

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

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Clean Water Act Section 401 Water Quality Certification
and Waste Discharge Requirements
for Discharge of Dredged and/or Fill Materials

PROJECT: Tijuana River Valley Channel Maintenance Project
Certification Number R9-2016-0228
WDID: 9000003131

Reg. Meas. ID: 411155 Place ID: 745397 Party ID: 547569 Person ID: 547570
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APPLICANT: City of San Diego
2781 Caminito Chollas, MS 44
City of San Diego, CA 92105

ACTION:

<input type="checkbox"/> Order for Low Impact Certification	<input type="checkbox"/> Order for Denial of Certification
<input checked="" type="checkbox"/> Order for Technically-conditioned Certification	<input type="checkbox"/> Enrollment in Isolated Waters Order No. 2004-004-DWQ
<input checked="" type="checkbox"/> Enrollment in SWRCB GWDR Order No. 2003-017-DWQ	

PROJECT DESCRIPTION

An application dated December 16, 2017 was submitted by the City of San Diego (hereinafter Applicant), for Water Quality Certification pursuant to section 401 of the Clean Water Act (United States Code (USC) Title 33, section 1341) for the proposed Tijuana River Valley Channel Maintenance Project (Project). The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) deemed the application to be complete on April 20, 2017. The Applicant proposes to discharge dredged or fill material to waters of the United States and/or State associated with construction activity at the Project site. The Applicant has also applied for a Clean Water Act section 404 permit from the United States Army Corps of Engineers for the Project (USACE File No. SPL-2009-00719-RRS).

The Project is located within the City of San Diego, San Diego County, California at 2310 Hollister Street, San Diego, CA 92154. The Project center reading is located at latitude - 117.093056 and longitude 32.553056. The Applicant has paid all required application fees for this Certification in the amount of \$43,988.00. On an annual basis, the Applicant must also pay all active discharge fees and post discharge monitoring fees, as appropriate¹. On April 21, 2017, the San Diego Water Board provided public notice of the Project application pursuant to California Code of Regulations, title 23, section 3858 by posting information describing the

¹ Additional information regarding fees can be found electronically on the State Water Resources Control Board web site at the following location: <http://www.waterboards.ca.gov/resources/fees/>

Project on the San Diego Water Board's web site and providing a period of twenty-one days for public review and comment. No comments were received.

The Applicant proposes to dredge and excavate the Pilot Channel of the Tijuana River Channel (Pilot Channel) and the northern and southern legs of the Smuggler's Gulch Channel. Two staging areas and access routes are proposed. The work will be implemented annually for 10 years.

Within the Pilot Channel the project proposes a combination of mechanized dry excavation and bucket fill and dredging for a length of 5400 linear feet. The channel is currently composed of loose sand clogged with trash, debris, tires, and vegetation. Depending on the results of City inspections, dredging or clearing may occur within all or some of the channel segments. Grading to re-construct the channel bank with compacted soil material may also occur as needed. No temporary or permanent structures will be built in the channel; the re-constructed channel bank will consist of compacted soil material. An estimated 15,000 cubic yards (and maximum of 30,000 cubic yards annually) of material are proposed to be removed in the upcoming maintenance event and annually thereafter and disposed in upland areas.

The Pilot Channel extends in an east to west direction, beginning 100 feet east of the Hollister Street Bridge and ending 5,300 feet west of the bridge, prior to the property line between the City ownership and FWS NWR ownership, for a total of 5,400 foot length. The Project will include clearing and/or dredging within a 23 foot wide corridor centered on the channel (approximately 5 feet deep with a 15 foot wide channel bottom). Three equipment turnaround areas will be utilized; each will be approximately 30 feet wide along the channel by 25 feet deep. An existing gabion mattress is located at the confluence of the Pilot Channel and Smuggler's Gulch and may also be repaired/maintained as part of this project.

Within Smuggler's Gulch, the applicant proposes to dry excavate the portions of Smuggler's maintained by the City which includes two sections (northern and southern Legs) totaling approximately 2,900 linear feet running northerly from Monument Road to the confluence with the Pilot Channel. Excavation will be limited to a footprint approximately 20 feet wide for both the northern and southern Legs. The applicant also proposes cleaning the existing culverts under Monument Road and at the Disney Crossing.

In order to control the infestation of polyphagous shot-hole borer, (*Euwallacea* sp.; "PSHB") cut biomass that is removed from the channel will be solarized, mulched, and disposed of off-site.

The Project application includes a description of the design objective, operation, and degree of treatment expected to be attained from equipment, facilities, or activities (including construction and post-construction BMPs) to treat waste and reduce runoff or other effluents which may be discharged. Compliance with the Certification conditions will help ensure that construction and post-construction discharges from the Project will not cause on-site or off-site downstream erosion, damage to downstream properties, or otherwise damage stream habitats in violation of water quality standards in the *Water Quality Control Plan for the San Diego Basin (9)* (Basin Plan).

Project construction will permanently impact 0.04 acre (76 linear feet) of wetland waters of the United States and/or State and 4.27 acre (8,364 linear feet) of non-wetland waters of the

United States and/or State. The Applicant reports that the Project purpose cannot be practically accomplished in a manner which would avoid or result in less adverse impacts to aquatic resources considering all potential practicable alternatives, such as the potential for alternate available locations, designs, reductions in size, configuration or density. Compensatory mitigation is not proposed for this project as the project impacts were previously mitigated through 1) the Tijuana River Emergency Channel Maintenance Wetland Mitigation Project ACOE 404 permit 93-966-EW establishing 9.43 acres of riparian habitat which was signed off in 2001 and 2) Water Quality Certification No. 09C-077 and its associated amendments by providing 4.31 acres of invasive species removal within the channel maintenance area and an additional 4.31 acre of invasive species removal adjacent to the project area. The existing 9.43 acres of establishment mitigation will compensate for proposed additional impacts to the channel throughout the 10 year term of this Certification. The City will report annually on the condition of this mitigation area.

Additional Project details are provided in Attachments 1 through 4 of this Certification.

TABLE OF CONTENTS

I.	STANDARD CONDITIONS.....	5
II.	GENERAL CONDITIONS	5
III.	CONSTRUCTION BEST MANAGEMENT PRACTICES	8
IV.	POST-CONSTRUCTION BEST MANAGEMENT PRACTICES	10
V.	PROJECT IMPACTS AND COMPENSATORY MITIGATION	10
VI.	MONITORING AND REPORTING REQUIREMENTS	11
VII.	NOTIFICATION REQUIREMENTS	14
VIII.	CALIFORNIA ENVIRONMENTAL QUALITY ACT COMPLIANCE	16
IX.	SAN DIEGO WATER BOARD CONTACT PERSON	17
X.	WATER QUALITY CERTIFICATION.....	17

Attachments:

1. Definitions
2. Project Location Maps
3. Project Site Plans
4. CEQA Mitigation Monitoring and Reporting Program

I. STANDARD CONDITIONS

Pursuant to section 3860 of title 23 of the California Code of Regulations, the following three standard conditions apply to all water quality certification actions:

- A. This Certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to section 13330 of the Water Code and chapter 28, article 6 (commencing with title 23, section 3867), of the California Code of Regulations.
- B. This Certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility and requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent Certification application was filed pursuant to California Code of Regulations title 23, section 3855 subdivision (b), and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
- C. This Certification action is conditioned upon total payment of any fee required under title 23, chapter 28 (commencing with section 3830) of California Code of Regulations and owed by the applicant.

II. GENERAL CONDITIONS

- A. **Term of Certification.** Water Quality Certification No. R9-2016-0228 (Certification) shall expire upon a) the expiration or retraction of the Clean Water Act section 404 (33 USC Title 33, section 1344) permit issued by the U.S. Army Corps of Engineers for this Project, or b) ten (10) years from the date of issuance of this Certification, whichever occurs first.
- B. **Duty to Comply.** The Applicant must comply with all conditions and requirements of this Certification. Any Certification noncompliance constitutes a violation of the Water Code and is grounds for enforcement action or Certification termination, revocation and reissuance, or modification.
- C. **General Waste Discharge Requirements.** The requirements of this Certification are enforceable through Water Quality Order No. 2003-0017-DWQ, *Statewide General Waste Discharge Requirements for Discharges of Dredged or Fill Material that have Received State Water Quality Certification (Water Quality Order No. 2003-0017-DWQ)*. This provision shall apply irrespective of whether a) the federal permit for which the Certification was obtained is subsequently retracted or is expired, or b) the Certification is expired. Water Quality Order No. 2003-0017-DWQ is accessible at:

http://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/generalorders/gowdr401regulated_projects.pdf.
- D. **Project Conformance with Application.** All water quality protection measures and BMPs described in the application and supplemental information for water quality certification are incorporated by reference into this Certification as if fully stated herein.

Notwithstanding any more specific conditions in this Certification, the Applicant shall construct, implement and comply with all water quality protection measures and BMPs described in the application and supplemental information. The conditions within this Certification shall supersede conflicting provisions within the application and supplemental information submitted as part of this Certification action.

- E. **Project Conformance with Water Quality Control Plans or Policies.** Notwithstanding any more specific conditions in this Certification, the Project shall be constructed in a manner consistent with the Basin Plan and any other applicable water quality control plans or policies adopted or approved pursuant to the Porter Cologne Water Quality Act (Division 7, commencing with Water Code Section 13000) or section 303 of the Clean Water Act (33 USC section 1313). The Basin Plan is accessible at:

http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/index.shtml

- F. **Project Modification.** The Applicant must submit any changes to the Project, including Project operation, which would have a significant or material effect on the findings, conclusions, or conditions of this Certification, to the San Diego Water Board for prior review and written approval. If the San Diego Water Board is not notified of a significant change to the Project, it will be considered a violation of this Certification.
- G. **Certification Distribution Posting.** During Project construction, the Applicant must maintain a copy of this Certification at the Project site. This Certification must be available at all times to site personnel and agencies. A copy of this Certification shall also be provided to any contractor or subcontractor performing construction work, and the copy shall remain in their possession at the Project site.
- H. **Inspection and Entry.** The Applicant must allow the San Diego Water Board or the State Water Resources Control Board, and/or their authorized representative(s) (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents as may be required under law, to:
1. Enter upon the Project or Compensatory Mitigation site(s) premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Certification;
 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Certification;
 3. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Certification; and
 4. Sample or monitor, at reasonable times, for the purposes of assuring Certification compliance, or as otherwise authorized by the Clean Water Act or Water Code, any substances or parameters at any location.

- I. **Enforcement Notification.** In the event of any violation or threatened violation of the conditions of this Certification, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under State law. For purposes of section 401(d) of the Clean Water Act, the applicability of any State law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this Certification.
- J. **Certification Actions.** This Certification may be modified, revoked and reissued, or terminated for cause including but not limited to the following:
1. Violation of any term or condition of this Certification;
 2. Monitoring results indicate that continued Project activities could violate water quality objectives or impair the beneficial uses of Smuggler's Gulch and Pilot Channel of the Tijuana River or their tributaries;
 3. Obtaining this Certification by misrepresentation or failure to disclose fully all relevant facts;
 4. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; and
 5. Incorporation of any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.

The filing of a request by the Applicant for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Certification condition.

- K. **Duty to Provide Information.** The Applicant shall furnish to the San Diego Water Board, within a reasonable time, any information which the San Diego Water Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Certification or to determine compliance with this Certification.
- L. **Property Rights.** This Certification does not convey any property rights of any sort, or any exclusive privilege.
- M. **Petitions.** Any person aggrieved by this action of the San Diego Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with the California Code of Regulations, title 23, sections 3867 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Certification. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

III. CONSTRUCTION BEST MANAGEMENT PRACTICES

- A. **Approvals to Commence Construction.** The Applicant shall not commence Project construction until all necessary federal, State, and local approvals are obtained.
- B. **Personnel Education.** Prior to the start of the Project, and annually thereafter, the Applicant must educate all personnel on the requirements in this Certification, pollution prevention measures, spill response measures, and BMP implementation and maintenance measures.
- C. **Spill Containment Materials.** The Applicant must, at all times, maintain appropriate types and sufficient quantities of materials on-site to contain any spill or inadvertent release of materials that may cause a condition of pollution or nuisance if the materials reach waters of the United States and/or State.
- D. **General Construction Storm Water Permit.** Prior to start of Project construction, the Applicant must, as applicable, obtain coverage under, and comply with, the requirements of State Water Resources Control Board Water Quality Order No. 2009-0009-DWQ, the *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activity*, (General Construction Storm Water Permit) and any reissuance. If Project construction activities do not require coverage under the General Construction Storm Water Permit, the Applicant must develop and implement a runoff management plan (or equivalent construction BMP plan) to prevent the discharge of sediment and other pollutants during construction activities.
- E. **Waste Management.** The Applicant must properly manage, store, treat, and dispose of wastes in accordance with applicable federal, state, and local laws and regulations. Waste management shall be implemented to avoid or minimize exposure of wastes to precipitation or storm water runoff. The storage, handling, treatment, or disposal of waste shall not create conditions of pollution, contamination or nuisance as defined in Water Code section 13050. Upon Project completion, all Project generated debris, building materials, excess material, waste, and trash shall be removed from the Project site(s) for disposal at an authorized landfill or other disposal site in compliance with federal, state and local laws and regulations.
- F. **Waste Management.** Except for a discharge permitted under this Certification, the dumping, deposition, or discharge of trash, rubbish, unset cement or asphalt, concrete, grout, damaged concrete or asphalt, concrete or asphalt spoils, wash water, organic or earthen material, steel, sawdust or other construction debris waste from Project activities directly into waters of the United States and or State, or adjacent to such waters in any manner which may permit its being transported into the waters, is prohibited.
- G. **Downstream Erosion.** Discharges of concentrated flow during construction or after Project completion must not cause downstream erosion or damage to properties or stream habitat.

- H. **Construction Equipment.** All equipment must be washed prior to transport to the Project site and must be free of sediment, debris, and foreign matter. All equipment used in direct contact with surface water shall be steam cleaned prior to use. All equipment using gas, oil, hydraulic fluid, or other petroleum products shall be inspected for leaks prior to use and shall be monitored for leakage. Stationary equipment (e.g., motors, pumps, generator, etc.) shall be positioned over drip pans or other types of containment.
- I. **Process Water.** Water containing mud, silt, or other pollutants from equipment washing or other activities, must not be discharged to waters of the United States and/or State or placed in locations that may be subjected to storm water runoff flows. Pollutants discharged to areas within a stream diversion must be removed at the end of each work day or sooner if rain is predicted.
- J. **Surface Water Diversion.** All surface waters, including ponded waters, must be diverted away from areas of active grading, construction, excavation, vegetation removal, and/or any other activity which may result in a discharge to the receiving water. Diversion activities must not result in the degradation of beneficial uses or exceedance of the receiving water quality objectives. Any temporary dam or other artificial obstruction constructed must only be built from materials such as clean gravel which will cause little or no siltation. Normal flows must be restored to the affected stream immediately upon completion of work at that location.
- K. **Re-vegetation and Stabilization.** All areas that have 14 or more days of inactivity must be stabilized within 14 days of the last activity. The Applicant shall implement and maintain BMPs to prevent erosion of the rough graded areas. After completion of grading, all areas must be re-vegetated with native species appropriate for the area. The re-vegetation palette must not contain any plants listed on the California Invasive Plant Council Invasive Plant Inventory, which can be accessed at <http://www.cal-ipc.org/ip/inventory/>.
- L. **Hazardous Materials.** Except as authorized by this Certification, substances hazardous to aquatic life including, but not limited to, petroleum products, unused cement/concrete, asphalt, and coating materials, must be prevented from contaminating the soil and/or entering waters of the United States and/or State. BMPs must be implemented to prevent such discharges during each Project activity involving hazardous materials.
- M. **Vegetation Removal.** Removal of vegetation must occur by hand, mechanically, or through application of United States Environmental Protection Agency (USEPA) approved herbicides deployed using applicable BMPs to minimize adverse effects to beneficial uses of waters of the United States and/or State. Discharges related to the application of aquatic pesticides within waters of the United States must be done in compliance with State Water Resources Control Board Water Quality Order No. 2004-0009-DWQ, the *Statewide General National Pollution Discharge Elimination System Permit for the Discharge of Aquatic Weed Control in Waters of the United States*, and any subsequent reissuance as applicable.

- N. **Limits of Disturbance.** The Applicant shall clearly define the limits of Project disturbance to waters of the United States and/or State using highly visible markers such as flag markers, construction fencing, or silt barriers prior to commencement of Project construction activities within those areas.
- O. **On-site Qualified Biologist.** The Applicant shall designate an on-site qualified biologist to monitor Project construction activities within or adjacent to waters of the United States and/or State to ensure compliance with the Certification requirements. The biologist shall be given the authority to stop all work on-site if a violation of this Certification occurs or has the potential to occur. Records and field notes of the biologist's activities shall be kept on-site and made available for review upon request by the San Diego Water Board.
- P. **Beneficial Use Protection.** The Applicant must take all necessary measures to protect the beneficial uses of waters of Smuggler's Gulch and the Pilot Channel of the Tijuana River. This Certification requires compliance with all applicable requirements of the Basin Plan. If at any time, an unauthorized discharge to surface waters (including rivers or streams) occurs or monitoring indicates that the Project is violating, or threatens to violate, water quality objectives, the associated Project activities shall cease immediately and the San Diego Water Board shall be notified in accordance with Notification Requirement VI.A of this Certification. Associated Project activities may not resume without approval from the San Diego Water Board.
- Q. **Groundwater Dewatering.** If groundwater dewatering is required for the Project, the Applicant shall enroll in and comply with the requirements of San Diego Water Board Order No. R9-2015-0013 NPDES No. CAG919003, *General Waste Discharge Requirements For Groundwater Extraction Discharges to Surface Waters within the San Diego Region* or its successor permit.

IV. PROJECT IMPACTS AND COMPENSATORY MITIGATION

- A. **Project Impact Avoidance and Minimization.** The Project must avoid and minimize adverse impacts to waters of the United States and/or State to the maximum extent practicable.
- B. **Project Impacts and Compensatory Mitigation.** Unavoidable Project impacts to Smuggler's Gulch and the Pilot Channel of the Tijuana River and their unnamed tributaries within the Tijuana River Watershed must not exceed the type and magnitude of impacts described in the table below. At a minimum, compensatory mitigation required to offset unavoidable temporary and permanent Project impacts to waters of the United States and/or State must be achieved as described in the table below:

	Impacts (acres)	Impacts (linear ft.)	Mitigation for Impacts (acres)	Mitigation Ratio (area mitigated :area impacted)	Mitigation for Impacts (linear ft.)	Mitigation Ratio (linear feet mitigated :linear feet impacted)
Permanent Impacts						
Stream Channel	4.27	8364	N/A ¹			
Wetland	0.04	76	N/A ¹			

1. Compensatory mitigation is not required for this project as the project impacts were previously mitigated through 1) The Tijuana River Emergency Channel Maintenance Wetland Mitigation Project ACOE 404 permit 93-966-EW establishing 9.43 acres of riparian habitat which was signed off in 2001 and 2) Water Quality Certification No. 09C-077 and its associated amendments by providing 4.31 acres of invasive species removal within the channel maintenance area and an additional 4.31 acre of invasive species removal adjacent to the project area. The existing 9.43 acres of establishment mitigation will compensate for additional impacts to the channel throughout the 10 year term of this Certification.

