

# CURRENT LONG-TERM MAINTENANCE PERMIT FOR COLMA CREEK FLOOD CHANNEL

ISSUED IN 2017

CURRENT PERMITTEE: COUNTY OF SAN MATEO,  
DEPARTMENT OF PUBLIC WORKS

Relevant permits include:

- California Department of Fish and Wildlife Lake and Streambed Alteration Agreement, valid to Dec. 31, 2021. (Minor amendment issued August 11, 2017 is also included.)
- U.S. Army Corps of Engineers (USACE) Nationwide Permit, valid to March 18, 2022.
- The San Francisco Bay Regional Water Quality Control Board 401 Certification, no expiration date but is required by the USACE permit so is subject to the Nationwide Permit March 18, 2022 expiration date.

Additional documents include:

- Letter from the San Francisco Bay Conservation and Development Commission (BCDC) confirming that a permit is not required since project is outside of BCDC jurisdiction.

California Department of Fish and Wildlife Lake and  
Streambed Alteration Agreement, Amendment



California Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
Bay Delta Region  
7329 Silverado Trail  
Napa, CA 94558  
(707) 944-5500  
[www.wildlife.ca.gov](http://www.wildlife.ca.gov)

*EDMUND G. BROWN, Jr., Governor*  
*CHARLTON H. BONHAM, Director*



August 11, 2017

Mark Chow  
County of San Mateo, Public Works Department  
555 County Center, 5th floor  
Redwood City, CA 94063

Dear Mr. Chow:

**Amendment of Lake or Streambed Alteration Agreement, Notification No. 1600-2015-0463-R3, Colma Creek Flood Control Maintenance Project**

The California Department of Fish and Wildlife (CDFW) has received your request to amend Lake or Streambed Alteration Agreement 1600-2015-0463-R3 (Agreement) and the required fee in the amount of \$421 for a minor amendment. Your request to amend the Agreement includes modification of the last paragraph of the Project Description, page 5 of the Agreement to read as follows:

To compensate for permanent impacts to 0.018 acres ~~665 square feet~~ of wetland habitat that will occur during culvert maintenance activities, 0.05 acres of credits will be purchased at the San Francisco Bay Wetland Mitigation Bank ~~approximately 0.10 acre of tidal wetlands will be re-established along Colma Creek in Reach 3.~~

CDFW hereby agrees to amend the agreement as requested. All conditions in the Agreement remain in effect. This amendment is considered minor because it substitutes mitigation at a local wetland bank, a mitigation alternative proposed in the Notification and previously reviewed by CDFW, for the onsite wetland restoration alternative stated in the Agreement. In review of the original Notification, CDFW found the two mitigation alternatives to be functionally equivalent; however, onsite mitigation was selected in consultation with the County. After issuance of the Agreement, the U.S. Army Corps and Regional Water Quality Control Board requested that the County mitigate at the wetlands bank. This amendment therefore provides consistency with other agency permits.

Copies of the Agreement and this amendment must be readily available at project worksites and must be presented when requested by a CDFW representative or agency with inspection authority.

Mark Chow  
August 11, 2017  
Page 2 of 2

If you have any questions regarding this letter, please contact Randi Adair, Senior Environmental Scientist (Supervisory), at (707) 576-2786 or by email at [randi.adair@wildlife.ca.gov](mailto:randi.adair@wildlife.ca.gov) .

Sincerely,



Craig J. Weightman, Environmental Program Manager

cc: California Department of Fish and Wildlife  
Lieutenant James Ober

FOR DEPARTMENT USE ONLY				
Date Received	Fee Enclosed	Approved?	Date Approved	Expiration Date
8-7-2017	\$ 421.00	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8/11/2017	12/31/2021



V# 02510047  
County of San Mateo

STATE OF CALIFORNIA  
DEPARTMENT OF FISH AND WILDLIFE

Adrian  
H. Olson



**REQUEST TO AMEND  
LAKE OR STREAMBED ALTERATION AGREEMENT**

Complete EACH field and include all required enclosures. Attach additional pages, if necessary.

**1. APPLICANT REQUESTING AMENDMENT**

*If the applicant is a business, agency, or utility, please include the name of the applicant's representative, who should be an employee of the applicant.*

Name	Mark Chow			Fish & Wildlife
Business/Agency	County of San Mateo, Department of Public Works			
Street Address	555 County Center, 5th Floor			AUG 07 2017
City, State, Zip	Redwood City, CA 94063			
Telephone	650-599-1489	Fax	650-361-8220	Napa
Email	mchow@smcgov.org			

**2. PROJECT INFORMATION**

Agreement Number	1600-2015-0463
Expiration Date	December 31, 2021

**3. AMENDMENT REQUEST AND FEE**

Check the applicable box below and refer to the current fee schedule to determine the appropriate amendment fee.

- A minor amendment is one that would not significantly modify the scope or nature of any project covered by the agreement or any measure included in the agreement to protect fish and wildlife resources.
- A major amendment is one that would significantly modify the scope or nature of any project covered by the agreement or any measure included in the agreement to protect fish and wildlife resources, or require additional environmental review.

Minor Amendment  Major Amendment

**Note: The Department may not process requests for amendments until it receives the correct fee.**

REQUEST TO AMEND LAKE OR STREAMBED ALTERATION AGREEMENT

4. AMENDMENT DESCRIPTION

A. Describe the amendment in detail

- Include any structures (e.g., rip-rap, culverts, or channel clearing) that will be placed, built, or completed in or near the stream, river, or lake.
- Specify the type and volume of materials that will be used.
- If water will be diverted or drafted, specify the purpose or use.

Enclose diagrams, drawings, plans, and/or maps that provide all of the following: site specific construction details; the dimensions of each structure and/or extent of each activity in the bed, channel, bank or floodplain; an overview of the entire project area (i.e., "bird's-eye view") showing the location of each structure and/or activity, significant area features, and where the equipment/machinery will enter and exit the project area.

See attachment.

Continued on additional page(s)

B. Explain the reason(s) for the amendment request

See attachment.

Continued on additional page(s)

3. SIGNATURE

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

  
Signature of Applicant or Applicant's Authorized Representative

8/3/2017  
Date

MARK CHOW  
Print Name

**Note: If approved, a copy of this form must be available at the work site with the original agreement.**

California Department of Fish and Wildlife Lake and  
Streambed Alteration Agreement



California Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
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EDMUND G. BROWN, Jr., Governor  
CHARLTON H. BONHAM, Director



July 5, 2017

Mark Chow  
County of San Mateo Public Works Department  
555 County Center, 5th Floor  
Redwood City, CA 94063

Dear Mr. Chow:

**Final Lake or Streambed Alteration Agreement, Notification No. 1600-2015-0463-R3, Colma Creek Flood Control Maintenance Project**

Enclosed is the final Streambed Alteration Agreement (Agreement) for the Colma Creek Flood Control Maintenance Project (Project). Before the California Department of Fish and Wildlife (CDFW) may issue an Agreement, it must comply with the California Environmental Quality Act (CEQA). In this case, CDFW acting as a responsible agency filed a Notice of Determination (NOD) within five working days of signing the Agreement. The NOD was based on information contained in the Initial Study/Mitigated Negative Declaration prepared by the lead agency.

Under CEQA, the filing of an NOD triggers a 30-day statute of limitations period during which an interested party may challenge the filing agency's approval of the Project. You may begin the Project before the statute of limitations expires if you have obtained all necessary local, state, and federal permits or other authorizations. However, if you elect to do so, it will be at your own risk.

If you have any questions regarding this letter, please contact Randi Adair, Senior Environmental Scientist (Supervisory) at (707) 576-2786 or by email at [randi.adair@wildlife.ca.gov](mailto:randi.adair@wildlife.ca.gov).

Sincerely,



Craig J. Weightman, Environmental Program Manager

cc: Horizon Water and Environment  
Ken Schwarz  
[ken@horizonh2o.com](mailto:ken@horizonh2o.com)

California Department of Fish and Wildlife  
Lieutenant Ober

**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE**

BAY DELTA REGION  
7329 SILVERADO TRAIL  
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[WWW.WILDLIFE.CA.GOV](http://WWW.WILDLIFE.CA.GOV)



**STREAMBED ALTERATION AGREEMENT**  
NOTIFICATION No. 1600-2015-0463-R3  
Colma Creek

COUNTY OF SAN MATEO  
COLMA CREEK FLOOD CONTROL MAINTENANCE PROJECT

This Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Wildlife (CDFW) and the County of San Mateo (Permittee) as represented by Mark Chow.

**RECITALS**

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, Permittee notified CDFW on December 30, 2015 that Permittee intends to complete the project described herein.

WHEREAS, pursuant to FGC section 1603, CDFW has determined that the project could substantially adversely affect existing fish or wildlife resources and has included measures in the Agreement necessary to protect those resources.

WHEREAS, Permittee has reviewed the Agreement and accepts its terms and conditions, including the measures to protect fish and wildlife resources.

NOW THEREFORE, Permittee agrees to complete the project in accordance with the Agreement.

**PROJECT LOCATION**

This Agreement authorizes routine maintenance on Colma Creek, which falls under the jurisdiction and responsibility of Permittee, and reestablishing and restoration of a tidal wetland along Colma Creek. Routine maintenance locations are located along 5.4 miles of Colma Creek, tributary to San Francisco Bay, between A Street downstream to Navigable Slough:

**Reach 1. A Street/El Camino Real to Spruce Avenue**

This segment consists entirely of a concrete lined channel and concrete box culverts. Downstream of A Street, the channel is culverted and then daylighted from the entrance to the Holy Cross Cemetery along Mission Road. The channel

is also culverted beneath the South San Francisco BART station and transitions to an open trapezoidal concrete channel immediately downstream of the BART station. This reach is not tidally influenced.

**Reach 2. Spruce Avenue to Produce Avenue**

Colma Creek flows through a concrete U-shaped channel. Approximately one foot of sediment has deposited across the channel bed, though in some locations deposition is greater. This section of Colma Creek is tidally influenced, but is only inundated during high tides.

**Reach 3a and Reach 3b. U.S. Highway 101 to the confluence of Navigable Slough**

At the Produce Avenue crossing, Colma Creek transitions to an earthen channel. The channel is approximately 70 to 80 feet wide, and the bed is comprised of soft sediments. The banks have a narrow band of emergent marsh dominated by pickleweed (*Sarcocornia pacifica*), which transitions to an upland community dominated by ruderal species. The channel widens as Colma Creek flows toward the Bay. At the mouth of the creek, there is a wetland complex characterized by broad expanses of mudflat habitat with narrow bands of intertidal marsh, rocky intertidal and upland habitats along the shoreline-Bay ecotone.

## **PROJECT DESCRIPTION**

Under this Agreement, Permittee will conduct "routine maintenance activities", generally defined as periodic activities necessary to maintain the water transport capacity of streams, channels and flood control channels, and the structural and functioning integrity of existing flood control channels and structures on or affecting streams. Routine maintenance activities include sediment, silt, trash and debris removal to clear channel obstructions, vegetation management, removal of non-native vegetation, culvert repair and bank protection to reduce erosion and concrete repair in hardened channels.

Routine maintenance activities authorized under this Agreement are stated in Table 1 and limited to the following:

- *Removal of Sediment in Reach 2* – Utilizing mechanized equipment to remove sediment in the creek in earthen and concrete-lined channels; utilizing hand tools for minor sediment removal in concrete-lined and earthen channels to maintain channel capacity. Removal shall only occur when sediment accumulates more than two feet above the channel bottom. Sediment removal is limited to 400 cubic yards and 600 linear feet per year;
- *Removal of Obstructions around Structures and Facilities in Reach 1, 2 and 3* – Utilizing hand tools or mechanized equipment for removal of trash, debris, non-living vegetation (e.g. leaves, uprooted cattails) and fallen trees and branches that could inhibit flows or damage structures within or crossing the creeks;

- *Vegetation Management in Reach 1, 2 and 3* – Utilizing hand tools or mechanical vegetation cutters for removal of living vegetation in the channel and on the lower half of the creek banks. Trees and woody vegetation greater than 6-inch diameter at breast height (dbh) shall only be trimmed, not removed, and pickleweed or other native saltmarsh vegetation shall not be removed;
- *Removal of Invasive, Non-native Plants in Reach 1, 2, 3a and 3b* – Removal of invasive, non-native plants and shrubs (not trees greater than 6 inches dbh) utilizing hand tools. Removal of this vegetation with mechanized equipment incidental to removing sediment;
- *Erosion Repair, Control and Planting in Reach 1, 2 and 3* – Placement of erosion control fabrics and other bio-engineered systems and planting of native vegetation to control bank erosion and slippage at new areas with erosion. Placement of rip-rap only to supplement existing outfall hardscape sites and for energy dissipation at the repaired culverts (no new rip-rap shall be installed except as described below);
- *Repair of Hardened Channel in Reach 1 and 2* – Repair failed sections of concrete wall revetments, concrete channels and rock riprap using concrete patching or reforming of the channel wall, periodic cleaning of weep holes and graffiti abatement (Reach 1, 2 and 3);
- *Culvert Maintenance and Repair in Reach 3a* – Removal of sediment and debris utilizing mechanized or hand tools; replacing two culverts with reinforced concrete pipe (RCP) or high density polyethylene (HDPE) pipe of the same diameter as existing pipes; adding rock slope protection (RSP) or replacing sack concrete with RSP at 12 culvert outlets and installing duckbill check valves at all 14 culverts outlets.
- *Access Road and Top-of-Bank Structures in Reach 1, 2 and 3* – Removal of debris, repair of access roads and repair of fencing on top-of-bank.

**Table 1: Routine Maintenance Activities**

Maintenance Activities	Colma Creek Flood Control Segment			
	Reach 1: A St./El Camino Real downstream to Spruce Ave.	Reach 2: Spruce Ave. downstream to Produce Ave.	Reach 3a: Produce Ave. downstream to Utah Avenue	Reach 3b: Utah Avenue downstream to Creek Mouth
Sediment removal on channel bed		X		
Repair or replacement of culverts; Clearing blocked culvert outfalls			X	
Vegetation management on channel banks and bed	X	X	X	X
Repair or maintenance of concrete/hardened channel banks and bed	X	X		
Install and maintain trash capture devices	X	X	X	X
Removal of obstructions (debris)	X	X	X	X
Installing and maintaining fences on channel banks	X	X	X	X
Repair access roads	X	X	X	X
As needed graffiti abatement	X	X	X	X

Equipment used will vary by maintenance activity and could include excavator, skip loader, mechanical compactor, back hoe, dump truck, hand mower, powered tools, and manual hand tools such as shovels, wheelbarrows, pick trimmers and mechanical cutters. No heavy equipment will operate in the active (flowing) stream channel but could operate in wetland areas during culvert repair and maintenance. For sediment removal work in Reach 2, a mini track loader could be operated in the channel (during low tide or when flows are minimal) to push sediment toward the excavator or construct temporary berms in the channel.

To compensate for impacts to 665 square feet of wetland habitat that will occur during culvert maintenance activities, approximately 0.10 acre of tidal wetlands will be re-established along Colma Creek in Reach 3.

## **PROJECT IMPACTS**

Existing fish or wildlife resources the routine maintenance activities could potentially substantially adversely affect include: Ridgway's rail (*Rallus longirostris obsoletus*), a species listed as endangered under the California Endangered Species Act (CESA) and the Endangered Species Act (ESA) and fully protected under FGC; green sturgeon (*Acipenser medirostris*) listed as threatened under ESA and designated as a California Species of Special Concern (SSC); longfin smelt (LFS) (*Spirinchus thaleichthys*) listed as threatened under CESA and candidate under ESA; nesting birds; permanent and temporary impacts to tidal wetland habitat and emergent vegetation.

The adverse effects the project could potentially have on the fish or wildlife resources identified above, without implementation of the Measures to Protect Fish and Wildlife Resources specified below, include: potential increase in sediment transport during project activities; increase in turbidity during project activities; direct take of species during project activities; loss of benthic community; temporary loss or impediment of terrestrial and aquatic animal species travel routes due to temporary structures; temporary loss of emergent and wetland vegetation; and disturbance to wildlife associated with construction noise.

## **MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES**

### **1. Administrative Measures**

Permittee shall meet each administrative requirement described below.

- 1.1 Documentation at Work Sites. Permittee shall make the Agreement, any extensions and amendments to the Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the work sites at all times. Such materials shall be presented to CDFW personnel, or personnel from other state, federal, or local agencies, upon request.

- 1.2 Providing Agreement to Persons at Work Sites. Permittee shall provide copies of the Agreement and any extensions and amendments to the Agreement to all persons who will be working on the project at the work site on behalf of Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.
- 1.3 Notification of Conflicting Provisions. Permittee shall notify CDFW if Permittee determines or learns that a provision in the Agreement might conflict with a provision imposed on the project by another local, state, or federal agency. In that event, CDFW shall contact Permittee to resolve any conflict.
- 1.4 Work Site Entry and Inspections. Permittee agrees that CDFW personnel may enter the work site(s) at any time to inspect routine maintenance activities performed and to verify compliance with this Agreement.
- 1.5 Additional Measures. CDFW personnel or its agents may inspect the routine maintenance activities performed at any of the work sites at any time. As a result of field inspection, CDFW, at its sole discretion, may require that additional measures be applied to specific activities to protect sensitive biological resources. Such measures may be amended into this Agreement with the agreement of both parties, or if an exception to authorized activities is identified, Permittee may be asked to submit separate written notification to CDFW Bay Delta Region pursuant to Measure 1.7, below.
- 1.6 Authorized Routine Maintenance Activities. Only those activities specifically described in the Project Description shall be conducted under this Agreement.
- 1.7 Exceptions to Authorized Activities. Permittee shall submit separate written notification (Forms FG 2023 and FG 2024) pursuant to Section 1602 of the FGC, together with the required fee prescribed in the CDFW Streambed Alteration Agreement fee schedule, and otherwise follow the normal notification process prior to the commencement of work activities in all cases where one or more of the following conditions apply:
  - The proposed work does not meet the criteria established for routine maintenance activities in the Project Description of this Agreement;
  - The nature of the proposed work is substantially modified from the work described in the Project Description of this Agreement;

- CDFW advises Permittee that conditions affecting fish and wildlife resources have substantially changed at a specified work site or that such resources would be adversely affected by the proposed maintenance activity; and/or
  - The proposed work would adversely impact a State of California (State) Species of Special Concern or State or federally listed rare, threatened, endangered or candidate species or its habitat.
- 1.8 Separate Notification-Replacement Structures. Installation of new structural features or trash racks, or replacement of existing structural features not otherwise described in this Agreement, is subject to a separate Lake and Streambed Alteration Agreement and further environmental review if there is a reasonable possibility that the project will have a significant impact on the environment (refer to CEQA Guidelines section 15300.2).
- 1.9 Unauthorized Take. This Agreement does not authorize the take of any State or federally listed threatened species, endangered species, SSC, or candidate species. If CDFW determines, or Permittee finds that there are such species on the work site, Permittee shall notify CDFW and/or US Fish and Wildlife Service (USFWS), as appropriate. Permittee shall immediately cease work until CDFW and other applicable agencies deem that the concern over special status species has been resolved. This Agreement does not authorize capture and/or handling of listed species.

## **2. Avoidance and Minimization Measures**

To avoid or minimize adverse impacts to fish and wildlife resources identified above, Permittee shall implement each measure listed below.

### **Work Periods**

#### **Reach 1 and Reach 2**

- 2.1 Seasonal Work Period for Reaches 1 and 2. To minimize adverse impacts to fish and wildlife and their habitats, work within this area shall be limited to June 1 to October 31. Re-vegetation and other minor maintenance activities (e.g. fence repair, access road grading and removal of obstructions if causing erosion or emergency situation) are not limited to this work period.

#### **Reach 3**

- 2.2 Seasonal Work Period for Reach 3. Work within Reach 3 and adjacent to any marsh habitat in any Reach shall be confined to the

period of September 1 to October 31 to avoid potential impacts to Ridgway's rails (RIRA) and LFS.

- 2.2.1 Variance to Seasonal Work Period. If construction within the Seasonal Work Period as stated in Measure 2.2 is not feasible, protocol-level surveys for RIRA shall be conducted in areas where construction occurs within 700 feet of tidal marsh habitat. If breeding RIRA are determined to be present, activities within 700 feet of an identified calling center shall be restricted to the period between September 1 and November 30, or as otherwise approved by CDFW in writing. No construction work shall occur during the RIRA breeding season within 700 feet of a RIRA calling center unless approved in writing by CDFW.
- 2.2.2 Rail Surveys. Permittee shall submit to CDFW the rail survey methodology and results prior to commencement of project activities.
- 2.2.3 Seasonal Work Period if Rails Are Not Present. Work within these locations and adjacent to marsh habitat shall be confined to the period of June 1 to October 31 if the CDFW-approved protocol-level rail surveys have been conducted and confirm there are no breeding rails within 700 feet of the rail calling center.
- 2.3 Work Period for Debris Removal. Minor debris removal that does not require excavation, and that is immediately necessary to prevent flooding, may be conducted at any time.
- 2.4 Completion by End of Seasonal Work Period. Routine maintenance activities shall not be initiated unless there is a high likelihood that it can be completed before the end of the seasonal work window designated in Measure 2.1 and/or 2.2. After October 1 of each year, projects that have not been started or are still underway shall be evaluated to ensure they can be completed before the end of the seasonal work period. Those projects unlikely to be completed before the end of the seasonal work windows shall not be started.
- 2.5 No Work around Extreme High Tide Periods. To avoid impacts to rails, activities within or adjacent to rail habitat shall not occur within two hours before or after extreme high tides (6.5' or above, as measured at the Golden Gate Bridge) when the marsh plain is inundated, because protective cover for rails is limited and activities could prevent them from reaching available cover.

## Following Measures Shall Apply to All Locations in Project Area

### Construction Measures

- 2.6 Work During Dry Period Only. The work period for completing the work within the creeks shall be timed with awareness of precipitation forecasts. No work shall occur during wet weather. Wet weather is defined as when there has been ¼ inch of rain in a 24-hour period. In addition, no work shall occur during a dry out period of 24 hours after the above referenced wet weather.
- 2.7 Weather Forecast. Permittee shall monitor the seventy-two hour forecast from the National Weather Service (<http://www.nws.noaa.gov>). When there is a forecast of more than 40% chance of rain or at the onset of any unanticipated precipitation, the Permittee shall remove all equipment and shall implement erosion and sediment control measures and all routine maintenance activities shall cease.
- 2.8 No Equipment in Channel. No equipment shall be operated in wetted portions of the creek, at any time except as may be necessary to construct a dewatering system or divert water flow around the work site with the prior written permission of CDFW.
- 2.9 Equipment in Wetland Marsh Areas. Project activities related to culvert repair, replacement and maintenance in Reach 3 may require large equipment to operate within the wetland areas. Equipment in this area shall operate on mats or shall be specialized low ground pressure equipment.
- 2.10 Existing Access Roads. Access to the routine maintenance activity site shall be via existing roads and access ramps. Any other heavy equipment shall be positioned on an existing paved or trail access road located above the top-of-bank.
- 2.11 Removal of Native Material. Except as explicitly described in this Agreement, the removal of native soils, rock, gravel, vegetation, and vegetative debris from the stream bed or stream banks is prohibited.
- 2.12 Removal of Trash and Debris. Permittee shall remove all raw construction materials and wastes from work sites following the completion of maintenance activities. Food-contaminated wastes generated during work shall be removed on a daily basis to avoid attracting predators to work sites. All temporary fences, barriers, and/or flagging shall be completely removed from work sites and properly disposed of upon completion of maintenance activities.

Permittee or its contractors shall not dump any litter or construction debris within the riparian/stream zone.

### **Wildlife Protection Measures**

- 2.13 **CDFW-Approved Qualified Biologist(s) and Biological Monitor(s).** Within a minimum of 30 days prior to initiating special-status surveys within the project area, Permittee shall submit to CDFW for approval, the names and resumes of all biologists and biological monitors (see definition in Exhibit A) involved in conducting surveys and/or monitoring work.
- 2.14 **Education Session before Commencement of Work.** A qualified biologist or biological monitor (see definition in Exhibit A) shall hold an annual training session for staff responsible for performing routine maintenance activities. Staff shall be trained to recognize special-status species and their habitats. Staff shall also be trained to use protective measures to ensure that such species are not adversely impacted by routine maintenance activities. The training program shall be updated at least annually to reflect current special-status species management practices. At least one staff person with up-to-date training in special-status species protective measures shall be present at each work site at all times. Any personnel joining the work crew later shall receive the same training before beginning work. The penalties for noncompliance of conditions in this Agreement shall be relayed to all project personnel.
- 2.15 **Designation of Work Area.** Prior to routine maintenance activities, a biological monitor shall clearly mark/flag or erect temporary construction fencing to designate the work area and to delineate the areas that shall be avoided. Flagging and or temporary construction fencing shall be removed immediately after the completion of construction work.
- 2.16 **Nesting Bird Survey.** If project occurs during the nesting season of raptors and migratory birds, a focused survey for active nests of such birds shall be conducted by the CDFW-approved qualified biologist within 7 days prior to the beginning of project-related activities. Surveys shall be conducted in all suitable habitat located at project work sites and in staging and storage areas. The minimum survey radii surrounding the work area shall be the following: i) 250 feet for passerines; ii) 500 feet for small raptors such as accipiters; iii) 1,000 feet for larger raptors such as buteos. The bird survey methodology and the results of the survey shall be submitted to CDFW prior to commencement of project activities.

