

## SECTION 01 57 13

## TEMPORARY EROSION AND SEDIMENT CONTROLS (ESCP)

## PART 1 – GENERAL

## 1.1 DESCRIPTION

- A. This Section specifies the general requirements for furnishing all labor, materials, equipment, and operations necessary for work related to storm water and erosion and sediment controls.
- B. The Project is serviced by City/County's combined sanitary sewer (CSS) and is not located within a Municipal Separate Storm Sewer System (MS4) area within the City/County. Runoff from the Project would discharge to the combined sanitary sewer and storm water system under the jurisdiction of the San Francisco Public Utilities Commission (SFPUC). The Contractor does not have to file a Notice of Intent (NOI) with the Regional Water Quality Control Board (RWQCB).
- C. The Contractor shall submit an Erosion and Sediment Control Plan (ESCP) site specific to the project conditions and a Construction Site Runoff Control Permit Application to the SFPUC. The Contractor shall obtain approval of its ESCP from the SFPUC prior to any demolition and earthmoving activities.
- D. In accordance with Federal, State, and local regulations, it is unlawful to discharge pollutants from construction sites into the City's combined sewer system. Best Management Practices (BMPs) must be implemented at all construction sites to minimize the discharge of pollutants into the combined sewer system (refer to Section 01 35 50 Additional Environmental Procedures).
- E. Failure to implement the ECSP, BMP's, control prohibited discharges in to the City's sewerage system, and control discharge pollutants from construction site is subject to Federal, State, and local regulatory fines.
- F. Liquidated Damages: In addition to any regulatory fines, should the Contractor fail to implement the ECSP, BMP's, control prohibited discharges in to the City's sewerage system, and control discharge pollutants from construction site as per this Section, or promptly take all required remedial actions to the City's satisfaction herein, the City Representative reserves the right to issue environmental non-compliance notices, have the necessary work performed by others, assess fines of one thousand dollars (\$1,000.00) per non-compliance occurrence or per event, or to deduct or withhold all monies required therefore as permitted under the Contract Documents.
- G. All work in this section shall be considered as incidental work to mobilization (Bid Item SW-40, Mobilization for Sewer Work) unless noted otherwise.

## 1.2 RELATED SECTIONS

- A. 01 41 00 Regulatory Requirements
- B. 01 35 49 Minimum Environmental Procedures
- C. 01 35 50 Additional Environmental Procedures
- D. 02 81 10 Environmental Management of Excavated Materials

### 1.3 CONSTRUCTION SITE RUNOFF CONTROL PERMIT

- A. The Contractor shall complete the application and obtain a Construction Site Runoff Control Permit ("Permit") with the San Francisco Public Utilities Commission, Wastewater Enterprise, Collection System Division (SFPUC-WWE/CSD). The Contractor shall comply with all Permit requirements.
- B. The Construction Site Runoff Control Permit Application can be found at: <http://www.sfwater.org/index.aspx?page=498> or obtained at the San Francisco Public Utilities Commission, Wastewater Enterprise, Collection System Division, 3801 3rd Street, Suite 600, San Francisco, telephone (415) 695-7339 or San Francisco Permit Center, 49 South Van Ness Avenue, Suite 200, San Francisco.
- C. The "Permit" application shall include an Erosion and Sediment Control Plan (ESCP) developed signed and stamped by a Qualified Stormwater Developer (QSD), as described in this section and as per the requirements of the SFPUC Construction Site Runoff Control Ordinance. <http://www.sfwater.org/index.aspx?page=235>
- D. Reference Documents:
  - 1. SFPUC Construction Best Management Practices Handbook, August 2013 (<https://sfwater.org/modules/showdocument.aspx?documentid=4282>)
  - 2. SFPUC Construction Site Runoff Control Technical Standards and Guidelines, February 2014 (<https://sfwater.org/modules/showdocument.aspx?documentid=9347>)
  - 3. California Stormwater Quality Association, *Construction Best Management Practice Online Handbook*. Available at <https://www.casqa.org/resources/bmp-handbooks>
  - 4. California Department of Transportation, *Storm Water Quality Handbooks Construction site Best Management Practices Manual*. Available at <http://www.dot.ca.gov/hq/construc/stormwater/manuals.htm>
- E. The Contractor is responsible for obtaining the Construction Site Runoff Control Permit in a timely manner and prior to the commencement of any land-disturbing activities. The City will not honor any claims from the Contractor arising from delays in obtaining the Construction Site Runoff Control Permit.
- F. The Contractor shall comply at all times with provisions contained in the Construction Site Runoff Control Permit which may include but not be limited to specific sampling, inspection, or reporting requirements.
- G. Contractor shall maintain a copy of the Construction Site Runoff Control Permit and Erosion and Sediment Control Plan onsite at all times.
- H. The Contractor shall be responsible for payment of all fines imposed due to any violations of the Permit requirements or violations of Article 4.1 and 4.2 of the Public Works Code [http://library.amlegal.com/nxt/gateway.dll/California/publicworks/article42sewersystemmanagement?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:sanfrancisco\\_ca\\$sanc=JD\\_147](http://library.amlegal.com/nxt/gateway.dll/California/publicworks/article42sewersystemmanagement?f=templates$fn=default.htm$3.0$vid=amlegal:sanfrancisco_ca$sanc=JD_147), and the Public Works Code – Control of Construction Site Runoff, Ordinance 260-13 <http://sfwater.org/modules/showdocument.aspx?documentid=5041>