V. MONITORING AND REPORTING REQUIREMENTS

- A. **Representative Monitoring.** Samples and measurements taken for the purpose of monitoring under this Certification shall be representative of the monitored activity.
- B. **Monitoring Reports.** Monitoring results shall be reported to the San Diego Water Board at the intervals specified in section V of this Certification.
- C. **Monitoring and Reporting Revisions.** The San Diego Water Board may make revisions to the monitoring program at any time during the term of this Certification and may reduce or increase the number of parameters to be monitored, locations monitored, the frequency of monitoring, or the number and size of samples collected.
- D. **Records of Monitoring Information.** Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements;
 - 2. The individual(s) who performed the sampling or measurements;
 - 3. The date(s) analyses were performed;
 - 4. The individual(s) who performed the analyses;

5. The analytical techniques or methods used; and
 6. The results of such analyses.
- E. **Discharge Commencement Notification.** The Applicant must notify the San Diego Water Board in writing **at least 5 days prior to** the start of Project construction.
- F. **Geographic Information System Data.** The Applicant must submit Geographic Information System (GIS) shape files of the Project impact sites within 30 days of the start of project construction and GIS shape files of the Project mitigation sites within 30 days of mitigation installation. All impact and mitigation site shape files must be polygons. Two GPS readings (points) must be taken on each line of the polygon and the polygon must have a minimum of 10 points. GIS metadata must also be submitted.
- G. **Annual Project Progress Reports.** The Applicant must submit annual Project progress reports describing status of BMP implementation, compensatory mitigation, and compliance with all requirements of this Certification to the San Diego Water Board prior to **March 1** of each year following the issuance of this Certification, until the Project has reached completion. Annual Project Progress Reports must be submitted even if Project construction has not begun. The monitoring period for each Annual Project Progress Report shall be January 1st through December 31st of each year. Annual Project Progress Reports must include, at a minimum, the following:
- a. The names, qualifications, and affiliations of the persons contributing to the report;
 - b. The status, progress, and anticipated schedule for completion of Project construction activities including the installation and operational status of best management practices project features for erosion and storm water quality treatment;
 - c. A description of Project construction delays encountered or anticipated that may affect the schedule for construction completion; and
 - d. A description of each incident of noncompliance during the annual monitoring period and its cause, the period of the noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
 - e. An assessment of the condition and long term management of the 9.43 acres of establishment compensatory mitigation area to ensure the long term sustainability of the resource in perpetuity

- H. **Final Project Completion Report.** The Applicant must submit a Final Project Completion Report to the San Diego Water Board **within 30 days of completion of the Project.** The final report must include the following information:
1. Date of construction initiation;
 2. Date of construction completion;
 3. BMP installation and operational status for the Project;
 4. As-built drawings of the Project, no bigger than 11"X17";
 5. Photo documentation of implemented post-construction BMPs and all areas of permanent and temporary impacts, prior to and after project construction. Photo documentation must be conducted in accordance with guidelines posted at http://www.waterboards.ca.gov/sandiego/water_issues/programs/401_certification/docs/StreamPhotoDocSOP.pdf. In addition, photo documentation must include Global Positioning System (GPS) coordinates for each of the photo points referenced; and
- I. **Reporting Authority.** The submittal of information required under this Certification, or in response to a suspected violation of any condition of this Certification, is required pursuant to Water Code section 13267 and 13383. Civil liability may be administratively imposed by the San Diego Water Board for failure to submit information pursuant to Water Code sections 13268 or 13385.
- J. **Electronic Document Submittal.** The Applicant must submit all reports and information required under this Certification in electronic format via e-mail to SanDiego@waterboards.ca.gov. Documents over 50 megabytes will not be accepted via e-mail and must be placed on a disc and delivered to:

California Regional Water Quality Control Board
San Diego Region
Attn: 401 Certification No. R9-2016-0228:74539:ngergans
2375 Northside Drive, Suite 100
San Diego, California 92108

Each electronic document must be submitted as a single file, in Portable Document Format (PDF), and converted to text searchable format using Optical Character Recognition (OCR). All electronic documents must include scanned copies of all signature pages; electronic signatures will not be accepted. Electronic documents submitted to the San Diego Water Board must include the following identification numbers in the header or subject line: Certification No. R9-2016-0228:74539:ngergans.

- K. **Document Signatory Requirements.** All applications, reports, or information submitted to the San Diego Water Board must be signed as follows:

1. For a corporation, by a responsible corporate officer of at least the level of vice president.
2. For a partnership or sole proprietorship, by a general partner or proprietor, respectively.
3. For a municipality, or a state, federal, or other public agency, by either a principal executive officer or ranking elected official.
4. A duly authorized representative may sign applications, reports, or information if:
 - a. The authorization is made in writing by a person described above.
 - b. The authorization specifies either an individual or position having responsibility for the overall operation of the regulated activity.
 - c. The written authorization is submitted to the San Diego Water Board Executive Officer.

If such authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the Project, a new authorization satisfying the above requirements must be submitted to the San Diego Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative.

- L. **Document Certification Requirements.** All applications, reports, or information submitted to the San Diego Water Board must be certified as follows:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

VI. NOTIFICATION REQUIREMENTS

- A. **Twenty Four Hour Non-Compliance Reporting.** The Applicant shall report any noncompliance which may endanger health or the environment. Any such information shall be provided orally to the San Diego Water Board within **24 hours** from the time the Applicant becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Applicant becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The San Diego Water Board, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

- B. Hazardous Substance Discharge.** Except as provided in Water Code section 13271(b), any person who, without regard to intent or negligence, causes or permits any hazardous substance or sewage to be discharged in or on any waters of the State, shall as soon as (a) that person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the County of San Diego, in accordance with California Health and Safety Code section 5411.5 and the California Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State toxic disaster contingency plan adopted pursuant to Government Code Title 2, Division 1, Chapter 7, Article 3.7 (commencing with section 8574.17), and immediately notify the State Water Board or the San Diego Water Board of the discharge. This provision does not require reporting of any discharge of less than a reportable quantity as provided for under subdivisions (f) and (g) of section 13271 of the Water Code unless the Applicant is in violation of a Basin Plan prohibition.
- C. Oil or Petroleum Product Discharge.** Except as provided in Water Code section 13272(b), any person who without regard to intent or negligence, causes or permits any oil or petroleum product to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) such person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the California Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State oil spill contingency plan adopted pursuant to Government Code Title 2, Division 1, Chapter 7, Article 3.7 (commencing with section 8574.1). This requirement does not require reporting of any discharge of less than 42 gallons unless the discharge is also required to be reported pursuant to Clean Water Act section 311, or the discharge is in violation of a Basin Plan prohibition.
- D. Anticipated Noncompliance.** The Applicant shall give advance notice to the San Diego Water Board of any planned changes in the Project or the Compensatory Mitigation project which may result in noncompliance with Certification conditions or requirements.
- E. Transfers.** This Certification is not transferable in its entirety or in part to any person or organization except after notice to the San Diego Water Board in accordance with the following terms:
- 1. Transfer of Property Ownership:** The Applicant must notify the San Diego Water Board of any change in ownership of the Project area. Notification of change in ownership must include, but not be limited to, a statement that the Applicant has provided the purchaser with a copy of the Section 401 Water Quality Certification and that the purchaser understands and accepts the certification requirements and the obligation to implement them or be subject to liability for failure to do so; the seller and purchaser must sign and date the notification and provide such notification to the San Diego Water Board **within 10 days of the transfer of ownership.**

2. **Transfer of Mitigation Responsibility:** Any notification of transfer of responsibilities to satisfy the mitigation requirements set forth in this Certification must include a signed statement from an authorized representative of the new party (transferee) demonstrating acceptance and understanding of the responsibility to comply with and fully satisfy the mitigation conditions and agreement that failure to comply with the mitigation conditions and associated requirements may subject the transferee to enforcement by the San Diego Water Board under Water Code section 13385, subdivision (a). Notification of transfer of responsibilities meeting the above conditions must be provided to the San Diego Water Board **within 10 days of the transfer date**.

3. **Transfer of Post-Construction BMP Maintenance Responsibility:** The Applicant assumes responsibility for the inspection and maintenance of all post-construction structural BMPs until such responsibility is legally transferred to another entity. At the time maintenance responsibility for post-construction BMPs is legally transferred the Applicant must submit to the San Diego Water Board a copy of such documentation and must provide the transferee with a copy of a long-term BMP maintenance plan that complies with manufacturer specifications. The Applicant must provide such notification to the San Diego Water Board within **10 days** of the transfer of BMP maintenance responsibility.

Upon properly noticed transfers of responsibility, the transferee assumes responsibility for compliance with this Certification and references in this Certification to the Applicant will be interpreted to refer to the transferee as appropriate. Transfer of responsibility does not necessarily relieve the Applicant of responsibility for compliance with this Certification in the event that a transferee fails to comply.

VII. CALIFORNIA ENVIRONMENTAL QUALITY ACT COMPLIANCE

- A. The City of San Diego is the Lead Agency under the California Environmental Quality Act (CEQA) (Public Resources Code section 21000, et seq.) section 21067, and CEQA Guidelines (California Code of Regulations, title 14, section 15000 et seq.) section 15367, and has filed a Notice of Determination dated October 28th, 2017 for the Final Environmental Impact Report (FEIR) titled Master Storm Water System Maintenance Program, Final Recirculated Program Environmental Impact Project, SCH. NO. 2004101032, Project No. 42891 (State Clearing House Number 2004101032). The Lead Agency has determined the Project will have a significant effect on the environment and mitigation measures were made a condition of the Project.

- B. The San Diego Water Board is a Responsible Agency under CEQA (Public Resources Code section 21069; CEQA Guidelines section 15381). The San Diego Water Board has considered the Lead Agency's FEIR and finds that the Project as proposed will have a significant effect on resources within the San Diego Water Board's purview.

- C. The San Diego Water Board has required mitigation measures as a condition of this Certification to avoid or reduce the environmental effects of the Project to resources within the Board's purview to a less than significant level.

- D. The Lead Agency has adopted a mitigation monitoring and reporting program pursuant to Public Resources Code section 21081.6 and CEQA Guidelines section 15097 to ensure that mitigation measures and revisions to the Project identified in the FEIR are implemented. The Mitigation Monitoring and Reporting Program (MMRP) is included and incorporated by reference in Attachment 4 to this Certification. The Applicant shall implement the Lead Agency's MMRP described in the FEIR, as it pertains to resources within the San Diego Water Board's purview. The San Diego Water Board has imposed additional MMRP requirements as specified in sections V and VI of this Certification.
- E. As a Responsible Agency under CEQA, the San Diego Water Board will file a Notice of Determination in accordance with CEQA Guidelines section 15096 subdivision (i).

VIII. SAN DIEGO WATER BOARD CONTACT PERSON

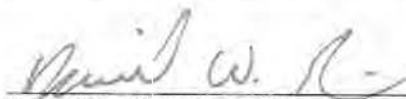
Nicole Gergans, Environmental Scientist
Telephone: (619) 521-3969
Email: nicole.gergans@waterboards.ca.gov

IX. WATER QUALITY CERTIFICATION

I hereby certify that the proposed discharge from the **Tijuana River Valley Channel Maintenance Project** (Certification No. R9-2016-0228) will comply with the applicable provisions of sections 301 ("Effluent Limitations"), 302 ("Water Quality Related Effluent Limitations"), 303 ("Water Quality Standards and Implementation Plans"), 306 ("National Standards of Performance"), and 307 ("Toxic and Pretreatment Effluent Standards") of the Clean Water Act. This discharge is also regulated under State Water Board Order No. 2003-0017-DWQ, "*Statewide General Waste Discharge Requirements for Dredged or Fill Discharges that have Received State Water Quality Certification (General WDRs)*," which requires compliance with all conditions of this Water Quality Certification. Please note that enrollment under Order No. 2003-017-DWQ is conditional and, should new information come to our attention that indicates a water quality problem, the San Diego Water Board may issue individual waste discharge requirements at that time.

Except insofar as may be modified by any preceding conditions, all Certification actions are contingent on (a) the discharge being limited to, and all proposed mitigation being completed in strict compliance with, the applicants' Project description and/or the description in this Certification, and (b) compliance with all applicable requirements of the Basin Plan.

I, David W. Gibson, Executive Officer, do hereby certify the forgoing is a full, true, and correct copy of Certification No. R9-2016-0228 issued on October 18, 2017.



DAVID W. GIBSON
Executive Officer
San Diego Water Board

18 October 2017
Date

ATTACHMENT 1

DEFINITIONS

Activity - when used in reference to a permit means any action, undertaking, or project including, but not limited to, construction, operation, maintenance, repair, modification, and restoration which may result in any discharge to waters of the state.

Buffer - means an upland, wetland, and/or riparian area that protects and/or enhances aquatic resource functions associated with wetlands, rivers, streams, lakes, marine, and estuarine systems from disturbances associated with adjacent land uses.

California Rapid Assessment Method (CRAM) - is a wetland assessment method intended to provide a rapid, scientifically-defensible and repeatable assessment methodology to monitor status and trends in the conditions of wetlands for applications throughout the state. It can also be used to assess the performance of compensatory mitigation projects and restoration projects. CRAM provides an assessment of overall ecological condition in terms of four attributes: landscape context and buffer, hydrology, physical structure and biotic structure. CRAM also includes an assessment of key stressors that may be affecting wetland condition and a "field to PC" data management tool (eCRAM) to ensure consistency and quality of data produced with the method.

Compensatory Mitigation Project - means compensatory mitigation implemented by the Applicant as a requirement of this Certification (i.e., applicant -responsible mitigation), or by a mitigation bank or an in-lieu fee program.

Discharge of dredged material – means any addition of dredged material into, including redeposit of dredged material other than incidental fallback within, the waters of the United States and/or State.

Discharge of fill material – means the addition of fill material into waters of the United States and/or State.

Dredged material – means material that is excavated or dredged from waters of the United States and/or State.

Ecological Success Performance Standards – means observable or measurable physical (including hydrological), chemical, and/or biological attributes that are used to determine if a compensatory mitigation project meets its objectives.

Enhancement – means the manipulation of the physical, chemical, or biological characteristics of an aquatic resource to improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Establishment – means the manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist. Creation results in a gain in aquatic resource area.

Fill material – means any material used for the primary purpose of replacing an aquatic area with dry land or of changing the bottom elevation of a water body.

Isolated wetland – means a wetland with no surface water connection to other aquatic resources.

Mitigation Bank – means a site, or suite of sites, where resources (e.g., wetlands, streams, riparian areas) are restored, established, enhanced, and/or preserved for the purpose of providing mitigation for impacts authorized by this Certification.

Preservation - means the removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/ historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/ historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

Start of Project Construction - For the purpose of this Certification, "start of Project construction" means to engage in a program of on-site construction, including site clearing, grading, dredging, landfilling, changing equipment, substituting equipment, or even moving the location of equipment specifically designed for a stationary source in preparation for the fabrication, erection or installation of the building components of the stationary source within waters of the United States and/or State.

Uplands - means non-wetland areas that lack any field-based indicators of wetlands or other aquatic conditions. Uplands are generally well-drained and occur above (i.e., up-slope) from nearby aquatic areas. Wetlands can, however, be entirely surrounded by uplands. For example, some natural seeps and constructed stock ponds lack aboveground hydrological connection to other aquatic areas. In the watershed context, uplands comprise the landscape matrix in which aquatic areas form. They are the primary sources of sediment, surface runoff, and associated chemicals that are deposited in aquatic areas or transported through them.

Water quality objectives and other appropriate requirements of state law – means the water quality objectives and beneficial uses as specified in the appropriate water quality control plan(s); the applicable provisions of sections 301, 302, 303, 306, and 307 of the Clean Water Act; and any other appropriate requirement of state law.

City of San Diego
Tijuana River Valley Channel Maintenance
Certification No. R9-2016-0228

**ATTACHMENT 2
PROJECT LOCATION MAPS**

- 1) Figure 1 – Regional Map**
- 2) Figure 2 – Vicinity Map**



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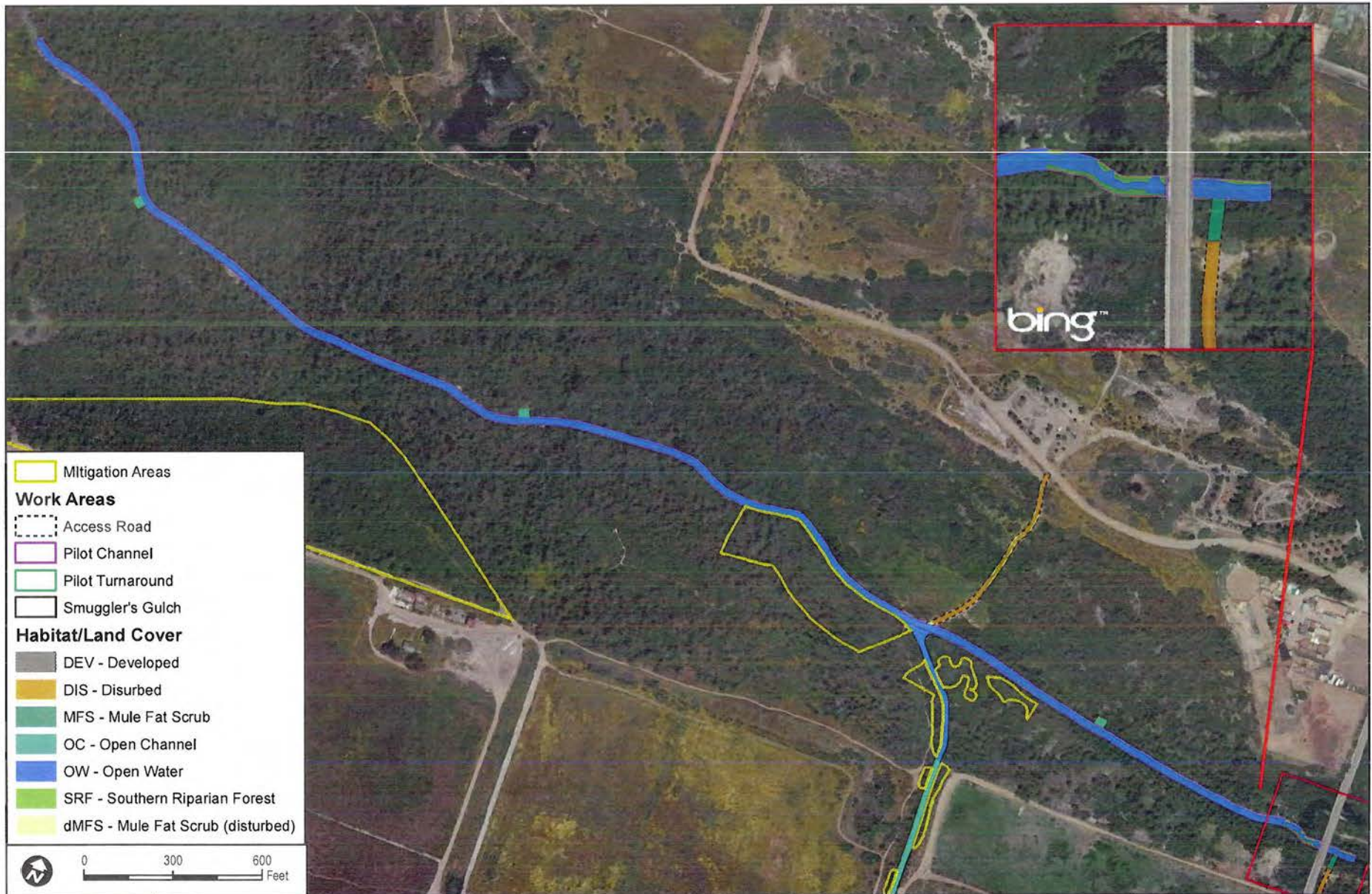
Tijuana River Pilot Channel and Smuggler's Gulch Channel Maintenance Project

FIGURE 1
Regional Map

City of San Diego
Tijuana River Valley Channel Maintenance Project
Certification No. R9-2016-0228

**ATTACHMENT 3
PROJECT SITE PLANS**

- 1) **Figure 3a – Biological Resources**
- 2) **Figure 3b – Biological Resources**
- 3) **Figure 3c – Biological Resources**
- 4) **As built plans for the Tijuana River Valley Channel Maintenance**