Nesting seasons are typically defined as followed: i) March 15 to August 30 for smaller bird species such as passerines; ii) February 15 to September 15 for raptors.

- 2.17 Active Nests. If active nests are found, the Permittee shall consult with the CDFW and the United States Fish and Wildlife Service (USFWS) regarding appropriate action to comply with the Migratory Bird Treaty Act of 1918 and the FGC of California. If a lapse in project-related work of 15 days or longer occurs, another focused survey shall be conducted before project work is reinitiated. If active nests are found, the Permittee shall consult with the CDFW and the USFWS prior to resumption of project activities.
- 2.18 Active Nest Buffers. Active nest sites shall be designated as "Ecologically Sensitive Areas" and protected (while occupied) during routine maintenance activities with the establishment of a temporary fence or construction barrier or flagging surrounding the nest site. The typical minimum distances of the protective buffers surrounding each identified nest site is usually the following: i) 1,000 feet for large raptors such as buteos; ii) 250 feet for small raptors such as accipiters; iii) 250 feet for passerines. A biological monitor shall monitor the behavior of the birds (adults and young, when present) at the nest site to ensure that they are not disturbed by project-related activities. Nest monitoring shall continue during project-related construction work until the young have fully fledged, are no longer being fed by the parents and have left the nest site, as determined by a the approved biological monitor.
- 2.19 Nesting Habitat Removal or Modification. No trees, shrubs or wetland and marsh habitat shall be disturbed, trimmed or pruned that contain active bird nests until all eggs have hatched, and young have fully fledged (are no longer being fed by the adults, and have completed left the nest site). No habitat modification shall occur within the ESA-fenced nest zone even if nest continues to be active beyond the typical nesting season for the species (refer to Measure 2.16), until the young have fully fledged and will no longer be adversely affected by the project.
- 2.20 Other Surveys. If habitat for rare plants, or other special-status species exists at a given work site and such species are known to exist within reasonable dispersal distance (see definition in Exhibit A) of the work area, a qualified biologist shall conduct a reconnaissance-level survey (if a survey is not specified in this Agreement) within 48 hours of the commencement of routine maintenance activities. At work sites where heavy equipment will be

used, upland access routes and staging areas shall also be surveyed.

- 2.21 Special-status Species Occurrence. If special-status species are found during surveys or construction and could be adversely impacted by work activities, all work shall cease and Permittee shall notify CDFW prior to project activities. CDFW reserves the right to provide additional provisions to this Agreement in the event that special-status species are discovered.
- 2.22 Leave Wildlife Unharmd. If any wildlife is encountered during routine maintenance activities, said wildlife shall be allowed to leave the project site unharmed.
- 2.23 Monitor on Site. If a special-status species is found within the project area, a CDFW-approved biological monitor and/or qualified biologist shall be present on the project site while all project activities are being conducted.
- 2.24 Injury or Mortality of Special-Status Species. If Permittee or its employees, contractors, or agents injures or kills a special-status species, or finds any such animal injured or dead, all activities in the work area shall immediately cease, and CDFW and USFWS shall be notified by telephone within 30 minutes of the discovery. A written report detailing the time, location, and general circumstances under which the dead or injured individual animal was found shall be submitted to CDFW and the USFWS no later than five (5) business days following the incident.
- 2.25 Stop Work Authority. The biological monitor or qualified biologist shall have the responsibility and authority of stopping the project if any crews or personnel are not complying with the provisions outlined in this Agreement.
- 2.26 Wetland Establishment and Restoration. Restoration activities described in the project description shall be completed by the end of the permit term.

### **Vegetation Removal Measures**

- 2.27 Vegetation Removal. With the exception of culvert maintenance work which will impact pickleweed and compensation will occur for those impacts, if any other areas with pickleweed or vegetation within 50 feet from the edge of pickleweed need to be cleared for routine maintenance activities, Permittee shall notify CDFW with an Amendment Request. CDFW will review the written Amendment

Request and may require additional measures to protect fish and wildlife resources as a condition for granting the vegetation removal. Any additional measures shall be made part of this Agreement

- 2.28 Qualified Biologist or Biological Monitor On-site. A qualified biologist or biological monitor (see Measure 2.13) shall be present during all routine maintenance activities at sites within pickleweed habitat or within 50 feet of pickleweed habitat. The biologist will document compliance with the avoidance and minimization measures. The biologist shall have authority to stop project activities if deemed necessary for any reason to protect any special status species. If the biologist has requested work stoppage because of any species, the CDFW shall be notified within 24 hours.
- 2.29 Vegetation Disturbance. Disturbance or removal of vegetation shall not exceed the minimum necessary to complete operations. Vegetation outside the routine maintenance work area shall not be removed or damaged without prior consultation and written approval of a CDFW representative.
- 2.30 Trimming of Vegetation. Trimming is defined herein as the removal of vegetation to the extent necessary to allow a specific level of access and for specific types of equipment (e.g. excavator) or to restore normal streamflow. There shall be no vegetation removal in excess of what is necessary to allow the level of access needed or to restore normal streamflow. Branches and/or limbs overhanging the channel and impacting water flows shall be properly pruned. Only those branches in the lower third of any woody plant and less than four (4) inches in diameter may be trimmed to accommodate maintenance activities. No vegetation on the bank or top-of-bank shall be removed by excavation or cutting off below the soil. All pruned material shall be removed from the area and properly disposed of.
- 2.31 Emergent Vegetation and Trees in Channel. Trees, shrubs and emergent wetland plants may be removed from natural channels if they are below ordinary high water and are restricting the capacity of the stream channel and are causing erosion or flooding. Emergent herbaceous vegetation may be removed by excavation using heavy equipment or hand tools, but shall be the minimum necessary to restore normal streamflow and is only allowable when incidental to the removal of accumulated sediment. Emergent herbaceous vegetation may be removed when not incidental to the removal of accumulated sediment when vegetation is restricting the capacity of the stream channel and is causing flooding and/or erosional events. In such cases, removal shall be completed by hand or with hand

tools, include the minimum necessary to restore normal streamflow, and avoid the removal of native material (soils, rock, gravel). Prior to removal, a qualified biologist shall first survey the area to determine that no sensitive species are present. All pruned material shall be removed from the area and properly disposed of.

- 2.32 Disposal of Invasive Plant Material. Invasive plant material removed during routine maintenance activities shall be bagged and appropriately incinerated or disposed of in a landfill or permitted composting facility.

### **Flow Diversion Measures**

- 2.33 Flow Diversions and Dewatering When Water is Present. In Reach 2, sediment removal shall be during late summer months when storm flows in the channel are minimal or absent. Sediment removal shall be conducted only at low tide when utilizing a sediment berm and silt curtain to isolate the project area.

In all other areas when working within the channel, or when conducting culvert maintenance and replacement activities, the water shall be diverted around the work area to isolate it using silt curtains and coffer dams. To isolate the work area, water tight coffer dams shall be constructed around the work area and water shall be pumped out of the work area. Extracted water can be discharged to upland areas nearby to water plants/landscaping or be contained and transported to a local wastewater treatment facility for treatment. Pumped water could also be discharged back to the channel in accordance with the San Francisco Bay Region Municipal Regional Stormwater NPDES Permit and Measure 2.36. Cofferdams shall be constructed of a non-erodible material which does not contain soil or fine sediment. Cofferdams and the stream diversion system shall remain in place and functional throughout the construction period. If, the coffer dams or stream diversion fail, they shall be repaired immediately. Flow diversions shall be done in a manner that prevents pollution and/or siltation to the creek.

- 2.34 Water Surface Elevation. During dewatering of the channel, the decrease in water surface elevation (WSE) shall be controlled such that WSE does not change at a rate that increases turbidity to the creek that could be deleterious to aquatic life and the likelihood of stranding aquatic life up- and downstream of the creek.

- 2.35 Amount of Streamflow Bypassed. When bypassing stream flow around work area, stream flow below the maintenance site shall be maintained similar to the unimpeded flow at all times.

- 2.36 Pump Contaminated Material. All contaminated (including muddy) water from the excavation and/or project activities shall be pumped into a holding facility or into a settling pond located in flat stable areas outside of the stream channel or pumped up on a stable grassy area where the water clears prior to flowing back into the stream.
- 2.37 Cease Project for Elevation of Turbidity Levels. Upon CDFW determination that turbidity/siltation levels resulting from project related activities constitute a threat to aquatic life, activities associated with the turbidity/siltation shall be halted until effective CDFW-approved control devices are installed or abatement procedures are initiated. CDFW may take enforcement action if appropriate turbidity and siltation control measures are not deployed.
- 2.38 Check for Stranded Aquatic Life. The biological monitor shall check daily for stranded aquatic life as the water level in the dewatering area drops. All reasonable efforts shall be made to capture and move all stranded native aquatic life observed in the dewatered areas. Capture methods may include fish landing nets, dip nets, buckets and by hand. Captured aquatic life shall be released immediately in the closest body of water adjacent to the work site. This condition does not allow for the take or disturbance of any state or federally listed species.
- 2.39 Pumped Diversions. If water is pumped around the work site, the suction end of the intake pipe shall be fitted with fish screens meeting CDFW and National Oceanic and Atmospheric Administration (NOAA) criteria to prevent entrainment or impingement of small fish. For more information on fish screen criteria please visit:  
[http://www.westcoast.fisheries.noaa.gov/fish\\_passage/solutions/index.html](http://www.westcoast.fisheries.noaa.gov/fish_passage/solutions/index.html) and  
[http://www.dfg.ca.gov/fish/Resources/Projects/Engin/Engin\\_ScreenCriteria.asp](http://www.dfg.ca.gov/fish/Resources/Projects/Engin/Engin_ScreenCriteria.asp).
- 2.40 Relocation of Fish and Amphibians. Prior to dewatering the site, the qualified biologist shall capture and relocate fish species if present. Measures shall be taken to minimize harm and mortality to listed fish resulting from fish relocation and dewatering activities. Capture methods may include, fish landing nets, dip nets, buckets and by hand.
- 2.41 Release Locations Criteria. Prior to capturing fish, the most appropriate release location(s) shall be determined, using the following criteria:

- 2.41.1 Temperature. Water temperature shall be similar to the capture location.
- 2.41.2 Habitat. There shall be ample cover habitat for the captured fish.
- 2.41.3 Exclusion from Work Site. There shall be low likelihood for the fish to reenter the work site or become impinged on the exclusion net or screen.

### **Erosion and Sediment Control**

- 2.42 Stockpiling of Soil. No castings or spoils shall be placed on the stream side of the bank or levee where it could enter the stream or cover wetland areas. If soils are stockpiled, the stockpile shall be located away from the creek and a straw waddle or other erosion control device shall surround the stockpile until it is disposed of or used.
- 2.43 Silt Control Measures. Silt control measures shall be utilized throughout all phases of the project where silt and/or earthen fill threaten to enter Waters of the State.
- 2.44 Silt Control Effectiveness. Silt control structures shall be monitored daily for effectiveness and shall be repaired or replaced as needed. Passage of sediment beyond the sediment barrier is prohibited. If the sediment barrier fails to retain sediment, construction activities shall cease and corrective measures shall be employed.
- 2.45 Erosion Control Best Management Practices (BMPs). All exposed soils within the work area shall be stabilized immediately following the completion of earthmoving activities to prevent erosion into the stream channel. Erosion control BMPs, such as silt fences, straw hay bales, and broadcasted straw shall be used. Erosion control fabrics shall be constructed of biodegradable materials, such as coir or jute, unless otherwise authorized by CDFW. Erosion control BMPs shall be monitored during and after each storm event for effectiveness. Modifications, repairs and improvements to erosion control BMPs shall be made as needed to protect water quality. At no time shall silt laden runoff be allowed to enter the stream or directed to where it may enter the stream.
- 2.46 Vegetation Replacement. All non-tidal exposed/disturbed areas and access points draining to the stream zone and left barren of vegetation following maintenance activities shall be re-vegetated with native plants or seeded with a blend of erosion control grass seeds and locally native vegetation. Non-native grass species shall not

exceed 25% of the total seed mix by count, and all nonnative grass seed shall be sterile (i.e. incapable of reproducing). Re-vegetation shall be completed immediately (within two weeks) after construction activities cease. Seed shall be covered with broadcast straw, jute netting, coconut fiber blanket or a similar erosion control blanket/mulch. Erosion control blankets with monofilament or woven plastic strands shall not be used.

- 2.47 Prohibited Plant Species. Permittee shall not plant, seed, or otherwise introduce invasive plant species. Prohibited exotic plant species include those categorized as "High" and "Moderate" in the California Invasive Plant Council's Inventory Database, which is accessible at: <http://www.cal-ipc.org/paf/>.

### **Equipment and Vehicles**

- 2.48 Staging and Storage Areas. Building materials and/or construction equipment shall not be stockpiled or stored where they could be washed into the water or where they will cover aquatic or riparian vegetation.
- 2.49 Equipment over Drip-pans. Staging and storage areas for equipment, materials, fuels, lubricants and solvents shall be located away from the wetted areas. Stationary equipment such as motors, pumps, generators, compressors and welders, located within or adjacent to the creek shall be positioned over drip-pans.
- 2.50 Maintenance of Vehicles. Any equipment or vehicles driven and/or operated adjacent to the creek areas shall be checked and maintained daily to prevent leaks of materials that if introduced to water could be deleterious to aquatic life, wildlife or riparian habitat. Vehicles must be moved away 150 feet from the stream prior to refueling and lubrication.

### **Toxic or Hazardous Materials**

- 2.51 Hazardous Materials. Any hazardous or toxic materials that could be deleterious to aquatic life that could be washed into state waters or its tributaries shall be contained in water tight containers or removed from the project site. Such materials include, but are not limited to, debris soil, silt, bark, rubbish, creosote-treated wood, raw cement/concrete or washings thereof, asphalt, paint or other coating material, and oil or other petroleum products. These materials shall be prevented from contaminating the soil and/or entering the waters of the State. Any such materials, placed within or where they may

enter a stream or lake, by Permittee or any party working under contract, or with permission of Permittee, shall be removed immediately. Best Management Practices (BMPs) shall be employed to accomplish these requirements.

- 2.52 Concrete – Primary Containment. Permittee shall install the necessary containment structures to control the placement of wet concrete and to prevent it from entering into the stream channel outside of those structures. No concrete shall be poured within the high flow line if the 15-day weather forecast indicates any chance of rain.
- 2.53 Concrete – Designated Monitor. At all times when Permittee is pouring or working with wet concrete, there shall be a designated monitor to inspect the containment structures and ensure that no concrete or other debris enters into the channel outside of those structures. Runoff from the concrete shall not be allowed to enter the stream channel at any time.
- 2.54 Isolate Poured Concrete for 30 Days. If feasible, poured concrete shall be excluded from the wetted channel for a period of 30 days after it is poured. During that time the poured concrete shall be kept moist, and runoff from the concrete shall not be allowed to enter a live stream. If the 30-day curing period is infeasible, the Permittee shall institute a minimum 7-day curing period and apply a non-toxic sealant designed for use in aquatic environments. The sealant shall be allowed to cure for a minimum of 72 hours and until the sealant is dry.
- 2.55 Concrete Curing Alternative. If rain does occur after pouring or concrete cannot be excluded from the wetted channel for a period of 30 days, the Permittee shall monitor the pH of any water that has come into contact with the poured concrete. If this water has a pH of 9.0 or greater, the water shall be pumped to a tanker truck or to a lined off-channel basin and allowed to evaporate or be transported to an appropriate facility for disposal. During the pH monitoring period, all water that has come in contact with poured concrete shall be isolated and not allowed to enter the water or otherwise come in contact with fish and other aquatic resources. The water shall be retested until pH values become less than 9.0. Once this has been determined, the area no longer needs to be isolated. Results of pH monitoring shall be made available to CDFW upon request. A non-toxic substance that can buffer the pH shall be made available on site to use if any contamination to water occurs.

- 2.56 Concrete Wash-down BMPs. Wash-down water from concrete delivery trucks, concrete pumping equipment, and other tools and equipment shall not be allowed to enter the stream channel and should be removed from the site for treatment following construction. No dry concrete shall be placed on the banks or in a location where it could be carried into the channel by wind or runoff.

### **Biotechnical Bank Stabilization**

- 2.57 Biotechnical Repair. Unless otherwise approved by CDFW, bank stabilization shall use biotechnical methods. Installation of riprap, and other hardened structures, shall only be considered after biotechnical approaches have been determined to be insufficient. In general, biotechnical approaches shall be considered those that incorporate live plants, large woody debris, geotextiles, mechanically stabilized soil and the rock slope protection necessary for scour protection and ballast. Methods described in the CDFW *California Salmonid Stream Habitat Restoration Manual* are generally acceptable.

### **RSP Replacement/Installation and Culvert Replacement**

- 2.58 Rock Slope Protection. Un-grouted RSP materials shall consist of clean rock, competent for the application, sized and properly installed to resist washout. RSP slopes shall be supported with competent boulders keyed into a footing trench with a depth sufficient to properly seat the footing course boulders and prevent instability (typically at least 1/3 diameter of footing course boulders). If channel hydraulic conditions can tolerate increased roughness along the channel banks at the bank repair site, and if the site can successfully support native vegetation; then the site should be considered and evaluated for potential placement of riparian species native to the area where there are voids between rocks. Planting of riparian native species at bank stabilization or repair site, would be subject to CDFW review, and may provide offsetting mitigation for other on-site project impacts.
- 2.59 RSP Fabric. RSP slopes and footing trenches shall feature an underlayment of appropriate grade geo-textile fabric, on slopes less than 1:1, or gravel blanket, on slopes greater than 1:1.
- 2.60 Transfer of Erosive Forces. The Permittee shall ensure that the bank stabilization design does not transfer the erosion force of the stream to the opposite bank or to another area downstream. To do this, Permittee shall ensure the RSP does not include any barbs or groins or other features which will deflect flow against the opposite

bank or cause downstream eddies; the restored stream gradient is consistent throughout the repair zone and the stream cross section through the repair zone is no narrower than areas immediately upstream or downstream.

- 2.61 Culvert Alignment. The new culverts shall be properly aligned within the stream and otherwise engineered, installed and maintained, to assure resistance to washout, and erosion of the stream bed, stream banks and/or fill.

### **Spills and Emergencies**

- 2.62 Spill Containment. All activities performed in or near a stream shall have absorbent materials designated for spill containment and clean-up activities on-site for use in an accidental spill. The Permittee shall immediately notify the California Emergency Management Agency at 1-800-852-7550 and immediately initiate the clean-up activities.

### **3. Reporting Measures**

Permittee shall meet each reporting requirement described below.

- 3.1 Notification of Proposed Activities. Permittee shall provide CDFW written notification of proposed routine maintenance activities to be performed in the upcoming year by May 20 each year. Notification reports shall describe the project location, general topography, hydrological features, vegetative cover within 50 feet of the work area, length and width of impact area, and a detailed description of proposed modifications to the banks, trails and/or channel. Reports shall be submitted to CDFW regardless of whether work is proposed.

CDFW shall append annual notification reports of proposed maintenance activities to this Agreement. For streamlined tracking, Permittee shall label annual notification reports according to the following convention: Exhibit B-[year] (e.g. Exhibit B-2016, Exhibit B-2017).

- 3.2 Additional Sites. Permittee may notify CDFW of work at additional sites if the proposed work fits the definition of routine maintenance, as specified in the Project Description. Work at additional sites may be submitted as described above.
- 3.3 Annual Reports for Completed Projects. On an annual basis, Permittee shall provide CDFW written notification of maintenance projects completed. Annual reports shall include the project identification (Reach name and location), a brief project description,

and the appropriate fee from the current CDFW Streambed Alteration Agreement Fee Schedule for work completed under this Agreement based upon the number of projects completed in the reporting period. The annual report is due on December 15 of each year. A report shall be submitted to CDFW regardless of whether work was completed. CDFW may terminate this Agreement if reports and fees are not submitted by this deadline.

- 3.4 Bird Survey Methods and Results. Prior to commencement of project activities the Permittee shall submit to CDFW a report containing the bird survey methods and results of the survey. Refer to Notification Number 1600-2015-0463-R3 when submitting the report to the CDFW.
- 3.5 Biological Surveys. If other surveys are conducted for compliance with this Agreement, the survey methods and results of the survey shall be submitted to CDFW prior to commencement of work. Refer to Notification Number 1600-2015-0463-R3 when submitting the report to the CDFW.
- 3.6 Notification to the California Natural Diversity Database (CNDDDB). If any listed, rare, or special status species are detected during project surveys or on or around the project site during project activities, the Permittee shall submit CNDDDB Field Survey Forms to CDFW in the manner described at the CNDDDB website ([http://www.dfg.ca.gov/biogeodata/cnddb/submitting\\_data\\_to\\_cnddb.asp](http://www.dfg.ca.gov/biogeodata/cnddb/submitting_data_to_cnddb.asp)) within 14 working days of the sightings. Copies of such submittals shall also be submitted to the CDFW regional office as specified below.

## CONTACT INFORMATION

Any communication that Permittee or CDFW submits to the other shall be in writing and any communication or documentation shall be delivered to the address below by U.S. mail, fax, or email, or to such other address as Permittee or CDFW specifies by written notice to the other.

### To Permittee:

Mark Chow  
County of San Mateo, Public Works Department  
555 County Center, 5<sup>th</sup> floor  
Redwood City, CA 94063  
Work (650) 802-4198  
Fax (650) 599-1489  
[mchow@smcgov.org](mailto:mchow@smcgov.org)

To CDFW:

Department of Fish and Wildlife  
Bay Delta Region  
7329 Silverado Trail  
Napa, California 94558  
Attn: Lake and Streambed Alteration Program – Suzanne DeLeon  
Notification #1600-2015-0463-R3  
Fax (707) 944-5553  
[Suzanne.DeLeon@wildlife.ca.gov](mailto:Suzanne.DeLeon@wildlife.ca.gov)

**LIABILITY**

Permittee shall be solely liable for any violations of the Agreement, whether committed by Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents or contractors and subcontractors, to complete the project or any activity related to it that the Agreement authorizes.

This Agreement does not constitute CDFW's endorsement of, or require Permittee to proceed with the project. The decision to proceed with the project is Permittee's alone.

**SUSPENSION AND REVOCATION**

CDFW may suspend or revoke in its entirety the Agreement if it determines that Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, is not in compliance with the Agreement.

Before CDFW suspends or revokes the Agreement, it shall provide Permittee written notice by certified or registered mail that it intends to suspend or revoke. The notice shall state the reason(s) for the proposed suspension or revocation, provide Permittee an opportunity to correct any deficiency before CDFW suspends or revokes the Agreement, and include instructions to Permittee, if necessary, including but not limited to a directive to immediately cease the specific activity or activities that caused CDFW to issue the notice.

**ENFORCEMENT**

Nothing in the Agreement precludes CDFW from pursuing an enforcement action against Permittee instead of, or in addition to, suspending or revoking the Agreement.

Nothing in the Agreement limits or otherwise affects CDFW's enforcement authority or that of its enforcement personnel.

## **OTHER LEGAL OBLIGATIONS**

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from obtaining any other permits or authorizations that might be required under other federal, state, or local laws or regulations before beginning the project or an activity related to it.

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from complying with other applicable statutes in the FGC including, but not limited to, FGC sections 2050 et seq. (threatened and endangered species), 3503 (bird nests and eggs), 3503.5 (birds of prey), 5650 (water pollution), 5652 (refuse disposal into water), 5901 (fish passage), 5937 (sufficient water for fish), and 5948 (obstruction of stream).

Nothing in the Agreement authorizes Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, to trespass.

## **AMENDMENT**

CDFW may amend the Agreement at any time during its term if CDFW determines the amendment is necessary to protect an existing fish or wildlife resource.

Permittee may amend the Agreement at any time during its term, provided the amendment is mutually agreed to in writing by CDFW and Permittee. To request an amendment, Permittee shall submit to CDFW a completed CDFW "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the corresponding amendment fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

## **TRANSFER AND ASSIGNMENT**

This Agreement may not be transferred or assigned to another entity, and any purported transfer or assignment of the Agreement to another entity shall not be valid or effective, unless the transfer or assignment is requested by Permittee in writing, as specified below, and thereafter CDFW approves the transfer or assignment in writing.

The transfer or assignment of the Agreement to another entity shall constitute a minor amendment, and therefore to request a transfer or assignment, Permittee shall submit to CDFW a completed CDFW "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the minor amendment fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

## **EXTENSIONS**

In accordance with FGC section 1605(b), Permittee may request one extension of the Agreement, provided the request is made prior to the expiration of the Agreement's term. To request an extension, Permittee shall submit to CDFW a completed CDFW "Request to Extend Lake or Streambed Alteration" form and include with the completed form payment of the extension fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). CDFW shall process the extension request in accordance with FGC 1605(b) through (e).

