Appendix L

Hydrology and Water Quality

Appendix L-1

Sanitation District Stormwater Pollution Control Plan

STORM WATER POLLUTION CONTROL PLAN (SWPCP)
for

START HERE…CLICK HERE TO INSERT PROJECT NAME-THEN TAB TO NEXT FIELD.

Contract Number:
INSERT CONTRACT NUMBER-THEN TAB TO NEXT FIELD.

Prepared for:
Insert Name of Lead Agency-then TAB.
Insert Address 1 and press ENTER to insert Address 2 or TAB to next field.
Insert City, State, ZIP-then TAB.
Insert Resident Engineer's Name-then TAB.
Insert Resident Engineer's Telephone Number-then TAB.

Submitted by:
Insert Contractor's Company Name-then TAB.
Insert Address 1 and press ENTER to insert Address 2 or TAB to next field.
Insert City, State, ZIP-then TAB.
Insert Telephone-then TAB.
Insert Owner/Representative's Name-then TAB.

Project Site Address
Insert job site address, if any-then TAB.
Insert job site telephone number, if any-then TAB.

Contractor's Water Pollution Control Manager
Insert WPCM's Name-then TAB.
Insert Telephone Number(s) and Email-then TAB.

Contractor's Designated Water Pollution Control Inspector (if different from WPCM)
Insert Inspector's Name-then TAB.
Insert Telephone Number(s) and Email -then TAB.

SWPCP Prepared by:
Insert Company Name-then TAB.
Insert Address 1 and press ENTER to insert Address 2 or TAB to next field.
Insert City, State, ZIP-then TAB.
Insert Telephone and Email-then TAB.
Insert Name and Title of Preparer-then TAB.

SWPCP Preparation Date
Insert Date

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Attachment B ..... Maintenance, Inspection, and Repair of Construction Site BMPs
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Attachment G ..... Trained Contractor Personnel Log
Attachment H…… CASQA BMP Fact Sheets
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Section 10
SWPCP Certification and Approval

10.1 Contractor's Certification and Approval by the Resident Engineer

CONTRACTOR'S CERTIFICATION OF SWPCP

"I certify under a penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted, to the best of my knowledge and belief is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature	Date
Name and Title	Telephone Number

For Use by Local Agency/Private Entity Only

LOCAL AGENCY/PRIVATE ENTITY RESIDENT ENGINEER'S APPROVAL OF SWPCP

I, and/or personnel acting under my direction and supervision, have reviewed this SWPCP and find that it meets the requirements set forth in the Special Provisions, the OCSD SWPPP and SWPCP Preparation Manual, and the Standard Specifications Section 7-1.01G – Water Pollution.

Resident Engineer's Signature	Date of SWPCP Approval
Resident Engineer's Name (printed)	Resident Engineer's Phone Number

Section 20
Project Information

20.1 Project Description

1. Introduction and Project Description:

2. Type of work to be performed:

3. Project Location and Unique Site Features:

3. Project Schedule:

The project schedule is represented in Attachment I. The Project start and end date are expected to be .

4. Potential Pollutant Sources:

20.2 Responsibilities

The Water Pollution Control Manager (WPCM) assigned to this project is:

Insert WPCM's Name-then TAB

Insert Telephone Number(s)-then TAB

Insert Contractor's Company Name-then TAB

Insert Address 1, then press ENTER to insert Address 2 or TAB to next field

Insert City, State, Zip-then TAB

The WPCM shall have primary responsibility and significant authority for the implementation, maintenance, inspection and amendments to the approved SWPCP. The WPCM will be available at all times throughout duration of the project. Duties of the Contractor's WPCM include but are not limited to:

- Ensuring full compliance with the SWPCP, and
- Implementing all elements of the SWPCP.

The WPCM shall have the authority to mobilize crews in order to make immediate repairs to the water pollution control measures.

This SWPCP was prepared by INSERT COMPANY, NAME AND PROFESSIONAL REGISTRATION OR OTHER QUALIFICATIONS (INCLUDING INFORMATION REGARDING OTHER TRAINING COURSES, SUCH AS SWPPP PREPARATION TRAINING) OF PERSON THAT PREPARED THE SWPCP.