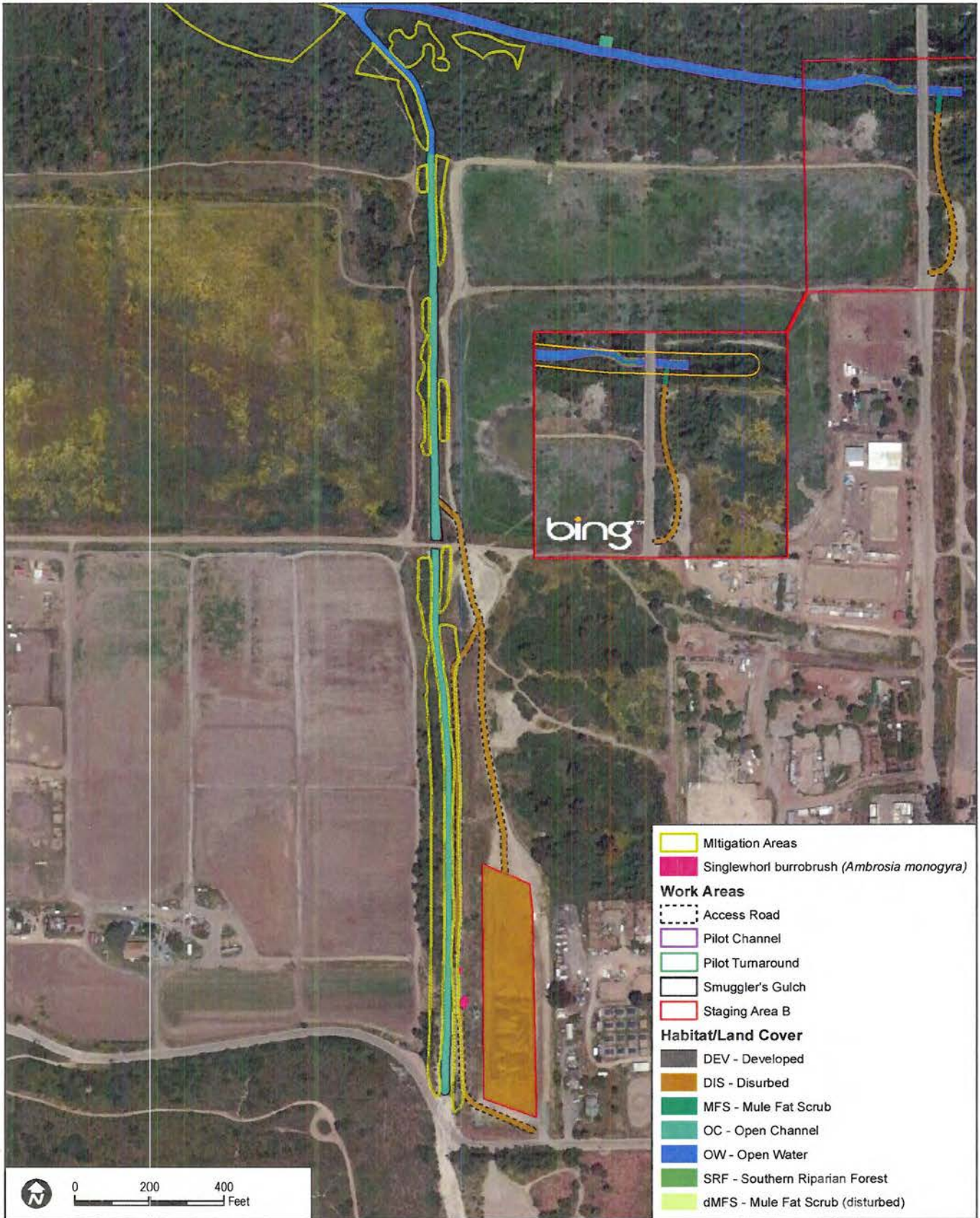
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SOURCE: BING Maps 2015

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Tijuana River Pilot Channel and Smuggler's Gulch Channel Maintenance Project

FIGURE 3a
Biological Resources



0 200 400 Feet

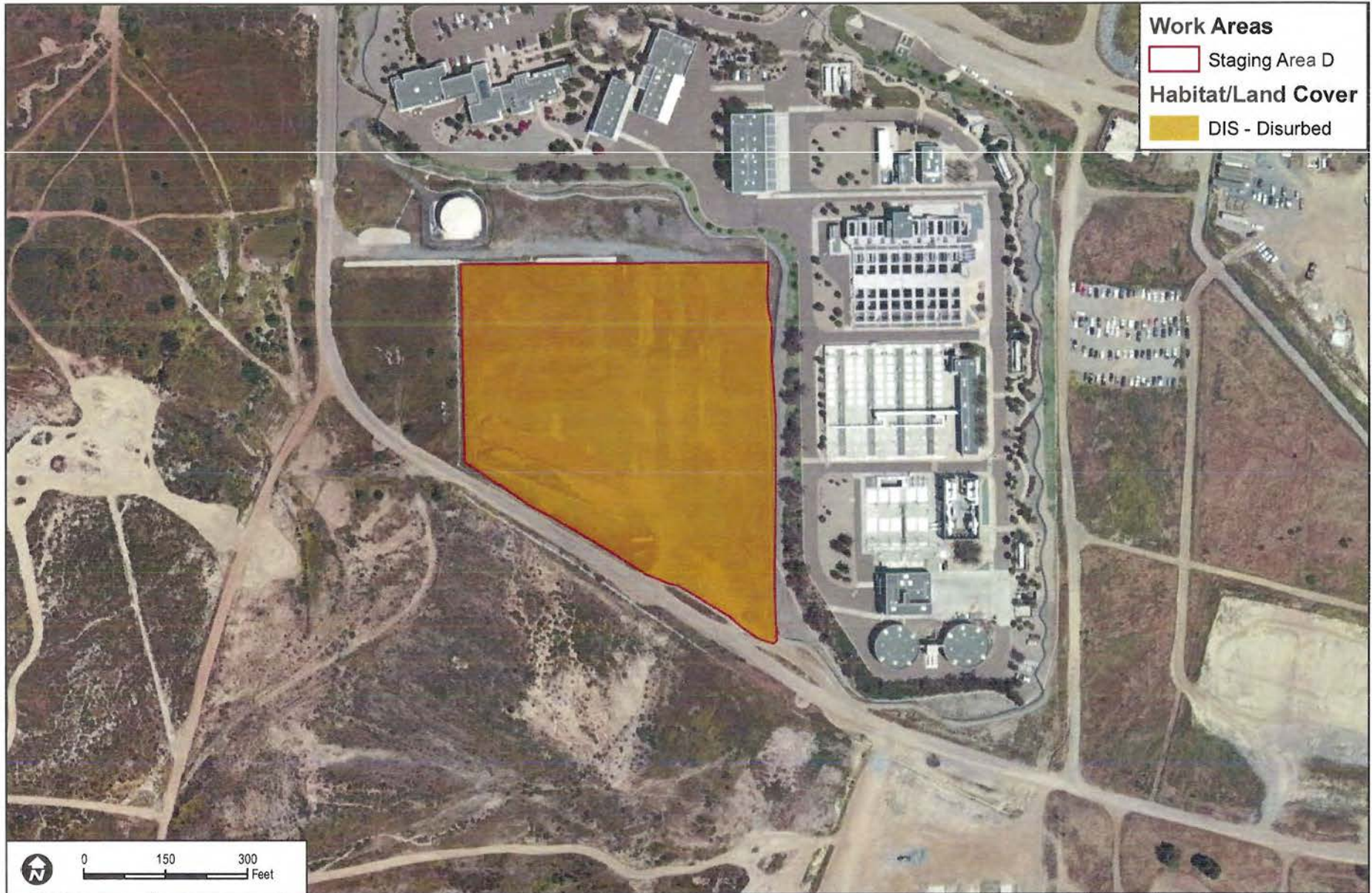
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SOURCE: BING 2015

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FIGURE 3b
Biological Resources

Tijuana River Pilot Channel and Smuggler's Gulch Channel Maintenance Project



Work Areas

- Staging Area D

Habitat/Land Cover

- DIS - Disurbed

0 150 300 Feet

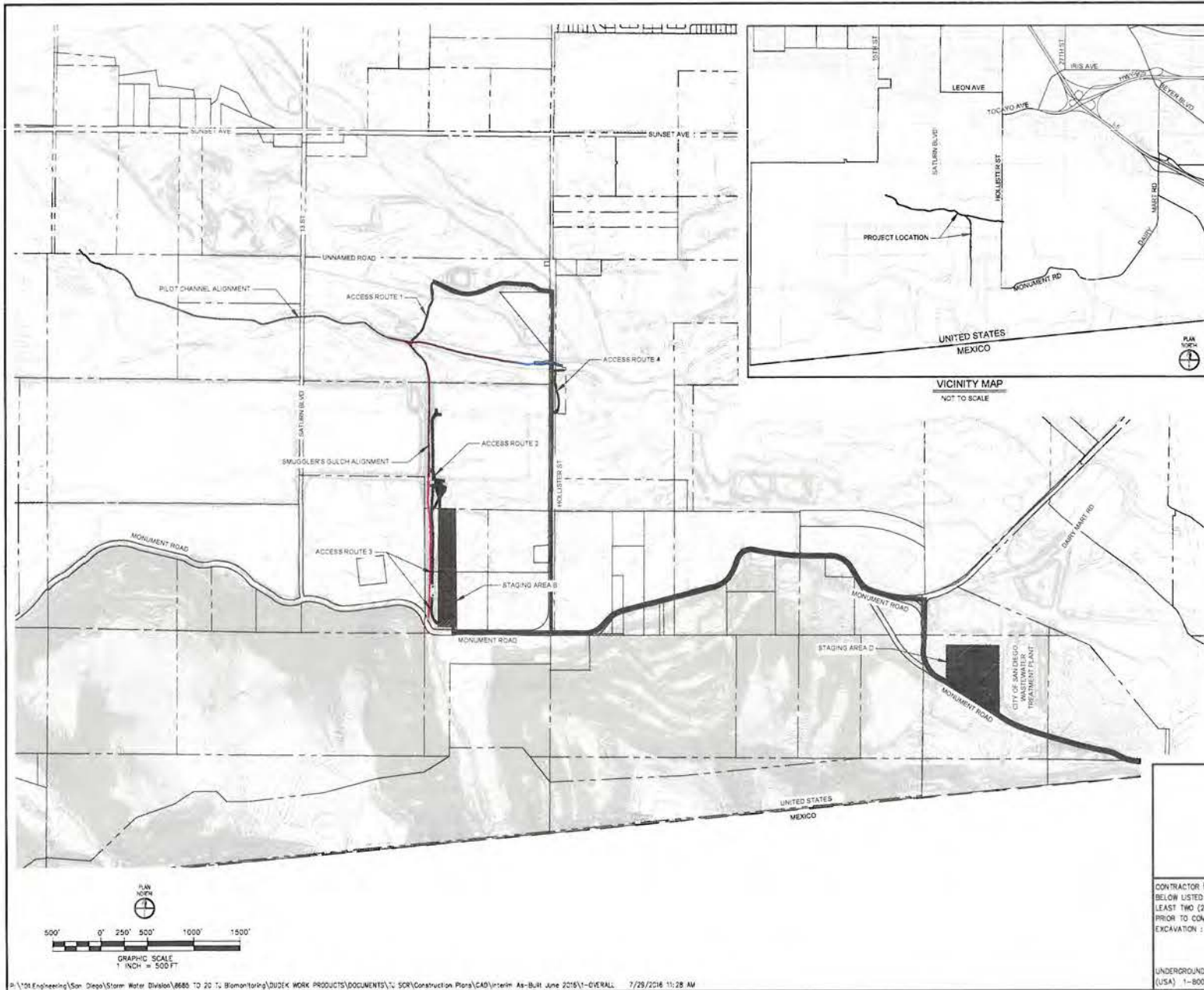
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SOURCE: BING Maps 2015

FIGURE 3c
Biological Resources

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Tijuana River Pilot Channel and Smuggler's Gulch Channel Maintenance Project



LEGEND

- PERMANENT TURNAROUND AREA (30' x 25')
- EXISTING ACCESS ROAD
- ESA
- STABILIZED CONSTRUCTION ENTRANCE (TC-1)
- EX WATER MAIN
- EX STORM DRAIN
- EX SEWER MAIN
- SILT FENCE (SE-1)
- FIBER ROLL (SE-5)
- STAGING AREA LIMITS
- MAJOR CONTOUR
- MINOR CONTOUR
- PARCEL
- HAUL ROUTE

WORK TO BE DONE

THE IMPROVEMENTS CONSIST OF THE FOLLOWING WORK TO BE DONE ACCORDING TO THESE PLANS AND THE STANDARD SPECIFICATIONS AND STANDARD DRAWINGS OF THE CITY OF SAN DIEGO.

- MAINTENANCE OF CHANNELS TO REMOVE ACCUMULATED SEDIMENT AND OTHER DEBRIS

STANDARD SPECIFICATIONS

STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK) 2012 EDITION, DOCUMENT NO. P19070112-01

CITY OF SAN DIEGO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (WHITEBOOK) 2012 EDITION, DOCUMENT NO. P19070112-02

CALIFORNIA DEPARTMENT OF TRANSPORTATION MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES 2012 EDITION, DOCUMENT NO. P19070112-04

CALIFORNIA DEPARTMENT OF TRANSPORTATION U.S. CUSTOMARY STANDARD SPECIFICATIONS 2010 EDITION, DOCUMENT NO. P19070112-02

STANDARD DRAWINGS

CITY OF SAN DIEGO STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION 2012 EDITION, DOCUMENT NO. P1920112-03

CALIFORNIA DEPARTMENT OF TRANSPORTATION U.S. CUSTOMARY STANDARD PLANS 2010 EDITION, DOCUMENT NO. P19070112-05

PRIOR TO THE ISSUANCE OF ANY CONSTRUCTION PERMIT, THE OWNER/PERMITTEE SHALL INCORPORATE ANY CONSTRUCTION BEST MANAGEMENT PRACTICES NECESSARY TO COMPLY WITH CHAPTER 14, ARTICLE 2, DIVISION 1 (GRADING REGULATIONS) OF THE SAN DIEGO MUNICIPAL CODE INTO THE CONSTRUCTION PLANS OR SPECIFICATIONS, (FROM CYCLE 4)

DATUM: NAD 1983 STATEPLANE CALIFORNIA VI FIPS 1046 FEET
 TOPO ELEVATIONS FOR PICTORIAL PURPOSES ONLY
 TOPOGRAPHY DATE: 1999

WORK PERFORMED 9/2013 - 7/2016

AS-BUILT PLANS FOR THE TIJUANA RIVER VALLEY CHANNEL MAINTENANCE PROJECT

OVERALL PLAN

CITY OF SAN DIEGO, CALIFORNIA
 ENGINEERING DEPARTMENT
 SHEET 1 OF 15 SHEETS

R.O. NO. _____

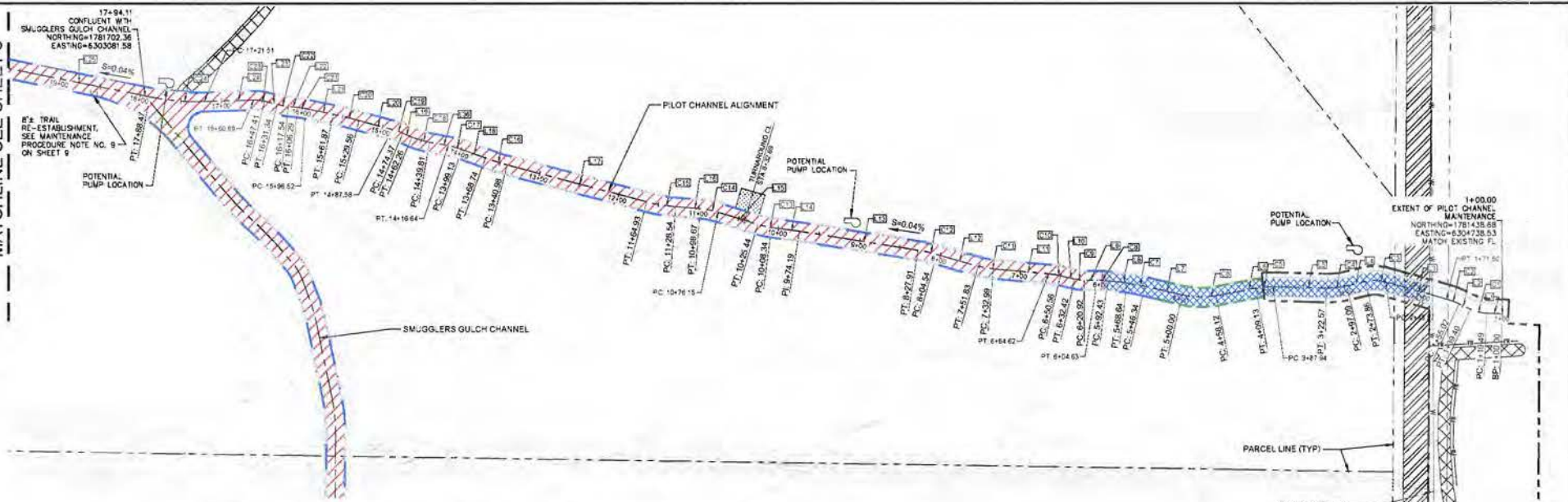
CONTRACTOR MUST NOTIFY THE BELOW LISTED AGENCY AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION:

FOR CITY ENGINEER	DATE	SECTION HEAD
DESCRIPTION	BY	APPROVED
FILE NAME	DATE	FILED
		PROJECT MANAGER
		DESIGN ENGINEER
		140-1731
		LAMBERT COORDINATES

UNDERGROUND SERVICE ALERT (USA) 1-800-422-4133

CONTRACTOR INSPECTOR _____ DATE STARTED _____ DATE COMPLETED _____

MATCHLINE SEE SHEET 3

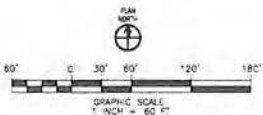


Number	Radius	Length	Line/Chord Direction
L1	-	19.49	N87°38'24.19"W
C1	50.00	18.81	N76°13'44.88"W
L2	-	15.63	N84°49'25.76"W
C2	100.00	16.48	N69°32'42.88"W
L3	-	77.07	N74°16'00.01"W
C3	50.00	25.29	N89°49'14.92"W
L4	-	23.24	S76°49'39.16"W
C4	100.00	25.47	S84°03'21.01"W
L5	-	85.38	N88°38'48.16"W
C6	100.00	21.49	S85°16'59.64"W
L6	-	45.98	S79°12'47.44"W
C6	100.00	41.68	N88°47'17.08"W
L7	-	46.34	N78°47'21.62"W
C7	200.00	22.30	N79°59'06.74"W
L8	-	23.79	N83°10'33.69"W
C8	100.00	12.20	N86°48'24.22"W
L9	-	16.29	S88°48'51.44"W
C9	50.00	11.50	N83°34'57.05"W
L10	-	18.15	N78°59'45.54"W
C10	100.00	14.05	N81°01'18.89"W

Number	Radius	Length	Line/Chord Direction
L11	-	88.37	N85°02'54.25"W
C11	100.00	18.94	N78°38'00.16"W
L12	-	52.71	S74°15'05.94"W
C12	200.00	23.97	N77°35'57.20"W
L13	-	146.29	N85°58'48.85"W
L14	-	34.18	N62°35'22.89"W
C13	100.00	17.10	N77°47'31.31"W
L15	-	50.71	N72°47'38.92"W
C14	100.00	22.52	N79°1'45.93"W
L16	-	29.88	N85°41'05.13"W
C15	200.00	38.59	N65°29'05.79"W
L17	-	176.05	N75°16'21.45"W
C16	300.00	27.78	N72°37'17.84"W
L18	-	30.39	N69°58'13.63"W
C17	100.00	17.51	N74°59'09.84"W
L19	-	23.17	N80°30'06.94"W
C18	100.00	22.45	N73°34'14.17"W
L19	-	12.11	N67°08'22.91"W
C19	100.00	13.21	N70°52'21.83"W
L20	-	81.99	N74°42'20.95"W

