TO A SMOOTH, CONTINUOUS SLOPE. JUNCTION STRUCTURE CHANNEL AND SHELVES SHALL BE COATED WITH CONCRETE COATING PER SPECIFICATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY FLOW DIVERSION AS REQUIRED TO FACILITATE FINISH WORK IN THE STRUCTURE.

REVISIONS	

DUDEK
605 Third Street Encinitas, CA 92024
760.942.5147 Fax 760.632.0164



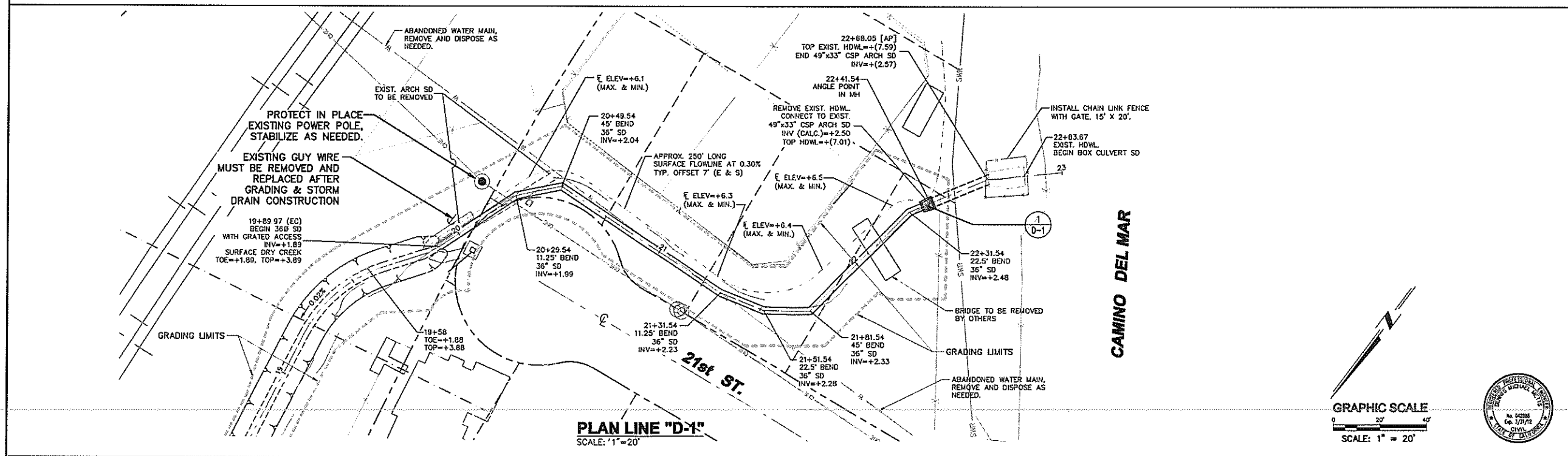
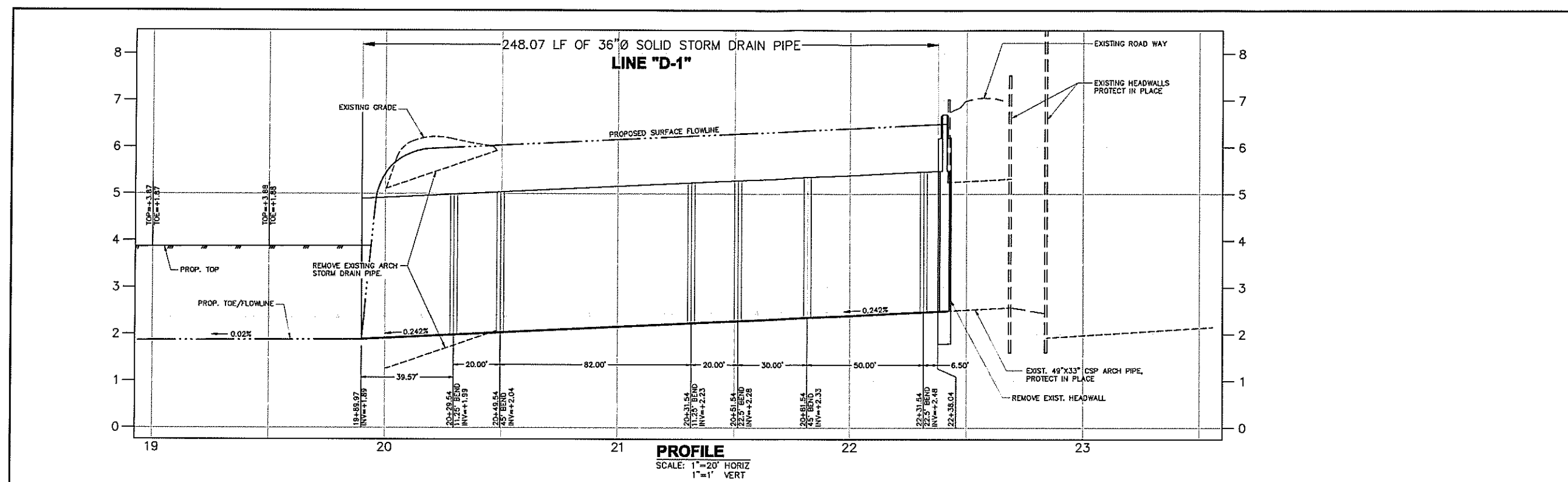
APPROVED BY:
ERIC MINICLU
DIRECTOR OF PUBLIC WORKS

PREPARED UNDER THE SUPERVISION OF:
DATE
DESIGNED: DENNIS MICHAEL METTS R.C.E. 042586 EXP. 3/31/12
DRAWN:
CHECKED:

NCTD ROW VECTOR HABITAT AND SAN DIEGUITO VECTOR HABITAT GRADING AND DRAINAGE REHABILITATION PROJECT
DETAILS
BEING A PORTION OF SEC. 11, T. 14 S., R. 4 W., S.B.M., IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA
CITY OF DEL MAR

D-1
DUDEK W.O. # 6451
SHEET 10 OF 11





NO.	REVISIONS

DUDEK
605 Third Street Encinitas, CA 92024
760.942.5147 Fax 760.632.0164



APPROVED BY:
ERIC MINICELLI DIRECTOR OF PUBLIC WORKS

PREPARED UNDER THE SUPERVISION OF:
DENNIS MICHAEL METTS R.C.E. 042588 EXP. 3/31/12

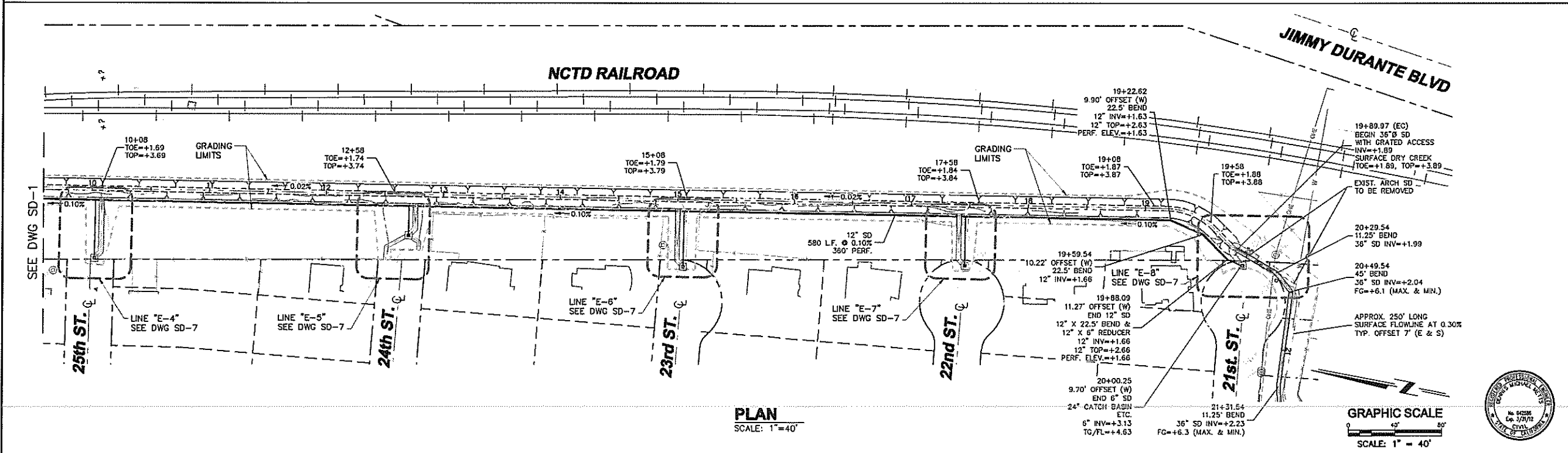
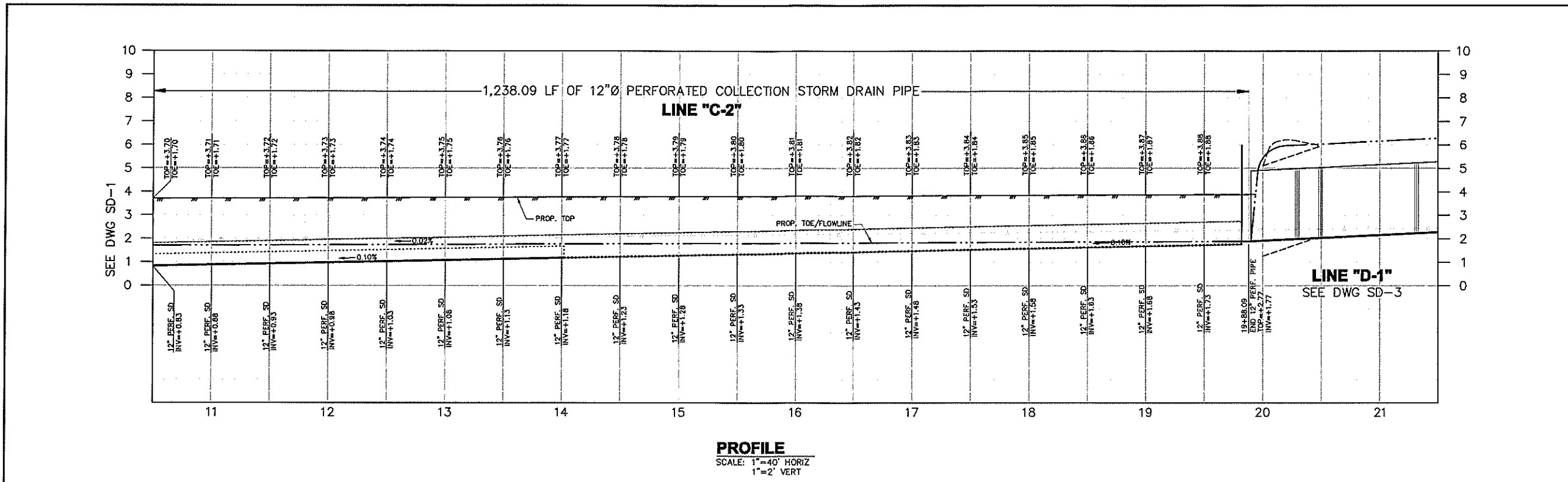
NCTD ROW VECTOR HABITAT AND SAN DIEGUITO VECTOR HABITAT GRADING AND DRAINAGE REHABILITATION PROJECT
NCTD ROW GRADING AND DRAINAGE
BEING A PORTION OF SEC. 11, T. 14 S., R. 4 W., S.B.M., IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA

SD-3
DUDEK W.O.# 6451
SHEET 5 OF 11

PROGRESS PRINTS NOT FOR CONSTRUCTION

Exhibit 6b Project Design

1/6/2012 1:28 PM



NO.	REVISIONS

DUDEK
405 Third Street Encinitas, CA 92024
760.942.5147 Fax 760.632.0164



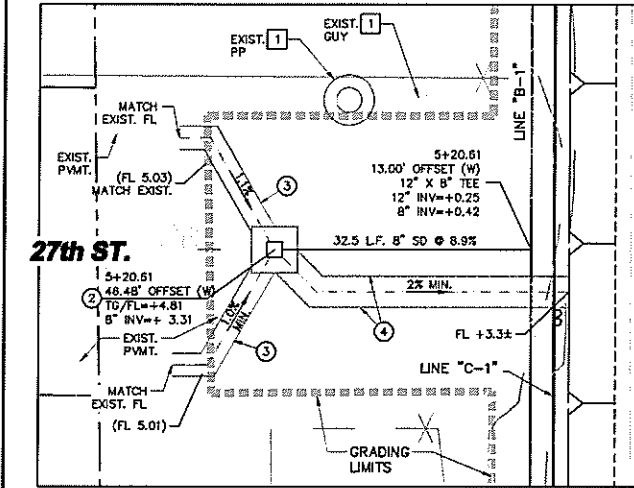
APPROVED BY:
ERIC MINICILLI DIRECTOR OF PUBLIC WORKS

PREPARED UNDER THE SUPERVISION OF:
DAVE
DESIGNED BY: DENNIS MICHAEL METTS R.C.E. 042588 EXP. 3/31/12
DRAWN BY:
CHECKED BY:

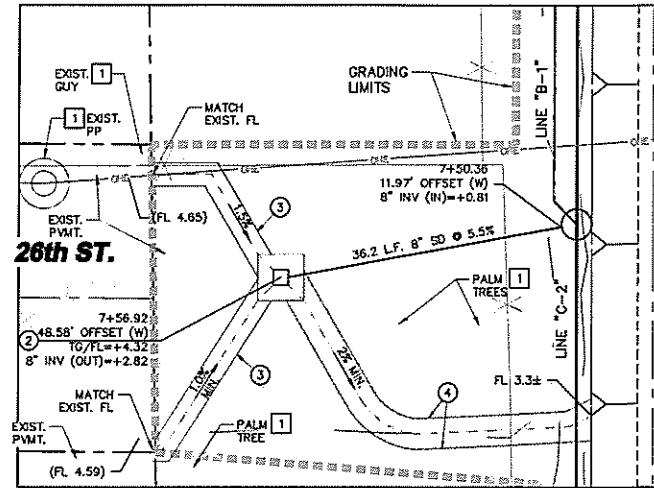
NCTD ROW VECTOR HABITAT AND SAN DIEGUITO VECTOR HABITAT GRADING AND DRAINAGE REHABILITATION PROJECT
NCTD ROW GRADING AND DRAINAGE
BEING A PORTION OF SEC. 11, T. 14 S., R. 4 W., S.B.M., IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA
CITY OF DEL MAR

SD-2
DUDEK W.O. # 6461
SHEET 4 OF 11

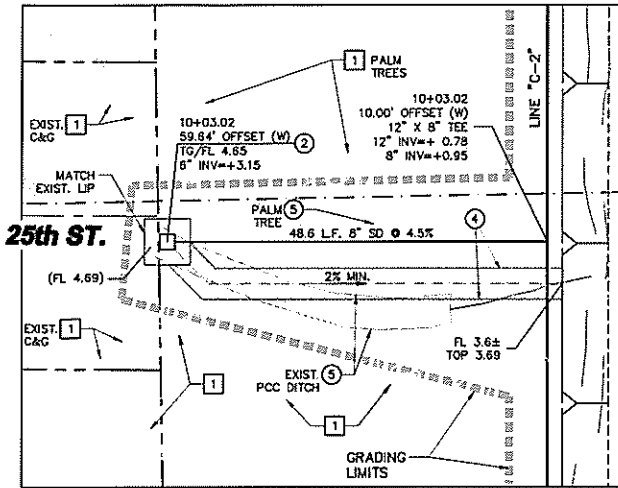
PROGRESS PRINTS NOT FOR CONSTRUCTION CONCEPT PLAN



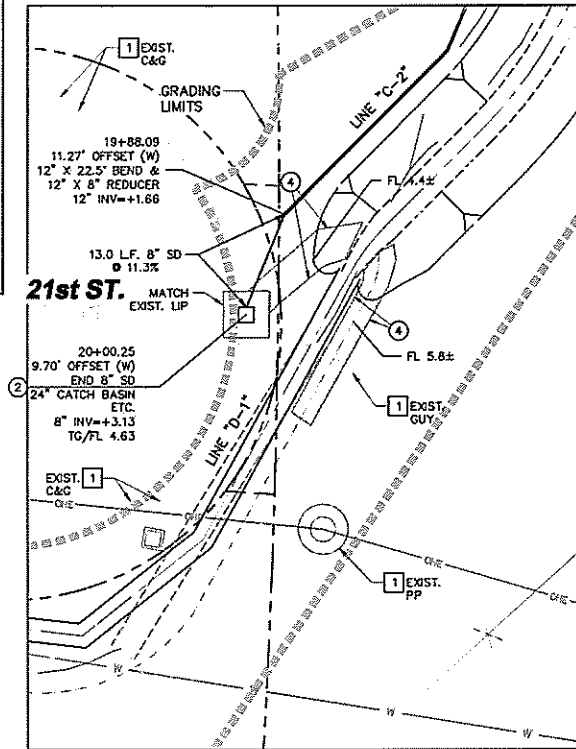
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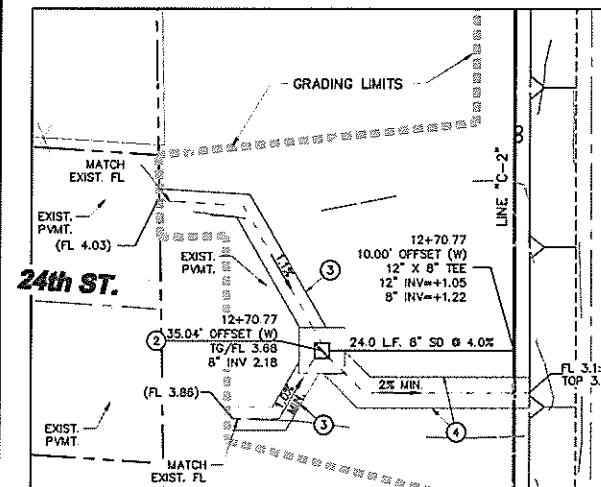
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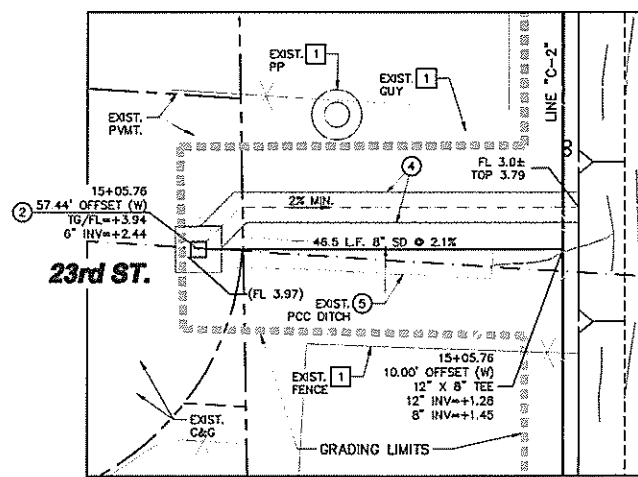
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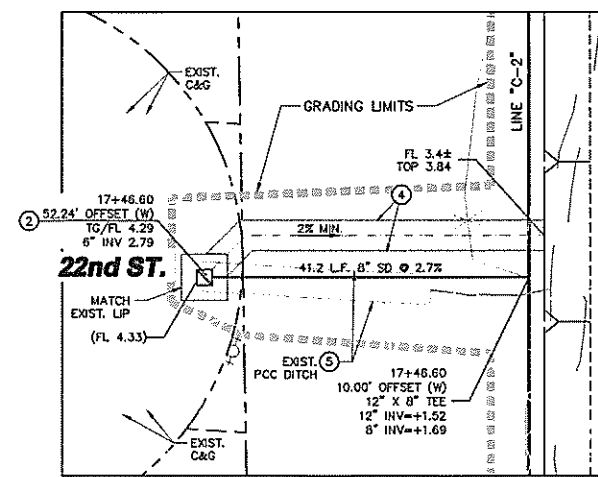
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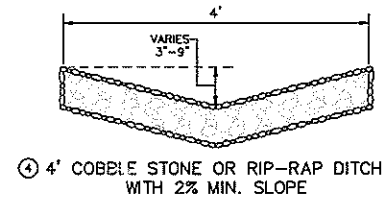
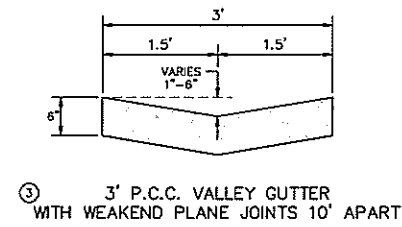
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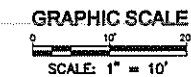
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PLAN LINE "E-7"
SCALE: 1"=10'



- ① PROTECT IN PLACE.
- ② 24" x 24" BROOKS BOX CATCH BASIN, PER DETAIL ON D-2.
- ③ 3' PCC VALLEY GUTTER, PER DETAIL ON THIS SHEET.
- ④ 4' LINED DITCH, PER DETAIL ON THIS SHEET.
- ⑤ DEMOLISH & REMOVE.



NO.	REVISIONS

DUDEK
605 Third Street Encinitas, CA 92024
760.942.5147 Fax 760.632.0164



APPROVED BY:
ERIC MINICELLI DIRECTOR OF PUBLIC WORKS

PREPARED UNDER THE SUPERVISION OF: DENNIS MICHAEL METTS R.C.E. 042588 EXP. 3/31/12
DESIGNED: _____
DRAWN: _____
CHECKED: _____

NCTD ROW VECTOR HABITAT AND SAN DIEGUITO VECTOR HABITAT GRADING AND DRAINAGE REHABILITATION PROJECT
NCTD ROW GRADING AND DRAINAGE
BEING A PORTION OF SEC. 11, T. 14 S., R. 4 W., S.B.M., IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA.

CITY OF DEL MAR

SD-5

DUDEK W.O. # 6451

SHEET 7 OF 11

PROGRESS PRINTS NOT FOR CONSTRUCTION CONCEPT PLAN

Exhibit 6d Project Design



March 9, 2015

JN 147717

SUBJECT: Preliminary Delineation of State and Federal Jurisdictional Waters Pursuant to Section 404 of the Clean Water Act for Construction Activities Associated with the 21st Street Ditch Project, City of Del Mar, County of San Diego, California

Introduction

The field work for this preliminary delineation was conducted on March 4, 2015. This delineation documents the regulatory authority of the U.S. Army Corps of Engineers Los Angeles District (Corps), San Diego Regional Water Quality Control Board (Regional Board), California Coastal Commission, and California Department of Fish and Wildlife South Coast Region (CDFW), pursuant to the Federal Clean Water Act (CWA), California Porter-Cologne Water Quality Control Act, and California Fish and Game Code.

Site Conditions

The 0.22-acre project site includes an unnamed drainage feature that enters the project site from a 4-foot box culvert to the west, flows through the project site from west to east, and exits the project site through a 5-foot culvert near the terminus of 21st Street. Standing water was observed at the time of the site visit. The feature drains the surrounding residential area and ultimately flows to San Dieguito Lagoon and the Pacific Ocean. Plant species observed include hottentot fig (*Carpobrotus edulis*, NI), wild radish (*Raphanus sativus*, NI), sour grass (*Oxalis pes-caprae*, NI), ripgut brome (*Bromus diandrus*, NI), barley (*Hordeum vulgare*, NI), common juniper (*Juniperus communis*, FACU), annual yellow sweetclover (*Melilotus indicus*, FACU), chairmaker's bulrush (*Schoenoplectus americanus*, OBL), and coast goldenbush (*Isocoma menziesii* var. *vernonioides*, FAC). The following ordinary high water mark (OHWM) indicators were observed: surface water, drift/debris, defined bed and bank, and a disruption of terrestrial vegetation.

Hydrophytic vegetation was restricted to the wetted portion of the channel and no soil pits were dug within the wetted channel. As such, soils within the wetted portion of the channel are assumed to be hydric. One soil pit (SP-1) was dug on the adjacent slope to document potential hydric soil indicators and determine the extent of jurisdictional wetland features within the boundaries of the project site. SP-1 was dug on the bank above the OHWM to a depth of 18 inches and displayed a constant matrix color of 10YR 3/2 with no evidence of redoximorphic features or other hydric soil indicators. Soil texture was sandy loam. Evidence of hydrology was noted through the presence of saturation (A3). Based on current site conditions, it was determined that area was not a wetland feature. Given the uniform nature of the site, it was determined that the location of

SP-1 was representative of all areas above OHWM and, as a result, only one soil pit was dug outside of the OHWM. Areas with standing water and wetland vegetation, specifically stands of chairmaker's bulrush, were assumed to contain hydric soils and are classified as fringe wetlands within the OHWM.

Results

State and federal jurisdictional areas were identified within the project site. Approximately 0.007-acre of Corps jurisdictional wetlands and 0.02-acre of Corps jurisdictional non-wetlands are located within the boundaries of the project site. No isolated conditions were observed within the boundaries of the project site; therefore, the Regional Board follows the Corps' jurisdiction. The drainage feature exhibited a clear bed and bank and qualifies as CDFW jurisdictional streambed. Approximately 0.07-acre of CDFW jurisdictional streambed occurs within the boundaries of the project site. Approximately 0.03-acre of CCC jurisdictional wetlands occurs within the boundaries of the project site.

Conclusion

The project applicant shall obtain the following regulatory approvals prior to commencement of any construction activities within the identified jurisdictional areas: Corps CWA Section 404 Permit; Regional Board CWA Section 401 Water Quality Certification; CDFW Section 1602 Streambed Alteration Agreement; and CCC Coastal Development Permit.



**ENVIRONMENTAL CHECKLIST
CITY OF DEL MAR
PLANNING DIVISION**

ENVIRONMENTAL ASSESSMENT NO. EA-XX-XX

- 1. PROJECT TITLE:** NCTD ROW Vector Habitat Grading and Drainage Rehabilitation Project
- 2. LEAD AGENCY:** City of Del Mar
1050 Camino del Mar
Del Mar, California 92014
- Contact:** Kathy Garcia, AICP,
Director of Planning/County Development
- Phone:** 858.755.9313
- 3. PROJECT LOCATION:** The proposed project is located in the northern part of San Diego County, in the City of Del Mar, California, as shown in Figure 1, Regional Map. More specifically, the proposed project is located in the City of Del Mar, in the northern part of San Diego County (Figure 2, Vicinity Map). The site is to the west of Jimmy Durante Boulevard within the NCTD right of way (ROW) spanning just beyond 21st Street to 28th Street.
- 4. PROJECT PROPONENT:** City of Del Mar
- Contact:** Eric Minicilli, Director of Public Works
- Phone:** 858.755.3294
- 5. GENERAL PLAN DESIGNATION:** Rail
- 6. ZONING:** Rail, Public Park (PP)
- 7. OVERLAY ZONES:** Floodplain and Lagoon
- 8. PROJECT DESCRIPTION:** Portions of the NCTD right of way area exhibits high groundwater levels which cause surface water to pool and create breeding environment for mosquito populations.