### 1.4 SUBMITTALS

As per Section 01 33 00 – Submittal Procedures, the Contractor shall submit the following documentation listed below.

- A. A copy of the SFPUC Construction Site Runoff Control Permit.
- B. The Erosion and Sediment Control Plan (ESCP) shall be submitted within (30) thirty calendar days after the Notice to Proceed and before commencement of demolition and earthmoving activities. Such work will not start without approval of the ECSP by the SFPUC.
- C. Qualifications of the designated qualified person (either a Qualified Stormwater Pollution Prevention Plan Developer or a Practitioner (QSD or QSP), implementing the ESCP.
- D. As warranted and upon request by the SFPUC Inspector or the City Representative, contractor shall submit reports of testing or monitoring results.
- E. Copies of the inspection reports on a monthly basis. Reports shall also be made available upon request if requested by the SFPUC Inspector or the City Representative.

#### 1.5 QUALITY ASSURANCE

- A. The Erosion and Sediment Control Plan (ESCP) shall be developed, signed and stamped by a Qualified Stormwater Developer (QSD).
- B. The Contractor shall have a qualified person, such as a Qualified Stormwater Practitioner (QSP), or otherwise qualified individual trained by a Qualified Stormwater Developer (QSD), to oversee the ESCP including implementation of all BMPs, erosion and sediment control measures, inspections, and its reporting requirements.

#### 1.6 GENERAL REQUIREMENTS

- A. Best Management Practices (BMPs): Within the area of work, The Contractor shall employ Best Management Practices. These shall be included in its ESCP. The Contractor shall comply with the following:
  - 1. The City's Stormwater Ordinance (Ordinance No. 83-10).
  - 2. California Stormwater Quality Association's Construction Best Management Practice Handbook, available for download at:  
[https://www.casqa.org/sites/default/files/BMPHandbooks/BMP\\_NewDevRedev\\_Complete.pdf](https://www.casqa.org/sites/default/files/BMPHandbooks/BMP_NewDevRedev_Complete.pdf)
- B. Water Control
  - 1. The Contractor is responsible for the continuous control of surface and ground water at all times during the course of the construction, including Saturdays, Sundays, holidays, work stoppages, during periods of labor strikes, and during periods of work stoppages.
  - 2. The Contractor is wholly responsible for obtaining the sewer discharge permit in a timely manner if required. The City will not honor any claims from the contractor arising from delays in obtaining the sewer discharge permit.
- C. Discharges to the City's combined sewer system shall meet the requirements of the following prior to discharges:
  - 1. Industrial Waste Ordinance No. 116-97 (Chapter X (Public Works Code), Part II, San Francisco Municipal Code, Article 4.1 and 4.2), the pre-treatment standards of the San Francisco Municipal Code, section 123, Industrial Waste Ordinance #19-92 and DPW Order No. 158,170

2. Requirements for Batch Wastewater Discharges - the San Francisco Public Utilities Commission Waste Water Enterprise, Collection System Division (SFPUC-WWE/CSD).
3. The Construction Dewatering Site Discharge Limits of the receiving Sewer Treatment Plant.