If Permittee fails to submit a request to extend the Agreement prior to its expiration, Permittee must submit a new notification and notification fee before beginning or continuing the project the Agreement covers (Fish & G. Code, § 1605, subd. (f)).

## **EFFECTIVE DATE**

The Agreement becomes effective on the date of CDFW's signature, which shall be: 1) after Permittee's signature; 2) after CDFW complies with all applicable requirements under the California Environmental Quality Act (CEQA); and 3) after payment of the applicable FGC section 711.4 filing fee listed at [http://www.dfg.ca.gov/habcon/ceqa/ceqa\\_changes.html](http://www.dfg.ca.gov/habcon/ceqa/ceqa_changes.html).

## **TERM**

This Agreement shall expire on **December 31, 2021**, unless it is terminated or extended before then. All provisions in the Agreement shall remain in force throughout its term. Permittee shall remain responsible for implementing any provisions specified herein to protect fish and wildlife resources after the Agreement expires or is terminated, as FGC section 1605(a)(2) requires.

## **EXHIBITS**

The documents listed below are included as exhibits to the Agreement and incorporated herein by reference.

- A. Definition of Terms
- B. Annual Notifications of Proposed Work (reserved for future exhibits)

## **AUTHORITY**

If the person signing the Agreement (signatory) is doing so as a representative of Permittee, the signatory hereby acknowledges that he or she is doing so on Permittee's behalf and represents and warrants that he or she has the authority to legally bind Permittee to the provisions herein.

## AUTHORIZATION

This Agreement authorizes only the project described herein. If Permittee begins or completes a project different from the project the Agreement authorizes, Permittee may be subject to civil or criminal prosecution for failing to notify CDFW in accordance with FGC section 1602.

## CONCURRENCE

The undersigned accepts and agrees to comply with all provisions contained herein.

### FOR COUNTY OF SAN MATEO

  
\_\_\_\_\_  
Mark Chow  
Permittee

6/27/2017  
Date

### FOR DEPARTMENT OF FISH AND GAME

  
\_\_\_\_\_  
Craig J. Weightman  
Environmental Program Manager

07/05/17  
Date

Prepared by: Suzanne DeLeón  
Environmental Scientist

Date Sent: March 24, 2016; June 13, 2016; June 30, 2016

## **EXHIBIT A DEFINITION OF TERMS**

As used herein and for purposes of the Agreement

**Best management practices (BMPs)**: management techniques or activities for stormwater management, pollution prevention and other management objectives. The term BMP is most commonly used in reference to the objectives of the federal Clean Water Act. BMPs may include structural techniques, such as physical stormwater control features, or non-structural techniques, such as signage and training.

**Bioengineering**: the application of the principles of engineering and natural sciences to flood control maintenance and erosion control. Bioengineering applications may be used to reduce the impacts on the natural and urban environment. Examples of bioengineering methods include willow wattling, log crib walls, revegetation with native plants, seeding, installation of rootballs, brush layering, brush matting, trench packing, inter-planting riprap, plantings and combinations of the above methods.

**Debris**: non-living vegetative or woody matter, trash, concrete rubble, etc. This definition does not include living vegetation.

**Emergency project**: is defined in the State Fish and Game Code, section 1600.

**Heavy equipment**: any equipment used that is larger than a pick-up truck.

**Natural channel**: a stream or watercourse that has not been modified by human acts such as lining the channel with cement, or creating an artificial channel for drainage or flood control. A natural channel may have in it erosion control structures, culverts or other minor modifications.

**Project**: a routine maintenance activity performed by Permittee during a given year. Each annual activity shall be construed as one project for fee purposes. A project does not include minor debris removal such as minor tree trimming, removing a shopping cart or a bag of garbage.

"Project" does not mean project as defined in section 21065 of the Public Resources Code or section 15378 of title 14 of the California Code of Regulations.

**Qualified Biologist**: A qualified biologist is an individual who shall have a minimum of five years of academic training and professional experience in biological sciences and related resource management activities with a minimum of two years conducting surveys for each species that may be present within the routine maintenance project area.

A biological monitor is an individual who shall have academic and professional experience in biological sciences and related resource management activities as it pertains to this project, experience with construction-level biological monitoring, be able to recognize species that may be present within the routine maintenance project area,

and be familiar with the habits and behavior of those species.

Reasonable dispersal distance: the distance from a particular location, such as a CNDDDB occurrence location or a critical habitat location, that a given species would be expected to disperse for mating, breeding, foraging, nesting, and other activities. The reasonable dispersal distance can be determined on a species-by-species level based on current scientific literature. For example, CNDDDB occurrences of California red-legged frog in a given creek indicate a high likelihood that this species also occurs downstream within the same creek system because flows provide easy downstream dispersal.

Special-status species: any species identified as a candidate or sensitive species in local or regional plans, policies or regulations, or by CDFW or the U.S. Fish and Wildlife Service. Plants on Lists 1A, 1B, or 2, published by the California Native Plant Society, are also considered special-status species for the purposes of this Agreement.

Structure: storm drain outfalls, tide gates, slide gates, culverts, revetments, bank protection, energy dissipaters, grade structures, sediment basins, weirs, diversion structures, trash racks, stream gauge structures, fish ladders, fish screens, utility line crossings, bridge piers.

**EXHIBIT B**  
**ANNUAL NOTIFICATIONS OF COMPLETED WORK**  
(Reserved for future exhibits)



1600-2015-0403-3  
**SAN FRANCISCO BAY AREA**

JOINT AQUATIC RESOURCE PERMIT APPLICATION

*Debra  
 Lt. O'Brien  
 Wili. O'Brien*

**This form is for use in San Francisco, Contra Costa, Alameda Counties, Marin County (except Estero San Antonio watershed), San Mateo County (except Gazos Creek Watershed), and the portions of the following counties that drain to San Francisco Bay: Sonoma, Napa, Solano, Santa Clara**

**Please consult JARPA Instructions before completing the form**

**Copies of this form are being submitted to the following agencies:**

Agency	Contact	Phone	Type of Application	Application/ Permit #	Status
<input checked="" type="checkbox"/> San Francisco Bay Regional Water Quality Control Board (RWQCB)			CWA Section 401 Permit and/or Waste Discharge Requirements		
<input checked="" type="checkbox"/> US Army Corps of Engineers (Corps)			CWA Section 404 Individual Permit		
<input checked="" type="checkbox"/> CA Dept of Fish and Wildlife (DFW)			F&GC Section 1602		
<input type="checkbox"/> US Environmental Protection Agency (EPA)					
<input checked="" type="checkbox"/> US Fish and Wildlife Service (FWS)			ESA Sec. 7 consultation		
<input checked="" type="checkbox"/> National Marine Fisheries Service (NMFS)			ESA Sec. 7 consultation		
<input type="checkbox"/> US Coast Guard					
<input checked="" type="checkbox"/> San Francisco Bay Conservation and Development Commission (BCDC)			Regionwide Permit #1		
<input type="checkbox"/> CA Lands Commission					
<input type="checkbox"/> Federal Funding Agency					
<input checked="" type="checkbox"/> Lead Local Agency	San Mateo County		CEQA		
<input type="checkbox"/> Other Local Agency			Local Permit		
<input type="checkbox"/> Other Local Agency			Local Permit		



REVISED 1-26-2016

**SECTION ONE – TO BE COMPLETED BY ALL APPLICANTS**

Attach additional sheets, if needed

<b>Box 1 Project Name</b> Colma Creek Flood Control Maintenance Project		<b>Applicant Name</b> Mark Chow		HIS... wife	
Business/Agency County of San Mateo, Department of Public Works					JAN 2 2016
Mailing Address 555 County Center, 5 <sup>th</sup> Floor, Redwood City, CA 94063					Nana
Work Phone 650-599-1489	Home Phone	Fax # 650-361-8220	E-mail Address mchow@smcgov.org		
Relationship of applicant to property: <input checked="" type="checkbox"/> Owner <input type="checkbox"/> Purchaser <input type="checkbox"/> Lessee <input checked="" type="checkbox"/> Other Employee of Owner					
Application is hereby made for a permit or permits to authorize the activities described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief, such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities. I hereby grant to the agencies to which this application is made, the right to enter the above-described location to inspect the proposed, in-progress or completed work. I agree to start work <u>only</u> after all necessary permits have been received.					
<b>Signature of applicant</b> 					<b>Date</b> 12/22/15

<b>Box 2 Authorized Agent/Operator Name and Signature (If an agent is acting for the applicant during the permit process)</b> Ken Schwarz, Horizon Water and Environment			
Mailing Address 180 GRAND AVENUE, SUITE 1405, OAKLAND, CA 94612			
E-mail Address ken@horizonh2o.com			
Work Phone 510-986-1851	Home Phone	Fax # 510-350-3592	Cell Phone #
I hereby designate the above named authorized agent to act as my agent in matters related to this application for permit(s). I understand that I am bound by the actions of my agent and I understand that if a federal or state permit is issued, I, or my agent, must sign the permit.			
<b>Signature of applicant</b>			<b>Date</b>
I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief, such information is true, complete, and accurate.			
<b>Signature of authorized agent</b> 			<b>Date</b> 12/28/15

<b>Box 3 Name of property owner(s), if other than applicant.</b>			
Mailing Address			
E-mail Address			
Work Phone	Home Phone	Fax #	Cell Phone #
I understand I am bound by actions of authorized agent and/or the applicant.			
<b>Signature of property owner (except public entity landowners)</b>			<b>Date</b> mo/date/year

**This page must be signed by the applicant, property owner and agent to be considered complete.**

**Box 4 Location, including street address, city, county, zip code where proposed activity will occur**  
Numerous locations in Cities of Colma and South San Francisco, San Mateo County

Waterbody (if known): Colma Creek

Tributary to: San Francisco Bay

Latitude & longitude if known:  
37°39'00.56"N 122°24'43.59"W

Zoning Designation: Parks and Recreation, Open Space

Assessors parcel number:  
See Attachment 1, Box 4.

Section, Township, Range, USGS Quadrangle Map, Latitude/Longitude:  
See Attachment 1, Box 4.

**Box 5 Existing site conditions:**

The Project area consists of constructed and modified channels, mudflats, rocky intertidal, emergent wetlands, open water, and ruderal/developed habitats. More detail is provided in Attachments 1, 2 and 3.

**Box 6 Proposed project starting date:** June 2016

Estimated duration of activity: annual maintenance, as needed Estimated completion date: 10 years subject to the terms of regulatory approvals.

Will the project be constructed in stages?  Yes  No

Describe any anticipated activities that will take place during the rainy season (October to April)?

Sediment removal and culvert maintenance would occur between June 15 to October 15. Activities such as trash removal and minor vegetation maintenance in upland areas may occur year-round.

**Box 7 Description of the proposed project:**

The Project's primary activities involve removal of localized sediment deposits along the channel bed in Reach 2 and culvert maintenance in Reach 3. Other routine maintenance activities that may occur throughout the Project area on an as-needed basis include: clearing of blocked culvert outfalls, vegetation management on channel banks and bed, repair or maintenance of concrete/hardened stream banks, removal of invasive vegetation, installation/maintenance of trash capture devices, removal of other flow obstructions (e.g., fallen trees, branches, debris, shopping cards as needed), and graffiti removal as needed. A complete project description is provided in Attachment 1.

Equipment and machinery to be used to complete the project:

Sediment removal and culvert maintenance activities will involve using excavator, skip loader, mechanical compactor, and haul trucks. Equipment will be operated from the top of bank or upland areas in most instances, but some equipment will need to enter wetlands or concrete channel areas for replacement of culverts, and possibly sediment removal. Hand tools would be used to conduct other routine maintenance activities on an as-needed basis.

Will water be present in the waterbody during the proposed work period?

Yes  No

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

Yes (enclose a plan to divert water around the worksite)  No

**Purpose of the proposed project:**

Colma Creek has a history of chronic flooding, and portions of the industrial area of South San Francisco occupy a historic floodplain. During the 1960s and 1970s, many areas in the Colma Creek Watershed underwent urban or suburban development. As a result, soil erosion and sediment yielded from the watershed was very high during this period. Continued erosion and soil erosion are a concern because accumulation of deposited sediment in the flood control channel can reduce conveyance capacity in the channel, thereby increasing the flooding risk for the surrounding areas. The primary purpose of the Project is to conduct maintenance activities as necessary along approximately 5.4 miles of the Colma Creek flood control channel to provide adequate flood conveyance capacity.

**Environmental Documents (non-CEQA):** List any environmental studies, surveys, etc. that have been prepared for the project and/or the project site. Provide the date of the document and the name of the individual, firm, or agency that prepared it. Attach additional pages as needed. See instructions.

- Wetland Delineation (prepared by Horizon Water and Environment, 2015) (Attachment 2)
- Biological Assessment (prepared by Horizon Water and Environment, 2015) (Attachment 3)
- Cultural Resources Report (prepared by Basin Research Associates, 2015) (Attachment 4)
- Colma Creek Flood Control Channel Multi-Agency Compensatory Mitigation Plan (prepared by Horizon Water and Environment, 2015) (Attachment 5)
- Colma Creek Flood Control Channel Maintenance Project Technical Studies (prepared by Horizon Water and Environment, 2014) (Attachment 6)
- Characterization of the Sediment from Colma Creek (Pacific EcoRisk 2014) (Attachment 7)

See special section of the instructions on drawings, figures and photographs. Attach figures, maps, and directions to the project site. One set of original or good quality reproducible drawings must be attached to applications to each agency. Applicants are encouraged to submit photographs of the project site, but these do not substitute for drawings. BCDC, the Corps Of Engineers and Coast Guard require at least one set of drawings on 8-1/2 x 11 inch sheets.

**Box 8A Placement of Structures And/Or Fill Material in Waters under Army Corps Jurisdiction**

- ◆ Will fill be placed below the ordinary high water line for fresh waters?  Yes  No
- ◆ Will rock, fill, bulkhead, pilings, structures or other material be placed waterward of the mean high water line for tidal waters?  Yes  No
- ◆ Will fill be placed below the high tideline in tidal waters?  Yes  No

If applicable, number of linear feet of impact

Amount of **total** fill – .61 cubic yards, 745 square feet, 0.017 acreage

Amount of fill **below the ordinary high water mark or high tide line** 58 cubic yards 0.017 acreage

Type of fill HDPE pipe, bedding material, rock slope protection

Material source Not known

See Attachment 1 for details.

**Box 8B Waterway Impacts: Placement of Structures and/or Fill in Waters of the State**

Will the project or activity involve work in the bed, bank or channel of a river, stream (including seasonal streams), or lake?  No  Yes

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

See Attached response to Box 8A.

Will the project affect any vegetation?  No  Yes. If yes, complete Box 17-FG11

**Box 9 Impacts on Wetlands**

◆ Will the proposed project have temporary or permanent impacts to wetlands, including isolated wetlands, seasonal wetlands, managed wetlands or on tide or submerged lands (i.e. fill, flooding, draining)?  Yes  
 No

If yes, please describe the wetlands, using additional pages as necessary. Provide one or more photographs of the existing conditions.

The project area contains intertidal marsh habitat on the margins of Colma Creek and in the marsh complex near the mouth of the creek in Reach 3. Other non-wetland habitats within the project area include modified channel, channel, intertidal mudflat, open water, rocky intertidal, and a seasonally ponded depression. A detailed discussion of wetland and non-wetland waters within the project area is provided in the *Biological Assessment* (Attachment 3) and *Wetland Delineation* (Attachment 2).

- ◆ If a wetlands delineation has been completed, please submit it with application.  Yes, Attached  No
- ◆ If a geology or soils report has been prepared, please submit with application.  Yes, Attached  No

**Box 10 Potential for Impacts to Threatened and Endangered Species**

Are any special status animal or plant species, or habitat that could support such species, known to be present on or near the project site?  Yes  No  Unknown

If yes, list here

Longfin smelt (*Spirinchus thaleichthys*), Bay-Delta Distinct Population Segment (DPS); Steelhead (*Oncorhynchus mykiss*), Bay-Delta DPS; green sturgeon (*Acipenser medirostris*), Southern DPS; and California clapper rail (*Rallus longirostris obsoletus*)

Identify the source(s) of information that supports a "yes" or "no" answer above:

See Biological Assessment included in Attachment 3 which addresses terrestrial and aquatic species potentially affected by the proposed Project.

Have surveys, using US Fish and Wildlife Service protocols, for possible listed species been conducted?

Yes, Attached  No

Annual surveys for California clapper rail in the project vicinity are conducted by the Invasive Spartina Project

If a federal or state listed species is being impacted, a biological assessment or study may be required to evaluate potential project impacts on biological resources. Has such a study been completed?  Yes, Attached  No

Has a hydrological study been completed for the project or project site?  Yes, Attached  No

Technical studies related to sediment sources and sedimentation in the channel were conducted by Horizon Water and Environment for the County of San Mateo in 2014 (Attachment 6). The objectives of this study were to: describe current sediment deposition conditions along the Colma Creek channel, estimate the average annual rate of sediment deposition in the channel, and identify and recommend target annual sediment

removal volumes and locations. Hydraulic modeling of the channel has also been conducted. The data and model are available on request.

**Box 11 Avoidance of Impacts**

Provide a full, technically accurate description of the entire activity and associated environmental impacts, including areas outside of jurisdictional waters. (90 percent of applications to the Regional Board require an Alternatives Analysis.) See instructions.

San Mateo County has a robust list of Best Management Practices designed to avoid impacts where possible and minimize effects to the maximum extent feasible. These are listed in Attachment 1. An IS/MND, which is currently under development, will also identify mitigation measures to further reduce any additional environmental impacts.

**Box 12 Mitigation**

Describe the size, type, location, function, and values of the proposed mitigation and a time line for implementation. Describe success criteria, monitoring, and long-term funding, management, and protection of the mitigation site. Attach A Mitigation Plan, if needed. Attach additional pages as needed. See instructions and contact APPROPRIATE AGENCY staff for additional assistance.

To offset impacts to waters and wetlands, the County proposes to re-establish intertidal wetlands in the project area. A Compensatory Mitigation and Monitoring Plan is provided in Attachment 5.

**Box 13 Excavation And/Or Dredging**

**For Non-Navigational Dredging Projects (construction, flood control, remediation, etc.) that do not propose disposal or reuse of dredged materials in aquatic environments [Navigational Dredging Projects or Dredging Projects that Propose Aquatic Placement of Dredged Material for which Testing may be Needed should be completed through the Dredged Material Management Office (DMMO)].**

Will excavation or dredging be required in water or wetlands?  Yes  No

If dredging or excavation:

- ◆ Volume: 400 (cubic yards)/area 0.18 (acres)/600 (linear feet of channel)
- ◆ Composition of material to be removed: Alluvial sediment with sandy loam or sandy clay loam texture
- ◆ Disposal location for excavated material: Upland reuse, sanitary landfill, or hazardous materials landfill, if necessary
- ◆ Method of dredging: Mechanical excavation
- ◆ Purpose of the dredging: Maintain channel capacity
- ◆ Estimated future maintenance dredging required annually: Approximately 400 cubic yards
- ◆ Additional information to be provided in an attachment  Yes  No

**Box 14 Environmental Impact Documentation**

Has a draft or final document been prepared for the project pursuant to the California Environmental Quality Act (CEQA), National Environmental Protection Act (NEPA), California Endangered Species Act (CESA) and/or federal Endangered Species Act (ESA)?

Yes (Check the box for each CEQA, NEPA, CESA, and ESA document that has been prepared and enclose a copy of each)

No (Check the box for each CEQA, NEPA, CESA, and ESA document listed below that will be or is being prepared)

Notice of Exemption       Mitigated Negative Declaration       NEPA document (*type*):  
 Initial Study       Environmental Impact Report       CESA document (*type*):  
 Negative Declaration       Notice of Determination (*Enclose*)  ESA document (*type*): Biological Assessment  
 THP/ NTMP       Mitigation, Monitoring, Reporting Plan

State Clearinghouse Number (*if applicable*) Draft Mitigated Negative Declaration is underway.

Has a CEQA lead agency been determined?  Yes       No  
 If yes, CEQA Lead Agency County of San Mateo, Department of Public Works  
 Contact Person Julie Casagrande  
 Telephone Number 650-599-1457

If the project described is part of a larger project or plan, briefly describe the larger project or plan.

Not part of a larger project

**Box 15 Public Notice** Has a federal agency or the applicant provided public notice of this application for water quality certification?

Federal Agency  Yes      If yes, date, , and       No

Applicant  Yes      If yes, date, , and       No

Other  Yes      If yes, date, , and       No

If public notice has not been made, please provide the names, addresses and telephone numbers of adjoining property owners, lessees, etc. (*Note that local governments may require additional notice – consult your local government agency.*) (See Attachment 1)

Name	Address	Phone number

**Box 16 Site Inspection**

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

I request agencies first contact (*insert name*) Julie Casagrande at (*insert telephone number*) 650-599-1457 to schedule a date and time to enter the property where the project described in this application will take place. I understand that this may delay the issuance of project permits.

**End of Section One**

**Section Two – Agency Specific Requirements for Project Permitting**

**Box 17 Department of Fish and Game – Projects Adjacent to Creeks, Streams, Lakes, and the Bay**

This project does not involve this agency (no additional questions completed)

**FG4. AGREEMENT TERM REQUESTED**

Regular (5 Years or less)     Long Term (greater than 5 years)

Project Term		Seasonal Work Period		Number of work days
Beginning (year)	Ending (year)	Start Date (month/day)	End Date (month/day)	
2016	2021 year permit)	June 15	October 15	varies - up to 60 but typically less than 15

**FG5. AGREEMENT TYPE**

Check the applicable box. If box B, C, D, or E is checked, complete the specified attachment.

A.	<input type="checkbox"/> Standard (Most construction projects, excluding the categories listed below)
B.	<input type="checkbox"/> Gravel/Sand/Rock Extraction (Attachment A) Mine I.D. Number: _____
C.	<input type="checkbox"/> Timber Harvesting (Attachment B) THP Number: _____
D.	<input type="checkbox"/> Water Diversion/Extraction/Impoundment (Attachment C) SWRCB Number: _____
E.	<input checked="" type="checkbox"/> Routine Maintenance (Attachment D)
F.	<input type="checkbox"/> DFG Fisheries Restoration Grant Program (FRGP) FRGP Contract Number: _____
G.	<input type="checkbox"/> Master
H.	<input type="checkbox"/> Master Timber Harvesting

**FG6. FEES**

	A. Project	B. Project Cost	C. Project Fee
1	Routine maintenance projects to be determined	N/A	N/A
2			
3			
4			
5			
		D. Base Fee (if applicable)	1,474.25

<b>E. TOTAL FEE ENCLOSED</b>	1,474.25
----------------------------------	----------

**FG7. PRIOR NOTIFICATION OR ORDER**

A. Has a notification previously been submitted to, or a Lake or Streambed Alteration Agreement previously been issued by, the Department for the project described in this notification?

Yes (*Provide the information below*)       No

Applicant: San Mateo County      Notification Number: 1600-2006-0413-  
3 \_\_\_\_\_ Date: September 25, 2006

Note: The scope of the Proposed Project has been modified based on the Regional Water Quality Control Board's request for additional technical studies and associated findings.

B. Is this notification being submitted in response to an order, notice, or other directive ("order") by a court or administrative agency (including the Department)?

No       Yes (*Enclose a copy of the order, notice, or other directive. If the directive is not in writing, identify the person who directed the applicant to submit this notification and the agency he or she represents, and describe the circumstances relating to the order.*)

*Continued on additional page(s)*

**18. PROJECT LOCATION**

*Include a map that marks the location of the project with a reference to the nearest city or town, and provide driving directions from a major road or highway*

D. Is the river or stream segment affected by the project listed in the state or federal Wild and Scenic Rivers Acts?  Yes  No  Unknown

E. County San Mateo

F. USGS 7.5 Minute Quad Map Name	G. Township	H. Range	I. Section	J. 1/4 Section
San Francisco, South, CA	3S	5W	21	SE, SW
San Francisco, South, CA	3S	5W	27	NE
San Francisco, South, CA	3S	5W	27	NW, SW, NE, SE
San Francisco, South, CA	3S	5W	23	SW

K. Meridian (*check one*)  Humboldt  Mt. Diablo  San Bernardino

L. Assessor's Parcel Number(s)

See Box 4 Location in Attachment 1.