To rectify these vector habitat challenges, the City of Del Mar (City) is designing and constructing localized drainage systems to remove standing, stagnant surface water (see Figure 3, Site Plan). Perforated small diameter pipelines are to be constructed below grade, within gravel drains, to collect and remove localized nuisance water. The perforations in the pipelines are to be constructed at a height equal to the groundwater level. The perforated pipeline will run parallel with the existing channel and end at a central collection pont near the end of 25th Street. The water will be transported through a closed conduit system from the collection point to a small solar-powered pump station located on City property on the easterly end of 28th Street, where it is lifted into the local sewer for final disposal. The solar-powered pump will operate completely with self generated power and will not be connected to any existing electricity lines. The surface above the nuisance water drainage system will be covered with gravel surface treatments to allow water percolation into the drainage system and covered with cobble stone to give a dry creek bed appearance. The existing stormwater channel will also be rehabilitated to its original grade after construction. An erosion control plan would be created that includes construction BMPs for containing erosion including silt fencing, fiber rolls and the use of sand bags to protect stormwater drains. Nuisance water collection systems will also be installed at the end of each public street perpendicular to NCTD right of way. The existing drainage ditch near the public tennis facility located adjacent to 21st Street will be replaced with a stormdrain pipe and the ditch will be graded to match existing surface elevations. High flow stormwater events will continue to flow overland within these drainages to maintain hydraulic conveyance. By collecting the local nuisance water into the proposed drainage system, vector habitat is eliminated and low flow nuisance water is directed away from the San Dieguito River.

9. SURROUNDING LAND USES AND SETTING: Adjacent land uses include residential properties to the west and Jimmy Durante Boulevard, limited commercial development, and governmental buildings to the east.

10. DISCRETIONARY ACTIONS: NA

Environmental Checklist

11. OTHER AGENCIES WHOSE APPROVALS OR PERMITS MAY BE REQUIRED:

- San Diego Regional Water Quality Control Board Clean Water Act/Clean Water Act, Section 401 Water Quality Certification and Construction Stormwater Permit
- California Department of Fish and Game Section 1602 Streambed Alteration Agreement
- California Coastal Commission Coastal Development Permit
- Federal Emergency Management Agency (Elevation Certificate)
- Army Corps of Engineers 404 Permit.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by the proposed project, involving at least one impact that is a “Potentially Significant Impact” or is “Potentially Significant Unless Mitigated,” as indicated by the environmental checklist on the following pages.

- | | | |
|---|--|--|
| <input type="checkbox"/> Land Use and Planning | <input type="checkbox"/> Transportation/Circulation | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Population and Housing | <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Utilities and Service Systems |
| <input type="checkbox"/> Geology/Soils | <input type="checkbox"/> Energy and Mineral Resources | <input type="checkbox"/> Aesthetics |
| <input checked="" type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Hazards | <input type="checkbox"/> Cultural Resources |
| <input type="checkbox"/> Air Quality | <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Mandatory Findings of Significance | | |

Environmental Checklist

ENVIRONMENTAL DETERMINATION

On the basis of this initial evaluation:

I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. **A MITIGATED NEGATIVE DECLARATION** will be prepared.

I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

I find that the proposed project **MAY** have a significant effect(s) on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a “potentially significant impact” or is “potentially significant unless mitigated.” An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effect that remains to be addressed.

Kathy Garcia, AICP, Director of
Planning/County Development

Date

PROJECT FIGURES

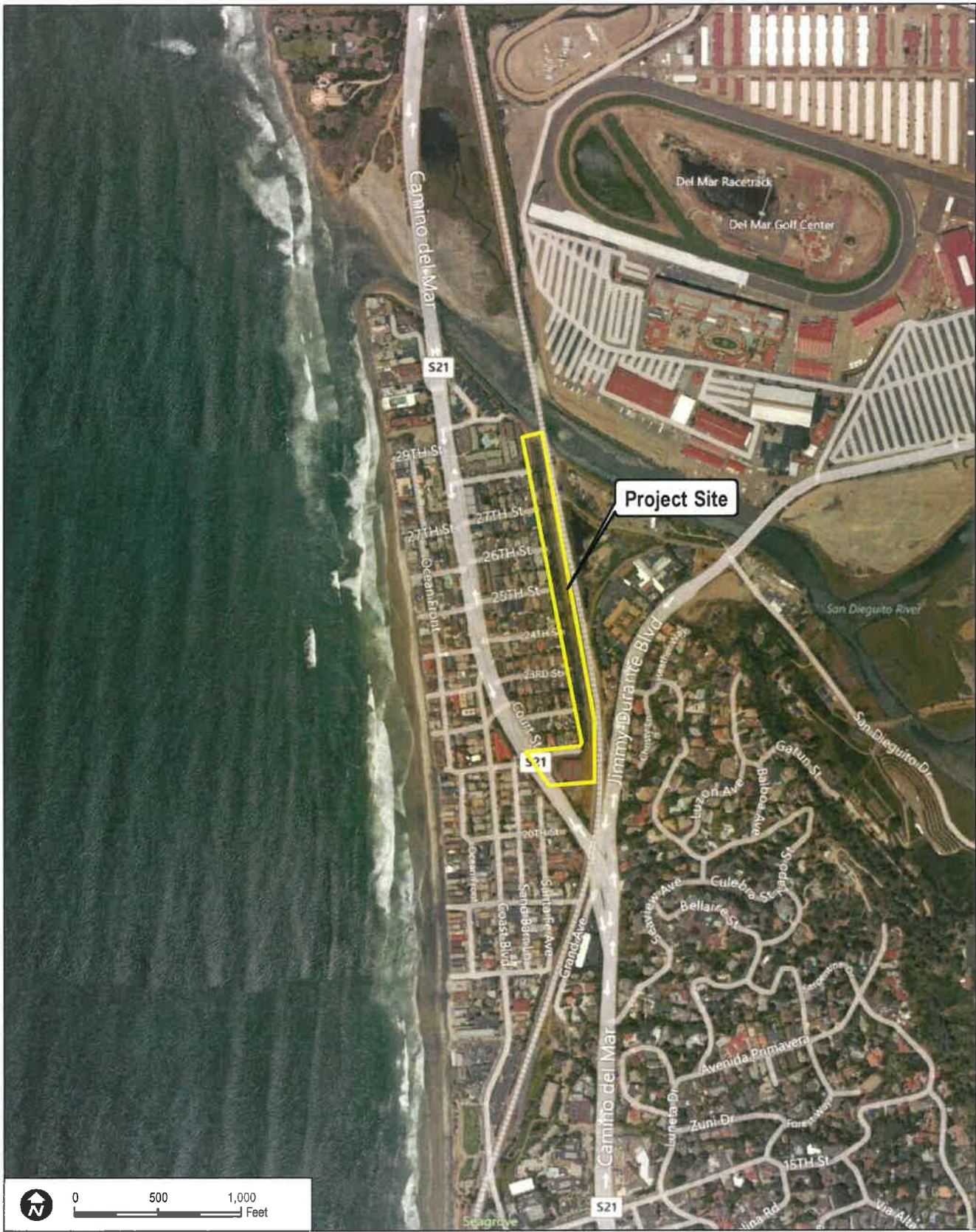
FIGURE 1 *REGIONAL MAP*

FIGURE 2 *VICINITY MAP*

FIGURE 3 *SITE PLAN*

Environmental Checklist

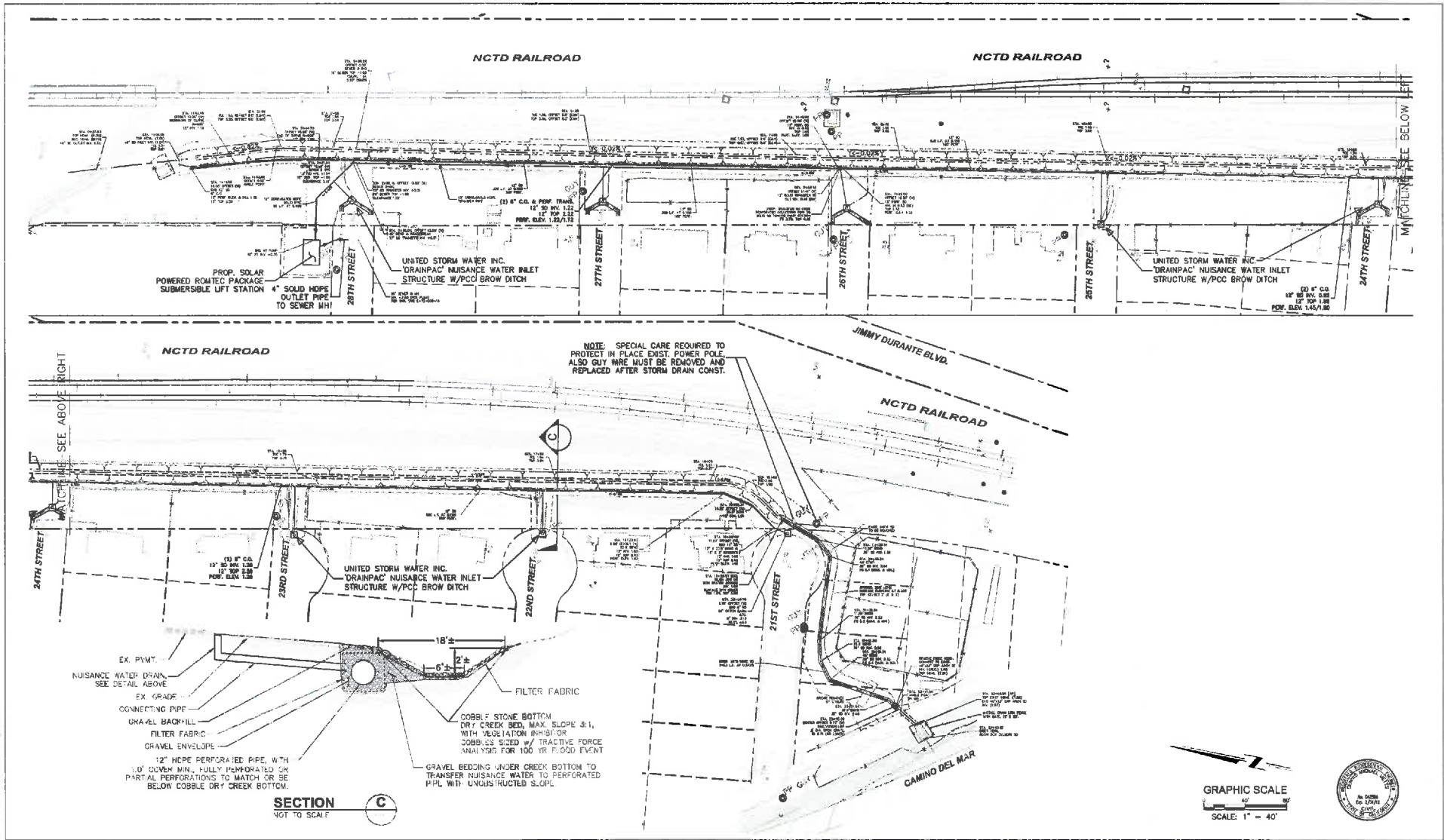
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<p>DUDEK</p>	<p>SCURCE Bng (2011)</p>	<p>FIGURE 2 Vicinity Map</p>
<p>6451.0006 - B</p>	<p>NCTD ROW Drainage Ditch Project</p>	

Environmental Checklist

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DUDEK

DATE: 02/01/2014

6451.0006 - B

NCTD ROW Drainage Ditch Project

FIGURE 3
Project Site Plan

Environmental Checklist

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Environmental Checklist

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to the project. A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards.
2. All answers must take account of the whole action involved. Answers should address off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant.
4. “Potentially Significant Impact” is appropriate, if there is substantial evidence that an effect is significant or potentially significant, or if the lead agency lacks information to make a finding of insignificance. If there are one or more “Potentially Significant Impact” entries when the determination is made, then preparation of an Environmental Impact Report is warranted.
5. “Less than Significant with Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how the mitigation measures reduce the effect to a less than significant level (mitigation measures listed in Section XVI, “Summary of Mitigation Measures,” may be cross-referenced).
6. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. CEQA Guidelines Section 15063(c)(3)(D). In such a case, a brief discussion should identify the following:
 - (a) *Earlier Analysis Used.* Identify and state where they are available for review.
 - (b) *Impacts Adequately Addressed.* Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - (c) *Mitigation Measures.* For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures where were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
7. References to information sources for potential impacts (*e.g.*, general plans, zoning ordinances) have been incorporated into the checklist. A source list has been provided in Section XV, Earlier Analysis. Other sources used or individuals contacted have been cited in the respective discussions.

Environmental Checklist

8. The following checklist has been formatted after the 2005 Appendix G of Chapter 3, Title 14, California Code of Regulations, also referred to as the State CEQA Guidelines, but has been augmented to reflect the City of Del Mar's requirements.

(**Note:** Standard Conditions of Approval (*Attachment 1*) - The City imposes standard conditions of approval, which are considered to be components of, or modifications to, the project, and some of these conditions result in reducing or minimizing environmental impacts to less than significant. However, because they are considered part of the project, they have not been identified as mitigation measures. Nonetheless, these conditions are imposed on the project, and would be monitored and enforced by the City of Del Mar should the project be approved.)

SAMPLE QUESTION:

<u>ISSUES (and Supporting Information Sources):</u>	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the proposal result in or expose people to potential impacts involving: Landslides or Mudflows? (Sources: 1, 6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion: The attached source list explains that 1 is the Del Mar Community Plan and 6 is a topographical map of the area which show that the area is located in a flat area. (Note: This response probably would not require further explanation).				

Environmental Checklist

<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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I. LAND USE AND PLANNING

Would the project:

- (a) Conflict with any general plan designation or zoning?

Discussion: The City of Del Mar Community Plan, also referred to as the General Plan, land use designation for the proposed project site is designated as Rail with a portion of the project adjacent to 21st Street designated as Public Park zoning (GeoViewer 2012). The project site is located within the NCTD right of way and is consistent with the Community Plan/General Plan land use designation. There are no applications requesting Community Plan/General Plan amendments, nor any zone change requests. No general plan designation or zoning impact would occur.

- (b) Conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project?

Discussion: The proposed development of the project site is applicable to The City of Del Mar Local Coastal Program (LCP) and Implementing Ordinances. By implementing the project consistent with the City of Del Mar Local Coastal Program and Implementing Ordinances, no conflicts are anticipated. As such, the project is considered consistent with applicable, adopted land use plans, policies and regulations.

An earthen drainage channel runs along the backside of the adjacent single-family residences from 21st Street to 28th Street. Each street has a cul-de-sac that drains nuisance runoff into the channel. The channel banks were examined for evidence of an ordinary high water mark (OHWM), including sediment deposition and water marks. Based on the presence of an OHWM and connectivity to the San Dieguito River, a navigable water, the channel is a water of the U.S. under the jurisdiction of ACOE. The freshwater marsh community is perennially inundated and supports obligate hydrophytic species. Hydric soils are defined as soils that are inundated for a long or very long period; therefore, the freshwater marsh community meets all three parameters for an ACOE wetland. Results of the wetland delineation indicate that freshwater marsh is the only community that meets all three parameters of a wetland water of the U.S. under the jurisdiction of ACOE (Dudek 2012). Therefore, a federal Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers (Corps) may be required. The project also may require a Clean Water Act Section 401 Water Quality Certification from the California Regional Water Quality Control Board (RWQCB). This certification would be obtained only if the proposed project is first approved by the City of Del Mar. No conflicts are anticipated should the project be approved. As such, the project impacts would not conflict with federal or state wetland regulations and impacts would be less than significant.

Environmental Checklist

<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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Finally, the project site includes Cismontane Alkali Marsh habitat (Dudek 2012). Cismontane Alkali Marsh meets the California Department of Fish and Game (CDFG) definition of a wetland and as such is under the jurisdiction of the CDFG, pursuant to Section 1602 of the California Fish and Game Code, the California Coastal Commission (CCC) pursuant to the Coastal Act of 1976, and the Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the federal Clean Water Act and the Porter-Cologne Act.

The ACOE, RWQCB, CDFG and CCC certifications would be obtained only if the proposed project is first approved by the City of Del Mar. No conflicts are anticipated should the project be approved. As such, the project impacts would not conflict with federal or state wetland regulations and impacts would be less than significant.

- (c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

Discussion: San Diego County has completed several conservation planning efforts with more currently in progress. The long-term goal of these plans is to establish a regional reserve system that will protect native habitat lands and their associated biota. The ultimate goal of these conservation plans is the establishment of biological reserve areas in conformance with State Natural Communities Conservation Planning Act (NCCP Act), and to contribute to the preserve system already established by the approved Multiple Species Conservation Plan (MSCP) in San Diego County (Dudek 2012).

The City of Del Mar is listed as a jurisdictional entity in the process of developing a MSCP Subarea Plan, although no draft has been submitted to the resource agencies for review (Dudek 2012). In the event that the City completes and adopts an MSCP Subarea Plan prior to obtaining a grading permit, compliance with the Subarea Plan guidelines on avoidance, mitigation, and species-specific coverage would be required. As the City has not adopted an MSCP Subarea Plan, the project is not in conflict with a conservation plan.

- (d) Be incompatible with any existing land use in the vicinity?

Discussion: The proposed project site would retain its previous land use designations and functions as a railroad right of way. The solar-powered pump station would be built on city owned property where the current pumping station is located. This would not result in change in existing land use. Additionally, the surface above the proposed localized drainage system and pipeline will be restored using cobblestone to create a dry river bed appearance that is consistent with the areas surrounding the right of way. No zoning or land use designations would be altered in the project site vicinity. No impact would occur.

Environmental Checklist

<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
(e) Affect agricultural resources or operations (e.g., impacts to soils or farmlands, or impacts from incompatible land uses)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion: The proposed project would not affect agricultural resources or operations since there are none on the project site or vicinity. No impact would occur.				
(f) Disrupt or divide the physical arrangement of an established community (including a low-income or minority community)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion: The proposed project would be located within the existing NCTD right of way, and would be consistent with City zoning and General Plan designation for the site. The proposed project would not disrupt or divide the physical arrangement of an established community. No impact would occur.				
II. POPULATION AND HOUSING				
Would the proposal:				
(a) Cumulatively exceed official regional or local population projections?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion: The proposed project has been developed for vector control and would not alter the capacity of the existing water and wastewater service. Therefore, the project is not anticipated to induce population growth. Impacts would be less than significant.				
(b) Induce substantial population growth in an area, either directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion: Private residences are located within the direct vicinity of the proposed project to the west. However, the proposed project would not alter or remove these homes, nor would it change any land use zoning or designations. The proposed project would not occur in a previously undeveloped area and would not further extend major infrastructure that would induce population growth. Therefore, no impact would result.				
(c) Displace existing housing, especially affordable housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion: Private housing is located within the direct vicinity of the proposed project. However, the proposed project would not alter or remove any homes and would not change				

Environmental Checklist

<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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any existing land use zoning or designations. No impact would result.

- (d) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

Discussion: The proposed project is located within the existing NCTD right of way and would not displace existing housing or result in the displacement of existing residents. As a result the project would not necessitate the construction of replacement housing elsewhere. No impact would result.

III. GEOLOGY/SOILS

Would the project result in or expose people to potential impacts involving:

- (a) Fault rupture?

Discussion: There are no mapped faults on the project site or in the immediate project area (California Geological Survey 2010). The proposed project would not result in the construction of buildings or structures for human occupancy or that would serve, house, entertain, or otherwise accommodate people. The project would also not introduce new uses such as dams, reservoirs, petroleum storage facilities, or civic uses that would expose people or structures to substantial adverse effects. Therefore, the proposed project would not result in or expose people to potential impacts of fault rupture. Potential impacts from exposure to fault rupture would be less than significant.

- (b) Strong seismic ground shaking?

Discussion: The proposed project site would be subject to potential ground shaking associated with earthquakes that may occur in the region. The development of the improved drainage system would not result in the construction of any buildings or structures for human occupancy. Therefore, compliance with the California Building Code as well as critical infrastructure design protocols is not applicable. The proposed project would only expose people to potential seismic shaking during limited, short-term construction and maintenance of the drainage systems. Potential impacts from ground shaking would be less than significant.

Environmental Checklist

<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
(c) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Discussion: The proposed project would not result in the construction of structures or buildings for human occupancy and would only require temporary and intermittent maintenance. Therefore, any exposure of people to ground failure or liquefaction would be less than significant.</p>				
(d) Seiche, tsunami, or volcanic hazard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Discussion: The project site is located near San Dieguito River and Lagoon, and is located within approximately one quarter mile from the Pacific Ocean. A portion of the project site is located within a mapped area of potential tsunami inundation (CalEMA et al. 2009). The proposed project would not result in the construction of buildings or structures for human occupancy and people should only be present for the intermittent maintenance and short-term construction of the proposed drainage system. Due to the minimal frequency of human presence on the project site the potential risk for inundation to a tsunami or seiche is considered low. In addition, the project site is not located near a volcano and would not be subject to a volcanic hazard. Therefore, any exposure of people to seiche, tsunami, or volcanic hazard would be less than significant.</p>				
(e) Landslides or mudflows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Discussion: The proposed project would not be subject to hazards from landslides or mudflows because the project site is relatively flat and not located in an area with adequately steep slopes for a landslide or mudflow event to occur. The project site consists of Tujunga Sand and therefore would have slopes ranging from 0 to 5% (NRCS 2011). The proposed project would not result in the construction of buildings or structures for human occupancy. As previously stated any human presence would be related to intermittent and short term construction or maintenance. Therefore, the impacts would be less than significant.</p>				
(f) Erosion, changes in topography or unstable soil conditions from excavation, grading or fill?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Discussion: The proposed project would include scraping, excavation, grading, top soil replacement and fill operations, which would have the potential to result in erosion, changes in topography or unstable soil conditions. However, the construction of a nuisance water system would not be subject to the critical infrastructure design protocols due to the limited scale of activities required. The portions of the site that will be graded will be made to closely match the existing surface elevations and slopes. Therefore, this impact is considered to be less than significant.</p>				

Environmental Checklist

<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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(g) Subsidence of the land?

Discussion: The proposed project would not construct any buildings for human occupancy and the construction of the nuisance water drainage system is not considered a critical infrastructure project. Due to the limited scale and potential hazards associated with the minor construction involved in the proposed project there is not expected to be any risk of explosion people to land subsidence. Therefore, impacts would be less than significant.

(h) Expansive soils?

Discussion: The proposed project would construct a nuisance water drainage system and would not involve the construction of structures that would involve the presence of people other than for intermittent and temporary maintenance. The limited construction activities involved would not adversely expose people to the hazards of expansive soils. Therefore, impacts would be less than significant.

(i) Unique geologic or physical features?

Discussion: The proposed project would not impact any unique geologic or physical features on the project site or in the immediate vicinity. Therefore, no impact would occur.

(j) Soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

Discussion: The proposed project site would connect to the City sewer system and the drainage system would not be used for the removal of occupant waste. Therefore, the project would not utilize septic tanks or other alternative wastewater disposal systems, and no impacts would occur.

Environmental Checklist

<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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IV. HYDROLOGY/WATER QUALITY

Would the project result in:

- (a) Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff, in a manner which would result in substantial erosion, siltation, or flooding, on- or off-site?

Discussion: Impacts to water quality during construction and operation may occur without mitigation incorporated. During construction, gasoline, diesel fuel, lubricating oil, and grease could potentially leak from vehicles and construction equipment on the project site.

As construction activities may coincide with a storm event, construction of the project could result in impacts to water quality. Exposed soils from excavation, grading and trenching activities could erode and be transported to nearby water resources. Sedimentation to drainages in the project area could have adverse effects on water quality. Additionally, accidental spills or disposal of potentially harmful materials used during construction could wash into and pollute surface waters or groundwater. These potential impacts would be short-term and limited to the construction phase. An erosion control plan would be created that includes construction BMPs for containing erosion including silt fencing, fiber rolls and the use of sand bags to protect stormwater drains. Additionally, the proposed project will be subject to the requirements necessary to obtain a Clean Water Act Section 401 and 404 permit. To reduce the risk of potential increased runoff of harmful chemicals into the ecosystem, all equipment and vehicles required for construction, maintenance and operation shall be refueled or maintained within paved roadways or designated staging areas. All stationary equipment, such as motors or generators, shall be stored on designated staging areas, existing roadways or previously developed land and drip pans shall be placed under all potential discharge conduits or leaks. Impacts would be less than significant.

- (b) Exposure of people or property to significant water-related hazards such as flooding?

Discussion: The proposed project site is located within a 100-year flood hazard area, and within the City's Floodplain Overlay Zone. Potential exposure to a 100-year flood event exists during the limited construction phase of the project. Due to the short length of construction and the fact that no structures for human use would be built, the risk of exposing people or property to such a flood event is less than significant. The proposed drainage project will not increase

Environmental Checklist

<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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the likelihood of a flooding event or the pooling of surface water in the project site, and thus would not be a longer-term significant impact after construction. Therefore, impacts would be less than significant.

- (c) Discharge into surface waters or other alteration of surface water quality (e.g., temperature, dissolved oxygen or turbidity)?

Discussion: The proposed project consists of the construction of a drainage pipeline under mostly existing disturbed or developed areas. The proposed project would modify the project area from a vegetated channel with standing water to a gravel lined channel with no standing water. There would be no net increase in runoff in this proposed project because it will exclude the use of impervious surfaces in the channel. Nor would the proposed improvements provide substantial sources of polluted runoff. Additionally, an erosion control plan will be implemented that would include silt fencing, fiber rolls and sand bags to decrease the runoff of sediments into any surrounding surface water bodies. Impacts to water discharge into surface waters and surface water quality would be less than significant.

- (d) Changes in the amount of surface water in any water body?

Discussion: The proposed project would not result in an increase in impervious surfaces on-site and thus would not increase runoff from the project site to the nearest receiving water, the San Dieguito River and Lagoon. The proposed project would not result in a measurable change in the amount of surface water conveyed to the San Dieguito River and Lagoon. The proposed project would create a below grade water drainage channel that would be covered with gravel. This improved drainage system would eliminate the occasional pooling of stagnant water that can occur in the current vegetated drainage channel. Therefore, impacts would be less than significant.

- (e) Changes in currents, or the course or direction of water movements?

Discussion: The nearest receiving water to the proposed project site is the San Dieguito River and Lagoon. The proposed project would replace the existing vegetative channel with a gravel lined channel and perforated pipe system that would reduce the amount of standing water that occasionally exists in the current drainage channel. This would represent a negligible change in the amount of water in the San Dieguito River and Lagoon and would not change their current, course, or direction of water movement. Therefore, any impacts would be less than significant.

Environmental Checklist

<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
(f) Change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of aquifer by cuts or excavation, or through substantial loss of groundwater recharge capability?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Discussion: The proposed project would not use impervious surfaces and therefore would not result in a reduced quantity of water able to infiltrate and recharge groundwater sources. The below grade pipes would have perforations located at a height equal to the season high ground water elevation so that ground water should not enter the drainage system. These design features would reduce the impact to the quantity of groundwater to a less than significant level without any substantial loss of groundwater recharge capability. Impacts would be less than significant.				
(g) Altered direction or rate of flow of groundwater?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Discussion: The proposed project would not alter the amount of ground water as detailed in Section IV (f) above. After construction the storm water channel will be rehabilitated to its original grade and would not change the direction of groundwater flow. The proposed project would not utilize or otherwise affect groundwater resources at a scale which would significantly alter the direction or rate of flow of groundwater. Impacts would be less than significant.				
(h) Impacts to groundwater quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Discussion: The proposed project would have the potential to impact groundwater water quality during construction excavation, grading and equipment refueling as described in Section IV (a) above. These construction-related activities would be short-term and would not create a lasting or significant effect on groundwater quality. Additionally, no impacts to groundwater quality would occur during operation of the proposed project. Therefore, impacts would be less than significant.				
(i) Substantial reduction in the amount of groundwater otherwise available for public water supplies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Discussion: The proposed project could potentially use a water truck for the purpose of wetting exposed soils to reduce fugitive dust emissions. This would not significantly utilize or increase the use of potable water from the municipal water supply system of the City of Del Mar due to the limited amount of water and the short period of construction. The proposed project would not significantly affect groundwater levels and the City receives its drinking water directly from the San Diego County Water Authority. For these reasons, there would not be a substantial reduction in the amount of groundwater otherwise available for public water supplies. Impacts would be less than significant.				