LEGEND

- PERMANENT TURNAROUND AREA (30' X 25')
- EXISTING ACCESS ROAD
- HAUL ROUTES
- E1
- E2
- E3
- E4
- E5
- E6
- E7
- E8
- E9
- E10
- STABILIZED CONSTRUCTION ENTRANCE (20' X 15')
- EX WATER MAIN
- EX STORM DRAIN
- EX SEWER MAIN
- SILT FENCE (SS-1)
- FIBER ROLL (SS-5)
- STAGING AREA LIMITS
- MAJOR CONTOUR
- MINOR CONTOUR
- PARCEL
- MHPA
- CHANNEL MAINTENANCE CENTERLINE
- LIMITS OF CHANNEL MAINTENANCE
- VEGETATION REMOVAL AND EXCAVATION OF SEGMENT 2013-2014
- VEGETATION REMOVAL ONLY 2013-2014
- SEDIMENT AND VEGETATION REMOVAL 2015-2016
- VEGETATION REMOVAL ONLY 2015-2016

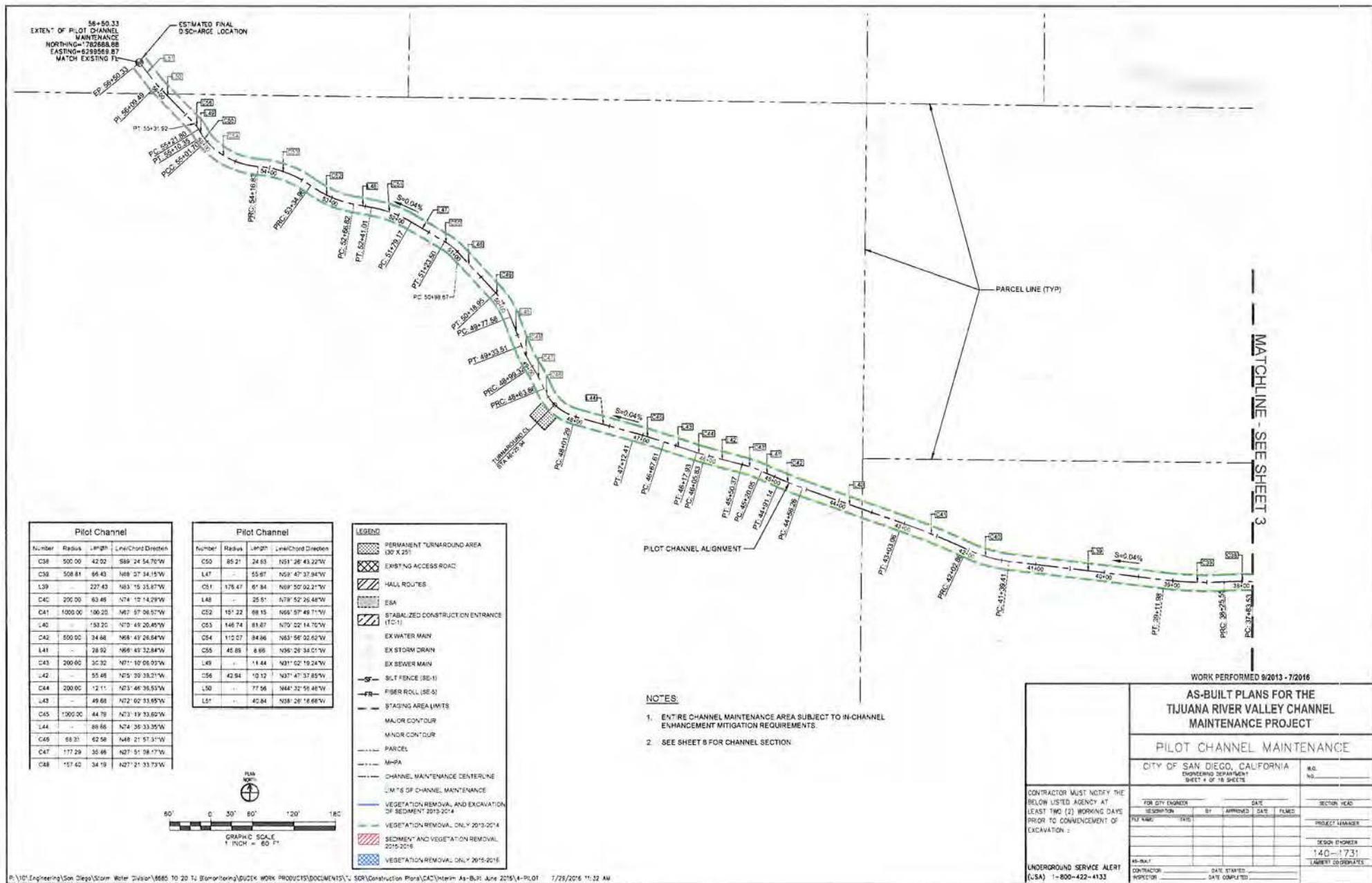


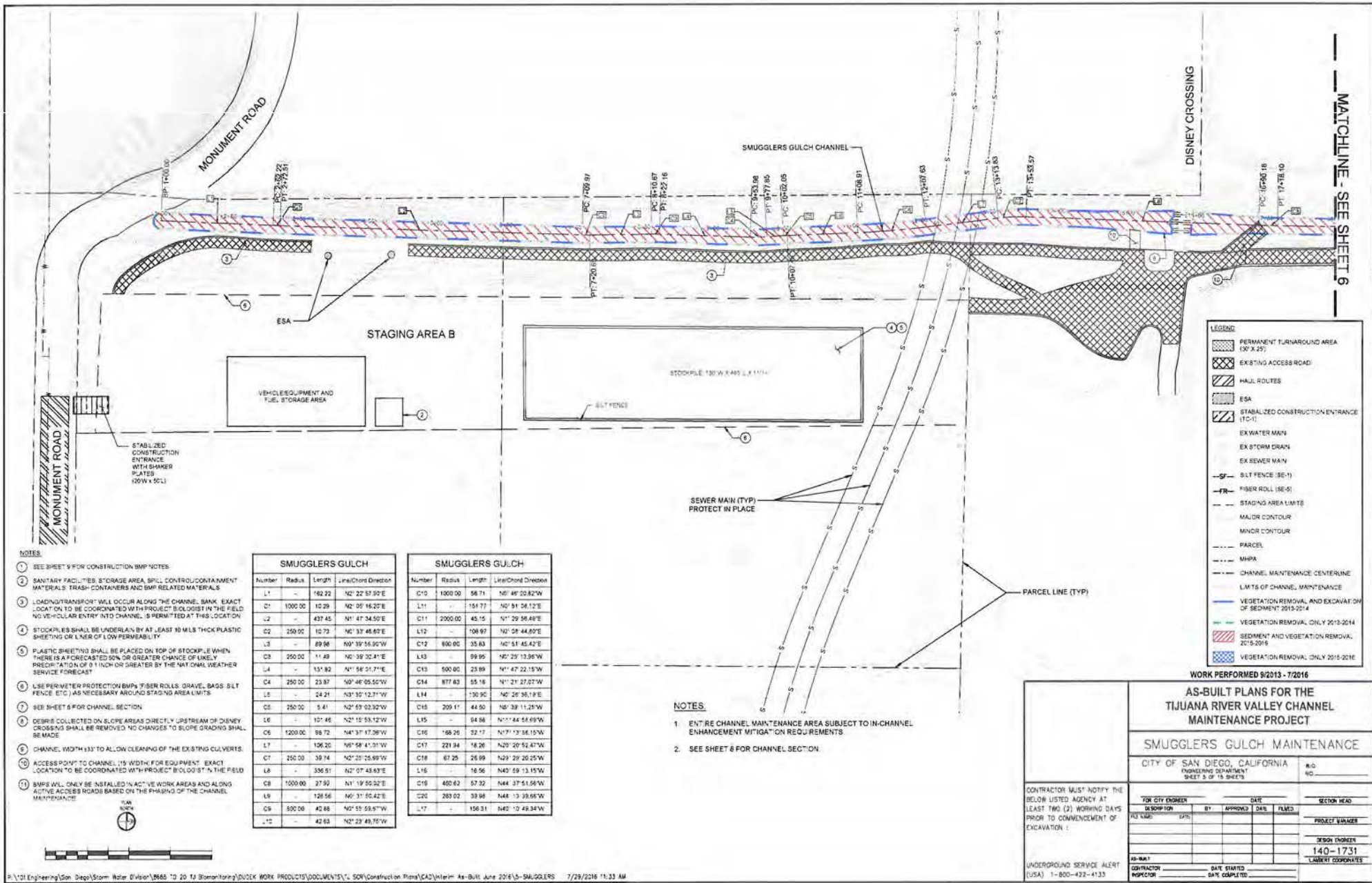
NOTES:

1. ENTIRE CHANNEL MAINTENANCE AREA SUBJECT TO IN-CHANNEL ENHANCEMENT MITIGATION REQUIREMENTS.
2. SEE SHEET 6 FOR CHANNEL SECTION.

WORK PERFORMED 9/2013 - 7/2016

AS-BUILT PLANS FOR THE TUJANA RIVER VALLEY CHANNEL MAINTENANCE PROJECT			
PILOT CHANNEL MAINTENANCE			
CITY OF SAN DIEGO, CALIFORNIA ENGINEERING DEPARTMENT SHEET 3 OF 18 SHEETS			R.C. NO. _____
CONTRACTOR MUST NOTIFY THE BELOW LISTED AGENCY AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION:		DATE	SECTION HEAD
FOR CITY ENGINEER	DATE	BY	APPROVED
DESCRIPTION	DATE	DATE	FILED
PROJECT NUMBER			PROJECT NUMBER
SECTION NUMBER			SECTION NUMBER
LAMBERT COORDINATES			LAMBERT COORDINATES
UNDERGROUND SERVICE ALERT (USA) 1-800-422-4133		DATE STARTED	DATE COMPLETED





LEGEND

- PERMANENT TURNAROUND AREA (30' X 25')
- EXISTING ACCESS ROAD
- HAUL ROUTES
- ESA
- STABILIZED CONSTRUCTION ENTRANCE (10' X 10')
- EX WATER MAIN
- EX STORM DRAIN
- EX SEWER MAIN
- S-F SILT FENCE (SE-1)
- F-R FIBER ROLL (SE-5)
- STAGING AREA LIMITS
- MAJOR CONTOUR
- MINOR CONTOUR
- PARCEL
- MHPA
- CHANNEL MAINTENANCE CENTERLINE
- LIMITS OF CHANNEL MAINTENANCE
- VEGETATION REMOVAL AND EXCAVATION OF SEDIMENT 2015-2014
- VEGETATION REMOVAL ONLY 2013-2014
- SEDIMENT AND VEGETATION REMOVAL 2015-2014
- VEGETATION REMOVAL ONLY 2015-2014

- NOTES**
1. SEE SHEET 9 FOR CONSTRUCTION BMP NOTES.
 2. SANITARY FACILITIES, STORAGE AREA, SPILL CONTROL/CONTAINMENT MATERIALS, TRASH CONTAINERS AND OIL RELATED MATERIALS.
 3. LOADING/TRANSPORT WILL OCCUR ALONG THE CHANNEL BANK. EXACT LOCATION TO BE COORDINATED WITH PROJECT BIOLOGIST IN THE FIELD. NO VEHICULAR ENTRY INTO CHANNEL. IS PERMITTED AT THIS LOCATION.
 4. STOCKPILES SHALL BE UNDERLAIN BY AT LEAST 30 MILS THICK PLASTIC SHEETING OR LNER OF LOW PERMEABILITY.
 5. PLASTIC SHEETING SHALL BE PLACED ON TOP OF STOCKPILE WHEN THERE IS A FORECASTED 50% OR GREATER CHANCE OF LINE 5 PRECIPITATION OF 0.1 INCH OR GREATER BY THE NATIONAL WEATHER SERVICE FORECAST.
 6. USE PERIMETER PROTECTION BMPs (FIBER ROLLS, GRAVEL, BAGS, SILT FENCE, ETC.) AS NECESSARY AROUND STAGNO AREA LIMITS.
 7. SEE SHEET 6 FOR CHANNEL SECTION.
 8. DEBRIS COLLECTED ON SLOPE AREAS DIRECTLY UPSTREAM OF DISNEY CROSSING SHALL BE REMOVED. NO CHANGES TO SLOPE GRADING SHALL BE MADE.
 9. CHANNEL WIDTH 133' TO ALLOW CLEANING OF THE EXISTING CULVERTS.
 10. ACCESS POINT TO CHANNEL 1/5 WIDTH FOR EQUIPMENT. EXACT LOCATION TO BE COORDINATED WITH PROJECT BIOLOGIST IN THE FIELD.
 11. BMPs WILL ONLY BE INSTALLED IN ACTIVE WORK AREAS AND ALONG ACTIVE ACCESS ROADS BASED ON THE PHASING OF THE CHANNEL MAINTENANCE.

SMUGGLERS GULCH			
Number	Radius	Length	Line/Chord Direction
L1	-	162.32	N2° 22' 57.90"E
C1	1000.00	10.29	N2° 09' 16.20"E
L2	-	437.45	N1° 47' 34.50"E
C2	250.00	10.73	N2° 33' 48.62"E
L3	-	89.98	N0° 39' 56.90"W
C3	250.00	11.49	N2° 39' 32.81"E
L4	-	151.82	N1° 58' 51.71"E
C4	250.00	23.87	N0° 46' 05.50"W
L5	-	24.21	N3° 30' 12.71"W
C5	250.00	5.41	N2° 53' 03.92"W
L6	-	101.46	N2° 15' 53.12"W
C6	1200.00	98.72	N4° 37' 17.96"W
L7	-	136.20	N0° 58' 41.31"W
C7	250.00	39.74	N2° 21' 25.89"W
L8	-	336.51	N2° 07' 43.83"E
C8	1000.00	27.90	N1° 19' 50.02"E
L9	-	126.56	N0° 31' 55.42"E
C9	500.00	42.88	N0° 15' 59.57"W
L10	-	42.63	N2° 23' 48.75"W

SMUGGLERS GULCH				
Number	Radius	Length	Line/Chord Direction	
C10	1000.00	58.71	N0° 46' 22.82"W	
L11	-	151.77	N0° 51' 58.12"E	
C11	2000.00	45.15	N1° 29' 58.48"E	
L12	-	108.97	N2° 58' 44.80"E	
C12	800.00	35.83	N2° 51' 45.42"E	
L13	-	99.95	N2° 29' 13.98"W	
C13	500.00	23.89	N1° 47' 22.15"W	
L14	-	877.63	55.18	N1° 21' 27.07"W
L14	-	130.90	N0° 26' 36.18"E	
C15	200.17	44.50	N0° 39' 11.28"W	
L15	-	94.98	N0° 44' 54.69"W	
C16	188.26	32.17	N0° 12' 38.15"W	
C17	221.94	16.26	N20° 20' 52.47"W	
C18	67.25	26.99	N29° 29' 20.25"W	
L16	-	18.56	N40° 59' 13.15"W	
C18	480.62	57.32	N44° 37' 51.58"W	
C20	283.02	39.98	N44° 13' 39.56"W	
L17	-	156.31	N42° 12' 49.34"W	

- NOTES**
1. ENTIRE CHANNEL MAINTENANCE AREA SUBJECT TO IN-CHANNEL ENHANCEMENT MITIGATION REQUIREMENTS.
 2. SEE SHEET 6 FOR CHANNEL SECTION.

WORK PERFORMED 9/2013 - 7/2016

AS-BUILT PLANS FOR THE TIJUANA RIVER VALLEY CHANNEL MAINTENANCE PROJECT

SMUGGLERS GULCH MAINTENANCE

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 9 OF 15 SHEETS

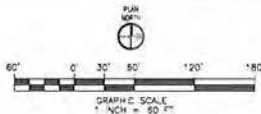
CONTRACTOR MUST NOTIFY THE BELOW LISTED AGENCY AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION:		SECTION HEAD
TOWNSHIP ENGINEER	DATE	
DESIGNER	BY	APPROVED
DATE	DATE	FILED
PROJECT NUMBER		PROJECT CHANGER
DESIGN ENGINEER		140-1731
CONTRACTOR		LAMBERT COOPERATES
DATE STARTED		
DATE COMPLETED		

UNDERGROUND SERVICE ALERT (USA) 1-800-422-4133

MATCHLINE - SEE SHEET 5

Number	Radius	Length	Line/Chord Direction
C9	800.00	42.88	N0° 55' 59.67"W
L10	-	42.83	N2° 23' 49.78"W
C10	1000.00	56.71	N0° 48' 20.82"W
L11	-	151.77	N0° 51' 08.12"E
C11	2000.00	45.15	N1° 29' 56.49"E
L12	-	108.97	N2° 08' 44.80"E
C12	800.00	35.83	N0° 51' 45.42"E
L13	-	89.86	N2° 25' 13.96"W
C13	500.00	23.69	N1° 47' 32.18"W
C14	877.83	55.18	N1° 21' 37.37"W
L14	-	150.90	N0° 29' 36.19"E
C15	209.1'	44.50	N0° 39' 11.20"W
L15	-	84.88	N11° 44' 58.69"W
C16	184.28	32.17	N17° 13' 38.15"W
C17	321.94	18.28	N20° 22' 52.47"W
C18	87.25	26.99	N29° 29' 20.25"W
L18	-	16.56	N42° 59' 13.15"W
C19	450.62	57.32	N44° 37' 51.59"W
C20	283.32	39.98	N44° 13' 39.68"W
L17	-	158.31	N40° 10' 49.34"W

LEGEND	
	PERMANENT TURNAROUND AREA (30' X 25')
	EXISTING ACCESS ROAD
	HAIL ROUTES
	ESA
	STABILIZED CONSTRUCTION ENTRANCE (TC-1)
	EX WATER MAIN
	EX STORM DRAIN
	EX SEWER MAIN
	SILT FENCE (SE-1)
	FIBER ROLL (SE-6)
	STAGING AREA LIMITS
	MAJOR CONTOUR
	MINOR CONTOUR
	PARCEL
	MHRA
	CHANNEL MAINTENANCE CENTERLINE
	LIMITS OF CHANNEL MAINTENANCE
	VEGETATION REMOVAL AND EXCAVATION OF SEDIMENT 2013-2014
	VEGETATION REMOVAL ONLY 2013-2014
	SEDIMENT AND VEGETATION REMOVAL, 2015-2016
	VEGETATION REMOVAL ONLY 2015-2016



- NOTES**
- LOADING/TRANSPORT WILL OCCUR ALONG THE CHANNEL BANK EXACT LOCATION TO BE COORDINATED WITH PROJECT BIDDING IN THE FIELD AND VEHICULAR ENTRY INTO CHANNEL IS PERMITTED AT THIS LOCATION.
 - SEE SHEET 8 FOR CHANNEL SECTION.
 - BMPs WILL ONLY BE INSTALLED IN ACTIVE WORK AREAS AND ALONG ACTIVE ACCESS ROADS BASED ON THE PHASING OF THE CHANNEL MAINTENANCE.

B'S TRAIL RE-ESTABLISHMENT, SEE MAINTENANCE PROCEDURE NOTE NO. 9 ON SHEET 9

APPROXIMATE LOCATION OF GABION MATRESS. CONTRACTOR TO REMOVE ACCUMULATED SEDIMENT AND PERFORM ANY NECESSARY MAINTENANCE ON THE GABION MATRESS.

STABILIZED CONSTRUCTION ENTRANCE WITH GRAVEL (20' X 50')

PILOT CHANNEL ALIGNMENT

NOTES

- ENTIRE CHANNEL MAINTENANCE AREA SUBJECT TO IN-CHANNEL ENHANCEMENT MITIGATION REQUIREMENTS.
- SEE SHEET 8 FOR CHANNEL SECTION.