20.3 Training

Training is required for those personnel responsible for installation, inspection, maintenance and repair of BMPs. Training is also required for those personnel responsible for developing, implementing and amending the WPCP.

The training log showing formal and informal training of various personnel is shown in Attachment G. A copy of all training certificate(s) for the WPCM and the SWPCP Preparer are included in Attachment G. Training records shall be updated, documented and reported in the SWPCP on a quarterly basis.

INSERT HERE ANY ADDITIONAL TEXT REGARDING TRAINING OR PERSONNEL.

Section 30
Pollution Sources and Control Measures

30.1 Soil Stabilization (Erosion Control) and Sediment Control

30.1.1 Soil Stabilization BMPs

The following soil stabilization BMP implementation table indicates the BMPs that shall be implemented to control erosion on the construction site. Implementation and locations of temporary soil stabilization BMPs are shown on the WPCDs in Attachment A and described in this section. The BMP working details can also be found in Attachment A of this SWPCP. The following list of BMPs and narrative explain how the selected BMPs will be incorporated into the project.

TEMPORARY SOIL STABILIZATION BMPs					
BMP NAME	**MINIMUM REQUIRE-MENT** (2)	**CONTRACT BID ITEM**	**BMP USED**		**IF NOT USED, STATE REASON**
			YES	**NO**	
Scheduling	✓	☐	☐	☐	
Preservation of Property/Preservation of Existing Vegetation	✓	☐	☐	☐	
Temporary Hydraulic Mulch (Bonded Fiber Matrix)	✓(1)	☐	☐	☐	
Temporary Hydraulic Mulch (Polymer Stabilized Fiber Matrix)	✓(1)	☐	☐	☐	
Temporary Erosion Control (With Temporary Seeding)	✓(1)	☐	☐	☐	
Temporary Soil Stabilizer	✓(1)	☐	☐	☐	
Temporary Erosion Control (Straw Mulch with Stabilizing Emulsion)	✓(1)	☐	☐	☐	
Temporary Erosion Control Blanket (On Slope)	✓(1)	☐	☐	☐	
Temporary Erosion Control Blanket (in swale or ditch)		☐	☐	☐	
Temporary Cover (Plastic Covers)	✓(1)	☐	☐	☐	
Temporary Mulch (Wood)		☐	☐	☐	
Earth Dikes/Drainage Swales & Lined Swales		☐	☐	☐	
Outlet Protection/Velocity Dissipation Devices		☐	☐	☐	
Slope Drains		☐	☐	☐	
Streambank Stabilization		☐	☐	☐	
ALTERNATIVE SOIL STABILIZATION BMPs USED(3) ○ Yes ○ No					**IF USED, STATE REASON**

TEMPORARY SOIL STABILIZATION BMPs					
BMP NAME	**MINIMUM REQUIRE-MENT** (2)	**CONTRACT BID ITEM**	**BMP USED**		**IF NOT USED, STATE REASON**
			YES	**NO**	

Notes:
(1) The Contractor shall ensure implementation of one of the two measures listed or a combination thereof to achieve and maintain the contract's rainy and non-rainy season requirements.
(2) Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the Contractor and approved by the Resident Engineer.
(3) Use of alternative BMPs will require written approval by the Resident Engineer.

INSERT NARRATIVE DESCRIBING SELECTED SOIL STABILIZATION BMPs

30.1.2 Sediment Control BMPs

The following sediment control BMP implementation table indicates the BMPs that shall be implemented to control sediment on the construction site. Implementation and locations of temporary sediment control BMPs are shown on the WPCDs in Attachment A and described in this section. The BMP working details can also be found in Attachment A of this SWPCP. The following list of BMPs and narrative explain how the selected BMPs will be incorporated into the project.