M. Coordinates (*If available, provide at least latitude/longitude or UTM coordinates and check appropriate boxes*)

Latitude/Longitude	Latitude: 37.64626		Longitude: -122.40123	
	<input type="checkbox"/> Degrees/Minutes/Seconds		<input checked="" type="checkbox"/> Decimal Degrees <input type="checkbox"/> Decimal Minutes	
UTM	Easting:	Northing:	<input type="checkbox"/> Zone 10 <input type="checkbox"/> Zone 11	
Datum used for Latitude/Longitude or UTM		<input type="checkbox"/> NAD 27 <input checked="" type="checkbox"/> NAD 83 or WGS 84		

<b>FG9. PROJECT CATEGORY AND WORK TYPE</b> (Check each box that applies)			
PROJECT CATEGORY	NEW CONSTRUCTION	REPLACE EXISTING STRUCTURE	REPAIR/MAINTAIN EXISTING STRUCTURE
Bank stabilization – bioengineering/recontouring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bank stabilization – rip-rap/retaining wall/gabion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boat dock/pier	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boat ramp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bridge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Channel clearing/vegetation management	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Culvert	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Debris basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diversion structure – weir or pump intake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Filling of wetland, river, stream, or lake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Geotechnical survey	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Habitat enhancement – revegetation/mitigation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Levee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Low water crossing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Road/trail	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sediment removal – pond, stream, or marina	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Storm drain outfall structure	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Temporary stream crossing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Utility crossing : Horizontal Directional Drilling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jack/bore	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Open trench	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Other (specify):</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**FG11 PROJECT IMPACTS**

B. Vegetation Type	Temporary Impact	Permanent Impact
Culvert Maintenance Area: Salt marsh comprised of pickleweed ( <i>Sarcocornia [=Salicornia] pacifica</i> ), fleshy jaumea ( <i>Jaumea carnosa</i> ), saltgrass ( <i>Distichlis spicata</i> ), gum plant ( <i>Grindelia stricta</i> )	Linear feet: <u>200</u> Total area: 14,610 sq. ft _____	Linear feet: <u>12</u> Total area: 115 sq. ft _____
Mitigation Area: Salt marsh comprised of pickleweed ( <i>Sarcocornia [=Salicornia] pacifica</i> ), fleshy jaumea ( <i>Jaumea carnosa</i> ), saltgrass ( <i>Distichlis spicata</i> ), gum plant ( <i>Grindelia stricta</i> )	Linear feet: <u>800</u> Total area: <u>6,446</u> sq. ft _____	Linear feet: <u>0</u> Total area: <u>0</u> _____

C. Tree Species	Number of Trees to be Removed	Trunk Diameter (range)
None affected or removed	None	

Continued on additional page(s)

**FG12. MEASURES TO PROTECT FISH, WILDLIFE, AND PLANT RESOURCES**

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

The County has prepared a Mitigation and Monitoring Plan for the project consistent with the USACE's South Pacific Division Final 2015 Regional Compensatory Mitigation and Monitoring Guidelines. The proposed mitigation site is located within Reach 3 of the project area. The complete Mitigation and Monitoring Plan is provided in Attachment 5.

**FG 13. PERMITS**

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

- A. USACE  Applied  Issued
- B. RWQCB  Applied  Issued
- C. CDFW  Applied  Issued
- D. BCDC  Applied  Issued
- E. Unknown whether  local,  state, or  federal permit is needed for the project. (Check each box that applies)

[Empty rectangular box for Box 17]

**FG 14 ENVIRONMENTAL REVIEW**

Has an environmental filing fee (DFG Code section 711.4) been paid?

- Yes (Enclosed)       No (Explain why it has not been paid) Environmental document is currently in preparation.

REVISED 1-26-2016

**FG 16. DIGITAL FORMAT**

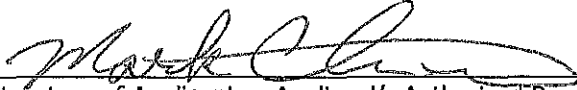
Is any of the information included as part of the notification available in digital format (i.e., CD, DVD, etc.)?

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

No

**FG 17. SIGNATURE**

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



12/22/15

Signature of Applicant or Applicant's Authorized Representative

Date

MARK CHOW

Print Name

**End of BOX 17**

**Bay Fill Information** - Fill means earth or any other substance or material, including pilings or structures placed on pilings, and structures floating at some or all times and moored for extended periods such as houseboats and floating docks.

- Total Volume of solid fill to be placed in water or marsh areas: 1,647 cubic feet
- Area to be covered with solid fill: 780 square feet
- Area to be covered with floating fill: 0 sq feet
- Area to be covered with pile-supported fill: 0 sq feet
- Area to be covered with cantilevered fill: 0 sq feet
- Salt pond area to be filled: 0 sq feet
- Managed wetland area in the primary management: 0 sq feet
- Area of the Suisun Marsh to be filled: 0 sq feet
- Area on new fill to be reserved for private, commercial, or other uses: 0 sq feet
- Area on new fill to be reserved for public access: 0 sq feet
- What is the basic purpose of the new fill in the Bay, salt pond, managed wetland, or certain waterway?

**Information on Fill to be provided in an attachment**

- Please specify the area of fill, in square feet, proposed to be covered in structures; used for roads; used for parking; used for pathways and sidewalks; covered with landscaping; used for piers, docks, and other maritime related purposes; placed for shoreline protection; and used for other purposes (specify uses).
  - Please provide dimensions of portions of all structures to be built on new fill, including length, width, area, height and number of stories.
  - Please provide one or more photographs of existing shoreline conditions.

**Provide the following information to justify the proposed fill in an attachment:**

BCDC can approve new fill for only five purposes: (1) accommodating a water-oriented use; (2) improving shoreline appearance; (3) providing new public access to the Bay; (4) accommodating a project that is necessary to the health, safety, or welfare of the public in the entire Bay Area; and (5) accommodating a project that is consistent with either: (1) the Suisun Marsh Preservation Act and the Suisun Marsh Protection Plan; or (2) the Suisun Marsh Local Protection Program. Please explain how the project is consistent with one or more of these purposes.

- If the fill is to be used for improving shoreline appearance or providing new public access to the Bay, please explain why it is physically impossible or economically infeasible to accomplish these goals without filling the Bay.
- Please explain how the fill will result in a stable and permanent shoreline.
- Please explain the steps that will be taken to assure that the project will provide reasonable protection to persons and property against hazards of unstable geologic or soil conditions or of flood or storm waters.
- Please provide the names, addresses, and telephone numbers of any licensed geologists, engineers, or architects involved in the project design who can provide technical information and certify to the safety of the project.

**BOX 18 (CONTINUED)**

- Please explain:
  1. What possible effects the proposed fill would have on the Bay Area, such as (1) any impact on the volume of Bay waters, on Bay surface area, or on the circulation of Bay water; (2) any impact on water quality; (3) any impact on the fertility of marshes or fish and wildlife resources; and (4) any impact on other physical conditions that exist within the area which would be affected by a proposed project, including land, air, water, minerals, flora, fauna, noise, or objects of historic or aesthetic significance; and
  2. How the nature, location, and extent of the proposed fill would minimize any possible harmful conditions or effects.
- Please explain how the public benefits of the project would exceed the public detriment from the loss of water or marshlands.
- For marina projects, please indicate how many berths, if any, are to be made available for live-aboard boats and explain how these live-aboard boats will contribute to public trust purposes.
- Please identify any other specific policies of the McAteer-Petris Act (California Government Code Title 7.2, especially Section 66605), the Suisun Marsh Preservation Act (California Public Resources Code Sections 29000-29612), the San Francisco Bay Plan and the Suisun Marsh Preservation Plan, and BCDC's regulations regarding minor fill for improving public access and shoreline appearance, that are relevant to and offer support for the project and explain how the project is consistent with these policies.

**Shoreline Band Information** - Shoreline band means the land area lying between the bay shoreline and a line drawn parallel to and 100 feet from the bay shoreline. The bay shoreline is the mean high water line, or five feet above mean sea level in marshlands.

- Types of activities to be undertaken or materials to be placed within the shoreline band
- Will the project be located within a water-oriented priority use area that is designated in the San Francisco Bay Plan?  
 Yes     No    If "yes", please attach an explanation of how the project can be approved despite this inconsistency. If no, complete the questions below:
  - Total shoreline band area within project site: No permanent structures or work in shoreline band
  - Area within shoreline band to be reserved for non-public uses: 0 sq feet
  - Area within shoreline band to be reserved for public access: 0 sq feet
- Information about the shoreline work to be provided in an attachment:
  - Please describe the area, in square feet, to be covered by structures; used for roads; used for parking; used for pathways and sidewalks; covered with landscaping; used for shoreline protection; and used for other purposes (specify uses).
  - Please identify the total number of parking spaces in the project and within the shoreline band.
  - Please provide dimensions of portions of all structures to be built within the shoreline band, including length, width, area, height, and number of stories.

**Environmental Impact Documentation**

- Is the project statutorily exempt from the need for environmental documentation?  Yes     No If "yes", please attach a statement supporting this exemption.
  - Is the project categorically exempt from the need for environmental documentation?  Yes     No If "yes", please attach a statement supporting this exemption.
  - Has a government agency other than the lead agency certified a "negative declaration" on the project?  Yes  
 No If "yes", please attach a copy of the certified negative declaration. If "no", please provide sufficient information to allow agencies to make the necessary findings regarding all applicable policies.
- Has a government agency other than the lead agency, certified an environmental impact document on the project?  Yes  
 No If "yes", please attach copies of the certification and the document. also, please provide a summary of the document if it is longer than 10 pages. If "no", please provide sufficient information to allow agencies to make the necessary findings regarding all applicable policies. the certified document must be submitted prior to action on the permit.

**Public Access Information**

- Does public access to the shoreline or views to the bay presently exist on the site of a property contiguous to the project?  Yes  No

If "yes", please attach a description of the public access. If "no", explain what is preventing public access to the shoreline.

- Will the project block public views of the bay or adversely impact present or future public access to the shoreline?  Yes  No

Please describe why the project will or will not affect public views or public access to the shoreline. For most large projects, identify: (1) the existing number of people or employees using the site; and (2) the existing number of cars, bicycles, and pedestrians visiting the site and the level of service of all nearby roads leading to the site. Please describe how the project will change these factors. Please describe the impact the project is expected to have on the existing use of the site and on existing public views or physical public access at the site. Please describe the impact the project is expected to have on the public's use of existing nearby parks, public access, public parking and other recreational areas on the shoreline and the roads leading to the site.

- Do public safety considerations or significant use conflicts make it infeasible to provide new public access to the shoreline on the project site?  Yes  No

If "yes", please attach a description of the public safety considerations or significant use conflicts which make it infeasible to provide public access at the project site and either (1) identify an offsite area where public access to the shoreline is to be provided as part of the project and describe the proposed public access at a specified offsite location, or (2) provide an explanation as to why no offsite public access is proposed as part of the project.

- Summarize the public access to be provided as part of the total project:
  - Total amount of public access 0 sq feet
  - Length of waterfront public access area 0 feet
  - Number of parking spaces for public access area 0
  - Area and width reserved for view corridor (s) 0 sq feet

Detailed information about public access to be provided in an attachment: Please describe, in square feet, length and width, when appropriate, the existing and proposed public access areas and improvements, including areas used for decks, piers, pathways, sidewalks, landscaping, parking, and other public features. Please describe how the public access area facilities would be accessible to handicapped persons. Please describe the connections to existing public streets or offsite public pathways. Specify how the public access will be permanently guaranteed (e.g. dedication, deed restriction, etc.).

**Disclosure Of Campaign Contributions**

The following contributions of \$250 or more were made by the applicant or applicant's agent to a BCDC commissioner or commissioner's alternate in the preceding twelve months to support the commissioner's or alternate's campaign for election to a local, state or federal office:

Contribution made to: \_\_\_\_\_ Contribution made by: \_\_\_\_\_ Date of contribution: \_\_\_\_\_

No such contributions have been made

**END OF FORM**



## NOTIFICATION OF LAKE OR STREAMBED ALTERATION

Applicant Name: County of San Mateo, Department of Public Works

Project Title: Colma Creek Flood Control Channel Maintenance Project

### ATTACHMENT D

#### Routine Maintenance

If the applicant is notifying the Department to obtain an agreement for routine maintenance activities, Section I must be completed and the information and documents described in Sections II and III must be submitted with the notification.

#### I. REGULARLY RE-OCCURRING MAINTENANCE ACTIVITIES

These are generally activities designed to maintain channel capacity. Check each box that applies:

Sediment removal:

In and around bridges, culverts, storm drain outlets, and/or water diversion inlets

Stream channel bottom

Pond or lake

Marina basin

Other: \_\_\_\_\_

Clearing trash and debris

Removing fallen trees

Removing dead (not dormant) trees and shrubs

Vegetation:

Limbing and/or trimming of branches and tree limbs

Vegetation removal under high power lines

Mowing levee slopes and stream banks

Mowing within stream and floodway channels

Removing emergent (e.g., bulrush and cattails) or other near water vegetation with:

hand tools

mechanical vegetation cutters and shredders

heavy equipment (soil disturbance)

chemicals

NOTIFICATION OF LAKE OR STREAMBED ALTERATION  
ATTACHMENT D

---

Removing vegetation from the **upper half** of the bank with:

- hand tools
- mechanical vegetation cutters or shredders
- heavy equipment (soil disturbance)
- chemicals

Removing vegetation from the **lower half** of bank with:

- hand tools
- mechanical vegetation cutters or shredders
- heavy equipment (soil disturbance)
- chemicals

Removing vegetation within the channel with:

- hand tools
- mechanical vegetation cutters and shredders
- heavy equipment (soil disturbance)
- chemicals

Removing invasive, non-native plants with:

- hand tools
- mechanical vegetation cutters and shredders
- heavy equipment (soil disturbance)
- chemicals

Other: \_\_\_\_\_

Debris and brush pile burning

Burning levees

Minor erosion repair:

Repair at existing erosion control sites

New erosion repair

Revegetation with local, native plant species

NOTIFICATION OF LAKE OR STREAMBED ALTERATION  
ATTACHMENT D

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Chemical application:

Herbicides

Rodenticides

Insecticides

Minor bridge work:

Reinforcing pilings

Reinforcing aprons

Bridge painting (access and falsework)

Materials to be used for reinforcement: \_\_\_\_\_

Other: Culvert Maintenance

Other: \_\_\_\_\_

Other: \_\_\_\_\_

**II. MAP OR MAPBOOK**

Maps must be of sufficient detail to assist in locating maintenance sites and should include the following:

- A. The applicant's jurisdictional boundaries
- B. All watercourses within the jurisdictional boundaries where maintenance will occur
- C. A key to identify each watercourse and the maintenance activities and location (e.g., bridges, water control diversions, and large scale maintenance) of those activities that are likely to occur

**III. SPECIAL STATUS SPECIES LOCATIONS**

A drawing, diagram, or map that shows the applicant's jurisdictional boundaries and the locations within that area where special status species are known to exist.



**Notice of Determination**

**To:**  
Office of Planning and Research  
For U.S. Mail:  
P.O. Box 3044  
Sacramento, CA 95812-3044

Street Address:  
1400 Tenth Street  
Sacramento, CA 95814

**From:**  
Department of Fish and Wildlife  
Bay Delta Region  
7329 Silverado Trail, Napa, CA 94558  
Contact: Randi Adair  
Phone: (707) 576-2786



Lead Agency  
County of San Mateo  
555 County Center, Redwood City, CA 94063  
Contact: Mark Chow  
Phone: (650) 599-1489

**SUBJECT: Filing of Notice of Determination pursuant to Public Resources Code section 21108**

**State Clearinghouse Number:** 2016062032

**Project Title:** Colma Creek Flood Control Maintenance Project (Lake or Streambed Alteration Agreement No. 1600-2015-0463-R3)

**Project Location (include county):** Routine maintenance locations are located along 5.4 miles of Colma Creek, tributary to San Francisco Bay, between A Street downstream to Navigable Slough, in San Mateo County.

**Project Description:** The California Department of Fish and Wildlife (CDFW) has executed Lake and Streambed Alteration Agreement number 1600-2015-0463-R3, pursuant to section 1602 of the Fish and Game Code to the project Applicant, County of San Mateo Public Works Department.

The project involves "routine maintenance activities", periodic activities necessary to maintain the water transport capacity of streams, channels and flood control channels, and the structural and functioning integrity of existing flood control channels and structures on or affecting streams. Routine maintenance activities include sediment, silt, trash and debris removal to clear channel obstructions, vegetation management, removal of non-native vegetation, culvert repair and bank protection to reduce erosion and concrete repair in hardened channels.

This is to advise that CDFW, acting as a Responsible Agency, approved the above described project on July 5, 2017 and has made the following determinations regarding the project pursuant to California Code of Regulations section 15096, subdivision (i):

1. The project will not have a significant effect on the environment. This determination is limited to effects within CDFW's permitting jurisdiction as a Responsible Agency.
2. CDFW considered the  mitigated negative declaration /  negative declaration prepared by the Lead Agency for this project pursuant to California Code of Regulations section 15096, subdivision (f).
3. Mitigation measures  were /  were not made a condition of CDFW's approval of the project.
4. A mitigation reporting or monitoring plan  was /  was not adopted by CDFW for this project.
5. A statement of overriding considerations was not adopted by CDFW for this project.
6. Findings were not made by CDFW pursuant to California Code of Regulations section 15091.

The  mitigated negative declaration /  negative declaration prepared for the project is available to the general public at the office location listed above for the Lead Agency. CDFW's record of project approval as Responsible Agency is available at CDFW's regional office.

Signature   
Craig J. Weightman, Environmental Program Manager

Date: July 5, 2017

Date Received for filing at OPR: \_\_\_\_\_

U.S. Army Corps of Engineers Nationwide Permit



DEPARTMENT OF THE ARMY  
SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS  
1455 MARKET STREET, 16<sup>TH</sup> FLOOR  
SAN FRANCISCO, CALIFORNIA 94103-1398

JUN 23 2017

Regulatory Division

Subject: File Number 2016-00024S

Mr. Mark Chow  
County of San Mateo, Department of Public Works  
555 County Center, 5th Floor  
Redwood City, California 94063

Dear Mr. Chow,

This correspondence is in reference to your submittal of December 28, 2015, concerning Department of the Army (DA) authorization to conduct maintenance activities along approximately 5.4 miles of the Colma Creek flood control channel, beginning at A Street in Colma, traversing Spruce Avenue and Produce Avenue in South San Francisco, to provide storm runoff drainage and flood protection in these cities, in San Mateo County, California (centered at Lat.: 37.6566°N, Long: 122.4171°W, Section 18, Township 2S, Range 6W).

Work within U.S. Army Corps of Engineers' (Corps) jurisdiction will include removal of localized sediment deposits along a 0.6-mile long portion of the channel (Spruce Avenue to Produce Avenue within Reach 2), repair and replacement of approximately fourteen (14) culverts within Reach 3, and other routine maintenance activities on the existing concrete channel such as clearing blocked culvert outfalls, vegetation management in concrete joints on the channel banks and bed, repair of concrete/hardened channel banks and bed, installing and maintaining trash capture devices, removing debris that could accumulate and become flow obstructions, and graffiti abatement. Work will require excavation of approximately 400 cubic yards within 0.19 acre of Reach 2, temporary impacts to 0.52 acre for staging, access, and/or dewatering, and permanent placement of 58 cubic yards fill within 0.017 acre(s) of Reach 3 in Colma Creek for rock slope protection added at culvert sites. All work shall be completed in accordance with the plans and drawings titled "USACE File #2016-00024S, Colma Creek Flood Control Channel Maintenance," dated June 21, 2017, Sheets 1 through 3, provided as Enclosure 1.

Section 404 of the Clean Water Act (CWA) generally regulates the discharge of dredged or fill material below the plane of ordinary high water in non-tidal waters of the United States, below the high tide line in tidal waters of the United States, and within the lateral extent of wetlands adjacent to these waters. Section 10 of the Rivers and Harbors Act generally regulates construction of structures and work, including excavation, dredging, and discharges of dredged or fill material, occurring below the plane of mean high water in tidal waters of the United States; in former diked baylands currently below mean high water; outside the limits of mean high water but affecting the navigable capacity of tidal waters; or below the plane of ordinary high water in non-tidal waters designated as navigable waters of the United States. Navigable waters of the United States generally include all waters subject to the ebb and flow of the tide;

and/or all waters presently used, or have been used in the past, or may be susceptible for future use to transport interstate or foreign commerce. A Preliminary Jurisdictional Determination (JD) has been completed for your site. Preliminary JDs are written indications that there may be waters of the U.S. on a parcel or indications of the approximate location(s) of waters of the U.S. on a parcel. Preliminary JDs are advisory in nature and may not be appealed. While this preliminary jurisdictional determination was conducted pursuant to Regulatory Guidance Letter No. 16-01, *Jurisdictional Determinations*, it may be subject to future revision if new information or a change in field conditions becomes subsequently apparent. The basis for this preliminary jurisdictional determination is fully explained in the enclosed *Preliminary Jurisdictional Determination Form*. You are requested to sign and date this form and return it to this office within two weeks of receipt. Please see the enclosed Preliminary JD map titled, "Preliminary Jurisdictional Determination, Colma Creek Flood Control Channel Maintenance, File 2016-00024S," Sheets 5a to 5f, dated June 21, 2017 (Enclosure 2).

Based on a review of the information in your submittal, the project qualifies for authorization under Department of the Army Nationwide Permit (NWP) 3 for *Maintenance*, 82 Fed. Reg. 1860, January 6, 2017

([http://www.spn.usace.army.mil/Portals/68/docs/regulatory/NWP/NWP17\\_03.pdf](http://www.spn.usace.army.mil/Portals/68/docs/regulatory/NWP/NWP17_03.pdf)), pursuant to Section 404 of the CWA of 1972, as amended (33 U.S.C. § 1344 *et seq.*) and Section 10 of the Rivers and Harbors Act (RHA) of 1899, as amended (33 U.S.C. § 403 *et seq.*). The project must be in compliance with the terms of the NWP, the general conditions of the Nationwide Permit Program ([www.spn.usace.army.mil/Portals/68/docs/regulatory/NWP/NWP17\\_GC.pdf](http://www.spn.usace.army.mil/Portals/68/docs/regulatory/NWP/NWP17_GC.pdf)), and the San Francisco District regional conditions cited on our website ([www.spn.usace.army.mil/Portals/68/docs/regulatory/NWP/NWP17\\_RC.pdf](http://www.spn.usace.army.mil/Portals/68/docs/regulatory/NWP/NWP17_RC.pdf)). You must also be in compliance with any special conditions specified in this letter for the NWP authorization to remain valid. Non-compliance with any term or condition could result in the revocation of the NWP authorization for your project, thereby requiring you to obtain an Individual Permit from the Corps. This NWP authorization does not obviate the need to obtain other State or local approvals required by law.

This verification will remain valid until March 18, 2022, unless the NWP authorization is modified, suspended, or revoked. Activities which have commenced (i.e., are under construction) or are under contract to commence in reliance upon a NWP will remain authorized provided the activity is completed within 12 months of the date of a NWP's expiration, modification, or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend, or revoke the authorization in accordance with 33 C.F.R. § 330.4(e) and 33 C.F.R. § 330.5 (c) or (d). This verification will remain valid if, during the time period between now and March 18, 2022, the activity complies with any subsequent modification of the NWP authorization. The Chief of Engineers will periodically review NWPs and their conditions and will decide to modify, reissue, or revoke the permits. If a NWP is not modified or reissued

within five years of its effective date, it automatically expires and becomes null and void. It is incumbent upon you to remain informed of any changes to the NWP's. Changes to the NWP's would be announced by Public Notice posted on our website (<http://www.spn.usace.army.mil/Missions/Regulatory/Public-Notices.aspx>). Upon completion of the project and all associated mitigation requirements, you shall sign and return the Certification of Compliance, Enclosure 3, verifying that you have complied with the terms and conditions of the permit.

This authorization will not be effective until you have obtained a Section 401 water quality certification from San Francisco Bay Regional Water Quality Control Board (RWQCB). If the RWQCB fails to act on a valid request for certification within 60 days after receipt of a complete application, the Corps will presume a waiver of water quality certification has been obtained. You shall submit a copy of the certification to the Corps prior to the commencement of work.

This authorization will not be effective until you have obtained a concurrence from the San Francisco Bay Conservation and Development Commission that your project will comply with California's Coastal Zone Management Act. If the Commission fails to act on a valid request for concurrence with your certification within six months after receipt, the Corps will presume a concurrence has been obtained. You shall submit a copy of the concurrence to the Corps prior to the commencement of work.

General Condition 18 stipulates that project authorization under a NWP does not allow for the incidental take of any federally-listed species in the absence of a biological opinion with incidental take provisions. As the principal federal lead agency for this project, the Corps initiated consultation with the United States Fish and Wildlife Service (USFWS) to address project related impacts to listed species, pursuant to Section 7(a) of the Endangered Species Act of 1973, as amended (16 U.S.C. § 1531 *et seq.*). By letters of January 23 and March 2, 2017 (Enclosure 4), USFWS concurred with the determination that the project is not likely to adversely affect California Ridgway's Rail (*Rallus obsoletus*, CRR).

In order to ensure compliance with this NWP authorization, the following special conditions shall be implemented:

1. The USFWS concurred with the determination that the project was not likely to adversely affect CRR. This concurrence was premised, in part, on project work restrictions outlined in Enclosure 4. These work restrictions are incorporated as special conditions to the NWP authorization for your project to ensure unauthorized incidental take of species and loss of critical habitat does not occur.