WORK PERFORMED 9/2013 - 7/2016

AS-BUILT PLANS FOR THE TJUANA RIVER VALLEY CHANNEL MAINTENANCE PROJECT			
SMUGGLERS GULCH MAINTENANCE			
CITY OF SAN DIEGO, CALIFORNIA			
ENGINEERING DEPARTMENT			SHEET NO.
SHEET # OF 15 SHEETS			
CONTRACTOR MUST NOTIFY THE BELOW LISTED AGENCY AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION:	TOP CITY ENGINEER	DATE	SECTION HEAD
	BY	APPROVED DATE	FILED
	DATE		PROJECT MANAGER
			DESIGN ENGINEER
			140-11731
			LAMBERT OR DERIVATES
UNDERGROUND SERVICE ALERT (USA) 1-800-422-4133	AS-BUILT CONTRACTOR	DATE STARTED	DATE COMPLETED



WORK PERFORMED 9/2013 - 7/2016

AS-BUILT PLANS FOR THE
TIJUANA RIVER VALLEY CHANNEL
MAINTENANCE PROJECT

STAGING AREA D

CITY OF SAN DIEGO, CALIFORNIA		PROJECT NO.
SHEET 7 OF 16 SHEETS		
DATE	BY	SCALE
APPROVED DATE	APPROVED	FILED
PROJECT NUMBER	DATE	PROJECT NUMBER
140-1731		
PROJECT	DATE	PROJECT
STAGING AREA D	7/2016	STAGING AREA D

CONTRACTOR MUST NOTIFY THE BELOW LISTED AGENCY AT LEAST 140 DAYS PRIOR TO COMMENCEMENT OF EXCAVATION:

UNDERGROUND SERVICE ALERT (USA) 1-800-482-4333

NOTES:

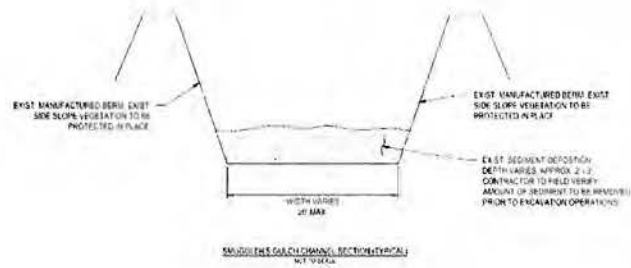
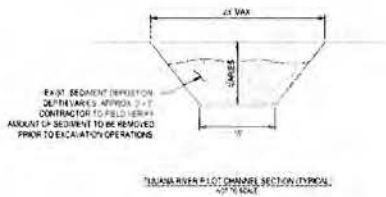
- USE SHEET 9 FOR CONSTRUCTION BY NOTES
- STAGING AREA SHALL BE PLACED ON TOP OF EXISTING EXCAVATION AND SHALL BE AT LEAST 24" ABOVE EXISTING GRADE
- STAGING AREA SHALL BE PROTECTED BY A FENCED PERIMETER WITH 36" HIGH PLYWOOD SHEET PILING AND 24" HIGH CONCRETE CURB
- STAGING AREA SHALL BE PROTECTED BY A FENCED PERIMETER WITH 36" HIGH PLYWOOD SHEET PILING AND 24" HIGH CONCRETE CURB
- STAGING AREA SHALL BE PROTECTED BY A FENCED PERIMETER WITH 36" HIGH PLYWOOD SHEET PILING AND 24" HIGH CONCRETE CURB

LEGEND

- PERMANENT TURNAROUND AREA (24' X 24')
- EXISTING ACCESS ROAD
- HAUL ROUTES
- EDA
- STABILIZED CONSTRUCTION ENTRANCE
- BY WATER MAIN
- SYSTEM DRAIN
- SEWER MAIN
- 36" TRAPEZOID
- 18" TRAPEZOID
- STAGING AREA LAYOUT
- MAJOR CONTOUR
- MINOR CONTOUR
- LOW SECTION
- WPA
- CHANGE MAINTENANCE SERVICE LINE
- LIMIT OF CHANGE MAINTENANCE
- VEGETATION REMOVAL AND EXCAVATION
- VEGETATION REMOVAL ONLY 2013-2014
- SEDIMENT AND VEGETATION REMOVAL 2015-2016
- VEGETATION REMOVAL ONLY 2015-2016

GRAPHIC SCALE: 1" = 50 FT

8/10/16 Engineering Services, Inc. 10000 Camino del Rio South, Suite 400, San Diego, CA 92108



WORK PERFORMED 9/2013 - 7/2016

AS-BUILT PLANS FOR THE
TJUANA RIVER VALLEY CHANNEL
MAINTENANCE PROJECT

CROSS SECTIONS

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET # OF 15 SHEETS

#. NO.

CONTRACTOR MUST NOTIFY THE BELOW LISTED AGENCY AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION :	FOR CITY ENGINEER	DATE	SECTION HEAD
	DESIGNER	BY APPROVED DATE FILED	
	FILE #/REV	SHD	PROJECT MANAGER
			DESIGN ENGINEER
UNDERGROUND SERVICE ALERT (USA) 1-800-422-4133	CONTRACTOR	DATE STARTED	LUMBER COORDINATES
	INSPECTOR	DATE COMPLETED	

OTHER BMP REQUIREMENTS:

1. THE MASTER LIST OF BMPs (INCLUDED AS APPENDIX B IN THE WPCR) SHOULD BE CONSULTED FOR ADDITIONAL BIOLOGICAL, CULTURAL, AND WATER QUALITY RELATED REQUIREMENTS.
2. AN ONE-TIME PRE-MAINTENANCE MEETING SHOULD BE CONDUCTED PRIOR TO THE START OF THE PROJECT. IN ATTENDANCE AT THE MEETING SHOULD BE THE MAINTENANCE CONTRACTOR, CITY STORM WATER DIVISION REPRESENTATIVES, MITIGATION MONITORING COORDINATOR, QUALIFIED WATER QUALITY SPECIALIST, PROJECT BIOLOGIST/MONITOR, QUALIFIED ARCHAEOLOGIST/HISTORICAL MONITOR/PALEONTOLOGICAL MONITOR, AND ANY OTHER KEY PERSONNEL. SENSITIVE HISTORICAL AND BIOLOGICAL RESOURCES SHOULD BE IDENTIFIED TO BE AVOIDED DURING THE MAINTENANCE ACTIVITIES AS WELL AS ANY CONDITIONS FOR POSSIBLE NIGHT AND/OR WEEKEND WORK. THE WATER QUALITY SPECIALIST SHOULD IDENTIFY MITIGATION MEASURES, PROTOCOLS AND BMPs TO BE CARRIED OUT DURING THE MAINTENANCE. THE MASTER LIST OF BMPs PROVIDES DETAILED INFORMATION ON PROCEDURES TO BE FOLLOWED.
3. THE CITY SHALL NOTIFY DFG, IN WRITING, AT LEAST FIVE DAYS PRIOR TO INITIATION OF CONSTRUCTION (PROJECT) ACTIVITIES AND AT LEAST FIVE DAYS PRIOR TO COMPLETION OF CONSTRUCTION (PROJECT) ACTIVITIES. EACH TIME PROJECT ACTIVITIES OCCUR, NOTIFICATION SHALL BE SENT TO DFG'S SOUTH COAST OFFICE, ATTN: STREAMBED ALTERATION PROGRAM - SM # 1600-2011-0271-RS.
4. AVOID THE INTRODUCTION OF INVASIVE PLANT SPECIES WITH PHYSICAL EROSION CONTROL MEASURES.
5. REMOVE ARUNDO THROUGH ONE, OR A COMBINATION OF, THE FOLLOWING METHODS: (1) FOLIAR SPRAY (SPRAYING HERBICIDE ON LEAVES AND STEMS WITHOUT CUTTING FIRST) WHEN ARUNDO OCCURS IN MONOCROP STANDS, OR (2) CUT AND PAINT (CUTTING STEMS CLOSE TO THE GROUND AND SPRAYING OR PAINTING HERBICIDE ON CUT STEM SURFACE) WHEN ARUNDO IS INTERMIXED WITH NATIVE PLANTS. WHEN SEDIMENT SUPPORTING ARUNDO MUST BE REMOVED, THE SEDIMENT SHALL BE EXCAVATED TO A DEPTH SUFFICIENT TO REMOVE THE RHIZOMES, WHEREVER FEASIBLE. FOLLOWING REMOVAL, OF SEDIMENT CONTAINING RHIZOMES, LOOSE RHIZOME MATERIAL SHALL BE REMOVED FROM THE CHANNEL AND DISPOSED OFFSITE. AFTER THE FINAL TREATMENT, THE AREA OF REMOVAL SHALL BE INSPECTED ON A QUARTERLY BASIS FOR UP TWO YEARS, OR UNTIL NO RESPROUTING IS OBSERVED DURING AN INSPECTION. IF RESPROUTING IS OBSERVED, THE CUT AND PAINT METHOD SHALL BE APPLIED TO ALL RESPROUTS.
6. PRIOR TO COMMENCING ANY MAINTENANCE ACTIVITY WHICH MAY IMPACT SENSITIVE BIOLOGICAL RESOURCES, THE MONITORING BIOLOGIST SHALL VERIFY THAT THE FOLLOWING ACTIONS HAVE BEEN TAKEN, AS APPROPRIATE:
 - FENCING, FLAGGING, SIGNAGE, OR OTHER MEANS TO PROTECT SENSITIVE RESOURCES TO REMAIN AFTER MAINTENANCE HAS BEEN IMPLEMENTED.
 - NOISE ATTENUATION MEASURES NEEDED TO PROTECT SENSITIVE WILDLIFE ARE IN PLACE AND EFFECTIVE; AND/OR
 - NESTING RAPTORS HAVE BEEN IDENTIFIED AND NECESSARY MAINTENANCE SETBACKS HAVE BEEN ESTABLISHED IF MAINTENANCE IS TO OCCUR BETWEEN JANUARY 15 AND AUGUST 31. SEE THE MASTER LIST OF BMPs FOR ADDITIONAL INFORMATION.
7. A QUALIFIED BIOLOGICAL MONITOR THAT CAN RECOGNIZE CLAPPER RAILS AND THEIR VOCALIZATIONS SHALL BE PRESENT DURING ALL THE PROJECT MAINTENANCE ACTIVITY WITHIN THE CHANNELS. ENFORCE THE LIMITS OF MAINTENANCE AND ENSURE THAT NO HARM TO CLAPPER RAILS OCCURS. BEFORE EACH WORKDAY IN THE PLOT CHANNEL BEGINS, THE BIOLOGICAL MONITOR SHALL WALK UPSTREAM TO DOWNSTREAM ON EITHER SIDE OF THE CHANNEL TO EVALUATE IF CLAPPER RAILS HAVE ENTERED THE PROJECT AREA. THE BIOLOGICAL MONITOR WILL FOLLOW PROCEDURES OUTLINED IN THE MASTER LIST OF BMPs.
8. CONTRACTOR SHALL HAVE A QUALIFIED BIOLOGIST ON SITE DAILY DURING PROJECT ACTIVITY TO ENSURE THAT AGREEMENT CONDITIONS ARE BEING MET AND MINIMIZE IMPACTS TO HABITAT. THE BIOLOGIST WILL BE KNOWLEDGEABLE OF WILD BIOLOGY AND ECOLOGY. THE BIOLOGIST SHALL BE AUTHORIZED TO STOP CONSTRUCTION IF NECESSARY TO PROTECT FISH AND WILDLIFE RESOURCES. IF ANY PROTECTED SPECIES ARE FOUND THE BIOLOGIST SHALL INFORM DFG. IF THERE IS A THREAT OF HARM TO ANY PROTECTED SPECIES OR OTHER AQUATIC WILDLIFE THE BIOLOGIST SHALL HALT CONSTRUCTION AND NOTIFY DFG. CONSULTATION WITH DFG IS REQUIRED BEFORE RE-COMMENCING WORK. THE QUALIFIED BIOLOGIST WILL FOLLOW PROCEDURES OUTLINED IN THE MASTER LIST OF BMPs.
9. IF ANY WILDLIFE IS ENCOUNTERED DURING THE COURSE OF CONSTRUCTION, SAID WILDLIFE SHALL BE ALLOWED TO LEAVE THE CONSTRUCTION AREA UNHARMED.
10. PRIOR TO THE START OF MAINTENANCE ACTIVITIES, ALL HISTORICAL RESOURCES AREAS SHALL BE FLAGGED, CARPED OR FENCED.
11. AREAS IDENTIFIED AS MODERATE TO HIGH POTENTIAL FOR THE OCCURRENCE OF SIGNIFICANT HISTORICAL RESOURCES SHALL BE IDENTIFIED FOLLOWING THE PROCEDURES OUTLINED IN THE MASTER LIST OF BMPs. AN ARCHAEOLOGICAL MONITOR SHALL BE PRESENT ON-SITE FULL TIME DURING CONSTRUCTION ACTIVITIES IN AREAS IDENTIFIED AS ARCHAEOLOGICAL RESOURCES.
12. IF HUMAN REMAINS ARE DISCOVERED, WORK SHALL HALT IN THAT AREA AND NO BODILY SHALL BE EXPORTED OFF-SITE UNTIL A DETERMINATION CAN BE MADE. THE PROCEDURES OUTLINED IN THE MASTER LIST OF BMPs SHALL BE FOLLOWED.
13. IF A LISTED SPECIES IS LOCATED WITHIN 500 FEET OF A PROPOSED MAINTENANCE ACTIVITY AND MAINTENANCE WOULD OCCUR DURING THE

ASSOCIATED BREEDING SEASON, AN ANALYSIS OF THE NOISE GENERATED BY MAINTENANCE ACTIVITY SHALL BE COMPLETED BY A QUALIFIED ACOUSTICIAN (POSSESSING CURRENT NOISE ENGINEER LICENSE OR REGISTRATION WITH MONITORING NOISE LEVEL EXPERIENCE WITH LISTED ANIMAL SPECIES) AND APPROVED BY THE ADO ENVIRONMENTAL DESIGNER. THE MASTER LIST OF BMPs PROVIDES DETAILED INFORMATION ON PROCEDURES TO BE FOLLOWED.

14. ALL LIGHTING ADJACENT TO, OR WITHIN, THE MHPA SHALL BE SHIELDED, UNIDIRECTIONAL, LOW PRESSURE SODIUM ILLUMINATION (OR SIMILAR) AND DIRECTED AWAY FROM SENSITIVE AREAS USING APPROPRIATE PLACEMENT AND SHIELDS. IF LIGHTING IS REQUIRED FOR NIGHTTIME MAINTENANCE, IT SHALL BE DIRECTED AWAY FROM THE PRESERVE AND THE TOPS OF ADJACENT TREES WITH POTENTIALLY NESTING RAPTORS, USING APPROPRIATE PLACEMENT AND SHIELDING.

WORK PERFORMED 9/2013 - 7/2016

**AS-BUILT PLANS FOR THE
TIJUANA RIVER VALLEY CHANNEL
MAINTENANCE PROJECT**

CONSTRUCTION BMP NOTES

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 10 OF 16 SHEETS

NO. _____

CONTRACTOR MUST NOTIFY THE BELOW LISTED AGENCY AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION:	FOR CITY ENGINEER	DATE	SECTION HEAD
	FOR STATE	DATE	PROJECT MANAGER
			DESIGN ENGINEER
			140-1731
			LABOR COORDINATOR
AS-BUILT		DATE STARTED	
CONTRACTOR INSPECTOR		DATE COMPLETED	
UNDERGROUND SERVICE ALERT (USA) 1-800-422-4133			

City of San Diego
Tijuana River Valley Channel Maintenance Project
Certification No. R9-2016-0228

ATTACHMENT 4
CEQA MITIGATION MONITORING AND REPORTING PROGRAM



CHAPTER 11.0

MITIGATION MONITORING AND
REPORTING PROGRAM



CHAPTER 11.0 MITIGATION MONITORING AND REPORTING PROGRAM

Section 21081.6 of the State of California Public Resources Code requires a Lead or Responsible Agency that approves or carries out a project where an environmental impact report (EIR) has identified significant environmental effects to adopt a "reporting or monitoring program for adopted or required changes to mitigate or avoid significant environmental effects." The City of San Diego is the lead Agency for the Master Program PEIR, and, therefore, is responsible for implementation of the MMRP. Because the PEIR recommends measures to mitigate these impacts, an MMRP is required to ensure that adopted mitigation measures are implemented.

As Lead Agency for the proposed project under CEQA, the City of San Diego will administer the MMRP for the following environmental issue areas: biological resources, historical resources, land use policies, paleontological resources, and water quality.

GENERAL

General Mitigation 1: Prior to commencement of work, the ADD Environmental Designee of the Entitlements Division shall verify that mitigation measures for impacts to biological resources (Mitigation Measures 4.3.1 through 4.3.20), historical resources (Mitigation Measures 4.4.1 and 4.4.2), land use policy (Mitigation Measures 4.1.1 through 4.1.13), paleontological resources (Mitigation Measure 4.7.1), and water quality (Mitigation Measures 4.8.1 through 4.8.3) have been included in entirety on the submitted maintenance documents and contract specifications, and included under the heading, "Environmental Mitigation Requirements." In addition, the requirements for a Pre-maintenance Meeting shall be noted on all maintenance documents.

General Mitigation 2: Prior to the commencement of work, a Pre-maintenance Meeting shall be conducted and include, as appropriate, the MMC, SWD Project Manager, Biological Monitor, Historical Monitor, Paleontological Monitor, Water Quality Specialist, and Maintenance Contractor, and other parties of interest.

General Mitigation 3: Prior to the commencement of work, evidence of compliance with other permitting authorities is required, if applicable. Evidence shall include either copies of permits issued, letters of resolution issued by the Responsible Agency documenting compliance, or other evidence documenting compliance and deemed acceptable by the ADD Environmental Designee.

General Mitigation 4: Prior to commencement of work and pursuant to Section 1600 et seq. of the State of California Fish & Game Code, evidence of compliance with Section 1605 is required, if applicable. Evidence shall include either copies of permits issued, letters of resolution issued by the Responsible Agency documenting compliance, or other evidence documenting compliance and deemed acceptable by the ADD Environmental Designee.

BIOLOGICAL RESOURCES

Potential impacts to biological resources would be reduced to below a level of significance through implementation of the following mitigation measures as well as Mitigation Measures 4.1-1 through 4.1-25.

Mitigation Measure 4.3.1: Prior to commencement of any activity within a specific annual maintenance program, a qualified biologist shall prepare an IBA for each area proposed to be maintained. The IBA shall be prepared in accordance with the specifications included in the Master Program.

Mitigation Measure 4.3.2: No maintenance activities within a proposed annual maintenance program shall be initiated before the City's Assistant Deputy Director (ADD) Environmental Designee and state and federal agencies with jurisdiction over maintenance activities have approved the IMPs and IBAs including proposed mitigation for each of the proposed activities. In their review, the ADD Environmental Designee and agencies shall confirm that the appropriate maintenance protocols have been incorporated into each IMP.

Mitigation Measure 4.3.3: No maintenance activities within a proposed annual maintenance program shall be initiated until the City's ADD Environmental Designee and Mitigation Monitoring Coordinator (MMC) have approved the qualifications for biologist(s) who shall be responsible for monitoring maintenance activities which may impact sensitive biological resources.

Mitigation Measure 4.3.4: Prior to undertaking any maintenance activity included in an annual maintenance program, a mitigation account shall be established to provide sufficient funds to implement all biological mitigation associated with the proposed maintenance activities. The fund amount shall be determined by the ADD Environmental Designee. The account shall be managed by the City's SWD, with quarterly status reports submitted to DSD. The status reports shall separately identify upland and wetland account activity. Based upon the impacts identified in the IBAs, money shall be deposited into the account, as part of the project submittal, to ensure available funds for mitigation.

Mitigation Measure 4.3.5: Prior to commencing any activity that could impact wetlands, evidence of compliance with other permitting authorities is required, if applicable. Evidence shall include copies of permits issued, letters of resolution issued by the Responsible Agency documenting compliance, or other evidence documenting compliance and deemed acceptable by the ADD Environmental Designee.

Mitigation Measure 4.3.6: Prior to commencing any activity where the IBA indicates significant impacts to biological resources may occur, a pre-maintenance meeting shall be held on site with the following in attendance: City's SWD Maintenance Manager (MM), MMC, and Maintenance Contractor (MC). The biologist selected to monitor the activities shall be present. At this meeting, the monitoring biologist shall identify and discuss the maintenance protocols that apply to the maintenance activities.

At the pre-maintenance meeting, the monitoring biologist shall submit to the MMC and MC a copy of the maintenance plan (reduced to 11"x17") that identifies areas to be protected, fenced, and monitored. This data shall include all planned locations and design of noise attenuation walls or other devices. The monitoring biologist also shall submit a maintenance schedule to the MMC and MC indicating when and where monitoring is to begin and shall notify the MMC of the start date for monitoring.

Mitigation Measure 4.3.7: Within three months following the completion of mitigation monitoring, two copies of a written draft report summarizing the monitoring shall be prepared by the monitoring biologist and submitted to the MMC for approval. The draft monitoring report shall describe the results including any remedial measures that were required. Within 90 days of receiving comments from the MMC on the draft monitoring report, the biologist shall submit one copy of the final monitoring report to the MMC.

Mitigation Measure 4.3.8: Within six months of the end of an annual storm water facility maintenance program, the monitoring biologist shall complete an annual report which shall be distributed to the following agencies: the City of San Diego DSD, CDFG, RWQCB, USFWS, and Corps. At a minimum, the report shall contain the following information:

- Tabular summary of the biological resources impacted during maintenance and the mitigation;
- Master table containing the following information for each individual storm water facility or segment which is regularly maintained;
- Date and type of most recent maintenance;
- Description of mitigation which has occurred; and
- Description of the status of mitigation which has been implemented for past maintenance activities.

Mitigation Measure 4.3.9: Wetland impacts resulting from maintenance shall be mitigated in one of the following ~~three~~two ways: (1) habitat creation, restoration, and/or enhancement ~~concurrent~~concurrent with maintenance, (2) habitat creation, restoration, and/or enhancement ~~prior to maintenance, or~~prior to maintenance, or (3) mitigation credits. ~~The amount of mitigation~~ When mitigation is proposed to be accomplished through concurrent creation, restoration or enhancement, the amount of planting shall be in accordance with ratios in Table 4.3-10 unless different mitigation ratios are required by state or federal agencies with jurisdiction over the impacted wetlands. In this event, the mitigation ratios required by these agencies will supersede, and not be in addition to, the ratios defined in Table 4.3-10. When previously created, restored or enhanced wetland habitat is proposed to be used for mitigation, the ratio shall be 1:1, provided the habitat has been determined to be successfully established by the ADD Environmental Designee in consultation with the Resource Agencies prior to commencing the maintenance activity. Mitigation credits may be used at a ratio of 1:1, provided the mitigation credits are from a mitigation bank which has been approved by the Resource Agencies. No maintenance shall commence until the ADD Environmental Designee has

determined that mitigation proposed for a specific maintenance activity meets one of these ~~three~~ two options.

WETLAND TYPE	MITIGATION RATIO ⁺
Southern riparian forest	3:1
Southern sycamore riparian woodland	3:1
Riparian woodland	3:1
Coastal saltmarsh	4:1
Coastal brackish marsh	4:1
Southern willow scrub	2:1
Mule fat scrub	2:1
Riparian scrub ¹	2:1
Freshwater marsh ²	+2:1
Cismontane alkali marsh	4:1
Disturbed wetland	+2:1
Streambed/natural flood channel	NA2:1

¹ Mitigation ratio within the Coastal Zone will be 3:1

² Mitigation ratio within the Coastal Zone will be 4:1⁺ Mitigation done in advance or through purchase of mitigation credits would be at a 1:1 ratio.

Mitigation locations for wetland impacts shall be selected using the following order of preference, based on the best mitigation value to be achieved.

1. Within impacted watershed, within City limits.
2. Within impacted watershed, outside City limits on City-owned or other publicly-owned land.
3. Outside impacted watershed, within City limits.
4. Outside impacted watershed, outside City limits on City-owned or other publically-owned land.

In order to mitigate for impacts in an area outside the limits of the watershed within which the impacts occur, the SWD must demonstrate to the satisfaction of the ADD Environmental Designee in consultation with the Resource Agencies that no suitable location exists within the impacted watershed.

Mitigation Measure 4.3.10: Whenever maintenance will impact wetland vegetation, a wetland mitigation plan shall be prepared in accordance with the Conceptual Wetland Restoration Plan contained in Appendix H of the Biological Technical Report, included as Appendix D.3 of the PEIR.

Mitigation which involves habitat enhancement, restoration or creation shall include a wetland mitigation plan containing the following information:

- Conceptual planting plan including planting zones, grading, and irrigation;
- Seed mix/planting palette;
- Planting specifications;
- Monitoring program including success criteria; and
- Long-term maintenance and preservation plan.

Mitigation which involves habitat acquisition and preservation shall include the following:

- Location of proposed acquisition;
- Description of the biological resources to be acquired including support for the conclusion that the acquired habitat mitigates for the specific maintenance impact; and
- Documentation that the mitigation area would be adequately preserved and maintained in perpetuity.

Mitigation which involves the use of mitigation credits shall include the following:

- Location of the mitigation bank;
- Description of the credits to be acquired including support for the conclusion that the acquired habitat mitigates for the specific maintenance impact; and
- Documentation that the credits are associated with a mitigation bank which has been approved by the appropriate Resource Agencies.

Mitigation Measure 4.3.11: Upland impacts shall be mitigated through payment into the City's Habitat Acquisition Fund, acquisition and preservation of specific land, or purchase of mitigation credits in accordance with the ratios identified in Table 4.3-11. Upland mitigation shall be completed within six months of the date the related maintenance has been completed.

**Table 4.3-11
UPLAND HABITAT MITIGATION RATIOS¹**

Vegetation Type	Tier	Location of Impact with Respect to the MHPA	
		Inside	Outside
Coast live oak woodland	I	2:1	1:1
Scrub oak chaparral	I	2:1	1:1
Southern foredunes	I	2:1	1:1
Beach	I	2:1	1:1
Diegan coastal sage scrub	II	1:1	1:1
Coastal sage-chaparral scrub	II	1:1	1:1
Broom baccharis scrub	II	1:1	1:1
Southern mixed chaparral	IIA	1:1	0.5:1
Non-native grassland	IIIB	1:1	0.5:1
Eucalyptus woodland	IV	--	--
Non-native vegetation/ornamental	IV	--	--
Disturbed habitat/ruderal	IV	--	--
Developed	IV	--	--

¹Assumes mitigation occurs within an MHPA

Mitigation Measure 4.3.12: Loss of habitat for the coastal California gnatcatcher shall be mitigated through the acquisition of suitable habitat or mitigation credits at a ratio of 1:1. Mitigation shall take place within the MHPA, and shall be accomplished within six months of the date maintenance is completed.

Mitigation Measure 4.3.13: Prior to commencing any maintenance activity which may impact sensitive biological resources, the monitoring biologist shall verify that the following actions have been taken, as appropriate:

- Fencing, flagging, signage, or other means to protect sensitive resources to remain after maintenance have been implemented;
- Noise attenuation measures needed to protect sensitive wildlife are in place and effective; and/or
- Nesting raptors have been identified and necessary maintenance setbacks have been established if maintenance is to occur between January 15 and August 31.

The designated biological monitor shall be present throughout the first full day of maintenance, whenever mandated by the associated IBA. Thereafter, through the duration of the maintenance activity, the monitoring biologist shall visit the site weekly to confirm that measures required to protect sensitive resources (e.g., flagging, fencing, noise barriers) continue to be effective. The monitoring biologist shall document monitoring events via a Consultant Site Visit Record. This record shall be sent to the MM each month. The MM will forward copies to MMC.

Mitigation Measure 4.3.14: Whenever off-site mitigation would result in a physical disturbance to the proposed mitigation area, the City will conduct an environmental review of the proposed mitigation plan in accordance with CEQA. If the off-site mitigation would have a significant impact on biological resources associated with the mitigation site, mitigation measures will be identified and implemented in accordance with the MMRP resulting from that CEQA analysis.

Mitigation Measure 4.3.15: Impacts to listed or endemic sensitive plant species shall be offset through implementation of one or a combination of the following actions:

- Impacted plants would be salvaged and relocated;
- Seeds from impacted plants would be collected for use at an off-site location;
- Off-site habitat that supports the species impacted shall be enhanced and/or supplemented with seed collected on site; and/or
- Comparable habitat at an off-site location shall be preserved.

Mitigation which involves relocation, enhancement or transplanting sensitive plants shall include the following:

- Conceptual planting plan including grading and, if appropriate, temporary irrigation;
- Planting specifications;
- Monitoring Program including success criteria; and
- Long-term maintenance and preservation plan.

Mitigation Measure 4.3.16: Maintenance activities shall not occur within the following areas:

- 300 feet from any nesting site of Cooper's hawk (*Accipiter cooperii*);
- 1,500 feet from known locations of the southern pond turtle (*Clemmys marmorata pallida*);
- 900 feet from any nesting sites of northern harriers (*Circus cyaneus*);
- 4,000 feet from any nesting sites of golden eagles (*Aquila chrysaetos*); or
- 300 feet from any occupied burrow or burrowing owls (*Athene cunicularia*).

Mitigation Measure 4.3.17: If evidence indicates the potential is high for a listed species to be present, based on historical records or site conditions, then clearing, grubbing, or grading (inside and outside the MHPA) shall be restricted during the breeding season where development may impact the following species:

- Light-footed clapper rail (between February 15 and August 15);
- Western snowy plover (between March 1 and September 15);
- Least tern (between April 1 and September 15);
- Cactus wren (between February 15 and August 15); or
- Tricolored black bird (between March 1 and August 1.

When other sensitive species, including, but not limited to, the arroyo toad, burrowing owl, or Quino checkerspot butterfly are known or suspected to be present all appropriate protocol surveys and mitigation measures shall be implemented.

Mitigation Measure 4.3.18: If a subject species is not detected during the protocol survey, the qualified biologist shall submit substantial evidence to the ADD Environmental Designee and an applicable resource agency which demonstrates whether or not mitigation measures such as noise walls are necessary between the dates stated above for each species. If this evidence concludes that no impacts to this species are anticipated, no mitigation measures would be necessary.

Mitigation Measure 4.3.19: If the SWD chooses not to do the required surveys, then it shall be assumed that the appropriate avian species are present and all necessary protection and mitigation measures shall be required as described in Mitigation Measure 4.3.21

Mitigation Measure 4.3.20: If no surveys are completed and no sound attenuation devices are installed, it will be assumed that the habitat in question is occupied by the appropriate species and that maintenance activities would generate more than 60dB(A) L_{eq} within the habitat requiring protection. All such activities adjacent to the protected habitat shall cease for the duration of the breeding season of the appropriate species and a qualified biologist shall establish a limit of work.

Mitigation Measure 4.3.21: If maintenance occurs during the raptor breeding season (January 15 to August 31), a pre-maintenance survey for active raptor nests shall be conducted in areas supporting suitable habitat. If active raptor nests are found, maintenance shall not occur within 300 feet of a Cooper's hawk nest, 900 feet of a northern harrier's nest, or 500 feet of any other raptor's nest until any fledglings have left the nest.

Mitigation Measure 4.3.22: If removal of any eucalyptus trees or other trees used by raptors for nesting within a maintenance area is proposed during the raptor breeding season (January 15 through August 31), a qualified biologist shall ensure that no raptors are nesting in such trees. If

maintenance occurs during the raptor breeding season, a pre-maintenance survey shall be conducted and no maintenance shall occur within 300 feet of any nesting site of Cooper's hawk or other nesting raptor until the young fledge. Should the biologist determine that raptors are nesting, the trees shall not be removed until after the breeding season. In addition, if removal of grassland or other habitat appropriate for nesting by northern harriers, a qualified biologist shall ensure that no harriers are nesting in such areas. If maintenance occurs during the raptor breeding season, a pre-maintenance survey shall be conducted and no maintenance shall occur within 900 feet of any nesting site of northern harrier until the young fledge.

Mitigation Measure 4.3.23: If maintenance activities would occur at known localities for listed fish species or within suitable habitat for other highly sensitive aquatic species (i.e., southwestern pond turtle), avoidance or minimization measures (i.e., exclusionary fencing, dewatering of the activity area, live-trapping, and translocation to suitable habitat) must be implemented.

Mitigation Measure 4.3.24: If maintenance activities will occur within areas supporting listed and/or narrow endemic plants, the boundaries of the plant populations designated sensitive by the resource agencies will be clearly delineated with flagging or temporary fencing that must remain in place for the duration of the activity.

Mitigation Measure 4.3.25: In order to avoid impacts to nesting avian species, including those species not covered by the MSCP, maintenance within or adjacent to avian nesting habitat shall occur outside of the avian breeding season (January 15 to August 31) unless postponing maintenance would result in a threat to human life or property.

HISTORICAL RESOURCES

Potential impacts to historical resources would be reduced to below a level of significance through implementation of the following mitigation measures.

Mitigation Measure 4.4.1: Prior to commencement of the first occurrence of maintenance activity within a drainage facility included in the Master Program, an archaeologist, meeting the qualifications specified by the City's HRG, shall determine the potential for significant historical resources to occur in the maintenance area. If the archaeologist determines that the potential is moderate to high, an IHA shall be prepared. Based on the IMP for the proposed maintenance activity, the archaeologist shall determine the APE, which shall include access, staging, and maintenance areas. The IHA shall include a field survey of the APE with a Native American monitor, using the standards of the City's HRG. In addition, the archaeologist shall request a record search from the SCIC. Based on the results of the field survey and record search, the archaeologist shall conduct an archaeological testing program for any identified historical resources, using the standards of the City's HRG. If significant historical resources are identified, they shall be taken to the Historical Resources Board for designation as Historic Sites. Avoidance or implementation of an Archaeological Data Recovery Program (ADRP) and Archaeological Monitoring Program shall be required to mitigate project impacts to significant historical resources. The archaeologist shall prepare a report in accordance with City guidelines. At a minimum, the IHA report shall include:

- Description of maintenance to be performed, including length, width, and depth;

- Prehistory and History Background Discussion;
- Results of Record Search;
- Survey Methods;
- Archaeological Testing Methods;
- Impact Analysis; and
- Mitigation Recommendations, including avoidance or implementation of an ADRP and archaeological monitoring program.

In the event that the IHA indicates that no significant historical resources occur within the APE, or have the potential to occur within the APE, no further action shall be required.

Mitigation Measure 4.4.2: Prior to initiating any maintenance activity where the IHA identifies existing significant historical resources within the APE, the following actions shall be taken.

4.4.2.1 The Storm Water Department shall select a Principal Investigator (PI), who shall be approved by the ADD Environmental Designee. The PI must meet the requirements of the City's HRG.

4.4.2.2 Mitigation recommendations from the IHA shall be incorporated into the IMP to the satisfaction of the PI and the ADD Environmental Designee. Typical mitigation measures shall include but not be limited to: delineating resource boundaries on maintenance plans; implementing protective measures such as fencing, signage or capping; and selective monitoring during maintenance activities.

4.4.2.3 If impacts to significant historical resources cannot be avoided, the PI shall prepare an Archaeological Research Design and Data Recovery Program (ARDDRP) for the affected resources, with input from a Native American consultant, and the ARDDRP shall be approved by the ADD Environmental Designee. Based on the approved research design, a phased excavation program shall be conducted, which will include the participation of a Native American. The sample size to be excavated shall be determined by the PI, in consultation with City staff. The sample size shall vary with the nature and size of the archaeological site, but need not exceed 15 percent of the overall resource area. The area involved in the ARDDRP shall be surveyed, staked and flagged by the archaeological monitor, prior to commencing maintenance activities which could affect the identified resources.

4.4.2.4 A pre-maintenance meeting shall be held on-site prior to commencing any maintenance that may impact a significant historical resource. The meeting shall include representatives from the PI, the Native American consultant, Storm Water Department, Mitigation Monitoring Coordinator (MMC), Resident Engineer (RE), and Maintenance

Contractor (MC). The PI shall explain mitigation measures which must be implemented during maintenance. The PI shall also confirm that all protective measures (e.g. fencing, signage or capping) are in place.

4.4.2.5 If human remains are discovered in the course of conducting the ARDDRP, work shall be halted in that area and the following procedures set forth in the California Public Resources Code (Sec. 5097.98) and State Health and Safety Code (Sec. 7050.5) will be taken:

- The PI shall notify the RE, and the MMC. The MMC will notify the appropriate Senior Planner in the Environmental Analysis Section (EAS).
- The PI shall notify the Medical Examiner, after consultation with the RE, either in person or via telephone.
- Work will be redirected away from the location of the discovery and any nearby area reasonably suspected to overlay adjacent human remains until a determination can be made by the Medical Examiner, in consultation with the PI, concerning the provenience of the remains.
- The Medical Examiner, in consultation with the PI, shall determine the need for a field examination to determine the provenience.
- If a field examination is not warranted, the Medical Examiner shall determine, with input from the PI, if the remains are or are most likely to be of Native American origin.
- If Human Remains are determined to be Native American, the Medical Examiner shall notify the Native American Heritage Commission (NAHC). The NAHC shall contact the PI within 24 hours after the Medical Examiner has completed coordination. The NAHC will identify the person or persons determined to be the Most Likely Descendent (MLD) and provide contact information. The PI will coordinate with the MLD for additional coordination. If (1) the NAHC is unable to identify the MLD, or the MLD fails to make a recommendation within 24 hours after being notified by the Commission; or (2) the landowner or authorized representative rejects the recommendation of the MLD and mediation in accordance with PRC 5097.94 (k) by the NAHC fails to provide measures acceptable to the landowner, then the landowner or their authorized representative shall re-inter the human remains and all associated grave goods with appropriate dignity, on the property in a location not subject to subsurface disturbance. Information on this process will be provided to the NAHC.
- If Human Remains are not Native American, the PI shall contact the Medical Examiner and notify them of the historic era context of the burial. The Medical Examiner shall determine the appropriate course of action with the PI and City staff (PRC 5097.98). If the remains are of historic origin, they shall be appropriately removed and conveyed to the Museum of Man for analysis. The decision for reinterment of the human remains shall be made in consultation with MMC, EAS, the landowner, and the Museum.

4.4.2.6 The PI shall be responsible for ensuring: (1) that all cultural materials collected are cleaned, catalogued and permanently curated with an appropriate institution; (2) that a letter of acceptance from the curation institution has been submitted to MMC; (3) that all artifacts are analyzed to identify function and chronology as they relate to the history of the area; (4) that faunal material is identified as to species; and (5) that specialty studies are completed, as appropriate. Curation of artifacts associated with the survey, testing and/or data recovery for this project shall be completed in consultation with LDR and the Native American representative, as applicable.

4.4.2.7 The Archaeologist shall be responsible for updating the appropriate State of California Department of Park and Recreation forms-DPR 523 A/B associated with the ARDDRP in accordance with the City's Historical Resources Guidelines, and submittal of such forms to the SCIC with the Final Results Report.

4.4.2.8 The PI shall prepare a Draft Results Report (even if negative) that describes the results, analysis and conclusions of the ARDDRP (with appropriate graphics). The MMC shall return the Draft Results Report to the PI for revision or for preparation of the Final Report. The PI shall submit the revised Draft Results Report to MMC for approval. The MMC shall provide written verification to the PI of the approved report. The MMC shall notify the RE of receipt of all Draft Result Report submittals and approvals. The MMC shall notify the RE of receipt of the Final Results Report.

Mitigation Measure 4.4.3: Prior to initiating any maintenance activity where the IHA identifies a moderate to high potential for the occurrence of significant historical resources within the APE, the following actions shall be taken:

4.4.3.1 Prior to Permit Issuance or Bid Opening/Bid Award

A. Entitlements Plan Check

1. Prior to permit issuance or Bid Opening/Bid Award, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for Archaeological Monitoring and Native American monitoring have been noted on the applicable maintenance documents through the plan check process.

B. Letters of Qualification have been submitted to ADD

1. Prior to Bid Award, the applicant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the project and the names of all persons involved in the archaeological monitoring program, as defined in the City of San Diego Historical Resources Guidelines (HRCG). If applicable, individuals involved in the archaeological monitoring program must have completed the 40-hour HAZWOPER training with certification documentation.
2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the archaeological monitoring of the project meet the qualifications established in the HRCG.