#### 1.7 EROSION AND SEDIMENT CONTROL PLAN (ESCP) REQUIREMENTS

- A. The site-specific Erosion and Sediment Control Plan (ESCP) shall be developed, signed and stamped by a Qualified Stormwater Developer (QSD). The Erosion and Sediment Control Plan (ESCP) shall be prepared in consideration to the site existing topography and how it will be altered. It shall provide information of the erosion and sediment controls measures that will be used to minimize the risk of sediment pollution and how they will be implemented and maintained for the project construction duration. A drawing or set of plans shall depict the specific BMPs or equivalent measures and sequencing to be used to control erosion and sediments.
- B. The Contractor shall prepare and implement an ESCP that conforms to Section 146.7 of the Construction Site Runoff Control Ordinance, and contain the following documentation:
  1. A cover letter with:
    - a. The Project name
    - b. The Contractor name and signature with the following statement "I certify under penalty of perjury that the information contained on the ESCP is accurate and true."
    - c. Name, address, phone number, email and qualifications of the qualified person for erosion and sediment and control measures designated to implement the ESCP.
    - d. Total square foot or acreage proposed land disturbing activities.
    - e. The location and perimeter of the project site;
    - f. The location of nearby storm drains and/or catch basins;
    - g. existing and proposed roadways and drainage pattern within the project site;
    - h. A drawing or diagram of the sediment and erosion control devices to used onsite.
    - i. Narrative discussion of management controls; inspection, maintenance, and repair procedures, and reporting schedules.
    - j. Any other information deemed necessary by the SFPUC General Manager.
- C. The ESCP shall provide a narrative description of the erosion and sediment control BMPs that will be implemented at the site in consideration to construction sequence and schedules for the following:
  1. Pre-Construction Actions: Before construction, evaluate, mark and protect unique areas surrounding the project site.
  2. Construction Access: Stabilize bare areas (equipment parking areas, construction routes, site entrances) immediately with gravel and other means to control track out.

3. Sediment Barriers and Traps: Install basins, traps, silt fences or inlet protection as needed for grading.
  4. Runoff Control: Install diversion, perimeter dikes and outlet protection as needed.
  5. Land clearing and grading: Begin major clearing and grading after installing sediment and runoff measures. Clear disposal areas as needed.
  6. Surface Stabilization: Apply temporary and permanent seeding, mulch, and sod for stabilization immediately on all disturbed areas where work is delayed or completed.
  7. Building construction: Install necessary erosion and sediment controls while excavation, paving and installing utilities.
  8. Landscaping and final stabilization: Stabilize all open areas including spoil areas. Remove temporary control measures and stabilize.
- D. The ESCP shall include a Plan View drawing or set of drawings depicting:
1. The site layout, construction site boundaries,
  2. Area drainage and proposed drainage channels.
  3. Suitable contours for the existing topography and proposed grading
  4. The location of all existing and proposed catch basins, storm drains and inlets and BMP protection proposed.
  5. Proposed site erosion and sediment controls.
  6. Locations of erosion and sediment control BMPs including the site access points and their track out controls
  7. Stockpile location, storage and staging areas, if any.
  8. Street profile, utility locations, property boundaries and easement delineations as applicable.
  9. Dewatering controls where applicable.
  10. Soil stabilization measures where applicable.
- E. The ESCP shall include a sample copy of the daily inspection check list and weekly inspection reports for the ESCP measures and BMPs inspected and implemented weekly and 24 hours prior and after a rain event
- F. The ESCP shall provide a Contractor's measures in the event of a spill.
- G. For projects requiring coverage under the State Water Resources Control Board's (SWRCB) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (General Permit) Order Number (No.) 2009-0009-DWQ as amended by Order No. 2012-0006-DWQ (National Pollutant Discharge Elimination System [NPDES] No. CAS000002), the required Storm Water Pollution Prevention Plan (SWPPP) may be submitted in lieu of an Erosion and Sediment Control Plan.