2. To offset the project's 0.02 acre of permanent impacts, the applicant shall purchase 0.05 acre of wetland mitigation credits from the San Francisco Bay Wetland Mitigation Bank. Prior to the authorized discharge of fill material into jurisdictional waters, the Corps shall receive written confirmation from the selected mitigation bank that the required preservation and creation/restoration credits have been purchased by the applicant.

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3. A post construction report shall be submitted 45 days after the conclusion of construction activities. The report shall document construction activities and contain as-built drawings (if different from drawings submitted with application) and include before and after photos.

You may refer any questions on this matter to Justin Yee of my Regulatory staff by telephone at (415) 503-6788 or by e-mail at Justin.J.Yee@usace.army.mil. All correspondence should be addressed to the Regulatory Division, South Branch, referencing the file number at the head of this letter.

The San Francisco District is committed to improving service to our customers. My Regulatory staff seeks to achieve the goals of the Regulatory Program in an efficient and cooperative manner, while preserving and protecting our nation's aquatic resources. If you would like to provide comments on our Regulatory Program, please complete the Customer Service Survey Form available on our website: <http://www.spn.usace.army.mil/Missions/Regulatory.aspx>

Sincerely,



Fur

Rick M. Bottoms, Ph.D.  
Chief, Regulatory Division

Enclosures

Copy Furnished (w/ encls):  
Horizon Water and Environment, Oakland, CA (Attn: Ken Schwarz)

Copy Furnished (w/ Encl 1 only):  
CA RWQCB, Oakland, CA  
SF BCDC, San Francisco, CA

Basemap and Imagery Sources: Source: Esri, DigitalGlobe, GeoEye, i-Planet, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



U.S. Army Corps  
of Engineers  
San Francisco District  
Regulatory Division

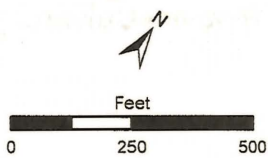
**USACE File # 2016-00024S  
Colma Creek Flood Control  
Channel Maintenance**

June 21, 2017

Sheet 1 of 3



**Figure 2b  
Reach 2 with  
Sediment Depth**



Sediment Depth (feet)	
0 - 0.5	1.5 - 2
0.5 - 1	2 - 2.5
1 - 1.5	2.5 - 4.75

Project Area



Colma Creek  
Flood Control Maintenance Project



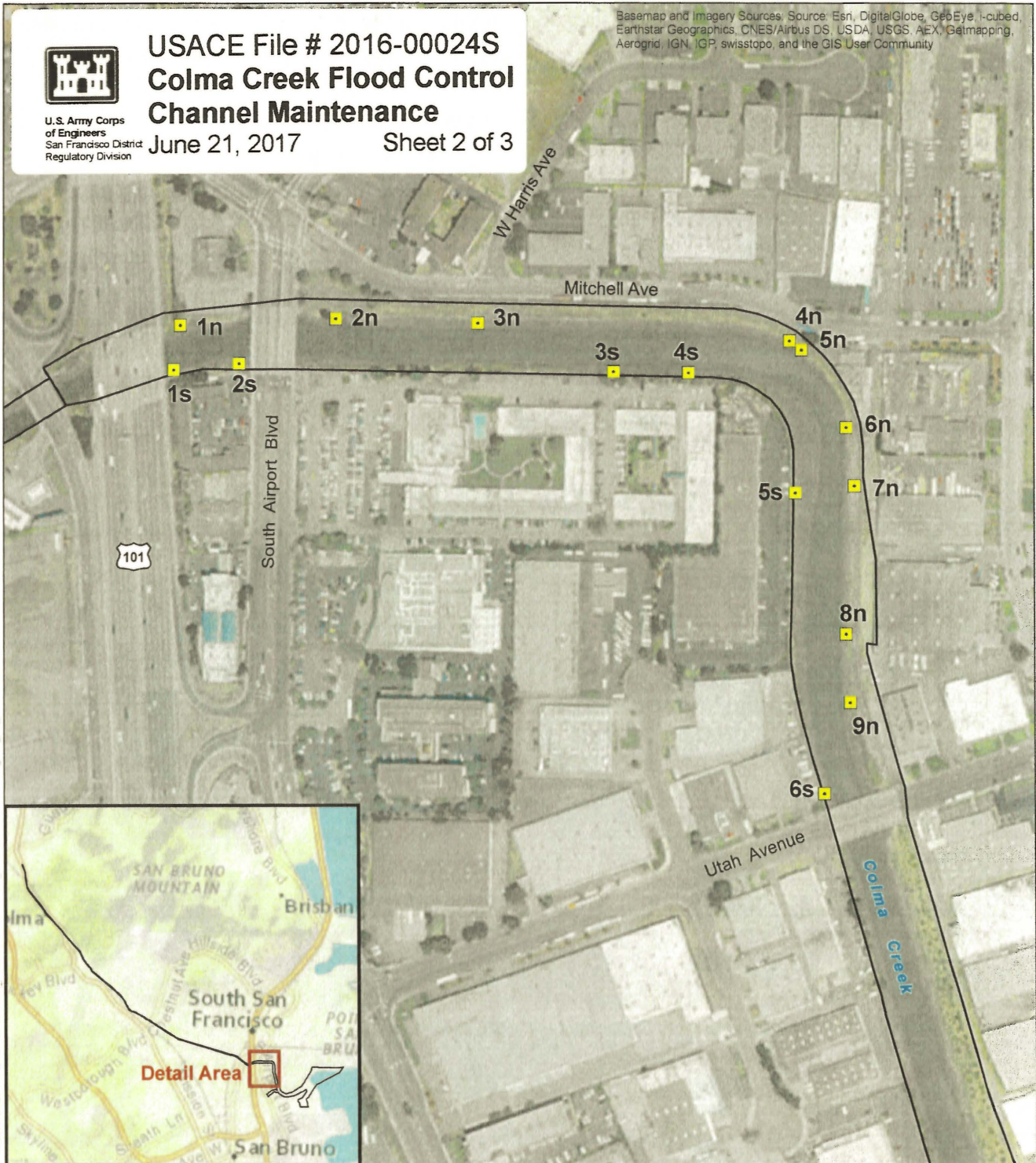
U.S. Army Corps  
of Engineers  
San Francisco District  
Regulatory Division

# USACE File # 2016-00024S Colma Creek Flood Control Channel Maintenance

June 21, 2017

Sheet 2 of 3

Basemap and Imagery Sources: Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



**Figure 2c  
Reach 3 Culverts**



Feet



Project Area

Culvert



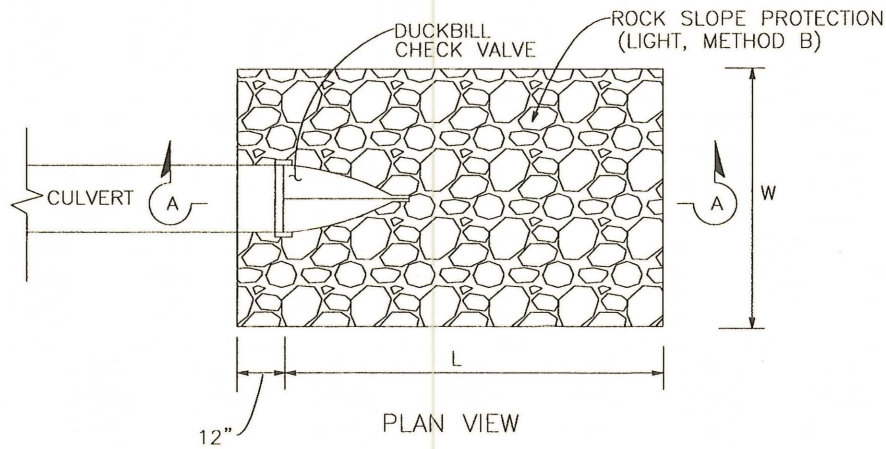
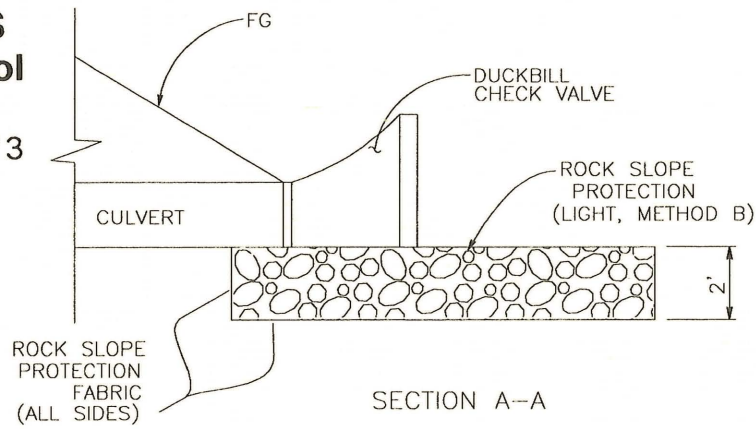


U.S. Army Corps  
of Engineers  
San Francisco District  
Regulatory Division

USACE File # 2016-00024S  
**Colma Creek Flood Control  
Channel Maintenance**

June 21, 2017

Sheet 3 of 3



PIPE SIZE	L (Ft)	W (Ft)
6"	11	5
12"	11	5
15"	11	5
18"	11	5
24"	14	6
36"	20	9

**ROCK SLOPE PROTECTION DETAILS**

Source: WRECO 2015



**Figure 5  
Culvert Repair Typical Details**

## PRELIMINARY JURISDICTIONAL DETERMINATION FORM

**This preliminary JD finds that there "may be" waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:**

District Office San Francisco District File/ORM # 2016-00024S PJD Date: Jun 21, 2017

State	<u>CA</u>	City/County	<u>San Mateo County</u>
Nearest Waterbody:	<u>Colma Creek</u>		
Location: TRS, LatLong or UTM:	<u>center at Lat.: 37.6566°N, Long: 122.4171°W, Section 18, Township 2S, Range 6W</u>		
Name/Address of Person Requesting PJD	<u>Mr. Mark Chow County of San Mateo, Department of Public Works 555 County Center, 5th Floor Redwood City, California 94063</u>		

Identify (Estimate) Amount of Waters in the Review Area:	Name of Any Water Bodies on the Site Identified as
Non-Wetland Waters: <u>28,512</u> linear ft. width <u>104.97</u> acres Stream Flow: <u>Per. (seasonal)</u>	Tidal: <u>Colma Creek upstream</u> Section 10 Waters: Non-Tidal: <u>Colma Creek downstream</u>
Wetlands: <u>13.03</u> acre(s) Cowardin Class: <u>Palustrine, emergent</u>	<input checked="" type="checkbox"/> Office (Desk) Determination <input type="checkbox"/> Field Determination: Date of Field Trip: _____

**SUPPORTING DATA: Data reviewed for preliminary JD (check all that apply - checked items should be included in case file and, where checked and requested, appropriately reference sources below):**

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Figures 5a to 5f, Delineation Map, Horizon 2015
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
  - Office concurs with data sheets/delineation report.
  - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps \_\_\_\_\_
- Corps navigable waters' study: \_\_\_\_\_
- U.S. Geological Survey Hydrologic Atlas:
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite quad name: San Francisco South
- USDA Natural Resources Conservation Service Soil Survey. Citation: \_\_\_\_\_
- National wetlands inventory map(s). Cite name: \_\_\_\_\_
- State/Local wetland inventory map(s): \_\_\_\_\_
- FEMA/FIRM maps: \_\_\_\_\_
- 100-year Floodplain Elevation is: \_\_\_\_\_
- Photographs:
  - Aerial (Name & Date): Google Maps 2017
  - Other (Name & Date): Site Photos, Delineation Report, Horizon 2015
- Previous determination(s). File no. and date of response letter: \_\_\_\_\_
- Other information (please specify): Colma Creek is navigable in fact, tidal in Reach 3

**IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.**

Signature and Date of Regulatory Project Manager  
(REQUIRED)

Signature and Date of Person Requesting Preliminary JD  
(REQUIRED, unless obtaining the signature is impracticable)

**EXPLANATION OF PRELIMINARY AND APPROVED JURISDICTIONAL DETERMINATIONS:**

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "preconstruction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable.

**PRELIMINARY JURISDICTIONAL DETERMINATION FORM**

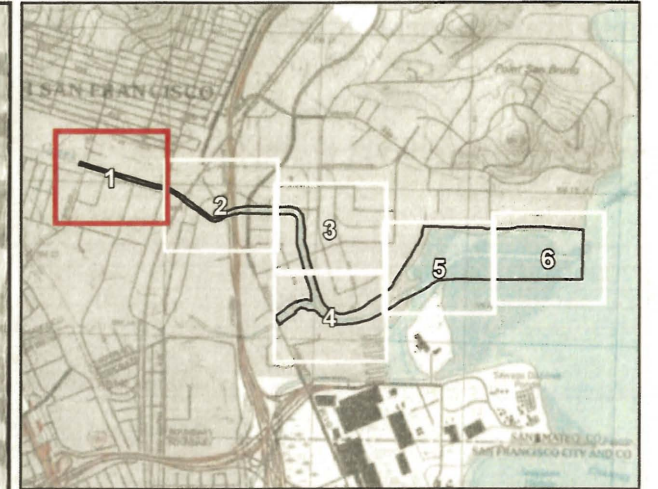
**This preliminary JD finds that there "may be" waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:**

Appendix A - Sites

District Office San Francisco District File/ORM # 2016-00024S PJD Date: Jun 21, 2017  
 State CA City/County San Mateo County Person Requesting PJD Mark Chow (c/o Ken Schwarz)

Site Number	Latitude	Longitude	Cowardin Class	Est. Amount of Aquatic Resource in Review Area	Class of Aquatic Resource
Crk1	37.6566N	122.4171W	Riverine	5.4mi	Section 10 tidal
Wetland	37.6566N	122.4171W	Palustrine, emergent	13.03 acres	Non-Section 10 wetland

Notes:



Sheet 1 of 6



Summary of Wetlands and Non-wetland Waters of the U.S.			
Description	Wetland ID	Type	Area (acres)
Modified Channel	MC-1	Waters	5.44
<b>Total</b>			<b>5.44</b>



**US Army Corps of Engineers**  
San Francisco District

**Preliminary Jurisdictional Determination**  
Colma Creek Flood Control Channel Maintenance, File 2016-00024S  
Location: 5.4 miles of Colma Creek, from A St. in Colma to San Francisco Bay, in San Mateo County, CA (centered at Lat: 37.657°N, Long: 122.417°W)

Preliminary Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act jurisdiction is delineated only within the Study Area.

Review Date: 21 JUNE 2017 Figures 5a to 5f

**Waters**

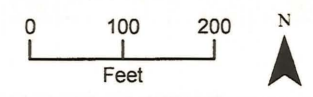
- Modified Channel
- Channel
- Mud Flat
- Rocky Intertidal
- Bay

**Wetlands**

- Intertidal Marsh

**Wetland Data Points**

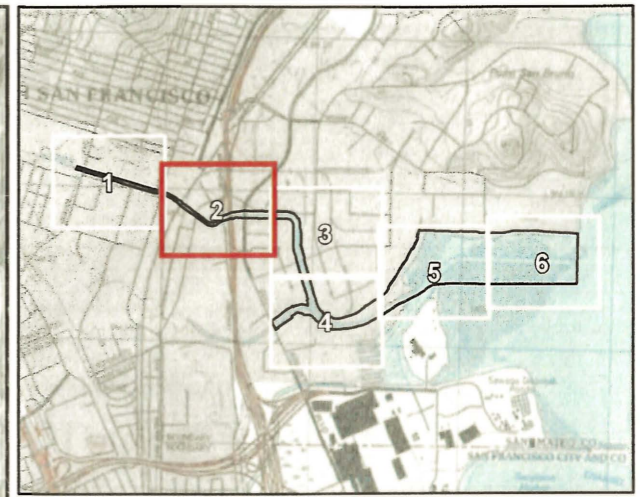
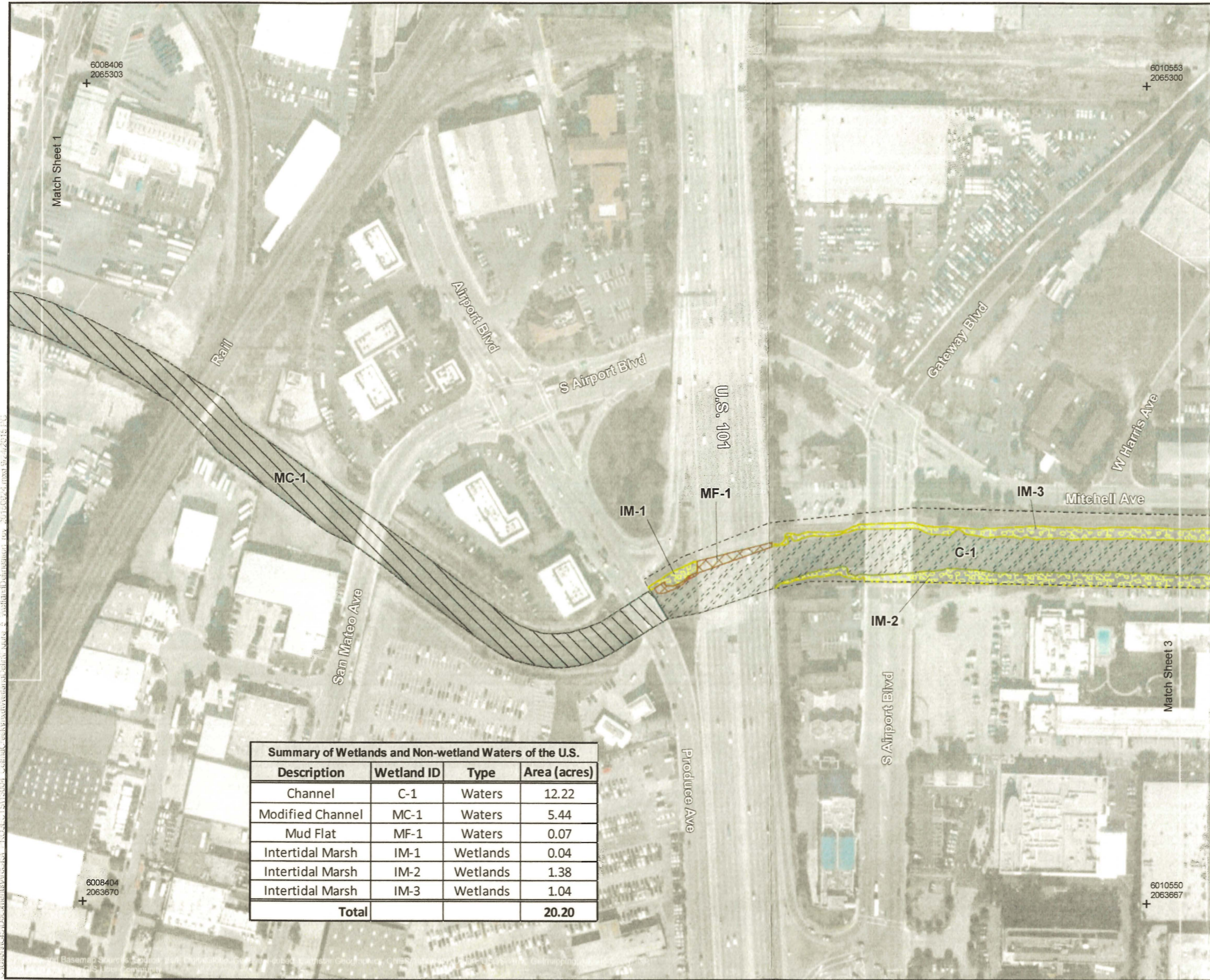
- Wetland
- Upland
- Wetland Delineation Study Area
- Control Point (California State Plane, Zone 3, feet)



PREPARED BY: 	180 Grand Ave Ste 1405 Oakland CA 94612 510-986-1850	PREPARED FOR: County of San Mateo Dept. of Public Works 555 County Center, 5th Floor Redwood City, CA 94063 (650) 363-4100
DRAWN BY: P. Glendening DELINEATION BY: K. Fisher DATE OF FIELD WORK: August 8, 2014	USACE REGULATORY FILE: VERIFIED BY: DATE OF VERIFICATION:	
<b>REVISIONS</b>		
DATE	DESCRIPTION	BY
25 Sept., 2015	Removed "Seasonally Ponded Depression", Expanded C-1	P. Glendening

**Colma Creek  
Flood Control Maintenance Project**

**Figure 5a  
Wetland Delineation Map**



**Waters**

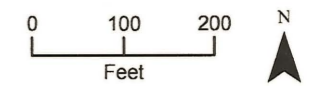
- Modified Channel
- Channel
- Mud Flat
- Rocky Intertidal Bay

**Wetlands**

- Intertidal Marsh

**Wetland Data Points**

- Wetland
- Upland
- Wetland Delineation Study Area
- Control Point (California State Plane, Zone 3, feet)

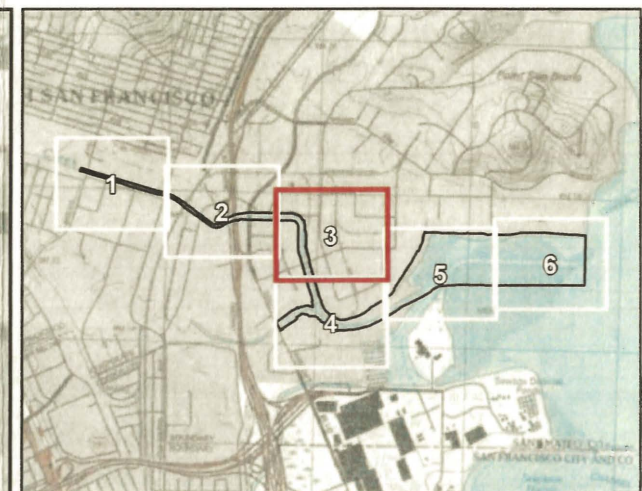
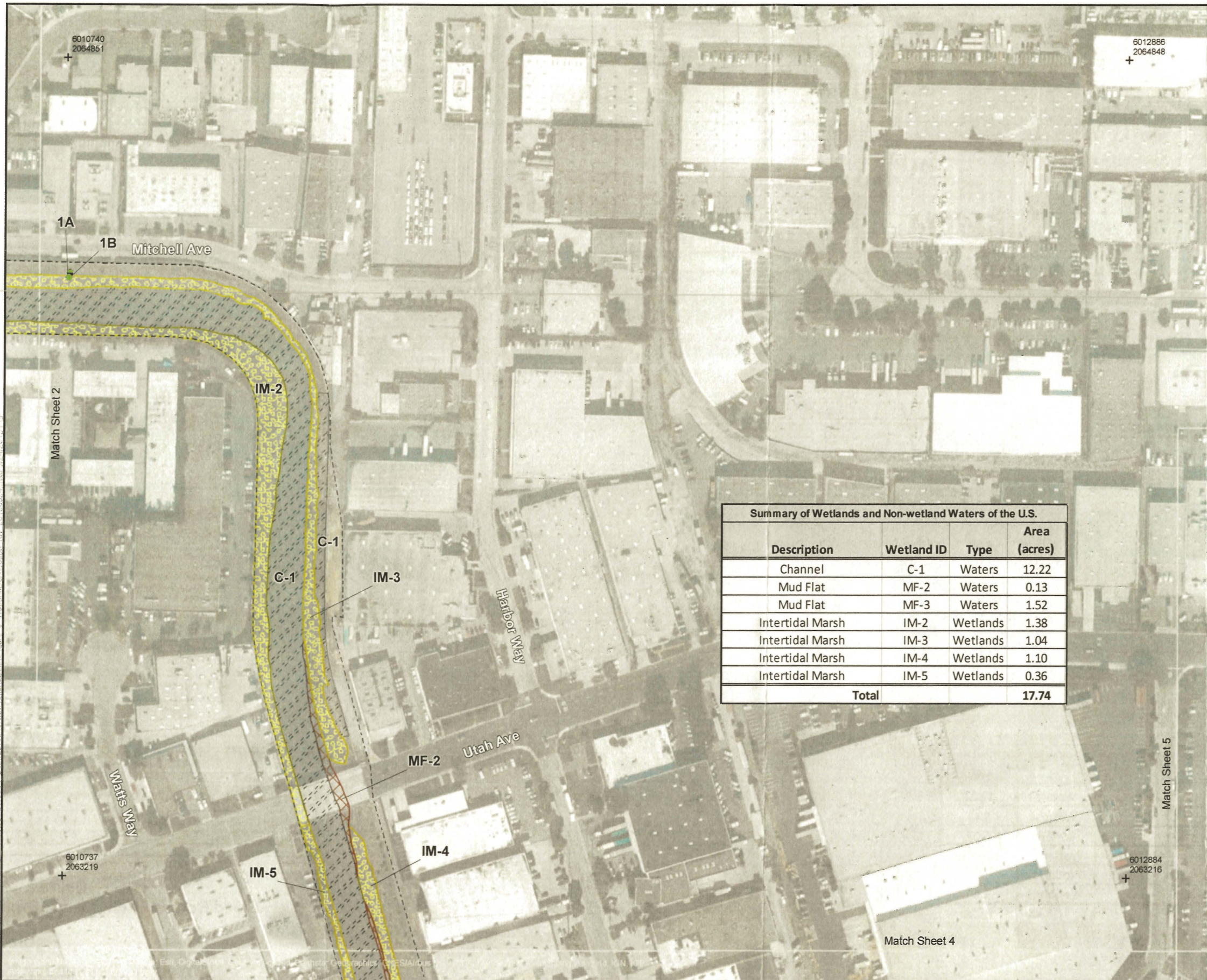