3. Prior to the start of work, the applicant must obtain written approval from MMC for any personnel changes associated with the monitoring program.

4.4.3.2 Prior to Start of Maintenance

A. Verification of Records Search

1. The PI shall provide verification to MMC that a site specific records search (1/4 mile radius) has been completed. Verification includes, but is not limited to a copy of a confirmation letter from South Coastal Information Center, or, if the search was in-house, a letter of verification from the PI stating that the search was completed.
2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities.
3. The PI may submit a detailed letter to MMC requesting a reduction to the 1/4 mile radius.

B. PI Shall Attend Pre-maintenance Meetings

1. Prior to beginning any work that requires monitoring; the Applicant shall arrange a Pre-maintenance Meeting that shall include the PI, Native American consultant/monitor (where Native American resources may be impacted), Maintenance Manager (MM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified Archaeologist and Native American Monitor shall attend any grading/excavation related Pre-maintenance Meetings to make comments and/or suggestions concerning the Archaeological Monitoring program with the Maintenance Manager and/or Grading Contractor.
 - a. If the PI is unable to attend the Pre-maintenance Meeting, the Applicant shall schedule a focused Pre-maintenance Meeting with MMC, the PI, RE, MM or BI, if appropriate, prior to the start of any work that requires monitoring.
2. Acknowledgement of Responsibility for Curation (CIP or Other Public Projects)
The applicant shall submit a letter to MMC acknowledging their responsibility for the cost of curation associated with all phases of the archaeological monitoring program.
3. Identify Areas to be Monitored
Prior to the start of any work that requires monitoring, the PI shall submit an Archaeological Monitoring Exhibit (AME) (with verification that the AME has been reviewed and approved by the Native American consultant/monitor when Native American resources may be impacted) based on the appropriate maintenance documents (reduced to 11x17) to MMC identifying the areas to be monitored including the delineation of grading/excavation limits.
The AME shall be based on the results of a site specific records search as well as information regarding the age of existing pipelines, laterals and associated appurtenances and/or any known soil conditions (native or formation).
MMC shall notify the PI that the AME has been approved.

4. When Monitoring Will Occur
 - a. Prior to the start of any work, the PI shall also submit a maintenance schedule to MMC through the RE indicating when and where monitoring will occur.
 - b. The PI may submit a detailed letter to MMC prior to the start of work or during maintenance requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final maintenance documents which indicate conditions such as age of existing pipe to be replaced, depth of excavation and/or site graded to bedrock, etc., which may reduce or increase the potential for resources to be present.
5. Approval of AME and Maintenance Schedule

After approval of the AME by MMC, the PI shall submit to MMC written authorization of the AME and Maintenance Schedule from the MM.

4.4.3.3 During Maintenance

- A. Monitor Shall be Present During Grading/Excavation/Trenching
 1. The Archaeological Monitor shall be present full-time during all soil disturbing and grading/excavation/trenching activities which could result in impacts to archaeological resources as identified on the AME. **The Maintenance Manager is responsible for notifying the RE, PI, and MMC of changes to any maintenance activities such as in the case of a potential safety concern within the area being monitored. In certain circumstances OSHA safety requirements may necessitate modification of the AME.**
 2. The Native American consultant/monitor shall determine the extent of their presence during soil disturbing and grading/excavation/trenching activities based on the AME and provide that information to the PI and MMC. If prehistoric resources are encountered during the Native American consultant/monitor's absence, work shall stop and the Discovery Notification Process detailed in Sections 4.4.3.3.B-C and 4.4.3.4-A-D shall commence.
 3. The PI may submit a detailed letter to MMC during maintenance requesting a modification to the monitoring program when a field condition such as modern disturbance post-dating the previous grading/trenching activities, presence of fossil formations, or when native soils are encountered that may reduce or increase the potential for resources to be present.
 4. The archaeological and Native American consultant/monitor shall document field activity via the Consultant Site Visit Record (CSV). The CSV's shall be faxed by the MM to the RE the first day of monitoring, the last day of monitoring, monthly (**Notification of Monitoring Completion**), and in the case of ANY discoveries. The RE shall forward copies to MMC.

B. Discovery Notification Process

1. In the event of a discovery, the Archaeological Monitor shall direct the contractor to temporarily divert all soil disturbing activities, including but not limited to digging, trenching, excavating or grading activities in the area of discovery and in the area reasonably suspected to overlay adjacent resources and immediately notify the RE or BI, as appropriate.
2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery.
3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible.
4. No soil shall be exported off-site until a determination can be made regarding the significance of the resource specifically if Native American resources are encountered.

C. Determination of Significance

1. The PI and Native American consultant/monitor, where Native American resources are discovered shall evaluate the significance of the resource. If Human Remains are involved, follow protocol in Section 4.4.3.4 below.
 - a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required.
 - b. If the resource is significant, the PI shall submit an Archaeological Data Recovery Program (ADRP) and obtain written approval of the program from MMC, MM and RE. ADRP and any mitigation must be approved by MMC, RE and/or MM before ground disturbing activities in the area of discovery will be allowed to resume. **Note: If a unique archaeological site is also an historical resource as defined in CEQA Section 15064.5, then the limits on the amount(s) that a project applicant may be required to pay to cover mitigation costs as indicated in CEQA Section 21083.2 shall not apply.**
 - (1). Note: For pipeline trenching and other linear projects in the public Right-of-Way, the PI shall implement the Discovery Process for Pipeline Trenching projects identified below under "D."
 - c. If the resource is not significant, the PI shall submit a letter to MMC indicating that artifacts will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that that no further work is required.
 - (1). Note: For Pipeline Trenching and other linear projects in the public Right-of-Way, if the deposit is limited in size, both in length and depth; the information value is limited and is not associated with any other resource; and there are no unique features/artifacts associated with the deposit, the discovery should be considered not significant.
 - (2). Note, for Pipeline Trenching and other linear projects in the public Right-of-Way, if significance cannot be determined, the Final Monitoring Report and Site Record (DPR Form 523A/B) shall identify the discovery as Potentially Significant.

D. Discovery Process for Significant Resources - Pipeline Trenching and other Linear Projects in the Public Right-of-Way

The following procedure constitutes adequate mitigation of a significant discovery encountered during pipeline trenching activities or for other linear project types within the Public Right-of-Way including but not limited to excavation for jacking pits, receiving pits, laterals, and manholes to reduce impacts to below a level of significance:

1. Procedures for documentation, curation and reporting
 - a. One hundred percent of the artifacts within the trench alignment and width shall be documented in-situ, to include photographic records, plan view of the trench and profiles of side walls, recovered, photographed after cleaning and analyzed and curated. The remainder of the deposit within the limits of excavation (trench walls) shall be left intact.
 - b. The PI shall prepare a Draft Monitoring Report and submit to MMC via the RE as indicated in Section 4.4.3.6-A.
 - c. The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation forms-DPR 523 A/B) the resource(s) encountered during the Archaeological Monitoring Program in accordance with the City's Historical Resources Guidelines. The DPR forms shall be submitted to the South Coastal Information Center for either a Primary Record or SDI Number and included in the Final Monitoring Report.
 - d. The Final Monitoring Report shall include a recommendation for monitoring of any future work in the vicinity of the resource.

4.4.3.4 Discovery of Human Remains

If human remains are discovered, work shall halt in that area and no soil shall be exported off-site until a determination can be made regarding the provenance of the human remains; and the following procedures as set forth in CEQA Section 15064.5(e), the California Public Resources Code (Sec. 5097.98) and State Health and Safety Code (Sec. 7050.5) shall be undertaken:

A. Notification

1. Archaeological Monitor shall notify the RE or BI as appropriate, MMC, and the PI, if the Monitor is not qualified as a PI. MMC will notify the appropriate Senior Planner in the Environmental Analysis Section (EAS) of the Development Services Department to assist with the discovery notification process.
2. The PI shall notify the Medical Examiner after consultation with the RE, either in person or via telephone.

B. Isolate discovery site

1. Work shall be directed away from the location of the discovery and any nearby area reasonably suspected to overlay adjacent human remains until a determination can be made by the Medical Examiner in consultation with the PI concerning the provenience of the remains.
2. The Medical Examiner, in consultation with the PI, will determine the need for a field examination to determine the provenience.

3. If a field examination is not warranted, the Medical Examiner will determine with input from the PI, if the remains are or are most likely to be of Native American origin.
- C. If Human Remains **ARE** determined to be Native American
1. The Medical Examiner will notify the Native American Heritage Commission (NAHC) within 24 hours. By law, **ONLY** the Medical Examiner can make this call.
 2. NAHC will immediately identify the person or persons determined to be the Most Likely Descendent (MLD) and provide contact information.
 3. The MLD will contact the PI within 24 hours or sooner after the Medical Examiner has completed coordination, to begin the consultation process in accordance with CEQA Section 15064.5(e), the California Public Resources and Health & Safety Codes.
 4. The MLD will have 48 hours to make recommendations to the property owner or representative, for the treatment or disposition with proper dignity, of the human remains and associated grave goods.
 5. Disposition of Native American Human Remains will be determined between the MLD and the PI, and, if:
 - a. The NAHC is unable to identify the MLD, OR the MLD failed to make a recommendation within 48 hours after being notified by the Commission, OR;
 - b. The landowner or authorized representative rejects the recommendation of the MLD and mediation in accordance with PRC 5097.94 (k) by the NAHC fails to provide measures acceptable to the landowner, THEN
 - c. To protect these sites, the landowner shall do one or more of the following:
 - (1) Record the site with the NAHC;
 - (2) Record an open space or conservation easement; or
 - (3) Record a document with the County.
 - d. Upon the discovery of multiple Native American human remains during a ground disturbing land development activity, the landowner may agree that additional conferral with descendants is necessary to consider culturally appropriate treatment of multiple Native American human remains. Culturally appropriate treatment of such a discovery may be ascertained from review of the site utilizing cultural and archaeological standards. Where the parties are unable to agree on the appropriate treatment measures the human remains and buried with Native American human remains shall be reinterred with appropriate dignity, pursuant to Section 4.4.3.5.c., above.
- D. If Human Remains are **NOT** Native American
1. The PI shall contact the Medical Examiner and notify them of the historic era context of the burial.
 2. The Medical Examiner will determine the appropriate course of action with the PI and City staff (PRC 5097.98).
 3. If the remains are of historic origin, they shall be appropriately removed and conveyed to the San Diego Museum of Man for analysis. The decision for internment of the human remains shall be made in consultation with MMC, EAS, the applicant/landowner, any known descendant group, and the San Diego Museum of Man.

4.4.3.5 Night and/or Weekend Work

- A. If night and/or weekend work is included in the contract
 - 1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the Pre-maintenance meeting.
 - 2. The following procedures shall be followed.
 - a. No Discoveries
In the event that no discoveries were encountered during night and/or weekend work, the PI shall record the information on the CSV and submit to MMC via fax by 8AM of the next business day.
 - b. Discoveries
All discoveries shall be processed and documented using the existing procedures detailed in Sections 4.4.3.3 - During Maintenance, and 4.4.3.4 – Discovery of Human Remains. Discovery of human remains shall always be treated as a significant discovery.
 - c. Potentially Significant Discoveries
If the PI determines that a potentially significant discovery has been made, the procedures detailed under Sections 4.4.3.3 During Maintenance and 4.4.3.4- Discovery of Human Remains shall be followed.
 - d. The PI shall immediately contact the RE and MMC, or by 8AM of the next business day to report and discuss the findings as indicated in Section 4.4.3.3-B, unless other specific arrangements have been made.
- B. If night and/or weekend work becomes necessary during the course of maintenance
 - 1. The Maintenance Manager shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.
 - 2. The RE, or BI, as appropriate, shall notify MMC immediately.
- C. All other procedures described above shall apply, as appropriate.

4.4.3.6 Post Maintenance

- A. Submittal of Draft Monitoring Report
 - 1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Historical Resources Guidelines (Appendix C/D) which describes the results, analysis, and conclusions of all phases of the Archaeological Monitoring Program (with appropriate graphics) to MMC via the RE for review and approval within 90 days following the completion of monitoring. **It should be noted that if the PI is unable to submit the Draft Monitoring Report within the allotted 90-day timeframe as a result of delays with analysis, special study results or other complex issues, a schedule shall be submitted to MMC establishing agreed due dates and the provision for submittal of monthly status reports until this measure can be met.**

- a. For significant archaeological resources encountered during monitoring, the Archaeological Data Recovery Program or Pipeline Trenching Discovery Process shall be included in the Draft Monitoring Report.
 - b. Recording Sites with State of California Department of Parks and Recreation
The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation forms-DPR 523 A/B) any significant or potentially significant resources encountered during the Archaeological Monitoring Program in accordance with the City's Historical Resources Guidelines, and submittal of such forms to the South Coastal Information Center with the Final Monitoring Report.
2. MMC shall return the Draft Monitoring Report to the PI via the RE for revision or, for preparation of the Final Report.
 3. The PI shall submit revised Draft Monitoring Report to MMC via the RE for approval.
 4. MMC shall provide written verification to the PI of the approved report.
 5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.
- B. Handling of Artifacts
1. The PI shall be responsible for ensuring that all cultural remains collected are cleaned and catalogued.
 2. The PI shall be responsible for ensuring that all artifacts are analyzed to identify function and chronology as they relate to the history of the area; that faunal material is identified as to species; and that specialty studies are completed, as appropriate.
- C. Curation of artifacts: Accession Agreement and Acceptance Verification
1. The PI shall be responsible for ensuring that all artifacts associated with the survey, testing and/or data recovery for this project are permanently curated with an appropriate institution. This shall be completed in consultation with MMC and the Native American representative, as applicable.
 2. When applicable to the situation, the PI shall include written verification from the Native American consultant/monitor indicating that Native American resources were treated in accordance with state law and/or applicable agreements. If the resources were reinterred, verification shall be provided to show what protective measures were taken to ensure no further disturbance occurs in accordance with Section 4.4.3.4 – Discovery of Human Remains, Subsection C.
 3. The PI shall submit the Accession Agreement and catalogue record(s) to the RE or BI, as appropriate for donor signature with a copy submitted to MMC.
 4. The RE or BI, as appropriate shall obtain signature on the Accession Agreement and shall return to PI with copy submitted to MMC.
 5. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.

D. Final Monitoring Report(s)

1. The PI shall submit one copy of the approved Final Monitoring Report to the RE or BI as appropriate, and one copy to MMC (even if negative), within 90 days after notification from MMC of the approved report.
2. The RE shall, in no case, issue the Notice of Completion until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.

LAND USE

Potential impacts to land use policies in the City's General Plan would be reduced to below a level of significance through implementation of the following mitigation measures.

Mitigation Measure 4.1.1: Prior to commencing maintenance on any storm water facility within, or immediately adjacent to, a Multi-Habitat Planning Area (MHPA), the ADD Environmental Designee shall verify that all MHPA boundaries and limits of work have been delineated on all maintenance documents.

Mitigation Measure 4.1.2: A qualified biologist (possessing a valid Endangered Species Act Section 10(a)(1)(a) recovery permit) shall survey those habitat areas inside and outside the MHPA suspected to serve as habitat (based on historical records or site conditions) for the coastal California gnatcatcher, least Bell's vireo and/or other listed species. Surveys for the appropriate species shall be conducted pursuant to the protocol survey guidelines established by the U.S. Fish and Wildlife Service. When other sensitive species, including, but not limited to, the arroyo toad, burrowing owl, or Quino checkerspot butterfly are known or suspected to be present all appropriate protocol surveys and mitigation measures identified in Subchapter 4.3. Biological Resources, required shall be implemented.

Mitigation Measure 4.1.3: If a listed species is located within 500 feet of a proposed maintenance activity and maintenance would occur during the associated breeding season, an analysis of the noise generated by maintenance activities shall be completed by a qualified acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the ADD Environmental Designee. The analysis shall identify the location of the 60 dB(A) L_{eq} noise contour on the maintenance plan. The report shall also identify measures to be undertaken during maintenance to reduce noise levels.

Mitigation Measure 4.1.4: Based on the location of the 60 dB(A) L_{eq} noise contour and the results of the protocol surveys, the Project Biologist shall determine if maintenance has the potential to impact breeding activities of listed species. If one or more of the following species are determined to be significantly impacted by maintenance, then maintenance (inside and outside the MHPA) shall avoid the following breeding seasons unless it is determined that maintenance is needed to protect life or property.

- Coastal California gnatcatcher (between March 1 and August 15 inside the MHPA only; no restrictions outside MHPA);

- Least Bell's vireo (between March 15 and September 15); and
- Southwestern willow flycatcher (between May 1 and September 1).

Mitigation Measure 4.1.5: If maintenance is required during the breeding season for a listed bird to protect life or property, then the following conditions must be met:

- At least two weeks prior to the commencement of maintenance activities, under the direction of a qualified acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from maintenance activities shall not exceed 60 dB(A) hourly average at the edge of occupied habitat. Concurrent with the commencement of maintenance activities and the maintenance of necessary noise attenuation facilities, noise monitoring shall be conducted at the edge of the occupied habitat area to ensure that noise levels do not exceed 60 dB(A) hourly average. If the noise attenuation techniques implemented are determined to be inadequate by the qualified acoustician or biologist, then the associated maintenance activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season of the subject species, as noted above.
- Maintenance noise shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the maintenance activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dB(A) hourly average. If not, other measures shall be implemented in consultation with the biologist and the ADD, as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of maintenance equipment and the simultaneous use of equipment.
- Prior to the commencement of maintenance activities that would disturb sensitive resources during the breeding season, the biologist shall ensure that all fencing, staking and flagging identified as necessary on the ground have been installed properly in the areas restricted from such activities.
- If noise attenuation walls or other devices are required to assure protection to identified wildlife, then the biologist shall make sure such devices have been properly constructed, located and installed.

Mitigation Measure 4.1.6: A pre-maintenance meeting shall be held with the Maintenance Contractor, City representative and the Project Biologist. The Project Biologist shall discuss the sensitive nature of the adjacent habitat with the crew and subcontractor. Prior to the pre-maintenance meeting, the following shall be completed:

- The Storm Water Division (SWD) shall provide a letter of verification to the Mitigation Monitoring Coordination Section stating that a qualified biologist, as defined in the City of San Diego Biological Resources Guidelines, has been retained to implement the

projects MSCP monitoring Program. The letter shall include the names and contact information of all persons involved in the Biological Monitoring of the project. At least thirty days prior to the pre-maintenance meeting, the qualified biologist shall submit all required documentation to MMC, verifying that any special reports, maps, plans and time lines, such as but not limited to, revegetation plans, plant relocation requirements and timing, MSCP requirements, avian or other wildlife protocol surveys, impact avoidance areas or other such information has been completed and updated.

- The limits of work shall be clearly delineated. The limits of work, as shown on the approved maintenance plan, shall be defined with orange maintenance fencing and checked by the biological monitor before initiation of maintenance. All native plants or species of special concern, as identified in the biological assessment, shall be staked, flagged and avoided within Brush Management Zone 2, if applicable.

Mitigation Measure 4.1.7: Maintenance plans shall be designed to accomplish the following.

- Invasive non-native plant species shall not be introduced into areas adjacent to the MHPA. Landscape plans shall contain non-invasive native species adjacent to sensitive biological areas, as shown on the approved maintenance plan.
- All lighting adjacent to, or within, the MHPA shall be shielded, unidirectional, low pressure sodium illumination (or similar) and directed away from sensitive areas using appropriate placement and shields. If lighting is required for nighttime maintenance, it shall be directed away from the preserve and the tops of adjacent trees with potentially nesting raptors, using appropriate placement and shielding.
- All maintenance activities (including staging areas and/or storage areas) shall be restricted to the disturbance areas shown on the approved maintenance plan. The project biologist shall monitor maintenance activities, as needed, to ensure that maintenance activities do not encroach into biologically sensitive areas beyond the limits of work as shown on the approved maintenance plan.
- No trash, oil, parking or other maintenance-related activities shall be allowed outside the established maintenance areas including staging areas and/or storage areas, as shown on the approved maintenance plan. All maintenance related debris shall be removed off-site to an approved disposal facility.
- Access roads through MHPA-designated areas shall comply with the applicable policies contained in the “Roads and Utilities Construction and Maintenance Policies” identified in Section 1.4.2 of the City’s Subarea Plan.