TEMPORARY SEDIMENT CONTROL BMPs					
BMP NAME	**MINIMUM REQUIRE-MENT** (2)	**CONTRACT BID ITEM**	**BMP USED**		**IF NOT USED, STATE REASON**
			YES	**NO**	
Temporary Silt Fence	✓(1)	☐	☐	☐	
Temporary Sediment Basin		☐	☐	☐	
Temporary Check Dam		☐	☐	☐	
Temporary Fiber Rolls	✓(1)	☐	☐	☐	
Temporary Gravel Bag Berm		☐	☐	☐	
Street Sweeping	✓	☐	☐	☐	
Temporary Sandbags		☐	☐	☐	
Temporary Straw Bale Barrier		☐	☐	☐	
Temporary Drain Inlet Protection	✓	☐	☐	☐	
ALTERNATIVE SEDIMENT CONTROL BMPs USED(3) ○ **Yes** ○ **No**					**IF USED, STATE REASON**

Notes:
(1) The Contractor shall ensure implementation of one of the two measures listed or a combination thereof to achieve and maintain the contract's rainy and non-rainy season requirements.
(2) Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the Contractor and approved by the Resident Engineer.
(3) Use of alternative BMPs will require written approval by the Resident Engineer.

INSERT NARRATIVE DESCRIBING TEMPORARY SEDIMENT CONTROL BMPs

30.1.3 Tracking Control BMPs

The following tracking control BMP implementation table indicates the BMPs that shall be implemented to reduce sediment tracking from the construction site onto private or public roads. Implementation and locations of tracking control BMPs are shown on the WPCDs in Attachment A and described in this section. The BMP working details can also be found in Attachment A of this SWPCP. The following list of BMPs and narrative explain how the selected BMPs will be incorporated into the project.

TEMPORARY TRACKING CONTROL BMPs					
BMP NAME	**MINIMUM REQUIRE-MENT**	**CONTRACT BID ITEM**	**BMP USED**		**IF NOT USED, STATE REASON**
			YES	**NO**	
Street Sweeping		☐	☐	☐	
Temporary Construction Entrance		☐	☐	☐	
Stabilized Construction Roadway		☐	☐	☐	
Temporary Entrance/Outlet Tire Wash		☐	☐	☐	
ALTERNATIVE TRACKING CONTROL BMPs USED (1) ○ **Yes** ○ **No**					**IF USED, STATE REASON**
Notes: (1) Use of alternative BMPs will require written approval by the Resident Engineer.					

INSERT NARRATIVE DESCRIBING TEMPORARY TRACKING CONTROL BMPs

30.1.4 Wind Erosion Control BMPs

The following wind erosion control BMP implementation table indicates the BMPs that shall be implemented to control wind erosion on the construction site. Implementation and locations of wind erosion control BMPs are shown on the WPCDs in Attachment A and/or described in this section. The BMP working details can be found in Attachment A. The following list of BMPs and narrative explain how the selected BMPs shall be incorporated into the project.

TEMPORARY WIND EROSION CONTROL BMPs					
BMP NAME	**MINIMUM REQUIRE-MENT(1)**	**CONTRACT BID ITEM**	**BMP USED**		**IF NOT USED, STATE REASON**
			YES	**NO**	
Wind Erosion Control	✓	☐	☐	☐	
Temporary Construction Entrance		☐	☐	☐	
Stabilized Construction Roadway		☐	☐	☐	
All Soil Stabilization Measures included in Section 500.3.4		☐	☐	☐	
ALTERNATIVE WIND EROSION CONTROL BMPs USED (2) ○ **Yes** ○ **No**					**IF USED, STATE REASON**

Notes:
(1) Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the Contractor and approved by the Resident Engineer.
(2) Use of alternative BMPs will require written approval by the Resident Engineer.

INSERT NARRATIVE DESCRIBING WIND EROSION CONTROL BMPs

30.2 Construction Site Management

30.2.1 Non-Stormwater Management BMPs

The following BMP implementation table indicates the BMPs that have been selected to control non-stormwater pollution on the construction site. Implementation and locations of non-stormwater control BMPs are shown on the WPCDs in Attachment A and described in this section. The BMP working details that will be adhered to are found in Attachment A of this SWPCP.