Summary of Wetlands and Non-wetland Waters of the U.S.			
Description	Wetland ID	Type	Area (acres)
Channel	C-1	Waters	12.22
Modified Channel	MC-1	Waters	5.44
Mud Flat	MF-1	Waters	0.07
Intertidal Marsh	IM-1	Wetlands	0.04
Intertidal Marsh	IM-2	Wetlands	1.38
Intertidal Marsh	IM-3	Wetlands	1.04
<b>Total</b>			<b>20.20</b>

PREPARED BY: Horizon 180 Grand Ave Ste 1405 Oakland CA 94612 510-986-1850	PREPARED FOR: County of San Mateo Dept. of Public Works 555 County Center, 5th Floor Redwood City, CA 94063 (650) 363-4100	
DRAWN BY: P. Glendening DELINEATION BY: K. Fisher DATE OF FIELD WORK: August 8, 2014	USAGE REGULATORY FILE: VERIFIED BY: DATE OF VERIFICATION:	
<b>REVISIONS</b>		
DATE	DESCRIPTION	BY
25 Sept., 2015	Removed "Seasonally Pondered Depression", Expanded C-1	P. Glendening

Colma Creek  
Flood Control Maintenance Project

**Figure 5b**  
**Wetland Delineation Map**



**Summary of Wetlands and Non-wetland Waters of the U.S.**

Description	Wetland ID	Type	Area (acres)
Channel	C-1	Waters	12.22
Mud Flat	MF-2	Waters	0.13
Mud Flat	MF-3	Waters	1.52
Intertidal Marsh	IM-2	Wetlands	1.38
Intertidal Marsh	IM-3	Wetlands	1.04
Intertidal Marsh	IM-4	Wetlands	1.10
Intertidal Marsh	IM-5	Wetlands	0.36
<b>Total</b>			<b>17.74</b>

**Waters**

- Modified Channel
- Channel
- Mud Flat
- Rocky Intertidal
- Bay

**Wetlands**

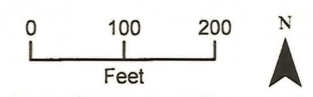
- Intertidal Marsh

**Wetland Data Points**

- Wetland
- Upland

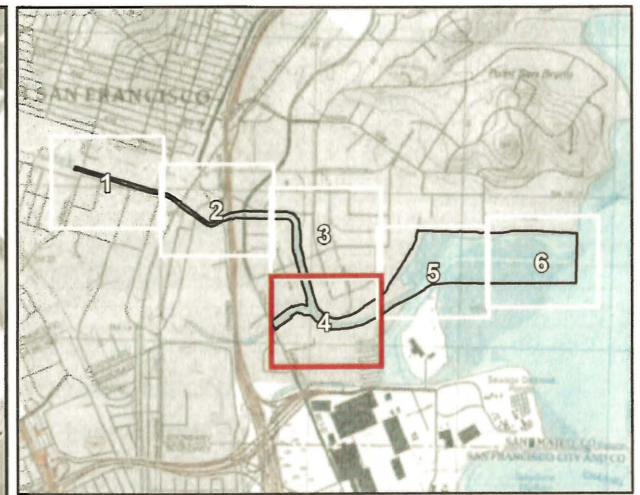
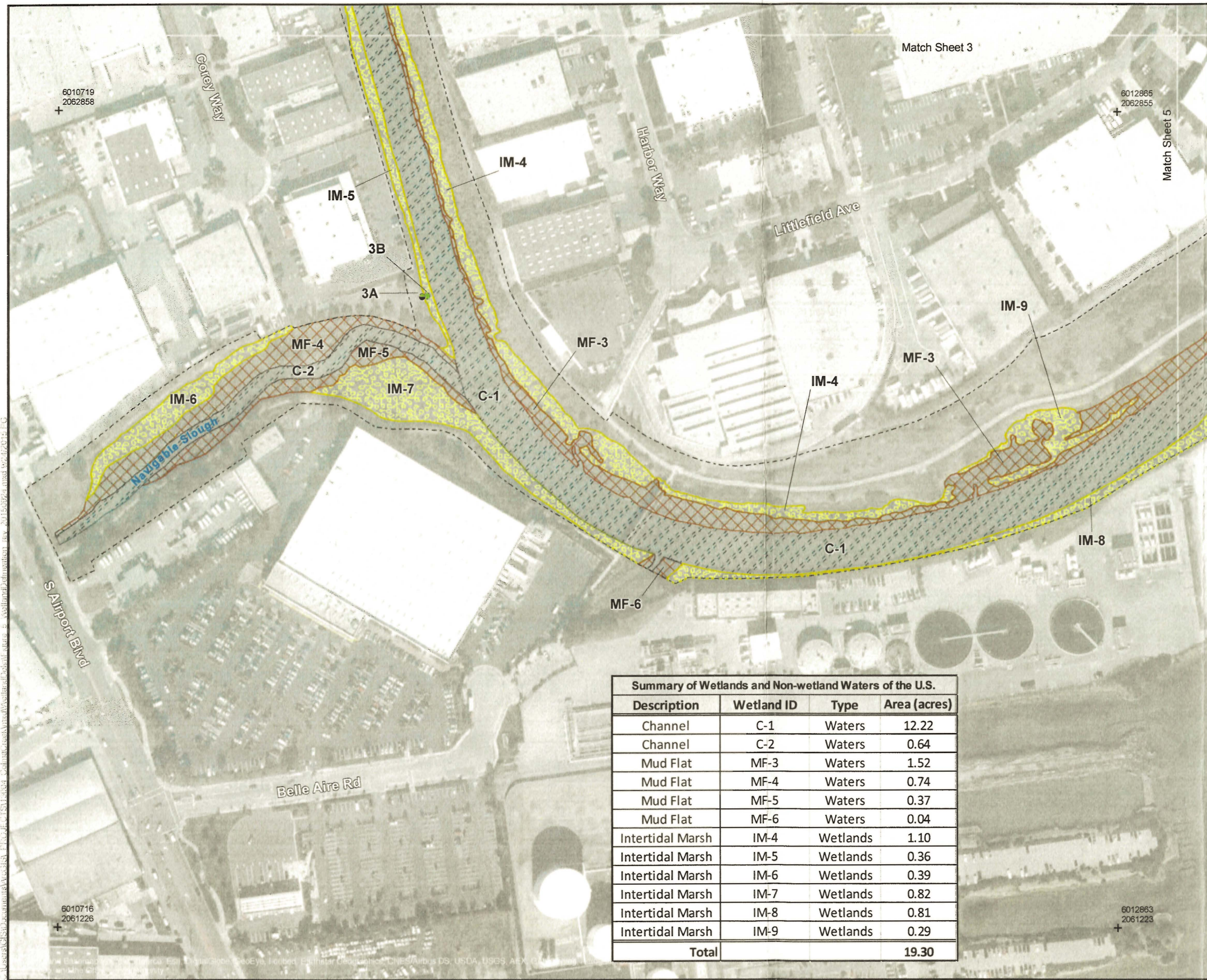
Wetland Delineation Study Area

Control Point (California State Plane, Zone 3, feet)



PREPARED BY: 	180 Grand Ave Ste 1405 Oakland CA 94612 510-886-1850	PREPARED FOR: County of San Mateo Dept. of Public Works 555 County Center, 5th Floor Redwood City, CA 94063 (650) 963-4100
DRAWN BY: P. Glendening DELINEATION BY: K. Fisher DATE OF FIELD WORK: August 8, 2014	USACE REGULATORY FILE: VERIFIED BY: DATE OF VERIFICATION:	
	<b>REVISIONS</b>	
<b>DATE</b>	<b>DESCRIPTION</b>	<b>BY</b>
25 Sept., 2015	Removed "Seasonally Ponded Depression" Expanded C-1	P. Glendening

**Colma Creek  
 Flood Control Maintenance Project**  
  
**Figure 5c  
 Wetland Delineation Map**



Sheet 4 of 6

**Waters**

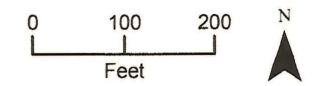
- Modified Channel
- Channel
- Mud Flat
- Rocky Intertidal Bay

**Wetlands**

- Intertidal Marsh

**Wetland Data Points**

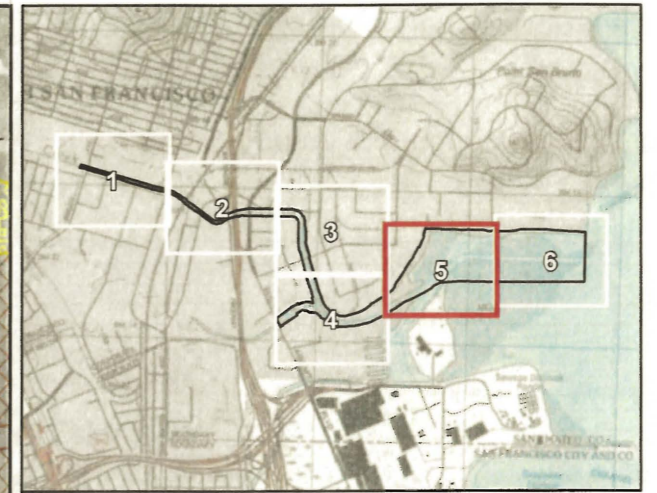
- Wetland
- Upland
- Wetland Delineation Study Area
- Control Point (California State Plane, Zone 3, feet)



Summary of Wetlands and Non-wetland Waters of the U.S.			
Description	Wetland ID	Type	Area (acres)
Channel	C-1	Waters	12.22
Channel	C-2	Waters	0.64
Mud Flat	MF-3	Waters	1.52
Mud Flat	MF-4	Waters	0.74
Mud Flat	MF-5	Waters	0.37
Mud Flat	MF-6	Waters	0.04
Intertidal Marsh	IM-4	Wetlands	1.10
Intertidal Marsh	IM-5	Wetlands	0.36
Intertidal Marsh	IM-6	Wetlands	0.39
Intertidal Marsh	IM-7	Wetlands	0.82
Intertidal Marsh	IM-8	Wetlands	0.81
Intertidal Marsh	IM-9	Wetlands	0.29
<b>Total</b>			<b>19.30</b>

PREPARED BY: 	180 Grand Ave Ste 1405 Oakland CA 94612 510-886-1850	PREPARED FOR: County of San Mateo Dept. of Public Works 555 County Center, 5th Floor Redwood City, CA 94063 (650) 363-4100
DRAWN BY: P. Glendening DELINEATION BY: K. Fisher DATE OF FIELD WORK: August 8, 2014	USACE REGULATORY FILE VERIFIED BY: DATE OF VERIFICATION:	
DATE	REVISIONS	BY
25 Sept., 2015	Removed "Seasonally Ponded Depression" Expanded C-1	P. Glendening

Colma Creek  
Flood Control Maintenance Project  
**Figure 5d**  
Wetland Delineation Map



Sheet 5 of 6

**Waters**

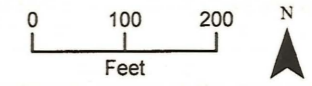
- Modified Channel
- Channel
- Mud Flat
- Rocky Intertidal
- Bay

**Wetlands**

- Intertidal Marsh

**Wetland Data Points**

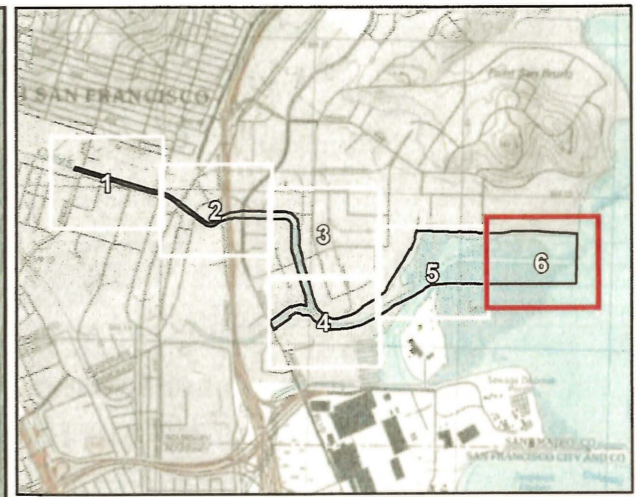
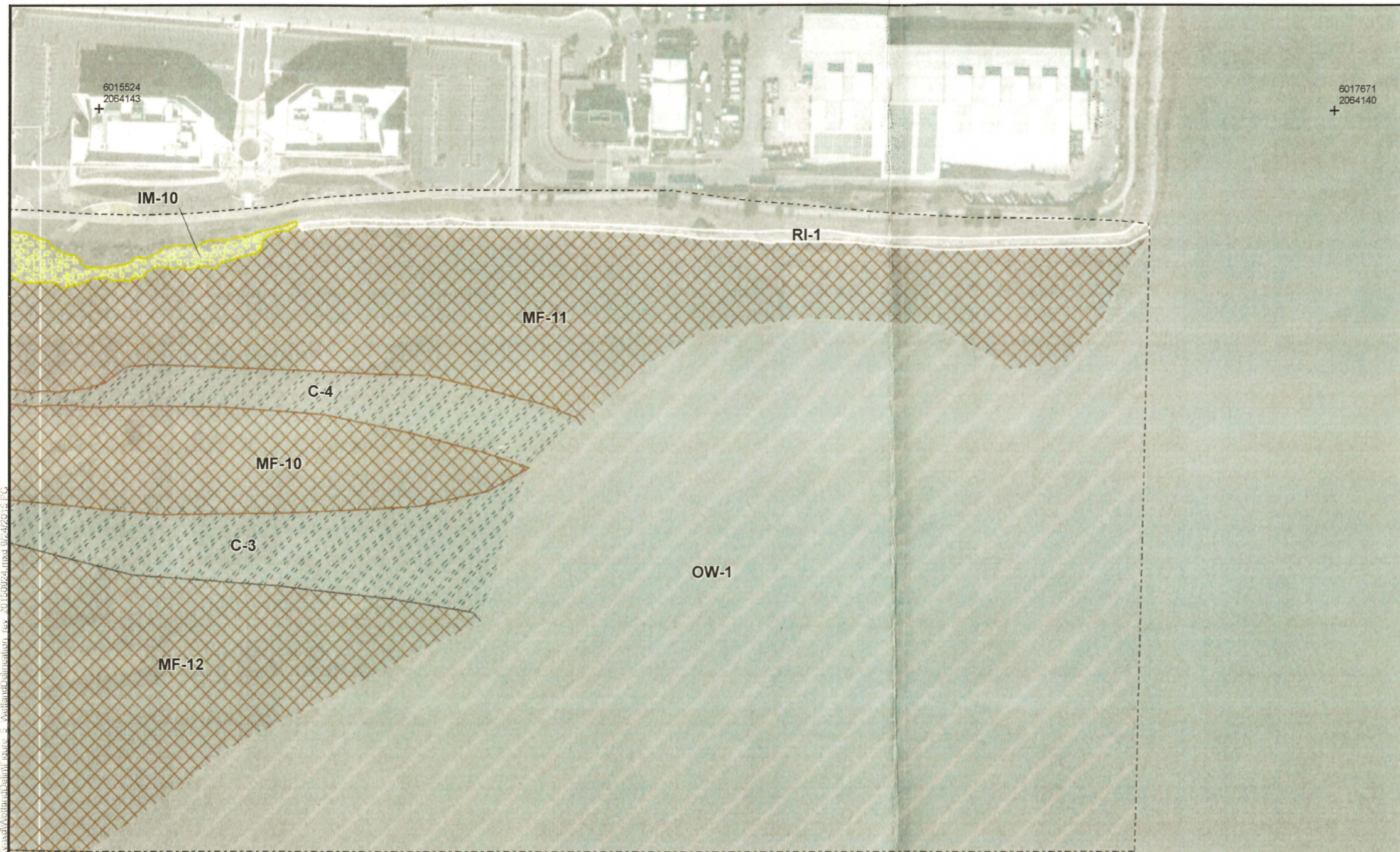
- Wetland
- Upland
- Wetland Delineation Study Area
- Control Point (California State Plane, Zone 3, feet)



Summary of Wetlands and Non-wetland Waters of the U.S.			
Description	Wetland ID	Type	Area (acres)
Channel	C-1	Waters	12.22
Channel	C-3	Waters	7.32
Channel	C-4	Waters	1.87
Mud Flat	MF-10	Waters	23.48
Mud Flat	MF-11	Waters	9.32
Mud Flat	MF-12	Waters	15.00
Mud Flat	MF-3	Waters	1.52
Mud Flat	MF-7	Waters	0.04
Mud Flat	MF-8	Waters	0.03
Mud Flat	MF-9	Waters	0.86
Intertidal Marsh	IM-10	Wetlands	6.80
Intertidal Marsh	IM-8	Wetlands	0.81
<b>Total</b>			<b>79.26</b>

PREPARED BY: 	180 Grand Ave Ste 1405 Oakland CA 94612 (510) 986-1850	PREPARED FOR: County of San Mateo Dept. of Public Works 555 County Center, 5th Floor Redwood City, CA 94063 (650) 353-4100
DRAWN BY: P. Glendening DELINEATION BY: K. Fisher DATE OF FIELD WORK: August 8, 2014	USACE REGULATORY FILE: VERIFIED BY: DATE OF VERIFICATION:	
REVISIONS		
DATE	DESCRIPTION	BY
25 Sept., 2015	Removed "Seasonally Ponded Depression", Expanded C-1	P. Glendening

Colma Creek  
Flood Control Maintenance Project  
**Figure 5e**  
Wetland Delineation Map



Sheet 6 of 6

**Waters**

- Modified Channel
- Channel
- Mud Flat
- Rocky Intertidal
- Bay

**Wetlands**

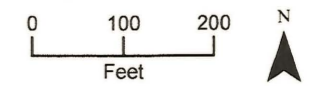
- Intertidal Marsh

**Wetland Data Points**

- Wetland
- Upland

Wetland Delineation Study Area

Control Point  
(California State Plane, Zone 3, feet)



Summary of Wetlands and Non-wetland Waters of the U.S.			
Description	Wetland ID	Type	Area (acres)
Channel	C-3	Waters	7.32
Channel	C-4	Waters	1.87
Mud Flat	MF-10	Waters	23.48
Mud Flat	MF-11	Waters	9.32
Mud Flat	MF-12	Waters	15.00
Open Water	OW-1	Waters	25.38
Rocky Intertidal	RI-1	Waters	0.50
Intertidal Marsh	IM-10	Wetlands	6.80
<b>Total</b>			<b>89.64</b>

PREPARED BY: 	180 Grand Ave Ste 1405 Oakland CA 94612 510-986-1850	PREPARED FOR: County of San Mateo Dept. of Public Works 555 County Center, 5th Floor Redwood City, CA 94063 (650) 363-4100
DRAWN BY: P. Glendening DELINEATION BY: K. Fisher DATE OF FIELD WORK: August 8, 2014	USACE REGULATORY FILE: VERIFIED BY: DATE OF VERIFICATION:	
<b>REVISIONS</b>		
DATE	DESCRIPTION	BY
25 Sept., 2015	Removed "Seasonally Pondered Depression", Expanded C-1	P. Glendening

Colma Creek  
Flood Control Maintenance Project  
**Figure 5f**  
**Wetland Delineation Map**

Imagery and Basemap Sources: Source: Esri, DigitalGlobe, GeoEye, I-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Match Sheet 5

6015522  
2062511

6017668  
2062508

Enclosure 3

Permittee: Mr. Mark Chow, County of San Mateo Department of Public Works

File Number: 2016-00024S

**Certification of Compliance  
for  
Nationwide Permit**

"I hereby certify that the work authorized by the above referenced File Number and all required mitigation have been completed in accordance with the terms and conditions of this Nationwide Permit authorization."

\_\_\_\_\_  
(Permittee)

\_\_\_\_\_  
(Date)

Return to:

Justin Yee  
U.S. Army, Corps of Engineers  
San Francisco District  
Regulatory Division, CESP-N-R-S  
1455 Market Street  
San Francisco, CA 94103-1398



## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
 San Francisco Bay-Delta Fish and Wildlife Office  
 650 Capitol Mall, Suite 8-300  
 Sacramento, California 95814



In reply refer to:  
 08FBDT00-2016-I-0233

JAN 23 2017

Ms. Holly Costa  
 Acting Regulatory Division Chief  
 San Francisco District  
 U.S. Army Corps of Engineers  
 1455 Market Street  
 San Francisco, California 94103-1398

Subject: Informal Consultation on the Colma Creek Flood Control Channel Maintenance Project, City of South San Francisco, San Francisco County, California (U.S. Army Corps of Engineers File Number: SPK-2016-00024S)

Dear Ms. Costa:

This letter is in response to the U.S. Army Corps of Engineers (Corps) May 26, 2016, request to initiate informal consultation with the U.S. Fish and Wildlife Service (Service) for the County of San Mateo (Applicant) Colma Creek Flood Control Channel Maintenance Project (Project), in City of South San Francisco, San Francisco County, California. The Corps' consultation initiation letter was received by the Service on May 31, 2016. The proposed project encompasses maintenance activities including the placement of 58 cubic yards of fill in 0.017 acre of jurisdictional waters. The Corps has determined that this project may affect, but is not likely to adversely affect the endangered California clapper rail (*Rallus longirostris obsoletus*). Regarding taxonomic assignment and nomenclature for the California clapper rail, until a time when the Service officially adopts recent changes made by the American Ornithologists' Union (from California clapper rail [*Rallus longirostris obsoletus*] to Ridgway's Rail [*Rallus obsoletus*]), the Service maintains the use of California clapper rail (*Rallus longirostris obsoletus*) in this current correspondence. The change in the common name and taxonomy of the California clapper rail, however, does not change the listing status of the species. This response is in accordance with section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act).

In reviewing the Project, the Service has relied upon: (1) the Corps' May 26, 2016, letter requesting informal consultation; (2) the Applicant's December 2015, *Biological Assessment for the Colma Creek Flood Control Channel Maintenance Project*; (3) electronic mail (email) between the Service, Corps, and Applicant from October 20, 2016 to December 9, 2016; (4) data from Olofson Environmental, Inc.'s November 28, 2016, *California Ridgeway's Rail Surveys for the San Francisco Estuary Invasive Spartina Project 2016*; and (5) other information available to the Service.

The San Mateo County Flood Control District (District), operating within the Public Works Department, is seeking regulatory approval to conduct routine maintenance activities from 2017-2021 (5 years) within the Colma Creek flood control channel. The proposed activities include: (1) removal of localized sediment deposits along a 0.6-mile portion of the channel; (2) repair and replacement of approximately 14 culverts; and (3) other routine, recurrent maintenance activities as-needed including clearing clogged culvert outfalls, vegetation management on concrete joints in the channel banks/beds, repair of concrete or hardened channel banks/beds, installing and maintaining trash capture devices, removing accumulating debris, installing and repairing fences on channel banks, repairing access roads, and graffiti abatement.

For purposes of consultation, necessary project maintenance activities are divided among three stretches (Reaches 1 through 3) of the Colma Creek flood control channel. Reach 1 is described as the upper maintenance reach including the channel upstream from the intersection of A Street/El Camino Real downstream to Spruce Avenue. Reach 2 encompasses the channel extending from Spruce Avenue downstream to Produce Avenue. Reach 3 encompasses the channel extending from Produce Avenue downstream to the creek outfall into San Francisco Bay. Sediment removal on the channel bed will primarily occur within Reach 2. Culvert repair and replacement will be limited to the areas between Highway 101 and Navigable Slough within Reach 3. All other general maintenance activities will occur along all three stretches of the channel.

Sediment removal is a primary object of the aforementioned maintenance activities and is required to ensure adequate conveyance capacity within the Colma Creek flood control channel. Sediment removal activities will be conducted using equipment (e.g., loaders, excavators, dump trucks) situated on the top of the bank. Per Regional Water Quality Control Board permit terms, sediment removal will only occur where silt has accumulated more than two feet on top of the channel bottom. Removal will be conducted during the summer months where flow is minimal or absent (August-September) and during low-tide. As a result, dewatering is not expected to be utilized; however, temporary cofferdams may be installed around the work area during low tide if necessary to facilitate the work.

To avoid working near the low-flow channel, sediment near the outer structures will be removed first and a sediment berm will be left between the excavated areas and the active channel. After removal, the berm will be breached to allow the incoming tide to enter the excavated areas. A silt curtain will be installed around the work site to trap suspended sediment generated by maintenance work and prevent turbidity increases. Up to 400 cubic yards of sediment may be removed in a given year, although this activity is only anticipated to be conducted once over the lifetime of the proposed five-year maintenance period. Material collected will be hauled off-site for disposal at an approved facility.

Several culvert and associated outfall structures are broken or degraded and require repair or replacement. These culverts are constructed of either reinforced concrete or corrugated metal pipe and range from 15 to 36 inches in diameter and 20 to 50 feet long. Fourteen (14) culverts in Reach 3 between Highway 101 and the Utah Avenue Bridge require maintenance and will have duckbill check valves added to their outlets, thereby reducing sedimentation in the culvert and preventing water ingress during high tides. The check valves will be installed with hand tools but

may require the assistance of heavy equipment such as a small lift. Twelve (12) culverts will have rock slope protection added to the outlet or will have existing sack concrete replaced with rock slope protection. Two (2) culverts will be replaced with reinforced concrete or high-density polyethylene pipe of the same diameter. Where feasible, equipment will operate from the top of the bank on the landward side of the existing concrete flood wall but some maintenance will require equipment operation within wetlands or soft sediment. In such cases, equipment will operate on mats or will be specialized low ground pressure equipment. Heavy equipment to be used includes an excavator, skip loader, mechanical compactor, and haul truck.

A silt curtain will be installed around the work areas at low tide and temporary cofferdams may be employed to isolate construction areas from tidal inundation. Environmentally Sensitive Area fencing will be used to demarcate the work site. Degraded culvert pipes will be excavated and disposed of at an appropriate facility. After the replacement culvert is installed or repaired, the trench will be backfilled, compacted, and restored to match the surrounding surfaces. Should the assessment of the existing culvert determine that the condition of the pipe is not severely deteriorated, a rehabilitation of the pipe such as slip-lining, may be proposed and performed in lieu of in-situ replacement.

Removal of sediment and debris that is blocking culverts, storm drain outlets, or dissipater teeth may also be necessary to maintain flood control capacity. As needed, the District will remove such obstructions by excavating localized portions of the channel during dry or low tide conditions from the bank top. Removal of vegetation that has colonized joints in the channel wall or bottom will also be removed to maintain channel access and flow. Herbicides approved for use in aquatic environments may be used to control vegetation on upper banks and access roads. Invasive upland species will be removed from all channel segments as necessary but no native saltmarsh vegetation will be disturbed.

Structural components of hardened channel banks and bed will also be addressed during maintenance activities. Failed or damaged section of concrete wall revetments, riprap, or sacked concrete bank revetments such as crumbling or chipping will be repaired using grout. Larger-scale repair work will require concrete patching or reforming of the channel wall. This will be conducted when the channel is at its lowest level or completely dry, and when rain is not in the 72-hour forecast. In addition, periodic cleaning of concrete wall weep holes may be necessary to prevent blockage and allow for drainage. Other routine maintenance activities include general removal of debris, abatement of graffiti, installation and maintenance of trash capture devices, and installation or repair of fencing. Staging of equipment and materials will occur within maintenance access roads adjacent to the channel.

### *Conservation Measures*

- 1) Maintenance activities occurring below the High Tide Line or Ordinary High Water will take place during the low-flow period and between August 1 and October 15.
- 2) For work that requires dewatering or fish exclusion, cofferdams or exclusion structures shall be installed at the lowest possible tides to minimize the potential for fish to be in the work area. Cofferdams will only be built from materials such as

sandbags, clean gravel, or rubber bladders which cause little siltation or turbidity. Visqueen shall be placed over sandbags to minimize water seepage into the maintenance areas and all runoff within the site will be effectively managed and coordinated with the local municipality before discharging water.

- 3) Exclusion structures (*e.g.*, silt curtain, netting) shall remain in place during instream construction activities and shall be monitored daily to ensure they are effectively excluding fish. Any pumps used for dewatering shall be screened with 3/32-inch or finer mesh material.
- 4) Work within wetland areas shall be minimized to the extent feasible. Construction occurring on soft sediment will either employ specialized low ground pressure equipment or will operate on installed mats.
- 5) Construction crews will implement best measurement practices (BMPs) for working within sensitive habitats including but not limited to: properly maintaining construction equipment to prevent any leaks, inspecting vehicles daily that are operated within 250 feet of the channel, refueling vehicles in a separate area designated for equipment away from slopes, drains, or watercourses, hazardous materials will be labeled, stored, and transported in accordance with city, county, state, and federal regulations, disposing of any hazardous wastes at appropriate facilities, and covering general waste containers at the end of every work day. Additionally, the Applicant will ensure any construction contractors develop and submit a Spill Prevention and Response Plan for prior to initiating construction activities.
- 6) A worker environmental training describing the sensitive species having the potential to occur in the action area will be conducted prior to initiating project construction. This training will also detail the consequences associated with violation of the Act. A fact sheet conveying this information will be prepared for distribution to anyone who enters the Project site.
- 7) Weep hole cleaning within 50 feet of nests will occur between August 15 and February 15, outside of the typical breeding season for birds, as these weep holes are often utilized by birds.
- 8) Maintenance activities involving heavy equipment, ground disturbance, or vegetation removal that is scheduled during the nesting season (February 15 to August 15) will be preceded by a focused survey for active bird nests no more than 15 days prior to the commencing of project activities. If active nests are found, the Applicant shall consult with the Service regarding appropriate action pursuant to the Migratory Bird Treaty Act of 1918.
- 9) The Applicant will implement the Project's Multi-Agency Compensatory Mitigation and Monitoring Plan, which will reestablish 0.10 acre of tidal wetlands along Colma Creek in Reach 3 to offset potential impacts to intertidal wetlands and waters due to

culvert maintenance. The mitigation site is located along Colma Creek downstream of proposed sediment removal activities and within the same reach as proposed culvert maintenance activities.

The Service concurs with the Corps' determination that the Project may affect, but is not likely to adversely affect the California clapper rail. This concurrence is based on the current absence of California clapper rail from the action area since prior to 2012 (evidenced by survey data from the Invasive Spartina Project 2016 annual rail monitoring program and recent California Natural Diversity Database queries), the implementation of the proposed avoidance and minimization measures and BMPs for construction activities, and the effects of habitat alteration through loss of sediment deposition is expected to be discountable or insignificant to the habitat value to the species. Additionally, the Project entails removal of a small amount of the existing contaminant load present in the San Francisco Bay as well as mitigation measures for loss of Corps jurisdictional waters and is expected to have beneficial effects on unoccupied California clapper rail habitat. No effects from interdependent or interrelated actions have been identified as a result of the Project.

Unless new information reveals effects of the proposed action may affect listed species to an extent not considered or a new species or critical habitat is designated that may be affected by the proposed action, no further action pursuant to the Act is necessary. Any actions or proposed actions that are modified in a manner that causes an effect to listed species or critical habitat that was not considered in this consultation will require reinitiation.

This concludes consultation for the Colma Creek Flood Control Channel Maintenance Project. Please address any question or concern regarding this response by contacting Elden Holldorf, Fish and Wildlife Biologist by telephone at 916-930-5614 or via email at [Elden\\_Holldorf@fws.gov](mailto:Elden_Holldorf@fws.gov) or Kim Squires, Section 7 Coordinator, via email at [Kim\\_Squires@fws.gov](mailto:Kim_Squires@fws.gov). Please refer to Service File Number: 08FBDT00-2016-I-0233 in any future correspondence regarding this project.

Sincerely,



Jana Affonso  
Assistant Field Supervisor

cc: Mr. Justin Yee, U.S. Army Corps of Engineers, San Francisco, California  
Ms. Allison Chan, Horizon Water and Environment, LLC, Oakland, California



# United States Department of the Interior

FISH AND WILDLIFE SERVICE  
San Francisco Bay-Delta Fish and Wildlife Office  
650 Capitol Mall, Suite 8-300  
Sacramento, California 95814



In reply refer to:  
08FBBDT00-2016-I-0233

Mr. Rick Bottoms  
Acting Regulatory Division Chief  
San Francisco District  
U.S. Army Corps of Engineers  
1455 Market Street  
San Francisco, California 94103-1398

MAR 2 2017

Subject: Amending the Informal Consultation on the Colma Creek Flood Control Channel Maintenance Project, City of South San Francisco, San Francisco County, California (U.S. Army Corps of Engineers File Number: SPK-2016-00024S)

Dear Mr. Bottoms:

This letter is in response to the U.S. Army Corps of Engineers (Corps) February 15, 2017, request to amend the U.S. Fish and Wildlife Service's (Service) January 23, 2017, letter of concurrence for the Informal Consultation on the Colma Creek Flood Control Channel Maintenance Project (Project). Your letter was received by our office on February 17, 2017. At issue is the applicant's modification of the Corps' required mitigation for the Project, resulting in the revision of Conservation Measure #9 as written in the original concurrence letter.

In July 2016, the Corps communicated to the applicant's agent that in order to conform with the 2008 Final Mitigation Rule, the purchase of mitigation bank credits is the preferred method over permittee-responsible mitigation for the purpose of offsetting a project's effects on waters and wetlands of the U.S. At the time the compensatory mitigation plan for the Project was prepared, the applicant's agent was unaware the San Francisco Bay Wetland Mitigation Bank offered tidal wetland credits suitable for offsetting the Project's effects. The Service acknowledges the proposed Project modifications and we provide an amendment of our original concurrence letter below.

### *Conservation Measures*

To reflect changes in the implementation of mitigation actions for the Project, the Corps has proposed the following conservation measure to replace the original ninth measure with the following:

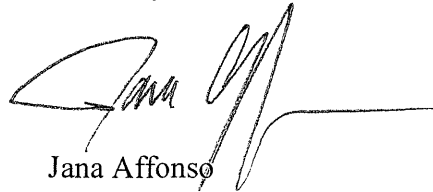
- 9) The Applicant will purchase 0.05 acre of wetland mitigation credits from the San Francisco Bay Wetland Mitigation Bank to offset potential impacts to intertidal wetlands

and waters due to culvert maintenance. The wetland mitigation bank is located in Redwood Shores, approximately 11 miles southeast of the Project area.

The Service has considered the described changes in the proposed Project's potential effects on the California clapper rail, and concurs with the Corps determination that the proposed Project as described and amended is not likely to adversely affect the California clapper rail. All other provisions of the Service's concurrence letter will remain unaltered.

Please address any question or concern regarding this response by contacting Elden Holldorf, Fish and Wildlife Biologist by telephone at 916-930-5614 or via email at [Elden\\_Holldorf@fws.gov](mailto:Elden_Holldorf@fws.gov) or Kim Squires, Section 7 Coordinator, via email at [Kim\\_Squires@fws.gov](mailto:Kim_Squires@fws.gov). Please refer to Service File Number: 08FBDT00-2016-I-0233 in any future correspondence regarding this project.

Sincerely,



Jana Affonso  
Assistant Field Supervisor

cc: Mr. Justin Yee, U.S. Army Corps of Engineers, San Francisco, California  
Ms. Allison Chan, Horizon Water and Environment, LLC, Oakland, California

RECEIVED  
SF DISTRICT  
2017 MAR -7 A 9 43  
CORPS OF ENGINEERS  
REGULATORY DIVISION

San Francisco Bay Regional Water Quality Control Board  
401 Certification

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**San Francisco Bay Regional Water Quality Control Board**

*Sent via electronic mail: No hard copy to follow*

August 31, 2017  
Regulatory Measure ID 404126  
CIWQS Place ID No. 820458  
Corps File No. 2016-00024S

County of San Mateo  
Department of Public Works  
555 County Center, 5<sup>th</sup> Floor  
Redwood City, CA 94063

Attention: Mark Chow ([mchow@smcgov.org](mailto:mchow@smcgov.org))

**Subject: 401 Water Quality Certification for the Colma Creek Flood Control  
Maintenance Project in the Cities of Colma and South San Francisco, San Mateo  
County**

Dear Mr. Chow:

San Francisco Bay Regional Water Quality Control Board (Water Board) staff has reviewed the application submitted by Horizon Water and Environment (Agent), on behalf of the County of San Mateo (Applicant), for the Colma Creek Flood Control Maintenance Project (Project) in the Cities of Colma and South San Francisco, San Mateo County. You have applied to the U.S. Army Corps of Engineers Regulatory Branch (Corps) requesting authorization to discharge dredge and fill materials to waters of the U.S. pursuant to Clean Water Act (CWA) Section 404 under Nationwide Permit (NWP) No. 3 (*Maintenance*) (Corps File No. 2016-00024S). You applied to this office pursuant to Section 401 of the Clean Water Act for water quality certification (Certification) verifying that the Project does not violate State water quality standards.

The following sections are derived from the application materials received by the Water Board on December 29, 2015 (Application), through August 2016. The Project purpose is to conduct maintenance activities as necessary along approximately 5.4 miles of the Colma Creek flood control channel to provide adequate flood conveyance capacity.

**Project Location:** The Project is located along the Colma Creek flood control channel in the cities of Colma and South San Francisco. The channel is 5.4 miles long and provides storm

runoff drainage for approximately 16.6 square miles of the northern San Francisco Peninsula, including portions of Daly City, Colma, South San Francisco, and San Bruno (Att. A, Figure 1). The channel has varied forms along its length, including earthen-lined trapezoidal channels, channels with concrete walls and earthen beds, fully concrete-lined channels, and concrete box culverts. Land uses adjacent to the Project area are diverse and include light manufacturing, residential, commercial space, warehouses, airport services, vehicles services, transportation, and cemeteries. The Project area is subdivided into three primary reaches (Att. A, Figure 2).

Reach 1 includes the upstream portion of the channel from A Street to Spruce Avenue. This segment consists entirely of a concrete lined channel and concrete box culverts. Downstream of A Street, the channel is culverted and then daylighted from the entrance to the Holy Cross Cemetery along Mission Road. The channel is also culverted beneath the South San Francisco BART station and transitions to an open trapezoidal concrete channel immediately downstream of the BART station. This reach is not tidally influenced.

Reach 2 is a concrete U-shaped channel that is within the middle maintenance reach of the Project area (Spruce Avenue to Produce Avenue). Approximately one foot of sediment is deposited across the channel bed, though deposition is greater in some locations. This section of Colma Creek is tidally influenced, but is only inundated during high tides. Little to no vegetation is present on deposited sediment bars.

Reach 3 is the channel segment downstream of Produce Avenue to the mouth of Colma Creek. At the Produce Avenue crossing, Colma Creek transitions into an earthen channel. The channel at this location is approximately 70 to 80 feet wide, and the bed is comprised of soft sediments. The banks have a narrow band of emergent marsh dominated by pickleweed (*Sarcocornia pacifica*) that transitions to an upland community dominated by ruderal species. The channel widens as Colma Creek flows towards the Bay. At the mouth of the creek is a wetland complex characterized by broad expanses of mudflat habitat, intertidal marsh, rocky intertidal, and upland habitats.

**Project Background:** The Colma Creek flood control channel provides flood protection services for residents of Colma, Daly City, and South San Francisco. The channel was built in 1974 to convey a 50-year flood. Historically, the watershed transports large amounts of sediment to the channel due to continued development within the watershed as well as erosion on San Bruno Mountain and within Colma Creek tributaries. Sediment deposition decreases channel conveyance capacity and increases flood risk for surrounding areas. Several channel improvements were implemented since the construction of the channel including channel widening, vertical wall construction, and installation of transitional structures between segments. A new channel segment was constructed between San Mateo Avenue and Produce Avenue in 1997, followed by the Spruce Avenue to San Mateo Avenue segment in 2006. The most recent sediment removal activity in 2003 removed 300 cubic yards of sediment upstream of the Produce Avenue bridge.

**Project Details:** The Project work consists of ongoing maintenance activities along 5.4 miles of Colma Creek including localized sediment removal; culvert maintenance activities; vegetation management; channel repair; installation and maintenance of trash capture devices; debris

removal; installation and repair of channel fences; access road repair; and graffiti abatement. Sediment removal activities are expected to occur on a routine basis every three to four years, or as needed. An estimated 400 cubic yards will be removed in a given year. The other activities will occur annually or as needed during the five year coverage. Project staging and access will occur within existing maintenance access roads adjacent to the channel in order to minimize impact. Project work in Reaches 1 through 3 is summarized in Table 1.

**Table 1: Summary of Project activities**

Maintenance Activities	Colma Creek Flood Control Segment		
	Reach 1: A St. to Spruce Ave.	Reach 2: Spruce Ave. to Produce Ave.	Reach 3: Produce Ave. to San Francisco Bay
Sediment removal on channel bed		X	
Repair or replacement of culverts; Clearing blocked culvert outfalls			X
Vegetation management on channel banks and bed	X	X	X
Repair or maintenance of concrete or hardened channel banks and bed	X	X	X
Installing and maintaining trash capture devices	X	X	X
As-needed general removal of obstructions and debris	X	X	X
Installing and maintaining fences on channel banks	X	X	X
Repair access roads	X	X	X
As-needed graffiti abatement	X	X	X

*Sediment Removal in Reach 2:* Proposed sediment removal sites were determined based upon channel design, which accommodates sediment up to two feet in depth along the bed. Four sediment removal sites are shown in Attachment A, Figure 2b. Sediment removal will only occur when sediment accumulates more than two feet above the channel bottom. Removal activities will be conducted during low tide in August and September when storm flows in the channel are minimal or absent. Mechanized equipment will operate from the top of the bank or within the channel if flows are minimal or absent. A silt curtain will be installed around the construction site and will be removed upon completion of sediment removal. To avoid working near the low-flow channel, sediment near the outer walls or structures will be removed first, with a sediment

boundary left between the excavated area and the active channel. After the sediment is removed, the berm will be breached to allow the incoming tide to enter the excavated area. Up to two feet of sediment depth will be preserved along the channel bed. Though dewatering is not anticipated, temporary cofferdams may be installed around the site if necessary. Dewatering and diversion activities will be in compliance with the conditions of this Certification. A sediment assessment report prepared by Pacific EcoRisk found that channel sediment is contaminated, and therefore excavated material will be properly disposed of offsite at an appropriate hazardous waste site according to contamination levels.

*Culvert Maintenance in Reach 3:* Fourteen culverts require maintenance in Reach 3 (Att. A, Figure 2c). The culverts, constructed from reinforced concrete pipe or corrugated metal pipe, range in size from 15 to 30 inches in diameter and 20 to 50 feet in length. Several existing sack concrete culvert outfalls also require repair or replacement. Repair recommendations, found in Table 2, include culvert replacement with RCP or HDPE pipe; rock slope protection (RSP) added to outfalls or used to replace sack concrete (Att. A, Figure 5); and duckbill check valve installation to limit backflow and sediment transport. While mechanized equipment will operate from the top of the bank when possible, culvert maintenance activities will sometimes require equipment to operate within wetlands. This equipment will either operate on mats or specialized low ground pressure equipment will be utilized. A silt curtain will be installed around the work site and Environmentally Sensitive Area fencing will be used to mark the boundary of the construction area. Temporary cofferdams may be installed around the site and dewatering and diversion activities will be in compliance with the conditions of this Certification. After each culvert is replaced or repaired, the trench will be backfilled, compacted, and restored to pre-Project conditions. Duckbill check valves will be installed by hand with assistance from a small lift as necessary.

*Removal of Debris and Obstructions:* To maintain flood control capacity, debris removal may occur as needed around culverts and other structures, including storm drain outlets, dissipater teeth, flood control structures, and trash capture facilities. Activities will be localized and may include fallen tree removal immediately adjacent to structures. Activity will occur during dry or low-tide conditions from the top of the bank.

*Vegetation Management:* Vegetation growing in concrete channel joints may be removed as necessary to maintain the integrity of the structure. Vegetation will be also be removed from channel banks and adjacent access roads as necessary to maintain access to the channel, but no native saltmarsh vegetation shall be removed or disturbed. Invasive upland species such as pampas grass (*Cortaderia selloana*), ice plant (*Carpobrotus edulis*), and fennel (*Foeniculum vulgare*) will be removed from all channel reaches as necessary. Removal of *Spartina* downstream of Spruce Avenue will be coordinated with the San Francisco Estuary Invasive *Spartina* Project.

*Repairs to Hardened Channel:* Damaged sections of concrete wall revetments, riprap, or sack concrete will be repaired at various sites. Minor damage to concrete will require grout repairs. Major damage to concrete may require concrete patching or reforming the channel wall. Construction will occur when the channel is at its lowest or completely dry, and when rain is not in the 72-hour forecast. Additionally, channel wall weep hole cleaning may occur periodically.

As birds often nest in the weep holes, cleaning will occur between August 15 and February 1 to avoid breeding season if an active nest is found within 50 feet of weep hole cleaning activities.

*Other maintenance Activities:* Other routine maintenance activities proposed may include removal of debris, repair of access roads, abatement of graffiti, installation and maintenance of trash capture devices, and installation or repair of fencing. Debris and trash will be disposed of at the Ox Mountain Sanitary Landfill. Except for road repairs, all activities will be non-ground disturbing.

**Impacts:** The *San Francisco Bay Basin Water Quality Control Plan* (Basin Plan) defines the beneficial uses of waters of the State. The Project will impact Colma Creek, which is a water of the State that has beneficial uses listed in the Basin Plan. The Basin Plan assigns the following beneficial uses to Colma Creek: warm freshwater habitat, water contact recreation, noncontact water recreation, and wildlife habitat.

In total, the Project's permanent and temporary impacts affect 0.72 acre along 895 feet of Colma Creek (Table 2).

**Table 2: Summary of Impacts to Waters and Wetlands**

Site	Activity	Temporary		Permanent		Impact Length (feet)
		Waters (acre)	Wetland (acre)	Waters (acre)	Wetland (acre)	
Bar 1-4	Sediment Removal	0.185	--	--	--	695
Culvert 1n	Add duckbill check valve	--	0.034	--	--	10
Culvert 1s	Add RSP and duckbill check valve	0.019	0.015	0.004	--	10
Culvert 2s	Replace 25 feet of existing culvert, add RSP, and add duckbill check valve	0.005	0.012	0.001	--	20
Culvert 3n	Replace 60 feet of existing culvert, add RSP, and add duckbill check valve	0.030	0.072	0.002	--	10
Culvert 3s	Add RSP and duckbill check valve	0.018	0.015	0.001	--	10
Culvert 4n	Replace sack concrete with RSP and add duckbill check valve	0.019	0.015	0.002	--	10
Culvert 4s	Replace 20 feet of existing culvert, add RSP, and add duckbill check valve	--	--	--	--	20
Culvert 5n	Replace sack concrete with RSP and add duckbill check valve	0.005	0.005	0.001	--	10
Culvert 5s	Replace culvert, add RSP, and add duckbill check valve	0.018	0.015	0.001	--	50
Culvert 6n	Replace sack concrete with RSP and duckbill check valve	--	0.059	--	0.001	10
Culvert 6s	Add duckbill check valve	0.018	0.015	0.001	--	10
Culvert 7n	Replace sack concrete with RSP and add duckbill check valve	0.018	0.015	--	--	10
Culvert 8n	Add RSP and duckbill check valve	0.018	0.015	0.001	--	10
Culvert 9n	Add RSP and duckbill check valve	0.018	0.015	0.001	--	10
<b>Total</b>		<b>0.37</b>	<b>0.34</b>	<b>0.015</b>	<b>0.002</b>	<b>895</b>

***Special-Status Species:*** On May 26, 2016, the Corps initiated informal consultation with the United States Fish & Wildlife Service (USFWS) and requested concurrence with the determination that the Project may affect, but is not likely to adversely affect, the California Ridgway's Rail, pursuant to the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. § 1531 et seq.). On January 23, 2017, USFWS issued a letter of concurrence with the Corps determination, entitled *Informal Consultation on the Colma Creek Flood Control Channel Maintenance Project, City of South San Francisco, San Francisco County, California* (Ref. No. 08FBDT00-2016-I-0233). An amendment to concurrence letter was issued March 2, 2017.

**Mitigation:** The Applicant will mitigate the Project's permanent and temporary impacts to waters of the State by purchasing mitigation credits. The Applicant will purchase a minimum of 0.05 acre of wetland mitigation credits from the San Francisco Wetland Mitigation Bank in Redwood City as described in the conditions of this Certification.

**California EcoAtlas:** The Water Board is now tracking riparian repair and maintenance projects in an effort to detect potential systemic instabilities and document project performance in Bay Area creeks. To streamline the reporting requirement, the Applicant is required to submit a Riparian Repair and Maintenance Wetland Tracker short form describing Project size, type, and performance measures. An electronic copy of the short form and instructions can be downloaded at: <http://www.waterboards.ca.gov/sanfranciscobay/certs.shtml>. Project information will be made available at the web link: <http://ecoatlas.org>.

**CEQA Compliance:** A Mitigated Negative Declaration was submitted for the Project by San Mateo County. A Notice of Determination was filed on October 28, 2016 (State Clearinghouse Number 2016062032). Water Board staff has reviewed the Mitigated Negative Declaration and concurs that it appropriately identifies and mitigates the Project's reasonably foreseeable environmental impacts.

**Certification and General Waste Discharge Requirements:** I hereby issue an order certifying that any discharge from the referenced Project 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, and with other applicable requirements of State law. This discharge is also regulated under State Water Resources Control Board Order No. 2003-0017-DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification," which requires compliance with all conditions of this Water Quality Certification. The following conditions are associated with this Certification:

1. The Project work shall be constructed as described in the Application materials. Any changes to these plans that may impact waters of the State shall be submitted to the Executive Officer for review and acceptance before they are implemented;
2. The Applicant shall adhere to the conditions of the CWA Section 404 NWP No. 3 (*Maintenance*) issued by the Corps (Corps File No. 2016-00024S);

3. The Applicant shall comply with the Conservation Measures in the *Informal Consultation on the Colma Creek Flood Control Channel Maintenance Project, City of South San Francisco, San Francisco County, California* issued January 23, 2017, and the amendment issued March 2, 2017 (Ref. No. 08FBBDT00-2016-I-0233), by USFWS on the Project's potential impacts to the California Ridgway's Rail;
4. The Applicant shall adhere to the conditions imposed by CDFW in the Streambed and Lake Alteration Agreement issued for the Project (Notification No. 1600-2015-0463-R3);
5. Construction in waters of the State is restricted to the April 15 to October 31 dry season;
6. The work period for completing the construction within the stream zone shall be restricted to periods of low or no stream flow and dry weather. Excavation for and placement of the fill shall not begin unless a no precipitation forecast is obtained covering the entire construction phase (within the area covered in this Certification) and the time necessary to implement erosion control measures. This forecast shall be documented by the Applicant upon request by the Water Board staff;
7. Precipitation forecasts shall be considered when planning construction activities. The Applicant shall monitor the 72-hour forecast from the National Weather Service at <http://www.nws.noaa.gov>. When there is a forecast of more than 40% chance of rain, or at the onset of unanticipated precipitation, the Applicant shall remove all equipment from the riparian area and shall implement erosion and sediment control measures (e.g., jute, straw, coconut fiber erosion control fabric, coir logs, straw) and all Project activities shall cease;
8. At least 14 days prior to the start of construction, the Applicant shall submit, acceptable to the Executive Officer, a dewatering plan, including the area to be dewatered, timing of dewatering, and method of dewatering to be implemented, including monitoring to ensure all dewatered discharge meets applicable receiving water limits and water quality objectives in the Basin Plan. All temporary dewatering methods shall be designed to have the minimum necessary impacts to waters of the State to isolate the immediate work area. All dewatering methods shall be installed such that natural flow is maintained upstream and downstream of the project area. Any temporary dams or diversions shall be installed such that the diversion does not cause sedimentation, siltation, or erosion upstream or downstream of the project area. All dewatering methods shall be removed immediately upon completion of Project activities;
9. **California EcoAtlas:** The Applicant is required to use the Riparian Repair and Maintenance Wetland Tracker form (short form) to provide Project information within 14 days from the date of this Certification. An electronic copy of the short form can be downloaded at: <http://www.waterboards.ca.gov/sanfranciscobay/certs.shtml>. The completed form shall be submitted electronically to [habitatdata@waterboards.ca.gov](mailto:habitatdata@waterboards.ca.gov) or shall be submitted as a hard copy via mail to both (1) the address on the letterhead (or to the Water Board), to the attention of California EcoAtlas and, (2) to the San Francisco Estuary Institute, 4911 Central Avenue, Richmond, CA 94804, to the attention of EcoAtlas;

## **Project Construction**

10. Within 30 days of the first Project-related disturbance of waters of the State occurs, the Applicant shall provide the Water Board with written and electronic notification that the Project has disturbed waters of the State;
11. At least 60 days prior to the start of culvert construction, the Applicant shall submit, acceptable to the Executive Officer, complete engineering design plans for the Project's culvert activities. If the Water Board fails to respond within 30 days from the receipt of the plans, construction may proceed as planned;
12. No equipment shall be operated in areas of flowing or standing water; no fueling, cleaning, or maintenance of vehicles or equipment shall take place within waters of the State, or within any areas where an accidental discharge to waters of the State may occur; construction materials and heavy equipment must be stored outside of the active flow of the creek. When work within waters of the State is necessary, the entire stream flow shall be diverted around the work area;
13. All work performed within waters of the State shall be completed in a manner that minimizes impacts to beneficial uses and habitat; measures shall be employed to minimize disturbances along waters of the State that will adversely impact the water quality of waters of the State. Disturbance or removal of vegetation shall not exceed the minimum necessary to complete Project implementation;
14. No debris, rubbish, creosote-treated wood, soil, silt, sand, cement, concrete, or washings thereof, or other construction-related materials or wastes, oil or petroleum products, or other organic or earthen material shall be allowed to enter into, or be placed where it may be washed by rainfall or runoff into Colma Creek. Any of these materials placed within or where they may enter waters of the State by the Applicant or any party working under contract, or with the permission of the Applicant shall be removed immediately. When construction is completed, any excess material shall be removed from the work area and any areas adjacent to the work area where such material may be washed into waters of the State. During construction, the contractor shall not dump any litter or construction debris within the riparian/stream zone. All such debris and waste shall be picked up daily and properly disposed of at an appropriate site
15. Within 60 days of completing Project construction activities, the Applicant shall submit an as-built report to the Water Board. The report shall include a description of the areas of actual disturbance during Project construction. The report shall clearly identify and illustrate the Project site, as well as the locations of permanent and temporary impacts;

## **Mitigation and Monitoring**

16. Prior to starting construction, the Applicant shall submit a Bill of Sale and Receipt that demonstrates the mitigation credits have been purchased from the San Francisco Bay Wetland Mitigation Bank. The amount of mitigation credits purchased by the Applicant shall be no less than 0.05 acre;

17. Prior to the start of construction, the Applicant shall establish photo-documentation points at each Project site where temporary and permanent impacts occur to wetland and upland vegetation. The points shall be used to ensure the impacted areas are restored to their pre-Project condition or better (See Condition 18). The Applicant shall prepare a site map with the photo-documentation points clearly marked. Prior to and following construction, the Applicant shall photographically document the immediate pre-and post-construction condition of sites where Project work occurs. These post-construction photographs and map shall be submitted, along with the progress report and as-built report (See Condition 15), to the Water Board within 60 days of completing construction activities for each work season;
18. All areas temporarily disturbed by Project construction shall be restored to their pre-Project condition, or better. Revegetation activities shall occur within two weeks of construction completion. Disturbed upland areas shall be revegetated with native plants or a native seed mix. Seed shall be covered with broadcast straw, jute netting, coconut fiber blanket, or a similar erosion control blanket or mulch. The Applicant shall allow disturbed wetland areas to revegetate naturally;
19. Disturbed areas shall be monitored for a minimum period of two years after construction is completed, and until the success criteria are met (See Condition 20), to ensure temporarily impacted vegetated areas become reestablished and are not permanently impacted;
20. Restoration will be considered successful when the absolute cover within the disturbed areas is comparable to pre-existing conditions, and the composition of non-native plants does not exceed those of pre-Project conditions. Cover shall be evaluated by visual inspection and photo documentation. Additional measures to attain this vegetative cover, potentially including seeding, planting and/or invasive species removal, shall be taken by the Applicant if necessary;
21. Annual letter reports shall be submitted to the Water Board by January 31 each year during the 2-year monitoring period. The reports shall include photographs from the photo-documentation points (See Condition 17) established at the Project site. Each report shall document the progress towards meeting the success criteria (See Condition 20). If the success criteria have not been achieved by the end of Year 2, then the Applicant shall describe any additional measures that need to be taken, along with a time schedule for implementation. Photographs taken from the photo-documentation locations shall be included in the report. Additional reports shall be submitted to the Water Board until the success criteria are met;

### **Standard Conditions**

22. In accordance with California Water Code (CWC) Section 13260, the Discharger shall file with the Board a report of any material change or proposed change in the ownership, character, location, or quantity of this waste discharge. Any proposed material change in operation shall be reported to the Executive Officer at least 30 days in advance of the proposed implementation of any change. This shall include, but not be limited to, all

significant new soil disturbances, all proposed expansions of development, or any change in drainage characteristics at the Project site. For the purpose of this Order, this includes any proposed change in the boundaries of the area of wetland/waters of the State to be filled;

23. This Certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to CWC Section 13330 and Section 3867 of Title 23 of the California Code of Regulations (23 CCR);
24. Within 30 days of completing all project elements with impacts to waters of the State that are authorized by this Certification, the Applicant shall provide the Executive Officer of the Water Board with a Final Project Completion Report that includes: (a) the Project name; (b) the CIWQS Place ID number listed at the top of this Certification; and (c) the date Project impacts to waters of the State at the Project site were completed;
25. This Certification action does not apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license, unless the pertinent certification application was filed pursuant to 23 CCR Subsection 3855(b) and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought; and
26. Certification is conditioned upon full payment of the required \$7,348 fee as set forth in 23 CCR Section 3833. Water Board staff received a deposit of \$640 on December 18, 2015. The remaining balance of \$6,708 is due to the Water Board within 14 days of Certification issuance. An annual discharge fee shall be paid to the Water Board until all of the impacts to waters of the State at the Project sites that are authorized by this Certification have been implemented. (Note: the Annual Active Discharge Fee may be changed by the State Board; at the time of Certification it was \$720 per year). After all impacts to waters of the State at the Project site have been implemented, an Annual Post Discharge Monitoring Fee shall be paid to the Water Board until the monitoring reports required pursuant to Condition 21 have all been submitted to the Water Board (Note: the Annual Post Discharge Monitoring Fee may be changed by the State Board; at the time of Certification it was \$360 per year).

This Certification applies to the Project as proposed in the application materials and designs referenced above in the conditions of Certification. Be advised that failure to implement the Project in conformance with this Certification is a violation of this water quality Certification. Any violation of water quality Certification conditions is a violation of State law and subject to administrative civil liability pursuant to CWC Section 13350. Failure to meet any condition of a Certification may subject the Applicant to civil liability imposed by the Water Board to a maximum of \$10,000 per day of violation or \$10 for each gallon of waste discharged in violation of this action. Any requirement for a report made as a condition to this action (e.g., Conditions 8, 9, 10, 11, 15, 16, 17, 21, 24, and 26) is a formal requirement pursuant to CWC Section 13267, and failure or refusal to provide, or falsification of such required report, is subject to civil liability as described in CWC Section 13268. Should new information come to our attention that

indicates a water quality problem with this Project, the Water Board may issue Waste Discharge Requirements.

Please contact Tahsa Sturgis of my staff at (510) 622-2316 or via email to [tahsa.sturgis@waterboards.ca.gov](mailto:tahsa.sturgis@waterboards.ca.gov) if you have any questions. All future correspondence regarding this Project should reference the CIWQS Place ID No. indicated at the top of this letter.

Sincerely,

for Bruce H. Wolfe  
Executive Officer

Attachment A: Project Location Maps, Design Plans, and Photographs

cc: SWRCB, DWQ, [stateboard401@waterboards.ca.gov](mailto:stateboard401@waterboards.ca.gov)  
Regional Water Board, Victor Aelion, [victor.aelion@waterboards.ca.gov](mailto:victor.aelion@waterboards.ca.gov)  
CDFW, Randi Adair, [randi.adair@wildlife.ca.gov](mailto:randi.adair@wildlife.ca.gov)  
USFWS:  
Elden Holldorf, [elden\\_holldorf@fws.gov](mailto:elden_holldorf@fws.gov)  
Kim Squires, [kim\\_squires@fws.gov](mailto:kim_squires@fws.gov)  
U.S. EPA, Region IX, Jennifer Siu, [siu.jennifer@epa.gov](mailto:siu.jennifer@epa.gov)  
Corps, SF Regulatory Branch:  
Rick Bottoms, [richard.m.bottoms@usace.army.mil](mailto:richard.m.bottoms@usace.army.mil)  
Holly Costa, [holly.n.costa@usace.army.mil](mailto:holly.n.costa@usace.army.mil)  
Justin Yee, [justin.j.yee@usace.army.mil](mailto:justin.j.yee@usace.army.mil)  
Horizon Water and Environment, Ken Schwarz, [ken@horizonh2o.com](mailto:ken@horizonh2o.com)

# **ATTACHMENT A**

**401 Water Quality Certification**

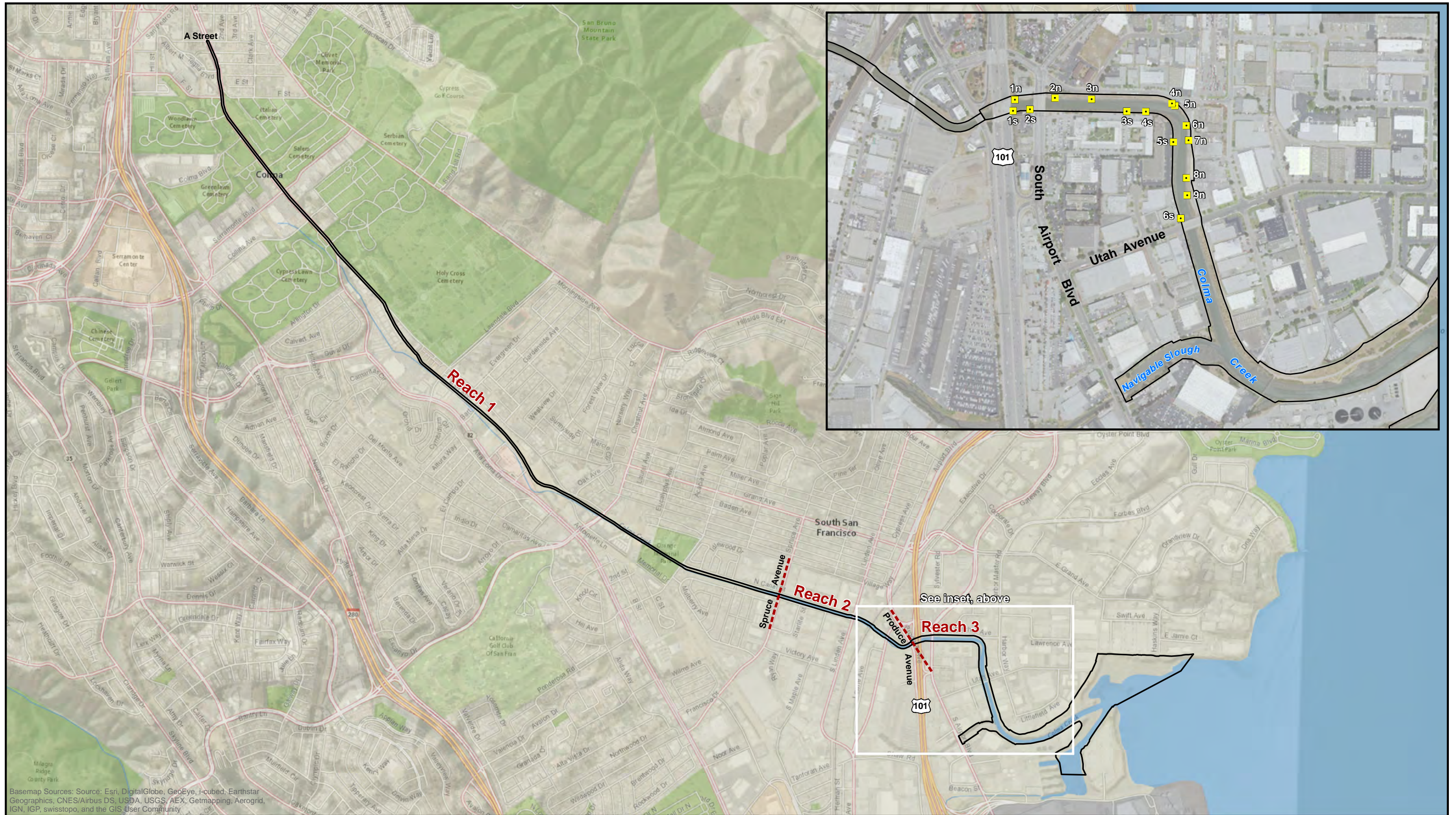
**Colma Creek**

**Flood Control Maintenance Project,**

**San Mateo County**



Figure 1. Colma Creek watershed.



Basemap Sources: Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Prepared by:

N

Miles

0 0.25 0.5

Action Area    
 Culvert  
 Reach Break

Colma Creek  
Flood Control Maintenance Project

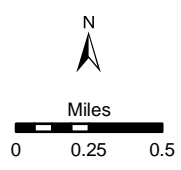
**Figure 2**  
Project Area

Basemap Sources: Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



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**Figure 2a  
Project Area**



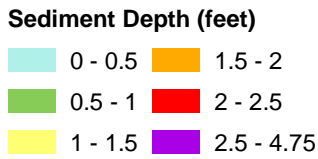
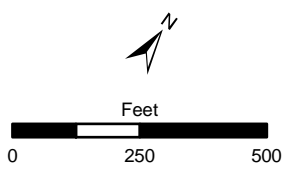
 Project Area



Colma Creek  
Flood Control Maintenance Project

Basemap and Imagery Sources: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

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Project Area

**Figure 2b**  
**Reach 2 with**  
**Sediment Depth**

Colma Creek  
Flood Control Maintenance Project

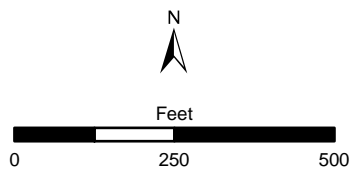


Basemap and Imagery Sources: Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



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**Figure 2c**  
**Reach 3 Culverts**



□ Project Area  
■ Culvert



Colma Creek  
Flood Control Maintenance Project

**Photo 1:**  
Roadway ditch adjacent to upper Reach 1, which is below Mission Boulevard at this location. Photo is taken near Colma BART station.



**Photo 2:** Mid Reach 1, looking upstream from McLellan Drive near the South San Francisco BART station. Channel transitions from box to trapezoidal shape. Note the minor accumulation of sediment and organic material in the larger trapezoidal channel.



**Photo 3:** Lower Reach 1, at energy dissipater teeth (looking upstream). A small amount of sediment and debris accumulate near the teeth.



**Photo 4:** Reach 2a looking downstream near Spruce Ave. Minor sediment accumulation on channel bed.



**Photo 5:** Reach 2b looking upstream at the Caltrain railroad bridge. Sediment deposits downstream of the bridge on the left side of the photo, where flow separation and eddying create a depositional environment.



**Photo 6:** A large point bar in Reach 2c (looking downstream toward Produce Ave).



**Photo 7:** Reach 3 looking downstream from Produce Avenue at low tide. Note earthen bed and banks comprised of fine sediment, some depositional bars along channel bed, and mid-bank bench with pickleweed.



**Photo 8:** Looking toward the mouth of Colma Creek.



**Culvert 1n**

Add  
duckbill  
check valve



**Culvert 1s**

Add RSP  
and  
duckbill  
check valve



**Culver 3n**

Replace sack concrete with RSP and add duckbill check valve



**Culvert 2n.**

None proposed



**Culvert 4s**

Replace culvert, add RSP, and add duckbill check valve



**Culvert 3s**

Add RSP and duckbill check valve



**Culvert 5n.**

Replace sack concrete with RSP and add duckbill check valve



**Culvert 4n**

Replace sack concrete with RSP and add duckbill check valve



**Culvert 7n.**

Replace sack concrete with RSP and add duckbill check valve



**Culvert 6n.**

Replace sack concrete with RSP and duckbill check valve



**Culvert 6s.**

Add  
duckbill  
check valve



**Culvert 9n.**

Add RSP  
and  
duckbill  
check valve



**Culvert 8n.**

Add RSP  
and  
duckbill  
check valve

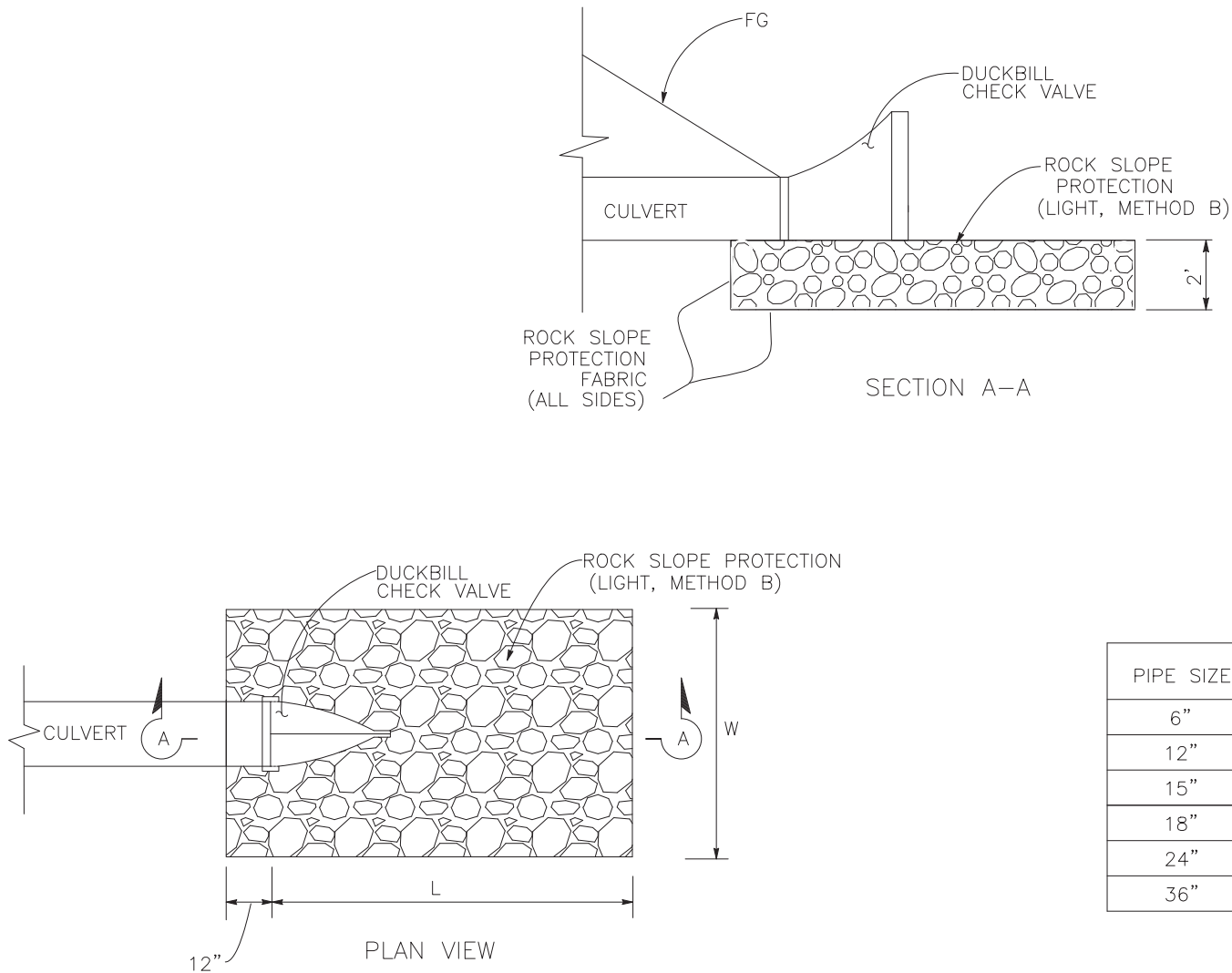


**Culvert 5s.**

Replace  
culvert,  
add RSP,  
and add  
duckbill  
check valve



S:\1\_Projects\14.012\_SMI-County\_Colma\_Cr\_Permitting\2\_404 Permits\ARPA\Figures (10.09.15) BP



PIPE SIZE	L (Ft)	W (Ft)
6"	11	5
12"	11	5
15"	11	5
18"	11	5
24"	14	6
36"	20	9

### ROCK SLOPE PROTECTION DETAILS

Source: WRECO 2015

Letter from the San Francisco Bay Conservation and  
Development Commission

# San Francisco Bay Conservation and Development Commission

455 Golden Gate Avenue, Suite 10600, San Francisco, California 94102 tel 415 352 3600 fax 415 352 3606

February 5, 2016

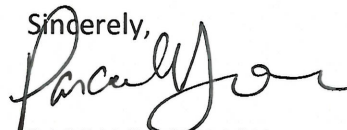
Mr. Mark Chow  
County of San Mateo, Department of Public Works  
555 County Center 5<sup>th</sup> Floor  
Redwood City, CA, 94063

SUBJECT: Application for Amendment to BCDC Permit No. M2001.044.01

Dear Mr. Chow:

Thank you for your application dated December 22, 2015, received in this office on January 7, 2016, for maintenance sediment removal from the Colma Creek flood control channel and compensatory mitigation of wetland re-establishment along Colma Creek in the City of South San Francisco, San Mateo County. Our review of your application has determined that this project is outside of BCDC jurisdiction and will not require a permit from our agency. Please be aware that future dredging, wetland restoration or other projects in and along Colma Creek may be within BCDC jurisdiction. We appreciate your continued due diligence in keeping us informed as such projects develop.

On January 7, 2016 we received a check for \$100.00 from Horizon Water & Environment, LLC covering the permit application fee on behalf of County of San Mateo Department of Public Works. A refund check of \$100.00 will be sent to Horizon Water & Environment, LLC under separate cover.

Sincerely,  
  
PASCALE SOUMOY  
Coastal Program Analyst

PS/gg

cc: Ken Schwarz, Horizon Water & Environment, LLC