Environmental Checklist

<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
(j) Create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion: See Section IV(a) for more information on potential impacts to ground water quality. The proposed project would construct an improved drainage system in place of the open vegetated channel that currently exists on the project site. This new drainage system would not increase the amount of impervious surfaces and would not lead to an increase in water runoff. The new drainage pipeline would connect to existing stormwater drainage systems but would not substantially change the amount of water that is currently conveyed by the existing drainage system.

During the construction phases of the proposed project there is a possibility for the spilling of fuel or chemicals used for refilling construction equipment. Also, scraping, excavating, grading, backfilling, and top soil replacement would occur during construction that could increase the amount of sediment runoff from the project site. These effects would be limited to the short term construction phase and would not create a long term or substantial contribution to polluted runoff. Construction BMPs for erosion control would also be used to limit the amount of sediment runoff from the project site. These BMPs would include the creation of an erosion control plan, the use of silt fencing, fiber rolls and sand bags around stormwater drains. With these measures in place any impacts would be reduced to a less than significant level.

(k) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or other flood hazard delineation map, or expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Discussion: Although a portion of the project is located within the 100-year floodplain, the project does not involve a housing component or the construction of any large above ground structures meant to accommodate people. During construction workers would be present on the project site and potentially be exposed to such a flooding event. Due to the short term natural of the construction there would not be a significant risk of loss, injury or death involving flooding. Therefore, flooding hazards and risks to the project are less than significant.

Environmental Checklist

<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
(l) Place within a 100-year flood hazard area any structures, which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion: The proposed project does not include any above surface structures of sizeable significance and would not impede or redirect the flow of a flood event. Any impacts would be less than significant

V. AIR QUALITY

Would the project:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| (a) Conflict with or obstruct implementation of the applicable air quality plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: Regional planning efforts to improve air quality include a variety of strategies to reduce emissions from motor vehicles and minimized emissions from stationary sources. The San Diego County Air Pollution Control District (SDCAPCD) is the agency principally responsible for comprehensive air pollution control in the San Diego Air Basin. The SDCAPCD develops rules and regulations, establishes permitting requirements for stationary sources, inspects sources, and enforces such measures through educational programs or fines, when necessary.

The applicable air quality plan for the San Diego Air Basin is the San Diego Regional Air Quality Strategy (SDRAQS). The SDRAQS is based on the population, vehicle, and land use trends developed in the general plans of the County of San Diego and the Cities within it. The SDRAQS addresses the State requirements, the San Diego portion of the California State Implementation Plan (SIP), and federal air quality requirements. The proposed project would not require any alterations or amendments to the existing general plans and designated land use zones. The drainage improvements would not generate growth, increase population or long-term vehicle usage, and would be consistent with these existing general plans and land use policies.

Emissions during construction of the project are expected to be less than the SDRAQS thresholds of significance, and maintenance activities would be sporadic and short term in nature. The types and quantities of construction equipment that would be used for the proposed project would be typical of the industry and would not be of sufficient magnitude in quantity to exceed those assumptions used in the preparation of the SDRAQS and any impact would be less than significant. Therefore, the proposed project would not conflict with the applicable land use plans and would not conflict with or obstruct the implementation of the applicable air quality plan.

Environmental Checklist

<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
(b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion: Construction emissions would come from heavy equipment exhaust; construction-related trips by workers; and associated fugitive dust generation from clearing, grading, and potential vehicle travel on unpaved roads. The principal pollutants of construction vehicle emissions would be CO, volatile organic compounds (VOC), NO_x and PM₁₀. Both VOC and NO_x are precursors of ozone (O₃). Since construction activities would be temporary and short term in nature, impacts associated with emissions during construction would be less than significant.

Generally, grading ordinances require that all grading surfaces and materials must be wetted, protected, or contained to reduce nuisance from dust with the Vector Habitat Remediation Program Project EIR recommending wetting of these surfaces twice daily. Also, for potential vehicle travel on unpaved roads speed limits are recommended to reduce the fugitive dust to a level below significance. Traffic associated with workers commuting to and from the project sites would slightly increase CO levels at nearby sensitive receptors or areas immediately adjacent to the project site. However, emissions from these short-term trips would be minimal and would not be anticipated to substantially contribute to an existing or projected air quality violation.

Emissions from other pollutants would be minimal during maintenance activities and would occur for short periods of time. Therefore, it is assumed that emissions would be below the County's screening threshold of 250 pounds per day for oxides of nitrogen (NO_x) and 75 pounds per day of volatile organic compounds (VOCs) and that the impacts would be less than significant.

(c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Discussion: In Section V(a), it is determined that the proposed construction of the drainage system would be within the San Diego Air Basin (SDAB) and would have to comply with the San Diego Regional Air Quality Strategy (SDRAQS). The California Air Resources Board has listed San Diego County as a nonattainment zone for Ozone, PM 2.5, and PM 10. The U.S. Environmental Protection Agency has designated the County as a nonattainment zone for 8-hour Ozone (CARB 2011). As described in Section V(a) the proposed project would not alter or add to the County of City general plans or land use designations that are the basis of the air quality projections in SDRAQS.

The SDRAQS does not address PM10 or PM2.5, but the proposed project, and other current or

Environmental Checklist

<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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future projects within the region, would need to comply with grading and dust control ordinances for grading permitting. The compliance with these documents, as well as the suggested design features for reducing fugitive dust described in the Vector Habitat Remediation Program EIR would reduce these fugitive dust emissions to below a significant level.

The Vector Habitat Remediation Program EIR also concluded that for a standard drainage project of this size the greenhouse gas emissions would be well under the proposed threshold by the County for small projects (County of San Diego 2009). Given the limited scale of the project and its consistency with the City General Plan and SDRAQS, it would not result in a cumulative considerable net increase in air pollutants. Therefore, the proposed project would not violate any air quality standard or significantly contribute to an existing or projected air quality violation either during construction or operation. Impacts would be less than significant.

- (d) Expose sensitive receptors to pollutants?

Discussion: The greatest potential for toxic air contaminant emissions for the proposed project would occur during construction from diesel particulate emissions from heavy equipment operations and maintenance operations that would lead to increased vehicle trips to the project site. Sensitive receptors could include residential uses, schools, resident care facilities, or day-care facilities of which the nearby residences adjacent to the project alignment would be the only potential sensitive receptor in the project area. See Section VII for a discussion about the potential effects of the project on sensitive biological receptors. The number of construction and maintenance vehicle trips generated by the proposed project is anticipated to be minimal because of the short construction phase. In addition, the maintenance trips would be sporadic and short term in nature and would not result in any permanent increase in the number of vehicle trips, which could contribute to long-term exhaust emissions and result in substantial pollutant concentrations. As noted above, the proposed project would not result in the exposure of sensitive receptors to substantial pollutant emissions or concentrations. Therefore, impacts to sensitive receptors would be less than significant.

- (e) Alter air movement, moisture or temperature, or cause any change in climate?

Discussion: The proposed project is the construction of a drainage system and pipeline that would not include additional above ground structures a small solar powered pump station. The improved drainage system would be designed to decrease the amount of stagnant, standing water along the NCTD right of way but would not substantially change the amount of moisture in the air. Therefore, the proposed project would not substantially alter air movement, moisture, or temperature. Impacts would be less than significant.

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<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
(f) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion: Land uses and industrial operations that are associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project would not be included in any of those categories but potential odors would be generated from vehicles and equipment exhaust emissions during construction and maintenance of the proposed project. Odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment. Construction equipment would operate at various locations throughout the construction site, and operation near existing sensitive receptors would be short term and intermittent. Maintenance activities that use diesel equipment would also generate some nuisance odors; however, as mentioned above, operation near existing sensitive receptors would be sporadic and temporary in nature. Therefore, impacts associated with odors during construction and maintenance would not significantly affect a substantial number of people. Impacts would be considered less than significant.

VI. TRANSPORTATION/CIRCULATION

Would the project result in:

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| (a) Increases in vehicle trips or traffic congestion that are substantial in relation to the existing traffic load and capacity of the street system? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: During construction, project traffic would consist of construction vehicles and worker trucks. The relatively minor scope of construction activities required in reducing mosquito breeding habitat consists primarily of a backhoe, excavator, compactor, water truck, dump truck and a loader. The short-term and limited nature of construction related traffic would not result in a substantial increase in traffic volume. These small volumes of traffic are not anticipated to substantially increase vehicle trips or congestion in relation to the existing street system.

Traffic generated during operation and maintenance of the proposed project would consist of sporadic trips and would likely consist of a small number of vehicles and equipment accessing the project site. Due to the small number of vehicles and equipment likely to be required for maintenance at future project sites, impacts during the operational phase of future projects would be less than significant. All construction and maintenance equipment would be stored in designated locations that would not substantially impact or close any existing public roadways. As such, implementation of the proposed project would not add a significant amount of traffic to local area road segments such that vehicle trips or congestion would increase substantially. Impacts would be less than significant.

Environmental Checklist

<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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| (b) Exceeding, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
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Discussion: Section VI(a) demonstrates that individually, the small number of vehicles and limited nature of construction; as well as the infrequent vehicle trips associated with operation and maintenance would not substantially increase congestion on the associated roadways. Cumulative impacts could occur as a result of the traffic generated by past, present, and expected future projects in the project area. However, as discussed above, construction and operation of the proposed project would generate only a temporary, small amount of traffic on the limited project area roadways. Due to the relatively minor activities proposed, increases in traffic on local area roadways would not result in a substantial contribution to cumulative traffic impacts in the region and would not result in sustained amounts of traffic. Impacts would be less than significant.

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| (c) Hazards to safety from design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: The proposed project would not create hazards to safety from design features. The proposed drainage improvements may require the removal of vegetation and potentially the creation of access roads for construction of the project and to aid in ongoing maintenance efforts. However, possible construction of access roads would be for purposes of project construction and maintenance only, and would not create roadways that would be open for use by the general public. The proposed project would not change the existing street configuration used by the general public and any potential access roads would be limited in length. The possible design of access roads is not expected to result in unsafe design features or unsafe configurations. Any potential impacts would be less than significant.

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| (d) Inadequate emergency access or access to nearby uses? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
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Discussion: In Section VI(c) above the possible construction of new access roads or the use of existing access roads to the project site is described. The proposed project would not cause the closure of any lanes on any public roadways during or after construction. Adequate access for the appropriate emergency access would be maintained to the site and the existing emergency access to adjacent properties at all times. Additionally, the construction of the proposed project would only occur for a short period. Therefore, the project would not result in inadequate emergency access or inadequate access to nearby uses. No impact would occur.

Environmental Checklist

<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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| (e) Insufficient parking capacity on-site or off-site? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The proposed project is for the creation of an improved drainage system along the NCTD right of way. This would only require vehicle parking during the construction and maintenance of the proposed project. As described in Section VI(a) above, the limited number of vehicles and short term length of construction would not significantly impact on-site or off-site parking. Additionally, maintenance would be sporadic and would likely involve only one or two vehicles that would not significantly affect parking capacity. No off-site parking would be provided or substantially impacted by the proposed project. Therefore, no significant impact would occur.

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| (f) Hazards or barriers for pedestrians or bicyclists? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
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Discussion: The project would not affect any existing bicycle lanes or facilities located in the vicinity of the project site. There would be no construction or alterations to existing general public roads, sidewalks, or bike lanes and construction of the proposed project would be short term in nature. Therefore, any potential impacts associated with hazards or barriers for pedestrians or bicyclists would be less than significant.

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| (g) Conflicts with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
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Discussion: The proposed project would not conflict with or alter any adopted policies supporting alternative transportation. The project construction would not alter function of any transportation infrastructure used by the general public. No impact would occur.

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| (h) Rail, waterborne or air traffic impacts? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
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Discussion: The proposed project site is located within the NCTD right of way adjacent to an existing rail line. However, the proposed project would not impact the use of the rail way and would only be constructing an improved drainage system parallel to the rail alignment. No waterborne or air traffic facilities are located in proximity to the project area and would not be affected by the proposed project. Therefore, no impact would occur.

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<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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VII. BIOLOGICAL RESOURCES

Would the project result in substantial impacts to:

- (a) Endangered, threatened or rare species or their habitats (including but not limited to, sensitive plants, fish, insects, animals and birds)?
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Discussion: The proposed project would result in the removal of 0.38 acre (2,042 linear feet) of waters of the U.S./state and CDFG-jurisdictional streambed consisting of 0.30 acre of open water and 0.08 acre of freshwater marsh (Dudek 2012). An additional 0.54 acre of CDFG-only jurisdictional streambed, consisting of disturbed cismontane alkali marsh, would also be impacted (Dudek 2012). Five listed bird species have a low or very low potential to occur in the marsh habitat on site (Dudek 2012). Listed species are defined as plant or wildlife species that are listed as threatened or endangered by either the California or federal Endangered Species Act. The potential impacts will be mitigated to a level below significance with the following measures in place:

BIO-1: To ensure avoidance of listed species, a qualified biologist will monitor ground disturbance activities to ensure no listed species are present within the disturbance area. The biologist will survey the site and suitable habitat areas for listed bird species in the disturbance area and within 500 feet of the disturbance area immediately prior to construction activities to ensure no listed species are present. The biologist shall monitor all direct habitat disturbance activities occurring within suitable habitat for listed species. If a listed species is present, construction within 500 feet of the occupied area will be stopped and delayed until the species has either vacated the disturbance area or the monitoring biologist and project applicant have consulted with the relevant wildlife agency (i.e., either USFWS, CDFG, or both) to determine the appropriate course of action to avoid both direct and indirect impacts. Construction activities may resume once the monitoring biologist, in coordination with the relevant wildlife agency(ies) as necessary, determines that there is no longer a potential for a listed species to be directly or indirectly affected. If the wildlife agency(ies) determine that take of the species associated with construction activities cannot be avoided, the project activities shall be postponed until the project applicant has obtained the necessary take permits/authorizations from the relevant agency(ies). With this mitigation in place, the proposed project

BIO-2: Mitigation for impacts to jurisdictional waters will be completed at a minimum 2:1 ratio of in-kind mitigation within the San Dieguito River watershed and will be accomplished through either off-site creation, contribution to a mitigation bank or in-lieu fee program, or collaboration with an existing off-site restoration program. On-

Environmental Checklist

<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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site mitigation is not feasible as the goal of the project (removal of stagnant water) is not compatible with wetland creation, which requires inundation. Mitigation for impacts to jurisdictional waters would be coordinated with and approved by ACOE, RWQCB, CDFG, and CCC.

BIO-3: To avoid impacts to nesting birds, ground disturbance activities and vegetation removal will be completed outside avian breeding season (between September 1 and January 14) to avoid impacts to nesting birds, ground disturbance activities and vegetation removal will be completed outside avian breeding season (between September 1 and January 14). If ground disturbance activities (including clearing and grubbing) are scheduled to occur between February 1 and August 31, a qualified biologist will conduct a nesting bird survey within 1 week of ground disturbance activities. The survey shall consist of full coverage of the proposed project footprint and up to a 300-foot buffer. The specific survey buffer will be determined in the field by the project biologist and will take into account the species nesting in the area and the habitat present. If no active nests are found, no additional measures are required. If nests are found, the nest locations shall be mapped by the qualified biologist utilizing GPS equipment, where feasible. The nesting bird species will be documented and, to the degree feasible, the nesting stage (e.g., incubation of eggs, feeding of young, near fledging). The biologist shall establish a no-disturbance buffer around each active nest. The buffer will be determined by the qualified biologist based on the biology of the species present and surrounding habitat. No construction or ground disturbance activities shall be conducted within the buffer until the biologist has determined the nest is no longer active and has informed the construction supervisor that activities may resume.

(b) Any species identified as a candidate, sensitive or special status species in local or regional plans, policies or regulations, or by the CDFG or U.S. Fish and Wildlife Service (USFWS)?

Discussion: As described in Section VII(a), five listed bird species that have a low or very low potential to occur on site. In addition, implementation of the proposed project would permanently impact 0.54 acre of cismontane alkali marsh (including disturbed forms) and 0.08 acre of freshwater marsh. Both of these communities are considered sensitive vegetation communities. Potential impacts would be mitigated to a less than significant level through the incorporation of mitigation measures BIO-1 through BIO-3.

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<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
(c) Locally designated species (e.g., heritage trees)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(d) Any riparian habitat or other sensitive natural community identified in local or regional plans, policies and/or regulations or by the CDFG or USFWS?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion: Section VII(a) describes the vegetation found on the project site. No locally designated species were identified on the project site. Therefore, no impact would occur.

Discussion: See Section VII(a) above. The proposed project site would impact approximately 0.38 acre (2,042 linear feet) of waters of the U.S./state and CDFG-jurisdictional streambed consisting of 0.30 acre of open water and 0.08 acre of freshwater marsh. An additional 0.54 acre of CDFG-only jurisdictional streambed, consisting of disturbed cismontane alkali marsh, would also be impacted. The cismontane alkali marsh is riparian wetland vegetation associated with the channel; therefore, CDFG jurisdiction extends to include these communities (Dudek 2012). These impacts would be mitigated to below a level of significance through the incorporation of mitigation measure BIO-2. Therefore, impacts would be mitigated to below a level of significance.

(e) Wetland habitat (e.g., marsh, riparian, vernal pool)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Discussion: See Section VII(a). The proposed project site would impact approximately 0.38 acre (2,042 linear feet) of waters of the U.S./state and CDFG-jurisdictional streambed consisting of 0.30 acre of open water and 0.08 acre of freshwater marsh. An additional 0.54 acre of CDFG-only jurisdictional streambed, consisting of disturbed cismontane alkali marsh, would also be impacted. The freshwater marsh is the only community that meets all three parameters of a wetland waters of the U.S. under the jurisdiction of ACOE. Impacts to these wetlands would be mitigated to below a level of significance through the incorporation of mitigation measure BIO-2. Therefore, impacts would be mitigated to below a level of significance.

(f) Wildlife dispersal or migration corridors?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Discussion: Section VII (a) describes the potential impacts of the proposed project on avian habitat. The impacts discussed in Section VII(a) could be potentially significant but would be mitigated to a less than significant level through the incorporation of mitigation measure BIO-1 through BIO-3.

Environmental Checklist

<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
(g) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(h) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion: The proposed project would not conflict with the City of Del Mar's local policies or ordinances protecting biological resources. No impact would occur.

Discussion: Section I(b) describes that the proposed project would be located in the City of Del Mar which is designated as a subarea in the MSCP. Although the creation of this subarea MSCP is underway, no document has been submitted to conservation agencies for review. In the event that the City completes and adopts an MSCP Subarea Plan prior to obtaining a grading permit, compliance with the Subarea Plan guidelines on avoidance, mitigation, and species-specific coverage would be required. The proposed site is also not included in any existing Multiple Habitat Conservation Plan that is available for public review. Any impacts would be less than significant.

VIII. ENERGY AND MINERAL RESOURCES

Would the project:

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|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| (a) Conflict with adopted energy conservation plans? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
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Discussion: The proposed project would not conflict with adopted energy conservation plans and the operation of the drainage channel would not require any external energy input. The only feature of the proposed project that would consume energy during operation would be the creation of a solar-powered pump station in place of the existing pump station which does not represent a considerable use of energy. This pump would not require any electricity input from the grid and would self-generate all of the required energy. No impact would occur.

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|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| (b) Use non-renewable resources in a wasteful and inefficient manner? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
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Discussion: The operation of the proposed project would not involve the use of non-renewable resources because the only energy consuming feature of the project is a solar-powered pump station. This pump would self-generate all of its required energy. Non-renewable energy would

Environmental Checklist

<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<p>be used to power construction equipment but would not result in the wasteful or inefficient use of non-renewable resources. The construction equipment would be typical of those used in the industry and construction would be short term in nature. The use of non-renewable resources would be limited and would not be used in a wasteful or inefficient manner. Any impacts would be less than significant.</p>				
<p>(c) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the state, or result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion: The proposed project would not result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State because no mineral resources have been identified on the project site. The project site is currently part of the Mineral Resource Zone (MRZ) 1 and a portion is in an MRZ-3 region (City of Del Mar 2009, Figure 4.15-1). MRZ-1 designates an area where adequate information indicates that no significant mineral deposits are present and MRZ-3 indicates an area containing mineral deposits, the significance of which cannot be evaluated from available data. The project site is also not delineated as a mineral resource recovery site in the Del Mar Community Plan.

The proposed project would involve some grading activities but these activities would not result in the loss of a significant quantity of a known mineral resource. All construction related activities would be contained within the NCTD right of way and would not affect the availability of any known mineral resource on the project site. The drainage improvement project would be consistent with the existing land use for the project site as well as with the surrounding land uses that do not involve the extraction of mineral resources. Therefore, the proposed project would not result in the loss of availability of a known mineral resource. Any impacts to mineral resources would be less than significant.

Environmental Checklist

<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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IX. HAZARDS/HAZARDOUS MATERIALS

Would the project involve:

- (a) A risk of accidental explosion or release of hazardous substances (including, but not limited to, oil, pesticides, chemicals, or radiation) through the routine transport, disposal or other emission of hazardous materials?

Discussion: The proposed project would not involve a substantial risk of accidental explosion or release of hazardous substances other than those associated with normal construction of drainage projects involving limited grading activities and vehicle refueling. Light grading associated with the proposed project is not expected to expose construction workers or the environment to soils or groundwater with contaminant levels exceeding the applicable federal and State contaminant level thresholds. The project would be required to meet the standard set forth in the Del Mar Municipal Code (DMMC) Chapter 11.30 regarding storm water management and discharge control would ensure that the appropriate actions to limit or eliminate exposure would be taken in the event of a contaminant spill. Equipment fuel will be used on site during construction and maintenance activities but not in excessive quantities and all refueling will be done in designated areas. Therefore, any risk of accidental release of hazardous substances would be less than significant.

- (b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?

Discussion: Refer to response IX(a). The proposed project does not involve the handling, transporting or excavation of hazardous materials besides those normally associated with construction of drainage projects that involve grading and vehicle refueling. The proposed project would not store fuel or other hazardous materials on-site. Equipment fuel that will be used during construction and maintenance activities will not be used in quantities that would create a significant hazard to the public or environment. Therefore impacts would be less than significant.

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<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
(c) Possible interference with an emergency response or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Discussion: The proposed project would not interfere with an emergency response plan or emergency evacuation plan because it would not alter any existing transportation routes utilized by emergency response vehicles. The project will be contained to the NCTD rail right of way and would not alter any transportation routes. Therefore, no impact would occur.</p>				
(d) The creation of any health hazard or potential health hazard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Discussion: The proposed project would not create any health hazard or potential hazards other than those typically associated with drainage improvement construction involving light grading and construction vehicle refueling. Refer to response IX(a) for a detailed discussion on the potential health hazards associated with the proposed project. Additionally, construction activities associated with the project would be required to comply with federal, State, and local regulations governing worker safety, the preparation of emergency response programs, and the use of controls to limit exposure to workers. The proposed project would also comply with the applicable federal, State and local regulations governing the treatment, storage, and disposal of hazardous wastes if any were encountered. The proposed project would not create a health hazard and any impacts of potential health hazards would be less than significant.</p>				
(e) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Discussion: The proposed project is the construction of a drainage system along the NCTD right of way. It is not within one-quarter mile of an existing or proposed school, and would not handle, store, or excavate any hazardous materials. Therefore, no impact would occur.</p>				
(f) Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Discussion: The proposed project is the construction of improved drainage systems along the NCTD right of way and would not create any health hazard or potential hazards other than those typically associated with the construction of drainage channels. The proposed project site is not included on the list of hazardous materials sites pursuant to Government Code Section 65962.5 (DTSC 2012). Therefore, no impacts would occur because of the proposed project</p>				

Environmental Checklist

<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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being located on a hazardous materials site.

- (g) Increased fire hazard in areas with flammable brush, grass, or trees?

Discussion: The proposed project site would not involve activities that would result in an increased fire hazard. In addition, the proposed project would not result in the addition of flammable brush, grass or trees and may involve the removal of some vegetation that would only decrease the fire hazard from these sources. Impacts to an increase in fire hazard would be less than significant.

X. NOISE

Would the project result in:

- (a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Discussion: The project proposed involves the construction of an improved drainage system that may require construction equipment for digging and grading purposes. Although the proposed project would only involve limited mechanical equipment during the short term construction phase, there is the potential to generate noise levels in excess of local standards. Located to the west and south of the project site are residential buildings that are classified as a noise sensitive land use by the Noise Element of the County of San Diego General Plan. Traffic-generated noise impacts would be negligible because the proposed project will not generate sustained, daily traffic. Ongoing maintenance of the project site will generate a very small amount of traffic (generally one to two maintenance vehicles). Maintenance activities would be sporadic and would not represent a substantial increase over the existing noise level in the project vicinity. In addition, the propose project will comply with the noise regulations of the City’s Municipal Code. Therefore, impacts will be less than significant.

- (b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Discussion: The most substantial vibration sources associated with construction of proposed project would be equipment utilized during grading activities and compaction. Construction of the proposed drainage system would not involve blasting or pile-driving that are known to generate excessive ground-borne vibrations. Maintenance activities of proposed drainage improvements would not generate ground-borne vibration. In addition, the proposed project will comply with the noise regulations of the City’s Municipal Code. Therefore, impacts will

Environmental Checklist

<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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be less than significant.

- (c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Discussion: The proposed project would not expose people to a substantial permanent increase in ambient noise levels. An increase in ambient noise levels may occur during the construction phase of the proposed project, but due to the short term nature of the proposed construction a permanent increase would not occur. The required maintenance of the drainage system may require the use of construction equipment but would be sporadic and short term in nature. Furthermore, operation of the drainage system would not increase the ambient noise levels in the project vicinity. No substantial permanent increase in ambient noise levels would occur as a result of the proposed project. Impacts would be less than significant.

- (d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Discussion: The proposed project would potentially increase existing noise levels during construction activities through the use of construction equipment for grading, excavating, filling and compacting. Although the construction of the proposed drainage systems would be short term in nature, it could pose a substantial temporary increase in ambient noise levels in the project vicinity. Also, maintenance activities potentially could involve similar construction equipment and may cause a periodic increase in ambient noise above existing levels without the project. These potential elevations in noise levels would be sporadic and temporary in nature. In addition, the proposed project will comply with the noise regulations of the City's Municipal Code. Therefore, impacts will be less than significant.

XI. PUBLIC SERVICES

Would the project have an effect upon, or result in a need for new or altered government services in any of the following areas:

- (a) Fire Protection?

Discussion: The proposed project would not require new or altered fire protection to service the improved drainage systems. The project would not involve occupancy by individuals and would not add to the risk or need for fire protection services of the project site. The project location would make the project infill development and would not increase response times. No impact would occur.