CONSTRUCTION SITE MANAGEMENT NON-STORMWATER MANAGEMENT POLLUTION CONTROL BMPs					
BMP NAME	**MINIMUM REQUIRE-MENT** (1)	**CONTRACT BID ITEM**	**BMP USED**		**IF NOT USED, STATE REASON**
			YES	**NO**	
Water Control and Conservation		☐	☐	☐	
Dewatering (2)		☐	☐	☐	
Paving, Sealing, Sawcutting, and Grinding Operations		☐	☐	☐	
Temp Stream Crossing (2)		☐	☐	☐	
Clear Water Diversion (2)		☐	☐	☐	
Illegal Connection and Illegal Discharge Detection Reporting	✓	☐	☐	☐	
Potable Water/Irrigation		☐	☐	☐	
Vehicle and Equipment Cleaning	✓	☐	☐	☐	
Vehicle and Equipment Fueling	✓	☐	☐	☐	
Vehicle and Equipment Maintenance	✓	☐	☐	☐	
Pile Driving Operations		☐	☐	☐	
Concrete Curing		☐	☐	☐	
Material and Equipment Used Over Water		☐	☐	☐	
Concrete Finishing		☐	☐	☐	
Structure Demolition/Removal Over or Adjacent to Water		☐	☐	☐	
ALTERNATIVE NON-STORMWATER CONTROL BMPs USED(3) ○ **Yes** ○ **No**					**IF USED, STATE REASON**

Notes:
(1) Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the Contractor and approved by the Resident Engineer.
(2) The BMPs listed above are incidental and do not include operations included as separate line items in the contract.
(3) Use of alternative BMPs will require written approval by the Resident Engineer.

INSERT NARRATIVE DESCRIBING NON-STORM WATER MANAGEMENT POLLUTION CONTROL BMPs

30.2.2 Waste Management and Materials Pollution Control BMPs

The following BMP implementation table indicates the BMPs that have been selected to control construction site wastes and materials. Implementation and locations of materials handling and waste management BMPs are shown on the WPCDs in Attachment A. The BMP working details that will be adhered to are found in Attachment A of this SWPCP. The following list of BMPs and narrative explain how the selected BMPs will be incorporated into the project.

CONSTRUCTION SITE MANAGEMENT WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs					
BMP NAME	**MINIMUM REQUIRE-MENT** (1)	**CONTRACT BID ITEM**	**BMP USED**		**IF NOT USED, STATE REASON**
			YES	**NO**	
Material Delivery and Storage	✓	☐	☐	☐	
Material Use	✓	☐	☐	☐	
Stockpile Management	✓	☐	☐	☐	
Spill Prevention and Control	✓	☐	☐	☐	
Solid Waste Management	✓	☐	☐	☐	
Hazardous Waste Management (2)		☐	☐	☐	
Contaminated Soil Management (2)		☐	☐	☐	
Concrete Waste Management		☐	☐	☐	
Temporary Concrete Washout Facility		☐	☐	☐	
Temporary Concrete Washout (Portable)		☐	☐	☐	
Sanitary/Septic Waste Management	✓	☐	☐	☐	
Liquid Waste Management		☐	☐	☐	
ALTERNATIVE WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs USED(3) ○ **Yes** ○ **No**					**IF USED, STATE REASON**

Notes:
(1) Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be verified by the Contractor or OCSD.
(2) The BMPs listed above are incidental and do not include operations included as separate line items in the contract.
(3) Use of alternative BMPs will require written approval by the Resident Engineer.

INSERT NARRATIVE DESCRIBING WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs

30.3 Water Pollution Control Drawings (WPCDs)

The WPCDs are included as Attachment A to this Water Pollution Control Plan. WPCDs are to include the locations of the BMPs selected, drainage patterns, discharge locations, staging areas and project entrance locations.

30.4 Construction BMP Maintenance, Inspection, and Repair

A completed Inspection, Maintenance, and Repair Program shall be provided in Attachment B of the SWPCP.

Site inspections shall be conducted by the Contractor's WPCM or other OCSD-approved 24-hour trained staff at the following minimum frequencies:

- Weekly.
- Daily inspections within the Lake Tahoe Hydrologic Unit.
- Prior to a forecast storm.
- After a rain event that causes runoff from the construction site.
- At 24-hour intervals during extended rain events.
- At any other time(s) or intervals of time specified in the Contract Special Provisions.

Completed inspection checklists (Attachment C) will be submitted to the Resident Engineer within 24 hours of inspection. Copies of the completed checklists will be kept with the SWPCP. A tracking or follow-up procedure shall follow any inspection that identifies deficiencies in BMPs.

Section 40
Amendments

The SWPCP shall be amended whenever there is a change in construction or operations that may cause the discharge of significant quantities of pollutants to surface waters, ground waters, municipal storm drain systems, or when deemed necessary by the Resident Engineer. All SWPCP amendments shall be documented in letter format and include revised WPCD sheets, as appropriate. SWPCP amendments shall be certified by the contractor and require approval by the Local Agency/Private Entity Resident Engineer. Approved amendments and log shall be attached to the Contractor's on-site SWPCP in Attachment D.

Project Name: **START HERE…CLICK HERE TO INSERT PROJECT NAME-THEN TAB TO NEXT FIELD.**

Contract Number: **INSERT CONTRACT NUMBER-THEN TAB TO NEXT FIELD.**

Amendment No.	Date	Brief Description of Amendment	Prepared By

Section 50
Reporting

50.1 Discharge Reporting

If a discharge occurs or if the project receives a written notice or order from any regulatory agency, the contractor will immediately notify the Engineer and will file a written report to the Resident Engineer within 7 days of the discharge event, notice, or order. Corrective measures will be implemented immediately following the discharge, notice or order. All discharges shall be documented on a Discharge Reporting Log in Attachment F and communicated via a Notice of Discharge form in Attachment E.

The report to the Resident Engineer will contain the following items:

- The date, time, location, nature of operation, and type of discharge, including the cause or nature of the notice or order.
- The BMPs deployed before the discharge event, or prior to receiving notice or order.
- The date of deployment and type of BMPs deployed after the discharge event, or after receiving the notice or order, including additional BMPs installed or planned to reduce or prevent re-occurrence.
- An implementation and maintenance schedule for any affected BMPs.

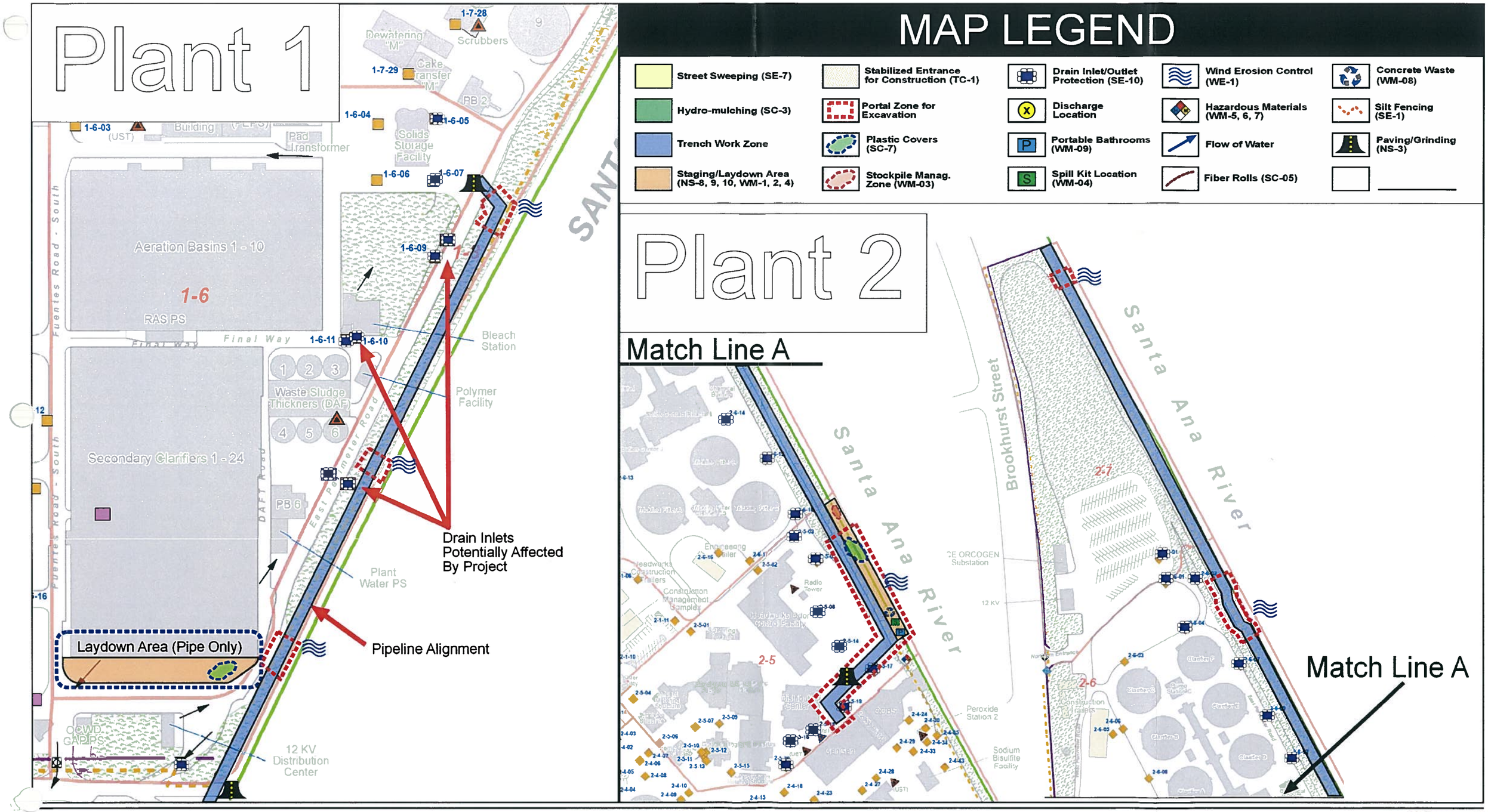
Discharges requiring reporting include:

- Non-stormwater, except conditionally exempted discharges, discharged to a waterway or a storm drain system, without treatment by an approved control measure (BMP).
- Stormwater discharged to a waterway or storm drain system where the control measures (BMPs) have been overwhelmed or not properly maintained or installed.
- Discharge of hazardous substances above the reportable quantities in 40 CFR 117.3 or 302.4.
- Stormwater runoff containing hazardous substances from spills discharged to a waterway or storm drain system.
- Discharges that may endanger health or the environment.
- Other discharge reporting as directed by the Resident Engineer.

Appendix L-2

Water Pollution Control Drawings

Water Pollution Control Drawing - 2

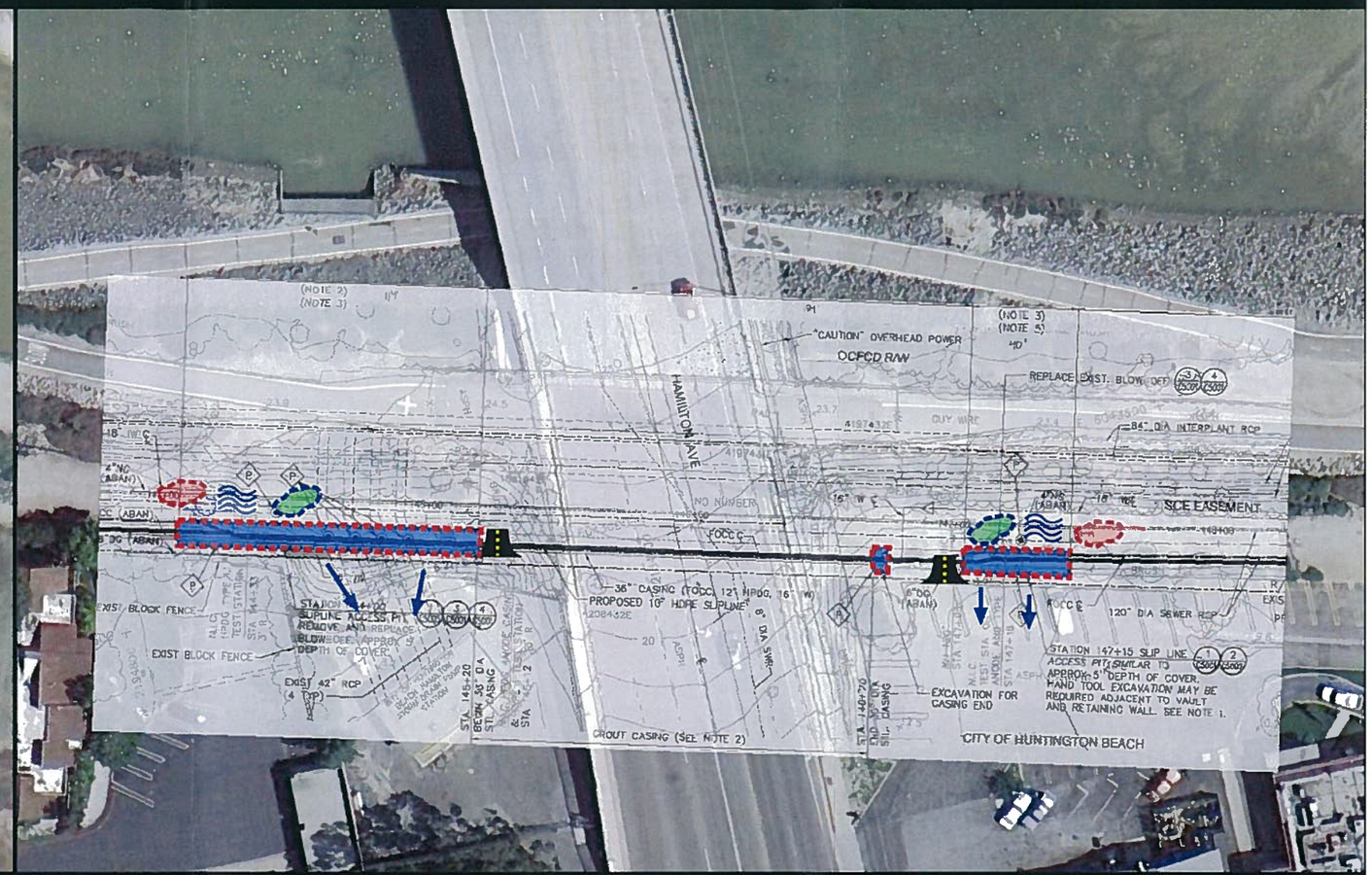


OCSD - Interplant Gas Line Rehabilitation (Plant Oultines)

Water Pollution Control Drawing - 3

Typical Staging Area (Along Alignment)

Typical Portal Layout Area (To Be Determined)



LEGEND

Street Sweeping (SE-7)	Portal Zone for Excavation	Drain Inlet/Outlet Protection (SE-10)	Discharge Location
Stabilized Entrance for Construction (TC-1)	Plastic Covers (SC-7)	Wind Erosion Control (WE-1)	Concrete Waste (WM-08)
Hydro-mulching (SC-3)	Stockpile Manag. Zone (WM-03)	Hazardous Materials (WM-5, 6, 7)	Silt Fencing (SE-1)
Trench Work Zone	Portable Bathrooms (WM-09)	Flow of Water	Paving/Grinding (NS-3)
Staging/Laydown Area (NS-8, 9, 10, WM-1, 2, 4)	Spill Kit Location (WM-04)	Fiber Rolls (SC-05)	

Notes

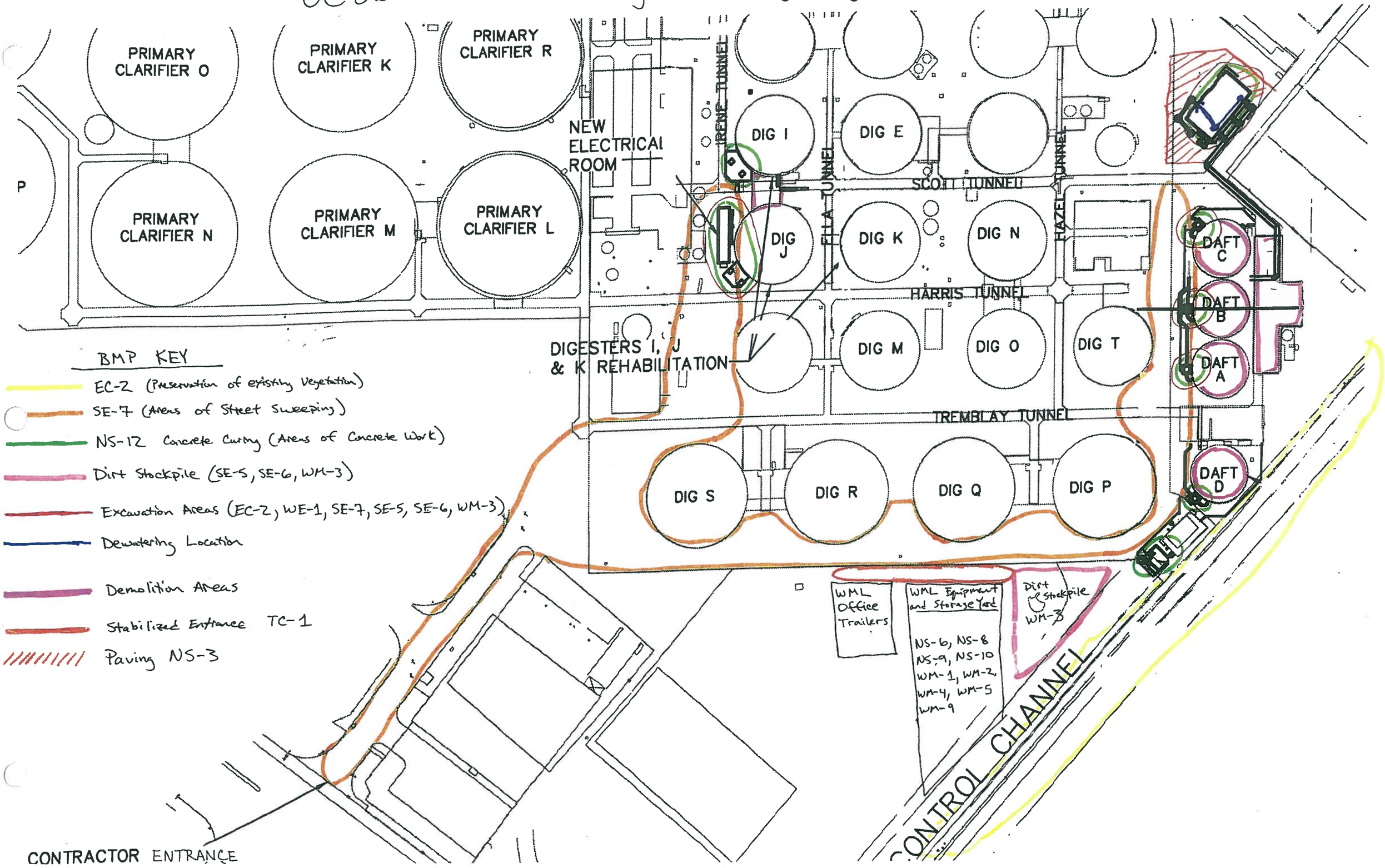
All open trenchwork will incorporate multiple BMPs in active work areas. These BMPs will vary depending on the location and geography of of the active work area. All open trench work will be protected at the end of each work day and stabilization will occur as work progresses along the alignment. The following items may be used during trenching, but are not graphically illustrated as they will progress as the active work zone moves: SC-1 Scheduling, SC-7 Plastic Covers, SC-16 Non-veg Stabilizers, NS-1 Water Conservation Practices, NS-3 Paving/Grinding, NS-6 Illicit Discharge Reporting, WM-2 Material Use, WM-4Spill Control, WM-5 Solid Waste Management, WM-9 Portable Toilet, SE-7 Street Sweeping (as needed), WE-1 Wind Erosion Control

General Notes for Work Areas During Project

- If any stockpiling of material is required for the project, at the end of each day stockpiles shall be covered and contained via fiber rolls.
- All equipment shall be parked as far as possible from drain inlets and fiber rolls will be placed around equipment at the end of each day.
- All drain inlets will be protected in an area where work is being performed.
- All exposed slopes left inactive for more than 14 days shall be stabilized using BFM
- Spill kits will be available on-site near equipment for rapid response to spill clean up.

NORTH

0 Not to Scale

OCSD - Interplant Gas Line Rehabilitation (Typical Portal and Staging Area Layout)

OCSD Solids Thickening & Processing Upgrades — P2-89 Project