## 1.8 EROSION AND SEDIMENT CONTROL PLAN (ESCP) IMPLEMENTATION

- A. The Contractor shall at all times comply with the Construction Site Runoff Control Ordinance contained in San Francisco's Public Works Code, Article 4.2 Sewer System Management, Section 146, Construction Site Runoff Control, including but not limited to the items below.
1. Design, testing, installation, and maintenance of erosion and sediment control operations and facilities shall adhere to the standards and specifications contained in the Construction Site Runoff Control Ordinance and regulations developed by SFPUC.
  2. Deposition of eroded sediment onto adjacent properties, a public right-of-way, a publicly controlled wetland, or the combined sewer system is prohibited.
  3. All erosion control materials shall be certified weed-free and shall be free of plastic monofilament netting or mesh.
  4. Contractor shall remove any erosion control materials that are not biodegradable upon project completion.
  5. Contractor shall promptly remove and correct damage resulting from any soil, miscellaneous debris or other materials washed, spilled, tracked dumped or otherwise deposited on public streets, highways, sidewalks or other public thoroughfare, incident to the construction activity, or during transit to and from the construction site.
  6. Erosion control facilities shall be maintained daily. These facilities shall control and contain erosion-caused silt deposits and provide for the safe discharge of silt free storm water into existing and proposed storm drain facilities. Design of these facilities must be approved and updated each year by the City Representative (Oct 1 – April 15).
  7. The Contractor shall provide devices or locations necessary to conduct sampling or metering operations, if requested by the SFPUC Inspector or the City Representative.
  8. The Contractor shall notify the SFPUC Inspector or the City Representative of any suspected, formed or unconfirmed release of Pollutants that creates a risk of non-storm water discharges into the combined sewer system.
  9. The ESCP shall be available on site at all times.
- B. Milestone notification – Contractor shall notify the SFPUC Inspector and the City Representative at least two working days before the following milestones occur:
1. Start of construction.
  2. Erosion and sediment control measures are completely installed.
  3. Final grading has been completed.
  4. Project completion.
- C. Daily Inspection, Maintenance and Repair Procedures: Contractor shall each day inspect, maintain, and repair all graded surfaces and erosion and sediment controls,

drainage structures, and other protective devices, plantings, and ground cover installed while construction is active.

1. The person(s) conducting inspections for the Contractor must be a Qualified Stormwater Pollution Prevention Plan Developer or Practitioner (QSD or QSP), or person trained by a QSP with experience in erosion and sediment control. Contractor shall maintain documentation onsite demonstrating inspector qualifications for review by SFPUC Inspector or City Representative.
  2. The Contractor must daily inspect all of the following areas:
    - a. Disturbed areas.
    - b. Material storage areas.
    - c. Locations where vehicles enter and exit the site.
    - d. All catch basins, storm drains and inlets. The contractor shall provide an inventory of the inlets existing conditions and their maintenance.
    - e. All areas where erosion and sediment control BMPs are used.
  3. Any necessary modification to BMPs shall be initiated within 72 hours of identification and completed as soon as possible.
- D. Weekly Inspection Report and Retention of Records: Contractor shall prepare weekly inspection reports to document inspection, maintenance and repair Procedures.
1. Weekly inspection report shall be in the form of a checklist, table or report and shall indicate:
    - a. The name of the individual preparing the report.
    - b. Statement work activities that occurred during the reporting period.
    - c. The locations that were inspected.
    - d. Description of maintenance and repairs performed.
    - e. Results of any sampling performed during the reporting period.
    - f. Statement of adequacy of the erosion and sediment control measures and any required upgrades to BMPs or to the ESCP.
    - g. A signature below the following statement: "I certify under penalty of perjury that this information is accurate and true."
  2. Weekly inspection reports shall be kept at the job trailer so that during an inspection, it can be shown to the SFPUC Inspector and City Representative.
  3. The Contractor shall submit copies of the inspection reports and the inventory of the inlets existing conditions and their maintenance on a monthly basis.