Environmental Checklist

<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
(b) Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Discussion: The proposed project would not require new or altered police protection to serve the drainage on the project site. Given the scale of the project and because it is an infill project, it is not anticipated that the project would reduce response times or require the construction of new police facilities or the addition of police officers or staff members. No impacts would occur.</p>				
(c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Discussion: The proposed project is the construction of an improved drainage system along the NCTD right of way and would not require additional school services. No impact would occur.</p>				
(d) Maintenance of public facilities, including roads?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Discussion: The proposed project would be a relatively small project aimed at improving the existing drainage systems and would not result in an unusual demand for the maintenance of public facilities. Affects from construction would not require additional maintenance because of the low volume of vehicles that would be used during the short construction period. Sporadic and short term maintenance may be required to retain the functionality of the drainage systems. This maintenance would not be a substantial alteration to the maintenance of the existing public facilities. Therefore, impacts would be less than significant.</p>				
(e) Other governmental services?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Discussion: The proposed project would not result in a need for new or physically altered governmental services because all necessary governmental services are currently available to serve the project site and vicinity. No impact would occur.</p>				

Environmental Checklist

<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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XII. UTILITIES AND SERVICE SYSTEMS

Would the project result in a need for new systems or supplies, or substantial alterations to the following utilities?

- (a) Power or natural gas?

Discussion: The proposed project would not require the extension of electrical power and natural gas facilities to serve the project site because the project would only encompass the improvement of a drainage system. The only electricity consuming feature of the proposed project is the pump station which is fueled by entirely self-generated solar power and would not require connection to the electricity grid. Therefore, no impact would occur.

- (b) Communications systems?

Discussion: The proposed project would not require the extension of communications systems to serve the project site because the project would not involve the use of communications systems. No impact would occur.

- (c) Local or regional water treatment or distribution facilities?

Discussion: The proposed project would improve the existing drainage systems along the NCTD right of way. This would include the addition of a solar powered pump station and connections to the existing sewer system. The increase in water conveyed to the sewer system would not be substantially more than the amount of water conveyed by the current drainage system because it would not increase impervious surfaces and would be placed above groundwater levels. The project would not require the creation of additional sewer systems. Therefore, the project would not require new additions or substantial alterations to water treatment or distribution facilities. Impacts to these systems would be less than significant.

- (d) Sewer or septic tanks?

Discussion: The proposed project would not require the use of a septic system but would connect to the existing sewer system along the NCTD right of way. The increase in water conveyed to the sewer system would be negligible and would not require an increase in the current system capacity. The proposed project would make alterations to the drainage ditch located south of 21st street and the construction of additional drainage connections to the existing municipal sewer system. These additions would not substantially alter the current sewer system. Therefore, impacts would be less than significant.

Environmental Checklist

<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
(e) Storm water drainage?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion: The proposed project would redesign the existing stormwater drainage systems along the NCTD right of way to reduce the water retention time of these areas and eliminate mosquito breeding habitat. The drainage improvements would not require the construction of new water or wastewater facilities, because no wastewater would be generated by project-related activities. Also, any increase in storm water conveyance to the drainage system would be negligible. The proposed project would not substantially expand the existing storm water drainage system and the improved drainage system would run adjacent to the current drainage channel. The construction of the improved drainage system would not require a substantial alteration to the direction or path of the existing system. Impacts would be less than significant.

(f) Solid waste disposal, including compliance with federal, state and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Discussion: The operation of the improved drainage systems would not generate any solid waste that would need disposal or that would need to comply with existing regulations. The construction of the proposed project could potentially generate solid waste; however, the quantities of waste would be minimal, and much of the waste would be plant materials that could be recycled. In compliance with federal, State, and local statutes and regulations related to solid waste the proposed project will be required to deposit all solid waste at a permitted solid waste facility. Therefore, no substantial alterations or need for new or expanded solid waste disposal services would occur and the impacts would be less than significant.

(g) Local or regional water supplies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Discussion: The proposed project would not require water supplies to serve the project site because it will only be constructing improvements to the existing drainage system. There would be no water demand for the project site because it would not involve any increase in human use or inhabitation. If during construction the use of water spraying for dust control purposes occurs, the impacts to the local water supply would be minimal due to the limited area and short-term nature of construction. The proposed project would not require substantial alterations or new services of the local or regional water supplies. Therefore, impacts would be less than significant.

Environmental Checklist

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XIII. AESTHETICS

Would the project:

- (a) Affect a scenic vista or scenic highway?

Discussion: The proposed project includes the development of perforated small diameter pipelines to be constructed within the NCTD right of way below grade, within gravel drains, to collect and remove localized nuisance water. The surface above the proposed pipeline will be restored using cobblestone to create a dry river bed appearance that is consistent with the areas surrounding the right of way. Camino Del Mar is designated as a scenic roadway in the Del Mar Community Plan and a small portion of the drainage system that is south of 21st Street may be visible from the road. This portion of the drainage system would be very limited and would not adversely affect the view from Camino Del Mar. The project would cause short-term impacts due to construction activities to adjacent residential entities. Due to the temporary nature of these impacts, and short duration for pipeline construction, visual impacts due to construction would be less than significant.

- (b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a state scenic highway?

Discussion: A small portion of the project site located south of 21st Street might be visible from Camino Del Mar which is designated as a scenic roadway in the Del Mar Community Plan. This portion of the project site, as well as the rest of the project site, would not involve substantial damage to scenic resources such as trees, rock outcroppings or historic buildings. The portion of the designated project site that is visible from Camino Del Mar would not involve the removal of any scenic resources. The proposed project would not result in the demolition of any existing buildings, structures, or landmarks. Construction or maintenance activities would be minimal and would not result in substantial adverse changes to project sites. These construction activities would be short term in nature and maintenance events would be sporadic and temporary. The proposed project would involve rehabilitation grading of the existing drainage channel to closely match the existing surface elevations for the street and tennis facility located south of 21st Street. The surface above the proposed pipeline will be restored using cobblestone to create a dry river bed appearance that would be consistent with surrounding areas and would not substantially damage any scenic resources. Therefore, impacts would be less than significant.

Environmental Checklist

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(c) Have a demonstrable negative aesthetic effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion: As discussed in response XIII(a), the proposed project includes the development of perforated small diameter pipelines to be constructed within City right of way below grade, within gravel drains, to collect and remove localized nuisance water. The surface above the proposed localized drainage system will be restored using cobblestone to create a dry river bed appearance that is consistent with the areas located along the right of way. The project would not degrade the existing visual character of the area creating a negative aesthetic effect. The project would cause short-term impacts due to construction activities to adjacent residential areas. Due to the temporary nature of these impacts, and short duration for pipeline construction, visual impacts due to construction would be less than significant.

(d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Discussion: No new sources of light or glare would be incorporated as part of the proposed project. The proposed drainage system and pipeline has no potential to create a new source of substantial light or glare that could adversely affect day or nighttime views in the area. No impacts would occur.

XIV. CULTURAL RESOURCES

Would the project:

(a) Disturb paleontological resources?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Discussion: The proposed project would involve ground-disturbing activities, but these activities would occur within established wetland areas, The NCTD railroad right of way and stormwater management facilities. These existing facilities have a low potential to contain significant paleontological resources. Additionally, the proposed project site has been previously disturbed and is considered to have a low probability for encountering paleontological resources. However, there still exists the possibility of unearthing paleontological resources below the surface of the project site. In the event that paleontological resources are unearthed during project subsurface activities, all earth disturbing work within 100-meter radius must be temporarily suspended or redirected until a paleontologist has evaluated the nature and significance of the find. After the find has been appropriately mitigated, work in the area may resume. Therefore, the disturbance to paleontological resources would be less than significant.

Environmental Checklist

<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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(b) Disturb archaeological resources?

Discussion: As detailed in Section XIV(a) the proposed project would have a low potential to contain archaeological resources because of the previously disturbed land and wetland areas where the project construction would take place. However, the proposed project does involve ground-disturbing activities, including grading, which have the potential to disturb archaeological resources. This potential disturbance would be abated by following the contingency of suspending or redirecting all earth disturbing work within a 100-meter radius until an archaeologist has evaluated the nature and significance of the find. After the find has been appropriately mitigated all work in the area may resume. Therefore, the impacts to archaeological resources would be less than significant.

(c) Affect historical resources?

Discussion: The proposed project is located within the NCTD right of way and consists of previously disturbed land and wetland habitat. The proposed project site does not contain any historical resources as defined in CEQA under Public Resources Code §21084.1 (California Office of Historic Preservation 2012). The only listed historical resource for the area is the Canfield-Wright House (N2240) which is not located on the proposed project site and would not be affected by the proposed project. Therefore, any potential impact to historical resources would be less than significant.

(d) Have the potential to cause a physical change, which would affect unique ethnic cultural values?

Discussion: The proposed project site is contained within the NCTD right of way and involves construction in previously disturbed land and wetland habitat. No cultural resources are known to exist on the project site. Therefore, the proposed project could not cause a physical change that would affect a unique ethnic cultural value. No impact would occur.

(e) Restrict existing religious or sacred uses within the potential impact area, or disturb any human remains, including those interred outside of formal cemeteries?

Discussion: No known existing religious or sacred uses, or human remains exist on the project site. Therefore, the proposed project would not restrict or disturb existing religious or sacred uses within the potential impact area. No impact would occur.

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<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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XV. RECREATION

Would the project:

- (a) Increase the demand for neighborhood or regional parks or other recreational facilities, such that substantial physical deterioration of the facilities would occur or be accelerated?

Discussion: The proposed project is the construction and operation of a drainage system within the NCTD right of way. No increase in human occupation would occur from the proposed project and it would not increase the demand for neighborhood or regional parks or recreational facilities. No impact would occur.

- (b) Affect existing recreational opportunities?

Discussion: The proposed project would be contained on the NCTD right of way with a portion of the project site existing adjacent to a drainage ditch located South of 21st Street near a public tennis court facility. The construction activities on this portion of the project site would not likely to block access to the tennis facility or affect opportunities to use the recreational facility. These construction-related activities would also be short term in nature and any potential effects would be limited in time and scale. The project would not significantly affect existing or proposed recreational opportunities in the City of Del Mar. Impacts would be less than significant.

- (c) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Discussion: The project does not include recreational facilities or expansion of recreational facilities; no impact would occur.

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<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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XVI. MANDATORY FINDINGS OF SIGNIFICANCE

- (a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?
-

Discussion: As analyzed in the relevant sections of this checklist, the proposed drainage channel improvements would be located in the existing NCTD right of way and would not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or pre-history. Impacts would be less than significant.

- (b) Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?
-

Discussion: The proposed project is consistent with the Del Mar Community Plan/General Plan with respect to existing land use and designations. The proposed project would not have the potential to achieve short-term goals to the disadvantage of long-term environmental goals. Impacts would be less than significant.

- (c) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)
-

Environmental Checklist

<i>Issues (and supporting information sources)</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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Discussion: Section VI(a) describes the effects related to cumulative traffic impacts. The proposed project would not involve any permanent impacts that would be considerable individually or when viewed in connection with the effects of past, current and probable future projects. Impacts would be less than significant.

- (d) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

Discussion: The proposed project would not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly. Impacts would be less than significant.

XVII. SUMMARY OF MITIGATION MEASURES

The mitigation measures set forth below shall be incorporated into the proposed project.

Biological Resources

BIO-1: To ensure avoidance of listed species, a qualified biologist will monitor ground disturbance activities to ensure no listed species are present within the disturbance area. The biologist will survey the site and suitable habitat areas for listed bird species in the disturbance area and within 500 feet of the disturbance area immediately prior to construction activities to ensure no listed species are present. The biologist shall monitor all direct habitat disturbance activities occurring within suitable habitat for listed species. If a listed species is present, construction within 500 feet of the occupied area will be stopped and delayed until the species has either vacated the disturbance area or the monitoring biologist and project applicant have consulted with the relevant wildlife agency (i.e., either USFWS, CDFG, or both) to determine the appropriate course of action to avoid both direct and indirect impacts. Construction activities may resume once the monitoring biologist, in coordination with the relevant wildlife agency(ies) as necessary, determines that there is no longer a potential for a listed species to be directly or indirectly affected. If the wildlife agency(ies) determine that take of the species associated with construction activities cannot be avoided, the project activities shall be postponed until the project applicant has obtained the necessary take permits/authorizations from the relevant agency(ies). With this mitigation in place, the proposed project

BIO-2: Mitigation for impacts to jurisdictional waters will be completed at a minimum 2:1 ratio of in-kind mitigation within the San Dieguito River watershed and will be accomplished through either off-site creation, contribution to a mitigation bank or in-lieu fee program, or collaboration with an existing off-site restoration program. On-site mitigation is not feasible as the goal of the project (removal of stagnant water) is not

Environmental Checklist

compatible with wetland creation, which requires inundation. Mitigation for impacts to jurisdictional waters would be coordinated with and approved by ACOE, RWQCB, CDFG, and CCC.

BIO-3: To avoid impacts to nesting birds, ground disturbance activities and vegetation removal will be completed outside avian breeding season (between September 1 and January 14). If ground disturbance activities (including clearing and grubbing) are scheduled to occur between February 1 and August 31, a qualified biologist will conduct a nesting bird survey within 1 week of ground disturbance activities. The survey shall consist of full coverage of the proposed project footprint and up to a 300-foot buffer. The specific survey buffer will be determined in the field by the project biologist and will take into account the species nesting in the area and the habitat present. If no active nests are found, no additional measures are required. If nests are found, the nest locations shall be mapped by the qualified biologist utilizing GPS equipment, where feasible. The nesting bird species will be documented and, to the degree feasible, the nesting stage (e.g., incubation of eggs, feeding of young, near fledging). The biologist shall establish a no-disturbance buffer around each active nest. The buffer will be determined by the qualified biologist based on the biology of the species present and surrounding habitat. No construction or ground disturbance activities shall be conducted within the buffer until the biologist has determined the nest is no longer active and has informed the construction supervisor that activities may resume.

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APPENDIX C
Cultural Resources Assessment



21st Street Drainage to Pipe Project

Cultural Resources Assessment Report

prepared for

Michael Baker International

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Irvine, CA 92618-2027

Contact: Richard Beck, Vice President

prepared by

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June 2017

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The following document contains sensitive and confidential information concerning Native American site locations and components and is not intended for general distribution. Archaeological site locations are exempted from the California Public Records Act, as specified in Government Code 6254.10, and from the Freedom of Information Act (Exemption 3), under the legal authority of both the National Historic Preservation Act (PL 102-574, Section 304[a]) and the Archaeological Resources Protection Act (PL 96-95, Section 9[a]). Sections of this report contain maps and other sensitive information. **Distribution should be restricted appropriately.**

Please cite this report as follows:

Campbell, Breana and Laura Hoffman

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Executive Summary

Rincon Consultants, Inc. (Rincon) was retained by Michael Baker International on behalf of the City of Del Mar to conduct a cultural resources assessment for the 21st Street Drainage to Pipe Project (project) located in the City of Del Mar, in San Diego County, California. The project site is located at the southeast corner of 21st Street and Court Street on a 0.22 acre site. The project site currently includes an existing drainage and foot bridge and is surrounded by residential structures. The project involves installation of a pipe within the drainage to be covered by imported fill.

This project requires a Clean Water Act (CWA) Section 404 permit from the U.S. Army Corps of Engineers (USACE). As such, this cultural resources assessment is in conformance with Section 106 of the National Historic Preservation Act (Section 106) and includes a records search, archival research, Native American Heritage Commission (NAHC) Sacred Lands File search, Native American scoping, historic group consultation, a pedestrian survey of the project site, and preparation of this report.

Based on the results of the records search, local consultation, Native American outreach, and pedestrian survey, no previously recorded or newly identified cultural resources are located within the APE of the current undertaking.

Because of the absence of known cultural resources within the project APE and the negative survey results, Rincon recommends a finding of ***no historic properties affected***. No further investigation regarding cultural resources is recommended.

The following measures are recommended in the case of unanticipated discoveries.

Unanticipated Discovery of Cultural Resources

If cultural resources are encountered during ground-disturbing activities, work in the immediate area should be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology (NPS 1983) should be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for the National Register of Historic Properties (NRHP) eligibility. If the discovery proves to be significant under the NHPA and cannot be avoided by the project, additional work such as data recovery excavation may be warranted to mitigate any significant impacts to historical resources.

Unanticipated Discovery of Human Remains

The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD shall complete the

inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

1 Introduction

Rincon Consultants, Inc. (Rincon) was retained by Michael Baker International on behalf of the City of Del Mar to conduct a cultural resources assessment for the 21st Street Drainage to Pipe Project (project) located in the City of Del Mar, in San Diego County, California (Figure 1). The project site is located at the southeast corner of 21st Street and Court Street on a 0.22-acre site. The project site currently includes an existing drainage and foot bridge and is surrounded by residential structures.

This project requires a Section 404 permit from the U.S. Army Corps of Engineers (USACE). As such, this cultural resources assessment is in conformance with Section 106 of the National Historic Preservation Act (Section 106) and includes a records search, archival research, Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search, Native American scoping, historic group consultation, a pedestrian survey of the project site, and preparation of this report.

1.1 Project Description

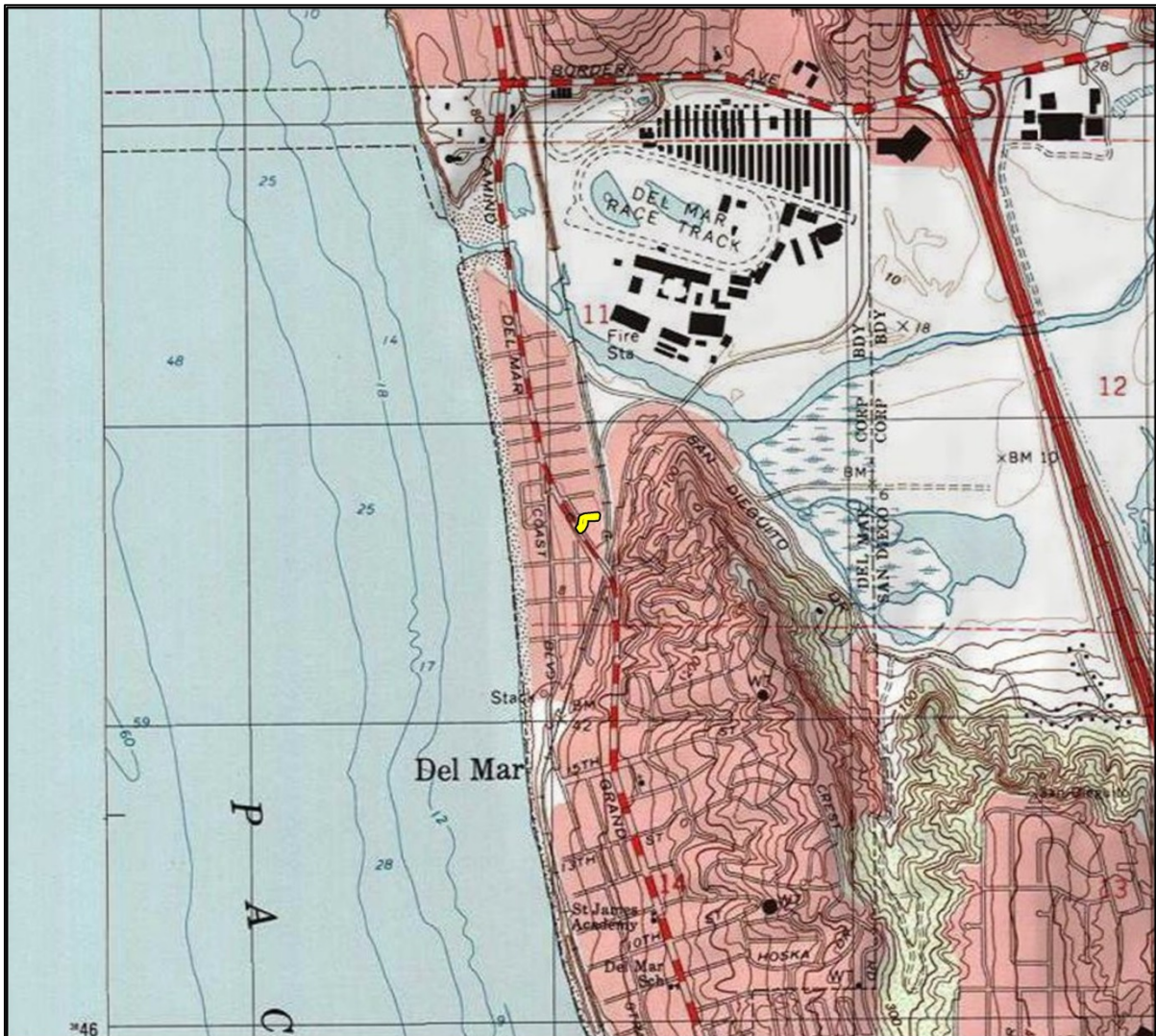
The 0.22-acre project site includes a 203-foot segment of an unnamed, unlined drainage ditch that is approximately 5 feet in diameter and begins west of the project site at a 4-foot box culvert and terminates at a 5-foot (diameter) culvert near 21st St at the east edge of the project site. Water flows from west to east through the ditch; flows are intermittent/perennial and are typically from urban runoff and storm events. Flows are not continuous throughout the year due to vector and conveyance issues correlated with vegetation growth and any fallen debris/foreign objects. In addition, this segment of the ditch exhibits high groundwater levels. Due to these conditions, standing water tends to pool in the drainage rather than flow offsite.

The standing water creates a breeding environment for mosquito populations. In addition, tennis balls from the public tennis facility land in the ditch and ultimately flow into the San Dieguito Lagoon. To remove standing and stagnant surface water and improve flood water conveyance, the City of Del Mar proposes the permanent placement of a small 36-inch storm drain pipe connecting at both existing culvert outlets and fill materials into the 203-foot portion of the unnamed drainage feature.

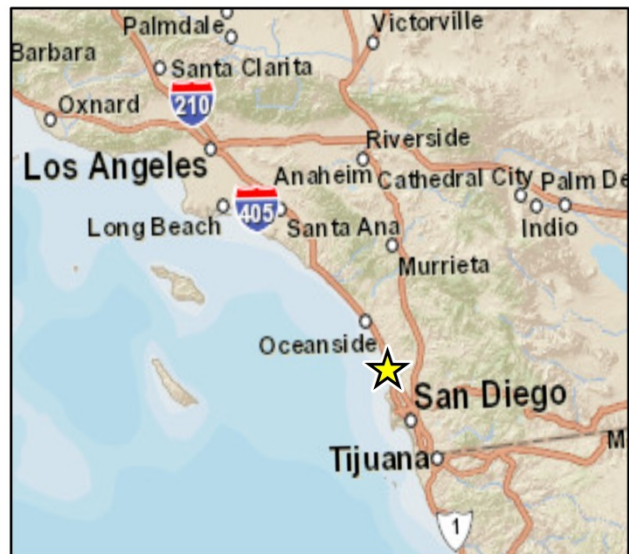
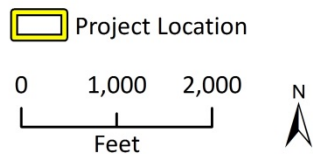
Specifically, scraping and excavation will remove the current drainage channel. The depth of the drainage ranges from 0.1 to 5.2 feet. The amount of excavation that will take place will be minimal, limited to the small amount necessary to smooth out the area within the grading limits. A 36-inch pipe will then be placed below grade at a height equal to the season high ground water elevation. This 36-inch pipe will connect the existing corrugated steel pipe towards Court St. and to the existing 48 by 33 inch corrugated metal pipe towards North County Transit Depot (NCTD) property. To the extent of the grading limits, fill material and top soil will be placed over this new section of the drainage channel. This portion will then be graded to match the existing surface elevations. These proposed activities could increase the amount of sediment runoff from the project. However, due to the limited scale of activities required for this project and the short term construction phase, associated environmental impacts are expected to be minimal.

The volume of soil fill used for the proposed project would be approximately 280 cubic yards.

Figure 1 Project Location Map



Imagery provided by National Geographic Society, ESRI and its licensors © 2017. Del Mar Quadrangle. T14S R04W S11. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.



1.2 Area of Potential Effects

The APE of an undertaking is defined in 36 CFR 800.16(d) as the “geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties if any such property exists.” The current undertaking’s APE was delineated to consider both direct and indirect impacts to archaeological and built-environment resources. The direct APE for this undertaking is limited to the immediate area surrounding the existing drainage (Figure 2). The horizontal APE is 290 feet by 5 feet; the vertical APE for this undertaking is 0 inches to 5 feet 6 inches below the existing grade. Because there is no above-ground elements being introduced as part of this undertaking there is no potential for indirect effects to the APE. Therefore the indirect APE for this undertaking is delineated as the 35-foot buffer around the direct APE as depicted in Figure 2.

1.3 Personnel

Rincon Archaeologist Breana Campbell, M.A., Registered Professional Archaeologist (RPA), conducted the records search, Native American scoping, Historic Affiliations Consultation, and pedestrian survey and is the primary author of this report. Cultural Resources Principal Investigator Laura Hoffman, M.A., RPA, served as principal investigator for this study. GIS Analyst Allysen Valencia prepared the figures for this report. Rincon Principal Joe Power, AICP CEP, reviewed this report for quality control.

Figure 2 APE Map



2 Regulatory Setting

This section provides information regarding applicable regulations and standards governing cultural resources, which must be adhered to before and during the implementation of the proposed project. The proposed project is subject to the environmental review requirements of NEPA and Section 106 of the National Historic Preservation Act (NHPA).

2.1 Federal Regulations

Cultural resources are considered during federal undertakings chiefly under Section 106 of the NHPA of 1966 (as amended) through one of its implementing regulations, 36 CFR 800 (Protection of Historic Properties), as well as NEPA. Properties of traditional religious and cultural importance to Native Americans are considered under Section 101(d)(6)(A) of NHPA. Other federal laws guiding cultural resource studies include the Archaeological and Historic Preservation Act of 1974, the American Indian Religious Freedom Act (AIRFA) of 1978, the Archaeological Resources Protection Act (ARPA) of 1979, and the Native American Graves Protection and Repatriation Act (NAGPRA) of 1989, among others.

Section 106 of NHPA (16 United States Code [USC] 470f) requires federal agencies to take into account the effects of their undertakings on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register of Historic Places (NRHP) and to afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings (36 CFR 800.1). Under Section 106, the significance of an adversely affected cultural resource is assessed and mitigation measures are proposed to reduce impacts to an acceptable level. Significant cultural resources are those resources listed in or are eligible for listing in the NRHP per the criteria listed below (36 CFR 60.4). Under 36 CFR 800, NRHP eligible/listed resources are referred to as “historic properties.” The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and that:

- A. Are associated with events that have made a significant contribution to the broad patterns of our history; or,
- B. Are associated with the lives of persons significant in our past; or,
- C. Embody the distinctive characteristic of a type, period, or method of installation, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or,
- D. Have yielded, or may be likely to yield, information important in prehistory or history.

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3 Natural and Cultural Setting

This chapter provides a brief description of the natural environment and a synopsis of the cultural history of the region.

3.1 Natural Environment

The project APE is located on the nearshore area approximately 200 meters (m) (656 feet) from the Pacific Ocean and 600 m (1,970 feet) south of the San Dieguito Lagoon, at an elevation of 2 meters. The project APE is located within a geological young alluvial floodplain deposit (Kennedy and Tan 2008). The Torrey Sandstone (middle Eocene) and Delmar Formation (middle Eocene) are located immediately south of the project APE (Kennedy and Tan 2008).

The nearshore coastal plain in Del Mar is characterized by a Mediterranean semiarid steppe climate (Bowman 1973; Hines 1991:4). Precipitation averages 22.5 to 40 cm (8.9 to 15.7 inches) per year, with the majority of rainfall occurring between December and April; these averages, however, fluctuate significantly based on long periods of drought in recent decades. Marine and terrestrial species are abundant in this area. The prominent vegetation in this area is coastal sage scrub (Munz 1974). The project APE is located near the San Dieguito Lagoon where several freshwater marsh species including cat tail (*Typha*), spike-rush (*Eleocharis* sp.), and bulrush (*Scirpus* sp.) and saltwater species including pickleweed (*Salicornia virginica*), salt grass (*Distichlis spicata*), and sea lavender (*Limonium californicum*) can be found (Munz 1974).

3.2 Cultural Setting

3.2.1 Prehistory

Numerous chronological sequences have been devised to aid in understanding cultural changes within southern California. Building on early studies and focusing on data synthesis, Wallace (1955, 1978) developed a prehistoric chronology for the southern California coastal region that is still widely used today and is applicable to near-coastal and many inland areas.

3.2.1.1 Terminal Pleistocene and Early Holocene (13,000 to 7,500 cal BP)

Traditional models describe California's first inhabitants as big-game hunters roaming North America during the end of the last Ice Age. This hunting technologies associated with this cultural group, known as the Clovis Complex, first appeared on the continent approximately 11,500 years ago (Fagan 2004; Moratto 1984; Wallace 1978). As the Ice Age came to a close, warmer and drier climatic conditions are thought to have created wide-spread cultural responses. The pluvial lakes and streams in the desert interior began to wane and cultures dependent on these water sources migrated to areas with moister conditions, such as the southern California coast (Byrd and Raab 2007). Early occupation dates from the Northern Channel Islands and the coasts of Oregon, Florida, and South America, however, show proof of an earlier wave of settlement on the continent by marine-adapted coastal peoples (Erlandson and Braje 2011; Dillehay 1997; Halligan et al. 2016;

Meltzer 1997). California's first inhabitants appeared via boats at least 1,000 years before the Clovis complex and subsisted primarily on marine resources such as shellfish, fish, and sea mammals which were supplemented by terrestrial resources (Erlandson 2002; Erlandson et al. 2007).

Due to rising sea levels and coastal erosion, evidence of Paleo-Indian occupation of southern California remains very limited. California's Northern Channel Islands, off the Santa Barbara coast, yield the earliest accepted occupation dates in the region. Human skeletal remains from Arlington Springs on Santa Rosa Island (~13,500 BP) and midden deposits on eastern San Miguel and northwestern Santa Rosa (~12,500 BP) have produced the earliest dates (Erlandson et al. 2011). In sum, over 60 sites in excess of 8,500 years old have been identified and radiocarbon dated on the islands, representing one of the most significant known clusters of early coastal sites in the Americas (Erlandson 1994; Erlandson et al. 2004; Erlandson and Braje 2011; Rick et al. 2005). San Diego and Orange counties and the Southern Channel Islands have not produced dates as early as these. However, radiocarbon evidence dates early occupation of the coastal region between circa 10,000 and 9,000 years ago (Byrd and Raab 2007).

The earliest occupation sites in San Diego County reflect a well-defined cultural response to changing climatic conditions in the southern California coastal region (Rogers 1929, 1939). The Harris Site, SDI-149, dates to roughly 9,000 years ago and defined what is known as the San Dieguito Complex (Warren 1967). This complex is characterized by leaf-shaped points and knives, crescents, and scrapers that are technologically similar to the interior Western Pluvial Lakes Tradition (WPLT) (Byrd and Raab 2007; Warren 1968). These technologies represent an exploitation of a wider range of plant and animal species than Late Pleistocene big game hunters. San Dieguito sites generally show evidence of the hunting of various animals, including birds, and gathering of plant resources, but an absence of marine resources (Byrd and Raab 2007).

Recent archaeological findings from the past two decades are challenging traditional views of the early occupation of the Southern California coast. Evidence of early maritime technologies and economies on the Northern Channel Islands complicate notions of a terrestrial-based economy in the region. A low number of early occupation sites in San Diego county and ongoing debates regarding the relationship between San Dieguito sites and contemporary sites with differing lithic technologies along the coast point to the fact that more research and new data are necessary in order to understand Terminal Pleistocene-Early Holocene lifeways in Southern California in general.

3.2.1.2 Middle Holocene (7,500 to 3,350 cal BP)

The Middle Holocene is generally viewed as a time of cultural transition. During this time, the cultural adaptations of the Early Holocene gradually altered. Use of milling stone tools began to appear across most of central and southern California around 8,000- 7,000 years ago, indicating a focus on the collection and processing of hard-shelled seeds. Environmental changes in the Southern Bight are thought to have been the key factor in these changing adaptations (Byrd and Raab 2007). The appearance of the La Jolla Cultural Complex occurs during this time and is characterized by coastal sites representing a strong maritime adaptation (Gallegos 1992; Moratto 1984). La Jolla Complex shell middens are located primarily along estuaries and bays and consist of flaked cobble tools, basin metates, manos, discoids, and flexed burials (Byrd and Raab 2007). Hunting and fishing were thought to be less important than the collection of shellfish and plant resources. The resource-rich littoral zones were able to support sizable semi-sedentary populations (Byrd and Raab 2007).

This adaptation was thought to reach its cultural climax between 7,000 and 4,000 years ago when shellfish were plentiful in coastal lagoons. After 4,000 years ago, however, it was argued that

“extensive estuarine silting began to cause a decline in shellfish and thus a depopulation of the coastal zone. Settlement shifted to river valleys, and resource exploitation focused on hunting small game and gathering plant resources (Warren 1968).” More recent research in San Diego County shows that Middle Holocene occupation of the region was much more diverse. Large, Middle Holocene village sites were located in the interior in addition to a variety of adaptive strategies visible along the coast (Byrd and Reddy 2002; Masters and Gallegos 1997). Paleoenvironmental data for the county reflect considerable inter-regional variation in the timing of coastal habitation, supporting the idea that patterns of environmental change and subsequent cultural adaptations were diverse (Altschul et al. 2005; Anderson and Byrd 1998; Byrd 2003; Byrd et al. 2004; Davis 2005; Waters et al. 1999).

Expansive trade networks linking the Southern California Bight to the American West began to emerge during the Middle Holocene. Howard and Raab (1993) reported evidence for a discrete Middle Holocene sphere of trade centered on Olivella grooved rectangle (OGR) beads, established 5,000 years ago. This trade network extended from the Southern Channel Islands across Southern California through the Mojave Desert to the western edges of Oregon’s Great Basin. Middle Holocene groups have traditionally been viewed as mobile hunter-gatherers, but Middle Holocene evidence from the Southern Channel Islands suggests the possibility of coastal sedentism in the region (Salls et al. 1993).

3.2.1.3 Late Holocene (3,350 cal BP to AD1769)

The Late Holocene saw continuity in occupation from Middle Holocene sites along the San Diego coast. Settlements at San Diego Bay, Mission Bay, the Peñasquitos Lagoon/Sorrento Valley area, San Elijo Lagoon/Escondido Creek, the Santa Margarita River drainage, Las Flores Creek, and San Mateo Creek were all occupied from the late Middle Holocene into the Late Holocene (Byrd et al. 2004; Byrd and Reddy 2002). It was also a time during which new cultural and technological adaptations emerged. The bow and arrow was adopted sometime after A.D. 500 and ceramics appeared in the area ca. A.D. 1000. However, patterns of technological and sociopolitical change varied geographically. For instance, the adoption of new social expressions, such as cremating the dead, varied greatly within San Diego County, typically appearing earlier in the east than the west and not occurring until late in time in coastal and insular areas (Byrd and Raab 2007; Koerper et al. 1996, 2002). Inter- and intra-regional trade dynamics also played a role in the adoption of new expressions. Culture change in the region did not always occur at a stable pace and was often affected by environmental fluctuations and other stressors.

Littoral and marine resources remained extremely important during the Late Holocene, and human populations were sustained by food surpluses, particularly acorns (Byrd and Raab 2007; Kroeber 1925). Other exploited food resources include shellfish, fish, small terrestrial mammals, and small-seeded plants. A wide range of plant resources were exploited along the San Diego coast, including a variety of grasses and plants that thrive in open areas created by regular burning. The appearance of the plant species Callandria, Lotus, Marah, corms/bulbs from wild flowers, Hordeum, Trifolium, Chenopodium, and Poaceae in the Late Holocene record support the idea that Kumeyaay were actively managing the landscape through the use of regular prescribed burns (Blackburn and Anderson 1993). Prescribed burning would have enhanced vegetal productivity while attracting grassland fauna (Cuthrell et al. 2012).

There is substantial evidence for the overexploitation of high-ranked food resources in Southern California at this time, leading to resource depression and a dietary expansion towards more high-cost resources (Braje et al. 2007; Byrd and Reddy 2002; Erlandson et al. 2008; Koerper et al. 2002;

Raab 1992; Raab and Yatsko 1992; Whitaker and Byrd 2014). At Camp Pendleton, Late Holocene faunal data demonstrates a shift towards smaller shellfish species and small terrestrial mammals and a decline in the dietary importance of large mammals (Byrd 1996; Byrd and Reddy 1999). Settlement patterns of the Late Holocene are characterized by large residential camps linked to smaller, short-term camps dedicated to specialized subsistence tasks (Byrd and Raab 2007). Shifts in settlement patterns are linked to subsistence strategies, which increasingly focused on lower-ranked and higher-cost resources.

While the Late Holocene in prehistoric San Diego County was a time of increased sociopolitical complexity and changing settlement patterns, it is important to note that these patterns were variable throughout the county and were driven by multiple stresses (i.e. environmental factors, resource depression, etc.).

3.2.2 Ethnography

The people who traditionally occupied the region along the Pacific coast from central San Diego County southward into Baja California and eastward into Imperial County were originally referred to by Europeans as the Diegueño or Diegueno, because they lived on the lands allotted to Mission San Diego de Alcalá (Carrico 1987; Gifford 1931). Today, the Native Americans dubbed Diegueno generally refer to themselves as the Kumeyaay (Shipek 1987). Linguistic studies support the division of the Kumeyaay people into northern (Ipai) and southern (Tipai) dialect groups, while often identifying the Desert Kumeyaay of eastern San Diego County, portions of northeastern Baja California, and the majority western portion of Imperial County as Kamia (Gifford 1931, Luomala 1978). As noted by Luomala (1978:592), anthropologists have created “hazily defined” divisions with “cultural and environmental differences shading into one another.” Prior to European contact, the boundary between the Kumeyaay groups was not rigid and the distinction between them likely existed as a gradient rather than a clear division of cultural and political units (Carrico 1987). These groups shared closely related Yuman languages, as well as customs, beliefs, and material culture. The project is located with the northern portion of Kumeyaay territory, but both the Ipai and Tipai will be discussed in the following sections as under the umbrella of “Kumeyaay,” as these two groups were closely related.

Kumeyaay territory extended inland throughout the Cuyamaca and Laguna Mountains into the Yuha and Anza Borrego deserts of Imperial County (Carrico 1987; Luomala 1978). The region includes tremendous environmental variation and resource zones. Neighboring groups included the Luiseño and Cupeño to the northwest, the Cahuilla to the northeast, the Quechan to the east, and the Paipai to the south (Kroeber 1925). Kumeyaay territory was divided among bands that typically controlled 10 to 30 linear miles. Within each band’s territory were a primary village and a number of secondary homesteads located along tributary creeks (Shipek 1982:297). Water and stored foods were communally available to all band members on a reciprocal basis (Luomala 1978). Each band was composed of 5 to 15 kinship groups (sibs or shiimul) (Kroeber 1925:719; Shipek 1987:8), some of which were divided among more than one band. Approximately 50 to 75 named kinship groups were located throughout the entire Kumeyaay territory (Shipek 1982).

While political organization varied between bands, for the most part, each band had a band leader, or a Kwaaypaay, and at least one assistant who acted as a messenger (Luomala 1978:597; Shipek 1982). The Kwaaypaay’s primary roles were to direct ceremonies, act as a disciplinary head, advise on marriages and family differences, make war decisions, and to organize hunting and foraging expeditions (Shipek 1982). The Kwaaypaay was in council with the band’s shaman on many important decisions. Accounts by Spanish missionaries and Kumeyaay elders suggest that status

differentiation was established during the Late Holocene, and possibly earlier (Shipek 1982). Inherited positions were ascribed to the eldest sons or to brothers. Socio-political structure was drastically disrupted by the introduction of Spanish, Mexican, and American policies and the subsequent depopulation of Kumeyaay populations due to disease and drought (Shipek 1982).

Winter villages were located in sheltered valleys near reliable sources of water with the entire band present. Dwellings in the relatively permanent winter villages were semi-subterranean and roughly circular, with a wooden pole framework covered with brush thatch. The main entrance had a mat covering to keep out the wind and ensure privacy, and ritually faced the east (Luomala 1978:597). Other structures in the village consisted of family-owned platform granaries, a village-owned brush ceremonial enclosure, and sweat lodges. A semi-circular enclosure was used for the keruk mourning ceremony, and a rock wall sometimes surrounded ceremonial and dance areas. At their summer camps, ramadas and windbreaks were common, which were built into trees or rock shelters. Granaries and more permanent housing would sometimes be constructed within frequently visited oak groves in the hills and mountains of Kumeyaay territory.

Many Kumeyaay camped in coastal valleys at certain times of the year and gathered coastal resources. Fish were taken with hooks, nets and bows, often from tule boats. Shellfish were gathered from the sandy beaches (e.g., *Chione*, *Pecten*, and *Donax*) and rocky shores (e.g., mussels and abalone). Common game birds included doves and quail; migratory birds included geese. A primary source of protein came from rabbits, woodrats, and other small game living along the mesas and foothills. These animals were caught using throwing sticks, the bow and arrow, or in nets on community drives. Hunting large game such as deer and mountain sheep was the role of expert hunters trained in specialized hunting folklore (Luomala 1978:601). Land resources generally belonged to the bands with only a few areas considered “tribal” land and open to anyone (Shipek 1982:301).

During the winter season small game and seasonal herbs were collected in the valleys. Greens included miner’s lettuce, clover, pigweed, and grasses. Seeds were harvested from buckwheat, chia and other salvias, and a variety of grasses. In the mountains and foothills, yucca was gathered for its stalks, flowers, and leaves. Elderberry, manzanita, cholla and prickly-pear *Opuntia* cactus, and juniper shrubs provided berries and fruit. The acorns from several species of oak were heavily depended upon, gathered during the late summer, and stored in family and village granaries. At least six species of oaks provided acorns for the Kumeyaay in San Diego County (Luomala 1978:600). For the Kumeyaay, and many other southern California groups, acorns were the primary staple. They were gathered, pounded into flour, and leached of toxic tannins. During the late spring and summer, small groups foraged in favored spots, usually at progressively higher elevations as various resources ripened (Shipek 1987).

All Kumeyaay practiced plant husbandry to “maintain and increase supplies of native foods” (Shipek 1987:12). These practices included: clearing lands for planting seeds of greens, shrubs, and specific trees; sowing grass seed on burned fields; and transplanting wild onions, tobacco, and cuttings of *Opuntia* (nopales or paddle cactus) near village sites.

Kumeyaay clothing was minimal. Men and children wore utilitarian belt sashes and pouches designed to hold tools and small game, while women wore a one or two piece apron made of shredded bark, and a round, twined cap. Robes of rabbit, willow bark or deerskin were worn in the winter and also served as bedding. Sandals woven from agave fibers were worn when traveling long distances (Luomala 1978:599). Special costumes and adornment were worn during ceremonies. With the exception of boys and mourners, hair was worn long with bangs cut at the forehead.

Kumeyaay baskets were of high quality were of similar weave and forms found elsewhere in southern California, though there were notable variation between groups on a local and regional level. The general unity in basketry traditions in the region can be credited to the prominence of acorn processing as central to California Indian lifeways (Jordan and Shennan 2003). The daily production of basketry was primarily a female occupation and was tied to food preparation such as cooking, grinding, etc. (Wallace 1978). Carrying nets and sacks were also made and used. Pottery was regularly manufactured and used for water jars, cooking and storage pots, and cremation urns (Kroeber 1925:722). The Kumeyaay made and traded curved clay pipes, stone pipes, and medicine sucking tubes.

Trade networks among the Kumeyaay involved highly complex relationships with social, economic, political, and religious factors (Baugh and Ericson 1993). Ethnographic evidence shows that the Kumeyaay had historically traded with other Native American groups, such as the Mohave, Yuman, Cocopa, Cahuilla, and the Luiseno (Carrico and Day 1981; Shackley 1981). Kumeyaay exchange items include eagle feathers and salt, tobacco, acorns, baked mescal roots, yucca fibers, sandals, baskets, carrying nets, gourd seeds, dried greens, tule roots, bulbs, cattail sprouts, yucca leaves, mescal, pine nuts, manzanita fruit, berries, chokecherries, dried sea food, and mesquite beans (Shipek 1991). At European contact, Spanish explorers reported that California Indians were regularly trading with Europeans, exchanging items such as baskets, otter skins, and food items such as acorns and shellfish for glass beads, silk, and cotton (Erlandson and Bartoy 1995; Gamble and Zepeda 2002). Goods were exchanged through organized systems of exchange. Exchange is visible in the archaeological record through the appearance of exotic, non-native materials such as obsidian, glass beads, Olivella shell beads and non-local ceramic types (Gamble and Zepeda 2002).

Religious mythologies shared by Kumeyaay groups include abstract spiritual concepts and a higher creator-god (Shipek 1985). Kuuchama, or Tecate Peak, was the most sacred landmark. The Kumeyaay believed it was designated by God as the location for acquiring power for good, healing, and peace. Other holy places recognized by all Kumeyaay include Wee'ishpa or Signal Mountain, Jacumba Peak, Mt. Woodson, Viejas Mountain, and other mountains beside the Colorado River in the Desert Kumeyaay region (Shipek 1985, 1987:14). Ceremonies among the Kumeyaay are similar to those of other southern California native peoples (Kroeber 1925: 712-717), including puberty rites, marriage, naming, cremation of the dead, and the annual mourning ceremony (keruk) for all those of the sib who had died the previous year. The ceremonial leader, an inherited religious position, conducted these rituals.

The Kumeyaay cremated the dead; the body was placed in a pyre with the head positioned towards the afterworld (to the south or east). All of the dead's possessions were burned to insure the spirit would not return for the living (Luomala 1978:603; Gamble and Zepeda 2002). The ashes of the dead were buried or placed in mortuary ollas that were then buried or placed in caves (Waterman 1910). During cremation ceremonies, there was "wailing, speech making, all-night singing of song cycles, and gift exchange with non-relatives from friendly clans. Mourners cut their hair, blackened their faces, and never mentioned the person's name again" (Luomala 1978:603).

3.2.3 History

Post-Contact history for California is generally divided into three periods: the Spanish Period (1769–1822), Mexican Period (1822–1848), and American Period (1848–present). Although Spanish, Russian, and British explorers visited the area for brief periods between 1529 and 1769, the Spanish Period in California begins with the establishment in 1769 of a settlement at San Diego and the founding of Mission San Diego de Alcalá, the first of 21 missions constructed between 1769 and

1823. Mexico's independence from Spain in 1821 marks the beginning of the Mexican Period, and the signing of the Treaty of Guadalupe Hidalgo in 1848, ending the Mexican-American War, signals the beginning of the American Period when California became a territory of the United States.

3.2.3.1 Spanish Period (1769-1822)

Juan Rodriguez Cabrillo in 1542 led the first European expedition to observe what is now called southern California. That year, he landed on Point Loma, approximately 29.5 km south of the proposed project APE. For more than 200 years, Cabrillo and other Spanish, Portuguese, British, and Russian explorers sailed the Alta (upper) California coast and made limited inland expeditions, but they did not establish permanent settlements (Bean 1968; Rolle 2003).

Gaspar de Portolá and Franciscan Father Junipero Serra established the first Spanish settlement in Alta California at Mission San Diego de Alcalá in 1769. This was the first of 21 missions erected by the Spanish between 1769 and 1823. The Mission and its associated presidio were initially built near the Kumeyaay village of Cosoy, near the present site of Old Town. However, the water supply at this location was lacking and the soil was not very fertile. Thus the mission was moved in 1774 to its present location, near the Kumeyaay village of Nipaguay (Mission San Diego 2013; City of San Diego 2006). The missions were responsible for administering to the local Indians as well as converting the population to Christianity (Engelhardt 1927b). Contact with diseases brought by Europeans, however, greatly reduced the Native American population.

During the Mission period, Spain granted ranchos to prominent citizens and soldiers, though very few when compared to the following Mexican Period. Presidio commandants were given the authority to grant house lots and garden plots to soldiers and sometime after 1800, soldiers and their families began to move towards the base of Presidio Hill to receive land grants from the presidio commandants (City of San Diego 2006). To manage and expand their herds of cattle on their large ranchos, colonists enlisted the labor of the surrounding Native American population (Engelhardt 1927a).

3.2.3.2 Mexican Period (1822-1848)

The Mexican period commenced when news of the success of the Mexican Revolution (1810-1821) against the Spanish crown reached California in 1822. This period was an era of extensive interior land grant development and exploration by American fur trappers west of the Sierra Nevada Mountains. The California missions declined in power and were ultimately secularized in 1834. The hallmark of the Mexican period was large ranchos deeded to prominent Mexican citizens, frequently soldiers, by the governors. By 1830, seven land grants had been made to San Diego residents near the presidio (Crane 2016).

Secularization of the missions caused increased hostilities by Native Americans against the Californios living in the San Diego area during the late 1830s. By 1835, the Mexican military and last residents abandoned the presidio (San Diego History Center 2016a). The pueblo's population dropped to 150 inhabitants by 1841, partly due to families leaving the town to settle on ranchos established on their large land grants (Crane 1991). Also, in 1838, San Diego was demoted from pueblo status due to its population decline, and was governed as part of the sub-prefecture of the Los Angeles pueblo (San Diego History Center 2016a).

During the supremacy of the ranchos (1834–1848), landowners largely focused on the cattle industry and devoted large tracts to grazing. Cattle hides became a primary southern California export, providing a commodity to trade for goods from the east and other areas in the United States

and Mexico. The number of nonnative inhabitants increased during this period because of the influx of explorers, trappers, and ranchers associated with the land grants. The rising California population contributed to the introduction and rise of diseases foreign to the Native American population, who had no associated immunities.

3.2.3.3 American Period (1848-Present)

The American period in San Diego County began as early as 1846 when the United States military occupied San Diego and effectively ended Californio resistance in 1847. The American government assumed formal control of Alta California with the signing of the Treaty of Guadalupe Hidalgo in 1848, in which the United States agreed to pay Mexico \$15 million for the territory that included California, Nevada, Utah, and parts of Colorado, Arizona, New Mexico, and Wyoming.

During the early American Period, cattle ranches dominated much of Southern California, although droughts and population growth resulted in farming and urban professions supplanting ranching through the late nineteenth century. After the U.S. took control of San Diego in 1846, the political and economic situation stabilized and population increased. The discovery of gold in Coloma, California in 1848 led to the California Gold Rush, leading to a massive increase in population (Guinn 1977). By 1853, the population of California exceeded 300,000. Thousands of settlers and immigrants continued to pour into the state, particularly after the completion of the transcontinental railroad in 1869. By the 1880s, the railroads had established networks throughout southern California, resulting in fast and affordable shipment of goods, as well as means to transport new residents (Dumke 1944).

3.2.3.4 City of Del Mar

In August 1882, Theodore Loop of New York came to southern California to build a railroad connecting San Diego and Los Angeles (Del Mar Historical Society n.d.). The original tracks for the railroad were laid down the center of what is now known as Del Mar. Loop met Jacob Shell Taylor, a rancher from New Mexico who sought to invest in the development of Del Mar shortly after construction of the railroad began. In 1885, Loop and Taylor purchased 338.11 acres of land and began developing the region as a resort town (Del Mar Historical Society n.d.). The name Del Mar was chosen by Loop's wife, Ella, who took the name from a poem titled "The Fight of Paseo Del Mar" by Bayard Taylor which had become popularized at this time (Del Mar Village 2015).

Jacob Taylor constructed as many as 40 small homes, a two-story Victorian schoolhouse, an observation tower, a train depot, and a water system to attract settlers to the area (Del Mar Historic Society n.d.). In 1886, Taylor opened "Casa Del Mar", the area's first resort, which included a dance pavilion on the beach and a large swimming pool called a Natatorium (Del Mar Village 2015). The completion of the hotel brought many visitors to the region, however the hotel burned down five years later and was never rebuilt.

In 1900, Del Mar experienced its second development boom when the South Coast Land Company purchased a significant portion of land north of what is now 9th Street (Del Mar Village n.d.). The directors of the company first constructed the Stratford Inn, a resort hotel overlooking the Pacific Ocean; today, the L'Auberge hotel occupies this site, located approximately 0.8 km (0.5 mile) south of the project APE. The 1920s and 30s were periods of tremendous growth for the community. In

the early 1930s organizers of the San Diego Fair began searching for a permanent location to hold the yearly festival. The 184-acre site south of San Dieguito Valley was suggested by Col. Ed Fletcher of the South Coast Land Company and was approved as the home of the San Diego Fair (Del Mar Village 2015). The Works Progress Administration (WPA) provided the initial funding for the development of the site and in 1936 the first fair was held on the site, which is approximately 0.6 km (0.4 mile) north of the project APE.

One year after the completion of the fairgrounds, the oval racetrack was completed and the Del Mar Turf Club was founded; actor and singer Bing Crosby was the first President of the club. July 3, 1937 was opening day at the track. Racing was briefly halted during World War II when the facilities were used as a bomber tail assembly plant. Racing returned shortly after Japan surrendered in 1945 and the Del Mar Racetrack continues to host races today (Del Mar Historical Society n.d.).

Del Mar was incorporated as a city in 1959. Following the inception of University California, San Diego south of the city, Del Mar was influenced by the influx of politically, socially, and environmentally active students and academics. During the 1960's, emphasis began to shift to beautifying and maintaining the natural landscape of the city (Del Mar Historical Society n.d.). In recent decades, Del Mar has seen growth as a community and well-traveled resort destination and is home to many historical landmarks.

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4 Background Research

This chapter provides background information related to previous archaeological studies within a 1-mile radius of the project APE. It also provides the results of the Native American outreach and historic group consultation conducted for this undertaking.

4.1 California Historical Resources Information System

On May 15, 2017, Rincon personnel conducted a search of cultural resource records housed at the California Historical Resources Information System (CHRIS), South Coastal Information Center (SCIC) located at San Diego State University. The search was conducted to identify previously conducted cultural resources work as well as identify previously recorded cultural resources within a 1-mile radius of the project APE. The CHRIS search included a review of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. The records search also included a review of available historic USGS 7.5- and 15-minute quadrangle maps.

4.1.1 Previously Conducted Cultural Resource Studies

The SCIC records search identified 38 previous studies within a one-mile radius of the project APE. These are summarized in Table 1. Of these studies, one encompasses project APE (SD-09361); however the project APE is not explicitly discussed in the report. The Resource Database listings for these studies are included with the records search summary in Appendix A.

Table 1 Previous Cultural Resources Studies within One Mile of the Project APE

Report Number	Author	Year	Title	Relationship to APE
SD-00672	Gallegos, Dennis, Roxana Phillips, and Andrew Pigniolo	1988	<i>A Cultural Resource Overview for the San Dieguito River Valley San Diego, California</i>	Outside
SD-02845	Leach, Larry L.	1985	<i>Cultural Resource Survey Report: Proposed Access to Del Mar Fairground Parking Area on the West Side of I-5</i>	Outside
SD-02958	Caltrans	1994	<i>Negative Archaeological Survey Report: 11-SD-5, P.M. R35.2, 189161</i>	Outside
SD-02959	Caltrans	1994	<i>Negative Archaeological Survey Report, First Addendum: 11-SD-5, P.M. R35.2 189161</i>	Outside
SD-03338	Rosen, Martin and Karen Crafts	1995	<i>Negative Archaeological Survey Report, Second Addendum: 11-SD-5, P.M. R35.2 189161</i>	Outside
SD-04177	Berryman, Judy, and Craig Woodman	2000	<i>Archaeological Investigations for the San Dieguito Wetland Restoration Project EIR/EIS</i>	Outside

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Report Number	Author	Year	Title	Relationship to APE
SD-04207	Westec	1977	<i>Archaeological/ Historical Survey of the Stratford Inn Garage</i>	Outside
SD-04236	APEC	1981	<i>Environmental Impact Report for San Dieguito River Study Draft Conceptual Master Plan</i>	Outside
SD-04658	City of San Diego	2002	<i>Formation of Underground Utility Districts: Proposed Mitigated Negative Declaration</i>	Outside
SD-05518	Gilmer, Joanne	2001	<i>Results of Cultural Resource Survey for the Dumka Property</i>	Outside
SD-06440	Berryman, Judy and Craig Woodman	1999	<i>Environmental Impact Report/ Environmental Impact Statement (EIR/EIS) for the San Dieguito Wetlands Restoration Project</i>	Outside
SD-06645	Rosen, Martin	1994	<i>Negative Archaeological Survey Grand Avenue & Old Del Mar Airport</i>	Outside
SD-07109	Warren, Claude	1959	<i>Test Excavations at the Del Mar Site (SDI-191)</i>	Outside
SD-07724	Caltrans	1995	<i>Negative Archaeological Survey Report 11-SD-5 P.M. R 35.2</i>	Outside
SD-07842	Ni Ghabhlain, Sinead	2002	<i>Significance Evaluation of the Del Mar Bluffs Spillway (P-37-024195)</i>	Outside
SD-08425	Rosen, Martin	2002	<i>Historic Property Survey Report Interstate 5 Northbound Auxiliary Lane Project 11-SD-5 KP R 56.0/R57.5 PM R334.81/R35.7; EA. 065100</i>	Outside
SD-09145	Gallegos, Dennis and Caroyln Kyle	1991	<i>Cultural Resource Survey Report San Diego Bikeway Project San Diego, California</i>	Outside
SD-09329	PBS & J	2004	<i>EIR for the GAD and Schroeder Residence Project</i>	Outside
SD-09331	Crawford, Kathleen	2004	<i>Historical assessment of the Residence at 351 13th Street</i>	Outside
SD-09361	Byrd, Brian F. and Collin O'Neil	2002	<i>Archaeological Survey Report for the Phase I Archaeological Survey Along Interstate 5 San Diego County, California</i>	Within
SD-09516	Caterino, David	2005	<i>The Cemeteries and Gravestones of San Diego County: An Archaeological Study</i>	Outside
SD-10415	Fulton, Phil	2006	<i>Cultural Resources Assessment Del mar Fairgrounds Project Cities of Del Mar and San Diego, San Diego County, California</i>	Outside
SD-10550	May, Vonn Marie	2002	<i>National Register of Historic Places Registration Form for the Canfield-Wright House</i>	Outside

Report Number	Author	Year	Title	Relationship to APE
SD-10610	Braciszewski, Bruce and Bob Nelson	1980	<i>National Register of Historic Places Inventory-Nomination Form for the Del Mar North Bluffs Preserve, the Site of Del Mar Man</i>	Outside
SD-10885	Mattingly, Scott A.	2007	<i>Archaeological and Geospatial Investigations of Fire-Altered Rock Features at Torrey Pines State Reserve, San Diego, California</i>	Outside
SD-11218	Price, Harry J.	2007	<i>Results of Cultural Resource Survey for the Racetrack View Drive Property</i>	Outside
SD-11623	Hector, Susan M. and Alice Brewster	2002	<i>San Dieguito River Valley Inventory of Archaeological Resources</i>	Outside
SD-11761	Dominici, Deb	2007	<i>Historic Property Survey Report, I-5 North Coast Widening Project</i>	Outside
SD-12273	Gross, Timothy G.	2004	<i>Cultural Resources Evaluation of the Riverpark Office Project, Del Mar, California</i>	Outside
SD-12662	Gross, Timothy G.	2003	<i>Archaeological Resources Survey, Dyson Property, Del Mar Estates, San Diego, California</i>	Outside
SD-12844	Pierson, Larry J.	2010	<i>Archaeological Resource Report Form: Mitigation Monitoring of the Racetrack View Drive Project, San Diego, California</i>	Outside
SD-13488	York, Andrew L. and John Hildebrand	2011	<i>Cultural Resources Investigation in Support of Consultation for the Regional Beach Sand II Project San Diego County, California</i>	Outside
SD-14049	Ni Ghabhlain, Sinead	2011	<i>Cultural Resource Survey Update Bridge 243.0 Revetment Project, Del Mar, California</i>	Outside
SD-14086	Pham, Angela N. And Sinead Ni Ghabhlain	2012	<i>Cultural and Historical Resources Constraints Report for the San Dieguito Bridge Replacement and Second Track Project; Del Mar Tunnel Alternatives Analysis</i>	Outside
SD-14092	Ni Ghabhlain, Sinead, Sarah Stinger Bowsher, and James Daniels	2009	<i>Cultural and Historical Resource Inventory and Evaluation Report for the San Dieguito River Bridge Replacement and Second Track Project, Del Mar, San Diego County, California</i>	Outside
SD-14397	Pigniolo, Andrew R.	2010	<i>Record Search Results for the Underground Utility District Via De La Valle Project</i>	Outside
SD-14891	U.S. Department of Homeland Security	2013	<i>FEMA HSGP: 2012-SS-00123 (16267) Del Mar City Hall</i>	Outside

Source: South Coastal Information Center May 2017

4.1.1.1 SD-09361

ASM Affiliates, Inc. (ASM) conducted a Phase I archaeological survey along Interstate 5 in San Diego County in 2002 and summarized their findings in report, SD-09361. The study was conducted to identify archaeological resources in areas where proposed upgrades to Interstate 5 were proposed. ASM identified fifteen sites and seven isolates, all prehistoric in age. None of the sites or isolates recorded as a part of the ASM survey are located in the APE for the current undertaking.

4.1.2 Previously Recorded Cultural Resources

The SCIC records search identified 12 previously recorded cultural resources within a one-mile radius of the project APE. These are summarized in Table 2. No previously recorded cultural resources are located within the project APE.

4.2 Historic Aerials

Rincon inspected historic aerials (ca. 1953 to present) of the project APE. The existing drainage was noted on the 1953 aerial of the project APE (Historic Aerials n.d.) as well as the Coast Highway (Highway 1) and the railway. The area surrounding the APE remained largely undeveloped until sometime before 1980; the 1980 aerial showed a small cluster of houses developed to the north of the project APE and the construction of the two existing tennis courts immediately south of the project APE.

4.3 Native American Outreach

Rincon contacted the NAHC to request a review of the SLF on May 5, 2017. The NAHC responded to Rincon's request on May 8, 2017, stating that the SLF search was conducted with "negative results". The NAHC provided a list of 16 tribes and individuals who may have knowledge of cultural resources within or near the project APE. On May 16, 2017, Rincon mailed letters to the 16 tribal groups and individuals. On May 22, 2017, Rincon made follow-up phone calls to each of the contacts and left voicemails when possible.

Mr. Clint Linton of the Lipay Nation of Santa Ysabel responded on May 22, 2017, requesting additional information regarding the depth of ground disturbing activities. Rincon emailed Mr. Linton on May 22, 2017 with the requested information. On May 26, 2017, Mr. Linton responded via email and requested that a Kumeyaay monitor be present for any ground disturbance that occurs outside of any documented fill area.

Mr. Dave Teller of the San Pasqual Band of Mission Indians did not have any comments but requested to have the consultation letter emailed to him. Rincon followed-up with that request on May 22, 2017. No additional response has been received.

As of the submission of this report, Rincon has received no additional responses to the letters mailed and follow-up calls made to the contacts. The results of the SLF and a consultation table are included in Appendix B of this report.

4.4 Historic Group Consultation

Rincon mailed letters to the Save our Heritage Organisation, Del Mar Historical Society, and the City of Del Mar Planning and Community Development office, on May 16, 2017, requesting information regarding any possible historical resources that may be affected by the proposed project. Follow-up voicemails and emails were left with the Save our Heritage Organisation, Del Mar Historical Society, and the City of Del Mar Planning and Community Development office on June 1, 2017.

The results of the historic group consultation are summarized in the consultation table included in Appendix B of this report.

Table 2 Previous Cultural Resource Studies within One Mile of the APE

Primary Number	Trinomial	Resource Type	Description	Recorder(s) and Year(s)	NRHP/CRHR Status	Relationship to APE
37-000192	SDI-192	Prehistoric Site	No description provided	Treganza, n.d.; Gross and Bull, n.d.; Foglia, Shannon and Brian Spelts 2016	Not evaluated	Outside
37-000193	SDI-193	Prehistoric Site	Sparse shell scatter with modern refuse and wooden structure	Treganza, n.d.; Gross and Bull, n.d.; Foglia, Shannon and Brian Spelts 2016	Not evaluated	Outside
37-007979	SDI-7979	Prehistoric Site	Lithic and shell midden; data recovery program in 1996	Barbolla, D. and D. Cheever 1980; Smith, B.F. 1996	Not evaluated	Outside
37-010940	SDI-10940	Prehistoric Site	Habitation site with associated midden, artifacts, hearths, and burials	Rogers, M., n.d.; Pigniolo, A. 1988	Not evaluated	Outside
37-017025	SDI-15065	Historic Site	U.S. Naval Auxiliary Air Facility and Del Mar Airport; Facility does not retain integrity	Berryman, J. 1998; Zepeda-Herman, C. 2009	Recommended Ineligible	Outside
37-024194	-	Historic Site	Features related to the Atchison, Topeka, and Santa Fe Railroad	Palette, D., 2001	Not evaluated	Outside
37-024195	-	Historic Site	Features related to the Atchison, Topeka, and Santa Fe Railroad	Palette, D., 2001	Not evaluated	Outside
37-024196	-	Historic Site	Features related to the Atchison, Topeka, and Santa Fe Railroad	Palette, D., 2001	Not evaluated	Outside
37-024197	-	Historic Site	10 th Street Bridge and Gazebo	Palette, D., 2001	Not evaluated	Outside
37-026493	SDI-17389	Prehistoric Site	Fire cracked rock and very low-density shell scatter	Rogers, M., n.d.	Not evaluated	Outside

Primary Number	Trinomial	Resource Type	Description	Recorder(s) and Year(s)	NRHP/CRHR Status	Relationship to APE
37-033561	-	Prehistoric Isolate	Sandstone bowl mortar	York, A., 2014	Not evaluated	Outside
37-033562	-	Prehistoric Isolate	Sandstone mortar	York, A., 2014	Not evaluated	Outside

Source: South Coastal Information Center May 2017

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5 Pedestrian Survey Methods and Results

5.1 Survey Methods

Rincon archaeologist Breana Campbell, M.A., RPA, conducted an intensive pedestrian survey of the project APE on May 15, 2017. She walked transects spaced at no more than 5 m apart, paying special attention to open space areas, including the exposed bank adjacent to the existing drainage. Ms. Campbell inspected these areas for the presence of prehistoric artifacts (such as flaked stone tools, tool-making debris, stone milling tools, ceramics, and fire-affected rock) and historical artifacts (such as glass, metal, and pottery). In addition, Ms. Campbell inspected the ground surface for soil discoloration that could indicate the presence of a cultural midden, and features indicative of the former presence of structures or buildings (for example, standing exterior walls, postholes, foundations). She documented the fieldwork using field notes and digital photographs, which are on file at Rincon's Carlsbad, California office.

5.2 Survey Results

The project APE encompasses approximately 0.22-acre of undeveloped land that has an existing drainage and modern foot bridge (ca. 2012) for access across the drainage. The APE is located within a well-developed area immediately east of Highway 1 in a residential neighborhood and is bounded by paved roads to the north and west and a tennis court to the east. No built environment resources were noted within the project APE. Figures 3 and 4 depict the existing conditions of the project APE. Surface visibility was excellent at approximately 90 percent.

Figure 3 Overview of project APE, view east



Figure 4 Existing drainage ditch, view west



Ms. Campbell noted weathered shell fragments on the surface during the survey (Figure 5). She examined the drainage cut and found scattered shell eroding down into the drainage from the upper soil horizon which consists of an alluvial deposit of sand. Shell species noted on the surface include *Pecten*, *Chione*, and *Donax*. Ms. Campbell inspected the shells for modifications and determined the shells to be naturally occurring within the alluvial sediments present within the APE, which was either deposited naturally or via transport as fill. No cultural artifacts or features were noted during the survey; therefore the survey was negative for cultural resources.

Figure 5 Naturally occurring weathered *Chione* shell fragment on surface of APE



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6 Conclusions

The cultural resources records search and field survey results presented herein identified no cultural resources within the project APE. No cultural resources were identified from Native American outreach or local group consultation. Based on the information provided herein, Rincon recommends a finding of ***no historic properties affected*** under the NHPA.

The following measures are recommended in the case of unanticipated discoveries.

6.1 Unanticipated Discovery of Cultural Resources

If cultural resources are encountered during ground-disturbing activities, work in the immediate area should be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology (NPS 1983) should be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for the California Register of Historical Resources (CRHR) eligibility. If the discovery proves to be significant under the California Environmental Quality Act (CEQA) and cannot be avoided by the project, additional work such as data recovery excavation may be warranted to mitigate any significant impacts to historical resources.

6.2 Unanticipated Discovery of Human Remains

The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

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Appendix A

Confidential Records Search Results - Not Included for Public Review

Appendix B

Section 106 Consultation

NATIVE AMERICAN HERITAGE COMMISSION

Environmental and Cultural Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710



May 8, 2017

Breana Campbell
Rincon Consultants, Inc.

Sent by E-mail: bcampbell@rinconconsultants.com

RE: Proposed 21st Street Drain to Pipe Project, City of Del Mar; Del Mar USGS Quadrangle, San Diego County, California

Dear Ms. Campbell:

A record search of the Native American Heritage Commission (NAHC) *Sacred Lands File* was completed for the area of potential project effect (APE) referenced above with negative results. Please note that the absence of specific site information in the *Sacred Lands File* does not indicate the absence of Native American cultural resources in any APE.

Attached is a list of tribes culturally affiliated to the project area. I suggest you contact all of the listed Tribes. If they cannot supply information, they might recommend others with specific knowledge. The list should provide a starting place to locate areas of potential adverse impact within the APE. By contacting all those on the list, your organization will be better able to respond to claims of failure to consult. If a response has not been received within two weeks of notification, the NAHC requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact via email: gayle.totton@nahc.ca.gov.

Sincerely,

A handwritten signature in blue ink that reads "Gayle Totton".

Gayle Totton, M.A., PhD.
Associate Governmental Program Analyst

**Native American Contact List
May 8, 2017
San Diego County**

Barona Band of Mission Indians
Edwin Romero Chairperson
1095 Barona Road Diegueno
Lakeside , CA 92040
clloyd@barona-nsn.gov
(619) 443-6612

(619) 443-0681

Ewilaapaay Band of Kumeyaay Indians
Robert Pinto Sr., Chairperson
4054 Willows Road Diegueno/Kumeyaay
Alpine , CA 91901
(619) 445-6315

(619) 445-9126 Fax

La Posta Band of Diegueño Mission Indians
Gwendolyn Parada, Chairperson
8 Crestwood Road Diegueno/Kumeyaay
Boulevard , CA 91905
LP13boots@aol.com
(619) 478-2113
(619) 478-2125 Fax

Manzanita Band of Kumeyaay Nation
Angela Elliott-Santos, Chairperson
P.O. Box 1302 Diegueno/Kumeyaay
Boulevard , CA 91905
(619) 766-4930

(619) 766-4957 Fax

San Pasqual Band of Diegueño Mission Indians
Allen E. Lawson, Chairperson
P.O. Box 365 Diegueno
Valley Center , CA 92082
allenl@sanpasqualtribe.org
(760) 749-3200

(760) 749-3876 Fax

Sycuan Band of the Kumeyaay Nation
Cody J. Martinez, Chairperson
1 Kwaaypaay Court Diegueno/Kumeyaay
El Cajon , CA 92019
ssilva@sycuan-nsn.gov
(619) 445-2613

(619) 445-1927 Fax

Viejas Band of Mission Indians of the Viejas Reservation
Robert J. Welch, Jr., Chairperson
1 Viejas Grade Road Diegueno/Kumeyaay
Alpine , CA 91901
jhagen@viejas-nsn.gov
(619) 445-3810

(619) 445-5337 Fax

Campo Band of Diegueño Mission Indians
Ralph Goff, Chairperson
36190 Church Road, Suite 1 Diegueno/Kumeyaay
Campo , CA 91906
rgoff@campo-nsn.gov
(619) 478-9046

(619) 478-5818 Fax

Jamul Indian Village of California
Erica Pinto, Chairperson
P.O. Box 612 Diegueno/Kumeyaay
Jamul , CA 91935
(619) 669-4785

(619) 669-4817

Mesa Grande Band of Diegueño Mission Indians
Virgil Oyos, Chairperson
P.O. Box 270 Diegueno
Santa Ysabel , CA 92070
mesagrandeband@msn.com
(760) 782-3818

(760) 782-9092 Fax

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person or agency of statutory responsibility as defined in Public Resources Code Sections 21080.3.1 Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed 21st Street Drain to Pipe Project, City of Del Mar, San Diego County, California

**Native American Contact List
May 8, 2017
San Diego County**

Pauma Band of Luiseno Indians
Temet Aguilar, Chairperson
P.O. Box 369, Ext. 303 Luiseno
Pauma Valley , CA 92061
(760) 742-1289

(760) 742-3422 Fax

Ewiiapaayp Band of Kumeyaay Indians
Michael Garcia, Vice Chairperson
4054 Willows Road Diegueno/Kumeyaay
Alpine , CA 91901
michaelg@leaningrock.net
(619) 445-6315

(619) 445-9126 Fax

Kwaaymii Laguna Band of Mission Indians
Carmen Lucas
P.O. Box 775 Diegueno-Kwaaymii
Pine Valley , CA 91962 Kumeyaay
(619) 709-4207

Barona Band of Mission Indians
Edwin Romero Chairperson
1095 Barona Road Diegueno
Lakeside , CA 92040
clloyd@barona-nsn.gov
(619) 443-6612

(619) 443-0681

Inaja Band of Diegueño Mission Indians
Rebecca Osuna, Chairman
2005 S. Escondido Blvd. Diegueno
Escondido , CA 92025
(760) 737-7628

(760) 747-8568 Fax

Iipay Nation of Santa Ysabel
Clint Linton, Director of Cultural Resources
P.O. Box 507 Diegueno/Kumeyaay
Santa Ysabel , CA 92070
cjlinton73@aol.com
(760) 803-5694

Iipay Nation of Santa Ysabel
Virgil Perez, Chairperson
P.O. Box 130 Diegueno/Kumeyaay
Santa Ysabel , CA 92070
(760) 765-0845

(760) 765-0320 Fax

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.

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This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed 21st Street Drain to Pipe Project, City of Del Mar, San Diego County, California



Native American Contact Table

Native American Contact	Mailing Address	Phone Number and/ or Email Address	Contact Attempt	Follow- Up	Results
Barona Band of Mission Indians Chairperson Edwin Romero	1095 Barona Road Lakeside, CA 92040	(619)443-6612	Letter mailed May 16, 2017	Phone call May 22, 2017	Chairperson Romero stated he had no comment regarding the project.
Pauma Band of Luiseno Indians Chairperson Temet Aguilar	P.O. Box 369 Pauma Valley, CA 92061	(760)742-1289 ext. 303	Letter mailed May 16, 2017	Phone call May 22, 2017	Left voicemail. No response received.
Ewiiapaayp Tribal Office Robert Pinto Sr., Chairperson	4054 Willows Road Alpine, CA 91901	(619)445-6315	Letter mailed May 16, 2017	Phone call May 22, 2017	No voicemail. No response received.
Sycuan Band of the Kumeyaay Nation Cody J. Martinez, Chairperson	1 Kwaaypaay Court El Cajon, CA 92019	(619)445-2613 ssilva@sycuan-nsn.gov	Letter mailed May 16, 2017	Phone call May 22, 2017	Left voicemail. No response received.

Native American Contact	Mailing Address	Phone Number and/ or Email Address	Contact Attempt	Follow- Up	Results
Inaja Band of Mission Indians Rebecca Osuna, Chairperson	2005 S. Escondido Blvd. Escondido, CA 92025	(760)747-7628	Letter mailed May 16, 2017	Phone call May 22, 2017	Left voicemail. No response received.
Iipay Nation of Santa Ysabel Clint Linton, Director of Cultural Resources	P.O. Box 507 Santa Ysabel, CA 92070	(760)803-5694 Cjlinton73@aol.com	Letter mailed May 16, 2017	Phone call May 22, 2017; Email sent May 22, 2017	Left voicemail. Followed-up via email. Mr. Linton requested that a Kumeyaay monitor be present for any ground disturbance that occurs outside documented fill.
Iipay Nation of Santa Ysabel Virgil Perez, Chairperson	P.O. Box 130 Santa Ysabel, CA 92070	(760)765-0845	Letter mailed May 16, 2017	Phone call May 22, 2017	Left voicemail. No response received.
San Pasqual Band of Mission Indians Allen E. Lawson, Chairperson	P.O. Box 365 Valley Center, CA 92082	(760)749-3200 allen@sanpasqualtribe.org	Letter mailed May 16, 2017	Phone call May 22, 2017	Mr. David Teller answered the phone and requested to have the letter Rincon sent on May 16, 2017, emailed. Rincon emailed the letter on May 22, 2017. No response received.
Kwaaymii Laguna Band of Mission Indians Carmen Lucas	P.O. Box 775 Pine Valley, CA 91962	(619)709-4207	Letter mailed May 16, 2017	Phone call May 22, 2017	Left voicemail. No response received.

Native American Contact	Mailing Address	Phone Number and/ or Email Address	Contact Attempt	Follow- Up	Results
Jamul Indian Village Erica Pinto, Chairperson	P.O. Box 612 Jamul, CA 91935	(619)669-4817	Letter mailed May 16, 2017	Phone call May 22, 2017	Phone number is out of service. No response received.
Campo Band of Mission Indians Ralph Goff, Chairperson	36190 Church Road, Suite 1 Campo, CA 91906	(619)479-9046 rgoff@campo-nsn.gov	Letter mailed May 16, 2017	Phone call May 22, 2017	Out of service. No response received.
La Posta Band of Diegueño Mission Indians Gwendolyn Parada, Chairperson	8 Crestwood Road Boulevard, CA 91905	(619)478-2113 lp13boots@aol.com	Letter mailed May 16, 2017	Phone call May 22, 2017	Left voicemail. No response received.
Manzanita Band of Kumeyaay Nation Angela Elliot Santos, Chairperson	P.O. Box 1302 Boulevard, CA 91905	(619)766-4930	Letter mailed May 16, 2017	Phone call May 22, 2017	Left voicemail. No response received.
Mesa Grande Band of Mission Indians Virgil Oyos, Chairperson	P.O. Box 270 Santa Ysabel, CA 92070	(619)782-3818 mesagrandeband@msn.com	Letter mailed May 16, 2017	Phone call May 22, 2017	Out of service. No response received.
Viejas Band of Kumeyaay Indians Robert J. Welch, Chairperson	1 Viejas Grade Road Alpine, CA 91901	(619)445-3810 jhagen@viejas-nsn.gov	Letter mailed May 16, 2017	Phone call May 22, 2017	Left voicemail. No response received.

Native American Contact	Mailing Address	Phone Number and/ or Email Address	Contact Attempt	Follow- Up	Results
Ewiaapaayp Tribal Office Michael Garcia, Vice Chairperson	4054 Willows Road Alpine, CA 91901	(619)445-6315 michaelg@leaningrock.net	Letter mailed May 16, 2017	Phone call May 22, 2017	Left voicemail. No response received.

Source: Native American Heritage Commission 2017



Rincon Consultants, Inc.

2215 Faraday Avenue Suite A
Carlsbad, California 92008

760 918 9444

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info@rinconconsultants.com

www.rinconconsultants.com

May 16, 2017

Barona Band of Mission Indians
Chairperson Edwin Romero
1095 Barona Road
Lakeside, CA 92040

**RE: Cultural Resources Assessment Report for the Proposed 21st Street Drain to Pipe Project,
City of Del Mar, San Diego County, California**

Dear Chairperson Romero:

Rincon Consultants, Inc. (Rincon) was retained by Michael Baker, International to provide a cultural resources assessment report for the 21st Street Drain to Pipe Project (project) located in the City of Del Mar, in San Diego County, California. This project requires a Section 404 permit from the U.S. Army Corps of Engineers (USACE). As such, the cultural resources study is being conducted in conformance with Section 106 of the National Historic Preservation Act (Section 106). The project site is situated on less than one-acre of land on the southeast corner of 21st street and Court Street. The proposed project will involve the conversion of an existing drainage to a pipe for vector control.

As part of the process of identifying cultural resources issues for this project, Rincon contacted the Native American Heritage Commission and requested a Sacred Lands File (SLF) search and a list of Native American tribal organizations and individuals who may have knowledge of sensitive cultural resources in or near the project area. Rincon received a response from the NAHC on May 8, 2017, which stated that the SLF search had been completed with "negative results". The NAHC suggested we contact you to discuss this project further.

If you have knowledge of cultural resources that may exist within or near the project site, please contact me in writing at the above address or bcampbell@rinconconsultants.com, or by telephone at (760) 918-9444, extension 217. Thank you for your assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "Breana Campbell", written in a cursive style.

Breana Campbell, M.A., RPA
Archaeologist

Enclosure: Project Location Map



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May 16, 2017

Pauma Band of Luiseno Indians
Chairperson Temet Aguilar
P.O. Box 369
Pauma Valley, CA 92061

**RE: Cultural Resources Assessment Report for the Proposed 21st Street Drain to Pipe Project,
City of Del Mar, San Diego County, California**

Dear Chairperson Aguilar:

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www.rinconconsultants.com

May 16, 2017

Ewiiapaayp Tribal Office
Robert Pinto Sr., Chairperson
4054 Willows Road
Alpine, CA 91901

**RE: Cultural Resources Assessment Report for the Proposed 21st Street Drain to Pipe Project,
City of Del Mar, San Diego County, California**

Dear Chairperson Pinto:

Rincon Consultants, Inc. (Rincon) was retained by Michael Baker, International to provide a cultural resources assessment report for the 21st Street Drain to Pipe Project (project) located in the City of Del Mar, in San Diego County, California. This project requires a Section 404 permit from the U.S. Army Corps of Engineers (USACE). As such, the cultural resources study is being conducted in conformance with Section 106 of the National Historic Preservation Act (Section 106). The project site is situated on less than one-acre of land on the southeast corner of 21st street and Court Street. The proposed project will involve the conversion of an existing drainage to a pipe for vector control.

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Breana Campbell, M.A., RPA
Archaeologist

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www.rinconconsultants.com

May 16, 2017

Sycuan Band of the Kumeyaay Nation
Cody J. Martinez, Chairperson
1 Kwaaypaay Court
El Cajon, CA 92019

**RE: Cultural Resources Assessment Report for the Proposed 21st Street Drain to Pipe Project,
City of Del Mar, San Diego County, California**

Dear Chairperson Martinez:

Rincon Consultants, Inc. (Rincon) was retained by Michael Baker, International to provide a cultural resources assessment report for the 21st Street Drain to Pipe Project (project) located in the City of Del Mar, in San Diego County, California. This project requires a Section 404 permit from the U.S. Army Corps of Engineers (USACE). As such, the cultural resources study is being conducted in conformance with Section 106 of the National Historic Preservation Act (Section 106). The project site is situated on less than one-acre of land on the southeast corner of 21st street and Court Street. The proposed project will involve the conversion of an existing drainage to a pipe for vector control.

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Breana Campbell, M.A., RPA
Archaeologist

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www.rinconconsultants.com

May 16, 2017

Inaja Band of Mission Indians
Chairperson Rebecca Osuna
2005 S. Escondido Blvd.
Escondido, CA 92025

**RE: Cultural Resources Assessment Report for the Proposed 21st Street Drain to Pipe Project,
City of Del Mar, San Diego County, California**

Dear Chairperson Osuna:

Rincon Consultants, Inc. (Rincon) was retained by Michael Baker, International to provide a cultural resources assessment report for the 21st Street Drain to Pipe Project (project) located in the City of Del Mar, in San Diego County, California. This project requires a Section 404 permit from the U.S. Army Corps of Engineers (USACE). As such, the cultural resources study is being conducted in conformance with Section 106 of the National Historic Preservation Act (Section 106). The project site is situated on less than one-acre of land on the southeast corner of 21st street and Court Street. The proposed project will involve the conversion of an existing drainage to a pipe for vector control.

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Breana Campbell, M.A., RPA
Archaeologist

Enclosure: Project Location Map



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Carlsbad, California 92008

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May 16, 2017

Iipay Nation of Santa Ysabel
Clint Linton
P.O. Box 507
Santa Ysabel, CA 92070

**RE: Cultural Resources Assessment Report for the Proposed 21st Street Drain to Pipe Project,
City of Del Mar, San Diego County, California**

Dear Mr. Linton:

Rincon Consultants, Inc. (Rincon) was retained by Michael Baker, International to provide a cultural resources assessment report for the 21st Street Drain to Pipe Project (project) located in the City of Del Mar, in San Diego County, California. This project requires a Section 404 permit from the U.S. Army Corps of Engineers (USACE). As such, the cultural resources study is being conducted in conformance with Section 106 of the National Historic Preservation Act (Section 106). The project site is situated on less than one-acre of land on the southeast corner of 21st street and Court Street. The proposed project will involve the conversion of an existing drainage to a pipe for vector control.

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Sincerely,

A handwritten signature in black ink, appearing to read "Breana Campbell", written in a cursive style.

Breana Campbell, M.A., RPA
Archaeologist

Enclosure: Project Location Map



Rincon Consultants, Inc.
2215 Faraday Avenue Suite A
Carlsbad, California 92008

760 918 9444
FAX 918 9449

info@rinconconsultants.com
www.rinconconsultants.com

May 16, 2017

Iipay Nation of Santa Ysabel
Chairperson Virgil Perez
P.O. Box 130
Santa Ysabel, CA 92070

**RE: Cultural Resources Assessment Report for the Proposed 21st Street Drain to Pipe Project,
City of Del Mar, San Diego County, California**

Dear Chairperson Perez:

Rincon Consultants, Inc. (Rincon) was retained by Michael Baker, International to provide a cultural resources assessment report for the 21st Street Drain to Pipe Project (project) located in the City of Del Mar, in San Diego County, California. This project requires a Section 404 permit from the U.S. Army Corps of Engineers (USACE). As such, the cultural resources study is being conducted in conformance with Section 106 of the National Historic Preservation Act (Section 106). The project site is situated on less than one-acre of land on the southeast corner of 21st street and Court Street. The proposed project will involve the conversion of an existing drainage to a pipe for vector control.

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May 16, 2017

San Pasqual Band of Mission Indians
Chairperson Allen E. Lawson
P.O. Box 365
Valley Center, CA 92082

**RE: Cultural Resources Assessment Report for the Proposed 21st Street Drain to Pipe Project,
City of Del Mar, San Diego County, California**

Dear Chairperson Lawson:

Rincon Consultants, Inc. (Rincon) was retained by Michael Baker, International to provide a cultural resources assessment report for the 21st Street Drain to Pipe Project (project) located in the City of Del Mar, in San Diego County, California. This project requires a Section 404 permit from the U.S. Army Corps of Engineers (USACE). As such, the cultural resources study is being conducted in conformance with Section 106 of the National Historic Preservation Act (Section 106). The project site is situated on less than one-acre of land on the southeast corner of 21st street and Court Street. The proposed project will involve the conversion of an existing drainage to a pipe for vector control.

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www.rinconconsultants.com

May 16, 2017

Kwaaymii Laguna Band of Mission Indians
Carmen Lucas
P.O. Box 775
Pine Valley, CA 91962

**RE: Cultural Resources Assessment Report for the Proposed 21st Street Drain to Pipe Project,
City of Del Mar, San Diego County, California**

Dear Ms. Lucas:

Rincon Consultants, Inc. (Rincon) was retained by Michael Baker, International to provide a cultural resources assessment report for the 21st Street Drain to Pipe Project (project) located in the City of Del Mar, in San Diego County, California. This project requires a Section 404 permit from the U.S. Army Corps of Engineers (USACE). As such, the cultural resources study is being conducted in conformance with Section 106 of the National Historic Preservation Act (Section 106). The project site is situated on less than one-acre of land on the southeast corner of 21st street and Court Street. The proposed project will involve the conversion of an existing drainage to a pipe for vector control.

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May 16, 2017

Jamul Indian Village
Chairperson Erica Pinto
P.O. Box 612
Jamul, CA 91935

RE: Cultural Resources Assessment Report for the Proposed 21st Street Drain to Pipe Project, City of Del Mar, San Diego County, California

Dear Chairperson Pinto:

Rincon Consultants, Inc. (Rincon) was retained by Michael Baker, International to provide a cultural resources assessment report for the 21st Street Drain to Pipe Project (project) located in the City of Del Mar, in San Diego County, California. This project requires a Section 404 permit from the U.S. Army Corps of Engineers (USACE). As such, the cultural resources study is being conducted in conformance with Section 106 of the National Historic Preservation Act (Section 106). The project site is situated on less than one-acre of land on the southeast corner of 21st street and Court Street. The proposed project will involve the conversion of an existing drainage to a pipe for vector control.

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www.rinconconsultants.com

May 16, 2017

Campo Band of Mission Indians
Ralph Goff, Chairperson
36190 Church Road, Suite 1
Campo, CA 91906

RE: Cultural Resources Assessment Report for the Proposed 21st Street Drain to Pipe Project, City of Del Mar, San Diego County, California

Dear Chairperson Goff:

Rincon Consultants, Inc. (Rincon) was retained by Michael Baker, International to provide a cultural resources assessment report for the 21st Street Drain to Pipe Project (project) located in the City of Del Mar, in San Diego County, California. This project requires a Section 404 permit from the U.S. Army Corps of Engineers (USACE). As such, the cultural resources study is being conducted in conformance with Section 106 of the National Historic Preservation Act (Section 106). The project site is situated on less than one-acre of land on the southeast corner of 21st street and Court Street. The proposed project will involve the conversion of an existing drainage to a pipe for vector control.

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www.rinconconsultants.com

May 16, 2017

La Posta Band of Diegueño Mission Indians
Gwendolyn Parada, Chairperson
8 Crestwood Road
Boulevard, CA 91905

**RE: Cultural Resources Assessment Report for the Proposed 21st Street Drain to Pipe Project,
City of Del Mar, San Diego County, California**

Dear Chairperson Parada:

Rincon Consultants, Inc. (Rincon) was retained by Michael Baker, International to provide a cultural resources assessment report for the 21st Street Drain to Pipe Project (project) located in the City of Del Mar, in San Diego County, California. This project requires a Section 404 permit from the U.S. Army Corps of Engineers (USACE). As such, the cultural resources study is being conducted in conformance with Section 106 of the National Historic Preservation Act (Section 106). The project site is situated on less than one-acre of land on the southeast corner of 21st street and Court Street. The proposed project will involve the conversion of an existing drainage to a pipe for vector control.

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Archaeologist

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www.rinconconsultants.com

May 16, 2017

Manzanita Band of Kumeyaay Nation
Angela Elliot Santos, Chairperson
P.O. Box 1302
Boulevard, CA 91905

**RE: Cultural Resources Assessment Report for the Proposed 21st Street Drain to Pipe Project,
City of Del Mar, San Diego County, California**

Dear Chairperson Santos:

Rincon Consultants, Inc. (Rincon) was retained by Michael Baker, International to provide a cultural resources assessment report for the 21st Street Drain to Pipe Project (project) located in the City of Del Mar, in San Diego County, California. This project requires a Section 404 permit from the U.S. Army Corps of Engineers (USACE). As such, the cultural resources study is being conducted in conformance with Section 106 of the National Historic Preservation Act (Section 106). The project site is situated on less than one-acre of land on the southeast corner of 21st street and Court Street. The proposed project will involve the conversion of an existing drainage to a pipe for vector control.

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May 16, 2017

Mesa Grande Band of Mission Indians
Virgil Oyos, Chairperson
P.O. Box 270
Santa Ysabel, CA 92070

RE: Cultural Resources Assessment Report for the Proposed 21st Street Drain to Pipe Project, City of Del Mar, San Diego County, California

Dear Chairperson Oyos:

Rincon Consultants, Inc. (Rincon) was retained by Michael Baker, International to provide a cultural resources assessment report for the 21st Street Drain to Pipe Project (project) located in the City of Del Mar, in San Diego County, California. This project requires a Section 404 permit from the U.S. Army Corps of Engineers (USACE). As such, the cultural resources study is being conducted in conformance with Section 106 of the National Historic Preservation Act (Section 106). The project site is situated on less than one-acre of land on the southeast corner of 21st street and Court Street. The proposed project will involve the conversion of an existing drainage to a pipe for vector control.

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Carlsbad, California 92008

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FAX 918 9449

info@rinconconsultants.com
www.rinconconsultants.com

May 16, 2017

Viejas Band of Kumeyaay Indians
Robert J. Welch, Chairperson
1 Viejas Grade Road
Alpine, CA 91901

**RE: Cultural Resources Assessment Report for the Proposed 21st Street Drain to Pipe Project,
City of Del Mar, San Diego County, California**

Dear Chairperson Welch:

Rincon Consultants, Inc. (Rincon) was retained by Michael Baker, International to provide a cultural resources assessment report for the 21st Street Drain to Pipe Project (project) located in the City of Del Mar, in San Diego County, California. This project requires a Section 404 permit from the U.S. Army Corps of Engineers (USACE). As such, the cultural resources study is being conducted in conformance with Section 106 of the National Historic Preservation Act (Section 106). The project site is situated on less than one-acre of land on the southeast corner of 21st street and Court Street. The proposed project will involve the conversion of an existing drainage to a pipe for vector control.

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info@rinconconsultants.com
www.rinconconsultants.com

May 16, 2017

Ewiiapaayp Tribal Office
Michael Garcia, Vice Chairperson
4054 Willows Road
Alpine, CA 91901

RE: Cultural Resources Assessment Report for the Proposed 21st Street Drain to Pipe Project, City of Del Mar, San Diego County, California

Dear Vice Chairperson Garcia:

Rincon Consultants, Inc. (Rincon) was retained by Michael Baker, International to provide a cultural resources assessment report for the 21st Street Drain to Pipe Project (project) located in the City of Del Mar, in San Diego County, California. This project requires a Section 404 permit from the U.S. Army Corps of Engineers (USACE). As such, the cultural resources study is being conducted in conformance with Section 106 of the National Historic Preservation Act (Section 106). The project site is situated on less than one-acre of land on the southeast corner of 21st street and Court Street. The proposed project will involve the conversion of an existing drainage to a pipe for vector control.

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Breana Campbell, M.A., RPA
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Historic Group Consultation Contact Table

Contact	Mailing Address	Phone Number and/ or Email Address	Contact Attempt	Follow- Up	Results
Save Our Heritage Organisation	2476 San Diego Avenue San Diego, CA 92110	(619) 297-9327 sohosandiego@aol.com	Letter mailed May 16, 2017	Follow-up email June 1, 2017	No response received.
Del Mar Historical Society	225 9th Street Del Mar, California 92014	No phone number listed info@delmarhistoricalsociety.org	Letter mailed May 16, 2017	Follow-up email June 1, 2017	No response received.
City of Del Mar Planning and Community Development	1050 Camino del Mar Del Mar, CA 92014	(858) 755-9313	Letter mailed May 16, 2017	Phone call June 1, 2017	Left voicemail. No response received.



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May 16, 2017

Save Our Heritage Organisation
2476 San Diego Avenue
San Diego, CA 92110

**RE: Cultural Resources Assessment Report for the Proposed 21st Street Drain to Pipe Project,
City of Del Mar, San Diego County, California**

To Whom it May Concern:

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May 16, 2017

Del Mar Historical Society
225 9th Street
Del Mar, California 92014
info@delmarhistoricalsociety.org

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City of Del Mar, San Diego County, California**

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May 16, 2017

City of Del Mar Planning and Community Development
1050 Camino del Mar
Del Mar, CA 92014

**RE: Cultural Resources Assessment Report for the Proposed 21st Street Drain to Pipe Project,
City of Del Mar, San Diego County, California**

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Archaeologist

Enclosure: Project Location Map

APPENDIX D
Storm Water Management Plan

CITY OF DEL MAR

**STANDARD DEVELOPMENT PROJECT
STORM WATER MANAGEMENT PLAN (SWMP)
FOR
21st Street Ditch Project**

**21st Street
Del Mar, CA 92014**

**ASSESSOR'S PARCEL NUMBER(S):
299-133-01 THRU 299-133-04**

PREPARED FOR:

City of Del Mar
1050 Camino Del Mar
Del Mar, CA 92014
(858)755-9313

STANDARD PROJECT SWMP PREPARED BY:

Michael Baker International
5050 Avenida Encinas, Suite 260
Carlsbad, CA 92008
(760)603-6252

**DATE OF SWMP:
February 13, 2017**

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TABLE OF CONTENTS

Acronym Sheet

Standard Project SWMP Project Owner's Certification Page

Project Vicinity Map

FORM 1 Site Information Checklist for Standard Projects

FORM 2 Source Control BMP Checklist for All Development Projects

FORM 3 Site Design/LID BMP Checklist for All Development Projects

Attachment 1: Copy of Plan Sheets Showing Permanent Storm Water BMPs

ACRONYMS

APN	Assessor's Parcel Number
BMP	Best Management Practice
HMP	Hydromodification Management Plan
HSG	Hydrologic Soil Group
MS4	Municipal Separate Storm Sewer System
N/A	Not Applicable
NRCS	Natural Resources Conservation Service
PDP	Priority Development Project
PE	Professional Engineer
SC	Source Control
SD	Site Design
SDRWQCB	San Diego Regional Water Quality Control Board
SIC	Standard Industrial Classification
SWMP	Storm Water Management Plan

STANDARD PROJECT SWMP PROJECT OWNER'S CERTIFICATION PAGE

Project Name: 21st Street Ditch Project
Permit Application Number:

PROJECT OWNER'S CERTIFICATION

This Standard Project SWMP has been prepared for the City of Del Mar by Michael Baker International. The Standard Project SWMP is intended to comply with the Standard Project requirements of the City of Del Mar BMP Design Manual, which is a design manual for compliance with the City of Del Mar and MS4 Permit (California Regional Water Quality Control Board San Diego Region Order No. 2013-0001, as amended by Order No. R9-2015-0001) requirements for storm water management.

The undersigned, while it owns the subject property, is responsible for the implementation of the provisions of this plan. Once the undersigned transfers its interests in the property, its successor-in-interest shall bear the aforementioned responsibility to implement the best management practices (BMPs) described within this plan. A signed copy of this document shall be available on the subject property into perpetuity.

Project Owner's Signature

Print Name

Company

Date

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SUBMITTAL RECORD

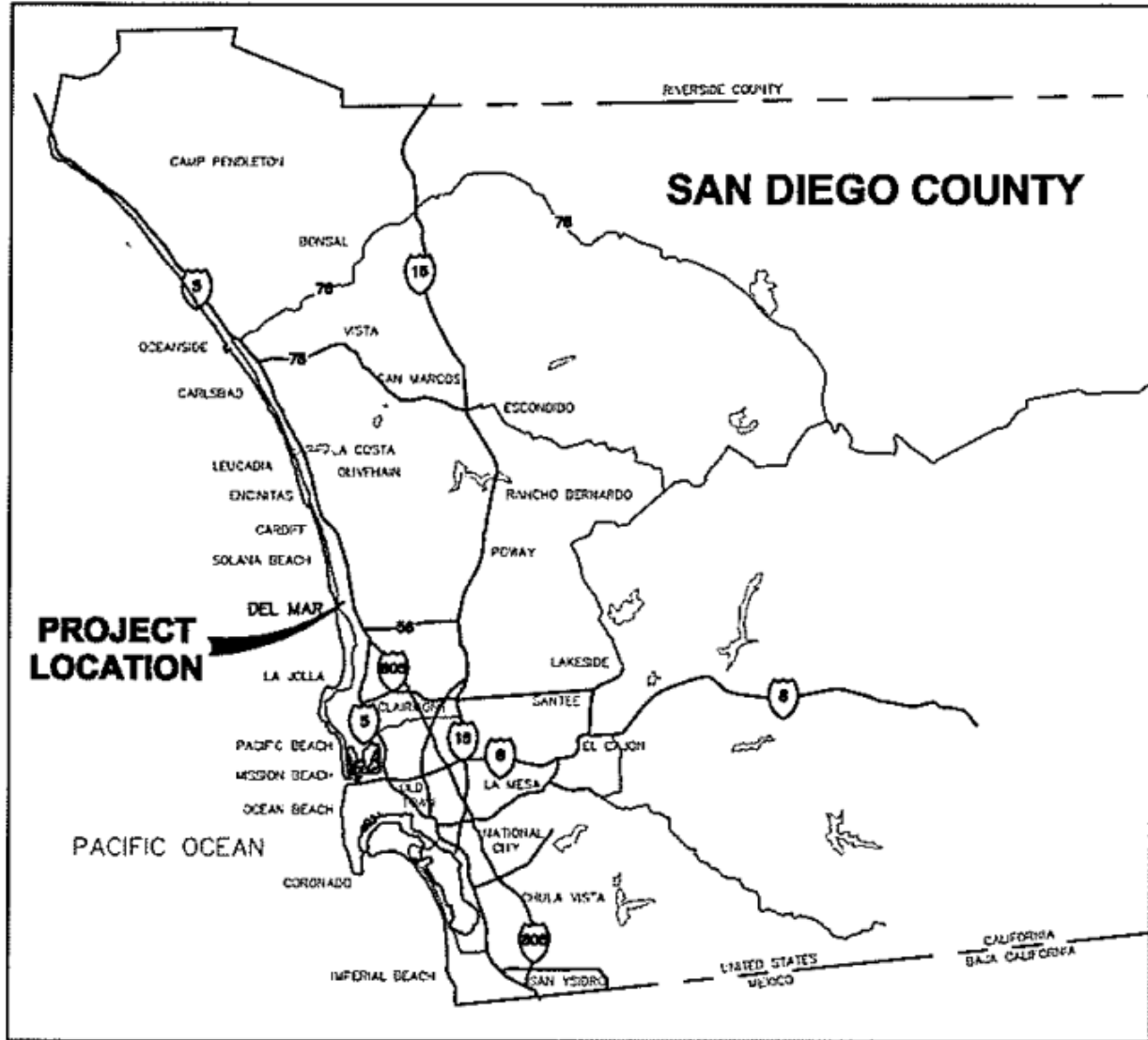
Use this Table to keep a record of submittals of this Standard Project SWMP. Each time the Standard Project SWMP is re-submitted, provide the date and status of the project. In column 4 summarize the changes that have been made or indicate if response to plancheck comments is included. When applicable, insert response to plancheck comments behind this page.

Submittal Number	Date	Project Status	Summary of Changes
1		<input type="checkbox"/> Preliminary Design / Planning/ CEQA <input type="checkbox"/> Final Design	Initial Submittal
2		<input type="checkbox"/> Preliminary Design / Planning/ CEQA <input type="checkbox"/> Final Design	
3		<input type="checkbox"/> Preliminary Design / Planning/ CEQA <input type="checkbox"/> Final Design	
4		<input type="checkbox"/> Preliminary Design / Planning/ CEQA <input type="checkbox"/> Final Design	

PROJECT VICINITY MAP

Project Name: 21st Street Ditch Project

Permit Application Number:



VICINITY MAP
NOT TO SCALE

Site Information Checklist For Standard Projects		Form 1 (Standard Projects) City of Del Mar BMP Design Manual
Project Summary Information		
Project Name	21 st Street Ditch Project	
Project Address	21 st Street Del Mar, CA 92014	
Assessor's Parcel Number(s) (APN(s))	299-133-01 THRU 299-133-04	
Permit Application Number		
Project Hydrologic Unit	Select One: <input checked="" type="checkbox"/> San Dieguito (HA Solana Beach, HSA Rancho Santa Fe) 905.11 <input type="checkbox"/> Los Peñasquitos (HA Miramar Reservoir) 906.1	
Project Watershed (Complete Hydrologic Unit, Area, and Subarea Name with Numeric Identifier)	San Dieguito (HA Solana Beach, HSA Rancho Santa Fe) 905.11	
Parcel Area (total area of Assessor's Parcel(s) associated with the project)	<u> N/A </u> Acres (<u> N/A </u> Square Feet)	
Area to be Disturbed by the Project (Project Area)	<u> .08 </u> Acres (<u> 3,500 </u> Square Feet)	
Project Proposed Impervious Area (subset of Project Area)	<u> 0 </u> Acres (<u> 0 </u> Square Feet)	
Project Proposed Pervious Area (subset of Project Area)	<u> .08 </u> Acres (<u> 3,500 </u> Square Feet)	
Note: Proposed Impervious Area + Proposed Pervious Area = Area to be Disturbed by the Project. This may be less than the Parcel Area.		

Description of Existing Site Condition and Drainage Patterns

Current Status of the Site (select all that apply):

- Existing development
- Previously graded but not built out
- Demolition completed without new construction
- Agricultural or other non-impervious use
- Vacant, undeveloped/natural

Description / Additional Information:

The project site currently contains an earthen channel that connects a storm drain outfall to another storm drain pipe on the other end.

Existing Land Cover Includes (select all that apply):

- Vegetative Cover
- Non-Vegetated Pervious Areas
- Impervious Areas

Description / Additional Information:

Form 1

Underlying Soil belongs to Hydrologic Soil Group (select all that apply):

- NRCS Type A
- NRCS Type B
- NRCS Type C
- NRCS Type D

Existing Natural Hydrologic Features (select all that apply):

- Watercourses
- Seeps
- Springs
- Wetlands
- None

Description / Additional Information:

According to Corps/RWQCB jurisdictional delineation, the project site contains about .007 ac of Wetlands.

Description of Existing Site Drainage [How is storm water runoff conveyed from the site? At a minimum, this description should answer (1) whether existing drainage conveyance is natural or urban; (2) describe existing constructed storm water conveyance systems, if applicable; and (3) is runoff from offsite conveyed through the site? If so, describe.]:

The project site currently contains an earthen channel that connects a storm drain outfall to another storm drain pipe on the other end. The runoff is then conveyed away from the site, traveling north along the NCTD ROW.

Description of Proposed Site Development and Drainage Patterns

Project Description / Proposed Land Use and/or Activities:

The 21st Street Ditch Project proposes storm drain improvements to connect the two existing storm drain pipes. Once the storm drain is connected, the earthen channel will be backfilled and the remaining area will be landscaped.

Form 1

List proposed impervious features of the project (e.g., buildings, roadways, parking lots, courtyards, athletic courts, other impervious features):

There are no proposed impervious features of the project.

List proposed pervious features of the project (e.g., landscape areas):

The project proposes to landscape the entire project site.

Does the project include grading and changes to site topography?

- Yes
- No

Description / Additional Information:

The project proposes to backfill the existing earthen channel

Does the project include changes to site drainage (e.g., installation of new storm water conveyance systems)?

- Yes
- No

Description / Additional Information:

The project proposes to backfill the existing earthen channel after connecting the existing storm drain pipes on each side. The runoff that currently enters the channel directly will sheet flow across the proposed landscaped area before entering the curb and gutter on the south end of 21st Street. This runoff will reach a curb cut that discharges back into the previous storm drain system.

Form 1

Identify whether any of the following features, activities, and/or pollutant source areas will be present (select all that apply):

- On-site storm drain inlets
- Interior floor drains and elevator shaft sump pumps
- Interior parking garages
- Need for future indoor & structural pest control
- Landscape/Outdoor Pesticide Use
- Pools, spas, ponds, decorative fountains, and other water features
- Food service
- Refuse areas
- Industrial processes
- Outdoor storage of equipment or materials
- Vehicle and Equipment Cleaning
- Vehicle/Equipment Repair and Maintenance
- Fuel Dispensing Areas
- Loading Docks
- Fire Sprinkler Test Water
- Miscellaneous Drain or Wash Water
- Plazas, sidewalks, and parking lots

Description / Additional Information:

Source Control BMP Checklist for All Development Projects (Standard Projects and Priority Development Projects)		Form 2 (Standard Projects) Del Mar BMP Design Manual	
Project Identification			
Project Name: 21 st Street Ditch Project			
Permit Application Number:			
Source Control BMPs			
<p>All development projects must implement source control BMPs SC-1 through SC-6 where applicable and feasible. See Chapter 4 and Appendix E of the Del Mar BMP Design Manual for information to implement source control BMPs shown in this checklist.</p> <p>Answer each category below pursuant to the following.</p> <ul style="list-style-type: none"> • "Yes" means the project will implement the source control BMP as described in Chapter 4 and/or Appendix E of the Del Mar BMP Design Manual. Discussion / justification is not required. • "No" means the BMP is applicable to the project but it is not feasible to implement. Discussion / justification must be provided. • "N/A" means the BMP is not applicable at the project site because the project does not include the feature that is addressed by the BMP (e.g., the project has no outdoor materials storage areas). Discussion / justification may be provided. 			
Source Control Requirement		Applied?	
SC-1 Prevention of Illicit Discharges into the MS4		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
		<input type="checkbox"/> N/A	
Discussion / justification if SC-1 not implemented:			
SC-2 Storm Drain Stenciling or Signage		<input type="checkbox"/> Yes	<input type="checkbox"/> No
		<input checked="" type="checkbox"/> N/A	
Discussion / justification if SC-2 not implemented:			

Form 2

SC-3 Protect Outdoor Materials Storage Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Discussion / justification if SC-3 not implemented:			
SC-4 Protect Materials Stored in Outdoor Work Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Discussion / justification if SC-4 not implemented:			
<p align="center">Source Control Requirement</p>	<p align="center">Applied?</p>		
SC-5 Protect Trash Storage Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Discussion / justification if SC-5 not implemented:			

Form 2

SC-6 Additional BMPs Based on Potential Sources of Runoff Pollutants (must answer for each source listed below):

<input type="checkbox"/> On-site storm drain inlets	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Interior floor drains and elevator shaft sump pumps	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Interior parking garages	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Need for future indoor & structural pest control	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Landscape/Outdoor Pesticide Use	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Pools, spas, ponds, decorative fountains, and other water features	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Food service	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Refuse areas	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Industrial processes	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Outdoor storage of equipment or materials	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Vehicle and Equipment Cleaning	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Vehicle/Equipment Repair and Maintenance	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Fuel Dispensing Areas	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Loading Docks	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Fire Sprinkler Test Water	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Miscellaneous Drain or Wash Water	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Plazas, sidewalks, and parking lots			

Discussion / justification if SC-6 not implemented. Clearly identify which sources of runoff pollutants are discussed. Justification must be provided for all "No" answers shown above.

Site Design/LID BMP Checklist for All Development Projects (Standard Projects and Priority Development Projects)	Form 3 (Standard Projects) Del Mar BMP Design Manual
---	---

Project Identification

Project Name: 21st Street Ditch Project

Permit Application Number:

Site Design BMPs

All development projects must implement site design BMPs SD-1 through SD-8 where applicable and feasible. See Chapter 4 and Appendix E of the Del Mar BMP Design Manual for information to implement site design/LID BMPs shown in this checklist.

- Answer each category below pursuant to the following.
- "Yes" means the project will implement the site design BMP as described in Chapter 4 and/or Appendix E of the Del Mar BMP Design Manual. Discussion / justification is not required.
 - "No" means the BMP is applicable to the project but it is not feasible to implement. Discussion / justification must be provided.
 - "N/A" means the BMP is not applicable at the project site because the project does not include the feature that is addressed by the BMP (e.g., the project site has no existing natural areas to conserve). Discussion / justification may be provided.

Site Design Requirement	Applied?		
SD-1 Maintain Natural Drainage Pathways and Hydrologic Features	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A

Discussion / justification if SD-1 not implemented:

SD-2 Conserve Natural Areas, Soils, and Vegetation	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
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Discussion / justification if SD-2 not implemented:

SD-3 Minimize Impervious Area	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
--------------------------------------	---	-----------------------------	------------------------------

Discussion / justification if SD-3 not implemented:

Form 3

SD-4 Minimize Soil Compaction	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Discussion / justification if SD-4 not implemented:			
SD-5 Impervious Area Dispersion	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Discussion / justification if SD-5 not implemented:			
SD-6 Runoff Collection	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Discussion / justification if SD-6 not implemented:			
SD-7 Landscaping with Native or Drought Tolerant Species	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Discussion / justification if SD-7 not implemented:			
SD-8 Harvesting and Using Precipitation	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Discussion / justification if SD-8 not implemented:			

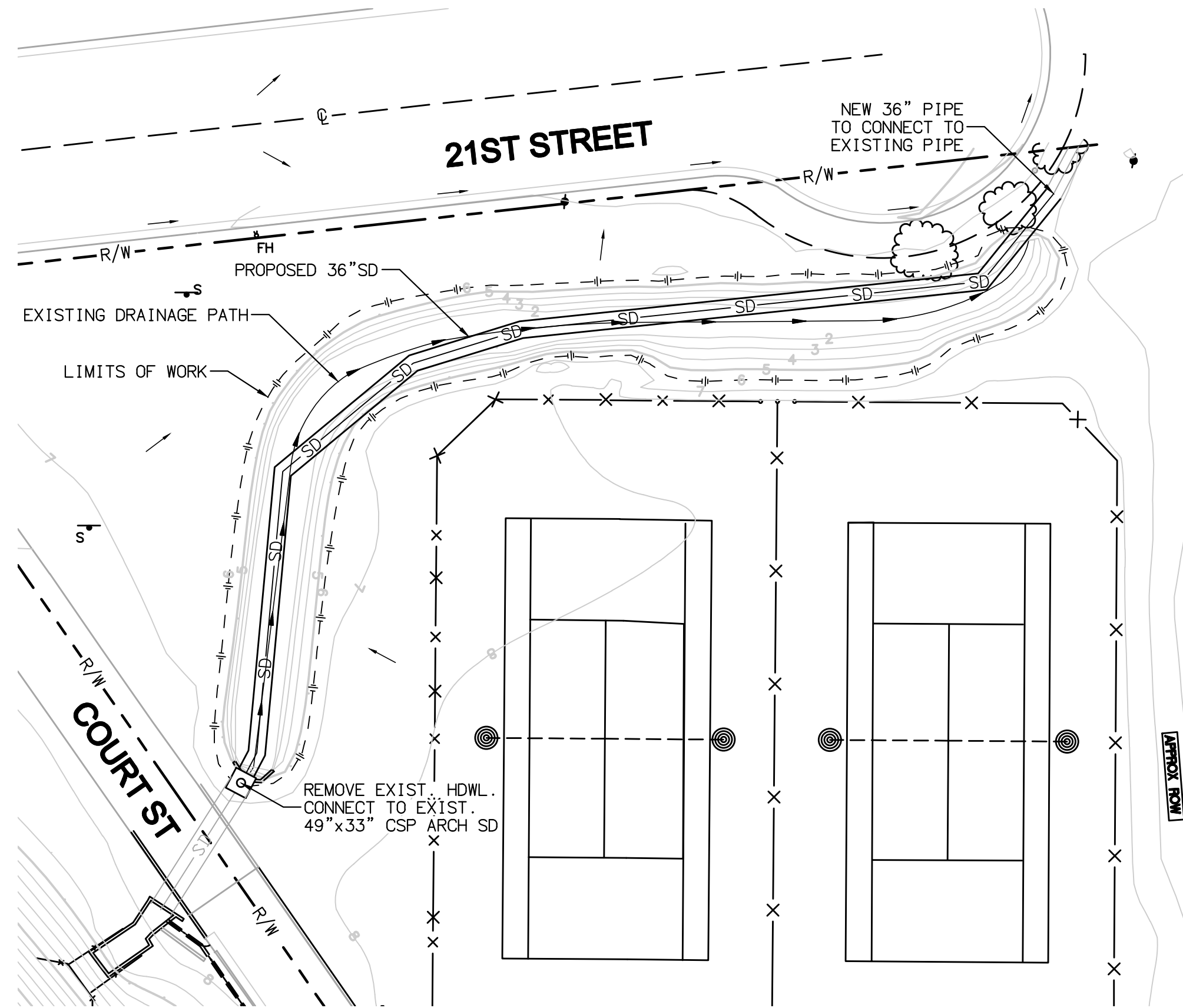
ATTACHMENT 1
Copy of Plan Sheets Showing Permanent Storm Water BMPs

This is the cover sheet for Attachment 1.

Use this checklist to ensure the required information has been included on the plans:

The plans should include:

- All applicable permanent site design and source control BMPs as noted in Forms 4 and 5
- A single plan BMP sheet for each construction drawing highlighting only those BMPs included in the referenced construction drawing. (See Section 5.5.2 of the City's JRMP for further detail.)



LEGEND:

- EXISTING RIGHT-OF-WAY --R/W--
- LIMITS OF WORK - - - - -
- EXISTING DRAINAGE PATH →
- EXISTING STORM DRAIN SD
- PROPOSED STORM DRAIN SD
- PROPOSED MANHOLE ○

PROJECT INFORMATION:

PROJECT WATERSHED: SAN DIEGUITO (HA SOLANA BEACH, HSA RANCHO SANTA FE) 905.11

HYDROLOGIC SOIL GROUP: A
 DISTURBED AREA: 0.08 ACRES
 EXISTING IMPERVIOUS AREA: 0 SQ.FT.
 PROPOSED IMPERVIOUS AREA: 0 SQ.FT.

BMPs IMPLEMENTED:

PERMANENT BMPs:

N/A

SOURCE CONTROL BMPs:

SC-1: PREVENTION OF ILLICIT DISCHARGES INTO THE MS4

SITE DESIGN BMPs:

- SD-2: CONSERVE NATURAL AREAS, SOILS, AND VEGETATION
- SD-3: MINIMIZE IMPERVIOUS AREA
- SD-4: MINIMIZE SOIL COMPACTION
- SD-7: LANDSCAPING WITH NATIVE OR DROUGHT TOLERANT SPECIES



SCALE: 1"=20'



**BMP SITE PLAN
 21ST STREET
 DITCH PROJECT**



City of Del Mar

1050 Camino del Mar, Del Mar, CA 92014
 T 858.755-9313 F 858.755-2794
www.delmar.ca.us

APPENDIX E
Comment Letters Received



EDMUND G. BROWN JR.
GOVERNOR

September 5, 2017

STATE OF CALIFORNIA
GOVERNOR'S OFFICE of PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT



KEN ALEX
DIRECTOR

RECEIVED

SEP 07 2017

City of Del Mar
Administrative Services Dept.

Tim Thiele, City Engineer
City of Del Mar
2010 Jimmy Durante Boulevard
Del Mar, CA 92014

Subject: 21st Street Ditch Project
SCH#: 2017081007

Dear Tim Thiele, City Engineer:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. The review period closed on September 1, 2017, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

**Document Details Report
State Clearinghouse Data Base**

SCH# 2017081007
Project Title 21st Street Ditch Project
Lead Agency Del Mar, City of

Type MND Mitigated Negative Declaration

Description The 0.22-acre project site includes a 203-foot segment of an unnamed, unlined drainage ditch that is approximately 5 feet in diameter. Water flows from west to east through the ditch; flows are intermittent/ perennial and are typically from urban runoff and storm events. The proposed project would permanently place a 36-inch solid storm drain pipe (connecting at both culvert outlets) and fill materials within the 203-foot portion of the unnamed drainage feature. The proposed project would also involve rehabilitation grading of the existing drainage channel to approximately match the existing surface elevations of the street and tennis facility located south of 21st Street. The purpose of the proposed project is to improve floodwater conveyance, maintain flow rate efficiency, and remove localized nuisance water.

Lead Agency Contact

Name Tim Thiele, City Engineer
Agency City of Del Mar
Phone (858) 755-9313 **Fax**
email
Address 2010 Jimmy Durante Boulevard
City Del Mar **State** CA **Zip** 92014

Project Location

County San Diego
City Del Mar
Region
Lat / Long 32° 58' 01" N / 117° 15' 58" W
Cross Streets Jimmy Durante and Camino Del Mar
Parcel No. 299-133-01
Township **Range** **Section** **Base**

Proximity to:

Highways Interstate 5
Airports
Railways SD Northern Railway
Waterways San Dieguito River
Schools
Land Use General Plan: Rail, Zoning: Rail, Public park (PP)

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Recreation/Parks; Archaeologic-Historic; Biological Resources; Coastal Zone; Drainage/Absorption; Forest Land/Fire Hazard; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Landuse

Reviewing Agencies Resources Agency; California Coastal Commission; Department of Fish and Wildlife, Region 5; Cal Fire; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 11; State Water Resources Control Board, Division of Water Rights; Regional Water Quality Control Board, Region 9; Native American Heritage Commission; Public Utilities Commission; State Lands Commission

Date Received 08/03/2017 **Start of Review** 08/03/2017 **End of Review** 09/01/2017



401 B Street, Suite 800
San Diego, CA 92101-4231
(619) 699-1900
Fax (619) 699-1905
sandag.org

September 1, 2017

File Number 3300300

Mr. Tim Thiele
City of Del Mar
1050 Camino Del Mar
Del Mar, CA 92014

Dear Mr. Thiele:

SUBJECT: 21st Street Ditch Project Mitigated Negative Declaration

Thank you for the opportunity to comment on the City of Del Mar's 21st Street Ditch Project Mitigated Negative Declaration. The San Diego Association of Governments (SANDAG) is submitting comments based on the policies included in San Diego Forward: The Regional Plan (Regional Plan). These policies will help to provide people with more travel and housing choices, protect the environment, create healthy communities, and stimulate economic growth. SANDAG's comments are submitted from a regional perspective emphasizing the need for better land use and transportation coordination.

San Dieguito Double Track Project

Additional rail service along the Los Angeles-San Diego-San Luis Obispo rail corridor is a goal in the Regional Plan. Track capacity, new stations, and other improvements are needed in order to add service, including completion of the San Dieguito Double Track Project.

The project area for the 21st Street Ditch Project is immediately adjacent to the San Dieguito project area. The water flows to the railroad right of way now, and SANDAG understands that will not change under the project condition. SANDAG requests the city continue to coordinate on the San Dieguito project with SANDAG and provide updates in the future as the project progresses.

SANDAG appreciates the opportunity to comment. If you have any questions, please contact me at (619) 699-1943 or seth.litchney@sandag.org.

Sincerely,

SETH LITCHNEY
Senior Regional Planner

SLI/KHE/pro

MEMBER AGENCIES

- Cities of
- Carlsbad
- Chula Vista
- Coronado
- Del Mar
- El Cajon
- Encinitas
- Escondido
- Imperial Beach
- La Mesa
- Lemon Grove
- National City
- Oceanside
- Poway
- San Diego
- San Marcos
- Santee
- Solana Beach
- Vista
- and
- County of San Diego

ADVISORY MEMBERS

- Imperial County
- California Department of Transportation
- Metropolitan Transit System
- North County Transit District
- United States Department of Defense
- San Diego Unified Port District
- San Diego County Water Authority
- Southern California Tribal Chairmen's Association
- Mexico

NATIVE AMERICAN HERITAGE COMMISSION

Environmental and Cultural Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone (916) 373-3710
Fax (916) 373-5471



August 30, 2017

Tim Thiele, City Engineer
City of Del Mar
21010 Jimmy Durante Boulevard
Del Mar, CA 92014

Sent via e-mail: tthiele@mbakerintl.com

Re: SCH# 2017081007, Proposed 21st Street Ditch Project, City of Del Mar; San Diego County, California

Dear Mr. Thiele:

The Native American Heritage Commission (NAHC) has reviewed the Mitigated Negative Declaration prepared for the project referenced above. The review included the Introduction and Project Description, the Initial Study Checklist, section 3.4, Cultural Resources, and Appendix C, prepared by Dudek/ Michael Baker International/ Rincon Consultants for the City of Del Mar. We have the following concerns:

1. There is no Tribal Cultural Resources section in the Initial Study Checklist as per California Natural Resources Agency (2016) "Final Text for tribal cultural resources update to Appendix G: Environmental Checklist Form," <http://resources.ca.gov/ceqa/docs/ab52/Clean-final-AB-52-App-G-text-Submitted.pdf> and the subsection under Cultural Resources is inadequate to address Tribal Cultural Resources.
2. There is no documentation of **government-to-government consultation by the lead agency** under AB-52 with Native American tribes traditionally and culturally affiliated to the project area as required by statute, or that mitigation measures were developed in consultation with the tribes. Discussions under AB-52 may include the type of document prepared; avoidance, minimization of damage to resources; and proposed mitigation. Contact by consultants during the Cultural Resources Assessments is not formal consultation.
3. There are no mitigation measures specifically addressing Tribal Cultural Resources separately and distinctly from Archaeological Resources. Mitigation measures must take Tribal Cultural Resources into consideration as required under AB-52, **with or without consultation** occurring. Mitigation language for archaeological resources is not always appropriate for or similar to measures specifically for handling Tribal Cultural Resources. For sample mitigation measures, please refer to California Natural Resources Agency (2016) "Final Text for tribal cultural resources update to Appendix G: Environmental Checklist Form," <http://resources.ca.gov/ceqa/docs/ab52/Clean-final-AB-52-App-G-text-Submitted.pdf>

The California Environmental Quality Act (CEQA)¹, specifically Public Resources Code section 21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment.² If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an environmental impact report (EIR) shall be prepared.³ In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources with the area of project effect (APE).

CEQA was amended in 2014 by Assembly Bill 52. (AB 52).⁴ **AB 52 applies to any project for which a notice of preparation or a notice of negative declaration or mitigated negative declaration is filed on or after July 1, 2015.** AB 52 created a separate category for "tribal cultural resources"⁵, that now includes "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment."⁶ Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.⁷ Your project may also be subject to **Senate Bill 18 (SB 18)** (Burton, Chapter 905, Statutes of 2004), Government Code 65352.3, if it also involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space. **Both SB 18 and AB 52 have tribal consultation requirements.** Additionally, if your project is also subject to the federal National Environmental

¹ Pub. Resources Code § 21000 et seq.

² Pub. Resources Code § 21084.1; Cal. Code Regs., tit. 14, § 15064.5 (b); CEQA Guidelines Section 15064.5 (b)

³ Pub. Resources Code § 21080 (d); Cal. Code Regs., tit. 14, § 15064 subd. (a)(1); CEQA Guidelines § 15064 (a)(1)

⁴ Government Code 65352.3

⁵ Pub. Resources Code § 21074

⁶ Pub. Resources Code § 21084.2

⁷ Pub. Resources Code § 21084.3 (a)

Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966⁸ may also apply.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

Agencies should be aware that AB 52 does not preclude agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52. For that reason, we urge you to continue to request Native American Tribal Consultation Lists and Sacred Lands File searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>. Additional information regarding AB 52 can be found online at http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf, entitled "Tribal Consultation Under AB 52: Requirements and Best Practices".

The NAHC recommends lead agencies consult with all California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources.

A brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments is also attached.

Please contact me at gayle.totton@nahc.ca.gov or call (916) 373-3710 if you have any questions.

Sincerely,



Gayle Totton, B.S., M.A., Ph.D
Associate Governmental Project Analyst

Attachment

cc: State Clearinghouse

⁸ 154 U.S.C. 300101, 36 C.F.R. § 800 et seq.

Pertinent Statutory Information:

Under AB 52:

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a **lead agency** shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice.

A **lead agency** shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.⁹ and **prior to the release of a negative declaration, mitigated negative declaration or environmental impact report.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code § 65352.4 (SB 18).¹⁰

The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- a. Alternatives to the project.
- b. Recommended mitigation measures.
- c. Significant effects.¹¹

1. The following topics are discretionary topics of consultation:

- a. Type of environmental review necessary.
- b. Significance of the tribal cultural resources.
- c. Significance of the project's impacts on tribal cultural resources.

If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency.¹²

With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process **shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code sections 6254 (r) and 6254.10.** Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public.¹³

If a project may have a significant impact on a tribal cultural resource, **the lead agency's environmental document shall discuss** both of the following:

- a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
- b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code section 21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource.¹⁴

Consultation with a tribe shall be considered concluded when either of the following occurs:

- a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
- b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.¹⁵

Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code section 21080.3.2 **shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program,** if determined to avoid or lessen the impact pursuant to Public Resources Code section 21082.3, subdivision (b), paragraph 2, and shall be fully enforceable.¹⁶

If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, **the lead agency shall consider feasible mitigation** pursuant to Public Resources Code section 21084.3 (b).¹⁷

An environmental impact report **may not be certified,** nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

- a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code sections 21080.3.1 and 21080.3.2 and concluded pursuant to Public Resources Code section 21080.3.2.
- b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

⁹ Pub. Resources Code § 21080.3.1, subs. (d) and (e)

¹⁰ Pub. Resources Code § 21080.3.1 (b)

¹¹ Pub. Resources Code § 21080.3.2 (a)

¹² Pub. Resources Code § 21080.3.2 (a)

¹³ Pub. Resources Code § 21082.3 (c)(1)

¹⁴ Pub. Resources Code § 21082.3 (b)

¹⁵ Pub. Resources Code § 21080.3.2 (b)

¹⁶ Pub. Resources Code § 21082.3 (a)

¹⁷ Pub. Resources Code § 21082.3 (e)

- c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code section 21080.3.1 (d) and the tribe failed to request consultation within 30 days.¹⁸
This process should be documented in the Tribal Cultural Resources section of your environmental document.

Under SB 18:

Government Code § 65352.3 (a) (1) requires consultation with Native Americans on general plan proposals for the purposes of "preserving or mitigating impacts to places, features, and objects described § 5097.9 and § 5091.993 of the Public Resources Code that are located within the city or county's jurisdiction. Government Code § 65560 (a), (b), and (c) provides for consultation with Native American tribes on the open-space element of a county or city general plan for the purposes of protecting places, features, and objects described in Sections 5097.9 and 5097.993 of the Public Resources Code.

- SB 18 applies to **local governments** and requires them to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf
- **Tribal Consultation:** If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.**¹⁹
- **There is no Statutory Time Limit on Tribal Consultation under the law.**
- **Confidentiality:** Consistent with the guidelines developed and adopted by the Office of Planning and Research,²⁰ the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code sections 5097.9 and 5097.993 that are within the city's or county's jurisdiction.²¹
- **Conclusion Tribal Consultation:** Consultation should be concluded at the point in which:
 - The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
 - Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation.²²

NAHC Recommendations for Cultural Resources Assessments:

- Contact the NAHC for:
 - A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
 - A Native American Tribal Contact List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
 - The request form can be found at <http://nahc.ca.gov/resources/forms/>.
- Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
 - If part or the entire APE has been previously surveyed for cultural resources.
 - If any known cultural resources have been already been recorded on or adjacent to the APE.
 - If the probability is low, moderate, or high that cultural resources are located in the APE.
 - If a survey is required to determine whether previously unrecorded cultural resources are present.
- If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
 - The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
 - The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

¹⁸ Pub. Resources Code § 21082.3 (d)

¹⁹ (Gov. Code § 65352.3 (a)(2)).

²⁰ pursuant to Gov. Code section 65040.2,

²¹ (Gov. Code § 65352.3 (b)).

²² (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Examples of Mitigation Measures That May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

- Avoidance and preservation of the resources in place, including, but not limited to:
 - Planning and construction to avoid the resources and protect the cultural and natural context.
 - Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
- Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - Protecting the cultural character and integrity of the resource.
 - Protecting the traditional use of the resource.
 - Protecting the confidentiality of the resource.
- Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
- Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed.²³
- Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated.²⁴

The lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.

- Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources.²⁵ In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
- Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
- Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code section 7050.5, Public Resources Code section 5097.98, and Cal. Code Regs., tit. 14, section 15064.5, subdivisions (d) and (e) (CEQA Guidelines section 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

²³ (Civ. Code § 815.3 (c)).

²⁴ (Pub. Resources Code § 5097.991).

²⁵ per Cal. Code Regs., tit. 14, section 15064.5(f) (CEQA Guidelines section 15064.5(f)).



San Diego County Archaeological Society, Inc.

Environmental Review Committee

4 September 2017

To: Mr. Tim Thiele, City Engineer
City of Del Mar
2010 Jimmy Durante Boulevard
Del Mar, California 92014

Subject: Draft Mitigated Negative Declaration
21st Street Ditch Project

Dear Mr. Thiele:

I have reviewed the subject DMND on behalf of this committee of the San Diego County Archaeological Society.

Based on the information contained in the DMND and the cultural resources report for the project, we have the following comments:

1. Regarding the project itself, we agree with the judgment that there is a low likelihood of encountering archaeological resources in the process of excavations. The mitigation measures are thus acceptable, though the construction crews may be unlikely to recognize such resources should they be encountered.
2. We are concerned that, despite the explicit warning headed "Confidential Distribution" on the second page of Rincon Consultants' Cultural Resources Assessment Report, restricted information has been included in the DMND and posted on the City's website. The City's environmental consultant that prepared the DMND, Dudek, has a substantial cultural resources group so staff there should have advised the City of the restriction. Normally, a copy of the cultural resources report with sensitive information removed would have been provided by Rincon and been included in the public version of the DMND. The City must remove this version of the DMND from public access and ensure that all versions available to the public in the future are the one with the restricted information removed.

Thank you for the opportunity to review and comment upon this DMND.

Sincerely,


James W. Royle, Jr., Chairperson
Environmental Review Committee

cc: Rincon Consultants, Inc.
Dudek
SDCAS President
File

VIEJAS

TRIBAL GOVERNMENT

P.O. Box 908
Alpine, CA 91903
#1 Viejas Grade Road
Alpine, CA 91901

Phone: 6194453810
Fax: 6194455337
viejas.com

August 23, 2017

Matthew DeCarlo
Archaeologist
City of Del Mar
605 Third Street
Encinitas, CA 92024

RE: 21st Street Ditch Project

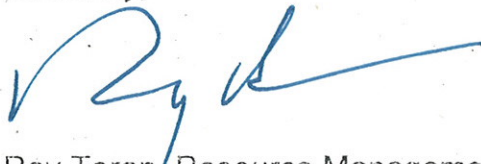
Dear Mr. DeCarlo,

The Viejas Band of Kumeyaay Indians ("Viejas") has reviewed the proposed project and at this time we have determined that the project site has cultural significance or ties to Viejas.

Viejas Band request that a Kumeyaay Cultural Monitor be on site for ground disturbing activities to inform us of any new developments such as inadvertent discovery of cultural artifacts, cremation sites, or human remains.

Please call me at 619-659-2312 or Ernest Pingleton at 619-659-2314 or email, rteran@viejas-nsn.gov or epingleton@viejas-nsn.gov, for scheduling. Thank you.

Sincerely,



Ray Teran, Resource Management
VIEJAS BAND OF KUMEYAAY INDIANS

VIEJAS

TRIBAL GOVERNMENT

P.O. Box 908
Alpine, CA 91903
#1 Viejas Grade Road
Alpine, CA 91901

Phone: 6194453810
Fax: 6194455337
viejas.com

August 8, 2017

RECEIVED

AUG 10 2017

City of Del Mar
Administrative Services Dept.

Tim Thiele
City Engineer
City of Del Mar
2010 Jimmy Durante Blvd.
Del Mar, CA 92014

Re: 21st Street Ditch Project

Dear Mr. Thiele,

In reviewing the above referenced project the Viejas Band of Kumeyaay Indians ("Viejas") would like to comment at this time.

The project area may contain many sacred sites to the Kumeyaay people. We request that these sacred sites be avoided with adequate buffer zones.

Additionally, Viejas is requesting, as appropriate, the following:

- A site visit
- Advance notice of any plans on mitigation measures
- Active participation in the development of said mitigation measures
- All NEPA/CEQA/NAGPRA laws be followed
- Qualified cultural monitors are on site at all time
- Give frequent up-dates to the tribes and final report on findings
- Immediately contact Viejas on any changes or inadvertent discoveries.

Thank you for your collaboration and support in preserving our Tribal cultural resources. I look forward to hearing from you. Please call me at 619-659-2312 or Ernest Pingleton at 619-659-2314, or email, rteran@viejas-nsn.gov or epingleton@viejas-nsn.gov, for scheduling. Thank you.

Sincerely,



Ray Teran, Resource Management
VIEJAS BAND OF KUMEYAAY INDIANS