Mitigation Measure 4.1.8: Prior to commencing any maintenance in, or within 500 feet of any area determined to support coastal California gnatcatchers, the ADD Environmental Designee shall verify that the MHPA boundaries and the following project requirements regarding the coastal California gnatcatcher are shown on the maintenance plans:

NO MAINTENANCE ACTIVITIES SHALL OCCUR BETWEEN MARCH 1 AND AUGUST 15. THE BREEDING SEASON OF THE COASTAL CALIFORNIA GNATCATCHER, UNTIL THE FOLLOWING REQUIREMENTS HAVE BEEN MET TO THE SATISFACTION OF THE ADD ENVIRONMENTAL DESIGNEE:

- a. A QUALIFIED BIOLOGIST (POSSESSING A VALID ENDANGERED SPECIES ACT SECTION 10(a)(1)(A) RECOVERY PERMIT) SHALL SURVEY THOSE HABITAT AREAS WITHIN THE MHPA THAT WOULD BE SUBJECT TO MAINTENANCE NOISE LEVELS EXCEEDING 60 DECIBELS [dB(A)] HOURLY AVERAGE FOR THE PRESENCE OF THE COASTAL CALIFORNIA GNATCATCHER. SURVEYS FOR THE COASTAL CALIFORNIA GNATCATCHER SHALL BE CONDUCTED PURSUANT TO THE PROTOCOL SURVEY GUIDELINES ESTABLISHED BY THE U.S. FISH AND WILDLIFE SERVICE WITHIN THE BREEDING SEASON PRIOR TO THE COMMENCEMENT OF ANY MAINTENANCE. IF GNATCATCHERS ARE PRESENT, THEN THE FOLLOWING CONDITIONS MUST BE MET:
 1. BETWEEN MARCH 1 AND AUGUST 15, MAINTENANCE OF OCCUPIED GNATCATCHER HABITAT SHALL BE PERMITTED. AREAS RESTRICTED FROM SUCH ACTIVITIES SHALL BE STAKED OR FENCED UNDER THE SUPERVISION OF A QUALIFIED BIOLOGIST; AND
 2. BETWEEN MARCH 1 AND AUGUST 15, NO MAINTENANCE ACTIVITIES SHALL OCCUR WITHIN ANY PORTION OF THE SITE WHERE MAINTENANCE ACTIVITIES WOULD RESULT IN NOISE LEVELS EXCEEDING 60 dB(A) HOURLY AVERAGE AT THE EDGE OF OCCUPIED GNATCATCHER HABITAT. AN ANALYSIS SHOWING THAT NOISE GENERATED BY MAINTENANCE ACTIVITIES WOULD NOT EXCEED 60 dB(A) HOURLY AVERAGE AT THE EDGE OF OCCUPIED HABITAT MUST BE COMPLETED BY A QUALIFIED ACOUSTICIAN (POSSESSING CURRENT NOISE ENGINEER LICENSE OR REGISTRATION WITH MONITORING NOISE LEVEL EXPERIENCE WITH LISTED ANIMAL SPECIES) AND APPROVED BY THE CITY MANAGER AT LEAST TWO WEEKS PRIOR TO THE COMMENCEMENT OF MAINTENANCE ACTIVITIES. PRIOR TO THE COMMENCEMENT OF MAINTENANCE ACTIVITIES DURING THE BREEDING SEASON, AREAS RESTRICTED FROM SUCH ACTIVITIES SHALL BE STAKED OR FENCED UNDER THE SUPERVISION OF A QUALIFIED BIOLOGIST; OR
 3. AT LEAST TWO WEEKS PRIOR TO THE COMMENCEMENT OF MAINTENANCE ACTIVITIES, UNDER THE DIRECTION OF A QUALIFIED ACOUSTICIAN, NOISE ATTENUATION MEASURES (e.g.,

BERMS, WALLS) SHALL BE IMPLEMENTED TO ENSURE THAT NOISE LEVELS RESULTING FROM MAINTENANCE ACTIVITIES WILL NOT EXCEED 60 dB(A) HOURLY AVERAGE AT THE EDGE OF HABITAT OCCUPIED BY THE COASTAL CALIFORNIA GNATCATCHER. CONCURRENT WITH THE COMMENCEMENT OF MAINTENANCE ACTIVITIES AND THE MAINTENANCE OF NECESSARY NOISE ATTENUATION FACILITIES, NOISE MONITORING* SHALL BE CONDUCTED AT THE EDGE OF THE OCCUPIED HABITAT AREA TO ENSURE THAT NOISE LEVELS DO NOT EXCEED 60 dB(A) HOURLY AVERAGE. IF THE NOISE ATTENUATION TECHNIQUES IMPLEMENTED ARE DETERMINED TO BE INADEQUATE BY THE QUALIFIED ACOUSTICIAN OR BIOLOGIST, THEN THE ASSOCIATED MAINTENANCE ACTIVITIES SHALL CEASE UNTIL SUCH TIME THAT ADEQUATE NOISE ATTENUATION IS ACHIEVED OR UNTIL THE END OF THE BREEDING SEASON (AUGUST 16).

* Maintenance noise shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the maintenance activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. If not, other measures shall be implemented in consultation with the biologist and the ADD environmental designee, as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of maintenance equipment and the simultaneous use of equipment.

b. IF COASTAL CALIFORNIA GNATCATCHERS ARE NOT DETECTED DURING THE PROTOCOL SURVEY, THE QUALIFIED BIOLOGIST SHALL SUBMIT SUBSTANTIAL EVIDENCE TO THE CITY MANAGER AND APPLICABLE RESOURCE AGENCIES WHICH DEMONSTRATES WHETHER OR NOT MITIGATION MEASURES SUCH AS NOISE WALLS ARE NECESSARY BETWEEN MARCH 1 AND AUGUST 15 AS FOLLOWS:

1. IF THIS EVIDENCE INDICATES THE POTENTIAL IS HIGH FOR COASTAL CALIFORNIA GNATCATCHER TO BE PRESENT BASED ON HISTORICAL RECORDS OR SITE CONDITIONS, THEN CONDITION A.III SHALL BE ADHERED TO AS SPECIFIED ABOVE.
2. IF THIS EVIDENCE CONCLUDES THAT NO IMPACTS TO THIS SPECIES ARE ANTICIPATED, NO MITIGATION MEASURES WOULD BE NECESSARY.

PALEONTOLOGICAL RESOURCES

Potential impacts to paleontological resources would be reduced to below a level of significance through implementation of the following mitigation measures.

Mitigation Measure 4.7.1: Prior to initiating any maintenance activity where significant paleontological resources may occur within the APE, the following actions shall be taken.

4.7.1.1 Prior to Permit Issuance or Bid Opening/Bid Award

- A. Entitlements Plan Check
 - 1. Prior to permit issuance or Bid Opening/Bid Award, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for Paleontological Monitoring have been noted on the appropriate maintenance documents.
- B. Letters of Qualification have been submitted to ADD
 - 1. Prior to Bid Award, the applicant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the project and the names of all persons involved in the paleontological monitoring program, as defined in the City of San Diego Paleontology Guidelines.
 - 2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the paleontological monitoring of the project.
 - 3. Prior to the start of work, the applicant shall obtain approval from MMC for any personnel changes associated with the monitoring program.

4.7.1.2 Prior to Start of Maintenance

- A. Verification of Records Search
 - 1. The PI shall provide verification to MMC that a site specific records search has been completed. Verification includes, but is not limited to a copy of a confirmation letter from San Diego Natural History Museum, other institution or, if the search was in-house, a letter of verification from the PI stating that the search was completed.
 - 2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities.
- B. PI Shall Attend Pre-maintenance Meetings
 - 1. Prior to beginning any work that requires monitoring, the Applicant shall arrange a Pre-maintenance Meeting that shall include the PI, Maintenance Manager (MM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified paleontologist shall attend any grading/excavation related Pre-maintenance Meetings to make comments and/or

- suggestions concerning the Paleontological Monitoring program with the Maintenance Manager and/or Grading Contractor.
- a. If the PI is unable to attend the Pre-maintenance Meeting, the Applicant shall schedule a focused Pre-maintenance Meeting with MMC, the PI, RE, MM or BI, if appropriate, prior to the start of any work that requires monitoring.
2. Acknowledgement of Responsibility for Curation (CIP or Other Public Projects)
The applicant shall submit a letter to MMC acknowledging their responsibility for the cost of curation associated with all phases of the paleontological monitoring program.
 3. Identify Areas to be Monitored
 - a. Prior to the start of any work that requires monitoring, the PI shall submit a Paleontological Monitoring Exhibit (PME) based on the appropriate maintenance documents (reduced to 11x17) to MMC for approval identifying the areas to be monitored including the delineation of grading/excavation limits. Monitoring shall begin at depths below 10 feet from existing grade or as determined by the PI in consultation with MMC. The determination shall be based on site specific records search data which supports monitoring at depths less than ten feet.
 - b. The PME shall be based on the results of a site specific records search as well as information regarding existing known soil conditions (native or formation).
 - c. MMC shall notify the PI that the PME has been approved.
 4. When Monitoring Will Occur
 - a. Prior to the start of any work, the PI shall also submit a maintenance schedule to MMC through the RE indicating when and where monitoring will occur.
 - b. The PI may submit a detailed letter to MMC prior to the start of work or during maintenance requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final maintenance documents which indicate conditions such as depth of excavation and/or site graded to bedrock, presence or absence of fossil resources, etc., which may reduce or increase the potential for resources to be present.
 5. Approval of PME and Maintenance Schedule
After approval of the PME by MMC, the PI shall submit to MMC written authorization of the PME and Maintenance Schedule from the MM.

4.7.1.3 During Maintenance

- A. Monitor Shall be Present During Grading/Excavation/Trenching
 1. The monitor shall be present full-time during grading/excavation/trenching activities including, but not limited to mainline, laterals, jacking and receiving pits, services and all other appurtenances associated with underground utilities as identified on the PME that could result in impacts to formations with high and/or moderate resource sensitivity. **The Maintenance Manager is responsible for notifying the RE, PI, and MMC of changes to any maintenance activities such as in the case of a potential safety concern within the area being monitored. In certain circumstances OSHA safety requirements may necessitate modification of the PME.**

2. The PI may submit a detailed letter to MMC during maintenance requesting a modification to the monitoring program when a field condition such as trenching activities that do not encounter formational soils as previously assumed, and/or when unique/unusual fossils are encountered, which may reduce or increase the potential for resources to be present.
 3. The monitor shall document field activity via the Consultant Site Visit Record (CSV). The CSV's shall be faxed by the MM to the RE the first day of monitoring, the last day of monitoring, monthly (**Notification of Monitoring Completion**), and in the case of ANY discoveries. The RE shall forward copies to MMC.
- B. Discovery Notification Process
1. In the event of a discovery, the Paleontological Monitor shall direct the contractor to temporarily divert trenching activities in the area of discovery and immediately notify the RE or BI, as appropriate.
 2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery.
 3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible.
- C. Determination of Significance
1. The PI shall evaluate the significance of the resource.
 - a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required. The determination of significance for fossil discoveries shall be at the discretion of the PI.
 - b. If the resource is significant, the PI shall submit a Paleontological Recovery Program (PRP) and obtain written approval of the program from MMC, MC and/or RE. PRP and any mitigation must be approved by MMC, RE and/or MM before ground disturbing activities in the area of discovery will be allowed to resume.
 - (1). Note: For pipeline trenching projects only, the PI shall implement the Discovery Process for Pipeline Trenching projects identified below under "D."
 - c. If resource is not significant (e.g., small pieces of broken common shell fragments or other scattered common fossils) the PI shall notify the RE, or BI as appropriate, that a non-significant discovery has been made. The Paleontologist shall continue to monitor the area without notification to MMC unless a significant resource is encountered.
 - d. The PI shall submit a letter to MMC indicating that fossil resources will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that no further work is required.
 - (1). Note: For Pipeline Trenching Projects Only. If the fossil discovery is limited in size, both in length and depth; the information value is limited and there are no unique fossil features associated with the discovery area, then the discovery should be considered not significant.

- (2). Note, for Pipeline Trenching Projects Only: If significance cannot be determined, the Final Monitoring Report and Site Record shall identify the discovery as Potentially Significant.

D. Discovery Process for Significant Resources - Pipeline Trenching Projects

The following procedure constitutes adequate mitigation of a significant discovery encountered during pipeline trenching activities including but not limited to excavation for jacking pits, receiving pits, laterals, and manholes to reduce impacts to below a level of significance.

1. Procedures for documentation, curation and reporting
 - a. One hundred percent of the fossil resources within the trench alignment and width shall be documented in-situ photographically, drawn in plan view (trench and profiles of side walls), recovered from the trench and photographed after cleaning, then analyzed and curated consistent with Society of Invertebrate Paleontology Standards. The remainder of the deposit within the limits of excavation (trench walls) shall be left intact and so documented.
 - b. The PI shall prepare a Draft Monitoring Report and submit to MMC via the RE as indicated in Section 4.7.1.1-A.
 - c. The PI shall be responsible for recording (on the appropriate forms for the San Diego Natural History Museum) the resource(s) encountered during the Paleontological Monitoring Program in accordance with the City's Paleontological Guidelines. The forms shall be submitted to the San Diego Natural History Museum and included in the Final Monitoring Report.
 - d. The Final Monitoring Report shall include a recommendation for monitoring of any future work in the vicinity of the resource.

4.7.1.4 Night and/or Weekend Work

- A. If night and/or weekend work is included in the contract
 1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the Pre-maintenance meeting.
 2. The following procedures shall be followed.
 - a. No Discoveries
In the event that no discoveries were encountered during night and/or weekend work, The PI shall record the information on the CSVR and submit to MMC via the RE via fax by 8AM on the next business day.
 - b. Discoveries
All discoveries shall be processed and documented using the existing procedures detailed in Section 4.7.1.3 - During Maintenance.
 - c. Potentially Significant Discoveries
If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section 4.7.1.3 - During Maintenance shall be followed.
 - d. The PI shall immediately contact the RE and MMC, or by 8AM on the next business day to report and discuss the findings as indicated in Section 4.7.1.3-

B. unless other specific arrangements have been made.

- B. If night and/or weekend work becomes necessary during the course of maintenance
 - 1. The Maintenance Manager shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.
 - 2. The RE, or BI, as appropriate, shall notify MMC immediately.
- C. All other procedures described above shall apply, as appropriate.

4.7.1.5 Post Maintenance

- A. Preparation and Submittal of Draft Monitoring Report
 - 1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Paleontological Guidelines which describes the results, analysis, and conclusions of all phases of the Paleontological Monitoring Program (with appropriate graphics) to MMC via the RE for review and approval within 90 days following the completion of monitoring.
 - a. For significant paleontological resources encountered during monitoring, the Paleontological Recovery Program or Pipeline Trenching Discovery Process shall be included in the Draft Monitoring Report.
 - b. Recording Sites with the San Diego Natural History Museum
The PI shall be responsible for recording (on the appropriate forms) any significant or potentially significant fossil resources encountered during the Paleontological Monitoring Program in accordance with the City's Paleontological Guidelines, and submittal of such forms to the San Diego Natural History Museum with the Final Monitoring Report.
 - 2. MMC shall return the Draft Monitoring Report to the PI via the RE for revision or, for preparation of the Final Report.
 - 3. The PI shall submit revised Draft Monitoring Report to MMC via the RE for approval.
 - 4. MMC shall provide written verification to the PI of the approved report.
 - 5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.
- B. Handling of Fossil Remains
 - 1. The PI shall be responsible for ensuring that all fossil remains collected are cleaned and catalogued.
- C. Curation of artifacts: Deed of Gift and Acceptance Verification
 - 1. The PI shall be responsible for ensuring that all fossil remains associated with the monitoring for this project are permanently curated with an appropriate institution.
 - 2. The PI shall submit the Deed of Gift and catalogue record(s) to the RE or BI, as appropriate for donor signature with a copy submitted to MMC.
 - 3. The RE or BI, as appropriate shall obtain signature on the Deed of Gift and shall

- return to PI with copy submitted to MMC.
- 4. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.

D. Final Monitoring Report(s)

- 1. The PI shall submit two copies of the Final Monitoring Report to MMC (even if negative), within 90 days after notification from MMC of the approved report.
- 2. The RE shall, in no case, issue the Notice of Completion until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.

WATER QUALITY

Potential impacts to water quality would be reduced to below a level of significance through implementation of the following mitigation measures.

Mitigation Measure 4.8.1: Prior to commencement of any activity within a specific annual maintenance program, a qualified water quality specialist shall prepare an IWQA for each area proposed to be maintained. The IWQA shall be prepared in accordance with the specifications included in the Master Program. If the IWQA indicates that maintenance would impact a water pollutant where the existing level for that pollutant exceeds or is within 25 percent of the standard established by the San Diego Basin Plan, mitigation measures identified in Table 4.8-8 shall be incorporated into the IMP to reduce the impact to within the established standard for that pollutant.

**Table 4.8-8
MITIGATION MEASURES FOR REDUCED POLLUTANT REMOVAL CAPACITY**

<u>Mitigation Measure</u>	<u>Pollutant Type</u>						
	<u>Bacteria</u>	<u>Metals</u>	<u>Nutrients</u>	<u>Pesticides</u>	<u>Sediment</u>	<u>TDS/ Chloride Sulfates</u>	<u>Trash</u>
<u>Remove kelp on beaches</u>					● —	● —	
<u>Sweep streets</u>	● —	● —	● —	● —	● —	● —	● —
<u>Retrofit residential landscaping to reduce runoff</u>	● —	● —	● —		● —		
<u>Install artificial turf</u>	● —	● —	● —	● —	● —		● —
<u>Install inlet devices on storm drains</u>		● —	● —		● —		
<u>Replace impermeable surfaces with permeable surfaces</u>		● —	● —		● —		● —

**Table 4.8-8 (cont.)
 MITIGATION MEASURES FOR REDUCED POLLUTANT REMOVAL CAPACITY**

<u>Mitigation Measure</u>	<u>Pollutant Type</u>						
	<u>Bacteria</u>	<u>Metals</u>	<u>Nutrients</u>	<u>Pesticides</u>	<u>Sediment</u>	<u>TDS/ Chloride Sulfates</u>	<u>Trash</u>
<u>Install modular storm water filtration systems</u>		● —	● —	● —	● —	● —	● —
<u>Install storm water retention basins</u>		● —	● —	● —	● —	● —	● —
<u>Install catch basin media filters</u>		● —	● —		● —	● —	● —
<u>Create vegetated swales</u>	● —	● —	● —	● —	● —	● —	● —
<u>Restore wetlands</u>	● —	● —	● —	● —	● —	● —	● —
<u>Install check dams</u>		● —			● —		● —

Mitigation Measure 4.8.2: No maintenance activities within a proposed annual maintenance program shall be initiated before the City’s ADD Environmental Designee and state and federal agencies with jurisdiction over maintenance activities have approved the IMPs and IWQAs including proposed mitigation and BMPs for each of the proposed activities. In their review, the ADD Environmental Designee and agencies shall also confirm that the appropriate maintenance protocols have been incorporated into each IMP.

Mitigation Measure 4.8.3: Prior to commencing any activity where the IWQA indicates significant water quality impacts may occur, a pre-maintenance meeting shall be held on site with following in attendance: City’s SWD, MM, MMC, and MC. A qualified water quality specialist shall also be present. At this meeting, the water quality specialist shall identify and discuss mitigation measures, protocols and BMPs identified in the IWQA that must be carried out during maintenance. After the meeting, the water quality specialist shall provide DSD with a letter indicating that the applicable mitigation measures, protocols and BMPs identified in the IWQA have been appropriately implemented.

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