#### 1.9 SPILL PREVENTION AND RESPONSE PROCEDURES

- A. The Contractor is responsible for minimizing the potential for spills of pollutants stored onsite. Leaks and spills shall be minimized and if observed, the Contractor shall clean it up immediately and institute preventive measures.
1. Be aware of potential spill areas and drainage routes in their work areas.
  2. Debris Management: Place trash and debris in the proper containers.

3. Containers must remain closed at all times except when transferring contents.
4. Do not attempt to carry or move heavy containers of oil or hazardous material without assistance or the use of a drum dolly.
5. Use funnels; pumps with closed hose systems, or other means to prevent spills while transferring material from large containers to small ones. Pumps in operation shall not be left on, unattended.
6. Hazardous materials will be stored in a designated area that is away from vehicle/traffic areas. Storage of all hazardous materials are prohibited, except those expressly permitted.
7. Immediately notify the supervisor of any spill occurring in the work area. It is the responsibilities of the Contractor's designated Safety Officer to direct the cleanup activities and contact necessary regulatory agencies. All necessary emergency telephone numbers shall be posted at the construction site at a location accessible to all personnel.
8. The Contractor shall know the proper methods to clean up small spills in their work areas, and how spent cleanup material shall be managed.
9. A qualified person with experience in erosion and sediment control will be responsible for recording all steps taken to control spills in the field notes/daily log.
10. Spill cleanup equipment must be readily available on site. Emergency response equipment includes absorbent socks, over pack drums, personal protective equipment, shovel, labels, valves, valve charts, valve wrenches to shut off water supply, etc.
11. Well-maintained equipment shall be used to perform the construction work, and, except in cases of failure or breakdown, equipment maintenance shall be performed off-site.
12. Equipment shall be inspected daily by the operator for leaks or spills. If leaks or spills are encountered, the source of the leak shall be identified, leaked material shall be cleaned up, and the cleaning materials shall be collected and disposed of properly.
13. Clean Spills Immediately: Keep equipment clean. Avoid excessive build-up of oil and grease. Remove absorbent from areas of spill in a timely manner.
14. The Contractor shall have on-site at all times sufficient absorbent materials and cleanup supplies, which shall be kept both on land and on barges (if used). The following includes a list of standard items that shall be available on each site as needed:
  - Resistant gloves;
  - Coveralls;
  - Petroleum absorbent socks, pillows, and diapers;
  - Chemical resistant disposal bags; and
  - Department of Transportation labels.
  - Material Safety Data Sheets ("MSDSs") are available on site with the contractor.
15. In addition to items listed above, spill kits shall be available at strategic locations. The purpose of the spill kit is to be prepared to clean up liquid releases of



hazardous materials such as hydraulic oil and motor oil from parked trucks and vehicles or paints, solvents, or fuels. Burst hydraulic lines are a common source of pollution from heavy vehicles.

At a minimum, spill kits shall contain the following items:

- Absorbent spill pads and socks;
- Absorbent material (e.g., solvent absorbent, vermiculite, etc.);
- Hydrophobic mop (i.e., a mop that absorbs oil, but not water);
- Safety gloves (that are appropriate for oils and other petroleum);
- 5 – 20 gallon bucket/drum with lid; and
- Drum labels and writing instrument.

Any spill shall be controlled using the following measures:

- Store all materials with secondary containment;
- Use secondary containment with drip reservoirs for dispensers;
- Place absorbent pads or drip pans under equipment that contains fluids;
- Keep a properly sized spill kit in all areas with the potential for leaks;
- Stock spill prevention equipment and spill cleanup kits at various locations around the project site;
- At a minimum, provide oil-absorbent mats for all equipment;
- Place secondary containment for any stationary equipment that needs to be within the setback area for streams, wetlands, or drainages; and
- Have absorbent pads and spill kits handy whenever hazardous materials are being used near surface water during construction.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION