Stormwater Quality Handbooks

Project Planning and Design Guide

Stormwater Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual

Construction Site Best Management Practices (BMPs) Reference Manual

Caltrans

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Stormwater Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual

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SECTION 1
INTRODUCTION AND BACKGROUND

1.1 PURPOSE AND SCOPE OF THIS MANUAL

Caltrans has a commitment to prevent pollution in stormwater runoff from Caltrans properties, facilities, and activities. This manual is part of Caltrans comprehensive and coordinated statewide effort to prevent pollution in stormwater runoff from Caltrans construction sites.

This document guides Contractors and Caltrans staff through the process of preparing a Stormwater Pollution Prevention Plan (SWPPP) or a Water Pollution Control Program (WPCP). The organization of this Manual is shown below. Working details and instructions for the implementation of construction site Best Management Practices (BMPs) are presented in the Standard Plans, Contract Plans, Standard Specifications and contract Special Provisions. The Caltrans *Construction Site Best Management Practices (BMPs) Reference Manual* should be used as guidance for determining site BMPs not specified in the contract documents.

Section 1 provides the purpose and scope of this Manual and background information on the National Pollutant Discharge Elimination System (NPDES) regulations and the Caltrans Statewide NPDES Permit.

Section 2 provides information of the determination of site Best management Practices (BMPs).

Section 3 provides detailed instructions for the preparation of a SWPPP.

Section 4 provides detailed instructions for the preparation of a WPCP.

Appendix A provides a listing of frequently used abbreviations and acronyms used throughout this Manual.

Appendix B provides definitions of terms used throughout this Manual.

Appendix C provides a listing of various types of products used in implementation of Temporary Soil Stabilization Controls.

Appendix D provides a list of standard Caltrans Construction Site BMP symbols to be used on Water Pollution Control Drawings.

1.1.1 Storm Water Pollution Prevention Plan/Water Pollution Control Plan

The Storm Water Pollution Prevention Plan (SWPPP) is a document that addresses water pollution control for a construction project. The Construction General Permit (CGP) requires that all stormwater discharges associated with construction activity, where said activity results in soil disturbance of one acre or more of land area, must be permitted under the CGP and have a fully developed site SWPPP on-site prior to beginning any soil disturbing activities. Caltrans may require the development of a SWPPP for projects with disturbed soil areas of less than 1 acre if it is determined that the project possesses a significant water quality risk.

The CGP requires the development of a project-specific SWPPP. The SWPPP must include the information needed to demonstrate compliance with all the requirements of the CGP. Figure 1-1, Caltrans SWPPP Process Flow Chart, summarizes the typical SWPPP documentation preparation process for a Caltrans project. These processes will be explained in detail in the following Sections 3 and 4 of this Preparation Manual. The SWPPP document must be written by a Qualified SWPPP Developer (QSD). Caltrans specifications require that a Water Pollution Control Manager (WPC Manager) be responsible for the implementation of a SWPPP. The WPC Manager must have the same qualifications as a QSD. Details pertaining to individuals who qualify as a QSD/ WPC Manager are explained in Section 1.4.1.

It should be noted that construction projects with a disturbed soil area of less than one acre and do not include the construction of a new building, do not require coverage under the CGP. However, Caltrans requires that a Water Pollution Control Program (WPCP) be prepared for project construction sites with less than one acre of disturbed soil area. Caltrans specifications require that the project specific WPCP be prepared by a Qualified SWPPP Practioner (QSP). The WPC manager responsible for implementation of the WPCP must have the same qualifications as a QSP.

In August 2010, the California Green Building Standards Code (CALGreen) was adopted by the California Building Standards Commission. CALGreen building standards require new residential and nonresidential buildings to develop a SWPPP regardless of the size of the project. This will be in effect January 1, 2011. SWPPPs must be designed to be project specific and conform to the State Stormwater NPDES Construction Permit or local ordinance, whichever is more stringent.

Figure 1-1

CALTRANS SWPPP PROCESS FLOW CHART

1000. SWPPP Preparation and Approval

1100. Extract all storm water related plans and special provisions from the contract documents: detail sheets for BMPs, locations of BMPs, SWPPP Special Provisions, temporary and permanent BMP Special Provisions.

1200. Contractor should seek all appropriate documents from Caltrans: NOC, conceptual SWPPP (if applicable), Storm Water Data Report, Hydraulics/Hydrology Report, Geotechnical Report, other plans, permits, etc.

1300. Obtain Caltrans SWPPP Preparation Manual and SWPPP Template.

1400. Contractor's QSD prepares SWPPP using SWPPP Preparation Manual and Template and submits to Caltrans for review and certification.

1500. Caltrans will certify SWPPP. Contractor shall make required copies and maintain a certified copy on site at all times.

2000. SWPPP Implementation

2100. BMPs

Implement BMPs in Compliance with SWPPP

2200. Training

Conduct Ongoing Training in accordance with SWPPP, Document in SWPPP Attachment D (CEM-2023 and CEM-2024).

2300. CONSTRUCTION SITE MONITORING PLAN (CSMP)

2310. Monitor NWS forecast daily and document chance of rain and precipitation amount (CEM-2040). The actual rainfall amount shall be recorded by reading the onsite rain gauge daily (CEM 2041).

2320. Contractor QSP shall conduct site inspections weekly; before, during, and after rain events, and quarterly for non-storm water discharges. Contractor shall complete form CEM-2030 Stormwater Site Inspection Report for each inspection. RL2&3 project Contractors shall conduct daily inspections of all access roads.

2321. If Contractor identifies an unauthorized discharge, Contractor shall complete form CEM-2061

2322. Contractor shall document all corrective actions by completing form CEM-2035 Stormwater Site Inspection Report Corrective Actions Summary

2330. Contractor shall check the WPCBMP List in the SWPPP (Attachment AA) and complete form CEM-2034 Stormwater Best Management Status Report weekly.

2340. Contractor shall complete applicable form (CEM-2045, 2046, 2047) for REAP 72 hours prior to a 50% chance of precipitation based on the NWS forecast (SWPPP Section 600.3)

2350. Contractor shall maintain and document calibrated meters using the appropriate form CEM-2055, 2056, 2057 or 2058.

2400. Active Treatment System (ATS)

The Contractor shall implement the ATS plan and Bioassessment as required by plans referenced in the SWPPP Section 700.6.

2500. Recordkeeping

The Contractor shall maintain all records as required by SWPPP Section 900.1.

2600. Annual Certification and Annual Report

The Contractor shall prepare an annual compliance certification form CEM-2070 by July 1 of each year. The Annual Report consists of CEM-2070 and all file category items for the fiscal year to be submitted to the Regional Board by September 1 of each year.

2700. Amendments

Amend SWPPP - WPCM or QSD must amend or revise SWPPP and maintain in SWPPP Attachment DD and log in SWPPP Section 100.3.2.

2360.0 SAMPLING AND ASSOCIATED FORMS

2361. Contractor shall identify discharge points from Attachment EE of SWPPP, monitoring locations using form CEM-2048 for non-visible storm water monitoring, and for Risk Level 2 or 3 sampling locations for each qualifying rain event using form CEM-2049. Contractor will notify RE prior to rain event sampling to coordinate scheduling of verification sampling.

2362. Contractor shall collect samples in accordance with CEM-2048 or 2049 each rain event where a breach, malfunction, leak or spill could potentially discharge non-visible pollutants.

2363. If Risk Level 2 or 3, Contractor shall collect samples from discharge points identified on form CEM 2049 for that rain event and analyze for pH and turbidity, and non-visible pollutants (if applicable) for each qualifying rain event.

[Since it is not known when the precipitation will add up to 0.5 inches, samples will be collected from first discharge with adequate volume to collect a sample.

2364. If Risk Level 2 or 3, even if it rains without a REAP and runoff is adequate to collect a storm water sample, the WPC Manager shall implement sampling and analysis following the procedures of forms CEM-2048 and CEM-2049.

2365. Before discharging dewatering effluent, Contractor shall amend SWPPP if necessary and shall implement the non-stormwater SAP.

2366. Risk Level 3 projects will sample for SSC and conduct receiving water sampling if an NEL is exceeded in accordance with SWPPP Section 700.

2367. After samples are collected, the Contractor shall document sampling on form CEM-2051. The Contractor shall analyze field samples and document results on form CEM-2052. For laboratory samples, the Contractor shall document results on CEM-2054 and the Chain of Custody form CEM-2050.

2370. DATA EVALUATION

2371. If Risk Level 2 or 3, sampling results average exceeds NALs (250 NTU, <6.5 or >8.5 pH), Contractor shall complete form CEM-2062, and implement immediate corrective actions.

2372. If Risk Level 3 sampling results average exceeds NELs (500 NTU, <6.0 or >9.0 pH), Contractor shall complete form CEM-2063, and implement immediate corrective actions.

1.2 FEDERAL REGULATIONS

Federal regulations for controlling discharges of pollutants from municipal separate storm sewer systems, construction sites, and industrial activities, were brought under the NPDES permit process by the 1987 amendments to the Clean Water Act (CWA), and the subsequent 1990 promulgation of federal stormwater regulations issued by the U.S. Environmental Protection Agency (USEPA). The USEPA regulations require municipal and industrial stormwater discharges to comply with an NPDES permit. In California, the USEPA delegated authority to issue NPDES permits to the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCBs).

1.3 CALTRANS STATEWIDE NPDES PERMIT

On July 15, 1999, the SWRCB issued Order No. 99-06-DWQ, NPDES No. CAS000003, National Pollutant Discharge Elimination System (NPDES) Permit, Statewide Storm Water Permit and Waste Discharge Requirements (WDRs) for the State of California, Department of Transportation (Caltrans); hereby called the "Permit". The Permit regulates stormwater discharges from Caltrans properties, facilities and activities, and requires that the Caltrans construction program comply with the requirements of the NPDES General Permit for Construction Activities (Construction General Permit).

The Permit gives RWQCBs the option to specify additional requirements they may consider necessary to meet water quality standards. In addition, RWQCBs retain the authority to issue NPDES permits for individual projects or adopt Regional Permits. Copies of the Permit can be downloaded from the SWRCB Web site, at:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/caltrans.shtml

For construction projects the Permit requires Caltrans to implement a year-round program in all parts of the State to effectively control stormwater and non-stormwater discharges. Furthermore, the Permit requires Caltrans to meet water quality standards through implementation of permanent and temporary (during construction) BMPs and other measures. The Permit prohibits the discharge of waste, including soil and sediment, which causes pollution or nuisance. This section does not intend to include all permit requirements. For information and complete listing of all requirements, refer to the Permit.

Caltrans has developed the Storm Water Pollution Prevention Plan (SWPPP) template to comply with the requirements of both the Permit and CGP. The following table shows where Permit requirements are incorporated into the SWPPP.

TABLE 1-1
Caltrans NPDES Permit Requirements

CALTRANS NPDES PERMIT No. CAS000003 REQUIREMENTS		
Caltrans Permit Reference	**Requirement**	**SWPPP Section**
H.1.b	SWPPP references and/or includes permanent and temporary BMPs	500.3 500.4 500.6
H.2	SWPPP contains all elements required in the State General Permit. CAS000002	100 – 900
H.6	SWPPP limits application, generation, and migration of toxic substances	500.1.2 500.4, 700.1.3
H.7	Implementation of adequate erosion and sediment controls after construction is completed	800
H.8.a	Copy of the Notice of Construction (NOC)	Attachment B
H.8.b	SWPPP contains BMPs for mobile operations (material production or recycling operations) including AC recycling, PCC Recycling, Concrete Mixing, Crushing, & storage of materials that are established by the contractor on the construction site or on other property specifically arranged for by Caltrans.	500.4.1
H.8.b	SWPPP applies to all areas that are directly related to construction including but not limited to staging & storage yards, material borrow areas or access roads whether or not they reside in CT right-of-way.	500.6
H.9	The SWPPP contains RWQCB WDR requirements for projects that reuse Aerially Deposited Lead. (Applicable only for projects that reuse ADL soils.)	500.4.1

1.4 CONSTRUCTION GENERAL PERMIT

Caltrans statewide NPDES permit requires Caltrans projects to comply with the Construction General Permit. Caltrans projects originally had to comply with the State Water Resources Control Board (SWRCB) *Order No. 92-08-DWQ*, Construction General Permit. Subsequently, the Construction General Permit (CGP) *Order No. 92-08-DWQ* was replaced by "State Water Resources Control Board (SWRCB) *Order No. 99-08-DWQ*, National Pollutant Discharge Elimination System (NPDES) General Permit *No. CAS000002*, Waste Discharge Requirements (WDRs) for Discharges of Storm Water Runoff Associated with Construction Activity" issued and modified by the SWRCB, to regulate discharges from construction sites that disturb 5 acres or more.

On September 2, 2009 the SWRCB adopted "National Pollution Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated With Construction and Land Disturbance Activities (*Order No 2009-0009-DWQ, NPDES No. CAS000002*)", commonly referred to as Construction General Permit (CGP), CGP *Order No. 2009-0009-DWQ, NPDES No. CAS000002* replaces *Order No. 99-08-DWQ, NPDES No. CAS000002*. A summary of the significant aspects of the CGP *Order No. 2009-0009-DWQ, NPDES No. CAS000002* are listed in Table 1-2.

It is important to note that the CGP applies to projects that are greater than or equal to one acre. Construction sites that are small (1 to 5 acres) and that obtain an approved Rainfall Erosivity Waiver authorized by the U.S. EPA Phase II regulations do not fall under jurisdiction of the CGP. Rainfall Erosivity Waiver will only apply when the determined Rainfall Erosivity Factor is less than 5. A project that is less than 1 acre or obtains a Rainfall Erosivity Waiver will not have to prepare a SWPPP under the CGP. However, Caltrans requires that a WPCP be prepared for the projects that do not require a SWPPP.

TABLE 1-2
Significant Aspects of the Construction General Permit

Construction General Permit (*Order No 2009-0009-DWQ, NPDES No. CAS000002*),	
Qualifications for Certification and Training Requirements	Requires that the SWPPP developer, implementer and inspector have documented qualifications and training. . See Section 1.4.1 for elaboration of training requirements.
Risk-Based Permitting Approach	Establishes three levels of calculated risk possibilities for a project. Risk is determined from erodability of soil and receiving water impairments.
Receiving Water Limitations	Requires construction –related activities that cause or contribute to an exceedandce of a water quality standard must be addressed.
Effluent Standards and Monitoring	Requires effluent monitoring for pH and turbidity in stormwater discharges. Monitoring is used to evaluate compliance with Numeric Effluent Limitations (NELs) and Numeric Action Levels (NALs) included in the General Permit.
Monitoring, Sampling, Reporting and Record Keeping	Requires visual site monitoring and monitoring effluent for water quality standards. The CGP has specific reporting and record keeping requirements.
Minimum Requirements Specified	Imposes and specifies minimum BMPs requirements.
Rain Event Action Plan (REAP)	Requires certain projects to develop and implement a REAP that is designed to protect exposed areas of the project within 48 hours prior to a likely forecasted storm event.
Active Treatment System (ATS) Requirements	Discharges choosing to implement an ATS on construction site shall comply with all the requirements of CGP Attachment F.
Annual Reporting	Requires all projects that are enrolled for more than one continuous three-month period to submit information and annually certify that the project has remained in compliance.
Post-Construction Stormwater Performance Standards	Specifies runoff reduction requirements for all projects not covered by a Phase I or Phase II MS4 NPDES permit, to avoid, minimize and/or mitigate post-construction stormwater runoff impacts

The Regional Water Boards are responsible for implementation and enforcement of the CGP. Therefore the CGP recognizes the authority of the Regional Water Boards to alter, approve, exempt, or rescind permit authority granted by the permit to protect the beneficial uses of receiving waters and prevent degradation of water quality. Summarized below are the requirements to comply with the CGP.

1.4.1 Qualifications for Certification and Training Requirements

The CGP requires certification of the SWPPP and mandates that all persons responsible for implementing the requirements of the CGP meet appropriate training. Training should be both formal and informal and occur on an ongoing basis. Training should include those provided by recognized governmental agencies or professional organizations.

1.4.1.1 Qualifications for Certification Requirements

The SWPPP document can only be written, amended and certified by a QSD. The QSD must have appropriate experience and have a professional registration or certification. Table 1-2 provides a list of professional registrations and certifications specified in the CGP. Moreover, the QSD must have Caltrans approved storm water management training described on the Department's Construction Storm Water and Water Pollution Control website. For Caltrans projects, the WPC Manager must have the same qualifications as a QSD.

The CGP requires that the implementer of the BMPs specified in the SWPPP have the qualifications-certification of a Qualified SWPPP Practitioner (QSP). For Caltrans projects, the WPC Manager responsible for implementing the SWPPP must met the qualifications-certification for a QSD.

For Caltrans WPCP projects, the WPCP developer and WPC Manager must have the qualifications-certification for a QSP.

Effective September 2, 2011, a QSP must be either a QSD or have one of the certifications provided in Table 1-3. In addition, a QSP must have the Caltrans approved stormwater management training described in the Caltrans' Construction Storm Water and Water Pollution Control website.

TABLE 1-3
Qualified Certification Criteria

QUALIFIED CERTIFICATION CRITERIA		
Certification Requirements	**Registered By**	**QSD/QSP/WPC Manager**
Professional Civil Engineer	California	All
Professional Geologist or Engineering Geologist	California	All
Landscape Architect	California	All
Professional Hydrologist	American Institute of Hydrology	All
Certified Professional in Erosion and Sediment Control (CPESC)	Enviro Cert International Inc.	All
Certified Professional in Stormwater Quality (CPSWQ)	Enviro Cert International Inc.	All
Certified Professional in Erosion and Sediment Control (NICET)	National Institute for Certification in Engineering Technologies	QSD/WPC Manager
Certified Erosion, Sediment and Stormwater Inspector (CESSWI)	Enviro Cert International Inc.	QSP
Certified Inspector of Sediment and Erosion Control (CISEC)	Certified Inspector of Sediment and Erosion Control, Inc.	QSP

1.4.1.2 Training Requirements

The CGP requires training for all individuals responsible for:

- activities associated with compliance with the CGP
- BMP installation maintenance and repair
- overseeing and revising, and amending the SWPPP

Caltrans requires water pollution control (WPC) training for project managers, supervisory personnel, subcontractors, and employees. Employees involved in WPC work must be trained in stormwater BMP implementation, maintenance standards and repair.

All employees, including subcontractor's employees, must be trained in the following subjects:

1. Water pollution control rules and regulations
2. Implementation and maintenance for:
   2.1. Temporary Soil Stabilization
   2.2. Temporary Sediment Control
   2.3. Tracking Control
   2.4. Wind Erosion Control
   2.5. Material pollution prevention and control
   2.6. Waste management
   2.7. Non-stormwater management

WPC training must be completed prior to working on the job

Caltrans contract specifications require that the Contractor conduct ongoing weekly training meeting that cover:

- WPC BMPs deficiencies and corrective actions
- BMPs that are required for work activities during the week
- spill prevention and control
- material delivery, storage, use, and disposal
- waste management
- non-stormwater management procedures

Personnel that will be responsible for collecting water quality samples shall be trained; training must include project specific Construction Site Monitoring Program (CSMP) review, health and safety reviews, and sampling simulations. Sampling and analysis training requirements are explained in this manual and further discussed in the *Construction Site Monitoring Program Guidance Manual*.

Record keeping of all documentation required for training and responsible parties must be included in the SWPPP. Documentation of all training for persons responsible for implementing the requirements of the CGP must be submitted as part of the Annual Report.

1.4.2 Risk Determination Requirements

A requirement for the development and approval of the SWPPP is the calculation of the project's sediment risk and receiving water risk during periods of disturbed soil area (DSA) exposure. The calculated risk determines the Risk Level (s) using the Risk Determination Worksheet. Any project that spans two or more planning watersheds must have a separate Risk Level calculation for each planning watershed. A planning watershed is defined by Calwater Watershed documents as a watershed that ranges in size from approximately 3,000 to 10,000 acres.

The project's risk level determination(s) must be reported to the State Water Resources Control Board as part of the Permit Registration Documents (PRDs). If the project is determined to have

more than one Risk Level, it is up to the discretion of the Regional Water Quality Control Board to break the project into separate levels of implementation.

Caltrans will provide the contractor documentation of the project Risk Level determination. The duration of construction based on the start date and end date of construction is an important factor in project Risk Level determination. If a project is delayed during construction or additional work is added by change order that increase project duration the project's Risk Level should be re-evaluated. The methods described below for determining the Risk Level for a project are provided as reference.

1.4.2.1 Determining Risk Level

The Risk Level of a project is determined by the combination of calculated project sediment risk and receiving water risk. A project's risk determination is defined as the relative amount of sediment that can be discharged, given a project and location details. The receiving water risk is determined by assessing the risk sediment discharges pose to receiving waters. The entire process is completed online using the CGP worksheet to determine the Risk Level. The link to the CGP worksheet is:

http://www.swrcb.ca.gov/water_issues/programs/stormwater/docs/constpermits/wqo_2009_0009_app_1.pdf

or

http://www.swrcb.ca.gov/water_issues/programs/stormwater/docs/constpermits/wqo_2009_0009_app_1.xls

The steps to calculate the Risk Level are defined below.

Step 1: Project Sediment Risk

The sediment risk is determined by multiplying the R, K, and LS factors from the Revised Universal Soil Loss Equation (RUSLE) to obtain an estimate of the project-related bare ground soil loss expressed in tons/acre. The RUSLE equation is as follows:

$$A=(R)(K)(LS)(C)(P)$$

Where: A= the rate of sheet and rill erosion

R= rainfall-runoff erosivity factor

K= soil erodibility factor

LS= length-slope factor (erosion controls)

C = cover factor (erosion controls)

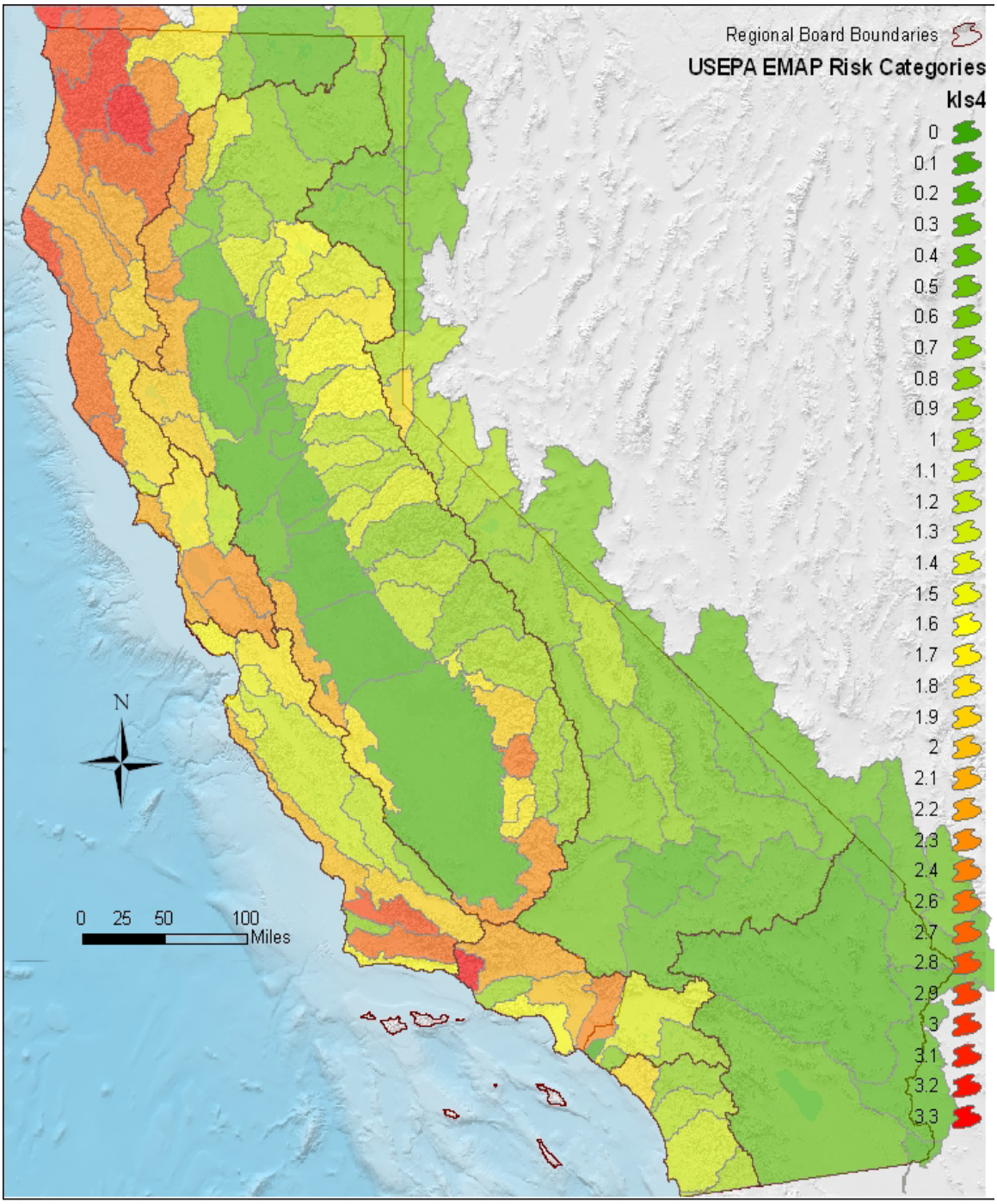
P= management operations and support practices (sediment controls)

The C and P factors are given values of 1.0 to simulate bare ground conditions.

There are two options available to determine soil loss: GIS map method or site-specific manual method. For both options an online calculator is used to determine the R factor. The link to the online calculator is:

http://cfpub.epa.gov/npdes/stormwater/LEW/lewCalculator.cfm

GIS Map Method: Using the R factor established by the online calculator, determine soil loss in tons per acre by multiplying the R factor, the value for K, and the value for LS from the map. The product of K and LS for the state of California of this option are shown in Figure 1-2:



Water Boards

State Water Resources Control Board, January 15, 2008

FIGURE 1-2
Product of K and LS Factors

Site Specific Manual Method: Using the R factor established by the online calculator (see instructions above), use the Risk Determination Worksheet available for download on the State Water Resources Control Board website:

www.waterboards.ca.gov/water_issues/programs/stormwater/docs/constpermits/wqo_2009_0009_app_1.xls

This worksheet assists in the determination of the soil loss for the project.

If soil loss is estimated to be less than 15 tons/acre, then the project is considered to be of low risk for sediment production and transport.

If soil loss is estimated to be between and 15 and 75 tons/acre, then the project is considered to be of medium risk for sediment production and transport.

If soil loss is estimated to be over 75 tons/acre, then the project is considered to be of high risk for sediment production and transport.

Step 2: Receiving Water Risk

The Receiving Water Risk is based on whether a project drains to a sediment-sensitive receiving waterbody. A sediment–sensitive receiving waterbody may be:

- on the most recent 303d list of water quality limited waterbodies for sediment, turbidity, or similar pollutants,
- has a USEPA-approved Total Maximum Daily Load (TMDL) plan for sediment, and/or
- has beneficial uses of COLD, SPAWN, and MIGRATORY.

A project that meets at least one of the three criteria has a high receiving water risk. There are two options that can be used to determine receiving water risk.

GIS Map Method: A GIS is under development that provides a map of sediment sensitive watersheds for the state of California. Once the map is completed, by noting the proximity of a project to Sediment sensitive areas will indicate whether the receiving waterbody is a high risk water body.

List Method: A list of sediment-sensitive waterbodies and waterbodies that have determined beneficial uses of COLD, SPAWN, and MIGRATORY can be found through the State Water Board's website. The links for the lists are provided below.

2006 EPA Approved Sediment-impaired Waterbodies Worksheet:
http://www.waterboards.ca.gov/water_issues/programs/tmdl/303d_lists2006_epa.shtml

List of waterbodies that have beneficial uses of COLD, SPAWN, and MIGRATORY: http://www.ice.ucdavis.edu/geowbs/asp/wbquse.asp

Step 3: Combined Sediment Transport and Receiving Water Risk

The combined risk determines the Risk Level of the project. The Risk Level determines the constraints and the required monitoring for the project. Table 1-4 specifies how the combined risk determines the Risk Level of a project.

TABLE 1-4
Combined Risk Level Matrix

COMBINED RISK LEVEL MATRIX				
Receiving Water Risk		Sediment Risk		
		Low	Medium	High
	Low	Level 1	Level 2	
	High	Level 2		Level 3

Risk Level 1 projects are subject to minimum BMP and visual monitoring requirements.

Risk Level 2 projects are subject to minimum BMPs, visual monitoring requirements, Numeric Action Levels (NALs) and some additional monitoring requirements.

Risk Level 3 projects are subject to minimum BMPs, visual monitoring requirements, Numeric Effluent Limits (NELs) and more rigorous monitoring requirements such as receiving water monitoring and in some cases, bioassessment.

1.4.3 Receiving Water Limitations

Construction-related activities that cause or contribute to an exceedance of water quality standards must be addressed. As part of the monitoring requirements of the CGP for sampling and analysis, procedures will aide in determining whether the installed and maintained BMPs are functioning properly in preventing pollutants from discharging into receiving water. If storm water runoff from construction sites contains pollutants, there is a risk that pollutants could enter the surface waters and cause or contribute to an exceedance of water quality standards. The primary method to ensure compliance with receiving water limitations is to implement BMPs that will be effective in preventing stormwater runoff from conveying pollutants away from the construction site.

The CGP requires that projects be subject to ensuring that all stormwater discharges and authorized non-stormwater discharges to any surface or ground water will not adversely affect human health or the environment. Discharge that occurs may not contain pollutants in quantities that threaten to cause pollution or a public nuisance. Moreover, stormwater discharges and authorized non-storm water discharges may not cause or contribute to an exceedance of any applicable water quality objectives or water quality standards. Water quality standards are published in Basin Plans adopted by each

Regional Water Board, the California Toxics Rule (CTR), the National Toxics Rule (NTR), and the Ocean Plan. Projects located within the watershed of a CWA 303(d) impaired water body, with an approved Total Maximum Daily Load (TMDL) from the U.S. EPA, must comply with the approved TMDL if it identifies "construction activity" or land disturbance as a source of the pollution. The website links to watersheds with TMDLs and the list of 303(d) water bodies is provided below.

Watersheds with TMDL: http://www.swrcb.ca.gov/water_issues/programs/tmdl/

303(d) listed Water Bodies:
http://www.swrcb.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Projects can determine the applicable water quality standards by contacting the Regional Board staff or by consulting the following online source. The actual Basin Plans that contain the water quality standards can be viewed at the website of the appropriate Regional Board for regional plans or the State Water Board for statewide plans. A map displaying the different Regional Water Board areas is provided as Fig. 1-3. Additional information is provided in the Table 1-5.

Regional Water Board: http//:www.waterboards.ca.gov/regions.html

State Water Board: http//:www.waterboards.ca.gov

The USEPA regulations are available at: http//:www.epa.gov

FIGURE 1-3
Water Board Region Map

TABLE 1-5
Online Resources for Regional Basin Plans

ONLINE RESOURCES FOR REGIONAL BASIN PLANS			
REGION	REGION NAME	CALTRANS DISTRICT	ONLINE RESOURCE
1	North Coast	1 & 2	http://www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan
2	San Francisco Bay	4	http://www.waterboards.ca.gov/sanfranciscobay/basin_planning.shtml
3	Central Coast	5	http://www.waterboards.ca.gov/centralcoast/publications_forms/publications/basin_plan/
4	Los Angeles	7	http://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/
5	Central Valley	1 & 2; 3 & 10; and 6	http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/
6	Lahontan	2,3,9&10; and 8 & 9	http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/
7	Colorado River	8 & 11	http://www.waterboards.ca.gov/coloradoriver/water_issues/programs/basin_planning/
8	Santa Ana	8 & 12	http://www.waterboards.ca.gov/santaana/water_issues/programs/basin_plan/index.shtml
9	San Diego	11	http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/index.shtml

1.4.4 Effluent Standards

All projects are subject to the narrative effluent limitations specified in the CGP. The narrative effluent limitations require storm water discharges associated with construction activity to meet all applicable provisions of Sections 301 and 402 of the CWA. These provisions require controls of pollutant discharges that utilize Best Available Technology (BAT) and Best Conventional Technology (BCT) to reduce pollutants and any more stringent controls necessary to meet water quality standards.

1.4.4.1 Effluent Standards and Limitations

Stormwater discharges and authorized non-storm water discharges regulated by the CGP may not contain a hazardous substance equal to or in excess of reportable quantities established in 40 C.F.R.117.3 and 302.4, unless a separate NPDES Permit has been issued to regulate the discharge.

The SWPPP must minimize or prevent pollutants in stormwater discharges and authorized non-storm water discharges through the use of controls, structures, and management practices that achieve BAT for toxic and non-conventional pollutants and BCT for conventional metals.

TABLE 1-6
Effluent Standards and Limitations

EFFLUENT STANDARDS AND LIMITATIONS						
Parameter	**Test Method**	**Discharge Type**	**Min. Detection Limit**	**Units**	**Numeric Action Level**	**Numeric Effluent Limitation**
pH	Field test with calibrated portable instrument	Risk Level 2	0.2	pH Units	Lower NAL= 6.5 Upper NAL=8.5	N/A
		Risk Level 3				Lower NEL= 6.0 Upper NEL=9.0
Turbidity	EPA 0180.1 and/or field test with calibrated portable instrument	Risk Level 2	1	NTU	250 NTU	N/A
		Risk Level 3				500 NTU
SSC	ASTM Method D3977-97	Risk Level 3	5	Mg/L	If turbidity NEL has been exceeded	-

Risk Level 2, and 3 projects are subject to numeric effluent standards comparable to the project's risk to water quality. Risk Level 2 projects that pose a medium risk to water quality are subject to technology-based Numeric Action Levels (NALs) for pH and turbidity. Risk level 3 projects that pose a high risk to water quality are subject to technology-based NALs and technology-based Numeric Effluent Limitations (NELs) for pH and turbidity.

1.4.4.2 Effluent Monitoring

Federal regulations require effluent monitoring for discharges subject to NALs and NELs. Subsequently, all Risk Level 2 and 3 projects must perform sampling and analysis of effluent discharges to characterize discharges associated with construction activity from the entire area disturbed by the project. Samples must be collected for a qualifying rain event that produces precipitation of 0.5 inch or greater at the time of discharge.

Caltrans requires that a Construction Site Monitoring Program (CSMP) be developed by the QSD as part of the SWPPP. The CSMP must be developed before beginning work and revised to reflect current construction activities. The CSMP will include sections that are specified by the risk level determination. Sampling and Analysis Plan (SAP) requirements for each risk level are listed below in Table 1-7.

1.4.5 Monitoring, Sampling, Reporting and Record Keeping

The CGP requires that a Construction Site Monitoring Program (CSMP) be developed by a QSD for all projects. The CSMP must be developed before beginning work and revised to reflect current construction activities. The CSMP will include sections based on a project's risk level determination. Sampling and Analysis Plan (SAP) requirements for each risk level are listed below in Table 1-7.

TABLE 1-7
Monitoring Requirements

MONITORING REQUIREMENTS				
Risk Level	**Visual Inspection**	**Non-visible Pollutant**	**Effluent**	**Receiving Water**
1	Three types required for all Risk Levels: non-storm water, pre-storm and post-qualifying rain event.	All Risk Levels SAP required	Where applicable	Not required
2			pH, sediment and turbidity SAP required	Not required
3			pH, sediment, turbidity and temporary active treatment systems SAP required	If NEL exceeded, pH, turbidity and Suspended Sediment Concentration, (SSC) Bioassessment for sites 30 ac or greater. SAP required

1.4.5.1 Visual Site Monitoring

All projects are required to conduct quarterly non-storm water visual site monitoring inspections. Quarterly inspections shall occur in the following inspection periods: January-March, April-June, July-September, and October-December. Quarterly monitoring specifically serves to document the presence or evidence of any non-storm discharge (authorized or unauthorized), pollutant characteristics, and potential pollutant source accounting. For these inspections, the WPC Manager or their representative must visually observe each drainage area for the presence of (or indications of prior) unauthorized and authorized non-storm water discharges and identification of their sources. BMPs must be assessed for effectiveness and integrity. Observations of stormwater or non-stormwater conveyed through and off of the project site must include notice of the presence of floating and suspended materials, oil sheen on the water or ground surface, water discoloration, turbidity, foul or nuisance odors, and sources of observed pollutants for flowing and contained stormwater.

For storm-related visual site monitoring inspections, the WPC Manager or their representative must visually observe stormwater discharge locations within two business days prior to a forcasted qualifying rain event. Caltrans has defined a qualifying rain event to be any storm that produces or is forecasted to produce at least 0.50 inch of precipitation at the time of discharge, with a 72-hour dry period

between events. During the pre-storm inspections it is important to identify any spills, leaks, or uncontrolled pollutant sources. If needed, corrective actions should be implemented and all BMPs must be inspected to identify whether they have been properly implemented in accordance with the SWPPP. All corrections to the BMPs must be made before the qualifying rain event. When there is a qualifying rain event which lasts greater than 24-hours, a visual inspection must be made during business hours of each successive working day.

Post-storm visual site monitoring is required within 48 hours of a qualifying rain event. A qualifying event is a storm that produces precipitation of 0.5 inch or greater at the time of discharge. Post-qualifying rain event inspections require projects to identify whether BMPs were adequately designed, implemented, and effective. Additionally the visual inspection must include the identification of BMPs necessary and revisions to the SWPPP accordingly.

The WPC Manager must maintain on-site records of all visual observations, personnel performing the observations, observation dates, weather conditions, locations observed, and corrective actions taken in response to the observations.

1.4.5.2 Sampling and Analysis Plans

The CSMP must include the Sampling and Analysis Plans (SAPs) necessary to monitor the effectiveness of the WPC practices and meet the CGP monitoring requirements. As many as six separate Sampling and Analysis Plans (SAPs) may be required as part of the CSMP. All CSMPs shall have the following SAPs:

- General
- Non-visible Pollutants
- Non-stormwater Discharges

If applicable, the CSMP will include SAPs:

- Stormwater pH and Turbidity
- Monitoring Required by Regional Board
- Monitoring of Active Treatment Systems

The SAPs must include a site health and safety plan and all personnel involved with the sampling must be trained to collect water quality samples and operation of sampling equipment. The training must be documented and included in the SAP.

Additionally, the SAPs included in the CSMP must include all the water quality sampling procedures that will be used for the project. The procedures must include the calibration, operation and maintenance of the sampling equipment that will be used for sample collection. Procedures that must be described in the SAPs include:

- laboratory selection and certification
- sample preparation, collection, labeling and preservation
- sample collection and chain-of-custody documentation
- field measurement methods and parameters
- analytical methods
- data management and reporting
- quality assurance and quality control

Samples collected and submitted to a laboratory for analysis must follow water quality sampling procedures and be submitted to a State-certified laboratory under 40 CFR Part 136 "Guidelines Establishing Test Procedures for the Analysis of Pollutants". The SAP must establish the identity of the State- certified laboratory, sample containers, preservation requirements, holding times, and analysis method required. A list of State-certified laboratories can be found online at:

http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx

Sample collection must be documented during precipitation. If dangerous weather conditions such as flooding or electrical storm occurs, or if the qualifying rain event occurs outside of scheduled work hours, physical sample collection is not required. To support qualifying rain event reporting a rain gauge must be installed and maintained on the project site.

Sample locations must be identified on SWPPP drawings. If discharge or sampling locations change due to work activities or a change in site conditions, the WPC Manager must update the potential sampling locations list.

1.4.5.3 Non-Visible Pollutant Monitoring

A SAP must be developed to monitor pollutants that are not visually detectable in stormwater. Construction discharges that contain pollutants of concern may be found in materials used in large quantities at constructions sites.

Water quality standards that apply to materials such as cement, fly ash, and other recycled materials and byproducts depend on their composition. Although some pollutants are not listed as California Toxics Rule (CTR) pollutants, they may have a numeric water quality objectives listed in the Basin Plan for the watershed(s) in which the project is located. WPC Managers are encouraged to discuss concerns about water quality standards with Regional Water Quality Control Board staff and other local jurisdictional water quality professionals.

Although preventing and eliminating the exposure of pollutants at construction sites is not always possible, it is essential to institute proper storage, disposal, and application of material to minimize the potential for non-visible pollutant monitoring. The SAP for non-visible pollutants must include a list that contains potential pollutants based on a review of potential sources. The QSD must review existing environmental and real estate documentation to determine the potential pollutants that could

be present in a project area as a result of current or past land use activities. The application of soil amendments, which include soil stabilization materials that could potentially change the pH or contribute toxic pollutants to stormwater, must be included in the SAP.

The SAP for non-visible pollutants must include sampling procedures and schedule for sample collection. Specifically sample collection should be conducted as follows: during the first two hours of rain events that generate runoff, during work hours, target each non-visible pollutant source, and include location and instructions for an uncontaminated control sample collection. Control samples should be collected from a location that does not come in contact with materials, wastes or areas associated with potential non-visible pollutants or disturbed soil areas within the project site limits.

1.4.5.4 Receiving Water Monitoring

For Risk Level 3 projects and projects with Active Treatment Systems (ATS) that discharge directly into a receiving water, to meet receiving water limitations discharges are subject to numeric effluent limitations. When an NEL is exceeded at a stormwater or ATS discharge location, upstream and downstream receiving water monitoring for pH, turbidity, and SSC is required. The receiving water sampling points must be indicated on the WPCDs.

1.4.5.4.1 Bioassessment Monitoring

Bioassessment monitoring is required for projects that are determined to be: Risk Level 3 and the project discharges directly to a freshwater wadeable stream that is either listed as impaired due to sediment and/or tributary to a downstream waterbody that is listed for sediment; or for projects with a total project-related ground disturbance greater than 30 acres. Bioassessment monitoring is conducted to assess the effect of the project on the biological integrity of receiving waters. For Caltrans projects, Caltrans will perform bioassessment monitoring when required.

Bioassessments must include the collection and reporting of specified in-stream biological data and specified in-stream physical habitat data. Macroinvertebrate samples must be collected both before any soil has been disturbed and after the project has been completed. The post-construction sample must be collected at a minimum of one winter season following completion of construction. Both preconstruction and post-construction samples must be collected upstream and downstream from the project area.

Field sampling methods and handling must comply with the specified techniques listed in *Standard Operating Procedures for Collecting Benthic Macroinvertebrate Samples and Associated Physical and Chemical Data for Ambient Bioassessments in California (Ode 2007*). This document can be found online at:

http://www.swrcb.ca.gov/swamp/docs/phab_sopr6.pdf

Bioassessment reports must follow the standard format titled SWAMP Stream Habitat Characterization. This form is available at:

http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/reports/fieldforms_fullversion052908.pdf

To qualify for bioassessment exception the project must complete a series of steps. For more information regarding exemption procedures contact the Regional Water Quality Control Board for approval of sampling exceptions.

1.4.5.5 Records and Reporting Requirements

All documents for stormwater monitoring information and copies of all reports (including the Annual Report) must be kept for a period of three years. All projects must keep all records on-site while construction is ongoing. Documentation requirements depend on the project's Risk Level. Applicable records that must be included in the SWPPP files include:

- site inspection reports which must document the:
  - date, place, time of facility inspections, sampling, visual observation, and/or measurements, including precipitation
  - individual(s) who performed the facility inspections, sampling, visual inspections, and/or measurements
- Sampling and analysis results which must: document the:
  - date and approximate time of analyses
  - individual(s) who performed the analyses
- a summary of all analytical results from the last three years, the method detection limits and reporting units, and the analytical techniques or methods used
- rain gauge readings from taken at project site
- quality assurance/quality control records and results
- non-storm water discharge visual monitoring inspections and stormwater discharge visual monitoring inspection records
- visual inspection and sample collection exception records
- any corrective actions and follow-up activities that resulted from analytical results, visual monitoring inspections, or site inspections
- permits obtained by Caltrans such as Fish & Game permits, US Army Corps of Engineers permits, RWQCB 401 Certifications, and RWQCB Waste Discharge Requirements for Aerially Deposited Lead Reuse

Section 900 of the SWPPP template contains the file categories for these records. The file categories will assist in the assembly of the annual report. The numbering system for file categories generally corresponds to Caltrans form numbers.

1.4.5.5.1 Water Quality Analytical Results and Evaluation

An electronic and printed copy of water quality analytical results, and quality assurance and quality control must be submitted within 48 hours of field analysis sampling. Samples that were submitted to a

laboratory for analysis must be reported within 30 days of collection. Included in the submittal must be an evaluation of the collected downstream in relation to the control sample. If the downstream sample indicates an increased level of pollution, the WPC practices must be assessed along with the site conditions, and surrounding influences that could contribute to the increased level of the pollution.

Acceptable electronic file formats include MS Excel (.xls extension), MS Word (.doc extension), text files (.txt extension), or comma-delimited files (.csv extension). All submittals must include:

- sample identification number
- contract number
- constituent
- reported value
- analytical method
- method detection limit;
- reported limit

1.4.5.5.2 NEL Violation Report

If the effluent sample exceeds a NEL for a Risk Level 3 project, then the Resident Engineer must be notified and a NEL Violation Report must be submitted. All Risk Level 3 dischargers must electronically submit all qualifying rain event sampling results to the State and Regional Water Boards, via SMARTS, no later than five days after conclusion of the qualifying rain event. In the event that an applicable NEL has been exceeded during a qualifying rain event equal to or larger than the compliance qualifying rain event, Risk Level 3 determined projects must report the onsite rain gauge reading and nearby governmental rain gauge readings for verification. Specifically the NEL Exceedance Report is required to contain:

- the analytical method(s), method reporting unit(s), and method detection limit(s) of each analytical parameter (analytical results that are less than the method detection limit are to be reported as “less than the method detection limit or <MDL”)
- the date, place, and time of sampling
- any visual observations(inspections)
- any measurements, including precipitation
- a description of the current BMPs associated with the effluent sample that exceeded the NEL and any proposed corrective actions taken

1.4.5.5.3 NAL Exceedance Report

If the effluent sample exceeds an NAL for Risk Level 2 or Risk Level 3 projects, then the Resident Engineer must be notified and a NAL Exceedance Report must be submitted. All Risk Level 3 projects

must electronically submit all qualifying rain event sampling results to the State and Regional Boards through the electronic data system no later than five days after the conclusion of a qualifying rain event. In the event that any effluent sample exceeds an applicable NAL, all Risk Level 2 projects must electronically submit all qualifying rain event sampling results to the State and Regional Boards no later than 10 days after conclusion of the qualifying rain event. The Regional Water Quality Control Boards have the authority to require the submittal of an NAL Exceedance Report.

Specifically, the NAL Exceedance Report is required to contain:

- the analytical method(s), method reporting unit(s), and method detection limit(s) of each analytical parameter (analytical results that are less than the method detection limit are to be reported as "less than the method detection limit or <MDL")
- the date, place, and time of sampling
- any visual observations (inspections)
- any measurements, including precipitation
- a description of the current BMPs associated with the effluent sample that exceeded the NAL and any proposed corrective actions taken

1.4.6 Minimum Requirements Specified

Dischargers shall minimize or prevent pollutants in stormwater discharges and non-stormwater discharges through the use of controls, structures, and management practices that achieve BAT for toxic and non-conventional pollutants and BCT for conventional pollutants.

The CGP specifies based on project Risk Level minimum required BMPs for:

- Good Site Management "Housekeeping"
- Non-stormwater Management
- Erosion Control
- Sediment Controls
- Run-on and Runoff Controls

The CGP specifies requirements for BMP inspection, maintenance and repair. Inspections must be performed weekly and at least once each 24-hour period during extended qualifed rain events.

Caltrans specifications and plans, and SWPPP Section 500 include the CGP minimum required BMPs.

1.4.7 Rain Event Action Plan (REAP)

For Risk Level 2 and 3 projects, a Rain Event Action Plan (REAP) must be prepared for each forecasted storm event to protect all exposed portions of the project site. REAPs must be developed by the WPC Manager to protect the jobsite at least 48 hours before a forecasted storm event. The CGP requirement is that a REAP be prepared for any likely precipitation event which would include events with forecasted precipitation of 0.01 inch or more of precipitation. To avoid unnecessary REAPs and project delays based on precipitation events that produce a small amount of measurable precipitation, such as overcast days with ground fog along the coast, Caltrans has interpreted forecasted storm events to be storm events where both the chance for precipitation is 50% or greater and the amount of precipitation could cause run-off from the project site. The Caltrans threshold for REAPs is based on a forecasted storm event defined as at least 0.10 inch of precipitation within a 24 hour period, predicted by the National Weather Service (NWS). In order for the forecasted storm event to trigger a REAP the probability of precipitation must have at least 50 percent chance of occurrence within the following 72 hours and the amount of precipitation is forecasted to be 0.10 inch or greater. The WPC Manager must monitor the National Weather Service Forecast Office on a daily basis. NWS real-time forecasts are available online at:

http://www.srh.noaa.gov/forecast

The REAP must be available onsite at least 48 hours prior to a forecasted storm event. A printed copy of each REAP must be at every job site and included in the SWPPP. The REAP must use approved forms and include:

- Site location
- Risk level
- Contact information including 24-hour emergency phone numbers for:
    - WPC Manager
    - Erosion and sediment control providers or subcontractors
    - Storm water sampling providers or subcontractors
- Storm Information
- Construction phase:
    - Highway Construction including active and inactive areas for work activities for building roads and structures
    - Plant Establishment including maintenance on vegetation installed for final stabilization where areas are inactive
    - Suspension where work activities are suspended and areas are inactive
- Construction phase information including:
    - Construction activities
    - Subcontractors and trades on the job site
    - Pre-storm activities including:
        - Responsibilities of the WPC manager

        - Responsibilities of the crew and crew size
        - Stabilization for active and inactive disturbed soil areas
        - Stockpile management
        - Corrective actions for deficiencies identified during pre-storm visual inspection
    - Activities to be done during forecasted storm events including:
        - Responsibilities of the WPC manager
        - Responsibilities of the crew and crew size
        - BMP maintenance and repair
    - Description of flood contingency measures

The REAP must be implemented and crews must be mobilized to complete necessary activities no later than 24 hours before precipitation occurs.

If the WPC Manager or the Resident Engineer (RE) identifies a deficiency in the implementation of the accepted SWPPP, the deficiency must be corrected immediately unless the RE authorizes an agreed date for correction. The correction must occur before the onset of precipitation.

If failure to correct the deficiency by the scheduled date or by the onset of precipitation occurs, Caltrans may correct the deficiency and deduct the cost of correcting the deficiency from payment. Failure to comply with the corrective action may result in the suspension of work by the RE until the project complies with the requirements of the SWPPP.

1.4.8 Active Treatment System (ATS) Requirements

An ATS treatment system is one that uses chemical coagulant, chemical flocculation, or electrocoagulation in order to reduce turbidity caused by fine suspended sediment. ATS is used for instances where traditional erosion and sediment controls do not effectively control accelerated erosion. Under such circumstances, where stormwater discharges leaving the site may cause or contribute to an exceedance of water quality standards, the use of an ATS may be necessary. Additionally, it may be appropriate to use an ATS when site constraints inhibit the ability to construct a sediment basin large enough to detain the volume of all forecasted storm events required to eliminate sediment sized particles from the discharge waters of said basin, or for sites with a larger fraction of clays, silts, or other colloidal sized particles within the site soils distribution, or for sites with highly erosive soils, clay and/or highly erosive soils are present, or when the site is very steep across long slope lengths.

CGP ATS requirements are based on small wastewater treatment systems, ATS regulations from the Central Valley Regional Water Quality Control Board, the Construction Storm Water Program at the State of Washington's Department of Ecology, as well as recent advances in technology and knowledge of coagulant performance and aquatic safety.

The CGP established NELs for discharges from construction sites that utilize an ATS. These systems lend themselves to NELs for turbidity and pH because of known treatment standards. The design standard for an ATS is a 10-year, 24-hour storm event.

Operators must be trained to effectively operate and maintain an ATS safely. Appropriate operator training ensures that all State Water Board monitoring and sampling requirements are met. The CGP requires that all ATS operators have training specific to using ATS's liquid coagulants.

1.4.9 Stormwater Annual Reporting Requirements

The contractor must prepare a Stormwater Annual Report each year. The Resident Engineer must ensure that an Annual Report is electronically submitted by September 1 of each year to the SWRCB for all projects enrolled for more than one continuous three-month period. The Annual Report serves to annually certify project compliance. Management of documentation and thorough record keeping are required to ensure compliance with reporting requirements. The Annual Report must include documentation to support that the monitoring objectives and qualified training have been met. An electronic or paper copy of each Annual Report must be kept by Caltrans for a period of three years after project completion.

1.4.9.1 Monitoring Documentation

The Annual Report requires that monitoring documentation is submitted. Record keeping of sampling and other action items conducted throughout the reporting year must be saved to ensure that the requirements of the Annual Report are met. Monitoring documentation must include:

- a summary and evaluation of all sampling and analysis results, this includes copies of laboratory reports associated with samples collected throughout the reporting year
- analytical method(s), method reporting unit(s), and method detection limit(s) of each analytical parameter. Moreover, analytical results that are less than the method detection limit shall be reported as "less than the method detection limit"
- a summary of corrective actions taken to correct BMPs used during the compliance year
- any compliance activities or corrective actions that were not implemented
- a summary of any violations of the General Permit that occurred during the reporting period
- the names of individual(s) who performed the facility inspections, sampling, visual observations (inspections), and/or measurements
- the date, place, time of facility inspections, sampling, visual observation (inspections), and/or measurements, including precipitation (rain gauge)
- visual observation and sample collection exception records and reports that are determined by the Risk Level of the project site

1.4.9.2 Training Documentation

Documentation of all training for individuals responsible for activities associated with BMP installation, inspection, maintenance, and repair must be included. Additionally, document training for individuals that are responsible for overseeing, revising, and amending the SWPPP. Training material includes documentation of informal and formal training conducted by the WPC Manager,

QSD, QSP, or a qualified trainer. Documentation for informal on-site training should include topics covered, time, date, attendees, and trainer.

1.4.10 Post-Construction Requirements

The CGP requires stormwater performance standards that specifically address water quality and channel protection for forcasted storm events. Runoff reduction requirements apply to projects, unless the project area is subject to post-construction standards of an active Phase I or II municipal separate storm sewer system (MS4) permit that has an approved Storm Water Management Plan. This provision takes effect September 2, 2012.

Post-construction standards require that through the use of non-structural and structural measures the project must meet pre-project water balances for the smallest storms up to the 85th percentile storm event. The Regional Board must be informed at least 30 days prior to the use of any structural control measure for compliance with this requirement. When seeking approval to use a structural control measure the infeasibility of a non-structural practice must be documented and must demonstrate that there will be fewer water quality impacts through using structural practices.

Projects, whose disturbed area is greater than two acres, must preserve the pre-construction drainage density (miles of stream length per square mile of drainage area) for all drainage areas within the area serving a first order stream or larger stream. Additionally, post-project time of runoff concentration must be equal or greater than pre-project time of concentration for runoff.

SECTION 2
DETERMINATION OF CONSTRUCTION SITE BEST MANAGEMENT PRACTICES

This section provides instructions for the determination of some construction site BMPs. The Caltrans *Construction Site Best Management Practices (BMPs) Reference Manual*, latest edition should be used as guidance for determining project site BMPs. It is important to note that the requirements of this Section are based on Caltrans minimum requirements, and that contract special provisions and plans may impose more stringent requirements on a project-by-project basis. Any changes to the BMP implementation after approval of the SWPPP or WPCP will require updating or amending the SWPPP or WPCP.

2.1 DEFINITIONS

2.1.1 Disturbed Soil Area (DSA)

Disturbed soil areas (DSAs) are areas of exposed, erodible soil that are within the construction limits and that result from construction activities. The following are not considered DSAs:

- Areas where temporary soil stabilization, erosion control, or slope protection have been applied and associated drainage facilities are in place, functional, and stabilized.
- Roadways, construction roads, access roads or contractor's yards that have been stabilized by the placement of compacted sub-base, base material, or paved surfacing.
- Areas where construction has been completed in conformance with the contract plans and permanent erosion control is in place and functional or permanent vegetation is established.
- For areas without permanent hard covers, soil stabilization is considered functional when a uniform vegetative cover equivalent to 70 percent of the native background vegetation coverage has been established or equivalent stabilization measures have been employed.

2.1.2 Active Areas and Non-Active Areas

Active Areas are construction areas where soil-disturbing activities have already occurred and continue to occur or will occur during the ensuing 14 days.

Non-Active Areas are construction areas (formerly active areas) that will be idle for at least 14 days.

The RE will conduct a review of the existing active areas on a regular basis to determine if a non- active status should be applied to some DSAs.

2.1.3 Slope Length and Benches

Slope length is measured or calculated along the continuous inclined surface. Each discrete slope is between one of the following: top to toe, top to bench, bench to bench, and bench to toe.

Benches are drainage facilities that intercept surface flow and convey the resulting concentrated flow away from a slope. For the purpose of determining slope lengths, fiber rolls or other appropriate BMPs can be considered equivalent to a bench.

2.2 TEMPORARY SOIL STABILIZATION AND SEDIMENT CONTROL IMPLEMENTATION GUIDANCE

Stormwater pollution control measures are required to be implemented on a year-round basis at an appropriate level. The requirements must be implemented in a proactive manner during all seasons while construction is ongoing. California has varied rainfall patterns throughout the state; therefore, the appropriate level of BMP implementation will also vary throughout the state. The temporary soil stabilization and sediment control BMPs specified in this section are based on rainfall patterns (time frames, intensities, and amounts), general soil types, seasons, slope inclinations and slope lengths. Appropriate water pollution control includes the implementation of an effective combination of both soil stabilizing erosion and sediment control BMPs.

The following subsections describe both general principles and specific guidance for selecting and implementing temporary soil stabilization and sediment control BMPs. See Table 2-1 for a summary of the required temporary soil stabilization and sediment control BMPs.

2.2.1 Scheduling

Construction scheduling shall consider the amount and duration of soil exposed to erosion by wind, rainfall, runoff, and vehicle tracking. Construction activities should be scheduled to minimize disturbed soil area during the time of the year when rainfall can be expected. A graphical schedule shall be prepared that shows the sequencing of construction activities with the installation and maintenance of soil stabilization and sediment control BMPs.

2.2.2 Preservation of Existing Vegetation

Preserving existing vegetation to the maximum extent possible and for as long as possible on a construction site reduces or eliminates erosion in those areas. To facilitate this practice, temporary fencing should be installed prior to commencement of clearing, grubbing or other soil-disturbing activities in areas where no construction activity is planned.

2.2.3 Stormwater Run-on and Concentrated Flows

The diversion of stormwater run-on and conveyance of concentrated flows must be considered in determining the appropriateness of the BMPs chosen. BMPs to divert or manage concentrated flows in a non-erodible fashion may be required on a project-by-project basis to divert off-site drainage through or around the construction site or to properly manage construction site stormwater runoff.

2.2.4 Disturbed Soil Area Management

The DSA management guidelines are based on rainfall patterns (time frames, intensities, and amounts), general soil types, seasons, slope inclinations, and slope lengths. All of these factors must be considered in order to develop the appropriate levels of soil stabilizing erosion and sediment control measures.

2.2.5 Disturbed Soil Area Size Limitations

Limiting the amount of disturbed soil is a critical component in conducting an effective stormwater management program.

For contracts using the Caltrans 2006 Standard Specifications, Standard Specifications Section 7-1.01G, Water Pollution states *"Unless otherwise approved by the Engineer in writing, the Contractor shall not expose a total area of erodible earth material, which may cause water pollution, exceeding 750,000 square feet for each separate location, operation or spread of equipment before either temporary or permanent erosion control measures are accomplished."* This requirement is applicable throughout all seasons. The resident engineer may approve increasing the size of disturbed soil areas beyond 750,000 square feet (17 acres) if appropriate control practices and an implementation plan are included in an approved SWPPP. A mobilization plan including a description of the delivery and deployment of the appropriate BMP material to the jobsite prior to all forcasted storm events shall be included in the SWPPP. Run-on controls shall be in place prior to opening any additional DSA.

Furthermore, for contracts using the Caltrans 2006 Standard Specifications, the Contract Special Provisions may further restrict the size of the project's total disturbed soil area to 5 acres during the rainy season. The resident engineer has the option to increase this limit beyond 5 acres if requested in writing by the contractor. If the contractor's request to increase the amount of DSA beyond 5 acres is approved by the resident engineer, the contractor shall have the BMP material(s) required to implement the appropriate control practices available onsite and the QSD must amend the SWPPP to reflect this change.

For contracts using the Caltrans 2010 Standard Specifications there are no limitations placed on the size of the project's total disturbed soil area. The limitation on disturbed soil area has been removed because of the risk based approach taken by the CGP and the requirements for year round sediment and erosion control BMPs.

DSAs shall be protected as follows:

- Temporary control practices for non-active DSAs shall be implemented in accordance with Table 2-1 of this Manual.
- Temporary control practices for active DSAs shall be implemented in accordance with Table 2-1 of this Manual.

For non-active DSAs, limit the erosive effects of stormwater flow on slopes by implementing BMPs such as fiber rolls to break up the slope lengths as follows:

a. Slope inclination 1:4 (V:H) and flatter: BMPs shall be placed on slopes at intervals no greater than 20 ft.

b. Slope inclination between 1:4 (V:H) and 1:2 (V:H): BMPs shall be placed on slopes at intervals no greater than 15 ft.

c. Slope inclination 1:2 (V:H) or greater: BMPs shall be placed on slopes at intervals no greater than 10 ft.

For non-active DSAs, permanent erosion control shall be applied to areas deemed complete as soon as possible but may need to be delayed until the project's defined seeding window.

Provide construction site BMPs in addition to those specified in Table 2-1 to convey concentrated flows in a non-erodible fashion.

Do not use fiber rolls on slopes where soil conditions do not warrant (slopes prone to surface failure).

2.2.6 Soil Stockpiles

Temporary soil stockpiles shall be protected with temporary soil stabilization and/or sediment controls when required. Section 500 of the SWPPP or Section 30 of the WPCP lists various materials that can be used for soil stockpile management.

Caltrans specifications require installation of stockpile BMPs within 72 hours of stockpiling material or before a forecasted storm event, whichever occurs first.

2.2.7 Sediment/Desilting Basins

The nature of linear projects and constrained rights-of-way inherent to Caltrans work may prohibit the use of sediment/desilting basins at some locations on certain projects and on some projects altogether. Sediment basins shall, at minimum, be designed according to Caltrans requirements or the method provided in CASQA's Construction BMP Guidance Handbook. The required sediment/desilting basin shall be constructed in accordance with contract documents and in conjunction with other soil stabilization and sediment control measures.

TABLE 2-1
Required Temporary Soil Stabilization and Sediment Control BMPs

REQUIRED TEMPORARY SOIL STABILIZATION AND SEDIMENT CONTROL BMPs (1)			
Risk Level	**TEMPORARY BMP TYPE**	**OPTIONS FOR TEMPORARY BMPs**	
		BMP NUMBER(2)	**2006 SSP NUMBER(3)**
1	SOIL STABILIZATION (4)	SS-2, SS-3, SS-4, SS-5, SS-6, SS-7, SS-8	07-351, 07-352, 07-381, 07-382, 07-353, 07-371, 07-354, 07-390, 07-380
	PERIMETER SEDIMENT BARRIER (5)	SC-1, SC-5, SC-6, SC-8, SC-9	07-430, 07-432, 07-420, 07-470, 07-460
	RUN-ON	SC-5, SC-6, SC-8, SS-9	07-420, 07-470
	RUN-OFF	SC-4, SS-9, SS-10, SS-11, SS-12	07-415

REQUIRED TEMPORARY SOIL STABILIZATION AND SEDIMENT CONTROL BMPs (1)			
Risk Level	**TEMPORARY BMP TYPE**	**OPTIONS FOR TEMPORARY BMPs**	
		BMP NUMBER(2)	**2006 SSP NUMBER(3)**
	TRACKING	TC-1 (at minimum), TC-2, TC-3, SC-7	07-480, 07-481, 07-346, 07-360
2	SOIL STABILIZATION (4) (6)	SS-2, SS-3, SS-4, SS-5, SS-6, SS-7, SS-8	07-351, 07-352, 07-381, 07-382, 07-353, 07-371, 07-354, 07-390, 07-380
	SEDIMENT BARRIER (5)	SC-1, SC-5, SC-6, SC-8, SC-9	07-430, 07-432, 07-420, 07-470, 07-460
	RUN-ON	SC-5, SC-6, SC-8, SS-9	07-420, 07-470
	RUN-OFF	SC-4, SS-9, SS-10, SS-11, SS-12	07-415
	TRACKING	TC-1 (at minimum), TC-2, TC-3	07-480, 07-481, 07-346, 07-360
	GRADE BREAK (7)	SC-5 or SC-6	07-420, 07-470
3	SOIL STABILIZATION (4) (6)	SS-2, SS-3, SS-4, SS-5, SS-6, SS-7, SS-8	07-351, 07-352, 07-381, 07-382, 07-353, 07-371, 07-354, 07-390, 07-380
	SEDIMENT BARRIER (5)	SC-1, SC-5, SC-6, SC-8, SC-9	07-430, 07-432, 07-420, 07-470, 07-460
	RUN-ON	SC-5, SC-6, SC-8, SS-9	07-420, 07-470
	RUN-OFF	SC-4, SS-9, SS-10, SS-11, SS-12	07-415
	TRACKING	TC-1 (at minimum), TC-2, TC-3	07-480, 07-481, 07-346, 07-360
	GRADE BREAK (7)	SC-5 or SC-6	07-420, 07-470

(1) Best Management Practice requirements of the CGP with associated Caltrans approved BMP and contract Standard Special Provisions options to meet the requirements.

(2) BMP numbers from the Caltrans Storm Water Quality Handbooks Construction Site Best Management Practices Manual, 2003.

(3) Caltrans Standard Special Provision (SSP) numbers.

(4) Required immediately for inactive disturbed soil areas which include all finished slopes and disturbed areas of construction that are not scheduled to be re-disturbed for at least 14 days.

(5) Sediment controls and barriers include all temporary sediment control construction BMPs identified in the Statewide Storm Water Management Plan (SWMP).

(6) Required for active areas at least 24 hours prior to a forecasted storm event.

(7) Grade break BMPs are linear barriers that must be installed perpendicular to flow in accordance with the following: flat to 25% slopes maximum every 20-foot spacing, 25-50% slopes maximum every 15-foot spacing, and steeper than 50% slopes maximum every 10-foot spacing.

2.3 GUIDANCE FOR IMPLEMENTATION OF OTHER BMPS

2.3.1 Mobile Operations

Mobile operations common to the construction of a project include asphalt recycling, concrete mixing, crushing and the storage of materials. BMPs shall be implemented as necessary, to control potential pollution that mobile operations may create.

2.3.2 Wind Erosion Controls

Wind erosion controls shall be considered for all disturbed soil areas on the project site that are subject to wind erosion and when significant wind and dry conditions are anticipated during construction of the project. Refer to the Contract Special Provisions for BMP line items for Wind Erosion Control BMPs and for further reference see the *Construction Site Best Management Practice (BMPs) Reference Manual*.

2.3.3 Tracking Controls

Tracking controls shall be implemented, as needed, to reduce the tracking of sediment and debris from the construction site. At a minimum, entrances and exits shall be inspected daily, and controls implemented as needed. Refer to the Contract Special Provisions for BMP line items for Tracking Control BMPs (including Street Sweeping) and for further reference see the *Construction Site Best Management Practices (BMPs) Reference Manual*.

2.3.4 Construction Site Management (Non-Stormwater and Waste Management and Materials Pollution Controls)

The objective of the construction site management (non-stormwater and waste management and materials pollution controls) is to reduce the discharge of materials other than stormwater to the stormwater drainage system or to receiving waters. These controls shall be implemented year-round for all applicable activities, material usage, and site conditions. Refer to the Construction Site Management Special Provision and for further reference see the *Construction Site Best Management Practices (BMPs) Reference Manual*.

SECTION 3
PREPARING A STORMWATER POLLUTION PREVENTION PLAN

3.1 PREPARATION AND APPROVAL OF A SWPPP

The contractor must prepare a Stormwater Pollution Prevention Plan (SWPPP) for projects that will create one acre or more of soil disturbance. For projects that are less than 5 acres and have an Environmental Protection Agency Small Construction Project Rainfall Erosivity Waiver the contractor shall prepare a Water Pollution Control Program (WPCP). The SWPPP must comply with Construction General Permit, contract special provisions, Caltrans 2006 Standard Specifications Section 7-1 .01G - Water Pollution or Caltrans 2010 Standard Specifications Section 13 Water Pollution Control, and it must be prepared in accordance with the procedures and general format set forth in this Manual.

This section provides detailed systematic procedures, instructions and a template that contractors shall use to prepare the project SWPPP. This section also contains instructions for the preparation of SWPPP Attachments and Appendices. The Permit requires that the SWPPP apply to all areas that are directly related to the construction activity, including but not limited to asphalt and/or concrete batch plants, staging areas, storage yards, material borrow areas, access roads, etc., whether or not they reside within the Caltrans rights-of-way.

The contractor shall prepare and submit a complete SWPPP to the Resident Engineer (RE) for review and approval. If revisions are required, as determined by the RE, the contractor shall revise the SWPPP as noted. The time frames for SWPPP submittal, review, and resubmittal are specified in the contract special provisions or Caltrans 2010 Standard Specifications Section 13 Water Pollution Control. No construction activity having the potential to cause water pollution, as determined by the RE, shall be performed until the SWPPP has been approved by the RE.

Three copies of the SWPPPs shall be submitted to Caltrans in a 3-ring binder with dividers and tabs for the Department's review. When the SWPPP is approved submit 4 printed copies in 3-ring binders with dividers and tabs and an electronic file (Microsoft® Word) of the SWPPP.

After the SWPPP has been approved, the SWPPP will require updates and may require amendments or revisions. Updates are minor and may be made by the WPC Manager and then submitted to the RE. SWPPP amendments and revisions require RE approval. Updates to the SWPPP include:

- Adding information into SWPPP file categories such as Rain Event Action Plans (REAPs), schedule updates and stormwater site inspection reports
- Increasing the quantity of a BMP shown in the SWPPP requires update to Water Pollution Control Drawings (WPCDs)
- Location change of a BMP shown on the WPCDs required because of field conditions requires update to WPCDs
- Additional BMPs are required by a REAP

Amendments to the SWPPP must be certified and are required when:

- There are amendments to the Permits
- There are any changes in construction activities or operations that may affect the discharge of pollutants from the construction site to surface waters, groundwater, or municipal separate storm sewer system (MS4)
- There are Permit violations
- The general objective of reducing pollutants in stormwater discharges is not achieved. For example a BMP not shown in the SWPPP is necessary, such as when silt fences are needed in addition to fiber rolls

Revision of the SWPPP is required when:

- The number of SWPPP amendments or the amount of information contained in the amendments makes implementation of the SWPPP confusing
- Contractor requests to revise the SWPPP based on planned changes in construction activities that would require a major SWPPP amendment
- The project risk level changes

3.2 INFORMATION PROVIDED BY CALTRANS

Caltrans may supply certain water quality-related information developed during the design process for use by the contractor, by way of the Information Handout and contract documents. This information is intended to provide the contractor with information that substantiates Caltrans' generation of quantities for selected construction site temporary BMPs, as well as show the location of placement of the construction site temporary and post-construction permanent BMPs. The contractor may use provided information to prepare a SWPPP.

3.2.1 Contract Bid Items, Specifications, and Details

Caltrans will provide contract bid items and minimum quantities for temporary BMPs. The contractor shall use these items to prepare the project SWPPP. The method of payment for these items will be specified in the contract special provisions. It should be noted that the location of these BMPs when shown on the plans are approximate. The actual locations shall be determined by the contractor and shown on SWPPP Attachment BB, Water Pollution Control Drawings, and listed on SWPPP Attachment CC, Water Pollution Control Best Management Practices List.

3.2.2 Construction Site Management

Construction Site Management (CSM) BMPs include Non- Stormwater Management Pollution Control BMPs and Waste Management and Materials Pollution Control BMPs that are not identified in the contract as separate contract bid items but are necessary for the project and must be included in the SWPPP.

3.2.3 Stormwater Information For SWPPP Preparation

The following stormwater information necessary for the preparation of a project SWPPP should be provided in the project Information Handout or should be requested from the project RE. The Stormwater Data Report prepared by Caltrans for the project should contain most of the following information.

Vicinity Map

A map extending approximately one quarter mile (1,320 feet) beyond the property boundaries of the construction site showing: the construction site, surface water bodies (including known springs and wetlands), known wells, an outline of off site drainage areas that discharge into the construction site, general topography, and the anticipated discharge location(s) where stormwater discharges to a municipal storm drain system or other water bodies. A U.S. Geological Survey (USGS) quad map may be used for showing the project site and a one-quarter mile (1,320 feet) extension beyond the property boundaries of the construction site.

Risk Level

Caltrans will provide the Risk Level Determination for the project which will dictate the type of BMPs that must be implemented on the site and Construction Site Monitoring Program Requirements.

List of Pre-Construction (Existing) Best Management Practices (BMPs)

A list and/or written descriptions of existing pre-construction BMPs, if any, that are already in place to reduce sediment and other pollutants in stormwater discharges. These pre-construction BMPs may consist of rock slope protection, infiltration basins, detention basins, biofiltration swales and strips, media filters, etc. If there are no pre-construction BMPs, then this may be indicated.

List of Permanent (Post-Construction) Stormwater Best Management Practices (BMPs)

A written listing and narrative descriptions of post- construction permanent BMPs that have been included and incorporated in the project; this information should be in the Stormwater Data Report. Narrative descriptions may also include operation and maintenance (O&M) procedures for the permanent BMPs, O&M short term and long term funding, and a statement indicating that the Maintenance Department will be responsible for O&M of the post construction BMPs.

Layout Sheets Showing Suggested Temporary BMP Locations

The contract plan layouts sheets will show the location of anticipated construction site BMPs or the BMPs will be shown on contract plan quantity summary sheets. The contract plan layout sheets may show suggested location of anticipated contractor staging areas and other contractor support facilities.

Explanation of Construction Site (Temporary) BMPs

A brief narrative explanation of the various temporary BMPs that may be implemented in the project, including any existing permanent BMPs that may be present within the project limits that can be used during construction, as well as any permanent BMPs that should be constructed early for use as a temporary BMP during construction, such as early application of permanent soil stabilization measures in areas that will no longer experience soil disturbance during construction.

Copy of Notice of Construction (NOC)/Notice of Intent (NOI)

For Caltrans projects, a copy of the Notice of Construction (NOC) for the project shall be submitted to the Regional Water Quality Control Board by Caltrans. The contractor shall insert a copy of the NOC in Attachment B of the SWPPP.

For non-Caltrans projects, the Local Agency / Private Entity administering the project should have submitted a Notice of Intent (NOI) for the project to the State Water Resources Control Board. A copy of the Notice of Intent and the Waste Discharge Identification (WDID) Number receipt letter issued for the project shall be inserted into Attachment B of the SWPPP.

Other Plans/Permits/Agreements

Other agencies may have issued permits or agreements (such as U.S. Army Corps of Engineers permit or Department of Fish and Game agreement) or have plan requirements for the construction of the project or imposed certain conditions. If so, a written description of the permit/agreement conditions and a copy of the permit/agreement will be provided by Caltrans for inclusion in Attachment F to the SWPPP.

For construction oversight projects, the Local Agency / Private Entity who administers the project is responsible for securing and providing all necessary permits, agreements, and approvals to Caltrans. The Local Agency / Private Entity who administers the project shall include copies of the permit/agreement in Attachment F of the SWPPP.

Construction Site Estimates

The Information Handout may contain the Stormwater Data Report which includes for the project site an estimate of the:

- construction site area in acres

- total disturbed area in acres
- runoff coefficient of the construction site before and after construction
- percentage of the area of the construction site that is impervious (e.g., pavement, building, etc.) before and after construction

3.2.4 Other Stormwater Information

The Information Handout may also include any other information that would explain the decisions or rationale behind the selection and deployment of temporary construction site and permanent BMPs chosen by the designer. Examples include the designer's estimated staging of the project and estimated time of year for those stages; any scheduling modifications included in the Order of Work specifications that were included to enhance water pollution control; and any specific BMP deployments that are considered to be critical to the success of the contractor's SWPPP.

Stormwater Data Report

The Information Handout may include the Stormwater Data Report. The Stormwater Data Report may include the subsequent information below as well as preliminary designs for permanent BMPs.

Drainage Information

The Information Handout may include a copy of the drainage information, such as the drainage report for the project, hydrology maps, delineation of drainage boundaries, concentrations of runoff, and runoff coefficients sufficient to determine peak discharges or run-on flowcharts.

Soils/Geotechnical Report, Project Materials Report and/or Other Reports

To the extent information is available from the soils/geotechnical report, the project materials report, site investigation report developed by the Hazardous Waste Section, or other regulatory or environmental compliance documentation, the Information Handout may include a description of all toxic materials known to have been treated, stored, disposed, spilled, or leaked in significant quantities onto the construction site, and any Waste Discharge Requirements (WDRs) issued by the Regional Water Quality Control Board (RWQCB) related to toxic materials.

The Nature of Fill Material and Existing Data Describing the Soil

The Information Handout may include a copy of the project materials report (geotechnical report). The contractor must describe the conditions of the fill material and the soil that can be found at the construction site (i.e., types of soils, groundwater location and conditions, dewatering operations that may be necessary, etc). Fill material should be described as whether it is native or non native, contaminated or uncontaminated, and its coverage technique (i.e., native soil coverage, asphalt or concrete coverage, and/or landscape).

Conceptual SWPPP

In some cases, Caltrans may prepare a Conceptual SWPPP (CSWPPP) for a project. The CSWPPP will provide additional direction and convey specific BMP expectations to the contractor. However, the CSWPPP shall not be considered a complete SWPPP and shall not replace the contractor's SWPPP, since CSWPPPs are prepared assuming standard construction practices and may not reflect the contractor's actual methods of construction, access requirements or project phasing. When a CSWPPP has been prepared, the information is made available to the contractor as part of the Information Handout. The contractor shall use the CSWPPP as a guide and reference tool to develop and submit the contract SWPPP that includes all elements of the CSWPPP and any additional elements required to complete the SWPPP in conformance with the contract special provisions, Caltrans Standard Specifications, the Permits, any other local requirements, and the procedures and general format set forth in this Manual.

3.3 SWPPP TEMPLATE

This section provides step-by-step SWPPP preparation procedures, instructions, examples and the SWPPP template. The template has been developed in Microsoft® Word with the following objectives:

1. Provide easy data entry for contractors to prepare SWPPPs (instructions can be viewed in the template while the SWPPP is being prepared).
2. Provide consistency in content and format of all SWPPPs prepared and submitted to Caltrans (thus making the SWPPP review process more efficient).

Instructions for using the electronic version of the SWPPP template:

1. Download the appropriate template from the Caltrans Web site at: http://www.dot.ca.gov/hq/construc/stormwater/templates.htm
2. Complete all applicable sections of the template and you may insert additional text where allowed in the template. A draft SWPPP with completed text for each section, including instructions, can be printed. The instructions include "check box" items that the SWPPP developer may use to help review that each of the required items is completed.
3. The final SWPPP can be viewed to check format and perform final edits as necessary. The document can then be printed without "instructions" by going to the menu bar in MS Word, selecting the "TOOLS" menu, selecting "OPTIONS" and making sure that the HIDDEN TEXT checkboxes under both the VIEW and PRINT tabs are cleared.

The SWPPP template shown in this section includes step-by-step SWPPP template instructions and section examples where appropriate for the following:

SWPPP Title Page

SWPPP Table of Contents

Section 100 SWPPP Certifications and Approval

Section 200	Objectives
Section 300	Project and Contractor Information
Section 400	References Other Plans, Permits and Agreements
Section 500	Determination of Construction Site Best Management Practices
Section 600	Project Site Implementation Program
Section 700	Construction Site Monitoring Program
Section 800	Post Construction Control Practices
Section 900	SWPPP Reporting Requirements

Guidance for preparing SWPPP Section 700 Construction Site Monitoring Program (CSMP) is available in *Caltrans Construction Site Monitoring Program Guidance Manual.* Step-by-step CSMP template instructions and sampling and analysis plan examples are provided where appropriate in the *Caltrans Construction Site Monitoring Program Guidance Manual.*

The SWPPP template including instructions and examples is shown on the following pages.

SWPPP Template

INSTRUCTIONS:

- Refer to the SWPPP / Water Pollution Control Program (WPCP) Instruction document for specific information on the use of the Template. The instruction document is available at: http://www.dot.ca.gov/hq/construc/stormwater/templates.htm
- The title page shall contain the information listed below.

❑ WDID Number: Leave it blank on the initial SWPPP submittal. The WDID number will be obtained by Caltrans or the Local Agency / Private Entity administering the project. When you receive the WDID number insert it by writing or typing on the SWPPP cover page.

❑ Title: "Stormwater Pollution Prevention Plan."

❑ Construction Project Name.

❑ Caltrans Contract Number and Project Identifier Number.

❑ If a Local Agency / Private Entity is administering the project, insert the Caltrans encroachment permit number issued to the Local Agency / Private Entity and Caltrans encroachment permit number issued to the Contractor.

❑ Project Risk Level.

❑ Identification and address of Lead Agency (Caltrans or Local Agency).

❑ RE Name and Telephone Number.

❑ Contractor's Name, Address, Telephone Number and Contact Person, note the Water Pollution Control (WPC) Manager, Qualified SWPPP Developer (QSD), or Qualified SWPPP Practitioner (QSP).

❑ Job Site Address and Telephone Number, if any.

❑ Is there a separate QSD for the project? Provide the name and title of Contractor's QSD, as well as the WPC Manager and QSP. The WPC Manager must be a certified QSD, so the WPC Manager and the QSD may be the same person. The QSD is responsible for writing, amending, and certifying the SWPPP.

☐ Yes ☐ No

Is there a separate QSP for the project? If one is appointed, the QSP shall be responsible for SWPPP implementation, inspection and repairs, and shall be available at all times throughout the duration of the project (see also Section 700.1). If a QSP is not appointed, the WPC Manager or the QSD shall perform the responsibilities of the QSP.

☐ Yes ☐ No

❑ Name of the company that developed the SWPPP (if it was prepared by an outside consultant), including name and title of preparer if different from the WPC Manager and the QSD listed above.

❑ SWPPP Date.

REQUIRED TEXT:

WASTE DISCHARGE IDENTIFICATION (WDID) NUMBER: _____

STORMWATER POLLUTION PREVENTION PLAN

for

Start Here ... Triple Click here to insert PROJECT NAME - then TAB to next field to continue entering project specific information

REQUIRED TEXT when CALTRANS is administering the project:

CONTRACT NO.: [INSERT CALTRANS CONTRACT NUMBER]-THEN TAB TO NEXT FIELD.
CALTRANS Project Identifier NUMBER: [Insert Caltrans Project Identifier]-then TAB to next field.

REQUIRED TEXT when a LOCAL AGENCY / PRIVATE ENTITY is administering the project:

CALTRANS ENCROACHMENT PERMIT NUMBER FOR LOCAL AGENCY / PRIVATE ENTITY: [Insert Caltrans Encroachment Permit Number Issued to Local Agency /Private Entity]-then TAB to next field.

CALTRANS ENCROACHMENT PERMIT NUMBER FOR CONTRACTOR: [Insert Caltrans Encroachment Permit Number Issued to Contractor]-then TAB to next field.

REQUIRED TEXT:

RISK LEVEL: [Insert Risk Level]-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 RE's Name]-then TAB.
[Insert RE's Telephone Number]-then TAB.

Submitted by:
[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.

[Insert Telephone Number(s)]-then TAB
[Insert Owner/Representative's Name]-then TAB.

Project Site Address

[Insert Site Address] Press the DELETE key if none, and TAB to next field.
[Insert Site Telephone Number] Press the DELETE key if none, and TAB to next field.

Contractor's Water Pollution Control (WPC) Manager/Qualified S WPPP Developer (QSD)

[Insert WPC Manager/QSD's Name]-then TAB.
[Insert Telephone Number(s)]-then TAB.

Contractor's Qualified SWPPP Developer (QSD) (if SWPPP not developed by WPC Manager)

[Insert QSD's Name]-then TAB.
[Insert Telephone Number(s)]-then TAB.

Contractor's Qualified S WPPP Practitioner (QSP) (if different from WPC Manager)

[Insert Inspector's Name]-then TAB.
[Insert Telephone Number(s)]-then TAB.

SWPPP Developed by:

[Insert QSD Company Name]-then TAB.
[Insert Address]-then TAB.
[Insert City, State, Zip]-then TAB.
[Insert Telephone Number(s)]-then TAB
[Insert Name and Title of Preparer]-then TAB.

SWPPP Date

[Insert Date]

INSTRUCTIONS:

Include the numbers and names for each section of the SWPPP, from Section 100 to Section 900. List the first page number of each sub-section.

Include a Tab for each major section of the SWPPP and for each of the attachments.

REQUIRED TEXT:

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File Category 20.23 ..... Contractor Personnel Training Documentation
File Category 20.31 ..... Contractor Stormwater Site Inspection Reports
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File Category 20.70 ..... Annual Certification of Compliance
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SECTION 100
SWPPP CERTIFICATIONS AND APPROVAL

100.1 Legally Responsible Person Certification and Caltrans Approval

INSTRUCTIONS:

Include a Separator and Tab for Section 100 for ready reference. The instructions for this section are provided below.

CALTRANS ADMINISTERED PROJECTS

- The SWPPP, as part of the Permit Registration Documents (PRDs), must be certified by the Legally Responsible Person (LRP) or a person legally authorized to sign and certify PRDs (the LRPs Approved Signatory); in conformance with Section IV.I and Section IV.J of Construction General Permit (CAS000002, Order No. 2009- 009-DWQ).
- The District Director, or RE when authorized Approved Signatory, shall sign and date the approval certificate.
- Print the District Director's or RE's name and telephone number.
- Include the LRP authorization for the RE to be the Approved Signatory as Attachment A.
- Include a copy of the Notice of Construction form or Notice of Intent (NOI) and documentation of California State Water Resources Control Board (SWRCB)-issued WDID Number) as Attachment B.

LOCAL AGENCY ADMINISTERED PROJECTS

- The SWPPP, as part of the Permit Registration Documents must be certified by the LRP or a person legally authorized to sign and certify PRDs (the LRPs Approved Signatory); in conformance with Section IV.I and Section IV.J of the CGP (CAS000002, Order No. 2009- 009-DWQ).
- The Local Agency LRP, or Local Agency RE when authorized, shall sign and date the approval certification.
- Print the Local Agency LRP or Local Agency RE's name and telephone number.
- The Caltrans Oversight Engineer shall sign and date the SWPPP.
- Print the Caltrans Oversight Engineer's name and telephone number.
- Include a copy of the SWRCB-issued WDID Number and NOI form as Attachment B.

PRIVATE ENTITY ADMINISTERED PROJECTS

- The SWPPP, as part of the PRDs, must be certified by the LRP or a person legally authorized to sign and certify PRDs (the LRPs Approved Signatory); in conformance with Section IV.I and Section IV.J of the CGP (CAS000002, Order No. 2009- 009-DWQ).
- The Private Entity LRP shall sign and date the approval certification.
- Print the Private Entity LRP name, title and telephone number.
- The Caltrans Oversight Engineer shall sign and date the SWPPP.
- Print the Caltrans Oversight Engineer's name and telephone number.
- Include a copy of the SWRCB-issued WDID Number and NOI form as Attachment B.

ANSWER THE FOLLOWING QUESTIONS

- Is a Local Agency administering the project?

  ☐ Yes ☐ No

- Has the Local Agency LRP authorized the RE as Approved Signatory?

  ☐ Yes ☐ No

- Is a Private Entity administering the project?

  ☐ Yes ☐ No

REQUIRED TEXT when CALTRANS is administering the project:

The California Department of Transportation (Caltrans) District Director, as the Legally Responsible Person (LRP), has authorized the Caltrans Resident Engineer (RE) to be the authorized Approved Signatory of Caltrans for approving, signing, and certifying the Stormwater Pollution Prevention Plan (SWPPP) in conformance with Section H, Provision 8.b; and Section M, Provision 10 of the Caltrans Permit (CAS000003, Order No. 99-06-DWQ) and Section IV.I of the Construction General Permit (CGP) (CAS000002, Order No. 2009-0009-DWQ). The LRP authorization for the RE to be the Approved Signatory is provided as Attachment A. The SWPPP was developed by the Contractor and submitted for review and approval to the RE, pursuant to the contract special provisions, Caltrans Standard Specifications, and the Caltrans Stormwater Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual. The Contractor is responsible and liable at all times for compliance with applicable requirements of the CGP (CAS000002, Order No. 2009-009- DWQ) for which compliance is ultimately determined by the Regional Water Quality Control Board (RWQCB), the State Water Resources Control Board (SWRCB), and/or the U.S. Environmental Protection Agency (USEPA). A copyof the Notice of Construction (NOC) submitted to the RWQCB or documentation of receipt of SWRCB-issued WDID Number and Notice of Intent (NOI) are in Attachment B.

For Caltrans Use Only
RE's Approval and
Caltrans Certification of the
Stormwater Pollution Prevention Plan

Project Name:	**Start Here ... Triple Click here to insert PROJECT NAME - then TAB to next field to continue entering project-specific information**
Caltrans Contract Number:	**INSERT CALTRANS CONTRACT NUMBER-THEN TAB TO NEXT FIELD.**
Caltrans Project Identification Number:	**INSERT CALTRANS PROJECT IDENTIFICATION NUMBER-THEN TAB TO NEXT FIELD.**

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure 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, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."

RE's Signature	Date
RE's Name	Telephone Number

REQUIRED TEXT when a LOCAL AGENCY is administering the project and the LOCAL AGENCY LRP is signing the SWPPP:

This SWPPP complies with the applicable requirements of the Construction General Permit (CAS000002, Order No. 2009-009-DWQ) issued by the State Water Resources Control Board. This SWPPP was developed pursuant to the contract specifications, Caltrans Standard Specifications and the Caltrans Stormwater Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual. The Contractor and Local Agency are responsible and liable at all times for compliance with applicable requirements of the Construction General Permit (CAS000002, Order No. 2009-009-DWQ) for which compliance is ultimately determined by the Regional Water Quality Control Board (RWQCB), the State Water Resources Control Board (SWRCB), and/or the U.S. Environmental Protection Agency (USEPA). Documentation of receipt of SWRCB-issued WDID Number and Notice of Intent (NOI) are in Attachment B.

"For Local Agency Use Only"
Local Agency Legally Responsible Person Certification of the Stormwater Pollution Prevention Plan

Project Name:	**Start Here ... Triple Click here to insert PROJECT NAME - then TAB to next field to continue entering project specific information**
Caltrans Encroachment Permit Number issued to Local Agency:	**INSERT CALTRANS ENCROACHMENT PERMIT NUMBER ISSUED TO LOCAL AGENCY-THEN TAB TO NEXT FIELD.**
Caltrans Encroachment Permit Number issued to Contractor:	**INSERT CALTRANS ENCROACHMENT PERMIT NUMBER ISSUED TO CONTRACTOR-THEN TAB TO NEXT FIELD.**
Local Agency Name:	**INSERT NAME OF LEAD AGENCY-THEN TAB.**

"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 assure 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, to the best of my knowledge and belief, the information submitted 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."

Legally Responsible Person's Signature	Date
Legally Responsible Person's Name	Telephone Number
Legally Responsible Person's Title	

For Use by Caltrans Only

CALTRANS OVERSIGHT ENGINEER'S CONCURENCE OF SWPPP

I, and/or personnel acting under my direction and supervision, have reviewed this SWPPP and concur with the Legally Responsible Person's findings that it meets the requirements set forth in the contract special provisions, Caltrans Standard Specifications, and the Caltrans Stormwater Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual.

Caltrans Oversight Engineer's Signature	Date of SWPPP Concurrence
Caltrans Oversight Engineer's Name	Telephone Number

REQUIRED TEXT when a LOCAL AGENCY is administering the project and the LOCAL AGENCY LRP has authorized the RE to be the Approved Signatory:

The Local Agency's Legally Responsible Person (LRP) has authorized the Resident Engineer (RE) to be the authorized Approved Signatory of the Local Agency for approving, signing, and certifying the Stormwater Pollution Prevention Plan (SWPPP) in conformance with Section IV.I of the Construction General Permit (CAS000002, Order No. 2009-0009-DWQ). The LRP authorization for the RE to be the Approved Signatory is included as Attachment A. The SWPPP was developed by the Contractor and submitted for review and approval to the RE, pursuant to the contract special provisions, Caltrans Standard Specifications and the Caltrans Stormwater Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual. The Contractor and Local Agency is responsible and liable at all times for compliance with applicable requirements of the Construction General Permit (CAS000002, Order No. 2009-009-DWQ) for which compliance is ultimately determined by the Regional Water Quality Control Board (RWQCB), the State Water Resources Control Board (SWRCB), and/or the U.S. Environmental Protection Agency (USEPA). Documentation of the SWRCB-issued WDID Number and Notice of Intent (NOI) form are in Attachment B.

"For Local Agency Use Only"
RE's Approval and
Local Agency Certification of the
Stormwater Pollution Prevention Plan

Project Name:	**Start Here ... Triple Click here to insert PROJECT NAME - then TAB to next field to continue entering project specific information**
Caltrans Encroachment Permit Number issued to Local Agency:	**INSERT CALTRANS ENCROACHMENT PERMIT NUMBER ISSUED TO LOCAL AGENCY-THEN TAB TO NEXT FIELD.**
Caltrans Encroachment Permit Number issued to Contractor:	**INSERT CALTRANS ENCROACHMENT PERMIT NUMBER ISSUED TO CONTRACTOR-THEN TAB TO NEXT FIELD.**
Local Agency Name	**INSERT NAME OF LEAD AGENCY-THEN TAB.**

"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 assure 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, to the best of my knowledge and belief, the information submitted 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."

RE's Signature	Date
RE's Name	Telephone Number

For Use by Caltrans Only
CALTRANS OVERSIGHT ENGINEER'S CONCURENCE OF SWPPP

I, and/or personnel acting under my direction and supervision, have reviewed this SWPPP and concur with the RE's findings that it meets the requirements set forth in the contract special provisions, Caltrans Standard Specifications, and the Caltrans Stormwater Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual.

Caltrans Oversight Engineer's Signature	Date of SWPPP Concurrence
Caltrans Oversight Engineer's Name	Telephone Number

REQUIRED TEXT when a PRIVATE ENTITY is administering the project:

This SWPPP complies with the applicable requirements of the Construction General Permit (CAS000002, Order No. 2009-009-DWQ) issued by the State Water Resources Control Board. This SWPPP was developed pursuant to the contract specifications, Caltrans Standard Specifications and the Caltrans Stormwater Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual. The Contractor and Insert **Private Entity Name-then TAB** are responsible and liable at all times for compliance with applicable requirements of the Construction General Permit (CAS000002, Order No. 2009-009-DWQ) for which compliance is ultimately determined by the Regional Water Quality Control Board (RWQCB), the State Water Resources Control Board (SWRCB), and/or the U.S. Environmental Protection Agency (USEPA). Documentation of receipt of the SWRCB-issued WDID Number and Notice of Intent (NOI) are in Attachment B.

"For Private Entity Use Only"
Legally Responsible Person Certification of the Stormwater Pollution Prevention Plan

Project Name:	**Start Here ... Triple Click here to insert PROJECT NAME - then TAB to next field to continue entering project specific information**
Caltrans Encroachment Permit Number issued to Private Entity:	**INSERT CALTRANS ENCROACHMENT PERMIT NUMBER ISSUED TO PRIVATE ENTITY-THEN TAB TO NEXT FIELD.**
Caltrans Encroachment Permit Number issued to Contractor:	**INSERT CALTRANS ENCROACHMENT PERMIT NUMBER ISSUED TO CONTRACTOR-THEN TAB TO NEXT FIELD.**
Private Entity Name:	**INSERT NAME OF PRIVATE ENTITY-THEN TAB.**

"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 assure 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, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."

Legally Responsible Person's Signature	Date
Legally Responsible Person's Name	Telephone Number
Legally Responsible Person's Title	

For Use by Caltrans Only
CALTRANS OVERSIGHT ENGINEER'S CONCURENCE OF SWPPP

I, and/or personnel acting under my direction and supervision, have reviewed this SWPPP and concur with the Legally Responsible Person's findings that it meets the requirements set forth in the contract special provisions, Caltrans Standard Specifications, and the Caltrans Stormwater Pollution Prevention Plan (SWPPP) and Water Pollution Control Program(WPCP) Preparation Manual.

Caltrans Oversight Engineer's Signature	Date of SWPPP Concurrence
Caltrans Oversight Engineer's Name	Telephone Number

100.2 Contractor and QSD SWPPP Certification

INSTRUCTIONS:

- The Contractor is required to certify the SWPPP.
- The Contractor is required by the contract specifcations to have a QSD develop, amend, and certify the SWPPP, and have a QSD implement the SWPPP.
- The SWPPP shall be submitted to the RE for review and approval.

Print the project name, the contract number, and the project identifier number at the top of the form.

If a Local Agency/Private Entity is administering the project, print the project name, the Caltrans encroachment permit number issued to the Local Agency/Private Entity, and the Caltrans encroachment permit number issued to the Contractor. For an Encroachment Permit project, the LRP for the initial project will also be the LRP for this SWPPP.

The contractor's Certification shall be signed by Contractor; specifically, the person responsible for overall management of the site, such as a corporation officer or person assigned the responsibility by a corporation officer, according to corporation procedures.

Print the name, title and telephone number of the person signing the certification for the Contractor.

The QSDs certification statement SWPPP shall be signed and dated by Contractor's QSD who developed the SWPPP.

Print the name, title and telephone number of the QSD signing the certification.

REQUIRED TEXT:

Contractor's Certification of SWPPP

Project Name:	**Start Here ... Triple Click here to insert PROJECT NAME - then TAB to next field to continue entering project specific information**

REQUIRED TEXT when CALTRANS is administering the project:

Caltrans Contract Number:	**INSERT CALTRANS CONTRACT NUMBER-THEN TAB TO NEXT FIELD.**
Caltrans Project Identification Number:	**INSERT CALTRANS PROJECT IDENTIFICATION NUMBER-THEN TAB TO NEXT FIELD.**

REQUIRED TEXT when a LOCAL AGENCY / PRIVATE ENTITY is administering the project:

Caltrans Encroachment Permit Number issued to Local Agency / Private Entity:	**INSERT CALTRANS ENCROACHMENT PERMIT NUMBER ISSUED TO LOCAL AGENCY / PRIVATE ENTITY-THEN TAB TO NEXT FIELD.**

Caltrans Encroachment Permit Number issued to Contractor:	**INSERT CALTRANS ENCROACHMENT PERMIT NUMBER ISSUED TO CONTRACTOR-THEN TAB TO NEXT FIELD.**

"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 assure 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 fines and imprisonment for knowing violations."

Contractor's Signature	Date
Contractor's Name	Telephone Number
Contractor's Title	

QSD's Certification of SWPPP

REQUIRED TEXT:

Project Name:	**Start Here ... Triple Click here to insert PROJECT NAME - then TAB to next field to continue entering project specific information**

REQUIRED TEXT when CALTRANS is administering the project:

Caltrans Contract Number:	**INSERT CALTRANS CONTRACT NUMBER-THEN TAB TO NEXT FIELD.**
Caltrans Project Identification Number:	**INSERT CALTRANS PROJECT IDENTIFICATION NUMBER-THEN TAB TO NEXT FIELD.**

REQUIRED TEXT when a LOCAL AGENCY / PRIVATE ENTITY is administering the project:

Caltrans Encroachment Permit Number issued to Local Agency / Private Entity:	**INSERT CALTRANS ENCROACHMENT PERMIT NUMBER ISSUED TO LOCAL AGENCY / PRIVATE ENTITY-THEN TAB TO NEXT FIELD.**
Caltrans Encroachment Permit Number issued to Contractor:	**INSERT CALTRANS ENCROACHMENT PERMIT NUMBER ISSUED TO CONTRACTOR-THEN TAB TO NEXT FIELD.**

"I certify under penalty of law that I relied upon available project and site information, current watershed and basin plan maps and available soil data to develop this SWPPP so that Best Management Practices (BMPs) were designed and placed in accordance with industry standards and best professional judgment to reduce pollutants from leaving the job site. All other sources relied upon to gain information for this project's SWPPP were appropriate and dependable, based on my best professional judgment. To the best of my knowledge and belief, the information submitted in this SWPPP is in compliance with all requirements of the Construction General Permit (CAS000002, Order No. 2009-009-DWQ)."

QSD's Signature	Date
QSD's Name	Telephone Number
QSD's Title	

100.3 Amendments

100.3.1 SWPPP Amendments Certification and Approval

INSTRUCTIONS:

When changes in the approved SWPPP are required, the Contractor's WPC Manager shall prepare changes to the SWPPP. Amendments to SWPPP require the following:

- The WPC Manager must be a qualified QSD and maintain one of the registrations or certifications required by the CGP for a QSD.

- The WPC Manager shall certify SWPPP amendments and submit them to the RE for review and approval.
- The CEM-2008 SWPPP Amendment Certification and Approval form, available in Appendix A, shall be used as the cover sheet for each amendment.
- All amendments shall be recorded on CEM-2009 SWPPP Amendment Log, available in Appendix B. Amendment Logs shall be kept in SWPPP File Category 20.02: Stormwater Pollution Prevention Plan Amendments. A copy of the Amendment Log shall be inserted into Attachment AA.
- Approved amendments should be inserted into the appropriate SWPPP section or attachment when possible and a copy shall be kept in Attachment AA.
- The Contractor amendment certification and Caltrans amendment approval by the LRP, or RE if authorized Approved Signatory, as provided in the CEM-2008 SWPPP/WPCP Amendment Certification and Approval form, shall be attached to the SWPPP amendment and inserted into Attachment AA.
- The following information shall be described in each amendment:
    - who requested the amendment
    - the location of proposed change
    - the reason for the change
    - the original Best Management Practice (BMP) proposed, if any
    - the new BMP proposed
    - any existing implemented BMP(s)

The SWPPP Amendment Certification and Approval form shall be used as the cover sheet for each amendment and shall include the following information:

- the printed project name, Caltrans contract number, and if applicable, the Caltrans encroachment permit number
- the printed Contractor's name and telephone number
- the Contractor's signature and the date
- the printed name of the Caltrans LRP, or RE if authorized Approved Signatory, and telephone number

When the amendment is approved, the Caltrans LRP, or RE if authorized as the Approved Signatory, shall sign and date the SWPPP Amendment Certification and Approval form.

- Approved amendments shall be inserted into the SWPPP in Attachment AA. Approved SWPPP Amendment Certification and Approval forms shall be included in Attachment AA.
- All SWPPP amendments shall be documented in the Amendment Log (see Section 100.3.2) and kept in SWPPP File Category 20.02: Stormwater Pollution Prevention Plan Amendments. A copy of

the Amendment Log shall also be inserted into Attachment AA.

REQUIRED TEXT:

This SWPPP is meant to be a "living document," therefore, updated and additional information is expected to be added to the SWPPP as the project progresses, including information regarding changes in the field that do not require an amendment, such as the following:

REQUIRED TEXT for Risk Level 2 and Risk Level 3 Projects:

- adding BMPs as required by a Rain Event Action Plan

REQUIRED TEXT:

- increasing or decreasing the quantity of BMPs in the field that are already part of the SWPPP
- updating WPCDs to show actual locations of BMPs to reflect actual site conditions

This SWPPP shall be amended when:

- there are amendments to the permits
- a change in construction activities or operations that may affectthe discharge of pollutants to surface waters, groundwater(s), or a municipal separate storm sewer system (MS4)
- a contract change order includes additional water pollution control practices, not already specified in the approved SWPPP
- SWPPP objectives to reduce or eliminate pollutants in stormwater discharges have not been achieved
- the RWQCB determines that a CGP violation has occurred, the SWPPP shall be amended and corrective actions implemented within 14 calendar days after notification by the RWQCB.

The following information shall be included in each amendment:

- who requested the amendment
- the location of proposed change
- the reason for the change
- the original BMP proposed, if any
- the new BMP proposed if any
- any affected existing BMP(s)

All SWPPP amendments prepared by the WPC Manager and approved by the Contractor shall be submitted for acceptance and certified by the LRP or Approved Signatory. SWPPP amendments shall not be implemented until certified by LRP or Approved Signatory unless otherwise directed by the RE. A blank copy of the CEM-2008

SWPPP/WPCP Amendment Certification and Approval form is in Appendix A. For approved amendments, the signed SWPPP Amendment Certification and Approval form shall be attached to the SWPPP amendment.

Approved and certified amendments shall be inserted into the appropriate section or attachment of the SWPPP. A copy of each approved and certified amendment shall be inserted into Attachment AA. All SWPPP amendments shall be listed in the SWPPP Amendment Log, available in Appendix B. The Amendment Log shall be kept in SWPPP File Category 20.02 and a copy shall be inserted into Attachment AA.

The SWPPP will be completely revised if either the number of amendments or the amount of information contained in the amendments makes implementation of the SWPPP confusing, as determined by the RE, or the Contractor requests to revise the SWPPP based on planned changes in activities that would require a major SWPPP amendment.

REPLACE THIS WITH ADDITIONAL TEXT OR DELETE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

100.3.2 Amendment Log

INSTRUCTIONS:

- All SWPPP amendment(s) prepared and approved as discussed in Section 100.3.1 shall be documented in the Amendment Log and kept in SWPPP File Category 20.02: Stormwater Pollution Prevention Plan Amendments. A copy of the Amendment Log shall be inserted into Attachment AA. A blank Amendment Log is available in Appendix B.
- Enter the project name, Caltrans contract number and Caltrans project identifier number (or Caltrans encroachment permit number) at the top of the form.
- Enter the amendment number, date, brief description, name of person who requested the Amendment and amendment approval date in the table.

EXAMPLE SWPPP AMENDMENT LOG:

Amendment No.	Date	Brief Description of Amendment	Requested By	Approval Date
001	12/10/2000	Change to grading schedule to begin on Feb. 10, 2001, and will include additional 2 acres. Water pollution control drawings amended to show 2 additional acres.	John Doe, Superintendent	12/20/2000

REQUIRED TEXT:

All approved and certified SWPPP amendments shall be shown on the SWPPP Amendment Log. A blank CEM-2009 SWPPP/WPCP Amendment Log form is in Appendix B. The SWPPP Amendment Log shall include the following information:

- amendment number
- amendment date
- brief description of the amendment
- name of individual requesting amendment
- approval date

All SWPPP amendment(s) prepared and certified as discussed in Section 100.3.1 shall be documented on the Amendment Log and filed in SWPPP File Category 20.02: Stormwater Pollution Prevention Plan Amendments. A copy of the Amendment Log shall also be inserted into Attachment AA.

100.4 Annual Compliance and Approval

INSTRUCTIONS:

- A blank copy of CEM-2070 Contractor's Annual Certification of Compliance and Annual Certification of Compliance form to be signed by the LRP is provided in Appendix C.
- Include completed and signed Annual Certification of Compliance forms in SWPPP File Category 20.70: Annual Certification of Compliance.

CALTRANS ADMINISTERED PROJECTS

- The LRP or authorized Approved Signatory shall certify annually that construction activities comply with the requirements of the CGP and the SWPPP.
- The Contractor's Annual Certification of Compliance shall be completed by the Contractor before July 15 of each year and submitted to the RE. This Certification is based upon the site inspections required in Section 700.

LOCAL AGENCY / PRIVATE ENTITY ADMINISTERED PROJECT

- When a Local Agency is administering the project, then the LRP for the Local Agency, or the RE if authorized to be the Approved Signatory, must sign the Annual Certification of Compliance.
- When a Private Entity is administering the project, then the Private Entity LRP must sign the Annual Certification of Compliance and submit the completed Annual Certification of Compliance to the Caltrans Oversight Engineer by July 15 of each year.
- When a Local Agency / Private Entity is administering the project, then the Caltrans Oversight Engineer must review and sign that the Annual Certification of Compliance is accepted.

REQUIRED TEXT when CALTRANS is administering the project:

By July 15 of each year, the Contractor shall submit the Contractor's Annual Certification of Compliance to the RE stating that the project is in compliance with the terms and conditions of the Permits and the SWPPP. By August 1 of each year, the Caltrans LRP, or RE as authorized Approved Signatory, will complete an Annual Certification of Compliance stating that the project is in compliance with the terms and conditions of the Permits and the SWPPP. A blank copy of the CEM-2070 SWPPP/WPCP Annual Certification of Compliance form is in Appendix C. Completed Annual Certification of Compliance forms will be filed in SWPPP File Category 20.70: Annual Certification of Compliance.

REQUIRED TEXT when a LOCAL AGENCY / PRIVATE ENTITY is administering the project:

By July 15 of each year, the Local Agency / Private Entity shall submit an Annual Certification of Compliance to the Caltrans Oversight RE stating that the project is in compliance with the terms and conditions of the Permits and the SWPPP. By August 1 of each year, the Caltrans Oversight Engineer will review and accept the Annual Certification of Compliance. The Caltrans Oversight Engineer will document acceptance of the Annual Certificate of Compliance by completing and signing the Acceptance of Annual Certification of Compliance. A blank copy of the CEM-2070 SWPPP/WPCP Annual Certification of Compliance form is in Appendix C. Completed Annual Certification of Compliance forms will be filed in SWPPP File Category 20.70: Annual Certification of Compliance.

SECTION 200
OBJECTIVES

INSTRUCTIONS:

- Include a Separator and Tab for Section 200 for ready reference.
- The five primary SWPPP objectives are described in the CGP, Section XIV, SWPPP Requirements, and are shown below in the "Required Text" section. Pollutant source identification and BMP selections shall be documented in the SWPPP to support the five SWPPP objectives.

REQUIRED TEXT:

This SWPPP has five (5) main objectives, which are listed below.

1. All pollutants and their sources, including sources of sediment associated with construction, construction site erosion, and all other activities associated with construction activity, are controlled.

2. Where not otherwise required to be under a California Regional Water Quality Control Board (RWQCB) permit, all non-stormwater discharges are identified and either eliminated, controlled, or treated.

3. Site BMPs are effective and result in the reduction or elimination of pollutants in stormwater discharges and authorized non- stormwater discharges from the construction activity to the best available technology (BAT) / best conventional technology (BCT) standard.

4. Calculations and design details for site run-on, as well as BMP controls, are complete and correct.

5. Stabilization BMPs designed to eliminate or reduce pollutants after construction is complete have been installed.

This SWPPP was developed to conform to the required elements of the Caltrans Permit (SWRCB Order No. 99-06-DWQ, NPDES No. CAS000003) and with the required elements of the CGP (CAS000002, Order No. 2009-0009-DWQ) issued by the SWRCB.

This SWPPP is designed to be a useful document for those who must implement the SWPPP on a daily basis in the field. Most of the information necessary for the daily implementation of the SWPPP is contained in Attachment BB: Water Pollution Control Drawings, Attachment CC: Water Pollution Control Best Management Practices List, and Attachment DD: Water Pollution Control Schedule.

This SWPPP is also a "living document" because updated and additional information is added to the SWPPP file categories as the project progresses, including:

- SWPPP Amendments
- Subcontractor and Material Supplier Information
- Contractor Personnel Training Documentation
- Site Inspection Reports

- Weekly BMP Status Reports
- Rain Event Action Plans
- Sampling and Analysis Results
- Equipment Maintenance and Calibration Records
- Notice of Discharge Reports

The SWPPP shall be readily available on site for the duration of the project.

SECTION 300
PROJECT AND CONTRACTOR INFORMATION

300.1 Project Description

INSTRUCTIONS:

- Include a Separator and Tab for Section 300 for ready reference.
- Provide the project description (county, cities, route and post-mile). Name the receiving waters and describe proximity to receiving waters to which the project will discharge, including surface waters, drainage channels, and drainage systems (identify who owns the drainage system; e.g., municipality or agency.)

EXAMPLE:

The construction project is located in Any County, in Any City, on State Route 42 from Post mile X to Post mile Y. The project will upgrade the westbound two-lane span by replacing the existing substandard steel truss bridge with a four-lane suspension bridge (which includes one high-occupancy vehicle (HOV) lane and a bicycle/pedestrian lane). The receiving water is the Salmon River, and the new suspension bridge consists of two towers in the Strait and a north and south anchorage. The existing maintenance facility will be demolished. This project also includes constructing a vista point at the north end of the bridge and a bicycle lane from the Route 80/29 separation to the south end of the bridge.

REQUIRED TEXT:

CLICK AND TYPE PROJECT DESCRIPTION HERE

300.2 Project Risk Level

INSTRUCTIONS:

Insert the risk level for the project site. The risk level should be calculated during the initial design phase of the project. The information will be provided by Caltrans or may be provided by the local Agency or private entity administering the project. A summary of how the risk level is calculated is located in Section 500.1.3.

REQUIRED TEXT:

The risk level assessment of the project site was calculated to be Risk Level [**Insert Risk Level**]**-then TAB to next field.** This risk level will determine the minimum level of BMPs that will be acceptable based on the project site and the project construction activities. The risk level is the basis for the minimum level of site-specific monitoring and reporting that will be required. The risk level is based on project duration, proximity to impaired receiving waters, and soil conditions. The Risk Level determination is discussed in Section 500.1.3 and documentation of the project's Risk Level determination is included in Attachment C.

300.3 Construction Sites Estimates

INSTRUCTIONS:

Provide an estimate of the features identified below.

- Construction site area (acres).
- Runoff coefficient before and after construction.
- Percentage impervious area before and after construction.
- Anticipated stormwater run-on to the construction site from off site in cubic feet per second (cfs). Show run-on flow calculations using the Rational Method (Q = CIA) or a comparably appropriate method:

	Area Runoff Coefficient	= _____	(A)
	Area Rainfall Intensity	= _____ in/hr	(B)
	Drainage Area	= _____ acres	(C)
Site Area Run-on Discharge	(A) x (B) x (C)	= _____ cfs	(D)

- Item A. The runoff coefficient represents the percent of water that will run off the ground surface during the storm. Values of the coefficient, "C", can be determined from Figure 819.2A, Runoff Coefficients for Undeveloped Areas (included in Example 2 below), and Figure 819.2B, Runoff Coefficients for Developed Areas (included as part of these instructions), from *Caltrans Highway Design Manual, Fifth Edition*.
- Refer to the *Caltrans Highway Design Manual*, Topic 819 – Estimating Design Discharge, for a more detailed explanation of calculating weighted runoff coefficients for areas containing varying amounts of different cover.
- Item B. Rainfall intensity, "I", in inches per hour, is the average rainfall intensity for the selected frequency. Refer to the County Flood Control, U. S. Army Corps of Engineers manuals, and/or locally approved drainage manuals for project-specific rainfall intensity values.
- Item C. Drainage area, "A", in acres, includes impervious and pervious areas and surfaces covered by buildings.
- SWPPP developer shall provide calculations for off-site run-on if flow quantities are not available via the project design documents (Drainage Report, Hydrology Report, etc.)
- The rational method should not be used for drainage areas greater than 320 acres (1.3 km^2). See *Caltrans, Highway Design Manual, Fifth Edition*, Section 819.2.

FIGURE 819.2B: RUNOFF COEFFICIENTS FOR DEVELOPED AREAS	
Type of Drainage Area	Runoff Coefficient
Business:	
Downtown areas	0.70 - 0.95
Neighborhood areas	0.50 - 0.70
Residential:	
Single-family areas	0.30 - 0.50
Multi-units, detached	0.40 - 0.60
Multi-units, attached	0.60 - 0.75
Suburban	0.25 - 0.40
Apartment dwelling areas	0.50 - 0.70
Industrial:	
Light areas	0.50 - 0.80
Heavy areas	0.60 - 0.90
Parks, cemeteries	0.10 - 0.25
Playgrounds	0.20 - 0.40
Railroad yard areas	0.20 - 0.40
Unimproved areas	0.10 - 0.30
Lawns:	
Sandy soil, flat, 2%	0.05 - 0.10
Sandy soil, average, 2-7%	0.10 - 0.15
Sandy soil, steep, 7%	0.15 - 0.20
Heavy soil, flat, 2%	0.13 - 0.17
Heavy soil, average, 2-7%	0.18 - 0.25
Heavy soil, steep, 7%	0.25 - 0.35
Streets:	
Asphaltic	0.70 - 0.95
Concrete	0.80 - 0.95
Brick	0.70 - 0.85
Drives and walks	0.75 - 0.85
Roofs	0.75 - 0.95

Include references for all calculation input parameters. Show the run-on area(s) and note the run-on flow rate(s) on the WPCD(s).

If there is no anticipated stormwater run-on to the site, describe the existing flow conditions that would preclude run-on. For example, if potential run-on is handled by an existing stormwater diversion feature, such as a lined ditch, then calculations would not be necessary. If the existing diversion feature would be affected by construction, then run-on flow calculations are necessary to design BMPs to protect the site from run-on.

For potential run-on, refer to Section 500.3.1 for the run-on control BMPs that will be designed to control the calculated run-on.

EXAMPLE 1:

WORKSHEET 300.3: PRE- AND POST-CONSTRUCTION SITE RUNOFF COEFFICIENTS	
Total Project Area: **49 Acres**	Overall Soil Type for the site: **D**
Step 1: Pre-Construction Land Use Conditions:	
43.34 acres of impervious hardscaped area with a Commercial/Industrial Land Use Impervious Runoff Coefficient C1: 0.90	
Sub-area/Total Area = 88.45%	
5.66 acres of pervious landscaped areas Pervious Runoff Coefficient C2: 0.45	
Sub-area/Total Area = 11.55%	
Overall Pre-Construction Site Runoff Coefficient = C1(%) + C2(%) = 0.90(.8845) + 0.45(.1155) = **0.85**	
Step 2: Post-Construction Land Use Conditions:	
42.47 acres of impervious hardscaped area with a Commercial/Industrial Land Use Impervious Runoff Coefficient C1: 0.90	
Sub-area/Total Area = 86.67%	
6.53 acres of pervious landscaped areas and pervious pavers Pervious Runoff Coefficient C2: 0.45	
Sub-area/Total Area = 13.33%	
Overall Post-Construction Site Runoff Coefficient = C1(%) = 0.9(.8667) + 0.45(.1333) = **0.84**	

Anticipated drainage patterns following the completion of grading activities are shown on the WPCDs.

Run-on from off-site areas anticipated: ☒ Yes ☐ No

Run-on from off-site areas will be prevented from flowing through areas that have been disturbed by construction unless appropriate conveyance systems are in place.

Hydrology calculations for all of the drainage areas affecting the project site can be found in the *Project Drainage Report*. The CGP requires that a construction project's SWPPP must show all calculations for anticipated stormwater run-on based on the size of the drainage area, rainfall intensity, and run-off coefficient. Based on the size and land use of the drainage areas discharging to the site, the Rational Formula can be used to calculate stormwater run-on.

The Rational Formula consists of Q = CIA:	Q = run-on flow (ft3/sec or cfs) C = run-off coefficient for drainage area I = rainfall intensity (inches/hour or in/hr) A = area draining onto the site (acres or ac)

Table 2, found on page 82 of the *City Drainage Design Manual*, is used for determining the runoff coefficients for the rational method formula. C-values specific to each area discharging run-on to the site will be used for the run-on calculations.

Rainfall intensity is the average rainfall intensity for the selected frequency. This data is typically available on intensity-duration-frequency (IDF) curves for the selected frequency and duration. The 2-year, 6-hour storm event will be adequate for determining the temporary controls and is used for the run-on calculations. Since the Civil-D computer program, specifically coded for the *City Drainage Design Manual*, including the applicable IDF curves, was used to calculate the flow rates in and around the project, the intensity for each area can be found in the Civil-D output (hydrology calculations) in Appendix A of the *Project Drainage Report* or in the IDF Curves, found on page 83 of the *City Drainage Design Manual*.

Three drainage areas discharge runoff onto the site from the northeast corner of Cain and Abel Roads. The westernmost discharge point is approximately 250 feet north of the intersection, where a section of the parking area drains to Cain Road and flows south toward the project. Run-on from this area will be designated Q_1. The parking area adjacent to Abel Road drains south onto the site. Run-on from this area will be designated Q_2. Runoff from the northeastern corner of the parking area is collected by a storm drain lateral, which connects to the inlet approximately 200 feet east of the intersection. Run-on from this area will be designated Q_3. See WPCD 1 for further clarification. Any run-on occurring in this area prior to the implementation of permanent stabilization measures will need to be diverted away from Disturbed Soil Areas (DSAs) and other BMPs. The run-on currently is collected and conveyed to an existing 48-inch-diameter storm drain at the intersection, which discharges the runoff to San Diego Bay.

Calculation of stormwater run-on from the three drainage areas described above, by Q = CIA	Q = run-on flow (cfs) C = run-off coefficient for drainage area I = rainfall intensity (in/hr) A = area draining onto the site (ac)
Land Use: Parking Lot & Hardscape Percent Impervious1: 59% Percent Impervious2: 90% Percent Impervious3: 95% Intensity1 at Node 1140: 1.896 in/hr Intensity2 at Node 1075: 2.159 in/hr Intensity3 at Node 1065: 2.490 in/hr	Hydrologic Soil Group: D C-value1: 0.63 C-value2: 0.95 C-value3: 0.97 Area1: 0.75 ac Area2: 1.45 ac Area3: 0.91 ac
Q1 = 0.63 x 1.896 x 0.75 = 1.19 cfs Q2 = 0.95 x 2.159 x 1.45 = 2.97 cfs Q3 = 0.97 x 2.490 x 0.91 = 2.20 cfs	See WPCD 1 for locations and flow rates.

It is recommended that construction activities in the aforementioned areas be completed during the dry season; otherwise, BMPs should be utilized to direct run-on away from disturbed areas. Inappropriate management of run-on and runoff can result in excessive physical impacts to receiving waters from sediment and increased flows.

EXAMPLE 2:

Existing Site Conditions:

	Area Runoff Coefficient	= 0.32	(A)
	Area Rainfall Intensity	= 0.50 in/hr	(B)
	Drainage Area	= 175 acres	(C)
Site Area Run-on Discharge	(A) x (B) x (C)	= 28 cfs	(D)

(A) The runoff coefficient represents the percent of water for the area that will run off the ground surface during the storm. The value for the runoff coefficient, 0.32, was determined from Figure 819.2A below, based on the site characteristics (terrain, type of soil, vegetation, etc.) for an undeveloped area.

(B) Rainfall intensity, in inches per hour, is the average rainfall intensity for the selected frequency and duration (2-year, 1-hour storm). The Rainfall Depth versus Return Period chart, from the San Bernardino County *Flood Control Hydrology Manual* gives a value of 0.5 in/hr for the site area.

(C) Drainage area, in acres, defined in the Project Drainage Report, is 175 acres.

FIGURE 819.2A: RUNOFF COEFFICIENTS FOR UNDEVELOPED AREAS

	Extreme	**High**	**Normal**	**Low**
Relief	0.28 - 0.35 Steep, rugged terrain with average slopes above 30%	0.20 - 0.28 Hilly, with average slopes of 10 to 30%	0.14 - 0.20 Rolling, with average slopes of 5 to 10%	0.08 - 0.14 Relatively flat land with average slopes of 0 to 5%
Soil Infiltration	0.12 - 0.16 No effective soil cover; either rock or thin soil mantle of negligible infiltration capacity	0.08 - 0.12 Slow infiltration rate; clay or shallow loam soils of low infiltration capacity, imperfectly or poorly drained	0.06 - 0.08 Normal infiltration rate; well drained light or medium textured soils, sandy loams, silt and silty loams	0.04 - 0.06 High infiltration rate; deep sand or other soil that takes up water readily, very light, well-drained soils
Vegetative Cover	0.12 - 0.16 No effective plant cover; bare or very sparse cover	0.08 - 0.12 Poor to fair plant cover; clean cultivation crops or poor natural cover (less than 20% of drainage area with good cover)	0.06 - 0.08 Fair to good plant cover; ~50% of area with good grassland or woodland cover, not more than 50% of area in cultivated crops	0.04 - 0.06 Good to excellent plant cover; ~90% of area with good grassland, woodland or equivalent cover

FIGURE 819.2A: RUNOFF COEFFICIENTS FOR UNDEVELOPED AREAS				
	Extreme	**High**	**Normal**	**Low**
Surface Storage	0.10 - 0.12 Negligible surface storage; a few shallow surface depressions; drainage ways steep and small, no marshes	0.08 - 0.10 Low surface storage; well-defined system of small drainage ways; no ponds or marshes	0.06 - 0.08 Normal surface storage; considerable surface depression storage; lakes and pond marshes	0.04 - 0.06 High surface storage; drainage system not sharply defined; large flood plain storage or large number of ponds or marshes.

Given: An undeveloped watershed consisting of;

1) rolling terrain with average slopes of 5%,
2) clay-type soils,
3) good grassland area, and
4) normal surface depressions.

Final: The runoff coefficient, C, for the above watershed.

Solution:

Relief	0.14
Soil Infiltration	0.08
Vegetative Cover	0.04
Surface Storage	0.06
C=	0.32

REQUIRED TEXT:

The following are estimates of the construction site.

- Construction site area **Insert Site Area-then TAB** acres
- Percentage impervious area before construction **Insert Percentage-then TAB** percent
- Runoff coefficient before construction **Insert Coefficient-then TAB**
- Percentage impervious area after construction **Insert Percentage-then TAB** percent
- Runoff coefficient after construction **Insert Site Coefficient-then TAB**

Run-on from off-site areas anticipated: ☐ Yes ☐ No

- Anticipated stormwater run-on flow rate to the construction site: **Insert Flow Rate-then TAB** cfs

Anticipated drainage patterns following the completion of grading activities are shown on the WPCDs in Attachment BB.

IF THE POTENTIAL EXISTS FOR RUN-ON TO THE SITE, REPLACE THIS WITH NARRATIVE TEXT INCLUDING RUN-ON CALCULATIONS AND CALCULATION INPUT PARAMETERS AND THE FOLLOWING; OTHERWISE, DELETE THE FOLLOWING AND REPLACE THIS WITH NARRATIVE TEXT DESCRIBING EXISTING FLOW CONDITIONS THAT PRECLUDE RUN-ON (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)

Locations of potential run-on with the estimated flow rates shall be noted on the WPCDs. The BMPs designed to handle the run-on flows are included in Section 500.3.1.

300.4 Vicinity and Site Map

INSTRUCTIONS:

- Include both a vicinity and site map in the SWPPP.
  - ❑ The Vicinity Map shall be an 8-1/2" x 11" color copy of a United States Geologic Survey (USGS) map or equal, and shall extend approximately one-quarter mile beyond the property boundaries of the construction site (an 11" x 17" may be used if needed). Insert the vicinity map as Attachment D and place a reference in Section 300.4. The Office of Water Programs, Water Quality Planning Tool website can be used to obtain images of USGS topographic maps by selecting the 'Post Miles' option on the webpage at: http://stormwater.water-programs.com/
  - ❑ To meet the site map requirement, insert a reduced copy (8-1/2" x 11" or 11" x 17") of the project's Title Sheet in Attachment D and make reference to it in Section 300.4.
  - ❑ Provide a brief narrative description of the vicinity to support the map in Attachment D. Describe important features, drainage areas, or receiving waters that could not be shown on the map.
- The vicinity map shall show those items listed below.
  - ❑ Easily identifiable major roadways.
  - ❑ Geographic features or landmarks.
  - ❑ Water bodies within or adjacent to the construction limits.
  - ❑ Construction site perimeter.
  - ❑ Staging areas and storage yards.
  - ❑ Known wells.
  - ❑ Outline of the off-site drainage area(s) that discharge into the construction site.
  - ❑ Identification of anticipated discharge location(s) where the stormwater from the construction site discharges to a municipal separate storm sewer system or other water body.
  - ❑ General topography.

REQUIRED TEXT:

The construction project vicinity map showing the project location, surface water boundaries, geographic features, construction site perimeter, and general topography, is located in Attachment D. The project contract plan Title Sheet provides additional detail regarding the project location and is also included in Attachment D.

REPLACE THIS WITH A BRIEF NARRATIVE DESCRIPTION OF THE VICINITY TO SUPPORT THE MAP IN ATTACHMENT D. DESCRIBE IMPORTANT FEATURES, DRAINAGE AREAS, OR RECEIVING WATERS THAT COULD NOT BE SHOWN ON THE MAP.

300.5 Unique Site Features

INSTRUCTIONS:

- Describe the source and conditions of the fill material and soils at the construction site (i.e., types of fills/soils, groundwater location and conditions, dewatering operations that may be necessary, etc.). A general description can usually be found in the geotechnical report or other environmental documents. Include any restrictions on construction or additional requirements based on the condition of the soil or the presence of groundwater.

- Provide a brief description of any unique site features (water bodies, wetlands, environmentally sensitive areas, endangered or protected species, etc.) and significant or high-risk construction activities that may impact stormwater quality. Include any unique features or activities within or adjacent to water bodies (such as dredging, dewatering, re-use of aerially deposited lead material, large excavations, or work within a water body).

EXAMPLE:

Project has Fill Material:	☒ Yes	☐ No	
Project has Native Material:	☒ Yes	☐ No	
Hydrologic Soil Group:	☐ A (high infiltration rate)		☐ B (moderate infiltration rate)
	☐ C (slow infiltration rate)		☒ D (very slow infiltration rate
Soil Erodibility:	☐ Slight	☒ Moderate	☐ Severe

The site is underlain by Huerhuero loam, Olivenhain cobbly loam, Redding-Urban land complex, Riverwash, Terrace escarpments, and Urban land (fill of unknown origin). Testing has determined the fill to have been mechanically placed. Mechanically placed fills generally are medium dense silty and clayey sands (typically with Standard Penetration Test (SPT) blow counts of 10 to 15) whereas the hydraulically placed fills are loose, poorly graded fine to medium sands (typically with SPT blow counts of 5 to 10). Some concrete and asphalt was encountered buried in the fills during the geotechnical investigation. The total fill thickness ranges from about 15 to 25 feet. Pile foundations for previous structures have been installed into this formation.

Huerhuero loam is described as loam, underlain by clay to clay loam. The Olivenhain cobbly loam is described as cobbly loam, underlain by very cobbly loam and clay. Redding-Urban land complex is described as gravelly loam, underlain by gravelly clay and loam. The Riverwash is a drainage way, which must be protected in place during construction. The terrace escarpments are highly erodible slopes and must be protected in place during construction. The fill material is described as silty sand with some clayey sand. The average soil characteristics from the test borings in Appendix B

(Lab Testing in Appendix D) of the Project Geotechnical Report are as follows: density is 99.5 pcf; resistance value is 55; and plastic index is 40.

In the geotechnical borings drilled at the site, groundwater was first encountered at more than 6.5 feet, except in the drainage way. At the time of previous explorations and in one recent boring (Boring B-133), groundwater was encountered at approximately 15 to 20 feet below existing grades. Since the groundwater level is expected to fluctuate with seasonal variations, a high groundwater level of +8 feet NAVD88 has been adopted for the project.

Unique Features Onsite: ☒ Water Bodies ☐ Wetlands ☒ Endangered or Protected Species
☒ Environmentally Sensitive Areas ☐ Other ☐ None

The Salmon River is located within the project limits. In order to properly construct the towers, a portion of the construction will occur within the river. An existing culvert will be demolished, and will be replaced by a larger reinforced concrete box within the tributary. Groundwater dewatering and dredging will be required for this portion of the project. Precautions will be taken to ensure the protection of the waterway during construction activities, in accordance with the Clean Water Act Section 404 Permit requirements. The permit application (33 CFR 325) is available for review.

REQUIRED TEXT:

Project has Fill Material: ☐ Yes ☐ No

Project has Native Material: ☐ Yes ☐ No

Hydrologic Soil Group: ☐ A (high infiltration rate) ☐ B (moderate infiltration rate)
☐ C (slow infiltration rate) ☐ D (very slow infiltration rate

Soil Erodibility: ☐ Slight ☐ Moderate ☐ Severe

Unique Features Onsite: ☐ Water Bodies ☐ Wetlands ☐ Endangered or Protected Species
☐ Environmentally Sensitive Areas ☐ Other ☐ None

IF THERE ARE UNIQUE PROJECT FEATURES, REPLACE THIS WITH ADDITIONAL NARRATIVE TEXT, OTHERWISE, DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

300.6 Contact Information for Responsible Parties

INSTRUCTIONS:

- For the following responsible parties, provide name, title, company or agency, address, phone number,emergency phone number (24/7), and email address:
  - ❑ WPC Manager/QSD
  - ❑ Qualified SWPPP Developer (if WPC Manager did not develop SWPPP)

- ❑ Resident Engineer
- ❑ Contractor
- ❑ Contractor Site Manager (if different then Contractor)
- ❑ QSP (if appointed)
- ❑ Erosion and Sediment Control Provider
- ❑ Stormwater Sampling and Testing Agent

- Provide contact information for anyone who will assist the Contractor's WPC Manager in performing the WPC Manager duties, such as a Qualified SWPPP Practitioner or stormwater inspector. Edit the template below to enter the name, title, company, address, telephone number, emergency telephone number (24/7), and email address. Also provide training records of other Contractor-designated responsible water pollution control personnel in Attachment E.
- If an Active Treatment System (ATS) is used, provide contact information for the person responsible for the ATS. Edit the template below to enter the name, title, company, address, telephone number, emergency phone number (24/7) and email address.
- The contact information provided in this section is required by Section VII.B.4 of the CGP. The SWPPP must include a list of names of all Contractors, subcontractors, and individuals who will be directed by the WPC Manager.

REQUIRED TEXT:

The following parties are responsible for this SWPPP:

WPC Manager

Name:	**Insert WPC Manager/QSD's Name-then TAB.**
Title:	Water Pollution Control Manager
Company:	**Insert Contractor's Company Name-then TAB.**
Address:	**Insert Address 1 then press ENTER to insert Address 2 or TAB to next field.** **Insert City, State, and ZIP-then TAB.**
Phone Number:	**Insert Telephone Number(s)-then TAB.**

Emergency Phone Number (24/7):	**Insert Telephone Number(s)-then TAB.**
Email address:	**Insert Email Address-then TAB.**

REQUIRED TEXT when the WPC MANAGER did NOT develop the SWPPP for the Contractor:

Qualified SWPPP Developer (QSD)

Name:	**Insert QSD's Name-then TAB.**
Title:	Qualified SWPPP Developer
Company:	**Insert Company Name-then TAB.**
Address:	**Insert Address 1 then press ENTER to insert Address 2 or TAB to next field.** **Insert City, State, and ZIP-then TAB.**
Phone Number:	**Insert Telephone Number(s)-then TAB.**
Email Address:	**Insert Email Address-then TAB.**

REQUIRED TEXT:

Resident Engineer

Name:	**Insert RE's Name-then TAB.**
Title:	Resident Engineer
Agency:	**Insert Name of Lead Agency-then TAB.**
Address:	**Insert Address 1 and press ENTER to insert Address 2 or TAB to next field.** **Insert City, State, and ZIP-then TAB.**
Phone Number:	**Insert R.E's Telephone Number-then TAB.**
Emergency Phone Number (24/7):	**Insert RE's Telephone Number-then TAB.**
Email Address:	**Insert Email Address-then TAB.**

Contractor

Name:	**Insert Owner/Representative's Name-then TAB.**

Title:	Contractor
Company:	**Insert Contractor's Company Name-then TAB.**
Address:	Insert Address 1 then press ENTER to insert Address 2 or TAB to next field. Insert City, State, and ZIP-then TAB.
Phone Number:	**Insert Telephone-then TAB.**
Emergency Phone Number (24/7):	**Insert Telephone-then TAB.**

Email Address: **Insert Email Address-then TAB.**

REQUIRED TEXT when the Contractor has a Site Manager:

Contractor Site Manager

Name:	**Insert Contractor Site Manager's Name-then TAB.**
Title:	**Insert Title-then TAB**
Company:	**Insert Company Name-then TAB.**
Address:	**Insert Address 1 then press ENTER to insert Address 2 or TAB to next field.** **Insert City, State, and ZIP-then TAB.**
Phone Number:	**Insert Telephone Number(s)-then TAB.**
Emergency Phone Number (24/7):	**Insert Telephone Number(s)-then TAB.**
Email Address:	**Insert Email Address-then TAB.**

REQUIRED TEXT if a QSP is appointed:

Qualified SWPPP Practitioner (QSP)

Name:	**Insert QSP's Name-then TAB.**
Title:	**Insert Title-then TAB**
Company:	**Insert Company Name-then TAB.**
Address:	**Insert Address 1 then press ENTER to insert Address 2 or TAB to next field.** **Insert City, State, and ZIP-then TAB.**
Phone Number:	**Insert Telephone Number(s)-then TAB.**

Emergency Phone Number (24/7):	**Insert Telephone Number(s)-then TAB.**
Email Address:	**Insert Email Address-then TAB.**

Erosion and Sediment Control Provider

Name:	**Insert Erosion and Sediment Control Provider Representative's Name-then TAB.**
Title:	**Insert Title-then TAB**
Company:	**Insert Company Name-then TAB.**
Address:	**Insert Address 1 then press ENTER to insert Address 2 or TAB to next field.** **Insert City, State, and ZIP-then TAB.**
Phone Number:	**Insert Telephone Number(s)-then TAB.**
Emergency Phone Number (24/7):	**Insert Telephone Number(s)-then TAB.**
Email Address:	**Insert Email Address-then TAB.**

Stormwater Sampling and Testing Agent

Name:	**Insert Sampling and Testing Agent's Name-then TAB.**
Title:	**Insert Title-then TAB**
Company:	**Insert Company Name-then TAB.**
Address:	**Insert Address 1 then press ENTER to insert Address 2 or TAB to next field.** **Insert City, State, and ZIP-then TAB.**
Phone Number:	**Insert Telephone Number(s)-then TAB.**
Emergency Phone Number (24/7):	**Insert Telephone Number(s)-then TAB.**
Email Address:	**Insert Email Address TAB.**

REPLACE THIS WITH ADDITIONAL NAMES AND ASSOCIATED RESPONSIBILITIES OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

300.7 List of Subcontractor and Materials Suppliers

INSTRUCTIONS:

- List the names of all subcontractors. Provide subcontractor contact information in SWPPP File Category 20.21: Subcontractor Contact Information and Notification Letters. Include each subcontractor's name, type of work performed, contact name, phone number and emergency telephone number (24/7). This information will be used by the WPC Manager to implement Rain Event Action Plans.
- A sample subcontractor SWPPP Notification letter and sample subcontractor contact log are provided in Appendix D. The subcontractor SWPPP Notification letter should include pertinent subcontractor water pollution control requirements and address subcontractor responsibility for compliance with SWPPP and CGP. Include copies of subcontractor notification letters in SWPPP File Category 20.21: Subcontractor Contact Information and Notification Letters.
- If additional subcontractors are added during the progress of the work:
  - ❑ Add the subcontractor to the subcontractor contact log in SWPPP File Category 20.21: Subcontractor Contact Information and Notification Letters, include appropriate contact information
  - ❑ Send the subcontractor a SWPPP Notification Letter
  - ❑ Include a copy of SWPPP Notification Letter in SWPPP File Category 20.21: Subcontractor Contact Information and Notification Letters.
- A SWPPP amendment is not required when adding subcontractors.
- List the names of major material suppliers who will delivery materials to the project site who must comply with requirements of the SWPPP. Notify the suppliers of pertinent water pollution control BMP(s) that apply to the type(s) of materials that they will deliver to the project site. It is the material supplier's responsibility to comply with the SWPPP.
- A sample SWPPP Notification Letter and sample contact log are provided in Appendix D for the project's material suppliers. Include copies of material supplier notification letters in SWPPP File Category 20.22: Material Supplier Contact Information and Notification Letters.

REQUIRED TEXT:

The following subcontractors will be working on this project:

1. **Insert Subcontractor Name/Company-then TAB.**

   SWPPP Responsibility: **Insert Responsibilities-then TAB.**

2. **Insert Subcontractor Name/Company-then TAB.**

   SWPPP Responsibility: **Insert Responsibilities-then TAB.**

3. **Insert Subcontractor Name/Company-then TAB.**

   SWPPP Responsibility: **Insert Responsibilities-then TAB.**

4. [LIST]

INCLUDE ALL AVAILABLE SUBCONTRACTOR NAMES AND THEIR RESPONSIBILITIES, THEN DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

Contact information for each subcontractor will be provided in the SWPPP Notification log in SWPPP File Category 20.21: Subcontractor Contact Information and Notification Letters. Contact information shall include subcontractor name, type of work performed, contact name, phone number and emergency telephone number (24/7).

The following materials suppliers will be delivering materials to the project site and must comply with pertinent SWPPP requirements:

1. **Insert Material Supplier Name/Company-then TAB.**

2. **Insert Material Supplier Name/Company-then TAB.**

3. **Insert Material Supplier Name/Company-then TAB.**

4. [LIST]

INCLUDE ALL AVAILABLE MATERIAL SUPPLIER NAMES, THEN DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

Contact information for each material supplier will be provided in the SWPPP Notification log in SWPPP File Category 20.22: Material Supplier Contact Information and Notification Letters. Contact information shall include company name, type of material supplied, contact name and phone number.

All subcontractors and material suppliers shall be notified that the project is covered by the following permits issued by the SWRCB.

- SWRCB Order No. 99-06-DWQ, NPDES No. CAS000003, National Pollutant Discharge Elimination System (NPDES) Permit, Statewide Storm Water Permit and Waste Discharge Requirements (WDRs) for the State of California, Department of Transportation. July 15, 1999.

- SWRCB Order No. 2009-0009-DWQ, NPDES General Permit No. CAS000002, National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, September 02, 2009 (Construction General Permit).

Each subcontractor and material supplier shall also be notified that the project has a SWPPP and the pertinent water pollution control BMPs with which the subcontractor or material supplier must comply. If subcontractors or material suppliers are added during the project, appropriate notification that the project has a SWPPP and the pertinent water pollution control BMPs shall be given to the subcontractor or materials supplier prior to working or supplying materials on the project site.

A SWPPP Notification Letter shall be sent to all subcontractors and material suppliers. A sample notification letter and notification letter log is provided in Appendix D. A copy of SWPPP Notification Letters sent to subcontractors and material suppliers are in SWPPP File Category 20.21: Subcontractor Contact Information and Notification Letters or 20.22 Material Supplier Contact Information and Notification Letters. Notification letter logs and contact information are filed in SWPPP File Category 20.21: Subcontractor Contact Information and Notification Letters and File Category 20.22: Material Supplier Contact Information and Notification Letters.

300.8 Training

INSTRUCTIONS:

- Describe the training for the following individuals responsible for the SWPPP:
  - ❑ WPC Manager
  - ❑ QSD, if SWPPP not developed by WPC Manager
  - ❑ QSP, if assisting WPC Manager
  - ❑ Stormwater inspector, if assisting the WPC Manager
- The Contractor's WPC Manager (QSD) shall have a minimum of 24 hours (3 days) of formal stormwater pollution prevention training and required qualifications and training under the Construction General Permit (CAS000002), Section VII, Training Qualifications and Certification Requirements.
- By September 2, 2011, the WPC Manager, QSD, and QSP must have attended an appropriate SWRCB-sponsored or approved QSD/QSP training course.
- Training of water quality sampling personnel shall be in accordance with the *Caltrans Construction Site Monitoting Program Guidance Manual*, latest edition.
- Informal stormwater training shall be documented using CEM-2023 Stormwater Training Record provided in Appendix E.
- Formal stormwater training shall be documented using CEM-2023 Stormwater Training Record and by providing class completion documentation. Documentation shall be submitted to the RE within 5 days of completion of training.
- A log of all stormwater training shall be maintained that can be used to prepare the Stormwater Annual Report. Form CEM-2024 Stormwater Training Log is provided in Appendix F.
- Training records shall be filed in SWPPP File Category 20.23: Contractor Personnel Training Documentation.
- Training information, consisting of the following, shall be provided in the *Stormwater Annual Report*:
  - ❑ documentation of all training for individuals responsible for all activities associated with compliance with CGP
  - ❑ documentation of all training for individuals responsible for BMP installation, inspection, maintenance, and repair
  - ❑ documentation of all training for individuals responsible for overseeing, revising, and amending the SWPPP

EXAMPLE:

John Doe, the WPC Manager for this project, meets the Qualified SWPPP Developer (QSD) qualifications and certification requirements of Section VII, Training Qualifications and Certification Requirements, of the CGP based on:

- California Registered Professional Civil Engineer, C XXXXX
- California State Water Board QSD Certification, XXXXXXXXX

The WPC Manager has received the following training:

- 24-hour Caltrans Training Provided by ABC Consultant
- Attended the 2001 International Erosion Control Association (IECA) 3-day Conference
- QSD Certification Training Seminar by California Stormwater Quality Association (CASQA), San Francisco, CA, October 27-29, 2010

The WPC Manager has the following SWPPP development and implementation experience:

- developed 24 SWPPPs for complex sites
- 15 years of experience as a WPC Manager working on 14 project sites

John Doe, Jr. developed the project SWPPP and meets the Qualified SWPPP Developer (QSD) qualifications and certification requirements of Section VII, Training Qualifications and Certification Requirements, of the CGP based on:

- California Registered Landscape Architect, LA XXXX
- California State Water Board QSD Certification, XXXXXXXXX

The QSD has received the following training:

- 24-hour Caltrans Training provided by Mountain College
- SWPPP Preparation training sponsored by Orange County Storm Water Program, June 2002
- Attended the 1999, 2000, 2001, and 2002 IECA 3-day conferences
- Received certification as a Certified Professional in Erosion and Sediment Control (CPESC) in July 2001
- Attended "NPDES Storm Water Permit Compliance" course in spring 2002, sponsored by the American Society of Civil Engineers (ASCE)
- QSD Certification Training Seminar by Alegre Environmental, San Marcos, CA, December 27-29, 2010

The QSD has the following SWPPP development experience:

- prepared over 15 project-specific SWPPPs

- over 15 years of experience in storm drain design, hydrology, and hydraulics

A QSP will be assisting the WPC Manager to ensure all required BMPs are implemented and perform non-stormwater and stormwater visual observations, sampling and analysis. The QSP for this project is John Doe, II.

By September 2, 2011, the QSP must meet the qualifications and certification requirements of Section VII, Training Qualifications and Certification Requirements, of the CGP. If the QSP qualifies as a QSD or meets the certification requirement for a QSP, then the registration or certification is shown below.

- California State Water Board QSP Certification, State Water Board Exam, Oakland, CA, January 10, 2011 (Certification pending)

The QSP has received the following training.

- 24-hour Caltrans Training Provided by XYZ Consultant
- QSP Certification Training Seminar by QASQA, San Diego, CA, January 5-7, 2011

The QSP has the following SWPPP implementation experience:

- 5-years experience in SWPPP site inspections and visual monitoring

Ongoing, formal training sessions for individuals responsible for SWPPP development and implementation shall be selected from one of the following organizations.

- City of Los Angeles Storm Water Program
- County of Los Angeles Storm Water Program
- State of California RWQCB
- IECA, Association of Bay Area Governments (ABAG)- and/or Associated Gerneral Contractors (AGC)-sponsored training
- United States Environmental Protection Agency (USEPA)-sponsored training
- recognized municipal stakeholder organizations throughout California
- professional organizations and societies in the building and construction field

Contractor or subcontractor employees responsible for water pollution control BMP installation, maintenance and repair have received the following training

- BMP Best Practices provided by ABC Consultants
- Contractor and subcontractor employees shall be trained prior to working on the site in the following subjects:
    - water pollution control rules and regulations
    - implementation and maintenance for:

  - temporary soil stabilization
  - temporary sediment control
  - tracking control
  - wind erosion control
  - material pollution prevention control
  - waste management
  - non-stormwater management
  - identifying and handling hazardous substances
  - potential dangers to humans and the environment from spills and leaks or exposure to toxic or hazardous substances

- Informal employee training shall include tailgate site meetings to be conducted weekly; tailgate meetings should address the following topics:
  - water pollution control BMP deficiencies and corrective actions
  - BMPs that are required for work activities during the week,
  - spill prevention and control
  - material delivery, storage, use, and disposal
  - waste management
  - non-stormwater management

A summary of formal and informal training of various personnel is shown in Attachment E. Copies of applicable training certificates (e.g., Caltrans 24-Hour Training Class and CGP Training) for the WPC Manager and the QSD (and others, if applicable) are included in Attachment E.

Training records for project personnel shall be updated by completing the CEM-2023 Stormwater Training Record form, available in Appendix E, and the CEM-2024 Stormwater Training Log form, available in Appendix F. Records of training, with training certificates attached, when applicable, and the training log will be kept in SWPPP File Category 20.23: Contractor Personnel Training Documentation. Personnel training records with required documentation attached and an updated training log shall be submitted to the RE within five (5) days of completion of training.

Training information, consisting of the following, shall be provided in the Stormwater Annual Report:

- documentation of all training for individuals responsible for all activities associated with compliance with CGP
- documentation of all training for individuals responsible for BMP installation, inspection, maintenance repair; and
- documentation of all training for individuals responsible for overseeing, revising, and amending the SWPPP

REQUIRED TEXT:

[Insert WPCM Name], the WPC Manager for this project, meets the Qualified SWPPP Developer (QSD) qualifications and certification requirements of Section VII, Training Qualifications and Certification Requirements, of the CGP based on:

- INSERT COMPANY, NAME AND PROFESSIONAL REGISTRATION OR OTHER QUALIFICATIONS (INCLUDING INFORMATION REGARDING OTHER TRAINING COURSES, SUCH AS CALTRANS SWPPP PREPARATION TRAINING) OF PERSON THAT PREPARED THE SWPPP

The WPC Manager has received the following training:

- [LIST]

The WPC Manager has the following SWPPP development and implementation experience:

- [LIST]

REQUIRED TEXT when the SWPPP is NOT developed by the WPC Manager:

[Insert QSD Name] developed the project SWPPP and meets the Qualified SWPPP Developer (QSD) qualifications and certification requirements of Section VII, Training Qualifications and Certification Requirements, of the CGP based on:

- INSERT COMPANY, NAME AND PROFESSIONAL REGISTRATION OR OTHER QUALIFICATIONS (INCLUDING INFORMATION REGARDING OTHER TRAINING COURSES, SUCH AS CALTRANS SWPPP PREPARATION TRAINING) OF PERSON THAT PREPARED THE SWPPP.

The QSD has received the following training:

- [LIST]

The QSD has the following SWPPP development experience:

- [LIST]

REQUIRED TEXT when a QSP will be assisting the WPC Manager:

A QSP will be assisting the WPC Manager to ensure that: required BMPs are implemented; non-stormwater and stormwater visual observations and sampling and analysis are performed; BMP maintenance is completed; and weekly training is provided. By September 2, 2011, [Insert QSP Name], the QSP for this project, must meet the qualifications and certification requirements of Section VII, Training Qualifications and Certification Requirements, of the CGP based on:

- INSERT COMPANY, NAME AND PROFESSIONAL REGISTRATION OR OTHER QUALIFICATIONS (INCLUDING INFORMATION REGARDING OTHER TRAINING COURSES, SUCH AS CALTRANS SWPPP PREPARATION TRAINING) OF PERSON THAT PREPARED THE SWPPP

The QSP has received the following training:

- [LIST]

The QSP has the following SWPPP implementation experience:

- [LIST]

REQUIRED TEXT when a Stormwater Inspector will be assisting the WPC Manager:

A stormwater inspector will be assisting the WPC Manager to ensure that: required BMPs are implemented; non-stormwater and stormwater visual observations and sampling and analysis are performed; BMP maintenance is completed; and weekly training is provided.

The stormwater inspector has received the following training:

- [LIST]

The stormwater inspector has the following SWPPP implementation experience:

- [LIST]

REQUIRED TEXT:

Ongoing, formal training sessions for individuals responsible for SWPPP development and implementation shall be selected from one of the following organizations.

- City of Los Angeles Storm Water Program
- County of Los Angeles Storm Water Program
- State of California RWQCB
- IECA-, ABAG- and/or AGC-sponsored training
- USEPA-sponsored training
- recognized municipal stakeholder organizations throughout California
- professional organizations and societies in the building and construction field
- [LIST]

Contractor or subcontractor employees responsible for water pollution control BMP installation, maintenance and repair have received the following training:

- [LIST]

Contractor and subcontractor employees shall be trained prior to working on the site in the following subjects:

- water pollution control rules and regulations
- implementation and maintenance for:
  - temporary soil stabilization
  - temporary sediment control
  - tracking control
  - wind erosion control
  - material pollution prevention control
  - waste management
  - non-stormwater management
- identification and handling of hazardous substances
- potential dangers to humans and the environment from spills and leaks or exposure to toxic or hazardous substances

Informal employee training shall include tailgate site meetings to be conducted weekly; tailgate meetings should address the following topics:

- water pollution control BMP deficiencies and corrective actions
- BMPs that are required for work activities during the week
- spill prevention and control
- material delivery, storage, use, and disposal
- waste management
- non-stormwater management procedures

A summary of formal and informal training of various personnel is shown in Attachment E. A copy of all training certificate(s) (e.g., Caltrans 24-Hour Training Class and CGP Training) for the WPC Manager and the Qualified SWPPP Developer are included in Attachment E.

Training records for project personnel shall be updated by completing the CEM-2023 Stormwater Training Record form, in Appendix E, and the CEM-2024 Stormwater Training Log form, in Appendix F. Records of training, with training certificates attached, when applicable, and the training log will be kept in SWPPP File Category 20.23: Contractor Personnel Training Documentation. Personnel training records, with required documentation attached and an updated training log shall be submitted to the RE within five (5) days of completion of training.

Training information, consisting of the following items, shall be provided in the Stormwater Annual Report:

- documentation of all training for individuals responsible for all activities associated with compliance with CGP

- documentation of all training for individuals responsible for BMP installation, inspection, maintenance repair, and

- documentation of all training for individuals responsible for overseeing, revising, and amending the SWPPP

[INSERT ANY ADDTIONAL TEXT REGARDING TRAINING OF PERSONNEL]

SECTION 400
REFERENCES, OTHER PLANS, PERMITS AND AGREEMENTS

INSTRUCTIONS:

- Include a Separator and Tab for Section 400 for ready reference.
- Identify and prepare a list of the documents referenced in the SWPPP. Contract plans and specifications, reports, design, and stormwater management-related documents used to prepare the SWPPP shall also be included in the references. Documents that shall be referenced are: all permits that apply to the project (federal, state and local), such as Fish and Game, U.S. Army Corps of Engineers, California Department of Toxic Substances Control (DTSC) Aerially Deposited Lead Reuse Variance, local RWQCB permits or specific requirements, etc.
- Referenced materials may also include: on-site project information such as the Contract Plans and Specifications, Geotechnical Report, Drainage Report, Stormwater Data Report, District-prepared Conceptual SWPPP, other reports provided by the owner, regulatory guidance from federal or state agencies, and published technical specifications.
- The reference for each document shall include:
    - complete name of the referenced document
    - number of the document (if applicable)
    - author
    - date published
    - document date/revision that applies
- Referenced documents shall be kept on site and be readily available for review.
- The SWPPP shall incorporate appropriate elements of other plans or permits required by local, state, or federal agencies.
- A copy of the Caltrans Statewide Permit No. CAS000003, and the General Permit No. CAS000002 shall be included in Attachment F.
- Any special requirements for each permit shall be described. Additional bullets should be inserted as needed. Bullets should be deleted if not needed.
- A copy of all other plans/permits/agreements shall be included in Attachment F of the SWPPP.

EXAMPLE:

The following documents are made a part of this SWPPP by reference:

- Standard Plans and Standard Specifications, dated May 2006
- Contract Plans and Special Provisions for Contract No. xx-xxxxxx
- SWRCB Order No. 99-06-DWQ, NPDES No. CAS000003, National Pollutant Discharge Elimination System (NPDES) Permit, Statewide Storm Water Permit and Waste Discharge Requirements (WDRs) for the State of California, Department of Transportation. July 15, 1999
- SWRCB Order No. 2009-0009-DWQ, NPDES General Permit No. CAS000002, National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, September 02. 2009 (Construction General Permit)
- *Caltrans Statewide Storm Water Management Plan* (SWMP), dated May, 2003
- *Caltrans Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual*, dated March, 2007
- RWQCB, Los Angeles Region, *Water Quality Control Plan*, adopted June 13, 1994
- *Conceptual Stormwater Pollution Prevention Plan* (CSWPPP) prepared for the Division of Toll Bridge Program, Contract No. 04-013014. Prepared by California Department of Transportation, District 04, Division of Toll Bridge Engineering Program, Environmental Engineering Branch, October 1999
- *Storm Water Management for Construction Activities – Developing Pollution Prevention Plans and Best Management Practices*, USEPA 832-R-92-005, October 1992
- *Caltrans Construction Site Storm Water Quality Guidance Manual* , December 2003
- *Caltrans Water Quality Data Reporting Protocols* , November 2003
- Attachment F includes copies of the Caltrans Permit, the Construction General Permit (CGP), and other local, state, and federal plans and permits. The following listed other local, state, and federal plans and permits are included in Attachment F :
    - RWQCB, Los Angeles Region, Waiver of Clean Water Act Section 401 Water Quality Certification, dated xx/xx/xx
    - U.S. Army Corps of Engineers, Clean Water Act Section 404, Nationwide Permit 26- authorization letter, dated xx/xx/xx
    - California Department of Fish and Games, Streambed Alternation Agreement II 564-xx, dated xx/xx/xx

REQUIRED TEXT:

The documents listed below are made a part of this SWPPP by reference:

- Standard Plans and Specifications, dated TYPE MONTH AND YEAR HERE

- Contract Plans and Special Provisions for Contract No. INSERT NUMBER, dated INSERT DATE, prepared by CALTRANS OR OTHER ENTITY PREPARING PLANS

- SWRCB Order No. 99-06-DWQ, NPDES No. CAS000003, National Pollutant Discharge Elimination System (NPDES) Permit, Statewide Storm Water Permit and Waste Discharge Requirements (WDRs) for the State of California, Department of Transportation (Caltrans), July 1999

- SWRCB-Order No. 2009-0009-DWQ, NPDES General Permit No. CAS000002, National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated With Construction and Land Disturbance Activities (Construction General Permit), September 2009

- *Caltrans Statewide Storm Water Management Plan* (SWMP), dated TYPE MONTH AND YEAR HERE

- *Caltrans Stormwater Pollution Prevention Plan (SWPPP) andWater Pollution Control Program(WPCP) Preparation Manual,* dated TYPE MONTH AND YEAR HERE

- *Caltrans Construction Site Monitoring Program Guidance Manual,* dated TYPE MONTH AND YEAR HERE

- (CLICK AND TYPE TO IDENTIFY APPLICABLE RWQCB BASIN PLAN)

- (CLICK AND TYPE OTHER REFERENCES HERE)

Attachment F includes copies of the Caltrans Permit, the CGP, and other local, state, and federal plans and permits. The following listed other local, state, and federal plans and permits are included in Attachment F:

- (LIST NAME(S), DATE(S) AND SOURCES OF OTHER LOCAL, STATE OR FEDERAL PLANS OR PERMITS HERE)

SECTION 500
DETERMINATION OF CONSTRUCTION SITE BEST MANAGEMENT PRACTICES

500.1 Pollutant Sources

500.1.1 Inventory of Materials and Activities that May Pollute Stormwater

INSTRUCTIONS:

- Include a Separator and Tab for Section 500 for ready reference.
- List all construction materials that will be used that have the potential to contribute to the discharge of pollutants to stormwater.
- List all construction activities (i.e., any construction or demolition activity, including, but not limited to, clearing, grubbing, grading, excavation, underground improvements, hardscape and/or landscape improvements) that have the potential to contribute sediment or other pollutants to stormwater discharges.
- Conduct an assessment of materials and equipment expected to be used on site that have the potential to contaminate stormwater runoff and prepare a plan to prevent or minimize the opportunity of potential pollutants to come into contact with stormwater or non-stormwater discharges.
- Select BMPs to eliminate or reduce the potential pollutants identified in the assessment of materials and equipment. Use the example and the BMP selection tables in the following sub-sections to confirm that all appropriate BMP controls are included.
- Provide a narrative description of each BMP selected, along with its implementation plan.

EXAMPLE:

The WPC Manager shall conduct an assessment of materials and equipment expected to be used on site that have the potential to contaminate stormwater runoff, and shall prepare a Materials Management Plan. The WPC Manager shall consider the following as part of the Materials Management Plan:

- the quantity, physical characteristics (e.g., liquid, powder, solid), and locations of each potential pollutant source handled, produced, stored, recycled, or disposed at the site
- the degree to which pollutants associated with those materials may be exposed to and mobilized by contact with stormwater
- the direct and indirect pathways that may result in exposure of pollutants to stormwater or authorized non-stormwater discharges

- the effectiveness of BMPs to reduce or prevent pollutants in stormwater discharges and authorized non-stormwater discharges

From this assessment, the WPC Manager shall determine the best strategy for preventing the contact of potential pollutants—during delivery, staging, usage, storage, and waste management—from coming in contact with stormwater. The Potential Pollutant Inventory must include all non-visible pollutants that are known or should be known to occur on the construction site, including, but not limited to, materials that:

- are being used in construction activities
- are being stored on the construction site
- were spilled during construction operations and not cleaned up
- were stored (or used) in a manner that created the potential for a release of the materials during past land use activities
- were spilled during previous land use activities and not cleaned up
- were applied to the soil as part of past land use activities

The following is a list of materials or substances commonly associated with construction activities as described in the Standard Plans and Standard Specifications, dated May 2006:

- dust palliative products (e.g. magnesium chloride, calcium chloride, and natural brines)
- waste materials associated with demolition activities [e.g., asbestos, wood debris; Freon; aluminum, zinc, masonry block rubble, and plain cement concrete (PCC) rubble]
- materials and waste associated with roadway paving operations (e.g., hot asphalt, asphalt emulsion, liquid asphalt, any type of asphalt concrete, cold mix, crumb rubber, acidity, alkalinity, and sawcutting slurries)
- materials and waste associated with hardscape improvements, such as drainage structures, median barriers, and bridge construction (e.g. Portland cement, masonry blocks, sealants, steel slag, metals, foundry sand, fly ash, mortor, treated wood, and rinse water)
- base, subbase, and stockpiled materials associated with hardscape and underground improvements (e.g., cement-bound granular mixtures, hydraulic road binder bound mixtures, soil cement, and soil treated by hydraulic road binder)contaminated soil [e.g., methyl tert-butyl ether (MTBE), benzene, and total petroleum hydrocarbons (TPH)]
- cleaning products (e.g., acids, chlorine, detergents, solvents, thinners, ammonia, lye, caustic sodas, bleaching agents, chromate salts, and tri-sodium phosphate)
- joint and curing compounds (e.g., patching compounds, levelers, drywall joint compounds, polymeric compounds, water reducing admixtures, sealants, and waterproofing coatings)
- concrete curing compounds (e.g., floor hardners, methacrylate, and epoxy resin products)
- painting products (e.g., paint, dyes, stripping pigments, sanding residue, paint strippers, acetone, methyl ethyl ketone, resins, sealants, solvents, thinners, lacquers, varnish, enamels, gum spirit, and turpentine)
- sandblasting materials and waste products (e.g. sandblasting abrasives, rust, rubble, and paint)

- raw landscaping materials and wastes (e.g. plant materials, aluminum sulfate, elemental sulfur, herbicides, organic and inorganic fertilizers and nutrients such as nitrogen, phosphorous, and potassium, pesticides, gypsum, lime, mulch, sand, gravel, and topsoil)

- soil amendments/stabilization products (e.g. polymer/copolymer, straw/mulch, lignin sulfonate, psyllium, guar/plant gums, and gypsum)

- treated wood products (e.g. Ammoniacal-copper-arsenate, Ammoniacal-copper-zinc-arsenate, borate, copper-chromium-arsenic, copper naphthenate, and creosote)

- materials and waste associated with building construction [e.g. volatile organic compounds (VOCs), metals, phenolics and mineral spirits; copper, formaldehydes, and creosote; phenolics, asbestos, benzene, phenols and naphthalene; metals, plated products, acidity/alkalinity, chromium, lead, zinc, tin, copper, aluminum, treated wood products, sediments, minerals, and asbestos]

- line flushing products (e.g. chlorinated water)

- vehicle and equipment fluids (e.g., TPH and fuels, oils and grease, coolants/antifreeze, solvents, sealers, acids, benzene and derivatives, lubricants, and discharges from batteries)

- portable toilet waste products [e.g., bacteria, biochemical oxygen demand (BOD), pathogens, and sanitary wastes]

- general litter (e.g., plastic, paper, cigarettes, other dry garbage, wood products, steel, and packaging)

This list is not all-inclusive and the WPC Manager shall update the Materials Management Plan and the Potential Pollutant Inventory in accordance with on-site conditions, documenting all materials or equipment that have been received or produced on site that are not designed to be outdoors and exposed to environmental conditions and are potential sources of stormwater contamination. An inventory form has been included as part of the Construction Site Monitoring Program (CSMP) to document any additional potential pollutants.

Some construction activities have the potential to generate pollutants in stormwater discharges if no BMPs are implemented. Construction activities can be grouped into categories for the purpose of identifying likely pollutants. Activities and areas, such as concrete pours and curing, concrete waste management areas, soil amendments (e.g. fly ash and lime), and mortar and stucco mixing, application, and waste management areas, should be monitored for high pH in site discharges.

The following table contains a list of construction activities that have the potential to contribute pollutants, including sediment, to stormwater discharges. All potential pollutants and their locations shall be listed on the Potential Pollutant Inventory. Details for controlling erosion and potential pollutant transport are discussed in Sections 500.3.1 through 500.3.5. Potential non-stormwater and waste management-related discharges are further described in Sections 500.4.1 and 500.4.2, respectively.

TABLE 500.1.1 ANTICIPATED CONSTRUCTION SITE ACTIVITIES WITH THE POTENTIAL TO DISCHARGE POLLUTANTS	
☒Demolition	☐Structure Demolition/Removal Over or Adjacent to Water ☒Building Demolition (Structure, HVAC, insulation) ☒Hardscape Demolition (Parking areas, curbs, gutters, sidewalks)
☒Earthwork	☒Clearing and Grubbing ☒Grading Activities ☒Soil Import and Export ☒Stockpiling ☒Excavation ☒Disturbance of Contaminated Soil ☒Dewatering ☐Temporary Stream Crossing ☒Drainage Construction ☐Dredging ☒Pile Driving ☒Utilities ☒Line Flushing (hydrostatic test water, pipe flushing) ☒Landscaping, Planting and Plant Maintenance, Amending of Soil and Mulching ☐Material and Equipment Use Over Water
☒Masonry, Concrete, Asphalt Work	☒Saw Cutting (cement and brick dust, saw cut slurries) ☒Paving and Grinding ☒Concrete Placement (colored chalks) ☒Concrete Curing (curing and glazing compounds) ☒Concrete Finishing (surface cleaners) ☒Concrete Waste Management
☒Building Construction	☒Paint Preparation, Painting, Stenciling, and Etching ☒Material Use ☒Material Delivery and Storage ☒Adhesives (glues, resins, epoxy synthetics, caulks, sealers, putty, sealing agents and coal tars) ☒Cleaning, Polishing (metal, ceramic, tile), and Sandblasting Operations ☒Plumbing (solder (lead, tin), flux (zinc chloride), pipe fitting) ☒Framing (sawdust, particle board dust and treated woods) ☒Interior Construction (tile cutting, flashing, saw-cutting drywall, galvanized metal in nails and fences, and electric wiring)
☒Equipment Use	☒Vehicle and Equipment Cleaning ☒Vehicle and Equipment Fueling ☒Vehicle and Equipment Maintenance
☒Waste Management	☒Hazardous Waste Management ☒Solid Waste Management (litter, trash, and debris) ☒Liquid Waste Management (wash water) ☒Sanitary Septic Waste Management (portable toilets, disturbance of existing sewer lines)

Materials Management Plan

Potential pollutants shall not be stored within 50 feet of stormwater conveyance features or concentrated flow paths. In addition, non-stormwater discharges shall not be made within 50 feet of potential pollutants.

Materials will be stored in various stockpiles based on whether they are designed to be outdoors or a potential pollutant. The following stockpiles will be covered and bermed prior to a forecasted storm event:

- contaminated soil
- soil amendments

Some materials, such as soil amendments, are designed to be used in a manner that will result in exposure to stormwater. In these cases, the materials shall be applied according to the manufacturer's instructions and at a time when they are unlikely to be washed away. Other construction materials must be stored, applied, and disposed of properly, in a manner protective of water quality.

Of significant concern for construction discharges are the pollutants found in materials used in large quantities, which are exposed to direct precipitation, such as recycled materials or by-products of combustion. The following materials will be kept on pallets off the ground and covered prior to a forecasted storm event:

- calcium chloride
- Portland cement

The following chemicals will be kept in the flammable containment cabinet on the south side of the construction trailer:

- acetone
- methyl ethyl ketone

The following materials will have their own secondary containment containers:

- diesel
- fuel oil

Vehicles and equipment will be placed in a bermed/contained area if:

- they need to be cleaned
- they are leaking
- they need maintenance
- they need to be refueled
- they are not designed to be exposed to inclement weather

Petroleum hydrocarbons and trichloroethene (TCE) will be identified by visual methods. Petroleum hydrocarbon is usually visible as a sheen, a bright band of color, or a brownish layer. TCE is denser than water and usually is found in a globular form. If there is a leak or spill of these potential pollutants, one of the methods described below will be employed to clean up the area. Refer to the Spill Response and Implementation Plan for additional guidance and disposal requirements.

- Pumping the pollutant into a container.

- Containing the pollutant using trenches or sumps in the adjacent excavation.
- Trapping the pollutant using absorbent booms (hydrocarbons only).
- Trapping the pollutant in red-flagged soils.

Waste materials will be stored in specific dumpsters based on whether they are a potential pollutant, designed to be outdoors, or recyclable. Waste material will be cleaned up at the end of each day and disposed of properly. Waste-containing asbestos shall be properly handled and contained at all time. Dumpsters containing hazardous particulate waste shall be covered or the waste removed from site prior to a forecasted storm event.

Baker tanks containing concrete washout shall be covered or inspected for sufficient capacity prior to a forecasted storm event.

The following areas will be inspected for leaks or spills prior to a forecasted storm event:

- vehicle and equipment storage and maintenance areas
- portable toilets

REQUIRED TEXT:

The following table contains a list of construction activities that have the potential to contribute pollutants, including sediment, to stormwater discharges. All potential pollutants, except sediment, and their locations shall be listed in this section, and, where possible, the locations shall be shown on the WPCDs in Attachment BB. Details for controlling these pollutants using soil stabilization and sediment control BMPs are discussed in Sections 500.3.1 through 500.3.5. Potential non-storm water and waste management-related discharges are further described in Sections 500.4.1 and 500.4.2, respectively.

TABLE 500.1.1
ANTICIPATED CONSTRUCTION SITE ACTIVITIES WITH THE POTENTIAL TO DISCHARGE POLLUTANTS

☐ Demolition	☐ Pavement Removal (asphalt concrete, concrete)
	☐ Structure Demolition/Removal over or Adjacent to Water
	☐ Building Demolition (Structure, HVAC, insulation)
	☐ Hardscape Demolition (Parking areas, curbs, gutters, sidewalks)
☐ Earthwork	☐ Clearing and Grubbing
	☐ Grading Activities
	☐ Soil Import and Export
	☐ Stockpiling
	☐ Excavation
	☐ Disturbance of Contaminated Soil
	☐ Dewatering
	☐ Temporary Stream Crossing
	☐ Drainage Construction
	☐ Dredging
	☐ Pile Driving
	☐ Utilities

TABLE 500.1.1 ANTICIPATED CONSTRUCTION SITE ACTIVITIES WITH THE POTENTIAL TO DISCHARGE POLLUTANTS	
	☐ Line Flushing (hydrostatic test water, pipe flushing)
	☐ Landscaping, Planting and Plant Maintenance, Amending of Soil and Mulching
	☐ Material and Equipment Use over Water
☐ Masonry, Concrete, Asphalt Work	☐ Saw Cutting (cement and brick dust, saw cut slurries)
	☐ Paving and Grinding
	☐ Concrete Placement (colored chalks)
	☐ Concrete Curing (curing and glazing compounds)
	☐ Concrete Finishing (surface cleaners)
	☐ Concrete Waste Management
☐ Building Construction	☐ Paint Preparation, Painting, Stenciling, and Etching
	☐ Material Use
	☐ Material Delivery and Storage
	☐ Adhesives (glues, resins, epoxy synthetics, caulks, sealers, putty, sealing agents and coal tars)
	☐ Cleaning, Polishing (metal, ceramic, tile), and Sandblasting Operations
	☐ Plumbing [solder (lead, tin), flux (zinc chloride), pipe fitting]
	☐ Framing (sawdust, particle board dust and treated woods)
	☐ Interior Construction (tile cutting, flashing, saw-cutting drywall, galvanized metal in nails and fences, and electric wiring)
☐ Equipment Use	☐ Vehicle and Equipment Cleaning
	☐ Vehicle and Equipment Fueling
	☐ Vehicle and Equipment Maintenance
☐ Waste Management	☐ Hazardous Waste Management
	☐ Solid Waste Management (litter, trash, and debris)
	☐ Liquid Waste Management (wash water)
	☐ Sanitary Septic Waste Management (portable toilets, disturbance of existing sewer lines)

The WPC Manager shall update the list of potential pollutants in accordance with onsite conditions, documenting all materials or equipment that have been received or produced onsite that are not designed to be outdoors and are potential sources of stormwater contamination.

Materials Management Plan

REPLACE THIS WITH NARRATIVE TEXT REGARDING THE ASSESSMENT OF ALL POTENTIAL POLLUTANTS AND THE MATERIALS MANAGEMENT PLAN TO BE IMPLEMENTED ONSITE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

The Materials Management Plan has been prepared based on the list of construction materials that will be on site and have the potential to contribute pollutants, other than sediment, to stormwater runoff. Best management practices to prevent or minimize the off-site discharge of pollutants from materials stored on the project site, are provided below.

The following stockpiles will be covered and bermed prior to forecasted storm events.

- [LIST]

The following materials will be kept off the ground or bermed and covered prior to forecasted storm events.

- [LIST]

The following materials will be properly stored according to Material Safety Data Sheet requirements.

- [LIST]

The following dumpsters shall be covered prior to forecasted storm events.

- [LIST]

The following areas will be inspected for leaks or spills prior to forecasted storm events.

- Portable toilets
- [LIST]

Potential pollutants shall not be stored within 50 feet of stormwater conveyance features or concentrated flow paths. In addition, non-stormwater discharges shall not be made within 50 feet of potential pollutants.

500.1.2 Potential Pollutants from Site Features or Known Contaminates

INSTRUCTIONS:

- Show and/or describe existing site features that, as a result of known past usage, may contribute pollutants to stormwater (e.g., toxic materials that are known to be treated, stored, disposed, or have been spilled or leaked onto the construction site).
- Review the contract documents and associated environmental documents to determine the known site contaminants and list them in this section.

EXAMPLE:

Former Industrial Operations: ☐Yes ☒No

Description of Former Industrial Operations: N/A

Historic Contamination: ☒Yes ☐No

Existing site features that, as a result of past usage, may contribute pollutants to stormwater (e.g., toxic materials that are known to have been treated, stored, disposed, or have been spilled or leaked onto the construction site) are identified below.

- Case Number H06091-000 – A petroleum hydrocarbon-impacted groundwater plume exists along the western perimeter of the site. This plume consists of benzene, MTBE, and TPH. The two cases for this plume were closed by the California Department of Public Health (CDPH) because the levels of contaminants of concern were determined to not pose a significant risk to human health and the environment. In addition, the County of San Diego's Department of Environmental Health (DEH) granted closure on the cases based on the condition

that the current use of the property remain as a transportation corridor.

The following listed contaminants are known to exist at the project site locations identified:

- This site includes aerially deposited lead.....located at……..

REQUIRED TEXT:

Former site usage or known site contamination may contribute pollutants to stormwater discharges from the site. Based on information available for the project site, the following site usage and historical contamination has been determined:

Former Industrial Operations: ☐Yes ☐No

Description of Former Industrial Operations: Insert Description

- [LIST]

Historic Contamination: ☐Yes ☐No

- [LIST]

The following contaminants are known to exist at the project site locations identified:

- [LIST]

IF HISTORIC CONTAMINATION EXISTS ON SITE, REPLACE THIS WITH ADDITIONAL NARRATIVE TEXT ON HOW TO PREVENT OR MINIMIZE CONTACT BETWEEN THE CONTAMINANTS AND STORMWATER/NON-STORMWATER DISCHARGES, OTHERWISE DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

500.1.3 Risk Level Determination

INSTRUCTIONS:

- Summarize the risk level determination. Risk level determination is dependent on the results of the sediment risk assessment performed for the site in conjunction with the receiving water risk assessment performed for the site. Information regarding risk level determination requirements can be found in Section 1.3.3 of the *SWPPP/WPCP Preparation Manual*.

- Provide a copy of the sediment risk factor worksheet using the Excel spreadsheet from Appendix 1 (Risk Determination Worksheet) of the CGP in Attachment C.

- If applicable, provide a copy of the USEPA Rainfall Erosivity Factor Calculator Pages to document the R factor used (http://cfpub.epa.gov/npdes/stormwater/LEW/lewCalculator.cfm). Include the Date Entry and Location pages as well as the R values pages in Attachment C.

  Note: Changing the dates of construction and/or reducing the area of disturbance can significantly reduce the R value, which may enable the project to be eligible for a Rainfall Erosivity Waiver.

- If the combination KLS factor is used from the map provided, include a copy in Attachment C of the map with the site location shown. The combined KLS should be included in the Excel worksheet as

either the K or LS factor and the other one should be entered as one (1).

- In Attachment C provide a copy of the Receiving Water Risk Factor Worksheet using the Excel spreadsheet from Appendix 1 of the CGP.
- In Attachment C provide a copy of the Combined Risk Level Matrix using the Excel spreadsheet from Appendix 1 of the CGP.

EXAMPLE:

Construction of the proposed project improvements is scheduled to occur from 10/10/2010 to 10/10/2011. The USEPA Rainfall Erosivity Factor Calculator and KLS map were used to calculate the sediment risk. The R factor is 41.9. The site location is shown on the KLS map and the associated combined KLS factor is 3.1. The resultant sediment risk is high (115.2). Copies of the Erosivity Index Calculator Results and the Sediment Risk Factor Worksheet are included in Attachment C, as well as the KLS map.

The disturbed area portion of the project site does not discharge to a sensitive water body, either directly or indirectly. Therefore, the receiving water risk is low. Using the combined risk level matrix, the Project Combined Risk is Level 2. The Receiving Water Risk Worksheet and Combined Risk level Matrix are included in Attachment C.

REQUIRED TEXT:

REPLACE THIS WITH THE RISK LEVEL DETERMINATION FOLLOWING THE PROVIDED INSTRUCTIONS AND EXAMPLE.

500.2 Pre-Construction Existing Stormwater Control Measures

INSTRUCTIONS:

- Identify the existing control measures in place prior to construction. Preconstruction control measures may include any measures used to reduce erosion, sediment or other pollutants in stormwater discharges. Pre-construction control measures may include but are not necessarily limited to: detention basins, infiltration basins, sediment basins, oil water separators, bridge slope protection, rock slope protection, existing erosion control, existing landscaping, lined ditches, and energy dissipaters.
- Describe how the existing control measures will be impacted by the project and how these existing measures will be incorporated into or modified during project implementation.

EXAMPLE:

The following are existing (pre-construction) control measures encountered within the project site:

- Detention basin located at the southeast end of the project. This basin was designed as a combination flood control and permanent treatment control measure. It is anticipated that the basin will be used as a temporary sediment basin during construction, and will be restored to original condition prior to project completion.
- Slopes under the existing bridge are protected with concrete. No disturbance to these slopes is anticipated.

Two existing slopes have permanent rock slope protection; they are shown on WPCD6. No disturbance is anticipated on

these slopes.

REQUIRED TEXT:

The following are existing (pre-construction) water pollution control measures within the project site.

- [LIST]

IF THERE ARE NO EXISTING CONTROL MEASURES, REPLACE THIS WITH NARRATIVE TEXT EXPLAINING WHY, OTHERWISE, DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

500.3 BMP Selection for Erosion and Sediment Control

INSTRUCTIONS FOR SECTIONS 500.3.1 TO 500.3.5:

BMP SELECTION PROCESS

- Based on the potential for erosion and sediment deposition throughout the site, the BMP selection process shall identify the BMPs necessary to reduce or eliminate sediment-laden discharges from the site.
- All contract-required BMPs and any other BMPs required by the contract special provisions, contract plans, standard plans, and standard specifications, shall be identified for each of the sub-sections of Section 500.3, identified below. If a non-standard BMP is to be used, it shall be identified in the applicable BMP selection table and a narrative description of its use and implementation shall be provided.
    - ☐ 500.3.1 Temporary Run-on Control BMPs
    - ☐ 500.3.2 Soil Stabilization (Erosion Control) BMPs
    - ☐ 500.3.3 Sediment Control BMPs
    - ☐ 500.3.4 Tracking Control BMPs
    - ☐ 500.3.5 Wind Erosion Control
- The example text provided in Sections 500.3.1 to 500.3.5 and the example water pollution control drawings (WPCDs) provided in Attachment BB are provided only as examples. Copying example text without modifying it to pertain to project-specific conditions does not necessarily meet the requirements of the NPDES permits referenced in Sections 1.2 and 1.3 of the *SWPPP/WPCP Preparation Manual*.
- BMPs shall be selected to eliminate or reduce erosion on site and discharge of sediment off site. The instructions and the BMP selection tables shall be used to confirm that all appropriate CGP risk level BMP requirements are included. The BMP selection table in each of the sub-sections of Section 500.3 shall be completed and a narrative description shall be provided of the BMPs selected.

- Identify the selected BMPs on the Project Water Pollution Control BMPs List in Attachment CC and show the locations or make a note of the selected BMPs on the WPCDs in Attachment BB.

EXAMPLE:

The Contractor shall control construction site erosion through the implementation of effective erosion and sediment control measures in accordance with Section D of Attachment C of the CGP. The Contractor and the WPC Manager shall develop a schedule that includes the sequencing of construction activities and the implementation of effective erosion control BMPs while taking local climate (rainfall, wind, etc.) into consideration, thereby reducing the amount and duration of soil exposed to erosion by wind, rain, runoff, and vehicle tracking. The SWPPP schedule shall: describe when work activities will be performed that could cause the discharge of pollutants in stormwater; describe the water pollution control practices associated with each construction phase; and identify the soil stabilization and sediment control practices for all disturbed soil areas. Effective soil cover shall be provided for inactive areas and all finished slopes, open space, utility backfill, and completed pads. Additional erosion and sediment control BMPs may be required in other locations around the Project as work progresses in order to prevent sediment from leaving the construction site. These measures shall be determined by the Contractor and the WPC Manager in the field; if measures are changed in the field, the SWPPP and the map in the construction trailer must be modified accordingly. Corrective actions/changes to the SWPPP shall be reviewed and signed by a QSD prior to implementation. Routine maintenance or the implementation of additional BMPs, as recommended in the SWPPP, does not require an amendment.

An effective combination of erosion (soil stabilization) and sediment control BMPs shall be implemented and maintained during construction of the project improvements. The principles listed below shall be followed to the maximum extent practicable to control erosion and sedimentation in disturbed areas at the site.

- Fit grading to the surrounding terrain.
- Time grading operations to minimize soil exposure.
- Retain existing vegetation whenever feasible.
- Vegetate and mulch or otherwise stabilize disturbed areas.
- Minimize the length and steepness of slopes.
- Keep runoff velocities low.
- Prepare drainage ways and outlets to handle concentrated runoff until permanent drainage structures are constructed.
- Trap sediment on site.
- Inspect and maintain control measures frequently.

Temporary erosion and sediment control BMPs shall be deployed according to the Water Pollution Control Schedule (WPCS) in Section 500.7 and the Materials Management Plan in Section 500.1.1. A more concise listing of the BMP control measures to be implemented and maintained at the project site are denoted in the BMP selection tables provided in the following sub-sections.

REQUIRED TEXT:

The Contractor shall control construction site erosion through the implementation of effective erosion and sediment control measures in accordance with the CGP. The Contractor and the WPC Manager shall develop a schedule that

includes the sequencing of construction activities and the implementation of effective erosion control BMPs while taking local climate (rainfall, wind, etc.) into consideration, thereby reducing the amount and duration of soil exposed to erosion by wind, rain, runoff, and vehicle tracking. The SWPPP schedule shall: describe when work activities will be performed that could cause the discharge of pollutants in stormwater; describe the water pollution control practices associated with each construction phase; and identify the soil stabilization and sediment control practices for all disturbed soil areas. Effective soil cover shall be provided for:

- [LIST]

Additional erosion and sediment control BMPs may be required in other locations on the project site as work progresses in order to prevent sediment from leaving the construction site. These measures shall be determined by the Contractor and the WPC Manager in the field. As long as the water pollution control measures consist of additions to the BMPs already selected in the approved SWPPP, then these additional measures do not require a SWPPP amendment and the WPC Manager shall simply show the additional measures on the WPCDs. If erosion control or sediment control BMPs must be changed because of field conditions or because they are determined to be ineffective, the SWPPP must be amended. Once deemed necessary, corrective actions/design changes to the SWPPP shall be reviewed and signed by the WPC Manager, implemented within 72 hours of identification, and completed as soon as possible. Immediate corrective action is required for numeric action level (NAL) exceedances. Routine BMP maintenance or the implementation of an additional quantity of a BMP included in the SWPPP as recommended by the WPC Manager does not require an amendment to the SWPPP.

An effective combination of erosion (soil stabilization) and sediment control BMPs shall be implemented and maintained during the project. The following principles shall be followed to the maximum extent practicable to control erosion and sedimentation in disturbed areas at the site.

- [LIST]

REPLACE THIS WITH ADDITIONAL NARRATIVE TEXT REGARDING BMP SELECTION OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

A more concise listing of the BMP control measures to be implemented and maintained at the project site are denoted in the BMP selection tables in the following sub-sections.

500.3.1 Temporary Run-on Control BMPs

INSTRUCTIONS:

- Control for site run-on shall be implemented if needed to protect water quality objectives. Run-on from off site shall be directed away from all disturbed areas or shall collectively be in compliance with the effluent limitations stated in the CGP.
- Run-on control BMPs can incorporate both soil stabilization and sediment control.
- Soil stabilization consists of source control measures that are designed to prevent soil particles from detaching and becoming suspended in stormwater runoff, while sediment controls are designed to intercept runoff and capture suspended soil particles through a settlement or filtration process. Therefore, sediment controls are used to complement and enhance the selected soil stabilization measures.
- The sequence of steps, described below, shall be used to identify temporary run-on control BMPs to be included in the SWPPP.

- Step 1: Incorporate the temporary run-on control BMPs that are described in:
  - Contract special provisions
  - contract plans
  - standard plans
  - standard specifications

  If the BMPs required in Step 1 are inadequate to address run-on control requirements, then:

- Step 2: Incorporate run-on controls, using one or more of the Caltrans minimum requirements listed in Table 2-1 of the *SWPPP/ WPCP Preparation Manual*.

- Step 3: If the BMPs selected from Steps 1 and 2 are inadequate to control run-on, then refer to the *Caltrans Statewide SWMP* for additional guidance with respect to construction site BMPs. For the fact sheets on these BMPs, see the *Construction Site Best Management Practices (BMPs) Reference Manual*.

- For Steps 1 through 3 above, the tables and guidance in Section 2 of the *SWPPP/WPCP Preparation Manual* may be used to help identify the run-on control BMPs to be used on the project site.

- When selecting BMPs for the project site:
  - ❑ consider the locations and uses of the disturbed areas
  - ❑ consider the degree to which pollutants associated with those areas may be mobilized by contact with stormwater
  - ❑ consider the direct and indirect pathways that run-on may affect those areas

- Complete the BMP selection table in this section to identify the run-on control BMPs that have been selected for use on the project. If a particular BMP will not be used or is not applicable check “Not Used” and enter a brief explanation. Include non-standard or alternative BMPs selected for the project in the BMP selection table.

- Provide a narrative description of the selected BMPs. Explain the general approach of how selected BMPs will be implemented at points of potential run-on. See Section 300.3 for the estimated run-on flow rate(s), including the calculations and calculation input parameters.

- Discuss the onsite availability of run-on control materials and proposed mobilization and implementation of temporary diversion BMPs in the event of a forecasted storm. Sufficient material(s) need to be available on site to protect DSAs from run-on. Areas that have already been protected from erosion using temporary or permanent physical stabilization or established vegetation stabilization BMPs are not considered to be “exposed DSAs” for purposes of this requirement.

- List selected run-on control BMPs by location on the Water Pollution Control Best Management Practices List (WPCBMPL) in Attachment CC.
- Show the BMPs selected to divert off-site drainage around and/or through the construction project on the WPCDs in Attachment BB. Show or note any additional BMPs used to protect disturbed soil from run-on.

EXAMPLE:

The CGP states that sites with low risk of impacting water quality are not subject to run-on and runoff control requirements unless an evaluation indicates that they are necessary or visual inspections show that such controls are required. Therefore, temporary diversion BMPs shall be implemented when deemed necessary by the WPC Manager to protect the site from run-on.

Since additional stormwater on the construction site can adversely impact construction activities and the deployment of other BMPs, thereby increasing costs, the methods for managing run-on have been addressed fully in this SWPPP. The implementation strategy is described in this section and the locations of temporary diversion BMPs are shown on the WPCDs in Attachment BB.

Anticipated drainage patterns following the completion of grading activities are shown on the WPCDs. Run-on from off-site areas shall be prevented from flowing through areas that have been disturbed by construction unless appropriate conveyance systems are in place. Calculations for anticipated stormwater run-on are shown in Section 300.3.

Stormwater from off site should be diverted around the project site or directed to an interior drain so that it does not impact disturbed soil or material storage areas. Within the project limits, the following actions will be employed to enhance the effectiveness of other BMPs:

- divert water away from areas of soil disturbance
- divert water from the top of disturbed slopes, which aids greatly in reducing erosion of slopes
- divert water around stockpiles, material storage areas or other sensitive areas
- place BMPs so that diverted water is safely directed to an inlet, temporary conveyance, or infiltrated into a vegetated area

The CGP requires that the SWPPP for a construction project describe all BMPs implemented to divert off-site drainage around or through the construction project. The BMP Fact Sheets for the selected temporary run-on control BMPs will be adhered to and can be found in the *Caltrans Construction Site Best Management Practices (BMP) Manual*, dated 2003. Temporary run-on control BMPs are listed by location in the WPCBMPL in Attachment CC and are shown on the WPCDs in Attachment BB. The Contractor may need temporary run-on control BMPs in other project locations as work progresses to keep run-on from entering disturbed areas of the site. These measures will be determined by the Contractor in the field; if measures are changed in the field, SWPPP Attachment BB and SWPPP Attachment CC will be updated. Use of alternative BMPs will require a SWPPP amendment and written approval by the RE. The following table explains how the selected BMPs shall be incorporated into the project.

TABLE 500.3.1 TEMPORARY RUN-ON CONTROL BMPs						
CONSTRUCTION BMP ID NO.(1)	**BMP NAME**	**CONTRACT MINIMUM REQUIRE-MENT(2)**	**CONTRACT BID ITEM**	**BMP USED**		**IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON**
				YES	**NO**	
SS-1	Scheduling	√	☒	☒	☐	
SS-2	Preservation of Property/ Preservation of Existing Vegetation	√	☒	☒	☐	
SS-9	Earth Dikes / Drainage Swales & Lined Swales	√	☒	☒	☐	
SS-10	Outlet Protection / Velocity Dissipation Devices		☐	☒	☐	
SS-11	Slope Drains		☐	☒	☐	
SS-12	Streambank Stabilization		☐	☐	☒	Natural drainage way will not be disturbed during construction.
SC-4	Temporary Check Dam		☐	☒	☐	
SC-5	Fiber Rolls		☒	☒	☐	
SC-6	Temporary Gravel Bag Berm		☒	☒	☐	
SC-8	Temporary Sandbag Barrier		☐	☐	☒	Gravel Bag Berm Used
ALTERNATIVE RUN-ON CONTROL BMPs USED(3) ☐ Yes ☒ No						IF USED, STATE REASON
CONSTRUCTION BMP ID NO.(1)	**BMP NAME**					

Notes:
(1) The BMP designations (SS-1, SC-5, etc.) are solely for maintaining continuity with existing Caltrans documents and are not provided to imply that the *Construction Site Best Management Practices (BMPs) Reference Manual* is a required contract document.
(2) Minimum requirements are based on the contract plans and specifications. Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the QSD or WPC Manager.
(3) Use of alternative BMPs will require written approval by the RE.

Implementation of Temporary Run-on Controls BMPs

BMPs will be deployed in a sequence to follow the progress of grading and construction. As the locations of soil disturbance change, temporary diversion controls will be adjusted accordingly to prevent run-on from impacting disturbed soil.

This project will implement the following practices for effective temporary DSA protection during construction.

SS-1 Scheduling – The Contractor/WPC Manager will schedule as many soil disturbing activities as possible during the dry season, leaving as much soil undisturbed as possible.

SS-2 Preservation of Existing Vegetation – The slopes will be protected in place. Only BMPs needed to divert run-on away from the site will disturb the slopes. No vehicle or foot traffic will be allowed on the slopes.

SS-9 Temporary Drainage Swales – Drainage swales will be cut in during grading and used to capture run-on from north of the site and convey it around the site and into the retention basins. Pipe slope drains and/or gravel filter berms may be used in conjunction with swales if deemed necessary by the contractor.

SS-10 Outlet Protection / Velocity Dissipation Devices – Outlet protection will be used to prevent scour and reduce discharge velocities at the outlets of pipe slope drains, drainage swales, gravel filter berms, and/or retention basins.

SC-4 Temporary Check Dams – Check dams may be used to reduce scour and channel erosion within drainage swales or in conjunction with gravel filter berms. One hundred gravel bags and 250 linear feet of fiber roll shall be stored on site for mobilization prior to forcasted storm events. The gravel bags shall be stacked two high in swale 1, every 50 feet, and the fiber rolls shall be installed every 75 feet in swale 3.

SC-5 Fiber Rolls – Fiber rolls will be used to protect staged materials and stockpiles from run-on. Materials, stockpiles, and waste will not be stored near concentrated flow paths. Five hundred linear feet of fiber roll shall be stored in the staging area for mobilization prior to forecasted storm events.

An agricultural area is situated adjacent to the east of the project. The run-on calculations for this area indicate 10 cfs of flow will occur during the design rain event. The run-on flow is not currently diverted. To protect disturbed areas from run-on during construction, the following BMPs will be implemented:

SC-6 gravel bag berm – A row of gravel bags will be stacked two high to divert the flow from the agricultural area adjoining the project. The gravel bags will be placed almost on a level contour but with a slight elevation change to direct the water to the existing concrete-lined ditch to the south. Five hundred gravel bags will be stockpiled in the northwest corner of the site for mobilization prior to forecasted storm events.

Once installed, run-on control BMPs may remain in place, except where they interfere with construction activities or access to and from the site.

REQUIRED TEXT:

REPLACE THIS WITH NARRATIVE TEXT REGARDING CGP RUN-ON REQUIREMENTS WITH RESPECT TO THE PROJECT RISK LEVEL FOLLOWING THE PROVIDED INSTRUCTIONS AND EXAMPLE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

TABLE 500.3.1 TEMPORARY RUN-ON CONTROL BMPs						
CONSTRUCTION BMP ID NO.(1)	**BMP NAME**	**CONTRACT MINIMUM REQUIRE-MENT(2)**	**CONTRACT BID ITEM**	**BMP USED**		**IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON**
				YES	**NO**	
SS-1	Scheduling		☐	☐	☐	
SS-2	Preservation of Property/ Preservation of Existing Vegetation		☐	☐	☐	
SS-9	Earth Dikes / Drainage Swales & Lined Swales		☐	☐	☐	
SS-10	Outlet Protection / Velocity Dissipation Devices		☐	☐	☐	
SS-11	Slope Drains		☐	☐	☐	
SS-12	Streambank Stabilization		☐	☐	☐	
SC-4	Temporary Check Dam		☐	☐	☐	
SC-5	Fiber Rolls		☐	☐	☐	
SC-6	Temporary Gravel Bag Berm		☐	☐	☐	
SC-8	Temporary Sandbag Barrier		☐	☐	☐	
ALTERNATIVE RUN-ONCONTROL BMPs USED(3) ☐ Yes ☐ No						IF USED, STATE REASON
CONSTRUCTION BMP ID NO.(1)	**BMP NAME**					

Notes:

(1) The BMP designations (SS-1, SC-5, etc.) are solely for maintaining continuity with existing Caltrans documents and are not provided to imply that the *Construction Site Best management Practices(BMPs) Reference Manual* is a required contract document.

(2) Minimum requirements are based on the contract plans and specifications. Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the QSD or WPC Manager.

(3) Use of alternative BMPs will require written approval by the RE.

Implementation of Temporary Run-on Controls BMPs

REPLACE THIS WITH NARRATIVE TEXT REGARDING PROJECT SPECIFIC BMP IMPLEMENTATION FOLLOWING THE PROVIDED INSTRUCTIONS AND EXAMPLE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

- [LIST]

500.3.2 Soil Stabilization (Erosion Control)

INSTRUCTIONS:

- Soil stabilization consists of source control measures that are designed to prevent soil particles from detaching and becoming suspended in stormwater runoff. Soil stabilization BMPs protect the soil surface by covering and/or binding the soil particles.
- Described below is the sequence of steps that shall be used to identify soil stabilization BMPs to be included in the SWPPP.
  - Step 1: Incorporate the temporary soil stabilization (erosion control) BMPs that are described in:
    - contract special provisions
    - contract plans
    - standard plans
    - standard specifications

  If the BMPs required in Step 1 are inadequate to address soil stabilization requirements, then:

  - Step 2: Incorporate the temporary soil stabilization (erosion control) BMPs using one or more of the Caltrans minimum requirements listed in Table 2-1 of the *SWPPP/ WPCP Preparation Manual*.
  - Step 3: If the BMPs selected from Steps 1 and 2 are inadequate to address soil stabilization requirements, then refer to the *Caltrans Statewide SWMP* for additional guidance with respect to construction site BMPs. For the fact sheets on these BMPs, see the *Construction Site Best Management Practices (BMPs) Reference Manual*.
- For Steps 1 through 3 above, the tables and guidance in Section 2 of the *SWPPP/WPCP Preparation Manual* may be used to help identify the soil stabilization BMPs to be used on the project.
- When selecting BMPs for the project site:

- ❑ consider the quantity, physical characteristics (e.g., liquid, powder, solid), and locations of each potential pollutant source handled, produced, stored, recycled, or disposed of at the site
- ❑ consider the degree to which pollutants associated with those materials may be exposed to an mobilized by contact with stormwater
- ❑ consider the direct and indirect pathways that pollutants may be exposed to stormwater or authorized non-stormwater discharges. This shall include an assessment of past spills or leaks, non-stormwater discharges, and discharges from adjoining areas

- Complete the BMP selection tables in this section to indicate the Soil Stabilization BMPs that have been selected for use on the project. If a particular BMP will not be used or is not applicable, check "Not Used" and enter a brief explanation. Include non-standard or alternative BMPs selected for the project in the BMP selection table.
- Provide a narrative description of temporary soil stabilization BMPs. Give a general approach on how temporary soil stabilization BMPs will be implemented on the project.
- Discuss the on-site availability of temporary soil stabilization materials (materials kept for temporary soil stabilization BMPs) and proposed mobilization and implementation of temporary soil stabilization BMPs in the event of a forecasted storm. Sufficient material(s) needed to install temporary soil stabilization BMPs necessary to protect the exposed portions (disturbed soil areas) of the site from erosion shall be stored on site. Areas that already have been protected from erosion using temporary or permanent physical stabilization or established vegetation stabilization BMPs are not considered to be "exposed DSAs" for purposes of this requirement.
- List selected soil stabilization BMPs by location on the WPCBMPL in Attachment CC.
- Show the locations or make a note of the selected soil stabilization BMPs on the WPCDs in Attachment BB.

EXAMPLE:

Soil stabilization, also referred to as erosion control, consists of source control measures that are designed to prevent soil particles from detaching and becoming transported in stormwater runoff. Soil stabilization BMPs protect the soil surface by covering and/or binding soil particles. This construction project will implement the following practices to achieve effective temporary and final soil stabilization (erosion control) during construction.

- Preserve existing vegetation where required and when feasible.
- Apply temporary soil stabilization (erosion control) to remaining active and non-active areas as required by the contract specifications , and the *SWPPP/WPCP Preparation Manual*, Appendix C. Reapply as necessary to maintain effectiveness.
- Stabilize non-active areas within 14 days of cessation of construction activities or one day prior to forecasted storm events, whichever occurs first.
- Control erosion in concentrated flow paths by applying erosion control blankets, check dams, and erosion control seeding, and by lining swales with plastic as required in the contract specifications and/or as shown on plans.

- Apply permanent erosion control seeding to areas deemed substantially complete by the RE.
- Prior to the completion of construction, apply permanent erosion control to all remaining disturbed soil areas as required in the contract specifications.

Sufficient soil stabilization materials shall be maintained on site to allow implementation in conformance with Caltrans requirements and this SWPPP. This includes implementation requirements for active areas and non-active areas that require deployment of BMPs prior to forecasted storm events.

This project shall incorporate minimum temporary soil stabilization measures required by the contract plans and specifications and other measures selected by the QSD, WPC Manager, and Contractor. Implementation information and locations of temporary soil stabilization BMPs are described in this section and listed by location in the WPCBMPL in Attachment CC. BMPs also are shown or noted on the WPCDs in Attachment BB. Erosion control may be required in other locations of the Project site as work progresses to prevent soil from being displaced. These measures will be determined by the Contractor in the field; if measures are changed in the field, the SWPPP Attachment BB and SWPPP Attachment CC must be updated. Use of alternative BMPs will require a SWPPP amendment and written approval by the RE. The following soil stabilization BMP selection table indicates the BMPs that shall be implemented to control erosion on the construction site.

TABLE 500.3.2
TEMPORARY EROSION CONTROL BMPs

CONSTRUCTION BMP ID NO(1)	BMP NAME	CONTRACT MINIMUM REQUIRE-MENT(2)	CONTRACT BID ITEM	BMP USED		IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON
				YES	NO	
SS-1	Scheduling	√	☒	☒	☐	
SS-2	Preservation of Property/ Preservation of Existing Vegetation	√	☒	☒	☐	
SS-3	Temporary Hydraulic Mulch (Bonded Stabilized Fiber Matrix)		☐	☐	☒	Straw Mulch Used
	Temporary Hydraulic Mulch (Polymer Stabilized Fiber Matrix)		☐	☐	☒	Straw Mulch Used
SS-4	Temporary Erosion Control (With Temporary Seeding)		☐	☐	☒	Straw Mulch Used
SS-5	Temporary Soil Stabilizer		☐	☐	☒	Straw Mulch Used
SS-6	Temporary Erosion Control (Straw Mulch with Stabilizing Emulsion)	√	☒	☒	☐	

TABLE 500.3.2 TEMPORARY EROSION CONTROL BMPs						
CONSTRUCTION BMP ID NO(1)	**BMP NAME**	**CONTRACT MINIMUM REQUIRE-MENT(2)**	**CONTRACT BID ITEM**	**BMP USED**		**IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON**
				YES	**NO**	
SS-7	Temporary Erosion Control Blanket (On Slope)		☐	☐	☒	No slopes shall be disturbed during construction.
	Temporary Erosion Control Blanket (In swale or ditch)	√	☒	☒	☐	
SS-7	Temporary Cover (Plastic Covers)	√	☒	☒	☐	
SS-8	Temporary Mulch (Wood)		☐	☐	☒	Straw Mulch Used
SS-9	Earth Dikes / Drainage Swales & Lined Swales		☐	☐	☒	Not required for project
SS-10	Outlet Protection / Velocity Dissipation Devices		☐	☐	☒	Not required for project
SS-11	Slope Drains		☐	☐	☒	Not required for project
SS-12	Streambank Stabilization		☐	☐	☒	Not required for project
ALTERNATIVE TEMPORARY EROSION CONTROL BMPs USED(3) ☐ Yes ☒ No						IF USED, STATE REASON
CONSTRUCTION BMP ID NO (1)	**BMP NAME**					

TABLE 500.3.2 TEMPORARY EROSION CONTROL BMPs						
CONSTRUCTION BMP ID NO(1)	BMP NAME	CONTRACT MINIMUM REQUIRE-MENT(2)	CONTRACT BID ITEM	BMP USED		IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON
				YES	NO	

Notes:
(1) The BMP designations (SS-1, SC-3, etc.) are solely for maintaining continuity with existing Caltrans documents and are not provided to imply that the *Construction Site Best Management Practices (BMPs) Reference Manual* is a required contract document.
(2) Minimum requirements are based on the contract plans and specifications. Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the QSD or WPC Manager.
(3) Use of alternative BMPs will require written approval by the RE.

Implementation of Temporary Soil Stabilization BMPs

BMPs shall be deployed in a sequence to follow the progress of grading and construction. As the locations of soil disturbance change, soil stabilization and erosion control BMPs shall be adjusted accordingly to control stormwater runoff throughout the disturbed areas. The following practices shall be implemented for effective temporary and final soil stabilization during and after construction.

- The project schedule shall sequence construction activities with the installation of both soil stabilization and sediment control measures. The construction schedule shall be arranged as much as practicable to leave soil undisturbed until immediately prior to clearing/grading.

- Existing vegetation shall be preserved where indicated on the WPCDs.

- The WPC Manager shall monitor weather using NWS reports to track conditions and alert crews with regard to forcasted storm events (http://www.weather.gov/).

- Prior to forecasted storm events (50 percent or greater chance of at least 0.10 inches of precipitation within 24-hours), all disturbed soil areas and temporary soil stabilization BMPs shall be inspected, and maintenance performed or additional BMPs deployed if necessary.

- Sufficient soil stabilization materials shall be maintained on site to allow implementation in conformance with this SWPPP. This includes implementation requirements for active and non-active areas that require BMP deployment before the onset of rain.

- Soil stabilization shall consist of covering disturbed soils with mulch, soil binders, geotextiles, or vegetation.
    - Soil cover such as hydraulic or wood mulch or soil binders shall serve to reduce the erosion potential by absorbing the energy of raindrops, promoting infiltration in lieu of runoff, and reducing the velocity of runoff, but will generally require a minimum curing time of 24 hours prior to a forecasted storm event.
    - Temporary soil stabilization (erosion control) measures shall be deployed in active and non-active areas as required. Such measures shall be redeployed as necessary to maintain effectiveness.
    - The application of any erodible landscape material shall be discontinued within 2 days prior to a forecasted stormevent or during periods of precipitation.

- Disturbed soil areas in which construction activities have been substantially completed shall be stabilized using permanent soil stabilization (erosion control) methods until hardscaping or landscaping can be completed.

- The Contractor must provide temporary stabilization, or initiate permanent stabilization, of disturbed areas within 14 calendar days of the most recent land disturbance in areas where construction support activities have

been temporarily suspended or have permanently ceased, except as stated below.

- When vegetative stabilization methods are being used at a site, but the site is located in an arid area during dry or drought conditions, vegetative stabilization measures shall be initiated as soon as practicable, when growing conditions are best for planting or seeding.
- Where disturbed areas are awaiting vegetative stabilization for periods greater than 14 calendar days after the most recent disturbance, non-vegetative methods of stabilization shall be employed.

- During the grading process, permanent drainage swales shall be cut into place. These permenant features may be used during construction, but the inlets will need to be protected in place. In addition, any sedimentation will have to be cleaned out prior to the end of construction, with care being taken to maintain the final grade according to plan.

- Control erosion in concentrated flow paths (drainage swales) will be achieved by applying erosion control blankets, check dams, erosion control seeding, or lining swales.

- BMPs that employ plastic materials shall be replaced by more sustainable, environmentally friendly alternatives where feasible. Where plastic materials are deemed necessary, the Contractor shall use plastic materials resistant to solar degradation.

- Prior to completion of construction, permanent erosion control methods shall be applied to all remaining disturbed soil areas.

- Temporary erosion control BMPs shall be removed after the protected areas are stabilized.

SS-1, SS-2 Scheduling and Preservation of Existing Vegetation

Construction activities shall be sequenced to include the installation of both soil stabilization and sediment control measures. BMPs will be deployed in a sequence that follows the progress of grading and construction. The construction schedule will be arranged as much as practicable to leave existing vegetation undisturbed until immediately prior to grading.

Run-off Controls

Check dams – gravel bag diversions will result in a concentrated flow that will be checked with dams to prevent erosion.

SC-10 Velocity Dissipation Devices – where the diversion at the upgradient edge of the project flows to the existing lined ditch, a velocity dissipation device consisting of 3- to 6-inch-diameter gravel will be used to slow the flow and to protect the area immediately above the concrete-lined ditch from erosion.

SS-6 Straw Mulch

Straw mulch will be applied to the disturbed areas adjacent to excavations and on shallow slopes surrounding the site. See the WPCDs in Attachment BB and WPCBMPL in Attachment CC of this SWPPP for locations where straw mulch will be used.

SS-7 Geotextiles, Plastic Covers and Erosion Control Blankets/Mats

Geotextile blankets will be used to provide temporary and permanent stabilization for the flow line of the vegetated swale on the western boundary of the project. Polyethylene covers will be used throughout the project area to cover small exposed soil areas prior to forcasted storm events, and will be anchored to prevent damage by wind. Loose stockpiled construction materials that are not actively being used (e.g., soil, spoils, aggregate, fly-ash, stucco, hydrated lime) will be covered and placed in a bermed area.

Deployment of Temporary Erosion Control

Construction activities will be sequenced to incorporate the installation of both soil stabilization and sediment control measures. The construction schedule will be arranged as much as practicable to leave existing vegetation undisturbed until immediately prior to clearing/grading.

BMPs will be deployed in a sequence to follow the progress of grading and construction. As the locations of soil disturbance change, soil stabilization and sedimentation controls will be adjusted accordingly to control stormwater runoff at the downgrade perimeter and drain inlets. The WPC Manager will monitor weather using NWS reports to track conditions and alert crews to the onset of rainfall events.

For temporary erosion control deployment during construction:

- disturbed soil areas will be stabilized with temporary or permanent soil stabilization (erosion control) within 14 days of when an area becomes inactive
- disturbed soil areas will be stabilized with temporary or permanent soil stabilization (erosion control) before forecasted storm events
- disturbed soil areas that are substantially complete will be stabilized with permanent soil stabilization (erosion control) until hardscaping or landscaping can be completed
- temporary soil stabilization BMPs will be deployed and inspected prior to forecasted storm events

REQUIRED TEXT:

Soil stabilization, also referred to as erosion control, consists of source control measures that are designed to prevent soil particles from detaching and becoming transported in stormwater runoff. Soil stabilization BMPs protect the soil surface by covering and/or binding soil particles. This project will incorporate temporary soil stabilization measures required by contract plans and specifications, *SWPPP/WPCP Preparation Manual* minimum temporary soil stabilization requirements, and other measures selected by the Contractor.

- [LIST]

Sufficient soil stabilization materials will be maintained on site to allow implementation in conformance with Caltrans requirements and as described in this SWPPP. This includes implementation requirements for active and non-active areas that require deployment prior to a forecasted storm event.

The following soil stabilization BMP selection table indicates the BMPs that shall be implemented to control erosion on the construction site. Temporary soil stabilization BMPs are shown on the WPCDs in Attachment BB and are listed by location in the WPCBMPL in Attachment CC. Any details for temporary soil stabilization BMPs are shown in Attachment BB.

TABLE 500.3.2
TEMPORARY EROSION CONTROL BMPs

CONSTRUCTION BMP ID NO(1)	BMP NAME	CONTRACT MINIMUM REQUIRE-MENT(2)	CONTRACT BID ITEM	BMP USED		IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON
				YES	NO	
SS-1	Scheduling	√	☐	☐	☐	

TABLE 500.3.2 TEMPORARY EROSION CONTROL BMPs						
CONSTRUCTION BMP ID NO[1]	**BMP NAME**	**CONTRACT MINIMUM REQUIRE-MENT[2]**	**CONTRACT BID ITEM**	**BMP USED**		**IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON**
				YES	**NO**	
SS-2	Preservation of Property/ Preservation of Existing Vegetation	√	☐	☐	☐	
SS-3	Temporary Hydraulic Mulch (Bonded Stabilized Fiber Matrix)		☐	☐	☐	
	Temporary Hydraulic Mulch (Polymer Stabilized Fiber Matrix)		☐	☐	☐	
SS-4	Temporary Erosion Control (With Temporary Seeding)		☐	☐	☐	
SS-5	Temporary Soil Stabilizer		☐	☐	☐	
SS-6	Temporary Erosion Control (Straw Mulch with Stabilizing Emulsion)		☐	☐	☐	
SS-7	Temporary Erosion Control Blanket (On Slope)		☐	☐	☐	
	Temporary Erosion Control Blanket (In swale or ditch)		☐	☐	☐	
SS-7	Temporary Cover (Geotextiles and Mats)		☐	☐	☐	
SS-8	Temporary Mulch (Wood)		☐	☐	☐	
SS-9	Earth Dikes / Drainage Swales & Lined Swales		☐	☐	☐	
SS-10	Outlet Protection/		☐	☐	☐	

TABLE 500.3.2 TEMPORARY EROSION CONTROL BMPs						
CONSTRUCTION BMP ID NO(1)	**BMP NAME**	**CONTRACT MINIMUM REQUIRE-MENT(2)**	**CONTRACT BID ITEM**	**BMP USED**		**IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON**
				YES	**NO**	
	Velocity Dissipation Devices					
SS-11	Slope Drains		☐	☐	☐	
SS-12	Streambank Stabilization		☐	☐	☐	
SS-13	Polyacrylamide		☐	☐	☐	
ALTERNATIVE TEMPORARY EROSION CONTROL BMPs USED(3) ☐ Yes ☒ No						IF USED, STATE REASON
CONSTRUCTION BMP ID NO (1)	**BMP NAME**					

Notes:
(1) The BMP designations (SS-1, SC-3, etc.) are solely for maintaining continuity with existing Caltrans documents and are not provided to imply that the Construction Site Best Management Practices (BMPs) Reference Manual is a required contract document.
(2) Minimum requirements are based on the contract plans and specifications. Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the QSD or WPC Manager.
(3) Use of alternative BMPs will require written approval by the RE.

The BMPs selected for the project are listed below along with an explanation of how they will be incorporated into the project.

- [LIST]

INSERT ADDITIONAL NARRATIVE TEXT FOR SOIL STABILIZATION HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

500.3.3 Sediment Control

INSTRUCTIONS:

- Sediment controls are used to complement and enhance the selected soil stabilization measures. Sediment controls are designed to intercept runoff and capture suspended soil particles through a settlement or filtration process.

- Described below is the sequence of steps that shall be used to identify temporary sediment control BMPs to be included in the SWPPP.

  - ❑ Step 1: Incorporate the temporary sediment control BMPs that are described in the following documents:

    - contract special provisions
    - contract plans
    - standard plans
    - standard specifications

- If the sediment control BMPs required in Step 1 are inadequate to address temporary sediment control requirements, then:

  - ❑ Step 2: Incorporate the temporary sediment control BMPs using one or more of the Caltrans minimum requirements listed in Table 2-1 of the *SWPPP/ WPCP Preparation Manual*.

  - ❑ Step 3: If the sediment control BMPs selected from Steps 1 and 2 are inadequate to address temporary sediment control requirements, then incorporate the temporary sediment control BMPs that are described in Section 4.5 of the SWMP. For reference on these BMPs, see the *Construction Site Best Management Practices (BMPs) Reference Manual*.

- For Steps 1 through 3 above, the tables and guidance in the *SWPPP/WPCP Preparation Manual*, Section 2 may be used to help identify the sediment control BMPs that may be required for the project.

- Complete the BMP selection tables in this section to indicate the temporary sediment control BMPs that have been selected for use on the project. If a particular BMP will not be used or is not applicable, check “Not Used” and enter a brief explanation. Include non-standard or alternative BMPs selected for the project in the BMP selection table.

- List selected temporary sediment control BMPs on the WPCBMPL in Attachment CC.

- Show selected temporary sediment control BMPs on the WPCDs from Attachment BB. Show BMPs used to divert off-site drainage around and/or through the construction project on the WPCDs.

- Provide a narrative description of temporary sediment control BMPs. Give a general approach on how temporary sediment control BMPs will be implemented on the project at the draining perimeter of disturbed soil areas, at the toes of slopes, and at inlets and outfall areas at all times.

- Discuss the on-site availability of temporary sediment control materials (materials kept for temporary sediment control BMPs) and proposed mobilization and implementation of temporary sediment control BMPs in the event of a forecasted storm. At a minimum, 10 percent of the installed sediment control BMPs are required to be maintained on site as standby sediment control BMPs that may be installed to prevent sediment discharges from exposed portions of the site.

EXAMPLE:

Sediment controls are structural measures that are intended to complement and enhance the soil stabilization (erosion control) measures and reduce sediment discharges from construction areas. Sediment controls are designed to intercept and settle out soil particles that have been detached and transported by the force of water. This project will incorporate temporary sediment control measures required by the contract plans and specifications, *SWPPP/WPCP Preparation Manual* minimum temporary sediment control requirements, and other measures selected by the Contractor.

Sediment control BMPs will be installed at all appropriate locations along the site perimeter and at all operational internal inlets to the storm drain system.

Throughout the duration of the project, temporary sediment control materials, equivalent to 10 percent of the materials installed on the site, will be maintained on site for implementation in the event of a forecasted storm, or a need for rapid response to failures or emergencies, in conformance with other Caltrans requirements, and as described in the SWPPP. This includes implementation requirements for active areas and non-active areas prior to a forecasted storm event.

The following sediment control BMP selection table indicates the BMPs that shall be implemented to control sediment on the construction site. Temporary sediment control BMPs are shown on the WPCDs in Attachment BB and are listed by location in the WPCBMPL in Attachment CC. Any details for temporary sediment control BMPs are shown in Attachment BB.

TABLE 500.3.3
TEMPORARY SEDIMENT CONTROL BMPs

CONSTRUCTION BMP ID NO(1)	BMP NAME	CONTRACT MINIMUM REQUIRE-MENT(2)	CONTRACT BID ITEM	BMP USED		IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON
				YES	NO	
SC-1	Temporary Silt Fence	√	☒	☒	☐	
SC-2	Temporary Sediment Basin		☐	☐	☒	Linear Project with no area for basin
SC-3	Temporary Sediment Trap		☐	☐	☒	Linear Project with no area for a sediment trap
SC-4	Temporary Check Dam		☒	☒	☐	
SC-5	Temporary Fiber Rolls	√	☒	☒	☐	
SC-6	Temporary Gravel Bag Berm		☒	☒	☐	
SC-7	Street Sweeping	√	☒	☒	☐	
SC-8	Temporary Sandbag Barrier		☐	☐	☒	Gravel Bag Berm Used
SC-9	Temporary Straw Bale Barrier		☐	☐	☒	Gravel Bag Berm Used

TABLE 500.3.3 TEMPORARY SEDIMENT CONTROL BMPs						
CONSTRUCTION BMP ID NO(1)	BMP NAME	CONTRACT MINIMUM REQUIRE-MENT(2)	CONTRACT BID ITEM	BMP USED		IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON
				YES	NO	
SC-10	Temporary Drain Inlet Protection	√	☒	☒	☐	
SC-11	Temporary Chemical Treatment		☐	☐	☒	Turbid discharges can be avoided
ALTERNATIVE SEDIMENT CONTROL BMPs USED(3) ☐ Yes ☒ No						IF USED, STATE REASON

Notes:
(1) The BMP designations (SS-1, SC-3, etc.) are solely for maintaining continuity with existing Caltrans documents and are not provided to imply that the *Construction Site Best Management Practices (BMPs) Reference Manual* is a required contract document.
(2) Minimum requirements are based on the contract plans and specifications. Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the QSD or WPC Manager.
(3) Use of alternative BMPs will require written approval by the RE.

The following list of BMPs and associated narratives explain how the selected BMPs will be incorporated into the project.

SC-1 Temporary Silt Fence

Silt fences will be deployed along the toes of exterior cut and fill slopes to settle out soil particles from stormwater runoff.

SC-4 Temporary Check Dam

Temporary check dams will installed during construction of the temporary earthen channels at the following locations: top of cut slope channel along Coyote Creek between Station 230+00 and 23 5+00; northerly fill slope between Stations 23 8+00 and 240+00; and also along Griffith Road between Stations 26+00 and 5 1+00.

SC-5 Temporary Fiber Rolls

Temporary fiber rolls will be installed along cut and fill slopes at locations shown on the drawings. Fiber rolls installed during Stage 1 will be left and protected in place during Stage 2 between Stations 236+00 and 237+00 and also between Stations 241+00 and 250+00.

SC-6 Temporary Gravel Bag Berm

Temporary gravel bag berms will be installed along the temporary earthen swales between Stations 206+00 and 225+00

along the southerly edge of the project limits, and also along the sides of the roadway between Stations 209+00 to 218+00 during stage 2.

SC-7 Street Sweeping

Street sweeping is described in Section 500.3.4.

SC-10 Temporary Drain Inlet Protection

Storm drain inlet protection will be used at all operational internal inlets to the storm drain system, as shown on the WPCDs. Drain inlet protection type is shown on the WPCDs for each inlet associated with each stage of construction.

REQUIRED TEXT:

Sediment controls are structural measures that are intended to complement and enhance the selected soil stabilization (erosion control) measures and reduce sediment discharges from construction areas. Sediment controls are designed to intercept and settle out soil particles that have been detached and transported by the force of water. This project will incorporate temporary sediment control measures required by the contract plans and specifications, *SWPPP/WPCP Preparation Manual* minimum temporary sediment control requirements, and other measures selected by the contractor.

Sediment control BMPs will be installed at all appropriate locations along the site perimeter and at all operational internal inlets to storm drain systems at all times.

Throughout the duration of the project, temporary sediment control materials, equivalent to 10 percent of the materials installed on site, will be maintained on site for implementation in prior to forecasted storm events, or the need for rapid response to failures or emergencies, in conformance with other Caltrans requirements, and as described in the SWPPP. This includes implementation requirements for active areas and non-active areas prior to a forecasted storm event.

The following sediment control BMP selection table indicates the BMPs that shall be implemented to control sediment on the construction site. Temporary sediment control BMPs are shown on the WPCDs in Attachment BB and are listed by location in the WPCBMPL in Attachment CC. Any details for temporary sediment control BMPs are shown in Attachment BB.

TABLE 500.3.3
TEMPORARY SEDIMENT CONTROL BMPs

CONSTRUCTION BMP ID NO(1)	BMP NAME	CONTRACT MINIMUM REQUIRE-MENT(2)	CONTRACT BID ITEM	BMP USED		IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON
				YES	NO	
SC-1	Temporary Silt Fence		☐	☐	☐	
SC-2	Temporary Sediment Basin		☐	☐	☐	
SC-4	Temporary Check Dam		☐	☐	☐	
SC-5	Temporary Fiber Rolls		☐	☐	☐	
SC-6	Temporary Gravel Bag Berm		☐	☐	☐	
SC-7	Street Sweeping	√	☐	☐	☐	

TABLE 500.3.3 TEMPORARY SEDIMENT CONTROL BMPs						
CONSTRUCTION BMP ID NO(1)	**BMP NAME**	**CONTRACT MINIMUM REQUIRE-MENT(2)**	**CONTRACT BID ITEM**	**BMP USED**		**IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON**
				YES	**NO**	
SC-8	Temporary Sandbag Barrier		☐	☐	☐	
SC-9	Temporary Straw Bale Barrier		☐	☐	☐	
SC-10	Temporary Drain Inlet Protection	√	☐	☐	☐	
SC-11	Temporary Chemical Treatment		☐	☐	☐	
ALTERNATIVE SEDIMENT CONTROL BMPs USED(3) ☐ Yes ☒ No						IF USED, STATE REASON

Notes:
(1) The BMP designations (SS-1, SC-3, etc.) are solely for maintaining continuity with existing Caltrans documents and are not provided to imply that the *Construction Site Best Management Practices (BMP) Reference Manual* is a required contract document.
(2) Minimum requirements are based on the contract plans and specifications. Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the QSD or WPC Manager.
(3) Use of alternative BMPs will require written approval by the RE.

The following list of BMPs and associated narratives explain how the selected BMPs will be incorporated into the project.

INSERT ADDITIONAL NARRATIVE TEXT FOR SEDIMENT CONTROLS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

500.3.4 Tracking Control

INSTRUCTIONS:

- Described below is the sequence of steps that shall be used to identify temporary tracking control BMPs to be included in the SWPPP.

  - Step 1: Incorporate the temporary tracking control BMPs that are described in:

    - contract special provisions

- contract plans
- standard plans
- standard specifications

If the tracking control BMPs required in Step 1 are inadequate to address tracking control requirements, then:

- ❑ Step 2: Incorporate the temporary tracking control BMPs using one or more of the Caltrans minimum requirements listed in Table 2-1 of the *SWPPP/ WPCP Preparation Manual*.
- ❑ Step 3: If the tracking control BMPs selected from Steps 1 and 2 are inadequate to address tracking control requirements, then incorporate the temporary tracking control BMPs that are described in Section 4.5 of the SWMP. For reference on these BMPs see the *Construction Site Best Management Practices (BMPs) Reference Manual*.

- For Steps 1 through 3 above, the tables and guidance in the *SWPPP/WPCP Preparation Manual*, Section 2 may be used to help identify the tracking control BMPs that may be required for the project.
- Complete the BMP selection table in this section to indicate the temporary tracking control BMPs that have been selected for use on the project. If a particular BMP will not be used or is not applicable, check "Not Used" and enter a brief explanation. Include non-standard or alternative BMPs selected for the project in the BMP selection table.
- List selected temporary tracking control BMPs on the WPCBMPL in Attachment CC.
- Tracking controls shall be considered and implemented year round and throughout the duration of the project. Show selected tracking control BMPs on the WPCDs in Attachment BB.
- Provide a narrative description of temporary tracking control BMPs. Give a general approach on how temporary tracking control BMPs will be implemented on the project at all access (ingress/egress) points to the project site where vehicles and/or equipment may track sediment from the construction site onto public or private roadways.

EXAMPLE:

Tracking control BMPs are be implemented to reduce the amount of sediment that is tracked from the construction site onto private or public roads. This project will incorporate temporary tracking control measures required by the contract plans and specifications, *SWPPP/WPCP Preparation Manual* minimum temporary tracking control requirements, and other measures selected by the Contractor.

The following tracking control BMP selection table indicates the BMPs that shall be implemented to reduce sediment tracking from the construction site onto private or public roads. Temporary tracking control BMPs shown on the WPCDs in Attachment BB and are listed by location in the WPCBMPL in Attachment CC. Any details for temporary tracking control BMPs are shown in Attachment BB.

TABLE 500.3.4
TEMPORARY TRACKING CONTROL BMPs

CONSTRUCTION BMP ID NO(1)	BMP NAME	CONTRACT MINIMUM REQUIRE-MENT(2)	CONTRACT BID ITEM	BMP USED		IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON
				YES	NO	
SC-7	Street Sweeping		☒	☒	☐	
TC-1	Temporary Construction Entrance		☒	☒	☐	
TC-2	Stabilized Construction Roadway		☒	☒	☐	
TC-3	Temporary Entrance / Outlet Tire Wash		☐	☐	☒	Construction Entrance/Exit with Street Sweeping is sufficient
ALTERNATIVE TEMPORARY TRACKING CONTROL BMPs USED(3) ☐ Yes ☒ No						IF USED, STATE REASON

Notes:
(1) The BMP designations (SS-1, SC-3, etc.) are solely for maintaining continuity with existing Caltrans documents and are not provided to imply that the *Construction Site Best Management Practices (BMPs) Reference Manual* is a required contract document.
(2) Minimum requirements are based on the contract plans and specifications. Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the QSD or WPC Manager.
(3) Use of alternative BMPs will require written approval by the RE.

The following list of BMPs and associated narratives explain how the selected BMPs will be incorporated into the project.

TC-1 Temporary Construction Entrance

A stabilized construction entrance/exit will be constructed and maintained at construction site entrances and exits, equipment yards, PCC batch plants and crushing plants, water filling areas for water trucks, and the project office location, as shown on the site map.

The site entrance/exit will be stabilized to reduce tracking of sediment as a result of construction traffic. The entrance will be designated and graded to prevent runoff from leaving the site. Stabilization material will be 3- to 6-inch-diameter crushed aggregate. The entrance will be flared where it meets the existing road to provide an adequate turning radius. A site entrance/exit shall only be installed to reduce tracking of sediment during soil-hauling activities that extend over a one-week time period.

BMPs will be implemented to prevent the off-site tracking of loose construction and landscape materials.

TC-2 Stabilized Construction Roadway

The construction roadway through the site will also be designated and stabilized to prevent erosion and to control tracking of mud and soil material onto adjacent roads. The roadway will be clearly marked for with a low speed limit

to control dust. Refer to the WPCDs for entrance/exit and construction roadway locations. Stabilization material will be 3- to 6-inch-diameter crushed aggregate. A regular maintenance program will be conducted to replace sediment-clogged stabilization material with new stabilization material.

SC-7 Street Sweeping

Road sweeping and vacuuming will occur during soil hauling and as necessary to keep streets clear of tracked material and debris. Washing of sediment tracked onto streets into storm drains will not occur.

REQUIRED TEXT:

Tracking control BMPs are be implemented to reduce sediment tracking from the construction site onto private or public roads. This project will incorporate temporary tracking control measures required by the contract plans and specifications, *SWPPP/WPCP Preparation Manual* minimum temporary tracking control requirements, and other measures selected by the contractor.

The following tracking control BMP selection table indicates the BMPs that shall be implemented to reduce sediment tracking from the construction site onto private or public roads. Temporary tracking control BMPs shown on the WPCDs in Attachment BB and are listed by location in the WPCBMPL in Attachment CC. Any details for temporary tracking control BMPs are shown in Attachment BB.

TABLE 500.3.4
TEMPORARY TRACKING CONTROL BMPs

CONSTRUCTION BMP ID NO(1)	BMP NAME	CONTRACT MINIMUM REQUIRE-MENT(2)	CONTRACT BID ITEM	BMP USED		IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON
				YES	NO	
SC-7	Street Sweeping		☐	☐	☐	
TC-1	Temporary Construction Entrance		☐	☐	☐	
TC-2	Stabilized Construction Roadway		☐	☐	☐	
TC-3	Temporary Entrance / Outlet Tire Wash		☐	☐	☐	
ALTERNATIVE TEMPORARY TRACKING CONTROL BMPs USED(3) ☐ Yes ☐ No						IF USED, STATE REASON

TABLE 500.3.4 TEMPORARY TRACKING CONTROL BMPs						
CONSTRUCTION BMP ID NO(1)	BMP NAME	CONTRACT MINIMUM REQUIRE-MENT(2)	CONTRACT BID ITEM	BMP USED		IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON
				YES	NO	

Notes:
(1) The BMP designations (SS-1, SC-3, etc.) are solely for maintaining continuity with existing Caltrans documents and are not provided to imply that the *Construction Site Best Management Practices (BMPs) Reference Manual* is a required contract document.
(2) Minimum requirements are based on the contract plans and specifications. Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the QSD or WPC Manager.
(3) Use of alternative BMPs will require written approval by the RE.

The following list of BMPs and associated narratives explain how the selected BMPs will be incorporated into the project.

INSERT ADDITIONAL NARRATIVE TEXT FOR TRACKING CONTROL HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

500.3.5 Wind Erosion Control

INSTRUCTIONS:

- Described below is the sequence of steps that shall be used to identify wind erosion control BMPs to be included in the SWPPP.
  - ❑ Step 1: Incorporate the temporary wind erosion control BMPs that are described in:
    - contract special provisions
    - contract plans
    - standard plans
    - standard specifications
- If the wind erosion control BMPs required in Step 1 are inadequate to address wind erosion control requirements, then:
  - ❑ Step 2: Incorporate the temporary wind erosion control BMPs that are described in Section 4.5 of the SWMP. For reference on these BMPs see the *Construction Site Best Management Practices (BMPs) Reference Manual*.
- For Steps 1 and 2 above, the tables and guidance in the SWPPP/WPCP Preparation Manual, Section 2 may be used to help identify the wind erosion control BMPs that may be required for the project.
- Complete the BMP selection table in this section to indicate the temporary wind erosion control BMPs that have been selected for use on the project. If a particular BMP will not be used or is not applicable, check "Not Used" and enter a brief explanation. Include non-standard or alternative

BMPs selected for the project in the BMP selection table.

- List selected wind erosion control BMPs on the WPCBMPL in Attachment CC.
- Provide a narrative description of wind erosion control BMPs. Give a general approach on how wind erosion control BMPs will be implemented on the project to control dust during construction operations, including stockpile operations, at all times.

EXAMPLE:

Wind erosion control BMPs are be implemented to prevent sediment from leaving the construction site. This project will incorporate temporary wind erosion control measures required by the contract specifications, *SWPPP/WPCP Preparation Manual* minimum temporary wind erosion control requirements, and other measures selected by the contractor.

The following temporary wind erosion control BMP selection table indicates the BMPs that shall be implemented to reduce wind erosion at the construction site. Temporary wind erosion control BMPs are shown on the WPCDs in Attachment BB and are listed by location in the WPCBMPL in Attachment CC. Any details for temporary wind erosion control BMPs are shown in Attachment BB.

TABLE 500.3.5
TEMPORARY WIND EROSION CONTROL BMPs

CONSTRUCTION BMP ID NO(1)	BMP NAME	CONTRACT MINIMUM REQUIRE-MENT(2)	CONTRACT BID ITEM	BMP USED		IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON
				YES	NO	
WE-1	Wind Erosion Control	√	☒	☒	☐	
TC-1	Temporary Construction Entrance		☒	☒	☐	
TC-2	Stabilized Construction Roadway		☒	☒	☐	
----	All Soil Stabilization Measures included in Section 500.3.2		☐	☒	☐	
ALTERNATIVE TEMPORARY WIND EROSION CONTROL BMPs USED(3) ☐ Yes ☒ No						IF USED, STATE REASON

Notes:
(1) The BMP designations (SS-1, SC-3, etc.) are solely for maintaining continuity with existing Caltrans documents and are not provided to imply that the *Construction Site Best Management Practices (BMPs) Reference Manual* is a required contract document.
(2) Minimum requirements are based on the contract plans and specifications. Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the QSD or WPC Manager.
(3) Use of alternative BMPs will require written approval by the RE.

The following list of BMPs and associated narratives explain how the selected BMPs shall be incorporated into the

project.

WE-1 Wind Erosion Control

Potable water shall be applied to disturbed soil areas of the project site to control dust and maintain optimum moisture levels for compaction. The water will be applied using water trucks. As shown on the project schedule, project soils will be disturbed and exposed from approximately May 1 through December 15. Water applications will be concentrated during the late summer and early fall months and especially during the embankment construction operations scheduled for July. The total water to be applied is expected to be between 0.8 and 1.3 million gallons.

Wind erosion control and water conservation practice BMPs will be implemented to provide dust control and prevent discharges from dust control activities and water supply equipment. Water application rates will be minimized as necessary to prevent runoff and ponding, and leaks from water equipment will be repaired immediately.

During windy conditions [forecast or actual wind conditions of approximately 25 miles per hour (mph) or greater], dust control measures will be applied to DSAs, including haul roads, to adequately control wind erosion.

Stockpiles will be managed using plastic covers to prevent wind dispersal of sediment from stockpiles.

REQUIRED TEXT:

Wind erosion control BMPs will be implemented to prevent sediment from leaving the construction site. This project will incorporate temporary wind erosion control measures required by the contract plans and specifications, *SWPPP/WPCP Preparation Manual* minimum temporary wind erosion control requirements, and other measures selected by the contractor.

The following temporary wind erosion control BMP selection table indicates the BMPs that shall be implemented to reduce wind erosion at the construction site. Temporary wind erosion control BMPs are shown on the WPCDs in Attachment BB and are listed by location in the WPCBMPL in Attachment CC. Any details for temporary wind erosion control BMPs are shown in Attachment BB.

TABLE 500.3.5
TEMPORARY WIND EROSION CONTROL BMPs

CONSTRUCTION BMP ID NO(1)	BMP NAME	CONTRACT MINIMUM REQUIRE-MENT(2)	CONTRACT BID ITEM	BMP USED		IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON
				YES	NO	
WE-1	Wind Erosion Control	√	☐	☐	☐	
TC-1	Temporary Construction Entrance		☐	☐	☐	
TC-2	Stabilized Construction Roadway		☐	☐	☐	
----	All Soil Stabilization Measures included in Section 500.3.2		☐	☐	☐	

TABLE 500.3.5 TEMPORARY WIND EROSION CONTROL BMPs						
CONSTRUCTION BMP ID NO(1)	BMP NAME	CONTRACT MINIMUM REQUIRE-MENT(2)	CONTRACT BID ITEM	BMP USED		IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON
				YES	NO	
ALTERNATIVE TEMPORARY WIND EROSION CONTROL BMPs USED(3) ☐ Yes ☐ No						IF USED, STATE REASON

Notes:
(1) The BMP designations (SS-1, SC-3, etc.) are solely for maintaining continuity with existing Caltrans documents and are not provided to imply that the *Construction Site Best Management Practices (BMPs) Reference Manual* is a required contract document.
(2) Minimum requirements are based on the required contract provisions, standard special provisions, plans and specifications. Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the QSD or WPC Manager.
(3) Use of alternative BMPs will require written approval by the RE.

The following list of BMPs and narrative explain how the selected BMPs shall be incorporated into the project.

INSERT ADDITIONAL NARRATIVE TEXT FOR WIND EROSION CONTROL HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)

500.4 BMP Selection for Construction Site Management

REQUIRED TEXT:

Construction site management shall consist of controlling potential sources of water pollution before they come in contact with stormwater systems or watercourses. The contractor shall control material pollution and manage waste and non-stormwater discharges at the construction site by implementing effective handling, storage, use, and disposal practices.

INSTRUCTIONS FOR SECTIONS 500.4.1 TO 500.4.4:

BMP SELECTION PROCESS

- Using the identified potential pollutant sources in Section 500.1, the BMP selection process identifies the BMPs necessary to reduce or eliminate pollutant discharges from the site.
- All contract required BMPs and any other BMPs required by the contract special provisions, contract plans, standard plans, and standard specifications will be identified for each section. If a non-standard BMP will be used, it will be identified in the BMP implementation table and a narrative description of its use and implementation will be provided.
- The example text provided in Sections 500.4.1 to 500.4.2 and the example WPCDs provided in Attachment BB are provided only as an examples. Copying example text for project-specific activities does not necessarily meet the requirements of the NPDES Permits referenced in Sections 1.2 and 1.3 of the *SWPPP/WPCP Preparation Manual*.
- BMPs will be selected to eliminate or reduce the pollutants identified in the Section 500.1.1: Materials Management inventory list. The BMP consideration checklists in each of the following

sections will be completed to assist in the selection of project-specific BMPs.

- ❑ 500.4.1: Non-Stormwater Site Management
- ❑ 500.4.2: Waste Management and Materials Pollution Control

- The selected BMPs on the project Water Pollution Control BMPs List and WPCDs will be identified. The instructions in Section 500.5 and the SWPPP Checklist will be followed to confirm that all WPCD requirements are included. A narrative description of the BMPs selected will be provided in the appropriate section.
- Risk Levels 1, 2 and 3 will all include, at a minimum, good housekeeping practices that must be followed. These are described below and shall be addressed by following the necessary guidelines in this SWPPP template.

500.4.1 Non-Stormwater Site Management

INSTRUCTIONS:

- The Caltrans Statewide NPDES Permit defines non-stormwater discharges as follows: "Non-stormwater discharges consist of all discharges from a municipal stormwater conveyance which do not originate from forecasted storm events (i.e., all discharges from a conveyance system other than stormwater)."
- The three types of non-stormwater discharges specified in the Permit are described below.

1. Discharges Authorized by a Separate NPDES Permit: Since these discharges have a separate permit, they are not addressed by this Statewide SWMP.
2. Exempted Discharges: These discharges have not been found to contain pollutants and can therefore be discharged without direct application of BMPs. (Previously described spill prevention, waste management and other practices will be implemented to ensure that these discharges remain uncontaminated.) These discharges include:
   - flows from riparian habitats or wetlands
   - diverted stream flows
   - springs
   - rising groundwater
   - uncontaminated groundwater infiltration
3. Conditionally Exempt Discharges: The conditionally exempt discharges and their associated BMPs and/or regulatory requirements are summarized below.

NON-STORM WATER BMPs for CONDITIONALLY EXEMPT DISCHARGES[1]		
	Non-Storm Water Discharges	BMP Titles
a.	Uncontaminated pumped groundwater	N/A Prior to discharge, Caltrans will work directly with the appropriate RWQCB to determine the appropriate monitoring requirements, if needed, for the proposed discharge.
b.	Foundation drains	N/A These discharges are not known to exist at the Department's facilities.
c.	Water from crawl space pumps	
d.	Footing drains	
e.	Air conditioning condensate	N/A Air-conditioning condensate discharges are not expected to occur. Routinely, the Department's air conditioning systems are so small that any such occurrences will evaporate prior to discharging to receiving waters.
f.	Irrigation water	Irrigation (Watering), Potable and Non-Potable[1] Irrigation water, landscape irrigation and lawn or garden watering runoff, though minimized through application of potable water/irrigation BMPs, occur on a regular basis as a result of excess irrigation water running off vegetated and nearby impervious areas and into storm drains. The preceding statement constitutes notice to the SWRCB and the RWQCBs of such occurrences statewide. The Department is currently conducting characterization studies that may reveal some irrigation and landscaping practices to be sources of pollutants. If found, BMPs will be implemented to eliminate or reduce the discharge of pollutants associated with irrigation so that such discharges will be conditionally approved under the Permit.
g.	Landscape irrigation	
h.	Lawn or garden watering	
i.	Planned and unplanned discharges from potable water sources	Irrigation (Watering), Potable and Non-Potable[1] and Water Line Repairs[2] Activities by others that generate these discharges will require pollution management as specified in the Permit. Parties that undertake activities on the Department's property that have the potential to result in stormwater discharges of this type will be required to notify the Department and the RWQCB in advance and to implement practices to appropriately manage pollutants.
j.	Water line and hydrant flushing	Water Line Repairs[2] Activities by others that generate these discharges will require pollution management as specified in the Permit. Parties that undertake activities on the Department's property that have the potential to result in stormwater discharges of this type will be required to notify the Department and the RWQCB in advance and to implement practices to appropriately manage pollutants.

NON-STORM WATER BMPs for CONDITIONALLY EXEMPT DISCHARGES[1]		
	Non-Storm Water Discharges	BMP Titles
k.	Individual residential car washing	N/A Cleaning of residential cars is not an allowed activity on the Department's property. See the Vehicle and Equipment Cleaning BMP for cleaning of construction vehicles and equipment (not considered an exempt discharge).[3]
l.	Discharges or flows from emergency fire fighting activities	N/A The Department has no authority over these discharges. The Department will inform all federal, state and local fire officials of the discharge requirements of the Permit and refer them to the SWRCB for advice or assistance in how to achieve these expectations.

Acronyms/Notes: BMP = best management practice
Caltrans = California Department of Transportation
N/A = not applicable
RWQCB = California Regional Water Quality Control Board
SWRCB = California State Water Resources Control Board

1. California Department of Transportation, *Statewide Storm Water Management Plan*, May 2003, Table 5-2, page 5-14, http://www.dot.ca.gov/hq/env/stormwater/pdf/swmp_may2003final.pdf.
2. *Statewide Stormwater Quality Practices Guidelines*, CTSW-RT-02-009, Section 4.5.16 and Table 2-25, pages 4-64 and
3. 2-28, http://www.dot.ca.gov/hq/env/stormwater/special/newsetup/_pdfs/management_ar_rwp/CTSW-RT-02-009.pd
4. *Statewide Stormwater Quality Practices Guidelines*, CTSW-RT-02-009, Table 2-24, pages 2-27.
5. *Statewide Stormwater Quality Practices Guidelines*, CTSW-RT-02-009, Section 4.5.12, pages 4-59.

- Non-stormwater discharges into storm drainage systems or waterways, which are not authorized under the Caltrans Permit or authorized under a separate NPDES permit, are prohibited. Examples of prohibited discharges common to construction activities include:

  - vehicle and equipment wash water, including concrete washout water
  - slurries from concrete cutting and coring operations, PCC grinding or asphalt concrete (AC) grinding operations
  - slurries from concrete or mortar mixing operations
  - blast residue from high-pressure washing of structures or surfaces
  - wash water from cleaning painting equipment
  - runoff from dust control applications of water or dust palliatives
  - sanitary and septic wastes
  - chemical leaks and/or spills of any kind including but not limited to petroleum, paints, cure compounds

- ❑ Some non-stormwater discharges are authorized under the Caltrans Permit and need not be prohibited unless identified as a source of pollutants. However, specific control measures may be required to minimize adverse impacts from these discharges. Some RWQCBs may require a separate NPDES permit or specific monitoring and reporting requirements for authorized discharges. Check with the RE or the applicable RWQCB for requirements in the project area. Non-stormwater discharges exempted by the Caltrans Permit include:
  - flows from riparian habitats or wetlands
  - diverted stream flows
  - springs, rising groundwater
  - uncontaminated groundwater infiltration

- Other discharges such as pumped groundwater, irrigation water, and water line and hydrant flushing (see Caltrans NPDES Permit, Order No. 99-06-DWQ, Section B, Non-stormwater Discharge Prohibitions, Item 3, Conditionally Exempt Discharges, for entire list), are not prohibited if they are identified as not being sources of pollutants to receiving waters or if appropriate control measures (BMPs) to minimize the adverse impacts of such sources are developed and implemented. Some RWQCBs may require a separate NPDES permit or specific monitoring and reporting requirements for the conditionally exempt discharges. Check with the RE regarding what discharges are conditionally exempt.

- Use the following steps to identify non-stormwater pollution control BMPs.
  - ❑ Step 1: Incorporate the non-stormwater pollution control BMPs that are described in:
    - contract special provisions
    - contract plans
    - standard plans
    - standard specifications

- If the non-stormwater pollution control BMPs required in Step 1 are inadequate to address potential pollutants in non-stormwater discharges, then:
  - ❑ Step 2: Incorporate the temporary non-stormwater pollution control BMPs that are described in Section 4.5 of the SWMP. To reference these BMPs, see the *Construction Site Best Management Practices (BMPs) Reference Manual*.

- For Steps 1 and 2 above, use the following process to identify and select BMPs for non-stormwater management pollution control. List each potential non-stormwater discharge and provide the information requested below.
  - ❑ Identify all potential non-stormwater discharges within the project site. Examine all project activities and determine what discharges will be generated or may be required to complete

each activity, including mobile-type operations. Discuss how mobile operations, such as maintenance and fueling of large or stationary equipment, will be addressed. Examples of common construction activities that may result in non-stormwater discharges on a project are:

- vehicle and equipment cleaning, fueling and maintenance
- surface water diversions
- dewatering operations
- saw-cutting
- drilling
- boring
- AC and PCC grinding
- AC and PCC recycling
- concrete mixing
- washout of concrete equipment
- crushing
- bridge cleaning
- blasting
- painting
- hydro-demolition
- mortar mixing
- air-blown mortar

❑ Complete the BMP selection table in this section to indicate the BMPs selected. Identify all contract-required BMPs and any other BMPs required by the contract special provisions. If a particular BMP will not be used or is not applicable, check “Not Used” and enter a brief reason.

- ❑ Describe each planned non-stormwater discharge from the project into the storm drain system or waterway, including flow/quantity and expected pollutants. If a flow or quantity cannot be determined, then fully describe the nature and extent of the activity such that the quantity can be inferred. One-time discharges shall be monitored by the WPC Manager during the time that such discharges are occurring.

- ❑ Describe each non-stormwater source or activity that may generate a discharge; containment facilities and appurtenances that would be employed; and flow paths of discharge to downstream inlets, drainage facilities, and receiving waters. Where possible, depict BMP locations on the WPCDs.

- ❑ Indicate the time period and frequency of each activity that generates or may generate a discharge.

- ❑ Describe mandatory non-stormwater control BMPs and practices required by Caltrans, the RWQCB (such as WDR requirements for projects that reuse aerially deposited lead soils), other permits, or other federal, state, or local agencies. Provide details and schedules, as appropriate. Include maintenance, inspection, testing, and reporting requirements. Provide permit information for discharges covered by a separate NPDES permit. List selected non-stormwater BMPs by location on the WPCBMPL in Attachment CC.

- ❑ Describe contractor-selected non-stormwater control BMPs and practices to minimize, contain, and dispose prohibited discharges or to minimize adverse impacts of authorized discharges from the project into the storm drain system or waterway. BMPs in both the Non-Stormwater Management and the Materials Handling and Waste Management categories may be applicable to non-stormwater discharges. Include maintenance, inspection, testing, and reporting procedures, if applicable. List selected temporary soil stabilization BMPs by location on the WPCBMPL in Attachment CC.

- ❑ Indicate how illicit connections and illegal discharges will be handled.

EXAMPLE:

Non-stormwater discharges into storm drainage systems or waterways, which are not authorized under the Caltrans Permit or authorized under a separate NPDES permit, shall be prohibited. The selection of non-stormwater BMPs is based on the list of construction activities with a potential for non-stormwater discharges identified in Section 500.1 of the Material Management Plan. This project will incorporate non-stormwater pollution control measures required by the contract plans and specifications, *SWPPP/WPCP Preparation Manual* minimum non-stormwater pollution control requirements, and other measures selected by the contractor.

The following non-stormwater control BMP selection table indicates the BMPs that shall be implemented to prevent non-stormwater discharges during construction at the project site. Non- stormwater pollution control BMPs are shown on the WPCDs in Attachment BB and are listed by location in the WPCBMPL in Attachment CC. Any details associated with non-stormwater pollution control BMPs are shown in Attachment BB.

TABLE 500.4.1 TEMPORARY NON STORMWATER POLLUTION CONTROL BMPs						
CONSTRUCTION BMP ID NO(1)	**BMP NAME**	**CONTRACT MINIMUM REQUIRE-MENT(2)**	**CONTRACT BID ITEM**	**BMP USED**		**IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON**
				YES	**NO**	
NS-1	Water Control and Conservation		☐	☒	☐	
NS-2	Dewatering(3)		☐	☐	☒	No dewatering anticipated.
NS-3	Paving, Sealing, Sawcutting, and Grinding Operations		☐	☒	☐	
NS-4	Temp Stream Crossing (3)		☐	☐	☒	Not applicable to this project because there are no streams to cross.
NS-5	Clear Water Diversion (3)		☐	☐	☒	Not applicable to this project because no upstream diversions exist.
NS-6	Illegal Connection and Illegal Discharge Detection Reporting	√	☐	☒	☐	
NS-7	Potable Water / Irrigation		☐	☒	☐	
NS-8	Vehicle and Equipment Cleaning	√	☐	☒	☐	
NS-9	Vehicle and Equipment Fueling	√	☐	☒	☐	
NS-10	Vehicle and Equipment Maintenance	√	☐	☒	☐	
NS-11	Pipe Driving Operations		☐	☒	☐	No pile driving on project.
NS-12	Concrete Curing		☐	☐	☐	
NS-13	Material and Equipment Used Over Water		☐	☐	☒	No construction over water.
NS-14	Concrete		☐	☐	☐	

TABLE 500.4.1 TEMPORARY NON STORMWATER POLLUTION CONTROL BMPs						
CONSTRUCTION BMP ID NO(1)	**BMP NAME**	**CONTRACT MINIMUM REQUIRE-MENT(2)**	**CONTRACT BID ITEM**	**BMP USED**		**IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON**
				YES	**NO**	
	Finishing					
NS-15	Structure Demolition / Removal Over or Adjacent to Water		☐	☐	☒	No structure demolition over/adjacent to water.
ALTERNATIVE TEMPORARY NON-STORMWATER POLLUTION CONTROL BMPs USED(4) ☐ Yes ☒ No						**IF USED, STATE REASON**
CONSTRUCTION BMP ID NO (1)	**BMP NAME**					

Notes:
(1) The BMP designations (SS-1, SC-3, etc.) are solely for maintaining continuity with existing Caltrans documents and are not provided to imply that the *Construction Site Best Management Practices (BMPs) Reference Manual* is a required contract document.
(2) Minimum requirements are based on the contract plans and specifications. Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the QSD or WPC Manager.
(3) The BMPs listed above are incidental and do not include operations listed as separated line items in the contract.
(4) Use of alternative BMPs will require written approval by the RE.

The following list of BMPs and associated narratives explain how the selected BMPs will be incorporated into the project.

NS-1 Water Control and Conservation / Potable Water and Irrigation

Water application rates will be minimized, as necessary, to prevent runoff and ponding and water equipment leaks will be repaired immediately. The water truck filling area will be stabilized.

Irrigated areas within the construction limits will be inspected for excess watering. Watering times and schedules will be adjusted to ensure that the appropriate amount of water is being used and to minimize runoff.

The exposure of construction materials to precipitation will be minimized. This does not include materials and equipment that are designed to be outdoors and exposed to environmental conditions (e.g., poles, equipment pads, cabinets, conductors, insulators, bricks).

NS-3 Paving, Sealing, Sawcutting, and Grinding Operations

The project will include placement of approximately 20 acres of HMA pavement. Paving locations and adjacent storm drain inlets are shown on WPCDs 2, 3, and 5. Paving operations generally will be conducted in August and

September, as shown on the Water Pollution Control Schedule in Section 500.7. Paving and Grinding Operation BMPs will be implemented to prevent paving materials from being discharged off site. Grate inlets within the AC paving area will be temporarily covered as shown in the detail on the WPCDs. Inlets outside of the HMA paving area will be protected with the type of drop inlet (DI) protection called out on the WPCDs. Following paving operations, the area will be swept, inlet covers will be removed, and the inlets will be inspected for paving materials.

The project includes approximately 1,000 feet of concrete saw-cutting at the on- and off-ramp project limits where traffic signal and ramp metering detection loops will be installed. Saw-cutting locations and adjacent storm drain inlets are shown on WPCDs 2, 3, and 4. Estimated saw-cutting dates are shown on the schedule in Section 500.7. Saw-cutting operations shall not be conducted during or immediately prior to rainfall events. Saw-cutting operations are expected to produce approximately 400 gallons of waste slurry consisting of water and fine PCC grit. The slurry shall be vacuumed and discharged to the concrete washout facility located at Button Willow Road. Dried and cured concrete wastes shall be disposed off site during concrete washout maintenance activities.

NS-6 Illegal Connection and Illegal Discharge Detection Reporting

The contractor will implement the Illegal Connection/Illegal Discharge Detection Reporting BMP throughout the duration of the project.

NS-8, NS-9, NS-10 Vehicle and Equipment Operations

Several types of vehicles and equipment will be used on site throughout the project, including graders, scrapers, excavators, loaders, paving equipment, rollers, trucks and trailers, backhoes, forklifts, generators, compressors, and traffic control equipment.

Vehicle and equipment fueling, and vehicle and equipment maintenance BMPs will be utilized to prevent discharges of fuel and other vehicle fluids. Except for concrete washout activities, which are addressed in Section 500.4.2, vehicle cleaning will not be performed on site.

A paved temporary fueling area shall be constructed in the contractor's yard as shown on WPCD-14. All wheeled vehicles shall be fueled off site or at the temporary fueling area. Fuel trucks, each equipped with absorbent spill clean-up materials, shall be used for all on-site fueling, whether at the temporary fueling area or for mobile fueling elsewhere on the site. Drip pans shall be used during all mobile fueling. The fueling truck shall be parked on the paved fueling area during overnight storage. Drip pans or absorbent pads shall be used during all vehicle and equipment maintenance activities that involve grease, oil, solvents, or other vehicle fluids. All vehicle maintenance and mobile fueling operations shall be conducted at least 50 feet away from operational inlets and drainage facilities and on a level, graded area.

NS-12, NS-14 Concrete Curing and Finishing

Drain inlets shall be protected prior to the application of curing compounds. Excess cure water and water from high-pressure blasting will be collected and disposed of, and will not be allowed to run off to inlets or swales. Wet blankets will be used wherever possible to eliminate excess cure water.

REQUIRED TEXT:

Non-stormwater discharges into storm drainage systems or waterways, which are not authorized under the Caltrans Permit or authorized under a separate NPDES permit, shall be prohibited. The selection of non-stormwater BMPs is based on whether construction activities with a potential for non-stormwater discharges will be conducted, as discussed in the Materials Management Plan and in Section 500.4. This project will incorporate non-stormwater pollution control measures required by the contract plans and specifications, *SWPPP/WPCP Preparation Manual* minimum non-stormwater pollution control requirements, and other measures selected by the contractor.

The following non-stormwater control BMP selection table indicates the BMPs that shall be implemented to prevent non-stormwater discharges from construction activities conducted at the project site. Non-stormwater pollution control BMPs are shown on the WPCDs in Attachment BB and are listed by location in the WPCBMPL in Attachment CC. Any details for non-stormwater pollution control BMPs are shown in Attachment BB.

TABLE 500.4.1
TEMPORARY NON STORMWATER POLLUTION CONTROL BMPs

CONSTRUCTION BMP ID NO(1)	BMP NAME	CONTRACT MINIMUM REQUIRE-MENT(2)	CONTRACT BID ITEM	BMP USED		IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON
				YES	NO	
NS-1	Water Control and Conservation		☐	☐	☐	
NS-2	Dewatering(3)		☐	☐	☐	
NS-3	Paving, Sealing, Sawcutting, and Grinding Operations		☐	☐	☐	
NS-4	Temporary Stream Crossing (3)		☐	☐	☐	
NS-5	Clear Water Diversion (3)		☐	☐	☐	
NS-6	Illegal Connection and Illegal Discharge Detection Reporting	√	☐	☐	☐	
NS-7	Potable Water / Irrigation		☐	☐	☐	
NS-8	Vehicle and Equipment Cleaning	√	☐	☐	☐	
NS-9	Vehicle and Equipment Fueling	√	☐	☐	☐	
NS-10	Vehicle and Equipment Maintenance	√	☐	☐	☐	
NS-11	Pipe Driving Operations		☐	☐	☐	
NS-12	Concrete Curing		☐	☐	☐	
NS-13	Material and		☐	☐	☐	

TABLE 500.4.1 TEMPORARY NON STORMWATER POLLUTION CONTROL BMPs						
CONSTRUCTION BMP ID NO(1)	**BMP NAME**	**CONTRACT MINIMUM REQUIRE-MENT(2)**	**CONTRACT BID ITEM**	**BMP USED**		**IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON**
				YES	**NO**	
	Equipment Used Over Water					
NS-14	Concrete Finishing		☐	☐	☐	
NS-15	Structure Demolition / Removal Over or Adjacent to Water		☐	☐	☐	
ALTERNATIVE TEMPORARY NON-STORMWATER POLLUTION CONTROL BMPs USED(4) ☐ Yes ☐ No						**IF USED, STATE REASON**
CONSTRUCTION BMP ID NO (1)	**BMP NAME**					

Notes:
(1) The BMP designations (SS-1, SC-3, etc.) are solely for maintaining continuity with existing Caltrans documents and are not provided to imply that the *Construction Site Best Management Practices (BMPs) Reference Manual* is a required contract document.
(2) Minimum requirements are based on the contract plans and specifications. Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the QSD or WPC Manager.
(3) The BMPs listed above are incidental and do not include operations listed as separated line items in the contract.
(4) Use of alternative BMPs will require written approval by the RE.

The following list of BMPs and associated narratives explain how the selected BMPs will be incorporated into the project.

INSERT ADDITIONAL NARRATIVE TEXT FOR NON-STORMWATER POLLUTION CONTROL HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

500.4.2 Waste Management and Materials Pollution Control

INSTRUCTIONS:

- Waste management consists of implementing procedural and structural BMPs for collecting, handling, storing and disposing of wastes generated by a construction project to prevent the release of waste materials into stormwater discharges. Wastes are going to be generated during construction; however, the methods used to collect, store, and remove the wastes will determine

the success of the waste management activities. Construction site wastes can range from residues collected from non-stormwater discharges (e.g., paint removal) to general site litter and debris (e.g., empty marker paint cans).

- Material pollution control (materials handling) measures consist of implementing procedural and structural BMPs for handling, storing and using construction materials to prevent the release of those materials into stormwater discharges. The amount and type of construction materials to be utilized at the site will be dependent upon the type of construction and the length of the construction period. Materials may be used continuously, such as fuel for vehicles and equipment, or may be used for a discrete period, such as fertilizer for occasional landscaping activities.

- Waste management and material pollution control BMPs shall be implemented to minimize stormwater contact with construction materials, wastes and service areas, and to prevent materials and wastes from being discharged off site. The primary mechanisms for stormwater contact that shall be addressed are:

    - direct contact with precipitation
    - contact with stormwater run-on and runoff
    - wind dispersion of loose materials
    - direct discharge to the storm drain system through spills or dumping

- Extended contact with some materials and wastes, such as asphalt cold mix and treated wood products, can also result in pollutants being leached into stormwater and shall be addressed.

- Disposal of any rinse or wash waters or materials on impervious or pervious site surfaces, or into the storm drain system shall be prevented.

- Containment of sanitation facilities (e.g., portable toilets) will be ensured to prevent discharges of pollutants to the stormwater drainage system or receiving water(s).

- Temporary sanitation facilities shall be cleaned or replaced, and shall be inspected regularly for leaks and spills.

- Waste disposal containers shall be covered at the end of every business day and during a rain event.

- Discharges from waste disposal containers to the stormwater drainage system or receiving water shall be prevented.

- Stockpiled waste material shall be contained and securely protected from wind and rain at all times unless actively being used.

- Procedures shall be implemented that effectively address hazardous and nonhazardous spills.

- Containment of concrete washout areas and other washout areas that may contain additional pollutants shall be provided so there is no discharge into the underlying soil and onto the surrounding areas.

- Use the following steps to identify waste management and materials pollution control BMPs.

- ❑ Step 1: Incorporate the waste management and materials pollution control BMPs that are described in:
  - contract special provisions
  - contract plans
  - standard plans
  - standard specifications

- If the waste management and materials pollution control BMPs required in Step 1 are inadequate to address potential pollutants in stormwater and non-stormwater discharges, then:
  - ❑ Step 2: Incorporate the temporary non-stormwater pollution control BMPs that are described in Section 4.5 of the SWMP. For a list of these BMPs, see the *Construction Site Best Management Practices (BMPs) Reference Manual*.

- For Steps 1 and 2 above, use the following guidelines to help select appropriate BMPs:
  - ❑ review construction activities to identify and quantify likely construction materials and wastes; identify materials and wastes with special handling or disposal requirements such as lead-contaminated soils, concrete saw-cutting liquids, waste chemicals and empty chemical containers (refer to Section 500.4.1).
  - ❑ substitute safer, less polluting products where possible; substitution of materials and products requires approval pursuant to the standard specifications.

Use the waste management BMP implementation table in this Section to identify Caltrans minimum requirements and additional BMPs selected to address project-specific activities. If a particular BMP will not be used or is not applicable, check “Not Used” in the BMP implementation table and enter a brief explanation.

In the narrative section, list the selected BMPs and describe the proposed facilities for materials storage and waste management (including on-site storage and disposal of waste). Discuss how each stormwater contact mechanism will be addressed. Include schedules, inspection, and maintenance requirements. Show facility locations and details on the WPCDs, where possible.

EXAMPLE:

An inventory of construction activities, materials, and waste is provided in Section 500.4.1. The following BMP consideration checklist indicates the BMPs that have been selected to control construction site wastes and materials. Locations and details of materials handling and waste management BMPs are shown on the WPCDs in Attachment BB and are listed by location in the WPCBMPL in Attachment CC. In the narrative description, a list of waste disposal facilities and the type of waste to be disposed at each facility is provided. The following list of BMPs and associated narratives explain how the selected BMPs will be incorporated into the project.

TABLE 500.4.2 TEMPORARY WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs						
CONSTRUCTION BMP ID NO(1)	**BMP NAME**	**CONTRACT MINIMUM REQUIRE-MENT(2)**	**CONTRACT BID ITEM**	**BMP USED**		**IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON**
				YES	**NO**	
WM-1	Material Delivery and Storage	√	☐	☒	☐	
WM-2	Material Use	√	☐	☒	☐	
WM-3	Stockpile Management	√	☐	☒	☐	
WM-4	Spill Prevention and Control	√	☐	☒	☐	
WM-5	Solid Waste Management		☐	☒	☐	
WM-6	Hazard Waste Management (3)		☐	☒	☐	
WM-7	Contaminated Soil Management (3)		☐	☒	☐	
WM-8	Concrete Waste Management		☐	☒	☐	
	Temporary Concrete Washout Facility		☒	☒	☐	
	Temporary Concrete Washout (Portable)		☐	☐	☒	
WM-9	Sanitary/Septic Waste Management	√	☐	☒	☐	
WM-10	Liquid Waste Maintenance	√	☐	☒	☐	
ALTERNATIVE TEMPORARY WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs USED(4) ☐ Yes ☒ No						**IF USED, STATE REASON**
CONSTRUCTION BMP ID NO (1)	**BMP NAME**					

TABLE 500.4.2 TEMPORARY WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs						
CONSTRUCTION BMP ID NO(1)	BMP NAME	CONTRACT MINIMUM REQUIRE-MENT(2)	CONTRACT BID ITEM	BMP USED		IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON
				YES	NO	

Notes:
(1) The BMP designations (SS-1, SC-3, etc.) are solely for maintaining continuity with existing Caltrans documents and are not provided to imply that the *Construction Site Best Management Practices (BMPs) Reference Manual* is a required contract document.
(2) Minimum requirements are based on the contract plans and specifications. Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the QSD or WPC Manager.
(3) The BMPs listed above are incidental and do not include operations listed as separated line items in the contract.
(4) Use of alternative BMPs will require written approval by the RE.

In general, BMPs shall be implemented to help prevent discharges of construction materials during delivery, storage, and use. The general material storage area shall be located in the Contractor's yard as shown on WPCD-4. A sandbag barrier shall be provided around the storage area to prevent run-on from adjacent areas. The two types of storage/containment facilities, listed below, shall be provided within the storage area to minimize stormwater contact with construction materials:

- Two watertight shipping containers shall be used to store hand tools, small parts, and most construction materials that can be carried by hand, such as paint cans, solvents and grease.

- A separate covered storage/containment facility shall be constructed adjacent to the shipping containers to provide storage for larger items, such as drums and items shipped or stored on pallets. The containment facility shall consist of a 10 foot by 20 foot raised concrete pad with 5-inch-tall curbed sides. A wood frame and corrugated tin roof and sides shall be constructed to protect the facility from sun and rain. The facility shall provide approximately 530 gallons of containment volume. The containment volume is adequate to store nine 55-gallon drums and the rainfall from a 24-hr, 25-year storm, pursuant to the Material Delivery and Storage BMP.

Very large items, such as light standards, framing materials, and stockpiled lumber, shall be stored in the open in the general storage area. Such materials shall be elevated with wood blocks to minimize contact with run-on.

Spill clean-up materials, material safety data sheets, a material inventory, and emergency contact numbers shall be maintained and stored in the southern shipping container.

WM-3 Stockpile Management

BMP WM-3, Stockpile Management shall be implemented to reduce or eliminate pollution of stormwater from stockpiles of soil and paving materials such as PCC rubble, AC, AC rubble, aggregate base, aggregate subbase, pre-mixed aggregate and asphalt binder (so called "cold mix" asphalt). Stockpiles shall be surrounded with sediment controls (BMP SC-5, Fiber rolls or SC-8, sandbag barrier). Plastic covers, or SS-5, Soil Binders, shall be used.

WM-4 Spill Prevention and Control

BMP WM-4, Spill Prevention and Control shall be implemented to contain and clean up spills and prevent material discharges to the storm drain system. Spill prevention is also discussed above in the Material Delivery, Storage and Use BMP, and below in the following waste management section.

WM-5, WM-6 Waste Management

BMP WM-5, Solid Waste Management and BMP WM-6, Hazardous Waste Management BMPs shall be implemented to minimize stormwater contact with waste materials and prevent waste discharges. Solid wastes shall be loaded directly onto trucks for off-site disposal. When on-site storage is necessary, solid wastes shall be stored in watertight dumpsters in the general storage area of the Contractor's yard. Dumpster locations are shown on WPCD-14. Solid waste, including rubble stockpiles, shall be removed and disposed off site at least weekly. ABC Waste Disposal (License CA9999999) shall provide solid waste disposal services. Liquid hazardous wastes shall be stored in the covered containment area discussed above for materials storage. Solid hazardous waste shall be stored in the shipping container or in the covered containment area. Hazardous wastes shall be placed in appropriate and clearly marked containers and segregated from other non-waste materials. Wastes shall be stored in sealed containers constructed of a suitable material and shall be labeled as required by Title 22 CCR, Division 4.5 and 49 CFR Parts 172, 173, 178, and 179. All hazardous waste shall be stored, transported, and disposed as required in Title 22 CCR, Division 4.5 and 49 CFR 261-263.

WM-7 Contaminated Soil Management

When contaminated soils are encountered, the RE shall be notified, the contaminated soils shall be contained, covered if stockpiled, and disposed per the Contaminated Soil Management BMP, and the contract special provisions. Employees shall be instructed to recognize evidence of contaminated soil, such as buried debris, discolored soil, and unusual odors.

WM-8 Concrete Residuals and Washout Wastes

This project includes placement of approximately 130 yards3 of concrete in four separate pours, the largest pour being approximately 50 yards3. The estimated maximum washout volume is 3.5 feet3.

Discharges will consist of rinse water and residual concrete (PCC, aggregates, admixture, and water). Estimated pour dates are shown on the project schedule in Section 500.7. Concrete pours shall not be conducted during or immediately prior to rainfall events.

Concrete waste management activities shall be implemented in accordance with contract documents, and maintained at the Contractor's yard as shown on WPCD-14.

Concrete washout facilities shall be designed in accordance with Standard Detail T59. All excess concrete and concrete washout slurries shall be discharged to the washout facility for drying. BMP maintenance, waste disposal, and BMP removal shall be conducted as described in Concrete Waste Management in the contracr special provision.

WM-9 Sanitary and Septic Wastes

The Contractor shall implement a Sanitary and Septic Waste Management BMP. Portable toilets shall be located and maintained at the Contractors' yard for the duration of the project. Specific locations are shown on WPCD-4. Weekly maintenance shall be provided each Wednesday by ABC Sanitation (license no. CA0Q45W) and wastes shall be disposed off site. The toilets shall be located away from concentrated flow paths and traffic flow.

REQUIRED TEXT:

An inventory of construction activities, materials, and wastes is provided in Section 500.1.1. The following BMP consideration checklist lists the BMPs that have been selected to control construction site wastes and materials. Locations and details of applicable materials handling and waste management BMPs are listed in the WPCBMPL and are shown on the WPCDs in Attachment BB. In the narrative description, a list of waste disposal facilities and the type of waste to be disposed at each facility is provided. The following list of BMPs and associated narratives explain how the selected BMPs will be incorporated into the project.

TABLE 500.4.2 TEMPORARY WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs						
CONSTRUCTION BMP ID NO(1)	**BMP NAME**	**CONTRACT MINIMUM REQUIRE-MENT(2)**	**CONTRACT BID ITEM**	**BMP USED**		**IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON**
				YES	**NO**	
WM-1	Material Delivery and Storage	√	☐	☐	☐	
WM-2	Material Use	√	☐	☐	☐	
WM-3	Stockpile Management	√	☐	☐	☐	
WM-4	Spill Prevention and Control	√	☐	☐	☐	
WM-5	Solid Waste Management	√	☐	☐	☐	
WM-6	Hazardous Waste Management (3)		☐	☐	☐	
WM-7	Contaminated Soil Management (3)		☐	☐	☐	
WM-8	Concrete Waste Management		☐	☐	☐	
	Temporary Concrete Washout Facility		☐	☐	☐	
	Temporary Concrete Washout (Portable)		☐	☐	☐	
WM-9	Sanitary/Septic Waste Management	√	☐	☐	☐	
ALTERNATIVE TEMPORARY WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs USED(4) ☐ Yes ☐ No						**IF USED, STATE REASON**
CONSTRUCTION BMP ID NO (1)	**BMP NAME**					

TABLE 500.4.2 TEMPORARY WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs						
CONSTRUCTION BMP ID NO(1)	BMP NAME	CONTRACT MINIMUM REQUIRE-MENT(2)	CONTRACT BID ITEM	BMP USED		IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON
				YES	NO	

Notes:
(1) The BMP designations (SS-1, SC-3, etc.) are solely for maintaining continuity with existing Caltrans documents and are not provided to imply that the *Construction Site Best Management Practices (BMPs) Reference Manual* is a required contract document.
(2) Minimum requirements are based on the contract plans and specifications. Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the QSD or WPC Manager.
(3) The BMPs listed above are incidental and do not include operations listed as separated line items in the contract.
(4) Use of alternative BMPs will require written approval by the RE.

INSERT ADDITIONAL NARRATIVE TEXT FOR WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

500.5 Water Pollution Control Drawings

INSTRUCTIONS:

- Prepare WPCDs in conformance with the following instructions and requirements of the CGP. Include the WPCDs as Attachment BB to the SWPPP. The WPCDs shall be no smaller than the "reduced plans" issued by Caltrans (approximately 11" x 17"). Sample WPCDs can be found in Section 3.4.8 of the *SWPPP/WPCP Preparation Manual*.

- The WPCDs includes all areas that are directly related to the construction activity, including but not limited to staging areas, storage yards, material borrow areas and storage areas, access roads, etc., whether or not they reside within the Caltrans right-of-way based on the Caltrans Permit.

- The WPCDs shall reflect the Contractor's phasing and/or construction staging, and shall address the entire scope of the contract work.

  - The WPCDs shall show locations of the BMPs that will be used.

  - A cover sheet(s) listing the BMPs that will be used along with the associated BMP symbols used on the WPCDs shall be included. Standard symbols and line types are shown in the *SWPPP/WPCP Preparation Manual*, Appendix D.

  - Temporary WPC details are included in the applicable standard plans and contract plans and shall be included in Attachment BB.

  - Additional details may be necessary to describe site-specific BMP applications. BMP details other than the ones shown in the contract plans and standard plans shall be submitted to the RE for approval. Use project layout, grading, stage construction, drainage sheets and/or erosion sheets as base sheets for the WPCDs. Use Section 500.1.2 as a guide for selecting BMPs based upon identified pollutant sources and construction activities. Select BMPs that are appropriate for the site and show their locations on the site map.

- The base sheets shall show the construction project in detail, including:
  - the construction site perimeter
  - geographic features within or immediately adjacent to the site; surface waters such as lakes, streams, springs, wetlands, estuaries, ponds, and the ocean, shall be included on the base sheets
  - site topography before and after construction; roads, paved areas, buildings, slopes, drainage facilities, and areas of known or suspected contamination shall be included on the base sheets
  - permanent (post-construction) BMPs; these are usually shown on the contract plans
- Also delineate the following on the WPCDs:
  - discharge points from the project to off-site storm drain systems or receiving waters
  - tributary areas and drainage patterns across the project area (show using flow arrows) into each on-site stormwater inlet or receiving water
  - tributary areas and drainage patterns to each on-site stormwater inlet, receiving water or discharge point
  - off-site tributary drainage areas that generate run-on to the project. (Where off-site tributary drainage areas are too large to depict on the drawings, use map notes or inserts illustrating the upstream drainage areas)
  - temporary on-site drainage(s) to carry concentrated flows
  - drainage patterns and slopes anticipated after major grading activities are completed
  - all areas of existing vegetation, soil cover, or native vegetation that will remain undisturbed during the project
  - all areas of soil disturbance (disturbed soil areas, DSAs);
  - location(s) of contaminated or hazardous soils
  - potential non-stormwater discharges and activities, such as dewatering operations, concrete saw-cutting or coring, pressure washing, waterline flushing, diversions, cofferdams, and vehicle and equipment cleaning; if operations can't be located, provide a narrative description
- Show proposed locations of all construction site BMPs, such as the following (include additional detail drawings if necessary to convey site-specific configurations):
  - show temporary soil stabilization and temporary sediment control BMPs that will be used during construction; include temporary on-site drainage(s) to carry concentrated flows, BMPs implemented to divert off-site drainage around or through the construction site, and BMPs that protect stormwater inlets
  - locate site ingress and egress points and any proposed temporary construction roads

- ❑ show BMPs to mitigate or eliminate non-stormwater discharges
- ❑ show BMPs for waste management and materials pollution control, including, but not limited to storage of soil or waste; construction material loading, unloading, storage and access areas; and areas designated for waste handling and disposal
- ❑ show BMPs for vehicle and equipment storage, fueling, maintenance, and cleaning

EXAMPLE:
Water Pollution Control Drawing (WPCDs) examples can be found in Section 3.4.8 of the SWPPP/WPCP Preparation Manual

REQUIRED TEXT:

The Water Pollution Control Drawings (WPCDs are the component of the project SWPPP that show the locations of BMPs necessary for the project to be in compliance with the CGP. If applicable, the location of BMPs must be shown by construction activity phases so that project compliance can be shown. The construction activity phases include the preliminary phase, grading phase, highway construction phase, and the highway planting / erosion control establishment phase as defined below.

Preliminary Phase (Pre-Construction Phase – Part of the Grading Phase)

Includes rough grading/or disking, clearing and grubbing operations, or any soil disturbance prior to mass grading.

Grading Phase

Includes reconfiguring the topography for the highway, including excavation for roadway (e.g., necessary blasting of hard rock), highway embankment construction (fills); mass grading, and stockpiling of select material for capping operations.

Highway Construction Phase

Encompasses both highway and structure construction. Highway construction includes final roadway excavation, placement of base materials and highway paving, finish grading, curbs, gutters and sidewalks, public utilities, public water facilities including fire hydrants, public sanitary sewer systems, storm drain systems and/or other drainage improvements, highway lighting, traffic signals and/or other highway electrical work, guardrail, concrete barriers, sign installation, pavement markers, traffic striping and pavement markings. Structure construction includes structure footings, bridges, retaining walls, major culverts, overhead sign structures and buildings.

Highway Planting / Erosion Control Establishment Phase

Includes clearing and grubbing operations, soil preparation (grading, incorporation of soil amendments, and placement of topsoil), irrigation (trenching, installation and trench backfilling), minor grading (top dressing and fine grading of lawn and ground cover areas), planting (seeding and planting of vegetation), mulching (application of wood chips or other mulches) and plant establishment (weeding, plant replacement, and, if needed, fertilizer application, irrigation maintenance, and reapplication of mulch). Erosion control includes placement of permanent erosion control materials and maintenance of temporary sediment controls during the erosion control establishment period.

The WPCDs provide field staff with the information on where to install BMPs so that they are effective. The WPCDs, WPCBML and Water Pollution Control Schedule provide the necessary tools for a contractor to plan and implement BMPs to meet the requirements of the project SWPPP.

The WPCDs cover sheet(s) shall include a listing of the BMPs that will be used along with the associated BMP symbols used on the WPCDs.

WPCDs are provided for all areas that are directly related to the construction activity, including but not limited to staging areas, storage yards, material borrow areas and storage areas, access roads, etc., whether or not they reside within the Caltrans rights-of-way.

The WPCDs shall show the construction project site in detail, including:

- the construction site perimeter
- geographic features within or immediately adjacent to the site; include surface waters such as lakes, streams, springs, wetlands, estuaries, ponds, and the ocean
- site topography before and after construction; include roads, paved areas, buildings, slopes, drainage facilities, and areas of known or suspected contamination
- permanent (post-construction) BMPs

The WPCDs shall show the following site information:

- discharge points from the project to off-site storm drain systems or receiving waters
- tributary areas and drainage patterns across the project area (show using flow arrows) into each on-site stormwater inlet or receiving water
- tributary areas and drainage patterns to each on-site stormwater inlet, receiving water or discharge point
- off-site tributary drainage areas that generate run-on to the project
- temporary on-site drainage(s) to carry concentrated flows
- drainage patterns and slopes anticipated after major grading activities are completed
- outlines of all areas of existing vegetation, soil cover, or native vegetation that will remain undisturbed during the project
- outlines of all areas of planned soil disturbance (disturbed soil areas, DSAs)
- known location(s) of contaminated or hazardous soils
- any potential non-stormwater discharges and activities, such as dewatering operations, concrete saw-cutting or coring, pressure washing, waterline flushing, diversions, cofferdams, and vehicle and equipment cleaning; if operations can't be located on the WPCDs, a narrative description should be provided

The WPCDs show proposed locations of all construction site BMPs. Additional detail drawings are provided if necessary to convey site-specific BMP configurations. The WPCDs shall show construction site BMPs including the following:

- temporary soil stabilization and temporary sediment control BMPs that will be used during construction
- any temporary on-site drainage(s) to carry concentrated flows, BMPs implemented to divert off-site drainage

around or through the construction site, and BMPs that protect stormwater inlets

- construction entrances used for site ingress and egress points and any proposed temporary construction roads;
- BMPs to mitigate or eliminate non-stormwater discharges
- BMPs for waste management and materials pollution control, including, but not limited to storage of soil or waste; construction material loading, unloading, storage and access areas; and areas designated for waste handling and disposal
- BMPs for vehicle and equipment storage, fueling, maintenance, and cleaning

The WPCDs can be found in Attachment BB of the SWPPP.

INSERT ADDITIONAL NARRATIVE TEXT FOR WATER POLLUTION CONTROL LIST HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)

500.6 Water Pollution Control BMP List

INSTRUCTIONS:

- Prepare WPCBMPL in conformance with the following instructions. Include the WPCBMPL as Attachment CC to the SWPPP. A sample WPCBMPL is provided in Section 3.4.9 of the *SWPPP/ WPCP Preparation Manual*.
  - ❑ Include a cover sheet(s) listing the BMPs that will be used.
  - ❑ The WPCBMPL shall show by location the BMPs that will be used. The number of locations shown on the WPCBMPL shall be established so that field staff and inspectors can easily identify where BMPs need to be located. The guidance provided below should be used to determine locations.

- At interchanges, identify locations by quadrants.
- Use 1/2-mile segments for mainline and provide both post mile and stationing identification.
- Structures.
- By road/street in active construction areas.
- Contractor yard.
- Staging area.
- Batch plant or material crushing operation.

- For mobile BMPs, such as those required for pavement placement or pavement grinding, list the location as Mobile Operation.

❑ The WPCBMPL shall reference appropriate WPCD(s) for each location.

❑ THE WPCBMPL shall show the estimated disturbed soil area for each location.

- List all construction site BMPs on the WPCBMPL. Include necessary additional information to convey site-specific configurations or BMP modifications.

  ❑ List temporary soil stabilization and temporary sediment control BMPs that will be used during construction. Include temporary on-site drainage(s) to carry concentrated flows, BMPs implemented to divert off-site drainage around or through the construction site, and BMPs that protect stormwater inlets.

  ❑ List temporary construction entrances for site ingress and egress points and any proposed temporary construction roads.

- List BMPs to be implemented to mitigate or eliminate non-stormwater discharges.

- List BMPs for waste management and materials pollution control, including, but not limited to storage of soil or waste; construction material loading, unloading, storage and access areas; and areas designated for waste handling and disposal.

- List BMPs for vehicle and equipment storage, fueling, maintenance, and cleaning.

- Prepare the WPCBMPL to reflect the Contractor's phasing and/or construction staging, and shall address the entire scope of the contract work.

EXAMPLE:
Water Pollution Control Best Management Practices List (WPCBMPL) examples can be found in Section 3.4.9 of the SWPPP/WPCP Preparation Manual

REQUIRED TEXT:

The Water Pollution Control Best Management Practices List (WPCBMPL) provides, by location and project phase/stage, the BMPs necessary for the project to be in compliance with the CGP. The WPCBMPL provides field staff both with a list of necessary BMPs and with an estimated quantity for each BMP by location and phase/stage of the project. The construction activity phases are typically the Preliminary Phase, Grading Phase, Highway Construction Phase, and the Highway Planting / Erosion Control Establishment Phase. The construction activity phases are defined in Section 500.5.

The WPCBMPL, water pollution control drawings and water pollution control schedule provide the tools necessary for the Contractor to plan and implement BMPs to meet the requirements of the project SWPPP. The BMPs listed on the WPCBMPL are the base line for site inspections and visual monitoring.

The WPCBMPL cover sheet includes a list of all BMPs to be used on the project based on Section 500 Determination of Construction Site Best Management Practices.

The names and number of locations listed on the WPCBMPL were established so that field staff and inspectors can

easily identify where BMPs need to be located. The WPCBMPL includes all locations that are directly related to the construction activity, including but not limited to staging areas, storage yards, material borrow areas and storage areas, access roads, etc., whether or not they reside within Caltrans rights-of-way.

Necessary additional information to convey site-specific BMP configurations or BMP modifications are noted on the WPCBMPL.

All construction site BMPs are listed on the WPCBMPL including the following:

- temporary soil stabilization and temporary sediment control BMPs that will be used during construction; include temporary on-site drainage(s) to carry concentrated flows
- BMPs implemented to divert off-site drainage around or through the construction site, and BMPs that protect stormwater inlets
- BMPs to mitigate or eliminate non-stormwater dischargesBMPs for waste management and materials pollution control, including, but not limited to storage of soil or waste; construction material loading, unloading, storage and access areas; and areas designated for waste handling and disposal
- BMPs for vehicle and equipment storage, fueling, maintenance, and cleaning
- permanent BMPs that are a component of the project SWPPP

The WPCBMPL can be found in Attachment CC of the SWPPP.

INSERT ADDITIONAL NARRATIVE TEXT FOR WPCBMPL HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

500.7 Water Pollution Control Schedule

INSTRUCTIONS:

- A graphical project schedule shall be provided. The project schedule may be used for the WPCS if it includes all WPCS requirements. The schedule shall contain a level of detail adequate to show major activities sequenced with the implementation of construction site BMPs, including:
  - ❑ project start and finish dates, including each stage of the project
  - ❑ SWPPP review and approval
  - ❑ annual certifications
  - ❑ mobilization dates
  - ❑ mass clearing and grubbing/roadside clearing dates
  - ❑ major grading/excavation dates
  - ❑ special dates named in other permits such as Fish and Game and Army Corps of Engineers Permits

- ❑ dates for submittal SWPPP amendments as required in the contract specifications
- ❑ implementation schedule, by location, for deployment of:
  - temporary soil stabilization BMPs
  - temporary sediment control BMPs
  - wind erosion control BMPs
  - tracking control BMPs
  - non-stormwater BMPs
  - waste management and materials pollution control BMPs
  - ❑ paving, saw-cutting, and any other pavement-related operations
  - ❑ major planned stockpiling operations
  - ❑ dates for other significant long-term operations or activities that may cause non-stormwater discharges, such as dewatering, grinding, etc
  - ❑ final stabilization activities staged over time for each area of the project

■ Note: Removal of vegetation and disturbance of existing ground surface conditions between October 15 of each year and May 1 of the following year is not allowed for projects located in the Lake Tahoe, Truckee River, East Fork Carson River, or West Fork Carson River Hydrologic Units, and projects above 5,000 feet in elevation in the portions of Mono County or Inyo County within the Lahontan RWQCB; except when an emergency situation exists that threatens the public health or welfare, or when the project is granted a variance by the RWQCB Executive Officer.

EXAMPLE:
Water Pollution Control Schedule (WPCS) examples can be found in Section 3.4.10 of the SWPPP/WPCP Preparation Manual.

REQUIRED TEXT:

The Water Pollution Control Schedule (WPCS) is the component of the project SWPPP that shows the timeline for when BMPs will be installed so that the project is in compliance with the CGP. The WPCS provides field staff with the information necessary to plan for adequate materials and crews to install BMPs at the right time so that they are effective. The WPCS, WPCBMPL, and WPCDs provide the necessary tools for the Contractor to plan and implement BMPs to meet the requirements of the project SWPPP.

The WPCS shall contain an adequate level of detail to show major activities sequenced with the implementation of construction site BMPs, including:

- project start and finish dates, including each stage of the project
- SWPPP review and approval

- annual certifications
- mobilization dates
- mass clearing and grubbing/roadside clearing dates
- major grading/excavation dates
- dates named in other permits such as Fish and Game and Army Corps of Engineers Permits
- dates for submittal of SWPPP amendments as required in the contract specifications

The WPCS shall show by location the dates for the deployment of:

- temporary soil stabilization BMPs
- temporary sediment control BMPs
- wind erosion control BMPs
- tracking control BMPs
- non-stormwater BMPs
- waste management and materials pollution control BMPs

The WPCS shall include:

- paving, saw-cutting, and any other pavement-related operations
- major planned stockpiling operations
- dates for other significant long-term operations or activities that may cause non-stormwater discharges, such as dewatering, grinding, etc
- final stabilization activities for each disturbed soil area of the project

The WPCS shall be updated quarterly and the quarterly updates shall be filed in SWPPP File Category 20.03: Water Pollution Control Schedule Updates.

The Water Pollution Control Schedule can be found in Attachment DD of the SWPPP.

INSERT ADDITIONAL NARRATIVE TEXT FOR WPCS HERE (use the “FORMAT OPTIONS” button to insert subtitles and/or paragraphs)

SECTION 600
PROJECT SITE IMPLEMENTATION PROGRAM

600.1 Water Pollution Control Manager Responsibilities

INSTRUCTIONS:

- Include a Separator and Tab for Section 600 for ready reference.
- The person responsible for water pollution control during construction is the WPC Manager.
- The WPC Manager must be a qualified QSD in accordance with Section VII.B.1 of the CGP and must sign a certification form located in Section 100.2 of this SWPPP. Also, effective September 2, 2011, the QSD shall have attended a SWRCB-sponsored or approved QSD training course. Documentation of training shall be maintained in the SWPPP files (File Category 20.23).
- The WPC Manager shall be available at all times throughout the duration of the project.
- Duties of the Contractor's WPC Manager include but are not limited to:
  - ❑ ensuring full compliance with the SWPPP and the Permit
  - ❑ implementing all elements of the SWPPP and contract specifications, including but not limited to implementing:
    - prompt and effective erosion and sediment control measures
    - all non-stormwater management, and materials and waste management activities such as: monitoring discharges (dewatering, diversion devices); performing general site cleanup activities; cleaning vehicles and equipment cleaning, performing fueling and maintenance activities; providing spill control; ensuring that no materials other than stormwater are discharged in quantities that will have an adverse effect on receiving waters or storm drain systems; etc
  - ❑ overseeing and ensuring that the following site inspections and visual site monitoring are conducted:
  - ❑ daily required BMP inspections
  - ❑ conducting routine weekly stormwater site BMP inspections
  - ❑ quarterly non-stormwater inspections
  - ❑ pre-storm inspections prior to forecasted storm events
  - ❑ daily inspections during extended forcasted storm events

- ❑ post-storm inspections for qualifying rain events
- ❑ monitoring the National Weather Forecast
- ❑ for Risk Level 2 and 3 projects, preparing and implementing Rain Event Action Plans for forecasted storm events
- ❑ for Risk Level 2 projects, submitting NAL exceedance reports to the RE
- ❑ for Risk Level 3 projects, submitting NEL violation reports to the RE
- ❑ for Risk Levels 2 and 3 projects, submitting stormwater sampling and analysis results to the RE
- ❑ preparing amendments to the SWPPP when required (Section 100.3)
- ❑ preparing Contractor's SWPPP Annual Compliance Certification
- ❑ preparing the Stormwater Annual Reports
- ❑ ensuring elimination of all unauthorized discharges
- ❑ mobilizing crews to repair, replace, and/or implement additional BMPs due to deficiencies, failures or other shortcomings identified during inspections, to be completed within 72 hours of identification (the Contractor's WPC Manager shall be assigned authority by the Contractor to mobilize crews)
- ❑ coordinating with the RE to assure that if design changes to BMPs are required due to deficiencies, failures or other shortcomings identified during inspections, the changes are completed as soon as possible and the SWPPP is revised accordingly
- ❑ mobilizing crews immediately in the event of NAL exceedances to repair existing BMPs and/or implement additional BMPs (the Contractor's WPC Manager shall be assigned authority by the Contractor to mobilize crews)
- ❑ coordinating with the RE in the event of NAL exceedances to assure that any SWPPP revisions (corrective actions) are made immediately to either prevent pollutants and authorized non-stormwater discharges from contaminating stormwater, or to substantially reduce the pollutants to levels consistently below the NALs, so the project complies with the SWPPP, the CGP and approved plans at all times
- ❑ submitting Notices of Discharge reports
- ❑ submitting reports of Illicit Connections or Illegal Discharges

- The Contractor's WPC Manager shall have primary responsibility and significant authority for the implementation, maintenance, inspection and amendments to the approved SWPPP.
- The Contractor may appoint a QSP or stormwater inspector to assist the WPC Manager with the implementation of the SWPPP BMPs. If a QSP is appointed, effective September 2, 2011, the QSP shall be either a QSD or have one of the following certifications:

- ❑ a certified erosion, sediment and stormwater inspector registered through Enviro Cert International, Inc.
- ❑ a certified inspector of sediment and erosion control registered through Certified Inspector of Sediment and Erosion Control, Inc

- Effective September 2, 2011, the QSP shall have attended a SWRCB-sponsored or approved QSP training course. Documentation of training shall be maintained in the SWPPP files (File Category 20.23).

REQUIRED TEXT:

The WPC Manager shall have primary responsibility and authority to implement the SWPPP and ensure the project is in compliance with the CGP. The WPC Manager is responsible for implementing the SWPPP and amending the SWPPP when any of the conditions specified in Section 100.3 are met. The Contractor has assigned authority to the WPC Manager to mobilize crews and subcontractors, as necessary, for SWPPP and CGP compliance. The WPC Manager will be available at all times throughout duration of the project.

Duties of the Contractor's WPC Manager include but are not limited to the following:

- ensuring full compliance with the SWPPP and the CGP
- implementing all elements of the SWPPP, including but not limited to implementing:
  - prompt and effective erosion and sediment control measures
  - all non-stormwater management, and materials and waste management activities such as: monitoring discharges (dewatering, diversion devices); performing general site cleanup; cleaning vehicles and equipment, performing fueling and maintenance activities; providing spill control; ensuring that no materials other than stormwater are discharged in quantities that will have an adverse effect on receiving waters or storm drain systems, etc
- overseeing and ensuring that the following site inspections and visual site monitoring are conducted:
  - daily required BMP inspections
  - weekly routine stormwater site BMP inspections
  - quarterly non-stormwater site inspections
  - pre-storm inspections prior to forecasted storm events
  - daily inspections during extended forcasted storm events
  - post-storm inspections for qualifying rain events
- mobilizing crews to repair, replace, and/or implement additional BMPs due to deficiencies, failures or other shortcomings identified during inspections, to be completed within 72 hours of identification (the contractor's WPC Manager shall be assigned authority by the Contractor to mobilize crews)
- coordinating with the RE to assure that if design changes to BMPs are required due to deficiencies, failures or other shortcomings identified during inspections, the changes are completed as soon as possible and the SWPPP is revised accordingly

- monitoring NWS Forecast Office forecasts for both forcasted storm events and qualifying rain events; these events are defined as follows:
    - a forecasted storm event is defined as a 50% or greater likelihood that 0.10 inch or more of precipitation will fall within a 24-hour period
    - a qualifying rain event is defined as a rain event that may produce or has produced ½ inch or greater of precipitation at the time of discharge, with a 72-hour dry period between events
- monitoring weather at the project site
- preparing and implementing qualifying rain event sampling and analysis plans

REQUIRED TEXT FOR RISK LEVEL 2 & 3 PROJECTS:

- preparing and implementing Rain Event Action Plans for forecasted storm events
- preparing and implementing qualifying rain event sampling and analysis plans
- mobilizing crews immediately, in the event of NAL exceedances, to repair existing BMPs and/or implement additional BMPs (the Contractor's WPC Manager shall be assigned authority by the Contractor to mobilize crews)
- coordinating with the RE in the event of NAL exceedances to assure that any SWPPP revisions (corrective actions) are made immediately, either to prevent pollutants and authorized non-stormwater discharges from contaminating stormwater, or to substantially reduce the pollutants to levels consistently below the NALs, so that the project complies with the SWPPP, the CGP and approved plans at all times
- submitting NAL exceedances reports to the RE
- submitting test results for stormwater samples to the

REQUIRED TEXT FOR RISK LEVEL 3 PROJECTS:

- submitting NEL violation reports to the RE

REQUIRED TEXT:

- preparing amendments to the SWPPP when required
- preparing contractor's SWPPP Annual Compliance Certification
- preparing the Stormwater Annual Reports
- ensuring elimination of all unauthorized discharges
- preparing and submitting Notice of Discharge reports to the RE
- preparing and submitting reports of illicit connections or illegal discharges to the RE

INSERT ADDITIONAL WPC MANAGER RESPONSIBILITIES HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)

600.2 Site Inspections

INSTRUCTIONS:

- Site inspections include both BMP inspections and visual monitoring inspections, shown in Section 700 Construction Site Monitoring Program.
- The purpose of BMP inspections is to:
  - ensure that BMPs were installed properly
  - ensure that proper BMP maintenance is being performed
  - evaluate BMP effectiveness and implement repairs or design changes as soon as feasible
- Inspections shall be overseen by the contractor's WPC Manager.
- Inspections shall be conducted by either:
  - WPC Manager
  - appointed QSP
  - stormwater inspector who has completed Caltrans approved 24-hour stormwater training
- Site inspections shall be documented on Stormwater Site Inspection Report forms in Appendix G of the SWPPP.
- Site inspections shall be performed at the following frequencies:
  - daily inspections shall be conducted for projects within the Lake Tahoe Hydrologic Unit
  - daily inspections of the following BMPs when applicable:
    - storage areas for hazardous materials and waste
    - hazardous waste disposal and transporting activities
    - hazardous material delivery and storage activities
    - vehicle and equipment cleaning facilities daily if vehicle and equipment cleaning occurs daily
    - vehicle and equipment maintenance and fueling areas daily if vehicle and equipment maintenance and fueling occurs daily
    - for vehicles and equipment at the job site verify that operators are inspecting vehicles and equipment each day of use.
    - demolition sites within 50 feet of storm drain systems and receiving waters

- pile driving areas for leaks and spills daily if pile driving occurs daily
- temporary concrete washouts daily if concrete work occurs daily
- paved roads at job site access points for street sweeping daily if earthwork and other sediment or debris generating activities occur daily
- dewatering work daily if dewatering work occurs daily
- temporary active treatment system daily if temporary active treatment system activities occur daily
- work over water daily if work over water occurs daily

❑ Weekly routine inspection of BMPs.

- Completed Stormwater Site Inspection Reports (CEM-2030) shall be submitted to the RE within 24 hours of inspection. Copies of the completed reports shall be kept in the SWPPP File Category 20.31: Contractor Stormwater Site Inspection Reports.
- A Stormwater Site Inspection Report Corrections Summary (CEM-2035) shall be completed for any inspection deficiencies in BMPs that were identified. Copies of the completed correction summary reports shall be attached to the corresponding inspection report and shall be kept in SWPPP file category 20.31: Contractor Stormwater Site Inspection Reports. The original CEM-2035 form shall be kept in SWPPP File Category 20.35: Corrective Actions Summary.

REQUIRED TEXT:

Stormwater site inspections and visual monitoring are necessary to ensure that the project is in compliance with the requirements of the CGP. Project site visual monitoring requirements are covered in Section 700.1 of the Construction Site Monitoring Program. Project site inspections of stormwater BMPs are conducted to identify and record:

- that BMPs are properly installed
- which BMPs need maintenance to operate effectively
- which BMPs have failed
- which BMPs could fail to operate as intended
- quarterly inspections for authorized and unauthorized non-stormwater discharges

Routine stormwater site inspections shall be conducted by the contractor's WPC Manager or other 24-hour trained staff at the following minimum frequencies:

- daily inspections of;
  - storage areas for hazardous materials and waste
  - hazardous waste disposal and transporting activities
  - hazardous material delivery and storage activities
  - vehicle and equipment cleaning facilities if vehicle and equipment cleaning occurs daily

  - vehicle and equipment maintenance and fueling areas if vehicle and equipment maintenance and fueling occurs daily
  - vehicles and equipment at the job site to verify that operators are inspecting vehicles and equipment each day of use.
  - demolition sites within 50 feet of storm drain systems and receiving waters
  - pile driving areas for leaks and spills if pile driving occurs daily
  - temporary concrete washouts if concrete work occurs daily
  - paved roads at job site access points for street sweeping if earthwork and other sediment or debris generating activities occur daily
  - dewatering work if dewatering work occurs daily
  - temporary active treatment system if temporary active treatment system activities occur daily
  - work over water if work over water occurs daily
- daily inspections for projects within the Lake Tahoe Hydrologic Unit
- weekly inspection of site BMPs

Stormwater site inspections shall be documented on CEM-2030 Stormwater Site Inspection Report, in Appendix G. Completed stormwater inspection reports shall be submitted to the RE within 24 hours after completion of the inspection. Copies of completed inspection reports will be kept in SWPPP File Category 20.31: Contractor Stormwater Site Inspection Reports.

Deficiencies identified during site inspections and correction of deficiencies will be tracked on the CEM-2035 Stormwater Site Inspection Report Corrective Actions Summary, in Appendix I. Corrective Action Summary forms shall be submitted to the RE when corrections are completed but must be submitted within five (5) days after completion of the site inspection. Completed Stormwater Site Inspection Report Corrective Actions Summary forms shall be filed in SWPPP File Category 20.35: Corrective Actions Summary. A copy of the completed Corrective Actions Summary form will also be attached to the corresponding Stormwater Site Inspection Report that generated the need for the CEM-2035 Stormwater Site Inspection Report Corrective Actions Summary.

INSERT ADDITIONAL NARRATIVE TEXT HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)

600.3 Weather Forecast Monitoring

INSTRUCTIONS:

- The WPC Manager must monitor the National Weather Service Forecast Office and document forecasts so that appropriate actions are taken prior to a forecasted storm event.
- Enter the project site address or project site latitude and longitude that will be used when obtaining weather forecast information from National Weather Service Forecast Office.
- List actions to be taken prior to a forecasted storm event.

REQUIRED TEXT:

The WPC Manager shall have primary responsibility to monitor the National Weather Service Forecast Office for forecasted precipitation based on project site location. Precipitation forecast information shall be obtained from the National Weather Service Forecast Office accessible at: http://www.srh.noaa.gov/.

The project site location to be used for obtaining forecast from National Weather Forecast Office website is [INSERT SITE ADDRESS OR SITE LATITUDE AND LONGITUDE].

The WPC Manager shall monitor the weather forecast on a daily basis for predicted precipitation within the following 96 hours. The WPC Manager shall monitor the forecast for the next 24, 48, 72 and 96 hours to determine if the forecast for precipitation is 50 percent or greater for any 6-hour period. If the forecast for precipitation is 50 percent or greater, the WPC Manager shall calculate the amount of precipitation forecasted for each 24-hour period and the total precipitation for the forecasted storm event and record the information. Weather forecast monitoring shall be recorded on CEM-2040 Weather Forecast Monitoring Form, in Appendix J. The completed CEM-2040 Weather Forecast Monitoring forms shall be filed in File Category 20.40: Weather Monitoring Logs. Within 2 working days of the last date shown on a completed Weather Forecast Monitoring Log form, a copy of the completed log will be submitted to the RE.

When the forecast for precipitation is 50 percent or greater and the forecasted amount of precipitation is 0.10 inch or more for any 24-hour period within the next 72 hours, the WPC Manager shall perform a pre-storm site inspection and ensure that the site is prepared for the forecasted storm event.

REQUIRED TEXT FOR RISK LEVEL 2 AND 3 PROJECTS:

For Risk Level 2 and 3 the WPC Manager will prepare a Rain Event Action Plan for forecasted storm events.

REQUIRED TEXT:

Forecasted storm event site preparation shall include, but is not limited to, the installation of soil stabilization and sediment BMPs on active disturbed soil areas and stockpiles.

INSERT ADDITIONAL ACTIONS TO BE TAKEN PRIOR TO A FORECASTED STORM EVENT HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)

600.4 Weather Monitoring

INSTRUCTIONS:

- The WPC Manager must monitor the weather at the project site so that appropriate documentation of weather conditions, including the amount of precipitation for each 24-hour period and the total amount of precipitation for each from forecasted storm events, is available.
- Weather monitoring shall be reported on CEM- 2041 Weather Monitoring Log form and logs shall be filed in SWPPP file category 20.40: Weather Monitoring Logs.
- The amount of precipitation recorded from the rain gauge at the project site will be shown on stormwater discharge sampling and testing reports and will be used to determine exceedance of the compliance storm event (5 year, 24 hour).
- Actions to be taken for unexpected forecasted storm events shall be listed.

- For Risk Level 3 projects, the amount of precipitation for a compliance storm, based on the project site location, shall be determined using maps available on the following websites:
  - http:/www.wrcc.dri.edu/pcpnfreq/nca5y24.gif
  - http:/www.wrcc.dri.edu/pcpnfreq/sca5y24.gif
- For Risk Level 3 projects, information from the NWS weather station nearest the project site, based on project site address or project site latitude and longitude, shall be used for verification of compliance storm event exceedances.

REQUIRED TEXT:

The WPC Manager shall have primary responsibility to monitor weather at the project site. The WPC Manager, on a daily basis, shall monitor the weather and record the weather conditions on the CEM-2041 Weather Monitoring Log form.

When there is precipitation, the WPC Manager shall ensure that storm precipitation data is obtained from the project site rain gauge. Precipitation monitoring will be performed at least every two hours during normal working hours and will include recording the time, amount of precipitation measured in the project site rain gauge, amount of cumulative precipitation within a 24-hour period, and total cumulative amount of precipitation for the forecasted storm event.

If no pre-storm visual site monitoring was performed, and the amount of precipitation for any 24-hour period is 0.10 inch or greater, the WPC Manager will implement during storm visual site monitoring, as discussed in Section 700.1.

REQUIRED TEXT for Risk Level 2 and Risk Level 3 Projects:

When a storm event was not forecasted to be a qualifying rain event, but the measured cumulative amount of precipitation for the forecasted storm event and the expected severity of the continuing storm event results in ½ inch or more of precipitation, the WPC Manager will implement a Qualifying Rain Event Sampling and Analysis Plan as soon as possible.

REQUIRED TEXT for Risk Level 3 Projects:

The compliance storm (5-year, 24-hour) for the project site is [INSERT (XX inches) COMPLIANCE STORM]–inches within a 24-hour period. When there is an exceedance of the compliance storm based on precipitation information recorded from the project site rain gauge, verification of the compliance storm exceedance will be based on the nearest NWS weather station to the project site. For this project, the NWS weather station to be used for compliance storm verification is [INSERT NWS WEATHER STATION] based on the project site location: [INSERT SITE ADDRESS OR SITE LATITUDE AND LONGITUDE].

REQUIRED TEXT:

Weather monitoring will be documented daily on the CEM-2041 Weather Monitoring Log form, in Appendix K. Completed weather monitoring log forms shall be kept in File Category 20.40: Weather Monitoring Logs. Within 2 working days of the last date shown on a completed weather monitoring log, a copy of the completed log will be submitted to the RE.

600.5 Best Management Practices Status Report

INSTRUCTIONS:

The WPC Manager must prepare a weekly status report of the water pollution control BMPs that are deployed and water pollution control BMPs that will be deployed the following week. Water pollution control BMP status is to be reported on the CEM-2034 Stormwater Best Management Practices Status Report form, in Appendix H. Copies of the completed forms shall be kept in SWPPP File Category 20.34: Best Management Practices Weekly Status Reports.

REQUIRED TEXT:

The WPC Manager shall prepare a weekly status report of the water pollution control BMPs installed on the project site and BMPs that will be deployed during the following week. The weekly BMP status report will be based on the progress of the work and the WPCBMPL for the project, with any additional BMPs the WPC Manager has determined are necessary based on the stage of construction and construction activities.

Because the SWPPP, including the WPCBMPL and WPCDs, are based on the entire project site and all construction activities, the weekly BMP status report should be a "snapshot" of which BMPs are deployed on the project site and which BMPs will be deployed the following week, so a project inspector or reviewer can easily determine what could be expected to be seen on the project site that week. The weekly status report will be used by stormwater inspectors and contractor pesonnel to ensure SWPPP compliance.

The weekly status report will be used to ensure that weekly training meetings cover BMPs that are required for work activities during the week. The weekly status report will be provided to regulatory agency staff who visit the project site to indicate which BMPs should be in place and which are schedueled to be implemented during the week.

INSERT ADDITIONAL NARRATIVE TEXT HERE OR DELETE THIS LINE (Use the "FORMATION OPTIONS" button to insert subtitles and/or paragraphs)

The weekly status of stormwater BMPs will be documented on CEM-2034 Stormwater Best Management Practices Status Report form, in Appendix H. Completed weekly status reports shall be submitted to the RE 48 hours prior to the beginning of the work week. Copies of the completed reports will be kept in SWPPP File Category 20.34: Best Management Practices Weekly Status Reports.

600.6 Rain Event Action Plans

INSTRUCTIONS:

- Rain Event Action Plans (REAPs) are required for Risk Level 2 and 3 projects. The REAP must be prepared 72 hours prior to any forecasted storm event, where a forecasted storm event is any weather pattern that is forecasted to have a 50 percent or greater probability of producing 0.1 inches or more of precipitation in the project area within a 24-hour period. If a storm event is forecasted for the following 48 hours, without a 72-hour warning, a REAP must still be prepared.
- The WPC Manager is responsible for preparing and implementing the REAP.
- The REAP shall be submitted to the RE 48 hours prior to a forecasted storm event.

- The REAP must be on the jobsite 48 hours before a forecasted storm event and a printed copy must be included as part of the SWPPP at the job site.
- REAPs shall be prepared base on the following construction phases:
  - highway construction
  - plant establishment
  - suspension where work activities are inactive

REQUIRED TEXT only for Risk Level 1 Projects:

REAPs are not required for this project based on the determination that this project is Risk Level 1.

REQUIRED TEXT for Risk Level 2 and Risk Level 3 Projects:

REAPs will be prepared by the WPC Manager when there is a forecasted storm event. A forecasted storm event is any weather pattern that is forecasted to have a 50 percent or greater probability of producing precipitation of 0.10 inch or more within any 24-hour period at the project site location. The WPC Manager will prepare the REAP for the forecasted storm event based on the current construction activity phase of the project. For REAPs, the construction activity phases are the Highway Construction Phase, Highway Planting / Erosion Control Establishment Phase or Inactive Project Phase. The construction activity phases are defined in Section 500.5.

When the NWS forecast for 72 hours and greater predicts a forecasted storm event, the WPC Manager will prepare a REAP using the REAP form appropriate to the current project construction phase. REAP forms are available in Appendix L. Prepared REAPs shall be submitted to the RE at least 48 hours prior to a forecasted storm event. If the NWS forecast changes and a storm event is forecasted to occur within 24-72 hours then a REAP must be prepared. If the NWS forecast changes and a storm event is forecasted to occur within the next 24 a REAP will not be prepared and the WPC Manager will take immediate actions to ready the project site for the forecasted storm event.

The WPC Manager shall implement a REAP within the 48 hours prior to the forecasted storm event. A copy of the REAP shall be available on the job site at least 48 hours prior to the forecasted storm event. Copies of REAPs will be maintained in SWPPP File Category 20.45: Rain Event Action Plans in reverse chronologic order.

SECTION 700
CONSTRUCTION SITE MONITORING PROGRAM

INSTRUCTIONS:

- Include a Separator and Tab for Section 700 for ready reference.
- The Construction Site Monitoring Program (CSMP) shall be developed based on a project's Risk Level, any RWQCB monitoring requirements and whether an Active Treatment System is to be used on the project site.
- The CSMP shall be prepared following the Caltrans *Construction Site Monitoring Program Guidance Manual*, latest edition.

700.1 Site Visual Monitoring Inspection

INSTRUCTIONS:

- Site visual monitoring inspections are required to be conducted for all project risk levels.
- The purpose of stormwater site visual monitoring inspections is to:
  - demonstrate that the site is in compliance with the discharge prohibitions
  - determine whether non-visible pollutants are present at the construction site and could be potentially causing or contributing to exceedances of water quality objectives
  - determine whether immediate corrective actions, additional BMP implementation, or SWPPP revisions are necessary to reduce pollutants in stormwater discharges and authorized non-stormwater discharges
  - determine whether BMPs included in the SWPPP/REAP are effective in preventing or reducing pollutants in stormwater discharges and authorized non-stormwater discharges
  - document the presence or evidence of any non-storm-water discharge (authorized or unauthorized), pollutant characteristics (floating and suspended material, sheen, discoloration, turbidity, odor, etc.), and source, if applicable, and the response taken to eliminate unauthorized non-stormwater discharges and to reduce or prevent pollutants from contacting non-stormwater discharges

REQUIRED TEXT:

This Construction Site Monitoring Program includes conducting site visual monitoring inspections of the project site to address the following objectives:

- determine whether non-visible pollutants are present at the construction site and are causing or contributing to

exceedances of water quality objectives

- determine whether BMPs included in the SWPPP are effective in preventing or reducing pollutants in stormwater dischagres and authorized non-stormwater discharges

REQUIRED TEXT for Risk Level 2 and Risk Level 3 Projects:

- determine whether BMPs included in the REAP are effective in preventing or reducing pollutants in stormwater dischagres and authorized non-stormwater discharges
- demonstrate that the site is in compliance with the discharge prohibitions and applicable NALs and NELs of the CGP

REQUIRED TEXT:

- determine whether immediate corrective actions, additional BMP implementation, or SWPPP amendments are necessary to reduce pollutants in stormwater and authorized non-stormwater discharges
- demonstrate that the site is in compliance with the discharge prohibitions
- document the presence or evidence of any non-stormwater discharge (authorized or unauthorized), pollutant characteristics (floating and suspended material, sheen, discoloration, turbidity, odor, etc.), and source, if applicable, and the response taken to eliminate unauthorized non-stormwater discharges and to reduce or prevent pollutants from contacting non-stormwater discharges

700.1.1 Visual Monitoring Locations

INSTRUCTIONS:

- The visual monitoring requirements which must be performed within 48 hours prior to any forecasted storm event (defined as any weather pattern that is forecasted to have a 50 percent or greater probability of producing 0.1 inches or more of precipitation in the project area within a 24 period) are visually observe:
  - stormwater drainage areas to identify any spills, leaks, or uncontrolled pollutant sources
  - all BMPs to identify whether they have been properly implemented
  - any stormwater storage and containment areas for leaks and ensure maintenance of adequate freeboard
- The visual monitoring requirements during extended forecasted storm events, and within 48 hours after a qualifying rain events (defined as a rain event that has produced ½ inch or more of precipitation at the time of discharge) are visually observe:
  - stormwater discharges at all discharge locations

- ❑ BMPs to identify and record BMPs that need maintenance to operate effectively, that have failed, or that could fail to operate as intended
- ❑ the discharge of stored or contained stormwater

- The quarterly visual monitoring requirement for non-stormwater discharges consists of: visually observing each drainage area for the presence of or indications of prior unauthorized and authorized non-stormwater discharges.
- The daily visual monitoring requirement for discharges consists of: visually observing the entire construction site for any discharges, either stormwater or non-stormwater.

REQUIRED TEXT:

Locations of Visual Monitoring Prior To A Forecasted Storm Event

Visual monitoring (a pre-storm inspection) of the project site is required when the forecast for precipitation is greater than 50 percent within the next 24, 48, 72, 96 hours, and the amount of precipitation forecasted for any 24-hour period is 0.10 inch or greater. Within 48 hours of a forecasted storm event, a stormwater visual monitoring site inspection shall be performed and shall include observations of:

- stormwater drainage areas to identify any spills, leaks, or uncontrolled pollutant sources
- BMPs to identify whether they have been properly implemented
- any stormwater storage and containment areas to detect leaks and ensure maintenance of adequate freeboard

[Enter Number of Drainage Areas]drainage area(s) on the project site and the Contractor's yard, staging areas, and storage areas have been identified as required forecasted storm event visual observation location(s), according to Section I.3.e of Attachments C, D, and E of the CGP. Drainage area(s) are shown on the WPCDs in Attachment BB and are listed by drainage area location number and location description in Table 700.1.1.1: Drainage Areas.

TABLE 700.1.1.1 DRAINAGE AREAS	
Drainage Area No.	**Location**

[Enter Number of Storage Areas] stormwater storage or containment area(s) are located on the project site. These stormwater storage and containment area(s) have been identified as required forecasted storm event visual observation location(s). Stormwater storage or containment area(s) are shown on the WPCDs in Attachment BB and are listed by storage or containment area location number and location description in Table 700.1.1.2: Stormwater Storage and Containment Areas.

TABLE 700.1.1.2 STORMWATER STORAGE AND CONTAINMENT AREAS	
Location No.	**Location**

Locations of Visual Monitoring during Extended Forcasted Storm Events and within 48 Hours After a Qualifying Rain Event

During any extended forecasted rain events and within 48 hours after a qualifying rain event (a rain event that has produced ½ inch or more of precipitation), a stormwater visual monitoring site inspection is required to observe:

- stormwater discharges at all discharge locations
- BMPs to identify and record those that need maintenance to operate effectively, those that have failed, and those that could fail to operate as intended
- the discharge of stored or contained stormwater

[Enter Number of Discharge Locations] discharge location(s) are located on the project site. These stormwater discharge location(s) have been identified as required visual observation location(s). Stormwater discharge location(s) are shown on the WPCDs in Attachment BB and and are listed in Table 700.1.1.3: Stormwater Discharge Locations.

TABLE 700.1.1.3 STORMWATER DISCHARGE LOCATIONS	
Unique Sampling Location Identifier	**Location**

BMP locations shown on the WPCDs in Attachment BB and are listed on the WPCBMPL in Attachment CC.

[Enter Number of Storage Areas] stormwater storage or containment area(s) are located on the project site. Stormwater storage or containment area(s) are shown on the WPCDs in Attachment BB and are listed on Table 700.1.1.2: Stormwater Storage and Containment Areas.

Locations of Visual Monitoring for Non-Stormwater Discharges

A visual monitoring site inspection for non-stormwater discharges requires that each drainage area be observed for the presence of or indications of prior unauthorized and authorized non-stormwater discharges.

[Enter Number of Drainage Areas] drainage area(s) are located on the project site and in the contractor's yard, staging areas, and storage areas that have been identified as observation location(s) for non-stormwater discharges. Drainage area(s) are shown on the WPCDs in Attachment BB and are listed in Table 700.1.1.1: Drainage Areas.

700.1.2 Visual Monitoring Schedule

INSTRUCTIONS:

- Visual monitoring inspections of the project site shall be conducted as follows:
  - ❑ daily for discharges
  - ❑ within 48 hours prior to a forecasted storm event
  - ❑ at 24-hour intervals during any extended forecasted storm event
  - ❑ within 48 hours after a qualifying rain event
  - ❑ quarterly for non-stormwater discharges

REQUIRED TEXT:

On a daily basis contractor personnel will visual monitor the project site for discharges and report any discharges to the WPC Manager.

Stormwater site visual monitoring inspections shall be conducted at a minimum:

- within 48 hours prior to a forecasted storm event (any weather pattern that is forecasted to have a 50 percent or greater probability of producing 0.1 inches or more of precipitation in the project area within a 24 period)
- at 24-hour intervals during any extended forecasted storm event
- within 48 hours after a qualifying rain event (a rain event that has produced ½ inch or more greater of precipitation)

Non-stormwater discharge site visual monitoring inspections shall be conducted, at a minimum, during each of the following periods: January-March, April-June, July-September, and October-December.

If visual monitoring of the site for stormwater is unsafe because of dangerous weather conditions, such as flooding and electrical storms, then the site inspector shall document the conditions that prevented the inspection. The documentation of the site visual monitoring inspection shall be filed in SWPPP File Category 20.33: Site Visual Monitoring Inspection Reports.

700.1.3 Visual Monitoring Procedures

INSTRUCTIONS:

- Contractor personnel, on a daily basis, shall be observant of any discharges. Discharges will be reported to the RE verbally upon discovery and in writing within 24 hours of discovery or occurrence. Form CEM-2061 for reporting discharges is shown in Appendix M.
- Note: USEPA has issued regulations that define Reportable Quantity (RQ) levels for oil and hazardous substances. These regulations are found in the Code of Federal Regulations (CFR) at 40 CFR Part 110, Part 117, or Part 302. The following are examples of RQs:
  - an oily sheen in stormwater runoff as a result of a spill or release is an exceedance of a RQ level
  - the RQ level for dieldrin, a pesticide, is 1 kilogram (kg); a spill or release of one or more kg of dieldrin is an exceedance of the RQ threshold
- BMPs shall be visually monitored for:
  - proper installation
  - proper maintenance
  - possibility of failure
  - ability to operate as intended
  - effectiveness
- Non-stormwater discharge BMPs shall be evaluated for proper installation and effectiveness.
- One-time discharges of non-stormwater shall be inspected when such discharges occur.

REQUIRED TEXT:

Site visual monitoring inspections shall be overseen by the contractor's WPC Manager. Site visual monitoring will be conduted by the WPC Manager, appointed QSP or stormwater inspector.

The name(s) and contact number(s) of the site visual monitoring inspection personnel are listed below and their training qualifications are provided in Attachment E:

- Assigned inspector: NAME OF INSPECTOR Contact phone: TELEPHONE NUMBER
- Alternate inspector: NAME OF INSPECTOR Contact phone: TELEPHONE NUMBER

Daily Visual Monitoring of the Site

On a daily basis, the contractor personnel on the site shall be observant of any discharges or evidence of a prior discharge. If a discharge or evidence of a prior discharge is discovered by the contractor, the WPC Manager or contractor shall immediately notify the RE, and shall file a written report on the CEM-2061 Notice of Discharge form with the RE

within 24 hours of the discharge or discovery of evidence of a prior discharge. Corrective measures shall be implemented immediately following the discovery of the discharge. Form CEM-2061 for reporting discharges is available in Appendix M.

Caltrans will notify the owner/operator of the MS4 and the RWQCB as soon as practicable, but no later than 24 hours after onset of or threat of discharge which can cause adverse conditions to the storm sewer system or the receiving water. This applies to any such discharge that is not covered by Office of Emergency Services (OES) procedures for discharges from a highway to a storm sewer system subject to a MS4 permit.

Discharges requiring reporting include:

- stormwater from a DSA discharged to a waterway without treatment by an effective combination of temporary erosion and sediment control BMPs
- 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 a 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, as provided in 40 CFR 110.3, 117.3 or 302.4
- stormwater runoff containing hazardous substances from spills discharged to a waterway or storm drain system

The initial notification to the RWQCB of a discharge or threat of discharge will be made immediately for any discharge that can cause adverse conditions to the storm sewer system or the receiving water, with a follow-up in writing within 24 hours. Adverse conditions include, but are not limited to, serious violations or serious threatened violations of Waste Discharge Requirements (WDRs), significant spills of petroleum products or toxic chemicals, or serious damage to control facilities that could affect compliance. Caltrans shall perform follow-up monitoring of major spills and/or perform confirmation sampling to ensure that threats to waters of the U.S. have been eliminated as determined by the local RWQCB.

Visual Monitoring Prior To Forecasted Storm Event

Visual monitoring of the project site is required when the forecast for precipitation is greater than 50 percent within the next 24, 48, 72, or 96 hours and the amount of precipitation forecasted for any 24-hour period during the storm event is 0.10 inch or greater within a 24-hour period. Site visual monitoring shall be conducted within 48 hours prior to a forecasted storm event. The pre-storm site visual monitoring shall include observations of:

- all drainage areas identified in Table 700.1.1.1 to identify any spills, leaks, or uncontrolled pollutant sources
- all stormwater storage and containment areas identified in Table 700.1.1.2 to detect leaks and ensure maintenance of adequate freeboard
- all BMPs for proper installation and adequate maintenance

Observations of the site and any recommended corrective actions will be documented in the CEM-2030 Stormwater Site Inspection Report. Any photographs used to document observations will be referenced in the stormwater site inspection report. Corrective actions documented in site inspection reports shall be immediately reviewed by the WCP Manager and, if deemed necessary, implemented prior to the forecasted storm event.

REQUIRED TEXT for Risk Level 2 and Risk Level 3 Projects:

Any corrective actions identified by a pre-storm visual monitoring site inspection shall be included in the REAP for the forecasted storm event.

REQUIRED TEXT:

Visual Monitoring during Extended Forecasted Storm Events

Stormwater visual monitoring site inspections shall be conducted at least once each 24-hour period during any extended forecasted storm events. During any extended forecasted storm event, the site visual monitoring inspector shall visually observe:

- stormwater discharges at all discharge locations (Table 700.1.1.3)
- all stored or contained stormwater that is derived from and discharged subsequent to the qualifying rain event producing precipitation of ½ inch or more at the time of discharge; stored or contained stormwater that will likely discharge after working hours, due to anticipated precipitation, shall be observed prior to the discharge during working hours

Stormwater discharges and stored or contained stormwater will be observed for the presence or absence of floating and suspended materials, sheens on the surface, discolorations, turbidity, odors, and source(s) of any observed pollutants.

During any forecasted storm event, stormwater visual monitoring site inspections will include the observation of all site BMPs for:

- proper installation
- achievement of maintenance requirements
- possible failure
- BMPs that could fail to operate as intended
- effectiveness, so that design changes can be implemented as soon as feasible if needed

Observations of the site and any recommended corrective actions will be documented in the CEM-2030 Stormwater Site Inspection Report. Any photographs used to document observations will be referenced on the stormwater site inspection report. Corrective actions documented in site inspection reports shall be immediately reviewed by the WCP Manager and, if deemed necessary, implemented within 72 hours of identification and completed as soon as possible. If BMPs require design changes, the changes shall be implemented and the SWPPP shall be amended to include the changes.

Visual Monitoring Within 48 Hours after a Qualifying Rain Event

Site visual monitoring post-qualifying rain events shall be conducted within 48 hours after the qualifying rain event. The post-storm site visual monitoring inspection shall include observations of:

- discharges of stormwater that have not been processed by a BMP or evidence of stormwater that has not been processed by a BMP at all discharge locations

- evidence of a breach at stored or contained stormwater that is derived from and discharged subsequent to the qualifying rain event producing precipitation of ½ inch or more at the time of discharge; stored or contained stormwater that will likely discharge after working hours, due to anticipated precipitation, shall be observed prior to the discharge during working hours

Stormwater discharges and stored or contained stormwater will be observed for the presence or absence of floating and suspended materials, sheens on the surface, discolorations, turbidity, odors, and source(s) of any observed pollutants.

Post-qualifying rain event stormwater visual monitoring site inspections will include observation of all site BMPs to determine if BMPs have failed to operate as intended because of :

- improper installation
- lack of maintenance
- lack of effectiveness

Observations of the site and any recommended corrective actions will be documented in the CEM-2030 Stormwater Site Inspection Report. Any photographs used to document observations will be referenced on the stormwater site inspection report. Corrective actions documented in site inspection reports shall be immediately reviewed by the WCP Manager and, if deemed necessary, implemented within 72 hours of identification and completed as soon as possible. If BMPs require design changes, the changes shall be implemented and the SWPPP shall be amended to include the changes.

Visual Monitoring of Non-Stormwater Discharges

For non-stormwater site visual monitoring, each drainage area will be monitored quarterly for the presence or prior indications of unauthorized and authorized non-stormwater discharges, and their sources. The presence or absence of non-stormwater discharges based on site observations will be documented in the CEM-2030 Stormwater Site Inspection Report. Documentation of observed non-stormwater discharges will include presence or absence of floating and suspended materials, sheens on the surface, discolorations, turbidity, odors, and source(s) of any observed pollutants.

Site observations of the site and any recommended corrective actions will be documented. Corrective actions documented in site inspection reports shall be immediately reviewed by the WCP Manager and, if deemed necessary, implemented within 72 hours of identification and completed as soon as possible. If BMPs require design changes, the changes shall be implemented and the SWPPP shall be amended to includethe changes. Corrective actions shall be documented in the CEM-2035 Stormwater Site Inspection Report Corrective Actions Summary. Any photographs used to document observations will be referenced in the CEM-2030 Stormwater Site Inspection Report.

700.1.4 Visual Monitoring Follow-up and Tracking Procedures

INSTRUCTIONS:

Deficiencies identified in visual monitoring site inspection reports and correction of deficiencies will be tracked on the CEM-2035 Stormwater Site Inspection Report Corrective Actions Summary, in Appendix I. Correction summaries shall be submitted to the RE when corrections are completed but must be submitted within five (5) days of a site inspection.

REQUIRED TEXT:

For deficiencies identified during visual monitoring (site inspections), the required repairs or maintenance of BMPs shall begin and be completed as soon as possible, while taking into consideration worker safety. For deficiencies identified during visual site inspections that require design changes, including additional BMPs, the implementation of changes will begin within 72 hours of identification of the deficiency and be completed as soon as possible. When design changes to BMPs are required, the SWPPP shall be amended, including the WCBMPL and WPCDs. If NALs are exceeded, corrective actions shall be approved by the WPC Manager and implemented immediately.

Deficiencies identified on site inspection reports, as well as corrections of deficiencies, will be tracked on the CEM-2035 Stormwater Site Inspection Report Corrective Actions Summary, in Appendix I. Corrective action summaries shall be submitted to the RE when corrections are completed, but must be submitted within five (5) days of a site inspection.

700.1.5 Data Management and Reporting

INSTRUCTIONS:

- The results of visual site monitoring shall be recorded on the CEM-2030 Stormwater Site Inspection Report, in Appendix G. A copy of each report shall be kept in SWPPP File Category 20.33: Site Visual Monitoring Inspection Reports.
- All CEM-2030 reports shall be provided to the RE within 24 hours of the inspection.
- Deficiencies identified during visual monitoring (site inspections) and correction of deficiencies will be tracked on the CEM-2035 Stormwater Site Inspection Report Corrective Actions Summary, shown in Appendix I. Corrective Action Summary forms shall be submitted to the RE when corrections are completed but must be submitted within five (5) days of the site inspection. Completed Stormwater Site Inspection Report Corrective Actions Summary forms shall be filed in SWPPP File Category 20.35: Corrective Actions Summary. A copy of the completed Corrective Actions Summary form will also be attached to the corresponding inspection and shall be kept in the SWPPP file category 20.33: Site Visual Monitoring Inspection Reports.
- Discharges will be reported to the RE verbally upon discovery, and in writing within 24 hours of discovery. The form required for reporting discharges is in Appendix M. CEM-2061 Notice of Discharge forms shall be kept in SWPPP File Category 20.61: Notice of Discharge Reports.

REQUIRED TEXT:

The results of site visual monitoring (pre-storm, during storm, post-storm, and quarterlyinspections) shall be recorded on the CEM-2030 Stormwater Site Inspection Report, in Appendix G. A copy of each report shall be kept in SWPPP File Category 20.33: Site Visual Monitoring Inspection Reports.All site visual monitoring reports shall be provided to the RE within 24 hours of the site inspection.

Deficiencies identified during visual monitoring (site inspections) and correction of deficiencies will be tracked on the CEM-2035 Stormwater Site Inspection Report Corrective Actions Summary, in Appendix I. Corrective Action Summary forms shall be submitted to the RE when corrections are completed, but must be submitted within five (5) days of the site inspection. Completed Stormwater Site Inspection Report Corrective Actions Summary forms shall be filed in SWPPP File Category 20.35: Corrective Actions Summary. A copy of the completed Corrective Actions Summary form will also be attached to the corresponding inspection report and shall be kept in the SWPPP File Category 20.33.

If a discharge or evidence of a prior discharge is discovered by the Contractor, the WPC Manager or Contractor shall immediately notify the RE, and will file a written report to the RE within 24 hours of the discovery of evidence of a prior discharge. The written report to the RE will contain:

- the date, time, location, and type of unauthorized discharge
- The nature of the operation that caused the discharge
- An initial assessment of any impacts caused by the discharge
- the BMPs deployed before the discharge
- the date of deployment and type of BMPs deployed after the discharge, including additional measures installed or planned to reduce or prevent re-occurrence
- steps taken or planned to reduce, eliminate and/or prevent recurrence of the discharge

Reporting of discharges shall be documented on the CEM-2061 Notice of Discharge form, in Appendix M. Completed Notice of Dischage reports shall be submitted to the RE within 24 hours of discovery of evidence of a discharge. Copies of the Notice of Discharge reports will be kept in SWPPP File Category 20.61: Notice of Discharge Reports.

700.2 Sampling and Analysis Plans

INSTRUCTIONS:

- As many as six separate Sampling and Analysis Plans (SAPs) may be required as part of the CSMP. All CSMPs shall have the following SAPs:
  - ❑ General
  - ❑ Non-visible Pollutants
  - ❑ Non-stormwater Discharges
- If applicable, SAPs shall be prepared for:
  - ❑ Stormwater pH and Turbidity
  - ❑ Monitoring Required by Regional Board
  - ❑ Monitoring of Active Treatment Systems

The information and requirements in the General SAP applies to all specific SAPs.

- Specific instructions for each SAP follow the general instructions in Sections 700.2.1 through 700.2.6.
- For additional information about preparing SAPs, refer to *Construction Site Monitoring Program Guidance Manual*, latest edition.

REQUIRED TEXT:

700.2.1 General SAP

A sampling and analysis plan (SAP) describes how samples will be collected, under what conditions, where and when the samples will be collected, what the sample will be tested for, what test methods and detection limits will be used, and what methods/procedures will be performed to ensure the integrity of the sample during collection, storage, shipping and testing (i.e., quality assurance/quality control protocols). Therefore, a SAP shall include the components listed below.

1. Scope of Monitoring Activities
2. Monitoring Preparation
3. Monitoring Strategy
4. Sample Collection and Handling
5. Sampling Analysis
6. Quality Control and Assurance
7. Data Management and Reporting
8. Data Evaluation
9. Change of Conditions

In addition to this General SAP, this CSMP contains specific SAPs for non-visible pollutants and non-stormwater discharges The CSMP may also contain three additional specific SAPs based on the project risk level, RWQCB sampling and analysis requirements, and monitoring an active treatment system. The information and requirements in this General SAP apply to all specific SAPs unless a specific SAP otherwise specifies.

700.2.1.1 Scope of Monitoring Activities

For specific details with regard to monitoring activities, refer to the specific SAP identified below.

- Non-visible Pollutants (Section 700.2.2.1)
- Non-Stormwater Discharges (Section 700.2.3.1)
- Stormwater pH and Turbidity (Section 700.2.4.1)
- Monitoring required by the Regional Board (Section 700.2.5.1)
- Monitoring for Active Treatment Systems (ATS) (Section 700.2.6.1)

700.2.1.2 Monitoring Preparation

INSTRUCTIONS:

- Train water quality sampling personnel in accordance with the Caltrans *Construction Site Monitoring Program Guidance Manual*, latest edition.
- Identify whether samples will be collected by the contractor's personnel, by a commercial laboratory, or by an environmental consultant.
- Identify training and experience of individuals responsible for collecting water samples.
- Identify the health and safety procedures for sampling personnel.
- Identify alternate sampling personnel in case of emergency, sick leave, and/or vacations during stormwater monitoring. Identify training of alternate sampling personnel.
- Identify the state-certified laboratory(ies) that will analyze samples for non-visible, non-stormwater, or dewatering permit-required constituents. For a the list of California state-certified laboratories that are accepted by Caltrans, access the following web site: www.dhs.ca.gov/ps/ls/elap/html/lablist.htm
- Include the appropriate required text to describe the strategy for ensuring that adequate sample collection supplies are available for the project in preparing for a sampling event.
- Describe the strategy for ensuring that appropriate field testing equipment is available for the project in preparing for a sampling event.

Samples will be collected by:

Contractor	☐ Yes	☐ No
Consultant	☐ Yes	☐ No
Laboratory	☐ Yes	☐ No

REQUIRED TEXT:

To ensure an effective construction site monitoring program, the following monitoring preparation activities are required:

- identifying qualified sampling personnel
- ensuring the availability of an adequate quantity of monitoring supplies
- ensuring the availability of field instruments; field instruments must be properly maintained and calibrated prior to sampling events
- identifying a qualified testing laboratory that is capable of performing stormwater and non-stormwater analysis for those constituents that must be tested in a laboratory

700.2.1.2.1 Qualified Sampling Personnel

Sampling personnel shall be trained to collect, maintain, and ship samples in accordance with the Surface Water Ambient Monitoring Program (SWAMP) *2008 Quality Assurance Program Plan* (QAPrP).

REQUIRED TEXT if Contractor personnel will collect samples:

Samples on the project site will be collected by the contractor's sampling personnel.

REQUIRED TEXT if consultant or laboratory will collect samples:

Samples on the project site will be collected by the following [specify laboratory or environmental consultant]:

Company Name:	**Insert Company Name-then TAB.**
Address:	**Insert Address 1 then press ENTER to insert Address 2 or TAB to next field.**
	Insert City, State, and ZIP-then TAB.
Contact Name:	**Insert Contact Name-then TAB.**
Title:	**Insert Title-then TAB**
Phone Number:	**Insert Telephone Number(s)-then TAB.**
Emergency Phone Number (24/7):	**Insert Telephone Number(s)-then TAB.**
Email Address:	**Insert Email Address TAB.**

REQUIRED TEXT:

Stormwater sampling and field analyses will be performed by the following primary and alternative stormwater samplers:

- [Insert name of the primary stormwater sampler and telephone number]
- [Insert name of the alternative stormwater sampler and telephone number

The primary stormwater sampler has received the following stormwater sampling training:

- [LIST]

The primary stormwater sampler has the following stormwater sampling experience:

- [LIST]

The alternate stormwater sampler has received the following stormwater sampling training:

- [LIST]

The alternate stormwater sampler has the following stormwater sampling experience:

- [LIST]

Training records of designated sampling personnel are provided in Attachment E, Contractor Personnel Stormwater Training.

Safety practices for sample collection will be in accordance with the [ENTER TITLE AND PUBLICATION DATE OF CONTRACTOR'S HEALTH AND SAFETY PLAN FOR THE PROJECT OR PROVIDE SPECIFIC REQUIREMENTS HEREIN].

700.2.1.2.2 Monitoring Supplies

***REQUIRED TEXT if Contractor will collect samples*:**

An adequate stock of monitoring supplies and equipment for sampling will be available on the project site prior to a sampling event. Monitoring supplies and equipment will be stored in a cool temperature environment that will prevent the supplies/equipment from coming into contact with rain or direct sunlight. Supplies maintained at the project site will include, but are not limited to, surgical gloves, sample collection equipment, coolers, appropriate number and volume of sample bottles, identification labels, re-sealable storage bags, paper towels, personal rain gear, ice, and the CEM-2050 Sample Information, Identification, and Chain-of-Custody Record forms.

The contractor will obtain and maintain the field testing instruments, identified in Section 700.2.1.2.3, for analyzing samples in the field by contractor sampling and testing personnel.

***REQUIRED TEXT if consultant or laboratory will collect samples*::**

[specify laboratory or environmental consultant] will provide monitoring supplies and equipment, including, but not limited to, surgical gloves, sample collection equipment, coolers, appropriate number and volume of sample bottles, identification labels, re-sealable storage bags, paper towels, personal rain gear, ice, and CEM-2050 Sample Information, Identification, and Chain-of-Custody Record forms.

[specify laboratory or environmental consultant] will obtain and maintain the field testing instruments, identified in Section 700.2.1.2.3, for analyzing samples in the field by their sampling and testing personnel.

REQUIRED TEXT:

700.2.1.2.3 Field Instruments

The field instrument(s) shown in Table 700.2.1.2.3: Field Instruments will be used to analyze the constituents shown:

TABLE 700.2.1.2.3 FIELD INSTRUMENTS	
Field Instrument	**Constituent**

The instrument(s) shall be maintained in accordance with manufacturer's instructions.

The instrument(s) shall be calibrated before each sampling and analysis event.

A Standard Operating Procedure (SOP) for calibration and maintenance of field instruments shall be implemented based on the meter manufacturer's instructions. A copy of the manufacture's instructions shall be attached to the SOP so that they are readily available.

Instrument maintenance shall be documented on the CEM-2055 Stormwater Equipment Maintenance Log, in Appendix P. Instrument calibration shall be documented using the following forms:

- CEM-2056 - Stormwater Turbidity Meter Calibration Record (Appendix Q)
- CEM-2057 - Stormwater pH Meter Calibration Record (Appendix R)
- CEM-2058 - Stormwater Meter Calibration Record (Appendix S)

Maintenance and calibration records shall be maintained in SWPPP File Category 20.55: Field Testing Equipment Maintenance and Calibration Records.

INSERT ADDITIONAL INFORMATION HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert bullets).

REQUIRED TEXT:

700.2.1.2.4 Testing Laboratory

Samples collected on the project site that require laboratory testing will be tested by a laboratory certified by the State Department of Health Services. Samples collected on the project site will be analyzed by:

Laboratory Name: **Insert Laboratory Name-then TAB.**

Address: **Insert Address 1 then press ENTER to insert Address 2 or TAB to next field.**

Insert City, State, and ZIP-then TAB.

Contact Name:	**Insert Contact Name-then TAB.**
Title:	**Insert Title-then TAB**
Phone Number:	**Insert Telephone Number(s)-then TAB.**
Emergency Phone Number (24/7):	**Insert Telephone Number(s)-then TAB.**
Email Address:	**Insert Email Address TAB.**

700.2.1.2 Monitoring Strategy

INSTRUCTIONS:

- Describe the potential locations for sampling.
- Describe the sampling schedule.
- Describe the rationale for selecting the sampling locations.
- Show all sampling locations on the WPCDs.
- Select sampling locations in areas that are safe, accessible, and out of the path of heavy traffic.

REQUIRED TEXT:

The monitoring strategy includes identifying analytical constituents, potential sampling locations, identification of actual sampling locations, and sampling schedule,

700.2.1.3.1 Analytical Constituents

Stormwater and non-stormwater discharges shall be monitored for the analytical constituents specified in the specific SAP(s) in this SWPPP.

700.2.1.3.2 Potential Sampling Locations

Potential sampling locations must be representative of the stormwater and non-stormwater discharges from the construction site. Existing conditions and associated construction activities within each drainage area form the basis for determining representative stormwater sampling locations.

Project drainage areas and potential sampling locations have been determined by:

- reviewing project plans
- visiting project site
- reviewing topography maps

The WPCDs show the demarcation of all drainage areas that are either:

- within the project site
- cover part of the project site

Potential stormwater discharge sampling locations were determined where concentrated run-off:

- leaves the Caltrans right-of-way
- drains into an MS4
- discharges into a receiving water

Potential run-on sampling locations were determined where concentrated run-on:

- enters the right-of-way
- combines with the stormwater on site and then discharges into an MS4, including the location(s) of discharge into the MS4

The following locations were determined when runoff discharges directly into receiving water bodies:

- the discharge location(s) into the receiving water
- a potential sampling location upstream of all discharge locations
- a potential sampling location downstream from all discharge location(s) into the receiving water

Necessary potential sampling locations were determined when:

- there are potential sources of non-visible pollutants, as discussed in Section 500.1, and discharge locations are downgradient
- run-on locations are present that may contribute non-visible pollutants
- there are potential non-stormwater discharges and corresponding discharge locations are downgradient
- there are proposed dewatering construction activities

If an ATS is used on site, then sample locations must be included in Section 700.2.6.

Potential stormwater and non-stormwater sampling locations must be shown on the WPCDs in Attachment BB and listed in Attachment EE: Stormwater Sample Locations. The QSD has identified each of the potential sampling locations with a unique sample location identification code, as shown below. The identification code must start with a number and must be different for each location. If the construction site lies in a west-to-east orientation, starting with one (01) from the east, the potential sampling locations shall be numbered toward the west. If the construction site lies in a south-to-north orientation, the potential sampling locations shall be numbered toward the north.

To further distinguish among the locations, each potential sampling location has been identified with one of the following abbreviations based on the sampling location type:

- discharge locations leaving Caltrans right-of-way: DL
- discharge locations from areas with known non-visible pollutants: NVP
- discharge locations upgradient of areas with known non-visible pollutants: UNVP
- discharge locations to an MS4: MS
- run-on locations: RO
- discharge locations into a receiving water: RW
- downstream of all discharge locations: RWD
- upstream of all discharge locations: RWU
- dewatering discharge locations: DDL
- contained stormwater discharge locations: CSDL
- discharge locations for ATS: ATS

The unique sample location identification code shall follow this format, **SSSTTTTXX**, where:

SSS	=	sampling location identifier number (e.g., 010)
TTTT	=	sampling location type (e.g. DL)
XX	=	identifier number for the type of sampling location

For example, the sampling location identification for the 15th sampling location based on starting from the south end of the project for a stormwater discharge location that has been identified to be the ninth discharge location would be **015DL09.**

Potential sampling locations shown on the WPCDs shall be identified with unique sampling location identifiers. Each potential sample location must be listed on Stormwater Sample Locations in Attachment EE. The unique identification of each potential sampling location based on its number and abbreviation of type shall be used on all sampling documentation.

The WPC Manager may have to revise and/or add additional sampling locations during the course of construction as conditions dictate.

700.2.1.3.3 Identification of Actual Sampling Locations

For each forecasted storm event, actual sampling locations will be determined by the WPC Manager based on the strategy described in each specific SAP. Sampling and analysis locations for Risk Level 1 projects will be documented on the CEM-2048 Storm Event Sampling and Analysis Plan, in Appendix N. For Risk Level 2 and Risk Level 3 projects, sampling and analysis locations will be documented on CEM-2048 Storm Event Sampling and Analysis Plan, in Appendix N, or CEM-2049 Qualifying Rain Event Sampling and Analysis Plan, in Appendix O, based on the forecasted storm event.

700.2.1.3.4 Sampling Schedule

For the sampling schedule, see the specific SAPs in this CSMP. If a scheduled sampling activity is unsafe because of dangerous weather conditions, such as flooding and electrical storms, then the stormwater sampler shall document why an exception to performing the sampling was necessary.

700.2.1.4 Sample Collection and Handling

Sample collection procedures shall be used to ensure that representative samples are collected and that the potential for contamination of samples is minimized. Sample handing procedures are followed to ensure that samples are identified accurately and that the required analysis is clearly documented. Chain-of-custody requirements for samples are necessary to trace the possession of the sample from collection through analysis.

INSTRUCTIONS:

- For sampling collection procedures, refer to the Caltrans *Construction Site Monitoring Program Guidance Manual*, latest edition, for general guidance.
- For laboratory analysis, all sampling, sample preservation, and analyses must be conducted according to test procedures under 40 CFR Part 136.
- For a list of California state-certified laboratories that are accepted by Caltrans, access the following website: www.dhs.ca.gov/ps/ls/elap/html/lablist.htm.
- A Sample Information, Identification, and Chain-of-Custody Record (CEM-2050) form is required to be submitted to the laboratory with the samples to trace the possession and handling of samples from collection through analysis.
- A Stormwater Sample Field Test Report (CEM-2052) form is to be completed for each sample or set of samples.
- A Stormwater Sampling and Testing Activity Log (CEM-2051) is required to document details of all sampling events and to record analyses results for the samples collected.
- Copies of completed sampling and testing forms will be placed in the appropriate SWPPP file category based on the type of sampling and testing performed (see below):
    - ❑ non-visible pollutant sampling and testing – SWPPP File Category 20.51
    - ❑ non-stormwater discharge sampling and testing – SWPPP File Category 20.50
    - ❑ turbidity, pH, and suspended sediment concentration (SSC) sampling and testing – SWPPP File Category 20.52
    - ❑ required RWQCB sampling and testing – SWPPP File Category 20.53
    - ❑ ATS sampling and testing – SWPPP File Category 20.54
- Each sample bottle is required to have a proper and complete identification label.
- Run-on samples should be collected using the sheet flow collection procedures or other procedure approved by the RE.
- Describe sample collection procedures to be used on the project site.

- Describe sample handling procedures.
- Describe decontamination waste disposal requirements (e.g., TSP soapy water shall not be discharged to the storm drainage system or receiving water).
- Describe sample collection documentation procedures.
- Describe procedures for recording and correcting sampling data.
- List laboratory that will be used for testing samples (i.e. laboratory for non-visible pollutant testing see Table 700.2.2.5: Sample Collection, Preservation and Analysis for Monitoring Non-Visible Pollutants, in Section 700.2.2.5).

REQUIRED TEXT:

700.2.1.4.1 Sample Collection Procedures

Samples shall be collected, maintained and shipped in accordance with the SWAMP's 2008 QAPrP.

Grab samples shall be collected and preserved in accordance with the methods identified in each specific SAP. Only personnel trained in proper water quality sampling shall collect samples.

Samples from areas of sheet flow shall be collected using the collection procedures described below to concentrate the flow in order to collect a sample or follow other procedures approved by the RE.

- Place several rows of sandbags in a half circle directly in the path of the sheet flow to pond water, and wait for enough water to spill over. Then place a cleaned or decontaminated flexible hose along the top, and cover with another sandbag so that ponded water will only pour through the flexible hose and into sample bottles. Do not reuse the same sandbags during future sampling events as they may cross-contaminate future samples.

- Place a cleaned or decontaminated dustpan with open handle in the path of the sheet flow so that water will pour through the handle and into sample bottles.

For receiving water sampling, upstream samples shall be collected to represent the water body upgradient of the construction site. Downstream samples shall be collected to represent the water body mixed with direct discharge from the construction site. Samples shall not be collected directly from ponded, sluggish, or stagnant water.

Receiving water upstream and downstream samples shall be collected using one of the following methods:

- placing a sample bottle directly into the stream flow in or near the main current upstream of sampling personnel and allowing the sample bottle to fill completely;

  OR

- placing a decontaminated or sterile bailer or other sterile collection devise in or near the main current to collect the sample and then transferring the collected water to appropriate sample bottles allowing the sample bottle to fill completely.

To maintain sample integrity and prevent cross-contamination, sampling collection personnel shall follow the procedures listed below.

- Wear a clean pair of surgical gloves donned prior to the collection and handling of each sample at each location.
- Decontaminate sampling equipment prior to sample collection using a TSP-soapy water wash, distilled water rinse, and final rinse with distilled water. Dispose of decontamination water/soaps appropriately (i.e., do not discharge to the storm drain system or receiving water).
- Do not allow the inside of the sample bottle to come into contact with any material other than the run-off sample.
- Discard sample bottles or sample lids that have been dropped onto the ground prior to sample collection.
- Do not leave the cooler lid open for an extended period of time once samples are placed inside.
- Do not sample near a running vehicle where exhaust fumes may impact the sample.
- Do not touch the exposed end of a sampling tube, if applicable.
- Avoid allowing rainwater to drip from rain gear or other surfaces into sample bottles.
- Do not eat, smoke, or drink during sample collection/field measurement.
- Do not sneeze or cough in the direction of an open sample bottle.
- Minimize the exposure of the samples to direct sunlight, as sunlight may cause biochemical transformation of the sample.

700.2.1.4.2 Sample Handling Procedures

Immediately following collection, sample bottles to be forwarded for laboratory analytical testing shall be capped, labeled, documented on the Stormwater Sampling Information, Identification, and Chain-of-Custody Record form, sealed in a re-sealable storage bag, placed in an ice-chilled cooler, at 0 ±4 degrees Celsius, and delivered within 24 hours to the laboratory shown in sub-section 700.2.1.2.4.

Immediately following collection, samples used for field analysis shall be tested in accordance with the field instrument manufacturer's instructions and results recorded on the CEM-2052 Stormwater Sample Field Test Report form.

700.2.1.4.3 Sample Documentation Procedures

All original data documented on sample bottle identification labels, the CEM-2050 Stormwater Sample Information, Identification and Chain-of-Custody Record form, and the CEM-2051 Stormwater Sampling and Testing Activity Log, shall be recorded using waterproof ink. These shall be considered accountable documents. If an error is made on an accountable document, the individual shall make corrections by lining through the error and entering the correct information. The erroneous information shall not be obliterated. All corrections shall be initialed and dated.

The following forms, used for sample documentation, are provided in the SWPPP appendices:

- CEM-2050 Stormwater Sampling Information, Identification, and Chain-of-Custody Record , in Appendix T
- CEM-2051Stormwater Sampling and Testing Activity Log , in Appendix U

Duplicate samples shall be identified in a manner consistent with the numbering system for other samples to prevent the laboratory from identifying duplicate samples. Duplicate samples shall be identified in the CEM-2051 Stormwater Sampling and Testing Activity Log.

Sample Bottle Identification Labels: Sampling personnel shall attach an identification label to each sample bottle, which shall include, at a minimum, the following information:

- project name
- contract number and/or project identifier number
- unique sample identification code, which shall follow this format, **SSSSSYYMMDDHHmmTT**, where:

SSSSS	=	sampling location identifier number (e.g., 01MS1)
YY	=	last two digits of the year (e.g. 11)
MM	=	month (01-12)
DD	=	day (01-31)
HH	=	hour sample collected (00-23)
mm	=	minute sample collected (00-59)
TT	=	Type or QA/QC Identifier (if applicable)
G	=	grab
FS	=	field duplicate

  For example, the sample number for a grab sample collected at Station 01MS1, collected at 4:15PM on December 8, 2011 would be **01MS11112081615G**.

- constituent to be analyzed
- initials of person who collected the sample

Stormwater Sampling and Testing Activity Log: A log of sampling events and test results shall include:

- sampling date
- separate times for collected samples and QA/QC samples, recorded to the nearest minute
- unique sample identification number and location
- constituent analyzed
- names of sampling personnel
- weather conditions (including precipitation amount)

- test results
- other pertinent data

Sample Information, Identification and Chain-of-Custody Record Forms: All samples to be analyzed by a laboratory will be accompanied by a CEM-2059 Sample Information, Identification and Chain-of-Custody Record form. The samplers will sign the Sample Information, Identification and Chain-of-Custody Record form when samples are turned over to the testing laboratory. Chain-of-custody procedures will be strictly adhered to for QA/QC purposes.

700.2.1.5 Sample Analysis

For the analytical methods to be used to determine the presence of pollutant(s), see the specific SAPs in this CSMP.

700.2.1.6 Quality Assurance/Quality Control

For verification of laboratory or field analysis, duplicate samples shall be collected at a rate of 10 percent or 1 minimum duplicate per sampling event. The duplicate sample shall be collected, handled, and analyzed using the same protocols as primary samples. A duplicate sample shall be collected immediately after the primary sample has been collected. Duplicate samples shall not influence any evaluations or conclusions; however, they shall be used as a check on laboratory or field analysis quality assurance.

700.2.1.7 Data Management and Reporting

INSTRUCTIONS:

- Sampling shall be documented on CEM-2050 Sample Information, Identification and Chain-of-Custody Record form, in Appendix T.
- Sample test results shall be reported on CEM-2052 Stormwater Sample Field test Report form or CEM-2054 Stormwater Sample Laboratory Test Report form, in Appendices V and W.
- A log of stormwater sampling and analysis activities shall be kept on CEM-2051 Stormwater Sampling and Testing Activities Log, in Appendix U.
- Sampling information and testing data results shall be provided to the RE within 48 hours of sampling for field analyzed samples and 30 days for laboratory analyzed samples.

REQUIRED TEXT:

All test results shall be documented on either the CEM-2052 Stormwater Sample Field Test Report form, or the CEM-2054 Stormwater Sample Laboratory Test Report form, and entered on the CEM-2051 Stormwater Sampling and Testing Activity Log. These shall be considered accountable documents. If an error is made on an accountable document, the individual shall make corrections by lining through the error and entering the correct information. The erroneous information shall not be obliterated. All corrections shall be initialed and dated.

For field tests, the submitted information shall include a signed copy of the CEM-2050 Sample Information, Identification and Chain-of-Custody Record form and CEM-2052 Stormwater Sample Field Test Report form. Appendix V contains the CEM-2052 Stormwater Sample Field Test Report form , which must accompany the Sample

Information, CEM-2050 Identification and Chain-of-Custody Record form from Appendix T. The test results shall be recorded on the CEM-2051Stormwater Sampling and Testing Activity Log , in Appendix U.

For laboratory testing, all laboratory analysis results shall be reported on CEM-2054 Stormwater Sample Laboratory Test Result form, in Appendix W. If the CEM-2054 Stormwater Sample Laboratory Test Report form is not completed by the testing laboratory, then the laboratory report used to complete the CEM-2054 Stormwater Sample Laboratory Test Report form shall be attached to the completed CEM-2054 Stormwater Sample Laboratory Test Report form. For each testreport, the CEM-2054 Stormwater Sample Laboratory Test Report and CEM-2050 Sample Information, Identification and Chain-of-Custody Record form shall be reviewed for consistency among laboratory methods, sample identifications, dates, and times for both primary samples and QA/QC samples. The test results shall be recorded on the CEM-2051 Stormwater Sampling and Testing Activity Log form.

All sampling and testing documentation, including CEM-2050Sample Information, Identification, and Chain-of-Custody Record forms, CEM-2051Stormwater Sampling and Testing Activity Logs, CEM-2052 Stormwater Sample Field Test Reports, and CEM-2054 Stormwater Sample Laboratory Test Reports shall be kept in appropriate SWPPP file category. Sampling and testing documentation shall be filed in the appropriate following SWPPP file category based on the specific SAP that required the sampling and analysis:

- non-visible pollutant sampling and testing – SWPPP File Category 20.51
- non-stormwater discharge sampling and testing – SWPPP File Category 20.50
- turbidity, pH, and SSC sampling and testing – SWPPP File Category 20.52
- required RWQCB sampling and testing – SWPPP File Category 20.53r
- ATS sampling and testing – SWPPP File Category 20.54

If corrective actions are taken as a result of the data evaluation, a copy of the completed CEM-2035 Stormwater Site Inspection Report Corrective Actions Summary shall be filed in File Category 20.35: Corrective Actions Summary.

A copy of completed sampling records and reports and an updated CEM- 2051 Stormwater Sampling and Testing Log shall be submitted to the RE. All water quality analytical results, including QA/QC data, shall be submitted to the RE within 48 hours of sampling for field analyzed samples, and within 30 days for laboratory analyses.

In addition to a paper copy of the water quality test results, the test results shall be submitted electronically in Microsoft Excel (.xls) format, and shall include, at a minimum, the following information from the lab: Sample ID Number, Contract Number, Constituent, Reported Value, Laboratory Name, Method Reference, Method Number, Method Detection Limit, and Reported Detection Limit. Electronic copies of stormwater data shall be forwarded by email to [RE Name] at [RE email address] for inclusion into a statewide database.

700.2.1.8 Data Evaluation

INSTRUCTIONS:

The CGP requires that BMPs be implemented on the construction site to reduce pollutants in discharges of stormwater from the construction site. Test results from stormwater discharges must be evaluated to determine if BMPs were properly implemented and are effective.

REQUIRED TEXT:

For data evaluation of stormwater sample test results, see specific SAPs.

700.2.1.9 Change of Conditions

Whenever stormwater visual monitoring site inspections indicate a change in site conditions that might affect the appropriateness of sampling locations, sampling and testing protocols shall be revised accordingly. All such revisions shall be implemented as soon as feasible, and the SWPPP updated or amended.

700.2.2 Sampling and Analysis Plan for Non-Visible Pollutants

INSTRUCTIONS:

- The CGP requires that effluent monitoring from discharge pipes or other locations be representative of the nature of the discharge. Therefore, the project SWPPP must include a SAP for pollutants that were identified in Section 500.1.1 or 500.1.2 that are not visually detectable in stormwater and non-stormwater discharges. The purpose of this SAP is to determine if BMPs implemented on the construction site are effective in preventing pollutants that are not visually detectable from leaving the construction site and potentially impacting water quality standards.
- All project risk levels are required to include a non-visible pollutant SAP; however, non-visible pollutant monitoring is only required where a discharge can cause or contribute to an exceedance of a water quality standards because:
  - construction materials or wastes are exposed
  - the site contains historical non-visible pollutants
  - construction activities have occurred or construction materials have been placed within the past 24 hours that may contribute non-visible pollutants
  - there is run-on to the site that contain non-visible pollutants
  - there is a breach, malfunction leak or spill from a BMP

REQUIRED TEXT:

This SAP has been prepared for monitoring non-visible pollutants in stormwater and non-stormwater discharges from the project site and off-site activities directly related to the project, in accordance with the requirements of the CGP and applicable requirements of the Caltrans *Construction Site Monitoring Program Guidance Manual,* [Insert latest edition]. This SAP for monitoring non-visible pollutants includes all of the components listed in Section 700.2.1.

700.2.2.1 Scope of Monitoring Activities

INSTRUCTIONS:

Identify the general sources and locations of potential non-visible pollutants on the project site according to the categories listed below.

- Materials or wastes as identified in Section 500.1.1 or 500.1.2 containing potential non-visible pollutants that are not stored under watertight conditions.
- Materials or wastes containing potential non-visible pollutants that are stored under watertight conditions, but (1) a breach, leakage, malfunction, or spill is observed; and (2) the leak or spill has not been cleaned up prior to the forecasted storm event; and (3) the potential exists for discharge of non-visible pollutants to surface waters or drainage system.
- Construction activities, such as application of fertilizers, pesticides, herbicides or non-pigmented curing compounds, that have occurred during a qualifying rain event or within 24 hours preceding a forcasted storm event, where the potential exists for a discharge of pollutants to surface waters or drainage system.
- Existing site features contaminated with non-visible pollutants, such as those identified in Section 500.1.2.
- Applications of soil amendments, including soil stabilizing products, with the potential to alter pH levels or other properties of soil (such as chemical properties, engineering properties, or erosion resistance), or contribute toxic pollutants to stormwater runoff, and where the potential exists for discharges of pollutants to surface waters or drainage systems (unless independent test data are available that demonstrate acceptable concentration levels of non-visible pollutants in the soil amendment).
- Certain soil amendments identified in the "Pollutant Testing Guidance Table," of the *Caltrans Construction Site Monitoring Program Guidance Manual*, latest edition, that do not discharge non-visible pollutants and are not subject to water quality monitoring requirements.
- Stormwater runoff from an area contaminated by historical usage of the site is observed and the potential exists for discharges of pollutants to surface waters or drainage systems.
- Stormwater run-on to the Caltrans right-of-way with the potential to contribute non-visible pollutants to discharges from the project.
- Breaches, malfunctions, leakages, or spills from a BMP.

EXAMPLE:

The construction materials, wastes, or activities listed below, and identified in Section 500.1.1, are potential sources of non-visible pollutants to stormwater discharges from the project. Storage, use, and operational locations are shown on the WPCDs in Attachment BB.

- solvents, thinners
- concrete curing

- treated wood
- soil stabilizers
- lime treated subgrade
- fertilizers, herbicides, and pesticides

The existing site features described below, and identified in Section 500.1.2, are potential sources of non-visible pollutants to stormwater discharges from the project. Locations of existing site features contaminated with non-visible pollutants are shown on the WPCDs in Attachment BB.

- Southwest portion of the construction site was previously used as a municipal landfill until 1987 and volatile organic compounds may be present in the soil.
- North portion of the construction site was a storage area for a metal plating shop until 1960 and metals may be present in the soil.

The soil amendments listed below have the potential to change the chemical properties, engineering properties, or erosion resistance of the soil and will be used on the project site. Locations of soil amendment application are shown on the WPCDs in Attachment BB.

- None

The project has the potential to receive stormwater run-on that may contribute non-visible pollutants to stormwater discharges from the project. Locations of such run-on to the Caltrans right-of-way are shown on the WPCDs in Attachment BB. The potential stormwater run-on loctions to the project site are:

- downgradient of the Millennium Chemical Company chemical plant and the Progress Industrial Park is identified as a run-on location to the construction site
- two locations along the eastern edge of the construction site boundary are identified as run-on locations
- One location at the northern boundary of the construction site

REQUIRED TEXT:

The scope of monitoring for discharges of non-visible pollutants from the construction site is based on the construction materials and construction activities to be performed on the project site, potential for the presence of non-visible pollutants, based on the historical use of the site, and potential non-visible pollutants in run-off from areas where soil amendments have been used on the project site.

The construction materials, wastes or activities listed below, and identified in Section 500.1.1, are potential sources of non-visible pollutants to stormwater discharges from the project. Storage, use, and operational locations are shown on the WPCDs in Attachment BB.

- [LIST]

The existing site features listed below, and identified in Section 500.1.2, are potential sources of non-visible pollutants to stormwater discharges from the project.

- [LIST]

The soil amendments listed below have the potential to change the chemical properties, engineering properties, or erosion resistance of the soil and will be used on the project site.

- [LIST]

INSERT ADDITIONAL NARRATIVE TEXT HERE OR DELETE THIS LINE (Use the "FORMATION OPTIONS" button to insert subtitles and/or paragraphs)

700.2.2.2 Monitoring Preparation

INSTRUCTIONS:

Refer to the general instructions in General SAP Section 700.2.1.2 for monitoring preparation. If additional requirements are necessary for monitoring preparation, insert additional text in this section.

REQUIRED TEXT:

Refer to the general requirements in General SAP Section 700.2.1.2 for monitoring preparation.

INSERT ADDITIONAL NARRATIVE TEXT FOR MONITORING PREPARTION HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.2.2.1 Qualified Sampling Personnel

Refer to the general requirements in General SAP Section 700.2.1.2.1 for Qualified Sampling Personnel.

INSERT ADDITIONAL NARRATIVE TEXT FOR QUALIFIED SAMPLING PERSONNEL HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.2.2.2 Monitoring Supplies

Refer to the general information in General SAP Section 700.2.1.2.2 regarding monitoring supplies.

INSERT ADDITIONAL NARRATIVE TEXT FOR MONITORING SUPPLIES HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.2.2.3 Field Instruments

Refer to the general information in General SAP Section 700.2.1.2.3 regarding field instruments.

INSERT ADDITIONAL NARRATIVE TEXT FOR FIELD INSTRUMENTS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.2.2.4 Testing Laboratory

Refer to the contact information found in General SAP Section 700.2.1.2.4 for the Testing Laboratory.

INSERT ADDITIONAL NARRATIVE TEXT FOR TESTING LABORATORY HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.2.3 Monitoring Strategy

The monitoring strategy for non-visible pollutants in stormwater discharges is to identify all potential non-visible pollutants that may be on the project site, non-visible pollutant sources, and water quality indicators that will indicate the presence of the non-visible pollutant in stormwater discharges. Locations will be identified where sources of non-visible pollutants will be used, stored or exist because of historical use of the project site so that these areas are monitored prior to and during forcasted storm events.

Non-visible pollutant monitoring is only required where a discharge can cause or contribute to an exceedance of a water quality standard based on one of the following triggers:

- construction materials are waste are exposed
- the site contains historical non-visible pollutants
- construction activity has occurred or material has been placed within the past 24 hours that may cause an exceedance of a water quality standard
- there is run-on to the site that may contains non-visible pollutants
- there is a breach, malfunction, leak or spill from a BMP

When one of the triggers that indicate a non-visible pollutant source may have come in contact with stormwater is discovered during a site inspection conducted prior to, during or after a forecasted storm event, the WPC Manager will require that sampling and analysis of the stormwater discharge be conducted for the applicable non-visible pollutant water quality indicator(s).

For the forecasted storm event in which a trigger for a non-visible pollutant sampling and analysis has occurred, the WPC Manager will also require the collection of an uncontaminated sample of runoff as a background sample for comparison with the samples being analyzed for non-visible pollutants. The WPC Manager will perform an evaluation of the analysis results from the non-visible pollutant stormwater discharge sampling location and the analysis results from the uncontaminated run-off sampling location to determine if there is an increased level of the tested non-visible pollutant analyte in the stormwater discharge.

700.2.2.3.1 Analytical Constituents

INSTRUCTIONS:

- Identify the specific non-visible pollutants on the project site and list the non-visible pollutants in Table 700.2.2.3.1: Potential Non-Visible Pollutants and Water Quality Indicator Constituents.
- List the non-visible pollutant source, non-visible pollutant name, and water quality indicator.
- Refer to the "Pollutant Testing Guidance Table," of the *Construction Site Monitoring Program Guidance Manual*, latest edition, for a partial list of some of the common non-visible pollutants and pollutant indicators.
    - ❑ Add lines to the table as needed.
    - ❑ Do not include visible pollutants such as:

- petroleum products: gas, diesel, and lubricants
- colored paints
- sand, gravel or topsoil
- asphalt cold mix

EXAMPLE:

Identification of Non-Visible Pollutants

The specific sources and types of potential non-visible pollutants on the project site and the applicable water quality indicator constituent(s) for that pollutant are listed in Table 700.2.2.3.1: Potential Non-visible Pollutants and Water Quality Indicator Constituents.

TABLE 700.2.2.3.1
POTENTIAL NON-VISIBLE POLLUTANTS AND WATER QUALITY INDICATOR CONSTITUENTS

Pollutant Source	Pollutant	Water Quality Indicator Constituent
Vehicle batteries	Lead, sulfate, acid	Lead, sulfate or pH

REQUIRED TEXT:

Identification of Potential Non-Visible Pollutants

The specific sources and types of potential non-visible pollutants on the project site and the applicable water quality indicator constituent(s) for that pollutant are listed in Table 700.2.2.3.1: Potential Non-visible Pollutants and Water Quality Indicator Constituents.

TABLE 700.2.2.3.1
POTENTIAL NON-VISIBLE POLLUTANTS AND WATER QUALITY INDICATOR CONSTITUENTS

Pollutant Source	Pollutant	Water Quality Indicator Constituent

TABLE 700.2.2.3.1 POTENTIAL NON-VISIBLE POLLUTANTS AND WATER QUALITY INDICATOR CONSTITUENTS		
Pollutant Source	**Pollutant**	**Water Quality Indicator Constituent**

700.2.2.3.2 Potential Sampling Locations

Using the criteria in Section 700.2.1.3.2, the potential sampling locations on the project site for monitoring non-visible pollutants were identified. Sampling locations are based on: proximity to planned non-visible pollutant storage; occurrence or use; accessibility for sampling and personnel safety; and other factors in accordance with the applicable requirements in the *Caltrans Construction Site Monitoring Program Guidance Manual*, latest edition. Sampling locations shall be shown on the WPCDs in Attachment BB and listed on Stormwater Sampling Locations in Attachment EE.

[Enter Number of Sampling Locations] sampling location(s) on the project site and the Contractor's support facilities have been identified as potential locations for the collection of samples of runoff from planned material and waste storage areas and areas where non-visible pollutant producing construction activities are planned. Potential non-visible pollutant sampling locations are listed in Table 700.2.2.3.2.1: Potential Non-Visible Pollutant Sampling Locations.

TABLE 700.2.2.3.2.1 POTENTIAL NON-VISIBLE POLLUTANT SAMPLING LOCATIONS	
Sampling Location Identifier	**Location Description**

TABLE 700.2.2.3.2.1 POTENTIAL NON-VISIBLE POLLUTANT SAMPLING LOCATIONS	
Sampling Location Identifier	**Location Description**

Potential non-visible pollutant sampling locations shall be shown on the WPCDs in Attachment BB and listed on Stormwater Sampling Locations inAttachment EE.

[Enter Number of Sampling Locations] sampling location(s) has been identified for the collection of an uncontaminated sample of runoff as a background sample for comparison with the samples being analyzed for non-visible pollutants. This location(s) was selected such that the sample will not have come in contact with (1) operational or storage areas associated with the materials, wastes, and activities identified in Section 500.1.1; (2) potential non-visible pollutants due to historical use of the site, as identified in Section 500.1.2; (3) areas in which soil amendments that have the potential to change the chemical properties, engineering properties, or erosion resistance of the soil have been applied; or (4) disturbed soils areas. Potential non-visible pollutant uncontaminated sampling locations are listed Table 700.2.2.3.2.2: Potential Uncontaminated Non-visible Pollutant Sampling Locations.

TABLE 700.2.2.3.2.2 POTENTIAL UNCONTAMINATED NON-VISIBLE POLLUTANT SAMPLING LOCATIONS	
Sampling Location Identifier	**Location Description**

Potential non-visible pollutant uncontaminated sampling locations shall be shown on the WPCDs in Attachment BB and listed on Stormwater Sampling Locations inAttachment EE.

700.2.2.3.3 Actual Sampling Locations

Sampling for non-visible pollutants at any potential non-visible pollutant sampling location will be based on any of the conditions listed below having been identified during the visual monitoring site inspections.

- Locations where materials or wastes containing potential non-visible pollutants are not stored under watertight conditions. Watertight conditions are defined as (1) storage in a watertight container, (2) storage under a watertight roof or within a building, or (3) protected by temporary cover and containment that prevents stormwater contact and runoff from the storage area.

- Locations where materials or wastes containing potential non-visible pollutants are stored under watertight conditions, but (1) a breach, malfunction, leakage, or spill is observed, (2) the leak or spill is not cleaned up prior to the forecasted storm event, and (3) the potential exists for discharge of non-visible pollutants to surface waters or a storm drain system.

- Locations where a construction activity (including but not limited to those identified in Section 500.1.1) with the potential to contribute non-visible pollutants (1) was occurring during or within 24 hours prior to the forecasted storm event, (2) involved the use of applicable BMPs that were observed to be breached, malfunctioning, or improperly implemented, and (3) resulted in the potential for discharge of non-visible pollutants to surface waters or a storm drain system.

- Locations where soil amendments that have the potential to change the chemical properties, engineering properties, or erosion resistance of the soil have been applied, and the potential exists for discharge of non-visible pollutants to surface waters or a storm drain system.

- Locations where stormwater runoff from an area contaminated by historical usage of the site has been observed to combine with stormwater runoff from the site, and the potential exists for discharge of non-visible pollutants to surface waters or a storm drain system.

If the presence of a material storage, waste storage, or operations area where spills have been observed or the potential for the discharge of non-visible pollutants to surface waters or a storm drain system was noted during a site inspection conducted prior to or during a forecasted storm event and such an area has not been identified on the list of potential non-visible pollutant sampling locations, the WPC Manager must identify the corresponding discharge location and the corresponding upgradient sampling location as actual non-visible sampling locations. The additional sampling location for non-visible pollutant monitoring shall be shown on the WPCDs in Attachment BB and added to Attachment EE: Stormwater Sampling Locations.

For forceasted storm events, the selection of the actual sampling locations for non-visible pollutants by the WPC Manager will be documented on the CEM-2048 Storm Event Sampling and Analysis Plan form, in Appendix N. The completed SAP for each storm event will be filed in File Category 20.46: Storm/Rain Event Sampling and Analysis Plans. Within 24 hours prior to a storm event, a copy of the storm event SAP shall be submitted to the RE.

REQUIRED TEXT for Risk Level 2 and Risk Level 3 Projects:

For qualfying rain events, the selection of the actual sampling locations for non-visible pollutants by the WPC Manager will be documented on the CEM-2049 Qualifying Rain Event Sampling and Analysis Plan, in Appendix O. The completed SAP for each qualifying rain event will be filed in File Category 20.46: Storm/Rain Event Sampling and Analysis Plans. Within 24 hours prior to a storm event, a copy of the qualyfing rain event SAP shall be attached to the REAP and submitted to the RE.

REQUIRED TEXT:

700.2.2.3.4 Sampling Schedule

In addition to the general scheduling requirements in General SAP Section 700.2.1.3.4, samples for non-visible pollutant monitoring, including both the non-visible pollutants samples and uncontaminated background samples, shall be collected during the first two hours of discharge from storm events that result in a sufficient discharge for sample collection. Samples shall be collected during working hours.

INSERT ADDITIONAL NARRATIVE TEXT FOR SAMPING SCHEDULE HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.2.4 Sample Collection and Handling

INSTRUCTIONS:

Refer to the general sample collection and handling instructions in General SAP Section 700.2.1.4. If additional requirements are necessary for sample collection and handling, insert additional text in this section.

REQUIRED TEXT:

Refer to the general requirements for sample collection and handling in General SAP Section 700.2.1.4.

INSERT ADDITIONAL NARRATIVE TEXT FOR SAMPLE COLLECTION AND HANDLING HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.2.4.1 Sample Collection Procedures

Refer to the general procedures for sample collection in General SAP Section 700.2.1.4.1.

INSERT ADDITIONAL NARRATIVE TEXT FOR SAMPLE COLLECTION PROCEDURES HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.2.4.2 Sample Handling Procedures

Refer to the general procedures for sample handling in General SAP Section 700.2.1.4.2.

INSERT ADDITIONAL NARRATIVE TEXT FOR SAMPLE HANDLING PROCEDURES HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.2.4.3 Sample Documentation Procedures

In addition to the general sample documentation procedures provided in General SAP Section 700.2.1.4.3, when applicable, the contractor's stormwater inspector will document in the CEM-2030 Stormwater Site Inspection Report, that samples for non-visible pollutants were taken during a storm event, based on the criteria for non-visible pollutant sampling described in Section 700.2.2.3.3.

INSERT ADDITIONAL NARRATIVE TEXT FOR SAMPLE DOCUMENTATION PROCEDURES HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.2.5 Sample Analysis

INSTRUCTIONS:

- Identify the test method and specifications to be used to monitor the non-visible pollutants included in Table 700.2.2.3.1: Potential Non-Visible Pollutants and Water Quality Indicator Constituents, in Section 700. 2.2.3.1.
- Fill in Table 700.2.2.5: Sample Collection, Preservation and Analysis for Monitoring Non-Visible Pollutants.
- Identify a test method in Table 700.2.2.5 for each Water Quality Indicator Constituent listed in Table 700.2.2.3.1 in Section 700.2.2.3.1.
- Identify test instruments to be used in the field for analyzing samples, if any.
- Will some measurements be taken in the field?

  ☐ Yes ☐ No

EXAMPLE if samples will be sent to laboratory:

TABLE 700.2.2.5
SAMPLE COLLECTION, PRESERVATION AND ANALYSIS FOR MONITORING NON-VISIBLE POLLUTANTS

Constituent	Analytical Method	Minimum Sample Volume	Sample Bottle	Sample Preservation	Reporting Limit	Maximum Holding Time
VOCs-Solvents	EPA 8260B	3 x 40 mL	VOA-glass	Store at 4˚C, HCl to pH<2	1 µg/L	14 days
SVOCs	EPA 8270C	1 x 1 L	Glass-Amber	Store at 4˚C	10 µg/L	7 days
Pesticides/PCBs	EPA 8081A/8082	1 x 1 L	Glass-Amber	Store at 4˚C	0.1µg/L	7 days
Herbicides	EPA 8151A	1 x 1 L	Glass-Amber	Store at 4˚C	Check Lab	7 days
BOD	EPA 405.1	1 x 500 mL	Polypropylene	Store at 4˚C	1 mg/L	48 hours
COD	EPA 410.4	1 x 250 mL	Glass-Amber	Store at 4˚C, H_2SO_4 to pH<2	5 mg/L	28 days
DO	SM 4500-O G	1 x 250 mL	Glass-Amber	Store at 4˚C	Check Lab	8 hours
pH	Field test with calibrated portable instrument	1 x 100 mL	Polypropylene	None	Unit less	15 minutes
Alkalinity	SM 2320B	1 x 250 mL	Polypropylene	Store at 4˚C	1 mg/L	14 days

TABLE 700.2.2.5 SAMPLE COLLECTION, PRESERVATION AND ANALYSIS FOR MONITORING NON-VISIBLE POLLUTANTS						
Constituent	**Analytical Method**	**Minimum Sample Volume**	**Sample Bottle**	**Sample Preservation**	**Reporting Limit**	**Maximum Holding Time**
Metals (Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, Se, Na, Th, Va, Zn)	EPA 6010B/7470A	1 x 250 mL	Polypropylene	Store at 4˚C, HNO_3 to pH<2	0.1 mg/L	6 months
Metals (Chromium VI)	EPA 7199	1 x 500 mL	Polypropylene	Store at 4˚C	1.0µg/L	24 hours

Notes:

°C – degrees celsius
BOD – biochemical oxygen demand
COD – chemical oxygen demand
DO – dissolved oxygen
EPA – Environmental Protection Agency
HCl – hydrochloric acid
HNO_3 – nitric acid
L – liter
mg/L – milligrams per liter
µg/L – micrograms per liter
mL – milliliter
PCB – polychlorinated biphenyls
SVOC – semivolatile organic compound
SM – Standard Method
H_2SO_4 – sulfuric acid
VOA – volatile organic analysis
VOC – volatile organic compound

REQUIRED TEXT if samples will be sent to the laboratory:

Samples collected for monitoring of non-visible pollutants will be analyzed by the laboratory identified in Section 700.2.1.2.4. Samples shall be analyzed for the constituents identified in Table 700.2.2.3.1, using the analytical methods identified in Table 700.2.2.5: Sample Collection, Preservation and Analysis for Monitoring Non-Visible Pollutants.

TABLE 700.2.2.5 SAMPLE COLLECTION, PRESERVATION AND ANALYSIS FOR MONITORING NON-VISIBLE POLLUTANTS						
Constituent	**Analytical Method**	**Minimum Sample Volume**	**Sample Bottle**	**Sample Preservation**	**Reporting Limit**	**Maximum Holding Time**

TABLE 700.2.2.5 SAMPLE COLLECTION, PRESERVATION AND ANALYSIS FOR MONITORING NON-VISIBLE POLLUTANTS						
Constituent	**Analytical Method**	**Minimum Sample Volume**	**Sample Bottle**	**Sample Preservation**	**Reporting Limit**	**Maximum Holding Time**

Notes:

REQUIRED TEXT if samples will be analyzed in the field:

For samples collected for field analysis, collection, analysis and equipment calibration shall be in accordance with the field instrument manufacturer's specifications.

Refer to General SAP Section 700.2.1.2.3 for general information regarding field instrument identification and requirements.

INSERT ADDITIONAL NARRATIVE TEXT FOR SAMPLE ANALYSIS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.2.6 Quality Assurance/Quality Control

INSTRUCTIONS:

Refer to general instructions about Quality Assurance/Quality Control (QA/QC) in General SAP Section 700.2.1.6. If additional requirements are necessary for QA/QC, insert additional text in this section.

REQUIRED TEXT:

Refer to the general requirements regarding Quality Assurance/Quality Control (QA/QC) in General SAP Section 700.2.1.6.

INSERT ADDITIONAL QUALITY CONTROL/QUALITY ASSURANCE TEXT HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)

700.2.2.7 Data Management and Reporting

INSTRUCTIONS:

Refer to general data management and reporting instructions in General SAP Section 700.2.1.7. If additional requirements are necessary for data management and reporting, insert additional text in this section.

REQUIRED TEXT:

Refer to general requirements for data management and reporting in Section General SAP 700.2.1.7.

INSERT ADDITIONAL DATA MANGEMENT AND REPORTING TEXT HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)

700.2.2.8 Data Evaluation

INSTRUCTIONS:

- Implement BMPs on the construction site, in accordance with the CGP, to reduce non-visible pollutants in discharges of stormwater from the construction site.
- Evaluate the discharge water quality sample analytical results to determine if the runoff/downgradient sample(s) show significantly elevated concentrations of the tested analyte relative to the concentrations found in the uncontaminated background sample.
- Implement corrective measures if necessary.
- Evaluate the water quality sample analytical results to determine if the runoff and run-on samples show significantly elevated levels of the tested constituent relative to the levels found in the background sample. The run-on sample analytical results shall be used as an aid in evaluating potential off-site influences on water quality results.

REQUIRED TEXT:

Water quality sample analytical results for non-visible pollutants shall be compared to the uncontaminated background sample results. Should the discharge (downgradient) sample show an increased level of the tested non-visible pollutant analyte relative to the background sample, the BMPs, site conditions, and surrounding influences shall be assessed to determine the probable cause for the increase.

As determined by the site and data evaluation, appropriate BMPs shall be repaired or modified to mitigate discharges of non-visual pollutant concentrations. Once deemed necessary, corrective actions shall be implemented within 72 hours of identification, completed as soon as possible, and documented on the CEM-2035 Stormwater Site Inspection Report Corrective Actions Summary. Revisions/design changes to BMPs required as a result of data evaluation and site assesment shall be implemented based on an amendment to the SWPPP.

INSERT ADDITIONAL DATA EVALUATION TEXT HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)

700.2.2.9 Change of Conditions

INSTRUCTIONS:

Refer to the general instructions for change of conditions in General SAP Section 700.2.1.9. If additional requirements are necessary for changes of conditions, then insert additional text in this section.

REQUIRED TEXT:

Refer to the general requirements for change of conditions in General SAP Section 700.2.1.9.

INSERT ADDITIONAL CHANGE OF CONDITIONS TEXT HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)

700.2.3 Sampling and Analysis Plan for Non-Stormwater Discharges

INSTRUCTIONS:

- The CGP requires that effluent monitoring from discharge pipes or other locations be representative of the nature of the discharge. This section addresses all non-stormwater discharges from the site at discharge points.
- Typical non-stormwater pollution sources include, but are not limited to, the following: water trucks, water tanks, concrete cutting and curing operations, hydrant or pipe flushing, washing or rinsing of any kind, and concrete washouts.
- Non-stormwater may be polluted with visible or non-visible pollutants. Section 700.2.2 addresses non-visible pollutants in stormwater discharges at discharge points.
- Does this project have a dewatering permit?

☐ Yes ☐ No

REQUIRED TEXT:

This SAP has been prepared for monitoring non-stormwater discharges from the project site and off-site activities directly related to the project, in accordance with the requirements of the CGP and applicable requirements of the Caltrans *Construction Site Monitoring Program Guidance Manual,* [Insert latest edition]. This SAP for monitoring non-stormwater discharges includes all of the components listed in Section 700.2.1.

700.2.3.1 Scope of Monitoring Activities

INSTRUCTIONS:

- Identify the general sources and locations of potential non-stormwater discharges from the project site.
- For projects with dewatering permits, insert:
  - ❑ permit number
  - ❑ name of RWQCB
  - ❑ monitoring parameters

- ❑ dewatering locations
- ❑ frequency of monitoring

REQUIRED TEXT:

Non-stormwater discharges can be authorized by a separate NPDES permit or conditional exemption. For non-stormwater discharges that are unauthorized or non-exempt where runoff is discharged off site, sampling and testing of the discharge must be conducted in compliance with the CGP and Caltrans Permit.

Conditionally exempt non-stormwater discharges include: water line and fire hydrant flushing, irrigation water, landscape irrigation, uncontaminated ground water dewatering, and other discharges not subject to a separate general NPDES permit adopted by a region. Conditionally exempt discharges are not prohibited (i.e., they are authorized) if they are identified as not being sources of pollutants to receiving waters, or if appropriate control measures (BMPs) to minimize the adverse impacts of such sources are developed and implemented.

Examples of unauthorized non-stormwater discharges common to construction activities include:

- vehicle and equipment wash water, including concrete washout water
- slurries from concrete cutting and coring operations, or grinding operations
- slurries from concrete or mortar mixing operations
- residue from high-pressure washing of structures or surfaces
- wash water from cleaning painting equipment
- runoff from dust control applications of water or dust palliatives
- sanitary and septic wastes
- chemical leaks and/or spills of any kind, including but not limited to, petroleum, paints, cure compounds, etc

When an unauthorized non-stormwater discharge is discovered, the WPC Manager will require sampling and analysis of the effluent to detect whether non-visible pollutants are present in the discharge. Sampling and analysis of non-stormwater discharges shall be performed in accordance with Section 700.2.2, the SAP for non-visible pollutants.

REQUIRED TEXT for Projects with non-stormwater dewatering and discharging stored stormwater:

Non-stormwater from dewatering operations or impounded stormwater may be discharged off site during this project. Stored stormwater isdefined as rain collected in trenches, foundation excavations, and excavations for pavement structural sections. Non-stormwater dewatering discharges or discharges of impounded stormwater shall be monitored for turbidity, pH and potential non-visible pollutants.

REQUIRED TEXT for Risk Level 2 and Risk Level 3 Projects:

Sampling and analysis for pH and turbidity of stored or impounded stormwater discharges subsequent to a qualifying rain event (a rain event that has produced ½ inch or more of precipitation at the time of discharge) shall be performed in accordance with Section 700.2.4, the SAP for stormwater pH and turbidity.

REQUIRED TEXT for projects with a Dewatering Permit:

This project is covered by dewatering permit number [Enter Permit Number] issued by [Enter Regional Water Board] RWQCB. The scope of monitoring based on the permit requirements is described below.

The stategy for monitoring dewatering discharges requires monitoring of the following parameters:

- [List Parameters]

Monitoring will be required at the following locations:

- [List Locations]

Monitoring must be performed:

- [List Frequency for Monitoring]

A copy of the dewatering permit is in Attachment F.

INSERT ADDITIONAL NARRATIVE TEXT FOR DEWATERING PERMIT SCOPE OF MONITORING ACTIVITIES HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

REQUIRED TEXT:

INSERT ADDITIONAL NARRATIVE TEXT FOR SCOPE OF MONITORING ACTIVITIES HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.3.2 Monitoring Preparation

INSTRUCTIONS:

Refer to the general instructions for monitoring preparation in General SAP Section 700.2.1.2. If additional requirements are necessary for monitoring preparation, insert additional text in this section.

REQUIRED TEXT:

Refer to the general requirements for monitoring preparation in General SAP Section 700.2.1.2.

INSERT ADDITIONAL NARRATIVE TEXT FOR SAMPLE COLLECTION AND HANDLING HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.3.2.1 Qualified Sampling Personnel

Refer to the general requirements for Qualified Sampling Personnel in General SAP Section 700.2.1.2.1.

INSERT ADDITIONAL NARRATIVE TEXT FOR QUALIFIED SAMPLING PERSONNEL HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.3.2.2 Monitoring Supplies

Refer to the general information regarding monitoring supplies in General SAP Section 700.2.1.2.2.

INSERT ADDITIONAL NARRATIVE TEXT FOR MONITORING SUPPLIES HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.3.2.3 Field Instruments

Refer to the general information regarding field instruments in General SAP Section 700.2.1.2.3.

INSERT ADDITIONAL NARRATIVE TEXT FOR FIELD INSTRUMENTS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.3.2.4 Testing Laboratory

Refer to the contact information for the testing laboratory found in General SAP Section 700.2.1.2.4.

INSERT ADDITIONAL NARRATIVE TEXT FOR TESTING LABORATORY HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.3.3 Monitoring Strategy

INSTRUCTIONS:

. If additional monitoring strategy requirements are necessary, insert additional text in this section.

REQUIRED TEXT:

Non-stormwater discharges from the construction site will be monitored for exceedances of water quality standards.

INSERT ADDITIONAL NARRATIVE TEXT FOR MONITORING STRATEGY HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.3.3.1 Analytical Constituents

For non-stormwater dewatering discharges and discharges of stored stormwater, samples shall be analyzed for the following constituents:

- turbidity
- pH
- [List potential non-visible pollutant water quality indicator]

INSERT ADDITIONAL NARRATIVE TEXT FOR ANALYTICAL CONSTITUENTS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

REQUIRED TEXT for projects with a Dewatering Permit:

Non-stormwater dewatering discharge samples shall be analyzed for the following dewatering permit-required constituents:

- [List constituents]

INSERT ADDITIONAL NARRATIVE TEXT FOR ANALYTICAL CONSTITUENTS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

REQUIRED TEXT:

700.2.3.3.2 Potential Sampling Locations

Using the criteria in Section 700.2.1.3.2, potential sampling locations on the project site for monitoring dewatering discharges, discharges of impounded stormwater, and other non-stormwater discharges were identified. Sampling locations were based on: proximity to planned non-stormwater dewatering; non-stormwater occurrence or use; accessibility for sampling and personnel safety; and other factors in accordance with the applicable requirements in the *Caltrans Construction Site Monitoring Program Guidance Manual*, latest edition. Sampling locations shall be shown on the WPCDs in Attachment BB and listed on Stormwater Sampling Locations in Attachment EE.

[Enter Number of Sampling Locations] sampling location(s) on the project site have been identified as potential locations for the collection of non-stormwater dewatering samples and the sampling location(s) are listed in Table 700.2.3.3.2.1: Potential Non-stormwater Dewatering Sampling Locations.

TABLE 700.2.3.3.2.1
POTENTIAL NON-STORMWATER DEWATERING SAMPLING LOCATIONS

Sampling Location Identifier	Location Description

[Enter Number of Sampling Locations] sampling location(s) on the project site been identified as potential locations for the collection of discharge samples of impounded stormwater and the sampling location(s) are listed in Table 700.2.3.3.2.2: Potential Impounded Stormwater Discharge Sampling Locations.

TABLE 700.2.3.3.2.2 POTENTIAL IMPOUNDED STORMWATER DISCHARGE SAMPLING LOCATIONS	
Sampling Location Identifier	**Location Description**

INSERT ADDITIONAL NARRATIVE TEXT FOR POTENTIAL SAMPLING LOCATIONS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

REQUIRED TEXT if discharging to a sediment-sensitive water body:

This project discharges into[specify sediment-sensitive water body],

This project may discharge non-stormwater from dewatering or discharge accumulated stormwater into [specify water body]. All discharges shall have a designated monitoring location for sampling prior to discharging to the sediment-sensitive water body.

The project non-stormwater discharge locations will discharge to [specify water body] at the location(s) listed in Table 700.2.3.3.2.3: Potential Dewatering / Impounded Stormwater Sampling Locations and Receiving Water Sampling Locations.

TABLE 700.2.3.3.2.3 POTENTIAL DEWATERING / IMPOUNDED STORMWATER SAMPLING LOCATIONS AND RECEIVING WATER SAMPLING LOCATIONS	
Dewatering / Impounded Stormwater Sampling Location Identifier	**Receiving Water Sampling Location Identifier**

Potential non-stormwatert sampling locations with associated receiving water sampling locations shall be shown on the WPCDs in Attachment BB and listed on Stormwater Sampling Locations in Attachment EE.

INSERT ADDITIONAL NARRATIVE TEXT FOR POTENTIAL SAMPLING LOCATIONS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

REQUIRED TEXT:

700.2.3.3.3 Actual Sampling Locations

Actual sampling locations will be determined by the WPC Manager when dewatering activities are in progress based on the potential dewatering discharge sample locations initially selected.

REQUIRED TEXT for projects with a Dewatering Permit:

Dewatering discharge sampling locations will be determined by the WPC Manager based on the criteria specified in the dewatering permit number [Enter Permit Number] issued by [Enter Regional Water Board] RWQCB.

REQUIRED TEXT:

When stormwater is impounded in excavations on the project site and the impounded stormwater has the pontential to create runoff from the project site, the WPC Manager will determine the actual sampling location for collecting impounded stormwater discharge samples.

If new locations for dewatering discharges or impounded stormwater discharges that have not been identified on the list of potential stormwater and non-stormwater sampling locations are identified during the course of construction, the WPC Manager must create sampling location identifiers for the dewatering discharge sampling location. The additional sampling location for dewatering discharge monitoring shall be shown on the WPCDs in Attachment BB and added to Attachment EE: Stormwater Sampling Locations.

INSERT ADDITIONAL NARRATIVE TEXT FOR ACTUAL SAMPLING LOCATIONS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.3.3.4 Sampling Schedule

Whenever there are dewatering discharges or impounded stormwater discharges, sampling will be performed daily during discharging. Sampling will be performed upon commenment of the dewatering discharge or impounded stormwater discharge, and then a minimum of three (3) samples per day will be collected for analysis.

INSERT ADDITIONAL NARRATIVE TEXT FOR SAMPLING SCHEDULE HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

REQUIRED TEXT for projects with a Dewatering Permit:

Dewatering discharge sampling schedule will be determined by the WPC Manager based on the criteria specified in the dewatering permit number [Enter Permit Number] issued by [Enter Regional Water Board] RWQCB.

INSERT ADDITIONAL NARRATIVE TEXT FOR ACTUAL SAMPLING LOCATIONS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

REQUIRED TEXT:

700.2.3.4 Sample Collection and Handling

INSTRUCTIONS:

- Refer to the general sample collection and handling instructions in General SAP Section 700.2.1.4. If additional requirements are necessary for sample collection and handling, insert additional text in this section.
- For projects with dewatering permits, insert additional requirements in appropriate sections.

REQUIRED TEXT:

Refer to the general requirements for sample collection and handling in General SAP Section 700.2.1.4.

INSERT ADDITIONAL SAMPLE COLLECTION AND HANDLING TEXT HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)

700.2.3.4.1 Sample Collection Procedures

Refer to the general procedures for sample collection in General SAP Section 700.2.1.4.1.

INSERT ADDITIONAL NARRATIVE TEXT FOR SAMPLE COLLECTION PROCEDURES HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.3.4.2 Sample Handling Procedures

Refer to the general procedures for sample handling in General SAP Section 700.2.1.4.2.

INSERT ADDITIONAL NARRATIVE TEXT FOR SAMPLE HANDLING PROCEDURES HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.3.4.3 Sample Documentation Procedures

In addition to the general procedures for sample documentation in General SAP Section 700.2.1.4.3, when applicable, the contractor's stormwater inspector will document on the CEM-2030 Stormwater Site Inspection Report that samples for non-stormwater discharge pollutants were taken based on a visual monitoring site inspection.

INSERT ADDITIONAL NARRATIVE TEXT FOR SAMPLE DOCUMENTATION PROCEDURES HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.3.5 Sample Analysis

INSTRUCTIONS:

- Specific analyses to be performed on samples collected from the project site are listed in Table 700.2.3.5: Sample Collection, Preservation and Analysis for Monitoring Water Extracted by Dewatering.
- Non-stormwater may be polluted with visible or non-visible pollutants. Section 700.2.2.5 provides additional guidance for sample analysis of non-visible pollutants.

REQUIRED TEXT:

Samples from non-stormwater discharges shall be analyzed for pH and turbidity.

The WPC Manager may determine that samples of non-stormwater discharges, need to be analyzed for non-visible pollutants. If the WPC Manager determines that non-visible pollutants may have contaminated the discharge, the samples shall be analyzed for the suspected pollutants. Sampling and analysis for non-visible pollutants in non-stormwater discharges shall be performed following the guidance in Section 700.2.2, the SAP for non-visible pollutants.

REQUIRED TEXT for projects with a Dewatering Permit:

Samples shall be analyzed for [specify parameters] based on the requirements specified in the dewatering permit number [Enter Permit Number] issued by [Enter Regional Water Board] RWQCB.

INSERT ADDITIONAL NARRATIVE TEXT FOR SAMPLE ANALYSIS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

REQUIRED TEXT:

Samples shall be analyzed for the constituents indicated in the Table 700.2.3.5: Sample Collection, Preservation and Analysis for Monitoring Water Extracted by Dewatering or Impounded Stormwater Discharges.

TABLE 700.2.3.5 SAMPLE COLLECTION, PRESERVATION AND ANALYSIS FOR MONITORING WATER EXTRACTED BY DEWATERING OR IMPOUNDED STORMWATER DISCHARGES						
Parameter	**Test Method**	**Sample Preservation**	**Minimum Sample Volume(1)**	**Sample Bottle**	**Maximum Holding Time**	**Detection Limit (min)**
Turbidity	Field test with calibrated portable instrument	Store at 4˚ C (39.2˚ F)	100 mL	Polypropylene or Glass	48 hours	1 NTU
pH	Field test with calibrated portable instrument	Store at 4˚ C (39.2˚ F)	100 mL	Polypropylene	48 hours	0.2

Notes: (1) Minimum sample volume recommended. Specific volume requirements will vary by instrument; check instrument manufacturer instructions.

°C – degrees Celsius
°F – degrees Fahrenheit
L – liter
Ml – milliliters
NTU – Nephelometric Turbidity Unit

REQUIRED TEXT if samples will be analyzed in the field:

For samples collected for field analysis, collection, analysis and equipment calibration shall be in accordance with the field instrument manufacturer's specifications.

Refer to general information for field instrument identification and requirements in General SAP Section 700.2.1.2.3.

INSERT ADDITIONAL NARRATIVE TEXT FOR SAMPLE ANALYSIS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.3.6 Quality Assurance/Quality Control

INSTRUCTIONS:

Refer to general instructions about Quality Assurance/Quality Control (QA/QC) in General SAP Section 700.2.1.6. If additional requirements are necessary for QA/QC, insert additional text in this section.

REQUIRED TEXT:

Refer to the general requirements regarding Quality Assurance/Quality Control (QA/QC) in Section General SAP 700.2.1.6. For samples analyzed for turbidity and pH the following replaces the requirements for QA/QC in Section 700.2.1.6:

The contractor shall coordinate with the Caltrans RE on sampling locations and timing for quality assurance verification of field sampling and analysis. The contractor shall notify the RE at least 24 hours prior to dewatering discharge or impounded stormwater discharge sampling events.

INSERT ADDITIONAL QUALITY CONTROL/QUALITY ASSURANCE TEXT HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)

700.2.3.7 Data Management and Reporting

INSTRUCTIONS:

Refer to general data management and reporting instructions in General SAP Section 700.2.1.7. If additional requirements are necessary for data management and reporting, insert additional text in this section.

REQUIRED TEXT:

Refer to the general requirements for data management and reporting in General SAP Section 700.2.1.7.

INSERT ADDITIONAL DATA MANGEMENT AND REPORTING TEXT HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)

700.2.3.8 Data Evaluation

INSTRUCTIONS:

Samples collected from dewatering discharges shall be evaluated to determine if the concentrations are less than or equal to the applicable water quality standard.

REQUIRED TEXT:

An evaluation of the water quality sample analytical results, including sampling locations and the QA/QC data, shall be submitted to the RE for every day that the water from dewatering is discharged. Should the dewatering discharge concentrations exceed applicable water quality standards, discharging will be stopped and the WPC Manager or other personnel shall evaluate the dewatering BMPs to determine the probable cause for the exceedance.

Samples of non-stormwater collected during discharge shall be evaluated by determining if suspected contaminants are present. Unauthorized discharges will be stopped as soon as possible and a report of discharge shall be completed and submitted to the RE. Authorized discharges shall be sampled for pH and Turbidity and all suspected pollutants. For pH and turbidity, sample results shall be compared to the NAL and NELs.

As determined by the data evaluation and project site assesment, appropriate BMPs shall be repaired or modified to mitigate the exceedances. Corrective actions taken shall be documents on the CEM-2035 Stormwater Site Inspection Report Corrective Actions Summary. Any revisions/design changes to BMPs shall be implemented based onan amendment to the SWPPP.

700.2.3.9 Changes of Conditions

INSTRUCTIONS:

Refer to the general instructions for changes of conditions in General SAP Section 700.2.1.9. If additional requirements are necessary for Changes of Conditions, then insert additional text in this section.

REQUIRED TEXT:

Refer to the general requirements for changes of conditions in General SAP Section 700.2.1.9.

INSERT ADDITIONAL CHANGE OF CONDITIONS TEXT HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)

700.2.4 Sampling and Analysis Plan for Stormwater pH and Turbidity

INSTRUCTIONS:

This project has a risk level determination of Risk Level 2 or Risk Level 3?

☐ Yes ☐ No

If "NO" delete Sections 700.2.4.1 to 700.2.4.9.

This risk level determination for this project is based on high receiving water risk?

☐ Yes ☐ No

REQUIRED TEXT for Risk Level 1 Projects:

This project is Risk Level 1 and does not require a SAP for pH and turbidity because this project has a low sediment risk and low receiving water risk.

REQUIRED TEXT for Risk Level 2 or Risk Level 3 Projects:

This SAP has been prepared for monitoring pH and turbidity in stormwater discharges from the project site and off-site activities directly related to the project in accordance with the requirements of the CGP and applicable requirements of the Caltrans *Construction Site Monitoring Program Guidance Manual*, [Insert latest edition]. This SAP for monitoring pH and turbidity includes all of the components listed in Section 700.2.1.

INSTRUCTIONS:

- The CGP requires dischargers to assess the risk level of a site based both on sediment transport and receiving water risk. Risk levels are established by calculating two factors: (1) the site's sediment risk; and (2) the receiving water risk during periods of soil exposure. Both factors are used to determine the site-specific risk level. The risk level determination for this project is shown in Section 500.1.3. For Risk Level 2 and Risk Level 3 projects, a SAP must be prepared for monitoring turbidity and pH of stormwater discharges. For Risk Level 3 sites that violate the turbidity daily average NEL, subsequent effluent samples must be analyzed for SSC in addition to pH and turbidity.
- For Risk Level 3 project sites that violate an NEL and discharge directly into receiving waters, the receiving waters must be subsequently monitored for pH, turbidity, and any additional parameters for which monitoring is required by RWQCB, for the duration of coverage under the CGP.
- For Risk Level 1 projects, the requirements outlined in Sections 700.2.4.1 thru 700.2.4.9 are not required.
- Note: If the cursor does not go to the next form field after answering a yes/no radio button question, then scroll down and click in the next applicable form field.

700.2.4.1 Scope of Monitoring Activities

INSTRUCTIONS:

Provide the name(s) of the sediment-sensitive water bodies that are sediment-sensitive based either on: (1) 303(d) listed water bodies impaired for sediment; (2) a USEPA-approved Total Maximum Daily Load (TMDL) implementation plan for sediment; or (3) the beneficial uses of Cold and Spawn and Migratory.

REQUIRED TEXT:

The scope of monitoring for this SAP includes monitoring for pH and turbidity in stormwater discharges from the project site and run-on to the project site.

REQUIRED TEXT for projects with high receiving water risk:

This project discharges into [specify sediment-sensitive water body], a water body that is sediment-sensitive. Monitoring of the receiving water will be required when there are direct discharges to the receiving water .

REQUIRED TEXT for Risk Level 3 Projects:

Monitoring activities for this project include:

- analyzing stormwater discharges for SSC when the NEL for turbidity is exceeded
- analyzing receiving water samples when the NEL for turbidity or pH is exceeded at any project site discharge location that discharges to a receiving water

700.2.4.2 Monitoring Preparation

INSTRUCTIONS:

Refer to the general instructions for monitoring preparation in General SAP Section 700.2.1.2. If additional requirements are necessary for monitoring preparation, insert additional text in this section.

REQUIRED TEXT:

Refer to the general requirements for monitoring preparation in General SAP Section 700.2.1.2.

INSERT ADDITIONAL NARRATIVE TEXT FOR MONITORING PREPARTION HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.4.2.1 Qualified Sampling Personnel

Refer to the general requirements for Qualified Sampling Personnel in General SAP Section 700.2.1.2.1.

INSERT ADDITIONAL NARRATIVE TEXT FOR QUALIFIED SAMPLING PERSONNEL HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.4.2.2 Monitoring Supplies

Refer to the general information regarding monitoring supplies in General SAP Section 700.2.1.2.2.

INSERT ADDITIONAL NARRATIVE TEXT FOR MONITORING SUPPLIES HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.4.2.3 Field Instruments

Refer to the general information regarding field instruments in General SAP Section 700.2.1.2.3.

INSERT ADDITIONAL NARRATIVE TEXT FOR FIELD INSTRUMENTS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.4.2.4 Testing Laboratory

Refer to the contact information for the testing laboratory found in General SAP Section 700.2.1.2.4.

INSERT ADDITIONAL NARRATIVE TEXT FOR TESTING LABORATORY HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.4.3 Monitoring Strategy

INSTRUCTIONS:

- Describe the constituents for which the stormwater discharge samples must be analyzed.
- Describe the potential stormwater discharge sampling locations.
- Describe the sampling locations for monitoring the impacts of direct stormwater discharges from the project to the sediment-sensitive or other water body.
- Describe potential sampling locations where run-on enters the project site.
- Describe how actual sampling locations will be selected for every qualifying rain event.
- Describe the sampling schedule for monitoring the impacts of stormwater discharges to the sediment-sensitive or other water body.

REQUIRED TEXT:

Monitor representative stormwater discharges from the project site for pH and turbidity during qualifying rain events (a rain event that has produced ½ inch or more of precipitation at the time of discharge).

700.2.4.3.1 Analytical Constituents

Stormwater discharge samples are to be analyzed for pH and turbidity.

INSERT ADDITIONAL NARRATIVE TEXT FOR ANALYTICAL CONSTITUENTS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

REQUIRED TEXT for Risk Level 3 Projects:

When a stormwater discharge exceeds the turbidity daily average NEL of 500 Nephelometric Turbidity Units (NTUs), then, for subsequent discharges, samples must be analyzed for SSC.

700.2.4.3.2 Potential Sampling Locations

INSTRUCTIONS:

- Provide location identifier(s) and describe the location(s) of project site discharges and show the discharge locations on the WPCDs in Attachment BB.
- Sampling locations for discharges are based on proximity to identified discharge or run-on location(s), accessibility for sampling, personnel safety, and other factors in accordance with the applicable requirements in the *Caltrans Construction Site Monitoring Program Guidance Manual*, latest edition

- Include the required text to identify direct discharge locations to receiving waters and sampling location(s), if applicable.
- To determine potential impairments that originate off site, include the identified locations of run-on to the Caltrans right-of-way from Section 500.3.1 and then identify run-on sampling location(s).
- Does the project site have discharge locations that discharge directly to the sediment-sensitive-listed water body?

  ☐ Yes ☐ No

- Does the project receive run-on with the potential to combine with stormwater discharges?

  ☐ Yes ☐ No

REQUIRED TEXT:

Using the criteria in Section 700.2.1.3.2, the potential sampling locations on the project site for monitoring pH and turbidity were identified. Potential sampling locations for monitoring stormwater discharges for pH and turbidity are based on drainage areas; run-on and runoff locations; accessibility for sampling and personnel safety; and other factors in accordance with the applicable requirements in the *Caltrans Construction Site Monitoring Program Guidance Manual*, latest edition. Stormwater discharge locations shall be shown on the WPCDs in Attachment BB and listed on Stormwater Sample Locations in Attachment EE

The stormwater discharge locations on the project site are listed in Table 700.2.4.3.2.1: Stormwater Discharge Locations.

TABLE 700.2.4.3.2.1
STORMWATER DISCHARGE LOCATIONS

Sampling Location Identifier	Location

INSERT ADDITIONAL NARRATIVE TEXT FOR STORMWATER DISCHARGE LOCATIONS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

INSTRUCTIONS for projects that have potential for direct discharge to sediment-sensitive receiving water:

- Provide location identifier(s) and describe the location(s) of direct discharges from the project site to the sediment-sensitive water body, and show the locations of direct discharge on the WPCDs in Attachment BB, if applicable.
- Identify a location upstream of all direct discharge from the construction site that appears to represent the flow of the water body to analyze the prevailing condition of the receiving water without any influence from the construction site. Describe exactly, either using GPS coordinates or post mile designations, where the sample will be collected. Note: Sampling too far upstream may not show prevailing conditions immediately upstream of the construction site.
- Identify a location immediately downstream from the last point of direct discharge from the construction site that appears to represent the nature of the flow to analyze potential impacts to the sediment-sensitive listed water body from the project. Describe exactly where the sample will be collected. Downstream samples should represent the receiving water mixed with flow from the construction site. Note: Sampling too far downstream may result in detection of pollutants from other discharges.
- Receiving water sampling locations are based on proximity to identified discharge location(s), accessibility for sampling and personnel safety, and other factors in accordance with the applicable requirements in the *Caltrans Construction Site Monitoring Program Guidance Manual*, latest edition.

REQUIRED TEXT for projects that have potential for direct discharge to sediment sensitive receiving water:

Runoff from the project has the potential to result in direct (concentrated) stormwater discharges to [specify sediment sensitive water body] at the locations listed in Table 700.2.4.3.2.2: Direct Stormwater Discharge Locations to Sediment Sensitive Waterbody.

TABLE 700.2.4.3.2.2 DIRECT STORMWATER DISCHARGE LOCATIONS TO SEDIMENT SENSITIVE WATERBODY	
Discharge Location Identifier	**Location**

Direct stormwater discharge locations to receiving waters shall be shown on the WPCDs in Attachment BB and listed on Stormwater Sampling Locations in Attachment EE.

INSERT ADDITIONAL NARRATIVE TEXT FOR DIRECT STORMWATER DISCHARGE LOCATIONS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

The monitoring of receiving waters is based on the locations of stormwater discharges. To monitor receiving waters for this project, both an upstream sampling location from the stormwater discharge location(s) and a sampling location immediately downstream from the last construction site stormwater discharge location should be selected. These locations are listed in Table 700.2.4.3.2.3: Receiving Water Sampling Locations.

TABLE 700.2.4.3.2.3 RECEIVING WATER SAMPLING LOCATIONS	
Sample Location Identifier	**Location**

Receiving water sampling locations shall be shown on the WPCDs in Attachment BB and listed on Stormwater Sampling Locations in Attachment EE.

INSERT ADDITIONAL NARRATIVE TEXT FOR RECEIVING WATER SAMPLING LOCATIONS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

REQUIRED TEXT for projects that do NOT receive run-on:

The project does not receive run-on with the potential to combine with stormwater discharges.

INSTRUCTIONS for projects that receive run-on:

- To determine potential impairments that originate off site, provide location identifier(s) and describe the location(s) of run-on to the project site (refer to Section 500.3.1). Describe exactly where the sample will be collected. Show run-on locations on the WPCDs in Attachment BB.
- Describe surrounding areas, such as agricultural fields, or other sites that may contribute run-on sediment to the site.
- To minimize backwater affects or poorly mixed flows, do not locate sampling points at point sources or confluences.
- Sampling locations are based on proximity to identified run-on location(s), accessibility for

sampling, personnel safety, and other factors in accordance with the applicable requirements in the *Caltrans Construction Site Monitoring Program Guidance Manual*, latest edition.

REQUIRED TEXT for projects that receive run-on:

The project receives run-on with the potential to combine with stormwater discharges at the locations listed in Table 700.2.4.3.2.4: Run-on Locations With Potential to Combine With Stormwater Discharges.

TABLE 700.2.4.3.2.4 RUN-ON LOCATIONS WITH POTENTIAL TO COMBINE WITH STORMWATER DISCHARGES	
Sampling Location Identifier	**Location**

Potential run-on sampling locations shall be shown on the WPCDs in Attachment BB and listed on Stormwater Sampling Locations in Attachment EE.

INSERT ADDITIONAL NARRATIVE TEXT FOR RUN-ON SAMPLING LOCATIONS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

INSTRUCTIONS for Risk Level 3 Projects:

- Provide location identifier(s) and describe the location(s) of direct discharges from the project site to the sediment-sensitive water body and show the locations of direct discharges on the WPCDs in Attachment BB, if applicable.
- Identify a location, upstream of all direct discharges from the construction site, which appears to represent the flow of the water body, to analyze the prevailing condition of the receiving water without any influence from the construction site. Describe exactly, either using GPS coordinates or post mile, where the sample will be collected. Note: Sampling too far upstream may not show prevailing conditions immediately upstream of the construction site.
- Identify a location immediately downstream from the last point of direct discharge from the construction site, which appears to represent the nature of the flow, to analyze potential impacts to the sediment-sensitive listed water body from the project. Describe exactly where the sample will be collected. Downstream samples should represent the receiving water mixed with flow from the construction site. Note: Sampling too far downstream may result in detection of pollutants from other discharges.

- Receiving water sampling locations are based on proximity to identified discharge location(s), accessibility for sampling, personnel safety, and other factors in accordance with the applicable requirements in the *Caltrans Construction Site Monitoring Program Guidance Manual*, latest edition.

REQUIRED TEXT for Risk Level 3 Projects:

If stormwater discharge location test results violate the NEL and the stormwater discharges into receiving waters, then sampling of the receiveing waters is required for the duration of the project. Upstream and downstream receiving water sampling locations are listed in Table 700.2.4.3.2.5: Receiving Water Sampling Locations.

TABLE 700.2.4.3.2.5 RECEIVING WATER SAMPLING LOCATIONS	
Sampling Location Identifier	**Location**

Potential receiving water sampling locations shall be shown on the WPCDs in Attachment BB and listed on Stormwater Sampling Locations Attachment EE.

INSERT ADDITIONAL NARRATIVE TEXT FOR RECEIVING WATER SAMPLING LOCATIONS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.4.3.3 Actual Sampling Locations

INSTRUCTIONS:

- The locations from which samplings are collected are selected to characterize discharges associated with the construction activity from the entire project site. The sampling locations are selected based on drainage areas that have the highest percentage of potentially disturbed soil area. Representative sampling for this project is based on sampling 20 percent of the project discharge locations per qualifying rain event. If 20 percent results in fewer than five (5) locations to be sampled, then a minimum of five (5) locations or all discharge locations will be sampled per qualifying rain event.

- Insert the receiving water sampling locations for monitoring the impacts of direct stormwater discharges from the project to the sediment-sensitive or other water body, if applicable.

- For Risk Level 3 projects, insert the receiving water sampling locations for monitoring receiving

waters when there are exceedances of NEL for turbidity or pH.

- Insert run-on sampling locations when there are identified locations of run-on to the Caltrans right-of-way.

REQUIRED TEXT:

The WPC Manager shall select sampling locations from the list of potential sampling locations for stormwater discharge sampling shown on the WPCDs in Attachment BB and listed on Stormwater Sampling Locations in Attachment EE.

If the construction activity has not started within the drainage area at a sampling location, and there is no disturbed soil within a drainage area, sampling from the stormwater discharge location from that drainage area is not required.

Within 72 to 48 hours prior to each qualifying rain event, the WPC Manager must identify the drainage areas that must be sampled. To identify these drainage areas, the WPC Manager must refer to the WPCDs and consider the conditions described below and activities within each drainage area that could have an effect on the stormwater discharge pH or turbidity.

- Turbidity: The area of the disturbed soil at the time of precipitation could have an impact on the stormwater run-off turbidity. The area of the disturbed soil at the time of predicted precipitation must be expressed as a percentage of the total drainage area. It is reasonable to assume that a larger percentage of disturbed soil area could result in a more turbid run-off.

- pH: The type of construction activities that could have an impact on stormwater run-off pH (for example, concrete work and saw cutting, lime stabilization work, use of crushed concrete, etc.).

For representative sampling of construction site discharges, 20 percent of the drainage areas with disturbed soil areas and 20 percent of the drainage areas where activities that could potentially have an impact on the discharge pH must be sampled. At least five (5) drainage area discharge locations for each qualifying rain event must be sampled. If there are five (5) or fewer drainage area sampling locations in a project, then all drainage area sampling locations must be sampled. The drainage areas with the largest percentage of disturbed soil area must be included in the selected drainage areas to be sampled. The drainage areas where the most extensive activities (activities that potentially can alter discharge pH) are in progress must be included in the selected drainage areas to be sampled.

This representative monitoring strategy for stormwater discharges requires collection of additional samples based upon the preceding sampling event stormwater discharge pH or turbidity analysis results when the:

- turbidity analysis results – even in one sampling location – in the previous sampling event have exceeded 200 NTU, the number of drainage areas with disturbed soil areas requiring sampling will be raised to 50 percent

- turbidity analysis results – even in one sampling location – in the previous sampling event have exceeded 250 NTU, the number of drainage areas with disturbed soil areas requiring sampling will be raised to 100 percent

- pH analysis results – even in one sampling location – in the previous sampling event have not fallen within 6.5 to 8.5 pH unit range, the number of drainage areas requiring sampling where construction activities could have an impact on the discharge pH readings will be raised to 50 percent

- pH analysis results – even in one sampling location – in the previous sampling event have not fallen within 6.0 to 9.0 pH unit range, the number of drainage areas requiring sampling where construction activities could have an impact on the discharge pH readings will be raised to 100 percent

The selection of additional sampling locations, based on turbidity results, will involve drainage areas with the highest percentage of disturbed soil area. The selection of additional sampling locations, based on pH results, will involve drainage areas with construction activities that are most likely to affect stormwater discharge pH. Selection of stormwater discharge sampling locations shall be documented on the CEM-2049 Qualifying Rain Event Sampling and Analysis Plan, in Appendix O. Completed qualifying rain event SAPs shall be kept in SWPPP File Category 20.46: Storm/Rain Event Sampling and Analysis Plans.

INSERT ADDITIONAL NARRATIVE TEXT FOR ACTUAL SAMPLING LOCATIONS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

REQUIRED TEXT for projects that have potential for direct discharge to sediment sensitive receiving water:

This project has discharge locations that discharge directly into the sediment-sensitive receiving water. Receiving water sampling locations will be sampled and analyzed for every qualifying rain event (rain events producing ½ inch or more of precipitation at the time of discharge).

Sampling location (designated number [Enter Number]) is upstream of all direct discharges from the construction site. Upstream samples shall be collected and analyzed for the prevailing condition of the receiving water without any influence from the construction site. The upstream samples will be used to determine the background levels of turbidity, suspended sediment concentration, and pH in the sediment-sensitive listed water body upstream of the project.

Sampling location number [Enter Number]) is located [Enter Location].

Sampling location (designated number [Enter Number]) is immediately downstream from the last point of direct discharge from the construction site for the collection of a sample to be analyzed for potential increases in turbidity, suspended sediment concentration, or potential exceedance in pH level in the sediment-sensitive listed water body caused by stormwater discharges from the project.

Sampling location number [Enter Number] is located [Enter Location].

Receiving water sampling locations shall be shown on the CEM-2049 Qualifying Rain Event Sampling and Analysis Plan by the WPC Manager prior to every qualifying rain event. Completed CEM-2049 plans shall be kept in SWPPP File Category 20.45: Storm/Rain Event Action and Sampling and Analysis Plans.

REQUIRED TEXT for projects that receive run-on:

This project receives run-on from surrounding area that may contribute to exceedances of NALs or NELs. Potential sampling locations have been selected from locations where run-on enters the Caltrans right-of-way

[Enter Number of Sampling Locations] potential sampling location(s) have been identified for the collection of samples of run-on with the potential to combine with runoff from the construction site, which discharge either to an MS4 or to a sediment-sensitive water body. Run-on samples taken from these locations will be analyzed to identify potential turbidity and pH that originates off the project site and contributes directly to stormwater discharges from the construction site to the MS4 or sediment-sensitive water body.

The selection of run-on sampling locations will be made by the WPC Manager. Run-on sampling locations will be selected based on stormwater discharge locations. If there is an NAL or NEL exceedance at a stormwater discharge location, any stormwater run-on location that contributes to the stormwater discharges from the construction site shall be selected for sampling. The selection of stormwater run-on sampling locations shall be documented on the CEM-2049 Qualifying Rain Event Sampling and Analysis Plan by the WPC Manager for every qualifying rain event. Completed CEM-2049 plans shall be kept in SWPPP File Category 20.45: Storm/Rain Event Action and Sampling and Analysis Plans.

INSERT ADDITIONAL NARRATIVE TEXT FOR ACTUAL SAMPLING LOCATIONS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

REQUIRED TEXT for Risk Level 3 Projects:

If test results from stormwater discharge locations exceed the NELs and the runoff discharges to the receiving water, then sampling of the receiving water is required for the duration of the project.

Sampling location (designated number [Enter Number]) is upstream of all direct discharges from the construction site. Upstream samples shall be collected and analyzed for the prevailing condition of the receiving water without any influence from the construction site. The upstream samples will be used to determine the background levels of turbidity, suspended sediment concentration, and pH in the sediment-sensitive listed water body upstream of the project.

Sampling location number [Enter Number]) is located [Enter Location].

Sampling location (designated number [Enter Number]) is immediately downstream from the last point of direct discharge from the construction site for the collection of a sample to be analyzed for potential increases in turbidity, suspended sediment concentration, or potential exceedance in pH level in the sediment-sensitive listed water body caused by stormwater discharges from the project.

Sampling location number [Enter Number] is located [Enter Location].

Receiving water sampling locations shall be marked on the CEM-2049 Qualifying Rain Event Sampling and Analysis Plan by the WPC Manager prior to every qualifying rain event. Completed CEM-2049 plans shall be kept in SWPPP File Category 20.45: Storm/Rain Event Action and Sampling and Analysis Plans.

REQUIRED TEXT:

700.2.4.3.4 Sampling Schedule

Discharge samples shall be collected for turbidity and pH for qualifying rain events that result in a discharge from the project site. When applicable, upstream, downstream, and run-on samples shall be collected for analysis of turbidity and pH. Sampling and testing for turbidity and pH will be performed daily during all qualifying rain events. Samples shall be collected during working hours.

At least 48 hours prior to each qualifying rain event, the WPC Manager must prepare the CEM-2049 Qualifying Rain Event Sampling and Analysis Plan that includes a list of sampling locations that must be sampled for the qualifying rain event.

The Qualifying Rain Event Sampling and Analysis Plan shall include all of the following sampling location types:

- discharge locations from the drainage areas with the largest percentage of disturbed soil areas
- discharge locations from the drainage areas where construction activities that could have an impact on stormwater run-off pH are in progress
- if applicable, at least one sampling location from drainage areas where the disturbed soil areas have been stabilized

For the purposes of the sampling schedule, the sampling locations must be arranged in the following order: starting with the sampling location on the northwest corner of the WPCDs as the first entry, move clockwise on the WPCDs and enter all the sampling location identifiers on the Qualifying Rain Event SAP schedule.

Within 48 to 24 hours prior to a qualifying rain event, the Qualifying Rain Event SAP shall be distributed to the individual collecting stormwater samples, and to the RE.

The Caltrans stormwater site inspector and contractor inspector must coordinate and select the sampling locations and the time to meet and collect simultaneous samples for the purposes of QA/QC.

Every reasonable attempt has to be made to collect at least three grab samples per day from each sampling location identified on the Qualifying Rain Event SAP during the qualifying rain event.

Sampling must start immediately after the flow begins or as soon as possible thereafter. The individual responsible for collecting samples must begin sampling with the first sampling location identified on the Qualifying Rain Event SAP and move on to the next sampling location until all locations are sampled. It is preferable that the three rounds of sampling are performed over the first three hours of the flow; however, depending on the time of the day or other dictating conditions in the field, the three rounds of sampling could be performed over a shorter period of time to ensure that three samples per location are collected.

If stormwater sampling is unsafe because of dangerous weather conditions, such as flooding and electrical storms, then the stormwater sampler shall document the conditions resulting in the sampling not being performed as planned. The documentation for the sampling exception shall be filed in SWPPP 20.52, Turbidity and pH Sampling and Test Results.

INSERT ADDITIONAL NARRATIVE TEXT FOR SAMPLING SCHEDULE HERE (use the “FORMAT OPTIONS” button to insert subtitles and/or paragraphs).

700.2.4.4 Sample Collection and Handling

INSTRUCTIONS:

Refer to the general sample collection and handling instructions in General SAP Section 700.2.1.4. If additional requirements are necessary for sample collection and handling, insert additional text in this section.

REQUIRED TEXT:

Refer to the general requirements for sample collection and handling in General SAP Section 700.2.1.4.

INSERT ADDITIONAL SAMPLE COLLECTION AND HANDLING TEXT HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)

700.2.4.4.1 Sample Collection Procedures

In addition to the general procedures for sample collection in General SAP Section 700.2.1.4.1, the procedures described below apply to sample collection for monitoring of pH and turbidity.

- Grab samples shall be collected and preserved in accordance with the methods identified in Table 700.2.4.5.1: Sample Collection, Preservation and Analysis for Monitoring Turbidity and pH, provided in Section 700.2.4.5.
- Only personnel trained in proper water quality sampling shall collect samples.

INSERT ADDITIONAL NARRATIVE TEXT FOR SAMPLE COLLECTION PROCEDURES HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.4.4.2 Sample Handling Procedures

Refer to the general procedures for sample handling in General SAP Section 700.2.1.4.2.

INSERT ADDITIONAL NARRATIVE TEXT FOR SAMPLE HANDLING PROCEDURES HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.4.4.3 Sample Documentation Procedures

Refer to the general procedures for sample documentation in General SAP Section 700.2.1.4.3.

INSERT ADDITIONAL NARRATIVE TEXT FOR SAMPLE DOCUMENTATION PROCEDURES HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.4.5 Sample Analysis

INSTRUCTIONS:

- Analytical tests to be used on the project are listed in Table 700.2.4.5.1: Sample Collection, Preservation and Analysis for Monitoring Turbidity and pH.
- This project is Risk Level 3?

  ☐ Yes ☐ No
- For Risk Level 3, include Table 700.2.4.5.2: Sample Collection, Preservation and Analysis for Monitoring Suspended Sediment Concentration (SSC).

REQUIRED TEXT:

Samples shall be analyzed for the constituents indicated in Table 700.2.4.5.1: Sample Collection, Preservation and Analysis for Monitoring Turbidity and pH.

TABLE 700.2.4.5.1 SAMPLE COLLECTION, PRESERVATION AND ANALYSIS FOR MONITORING TURBIDITY AND PH						
Parameter	**Test Method**	**Sample Bottle**	**Minimum Sample Volume(1)**	**Sample Preservation**	**Maximum Holding Time**	**Detection Limit (min)**
Turbidity	Field test with calibrated portable instrument	Polypropylene or Glass	100 mL	Store at 4˚ C (39.2˚ F)	48 hours	1 NTU
pH	Field test with calibrated portable instrument	Polypropylene	100 mL	Store at 4˚ C (39.2˚ F)	15 minutes	0.2

Acronyms/Notes:

C = Celsius

F = Fahrenheit

Min = minutes

mL = milliliter

NTU = Nephelometric Turbidity Units

(1) Minimum sample volume recommended. Specific volume requirements will vary by instrument; check instrument manufacturer instructions.

INSERT ADDITIONAL NARRATIVE TEXT FOR SAMPLE ANALYSIS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

REQUIRED TEXT for Risk Level 3 Projects:

If turbidity exceeds the NEL of 500 NTU, samples shall be analyzed for the constituents indicated in Table 700.2.4.5.2: Sample Collection, Preservation and Analysis for Monitoring Suspended Sediment Concentration.

TABLE 700.2.4.5.2 SAMPLE COLLECTION, PRESERVATION AND ANALYSIS FOR MONITORING SUSPENDED SEDIMENT CONCENTRATION (SSC)						
Parameter	**Test Method**	**Sample Preservation**	**Minimum Sample Volume(1)**	**Sample Bottle**	**Maximum Holding Time**	**Detection Limit (min)**
Suspended Sediment Concentration	ASTM D3977-97	Store at 4˚ C (39.2˚ F)	200 mL	Contact Laboratory	7 days	5 mg/L

TABLE 700.2.4.5.2

SAMPLE COLLECTION, PRESERVATION AND ANALYSIS FOR MONITORING SUSPENDED SEDIMENT CONCENTRATION (SSC)

Notes: [(1)] Minimum sample volume recommended. Specific volume requirements will vary by laboratory; check with laboratory when setting up bottle orders.

ASTM	–	American Society for Testing and Materials
°C	–	Degrees Celsius
°F	–	Degrees Fahrenheit
mg/L	–	Milligrams per liter
mL	–	Milliliters

REQUIRED TEXT:

Samples collected for field analysis shall meet the requirements of the field instrument manufacturer's instructions.

Refer to the general information regarding field instruments in General SAP Section 700.2.1.2.3, which includes field instrument calibration and maintenance documentation requirements.

INSERT ADDITIONAL NARRATIVE TEXT FOR SAMPLE ANALYSIS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.4.6 Quality Assurance/Quality Control

INSTRUCTIONS:

Refer to general instructions about QA/QC in General SAP Section 700.2.1.6. If additional requirements are necessary for QA/QC, insert additional text in this section.

REQUIRED TEXT:

Refer to the general requirements regarding Quality Assurance/Quality Control (QA/QC) in General SAP Section 700.2.1.6. The following replaces the requirements for QA/QC in Section 700.2.1.6 for turbidity and pH quality assurance testing. However, Section 700.2.1.6 requirements apply for SSC quality assurance testing: The contractor shall coordinate with Caltrans RE on sampling locations and timing for quality assurance verification of field sampling and analysis activities. The contractor shall notify the RE at least 24 hours prior to sampling events.

INSERT ADDITIONAL QUALITY CONTROL/QUALITY ASSURANCE TEXT HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)

700.2.4.7 Data Management and Reporting

INSTRUCTIONS:

Refer to general data management and reporting instructions in General SAP Section 700.2.1.7. If additional requirements are necessary for data management and reporting, insert additional text in this section.

REQUIRED TEXT:

Refer to general requirements for data management and reporting in General SAP Section 700.2.1.7.

INSERT ADDITIONAL DATA MANGEMENT AND REPORTING TEXT HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)

REQUIRED TEXT for Risk Level 2 and Risk Level 3 Projects:

In addition to the general requirements for data managementment and reporting in General SAP Section 700.2.1.7, the additional reporting described below is required.

Numeric Action Limit Exceedance Reporting - This project is subject to NALs for pH and turbidity as shown in Table 700.2.4.7.1: NALs for Monitoring pH and Turbidity.

TABLE 700.2.4.7.1
NALs FOR MONITORING pH AND TURBIDITY

Parameter	Test Method	Detection Limit (Min)	Unit	Numeric Action Level
pH	Field test with calibrated portable instrument	0.2	pH units	Lower NAL = 6.5 Upper NAL = 8.5
Turbidity	Field test with calibrated portable instrument	1	NTU	250 NTU

Acronyms:

NAL = numeric action level

NTU = Nephelometric Turbidity **Units**

If an NAL is exceeded, then form CEM-2062 NAL Exceedance Report will be completed and submitted to the RE within 48 hours after the sampling and analysis event. The NAL Exceedance Report will include:

- test results, analytical methods, reporting units, and detection limits
- date, sampling location, time of sampling, and visual observations
- predicted quantity of precipitation of the forecasted storm event, and estimated quantity of precipitation at the time of sampling
- description of BMPs
- corrective actions taken to manage the NAL exceedance

Once deemed necessary, corrective actions shall be immediately implemented and documented. Appendix I contains the CEM-2035 Stormwater Site Inspection Report Corrective Actions Summary form and Appendix X contains the CEM-2062 NAL Exceedance Report form. NAL exceedance reports will be filed in SWPPP File Category 20.62: Numeric Action Level Exceedance Reports.

REQUIRED TEXT for Risk Level 3 Projects:

NEL Exceedance Reporting - This project is subject to NELs for pH and turbidity, as shown in Table 700.2.4.7.2: NELs for Monitoring pH and Turbidity.

TABLE 700.2.4.7.2
NELs FOR MONITORING pH AND TURBIDITY

Parameter	Test Method	Detection Limit (Min)	Unit	Numeric Effluent Limitation
pH	Field test with calibrated portable instrument	0.2	pH units	Lower NEL = 6.0 Upper NEL = 9.0
Turbidity	Field test with calibrated portable instrument	1	NTU	500 NTU

Acronyms:

NEL = numeric effluent limitation

NTU = Nephelometric Turbidity Units

If an NEL is exceeded, then form CEM-2063 NEL Violation Report will be completed and submitted to the RE within 6 hours after determining the violation. The NEL Violation Report will include:

- test results, analytical methods, reporting units, and detection limits
- date, sampling location, time of sampling, and visual observation
- predicted quantity of precipitation of the forecasted storm event and estimated quantity of precipitation at the time of sampling
- description of BMPs
- corrective actions taken to manage the NEL exceedance

Once deemed necessary, corrective actions shall be immediately implemented and documented. Appendix I contains the CEM-2035 Stormwater Site Inspection Report Corrective Actions Summary form and Appendix Y contains CEM-2063 NEL Violation Report form. NEL violation reports will be filed in SWPPP File Category 20.63; Numeric Effluent Limitation Violation Reports.

700.2.4.8 Data Evaluation

INSTRUCTIONS:

- The CGP requires that BMPs be implemented on the construction site to prevent a significant change in pH and a significant increase in sediment load in stormwater discharges relative to pre-construction levels.

- Sample results from stormwater discharges shall be evaluated to determine if the concentrations are less than or equal to the applicable water quality standard.
- For receiving waters, the downstream water quality sample analytical results shall be evaluated to determine if the downstream sample(s) show undesirable changes to the levels of the tested constituent relative to the levels found in the upstream sample. The run-on sample analytical results shall be used as an aid in evaluating potential off-site influences on water quality results. If elevated levels of pollutants are identified, additional BMPs must be implemented in an iterative manner to prevent a net increase in pollutants to receiving waters.

REQUIRED TEXT:

An evaluation of the water quality sample analytical results, including sampling locations and the QA/QC data, shall be submitted to the RE for every day of stormwater sampling. If the stormwater discharge concentrations exceed applicable water quality standards, the WPC Manager or other personnel shall evaluate the project site BMPs to determine the probable cause for the exceedance.

As determined by the data evaluation and project site assesment, appropriate BMPs shall be repaired or modified to mitigate the exceedances. Corrective actions taken shall be documented on the CEM-2035 Stormwater Site Inspection Report Corrective Actions Summary. Any revisions/design changes to BMPs shall be implemented based on an amendment to the SWPPP.

INSERT ADDITIONAL DATA EVALUATION TEXT HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)

700.2.4.9 Change of Condition

INSTRUCTIONS:

Refer to the general instructions for changes of conditions with regard to SAPs in General SAP Section 700.2.1.9. If additional requirements are necessary for a Change of Conditions, then insert additional text in this section.

REQUIRED TEXT:

Refer to the general requirements for changes of conditions in General SAP Section 700.2.1.9.

INSERT ADDITIONAL CHANGE OF CONDITIONS TEXT HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)

700.2.5 Sampling and Analysis Plan for Monitoring Required by Regional Board

INSTRUCTIONS:

- The CGP requires stormwater effluent monitoring for any additional parameters required by a RWQCB.
- The RWQCB is requiring additional monitoring?

☐ Yes ☐ No

- If there are no additional parameters shown in the contract special provisions, then the RWQCB has not specified any additional parameters and Sections 700.2.5.1 – 700.2.5.9 shall be deleted.

REQUIRED TEXT FOR PROJECTS EXEMPT FROM ADDITIONAL REGIONAL BOARD MONITORING REQUIREMENTS:

This project does not require a project specific Sampling and Analysis Plan for Monitoring Required by a RWQCB.

REQUIRED TEXT WHEN REGIONAL BOARD HAS REQUESTED ADDITIONAL MONITORING REQUIREMENTS:

This SAP has been prepared for monitoring [specify parameters] in receiving waters or in stormwater discharges from the project site and off-site activities directly related to the project, as identified by the [Enter Regional Water Board] RWQCB. Sampling and analysis will be performed in accordance with the requirements of [Enter Regional Water Board] RWQCB and the applicable sections of the *Caltrans Construction Site Monitoring Program Guidance Manual*, [Insert latest edition]. This SAP for monitoring [specify parameters] includes all of the components listed in Section 700.2.1.

700.2.5.1 Scope of Monitoring Activities

INSTRUCTIONS:

Provide the RWQCB monitoring requirements for additional parameter(s).

REQUIRED TEXT:

The [Enter Regional Water Board] RWQCB has requested monitoring of stormwater discharges or receiving waters with regard to [specify parameters].

Monitoring must be performed:

- [List Frequency for Monitoring]

700.2.5.2 Monitoring Preparation

INSTRUCTIONS:

Refer to the general instructions for monitoring preparation in General SAP Section 700.2.1.2. If additional requirements are necessary for monitoring preparation, insert additional text in this section.

REQUIRED TEXT:

Refer to the general requirements for monitoring preparation in General SAP Section 700.2.1.2.

INSERT ADDITIONAL NARRATIVE TEXT FOR MONITORING PREPARTION HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.5.2.1 Qualified Sampling Personnel

Refer to the general requirements for Qualified Sampling Personnel in General SAP Section 700.2.1.2.1.

INSERT ADDITIONAL NARRATIVE TEXT FOR QUALIFIED SAMPLING PERSONNEL HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.5.2.2 Monitoring Supplies

Refer to the general information regarding monitoring supplies in General SAP Section 700.2.1.2.2.

INSERT ADDITIONAL NARRATIVE TEXT FOR MONITORING SUPPLIES HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.5.2.3 Field Instruments

Refer to the general information regarding field instruments in General SAP Section 700.2.1.2.3.

INSERT ADDITIONAL NARRATIVE TEXT FOR FIELD INSTRUMENTS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.5.2.4 Testing Laboratory

Refer to the contact information for the testing laboratory found in General SAP Section 700.2.1.2.4.

INSERT ADDITIONAL NARRATIVE TEXT FOR TESTING LABORATORY HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.5.3 Monitoring Strategy

INSTRUCTIONS:

- Describe the constituents for which the stormwater discharge samples must be analyzed.
- Describe the potential stormwater discharge sampling locations.
- Describe the sampling locations for monitoring the impacts of direct stormwater discharges from the project to the sediment-sensitive or other water body.
- Describe potential sampling locations where run-on enters the project site.
- Describe how actual sampling locations will be selected for every qualifying rain event.
- Describe the sampling schedule for monitoring the impacts of stormwater discharges to the

sediment-sensitive or other water body.

REQUIRED TEXT:

This section describes the sampling and analysis strategy and schedule for monitoring [specify parameters] levels in an impaired water body or in the stormwater discharges from the project site.

INSERT ADDITIONAL NARRATIVE TEXT REGARDING THE IMPAIRED WATER BODY HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.5.3.1 Analytical Constituents

[Insert Stormwater discharge or Receiving water] samples are to be analyzed for:

- [List Constituents]

INSERT ADDITIONAL NARRATIVE TEXT FOR ANALYTICAL CONSTITUENTS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.5.3.2 Potential Sampling Locations

INSTRUCTIONS:

- Provide location identifier(s) and describe the location(s) of project site discharges.
- Provide location identifier(s) and describe the location(s) of direct discharges from the project site to the impaired water body and show the locations of direct discharges on the WPCDs, if applicable.
- Identify a location upstream of all direct discharges from the construction site, which appears to represent the flow of the water body, to analyze the prevailing condition of the receiving water without any influence from the construction site. Describe exactly, either using GPS coordinates or post mile, where the sample will be collected. Note: Sampling too far upstream may not show prevailing conditions immediately upstream of the construction site.
- Identify a location immediately downstream from the last point of direct discharge from the construction site, which appears to represent the nature of the flow, to analyze potential impacts to the impaired water body from the project. Describe exactly where the sample will be collected. Downstream samples should represent the receiving water mixed with flow from the construction site. Note: Sampling too far downstream may result in detection of pollutants from other discharges.
- Include the appropriate text to identify whether run-on to the Caltrans right-of-way may combine with stormwater and directly discharge to sediment-sensitive water bodies. If the project does receive run-on, describe the locations of run-on as discussed in Section 500.3.1 and shown the locations on the WPCDs.

- To determine potential impairments that originate off site, include the required text to identify run-on sampling location(s) for projects that have run-on. Describe exactly where the sample will be collected.
- Describe surrounding areas, such as agricultural fields or other sites, which may contribute run-on sediment to the site.
- To minimize backwater affects or poorly mixed flows, do not locate sampling points at point sources or confluences.
- Sampling locations are based on proximity to identified discharge or run-on location(s), accessibility for sampling, personnel safety, and other factors in accordance with the applicable requirements in the *Caltrans Construction Site Monitoring Program Guidance Manual*.
- Does the project receive run-on with the potential to combine with stormwater that discharges directly to the impaired water body?

  ☐ Yes ☐ No

REQUIRED TEXT for monitoring stormwater discharge locations:

This project discharges into [specify water body(ies)], a water body that is [specify water body impairment] impaired. The stormwater discharge sampling locations for this project that the RWQCB has requested be monitored are listed in Table 700.2.5.3.2.1: Stormwater Discharge Locations Required To Be Monitored By RWQCB.

TABLE 700.2.5.3.2.1 STORMWATER DISCHARGE LOCATIONS REQUIRED TO BE MONITORED BY RWQCB	
Sampling Location Identifier	**Location**

Stormwater discharge sampling locations shall be shown on the WPCDs in Attachment BB and listed on Stormwater Sampling Locations in Attachment EE.

INSERT ADDITIONAL NARRATIVE TEXT FOR RUN-ON SAMPLING LOCATIONS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

REQUIRED TEXT for monitoring receiving water locations:

This project discharges into [specify water body(ies)], a water body that is [specify water body impairment] impaired. The project has the potential for direct (concentrated) stormwater discharges to [specify impaired water body]. The RWQCB has requested monitoring of the receiving water based on the stormwater discharge locations listed in Table 700.2.5.3.2.2: Stormwater Discharge Locations To Receiving Water.

TABLE 700.2.5.3.2.2 STORMWATER DISCHARGE LOCATIONS TO RECEIVING WATER	
Discharge Location Identifier	**Location**

Stormwater discharge locations to a receiving water shall be shown on the WPCDs in Attachment BB and listed on Stormwater Sampling Locations in Attachment EE.

INSERT ADDITIONAL NARRATIVE TEXT FOR STORMWATER DISCHARGE LOCATIONS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

The RWQCB has requested monitoring of the receiving waters based on the stormwater discharge locations. To monitor the receiving water for this project, sampling will be conducted at the receiving water sampling locations listed in Table 700.2.5.3.2.3: Receiving Water Sampling Locations Requied To Be Monitored By RWQCB.

TABLE 700.2.5.3.2.3 RECEIVING WATER SAMPLING LOCATIONS REQUIRED TO BE MONITORED BY RWQCB	
Sampling Location Identifier	**Location**

Receiving water sampling locations shall be shown on the WPCDs in Attachment BB and listed on Stormwater Sampling Locations in Attachment EE.

INSERT ADDITIONAL NARRATIVE TEXT FOR RECEIVING WATER SAMPLING LOCATIONS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

REQUIRED TEXT for projects that do NOT receive run-on:

The project does not receive run-on with the potential to combine with stormwater that discharges to [specify water body].

REQUIRED TEXT for projects that receive run-on:

The project receives run-on with the potential to combine with stormwater discharges that discharges to [specify water body]. Run-on locations with the potential to combine with stormwater discharges are listed in Table 700.2.5.3.2.4: Run-on Locations With Potential To Combine With Stormwater Discharges.

TABLE 700.2.5.3.2.4
RUN-ON LOCATIONS WITH THE POTENTIAL TO COMBINE WITH STORMWATER DISCHARGES

Sampling Location Identifier	Location

Potential run-on sampling locations shall be shown on the WPCDs in Attachment BB and listed on Stormwater Sampling Locations in Attachment EE.

INSERT ADDITIONAL NARRATIVE TEXT FOR RECEIVING WATER SAMPLING LOCATIONS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.4.3.3 Actual Sampling Locations

INSTRUCTIONS:

- Describe the sampling schedule for monitoring the impacts of stormwater discharges to the sediment-sensitive or other water body.

- Describe the sampling locations for monitoring the impacts of direct stormwater discharges from the project to the sediment-sensitive or other water body.
- To determine potential impairments that originate from off site, include the required text to identify run-on sampling location(s), for projects that, in Section 500.3.1, identified locations of run-on to the Caltrans right-of-way.

REQUIRED TEXT for monitoring at a stormwater discharge location:

Prior to qualifying rain events, the WPC Manager shall identify all stormwater discharge sampling locations that the RWQCB has requested be monitored, as shown on Table 700.2.5.3.2.1: Stormwater Discharge Locations Required To Be Monitored By RWQCB. If construction activity has not started within the drainage area at a sampling location, and there is no disturbed soil within the drainage area, sampling from the stormwater discharge location from that drainage area is not required.

Within 72 to 48 hours prior to each qualifying rain event, the WPC Manager must identify the drainage areas that must be sampled. Selection of stormwater discharge sampling locations shall be documented on the CEM-2049 Qualifying Rain Event Sampling and Analysis Plan by the WPC Manager for every qualifying rain event. Completed CEM-2049 Qualifying Rain Event SAPs shall be kept in SWPPP File Category 20.46: Storm/Rain Event Sampling and Analysis Plans.

INSERT ADDITIONAL NARRATIVE TEXT FOR ACTUAL SAMPLING LOCATIONS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

REQUIRED TEXT when receiving water sampling is required:

The [Enter Regional Water Board] has requested monitoring of the receiving waters. The request requires the monitoring of [specify parameters] in [specify water body] when stormwater discharges from the site. The receiving water sampling locations were determined based on the locations providing a representative sample of the receiving water.

Prior to qualifying rain events, the WPC Manager shall identify for sampling all receiving water sampling locations that the RWQCB has requested be monitored as shown on Table 700.2.5.3.2.3: Receiving Water Sampling Locations Required To Be Monitored By RWQCB.

Sample location **(**designated number [Enter Receiving Water Control Number]) is upstream of all direct discharges from the construction site. This location shall be used to collect a control sample to be analyzed for the prevailing condition of the receiving water without any influence from the construction site. The control sample will be used to determine the background levels of [specify parameters] in the water body upstream of the project, if any.

Sample location number[Enter Receiving Water Control Number] is located [Enter Receiving Water Control Location].

Sample location **(**designated number [Enter Receiving Water Number]) is immediately downstream from the last point of direct discharge from the construction site. This location will be used to collect a sample to be analyzed for potential increases in [specify parameters] in the water body caused by stormwater discharges from the project, if any.

Sample location number [Enter Receiving Water Number] is located [Enter Receiving Water Location].

Receiving water sampling locations shall be shown on the CEM-2049 Qualifying Rain Event Sampling and Analysis Plan by the WPC Manager prior to every qualifying rain event. Completed CEM-2049 Qualifying Rain Event SAPs shall be kept in SWPPP File Category 20.46: Storm/Rain Event Sampling and Analysis Plans.

INSERT ADDITIONAL INFORMATION FOR ACTUAL RECEIVING WATER SAMPLING LOCATIONS HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert bullets)

REQUIRED TEXT only for projects that receive run-on:

This project receives run-on from surrounding area that may contribute to [specify parameters] exceedances in stormwater discharges. Sampling locations where run-on enters the Caltrans right-of-way are shown on Table 700.2.5.3.2.4: Run-on Locations with Potential to Combine with Stormwater Discharges, may contribute to [specify parameters] exceedances.

[Enter Number of Sampling Locations] potential sampling location(s) (designated number(s) [Enter Number]) have been identified for the collection of samples of run-on to the Caltrans right-of-way that have the potential to combine with discharges from the construction site to the impaired water body. Run-on samples taken from these locations will be analyzed to identify potential [specify parameters] that originate off site and contribute to direct stormwater discharges from the construction site to the impaired water body.

Prior to qualifying rain events, the WPC Manager shall identify for sampling all run-on sampling locations that may contribute to [specify parameters] exceedances in the receiving water. Run-on sampling locations will be selected based on the stormwater discharge locations selected. The selection of stormwater run-on sampling locations shall be documented on the CEM-2049 Qualifying Rain Event Sampling and Analysis Plan by the WPC Manager for every qualifying rain event. Completed CEM-2049 Qualifying Rain Event SAPs shall be kept in SWPPP File Category 20.46: Storm/Rain Event Sampling and Analysis Plans.

INSERT ADDITIONAL NARRATIVE TEXT FOR ACTUAL SAMPLING LOCATIONS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

REQUIRED TEXT:

700.2.5.3.4 Sampling Schedule

Samples shall be collected for [specify parameters] for qualifying rain events that result in a discharge from the project site. Sampling and testing for [specify parameters] will be performed daily during all qualifying rain events. Samples shall be collected during working hours.

Within 48 to 24 hours prior to a qualifying rain event, the CEM-2049 Qualifying Rain Event SAP showing the sampling schedule shall be distributed to the individual collecting stormwater samples and the RE. A qualifying rain event is any storm event that produces precipitation of ½ inch or more at the time of discharge. In conformance with the USEPA definition, a minimum of 72 hours of dry weather will be used to distinguish between separate qualifying rain events.

INSERT ADDITIONAL NARRATIVE FOR SAMPLING SCHEDLE HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert bullets)

700.2.5.4 Sample Collection and Handling

INSTRUCTIONS:

Refer to the general sample collection and handling instructions in General SAP Section 700.2.1.4. If additional requirements are necessary for sample collection and handling, insert additional text in this section.

REQUIRED TEXT:

Refer to the general requirements for sample collection and handling in General SAP Section 700.2.1.4.

INSERT ADDITIONAL SAMPLE COLLECTION AND HANDLING TEXT HERE OR DELETE THIS LINE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.5.4.1 Sample Collection Procedures

Refer to the general procedures for sample collection in General SAP Section 700.2.1.4.1.

INSERT ADDITIONAL NARRATIVE TEXT FOR SAMPLE COLLECTION PROCEDURES HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.5.4.2 Sample Handling Procedures

Refer to the general procedures for sample handling in General SAP Section 700.2.1.4.2.

INSERT ADDITIONAL NARRATIVE TEXT FOR SAMPLE HANDLING PROCEDURES HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.5.4.3 Sample Documentation Procedures

Refer to the general procedures for sample documentation in General SAP Section 700.2.1.4.3.

INSERT ADDITIONAL NARRATIVE TEXT FOR SAMPLE DOCUMENTATION PROCEDURES HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.5.5 Sample Analysis

INSTRUCTIONS:

Insert parameters and tests to be used into Table 700.2.5.5: Sample Collection, Preservation and Analysis for Monitoring [specify parameters].

REQUIRED TEXT:

Samples shall be analyzed for the constituents indicated in Table 700.2.5.5: Sample Collection, Preservation and Analysis for Monitoring [specify parameters].

TABLE 700.2.5.5 SAMPLE COLLECTION, PRESERVATION AND ANALYSIS FOR MONITORING [SPECIFY PARAMETERS]						
Parameter	**Test Method**	**Sample Bottle**	**Minimum Sample Volume(1)**	**Sample Preservation**	**Maximum Holding Time**	**Detection Limit (min)**

Notes: (1) Minimum sample volume recommended. Specific volume requirements will vary by instrument; check instrument manufacturer instructions.

°C – degrees Celsius
°F – degrees Fahrenheit
l – liter
min – minutes
mL – milliliters

INSERT ADDITIONAL SAMPLING ANALYSIS INFORMATION HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert bullets)

Samples collected for field analysis shall meet the requirements of the field instrument manufacturer's instructions.

Refer to the general information regarding field instruments in General SAP Section 700.2.1.2.3, which includes field instrument calibration and maintenance documentation requirements.

INSERT ADDITIONAL NARRATIVE TEXT FOR SAMPLE ANALYSIS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.5.6 Quality Assurance/Quality Control

INSTRUCTIONS:

Refer to the general instructions about QA/QC in General SAP Section 700.2.1.6. If additional requirements are necessary for QA/QC, insert additional text in this section.

REQUIRED TEXT:

Refer to the general requirements regarding Quality Assurance/Quality Control (QA/QC) in General SAP Section 700.2.1.6.

INSERT ADDITIONAL NARRATIVE TEXT FOR QUALITY ASSURANCE/QUALITY CONTROL HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.5.7 Data Management and Reporting

INSTRUCTIONS:

Refer to general data management and reporting instructions in General SAP Section 700.2.1.7. If additional requirements are necessary for data management and reporting, insert additional text in this section.

REQUIRED TEXT:

Refer to the general requirements for data managementment and reporting in General SAP Section 700.2.1.7.INSERT ADDITIONAL DATA MANGEMENT AND REPORTING TEXT HERE OR DELETE THIS LINE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.5.8 Data Evaluation

INSTRUCTIONS:

- Sample results from stormwater discharges shall be evaluated to determine if the concentrations of RWQCB-requested parameters are less than or equal to the applicable water quality standard or limitations set by the RWQCB.
- For receiving waters, the downstream water quality sample analytical results shall be evaluated to determine if the downstream sample(s) show undesirable changes to the levels of the tested constituent relative to the levels found in the upstream sample. The run-on sample analytical results shall be used as an aid in evaluating potential off-site influences on water quality results. If elevated levels of pollutants are identified, additional BMPs must be implemented in an iterative manner to prevent a net increase in pollutants to receiving waters.

REQUIRED TEXT:

An evaluation of the water quality sample analytical results, including sampling locations and the QA/QC data, shall be submitted to the RE for every day of stormwater sampling. If the stormwater discharge concentrations exceed applicable water quality standards or parameter limitations set by the RWQCB, the WPC Manager or other personnel shall evaluate the project site BMPs to determine the probable cause for the exceedance.

As determined by the data evaluation and project site assesment, appropriate BMPs shall be repaired or modified to mitigate the exceedances. Corrective actions taken shall be documented on the CEM-2035 Stormwater Site Inspection Report Corrective Actions Summary. Any revisions/design changes to BMPsshall be implemented based on an amendment to the SWPPP.

INSERT ADDITIONAL DATA EVALUATION TEXT HERE OR DELETE THIS LINE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.5.9 Change of Condition

INSTRUCTIONS:

Refer to the general instructions for changes of conditions in General SAP Section 700.2.1.9. If additional requirements are necessary for Changes of Conditions, then insert additional text in this section.

REQUIRED TEXT:

Refer to the general requirements for changes of conditions in General SAP Section 700.2.1.9.

INSERT ADDITIONAL CHANGE OF CONDITIONS TEXT HERE OR DELETE THIS LINE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.6 Sampling and Analysis Plan for Monitoring of Active Treatment System

INSTRUCTIONS:

- Is an ATS to be deployed on site?

  ☐ Yes ☐ No

- If no ATS will be deployed, then Sections 700.2.6.1- 700.2.6.9 shall be deleted.

REQUIRED TEXT only when ATS will NOT be onsite:

This project does not require a SAP for an ATS because deployment of such a system is not planned.

REQUIRED TEXT when an Active Treatment System (ATS) will be onsite:

This SAP has been prepared for monitoring turbidity, pH and residual chemical/additive in stormwater discharges from the ATS located on site in accordance with the applicable requirements of the CGP and the Caltrans *Construction Site Monitoring Program Guidance Manual,* [Insert latest edition]. This SAP for ATS monitoring includes all of the components listed in Section 700.2.1.

700.2.6.1 Scope of Monitoring Activities

INSTRUCTIONS:

- ATS effluent samples and measurements must be collected from the discharge pipe or another location representative of the nature of the discharge at project sites where an ATS is deployed.
- If additional requirements are necessary for the Scope of Monitoring Activities, then insert additional text in this section.

REQUIRED TEXT:

This SAP is for monitoring the discharges of ATS for compliance with the requirements in Attachment F: Active Treatment System (ATS) Requirements of the CGP. The purpose of this monitoring of the ATS is to provide quality assurance that the ATS instrumentation, which automatically measures and records effluent water quality data, is working properly.

INSERT ADDITIONAL NARRATIVE TEXT FOR SCOPE OF MONITORING ACTIVITIES HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.6.2 Monitoring Preparation

INSTRUCTIONS:

Refer to the general instructions for monitoring preparation in General SAP Section 700.2.1.2. If additional requirements are necessary for monitoring preparation, insert additional text in this section.

REQUIRED TEXT:

Refer to the general requirements for monitoring preparation in General SAP Section 700.2.1.2.

INSERT ADDITIONAL NARRATIVE TEXT FOR MONITORING PREPARATION HERE (use the “FORMAT OPTIONS” button to insert subtitles and/or paragraphs).

700.2.6.2.1 Qualified Sampling Personnel

Refer to the general requirements for Qualified Sampling Personnel in General SAP Section 700.2.1.2.1.

INSERT ADDITIONAL NARRATIVE TEXT FOR QUALIFIED SAMPLING PERSONNEL HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.6.2.2 Monitoring Supplies

Refer to the general information regarding monitoring supplies in General SAP Section 700.2.1.2.2.

INSERT ADDITIONAL NARRATIVE TEXT FOR MONITORING SUPPLIES HERE (use the “FORMAT OPTIONS” button to insert subtitles and/or paragraphs).

700.2.6.2.3 Field Instruments

Refer to the general information regarding field instruments in General SAP Section 700.2.1.2.3.

INSERT ADDITIONAL NARRATIVE TEXT FOR FIELD INSTRUMENTS HERE (use the “FORMAT OPTIONS” button to insert subtitles and/or paragraphs).

700.2.6.2.4 Testing Laboratory

Refer to the contact information for the testing laboratory found in General SAP Section 700.2.1.2.4.

INSERT ADDITIONAL NARRATIVE TEXT FOR TESTING LABORATORY HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.6.3 Monitoring Strategy

INSTRUCTIONS:

- Refer to the general instructions for monitoring strategy in General SAP Section 700.2.1.3. If additional monitoring strategies are necessary, insert additional text in this section.
- Describe the constituents for which stormwater discharge samples must be analyzed.
- Identify the specific chemical/additive used by the ATS on the project site and list the chemical/additive in Table 700.2.6.3.1: ATS Chemical/Additive and Water Quality Indicator Constituents.
- Describe the potential ATS stormwater discharge sampling locations.

REQUIRED TEXT:

The strategy for monitoring ATS stormwater discharges is to sample ATS effluent daily and analyze the samples for compliance with water quality standards for turbidity, pH and residual additive/chemical. In addition, the ATS monitoring test results shall be compared to the automatically recorded water quality test results for the ATS to provide quality assurance for ATS discharges.

700.2.6.3.1 Analytical Constituents

Stormwater discharge samples are to be analyzed for turbidity, pH and residual chemical/additive.

The constituent(s) that indicate residual chemical/additive are shown in Table 700.2.6.3.1: ATS Chemical/Additive and Water Quality Indicator Constituents.

TABLE 700.2.6.3.1
ATS CHEMICAL/ADDITIVE AND WATER QUALITY INDICATOR CONSTITUENTS

Chemical/Additive	Water Quality Indicator Constituent

INSERT ADDITIONAL NARRATIVE TEXT FOR ANALYTICAL CONSTITUENTS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.6.3.2 Potential Sampling Locations

INSTRUCTIONS:

Provide location identifier(s) and describe the location(s) of ATS stormwater discharge.

REQUIRED TEXT:

Potential sampling locations on the project site for monitoring ATS stormwater discharges are listed in Table 700.2.6.3.2: ATS Stormwater Discharge Locations.

TABLE 700.2.6.3.2 ATS STORMWATER DISCHARGE LOCATIONS	
Sampling Location Identifier	**Location**

Potential ATS sampling locations shall be shown on the WPCDs in Attachment BB and listed on Stormwater Sampling Locations in Attachment EE.

INSERT ADDITIONAL NARRATIVE TEXT FOR POTENTIAL SAMPLING LOCATION HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.3.3.3 Actual Sampling Locations

Actual sampling locations for ATS will be determined by the WPC Manager based on how the ATS is set up. The sampling locations for ATS effluent will be from the ATS discharge pipe or sampling valve that is representative of the nature of the discharge.

If potential ATS stormwater discharge sampling locations are not identified during the course of construction, the WPC Manager must create an identifier for the discharge sampling location. The actual sampling location for ATS discharge monitoring will be shown on WPCDs in Attachment BB and added to Attachment EE: Stormwater Sampling Locations.

700.2.6.3.4 Sampling Schedule

The requirements in General SAP Section 700.2.1.3.4 do not apply to ATS sampling.

When ATS is discharging water from the project site, effluent samples shall be collected and analyzed for turbidity, pH and residual chemical/additive on a daily basis. For turbidity and pH, a minimum of three samples shall be collected daily during working hours. Effluent samples for residual chemical/additive shall be collected within one hour of ATS start-up; a minimim of one sample for every 8 hours of ATS operation shall be collected.

INSERT ADDITIONAL NARRATIVE TEXT FOR SAMPING SCHEDULE HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.6.4 Sample Collection and Handling

INSTRUCTIONS:

Refer to the general sample collection and handling instructions in General SAP Section 700.2.1.4. If additional requirements are necessary for sample collection and handling, insert additional text in this section.

REQUIRED TEXT:

Refer to the general requirements for sample collection and handling in General SAP Section 700.2.1.4.

INSERT ADDITIONAL SAMPLE COLLECTION AND HANDLING TEXT HERE OR DELETE THIS LINE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.6.4.1 Sample Collection Procedures

In addition to the general requirements for Sample Collection Procedures in General SAP Section 700.2.1.4.1, the following procedures apply to ATS sample collection.

- Grab samples shall be collected and preserved in accordance with the methods identified in Table 700.2.6.5: Sample Collection, Preservation and Analysis for ATS Monitoring, found in Section 700.2.6.5.
- Only personnel trained in proper water quality sampling shall collect samples.
- ATS grab samples shall be collected using one of the following methods:
    - placing a sample bottle directly into the discharge flow and allowing the sample bottle to fill completely
    - collecting the sample from the valve provided for sample collection

INSERT ADDITIONAL NARRATIVE TEXT FOR SAMPLE COLLECTION PROCEDURES HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.6.4.2 Sample Handling Procedures

Refer to the general procedures for sample handling in General SAP Section 700.2.1.4.2.

INSERT ADDITIONAL NARRATIVE TEXT FOR SAMPLE HANDLING PROCEDURES HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.6.4.3 Sample Documentation Procedures

Refer to the general procedures for sample documentation in General SAP Section 700.2.1.4.3.

INSERT ADDITIONAL NARRATIVE TEXT FOR SAMPLE DOCUMENTATION PROCEDURES HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.6.5 Sample Analysis

INSTRUCTIONS:

- Specific chemicals/additives used by the ATS on the project site and water quality indicator constituents are shown in Table 700.2.6.3.1: ATS Chemical/Additive and Water Quality Indicator Constituents.
- List the chemical/additive parameter(s) in Table 700.2.6.5: Sample Collection, Preservation and Analysis for ATS Monitoring.
- Identify test methods to be used on the project in Table 700.2.6.5.
- Insert into Table 700.2.6.5 information regarding sample preservation, minimum sample volume, bottle type, maximum holding time and detection limit.

REQUIRED TEXT:

ATS samples shall be analyzed for turbidity, pH and chemical/additive residue. The chemical/additive residue can be detected based on the following [specify parameters].

Samples shall be analyzed for the constituents indicated in Table 700.2.6.5: Sample Collection, Preservation and Analysis for ATS Monitoring.

TABLE 700.2.6.5
SAMPLE COLLECTION, PRESERVATION AND ANALYSIS FOR ATS MONITORING

Parameter	Test Method	Sample Preservation	Minimum Sample Volume(1)	Sample Bottle	Maximum Holding Time	Detection Limit (min)
Turbidity	Field test with calibrated portable instrument	Store at 4˚ C (39.2˚ F)	100 mL	Polypropylene or Glass	48 hours	1 NTU
pH	Field test with calibrated portable instrument	Store at 4˚ C (39.2˚ F)	100 mL	Polypropylene	48 hours	0.2

TABLE 700.2.6.5 SAMPLE COLLECTION, PRESERVATION AND ANALYSIS FOR ATS MONITORING						
Parameter	**Test Method**	**Sample Preservation**	**Minimum Sample Volume[(1)]**	**Sample Bottle**	**Maximum Holding Time**	**Detection Limit (min)**

Notes: [(1)] Minimum sample volume recommended. Specific volume requirements will vary by instrument; check instrument manufacturer instructions.

°C – degrees Celsius
°F – degrees Fahrenheit
l – liter
Min – minutes
mL – milliliters
NTU – Nephelometric Turbidity Unit

For samples collected for field analysis, collection, analysis and equipment calibration shall be in accordance with the field instrument manufacturer's specifications.

See General SAP Section 700.2.1.2.3 for field instrument identification and requirements for field instruments.

INSERT ADDITIONAL NARRATIVE TEXT FOR SAMPLE ANALYSIS HERE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.6.6 Quality Assurance/Quality Control

INSTRUCTIONS:

Refer to the general instructions about QA/QC in General SAP Section 700.2.1.6. If additional requirements are necessary for QA/QC, insert additional text in this section.

REQUIRED TEXT:

Refer to the general requirements regarding Quality Assurance/Quality Control (QA/QC) in General SAP Section 700.2.1.6. The following replaces the requirements for QA/QC in Section 700.2.1.6 for turbidity and pH quality assurance testing. However, Section 700.2.1.6 requirements apply for SSC quality assurance testing: Contractor shall coordinate with Caltrans RE on sampling timing for quality assurance verification of field sampling and analysis. Contractor shall notify the RE at least 24 hours prior to ATS sampling events.

INSERT ADDITIONAL QUALITY CONTROL/QUALITY ASSURANCE TEXT HERE OR DELETE THIS LINE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.6.7 Data Management and Reporting

INSTRUCTIONS:

Refer to general data management and reporting instructions in General SAP Section 700.2.1.7. If additional requirements are necessary for data management and reporting, insert additional text in this section.

REQUIRED TEXT:

Refer to general requirements for data managementment and reporting in General SAP Section 700.2.1.7.

INSERT ADDITIONAL DATA MANGEMENT AND REPORTING TEXT HERE OR DELETE THIS LINE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

REQUIRED TEXT for Risk Level 3 Projects:

In addition to the general requirements for data managementment and reporting in General SAP Section 700.2.1.7, the following additional reporting is required.

Numeric Effluent Limitation Reporting - Stormwater discharges from the ATS are subject to NELs for turbidity and residual chemicals as shown in Table 700.2.6.7: NELs for Monitoring Residual Chemicals and Turbidity.

TABLE 700.2.6.7
NELs FOR MONITORING RESIDUAL CHEMICALS AND TURBIDITY

Parameter	Test Method	Detection Limit (Min)	Unit	Numeric Effluent Limitation
Residual Chemical	Discharger selected test method meeting CGP requirements[1]	=< 10%	mg/L	over 10% of maximum allowable threshold concentration (MATC)
Turbidity	Field test with calibrated portable instrument	1	NTU	10 NTU for daily flow weighted average and 20NTU for any single sample

Notes:
1. Discharger selected test - A test method that produces a result within one hour of sampling and is validated by a California State certified laboratory. Specifically the lab must review the test protocol, test parameters, and the detection limit of the coagulant.

If an NEL is exceeded, then form CEM-2063 Numeric Effluent Limitation Violation Report will be completed and submitted to the RE within six hours of determining the violation. The NEL Violation Report will include:

- analytical methods, reporting units, and detection limits
- date, location, time of sampling, visual observation and measurements
- corrective actions taken to manage the NEL exceedance

Once deemed necessary, corrective actions shall be immediately implemented and documented. Appendix I contains the CEM-2035 Stormwater Site Inspection Report Corrective Actions Summary and Appendix Y contains CEM-2063 Numeric Effluent Limitation Violation Report form NEL violation reports will be filed in SWPPP File Category 20.63: Numeric Effluent Limitation Violation Reports.

700.2.6.8 Data Evaluation

INSTRUCTIONS:

The CGP requires an ATS to comply with NELs of 10 NTU for the daily flow weighted average and 20 NTU for any single sample.

REQUIRED TEXT:

An evaluation of the ATS water quality sample analytical results shall be submitted to the RE with the water quality analytical results and the QA/QC data for every event that samples are collected. The ATS monitoring test results shall be compared to the daily recorded water quality test results for the ATS. If the monitoring test results are not verifying the ATS daily recorded test results, then the WPC Manager or other personnel shall evaluate and determine the probable cause for the non-verification.

As determined by the data and evaluation, appropriate actions shall be taken so that the ATS is operating effectively. Corrective actions taken shall be documented on the CEM-2035 Stormwater Site Inspection Report Corrective Actions Summary.

INSERT ADDITIONAL DATA EVALUATION TEXT HERE OR DELETE THIS LINE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

700.2.6.9 Change of Condition

INSTRUCTIONS:

Refer to the general instructions for changes of conditions in General SAP Section 700.2.1.9. If additional requirements are necessary for Changes of Conditions, then insert additional text in this section.

REQUIRED TEXT:

Refer to the general requirements for changes of conditions in General SAP Section 700.2.1.9.

INSERT ADDITIONAL CHANGE OF CONDITIONS TEXT HERE OR DELETE THIS LINE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

SECTION 800
POST-CONSTRUCTION CONTROL PRACTICES

800.1 Post-Construction Control Practices

INSTRUCTIONS:

- Post-Construction BMPs are permanent measures installed during construction that are designed to reduce or eliminate pollutant discharges from the site after construction is completed. Caltrans may provide listings, descriptions, and special operations and maintenance requirements for post-construction BMPs in the Stormwater Information Handout, which includes the Storm Water Data Report.

- Provide descriptions of the BMPs employed after all construction stages have been completed at the site (Post-Construction BMPs). Direct reference to the Storm Water Data Report may be made if one is available for the project. Examples of post-construction measures are:
  - ❑ infiltration basins
  - ❑ detention basins
  - ❑ biofiltration strips and/or swales
  - ❑ permanent erosion control, seeding and planting
  - ❑ outlet protection/velocity dissipation devices
  - ❑ earth dikes, drainage swales, and lined ditches;
  - ❑ bridge slope protection
  - ❑ rock slope protection
  - ❑ mulching

EXAMPLE:

The following are the post-construction BMPs for the project site:

- outlet protection/velocity dissipation devices at all culvert outlets
- rock slope protection in slopes under and adjacent to all bridges
- Erosion Control Type D seeding on all other slopes; seeded areas will be planted and protected with wood mulch
- biofiltration strips and swales

- an infiltration basin

Refer to the Storm Water Data Report for a complete summary and description of post-construction BMPs.

REQUIRED TEXT:

The following are the post-construction BMPs for the project site:

- [LIST]

INSERT ADDITIONAL NARRATIVE TEXT HERE OR DELETE THIS LINE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

800.2 Post-Construction Operation/Maintenance

INSTRUCTIONS:

- List the parties responsible for long-term operation and maintenance of permanent BMPs. One of three alternatives must be included: (1) Caltrans regional maintenance staff; (2) a local agency or municipality; or (3) Caltrans maintenance staff and local agency or municipality (if the project maintenance will be shared or a portion of the project is to be maintained by a local agency). This information may be provided by Caltrans.

- Describe the short- and long-term funding sources for operations and maintenance.

- For a project site that is, or has a portion that is, not under the jurisdiction of the Caltrans Stormwater Management Plan (e.g., encroachment permit projects), the following additional requirements apply on and after September 2, 2012, unless modified by the RWQCB. This information may be provided by Caltrans or the local Agency or private entity administering this project (see Section 100.1 Approval and Certification for local Agency or private entity identification).

  - Include the map and worksheets submitted with the NOI that demonstrate compliance with the Post-Construction Standards of the CGP Section XIII. Describe the non-structural controls to be used, or the structural controls used if it was demonstrated that non-structural controls were infeasible or that structural controls would produce a greater reduction in water quality impacts. Describe the controls used that will replicate the pre-project water balance (defined as the volume of rainfall that ends up as runoff) for the smallest storms up to the 85th percentile storm event (or the smallest storm event that generates runoff, whichever is larger).

  - Describe how the volume that cannot be addressed using nonstructural practices shall be captured in structural practices. Include documentation of approval by the RWQCB.

  - Summarize the infeasibility of using non-structural practices on the project site, or the documentation that there will be fewer water quality impacts through the use of structural practices.

  - For sites in which the disturbed area exceeds two acres, describe how the pre-construction drainage density (miles of stream length per square mile of drainage area)

for all drainage areas within the area serving a first-order stream or larger stream are preserved and how the post-project time of runoff concentration is ensured to be equal to or greater than pre-project time of concentration.

EXAMPLE:

The post-construction BMPs that are listed above will be funded and maintained in the following manner.

- short-term funding: Caltrans District 7 Maintenance
- long-term funding: Caltrans District 7 Maintenance

The responsible party for the post-construction BMPs is Caltrans District 7 Maintenance. Refer to the Storm Water Data Report.

REQUIRED TEXT:

The post-construction BMPs that are listed above will be funded and maintained in the following manner.

- short-term funding: INSERT LANGUAGE DEFINING SHORT TERM FUNDING
- long-term funding: INSERT LANGUAGE DEFINING LONG TERM FUNDING

The responsible party for the long-term maintenance of post-construction BMPs is (ENTER ONE OF THE THREE ALTERNATIVES LISTED IN THE INSTRUCTIONS).

INSERT ANY ADDITIONAL LANGUAGE PROVIDED BY CALTRANS OR LOCAL AGENCY OR PRIVATE ENTITY ADMINISTERING THE PROJECT HERE OR DELETE THIS LINE (use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs).

SECTION 900
SWPPP REPORTING REQUIREMENTS

900.1 Recordkeeping

REQUIRED TEXT:

To manage the various documents required by the SWPPP and to provide easy access to the documents, the following SWPPP file categories will be used to file SWPPP compliance documents:

File Category 20.01..... Stormwater Pollution Prevention Plan (SWPPP)
File Category 20.02.....Stormwater Pollution Prevention Plan Amendments
File Category 20.03.....Water Pollution Control Schedule Updates
File Category 20.05..... Notice of Construction or Notice of Intent
File Category 20.06.....Legally Responsible Person Authorization of Approved Signatory
File Category 20.10.....Correspondence
File Category 20.21..... Subcontractor Contact Information and Notification Letters
File Category 20.22.....Material Supplier Contact Information and Notification Letters
File Category 20.23.....Contractor Personnel Training Documentation
File Category 20.31.....Contractor Stormwater Site Inspection Reports
File Category 20.32..... Caltrans Stormwater Site Inspection Reports
File Category 20.33..... Site Visual Monitoring Inspection Reports
File Category 20.34.....Best Management Practices Weekly Status Reports
File Category 20.35.....Corrective Actions Summary
File Category 20.40.....Weather Monitoring Logs
File Category 20.45..... Rain Event Action Plans
File Category 20.46..... Storm/Rain Event Sampling and Analysis Plans
File Category 20.50..... Non-Stormwater Discharge Sampling and Test Results
File Category 20.51.....Non-Visible Pollutant Sampling and Test Results
File Category 20.52.....Turbidity, pH and SSC Sampling and Test Results
File Category 20.53..... ...Required Regional Water Board Monitoring Sampling and Test Results
File Category 20.54..... ATS Monitoring Sampling and Test Results
File Category 20.55.....Field Testing Equipment Maintenance and Calibration Records
File Category 20.61..... Notice of Discharge Reports
File Category 20.62..... Numeric Action Level Exceedance Reports
File Category 20.63.....Numeric Effluent Limitation Violation Reports
File Category 20.70..... Annual Certification of Compliance
File Category 20.80.....Stormwater Annual Reports
File Category 20.90.....Notice of Termination

Records shall be retained for a minimum of three years for the following items:

- approved SWPPP document and amendments
- Stormwater Site Inspection Reports
- Site Inspection Report Corrections Summary
- Rain Event Action Plans (REAPs)
- Notice of Discharge Reports
- Numeric Action Limit (NAL) Exceedance Reports
- Numeric Effluent Limitaion (NEL) Violation Reports
- sampling records and analysis reports
- Annual Compliance Certifications
- copies of all applicable permits

900.2 Stormwater Annual Report

REQUIRED TEXT:

A Stormwater Annual Report will be prepared for this project to document the stormwater monitoring information and training information.

The stormwater monitoring information listed below shall be included in the Stormwater Annual Report.

- A summary and evaluation of all sampling and analysis results, including copies of laboratory reports.
- The analytical method(s), method reporting unit(s), and method detection limit(s) of each analytical parameter.
- A summary of all corrective actions taken during the compliance year.
- Identification of any compliance activities or corrective actions that were not implemented.
- A summary of all violations of the CGP.
- The names of individual(s) who performed site inspections, sampling, site visual monitoring inspections and/or measurements.
- The date, place, and time of site inspections, sampling, site visual monitoring inspections, and/or measurements, including precipitation (rain gauge).
- Any site visual monitoring inspection and sample collection exception records.

The stormwater training information listed below shall be included in the Stormwater Annual Report.

- Documentation of all training for individuals responsible for all activities associated with compliance with the CGP.
- Documentation of all training for individuals responsible for BMP installation, inspection, maintenance, and repair.
- Documentation of all training for individuals responsible for overseeing, revising and amending the SWPPP.

900.3 Discharge Reporting

INSTRUCTIONS:

- Discharges will be reported in writing to the RE verbally upon discovery and in writing within 7 days of occurrence (3 days for Districts 7 and 11) or as required in the Special Provisions. A Notice of Discharge form for reporting discharges shall be included in Appendix M. CEM-2065 Discharge Reporting Log form shall be included in Appendix Z. Completed forms shall be kept in File Category 20.61: Notice of Discharge Reports.
- Note: USEPA has issued regulations that define Reportable Quantity (RQ) levels for oil and hazardous substances. These regulations are found in the CFR at 40 CFR Part 110, Part 117, or Part 302.

REQUIRED TEXT:

If an unauthorized discharge is discovered or evidence of a previously unseen discharge is discovered, the Contractor shall notify the RE within 6 hours of the discovery, and will file a written report with the RE within 48 hours after the discovery. The written report to the RE will contain the following items:

- date, time, location, and type of unauthorized discharge
- nature of operation that caused the discharge
- initial assessment of any impacts caused by the discharge
- BMPs deployed before the discharge event and date(s) of deployment
- BMPs deployed after the discharge event, including re-installation, maintenance or repair of initial BMPs
- steps taken or planned to reduce, eliminate and/or prevent recurrence of the discharge

Reporting of discharges shall be documented on the CEM-2061 Notice of Discharge form, in Appendix M. A log of all reportable discharges shall be documented on CEM-2065 Discharge Reporting Log form, in Appendix Z. Completed CEM-2061 Notice of Discharge forms shall be submitted to the RE within 24 hours after the discharge event or discovery of evidence of a prior discharge. Copies of completed forms will be kept in File Category 20.61: Notice of Discharge Reports.

900.4 Regulatory Agency Notice or Order Reporting

INSTRUCTIONS:

Regulatory agency notices or orders will be reported to the RE verbally upon receiving the notice or order. A written report with a copy of the notice or order shall be submitted to the RE within 3 days of receiving a notice or order.

REQUIRED TEXT:

If a written notice or order is issued to the project by any regulatory agency, the Contractor will notify the RE within 6 hours of receiving the notice or order and will file a written report to the RE within 48 hours of receiving the notice or order. Corrective measures will be implemented immediately following receipt of the notice or order.

The report to the RE will contain the following items:

- the date, time, location, and cause or nature of the notice or order;
- the BMPs deployed prior to receiving the notice or order;
- the date of deployment and type of BMPs deployed after receiving the notice or order, including additional BMPs installed or planned to reduce or prevent reccurrence; and
- an implementation and maintenance schedule for any affected BMPs.

900.5 Illicit Connection/Illegal Discharge Reporting

INSTRUCTIONS:

If the Contractor discovers an illicit connection or illegal discharge during a stormwater site visual monitoring site inspection or while performing work on the project, the RE shall be notified verbally upon discovering the illicit connection or illegal discharge. A written report about the illicit connection or illegal discharge shall be submitted to the RE within 3 days of discovering the illicit connection or illegal discharge.

REQUIRED TEXT:

If the Contractor discovers an illicit connection to a storm drain system or any pipe discharging onto the project site, not shown on the project plans, the Contractor shall notify the RE within 6 hours of the discovery and shall file a written report to the RE within 48 hours of the discovery.

If the Contractor discovers any illegal discharge, including illegal disposing of material on the project site, the Contractor shall immediately notify the RE and shall file a written report to the RE within 3 days of discovery.

The report to the RE will contain the following items:

- the date, time, and location of the discovery
- the details for the illicit connection or illegal discharge, including any photographs taken
- any actions taken to contain the illegal discharge
- any sampling and testing performed on material that was illegally disposed of or discharged

3.4 SWPPP ATTACHMENTS

3.4.1 Attachment A Legally Responsible Person Authorization of Approved Signatory

The CGP Section VII B. SWPPP Certification Requirements states that the Legally Responsible Person (LRP) shall list in the SWPPP, the name of the Approved Signatory, and provide a copy of the written agreement or other mechanism that provides the authority from the LRP in the SWPPP. For Caltrans projects, the written agreement from the District Director authorizing the RE to be approved Signatory is Form CEM-2006 Legally Responsible Person Authorization of Approved Signatory. Request a copy of completed form CEM-2006 from the RE and include it in Attachment A.

For non-Caltrans projects, the Local Agency must provide written agreement for LRP Authorization of Approved Signatory. Caltrans does not allow the LRP for a Private Entity to delegate responsibility to an Approved Signatory.

If the LRP has not authorized an approved signatory then the following statement should be included in Attachment A.
"The Legally Responsible Person for this project is:
Name
Title

There is no Approved Signatory for this project."

Include one of the following in Attachment A:

- ❑ Form CEM-2006 Legally Responsible Person Authorization of Approved Signatory.
- ❑ Local Agency written agreement for LRP Authorization of Approved Signatory
- ❑ LRP statement that there is no Approved Signatory for the project.

An example of CEM-2006 Legally Responsible Person Authorization of Approved Signatory is on the following page.

ATTACHMENT A - Legally Responsible Person Authorization of Approved Signatory

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

LEGALLY RESPONSIBLE PERSON
AUTHORIZATION OF APPROVED SIGNATORY

CEM-2006 (REV. 8/2010)

PROJECT INFORMATION NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER
LEGALLY RESPONSIBLE PERSON NAME AND TITLE	LEGALLY RESPONSIBLE PERSON ADDRESS

The above person appoints the following person:

Authorized approved signatory name and title

Authorized approved signatory address

I hereby agree and further authorize the above-named designated authorized approved signatory to certify all permit registration documents, Numeric Action Limit Exeedance Reports, Numeric Effluent Limitation Violation Reports, Annual Reports, and Notices of Termination in accordance with Section IV.I, Section IV.XVI, Attachment D, and Attachment E of the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ, NPDES No. CAS000002.

I hereby further authorize the above-named designated approved signatory to submit documents electronically to the State Water Resources Control Board SMARTS database.

EXECUTED THIS _____ DAY OF _____, 20 _____ AT _____ CALIFORNIA.

Legally responsible person signature	Approved signatory signature
Legally responsible person name	Approved signatory name
Phone number	Phone number

ADA Notice For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

ATTACHMENT A - Legally Responsible Person Authorization of Approved Signatory

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

LEGALLY RESPONSIBLE PERSON
AUTHORIZATION OF APPROVED SIGNATORY

CEM-2006 (REV. 8/2010)

Instructions

General Information

- This form is required for compliance with provisions in Section IV.I of the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated With Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ, NPDES No. CAS000002
- The legally responsible person (LRP) for Caltrans projects is the district director. The LRP may authorize the project resident engineer to be the approved signatory.
- For a local agency, the LRP is either a principal executive officer or ranking elected official. The local agency LRP may authorize the project resident engineer to be the approved signatory.
- For a private entity performing work in the state right-of-way under an encroachment permit, the LRP must be one of the following:
  1. For a corporation, a responsible corporate officer.
  2. For a partnership or sole proprietorship, a general partner or the proprietor, respectively.
- The private entity LRP may not authorize an approved signatory.
- Include a copy of the completed form in the project Storm Water Pollution Prevention Plan.

Form

Project Identifier Number
Caltrans projects starting July 1, 2010, will have a project identifier number. For projects without a number, write N/A in the field.

Contract Number/Co/Rte/PM
For local agency encroachment permit projects, write the encroachment permit number in the contract number field.

3.4.2 Attachment B Notice of Construction (NOC) / Notice of Intent (NOI)

For Caltrans projects, the Information Handout should include a copy of form CEM-2002 Notification of Construction or form CEM-2004 Notification of Construction (Desert Areas) for the project, submitted to the Regional Water Quality Control Board by Caltrans. If a copy of the NOC is not in the project Information Handout then request a copy of the NOC from RE.

For non-Caltrans projects, the Local Agency or Private Entity administering the project should have submitted a Notice of Intent (NOI) for the project to the State Water Resources Control Board. This attachment will need to be left blank for the original submittal until the SWPPP is approved and WDID number is received from SWRCB. A copy of the Notice of Intent and the Waste Discharge Identification (WDID) Number issued for the project should be requested from the RE for the project.

Include in Attachment B one of the following:

- ❑ Form CEM-2002 Notification of Construction
- ❑ Form CEM-2004 Notification of Construction (Desert Areas)
- ❑ Notice of Intent and Waste Discharge Identification.

An example of CEM- 2002 Notification of Construction is on the following page.

Attachment B - Notice of Construction

Page 1 of 3

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

NOTIFICATION OF CONSTRUCTION

CEM-2002 (REV. 9/2010)

ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

In compliance with Caltrans Statewide NPDES Stormwater Permit Order No. 99-06 DWQ, NPDES No. CAS000003

I. IDENTIFICATION - Attach Vicinity Map

PROJECT INFORMATION NAME AND SITE ADDRESS	SUBMITTAL ☐ First Submittal ☐ Amendment Number _____	DATE CONTRACT NUMBER/CO/RTE/PM
TENTATIVE START DATE	PROJECT SITE RISK LEVEL ☐ Risk Level 1	PROJECT IDENTIFIER NUMBER
TENTATIVE END DATE	☐ Risk Level 2 ☐ Risk Level 3	TENTATIVE DATE SWPPP AVAILABLE

II. CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARDS

☐ Region 1, North Coast	Region 5, Central Valley	Region 6, Lahontan	☐ Region 7, Colorado River
☐ Region 2, San Francisco Bay	☐ Sacramento	☐ South Lake Tahoe	☐ Region 8, Santa Ana
☐ Region 3, Central Coast	☐ Fresno	☐ Victorville	☐ Region 9, San Diego
☐ Region 4, Los Angeles	☐ Redding		

III. CALTRANS DISTRICT

NAME/NUMBER	PROJECT CONTACT
ADDRESS	POSITION TITLE
CITY	PHONE

IV. CONSTRUCTION FIELD OFFICE - Attach map of its location.

STREET ADDRESS			CONSTRUCTION CONTACT
PHYSICAL LOCATION IF DIFFERENT THAN ADDRESS ABOVE			POSITION TITLE
CITY	STATE	ZIP CODE	PHONE

V. CONSTRUCTION SITE INFORMATION

DESCRIPTION AND TYPE OF WORK

ADDITIONAL RELATED REQUIRED APPROVALS ☐ DTSC Variance ☐ CWA 404/401 ☐ DFG 1601 ☐ NPDES/WDRs ☐ OTHER

DESCRIBE:

TOTAL CONSTRUCTION AREA ACRES	TOTAL DISTURBED AREA ACRES
RECEIVING WATER NAME	PROJECT IN OR ADJACENT TO RECEIVING WATER? ☐ YES ☐ NO

PROJECT DISCHARGES TO ☐ Groundwater infiltration ☐ Basin infiltration (name) ☐ Municipal or other system name

VI. CERTIFICATION

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

SIGNATURE	DATE
PRINT/TYPE NAME	TITLE

Attachment B - Notice of Construction

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION
NOTIFICATION OF CONSTRUCTION
CEM-2002 (NEW 9/2010)

Page 2 of 3

Caltrans Statewide NPDES Permit
Order No. 99-06 DWQ, NPDES CAS000003

Instructions

The Caltrans Statewide NPDES Permit requires that Caltrans submit a Notification of Construction (NOC) for construction projects covered by the permit to the appropriate Regional Water Quality Control Board (RWQCB) at least 30 days before the start of construction. In some cases, the RWQCB may view two or more smaller projects in the same corridor part of a larger common plan of development. The project manager should be aware of other projects in the corridor. Mention these projects in section V, Construction Site Information, if needed.

Typically, the district stormwater coordinator, environmental staff, project manager, or project engineer completes most information on the form; submits the NOC to the appropriate RWQCB at the time the PS&E package goes to the office engineer; and transmits a copy to the district construction division. Do not submit fees to the RWQCB.

At the time of the first submittal to the RWQCB, the district may elect to leave blank the information in Section IV, Construction Field Office, and resubmit a copy of the form with that information filled in when Caltrans assigns the resident engineer to the project. Alternatively, the district may wish to fill in a contact name of someone other than the resident engineer, such as the area senior construction engineer or project manager, who will remain that project's contact until resubmitting the NOC with new contact information or filing the Notice of Completion of Construction (NOCC). You may complete the form electronically or by printing legibly.

I. IDENTIFICATION.
Provide a brief project descriptive name and the project site address. When the NOC is first submitted to the RWQCB, check the "First Submittal" box and enter the following information:

- Contract number, construction project identifier number, county, route, and post mile.
- Date you first submitted the NOC to the RWQCB or the date of the subsequent submittal.
- Tentative start and end dates of construction.
- Tentative date when the Storm Water Pollution Prevention Plan (SWPPP) will be available.
- Enter the project risk level.
- For subsequent changes of information, enter the amendment number in addition to the contact information.

Provide a "to-scale" or "to-approximate-scale" vicinity drawing of the construction site and the immediate surrounding area. Limit the map to either 8.5" x11" or 11" x 17". Do not submit a drawing that does not meet these size limits. The map must show—at a minimum—the site perimeter, geographic features surrounding the site, general topography, and location of the construction project in relation to surface waters and named streets, roads, intersections, or landmarks.

II. CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
Check the box of the RWQCB that has jurisdiction over the area the project is in.

III. CALTRANS DISTRICT
Enter the name and address of the Caltrans district individual responsible for submitting the Notice of Construction (NOC) to the RWQCB. Typically the individual is the project engineer, project manager, district stormwater coordinator, or environmental program staff.

IV. CONSTRUCTION FIELD OFFICE
Enter Caltrans field office information, if known, and the construction contact person information. The district may elect to use contact information for the resident engineer or other individual, such as the area senior or project manager, after the project has been assigned. If the construction contact information changes, the district should submit a revised form to the RWQCB.

Provide the physical address of the field office or, if no physical address is available, a description of the physical location of the field office and a map location.

Attachment B - Notice of Construction

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION
NOTIFICATION OF CONSTRUCTION
CEM-2002 (NEW 9/2010)

Page 3 of 3

Caltrans Statewide NPDES Permit
Order No. 99-06 DWQ, NPDES CAS000003

V. CONSTRUCTION SITE INFORMATION

Provide a brief narrative description of the work. You may attach a checklist of permanent and temporary BMPs if needed or required by a RWQCB. You may also attach a checklist of construction BMPs as an amendment after the SWPPP is complete. Check the appropriate boxes to indicate additional required approvals, permits, or certifications. Examples:

- Variance from the Department of Toxics Substances Control (DTSC) for reuse of soil containing lead.
- Dredge or fill operations requiring Army Corps of Engineers 404 certification or Clean Water Act 401 certification.
- Streambed alteration requiring Department of Fish and Game 1601 permit and non-stormwater discharges requiring separate waste discharge requirements.

Describe the condition and whether the approval, permit, or certification has been issued. If the project involves soils subject to the DTSC variance, notify the appropriate RWQCB to determine if it must issue separate waste discharge requirements. RWQCBs have up to 120 days to issue these requirements, so notify the RWQCB early in the process.

Indicate the total size of the construction project in acres. Also indicate the size of the disturbed soil area. The Stormwater Management Plan defines disturbed soil area as "areas of exposed, erodible soil, including stockpiles within the construction limits and result from construction activities."

Identify the name of the surface water body receiving the stormwater discharge. Indicate whether the project is in or immediately adjacent to the receiving water. If the stormwater has infiltrated, check the box for infiltration basin, and identify the basin's location. If the discharge is to a separate storm sewer system, such as a collection system operated by a municipality, flood control district, utility, or similar entity, check the box for municipal or other system and enter the name of the system owner.

VI. CERTIFICATIONS

The permit requires the district director or a duly authorized representative to certify the Notice of Construction. If the district director elects to delegate signature authority, the district must have previously submitted the list of authorized representatives to the appropriate RWQCB.

Attachment B - Notice of Construction

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

NOTIFICATION OF CONSTRUCTION (DESERT AREAS)

(Applies to projects below elevation 1200 meters, RWQCB 6 and 7 jurisdiction.))

CEM-2004 (REV 9/2010)

ADA Notice

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In compliance with Caltrans Statewide NPDES Stormwater Permit Order No. 99-06 DWQ, NPDES No. CAS000003

I. IDENTIFICATION - Attach Vicinity Map, ½ size copy of Title Sheet

PROJECT INFORMATION NAME AND SITE ADDRESS	TENTATIVE END DATE	DATE
	PROJECT SITE RISK LEVEL ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3	CONTRACT NUMBER/CO/RTE/PM
TENTATIVE START DATE		PROJECT IDENTIFIER NUMBER

II. CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARDS

☐ REGION 6, LAHONTAN RWQCB South VICTORVILLE OFICE 14440 Civic Drive, Ste 200 Victorville, CA 92392 — Phone (760-241-6583 FAX (760) 241-7308

☐ REGION 7, COLORADO RIVER BASIN RWQCB 73-720 Fred Waring Drive, Ste. 100 Palm Desert, CA 92260 — Phone (760) 346-7491 FAX (760-341-6820

III. CALTRANS DISTRICT

NAME/NUMBER	PROJECT CONTACT
ADDRESS	POSITION TITLE
CITY	PHONE

IV. CONSTRUCTION OFFICE - Attach Location Map

STREET ADDRESS		CONSTRUCTION CONTACT	
PHYSICAL LOCATION IF DIFFERENT THAN ADDRESS ABOVE		POSITION TITLE	
CITY	STATE	ZIP CODE	PHONE

V. CONSTRUCTION SITE INFORMATION

DESCRIPTION AND TYPE OF WORK

BMPS To be implemented (check boxes that apply or attach SWPPP)

Temporary Soil Stabilization BMPs

- ☐ SS-1 Scheduling
- ☐ SS-2 Existing vegetation present
- ☐ SS-3 Hydraulic mulch
- ☐ SS-4 Hydroseeding
- ☐ SS-5 Soil binders
- ☐ SS-6 Straw mulch
- ☐ SS-7 Geotextiles, plastic covers, and erosion control blankets
- ☐ SS-8 Wood mulching
- ☐ SS-9 Earth dikes/drainage swales and lined ditches
- ☐ SS-10 Outlet protection and velocity dissipation devices
- ☐ SS-11 Slope drains
- ☐ SS-12 Stream bank stabilization

Temporary Sediment Control BMPs

- ☐ SC-1 Silt Fence
- ☐ SC-2 Desilting Basin
- ☐ SC-3 Sediment Trap
- ☐ SC-4 Check Dam
- ☐ SC-5 Fiber Rolls
- ☐ SC-6 Gravel Bag Berm
- ☐ SC-7 Street Sweeping & Vacuuming
- ☐ SC-8 Sandbag Barrier
- ☐ SC-9 Straw Bale Barrier
- ☐ SC-10 Storm Drain Inlet Protection

☐ Wind erosion control BMPs ☐ Tracking Control BMPs ☐ Non-StormWater Management BMPs ☐ Waste Management and materials pollution control BMPs

ADDITIONAL RELATED REQUIRED APPROVALS ☐ DTSC Variance ☐ CWA 404/401 ☐ DFG 1601 ☐ NPDES/WDRS ☐ OTHER

Describe

USGS COORDINATES	NORTHING	EASTING	
TOTAL CONSTRUCTION AREA	ACRES	TOTAL DISTURBED AREA	ACRES
RECEIVING WATER NEAREST PROJECT SITE		APPROXIMATE CLOSEST DISTANCE TO RECEIVING WATER	

PROJECT DISCHARGES TO ☐ Groundwater infiltration ☐ Basin (location) ☐ Municipal or other system name

VI. CERTIFICATION

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

SIGNATURE	DATE
PRINT/TYPE NAME	TITLE

3.4.3 Attachment C Risk Level Determination

The CGP contains a risk-based permitting approach by establishing three levels of risk possible for a construction site. Risk level (RL) is calculated in two parts: 1. project sediment risk, and 2. receiving water risk. The RL determination quantifies sediment and receiving water characteristics and uses these results to determine the overall site RL, defined as either Levels 1, 2 and 3. Level 3 is the highest RL and requires more extensive monitoring and reporting compared to Level 1. The complete methodology used by Caltrans for determining the RL for a project is available at:

http://www.dot.ca.gov/hq/oppd/stormwtr/index.htm

The project Risk Level determination will be provided by Caltrans for inclusion in Attachment C to the SWPPP.

- ❑ Include in Attachment C a copy of the project Risk Level determination.

Attachment C -Risk Level Determination

	A	B	C	D
1	Version 6/10/2009			
2		**Risk Determination Worksheet**		
3				
4			**Step 1**	Determine Sediment Risk via one of the options listed:
5				1. GIS Map Method - EPA Rainfall Erosivity Calculator & GIS map
6				2. Individual Method - EPA Rainfall Erosivity Calculator & Individual Data
7			**Step 2**	Determine Receiving Water Risk via one of the options listed:
8				1. GIS map of Sediment Sensitive Watersheds provided (in development)
9				2. List of Sediment Sensitive Watersheds provided
10			**Step 3**	Determine Combined Risk Level
11				
12				
13			**EA:**	**03-0a6334 Donner 3**
14				**03-Nev-80**
15				**Pavement and Drainage Rehab**
16			**Lat**	**39.357**
17			**Long**	**120.247**
18				
19		**Const Start**		**9/11/2011**
20		**CCA Date**		**10/15/2011**
21		**Project Combined Risk**		**Level 2**

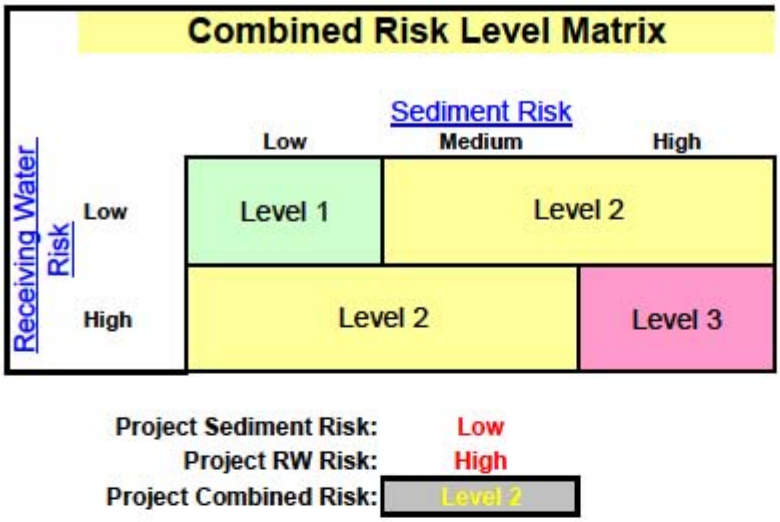
Attachment C -Risk Level Determination

	A	B	C
1	**Sediment Risk Factor Worksheet**		**Entry**
2	**A) R Factor**		
3	Analyses of data indicated that when factors other than rainfall are held constant, soil loss is directly proportional to a rainfall factor composed of total storm kinetic energy (E) times the maximum 30-min intensity (I30) (Wischmeier and Smith, 1958). The numerical value of R is the average annual sum of EI30 for storm events during a rainfall record of at least 22 years. "Isoerodent" maps were developed based on R values calculated for more than 1000 locations in the Western U.S. Refer to the link below to determine the R factor for the project site.		
4	http://cfpub.epa.gov/npdes/stormwater/LEW/lewCalculator.cfm		
5	**R Factor Value**		1.8
6	**B) K Factor (weighted average, by area, for all site soils)**		
7	The soil-erodibility factor K represents: (1) susceptibility of soil or surface material to erosion, (2) transportability of the sediment, and (3) the amount and rate of runoff given a particular rainfall input, as measured under a standard condition. Fine-textured soils that are high in clay have low K values (about 0.05 to 0.15) because the particles are resistant to detachment. Coarse-textured soils, such as sandy soils, also have low K values (about 0.05 to 0.2) because of high infiltration resulting in low runoff even though these particles are easily detached. Medium-textured soils, such as a silt loam, have moderate K values (about 0.25 to 0.45) because they are moderately susceptible to particle detachment and they produce runoff at moderate rates. Soils having a high silt content are especially susceptible to erosion and have high K values, which can exceed 0.45 and can be as large as 0.65. Silt-size particles are easily detached and tend to crust, producing high rates and large volumes of runoff. Use Site-specific data must be submitted.		
8	Site-specific K factor guidance		
9	**K Factor Value**		1.132
10	**C) LS Factor (weighted average, by area, for all slopes)**		
11	The effect of topography on erosion is accounted for by the LS factor, which combines the effects of a hillslope-length factor, L, and a hillslope-gradient factor, S. Generally speaking, as hillslope length and/or hillslope gradient increase, soil loss increases. As hillslope length increases, total soil loss and soil loss per unit area increase due to the progressive accumulation of runoff in the downslope direction. As the hillslope gradient increases, the velocity and erosivity of runoff increases. Use the LS table located in separate tab of this spreadsheet to determine LS factors. Estimate the weighted LS for the site prior to construction.		
12	LS Table		
13	**LS Factor Value**		1
14			
15	**Watershed Erosion Estimate (=RxKxLS) in tons/acre**		2.0376
16	**Site Sediment Risk Factor**		**Low**
17	Low Sediment Risk: < 15 tons/acre		
18	Medium Sediment Risk: >=15 and <75 tons/acre		
19	High Sediment Risk: >= 75 tons/acre		
20			

Attachment C -Risk Level Determination

Receiving Water (RW) Risk Factor Worksheet	Entry
A. Watershed Characteristics	**yes/no**
A.1. Does the disturbed area discharge (either directly or indirectly) to a **303(d)-listed waterbody impaired by sediment**? For help with impaired waterbodies please check the attached worksheet or visit the link below: 2006 Approved Sediment-impared WBs Worksheet http://www.waterboards.ca.gov/water_issues/programs/tmdl/303d_lists2006_epa.shtml **OR** A.2. Does the disturbed area discharge to a waterbody with designated beneficial uses of SPAWN & COLD & MIGRATORY? http://www.ice.ucdavis.edu/geowbs/asp/wbquse.asp	**Yes**

Based on mapping at http://sv08arcgis/CGP2009/ (see screen shot in worksheet), the project appears to be within the Hare Creek planning level watershed. This PWS is shown as being impaired for Sediment.


Combined Risk Level Matrix
Sediment Risk
Low
Medium
High
Receiving Water Risk
Low
High
Level 1
Level 2
Level 2
Level 3
Project Sediment Risk: Low
Project RW Risk: High
Project Combined Risk: Level 2

3.4.4 Attachment D Vicinity Map and Site Map

Include both a vicinity and site map in the SWPPP.

- ❑ The Vicinity Map shall be an 8-1/2" x 11" color copy of a United States Geologic Survey (USGS) map or equal, and shall extend approximately one-quarter mile beyond the property boundaries of the construction site (an 11" x 17" may be used if needed). Insert the vicinity map as Attachment D and place a reference in Section 300.4. The Office of Water Programs, Water Quality Planning Tool website can be used to obtain images of USGS topographic maps by selecting the 'Post Miles' option on the webpage at: http://stormwater.water-programs.com/

- ❑ To meet the site map requirement, insert a reduced copy (8-1/2" x 11" or 11" x 17") of the project's Title Sheet in Attachment D.

The vicinity map shall show:

- ❑ easily identifiable major roadways
- ❑ geographic features or landmarks
- ❑ water bodies within or adjacent to the construction limits
- ❑ construction site perimeter
- ❑ staging areas and storage yards
- ❑ known wells
- ❑ outline of the off-site drainage area(s) that discharge into the construction site
- ❑ identification of anticipated discharge location(s) where the stormwater from the construction site discharges to a municipal separate storm sewer system or other water body
- ❑ general topography

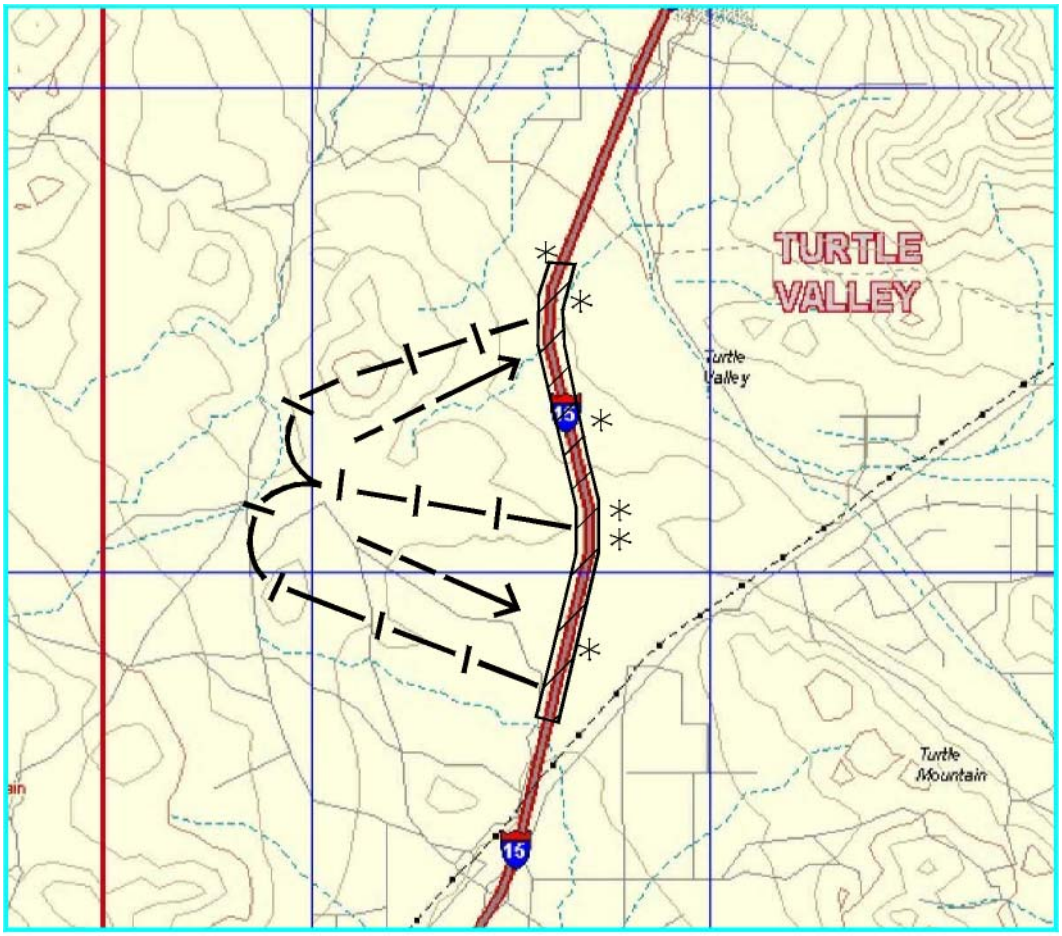
Attachment D
Vicinity Map

SAMPLE VICINITY MAP

FOR

THE CONSTRUCTION ON STATE HIGHWAY 15
IN SAN BERNARDINO COUNTY NEAR BARSTOW

FROM 1.5 miles NORTH OF POWERLINE ROAD
OVERCROSSING TO WILDWASH BRIDGE



LEGEND:

PROJECT AREA

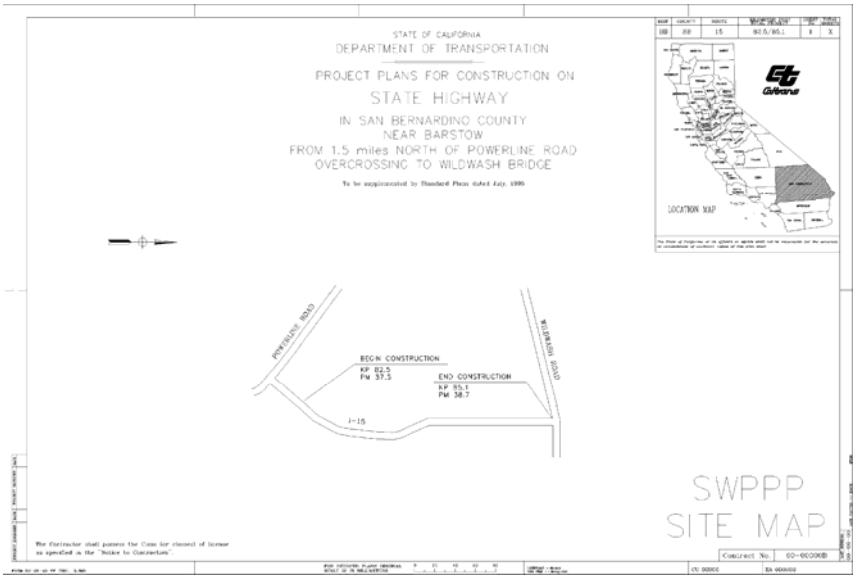
* DISCHARGE POINTS

OFFSITE DRAINAGE AREAS
DISCHARGING ON TO SITE

N.T.S.

Attachment D
Site Map

SAMPLE SITE MAP



3.4.5 Attachment E Contractor Personnel Stormwater Training

A summary of formal stormwater training for the project manager/superintendent, WPC Manager, Qualified SWPPP Practitioner, stormwater inspector, stormwater discharge sampler and tester, employees responsible for BMP installation, maintenance and repair and all contractor employees must be included in Attachment E.

For subcontractors a summary of formal stormwater training, for subcontractor foreman and all subcontractor employees must be included in Attachment E.

The format and information shown on Attachment E should follow the sample Contractor Personnel Stormwater Training Record or Subcontractor Stormwater Personnel Training Record shown on the following pages.

SWPPP ATTACHMENT E
CONTRACTOR PERSONNEL STORMWATER TRAINING RECORD

PROJECT NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM	
	PROJECT IDENTIFIER NUMBER	
CONTRACTOR NAME AND ADDRESS	PROJECT WATER POLLUTION CONTROL ☐ WPCP ☐ SWPPP	PROJECT SITE RISK LEVEL ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
Submitted by Contractor (Print Name and Sign)		Date

CONTRACTOR PERSONNEL STORMWATER TRAINING RECORD

Project Manager

NAME	TITLE		PHONE
Training Course Title	**Training Objective**	**Date Training Completed**	**Course Length (Hours)**

Water Pollution Control Manager

NAME	COMPANY		PHONE
TITLE			PHONE 24/7
Training Course Title	**Training Objective**	**Date Training Completed**	**Course Length (Hours)**

SWPPP ATTACHMENT E
CONTRACTOR PERSONNEL STORMWATER TRAINING RECORD

PROJECT NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER

STORMWATER TRAINING RECORD CONTINUED

Include the following when a Qualified SWPPP Practitioner will be assisting the WPC manager with SWPPP implementation.

Qualifier SWPPP Practitioner			
NAME	COMPANY		PHONE
TITLE			PHONE 24/7
Training Course Title	**Training Objective**	**Date Training Completed**	**Course Length (Hours)**

Include the following training record information when a stormwater inspector will be assisting the WPC manager.

Stormwater Inspector			
NAME	COMPANY		PHONE
TITLE			PHONE 24/7
Training Course Title	**Training Objective**	**Date Training Completed**	**Course Length (Hours)**

SWPPP ATTACHMENT E
CONTRACTOR PERSONNEL STORMWATER TRAINING RECORD

PROJECT NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER

STORMWATER TRAINING RECORD CONTINUED

Include the following when contractor employees will be responsible for BMP installation, maintenance and repair.

Employees Responsible for BMP Installation, Maintenance and Repair			
EMPLOYEE NAME			
Training Course Title	**Training Objective**	**Date Training Completed**	**Course Length (Hours)**
EMPLOYEE NAME			
Training Course Title	**Training Objective**	**Date Training Completed**	**Course Length (Hours)**
EMPLOYEE NAME			
Training Course Title	**Training Objective**	**Date Training Completed**	**Course Length (Hours)**

SWPPP ATTACHMENT E
CONTRACTOR PERSONNEL STORMWATER TRAINING RECORD

PROJECT NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER

STORMWATER TRAINING RECORD CONTINUED

Include the following when contractor employees will be responsible for stormwater sampling and analysis.

Employees Responsible for Stormwater Sampling and Analysis			
EMPLOYEE NAME			
Training Course Title	**Training Objective**	**Date Training Completed**	**Course Length (Hours)**
EMPLOYEE NAME			
Training Course Title	**Training Objective**	**Date Training Completed**	**Course Length (Hours)**
EMPLOYEE NAME			
Training Course Title	**Training Objective**	**Date Training Completed**	**Course Length (Hours)**

SWPPP ATTACHMENT E
CONTRACTOR STORMWATER TRAINING RECORD

PROJECT NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER

STORMWATER TRAINING RECORD CONTINUED

CONTRACTOR EMPLOYEES STORMWATER TRAINING RECORD

Employee Name	Title of Training Course	Date Training Completed	Course Length (Hours)

I have reviewed this document and based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is, true accurate, and complete.

Water Pollution Control Manager Name	Date
Water Pollution Control Manager Signature	

SWPPP ATTACHMENT E
SUBCONTRACTOR PERSONNEL STORMWATER TRAINING RECORD

PROJECT NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM	
	PROJECT IDENTIFIER NUMBER	
CONTRACTOR NAME AND ADDRESS	PROJECT WATER POLLUTION CONTROL ☐ WPCP ☐ SWPPP	PROJECT SITE RISK LEVEL ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
SUBCONTRACTOR NAME AND ADDRESS		

Subcontractor (Print Name and Sign)	Date
Submitted by Contractor (Print Name and Sign)	Date

SUBCONTRACTOR PERSONNEL STORMWATER TRAINING RECORD

Subcontractor Superintendent/Foreman

NAME	TITLE		PHONE
Training Course Title	**Training Objective**	**Date Training Completed**	**Course Length (Hours)**

SUBCONTRACTOR EMPLOYEES STORMWATER TRAINING RECORD

Employee Name	**Title of Training Course**	**Date Training Completed**	**Course Length (Hours)**

SWPPP ATTACHMENT E
SUBCONTRACTOR PERSONNEL STORMWATER TRAINING RECORD

PROJECT NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER

STORMWATER TRAINING RECORD CONTINUED

Include the following when subcontractor employees will be responsible for BMP installation, maintenance and repair.

Employees Responsible for BMP Installation, Maintenance and Repair			
EMPLOYEE NAME			
Training Course Title	**Training Objective**	**Date Training Completed**	**Course Length (Hours)**
EMPLOYEE NAME			
Training Course Title	**Training Objective**	**Date Training Completed**	**Course Length (Hours)**
EMPLOYEE NAME			
Training Course Title	**Training Objective**	**Date Training Completed**	**Course Length (Hours)**

SWPPP ATTACHMENT E
SUBCONTRACTOR PERSONNEL STORMWATER TRAINING RECORD

PROJECT NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER

STORMWATER TRAINING RECORD CONTINUED

SUBCONTRACTOR EMPLOYEES STORMWATER TRAINING RECORD

Employee Name	Title of Training Course	Date Training Completed	Course Length (Hours)

3.4.6 Attachment F Other Plans/Permits/Agreements

- ❑ Include in Attachment F a copy of the Caltrans Statewide Permit CAS000003. Caltrans permit is available at:

  http://www.waterboards.ca.gov/water_issues/programs/stormwater/caltrans.shtml

- ❑ Include in Attachment F a copy of the Construction General Permit CAS000002 (CGP) and appropriate CGP Attachment C, D or E based on project risk level.

- ❑ Include in Attachment F copies of other local, state, and federal plans, permits, and agreements. Other plans, permits, and agreements shall be listed in Section 400 of the SWPPP. Example plans, permits and agreements include:
  - RWQCB Waiver of Clean Water Act Section 401 Water Quality Certification
  - US Army Corps of Engineers, Clean Water Act Section 404, Nationwide Permit 26-authorization letter
  - California Department of Fish and Game Streambed Alteration
  - General Dewatering Permit issued by a RWQCB

3.4.7 Attachment AA SWPPP Amendments

When changes in the approved SWPPP are required, the contractor's Water Pollution Control Manager (WPC Manager) shall prepare changes to the SWPPP. Amendments to the SWPPP require the following:

- The WPC Manager shall certify SWPPP amendments.
- The contractor shall certify SWPPP amendments and submit them to the Resident Engineer for review and approval.
- The SWPPP Amendment certification and approval form shall be used as the cover sheet for each amendment. A copy of the form is shown in SWPPP Appendix A.
- All amendments shall be recorded in the SWPPP amendment log in Attachment AA.
- Approved amendments should be inserted into the appropriate SWPPP Section or Attachment when possible and a copy shall be kept in Attachment AA.
- When an amendment to the SWPPP is approved by the Legally Responsible Person, or RE if authorized Approved Signatory, form CEM-2008 SWPPP/WPCP Amendment Certification and Acceptance shall be attached to the SWPPP amendment and inserted into Attachment AA.

All approved and certified SWPPP amendments shall be shown on CEM-2009SWPPP/WPCP Amendment Log form in Attachment AA. The amendment log shall include:

- amendment number
- date
- brief description of the amendment
- requested by
- Amendment approval date

Caltrans form CEM-2009 SWPPP/WPCP Amendment Log shown on the next page shall be used to record SWPPP amendments.

Include in Attachment AA the following:

- ❑ Form CEM- 2009 SWPPP/WPCP Amendment Log. Enter the project name, Caltrans contract number, Caltrans project identifier number. For non-Caltrans projects, enter the encroachment permit number in the contract number box.

ATTACHMENT AA- SWPPP Amendment Log

PROJECT NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER
	WDID NUMBER:
CONTRACTOR NAME AND ADDRESS	PROJECT SITE RISK LEVEL ☐ Risk Level 1 ☐ Not Applicable (WPCP) ☐ Risk Level 2 ☐ Risk Level 3
Submitted by Contractor (Print Name and Sign)	Date

AMENDMENTS LOG

Amendment Number	Date	Brief Description of Amendment	Requested By	Approval Date

Page __ of __

GENERAL INFORMATION

- The information shown on this form is required for projects with either a Stormwater Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP) to document amendments.
- Attach a completed copy of this form to each approved SWPPP/WPCP amendment and include in SWPPP Attachment AA or WPCP Attachment C.

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FORM

- Contract Number/Co/Rte/PM: For local agency encroachment permit projects write the encroachment permit number in the Contract Number field.
- Project Identifier Number: Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number write N/A in the field.
- WDID Number: For projects with Water Pollution Control Program (WPCP) enter "WPCP" in this field.
- When SWPPP or WPCP amendments are approved by the Resident Engineer enter:

1. The Amendment Number
2. Date
3. Brief description of the amendment
4. Name and title of person who requested the amendment
5. Approval date by the Resident Engineer

-

3.4.8 Attachment BB Water Pollution Control Drawings

The Water Pollution Control Drawings (WPCDs) are the component of the project SWPPP that show the necessacy BMPs by project phase/stage for the project to be in compliance with the Construction General Permit. The Caltrans Permit states: "The SWPPP shall apply to all areas that are directly related to the construction activity, including but not limited to staging areas, storage yards, material borrow areas and storage areas, access roads, etc., whether or not they reside within the Caltrans rights-of-way." The WPCDs shall reflect the Contractor's phasing and/or construction staging, and shall address the entire scope of the contract work.

The construction activity phases that the WPCDs should address in the SWPPP are the Preliminary Phase, Grading Phase, Highway Construction Phase, and the Highway Planting/Erosion Control Establishment Phase. These phases are defined below.

Preliminary Phase (Pre-Construction Phase – Part of the Grading Phase)
Construction stage, including rough grading or disking, clearing and grubbing operations, or any soil disturbance prior to mass grading.

Grading Phase
Includes reconfiguring the topography for the highway including; excavation for roadway and necessary blasting of hard rock, highway embankment construction (fills); mass grading, and stockpiling of select material for capping operations.

Highway Construction Phase
Highway construction phase includes both highway and structure construction. Highway construction includes final roadway excavation, placement of base materials and highway paving, finish grading, curbs, gutters and sidewalks, public utilities, public water facilities including fire hydrants, public sanitary sewer systems, storm drain systems and/or other drainage improvements, highway lighting, traffic signals and/or other highway electrical work, guardrail, concrete barriers, sign installation, pavement markers, traffic stripping and pavement markings. Structure construction includes structure footings, bridges, retaining walls, major culverts, overhead sign structures and buildings.

Highway Planting / Erosion Control Establishment Phase
Highway planting including clearing and grubbing operations, soil preparation (grading, incorporation of soil amendments, placement of topsoil), irrigation (trenching, installation, trench backfilling), minor grading (top dressing , fine grading lawn and ground cover areas), hardscaping, planting (seeding and planting of plants), mulch (application of wood chips or other mulches) and plant establishment (weeding, plant replacement and if needed: fertilizer application, irrigation maintenance, reapplication of mulch). Erosion control includes placement of permanent erosion control materials and maintenance of temporary sediment controls during the erosion control establishment period.

The WPCDs for the grading phase and highway construction phase may need to show different stages to completely identify all required BMPs. The stage construction sheets of the project plans may be used as base sheets for the WPCDs when staging is required.

The WPCDs provide field staff with the information on where to install BMPs so that they are effective. The WPCDs, Water Pollution Control Best Management List and Water Pollution Control Schedule provide the necessary tools for a contractor to plan and implement BMPs to meet the requirements of the project SWPPP.

Prepare Water Pollution Control Drawings (WPCDs) in conformance with the following instructions and requirements. The WPCDs shall be no smaller than the "reduced plans" (approximately 11"x17") issued by Caltrans.

- ❑ The WPCDs shall show locations for the BMPs that will be used.
- ❑ Include cover sheet(s) listing the BMPs that will be used along with the associated BMP symbols used on the WPCDs. Standard symbols and line types are shown in the SWPPP/WPCP Preparation Manual, Appendix D.

- ❑ Temporary WPC details are included in the applicable Standard Plans, contract plans and Attachment BB.
- ❑ Additional details may be necessary to describe site-specific BMP applications. BMP details other than the ones shown in the contract plans and Standard Plans shall be submitted to the RE for approval.

Use project layout, grading, stage construction, drainage sheets and/or erosion sheets as base sheets for the WPCDs. Use Section 500.1.2 as a guide to identify pollutant sources and BMPs for construction activities. Select BMPs that are appropriate for the site and show their locations on the WPCDs. The base sheets shall show the construction project in detail, including:

- ❑ The construction site perimeter
- ❑ Geographic features within or immediately adjacent to the site. Include surface waters such as lakes, streams, springs, wetlands, estuaries, ponds, and the ocean
- ❑ Site topography before and after construction. Include roads, paved areas, buildings, slopes, drainage facilities, and areas of known or suspected contamination
- ❑ Permanent (post-construction) BMPs. These are usually shown on the contract plans.

The Construction Site Monitoring Program requires information for stormwater and non-stormwater monitoring be shown on the WPCDs. See Construction Site Monitoring Program Guidance Manual for required information to be shown on WPCDs. Delineate the following site information on the WPCDs:

- ❑ Discharge points from the project to site storm drain systems or receiving waters
- ❑ Tributary areas and drainage patterns across the project area (show using flow arrows) into each onsite stormwater inlet or receiving water
- ❑ Tributary areas and drainage patterns to each onsite stormwater inlet, receiving water or discharge point
- ❑ Off-site tributary drainage areas that generate run-on to the project. (Where off-site tributary drainage areas are too large to depict on the drawings, use map notes or inserts illustrating the upstream drainage areas)
- ❑ Temporary onsite drainage(s) to carry concentrated flows
- ❑ Drainage patterns and slopes anticipated after major grading activities are completed;
- ❑ Outline all areas of existing vegetation, soil cover, or native vegetation that will remain undisturbed during the project
- ❑ Outline all areas of soil disturbance (disturbed soil areas, DSAs)
- ❑ Identify location(s) of contaminated or hazardous soils
- ❑ Locate potential non-stormwater discharges and activities, such as dewatering operations, concrete saw-cutting or coring, pressure washing, waterline flushing, diversions, cofferdams, and vehicle and equipment cleaning. If operations can't be located, provide a narrative description

Show proposed locations of all construction site BMPs on the WPCDs. Include additional detail drawings if necessary to convey site-specific configurations.

- ❑ Show temporary soil stabilization and temporary sediment control BMPs that will be used during construction. Include temporary onsite drainage(s) to carry concentrated flows, BMPs implemented to divert off-site drainage around or through the construction site, and BMPs that protect stormwater inlets

- ❑ Locate site ingress and egress points and any proposed temporary construction roads
- ❑ Show BMPs to mitigate or eliminate non-stormwater discharges
- ❑ Show BMPs for waste management and materials pollution control, including, but not limited to storage of soil or waste; construction material loading, unloading, storage and access areas; and areas designated for waste handling and disposal
- ❑ Show BMPs for vehicle and equipment storage, fueling, maintenance, and cleaning

Sample WPCDs are shown on the following pages.

WATER POLLUTION CONTROL DRAWINGS (WPCDs)

FOR

ROUTE BB

STAGE 1

ANYTOWN, ANY COUNTY
CALTRANS CONTRACT NO. 00-00000

PREPARED BY:

ZZZ CONSTRUCTION COMPANY

SAMPLE WPCD NOTE: DO NOT SIMPLY COPY THE FOLLOWING NOTES FOR PROJECT SPECIFIC USE. COPYING TEXT FROM THESE SAMPLE WPCDs DOES NOT NECESSARILY MEET NPDES PERMIT REQUIREMENTS. USE PROJECT SPECIFIC NOTES.

LEGEND

- CWM — CWM — WM-8 Concrete Waste Management
- SC-10 Storm Drain Inlet Protection
- ESA — Environmentally Sensitive Area
- Surface Flow Direction
- Pipe/Underground Flow Direction
- VEC — NS-8 Vehicle & Equipment Cleaning
- VEF — NS-9 Vehicle & Equipment Fueling
- VEM — NS-10 Vehicle & Equipment Maintenance
- PEV — SS-2 Preservation of Existing Vegetation
- TSP — SS-4 Hydroseeding
- S — SS-6 Straw Mulch
- SOS — SS-5 Soil Binders
- PS — Permanent Seeding
- TC-1 Stabilized Construction Entrance/Exit
- TSD — SS-11 Slope drains
- SS-9 Earth Dike/Drainage Swales and Lined Ditches
- CD — CD — SC-4 Check Dams
- SC-1 Silt Fences
- SC-3 Sediment Traps
- FR — SC-5 Fiber Rolls
- SB — SC-8 Sandbag Barrier
- Stormwater Discharge Location

GENERAL WATER POLLUTION CONTROL NOTES

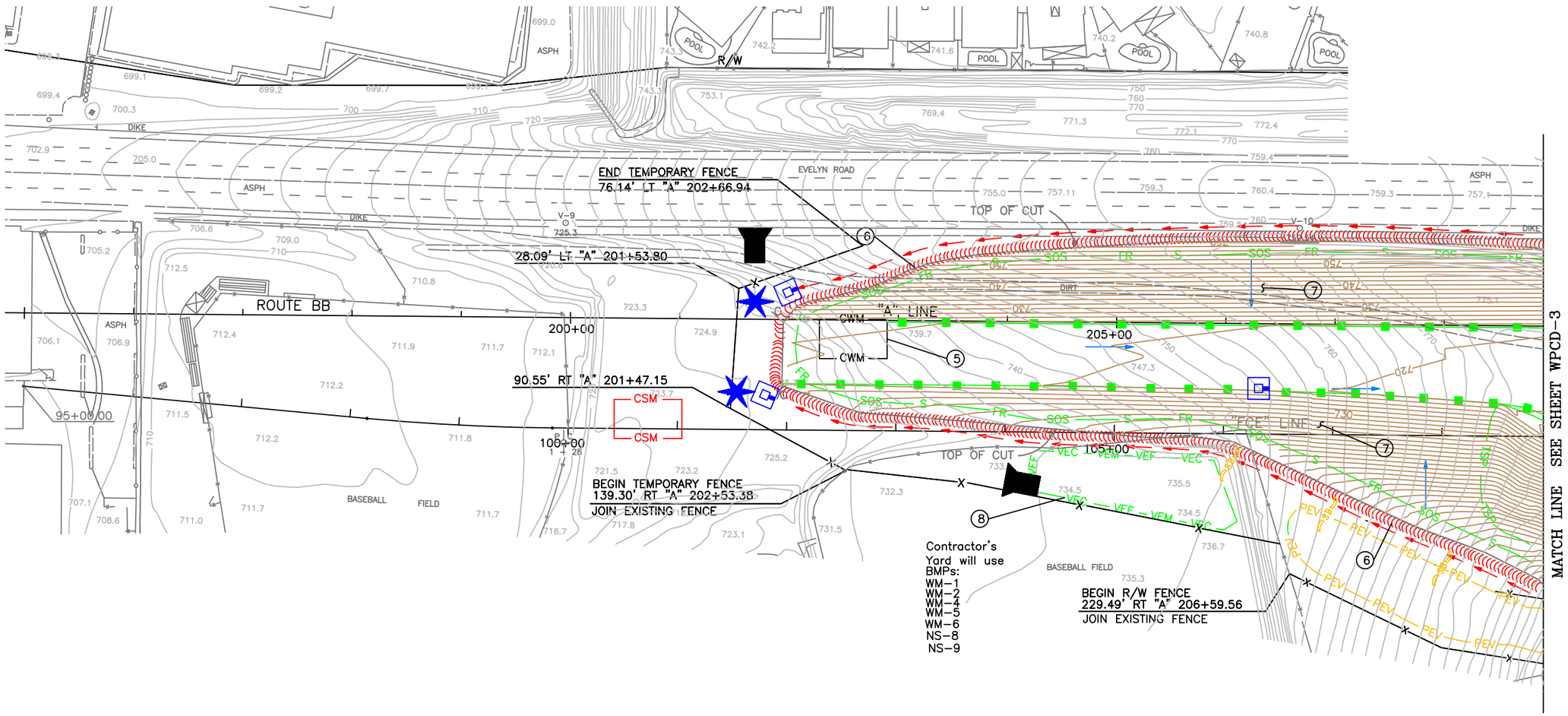
1. THE INFORMATION ON THESE DRAWINGS ARE ACCURATE FOR WATER POLLUTION CONTROL PURPOSES ONLY.
2. THE INFORMATION ON THIS PLAN IS INTENDED TO BE USED AS A GUIDELINE FOR THE CONTRACTOR AND SUBCONTRACTORS TO INSTALL WATER POLLUTION CONTROL DEVICES AT GENERAL LOCATIONS THROUGHOUT THE SITE. tHESE DRAWINGS ARE TO BE USED IN CONJUNCTION WITH THE NARRATIVE SECTION OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP).
3. FIELD CONDITIONS MAY NECESSITATE MODIFICATIONS TO THESE DRAWINGS.
4. PERMANENT EROSION CONTROL WILL BE INSTALLED AS AREAS ARE DETERMINED TO BE SUBSTANTIALLY COMPLETE.

STORM WATER POLLUTION CONTROL CONSTRUCTION NOTES:

1. Rock check dams.
2. Gravel bag check dams
3. Install hydroseeding BMP's SS-4
4. Contractor proposed alternate concrete washout detail, Type-1 Below Ground. See WPCD-14 for detail.
5. Contractor proposed alternate concrete washout detail, Type-2 Above Ground. See WPCD-14 for detail.
6. Earth berms installed during excavation staging.
7. Surface roughening required on all slope areas before applying soil binders (on active slope or roadway) and/or straw mulch (on inactive slopes only). Inactive slopes greater than 60 feet in height will be hydroseeded.
8. Temporary slope drain without energy dissipation.
9. Combined Vehicle Cleaning, Fueling and Maintenance area.

WPCD-1

ZZZ CONSTRUCTION COMPANY	WATER POLLUTION CONTROL DRAWINGS TITLE SHEET				
DRAWN D.J.D					
APPROVED	SIZE A	SCALE NONE	DATE 11/00	REV 0	SHEET 1 OF 14



NOTE:

FOR LEGEND AND CONSTRUCTION NOTES SEE SHEET WPCD-1.

STAGE 1
WPCD-2

SCALE: 1"=50'

THIS PLAN ACCURATE FOR EROSION AND SEDIMENT CONTROL WORK ONLY

DATE	REVISED BY	DATE REVISED

CALCULATED/DESIGNED BY

CHECKED BY

PROJECT ENGINEER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

LAST REVISION

FORM DC-OE-92-PF (REV. 3/88)

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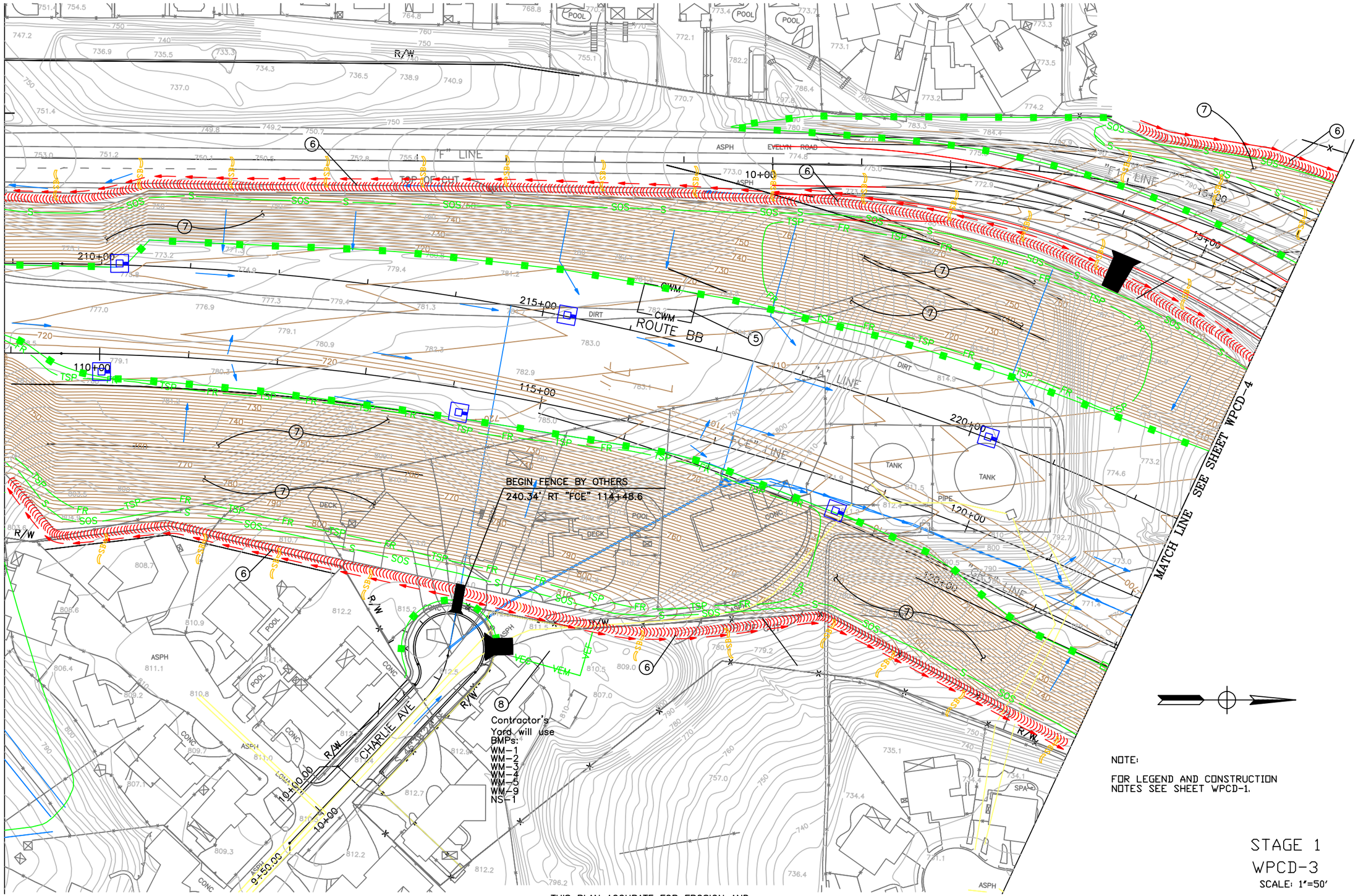

STAGE 1
WPCD-3
SCALE: 1"=50'

THIS PLAN ACCURATE FOR EROSION AND SEDIMENT CONTROL WORK ONLY

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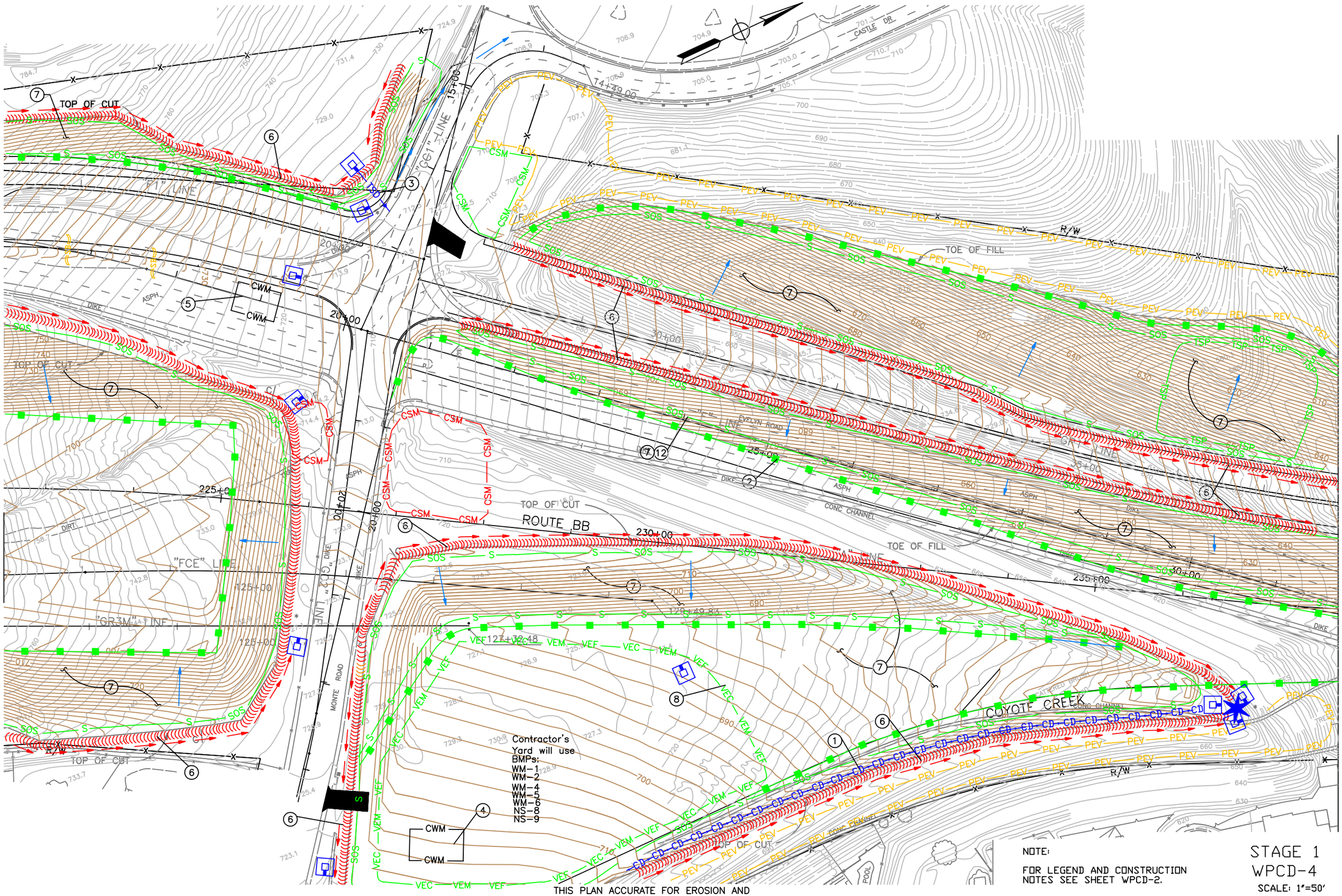
CU | EA

MATCH LINE SEE SHEET WPCD-3



MATCH LINE SEE SHEET WPCD-5

THIS PLAN ACCURATE FOR EROSION AND SEDIMENT CONTROL WORK ONLY

NOTE:

FOR LEGEND AND CONSTRUCTION NOTES SEE SHEET WPCD-2.

STAGE 1
WPCD-4
SCALE: 1"=50'

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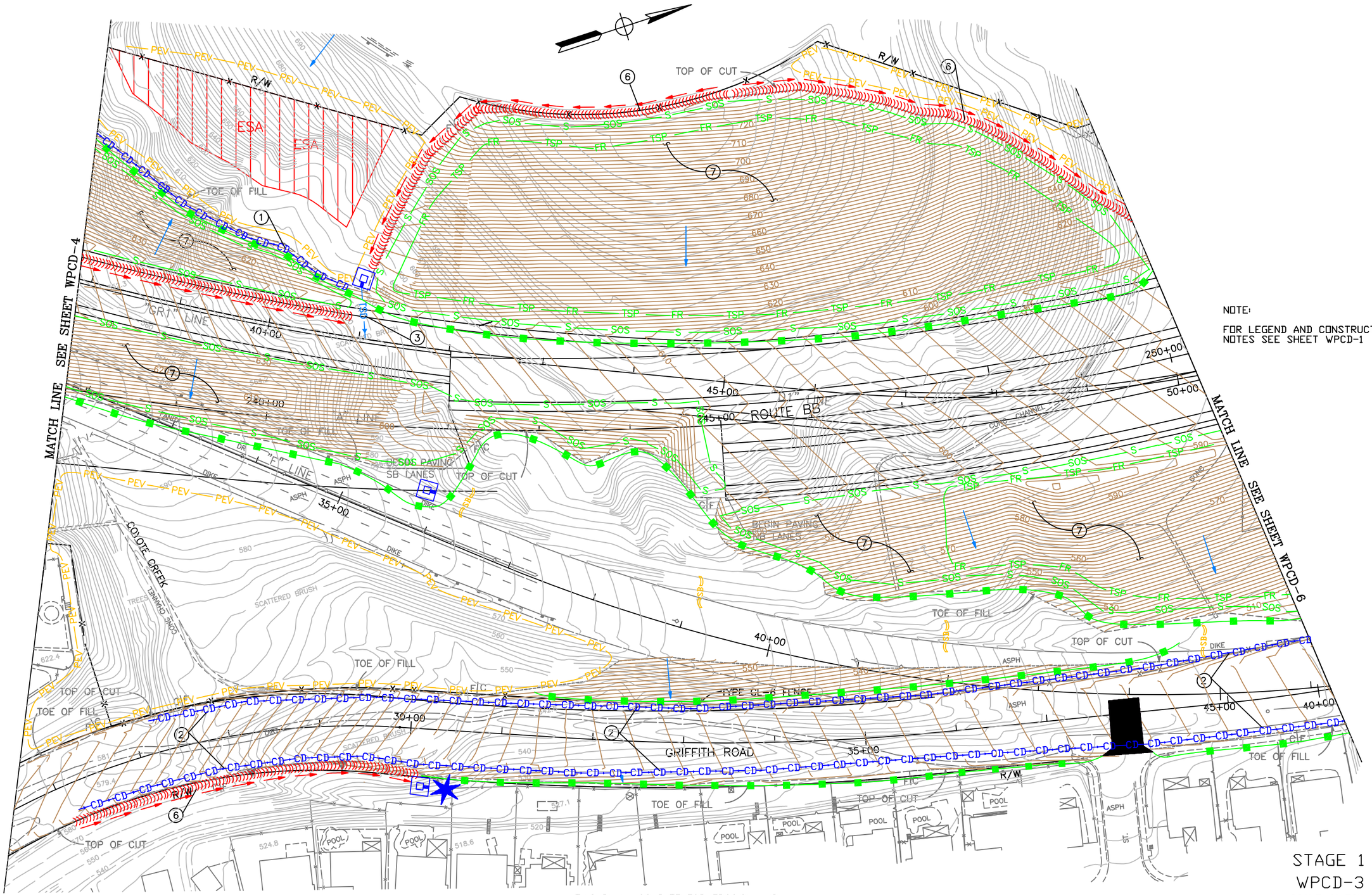

NOTE:

FOR LEGEND AND CONSTRUCTION NOTES SEE SHEET WPCD-1

STAGE 1
WPCD-3
SCALE: 1"=50'

THIS PLAN ACCURATE FOR EROSION AND SEDIMENT CONTROL WORK ONLY

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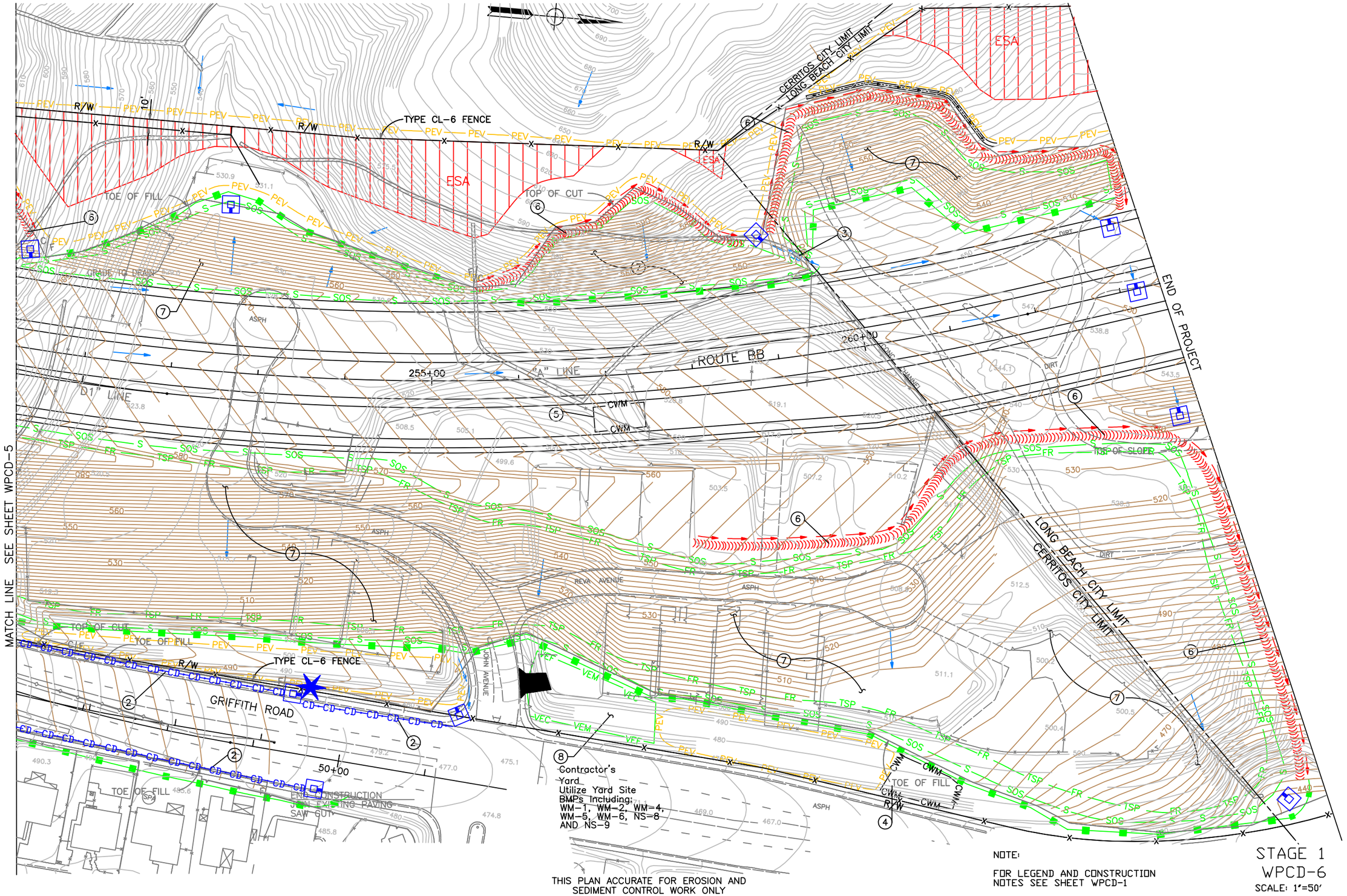

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CU

EA

WATER POLLUTION CONTROL DRAWINGS (WPCDs)

FOR

ROUTE BB

STAGE 2

ANYTOWN, ANY COUNTY
CALTRANS CONTRACT NO. 00-00000

PREPARED BY:

ZZZ CONSTRUCTION COMPANY

LEGEND

- CWM — WM-8 Concrete Waste Management
- SC-10 Storm Drain Inlet Protection
- ESA — Environmentally Sensitive Area
- Surface Flow Direction
- Pipe/Underground Flow Direction
- CSM — WM-7 Contaminated Soil Management
- VEC — NS-8 Vehicle & Equipment Cleaning
- VEF — NS-9 Vehicle & Equipment Fueling
- VEM — NS-10 Vehicle & Equipment Maintenance
- PEV — SS-2 Preservation of Existing Vegetation
- TSP — SS-4 Hydroseeding
- S — SS-6 Straw Mulch
- SOS — SS-5 Soil Binders
- PS — Permanent Seeding
- TC-1 Stabilized Construction Entrance/Exit
- TSD — SS-11 Slope drains
- SS-9 Earth Dike/Drainage Swales and Lined Ditches
- CD — SC-4 Check Dams
- SC-1 Silt Fences
- SC-3 Sediment Traps
- FR — SC-5 Fiber Rolls
- SB — SC-8 Sandbag Barrier
- Stormwater Discharge Location
- DW — NS-2 Dewatering Operations

GENERAL WATER POLLUTION CONTROL NOTES

1. THE INFORMATION ON THESE DRAWINGS ARE ACCURATE FOR WATER POLLUTION CONTROL PURPOSES ONLY.
2. THE INFORMATION ON THIS PLAN IS INTENDED TO BE USED AS A GUIDELINE FOR THE CONTRACTOR AND SUBCONTRACTORS TO INSTALL WATER POLLUTION CONTROL DEVICES AT GENERAL LOCATIONS THROUGHOUT THE SITE. THESE DRAWINGS ARE TO BE USED IN CONJUNCTION WITH THE NARRATIVE SECTION OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP).
3. FIELD CONDITIONS MAY NECESSITATE MODIFICATIONS TO THESE DRAWINGS.
4. PERMANENT EROSION CONTROL WILL BE INSTALLED AS AREAS ARE DETERMINED TO BE SUBSTANTIALLY COMPLETE.

SAMPLE WPCD NOTE: DO NOT SIMPLY COPY THE FOLLOWING NOTES FOR PROJECT SPECIFIC USE. COPYING TEXT FROM THESE SAMPLE WPCDs DOES NOT NECESSARILY MEET NPDES PERMIT REQUIREMENTS. USE PROJECT SPECIFIC NOTES.

STORM WATER POLLUTION CONTROL CONSTRUCTION NOTES:

(LOCATIONS OF CIRCLED NUMBERS ARE SHOWN ON THE WPCD SHEETS)

1. Install Type 1 inlet protection at drop inlet structures.
2. Install Type 3 inlet protection at drop inlet structures.
3. Temporary slope drain without energy dissipation.
4. Contractor proposed alternate concrete washout detail, Type-1 Below Ground. See WPCD-14 for detail.
5. Contractor proposed alternate concrete washout detail, Type-2 Above Ground. See WPCD-14 for detail.
6. Dewatering operations may be necessary during trenching for pipe installation.
7. Pipe outlet energy dissipator.
8. Combined Vehicle Cleaning, Fueling and Maintenance area.
9. Silt fence to be removed after final stabilization is complete.

WPCD-7

ZZZ CONSTRUCTION COMPANY	WATER POLLUTION CONTROL DRAWINGS TITLE SHEET				
DRAWN D.J.D					
APPROVED	SIZE A	SCALE NONE	DATE 11/00	REV 0	SHEET 7 OF 14

END TEMPORARY FENCE
76.14' LT "A" 202+66.94

28.09' LT "A" 201+53.80

90.55' RT "A" 201+47.15

BEGIN TEMPORARY FENCE
139.30' RT "A" 202+53.38
JOIN EXISTING FENCE

BEGIN R/W FENCE
229.49' RT "A" 206+59.56
JOIN EXISTING FENCE

Contractor's Yard will use BMPs:
WM-1
WM-2
WM-4
WM-5
WM-6
NS-8
NS-9

TOP OF CUT

ROUTE BB

EVELYN ROAD

"A" LINE

"FCE" LINE

BASEBALL FIELD

MATCH LINE SEE SHEET WPCD-9

NOTE:

FOR LEGEND AND CONSTRUCTION NOTES SEE SHEET WPCD-1.

THIS PLAN ACCURATE FOR EROSION AND SEDIMENT CONTROL WORK ONLY

STAGE 2
WPCD-8
SCALE: 1"=50'

REVISED BY	DATE REVISED

DATE

CALCULATED/DESIGNED BY

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PROJECT ENGINEER

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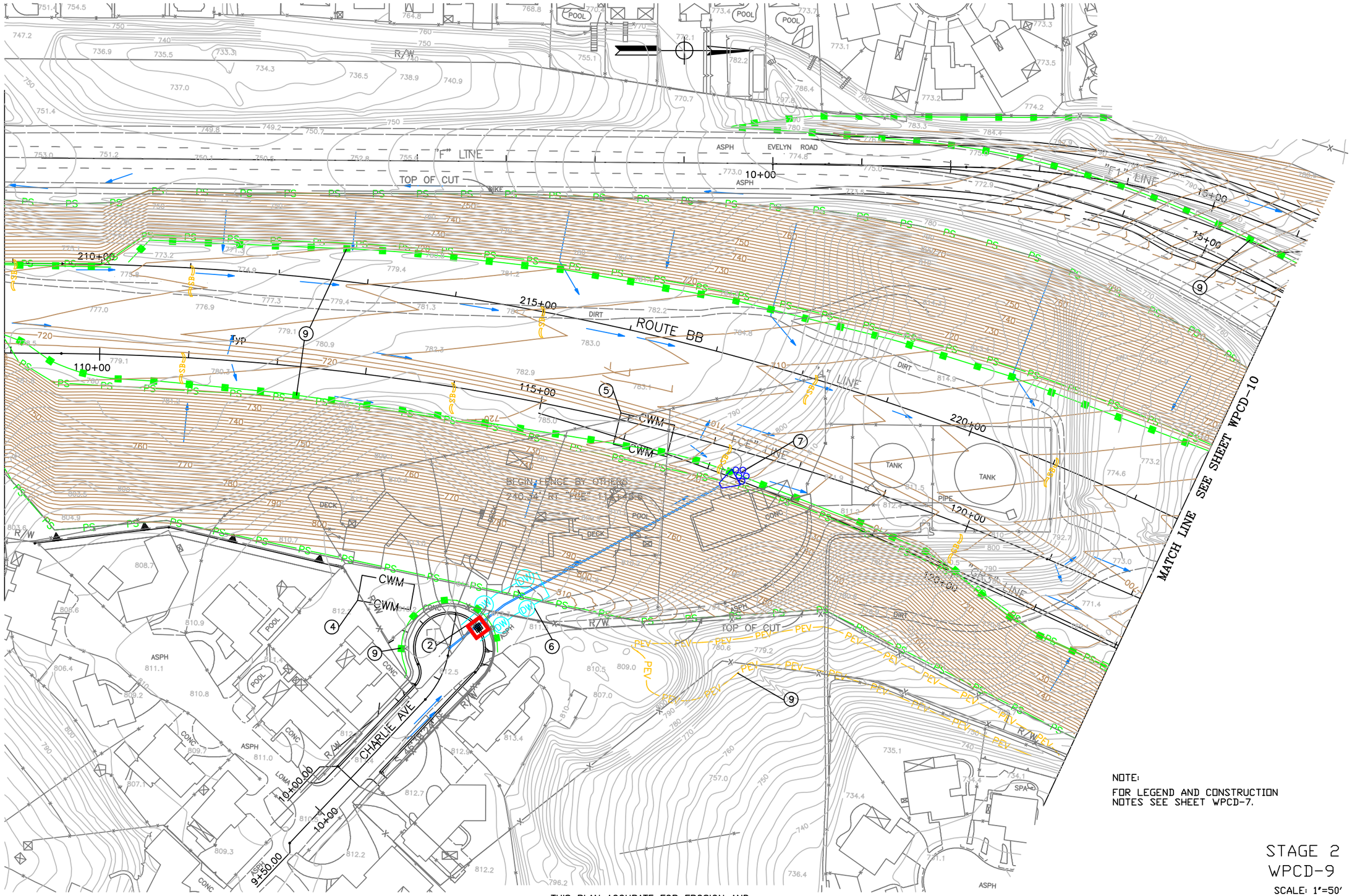

NOTE:
FOR LEGEND AND CONSTRUCTION NOTES SEE SHEET WPCD-7.

STAGE 2
WPCD-9
SCALE: 1"=50'

THIS PLAN ACCURATE FOR EROSION AND SEDIMENT CONTROL WORK ONLY

DATE	REVISED BY	DATE	REVISED BY

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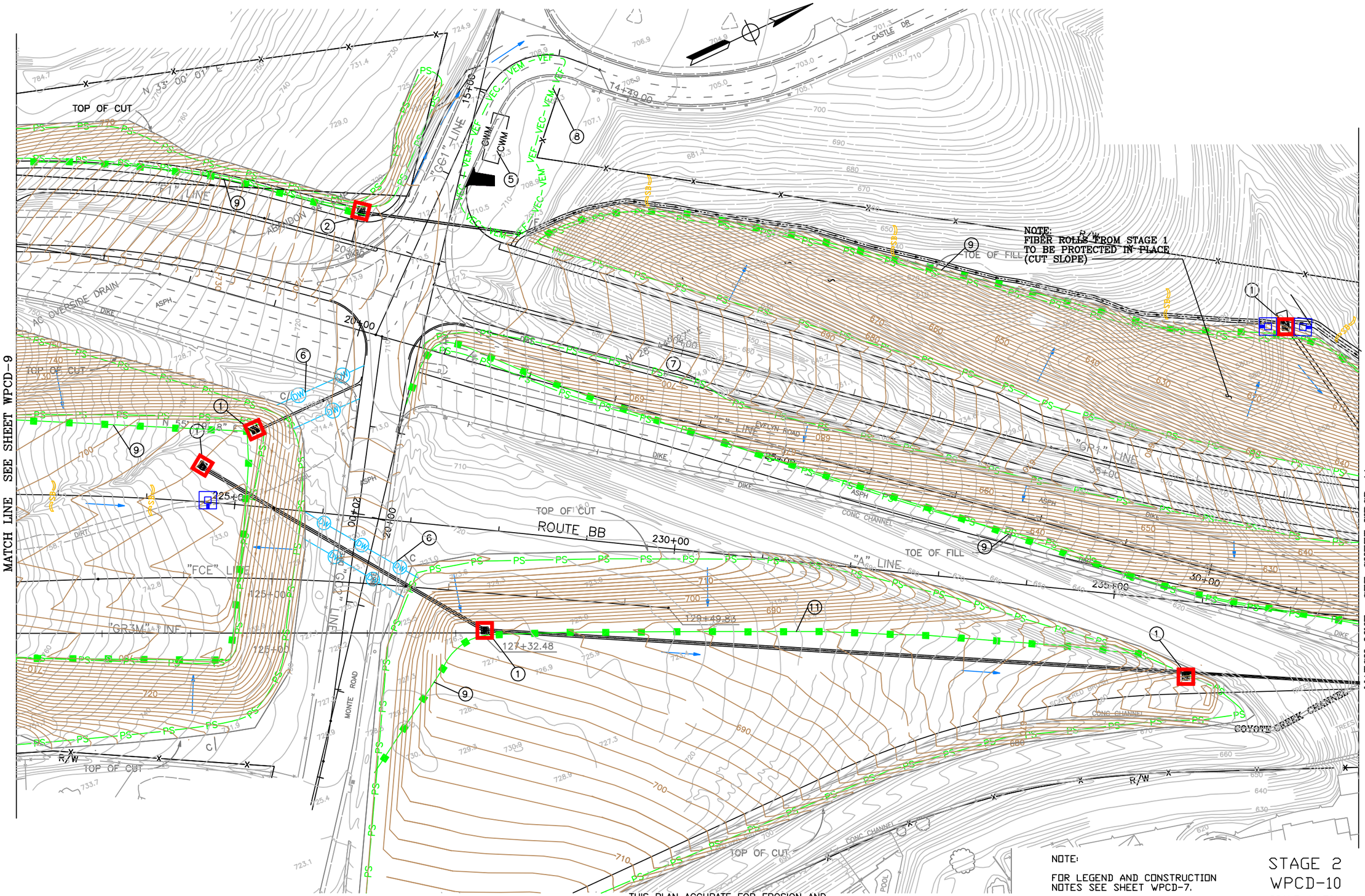


NOTE:

FOR LEGEND AND CONSTRUCTION NOTES SEE SHEET WPCD-7.

THIS PLAN ACCURATE FOR EROSION AND SEDIMENT CONTROL WORK ONLY

STAGE 2
WPCD-10
SCALE: 1"=50'

DATE	REVISED BY	DATE REVISED

CALCULATED/DESIGNED BY

CHECKED BY

PROJECT ENGINEER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

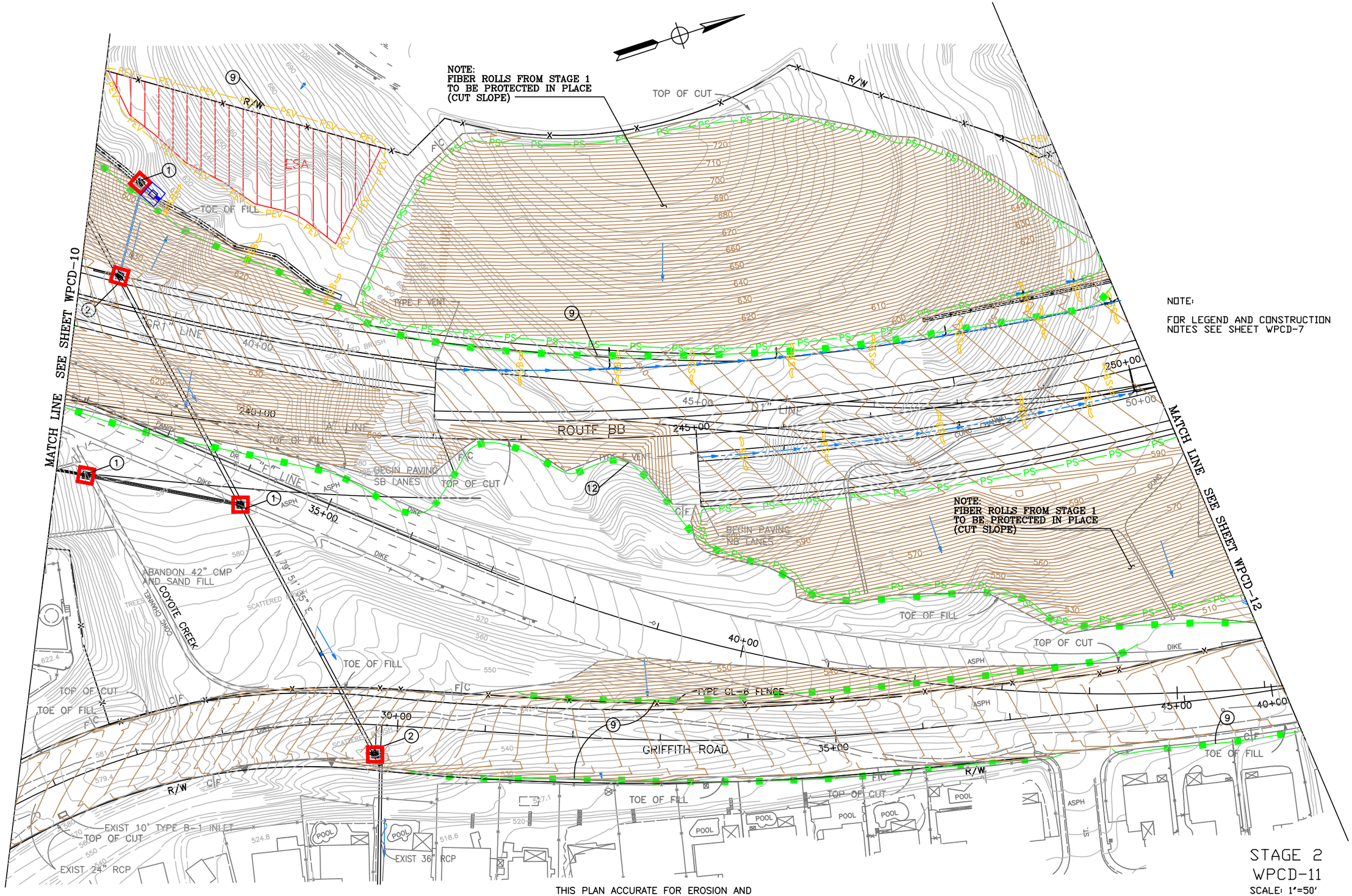
FORM DC-OE-92-PF (REV. 3/88)

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

CU 11290

EA 010721

LAST REVISION



STAGE 2
WPCD-11
SCALE: 1"=50'

THIS PLAN ACCURATE FOR EROSION AND
SEDIMENT CONTROL WORK ONLY

DATE	REVISED BY	DATE	REVISED BY

CALCULATED/DESIGNED BY
CHECKED BY

PROJECT ENGINEER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

LAST REVISION

FORM DC-OE-92-PF (REV. 3/88)

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES 0 1 2 3

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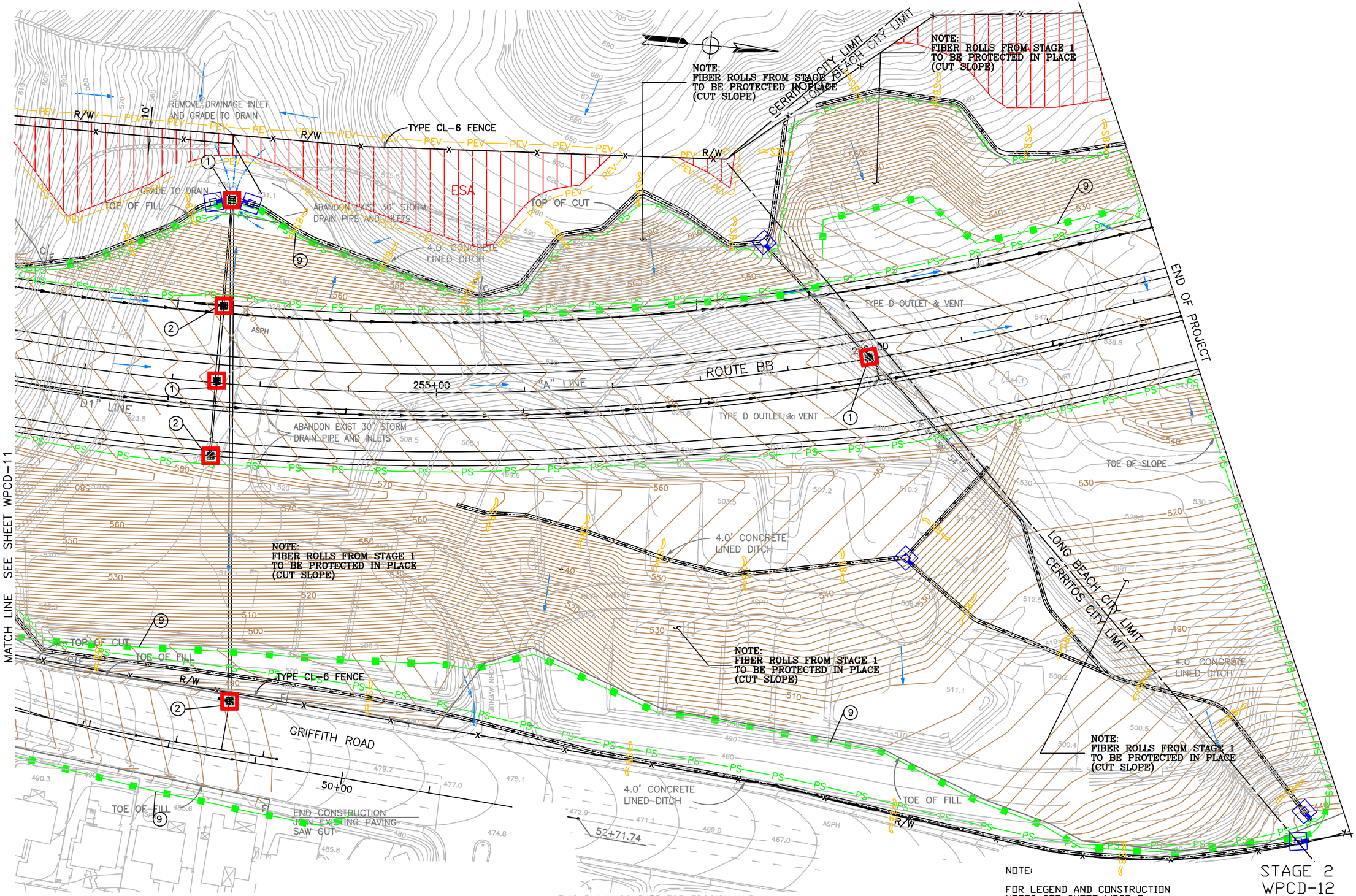


NOTE:

FOR LEGEND AND CONSTRUCTION NOTES SEE SHEET WPCD-7

THIS PLAN ACCURATE FOR EROSION AND SEDIMENT CONTROL WORK ONLY

STAGE 2
WPCD-12
SCALE: 1'=50'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

PROJECT ENGINEER

CALCULATED/DESIGNED BY

CHECKED BY

DATE

REVISED BY

DATE REVISED

LAST REVISION

FORM DC-OE-92-PF (REV. 3/88)

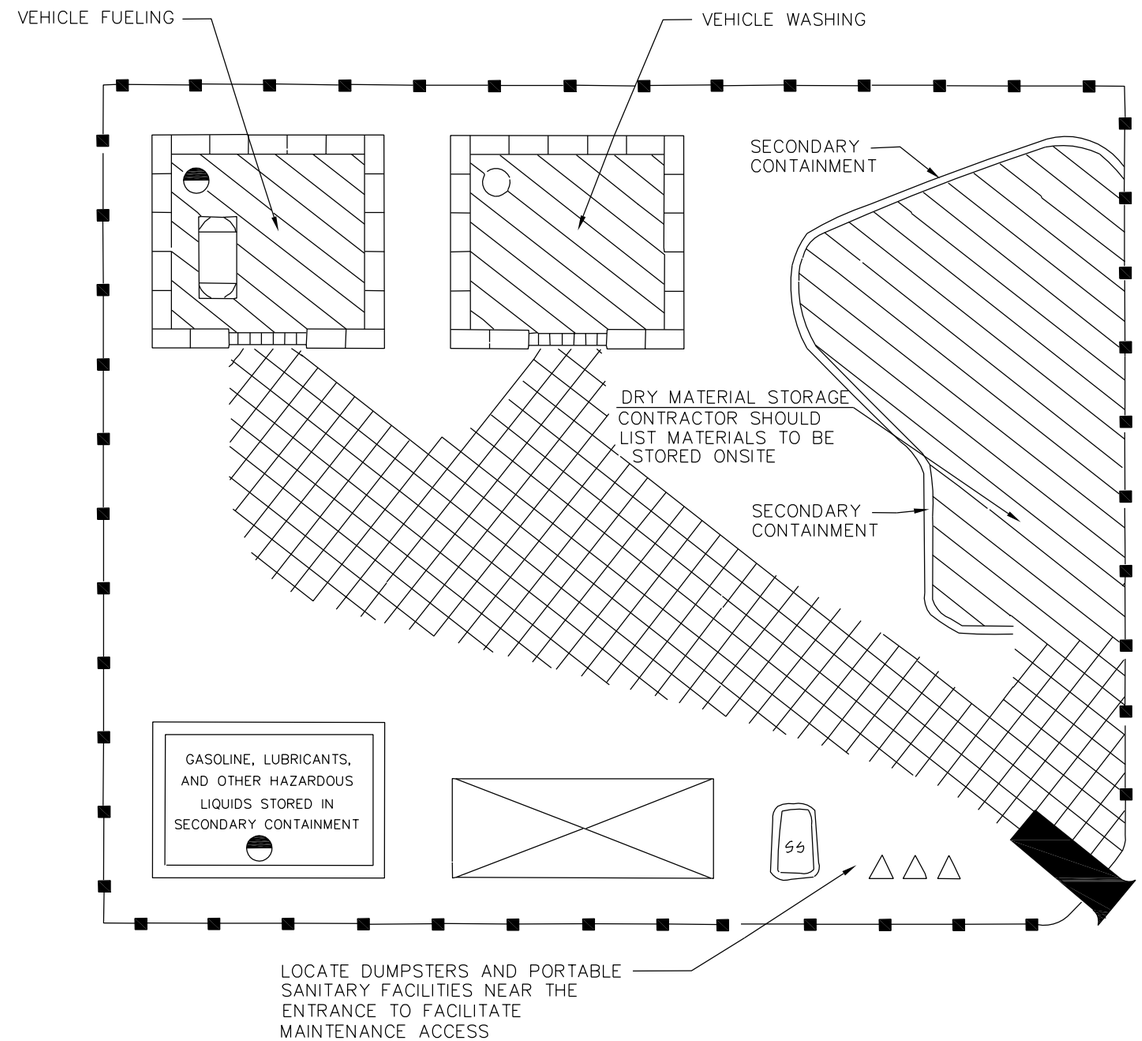
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

CU

EA

LEGEND

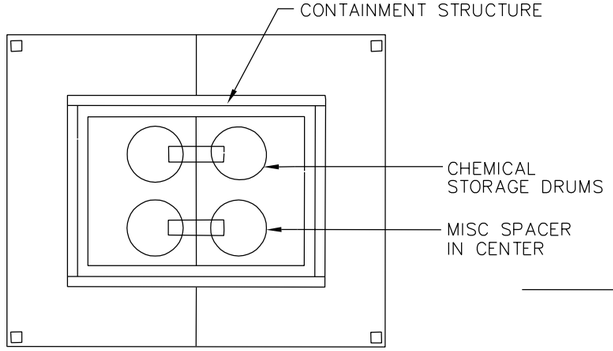
- COVERED STORAGE AREA
- PORTABLE SANITARY FACILITY CONSTRUTED TO RESIST TIPPING
- DUMPSTER
- STRAW BALE BARRIER OR GRAVEL BAG BARRIER
- ABSORBENT MATERIAL
- SUMP
- SILT FENCE AROUND ENTIRE PERIMETER
- STABLIZED CONSTRUCTION ENTRANCE
- STABILIZED CONSTRUCTION ROADWAY
- CONCRETE PAD OR OTHER IMPERVIOUS MATERIAL
- FUELING TANK WITH SECONDARY CONTAINMENT



SAMPLE CONTRACTOR'S CONSTRUCTION YARD

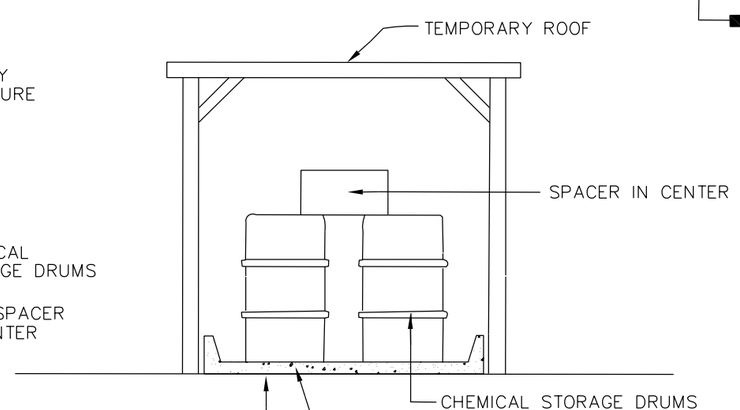
NO SCALE

NOTE: DO NOT COPY THIS SAMPLE ONTO PROJECT SPECIFIC DRAWINGS



PLAN

NO SCALE



CONCRETE SECONDARY CONTAINMENT STRUCTURE SPILL CONTAINMENT VOLUME TO CONTAIN PRECIPITATION FROM A 24-HR, 25-YR STORM EVENT PLUS THE GREATER OF 10% OF THE AGGREGATE VOLUME OF ALL CONTAINERS OR 100% OF THE CAPACITY OF THE LARGEST CONTAINER WITHIN ITS BOUNDARY, WHICHEVER IS GREATER.

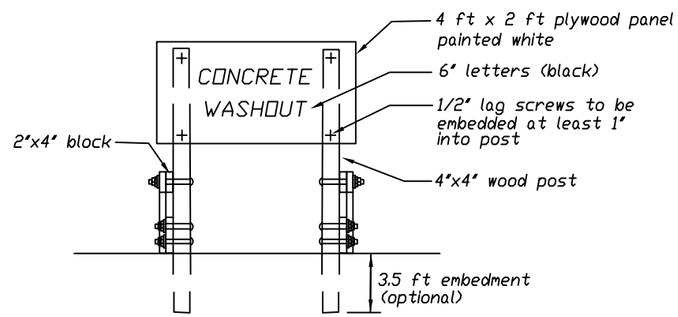
SECTION

NO SCALE

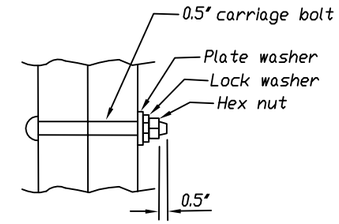
CHEMICAL STORAGE

WPCD-13

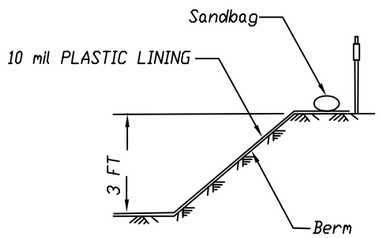
ZZZ CONSTRUCTION COMPANY	WATER POLLUTION CONTROL DRAWINGS CONSTRUCTION DETAILS				
DRAWN D.J.D.					
APPROVED	SIZE A	SCALE NONE	DATE 11/00	REV 0	SHEET 13 OF 14



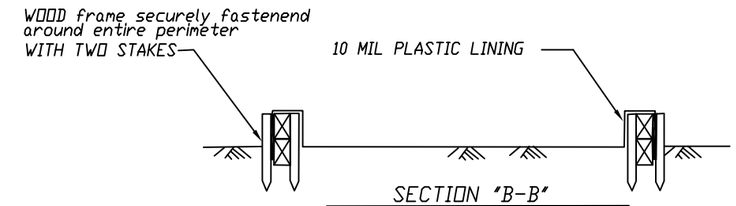
SIGN ELEVATION
NOT TO SCALE



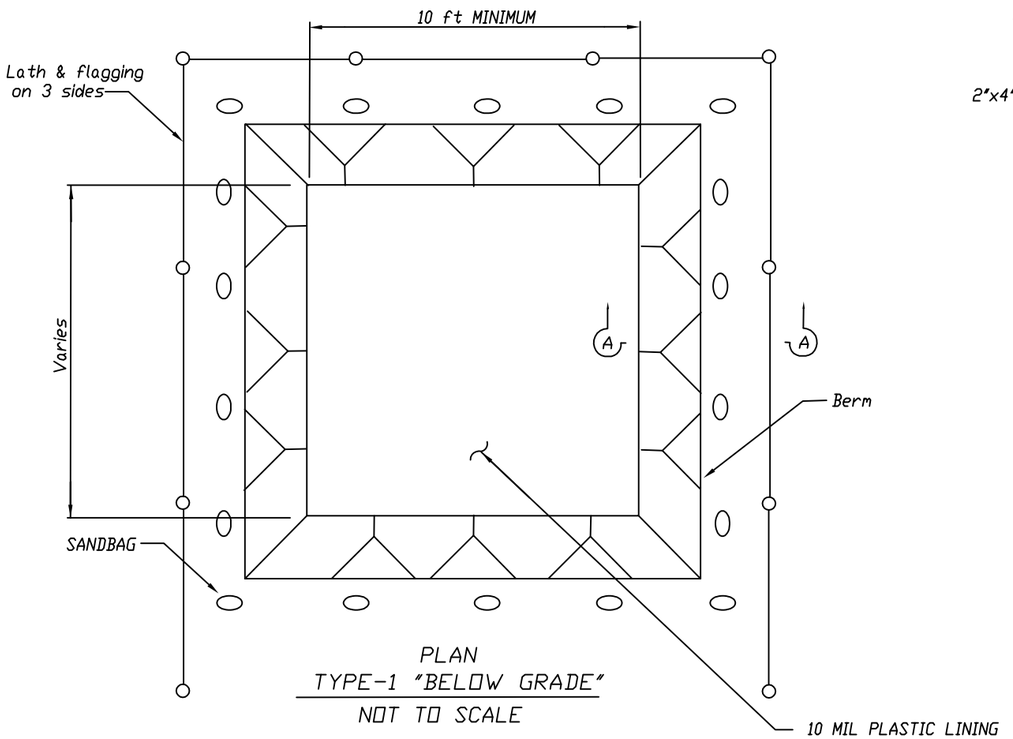
BOLT CONNECTION DETAIL
NOT TO SCALE



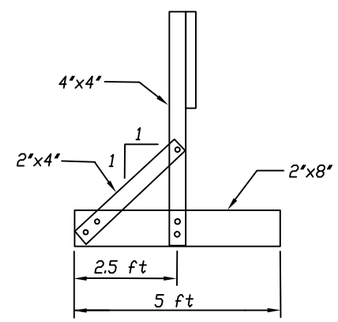
SECTION A-A

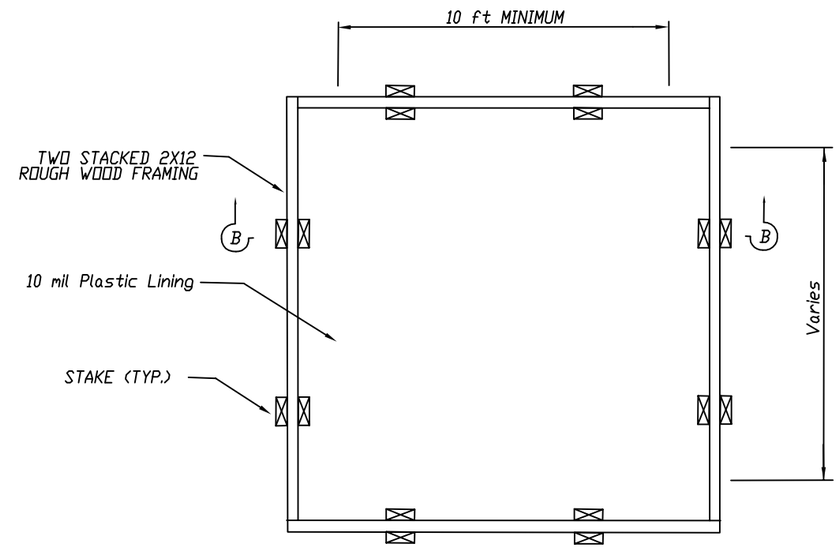


SECTION "B-B"
NOT TO SCALE



PLAN
TYPE-1 "BELOW GRADE"
NOT TO SCALE





PLAN
TYPE-2 "ABOVE GRADE"
NOT TO SCALE

WPCD-14

NOTE:

ACTUAL LAYOUT DETERMINED IN THE FIELD

THE CONCRETE WASHOUT SIGN (SEE PAGE 6) TO BE INSTALLED WITHIN 30 FT OF THE TEMPORARY CONCRETE WASHOUT FACILITY

ZZZ CONSTRUCTION COMPANY	WATER POLLUTION CONTROL DRAWINGS CONCRETE WASHOUT DETAILS (CONTRACTOR PROPOSED ALTERNATE)				
DRAWN D.J.D.					
APPROVED	SIZE A	SCALE NONE	DATE 11/00	REV 0	SHEET 14 OF 14

3.4.9 Attachment CC Water Pollution Control Best Management Practices List

The Water Pollution Control Best Management Practices List (WPCBMPL) provides by location and project phase/stage the necessacy BMPs for the project to be in compliance with the Construction General Permit. The WPCBMPL shall reflect the Contractor's phasing and/or construction staging, and shall address the entire scope of the contract work. The WPCBMPL provides field staff with both a list of necessay BMPs and estimated quantity for each BMP by location and phase/stage of the project.

The construction activity phases that the WPCBMPL may need to address are the Preliminary Phase, Grading Phase, Highway Construction Phase, and the Highway Planting / Erosion Control Establishment Phase. These phases are defined below.

Preliminary Phase (Pre-Construction Phase – Part of the Grading Phase)
Construction stage including rough grading/or disking, clearing and grubbing operations, or any soil disturbance prior to mass grading.

Grading Phase
Includes reconfiguring the topography for the project including; excavation for roadway including necessary blasting of hard rock, highway embankment construction (fills); mass grading, and stockpiling of select material for capping operations.

Highway Construction Phase
Highway construction phase includes both highway and structure construction. Highway construction includes final roadway excavation, placement of base materials and highway paving, finish grading, curbs, gutters and sidewalks, public utilities, public water facilities including fire hydrants, public sanitary sewer systems, storm drain systems and/or other drainage improvements, highway lighting, traffic signals and/or other highway electrical work, guardrail, concrete barriers, sign installation, pavement markers, traffic stripping and pavement markings. Structure construction includes structure footings, bridges, retaining walls, major culverts, overhead sign structures and buildings.

Highway Planting / Erosion Control Establishment Phase
Highway planting including clearing and grubbing operations, soil preparation (grading, incorporation of soil amendments, placement of topsoil), irrigation (trenching, installation, trench backfilling), minor grading (top dressing, fine grading lawn and ground cover areas), hardscaping, planting (seeding and planting of plants), mulch (application of wood chips or other mulches) and plant establishment (weeding, plant replacement and if needed: fertilizer application, irrigation maintenance, reapplication of mulch). Erosion control includes placement of permanent erosion control materials and maintenance of temporary sediment controls during the erosion control establishment period.

For the grading phase and highway construction phase, the WPCBMPL may need to include different stages to completely identify all required BMPs for each location. The stage construction sheets of the project plans may be used as the basis for identifying stages on the WPCBMPL.
The WPCBMPL, Water Pollution Control Drawings and Water Pollution Control Schedule provide the necessary tools for a contractor to plan and implement BMPs to meet the requirements of the project SWPPP. The BMPs listed on the WPCBMPL are the base line for site inspections and visual monitoring.

Prepare the Water Pollution Control Best Management Practices List (WPCBMPL) in conformance with the following instructions.

- ❑ Include a cover sheet(s) listing the BMPs that will be used.

- ❑ The WPCBMPL shall show by location the BMPs that will be used. The number of locations shown on the WPCBMPL shall be established so that field staff and inspectors can easily identify where BMPs need to be located. Typical project locations that should be listed on the WPCBMPL and clearly delineated on the WPCDs are:
  - at interchanges identify locations by quadrants
  - use ½ mile segments for mainline and provide both post mile and stationing identification
  - structures
  - city street or county road
  - contractor yard
  - staging area
  - batch plant or material crushing operation
  - list location for mobile BMPs such as pavement placement and grinding location as Mobile Operation
- ❑ The WPCBMPL shall reference appropriate WPCDs for each location.
- ❑ The WPCBMPL shall show the estimated disturbed soil area for each location.

List all construction site BMPs on the WPCBMPL. Include necessary additional information to convey site-specific configurations or BMP modifications. The WPCBMPL shall include:

- ❑ temporary soil stabilization and temporary sediment control BMPs that will be used during construction. Include temporary onsite drainage(s) to carry concentrated flows, BMPs implemented to divert off-site drainage around or through the construction site, and BMPs that protect stormwater inlets
- ❑ temporary construction entrances BMP for site ingress and egress points and any proposed temporary construction roads
- ❑ BMPs to mitigate or eliminate non-stormwater discharges
- ❑ BMPs for waste management and materials pollution control, including, but not limited to storage of soil or waste; construction material loading, unloading, storage and access areas; and areas designated for waste handling and disposal
- ❑ BMPs for vehicle and equipment storage, fueling, maintenance, and cleaning

A sample format with required information for the WPCBMPL is shown on the following pages.

Attachment BB
Water Pollution Control Best Management Practices List

PROJECT NAME AND SITE ADDRESS Route 55/91 Interchange	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER
CONTRACTOR NAME AND SITE ADDRESS	PROJECT SITE RISK LEVEL ☑ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3

Water Pollution Control Best Management Practices List (WPCBMPL)

Project Phases included in WPCBMPL	Project Stages included in WPCBMPL
☐ Preliminary Phase	☐ 1 Stage
☐ Grading Phase	☑ 2 Stages
☑ Highway Construction Phase	☐ 3 Stages
☐ Highway Planting / Erosion Control Phase	☐ 4 Stages

Project Required BMP	Best Management Practice (BMP}	BMP ID	Total Quantity Required
	TEMPORARY SOIL STABILZATION		
☑	Preservation of Existing Vegetation	SS-02	3.8 acre
☐	Hydraulic Mulch	SS-03	
☑	Hydroseeding	SS-04	1.4 acre
☑	Geotextiles, Mats, Plastic Covers, and Erosion Control Blankets	SS-07	5600 sq ft
☑	Earth Dikes/Drainage Swales and Lined Ditches	SS-09	1000 lf
☐			
	TEMPORARY SEDIMENT CONTROL		
☑	Silt Fence	SC-01	600 lf
☑	Sediment/Distilling Basin	SC-02	2200 soft
☑	Fiber Rolls	SC-05	3600 lf
☑	Gravel Bag Berm	SC-06	600 lf
☑	Storm Drain Inlet Protection	SC-10	6
☐			

Page 1 of 6

Water Pollution Control Best Management Practices List

PROJECT NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER

Water Pollution Control Best Management Practices List

Project Required BMP	Best Management Practice (BMP)	BMP ID	Total Quantity Required
	WIND EROSION CONTROL		
☑	Wind Erosion Control	WE-01	
	TRACKING CONTROLS		
☑	Stabilized Construction Entrance/Exit	TC-01	2
	NON-STORMWATER MANAGEMENT		
☑	Water Conservation Practices	NS-01	1
☑	Illicit Connection/Illegal Discharge Detection and Reporting	NS-06	1
☑	Vehicle and Equipment Fueling	NS-09	1
☑	Vehicle and Equipment Maintenance	NS-10	1
☐			
	WASTE MANAGEMENT AND POLLUTION CONTROL		
☑	Stockpile Management	WM-03	4
☑	Spill Prevention and Control	WM-04	1
☑	Solid Waste Management	WM-05	1
☑	Concrete Waste Management	WM-08	2
☑	Sanitary/Septic Waste Management	WM-09	4 toilets
☐			

Page 2 of 6

Attachment BB
Water Pollution Control Best Management Practices List

PROJECT NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER

No.	Water Pollution Control Best Management Practices List			
1	Location: Contractor's Yard	Project Phase: All Stage:	Location shown on WPCD sheet number: WPCD #2	Disturbed Soil Area: 1.0 acres
	Best Management Practice (BMP)		**BMP ID**	**Quantity Required**
	Spill Prevention and Control: Spill control materials		WM-4	1.0
	Sanitary/Septic Waste Management: Portable toilets w/wash station		WM-9	2.0
	Vehicle and Equipment Fueling: South end of yard		NS-9	1.0
	Vehicle and Equipment Maintenance: South end of yard		NS-10	1.0
	Concrete Waste Management: Watertight bin		NS-8	1.0
	Stockpile Management: SW corner of yard		WM-3	3
	Solid Waste Management: Roll of bin		WM-5	1.0
	Plastic Cover: Cover for stockpiles		SS-7	2600 sq ft
	Fiber rolls: Stockpile perimeter control		SC-5	300 lf
	Stabilized Construction Entrance/Exit		TC-01	1

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Attachment BB
Water Pollution Control Best Management Practices List

PROJECT NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER

No.	Water Pollution Control Best Management Practices List			
2	Location: Route 55/91 Interchange (NW quadrant)	Project Phase: Highway Const. Stage: 01	Location shown on WPCD sheet number: WPCD #03	Disturbed Soil Area: 0.7acres
	Best Management Practice (BMP)		**BMP ID**	**Quantity Required**
	Preservation of Existing Vegetation		SS-2	3.8 acre
	Stabilized Construction Entrance/Exit		TC-01	1
	Sanitary/Septic Waste Management: Portable toilets w/wash station		WM-9	2 toilets
	Storm Drain Inlet Protection		SC-10	6
	Stockpile Management		WM-3	1
	Fiber Rolls: Stockpile perimeter control		SC-5	300 lf
	Plastic Cover: Cover for stockpiles		SS-7	3000 soft
	Hydroseeding		SS-4	0.7 acre
	Silt Fence: Perimeter control		SC-1	600 lf
	Drainage Swales: Divert run-on to sediment basin		SS-9	1000 lf
	Sediment/ Distilling Basin		SC-2	800 sq ft
	Concrete Waste Management: Watertight bin		WM-8	1

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Attachment BB
Water Pollution Control Best Management Practices List

PROJECT NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER

No.	Water Pollution Control Best Management Practices List			
3	Location: Route 55/91 Interchange (NW quadrant)	Project Phase: Highway Const. Stage: 02	Location shown on WPCD sheet number: WPCD #04	Disturbed Soil Area: 0.7acres
	Best Management Practice (BMP)		**BMP ID**	**Quantity Required**
	Preservation of Existing Vegetation		SS-2	3.8 acre
	Stabilized Construction Entrance/Exit		TC-01	1
	Sanitary/Septic Waste Management: Portable toilets w/wash station		WM-9	2 toilets
	Storm Drain Inlet Protection		SC-10	6
	Stockpile Management		WM-3	1
	Fiber Rolls: Stockpile perimeter control		SC-5	300 lf
	Plastic Cover: Cover for stockpiles		SS-7	3000 soft
	Hydroseeding: Reapplication required		SS-4	0.7 acre
	Fiber Rolls: On slopes		SC-5	3000 lf
	Gravel Bags: Divert run-on from northeast to natural drainage		SC-6	600 lf
	Sediment/ Distilling Basin: Enlarge basin		SC-2	1400 sq ft
	Concrete Waste Management: Watertight bin		WM-8	1

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Attachment BB
Water Pollution Control Best Management Practices List

PROJECT NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER

No.	Water Pollution Control Best Management Practices List			
4	Location: Various	Project Phase: Highway Const. Stage: 01-02	Location shown on WPCD sheet number: WPCD #None	Disturbed Soil Area: 0.0acres
	Best Management Practice (BMP)		**BMP ID**	**Quantity Required**
	Wind Erosion:		WE-01	N/A
	Illicit Connection/Illegal Discharge Detection and Reporting:		NS-06	N/A

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3.4.10 Attachment DD Water Pollution Control Schedule

The Water Pollution Control Schedule (WPCS) is the component of the project SWPPP that shows the timeline for when BMPs will be installed so that the project is in compliance with the Construction General Permit. The WPCS provides field staff with the information necessary to plan for adequate materials and crews to install BMPs at the right time so that they are effective. The Water Pollution Control Schedule ,Water Pollution Control Best Management List, and Water Pollution Control Drawings provide the necessary tools for a contractor to plan and implement BMPs to meet the requirements of the project SWPPP.

The WPCS shall be a graphical project schedule. The project schedule may be used for the WPCS if the project schedule includes all WPCS requirements. The schedule shall contain an adequate level of detail to show major activities sequenced with implementation of construction site BMPs, including:

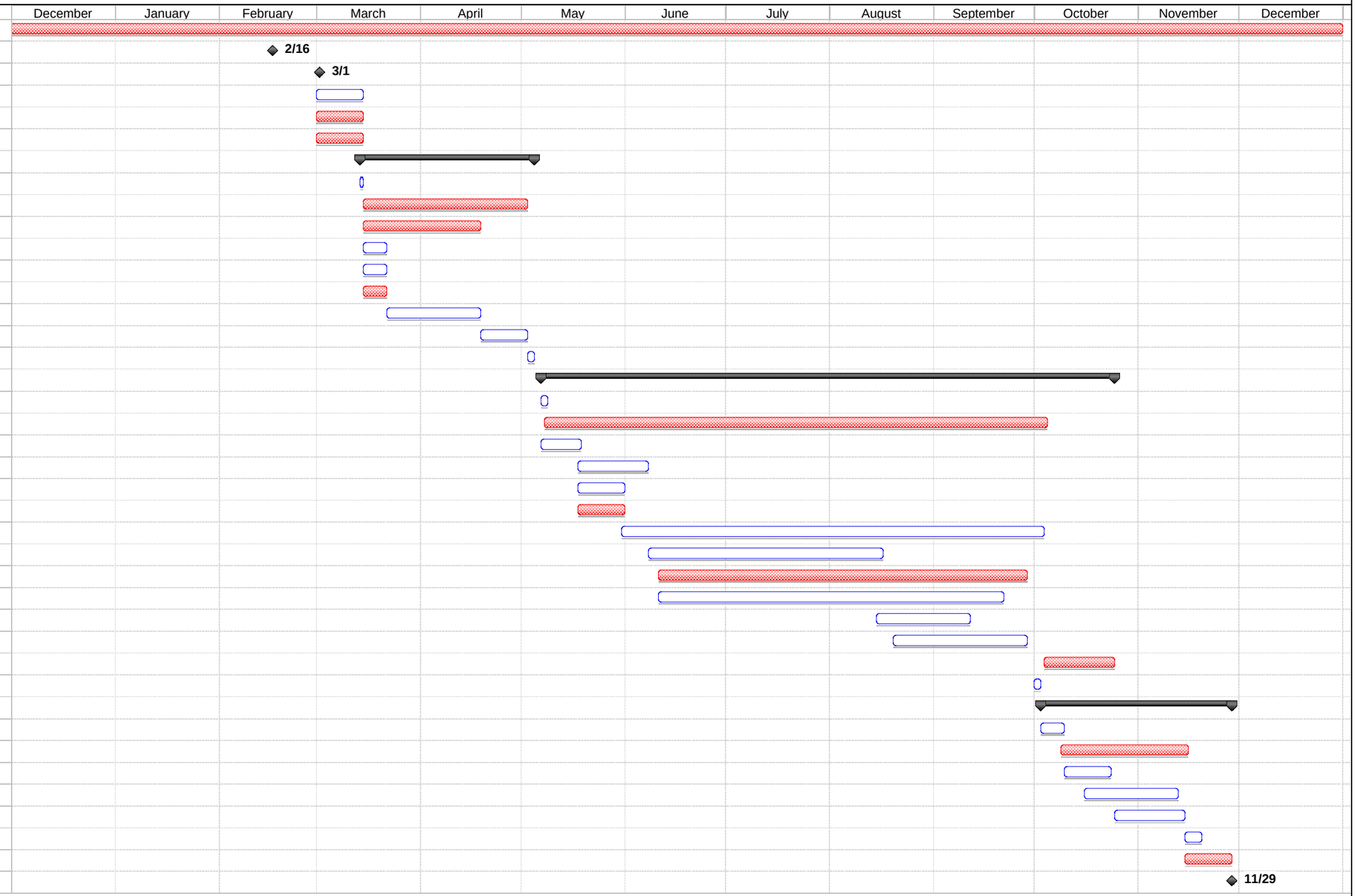
- project start and finish dates, including each stage of the project
- SWPPP review and approval
- annual certifications
- mobilization dates
- mass clearing and grubbing/roadside clearing dates
- major grading/excavation dates
- special dates named in other permits such as Fish and Game and Army Corps of Engineers Permits
- dates for submittal SWPPP Amendments required by the contract specifications
- implementation schedule by location for deployment of:
    - temporary soil stabilization BMPs
    - temporary sediment control BMPs
    - wind erosion control BMPs
    - tracking control BMPs
    - non-stormwater BMPs
    - waste management and materials pollution control BMPs
- paving, saw-cutting, and any other pavement related operations
- major planned stockpiling operations
- dates for other significant long-term operations or activities that may cause non-stormwater discharges such as dewatering, grinding, etc.
- final stabilization activities staged over time for each area of the project

Projects located in the Lake Tahoe, Truckee River, East Fork Carson River, or West Fork Carson River Hydrologic Units, and projects above 5,000 ft in elevations in the portions of Mono County or Inyo County within the Lahontan RWQCB are not allowed to perform removal of vegetation nor disturbance of existing ground surface conditions between October 15 of each year

and May 1 of the following year; except when there is an emergency situation that threatens the public health or welfare, or when the project is granted a variance by the RWQCB Executive Officer.

SAMPLE
WATER POLLUTION CONTROL IMPLEMENTATION SCHEDULE

ID	Task Name
1	Rainy Season
2	SWPPP Approved
3	**Project Start Date**
4	Mobilization
5	Construct Material/Waste Storage Facilities
6	Construct Stabilized Access
7	**Add Temporary Lane in Median (Sta 400-900)**
8	Install Median K-rail
9	Install/Maintain Temporary Sediment Controls
10	Install/Maintain Temporary Soil Stabilization
11	Demolish Median
12	PCC Sawcutting
13	Non-storm water BMPs for Sawcutting
14	Median Grading
15	Median Base/ AC Paving
16	Restripe Mainline, Remove K-rail
17	**Lane Addition (Sta 500-800)**
18	Install K-rail and Traffic Control
19	Install/Maintain Temporary Sediment Controls
20	Clearing/Grubbing
21	Demolition
22	PCC Sawcutting
23	Non-storm water BMPs for Sawcutting
24	Grading
25	Drainage
26	Install/Maintain Temporary Concrete Washouts
27	Sound Wall Construction
28	Base
29	PCC Paving
30	Permanent Erosion Control/Landscaping
31	Restripe Mainline, Remove K-rail
32	**Remove Temporary Median Lane**
33	Install K-Rail and Traffic Control
34	Install/Maintain Temporary Sediment Controls
35	Demolition
36	Grading
37	Drainage
38	Remove K-rail
39	Install Permanent Erosion Control Type D
40	Project Completion



Implementation of Construction Site BMPs shown in red

Task | Progress | Summary | External Tasks | Deadline
Split | Milestone | Project Summary | External Milestone

3.4.11 Attachment EE Stormwater Sampling Locations

The *Construction Site Monitoring Program Guidance Manual* provides instructions on determining potential stormwater sampling locations to be shown on Attachment EE.

The format of Attachment EE should follow the sample shown on the following pages.

Attachment EE
Stormwater Sampling Locations

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:	Project Site Risk Level:
		☐ Risk Level 1
	Project Identifier Number	☐ Risk Level 2
		☐ Risk Level 3

STORMWATER SAMPLING LOCATIONS

Project Site Non-Visible Pollutant Sampling Locations

Location No	Location	Pollutant Source	Pollutant	Water Quality Indicator Constituent

Instruction: Include the following Table for Risk Level 2 and Risk Level 3 projects. Delete the Table for Risk Level 1 projects.

Project Site Discharge Sampling Locations for Turbidity and pH

Location No	Location	Drainage Area (acres)	Disturbed Soil Area (acres)	Percentage of Drainage Area that is Disturbed Soil Area (%)	Are there construction activities that may affect pH of stormwater discharges?
					☐ Yes ☐ No
					☐ Yes ☐ No
					☐ Yes ☐ No

Attachment EE
Stormwater Sampling Locations

Project Name	Contract Number/Co/Rte/PM	Project Identifier Number

STORMWATER SAMPLING LOCATIONS CONTINUED

Instruction: Include the following Table for Risk Level 2 and Risk Level 3 when project site has discharge locations that discharge directly to a receiving water. Delete the Table for Risk Level 1 projects.

Receiving Water Sampling Locations for Turbidity and pH When Project Site Discharges Directly To The Receiving Water

Location No	Location	Drainage Area (acres)	Disturbed Soil Area (acres)	Percentage of Drainage Area that is Disturbed Soil Area (%)	Construction Activities That May Affect pH of Stormwater Discharges?
					☐ Yes ☐ No
					☐ Yes ☐ No

Instruction: Include the following Table for All Risk Levels. Delete the Table for Risk Level 1 projects.

Project Site Run-on Sampling Locations

Location No.	Location	Run-on May Affect Water Quality Discharged at Project Site Discharge Location No.	Is there any off-site disturbed soil area that could affect run-on water quality?	Are there any off-site pollutants identified that could affect run-on water quality?	Identified Potential Off-site Pollutants
			☐ Yes ☐ No	☐ Yes ☐ No	
			☐ Yes ☐ No	☐ Yes ☐ No	

Attachment EE
Stormwater Sampling Locations

Project Name	Contract Number/Co/Rte/PM	Project Identifier Number

STORMWATER SAMPLING LOCATIONS CONTINUED

Instruction: Include the following Table for All Risk Level 3 projects. Delete the Table for Risk Level 1 and Risk Level 2 projects.

Receiving Water Sampling Locations

Location No.	Location	Project Site Discharge Location No.	Discharges from this project site discharge location do not reach receiving water?
			☐ Yes ☐ No
			☐ Yes ☐ No

Instruction: Include the following Table for All Risk Levels when dewatering will be performed on the project site. Delete the Table if there is no dewatering planned for the project site.

Project Site Dewatering Sampling Locations

Location No	Location	Dewatering Permit?	Pollutant From Construction Activity	Water Quality Indicator Constituent
		☐ Yes ☐ No		

Instruction: Include the following Table for Risk Level 3 when an active treatment system will be used on the project site. Delete the Table if active treatment system is planned to be used on the project site.

Active Treatment System (ATS) Sampling Locations

Location No	Location	Chemical/Additive Used in Active Treatment System	Residual Chemical/Additive Indicator Constituent

3.5 SWPPP APPENDICES

3.5.1 SWPPP Appendices A – Z

SWPPP Appendices A-B and D-Z contain Caltrans forms used to document and report information necessary for SWPPP implementation. A copy of these documents must be included in the SWPPP binder; and a file containing Appendices A-B and D-Z is available for Contractors to download at Caltrans Web site at:

http://www.dot.ca.gov/hq/construc/stormwater/templates.htm

For implementing the SWPPP the contractor must use the most recent Caltrans forms available at:

http://www.dot.ca.gov/hq/construc/forms.htm

The following appendices are to be included in the SWPPP:

Appendix A	CEM-2008 SWPPP/WPCP Amendment and Certification Form
Appendix B	CEM-2009 SWPPP/WPCP Amendment Log Form
Appendix C	CEM-2070 SWPPP/WPCP Annual Certification OF Compliance Form
Appendix D	Subcontractor/Material Supplier Notification Letter and Contact Information
Appendix E	CEM-2023 Stormwater Training Record Form
Appendix F	CEM-2024 Stormwater Training Log Form
Appendix G	CEM-2030 Stormwater Site Inspection Report
Appendix H	CEM-2034 Stormwater Best Management Practices Status Report Form
Appendix I	CEM-2035 Stormwater Site Inspection Report Corrective Actions Summary
Appendix J	CEM-2040 Weather Forecast Monitoring Form
Appendix K	CEM-2041 Weather Monitoring Form
Appendix L	CEM-2045 Rain Event Action Plan Highway Construction Phase
	CEM-2046 Rain Event Action Plan Plant Establishment Phase
	CEM-2047 Rain Event Action Plan For Inactive Project
Appendix M	CEM-2061 Notice of Discharge Report Form
Appendix N	CEM-2048 Storm Event Sampling and Analysis Plan
Appendix O	CEM-2049 Qualifying Rain Event Sampling and Analysis Plan
Appendix P	CEM-2055 Stormwater Equipment Maintenance Log Form
Appendix Q	CEM-2056 Stormwater Turbidity Meter Calibration Record Form

Appendix R	CEM-2057 Stormwater pH Meter Calibration Record Form
Appendix S	CEM-2058 Stormwater Meter Calibration Record Form
Appendix T	CEM-2050 Sample Information, Identification, and Chain of Custody Record Form
Appendix U	CEM-2051 Stormwater Sampling and Testing Activity Log
Appendix V	CEM 2052 Stormwater Sample Field Test Report Form
Appendix W	CEM-2054 Stormwater Sample Laboratory Test Report Form
Appendix X	CEM-2062 NAL Exceedance Report Form
Appendix Y	CEM-2063 NEL Violation Report Form
Appendix Z	CEM-2065 Notice of Discharge Log Form

Appendix D shall include a sample subcontractor/material supplier SWPPP notification letter. All subcontractors and material suppliers shall be notified that the project is covered by the following permits issued by the California State Water Resources Control Board:

- SWRCB Order No. 99-06-DWQ, NPDES No. CAS000003 ("Permit"), National Pollutant Discharge Elimination System (NPDES) Permit, Statewide Storm Water Permit and Waste Discharge Requirements (WDRs) for the State of California, Department of Transportation. July 15, 1999.
- SWRCB Order No. 2009-0009-DWQ, NPDES General Permit No. CAS000002, National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, September 02. 2009.

Each subcontractor and material supplier shall also be notified that the project has a SWPPP and the pertinent water pollution control best management practices that the subcontractor or material supplier must comply with. A sample notification letter is shown on the next page.

Appendix D shall also contain the log to be used to record subcontractor and material supplier notification and contact information.

Contact information for each subcontractor will be provided in SWPPP Notification log in SWPPP file category 20.21 Subcontractor Notification Letters and Contact Information. Contact information shall include subcontractor name, type of work performed, contact name, phone number and emergency telephone number (24/7).

Contact information for each material supplier will be provided in SWPPP Notification log in SWPPP file category 20.22 Material Supplier Notification Letters and Contact Information. Contact information shall include company name, type of material supplied, contact name and phone number.

Appendix A CEM-2008 SWPPP Amendment and Certification Form

- Required for projects with either a Stormwater Pollution Prevention Plan (SWPPP) to document amendments approval.
- Caltrans, Local and private agencies have a legally responsible person (LRP) to authorize the project resident engineer to be Approved Signatory for SWPPP approval.

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:
Contractor Name and Address:	Project Site Risk Level: ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3

Stormwater Pollution Prevention Plan (SWPPP) / Water Pollution Control Program (WPCP) Amendment No.___

Contractor Water Pollution Control Manger Signature	Date
Contractor Water Pollution Control Manger Name	Telephone Number

Contractor Certification of SWPPP/WPCP Amendment

"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."

Contractor Signature	Date
Contractor Name	Telephone Number
Title	

Resident Engineer Approval/Acceptance of SWPPP/WPCP Amendment

"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."

Resident Engineer Signature	Date of Amendment Approval/Acceptance
Resident Engineer Name	Telephone Number

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:
Contractor Name and Address:	Project Site Risk Level: ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3

Stormwater Pollution Prevention Plan (SWPPP) /

Water Pollution Control Program (WPCP)

Amendment No.___

Required for Private Entity Administered Projects

"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."

Legally Responsible Person Signature	Date
Legally Responsible Person Name	Telephone Number
Title	

Required for Local Agency/ Private Entity Administered Project

Caltrans Oversight Engineer's Concurrence With SWPPP/WPCP Amendment

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

Oversight Engineer Signature	Date of Amendment Concurrence
Oversight Engineer Name	Telephone Number

Form instructions are currently being developed based on form review comments.

GENERAL INFORMATION

- The information shown on this form is required for projects with either a Stormwater Pollution Prevention Plan

(SWPPP) or Water Pollution Control Program (WPCP) to document amendments acceptance/approval.

- Stormwater Pollution Prevention Plan (SWPPP) amendments must be approved by a Legally Responsible Person or Approved Signatory approved by the LRP.
  - For Caltrans the LRP is the District Director. The LRP may authorize the project resident engineer to be Approved Signatory.
  - For a local agency the LRP is either a principal executive officer or ranking elected official. The local agency LRP may authorize the project resident engineer to be the Approved Signatory.
  - For a private entity performing work in the State right-of-way under an encroachment permit the LRP must be one of the following:
    a. For a corporation: a responsible corporate officer.
    b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively.
    The private entity LRP may not authorize an Approved Signatory.
- Attach a completed copy of this form to each SWPPP/WPCP amendment and include in SWPPP Attachment AA or WPCP Attachment C.

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FORM

- Contract Number/Co/Rte/PM: For local agency encroachment permit projects write the encroachment permit number in the Contract Number field.
- Project Identifier Number: Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number write N/A in the field.
- WDID Number: For projects that have Water Pollution Control Program (WPCP) enter “WPCP” in this field.
- Project Site Risk Level: Check the box for the appropriate SWPPP risk level.

Appendix B CEM-2009-SWPPP Amendment Log Form

- Required for projects with either a Stormwater Pollution Prevention Plan (SWPPP) to document approved amendments.
- To be approved by the Resident Engineer.

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:
Contractor Name and Address:	Project Site Risk Level: ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
Submitted by Contractor (Print Name and Sign):	Date:

AMENDMENTS LOG

Amendment Number	Date	Brief Description of Amendment	Requested By	Approval Date

Page __ of __

Form instructions are currently being developed based on form review comments.

GENERAL INFORMATION

- The information shown on this form is required for projects with either a Stormwater Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP) to document amendments.
- Attach a completed copy of this form to each approved SWPPP/WPCP amendment and include in SWPPP Attachment DD or WPCP Attachment C.

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FORM

- Contract Number/Co/Rte/PM: For local agency encroachment permit projects write the encroachment permit number in the Contract Number field.
- Project Identifier Number: Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number write N/A in the field.
- WDID Number: For projects with Water Pollution Control Program (WPCP) enter "WPCP" in this field.
- When SWPPP or WPCP amendments are approved by the Resident Engineer enter:

6. The Amendment Number
7. Date
8. Brief description of the amendment
9. Name and title of person who requested the amendment
10. Approval date by the Resident Engineer

-

Appendix C CEM-2070 SWPPP Annual Certification of Compliance Form

- To be submitted to Caltrans for Annual Compliance.
- Ensures that the project site and activities are in compliance with the NPDES General permit for storm water dischargers.
- Ensures that water pollution control measures are being implemented in accordance with the SWPPP.

Project Information Name and Site Address	Contract Number/Co/Rte/PM	
	Project Identifier Number	
	WDID Number:	
Contractor Name and Address	Project Site Water Pollution Control ☐ WPCP ☐ SWPPP	SWPPP Project Site Risk Level ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3

Stormwater Pollution Prevention Plan (SWPPP) / Water Pollution Control Program (WPCP) Annual Certification of Compliance

Water Pollution Control Manager Certification

This certification for the project site is based on an inspection of the project site conducted on (date)

"I certify based on my inspection of the project site that:"

☐ Yes ☐ No Water pollution control measures are being implemented in accordance with the SWPPP or WPCP approved for the project, including approved SWPPP/WPCP amendments.

☐ Yes ☐ No The project site and activities thereon are in compliance with the Caltrans Statewide NPDES Permit No. CAS000003, the NPDES General Permit for Storm water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-00009-DWQ, NPDES Permit No. CAS000002, or local NPDES permit, whichever is applicable.

Contractor Water Pollution Control Manger Signature	Date
Contractor Water Pollution Control Manger Name	Telephone Number

Contractor Annual Certification of Compliance

"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."

Contractor Signature	Date
Contractor Name	Telephone Number
Title	

Project Information Name and Site Address	Contract Number/Co/Rte/PM	
	Project Identifier Number	
	WDID Number	
Contractor Name and Address	Project Site Water Pollution Control ☐ WPCP ☐ SWPPP	SWPPP Project Site Risk Level ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3

Stormwater Pollution Prevention Plan (SWPPP) /

Water Pollution Control Program (WPCP)
Annual Certification of Compliance

Required for Private Entity Administered Projects

Private Entity Legally Responsible Person Annual Certification of Compliance

"I certify that the project is in compliance with the project site approved Stormwater Pollution Prevention Plan or Water Pollution Control Program including approved amendments. The project site and activities thereon are in compliance with the Caltrans Statewide NPDES Permit No. CAS000003, the NPDES General Permit for Storm water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-00009-DWQ, NPDES Permit No. CAS000002, or local NPDES permit, whichever is applicable.

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."

Legally Responsible Person Signature	Date
Legally Responsible Person Name	Telephone Number
Title	

Project Information Name and Site Address	Contract Number/Co/Rte/PM
	Project Identifier Number
	WDID Number

Resident Engineer Approval of Annual Certification of Compliance

An inspection of the project site for annual certification of compliance was conducted on (date)	Annual Certification of Compliance project site inspection conducted by

"I certify that I and /or personnel acting under my direction and supervision, have inspected the project site and find the following:"

☐ Yes ☐ No Water pollution control measures are being implemented in accordance with the SWPPP or WPCP approved for the project, including approved SWPPP/WPCP amendments.

☐ Yes ☐ No The project site and activities thereon are in compliance with the Caltrans Statewide NPDES Permit No. CAS000003, the NPDES General Permit for Storm water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-00009-DWQ, NPDES Permit No. CAS000002, or local NPDES permit, whichever is applicable.

The box above is checked "no" based on the project site annual certification inspection and the following corrective actions are necessary for the project to be in compliance with SWPPP/WPCP or NPDES Permits:

"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, 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."

Resident Engineer Signature	Date of Approval
Resident Engineer Name	Telephone Number

Required for Local Agency/ Private Entity Administered Project

Caltrans Oversight Engineer's Concurrence With Annual Certification of Compliance

I, and/or personnel acting under my direction and supervision, have reviewed this Annual Certification of Compliance and concur that the project is in compliance with SWPPP or WPCP approved for the project, including approved SWPPP/WPCP amendments, and applicable NPDES Permits.

Oversight Engineer Signature	Date of Concurrence
Oversight Engineer Name	Telephone Number

GENERAL INFORMATION

- By July 15 of each year, an Annual Certification of Compliance is required for projects with either a Stormwater Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP)

- The project site inspection for annual certification should be documented on form CEM-2030 Stormwater Site Inspection Report
- Stormwater Pollution Prevention Plan (SWPPP) Annual Certification of Compliance must be certified by a Legally Responsible Person (LRP) or Approved Signatory approved by the LRP.
  - For Caltrans the LRP is the District Director. The LRP may authorize the project resident engineer to be Approved Signatory.
  - For a local agency the LRP is either a principal executive officer or ranking elected official. The local agency LRP may authorize the project resident engineer to be the Approved Signatory. If the local agency LRP has not approved the local agency resident engineer to be an approved signatory then the local agency LRP must sign in the resident engineer signature box in section Resident Engineer Approval of Annual Certification of Compliance.
  - For a private entity performing work in the State right-of-way under an encroachment permit the LRP must be one of the following:
    a. For a corporation: a responsible corporate officer.
    b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively.
    The private entity LRP may not authorize an Approved Signatory.
- A completed copy of this form shall be filed in SWPPP/WPCP file category 20.70 Annual Certification of Compliance.

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FORM

- Contract Number/Co/Rte/PM: For local agency encroachment permit projects write the encroachment permit number in the Contract Number field.
- Project Identifier Number: Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number write N/A in the field.
- WDID Number: For projects that have Water Pollution Control Program (WPCP) enter “WPCP” in this field.
- Project Site Water Pollution Control: Check appropriate box for Water Pollution Control Program (WPCP) or Stormwater Pollution Prevention Plan.
- SWPPP Project Site Risk Level: Check the box for the appropriate SWPPP risk level.

Appendix D Subcontractor/Material Supplier Notification Letter and Contact Information

ABC Construction Inc., [*Date]*
123 Rock Road
Rock City, CA 90000

Dear Sir/Madam,

Be advised that this project must comply with the requirements of Order No. 99-06-DWQ, NPDES No. CAS000003 ("Permit"), National Pollutant Discharge Elimination System (NPDES) Permit, Statewide Storm Water Permit and Waste Discharge Requirements (WDRs) for the State of California, Department of Transportation, adopted by California State Water Resources Control Board (SWRCB) on July 15, 1999. This project must also comply with the requirements of Order No. 2009-0009-DWQ, NPDES General Permit No. CAS000002, National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, adopted by SWRCB on September 02. 2009.

[Contractor] has developed a Storm Water Pollution Prevention Plan (SWPPP) in order to implement the requirements of the Permits. Be aware of and comply with the following water pollution control Best Management Practices (BMPs) [*use one of the following* 1) related to your work on 2) when delivering materials to] the project site:

- [*insert list of BMPs*]

You are required to comply with the SWPPP and Permits for any work that you perform on the project site. Any person who violates condition of the Permits may be subject to substantial penalties in accordance with state and federal law. You are encouraged to advise each of your employees working on the project site of the requirements of the SWPPP and the Permits. All employees prior to working on the project site must have completed basic water pollution control training that includes water pollution control laws and regulations and implementation and maintenance requirements for water pollution control Best Management Practices (BMPs).

A copy of the Permits and project SWPPP are available for your review at the construction office. If you have further questions contact me at [*email address*] or [*phone number*].

Sincerely,

John Doe
Project Superintendent

Appendix D SWPPP Notification Log

CONTRACT NUMBER/CO/RTE/PM	PROJECT IDENTIFIER NUMBER	WDID NUMBER	DATE

☐ **SUBCONTRACTOR SWPPP NOTIFICATION LOG**

☐ **MATERIAL SUPPLIER SWPPP NOTIFICATION LOG**

Log No.	Subcontractor / Materials Supplier Name	Subcontractor / Materials Supplier Address	Type of Work Performed / Material Supplied	Contact Name Email Address	Phone Number	24/7 Phone Number	Date Notification Letter Sent
1	ABC Rock	16923 Rock Road Rock Valley, CA 90000	Rock	Rocky Rocky@dot.ca.gov	916-227-7314	916-227-7314	02/09/10

Appendix E CEM-2023 Stormwater Training Record Form

- To be submitted to Caltrans for annual compliance.
- To document stormwater training for all employees with compliance with the construction general permit and contract specifications.
- To ensure review and record keeping of stormwater training logs.

Project Information Name and Site Address	Contract Number/Co/Rte/PM
	Project Identifier Number
	WDID Number
Contractor Name and Address	Project Site Risk Level ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
Submitted by Contractor (Print Name and Sign):	Date:

STORMWATER TRAINING RECORD

Training Course Title / Specific Training Objective	Location	Date of Training
Stormwater Topic(s) ☐ Temporary Soil Stabilization ☐ Temporary Sediment Control ☐ Tracking Controls ☐ Wind Erosion Control ☐ Non-stormwater Management ☐ Stormwater Discharge Sampling ☐ Waste Management and Materials Pollution Control ☐ Spill Prevention and Control ☐ BMPs required for Work Activities Current Week ☐ Stormwater Pollution Prevention Plan ☐ Water Pollution Control Program	Instructor Name Instructor Title Phone Course Length (hours)	Type of Training ☐ Formal ☐ Informal Training Audience ☐ General ☐ BMPs ☐ SWPPP

ATTENDEE ROSTER

Name	Company	Phone

Project Information Name and Site Address	Contract Number/Co/Rte/PM
	Project Identifier Number
	WDID Number

ATTENDEE ROSTER

Name	Company	Phone

Review and Record Keeping

Training information has been entered into the Stormwater Training Log?

☐ Yes ☐ No

I have reviewed this document and based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is, true accurate, and complete.

Water Pollution Control Manager (Name):	Date

Water Pollution Control Manager Signature:

GENERAL INFORMATION

- The information shown on this form is required for projects with either a Stormwater Pollution Prevention Plan

(SWPPP) or Water Pollution Control Program (WPCP) to document stormwater training for contractor and subcontractor managers, supervisors and employees. This information shown on this form and required training documentation will be included in the stormwater annual report for SWPPP projects.

- This form to be used to document training for all employees responsible for activities associated with compliance with the Construction General Permit and contract specifications. Required weekly informal stormwater training shall be documented by using this form.
- Provide this training record and an updated copy of the Stormwater Training Log to the Resident Engineer within 5 days of date of training.
- Attach additional copies of page 2 of this form if necessary to record all attendees attending training.

FORM

- Contract Number/Co/Rte/PM: For local agency encroachment permit projects write the encroachment permit number in the Contract Number field.
- Project Identifier Number: Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number write N/A in the field.
- WDID Number: For projects with Water Pollution Control Program (WPCP) enter "WPCP" in this field.
- Attendee Roster: Enter employee name, contractor or subcontractor company name and employee phone number.
- Training Audience: Enter one of the following responses:
  - General – Training for individuals responsible for all activities associated with compliance with the General Construction Permit
  - BMPs – Training for individuals responsible for BMP installation, inspection, maintenance and repair.
  - SWPPP – Training for individuals responsible for overseeing revising and amending the SWPPP.

Appendix F CEM-2024 Stormwater Training Log Form

- To be submitted to Caltrans for annual compliance.
- Required for projects with either a Stormwater Prevention Plan (SWPPP).
- Documents stormwater training for contractors and subcontractor managers, supervisors, and employees.

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	Project Identifier Number:
	WDID Number:
Contractor Name and Address:	Project Site Risk Level: ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
Submitted by Contractor (Print Name and Sign):	Date:

STORMWATER TRAINING LOG

Date of Training	Training Audience	Number of Training Attendees	Stormwater Training Course Title or Stormwater Topics Covered by Training	Date Training Documentation Provided to Resident Engineer
	☐ General ☐ BMPs ☐ SWPPP			
	☐ General ☐ BMPs ☐ SWPPP			
	☐ General ☐ BMPs ☐ SWPPP			
	☐ General ☐ BMPs ☐ SWPPP			
	☐ General ☐ BMPs ☐ SWPPP			

Form instructions are currently being developed based on form review comments.
GENERAL INFORMATION

- The information shown on this form is required for projects with either a Stormwater Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP) to document stormwater training for contractor and subcontractor managers, supervisors and employees. This information shown on this form and required training documentation will be included in the stormwater annual report for SWPPP projects.
- Provide an updated copy of this form with attached training documentation to the Resident Engineer within 5 days of date of training.

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FORM

- Contract Number/Co/Rte/PM: For local agency encroachment permit projects write the encroachment permit number in the Contract Number field.
- Project Identifier Number: Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number write N/A in the field.
- WDID Number: For projects with Water Pollution Control Program (WPCP) enter "WPCP" in this field.
- Training Audience: Enter one of the following responses:
  - General – Training for individuals responsible for all activities associated with compliance with the General Construction Permit
  - BMPs – training for individuals responsible for BMP installation, inspection, maintenance and repair.
  - SWPPP – training for individuals responsible for overseeing revising and amending the SWPPP.
-

Appendix G CEM-2030 Stormwater Site Inspection Report

- All areas of a jobsite to be reported and inspected.
- Risk level 1, 2 and 3 requirement.
- Complete BMP repair or design changes within 72 hours of identifications.
- To be submitted to the Resident Engineer within 24 hours of inspection.

Project Information Name and Site Address:	Contract Number/Co/Rte/PM: WDID Number:
Contractor Name and Address:	Project Site Risk Level: ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
Submitted by contractor (Print Name and Sign):	Date:
Water Pollution Control Manager Name and Company Name:	Phone Number: Emergency Phone Number (24/7):

General Information

Inspectors Name:	Date of Inspection:

Weather Condition:	Precipitation Condition:		Wind Condition:
Check appropriate box	*Check appropriate box*		*Check appropriate box*
☐ Clear	☐ Misty	☐ Heavy Rain	☐ None
☐ Partly Cloudy	☐ Light Rain	☐ Hail	☐ Less than 5 MPH
☐ Cloudy	☐ Rain	☐ Snow	☐ Greater than 5 MPH

Construction Phase:	Site Information:
Check appropriate box	_____ Acres Total Project Area
☐ Highway Construction	_____ Acres Total Project Disturbed Soil Area(DSA)
☐ Plant Establishment	_____ Acres Current Phase Disturbed Soil Area(DSA)
☐ Suspension of Work (Inactive Site)	_____ Acres Current Phase Inactive Disturbed Soil (DSA)

Inspection Type: *Check appropriate box*	**Storm Information**	
☐ Weekly ☐ Quarterly Non-Storm Water	Time Elapsed Since Last Storm: _____ days	Precipitation Amount From Last Storm: _____ inch(es)
☐ Pre-Storm	Time Storm is Expected: _____ (*time*) _____ (*date*)	Expected Precipitation Amount: _____ inch(es)
☐ During Storm Event	Time Elapsed Since Storm Began: _____ hours-minutes	Precipitation Amount from Storm Recorded From Site Rain Gauge: _____ inch(es)
☐ Post Storm	Time Elapsed Since Storm: _____ hours-minutes	Precipitation Amount for Storm Recorded From Site Rain Gauge: _____ inch(es)

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:

Site Inspection of Best Management Practices

If the inspection form does not contain enough lines for all locations attach additional pages for that BMP so that all locations are inspected and reported

Preservation of Existing Vegetation ☐ Yes ☐ No	**Right location?**		**Properly installed?**		**Maintenance or repair necessary?**		**Photo(s)**	**Comments Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	

Temporary Soil Stabilization ☐ Yes ☐ No	**Are inactive areas covered?**		**100% Coverage of required areas?**		**Are stabilized areas free from visible erosion?**		**Photo(s)**	**Comments Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:

Site Inspection of Best Management Practices Continued

Temporary Linear Sediment Barriers ☐ Yes ☐ No	**Right location?**		**Properly installed? Cross barriers installed?**		**Maintenance when 1/3 height? Repair needed?**		**Photograph(s)**	**Comments Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	

Storm Drain Inlet Protection ☐ Yes ☐ No	**All inlets protected?**		**Properly installed?**		**Maintenance or repair needed?**		**Photo(s)**	**Comments Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:

Site Inspection of Best Management Practices Continued

Sediment / Desilting Basins ☐ Yes ☐ No	**Basin inlets, outlets, and spillways in working order?**		**Is water contained in basin?**		**Maintenance required to provide required retention or detention**		**Photograph(s)**	**Comments** **Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	

Stockpile Management ☐ Yes ☐ No	**Properly located?**		**Properly covered and perimeter control installed?**		**Maintenance or repair needed?**		**Photograph(s)**	**Comments** **Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:

Site Inspection of Best Management Practices Continued

Tracking Controls ☐ Yes ☐ No	**Do all entrances and exits have tracking controls?**		**Pavement free from visible sediment tacking?** **Daily sweeping?**		**Does sediment need to be removed from rock or ribbed plates?**		**Photograph(s)**	**Comments** **Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	

Wind Erosion Control ☐ Yes ☐ No	**Water trucks on site?**				**Visible dust?**		**Photo(s)**	**Comments Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:

Site Inspection of Best Management Practices Continued

Dewatering Operations ☐ Yes ☐ No	**Is dewatering currently active?**		**Is dewatering in conformance with RWQCB permit?**		**Is dewatering discharge within discharge specified limitations?**		**Photograph(s)**	**Comments** **Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	

Temporary Stream Crossing ☐ Yes ☐ No	**Constructed as shown on the plane?**		**Conforms to 404 Permit and 1601 Permit requirements?**		**Maintenance or repair required?**		**Photograph(s)**	**Comments** **Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:

Site Inspection of Best Management Practices Continued

Vehicle and Equipment Fueling and Maintenance ☐ Yes ☐ No	**Located away from drainage courses and water courses?**		**Areas protected from run-on and runoff?**		**Performed on impermeable surface with berm?** **If no, drip pans used?**		**Areas reasonably clean and free of spills, leaks and other material?**		**Vehicles and equipment inspected daily for leaks?** **Repair if necessary?**		**Photograph(s)**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**
Location 1:	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Location 2:	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Location 3:	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

	Comments / Required Actions
Location 1:	
Location 2:	
Location 3:	

Vehicle and Equipment Cleaning ☐ Yes ☐ No	**Washing areas located away from drainage courses and water courses?**		**Washing areas protected from run-on and runoff?**		**Washing performed on impermeable surface with berm?**		**Washing areas reasonably clean and free of spills, leaks and other material?**		**Washing limited to water, no soap?** **Wash water contained for infiltration/ evaporation or disposal?**		**Photograph(s)**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**
Location 1:	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Location 2:	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

	Comments / Required Actions
Location 1:	
Location 2:	

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:

Site Inspection of Best Management Practices Continued

Material Storage ☐ Yes ☐ No	**Located away from drainage courses and water courses?**		**Areas protected from run-on and runoff?**		**Are bagged and boxed materials stored on pallets?** **Liquid materials in secondary containment?**		**Areas reasonably clean and free of spills, leaks and other material?**		**Is material inventory up to date?**		**Photograph(s)**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**
Location 1:	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Location 2:	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Location 3:	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Location 4:	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

	Comments \ Required Actions
Location 1:	
Location 2:	
Location 3:	
Location 4:	

Additional Requirements For Hazardous Material Storage ☐ Yes ☐ No	**Stored in properly labeled containers?**		**Liquids have secondary containment?**		**Secondary containment facilities free from spills and rainwater?**		**Are clean-up and spill reporting procedures posted?**		**Are clean-up supplies available and adequate for minor spills?**		**Photo(s)**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**
Location 1:	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Location 2:	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

	Comments \ Required Actions
Location 1:	
Location 2:	

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:

Site Inspection of Best Management Practices Continued

Waste Management ☐ Yes ☐ No	**Are watertight liter containers and dumpsters properly located?**		**Is litter and material waste placed in watertight dumpsters?**		**Do waste management containers have enough capacity for planned operations?**		**Photograph(s)**	**Comments** **Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	

Concrete Waste Management ☐ Yes ☐ No	**Are washout facilities functional and identified?**		**Are concrete washout liners free from punctures and holes?**		**Is there sufficient volume and freeboard for planned operations?**		**Photograph(s)**	**Comments** **Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:

Site Inspection of Best Management Practices Continued

For project specific BMP's insert the BMP name and any additional inspection requirements below

Project Specific BMP _____ ☐ Yes ☐ No	**Properly located?**		**Properly installed?**		**Maintenance or repair needed?**		**Photo(s)**	**Comments Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	

Project Specific BMP _____ ☐ Yes ☐ No	**Properly located?**		**Properly installed?**		**Maintenance or repair needed?**		_____ _____ _____		_____ _____ _____			**Photo(s)**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**		**Yes**
Location 1:	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		☐
Location 2:	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		☐
Location 3:	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		☐
Location 4:	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		☐

	Comments \ Required Actions
Location 1:	
Location 2:	
Location 3:	
Location 4:	

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:

Pre-Storm Visual Inspection Requirements

In addition to visual inspection of all BMP's to determine if they have been properly implemented in accordance with SWPPP/REAP, inspect the following:

Drainage Areas	**Leaks or spills?**		**Any uncontrolled pollutant sources?**		**Stored materials that should be moved?**		**Photo(s)**	**Comments Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	

Drainage Discharge Locations	**Free of erosion or sediment?**						**Photo(s)**	**Comments Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location:	☐	☐	☐	☐	☐	☐	☐	

Desilting Basins and Other Stormwater Storage ☐ Yes ☐ No	**Any water retained or stored?**		**Any leaks?**		**Adequate freeboard for storm event?**		**Photo(s)**	**Comments Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	
Location 1:	☐	☐	☐	☐	☐	☐	☐	
Location 2:	☐	☐	☐	☐	☐	☐	☐	

Desilting Basins and Other Stormwater Storage *If any water is retained or stored report the following.*	**Presence of floating and suspended materials?**		**Presence of discoloration or turbidity?**		**Presence of odors?**		**If yes to observed pollutants was sample taken?**		**Identify source of any observed pollutants. Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	
Location 1:	☐	☐	☐	☐	☐	☐	☐	☐	
Location 2:	☐	☐	☐	☐	☐	☐	☐	☐	

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:

During Storm Visual Inspection Requirements

In addition to visual inspection of allBMP's to determine whether they are performing and are adequate or additional BMP's are needed or BMP's need immediate maintenance, inspect the following:

Drainage Discharge Locations	**Any flowing water?**		**Free of erosion or sediment?**		**Discharge sample taken?**		**Run-on sample taken**		**Comments Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	
Location 1:	☐	☐	☐	☐	☐	☐	☐	☐	
Location 2:	☐	☐	☐	☐	☐	☐	☐	☐	
Location 3:	☐	☐	☐	☐	☐	☐	☐	☐	
Location 4:	☐	☐	☐	☐	☐	☐	☐	☐	

Drainage Discharge Locations *If any water is flowing report the following*	**Presence of floating and suspended materials?**		**Presence of discoloration or turbidity?**		**Presence of odors?**		**If yes to observed pollutants was sample taken?**		**Identify source of any observed pollutants. Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	
Location 1:	☐	☐	☐	☐	☐	☐	☐	☐	
Location 2:	☐	☐	☐	☐	☐	☐	☐	☐	
Location 3:	☐	☐	☐	☐	☐	☐	☐	☐	
Location 4:	☐	☐	☐	☐	☐	☐	☐	☐	

Risk Level 3 Drainage Discharge Locations *If any water is flowing report the following*	**Run-on sample taken?**		**Upstream / un-gradient receiving water sample taken?**		**Downstream / down-gradient receiving water sample taken?**		**Comments Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	
Location :	☐	☐	☐	☐	☐	☐	
Location :	☐	☐	☐	☐	☐	☐	

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:

During Storm Visual Inspection Requirements Continued

Desilting Basins and Other Stormwater Storage ☐ Yes ☐ No	**Any water retained or stored?**		**Any leaks?**		**Adequate freeboard for storm event?**		**Comments Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	
Location 1:	☐	☐	☐	☐	☐	☐	
Location 2:	☐	☐	☐	☐	☐	☐	

Desilting Basins and Other Stormwater Storage *If any water is retained or stored report the following.*	**Presence of floating and suspended materials?**		**Presence of discoloration or turbidity?**		**Presence of odors?**		**If yes to observed pollutants was sample taken?**		**Identify source of any observed pollutants. Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	
Location 1:	☐	☐	☐	☐	☐	☐	☐	☐	
Location 2:	☐	☐	☐	☐	☐	☐	☐	☐	

Non-Visible Pollutant Locations ☐ Yes ☐ No *Inspect locations where disturbed soil or materials are stored or used on site that contain non-visible pollutants*	**Any breath malfunction, leakage or spill?**		**Any run-on?**		**Any flowing discharge?**		**Comments Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	
Location 1:	☐	☐	☐	☐	☐	☐	
Location 2:	☐	☐	☐	☐	☐	☐	

Non-Visible Pollutant Locations *If any water is flowing report the following.*	**Presence of floating and suspended materials?**		**Presence of discoloration or turbidity?**		**Presence of odors?**		**Discharge sample taken?**		**Uncontaminated* sample taken?**			
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**		**Yes**	**No**	
Location 1:	☐	☐	☐	☐	☐	☐	☐	☐		☐	☐	
Location 2:	☐	☐	☐	☐	☐	☐	☐	☐		☐	☐	

*Sample storm water that has not come in contact with disturbed soil or stored materials or where materials were used on site for comparison with contaminated sample.

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:

Post Storm Visual Inspection Requirements

Within 48 hours of a qualifying rain event inspect all BMP's to determine whether BMP's were adequate, implemented and effective and identify any additional BMP's needed. Perform the following visual inspections of the project site:

Drainage Discharge Locations	**Any flowing water?**		**Free of erosion or sediment?**		**Discharge sample taken?**		**Run-on sample taken**		**Comments Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	
Location 1:	☐	☐	☐	☐	☐	☐	☐	☐	
Location 2:	☐	☐	☐	☐	☐	☐	☐	☐	
Location 3:	☐	☐	☐	☐	☐	☐	☐	☐	
Location 4:	☐	☐	☐	☐	☐	☐	☐	☐	

Drainage Discharge Locations *If any water is flowing report the following*	**Presence of floating and suspended materials?**		**Presence of discoloration or turbidity?**		**Presence of odors?**		**If yes to observed pollutants was sample taken?**		**Identify source of any observed pollutants. Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	
Location 1:	☐	☐	☐	☐	☐	☐	☐	☐	
Location 2:	☐	☐	☐	☐	☐	☐	☐	☐	
Location 3:	☐	☐	☐	☐	☐	☐	☐	☐	
Location 4:	☐	☐	☐	☐	☐	☐	☐	☐	

Risk Level 3 Drainage Discharge Locations *If any water is flowing report the following*	**Run-on sample taken?**		**Upstream / un-gradient receiving water sample taken?**		**Downstream / down-gradient receiving water sample taken?**		**Comments Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	
Location :	☐	☐	☐	☐	☐	☐	
Location :	☐	☐	☐	☐	☐	☐	

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:

Post Storm Visual Inspection Requirements Continued

Desilting Basins and Other Stormwater Storage ☐ Yes ☐ No	**Any water retained or stored?**		**Any leaks?**				**Photo(s)**	**Comments Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	
Location 1:	☐	☐	☐	☐	☐	☐	☐	
Location 2:	☐	☐	☐	☐	☐	☐	☐	

Desilting Basins and Other Stormwater Storage *If any water is retained or stored report the following.*	**Presence of floating and suspended materials?**		**Presence of discoloration or turbidity?**		**Presence of odors?**		**If yes to observed pollutants was sample taken?**		**Identify source of any observed pollutants. Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	
Location 1:	☐	☐	☐	☐	☐	☐	☐	☐	
Location 2:	☐	☐	☐	☐	☐	☐	☐	☐	

Non-Visible Pollutant Locations ☐ Yes ☐ No *Inspect all locations where disturbed soil or materials are stored or used on site that contain non-visible pollutants*	**Any breath malfunction, leakage or spill?**		**Any run-on?**		**Any flowing discharge?**		**Photo(s)**	**Comments Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	
Location 1:	☐	☐	☐	☐	☐	☐	☐	
Location 2:	☐	☐	☐	☐	☐	☐	☐	

Non-Visible Pollutant Locations *If any water is flowing report the following.*	**Presence of floating and suspended materials?**		**Presence of discoloration or turbidity?**		**Presence of odors?**		**Discharge sample taken?**		**Uncontaminated* sample taken?**			
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**		**Yes**	**No**	
Location 1:	☐	☐	☐	☐	☐	☐	☐	☐		☐	☐	
Location 2:	☐	☐	☐	☐	☐	☐	☐	☐		☐	☐	

*Sample storm water that has not come in contact with disturbed soil or stored materials or where materials were used on site for comparison with contaminated sample.

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:

Quarterly Non-Storm Water Discharge Visual Inspection Requirements

Conduct one visual inspection quarterly in each of the following periods: January-March, April-June, July-September, and October-December.

Drainage Areas	**Any presence of of a non-storm water discharge?**		**Any indication of a prior non-storm water discharge?**		**Date discharge was observed**		**Photo(s)**	**Identify source of non-storm water discharge. Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	
Location 1:	☐	☐	☐	☐	☐	☐	☐	
Location 2:	☐	☐	☐	☐	☐	☐	☐	

Drainage Areas *If any water is retained or stored report the following*	**Presence of floating and suspended materials?**		**Presence of discoloration or turbidity?**		**Presence of orders?**		***Sample taken?**		**Comments Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	
Location 1:	☐	☐	☐	☐	☐	☐	☐	☐	
Location 2:	☐	☐	☐	☐	☐	☐	☐	☐	

* Sample non-storm water discharge at the location where the discharge leaves the job-site and record location under Drainage Discharge Locations

Drainage Discharge Locations	**Any presence of of non-storm water discharge?**		**Any indication of a prior non-storm water discharge?**		**Date and time discharge was observed**	**Photograph(s)**	**Identify source of non-storm water discharge. Required Actions**
	Yes	**No**	**Yes**	**No**		**Yes**	
Location 1:	☐	☐	☐	☐		☐	
Location 2:	☐	☐	☐	☐		☐	
Location 3:	☐	☐	☐	☐		☐	
Location 4:	☐	☐	☐	☐		☐	

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:

Quarterly Non-Storm Water Discharge Visual Inspection Requirements Continued

Drainage Discharge Locations *If any water is flowing report the following*	**Presence of floating and suspended materials?**		**Presence of discoloration or turbidity?**		**Presence of odors?**		**Discharge sample taken?**		**Run-on sample taken?**		**Photograph**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**
Location 1:	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Location 2:	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Location 3:	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Location 4:	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Risk Level 3 Drainage Discharge Locations *If any water is flowing report the following*			**Upstream / un-gradient receiving water sample taken?**		**Downstream / down-gradient receiving water sample taken?**		**Comments Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	
Location :	☐	☐	☐	☐	☐	☐	
Location :	☐	☐	☐	☐	☐	☐	
Location :	☐	☐	☐	☐	☐	☐	

Illicit Connection/ Illegal Discharge Detection *Observe the job-site and job-site perimeter for illicit connections and illegal discharges*	**Any evidence of illicit connections?**		**Any illegal discharges onto job-site?** **Any illegal dumping?**		**Engineer notified of illicit connection or illegal discharge?**		**Photograph(s)**	**Comments** **Required Actions**
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	
Location:	☐	☐	☐	☐	☐	☐	☐	
Location	☐	☐	☐	☐	☐	☐	☐	

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:

Site Inspection Report General Comments

Are the BMP's installed as required by the SWPPP for the phase of construction?

☐ Yes ☐ No

Does the SWPPP currently reflect the current site conditions and contractor operations?

☐ Yes ☐ No

Does the SWPPP need to be amended?

☐ Yes ☐ No

Are there any water pollution control concerns on the project site not addressed by the comments /required actions shown above for BMP's based on the field review of the job-site?

☐ Yes ☐ No

If yes provide below details and comment / required actions for each location.

Location	Water Pollution Control Concern	Comment / Required Action
.		
.		
.		

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:

Stormwater Inspection Report Certification

I certify under penalty of law that this Stormwater Inspection Report was performed in accordance with the General Permit. The information contained in this inspection report was gathered form a field site inspection. I am aware that Section 309 (c)(4) of the Clean Water Act (CWA) provides for significant penalties, including fines and imprisonment for knowingly submitting false material statement, representation or certification.

Stormwater Inspector (Name):	Date Report Completed:
Stormwater Inspector Signature:	

I certify under penalty of law that this Stormwater Inspection Report was performed in accordance with the General Permit by me or under my direction or supervision. The information contained in this inspection report was gathered and evaluated by qualified personnel prior to submittal. Based on my review of the information and inquiry of those who gathered and evaluated the information, the information submitted is, to the best of my knowledge and belief, true accurate, and complete.
I am aware that Section 309 (c)(4) of the Clean Water Act (CWA) provides for significant penalties, including fines and imprisonment for knowingly submitting false material statement, representation or certification.

Water Pollution Control Manager (Name):	Date:
Water Pollution Control Manager Signature:	

Stormwater Inspection Report Acceptance

Accepted by Resident Engineer (Name):	Date:
Resident Engineer Signature:	

Instructions are currently being developed based on form review comments.
GENERAL INFORMATION • If the inspection form does not contain enough lines to report all locations on a job-site attached additional copies of the form page so that all locations are inspected and reported. • Obtain forecasted precipitation information from National Weather Service Forecast Office(NOAA) *http://www.srh.noaa.gov/forecast* • The weather information should be the best estimate of beginning of the storm event, duration of the event, time elapsed since the last storm. • Rainfall amounts should be recorded from the project site rain gauge.
STORM VISUAL INSPECTIONS • For non-visible pollutant inspections report on all locations shown in the SWPPP.
REQUIRED ACTIONS • All requiring actions reported on this form shall also be reported on form CEM-XXXX Stormwater Inspection Report Summary. • Locations identified where BMP's are failing or have other shortcomings require implementation of repairs or design changes within 72 hours of identification and complete BMP repairs or other changes as soon as possible

Appendix H CEM-2034 Stormwater Best Management Practices Status Report Form

- To be submitted weekly to the Resident Engineer within 48 hours prior to beginning the work week.
- Includes the status of all required locations of BMPs

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

STORMWATER BEST MANAGEMENT STATUS REPORT

CEM-2034 (NEW 9/2010)

PROJECT INFORMATION NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER
	WDID NUMBER
CONTRACTOR NAME AND ADDRESS	PROJECT SITE RISK LEVEL ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3

Water pollution control manager (print name and sign)	Date
Submitted by contractor (print name and sign)	Date

Provide a weekly list of stormwater best management practices on the stormwater pollution prevention plan that are active on the project site.

No.	Stormwater Best Management Practices Status			
1	Location	Disturbed soil area _____ acres	Active disturbed soil area _____ acres	Inactive disturbed soil area _____ acres
	BMP Name	**BMP ID**	**Quantity Installed To Date**	**Quantity to be Installed Next Week**
2	Location	Disturbed soil area _____ acres	Active disturbed soil area _____ acres	Inactive disturbed soil area _____ acres
	BMP Name	**BMP ID**	**Quantity Installed To Date**	**Quantity to be Installed Next Week**

ADA Notice For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

STORMWATER BEST MANAGEMENT STATUS REPORT

CEM-2034 (NEW 9/2010)

PROJECT INFORMATION NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER
	WDID NUMBER

No.	Stormwater Best Management Practices Status, continued			
____	Location	Disturbed soil area ____ acres	Active disturbed soil area ____ acres	Inactive disturbed soil area ____ acres
	BMP Name	**BMP ID**	**Quantity Installed To Date**	**Quantity to be Installed Next Week**
____	Location	Disturbed soil area ____ acres	Active disturbed soil area ____ acres	Inactive disturbed soil area ____ acres
	BMP Name	**BMP ID**	**Quantity Installed To Date**	**Quantity to be Installed Next Week**

PROOF COPY

RETURN TO HQ FORMS

OK X_____

DATE: _____

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STORMWATER BEST MANAGEMENT STATUS REPORT

CEM-2034 (NEW 9/2010)

PROJECT INFORMATION NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER
	WDID NUMBER

No.	Stormwater Best Management Practices Status, continued			
____	Location	Disturbed soil area ____ acres	Active disturbed soil area ____ acres	Inactive disturbed soil area ____ acres
	BMP Name	**BMP ID**	**Quantity Installed To Date**	**Quantity to be Installed Next Week**
____	Location	Disturbed soil area ____ acres	Active disturbed soil area ____ acres	Inactive disturbed soil area ____ acres
	BMP Name	**BMP ID**	**Quantity Installed To Date**	**Quantity to be Installed Next Week**
____	Location	Disturbed soil area ____ acres	Active disturbed soil area ____ acres	Inactive disturbed soil area ____ acres
	BMP Name	**BMP ID**	**Quantity Installed To Date**	**Quantity to be Installed Next Week**
____	Location	Disturbed soil area ____ acres	Active disturbed soil area ____ acres	Inactive disturbed soil area ____ acres
	BMP Name	**BMP ID**	**Quantity Installed To Date**	**Quantity to be Installed Next Week**

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STORMWATER BEST MANAGEMENT STATUS REPORT

CEM-2034 (NEW 9/2010)

General Information

- The water pollution control manager must oversee preparation of the best management practices status report and submit a copy of the BMP status report weekly.
- Attach additional copies of page 2 and page 3 of this form to include all required locations.
- Insert consecutive numbers for each location when using page 2 or page 3 of this form

BMP Name	BMP ID	Quantity Installed	Total Required
Temporary Soil Stabilization		**Non-Stormwater Management**	
Preservation of existing vegetation	SS-02	Water conservation practices	NS-01
Hydraulic mulch	SS-03	Dewatering operations	NS-02
Hydroseeding	SS-04	Paving and grinding operations	NS-03
Soil binders	SS-05	Temporary stream crossing	NS-04
Straw mulch	SS-06	Clear water diversion	NS-05
Geotextiles, mats, plastic covers, and lined ditches	SS-07	Illegal connection or discharge detection and reporting	NS-06
Wood mulching	SS-08	Potable water and irrigation	NS-07
Earth dikes and drainage swales and lined ditches	SS-09	Vehicle and equipment cleaning	NS-08
Outlet protection and velocity dissipation devices	SS-10	Vehicle and equipment fueling	NS-09
Slope drains	SS-11	Vehicle and equipment maintenance	NS-10
Streambank stabilization	SS-12	Pile-driving operations	NS-11
Temporary Sediment Control		Concrete curing	NS-12
Silt fence	SC-01	Material and equipment use over water	NS-13
Sediment or distilling basin	SC-02	Concrete finishing	NS-14
Sediment trap	SC-03	Structure demolition or removal over or adjacent to water	NS-15
Checkdams	SC-04	**Waste Management and Pollution Control**	
Fiber rolls	SC-05	Material delivery and storage	WM-01
Gravel bag berm	SC-06	Material use	WM-02
Sandbag barrier	SC-07	Stockpile management	WM-03
Straw bale barrier	SC-09	Spill prevention and control	WM-04
Storm drain inlet protection	SC-10	Solid waste management	WM-05
Wind Erosion Control		Hazardous waste management	WM-06
Wind erosion control	WE-01	Contaminated soil management	WM-07
Tracking Controls		Concrete waste management	WM-08
Stabilized construction entrance and exit	TC-01	Sanitary or septic waste management	WM-09
Stabilized construction roadway	TC-02	Liquid waste management	WM-10
Entrance and exit tire wash	TC-03		
Street sweeping	SC-07		

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Appendix I CEM-2035 Stormwater Site Inspection Report Corrective Actions Summary

- Required by the construction general permit.
- Verifies stormwater site inspection corrective actions identified in a site inspection report summary.
- Corrective actions must begin within 72 hours of the site inspection.

Project Information Name and Site Address:	Contract Number/Co/Rte/PM: WDID Number:
Contractor Name and Address:	Project Site Risk Level: ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
Submitted by Contractor (Print Name and Sign):	Date:
Implementation of required actions identified in a Stormwater Site Inspection Report must be made as soon as possible but must begin within 72 hours of the site inspection	Date of Site Inspection:

No.	Verification of Stormwater Site Inspection Corrective Actions		
1	BMP Type:	Location:	
	Required Action:	Comments:	
	Date Completed:	Verified by Print Name:	Verified by Signature:
2	BMP Type:	Location:	
	Required Action:	Comments:	
	Date Completed:	Verified by Print Name:	Verified by Signature:
3	BMP Type:	Location:	
	Required Action:	Comments:	
	Date Completed:	Verified by Print Name:	Verified by Signature:

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:

No.	Verification of Stormwater Site Inspection Corrective Actions		
___	BMP Type:	Location:	
	Required Action:	Comments:	
	Date Completed:	Verified by Print Name:	Verified by Signature:
___	BMP Type:	Location:	
	Required Action:	Comments:	
	Date Completed:	Verified by Print Name:	Verified by Signature:
___	BMP Type:	Location:	
	Required Action:	Comments:	
	Date Completed:	Verified by Print Name:	Verified by Signature:
___	BMP Type:	Location:	
	Required Action:	Comments:	
	Date Completed:	Verified by Print Name:	Verified by Signature:

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:

Stormwater Site Inspection Report Summary Certification

I certify under penalty of law that this Stormwater Site Inspection Report Summary was prepared by me or under my direction or supervision. The information contained in the summary was gathered and evaluated by qualified personnel prior to submittal. Based on my review of the information and inquiry of those who gathered and evaluated the information, the information submitted is, to the best of my knowledge and belief, true accurate, and complete.
I am aware that Section 309 (c)(4) of the Clean Water Act (CWA) provides for significant penalties, including fines and imprisonment for knowingly submitting false material statement, representation or certification.

Water Pollution Control Manager (Name):	Date:
Water Pollution Control Manager Signature:	

Stormwater Site Inspection Report Summary Acceptance

Accepted by Resident Engineer (Name):	Date:
Resident Engineer Signature:	

Form instructions are currently being developed based on form review comments.

GENERAL INFORMATION

- The information shown on this form is required by CGP Attachments C, D and E, Section G., 5.,g.
- If the summary form does not contain enough lines to report all required actions shown on CEM-2035 Stormwater Site Inspection Report attached use additional copies of page 2 of this form so that all required actions from an inspection form are reported.
- On page 2 of this form, and additional copies of page 2, insert consecutive numbers for each required action.

.

REQUIRED ACTIONS

- Locations identified where BMP's are failing or have other shortcomings require implementation of repairs or design changes within 72 hours of identification and complete BMP repairs or other changes as soon as possible
- Comments must be provided when the required action is changed from that shown on Stormwater Site Inspection Report

Appendix J CEM-2040 Weather Forecast Monitoring Form

- Weather forecasts for project sites with a SWPPP to be documented daily.
- Amount and percentage of precipitation are recorded from the National Weather Service Forecast Office.

Project Information Name and Site Address:	Contract Number/Co/Rte/PM: WDID Number:
Contractor Name and Address:	Project Site Risk Level: ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
Submitted by Contractor (Print Name and Sign):	Date:

WEATHER FORECAST LOG

WEEK OF __/__/__ - __/__/__

National Weather Forecast Office http://www.srh.noaa.gov/forecast project site forecast based on Search using:

_____

(*Address or Latitude and Longitude*)

Forecast Date/Time	**24-Hour Forecast**	**48-Hour Forecast**	**72-Hour Forecast**	**96-Hour Forecast**
	Date	Date	Date	Date
	Chance of Precipitation %	Chance of Precipitation %	Chance of Precipitation %	Chance of Precipitation %
	Amount of Precipitation inches	Amount of Precipitation inches	Amount of Precipitation inches	Amount of Precipitation inches
	Is the Chance of precipitation 50 percent or greater within 48 hours of forecast date? ☐ Yes ☐ No	Is the Chance of precipitation 50 percent or greater within 72 hours of forecast date? ☐ Yes ☐ No	What is the forecasted cumulative amount of precipitation for storm event? _____ inches	Is the forecasted cumulative amount of precipitation for storm event ½ inch or greater? ☐ Yes ☐ No

Page __ of __

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:

WEATHER FORECAST LOG

Forecast Date/Time	24-Hour Forecast	48-Hour Forecast	72-Hour Forecast	96-Hour Forecast
	Date	Date	Date	Date
	Chance of Precipitation %	Chance of Precipitation %	Chance of Precipitation %	Chance of Precipitation %
	Amount of Precipitation inches	Amount of Precipitation inches	Amount of Precipitation inches	Amount of Precipitation inches
	Is the chance of precipitation 50 percent or greater within 48 hours of forecast date? ☐ Yes ☐ No	Is the chance of precipitation 50 percent or greater within 72 hours of forecast date? ☐ Yes ☐ No	What is the forecasted cumulative amount of precipitation for storm event? _____ inches	Is the forecasted cumulative amount of precipitation for storm event ½ inch or greater? ☐ Yes ☐ No
	Date	Date	Date	Date
	Chance of Precipitation %	Chance of Precipitation %	Chance of Precipitation %	Chance of Precipitation %
	Amount of Precipitation inches	Amount of Precipitation inches	Amount of Precipitation inches	Amount of Precipitation inches
	Is the chance of precipitation 50 percent or greater within 48 hours of forecast date? ☐ Yes ☐ No	Is the chance of precipitation 50 percent or greater within 72 hours of forecast date? ☐ Yes ☐ No	What is the forecasted cumulative amount of precipitation for storm event? _____ inches	Is the forecasted cumulative amount of precipitation for storm event ½ inch or greater? ☐ Yes ☐ No

Page __ of __

Form instructions are currently being developed based on form review comments.

GENERAL INFORMATION

- The information shown on this form is required for projects with either a Stormwater Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP) to document weather forecast for the project site.
- This form is used to log daily the weather forecast information obtained from National Weather Service Forecast Office for chance of precipitation in percentage and forecasted amounts of precipitation based on the project site location.
- To obtain accurate weather forecast information for a project site on the National Weather Service Forecast Office website enter the project site nearest city, state or zip code in the Search for: box. When the forecast comes up, go to the bottom of the webpage and click on Forecast Weather Table Interface. When the weather forecast table page comes up go to the bottom right side of the page and in the box for Search by address; city, ST; latitude and longitude input the project site street address, city, and State or project site latitude or longitude.
- The weather forecasting log must be completed each working day. If the project is a calendar day project (seven working days week) attached additional copy of page two of the form so that all seven days can be reported.
- Weekly Weather Forecast Monitoring Logs shall be submitted to the Resident Engineer within 48 hours of the ending date shown on the weather forecast monitoring log.

FORM

- Contract Number/Co/Rte/PM: For local agency encroachment permit projects write the encroachment permit number in the Contract Number field.
- Project Identifier Number: Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number write N/A in the field.
- WDID Number: For projects with Water Pollution Control Program (WPCP) enter "WPCP" in this field.
- Enter the project site street address, including city and State, or latitude and longitude used to obtain National Weather Service forecast.
- Weekly Reporting Period: Enter the first and last working day for the reporting period
- Enter weather forecast information from Forecast Weather Table Interface page of the National Weather Service Forecast Office webpage. Forecasted chance of precipitation and forecasted precipitation amounts for each 6-hour period for next 24-hour(1 day), 48-hour(2 days), 72- hour(3 days) and 96-hours(4 days) are to be recorded on the form. For each day you do a forecast, do not include forecast information for the forecast date.
- From the forecast information recorded, determine if there is the chance for precipitation of 50 percent or greater within 48 hours of the forecast date and check the appropriate box.
- From the forecast information recorded, determine if there is the chance for precipitation of 50 percent or greater within 72 hours of the forecast date and check the appropriate box.
- Using the forecasted amounts of precipitation for each 6 hour period sum the amounts to determine the cumulative amount of precipitation for a storm event and record the amount on the form. You may need to use information within the 96-hour forecast to determine storm event forecasted cumulative amount of precipitation.
- Determine if the forecasted cumulative amount of precipitation for the storm event is ½ inch or greater and check the appropriate box.

WPCP/SPPPP IMPLEMENTATION REQUIREMENTS BASED ON WEATHER FORECAST

- For Water Pollution Control Program (WPCP) projects if the there is the chance for precipitation of 50 percent or greater within 48 hours of the forecast date the WPCM must implement appropriate water pollution control practices.
- For Stormwater Pollution Prevention Plan projects if the there is the chance for precipitation of 50 percent or greater within 48 hours or 72 hours of the forecast date the WPCM must implement appropriate water pollution control practices and must prepare a Rain Event Action Plan for Risk Level 2 and Risk Level 3 projects.
- For WPCP projects if the forecasted cumulative amount of precipitation for the storm event is ½ inch or greater then the WPCM must perform a pre-storm stormwater site inspection within 48 prior to the storm event.
- For SWPPP projects if the forecasted cumulative amount of precipitation for the storm event is ½ inch or greater then the WPCM must perform a visual site monitoring inspections pre-storm, daily during storm and post storm. For Risk Level 2 and Risk Level 3 daily stormwater discharge sampling and analysis is required for qualifying storm events.

Appendix K CEM-2041 Weather Monitoring Form

- Weather forecasts for project sites with either a SWPPP or a WPCP to be documented daily.
- Weather Monitoring Logs shall be submitted to the Resident Engineer within 5 working days of the ending date shown on the weather monitoring log.
- Locate the National Weather Service (NWS) automated weather station nearest the project site. For exceedance of compliance storm verification.

PROJECT INFORMATION NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER
	WDID NUMBER
CONTRACTOR NAME AND ADDRESS	PROJECT SITE RISK LEVEL ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
SUBMITTED BY CONTRACTOR (PRINTNAME AND SIGN)	DATE

WEATHER MONITORING LOG

WEEK OF __/__/__ - __/__/__

Weather Information for __/__/__

Weather Condition	Temperature	Precipitation Condition ☐ None		Wind Condition
☐ Clear	Maximum _____ °F	☐ Misty	☐ Heavy Rain	☐ None
☐ Partly Cloudy	Minimum _____ °F	☐ Light Rain	☐ Hail	☐ Less than 5 MPH
☐ Cloudy		☐ Rain	☐ Snow	☐ Greater than 5 MPH

Storm Precipitation Information

Complete the following when there is any precipitation within the 24 hour period.

Time	Project Site Rain Gauge (inches)	Amount Of Precip (inches)	Storm Event Information		
			Storm event began? _____ on _____ *(time)* *(date)* Cumulative amount of precipitation from previous day? _____ inches	Storm event ended? _____ on _____ *(time)* *(date)* ☐ Extended duration storm event.	What is the cumulative amount of precipitation for storm event to date? _____ inches What is the 24 hour cumulative amount of precipitation? _____ inches
			Is the cumulative amount of precipitation for storm event ½ inch or greater? ☐ Yes ☐ No If yes for Risk level 2 and 3 projects are stormwater discharges being sampled and analyzed? ☐ Yes ☐ No		

Additional Storm Event Information

Compliance Storm Event		ATS Compliance Storm Event *Complete the following when ATS is used on project site*	
The compliance storm event (5 year 24 hour storm) for this project site is? _____ inches	Has the storm event exceeded the compliance storm event? ☐ Yes ☐ No	The compliance storm event (10 year 24 hour storm) for this project site is? _____ inches	Has the storm event exceeded the compliance storm event? ☐ Yes ☐ No

If yes to exceedance of the compliance storm event based on project site rain gauge readings, attach printout of precipitation data from nearest National Weather Service weather station as verification of compliance storm exceedance.

National Weather Service verification of project site compliance storm event exceedance from weather station

_____ is based on project site _____

(*NWS Weather Station*) (*Address or Latitude and Longitude*).

Weather information input by (print name and sign)

Page __ of __

PROJECT INFORMATION NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER
	WDID NUMBER

Weather Information for __/__/__

Weather Condition	Temperature	Precipitation Condition		Wind Condition
☐ Clear	Maximum _____ °F	☐ None		☐ None
☐ Partly Cloudy	Minimum _____ °F	☐ Misty	☐ Heavy Rain	☐ Less than 5 MPH
☐ Cloudy		☐ Light Rain	☐ Hail	☐ Greater than 5 MPH
		☐ Rain	☐ Snow	

Storm Precipitation Information

Complete the following when there is any precipitation within the 24 hour period.

Time	Project Site Rain Gauge Reading (inches)	Cumulative Amount Of Precipitation (inches)	Storm Event Information		
			Storm event began? _____ on _____ *(time)* *(date)* Cumulative amount of precipitation from previous day? _____ inches	Storm event ended? _____ on _____ *(time)* *(date)* ☐ Extended duration storm event.	What is the cumulative amount of precipitation for storm event to date? _____ inches What is the 24 hour cumulative amount of precipitation? _____ inches
			Is the cumulative amount of precipitation for storm event ½ inch or greater? ☐ Yes ☐ No If yes for Risk level 2 and 3 projects are stormwater discharges being sampled and analyzed? ☐ Yes ☐ No		

Additional Storm Event Information

Compliance Storm Event		ATS Compliance Storm Event *Complete the following when ATS is used on project site*	
The compliance storm event (5 year 24 hour storm) for this project site is? _____ inches	Has the storm event exceeded the compliance storm event? ☐ Yes ☐ No	The compliance storm event (10 year 24 hour storm) for this project site is? _____ inches	Has the storm event exceeded the compliance storm event? ☐ Yes ☐ No

If yes to exceedance of the compliance storm event based on project site rain gauge readings, attach printout of precipitation data from nearest National Weather Service weather station as verification of compliance storm exceedance.

National Weather Service verification of project site compliance storm event exceedance from weather station

_____ is based on project site _____

(*NWS Weather Station*) (*Address or Latitude and Longitude*).

Weather information input by (print name and sign)

Page __ of __

PROJECT INFORMATION NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER
	WDID NUMBER

Weather Information for __/__/__

Weather Condition	Temperature	Precipitation Condition ☐ None		Wind Condition
☐ Clear	Maximum _____ °F	☐ Misty	☐ Heavy Rain	☐ None
☐ Partly Cloudy	Minimum _____ °F	☐ Light Rain	☐ Hail	☐ Less than 5 MPH
☐ Cloudy		☐ Rain	☐ Snow	☐ Greater than 5 MPH

Storm Precipitation Information

Complete the following when there is any precipitation within the 24 hour period.

Time	Project Site Rain Gauge Reading (inches)	Cumulative Amount Of Precipitation(inches)	Storm Event Information		
			Storm event began? _____ on _____ *(time)* *(date)* Cumulative amount of precipitation from previous day? _____ inches	Storm event ended? _____ on _____ *(time)* *(date)* ☐ Extended duration storm event.	What is the cumulative amount of precipitation for storm event to date? _____ inches What is the 24 hour cumulative amount of precipitation? _____ inches
			Is the cumulative amount of precipitation for storm event ½ inch or greater? ☐ Yes ☐ No		
			If yes for Risk level 2 and 3 projects are stormwater discharges being sampled and analyzed? ☐ Yes ☐ No		

Additional Storm Event Information

Compliance Storm Event		Active Treatment system(ATS) Compliance Storm Event *Complete the following when ATS is used on project site*	
The compliance storm event (5 year 24 hour storm) for this project site is? _____ inches	Has the storm event exceeded the compliance storm event? ☐ Yes ☐ No	The compliance storm event (10 year 24 hour storm) for this project site is? _____ inches	Has the storm event exceeded the compliance storm event? ☐ Yes ☐ No

If yes to exceedance of the compliance storm event based on project site rain gauge readings, attach printout of precipitation data from nearest National Weather Service weather station as verification of compliance storm exceedance.

National Weather Service verification of project site compliance storm event exceedance from weather station

_____ is based on project site _____

(*NWS Weather Station*) (*Address or Latitude and Longitude*).

Weather information input by (print name and sign)

WEATHER MONITORING LOG REVIEW

I have reviewed this document and based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is, true accurate, and complete.

Water pollution control manager name	National Weather Service precipitation data for compliance storm exceedances attached to this log submittal? ☐ Yes ☐ No
Water pollution control manager signature	Date

Page __ of __

Form instructions are currently being developed based on form review comments.

GENERAL INFORMATION

- The information shown on this form is required for projects with either a Stormwater Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP) to document weather forecast for the project site.
- This form is used to record daily weather information for the project site location.
- The weather monitoring log must be completed each working day. If the project is a calendar day project (seven working days week) attached additional copy of page two of the form so that all seven days can be reported.
- Weather Monitoring Logs shall be submitted to the Resident Engineer within 5 working days of the ending date shown on the weather monitoring log.
- For verifying exceedance of compliance storm locate the National Weather Service (NWS) automated weather station nearest the project site. NWS weather station locations are available at: http://www.wrh.noaa.gov/sto/obsmap.php.
- Print out precipitation data for the nearest NWS weather station for any storm event that exceeds the compliance storm event. NWS weather station precipitation data is available at: http://www.cnrfc.noaa.gov/awipsProducts/RNOHYDRSA.php

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FORM

- Contract Number/Co/Rte/PM: For local agency encroachment permit projects write the encroachment permit number in the Contract Number field.
- Project Identifier Number: Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number write N/A in the field.
- WDID Number: For projects with Water Pollution Control Program (WPCP) enter "WPCP" in this field.
- Enter the project site street address, including city and State, or latitude and longitude used to obtain National Weather Service forecast.
- Weekly Reporting Period: Enter the first and last working day for the reporting period
- Enter weather monitoring information.
- Enter precipitation information during working hours at least every two hours:
  1. Time
  2. Rain gauge reading
  3. Storm event cumulative precipitation amount
- Using the amounts of precipitation for each 2 hour period during working hours and the amount of precipitation during non-working hours to determine the cumulative amount of precipitation for a storm event and record the amount on the form. Determine if the forecasted cumulative amount of precipitation for the storm event is ½ inch or greater and check the appropriate box.
- Compliance Storm Event: Compliance Storm Event for Risk Level 3 project site discharges is determined by using the following maps:
  http://www.wrcc.dri.edu/pcpnfreq/nca5y24.gif
  http:///www.wrcc.dri.edu/pcpnfreq/sca5y24.gif
- ATS Compliance Storm Event: Compliance Storm Event for ATS discharge compliance is determined using the following maps:
  http://www.wrcc.dri.edu/pcpnfreq/nca10y24.gif
  http:///www.wrcc.dri.edu/pcpnfreq/sca10y24.gif

If the storm event exceeds the compliance storm event, verification of compliance storm event is required based on nearby governmental rain gauge readings. Enter the project site street address, including city and State, or latitude and longitude used to determine National Weather Service nearest weather station and weather station identification.

Appendix L CEM-2045 Rain Event Action Plan Highway Construction Phase
CEM-2046 Rain Event Action Plan Plant Establishment Phase
CEM-2047 Rain Event Action Plan for Inactive Project

- The Rain Event Action Plan should be implemented in accordance with the General Construction Permit, Risk Levels 2 and 3.
- To document actions required before predicted rain event. .
- A qualifying rain event occurs when a predicted weather pattern will produce one-half inch or more of precipitation
- A qualifying rain event requires stormwater visual monitoring, site inspections, and sampling and analysis of stormwater discharges.

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:
Contractor Name and Address:	Project Site Risk Level: ☐ Risk Level 2 ☐ Risk Level 3
Submitted by Contractor (Print Name and Sign):	Date:
Water Pollution Control Manager Name and Company Name	Phone Number:
	Emergency Phone Number (24/7)
Erosion and Sediment Control Provider or Subcontractor Name and Company Name:	Phone Number:
	Emergency Phone Number (24/7)
Stormwater Sampling and Testing Agent or Subcontractor Name and Company:	Phone Number:
	Emergency Phone Number (24/7)

Storm Information

Attach to this REAP forecasted precipitation information from National Weather Service Forecast Office(NOAA)
http://www.srh.noaa.gov/forecast

Project Site Zip Code:	Date Forecast Checked:	Time Forecast Checked:
Forecast Percent Probability of Precipitation in 24 hours:	Expected Precipitation Amount	Date:
Forecast Percent Probability of Precipitation in 48 hours:	Expected Precipitation Amount	Date:
Forecast Percent t Probability of Precipitation in 72 hours:	Expected Precipitation Amount:	Date:
Predicted weather pattern rain event will produce ½-inch or more of rain: ☐ Yes ☐ No	Note: For a qualifying rain event when the predicted weather pattern will produce ½ –inch or more of precipitation visual monitoring (inspection) and sampling and analysis of storm water discharges will be required.	

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:

Activities Associated with Highway Construction Projects

Check ALL boxes below that apply to current project site.

☐ Clearing and Grubbing	☐ Structure Construction	☐ Highway Planting
☐ Earthwork	☐ Soundwall Construction	☐ Soil Amendments
☐ Culvert Construction	☐ Curb, Gutter and Sidewalks	☐ Plant Establishment
☐ Rough Grading	☐ Paving Operations	☐ Material Delivery and Storage
☐ Storm Drain Installation	☐ Finishing Roadway	☐ Equipment Maintenance/Fueling
☐ Utility Installation: water-gas-sewer	☐ Metal Beam Guard Rail Installation	☐ Erosion and Sediment Control
☐ Structure Foundations (Including Piles)	☐ Sign Installation	☐ Other _____
☐ Subgrade Grading	☐ Highway Electrical Work	☐ Other _____
☐ Subbase and Base Placement	☐ Traffic Striping and Pavement Markings	
☐ Finish Grading		

Subcontractors or Trades Active on Site for Highway Construction

Check ALL boxes below that apply to current project site.

☐ Grading (Operating Engineers)	☐ Curb, Gutter and Sidewalk (carpenters, Laborers & Concrete Finishers
☐ Underground Storm Drain (Operating Engineers & Laborers)	☐ Lighting and Signals (Operating Engineers & Electricians)
☐ Underground Utilities (Operating Engineers & Laborers)	☐ Metal Beam Guard Rail (Operating Engineers & Laborers)
☐ Underground Utilities (Public or Private Utility Company)	☐ Signs (Operating Engineers)
☐ Pile Installation (Pile Butts)	☐ Traffic Striping and Pavement Markings (???)
☐ Concrete Foundations (Carpenters, Laborers & Concrete Finishers)	☐ Masonry Soundwalls (Masons & Laborers)
☐ Bar Reinforcement Placement (???)	☐ Erosion and Sediment Control (???)
☐ Structure Construction (Carpenters & Laborers)	☐ Highway Planting (???)
☐ Concrete Placement (Operating Engineer, Laborers & Concrete Finishers)	☐ Other: _____
☐ Hot Mix Asphalt Placement (Operating Engineers & Laborers)	☐ Other: _____

Project Information Name and Site Address:	Contract Number/Co/Rte/PM: WDID Number:

Trade (Subcontractor) Information Provided

Check ALL boxes below that apply to current project site.

☐ Project SWPPP Handout	☐ Tailgate Meetings
☐ Contract Specifications	☐ Posters & Signage
☐ Educational Material Handout	☐ Other:_____
☐ SWPPP Training Workshop	☐ Other:_____

Predicted Rain Event Triggered Actions

Activity	Actions Required Before Predicted Rain Event
Information and Scheduling	☐ Project Superintendent informed of predicted rain at _____ (*time*) on _____ (*date*). ☐ Inform foreman and subcontractors of predicted rain ☐ Erosion control/sediment control provider notified to provide: ☐ Pre-storm crew with at least ____ people ☐ Pre-storm crew to start implementing storm event actions by _____ (*time*) on _____(*date*) ☐ If non-visible sampling and testing is required, alert sample collection and testing provider ☐ Check for adequate erosion and sediment control materials are on hand for: ☐ Pre-storm required actions ☐ Extended storm event maintenance and repair ☐ Review that the BMP site map is updated and provide a copy to erosion and sediment control provider or subcontractor ☐ Other: _____ ☐ Other: _____ ☐ Other: _____ ☐ Other: _____ ☐ Other: _____

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:

Predicted Rain Event Triggered Actions

Activity	Actions Required Before Predicted Rain Event
Information and Scheduling	If a qualified rain event perform the following: ☐ Ensure a pre-storm inspection has been completed ☐ Schedule staff for inspections during storm ☐ Review the discharge location site map for the current phase of the project and include any sampling locations necessary for non-visible discharges ☐ Alert sample collection and testing provider that sampling will be required and provide the following: ☐ Updated discharge location site map ☐ The required number of sampling locations for this phase of the project is: ☐ _____ discharge points ☐ _____ receiving waters for risk level 3 ☐ _____ non-visible potential discharge points ☐ Sampling will needed beginning at approximately _____ (*time*) on _____ (*date*) ☐ Identify non-visible pollutant testing requirements ☐ Erosion control/sediment control provider notified to provide crew during the storm event with at least ____ people ☐ The following additional actions will be implemented for a qualifying rain event: ☐ Other: _____ ☐ Other: _____ ☐ Other: _____ ☐ Other: _____ ☐ Other: _____ ☐ In the event of flooding, the following contingency plan will be implemented: _____ _____ _____

Project Information Name and Site Address:	**Contract Number/Co/Rte/PM:**
	WDID Number

Predicted Rain Event Triggered Actions Continued

Activity	Actions Required Before Predicted Rain Event
Material Storage Areas	☐ Material covered or in sheds (ex: treated woods and metals) ☐ Stockpiles covered and perimeter control installed ☐ Other: _____ ☐ Other: _____
Waste Management Areas	☐ Dumpsters closed ☐ Drain holes plugged ☐ Recycling bins covered ☐ Sanitary stations bermed and protected from tipping ☐ Other: _____ ☐ Other: _____
Concrete Rinse Out Areas	☐ Cover wash-out bins ☐ Adequate capacity for rain ☐ Other: _____ ☐ Other: _____

Operations	☐ Operations to shut down for rain event
	  ☐ Grading
	  ☐ Concrete pours
	  ☐ Hot mix asphalt paving
	  ☐ Other: _____
	  ☐ Other: _____
	☐ Soil amendments not to be applied within the 24 hours prior to a rain event
	☐ Other: _____
	☐ Other: _____

	WDID Number:

Predicted Rain Event Triggered Actions Continued

Activity	Actions Required Before Predicted Rain Event
Secure Site for Storm Event	☐ Materials and equipment properly stored and covered ☐ Waste and debris disposed in covered dumpsters or removed from site ☐ Trenches and excavations protected ☐ Perimeter controls around disturbed areas ☐ Other: _____ ☐ Other: _____
Site Erosion and Sediment Control BMP's	☐ Site perimeter controls in plan ☐ Catch basin and drop inlet protection in place ☐ Adequate capacity in sediment basins and traps ☐ Deploy temporary erosion control on inactive areas ☐ Deploy temporary perimeter control around disturbed areas and stockpiles ☐ Sweep roads ☐ Other: _____ ☐ Other: _____ ☐ Other: _____
Spills and Drips	☐ Clean up all spills and drips, including paint, fuel and oil ☐ Empty drip pans ☐ Other: _____ ☐ Other: _____
Pre-storm Inspection Identified Actions	☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐ _____

Project Information Name and Site Address:	***Contract Number/Co/Rte/PM:***
	WDID Number
I certify under penalty of law that this Rain Event Action Plan (REAP) will be implemented in accordance with the General Permit by me or under my direction or supervision. The information contained in this REAP was gathered and evaluated by qualified personnel prior to submittal. Based on my review of the information and inquiry of those who gathered and evaluated the information, the information submitted is, to the best of my knowledge and belief, true accurate, and complete. I am aware that Section 309 (c)(4) of the CWA provides for significant penalties, including fines and imprisonment for knowingly submitting false material statement, representation or certification.	
Water Pollution Control Manager (Name):	Date:
Water Pollution Control Manager Signature:	
Accepted by Resident Engineer (Name):	Date:
Resident Engineer Signature:	

Appendix M CEM-2061 Notice of Discharge Form

- Required by Caltrans for compliance.
- To be completed when discharges are causing or contributing to an exceedance of an applicable water quality standard.
- Sampling guidance is found in the current edition of the Construction Site Monitoring Program Guidance Manual.

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	Project Identifier Number:
	WDID Number:
Contractor Name and Address:	Project Site Risk Level: ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
Submitted by Contractor (Print Name and Sign):	Date:

Notice of Discharge General Information

Location:			Date Discharge Discovered:	
Discharge identified by stormwater visual site inspection? ☐ Yes ☐ No	Discharge discovered by contractor during daily work? ☐ Yes ☐ No	Discharge samples taken? ☐ Yes ☐ No	Discharge Type: ☐ Stormwater ☐ Authorized Non-Stormwater ☐ Non-authorized Non-Stormwater	Exceedance of Applicable Water Quality Standard: ☐ Turbidity ☐ pH ☐ _____
Discharge identified by Regional Water Quality Control Board? ☐ Yes ☐ No	Discharge identified by State Water Resources Control Board? ☐ Yes ☐ No		Date and Time Water Pollution Control Manager Notified of Discharge: Date and Time Resident Engineer Notified of Discharge:	

Storm Event Information

Complete this section for stormwater discharges.

Start of storm event: _____ *Date* _____ *Time*	Start of storm event: _____ *Date* _____ *Time*	Duration of storm event: _____ *Hours-Minutes.*	Precipitation Amount from Storm Recorded From Site Rain Gauge: _____ inch(es)	Storm event precipitation amount from governmental rain gauge: _____ inch(es)

Project Information Name and Site Address:	***Contract Number/Co/Rte/PM:***
	Project Identifier Number:
	WDID Number:

Notice of Discharge Information	
Based on a visual observation of the discharge location the nature and cause of the water quality standard exceedance is:	Photographs: ☐ Yes ☐ No
The BMPs currently installed at the location of the discharge:	Photographs: ☐ Yes ☐ No
Any additional BMPs which will be implemented to prevent or reduce pollutants that are causing or contributing to the exceedance of a water quality standard: Implementation schedule for additional BMPs:	Photographs: ☐ Yes ☐ No
Any maintenance or repair of BMPs: Implementation schedule for BMPs maintenance or repair:	Photographs: ☐ Yes ☐ No
Any other required corrective actions: Implementation schedule for corrective actions:	Photographs: ☐ Yes ☐ No
Summary of actions taken to reduce the pollutants causing or contributing to the water quality standard exceedance:	Photographs: ☐ Yes ☐ No

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	Project Identifier Number:
	WDID Number:

Sampling and Analyses Results:

Required when discharge samples are taken.

Sample Location Identification Number:	Date of Sampling:
Samples Collected by:	Date of Analyses:
Samples Analyses by:	Date and Time Water Pollution Control Manager Notified of Results:
Analyzer Phone Number:	Date and Time Resident Engineer Notified of Results:

Sample Identification	**Sample Collection Time**	**Storm Event Precipitation Amount at Sample Time**	**Analyses (_____)**

Analyses Information

Meter Manufacturer:	Model Number:	Serial Number:	Calibration Date:
Analytical Method:	Method Reporting Unit	Method Detection Limit:	

Note: Meter calibration information available in the SWPPP files.

Additional Information

Run-on Samples Taken? ☐ Yes ☐ No	Run-on Sample(s) Identification
Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	Project Identifier Number:

	WDID Number:

Notice of Discharge Report Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure 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, to the best of my knowledge and belief, the information submitted is, true accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Water Pollution Control Manager (Name):	Date:
Water Pollution Control Manager Signature:	
Accepted by Resident Engineer (Name):	Date:
Resident Engineer Signature:	

Discharge reported by telephone or e-mail to the Regional water Quality Control Board (RWQCB) within 48 hours of discharge discovery? ☐ Yes ☐ No	Date Discharge Reported to RWQCB:	Resident Engineer Initials:
Notice of Discharge Report submitted to RWQCB within 14 days (3 days for District 7 and District 11)? ☐ Yes ☐ No	Date Report Submitted to RWQCB:	Resident Engineer Initials:

GENERAL INFORMATION

- This form is required for compliance with provisions in Section C-2-Receiving Water Limitations for Construction of the National Pollutant Discharge Elimination System (NPDES) Permit Statewide Storm Water Permit and Waste Discharge requirements (WDRs) for the State of California, Department of Transportation (Caltrans), Order No. 99-06-DWQ, NPDES No. CAS000003.
- This form is to be completed when the Contractor, Caltrans, State Water Resources Control Board, or Regional Water Quality Control Board staff determines that stormwater discharges and/or authorized non-stormwater discharges are causing or contributing to an exceedance of an applicable water quality standard.
- Water quality standards are contained in the Statewide Water Quality Control Plan and/or applicable Regional water Quality Control Boards (RWQCBs) Basin Plan.
- Sampling guidance is found in Construction Site Monitoring Program Guidance Manual, dated July 2010 or current edition.
- Included a copy of the completed form in the project Storm Water Pollution Prevention Plan (SWPPP) files.

FORM

- Project Identifier Number: Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number write N/A in the field.
- Contract Number/Co/Rte/PM: For local agency encroachment permit projects write the encroachment permit number in the Contract Number field.
- Storm Event Information: Leave section blank if box is checked for either Authorized Non-stormwater Discharge or Non-authorized Non-stormwater Discharge.
- Discharge Information: Do not leave any sub-section blank, Caltrans Permit specifically requires Caltrans to submit the information in this section to RWQCBs.
- Discharge Information: For non-stormwater discharges describe the construction operation or activity that caused the discharge.
- Sampling and Analyses Results: Leave section blank if the no box is checked for Discharge samples taken?
- Analyses Results: Analytical results that are less than the method detection limit shall be reported as "Less than the method detection limit."
- Analyses Information: Leave section blank if the no box is checked for Discharge samples taken?
- Addition Information: Leave Run-on Sample identification blank if no box is checked for Run-on Samples Taken?

Appendix N CEM-2048 Storm Event Sampling and Analysis Plan

- Shall be filled within 24 hours prior to a storm event.

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	Project Identifier Number
	WDID Number:
Contractor Name and Address:	Project Site Risk Level: ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
Submitted by Contractor (Print Name and Sign):	Date:

STORM EVENT SAMPLING AND ANALYSIS PLAN

WEATHER FORECAST INFORMATION

Weather Forecast at _____ (*time*) _____(*date*)

24-Hour Forecast	**48-Hour Forecast**	**72-Hour Forecast**	**Forecasted Amount of Precipitation**
Date	Date	Date	What is the forecasted cumulative amount of precipitation for storm event? _____ inches
Chance of Precipitation %	Chance of Precipitation %	Chance of Precipitation %	
			Is the forecasted cumulative amount of precipitation for storm event ½ inch or greater? ☐ Yes ☐ No
Amount of Precipitation inches	Amount of Precipitation inches	Amount of Precipitation inches	

If yes and the project is Risk Level 1, complete this form.
If yes and the project is Risk Level 2 or 3, stop here and use form CEM-2049, "Qualifying Storm Event Sampling and Analysis Plan."
If no, complete this form.

SCHEDULE FOR SAMPLING

Based on the weather forecast stormwater discharge sampling will be required to begin on _____ (date) at approximately _____ (time)

Stormwater discharge sampling is required every 24 hours during an extended storm event, so based on the duration of the predicted storm event stormwater discharge sampling will be required on the following dates:

_____
_____
_____

The order stormwater discharge sample location will be sampled is:

☐ Numeric order by location number.
☐ Reverse numeric order by location number.
☐ The following specified order: _____
_____

Reason for specified sampling order: _____

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	Project Identifier Number
	WDID Number:

STORM EVENT SAMPLING AND ANALYSIS PLAN

Complete "Storm Event Sampling and Analysis Worksheet" to determine sampling locations.

Non-Visible Pollutant Sampling Locations

Complete worksheet to determine non-visible pollutant sampling locations.

☐ There are no sampling locations for non-visible pollutants for this storm event.
☐ Sampling locations for non-visible pollutants for this storm event are shown in Table 1.

Table 1: Storm Event Non-Visible Pollutant Sampling Locations

Location No	Uncontaminated Location No.	Location	Sample Type	Water Quality Indicator Constituent	Analyses

Table 2 Sampling Locations for Storm Event Listed in Numeric Order

No.	Location No.	QC/QA	No.	Location No.	QC/QA	No.	Location No.	QC/QA	No.	Location No.	QC/QA
1		☐	4		☐	7		☐	10		☐
2		☐	5		☐	8		☐	11		☐
3		☐	6		☐	9		☐	12		☐

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	Project Identifier Number
	WDID Number:

Storm Event Sampling and Analyses Plan Certification

I certify under penalty of law that this Storm Event Sampling and Analyses Plan was prepared by me or under my direction or supervision. The information contained in the summary was gathered and evaluated by qualified personnel prior to submittal. Based on my review of the information and inquiry of those who gathered and evaluated the information, the information submitted is, to the best of my knowledge and belief, true accurate, and complete.

I am aware that Section 309 (c)(4) of the Clean Water Act (CWA) provides for significant penalties, including fines and imprisonment for knowingly submitting false material statement, representation or certification.

Water Pollution Control Manager (Name):	Date:
Water Pollution Control Manager Signature:	

Storm Event Sampling and Analysis Plan Review

Reviewed by Resident Engineer (Name):	Date:
Resident Engineer Signature:	

Project Name	Contract Number/Co/Rte/PM:
Water Pollution Control Manager Name	Project Identifier Number
Water Pollution Control Manager Signature	WDID Number:
	Date
STORM EVENT SAMPLING AND ANALYSES WORKSHEETS	

Worksheet for Determining Non-Visible Pollutant Storm Event Sampling and Analyses Plan

Determining Non-Visible Pollutant Sampling Locations

Instruction: Enter the potential non-visible pollutant sampling locations from SWPPP Attachment EE. From pre-storm site visual monitoring inspection determine if pollutant source is present and check the appropriate box. For each potential non-visible sampling location, determine from the pre-storm site visual monitoring inspection if any of the five criteria for triggering sampling and analysis for non-visible pollutant are met and check the appropriate box in "Pre-storm site inspection identified trigger for sampling?" column.

The five triggers for sampling non-visible pollutant sampling locations are:

1. Materials or waste containing non-visible pollutants are not stored under watertight conditions.
2. Materials or waste containing non-visible pollutants are stored under watertight conditions, but (1) a breach, malfunction, leakage, or spill is observed, (2) the leak or spill is not cleaned up prior to storm event, and (3) there is a potential for a discharge of non-visible pollutants.
3. A construction activity with potential to contribute non-visible pollutants (1) was occurring within 24 hours prior to storm event, (2) applicable BMPs were observed to be breached, malfunctioning, or improperly implemented, and (3) there is a potential for a discharge of non-visible pollutants.
4. Soil amendments have been applied and there is the potential for a discharge of non-visible pollutants.
5. Stormwater runoff from an area contaminated by historic usage of the site has the potential to combine with stormwater runoff from the site and there is a potential for a discharge of non-visible pollutants.

Non-Visible Pollutant Sampling Required?

☐ No - If no pollutant sources are present, sampling stormwater discharges for non-visible pollutants is not required.

☐ No - If no triggers were identified by pre-storm site visual monitoring inspection, sampling stormwater discharges for non-visible pollutants is not required.

☐ Yes - If the pollutant source is present and the answer to a trigger question is yes check the box in the "Storm Event Sample Location" column.

Project Name	Contract Number/Co/Rte/PM:
Water Pollution Control Manager Name	Project Identifier Number
Date	WDID Number:
STORM EVENT SAMPLING AND ANALYSES WORKSHEETS	

Table A: Potential Project Site Non-Visible Pollutant Sampling Locations

Location No	Uncontaminated Location No.	Location	Pollutant Source	Is there an active pollutant source?	Pre-storm site inspection identified trigger for sampling?	Storm Event Sample Location
				☐ Yes ☐ No	☐ Yes ☐ No	☐
				☐ Yes ☐ No	☐ Yes ☐ No	☐
				☐ Yes ☐ No	☐ Yes ☐ No	☐
				☐ Yes ☐ No	☐ Yes ☐ No	☐
				☐ Yes ☐ No	☐ Yes ☐ No	☐
				☐ Yes ☐ No	☐ Yes ☐ No	☐
				☐ Yes ☐ No	☐ Yes ☐ No	☐
				☐ Yes ☐ No	☐ Yes ☐ No	☐

Enter into Table 1 on CEM-2049 "Storm Event Sampling and Analyses Plan" all locations from worksheet Table A that have the box checked in the "Storm Event sample Location" column. Refer to SWPPP Attachment EE to determine pollutant and water quality indicator constituent and SWPPP Section 700.2.2.3.3 for information to complete Table 1.

Project Name	Contract Number/Co/Rte/PM:
Water Pollution Control Manager Name	Project Identifier Number
Date	WDID Number:
STORM EVENT SAMPLING AND ANALYSES WORKSHEETS	

Worksheet for Determining Non-Visible Pollutant Storm Event Sampling and Analyses Plan for Locations Identified by Pre-Storm Site Monitoring Inspection That Were Not Shown on SWPPP Attachment EE.

Instruction: List any project site non-visible sampling location identified by pre-storm site visual monitoring in Table B that were not identified in SWPPP Attachment EE Table "Potential Sampling Locations for Non-visible Pollutants." Determine pollutant source, pollutant and water quality indicator constituent and enter the information into Table B.

Table B: Non-Visible Pollutant Sampling Locations Identified by Pre-Storm Site Inspection

Location No	Uncontaminated Location No.	Location	Pollutant Source	Pollutant	Water Quality Indicator Constituent

Enter the information from worksheet Table B into Table 1 on CEM-2049 "Storm Event Sampling and Analyses Plan".

Form instructions are currently being developed based on form review comments.
GENERAL INFORMATION
FORM • Contract Number/Co/Rte/PM: For local agency encroachment permit projects write the encroachment permit number in the Contract Number field. • Project Identifier Number: Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number write N/A in the field. • WDID Number: For projects with Water Pollution Control Program (WPCP) enter "WPCP" in this field. •

Appendix O CEM-2049 Qualifying Rain Event Sampling and Analysis Plan

- To document sampling locations for turbidity and pH for Risk Level 2 and Risk Level 3 projects for qualifying rain events.
- To determine additional storm event sampling locations based on prior storm event test results.

PROJECT INFORMATION NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER
	WDID NUMBER
CONTRACTOR NAME AND ADDRESS	PROJECT SITE RISK LEVEL ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
Submitted by contractor (print and sign name)	Date

Qualifying Rain Event Sampling and Analysis Plan

Weather Forecast Information

Weather forecast at _____ (*time*) _____(*date*)

24-hour Forecast	48-hour Forecast	72-hour Forecast	Forecasted Amount of Precipitation
Date	Date	Date	What is the forecasted cumulative amount of precipitation for storm event? _____ inches
% Chance of Precipitation	% Chance of Precipitation	% Chance of Precipitation	
			Is the forecasted cumulative amount of precipitation for storm event ½ inch or greater? ☐ Yes ☐ No
Amount of Precipitation in Inches	Amount of Precipitation in Inches	Amount of Precipitation in Inches	

If yes and the project is Risk Level 2 or Risk Level 3, complete this form.

If yes and the project is Risk Level 1, stop here and use form CEM-2048, "Storm Event Sampling and Analysis Plan."

If no, stop here and use form CEM-2048, "Storm Event Sampling and Analysis Plan."

Sampling Schedule

Based on the weather forecast, stormwater discharge sampling is required to begin on _____ (date) at approximately _____ (time)

Stormwater discharge sampling is required every 24 hours during an extended storm event, so based on the predicted duration of the storm event, it is required on the following dates:

_____ _____ _____ _____

Does stored or contained stormwater from a prior qualifying rain event need to be sampled before being discharged?

☐ Yes ☐ No If yes, notify the sampling and analysis provider.

The order in which stormwater discharge sample location will be sampled

☐ Numeric order by location number

☐ Reverse numeric order by location number

☐ The following specified order _____

_____

Reason for specified sampling order

_____

_____

PROJECT INFORMATION NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER
	WDID NUMBER

Qualifying Rain Event Sampling and Analysis Plan

Complete "Qualifying Rain Event sampling and Analysis Plan Worksheet" to determine sampling locations for storm event.

Non-Visible Pollutant Sampling Locations

☐ No sampling locations exist for non-visible pollutants for this storm event.

☐ Table 1 shows non-visible pollutant sampling locations for this storm event.

Table 1 Rain Event Non-Visible Pollutant Sampling Locations

Location Number	Uncontaminated Location Number	Location	Sample Type	Water Quality Indicator Constituent	Analysis

Stormwater Discharge Sampling Locations

☐ No sampling locations for turbidity and pH exist for this storm event.

☐ Table 2 shows sampling locations for required turbidity and pH analysis, optional SSC analysis, and other analysis for this storm event.

Table 2 Storm Event Sampling Locations for Turbidity and pH			
Location Number	**Location**	**Required Analysis**	**Optional Analysis**
		☐ Turbidity ☐ pH	☐ SSC ☐ Other
		☐ Turbidity ☐ pH	☐ SSC ☐ Other
		☐ Turbidity ☐ pH	☐ SSC ☐ Other
		☐ Turbidity ☐ pH	☐ SSC ☐ Other
		☐ Turbidity ☐ pH	☐ SSC ☐ Other
		☐ Turbidity ☐ pH	☐ SSC ☐ Other
		☐ Turbidity ☐ pH	☐ SSC ☐ Other

☐ Other Analyses Required _____

PROJECT INFORMATION NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER
	WDID NUMBER

Project Site Run-on Sampling Locations

☐ There are no project site run-on locations to be sampled for this storm event.
☐ Table 3 shows sampling locations for project site run-on for this storm event.

Table 3 Qualifying Rain Event Project Site Run-on Sampling Locations

Location Number	Location	Required Analysis	Optional Analysis
		☐ Turbidity ☐ pH	☐ SSC ☐ Other
		☐ Turbidity ☐ pH	☐ SSC ☐ Other
		☐ Turbidity ☐ pH	☐ SSC ☐ Other
		☐ Turbidity ☐ pH	☐ SSC ☐ Other
		☐ Turbidity ☐ pH	☐ SSC ☐ Other

☐ Other Analyses Required _____

Receiving Water Sampling Locations

☐ There are no receiving water locations to be sampled for this storm event.
☐ Table 3 shows receiving water sampling locations for this storm event.

Table 4 Receiving Water Sampling Locations

Location Number	Location	Required Analysis	Optional Analysis
		☐ Turbidity ☐ pH	☐ SSC ☐ Other
		☐ Turbidity ☐ pH	☐ SSC ☐ Other
		☐ Turbidity ☐ pH	☐ SSC ☐ Other

☐ Other Analyses Required: _____

PROJECT INFORMATION NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER
	WDID NUMBER

Table 5 Sampling Locations for Rain Event Listed in Numeric Order

Number	Location Number	QCQA	Number	Location Number	QCQA	Number	Location Number	QCQA	Number	Location Number	QCQA
1		☐	11		☐	21		☐	31		☐
2		☐	12		☐	22		☐	32		☐
3		☐	13		☐	23		☐	33		☐
4		☐	14		☐	24		☐	34		☐
5		☐	15		☐	25		☐	35		☐
6		☐	16		☐	26		☐	36		☐
7		☐	17		☐	27		☐	37		☐
8		☐	18		☐	28		☐	38		☐
9		☐	19		☐	29		☐	39		☐
10		☐	20		☐	30		☐	40		☐

Qualifying Rain Event Sampling and Analysis Plan Certification

I certify under penalty of law that this Storm Event Sampling and Analysis Plan was prepared by me or under my direction or supervision. The information contained in the summary was gathered and evaluated by qualified personnel before submittal. Based on my review of the information and inquiry of those who gathered and evaluated the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that Section 309 (c)(4) of the Clean Water Act (CWA) provides for significant penalties, including fines and imprisonment for knowingly submitting false material statement, representation or certification.

Water pollution control manager name	Date
Water pollution control manager signature	

Qualifying Rain Event Sampling and Analysis Plan Review

Reviewed by resident engineer name	Date
Resident engineer signature	

PROJECT NAME	CONTRACT NUMBER/CO/RTE/PM:
WATER POLLUTION CONTROL MANAGER NAME	PROJECT IDENTIFIER NUMBER
WATER POLLUTION CONTROL MANAGER SIGNATURE	WDID NUMBER:
	DATE
Qualifying Rain Event Sampling and Analysis Plan Worksheets	

Determining Non-Visible Pollutant Sampling Locations

Instructions Enter the potential non-visible pollutant sampling locations from SWPPP Attachment EE. From pre-storm site visual monitoring inspection, determine if the pollutant source is present and check the appropriate box. For each potential non-visible sampling location, determine from the pre-storm site visual monitoring inspection if any of the five criteria for triggering sampling and analysis for non-visible pollutant are met and check the appropriate box in **"**Pre-storm site inspection identified trigger for sampling?" column.

The five triggers for sampling non-visible pollutant sampling locations are:

6. Materials or waste containing non-visible pollutants are not stored under watertight conditions.
7. Materials or waste containing non-visible pollutants are stored under watertight conditions, but (1) a breach, malfunction, leakage, or spill is observed, (2) the leak or spill is not cleaned up before the storm event, and (3) a potential exists for discharge of non-visible pollutants.
8. A construction activity with potential to contribute non-visible pollutants (1) was occurring within 24 hours before the storm event; (2) applicable BMPs were observed to be breached, malfunctioning, or improperly implemented; and (3) a potential exists for discharge of non-visible pollutants.
9. Soil amendments have been applied and the potential exists for a discharge of non-visible pollutants.
10. Stormwater runoff from an area contaminated by historic site use has the potential to combine with stormwater runoff from the site and potential exists for a discharge of non-visible pollutants.

Non-Visible Pollutant Sampling Required?

☐ No—If no pollutant sources are present, sampling stormwater discharges for non-visible pollutants is not required.

☐ No—If pre-storm site visual monitoring inspection identified no triggers that require sampling for non-visible pollutants, sampling stormwater discharges for non-visible pollutants is not required.

☐ Yes—If the pollutant source is present and the answer to a trigger question is "yes," check the box in the "Storm Event Sample Location" column.

PROJECT NAME	CONTRACT NUMBER/CO/RTE/PM
WATER POLLUTION CONTROL MANAGER NAME	PROJECT IDENTIFIER NUMBER
DATE	WDID NUMBER

Qualifying Rain Event Sampling and Analysis Plan Worksheets, continued

Table A Potential Project Site Non-Visible Pollutant Sampling Locations

Location Number	Uncontaminated Location Number	Location	Pollutant Source	Active pollutant source exists?	Pre-storm site inspection identified trigger for sampling?	Storm Event Sample Location
				☐ Yes ☐ No	☐ Yes ☐ No	☐
				☐ Yes ☐ No	☐ Yes ☐ No	☐
				☐ Yes ☐ No	☐ Yes ☐ No	☐
				☐ Yes ☐ No	☐ Yes ☐ No	☐
				☐ Yes ☐ No	☐ Yes ☐ No	☐
				☐ Yes ☐ No	☐ Yes ☐ No	☐
				☐ Yes ☐ No	☐ Yes ☐ No	☐

Enter into Table 1 on CEM-2049, “Qualifying Rain Event Sampling and Analysis Plan,” all locations checked in the “Storm Event Sample Location” column of the Table A worksheet. Refer to SWPPP Attachment EE to determine pollutant and water quality indicator constituent and SWPPP Section 700.2.2.3.3 for information to complete Table 1.

Worksheet for Determining Non-Visible Pollutant Rain Event Sampling and Analysis Plan for Locations Identified by Pre-Storm Site Monitoring Inspection Not Shown on SWPPP Attachment EE.

Instruction List any project site non-visible sampling location identified by pre-storm site visual monitoring in Table B that were not identified in SWPPP Attachment EE Table "Potential Sampling Locations for Non-visible Pollutants." Determine pollutant source, pollutant and water quality indicator constituent and enter the information into Table B.

Table B Non-Visible Pollutant Sampling Locations Identified by Pre-Storm Site Inspection

Location Number	Uncontaminated Location Number	Location	Pollutant Source	Pollutant	Water Quality Indicator Constituent

Enter the information from worksheet Table B into Table 1 on CEM-2049, "Qualifying Rain Event Sampling and Analysis Plan."

PROJECT NAME	CONTRACT NUMBER/CO/RTE/PM
WATER POLLUTION CONTROL MANAGER NAME	PROJECT IDENTIFIER NUMBER
DATE	WDID NUMBER

Qualifying Rain Event Sampling and Analysis Plan Worksheets, continued

Worksheet for Determining Rain Event Sampling Locations for Turbidity and pH for Risk Level 2 and Risk Level 3 Projects for Qualifying Rain Events

Determining Sampling Locations Based on Turbidity

Instruction List all project stormwater discharge sampling location shown in SWPPP Attachment EE Table, "Project Site Discharge Sampling Locations for Turbidity and pH" on Table C. Based on pre-storm site visual monitoring inspection determine if there is any disturbed soil area at each location and then check the appropriate box in Table C for each location. Enter the drainage area in acres for each location from SWPPP Attachment EE. For those locations that currently have disturbed soil area, determine during the pre-storm site monitoring inspection the current disturbed soil area in acres and enter the information in Table C. Calculate and enter the percentage of drainage area that is disturbed soil area in Table C.

Determine the Number of Sampling Locations for Representative Sampling based on Turbidity

Check the appropriate following box used to determine representative sampling locations.

☐ If fewer than five discharge locations currently have disturbed soil area then sample all discharge locations with disturbed soil area. Check the box in the "Storm Event Sample Location" column on Table C for all locations which currently have disturbed soil area.

☐ If the project has 25 or fewer stormwater discharge sampling locations and if more than five discharge locations currently have disturbed soil area, select the five locations with the highest percentage of drainage area that is disturbed soil area to determine the storm event sampling locations. Check the box in the "Rain Event Sampling Location" column in Table C for all five locations.

☐ If more than 25 stormwater discharge sampling locations exist, determine the number of locations that must be sampled based on 20 percent of the total stormwater discharge sampling locations.

_____ (stormwater discharge locations) x .20 =_____ (number of sampling locations)

To determine the storm event sampling locations, select the required number of sampling locations with the highest percentage of drainage area that is disturbed soil area. Check the box in the "Rain Event Sampling Location" column on Table C for each sampling location selected.

☐ If there was a Numeric Effluent Limitation exceedance for a prior storm event, check the box in the "Storm Event Sampling Location" for all locations with disturbed soil area.

Determining Sampling Locations Based on pH

Project sites may have current construction activities that may affect the pH of stormwater discharges.

To ensure that selection of discharge locations with current construction activities that may affect pH are included in project site representative sampling the following selection process should be followed.

Instruction Based on pre-storm site visual monitoring inspection determine if there is current construction activity within each drainage area that could affect the pH of stormwater discharges and then check the appropriate box in the column of Table C for each discharge location. Check the box in column A of table D if both questions in the previous two columns have been answered Yes.

The Number of Sampling Locations for Representative Sampling is based on:

Check the appropriate following box used to determine representative sampling location for pH.

☐ If fewer than five discharge locations currently have disturbed soil area and no additional discharge locations have current construction activities that could affect pH, base storm event representative sampling on locations selected using turbidity. Check the box in "Storm Event Sample Location Column" in Table C for all locations which have disturbed soil area.

☐ If fewer than five discharge locations currently have disturbed soil area and additional discharge locations have current construction activities that could affect pH, sample all discharge locations with disturbed soil area and select the two additional locations with the highest potential for pH discharges based on current construction activities that may affect the pH of stormwater discharges. Check the "Location selected for sampling based on pH?" box for each selected location based on the highest potential for pH discharges. Check the box in the "Storm Event Sample Location" column in Table C for locations with box checked in "Location selected for sampling based on disturbed soil area?" column or locations with box checked in "Location selected for sampling based on pH?" column.

PROJECT NAME	CONTRACT NUMBER/CO/RTE/PM
WATER POLLUTION CONTROL MANAGER NAME	PROJECT IDENTIFIER NUMBER
DATE	WDID NUMBER
Qualifying Rain Event Sampling and Analysis Plan Worksheets, continued	

The Number of Sampling Locations for Representative Sampling is based on: (continued)

☐ If five or more discharge locations currently have disturbed soil area and at least two boxes in Column A are checked, base storm event representative sampling on sampling locations selected based on disturbed soil area. Check the box in the "Storm Event Sample Location" column in Table C for sampling locations with box checked in "Location selected for sampling based on disturbed soil area?" column.

☐ If five or more discharge locations have disturbed soil area and one box or no boxes are checked in Column A, additional sampling locations should be considered based on pH. If there are discharge locations with no disturbed soil area with construction activities that could affect pH, sample all storm event sample locations based on turbidity, and select two locations with the highest potential for pH discharges based on current construction activities. Check the box in the "Storm Event Sample Location" column in Table C for locations with box checked in "Location selected for sampling based on disturbed soil area?" column or locations with box checked in "Location selected for sampling based on pH?" column.

PROJECT NAME	CONTRACT NUMBER/CO/RTE/PM	PROJECT IDENTIFIER NUMBER	WDID NUMBER

Qualifying Rain Event Sampling and Analysis Plan Worksheets, continued

Table C Project Site Discharge Sampling Location Based on Disturbed Soil Area and pH

Location Number	Location	Any disturbed soil area?	Drainage area in acres	Current disturbed soil area in acres	Percentage of drainage area that is disturbed soil area	Location selected for sampling based on disturbed soil area?	Are there current construction activities that may affect pH of stormwater discharges?	Check the box if the answer is yes to both questions. (Column A)	Location selected for sampling based on pH?	Rain event sample location
		☐ Yes ☐ No				☐ Yes ☐ No	☐ Yes ☐ No	☐	☐	☐
		☐ Yes ☐ No				☐ Yes ☐ No	☐ Yes ☐ No	☐	☐	☐
		☐ Yes ☐ No				☐ Yes ☐ No	☐ Yes ☐ No	☐	☐	☐
		☐ Yes ☐ No				☐ Yes ☐ No	☐ Yes ☐ No	☐	☐	☐
		☐ Yes ☐ No				☐ Yes ☐ No	☐ Yes ☐ No	☐	☐	☐
		☐ Yes ☐ No				☐ Yes ☐ No	☐ Yes ☐ No	☐	☐	☐

Enter into Table 2 on CEM-2049, “Qualifying Rain Event Sampling and Analysis Plan,” locations from worksheet Table C with the box in the “Storm Event Sample Location” column checked.

PROJECT NAME	CONTRACT NUMBER/CO/RTE/PM
WATER POLLUTION CONTROL MANAGER NAME	PROJECT IDENTIFIER NUMBER
DATE	WDID NUMBER
Rain Event Sampling and Analysis Plan Worksheets, continued	
Worksheet for determining additional storm event sampling locations based on prior storm event test results near numeric action levels	

Has the daily average for any discharge location exceeded the NTU daily average of 200 NTU or has pH daily average outside the 6.5 to 8.8 range for any storm event?

☐ Yes—Complete the worksheet.

☐ No—Stop. No additional sampling locations are necessary for this storm event.

Instructions If stormwater sample test results have exceeded limitations set for representative sampling, select additional sampling locations to sample and analyze 50 percent of the project site's stormwater discharge locations.

Determine the number of locations that must be sampled based on 50 percent of the total stormwater discharge sampling locations.

_____ (stormwater discharge locations) x .50 =_____ (number of sampling locations)

Check the appropriate box below used to determine representative sampling locations.

☐ If the number of sampling locations is five or fewer, no additional sampling locations need to be selected.

☐ If the number of sampling locations is determined to be more than 5, complete Table D. Copy the information from Table C for the first six columns of Table D. Use the information in the last column of Table C, "Storm Event Sample Location," for column 7. If NTU limit was exceeded, select additional sampling locations to meet the required number of representative sampling locations based on additional locations with the highest percentage of drainage area that is disturbed soil area. If pH range was exceeded, select additional sampling locations to meet the required number of representative sampling locations based on discharge locations that have current construction activities that could affect pH .Check the box in the "Additional Storm Event Sampling Location" column for each additional discharge location selected for sampling.

PROJECT NAME	CONTRACT NUMBER/CO/RTE/PM	PROJECT IDENTIFIER NUMBER	WDID NUMBER

Qualifying Rain Event Sampling and Analysis Plan Worksheets, continued

Table D Additional Storm Event Sampling Locations for Turbidity and pH based on exceedance of 200 NTU or pH outside the 6.5 to 8.5 range

Location Number	Location	Any disturbed soil area?	Drainage area in acres	Current disturbed soil area in acres	Percentage of drainage area that is disturbed soil area	Storm event sample location?	Additional location selected for sampling based on disturbed soil area?	Are there current construction activities that may affect pH of stormwater discharges?	Additional location selected for sampling based on pH?
		☐ Yes ☐ No				☐ Yes ☐ No	☐	☐ Yes ☐ No	☐
		☐ Yes ☐ No				☐ Yes ☐ No	☐	☐ Yes ☐ No	☐
		☐ Yes ☐ No				☐ Yes ☐ No	☐	☐ Yes ☐ No	☐
		☐ Yes ☐ No				☐ Yes ☐ No	☐	☐ Yes ☐ No	☐
		☐ Yes ☐ No				☐ Yes ☐ No	☐	☐ Yes ☐ No	☐
		☐ Yes ☐ No				☐ Yes ☐ No	☐	☐ Yes ☐ No	☐
		☐ Yes ☐ No				☐ Yes ☐ No	☐	☐ Yes ☐ No	☐

Enter into Table 2 on CEM-2049, “Qualifying Rain Event Sampling and Analysis Plan,” locations from worksheet Table D with the box in the “Additional location selected for sampling based on disturbed soil area?” column or box checked in “Additional location selected for sampling based on pH?” column.

PROJECT NAME	CONTRACT NUMBER/CO/RTE/PM
WATER POLLUTION CONTROL MANAGER NAME	PROJECT IDENTIFIER NUMBER
DATE	WDID NUMBER
Qualifying Rain Event Sampling and Analysis Plan Worksheets, continued	
Worksheet for Determining Rain Event Run-on Sampling Locations	

Instructions List in Table E discharge locations that were selected as storm event sample locations shown in Table C and additional storm water sample locations shown in Table D. Determine if there are stormwater run-on locations associated with the selected storm event sample locations, stormwater run-on locations are shown in Table "Project Site Run-on Locations" SWPPP Attachment EE.

Storm Event Run-on of Sampling is based on

Check the appropriate box below used to determine run-on sampling.

☐ No stormwater run-on locations exist for the selected discharge locations.

☐ If run-on locations exist, sample the run-on locations for the first three storm events that occur on a project to determine the run-on baseline.

☐ If the run-on baseline, determined from at least three storm events, is less then 50 NTU or inside the range of 7.0 to 8.0 for pH, run-on samples are not required for this storm event. Do not check box without data for at least three storm events.

☐ Run-on sampling is required if a prior storm event at a discharge location exceeded a numeric action level or numeric effluent limitation.

Table E Potential Rain Event Run-on Sampling Locations

Storm event sample location number	Location	Does project site run-on combine with discharges at this location?	If yes to run-on, what is its location number?	Is baseline for turbidity less than 50 NTU for run-on?	Is baseline for pH between 7.0 and 8.0 for run-on?	Storm event run-on sample location
		☐ Yes ☐ No		☐ Yes ☐ No	☐ Yes ☐ No	☐
		☐ Yes ☐ No		☐ Yes ☐ No	☐ Yes ☐ No	☐
		☐ Yes ☐ No		☐ Yes ☐ No	☐ Yes ☐ No	☐

Enter into Table 3 on CEM-2049, "Storm Event Sampling and Analysis Plan," locations from worksheet Table E that have the "Storm Event
Run-on Sample Location" column box checked.

PROJECT NAME	CONTRACT NUMBER/CO/RTE/PM
WATER POLLUTION CONTROL MANAGER NAME	PROJECT IDENTIFIER NUMBER
DATE	WDID NUMBER

Rain Event Sampling and Analysis Plan Worksheets, continued

Worksheet for Determining Storm Event Receiving Water Sampling Locations

1. Does the project site have any locations that discharge directly into a receiving water?

   ☐ Yes—Complete worksheet F1.

   ☐ No—Go to question 2.

2. Has there been a Numeric Effluent Limitation (NEL) exceedance on this project?

   ☐ Yes—Complete worksheet F2.

   ☐ No—Stop, no receiving water sampling locations are necessary for this storm event.

Worksheet F1 Determining Storm Event Receiving Water Sampling Locations

Instructions List project stormwater discharge sampling locations shown in SWPPP Attachment EE Table, "Receiving Water Sampling Locations for Turbidity and pH When Project Site Discharges Directly to the Receiving Water." Based on pre-storm site visual monitoring inspection, determine if there is disturbed soil area at each location and check the appropriate box in Table F1 for each location. Based on pre-storm site visual monitoring inspection, determine if any current construction activity may affect the pH of stormwater discharge at each location and check the appropriate box in Table F1 for each location. For each location, if either disturbed soil area or current construction activity may affect the pH of stormwater discharge, check the box for storm event sample location.

Table F1 Receiving Water Sampling Locations for Turbidity and pH When Project Site Discharges Directly To The Receiving Water

Location Number	Location	Is there any disturbed soil area?	Current construction activity that may affect pH of stormwater discharges?	Storm event sample location
		☐ Yes ☐ No	☐ Yes ☐ No	☐
		☐ Yes ☐ No	☐ Yes ☐ No	☐
		☐ Yes ☐ No	☐ Yes ☐ No	☐
		☐ Yes ☐ No	☐ Yes ☐ No	☐

Enter into Table 4 on CEM-2049, "Storm Event Sampling and Analysis Plan," locations from worksheet Table F1 that have the box in the "Storm Event Sample Location" column checked. Duplicate entries are not required in Table 4 for the same Receiving Water Location Number and Receiving Water Location based on different discharge locations.

PROJECT NAME	CONTRACT NUMBER/CO/RTE/PM
WATER POLLUTION CONTROL MANAGER NAME	PROJECT IDENTIFIER NUMBER
DATE	WDID NUMBER

Qualifying Rain Event Sampling and Analysis Plan Worksheets, continued

Worksheet F2 Determining Storm Event Receiving Water Sampling Locations

Instructions Enter the receiving water Location Number and Location for receiving water discharge locations shown on Table C with the box in the "Storm Event Sample Location" column checked. Check the appropriate box for each discharge location if there was NEL exceedance for a prior storm event. Check the appropriate box for each discharge location if discharges from the location can reach receiving water. If the answer to "Discharge from this project site discharge location reach receiving water?" is yes then determine the receiving water sampling location number and receiving water location description. Refer to SWPPP Attachment EE for determining the receiving water sampling location association with each discharge location number. If stormwater discharge from a discharge location cannot reach receiving water, leave the receiving Water Location Number and Receiving Water Location blank.

Check the appropriate following box to indicate the basis used to determine receiving water sampling locations.

☐ No receiving water sampling locations for the discharge locations with prior NEL exceedance. Discharges from discharge locations do not reach receiving waters.

☐ Receiving water sampling locations are based on discharge locations where NEL was exceeded on prior storm events.

Table F2 Receiving Water Sampling Locations

Discharge location number	NEL exceedance at discharge location	Discharge from this project site discharge location reach receiving water?	Receiving water location number	Receiving water location	Storm event sample location
	☐ Yes ☐ No	☐ Yes ☐ No			☐
	☐ Yes ☐ No	☐ Yes ☐ No			☐
	☐ Yes ☐ No	☐ Yes ☐ No			☐
	☐ Yes ☐ No	☐ Yes ☐ No			☐

Enter into Table 4 on CEM-2049, "Storm Event Sampling and Analysis Plan," locations from worksheet Table F2 that have the box in the "Storm Event Sample Location" column checked. Duplicate entries for receiving water sampling location are not required in Table 4 if the same receiving water sampling location is selected based on different discharge locations.

GENERAL INFORMATION
FORM • Contract Number/Co/Rte/PM For local agency encroachment permit projects write the encroachment permit number in the Contract Number field. • Project Identifier Number Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number, write "N/A" in the field. • WDID Number For projects with Water Pollution Control Program enter "WPCP" in this field.

Appendix P CEM-2055 Stormwater Equipment Maintenance Log Form

- Documents instrument maintenance
- Instrument calibration shall be documented using forms CEM 2056, CEM 2057, and CEM 2058.

PROJECT INFORMATION NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER
	WDID NUMBER
CONTRACTOR NAME AND ADDRESS	PROJECT SITE RISK LEVEL ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
SUBMITTED BY CONTRACTOR (PRINT NAME AND SIGN)	DATE

Meter

Maintenance Log

Meter manufacturer		Meter model number	Meter serial number
Date Repaired	**Repair or Parts Replaced**	**Repaired by**	**Notes**

Instructions

GENERAL INFORMATION

- The information shown on this form is required to document maintenance on stormwater field analyses equipment, such as turbidity meters and pH meters.
- Completed forms must be filed in project file category 20.55, Field Testing Equipment Maintenance and Calibration Records.

FORM

- **Contract Number/Co/Rte/PM**
  For local agency encroachment permit projects, write the encroachment permit number in the Contract Number field.
- **Project Identifier Number**
  Caltrans projects starting July 1, 2010, will have a Project Identifier Number. For projects without a project identifier number write "N/A" in the field.
- **WDID Number**
  For projects with Water Pollution Control Program enter "WPCP" in this field.
- **Project Site Risk Level**
  Check the box for the appropriate SWPPP risk level.
- **Meter**
  Enter the meter manufacturer, model number, and serial number. Use a separate form for each field meter used on a project site.

Appendix Q CEM-2056 Stormwater Turbidity Meter Calibration Record Form

- Required for projects with Construction Site Monitoring Program as part of Stormwater Pollution Prevention Plan (SWPPP) to stormwater analyses meter calibration.
- Documents turbidity Meter Calibration data that have to be reviewed by the water pollution control manager.

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	Project Identifier Number:
	WDID Number:
Contractor Name and Address:	Project Site Risk Level: ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
Submitted by Contractor (Print Name and Sign):	Date:

Turbidity Meter

Meter Manufacturer:	Meter Model Number:	Meter Serial Number:

Standard Solution

Standard Solution (NTU)	Control Number	Date
0.02		
10.0		
1000		

Turbidity Meter Calibration Date _____

Standard Solution (NTU)	Cal Standard Solution Expiration Date	Initial Calibration		Re-Calibration		Drift Check		Notes	Initials
		Time:		Time:		Time			
		Cal	Read	Cal	Read	Read	Acceptable Performance		
0.02								☐	
10.0								☐	
1,000								☐	

Turbidity Meter Calibration Date _____

Standard Solution (NTU)	Cal Standard Solution Expiration Date	Initial Calibration		Re-Calibration		Drift Check		Notes	Initials
		Time:		Time:		Time			
		Cal	Read	Cal	Read	Read	Acceptable Performance		
0.02								☐	
10.0								☐	
1,000								☐	

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	Project Identifier Number:
	WDID Number:

Turbidity Meter Calibration Date _____

Standard Solution (NTU)	Cal Standard Solution Expiration Date	Initial Calibration		Re-Calibration		Drift Check		Notes	Initials
		Time:		Time:		Time			
		Cal	Read	Cal	Read	Read	Acceptable Performance		
0.02								☐	
10.0								☐	
1,000								☐	

Turbidity Meter Calibration Date _____

Standard Solution (NTU)	Cal Standard Solution Expiration Date	Initial Calibration		Re-Calibration		Drift Check		Notes	Initials
		Time:		Time:		Time			
		Cal	Read	Cal	Read	Read	Acceptable Performance		
0.02								☐	
10.0								☐	
1,000								☐	

Turbidity Meter Calibration Date _____

Standard Solution (NTU)	Cal Standard Solution Expiration Date	Initial Calibration		Re-Calibration		Drift Check		Notes	Initials
		Time:		Time:		Time			
		Cal	Read	Cal	Read	Read	Acceptable Performance		
0.02								☐	
10.0								☐	
1,000								☐	

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	Project Identifier Number:
	WDID Number:

Turbidity Meter Calibration Date _____

Standard Solution (NTU)	Cal Standard Solution Expiration Date	Initial Calibration		Re-Calibration		Drift Check		Notes	Initials
		Time:		Time:		Time			
		Cal	Read	Cal	Read	Read	Acceptable Performance		
0.02								☐	
10.0								☐	
1,000								☐	

Turbidity Meter Calibration Date _____

Standard Solution (NTU)	Cal Standard Solution Expiration Date	Initial Calibration		Re-Calibration		Drift Check		Notes	Initials
		Time:		Time:		Time			
		Cal	Read	Cal	Read	Read	Acceptable Performance		
0.02								☐	
10.0								☐	
1,000								☐	

Date	Notes

Review

I have reviewed this document and based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is, true accurate, and complete.

Water Pollution Control Manager (Name)	Date
Water Pollution Control Manager Signature:	

Form instructions are currently being developed based on form review comments.
GENERAL INFORMATION • The information shown on this form is required for projects with Construction Site Monitoring Program as part of Stormwater Pollution Prevention Plan (SWPPP) to stormwater analyses meter calibration. • Completed forms shall be filed in project file category 20.55Field Testing Equipment Maintenance and Calibratio •
FORM • Contract Number/Co/Rte/PM: For local agency encroachment permit projects write the encroachment permit number in the Contract Number field. • Project Identifier Number: Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number write N/A in the field. • WDID Number: •
•

Appendix R CEM-2057 Stormwater pH Meter Calibration Record Form

- Required for projects with Construction Site Monitoring Program as part of Stormwater Pollution Prevention Plan (SWPPP) to stormwater analyses meter calibration.
- pH Meter Calibration record

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	Project Identifier Number:
	WDID Number:
Contractor Name and Address:	Project Site Risk Level: ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
Submitted by Contractor (Print Name and Sign):	Date:

pH Meter

Meter Manufacturer:	Meter Model Number:	Meter Serial Number:

Buffer Solution

Standard Buffer	Control Number	Expiration Date	Date Opened
pH Buffer 4.0			
pH Buffer 7.0			
ph Buffer 10.0			

pH Meter Calibration Record

Date	Electrode No.	Temperature at Calibration	Slope (%)	Buffers Used for Calibration			Re-check pH 7.0	Notes	Initials
				pH 4.0	pH 7.0	pH 10.0			
				☐	☐	☐	☐	☐	
				☐	☐	☐	☐	☐	
				☐	☐	☐	☐	☐	
				☐	☐	☐	☐	☐	
				☐	☐	☐	☐	☐	

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	Project Identifier Number:
	WDID Number:

pH Meter Calibration Record Continued

Date	Electrode No.	Temperature at Calibration	Slope (%)	Buffers Used for Calibration			Re-check pH 7.0	Notes	Initials
				pH 4.0	pH 7.0	pH 10.0			
				☐	☐	☐	☐	☐	
				☐	☐	☐	☐	☐	
				☐	☐	☐	☐	☐	
				☐	☐	☐	☐	☐	
				☐	☐	☐	☐	☐	
				☐	☐	☐	☐	☐	
				☐	☐	☐	☐	☐	
				☐	☐	☐	☐	☐	

Date	Calibration Notes

Review

I have reviewed this document and based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is, true accurate, and complete.

Water Pollution Control Manager (Name)	Date

Water Pollution Control Manager Signature:

Form instructions are currently being developed based on form review comments.

GENERAL INFORMATION

- The information shown on this form is required for projects with Construction Site Monitoring Program as part of Stormwater Pollution Prevention Plan (SWPPP) to stormwater analyses meter calibration.
- Completed forms shall be filed in project file category 20.55Field Testing Equipment Maintenance and Calibratio
-

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FORM

- Contract Number/Co/Rte/PM: For local agency encroachment permit projects write the encroachment permit number in the Contract Number field.
- Project Identifier Number: Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number write N/A in the field.
- WDID Number:
-

ELECTROTRODE MAINTENANCE

- To pass calibration the pH meter must display a slope between 95% and 105%. If the pH meter does not display a slope between 95% and 105% than take corrective action as follows:
    1. Change the standard pH and buffers and recalibrate.
    2. Change the 3M KCI fill in the electrode or bring up the volume and recalibrate.
    3. Clean the electrode with the pH Electrode Cleaning Solution (follow manufacturers instructions) and recalibrate.
    4. If the meter does not recalibrate using the three steps above then consult the manufacturer's technical manual and discontinue use of the meter until it is functioning properly.
- Any corrective actions to calibrate the pH meter must be recorded in the calibration notes section on form CEM-2056 Stormwater pH Meter Calibration Record.
- Any pH meter maintenance activities shall be recorder under the calibration notes section on form CEM-2056 Stormwater pH Meter Calibration Record.
-

Appendix S CEM-2058 Stormwater Meter Calibration Record Form

- Required for projects with Construction Site Monitoring Program as part of Stormwater Pollution Prevention Plan (SWPPP) to stormwater analyses meter calibration.
- Conductivity Meter Calibration Record
- Dissolved-Oxygen Meter Calibration Record

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	Project Identifier Number:
	WDID Number:
Contractor Name and Address:	Project Site Risk Level: ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
Submitted by Contractor (Print Name and Sign):	Date:

Meter

Meter Manufacturer:	Meter Model Number:	Meter Serial Number:

Conductivity Meter Calibration Date _____

Standard Solution (uS/cm)	Cal Standard Solution Expiration Date	Initial Calibration		Re-Calibration		Drift Check		Notes	Initials
		Time:		Time:		Time			
		Cal	Read	Cal	Read	Read	Acceptable Performance		
447								☐	
1413								☐	
8974								☐	
15,000									

Dissolved Oxygen Meter Calibration Date _____

Standard	Cal Standard Solution Expiration Date	Initial Calibration		Re-Calibration		Drift Check		Notes	Initials
		Time:		Time:		Time			
		Cal	Read	Cal	Read	Read	Acceptable Performance		
Open Air (mg/L)								☐	
Zero Oxygen Standard (MG/L)								☐	
Barometer (mm Hg)								☐	

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	Project Identifier Number:
	WDID Number:

_____ Meter Calibration Date _____

Standard	Cal Standard Solution Expiration Date	Initial Calibration		Re-Calibration		Drift Check		Notes	Initials
		Time:		Time:		Time			
		Cal	Read	Cal	Read	Read	Acceptable Performance		
								☐	
								☐	
								☐	

_____ Meter Calibration Date _____

Standard	Cal Standard Solution Expiration Date	Initial Calibration		Re-Calibration		Drift Check		Notes	Initials
		Time:		Time:		Time			
		Cal	Read	Cal	Read	Read	Acceptable Performance		
								☐	
								☐	
								☐	

Date	Notes

Review

I have reviewed this document and based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is, true accurate, and complete.

Water Pollution Control Manager (Name)	Date

Water Pollution Control Manager Signature:

Form instructions are currently being developed based on form review comments.
GENERAL INFORMATION • The information shown on this form is required for projects with Construction Site Monitoring Program as part of Stormwater Pollution Prevention Plan (SWPPP) to stormwater analyses meter calibration. • Completed forms shall be filed in project file category 20.55Field Testing Equipment Maintenance and Calibratio •
FORM • Contract Number/Co/Rte/PM: For local agency encroachment permit projects write the encroachment permit number in the Contract Number field. • Project Identifier Number: Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number write N/A in the field. • WDID Number: •
FORM • Acceptable performance for conductivity drift is ±10 percent. • Acceptable performance for dissolved oxygen is ±10 percent.

Appendix T CEM-2050 Sample Information, Identification, and Chain of Custody Record Form

- Required by the (NPDES) General Permit for compliance
- A separate Sample Information, Identification, and Chain-of-Custody Record to be completed for each sampling location daily.
- Samples are collected, maintained, and shipped according to the Surface Ambient Monitoring Program's 2008 Quality Assurance Program Plan.

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	Project Identifier Number:
	WDID Number:
Contractor Name and Address:	Project Site Risk Level: ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
Submitted by Contractor (Print Name and Sign):	Date:

Daily Sample Record

Location:	Date of Sampling:
Sample Location Identification Number:	Sampled Collected For: ☐ Storm Event ☐ Discharge of Stored Stormwater ☐ Dewatering Discharge ☐ other_____
Sampled By Signature:	
Sampled By Print Name:	Samples To Be Analyzed For Parameter(s): ☐ Turbidity ☐ pH ☐ other_____ ☐ other_____
Company:	

Sample Identification	Sample Collection Time	Storm Event Precipitation Amount at Sample Time	Sample Preservative	Comments	Photo(s)
					☐
					☐
					☐

Preservative Key:
0. None
1. Stored at 4 Celsius
2. Other _____

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	Project Identifier Number:
	WDID Number:

Storm Data	
Storm Start Date and Time:	Time Elapsed Since Last Storm: _____ days

Sampling Exception	
Sampling Exception: ☐ Yes ☐ No	Sampling was not conducted because of the following conditions:

Chain-of-Custody

Relinquished By:	Received By:	Relinquished By:	Received By:
Signature:	Signature:	Signature:	Signature:
Print Name:	Print Name:	Print Name:	Print Name:
Company:	Company:	Company:	Company:
Date/Time:	Date/Time:	Date/Time:	Date/Time:

Review and Record Keeping

I have reviewed this document and based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is, true accurate, and complete.

Sampling information has been entered into the Sampling and Testing Activity Log:

☐ Yes ☐ No

Water Pollution Control Manager (Name):	Date:
Water Pollution Control Manager Signature:	
Accepted by Resident Engineer (Name):	Date:
Resident Engineer Signature:	

INSTRUCTIONS:

GENERAL INFORMATION

- This form is required for compliance with provisions in Section I of Attachments C, D and E of the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated With Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ, NPDES No. CAS000002.
- Sampling guidance is found in Construction Site Monitoring Program Guidance Manual, dated July 2010.
- All sampling and sample preservation shall be in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association).
- Collect, maintain and ship samples in accordance with the Surface Ambient Monitoring Program's (SWAMP) 2008 Quality Assurance Program Plan (QAPrP).
- Complete a separate Sample Information, Identification, and Chain-of-Custody Record for each sampling location on a daily basis.
- Included a copy of the completed form in the project Storm Water Pollution Prevention Plan (SWPPP) files.

FORM

- Project Identifier Number: Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number write N/A in the field.
- Contract Number/Co/Rte/PM: For local agency encroachment permit projects write the encroachment permit number in the Contract Number field.
- Sample Identification: Establish sample identification code as shown below:

SSSSSYYMMDDHHmmTT

Where:

SSSSS	=	sampling point number (e.g., CCUP1, CCDN2)
YY	=	last two digits of the year (e.g. 06)
MM	=	month (01-12)
DD	=	day (01-31)
HH	=	hour sample collected (00-23)
mm	=	minute sample collected (00-59)
TT	=	Type or QA/QC Identifier (if applicable)
		G = grab
		FS = field duplicate

For example, the sample number for a grab sample collected at Station CCUP1 collected at 4:15PM on December 8, 2006 would be:

CCUP10612081615G

Appendix U CEM-2051 Stormwater Sampling and Testing Activity Log

- Required to document details of all sampling events and to record results for samples.
- Identifies duplicate samples

PROJECT INFORMATION NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER
	WDID NUMBER
CONTRACTOR NAME AND ADDRESS	PROJECT SITE RISK LEVEL ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
SUBMITTED BY CONTRACTOR (PRINT AND SIGN NAME)	DATE

STORMWATER SAMPLING AND ANALYSIS LOG REVIEW	
I have reviewed this document and, based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete.	
	Are laboratory test results attached to this stormwater sampling and analysis log submittal? ☐ Yes ☐ No
Water pollution control manager signature	Date

CONTRACT NUMBER/CO/RTE/PM	PROJECT IDENTIFIER NUMBER	WDID NUMBER	DATE

STORMWATER SAMPLING AND ANALYSIS LOG

Log Number	Date of Sampling	Sampling Location	Time Sample Taken	Amount of Precipitation	Sample Identification	Analysis	Analysis Result	Daily Average Analysis Result	Lab Report Attached
						☐ Turbidity ☐ pH ☐ _____			☐ Yes ☐ No
						☐ Turbidity ☐ pH ☐ _____			☐ Yes ☐ No
						☐ Turbidity ☐ pH ☐ _____			☐ Yes ☐ No
						☐ Turbidity ☐ pH ☐ _____			☐ Yes ☐ No
						☐ Turbidity ☐ pH ☐ _____			☐ Yes ☐ No
						☐ Turbidity ☐ pH ☐ _____			☐ Yes ☐ No

Instructions

GENERAL INFORMATION

- Projects with Construction Site Monitoring Program require the information on this form as part of the Stormwater Pollution Prevention Plan to document stormwater analysis meter calibration. The stormwater annual report for SWPPP projects requires this information.
- Complete this form after every storm event that requires sampling and analysis.
- Complete this form weekly for logging non-stormwater sampling and analysis, and indicate in the sampling location column the reason for non-stormwater samples, such as sample from dewatering operation.

FORM

Contract Number/Co/Rte/PM
For local agency encroachment permit projects, write the encroachment permit number in the Contract Number field.

Project Identifier Number
Caltrans projects starting July 1, 2010, will have a Project Identifier Number. For projects without a PID, write “N/A” in the field.

Log Number
Log numbering should be consecutive starting from the first storm event to the last storm event for a project

Amount of Precipitation
Enter the cumulative amount of precipitation from the storm event at the time each sample is taken.

Analysis Result
For turbidity and pH, a minimum of three samples is required to determine the daily average. If more than three daily samples are taken, use two rows to report all samples, and report the daily average in second row.

Appendix V CEM-2052 Stormwater Sample Field Test Report Form

- Required by (NPDES) General Permit for compliance
- All sampling and sample preservation must be in accordance with the current American Public Health Association edition of "Standard Methods for the Examination of Water and Wastewater."
- Samples are collected, maintained, and shipped according to the Surface Ambient Monitoring Program's 2008 Quality Assurance Program Plan.
- A separate Stormwater Sample Laboratory Analysis Report shall be completed for each sampling location daily.

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	Project Identifier Number:
	WDID Number:
Contractor Name and Address:	Project Site Risk Level: ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
Submitted by Contractor (Print Name and Sign):	Date:

Stormwater Samples Field Analyses

Location:	Date of Sampling:
Sample Location Identification Number:	Date of Analyses:
Sample Analyzed By Signature:	
Sample Analyzed By Print Name:	
Analyzer Phone Number:	Samples Analyzed For Parameter(s): ☐ Turbidity ☐ pH ☐ other_____ ☐ other_____
Company:	

Sample Identification	Turbidity Analyses (NTU)	pH Analyses (pH)	_____ Analyses (_____)	_____ Analyses (_____)	Comments
					☐
					☐
					☐
QUALIFYING RAIN EVENT DAILY AVERAGE ANALYSES RESULT:					☐

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	Project Identifier Number:
	WDID Number:

Turbidity Analyses Information			
Turbidity Meter Manufacturer:	Model Number:	Serial Number:	Calibration Date:
Analytical Method:	Method Reporting Unit:	Method Detection Limit:	

pH Analyses Information			
Turbidity Meter Manufacturer:	Model Number:	Serial Number:	Calibration Date:
Analytical Method:	Method Reporting Unit:	Method Detection Limit:	

_____ Analyses Information			
Meter Manufacturer:	Model Number:	Serial Number:	Calibration Date:
Analytical Method:	Method Reporting Unit:	Method Detection Limit:	

Note: Meter calibration information available in the SWPPP files.
Comments:

Review and Record Keeping		
Test results have entered into the Sampling and Testing Activity Log? ☐ Yes ☐ No	Numeric Action Level exceedance? ☐ Yes ☐ No	Numeric Effluent Limitation violation? ☐ Yes ☐ No
I have reviewed this document and based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is, true accurate, and complete.		
Water Pollution Control Manager (Name):	Date:	
Water Pollution Control Manager Signature:		
Accepted by Resident Engineer (Name):	Date:	
Resident Engineer Signature:		

INSTRUCTIONS:

GENERAL INFORMATION

- This form is required for compliance with provisions in Section I of Attachments C, D and E of the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated With Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ, NPDES No. CAS000002.
- Sampling guidance is found in Construction Site Monitoring Program Guidance Manual, dated July 2010.
- All sampling and sample preservation shall be in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association).
- Collect, maintain and ship samples in accordance with the Surface Ambient Monitoring Program's (SWAMP) 2008 Quality Assurance Program Plan (QAPrP).
- Complete a separate Stormwater Sample Field Analyses Report for each sampling location on a daily basis.
- Included a copy of the completed form in the project Storm Water Pollution Prevention Plan (SWPPP) files.

FORM

- Project Identifier Number: Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number write N/A in the field.
- Contract Number/Co/Rte/PM: For local agency encroachment permit projects write the encroachment permit number in the Contract Number field.
- Analyses Result: Analytical results that are less than the method detection limit shall be reported as "Less than the method detection limit."
- QUALIFYING RAIN EVENT DAILY AVERAGE ANALYSES RESULT: A minimum of three daily samples are required to calculate the daily average for a qualifying rain event.
- Numeric Action Level exceedance: In the event that any daily average effluent samples analyses results exceeds an applicable Numeric Action Level(NAL) complete form CEM 2062 "Numeric Action Level Exceedance Report" and submit all storm event sampling results to the State Water Board no later than 10 days after the conclusion of the storm event.
- Numeric Effluent Limitation violation: In the event that any daily average effluent samples analyses results exceeds an applicable Numeric Effluent Limitation (NEL) complete form CEM 2063 "Numeric Effluent Limitation Violation Report" and submit an NEL Violation Report to the State Water Board within 24 hours after the NEL violation was identified. Submit all storm event sampling results to the State Water Board no later than 5 days after the conclusion of the storm event.

Appendix W CEM-2054 Stormwater Sample Laboratory Test Report Form

- Required by the (NPDES) General Permit for compliance
- All sampling and sample preservation must be in accordance with the current American Public Health Association edition of "Standard Methods for the Examination of Water and Wastewater."
- Samples are collected, maintained, and shipped according to the Surface Ambient Monitoring Program's 2008 Quality Assurance Program Plan.
- A separate Stormwater Sample Laboratory Analysis Report shall be completed for each sampling location daily.

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	Project Identifier Number:
	WDID Number:
Contractor Name and Address:	Project Site Risk Level: ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
Submitted by Contractor (Print Name and Sign):	Date:

Stormwater Samples Laboratory Analyses

If this form is completed by Water Pollution Control Manager attach Laboratory Report.

Location:	Date of Sampling:
	Date Sample Received By Laboratory:
Sample Location Identification Number:	Date of Sample Analyses:
Sample Chain-of-Custody: ☐ Yes ☐ No Adequate Sample Preservation: ☐ Yes ☐ No	Sampled Collected For: ☐ Storm Event ☐ Discharge of Stored Stormwater ☐ Dewatering Discharge ☐ other_____
Sample Analyzed By Signature:	
Sample Analyzed By Print Name:	Samples Analyzed For Parameter(s): ☐ _____ ☐ _____ ☐ _____
Laboratory:	

Sample Identification	_____ **Analyses (____)**	_____ **Analyses (_____)**	_____ **Analyses (_____)**	**Comments**

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	Project Identifier Number:
	WDID Number:

_____ Analyses Information			
Equipment Manufacturer:	Model Number:	Serial Number:	Calibration Date:
Analytical Method:	Method Reporting Unit:	Method Detection Limit:	

_____ Analyses Information			
Equipment Manufacturer:	Model Number:	Serial Number:	Calibration Date:
Analytical Method:	Method Reporting Unit:	Method Detection Limit:	

_____ Analyses Information			
Equipment Manufacturer:	Model Number:	Serial Number:	Calibration Date:
Analytical Method:	Method Reporting Unit:	Method Detection Limit:	

Comments:

Review and Record Keeping	
Test results have entered into the Sampling and Testing Activity Log: ☐ Yes ☐ No	
I have reviewed this document and based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is, true accurate, and complete.	
Water Pollution Control Manager (Name):	Date:
Water Pollution Control Manager Signature:	
Accepted by Resident Engineer (Name):	Date:
Resident Engineer Signature:	

INSTRUCTIONS:

GENERAL INFORMATION

- This form is required for compliance with provisions in Section I of Attachments C, D and E of the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated With Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ, NPDES No. CAS000002.
- Sampling guidance is found in Construction Site Monitoring Program Guidance Manual, dated July 2010.
- All sampling and sample preservation shall be in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association).
- Collect, maintain and ship samples in accordance with the Surface Ambient Monitoring Program's (SWAMP) 2008 Quality Assurance Program Plan (QAPrP).
- Complete a separate Stormwater Sample Laboratory Analyses Report for each sampling location on a daily basis.
- Included a copy of the completed form in the project Storm Water Pollution Prevention Plan (SWPPP) files.

FORM

- Project Identifier Number: Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number write N/A in the field.
- Contract Number/Co/Rte/PM: For local agency encroachment permit projects write the encroachment permit number in the Contract Number field.
- Sample Analyzed By Signature: If form is completed by the WPCM write "See attached laboratory report" in field for Sample Analyzed By Signature: and attach laboratory report.
- Analyses Results: Analytical results that are less than the method detection limit shall be reported as "Less than the method detection limit."

Appendix X CEM-2062 NAL Exceedance Report Form

- To be submitted within 48 hours after conclusion of the storm event if requested by RWQCB

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	Project Identifier Number:
	WDID Number:
Contractor Name and Address:	Project Site Risk Level: ☐ Risk Level 2 ☐ Risk Level 3
Submitted by Contractor (Print Name and Sign):	Date:

Numeric Action Level Exceedance Information

Location:	Parameter Exceedance: ☐ Turbidity ☐ pH	Parameter Daily Average:
Sample Location Identification Number:	Date of Sampling:	
Samples Collected by:	Date of Analyses:	
Samples Analyses by:	Date and Time Water Pollution Control Manager Notified:	
Analyzer Phone Number:	Date and Time Resident Engineer Notified:	

Sample Identification	**Sample Collection Time**	**Storm Event Precipitation Amount at Sample Time**	**_____ Analyses (_____)**
QUALIFYING RAIN EVENT DAILY AVERAGE ANALYSES RESULT:			

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	Project Identifier Number:
	WDID Number:

Analyses Information			
Meter Manufacturer:	Model Number:	Serial Number:	Calibration Date:
Analytical Method:		Method Reporting Unit	Method Detection Limit:
Note: Meter calibration information available in the SWPPP files.			

Storm Event Information				
Start of storm event: _____ *Date* _____ *Time*	Start of storm event: _____ *Date* _____ *Time*	Duration of storm event: _____ *Hours-Minutes.*	Precipitation Amount from Storm Recorded From Site Rain Gauge: _____ inch(es)	Storm event precipitation amount from governmental rain gauge: _____ inch(es)

Exceedance Location Information	
Visual Observation of Location:	Photographs: ☐ Yes ☐ No
BMPs Installed at Location:	Photographs: ☐ Yes ☐ No
Corrective Actions Taken:	Photographs: ☐ Yes ☐ No

Additional Information	
Run-on Samples Taken? ☐ Yes ☐ No	Run-on Sample(s) Identification

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	Project Identifier Number:
	WDID Number:

Numeric Action Level Exceedance Report Certification		
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure 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, to the best of my knowledge and belief, the information submitted is, true accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.		
Water Pollution Control Manager (Name):	Date:	
Water Pollution Control Manager Signature:		
Accepted by Resident Engineer (Name):	Date:	
Resident Engineer Signature:		
Numeric Action Level Exceedance Report and all storm event sampling results submitted to State Water Board SMARTS database? ☐ Yes ☐ No	Date Input:	Resident Engineer Initials:

GENERAL INFORMATION

- This form is required for compliance with provisions for Numeric Action Level (NAL) Exceedance Report in Section I of Attachments D and E of the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated With Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ, NPDES No. CAS000002.
- Sampling guidance is found in Construction Site Monitoring Program Guidance Manual, dated July 2010.
- In the event that any daily average effluent samples analyses results exceeds an applicable NAL all storm event sampling results shall be submitted to the State Water Board no later than 10 days after the conclusion of the storm event.
- Regional Boards have the authority to require the submittal of an NAL Exceedance Report.
- Included a copy of the completed form in the project Storm Water Pollution Prevention Plan (SWPPP) files.

FORM

- Project Identifier Number: Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number write N/A in the field.
- Contract Number/Co/Rte/PM: For local agency encroachment permit projects write the encroachment permit number in the Contract Number field.
- Analyses Results: Analytical results that are less than the method detection limit shall be reported as "Less than the method detection limit."
- Storm Event Precipitation Amount at Sample Time: At time of sample collection record amount of precipitation from on-site rain gauge.
- QUALIFYING RAIN EVENT DAILY AVERAGE ANALYSES RESULT**:** A minimum of three daily samples are required to calculate the daily average for a qualifying rain event.

Appendix Y CEM-2063 NEL Violation Report Form

- Required by the (NPDES) General Permit for compliance
- To be submitted to the State Water Board within 24-hours after an NEL Exceedance has been identified.
- To be submitted to the State Water Board within 5 days after the conclusion of the storm event when the daily average of effluent samples analysis results exceeds an applicable NEL
- Can be submitted to RWQCB in place of a Notice of Discharge Report.

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	Project Identifier Number:
	WDID Number:
Contractor Name and Address:	Project Site Risk Level: ☐ Risk Level 3
Submitted by Contractor (Print Name and Sign):	Date:

Numeric Effluent Limitation Violation Information

Location:	Parameter Violation: ☐ Turbidity ☐ pH	Parameter Daily Average:
Sample Location Identification Number:	Date of Sampling:	
Samples Collected by:	Date of Analyses:	
Samples Analyses by:	Date and Time Water Pollution Control Manager Notified:	
Analyzer Phone Number:	Date and Time Resident Engineer Notified:	

Sample Identification	**Sample Collection Time**	**Storm Event Precipitation Amount at Sample Time**	**_____ Analyses (_____)**
QUALIFYING RAIN EVENT DAILY AVERAGE ANALYSES RESULT:			

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	Project Identifier Number:
	WDID Number:

Analyses Information			
Meter Manufacturer:	Model Number:	Serial Number:	Calibration Date:
Analytical Method:		Method Reporting Unit	Method Detection Limit:
Note: Meter calibration information available in the SWPPP files.			

Storm Event Information *Attach a copy of governmental rain gauge information used.*				
Start of storm event: _____ *Date* _____ *Time*	End of storm event: _____ *Date* _____ *Time*	Duration of storm event: _____ *Hours-Minutes.*	Storm event precipitation amount recorded from on-site rain gauge: _____ inch(es)	Storm event precipitation amount from governmental rain gauge: _____ inch(es)
Storm event 24 hour maximum precipitation amount recorded from on-site rain gauge: _____ inch(es)	Storm event 24 hour maximum precipitation amount from governmental rain gauge: _____ inch(es)	Compliance Storm 5 year 24 hour storm? _____ inch(es)	Compliance Storm Exception (5 year 24 hour storm)? ☐ Yes ☐ No	

Violation Location Information	
Visual Observation of Location:	Photographs: ☐ Yes ☐ No
BMPs Installed at Location:	Photographs: ☐ Yes ☐ No
Corrective Actions Taken:	Photographs: ☐ Yes ☐ No

Project Information Name and Site Address:	Contract Number/Co/Rte/PM: Project Identifier Number: WDID Number:

Additional Information

Run-on Samples Taken?	Receiving Water Samples Taken?	For Turbidity NEL Violation: Samples taken for Suspended Sediment Concentration (SSC)?
☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Run-on Sample(s) Identification	Receiving Water Sample(s) Identification:	SSC Sample(s) Identification:

Numeric Effluent Limitation Violation Report Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure 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, to the best of my knowledge and belief, the information submitted is, true accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Water Pollution Control Manager (Name):	Date:
Water Pollution Control Manager Signature:	
Accepted by Resident Engineer (Name):	Date:
Resident Engineer Signature:	

Numeric Effluent Limitation Violation Report submitted to State Water Board SMARTS database within 24 hours after NEL exceedance was identified? ☐ Yes ☐ No	Date Input:	Resident Engineer Initials:
All storm event sampling results submitted to State Water Board SMARTS database within 5 days after the conclusion of the storm event? ☐ Yes ☐ No	Date Input:	Resident Engineer Initials:

GENERAL INFORMATION

- This form is required for compliance with provisions for Numeric Effluent Limitation Level (NEL) Violation Report in Section I of Attachment E of the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated With Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ, NPDES No. CAS000002.
- Sampling guidance is found in Construction Site Monitoring Program Guidance Manual, dated July 2010
- When the daily average of effluent samples analyses results exceeds an applicable NEL submit the Numeric Effluent Limitation Level Violation Report to the State Water Board within 24 hours after an NEL exceedance has been identified.
- When the daily average of effluent samples analyses results exceeds an applicable NEL all storm event sampling results shall be submitted to the State Water Board no later than 5 days after the conclusion of the storm event.
- Regional Boards have the authority to require the submittal of an NEL Violation Report.
- Included a copy of the completed form in the project Storm Water Pollution Prevention Plan (SWPPP) files.

FORM

- Project Identifier Number: Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number write N/A in the field.
- Contract Number/Co/Rte/PM: For local agency encroachment permit projects write the encroachment permit number in the Contract Number field.
- Storm Event Precipitation Amount at Sample Time: At time of sample collection record amount of precipitation from on-site rain gauge.
- Analyses Results: Analytical results that are less than the method detection limit shall be reported as "Less than the method detection limit."
- QUALIFYING RAIN EVENT DAILY AVERAGE ANALYSES RESULT: A minimum of three daily samples are required to calculate the daily average for a qualifying rain event
- Complance Storm Event: Compliance Storm Event is the 5 year, 24 hour storm (expressed in tenths of an inch of rainfall), as determined by using these maps:

  http://www.wrcc.dri.edu/pcpnfreq/nca5y24.gif

  http://www.wrcc.dri.edu/pcpnfreq/sca5y24.gif

  Compliance storm verification shall be done by reporting the on-site rain gauge readings as well as nearby governmental rain gauge readings. Attach a copy of the governmental rain gauge readings to this report.

Appendix Z CEM-2065 Discharge Reporting Log Form

- Required by (NPDES) Permit for compliance.
- To be completed when discharges are causing or contributing to an exceedance of an applicable water quality standard.
- Water quality standards are contained in the Statewide Water Quality Control Plan and/or applicable Regional water Quality Control Boards (RWQCBs) Basin Plan.

Project Information Name and Site Address:	Contract Number/Co/Rte/PM: WDID Number:
Contractor Name and Address:	Project Site Risk Level: ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
Submitted by Contractor (Print Name and Sign):	Date:

NOTICE OF DISCHARGE LOG

Date	Discharge Location	Cause of Discharge	Description of Material(s) Discharged	Estimated Quantity of Discharge	Date RWQCB Notified

Page __ of __

Form instructions are currently being developed based on form review comments.

GENERAL INFORMATION

- The information shown on this form is required for projects with either a Stormwater Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP) to document discharges.
- This form is used to log discharges including stormwater, authorized non-stormwater and non-authorized non-stormwater dischages that have an exceedance of an Applicable Water Quality Standard.
- Log all discharge incidents reported on forms:
  - CEM-2061 Notice of Discharge Report
  - CEM-2062 Numeric Action Level Exceedance Report
  - CEM-2063 Numeric Effluent Limitation Violation Report
- An updated Notice of Discharge Log is to be submitted to the Resident Engineer with each Notice of Discharge Report, Numeric Action Level Exceedance Report or Numeric Effluent Limitation Violation Report.

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FORM

- Contract Number/Co/Rte/PM: For local agency encroachment permit projects write the encroachment permit number in the Contract Number field.
- Project Identifier Number: Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number write N/A in the field.
- WDID Number: For projects with Water Pollution Control Program (WPCP) enter “WPCP” in this field.
- Enter information about discharge incidents from forms:
  - CEM-2061 Notice of Discharge Report
  - CEM-2062 Numeric Action Level Exceedance Report
  - CEM-2063 Numeric Effluent Limitation Violation Report
- The Resident Engineer will notify the Regional Water Quality Control Board and record the Date RWQCB Notified.

Form instructions are currently being developed based on form review comments.

GENERAL INFORMATION

- The information shown on this form is required for projects with either a Stormwater Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP) to document discharges.
- This form is used to log discharges including stormwater, authorized non-stormwater and non-authorized non-stormwater dischages that have an exceedance of an Applicable Water Quality Standard.
- Log all discharge incidents reported on forms:
  - CEM-2061 Notice of Discharge Report
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  - CEM-2063 Numeric Effluent Limitation Violation Report
- An updated Notice of Discharge Log is to be submitted to the Resident Engineer with each Notice of Discharge Report, Numeric Action Level Exceedance Report or Numeric Effluent Limitation Violation Report.

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FORM

- Contract Number/Co/Rte/PM: For local agency encroachment permit projects write the encroachment permit number in the Contract Number field.
- Project Identifier Number: Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number write N/A in the field.
- WDID Number: For projects with Water Pollution Control Program (WPCP) enter “WPCP” in this field.
- Enter information about discharge incidents from forms:
  - CEM-2061 Notice of Discharge Report
  - CEM-2062 Numeric Action Level Exceedance Report
  - CEM-2063 Numeric Effluent Limitation Violation Report
- The Resident Engineer will notify the Regional Water Quality Control Board and record the Date RWQCB Notified.

SECTION 4
PREPARING A WATER POLLUTION CONTROL PROGRAM

4.1 WPCP PREPARATION AND APPROVAL OF A WPCP

The contract specifications require the contractor to prepare a Water Pollution Control Program (WPCP) for each project that the construction work results in less than 1 acre of soil disturbance or for small construction projects (1 to 5 acres of disturbed soil area) that have an approved Rainfall Erosivity Waiver authorized by the U.S. EPA that are not subject to the requirements of the Construction General Permit. The WPCP prepared for a project must comply with Caltrans 2006 Standard Specifications Section 7-1.01G – Water Pollution or Caltrans 2010 Standard Specifications Section 13 Water Pollution Control and the contract special provisions following the procedures and format set forth in this Manual.

The section provides detailed, step-by-step procedures, instructions and a template that contractors shall use to prepare a WPCP. This section also contains instructions for preparation of the WPCP Attachments and Appendices.

The contractor shall prepare and submit a complete WPCP to the Caltrans Resident Engineer (RE) for review and approval. If revisions are required, as determined by the RE, the contractor must revise and resubmit the WPCP. The time frames for WPCP submittal, review, and re-submittal are specified in the contract special revisions or Caltrans 2010 Standard Specifications Section 13 Water Pollution Control. No activity having the potential to cause water pollution, as determined by the RE, shall be performed until the WPCP has been approved by the RE. Construction activities that will not threaten water quality, such as traffic control, may proceed without an approved WPCP if authorized by the RE.

The WPCP shall be submitted to Caltrans in a 3-ring binder with separators and tabs. When the WPCP is approved submit 4 printed copies in 3-ring binders with dividers and tabs and an electronic file (Microsoft® Word) of the SWPPP.

4.1.1 Information Provided by Caltrans

In addition to information in the contract special provisions and shown on the contract plans, Caltrans may supply to the contractor certain information developed during the design process. The stormwater information necessary for the preparation of a project WPCP should be provided in the project Information Handout or should be requested from the project RE. The Stormwater Data Report prepared by Caltrans for the project should contain most of the following information. The contractor shall use this information to prepare the WPCP, as appropriate. Items that may be provided are:

Vicinity Map

A map extending approximately one quarter mile (1,320 feet) beyond the property boundaries of the construction site showing: the construction site; surface water bodies (including known springs and wetlands); known wells; an outline of off-site drainage areas that discharge into the construction site; general

topography; and the anticipated discharge location(s) where the construction site's stormwater discharges to a municipal storm drain system or other water body. A U.S. Geological Survey (USGS) quad map may be used for showing the project site and a one-quarter mile (1,320 feet) extension beyond the property boundaries of the construction site.

Soils/Geotechnical Report, Project Materials Report and/or Other Reports

Toxic History of the Site: To the extent information is available from the soils/geotechnical report, the project materials report, site investigation report developed by the Hazardous Waste Section, or other regulatory or environmental compliance documentation (e.g. CEQA Initial Study, Phase I Environmental Site Assessment, etc.), the Information Handout may include a description of all toxic materials known to have been treated, stored, disposed, spilled, or leaked in significant quantities onto the construction site.

Site Geotechnical Report: The Information Handout may include a copy of the project materials report (geotechnical report). The contractor must describe the conditions of the fill and native soil materials that can be found at the construction site. Fill material should be described as whether it is native or non-native, contaminated or uncontaminated, and its stabilization technique (i.e., native soil coverage, asphalt or concrete coverage, and/or landscape).

List of Pre-Construction (Existing) Best Management Practices (BMPs)

The Information Handout may provide a list and written descriptions of existing pre-construction practices, if any, that are already in place to reduce sediment and other pollutants in stormwater discharges. These permanent BMPs may consist of biofiltration swales and strips, media filters, etc. Indicate whether there are existing pre-construction BMPs.

List of Permanent (Post-Construction) Stormwater Control Measures (BMPs)

The Information Handout may provide a written listing and narrative descriptions of post-construction permanent BMPs that have been included in the project. Narrative descriptions may also include operation and maintenance (O&M) procedures for the permanent BMPs, O&M short term and long term funding, and a statement indicating that the Maintenance Department will be responsible for O&M of the post construction BMPs.

Layout Sheets Showing Suggested Temporary BMP Locations

The contract plan layouts sheets will show the location of anticipated construction site BMPs or the BMPs will be shown on contract plan quantity summary sheets. The contract plan layout sheets may show the location of anticipated contractor staging areas and other contractor support facilities.

Explanation of Construction Site (Temporary) BMPs

The Information Handout may provide a brief narrative explanation of the various temporary BMPs that may be implemented in the project, including any existing permanent BMPs that may be present within the project limits that can be used during construction, as well as any permanent BMPs that should be constructed early for use as a temporary BMP during construction, such as early application of permanent soil stabilization measures in areas that will no longer experience soil disturbance during construction.

Drainage Report

The Information Handout may include a copy of the drainage report for the project or appropriate information, such as the hydrology maps, delineation of drainage boundaries, concentrations of runoff, and runoff coefficients.

Construction Site Estimates

The Information Handout may contain the Stormwater Data Report which includes for the project site an estimate of the:

- construction site area in acres;
- disturbed soil area in acres;
- runoff coefficient of the construction site before and after construction; and
- percentage of the construction site impervious area (e.g., pavement, building, etc.) before and after construction.

Other Information

The Information Handout may also include any other information that would explain the decisions or thought process behind the selection and deployment of the temporary BMPs chosen by the designer. Examples include the designer's estimated staging of the project and estimated time of year for those stages; any scheduling modifications included in the Order of Work specifications that were included to enhance water pollution control; and any specific BMP deployments that are considered to be critical to the success of the contractor's WPCP.

Other Plans/Permits/Agreements

Other agencies may have issued permits/agreements or have plan requirements for the construction of the project or imposed certain conditions. If so, a written description of the permit/agreement conditions and a copy of the permit/agreement will be provided by Caltrans for inclusion in an attachment to the WPCP. Hazardous materials must be handled in accordance with specific laws and regulations and disposed of as a hazardous waste. If during the preparation of the contract, it is known that special permits for accomplishing disposal of hazardous waste is known, then a written explanation will be provided to the

contractor to be incorporated within this section and it must be consistent with other specifications in the contract. In addition, information regarding other related permits/agreements such as California Department of Fish and Game or U.S. Army Corps of Engineers permits/agreements may also be included. For oversight projects, the Local Agency / Private Entity administering the project, is responsible for securing all necessary permits, certifications, and approvals. Copies of such documents shall be provided by the Local Agency / Private Entity and included in an attachment to the WPCP.

4.1.2 Minimum Requirements for Construction Sites

In order to ensure a minimum level of water pollution control, Caltrans has designated some BMPs as minimum requirements that contractors must implement during construction of highway projects statewide. The minimum required BMPs are specified in the contract standard specifications and contract special provisions. More information about minimum required BMPs can be found in the *Caltrans Stormwater Quality Handbook Best Management Practices* (BMPs) *Reference Manual*, latest edition.

4.2 WPCP TEMPLATE

This section provides step-by-step WPCP preparation procedures, instructions, examples and the WPCP template. The template has been developed in Microsoft® Word with the following objectives:

1. Provide easy data entry for contractors to prepare a WPCP.
2. Provide instructions in the template that can be viewed while the WPCP is being prepared.
3. Provide consistency in content and format of all WPCPs prepared and submitted to Caltrans so that review, approval and implementation of WPCPs on Caltrans projects is more efficient.

Instructions for using the electronic version of the WPCP template:

1. Download the appropriate template from the Caltrans Web site at: http://www.dot.ca.gov/hq/construc/stormwater/templates.htm
2. Complete all applicable sections of the template and you may insert additional text where allowed in the template. A draft WPCP with completed text for each section, including instructions, can be printed. The instructions include "check box" items that the WPCP developer may use to help review that each of the required items is completed.
3. The final WPCP can be viewed to check format and perform final edits as necessary. The document can then be printed without "instructions" by going to the menu bar in MS Word, selecting the "TOOLS" menu, selecting "OPTIONS" and making sure that the HIDDEN TEXT checkboxes under both the VIEW and PRINT tabs are cleared.

The WPCP template shown in this section includes step-by-step instructions and WPCP section examples where appropriate for the following:

Title Page

Table of Contents

Section 10 WPCP Certification and Acceptance

Section 20	Project and Contractor Information
Section 30	Pollution Sources and Control Measures
Section 40	WPCP Implementation
Section 50	WPCP Reporting Requirements

The WPCP template including instructions and examples is shown on the following pages.

WPCP Template

INSTRUCTIONS

- Refer to the SWPPP/WPCP Instruction document for specific information on the use of the Template. The instruction document is available at: http://www.dot.ca.gov/hq/construc/stormwater/templates.htm
- The title page shall have the following information:
  - Title: "Water Pollution Control Program"
  - Construction Project Name
  - Caltrans Contract Number
  - Caltrans Project Identifier Number
  - If a Local Agency / Private Entity is administering the project enter the Caltrans encroachment permit number for permit issued to the public agency / private entity and the Caltrans encroachment permit number for the permit issued to the contractor
  - Identification and address of Lead Agency (Caltrans or Local Agency)
  - Caltrans' Resident Engineer Name and Telephone Number
  - Contractor's Name, Address, Telephone Number and Contact Person
  - Job Site Address and Telephone Number
  - Name of the Contractor's Water Pollution Control Manager (WPC Manager) and Telephone Number. The WPC Manager must be either a Qualified SWPPP Developer or a Qualified SWPPP Practitioner
  - If water pollution control inspector is different from the WPC Manager then insert the inspectors Name and telephone Number
  - Name of the company that developed the WPCP (if it was prepared by an outside consultant), including name and title of preparer
  - WPCP Date

REQUIRED TEXT

WATER POLLUTION CONTROL PROGRAM (WPCP)

For

Start Here ... Triple Click here to insert PROJECT NAME - then TAB to next field to continue entering project specific information.

REQUIRED TEXT FOR CALTRANS ADMINISTERED PROJECT:

Caltrans Contract Number:

Insert Caltrans Contract Number then TAB to next field.

Caltrans Project Identifier Number:

Insert Caltrans Contract Number then TAB to next field.

REQUIRED TEXT FOR LOCAL AGENCY / PRIVATE ENTITY ADMINISTERED PROJECT:

Caltrans Encroachment Permit Number for Local Agency / Private Entity:

Insert Caltrans ENCROACHMENT PERMIT Number issued to local agency/private entity then TAB to next field.

Caltrans Encroachment Permit Number for Contractor:

Insert Caltrans ENCROACHMENT PERMIT Number issued to Contractor then TAB to next field.

REQUIRED TEXT:

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 for Address 2 or TAB to next field-then TAB.
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 WPC Manager's Name-then TAB.
Insert Telephone Number(s)-then TAB.

Contractor's Designated Water Pollution Control Inspector (if different from WPC Manager)

Insert Inspectors Name-then TAB.
Insert Telephone Number(s)-then TAB.

WPCP Prepared by:

Insert Company Name-then TAB.
Insert Address 1 and press ENTER to insert Address 2 or TAB to next field.
Insert Telephone-then TAB.
Insert Name and Title of Preparer-then TAB.

WPCP Preparation Date

Insert Date

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WPCP Attachments

Attachment A..... Water Pollution Control Drawings
Attachment B..... Water Pollution Control Schedule
Attachment C .....WPCP Amendments
Attachment D .....Stormwater Training Documentation

INSERT ADDITIONAL ATTACHMENT REFERENCES OR DELETE THIS LINE

INSTRUCTIONS

- Current Construction Engineering Management (CEM) forms that are to be included in the appendices are available at:

  http://www.dot.ca.gov/hq/construc/forms.htm

REQUIRED TEXT

WPCP Appendices

Appendix A.....CEM-2008 SWPPP/WPCP Amendment Certification and Acceptance
Appendix B..... CEM-2009 SWPPP/WPCP Amendments Log
Appendix C..... CEM-2023 Stormwater Training Record
Appendix D.....CEM-2024 Stormwater Training Log
Appendix E.....CEM-2041 Weather Monitoring Log
Appendix F..... CEM-2034 Stormwater Best Management Practices Status Report
Appendix G ..... CEM-2030 Stormwater Site Inspection Report
Appendix H..... CEM-2035 Stormwater Site Inspection Report Corrective Actions Summary
Appendix I .....CEM-2061 Notice of Discharge Report
Appendix J .....CEM-2065 Notice of Discharge Log
Appendix K..... CEM-2070 SWPPP/WPCP Annual Certification of Compliance

INSERT ADDITIONAL APPENDIX REFERENCES OR DELETE THIS LINE

WPCP Certification and Acceptance

10.1 Contractor's Certification and Acceptance by the Resident Engineer

INSTRUCTIONS

- Include a Separator and Tab for Section 10 for ready reference.
- The WPCP preparer shall certify that qualifications and certification requirements have been met.
- The WPCP shall be certified by the contractor.
- Certification shall be signed and dated by Contractor's staff; specifically, the person responsible for overall management of the site, such as a corporate officer or person assigned the responsibility by a corporate officer, according to corporate procedures.
- Print the name, title and telephone number of the person signing the certification.
- The WPCP shall be submitted to the Resident Engineer for review and acceptance.

REQUIRED TEXT

WPCP PREPARER CERTIFICATION OF WPCP

"I certify that I have the qualifications and certifications specified for a Qualified SWPPP Developer (QSD) or Qualified SWPPP Practinoner (QSP) shown in the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ, NPDES No.CAS000002, Section VII, Training Qualifications and Certification Requirements.

I certify that this WPCP meets the requirements set forth in the contract special provisions, Caltrans Standard Specifications, and the Caltrans SWPPP/WPCP Preparation Manual.

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."

WPCP Preparer Signature	Date
WPCP Preparer Name	Telephone Number
WPCP Preparer Title	

CONTRACTOR'S CERTIFICATION OF WPCP

"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."

Contractor's Signature	Date
Contractor's Name	Telephone Number
Contractor's Title	

INSTRUCTIONS

- If Caltrans is administering the project, then the Caltrans Resident Engineer, as the authorized representative of the Department shall provide and sign the following certification upon acceptance of the WPCP.
- If a Local Agency is administering the project, then both the Local Agency Resident Engineer and the Caltrans Oversight Engineer shall provide and sign the following certification upon acceptance of the WPCP.

Is a Local Agency / Private Entity administering the project?

☐ Yes ☐ No

REQUIRED TEXT WHEN CALTRANS IS ADMINISTERING PROJECT

For Use by Caltrans Only

CALTRANS RESIDENT ENGINEER'S ACCEPTANCE OF WPCP

"I certify under a penalty of law that this document and all attachments were reviewed under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly evaluated 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."

This WPCP is accepted based on a review performed by myself or personnel acting under my direction. that detrermined that the WPCP meets the requirements set forth in the contract special provisions, Caltrans Standard Specifications, and the Caltrans SWPPP/WPCP Preparation Manual.

Resident Engineer's Signature	Date of WPCP Acceptance
Resident Engineer's Name	Telephone Number

REQUIRED TEXT WHEN LOCAL AGENCY / PRIVATE ENTITY IS ADMINISTERING PROJECT

For Use by Local Agency / Private Entity Only

LOCAL AGENCY / PRIVATE ENTITY RESIDENT ENGINEER'S ACCEPTANCE OF WPCP

"I certify under a penalty of law that this document and all attachments were reviewed under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly evaluated 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."

This WPCP is accepted based on a review performed by myself or personnel acting under my direction. that detrermined that the WPCP meets the requirements set forth in the contract special provisions, Caltrans Standard Specifications , and the Caltrans SWPPP/WPCP Preparation Manual.

Resident Engineer's Signature	Date of WPCP Approval
Resident Engineer's Name	Telephone Number

For Use by Caltrans Only

CALTRANS OVERSIGHT ENGINEER'S CONCURENCE OF WPCP

I, and/or personnel acting under my direction and supervision, have reviewed this WPCP and concur with the Resident Engineer's findings that it meets the requirements set forth in the contract special provisions, Caltrans Standard Specifications, and the Caltrans SWPPP/WPCP Preparation Manual.

Caltrans Oversight Engineer's Signature	Date of WPCP Concurrence
Caltrans Oversight Engineer's Name	Telephone Number

INSERT ADDITIONAL TEXT HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)

10.2 Amendments

INSTRUCTIONS

- The WPCP 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 WPCP amendments shall be documented in letter format and include revised WPCD sheets, as appropriate. WPCP amendments shall be certified by the contractor and require approval by the Caltrans or Local Agency / Private Entity Resident Engineer (and Caltrans Oversight Engineer if applicable). Accepted amendments shall be attached to the Contractor's on-site WPCP in Attachment C.
- The following items will be included in the amendment, as appropriate:
  - who requested the amendment
  - location of proposed change
  - reason for change
  - the original BMP proposed, if any
  - the new BMP proposed
  - any revised WPCDs for detail or location changes
- Include a copy of the Amendment Log in Attachment C.
- The certification form shall be included in Attachment C and shall be signed by the contractor and Resident Engineer (and Oversight Engineer if applicable) for each amendment. The signed forms shall be included with the Amendment.
- If Caltrans is administering the project, then the Caltrans Resident Engineer, as the authorized representative of the Department shall be responsible for reviewing and accepting the amendment.
- If a Local Agency / Private Entity is administering the project, then the Local Agency / Private Entity Resident Engineer shall be responsible for reviewing and accepting. When the amendment is accepted by the Local Agency / Private Entity Resident Engineer, then form CEM-2008 SWPPP/WPCP Certification and Acceptance shall be provided to the Caltrans Oversight Engineer for concurrence.
- Amendments shall be documented on CEM-2009 SWPPP/WPCP Amendment Log form. Enter the Amendment number, date, brief description, and name of the person who requested the Amendment in the amendment log. Include a copy of CEM-2009 SWPPP/WPCP Amendment Log in WPCP Attachment C.

EXAMPLE AMENDMENT LOG:

AMENDMENT NO.	DATE	BRIEF DESCRIPTION OF AMENDMENT	REQUESTED BY	APPROVAL DATE
001	12/10/2000	Grading schedule changed to begin on Feb. 10, 2001, and will include additional 0.2 acres. Amended water pollution control drawings showing 0.2 additional acres.	John Doe, Superintendent	12/20/2000

REQUIRED TEXT:

The WPCP 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. The WPCP must be amended when:

- changes in work activities could affect the discharge of pollutants
- WPC practices are added by contract change order
- WPC practices are added at the contractor's discretion

Amendments to WPCP shall be documented in letter format and include revised Water Pollution Control Drawing sheets, as appropriate. WPCP amendments shall be certified by the contractor and require acceptance by Caltrans or Local Agency / Private Entity Resident Engineer. For encroachment permit projects, Caltrans Oversight Engineer concurrence is required. Documentation of WPCP amendment certification, acceptance and Caltrans Oversight Engineer concurrence, if required will be documented using CEM-2008 SWPPP/WPCP Amendment Certification and Acceptanceform, in Appendix A.

All WPCP amendments shall be documented on CEM-2009 SWPPP/WPCP Amendments Log whichincludes:

- amendment number
- amendment date
- brief description of the amendment
- name of individual requesting amendment
- amendment acceptance date.

All WPCP amendments shall be logged on CEM-2009 SWPPP/WPCP Amendment Log form, in Appendix B. Accepted amendments with an updated amendment log shall be attached to the contractor's on-site WPCP in Attachment C.

10.3 Contractor's Annual Certification and Acceptance by the Resident Engineer

INSTRUCTIONS

- Annually the WPCP shall be certified by the contractor.
- Certification shall be signed and dated by Contractor's staff; specifically, the person responsible for overall management of the site, such as a corporate officer or person assigned the responsibility by a corporate officer, according to corporate procedures.

REQUIRED TEXT

Each year by July 15 the contractor shall certify that the water pollution control measures are being implemented in accordance with the accepted WPCP for the project, including accepted WPCP amendments. The contractor shall submit the annual certification to the Resident Engineer for acceptance. Documentation of annual certification shall be on CEM-2070 SWPPP/WPCP Annual Certification of Compliance form, in Appendix K.

Section 20
Project and Contractor Information

INSTRUCTIONS

- Include a Separator and Tab for Section 20 for ready reference.
- Provide narrative text addressing the following topics in a format that can be easily understood by a person who is not familiar with the project.

20.1 Project Description

INSTRUCTIONS:

- Provide a brief description of the project.
- Describe the type(s) of work that will be performed.
- Provide a brief description of the project location, including descriptive items such as county, route, post mile, city, and street names.
- Describe proximity to receiving waters to which the project will discharge, including surface waters, drainage channels, and drainage systems.
- Identify drainage system owners (municipality or agency).
- Name the receiving waters and describe proximity to receiving waters to which the project will discharge, including surface waters, drainage channels, and drainage systems (identify who owns the drainage system; i.e., municipality or agency.)

EXAMPLE:

The construction project is located in Any County, in Any City, on State Route I-5 from Post mile X to Post mile Y. The project consists of sound wall construction, shoulder work, and PCC pavement removal and replacement along approximately 1300 feet of highway. Project runoff is conveyed approximately 2600 feet south to the Calaveras River via a combination of Caltrans-owned roadside ditches and underground drainage facilities. The Calaveras River discharges to the San Joaquin River approximately 1.9 miles downstream from I-5. The total disturbed area is about 0.8 acres.

REQUIRED TEXT:

CLICK AND TYPE PROJECT DESCRIPTION HERE

20.2 Unique Site Features

INSTRUCTIONS:

- Provide a brief description of any unique site features (water bodies, wetlands, environmentally sensitive area, endangered or protected species, etc.).
- Describe significant or high-risk activities that may impact stormwater quality. Include any unique features or activities within or adjacent to water bodies (such as dredging, re-use of aerially deposited lead material, large excavations, or work within a water body).

EXAMPLE:

The project site is within 1,000 feet of the Calaveras and San Joaquin Rivers.

REQUIRED TEXT:

CLICK AND TYPE PROEJCT FEATURES HERE

20.3 Contact Information for Responsible Parties

INSTRUCTIONS:

- For the following responsible parties provide name, title, company or agency, address, phone number, emergency phone number (24/7), email address:
  - Water Pollution Control Manager
  - WPCP Preparer (if WPC Manager did not develop WPCP)
  - Resident Engineer
  - Contractor Manager responsible for WPCP Certification
  - Contractor Site Manager (if different from Contractor Manager)
  - Stormwater Inspector (when appropriate)
  - Erosion and Sediment Control Provider
- If a stormwater inspector will assist the Contractor's WPC Manager, provide contact information. Edit the template below to enter the name, title, company, address, telephone number, emergency telephone number (24/7) and email address.
- If Active Treatment System (ATS) is used, provide contact information for person responsible for ATS. Edit the template below to enter the name, title, company, address, telephone number, emergency phone number (24/7) and email address.

REQUIRED TEXT:

The following parties are responsible for this WPCP:

Resident Engineer

Name:	**Insert Resident Engineer's Name-then TAB.**
Title:	Resident Engineer
Agency:	**Insert Name of Lead Agency-then TAB.**
Address:	**Insert Address 1 and press ENTER to insert Address 2 or TAB to next field.**
Phone Number:	**Insert R.E.'s Telephone Number-then TAB.**
Emergency Phone Number (24/7):	**Insert R.E.'s Telephone Number-then TAB.**
Email Address:	**Insert Email Address-then TAB.**

Contractor

Name:	**Insert Owner/Representative's Name-then TAB.**
Title:	Insert Title
Company:	**Insert Contractor's Company Name-then TAB.**
Address:	Insert Address 1 then press ENTER to insert Address 2 or TAB to next field
Phone Number:	**Insert Telephone Number-then TAB.**
Emergency Phone Number (24/7):	**Insert Telephone Number-then TAB.**
Email Address:	**Insert Email Address-then TAB.**

REQUIRED TEXT WHEN THE CONTRACTOR HAS A SITE MANAGER:

Contractor Site Manager

Name:	**Insert Contractor Site Manager's Name-then TAB.**
Title:	Insert Title
Company:	**Insert Company Name-then TAB.**
Address:	**Insert Address 1 then press ENTER to insert Address 2 or TAB to the next field.**

Phone Number:	**Insert Telephone Number-then TAB.**
Emergency Phone Number (24/7):	**Insert Telephone Number-then TAB**
Email Address:	**Insert Email Address-then TAB.**

REQUIRED TEXT:

Water Pollution Control Manager (WPC Manager)

Name:	**Insert WPC Manager's Name-then TAB.**
Title:	Insert Title
Company:	**Insert Company Name-then TAB.**
Address:	**Insert Address 1 then press ENTER to insert Address 2 or TAB to the next field.**
Phone Number:	**Insert Telephone Number-then TAB.**
Emergency Phone Number (24/7):	**Insert Telephone Number-then TAB.**
Email Address:	**Insert Email Address-then TAB.**

Erosion and Sediment Control Provider

Name:	**Insert Representative's Name for erosion and sediment control provider-then TAB.**
Title:	Insert Title
Company:	**Insert Company Name-then TAB.**
Address:	**Insert Address 1 then press ENTER to insert Address 2 or TAB to next field.**
Phone Number:	**Insert Telephone Number-then TAB.**
Emergency Phone Number (24/7):	**Insert Telephone Number-then TAB.**
Email Address:	**Insert Email Address-then TAB.**

INSERT ADDITIONAL RESPONSIBLITIES AND/OR NAMES HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)

20.4 Training

INSTRUCTIONS:

- Formal training is required for individuals responsible for WPCP development, implementation and amending or revising the WPCP. Training is required for those personnel responsible for installation, inspection, maintenance, and repair of BMPs. The WPCP shall document all training.

- Describe the training for the following individuals responsible for the WPCP:

  - Water Pollution Control Manager (WPC Manager)

  - WPCP Preparer, if WPCP not developed by WPC Manager

  - Stormwater Inspector, if assisting WPC Manager

- Describe the types of training that the contractor's or subcontractor's BMP inspection, maintenance, and repair personnel have received or will receive.

- Describe the types of training provided for all contractor and subcontractor employees that is directly related to water pollution control. Existing contractor and subcontractor employees shall receive training prior to working on the project. New employees shall receive water pollution control training prior to working on the project site and the training records shall be submitted to the Resident Engineer within 5 days of training.

- Training may be both formal and informal (Caltrans 24 Hour Training Class, Construction General Permit training, etc.).

- Formal water pollution control or erosion and sediment control training sessions may include certification as a Certified Professional in Erosion and Sediment Control (CPESC); workshops offered by the SWRCB, RWQCB, Community College or University of California Extension; or other locally recognized agencies or professional organizations such as the International Erosion Control Association (IECA), Association of Bay Area Governments (ABAG), Association of General Contractors (AGC), etc. Contractors are encouraged to contact the RWQCB or the SWRCB to inquire about availability of training.

- A listing of training organizations, subject matter and classes are located at http://www.dot.ca.gov/hq/construc/stormwater/stormwater1.html

- The Contractor's WPC Manager shall have a minimum of 24 hours (3 days) of formal stormwater pollution prevention training and required qualifications and training for Qualified SWPPP Developer (QSD) or Qualified SWPPP Practitioner under the Construction General Permit (CAS000002), Section VII, Training Qualifications and Certification Requirements.

- After September 2, 2011 any Qualified SWPPP Developer (QSD) or Qualified SWPPP Practitioner shall have attended a State Water Board-sponsored or approved training course.

- Onsite informal water pollution control training shall be conducted on an ongoing basis.

- Document informal stormwater training using the sample training log sheet provided as Appendix C.

- Document formal stormwater training by providing a list of classes and copies of class completion documentation. Documentation shall be submitted to the Resident Engineer within 24 hours of completion of training.

- Training records shall be updated, documented and reported in WPCP file category 20.23 Contractor Personnel Training Documentation.

EXAMPLE:

John Doe, Jr., the WPC Manager for the project, meets the Qualified SWPPP Practioner (QSP) registration or certification requirement of Section VII., "Training Qualifications and Certification Requirements," of the Construction General Permit based on:

- California Registered Professional Civil Engineer, C 0000A

The WPC Manager has received the following training:

- 24-hour Caltrans Training Provided by ABC Consultant

The WPC Manager has the following WPCP development and implementation experience:

- Has developed 24 WPCPs

- Has 15 years of experience as a WPC Manager working on 14 project sites

The WPCP for this project was developed by John Doe, the WPC Manager for this project, who meets the Qualified SWPPP Practioner (QSP) registration or certification requirement of Section VII., "Training Qualifications and Certification Requirements," of the Construction General Permit based on:

- Certified erosion, sediment and stormwarter inspector registered through Enviro Cert International, Inc.

The QSP has received the following training:

24-hour Caltrans Training Provided by Mountain College

The WPCP developer has the following WPCP development experience:

Has prepared over 15 project-specific WPCPs

Contractor or subcontractor employees responsible for water pollution control best management practices (BMPs) installation, maintenance and repair have received the following training:

BMP Best Practices Provided by ABC Consultants

Contractor and subcontractor employees shall be trained prior to working on the site in the following subjects:

- water pollution control rules and regulations

- implementation and maintenance for:

  - temporary soil stabilization
  - temporary sediment control
  - tracking control
  - wind erosion control
  - material pollution prevention control
  - waste management
  - non-storm water management

- identifying and handling hazardous substances
- potential dangers to humans and the environment from spills and leaks or exposure to toxic or hazardous substances

Informal employee training shall include tailgate site meetings to be conducted weekly and address the following topics:

- water pollution control best management practices (BMPs), deficiencies and corrective actions
- BMPs that are required for work activities during the week
- spill prevention and control
- material delivery, storage, use, and disposal
- waste management
- non-storm water management

A summary of formal and informal training of various personnel is shown in Attachment D. A copy of all training certificate(s) (e.g., Caltrans 24 Hour Training Class and Construction General Permit Training) for the WPC Manager and the WPCP developer (and others, if applicable,) are included in Attachment D. Training records for project personnel shall be updated by completing the training log shown in Appendix C. A copy of the training log and copies of all training certificates for project personnel will be kept in WPCP file category 20.23 Contractor Personnel Training Documentation. An updated trainig log and documentation of new training shall be submitted to the RE within 5 days of training.

REQUIRED TEXT:

INSERT WPC Manager NAME-THEN TAB, the WPC Manager for this project,meets the Qualified SWPPP Practioner (QSP) registration or certification requirement of Section VII., "Training Qualifications and Certification Requirements," of the Construction General Permit based on:

- INSERT PROFESSIONAL REGISTRATION OR CERTIFICATION, INCLUDE LICENSE OR CERTIFICATION NUMBER

The WPC Manager has received the following training:

- INSERT LIST OF TRAINING COURSES, SUCH AS CALTRANS SWPPP PREPARATION COURSE

The WPC Manager has the following WPCP development and implementation experience:

- INSERT LIST OF SWPPP EXPERIENCE

REQUIRED TEXT :

The WPCP for this project was developed by INSERT QSP NAME-THEN TAB who meets the Qualified SWPPP Practioner (QSP) registration or certification requirement of Section VII., "Training Qualifications and Certification Requirements," of the Construction General Permit based on:

- INSERT PROFESSIONAL REGISTRATION OR CERTIFICATION, INCLUDE LICENSE OR CERTIFICATION NUMBER

The QSP has received the following training:

- INSERT LIST OF TRAINING COURSE, SUCH AS CALTRANS SWPPP PREPARATION COURSE

The QSP has the following WPCP development experience:

- INSERT LIST OF WPCP EXPERIENCE

REQUIRED TEXT WHEN STORMWATER INSPECTOR WILL BE ASSISTING WPC MANAGER:

A stormwater inspector will be assiting the WPC Manager to ensure all required BMPs are implemented and perform non-storm water and stormwater visual observations, sampling and analysis. The stormwater inspector for this project is:

- INSERT STORMWATERINSPECTOR'S NAME-THEN TAB.

The stormwater inspector has received the following training:

- INSERT LIST OF TRAINING COURSE, SUCH AS 24-HOUR CALTRANS TRAINING

The stormwater inspector has the following WPCP implementation experience:

- INSERT LIST OF WPCP IMPLEMENTATION EXPERIENCE

REQUIRED TEXT:

Contractor or subcontractor employees responsible for water pollution control best management practices (BMPs) installation, maintenance and repair have received the following training:

- INSERT LIST OF BMP TRAINING

Contractor and subcontractor employees shall be trained prior to working on the site in the following subjects:

- water pollution control rules and regulations.

- implementation and maintenance for:
  - temporary soil stabilization
  - temporary sediment control
  - tracking control
  - wind erosion control
  - material pollution prevention control
  - waste management
  - non-storm water management
- identifying and handling hazardous substances
- potential dangers to humans and the environment from spills and leaks or exposure to toxic or hazardous substances

Informal employee training shall include tailgate site meetings to be conducted weekly and address the following topics:

- water pollution control best management practices (BMPs) deficiencies and corrective actions
- BMPs that are required for work activities during the week
- spill prevention and control
- material delivery, storage, use, and disposal
- waste management
- non-stormwater management

A summary of formal and informal training of various personnel is shown in Attachment D. A copy of all training certificate(s) for the WPC Manager and the WPCP Preparer are included in Attachment D.

Stormwater training for project personnel shall be documented on form CEM-2023 Stormwater Training shown in Appendix C. For each training occurance, both a training record and an updated training log, form CEM-2024 Stormwater Training Log.shown in Appendix D, must be completed. A copy of the training log, training record and copies of all training certificates for project personnel will be kept in WPCP file category 20.23 Contractor Personnel Training Documentation. An updated trainig log and documentation of new training shall be submitted to the RE within 5 days of training.

Section 30
Pollution Sources and Control Measures

30.1 Pollutant Sources

30.1.1 Inventory of Materials and Activities that May Pollute Stormwater

INSTRUCTIONS:

- List all construction materials that will be used and construction activities that will have the potential to contribute to the discharge of pollutants to stormwater.
- List all construction activities (i.e., any construction or demolition activity, including, but not limited to, clearing, grading, grubbing, or excavation,) that have the potential to contribute sediment or other pollutants to stormwater discharges.
- Insert as many bullets as necessary to complete the inventory.

EXAMPLE:

The following is a list of construction materials that will be used and activities that will be performed that will have the potential to contribute pollutants other than sediment to stormwater runoff:

- vehicle fluids, including oil, grease, petroleum, and coolants
- asphaltic emulsions associated with asphalt-concrete paving operations
- cement materials associated with PCC paving operations, drainage structures, median barriers, and bridge construction
- base and subbase material
- joint and curing compounds
- concrete curing compounds (e.g. methacrylate and epoxy resin products)
- paints
- solvents, thinners, acids

- sandblasting materials
- mortar mix
- landscaping materials and wastes (topsoil, plant materials, herbicides, fertilizers, pesticides, mulch)
- BMP materials (sandbags, liquid copolymer)
- treated lumber (materials and wastes)
- PCC rubble
- masonry block rubble
- general litter

The following is a list of construction activities that have the potential to contribute sediment to stormwater discharges include:

- clearing and grubbing operations
- grading operations
- soil import operations
- utility excavation operations
- sandblasting operations
- landscaping operations

REQUIRED TEXT:

The following is a list of construction materials that will be used and activities that will be performed that will have the potential to contribute pollutants, other than sediment, to stormwater runoff:

- (LIST)

The following is a list of construction activities that have the potential to contribute sediment to stormwater discharges include:

- (LIST)

INSERT ADDITIONAL NARRATIVE TEXT HERE OR DELTET THIS LINE (USE THE "FORMATION OPTIONS" button to insert subtitles and/or paragraphs)

30.1.2 Potential Pollutants from Site Features or Known Contaminants

INSTRUCTIONS:

- Show and/or describe existing site features related to past usage that may contribute pollutants to stormwater, (e.g., toxic materials that are known to have been treated, stored, disposed, spilled, or leaked onto the construction site).
- Review the contract documents and associated environmental documents to determine the known site contaminants and list them in this section.

EXAMPLE:

Existing site features that, as a result of known past usage, may contribute pollutants to stormwater, (e.g., toxic materials that are known to have been treated, stored, disposed, spilled, or leaked onto the construction site) include:

- none

The following listed contaminants are known to exist at the project site locations identified:

- This site includes aerially deposited lead. The lead is located at….

REQUIRED TEXT:

Existing site features that, as a result of past usage, may contribute pollutants to stormwater (e.g., toxic materials that are known to have been treated, stored, disposed, spilled, or leaked onto the construction site) include:

- (LIST)

The following contaminants are known to exist at the project site locations identified:

- (LIST)

INSERT ADDITIONAL NARRATIBE TEXT HER OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)

GENERAL INSTRUCTIONS FOR BMP SELECTION PROCESS

BMP SELECTION PROCESS

- BMPs are selected to reduce or eliminate pollutants in stormwater and non-stormwater discharges associated with construction activities. Described below is the sequence of steps that shall be used to identify BMPs to be included in WPCPs.

Step 1: Incorporate the temporary water pollution control BMPs that are described in:

- contract special provisions
- contract plans
- standard plans
- standard specifications

If the BMPs required in Step 1 are inadequate to address potential pollutants in stormwater discharges and non-stormwater discharges, then:

Step 2: Incorporate the temporary water pollution control BMPs using one or more of the Caltrans minimum requirements listed in Table 2-1 of the SWPPP/WPCP Preparation Manual.

Step 3 If the BMPs selected from Steps 1 and 2 are inadequate to address potential pollutants in stormwater discharges and non-stormwater discharges, and then incorporate the temporary water pollution control BMPs that are described in Section 4.5 of the SWMP. For reference on these BMPs see the *Construction Site Best Management Practices (BMPs) Reference Manual*

- Show the selected BMPs on the WPCDs.
- Complete the BMP implementation tables and descriptions in each of the following sections:

30.2 Soil Stabilization (Erosion Control) and Sediment Control

30.3 Construction Site Management

30.2 Soil Stabilization (Erosion Control) and Sediment Control

INSTRUCTIONS

- Use each of the following sections to identify erosion and sediment controls that will be implemented during the project.

30.2.1 Soil Stabilization Practices

30.2.2 Sediment Control Practices

30.2.3 Sediment Tracking Controls

30.2.4 Wind Erosion Controls

30.2.1 Soil Stabilization BMPs

INSTRUCTIONS

- Soil stabilization consists of source control measures that are designed to prevent soil particles from detaching and becoming suspended in stormwater runoff. Soil stabilization BMPs protect the soil surface by covering and/or binding the soil particles.
- Provide a brief description of soil-disturbing activities, such as clearing and grubbing, grading, excavation, trenching, etc. Show the limits of the soil-disturbed areas on the WPCDs.
- Complete the following BMP implementation table for temporary soil stabilization BMPs.
- Describe the locations and scheduled installations for each selected soil stabilization BMP.
- If the project will not create disturbed soil areas, state as such and check "No" for all BMPs in the soil stabilization selection BMP implementation table and enter "N/A" as the reason not used.

EXAMPLE

The following soil stabilization BMP implementation table indicates the BMPs that shall be implemented to control erosion on the construction site. Locations of temporary soil stabilization BMPs are shown on the WPCDs in Attachment A. Implementation and locations of the temporary soil stabilization BMPs are described in this section. The BMPs required by the contract specifications and plans are included in Attachment A of this WPCP. The following list of BMPs and narrative explain how the selected BMPs will be incorporated into the project.

Soil disturbing activities consist of minor grading along the shoulder and trenching for utilities and sound wall footings as shown on WPCD-2. Existing vegetation will be preserved outside the immediate construction zone as shown.

SS-1 Scheduling

The majority of soil disturbing work will be conducted outside of the wet season, see Attachment C Water Pollution Control Schedule. Temporary soil stabilization, sediment control, tracking control, wind erosion control, non-storm water management and waste and materials management BMPs are scheduled to coincide with the scheduled soil disturbing activities and other construction activities scheduled that could potentially discharge pollutants to the storm drain system.

SS-2 Preservation of Existing Vegetation

Clearing and grubbing will be limited to the boundaries of active construction as shown on WPCD-2. Surrounding areas of existing vegetation will be protected by installing ESA fencing around the drip lines of the trees.

SS-5 Soil Binders (Copolymer)

BMP SS-5 was selected to minimize interference with the final (permanent) erosion control measures (decorative landscaping). Soil binders will be applied year-round to all non-active disturbed soil areas. Soil binders will be installed within 14 days from when disturbed soil areas become non-active and before forcasted storm events on active disturbed soil areas.

REQUIRED TEXT

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. Any additional BMP detail drawing necessary to convey site

specific BMP configuations can also be found in Attachment A of this WPCP. The following list of BMPs and narrative explain how the selected BMPs will be incorporated into the project.

TEMPORARY SOIL STABILIZATION BMPs						
CONSTRUCTION BMP ID NO(1)	BMP NAME	CONTRACT MINIMUM REQUIRE-MENT(2)	CONTRACT BID ITEM	BMP USED		IF CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON
				YES	NO	
SS-1	Scheduling	√	☐	☐	☐	
SS-2	Preservation of Property/ Preservation of Existing Vegetation	√	☐	☐	☐	
SS-3	Temporary Hydraulic Mulch (Bonded Stabilized Fiber Matrix)	√(2)	☐	☐	☐	
	Temporary Hydraulic Mulch (Polymer Stabilized Fiber Matrix)	√(2)	☐	☐	☐	
SS-4	Temporary Erosion Control (With Temporary Seeding)	√(2)	☐	☐	☐	
SS-5	Temporary Soil Stabilizer	√(2)	☐	☐	☐	
SS-6	Temporary Erosion Control (Straw Mulch with Stabilizing Emulsion)	√(2)	☐	☐	☐	
SS-7	Temporary Erosion Control Blanket (On Slope)	√(2)	☐	☐	☐	
	Temporary Erosion Control Blanket (In swale or ditch)		☐	☐	☐	
SS-7	Temporary Cover (Geotextiles and Mats)	√(2)	☐	☐	☐	
SS-8	Temporary Mulch (Wood)		☐	☐	☐	

TEMPORARY SOIL STABILIZATION BMPs						
CONSTRUCTION BMP ID NO[1]	**BMP NAME**	**CONTRACT MINIMUM REQUIRE-MENT[2]**	**CONTRACT BID ITEM**	**BMP USED**		**IF CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON**
				YES	**NO**	
SS-9	Earth Dikes / Drainage Swales & Lined Swales		☐	☐	☐	
SS-10	Outlet Protection / Velocity Dissipation Devices		☐	☐	☐	
SS-11	Slope Drains		☐	☐	☐	
SS-12	Streambank Stabilization		☐	☐	☐	
ALTERNATIVE TEMPORARY SOIL STABIZATION BMPs USED[3] ☐ Yes ☒ No						IF USED, STATE REASON
CONSTRUCTION BMP ID NO [1]	**BMP NAME**					

Notes:
(1) The BMP designations (SS-1, SC-3, etc.) are solely for maintaining continuity with existing Caltrans documents and are not provided to imply that the Construction Site Best Management Practices (BMPs) Reference Manual is a required contract document.
(2) Minimum requirements are based on the required contract i plans and specifications. Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the WPCP Preparer or WPC Manager.
(3) Use of alternative BMPs will require written approval by the Resident Engineer.

INSERT NARRATIVE DESCRIBING SELECTED SOIL STABILIZTION BMPs

30.2.2 Sediment Control BMPs

INSTRUCTIONS

- Sediment controls are used to complement and enhance the selected soil stabilization measures. Sediment controls are designed to intercept runoff and capture suspended soil particles through a settlement or filtration process.
- Provide a brief description of soil-disturbed areas that will necessitate sediment control BMPs. References to the WPCDs and/or Section 30.2.1 are often sufficient.
- Complete the following BMP implementation table for temporary sediment control BMPs. All listed BMPs shall be considered for the project.
- Describe the locations and scheduled installations for each selected sediment control BMP.
- Show selected BMPs on the WPCDs.

EXAMPLE

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. Any additional BMP detail drawings necessary to convey site specific BMP configurations can also be found in Attachment A of this WPCP. The following list of BMPs and narrative explain how the selected BMPs will be incorporated into the project.

Temporary fiber rolls will be used at the toe of slopes and as perimeter sediment controls. Sediment controls for this project will be implemented year-round. Sediment controls will be installed within 14 days from when disturbed soil areas become non-active and before forcasted storm events on active disturbed soil areas. Deployment locations will be as follows:

SC-5 Temporary Fiber Rolls

Fiber rolls will be deployed along the downstream (southern) construction site perimeter as shown on WPCD-2. Once the drainage channel is constructed and lined, fiber rolls will be extended north, along each side of the channel. See SC-4, Temporary Check Dam, below.

SC-4 Temporary Check Dam

Concentrated flows will be conveyed by the drainage channel that runs north-south, adjacent to the shoulder. During channel construction, sediment control will be provided by gravel bag check dams, spaced at 30 feet. Once the channel is lined, temporary fiber rolls will be installed along the channel banks to prevent sediment from entering the channel.

REQUIRED TEXT

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. Any additional BMP detail drawings necessary to convey site specific BMP configurations can also be found in Attachment A of this WPCP. The following list of BMPs and narrative explain how the selected BMPs will be incorporated into the project.

TEMPORARY SEDIMENT CONTROL BMPs						
CONSTRUCTION BMP ID NO[1]	**BMP NAME**	**CONTRACT MINIMUM REQUIRE-MENT[2]**	**CONTRACT BID ITEM**	**BMP USED**		**IF CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON**
				YES	**NO**	
SC-1	Temporary Silt Fence	√[2]	☐	☐	☐	
SC-2	Temporary Sediment Basin		☐	☐	☐	
SC-4	Temporary Check Dam		☐	☐	☐	
SC-5	Temporary Fiber Rolls	√[2	☐	☐	☐	
SC-6	Temporary Gravel Bag Berm		☐	☐	☐	
SC-7	Street Sweeping	√	☐	☐	☐	
SC-8	Temporary Sandbag Barrier		☐	☐	☐	
SC-9	Temporary Straw Bale Barrier		☐	☐	☐	
SC-10	Temporary Drain Inlet Protection	√	☐	☐	☐	
ALTERNATIVE SEDIMENT CONTROL BMPs USED[3] ☐ Yes ☐ No						IF USED, STATE REASON

Notes:
(1) The BMP designations (SS-1, SC-3, etc.) are solely for maintaining continuity with existing Caltrans documents and are not provided to imply that the Construction Site Best Management Practices (BMPs) Reference Manual is a required contract document.
(2) Minimum requirements are based on the required contract plans and specifications. Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the WPCP Preparer or WPC Manager.
(3) Use of alternative BMPs will require written approval by the Resident Engineer.

INSERT NARRATIVE DESCRIBINGTEMPORARY SEDIMENT CONTROL BMPs

30.3.3 Tracking Control BMPs

INSTRUCTIONS

- Refer to the following BMP implementation table for sediment tracking control BMPs. If a particular BMP will not be used or is not applicable enter a brief reason.
- Tracking controls shall be considered and implemented year round and throughout the duration of the project. Show selected sediment tracking control BMPs on the WPCDs in Attachment A.

REQUIRED TEXT

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. Any additional BMP detail drawings necessary to convey site specific BMP configurations can also be found in Attachment A of this WPCP. The following list of BMPs and narrative explain how the selected BMPs will be incorporated into the project.

TEMPORARY TRACKING CONTROL BMPs						
CONSTRUCTION BMP ID NO[1]	BMP NAME	CONTRACT MINIMUM REQUIRE-MENT[2]	CONTRACT BID ITEM	BMP USED		IF CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON
				YES	NO	
SC-7	Street Sweeping		☐	☐	☐	
TC-1	Temporary Construction Entrance		☐	☐	☐	
TC-2	Stabilization Construction Roadway		☐	☐	☐	
TC-3	Temporary Entrance / Outlet Tire Wash		☐	☐	☐	
ALTERNATIVE TRACKING CONTROL BMPs USED[2] ☐ Yes ☐ No						IF USED, STATE REASON

Notes:
(1) The BMP designations (SS-1, SC-3, etc.) are solely for maintaining continuity with existing Caltrans documents and are not provided to imply that the Construction Site Best Management Practices (BMPs) Reference Manual is a required contract document.
(2) Use of Alternative BMPs will require written approval by the Resident Engineer.

INSERT NARRATIVE DESCRIBING TRACKING CONTROL BMPs

30.2.4 Wind Erosion Control BMPs

INSTRUCTIONS

- Refer to the following BMP implementation table for wind erosion control BMPs. If a particular BMP will not be used or is not applicable enter a brief reason.
- Provide a narrative description of wind erosion control BMPs. Give a general approach on how wind erosion control BMPs will be implemented on the project to control dust during construction operations, including stockpile operations at all times.
- If the project will not create disturbed soil areas, indicate this in the narrative description.

REQUIRED TEXT

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 following list of BMPs and narrative explain how the selected BMPs shall be incorporated into the project.

TEMPORARY WIND EROSION CONTROL BMPs						
CONSTRUCTION BMP ID NO(1)	BMP NAME	CONTRACT MINIMUM REQUIRE-MENT(2)	CONTRACT BID ITEM	BMP USED		IF CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON
				YES	NO	
WE-1	Wind Erosion Control	√	☐	☐	☐	
TC-1	Temporary Construction Entrance		☐	☐	☐	
TC-2	Stabilization Construction Roadway		☐	☐	☐	
------	All Soil Stabilization Measures included in Section 30.2.1		☐	☐	☐	
ALTERNATIVE WIND EROSION CONTROL BMPs USED(2) ☐ Yes ☐ No						IF USED, STATE REASON

TEMPORARY WIND EROSION CONTROL BMPs						
CONSTRUCTION BMP ID NO[1]	BMP NAME	CONTRACT MINIMUM REQUIRE-MENT[2]	CONTRACT BID ITEM	BMP USED		IF CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON
				YES	NO	

Notes:
(1) The BMP designations (SS-1, SC-3, etc.) are solely for maintaining continuity with existing Caltrans documents and are not provided to imply that the Construction Site Best Management Practices (BMPs) Reference Manual is a required contract document.
(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 WIND EROSION CONTROL BMPs

30.3 Construction Site Management

30.3.1 Non-Stormwater Management BMPs

INSTRUCTIONS

- Non-stormwater discharges which are not authorized under the Caltrans Permit or authorized under a separate NPDES permit are prohibited. Examples of prohibited discharges common to construction activities include:
  - vehicle and equipment wash water
  - concrete washout water
  - slurries from concrete cutting and coring operations or AC grinding operations
  - slurries from concrete or mortar mixing operations
  - blast residue from high-pressure washing of structures or surfaces
  - wash water from cleaning painting equipment
  - runoff from dust control applications of water or dust palliatives
  - sanitary and septic wastes
- List all activities that have the potential to produce non-stormwater discharges. Consider dewatering operations and any construction activity that requires water use. Discuss planned dewatering operations with the Resident Engineer to determine possible requirement for permits and/or treatment. Discuss how mobile operations, such as maintenance and fueling for large or stationary equipment, will be addressed.
- Use the following BMP implementation table to select BMPs as necessary to contain, remove, and dispose potential non-stormwater discharges.

- Describe the locations and scheduled installations for each selected Non-Stormwater Management BMPs.

REQUIRED TEXT

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. Any additional BMP detail drawings necessary to convey site specific BMP configurations can also be found in Attachment A of this WPCP.

CONSTRUCTION SITE MANAGEMENT NON-STORMWATER POLLUTION CONTROL BMPs						
CONSTRUCTION BMP ID NO(1)	BMP NAME	CONTRACT MINIMUM REQUIRE-MENT(2)	CONTRACT BID ITEM	BMP USED		IF CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON
				YES	NO	
NS-1	Water Control and Conservation		☐	☐	☐	
NS-2	Dewatering(3)		☐	☐	☐	.
NS-3	Paving, Sealing, Sawcutting, and Grinding Operations		☐	☐	☐	
NS-4	Temp Stream Crossing (3)		☐	☐	☐	.
NS-5	Clear Water Diversion (3)		☐	☐	☐	
NS-6	Illegal Connection and Illegal Discharge Detection Reporting	√	☐	☐	☐	
NS-7	Potable Water / Irrigation		☐	☐	☐	
NS-8	Vehicle and Equipment Cleaning	√	☐	☐	☐	
NS-9	Vehicle and Equipment Fueling	√	☐	☐	☐	
NS-10	Vehicle and Equipment Maintenance	√	☐	☐	☐	

CONSTRUCTION SITE MANAGEMENT NON-STORMWATER POLLUTION CONTROL BMPs						
CONSTRUCTION BMP ID NO[1]	**BMP NAME**	**CONTRACT MINIMUM REQUIRE-MENT[2]**	**CONTRACT BID ITEM**	**BMP USED**		**IF CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON**
				YES	**NO**	
NS-11	Pipe Driving Operations		☐	☐	☐	
NS-12	Concrete Curing		☐	☐	☐	
NS-13	Material and Equipment Used Over Water		☐	☐	☐	
NS-14	Concrete Finishing		☐	☐	☐	
NS-15	Structure Demolition / Removal Over or Adjacent to Water		☐	☐	☐	
ALTERNATIVE NON-STORMWATER POLLUTION CONTROL BMPs USED[4] ☐ Yes ☐ No						IF USED, STATE REASON
CONSTRUCTION BMP ID NO [1]	**BMP NAME**					

Notes:
(1) The BMP designations (SS-1, SC-3, etc.) are solely for maintaining continuity with existing Caltrans documents and are not provided to imply that the Construction Site Best Management Practices (BMPs) Reference Manual is a required contract document.
(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) The BMPs listed above are incidental and do not include operations included as separated line items in the contract.
(4) Use of alternative BMPs will require written approval by the Resident Engineer.

INSERT NARRATIVE DESCRIBING NON-STORM WATER MANAGEMENT POLLUTION CONTROL BMPs

30.3.2 Waste Management and Materials Pollution Control BMPs

INSTRUCTIONS

- Waste management consists of implementing procedural and structural BMPs for collecting, handling, storing and disposing of wastes generated by a construction project to prevent the release of waste materials into stormwater discharges. Wastes are going to be generated during construction; however, the methods in which the wastes are collected, stored, and removed will determine the success of the waste management pollution control BMPs. Construction site wastes can range from residues collected from non-stormwater discharges (i.e. paint removal) to general site litter and debris (i.e. empty marker paint cans).

- Material pollution control (materials handling) consist of implementing procedural and structural BMPs for handling, storing and using construction materials to prevent the release of those materials into stormwater discharges. The amount and type of construction materials to be utilized at the site will be dependent upon the type of construction and the length of the construction period. The materials may be used continuously, such as fuel for vehicles and equipment, or the materials may be used for a discrete period, such as fertilizer for landscaping.

- Waste management and materials pollution control BMPs must be implemented to minimize stormwater contact with construction materials, wastes and service areas, and to prevent materials and wastes from being discharged off-site.

- Review project activities to identify likely construction materials and wastes. Identify materials and wastes with special handling or disposal requirements, such as lead contaminated soils. List anticipated materials and wastes below.

- Based on the listed materials and wastes, use the following waste management and materials pollution controls BMP consideration checklist to select appropriate BMPs.

- Describe the locations and scheduled installations for each selected waste management and materials pollution control BMPs. For Solid Waste Management WM-5, a list of waste disposal facilities and the type of waste to be disposed at each facility is provided.

REQUIRED TEXT

The following BMP implementation table indicates the BMPs that have been selected to control pollutants from construction site wastes and materials. Implementation and locations of materials handling and waste management BMPs are shown on the WPCDs in Attachment A. Any additionalBMP detail drawings necessary to convey site specific BMP configurations can also be found in Attachment A of this WPCP. 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

CONSTRUCTION BMP ID NO(1)	BMP NAME	CONTRACT MINIMUM REQUIRE-MENT(2)	CONTRACT BID ITEM	BMP USED		IF CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON
				YES	NO	
WM-1	Material Delivery and Storage	√	☐	☐	☐	
WM-2	Material Use	√	☐	☐	☐	
WM-3	Stockpile Management	√	☐	☐	☐	
WM-4	Spill Prevention and Control	√	☐	☐	☐	
WM-5	Solid Waste Management		☐	☐	☐	
WM-6	Hazard Waste Management (3)		☐	☐	☐	
WM-7	Contaminated Soil Management (3)		☐	☐	☐	
WM-8	Concrete Waste Management		☐	☐	☐	
	Temporary Concrete Washout Facility		☐	☐	☐	
	Temporary Concrete Washout (Portable)		☐	☐	☐	
WM-9	Sanitary/Septic Waste Management	√	☐	☐	☐	
WM-10	Liquid Waste Maintenance		☐	☐	☐	
ALTERNATIVE WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs USED(4) ☐ Yes ☐ No						IF USED, STATE REASON
CONSTRUCTION BMP ID NO (1)	**BMP NAME**					

CONSTRUCTION SITE MANAGEMENT WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs						
CONSTRUCTION BMP ID NO[1]	BMP NAME	CONTRACT MINIMUM REQUIRE-MENT[2]	CONTRACT BID ITEM	BMP USED		IF CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON
				YES	NO	

Notes:
(1) The BMP designations (SS-1, SC-3, etc.) are solely for maintaining continuity with existing Caltrans documents and are not provided to imply that the Construction Site Best Management Practices (BMPs) Reference Manual is a required contract document.
(2) Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be verified by the contractor and approved by the Resident Engineer.
(3) The BMPs listed above are incidental and do not include operations included as separated line items in the contract.
(4) Use of alternative BMPs will require written approval by the Resident Engineer.

INSERT NARRATIVE DESCRIBING WAST MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs

30.4 Water Pollution Control Drawings (WPCDs)

INSTRUCTIONS

- The contractor shall include WPCDs in the WPCP to show the locations, applications, and deployment of the BMPs checked in the preceding sections.
- The WPCDs shall include one or more drawings at a scale sufficient to clearly show on-site drainage patterns and the location of BMPs. The WPCDs shall be no smaller than the "reduced plans" (approximately 11" x 17") issued by Caltrans. Use the sample WPCD included in Attachment BB of the Caltrans "SWPPP/WPCP Preparation Manual."
- The WPCDs shall include:
  - Detail sheets showing construction details for the BMPs that shall be used.
  - Location sheets, usually modified layout, grading, stage construction, and/or drainage sheets, showing the locations of BMPs that will be used. Delineation of BMPs to be implemented during project construction will be in the form of construction notes and/or symbols.

REQUIRED TEXT

The Water Pollution Control Drawings (WPCDs) show the necessary BMPs by project phase/stage for the project to be in compliance with water pollution control requirements. The WPCDs provide field staff with the information on where to install BMPs so that they are effective. The WPCDs and Water Pollution Control Schedule provide the necessary tools for a contractor to plan and implement BMPs to meet the requirements of the project WPCP.

The WPCD cover sheet(s) shall include a listing of the BMPs that will be used along with the associated BMP symbols used on the WPCDs.

WPCDs are provided for all areas that are directly related to the construction activity, including but not limited to staging areas, storage yards, material borrow areas and storage areas, access roads, etc., whether or not they reside within the Caltrans rights-of-way.

The WPCDs shall show the construction project site in detail, including:

- construction site perimeter
- geographic features within or immediately adjacent to the site, including surface waters such as lakes, streams, springs, wetlands, estuaries, ponds, and the ocean
- site topography before and after construction, including roads, paved areas, buildings, slopes, drainage facilities, and areas of known or suspected contamination
- permanent (post-construction) BMPs

The WPCDs shall show the following site information:

- discharge points from the project to off-site storm drain systems or receiving waters
- tributary areas and drainage patterns across the project area (show using flow arrows) into each onsite stormwater inlet or receiving water
- tributary areas and drainage patterns to each onsite stormwater inlet, receiving water or discharge point
- off-site tributary drainage areas that generate run-on to the project
- temporary onsite drainage(s) to carry concentrated flows
- drainage patterns and slopes anticipated after major grading activities are completed
- outline of all areas of existing vegetation, soil cover, or native vegetation that will remain undisturbed during the project
- outline of all areas of planned soil disturbance (disturbed soil areas, DSAs)
- known location(s) of contaminated or hazardous soils
- any potential non-stormwater discharges and activities, such as dewatering operations, concrete saw-cutting or coring, pressure washing, waterline flushing, diversions, cofferdams, and vehicle and equipment cleaning. If operations can't be located on the WPCDs, a narrative description is provided.

The WPCDs show proposed locations of all construction site BMPs. Additional detail drawings are provided if necessary to convey site-specific BMP configurations. The WPCDs shall show construction site BMPs including the following:

- temporary soil stabilization and temporary sediment control BMPs that will be used during construction. Any temporary onsite drainage(s) to carry concentrated flows, BMPs implemented to divert off-site drainage around or through the construction site, and BMPs that protect stormwater inlets
- construction entrances used for site ingress and egress entrance and exit points and any proposed temporary construction roads

- BMPs to mitigate or eliminate non-stormwater discharges
- BMPs for waste management and materials pollution control, including, but not limited to storage of soil or waste; construction material loading, unloading, storage and access areas; and areas designated for waste handling and disposal
- BMPs for vehicle and equipment storage, fueling, maintenance, and cleaning

INSERT ADDITIONAL NARRATIVE TEXT FOR WATER POLLUTION CONTROL DRAWINGS HERE (Use the "FORMAT OPIONS" button to insert subtitles and/or paragraphs)

The WPCDs are included as Attachment A to this WPCP.

30.5 Water Pollution Control Schedule

INSTRUCTIONS

- Project Schedule: Provide a written or graphical project schedule. A graphical schedule in the form of an image file can be copied into the form field for the graphical schedule. Alternatively the graphical schedule can be manually included in the document. The schedule only needs to be detailed enough to show major activities sequenced with the implementation of construction site BMPs, including:

  - project start and finish dates
  - mobilization dates
  - mass clearing and grubbing, roadside clearing dates
  - major grading and excavation dates
  - dates for special activities named in other permits, such as Fish and Game
  - implementation schedule, by location, for deployment of:
    - temporary soil stabilization BMPs
    - temporary sediment control BMPs
    - tracking control BMPs
    - wind erosion control BMPs
    - non-stormwater BMPs
    - waste management and materials pollution control BMPs
  - paving, sawcutting, and any other pavement related operations
  - planned stockpiling operations
  - dates for other significant long-term operations or activities that may plan non-stormwater discharges such as dewatering, grinding, etc.

- Note: Projects located in the Lake Tahoe, Truckee River, East Fork Carson River, or West Fork Carson River Hydrologic Units, and projects above 5,000 ft in elevation in the portions of Mono County or Inyo County within the Lahontan RWQCB are not allowed to perform removal of vegetation nor disturbance of existing ground surface conditions between October 15 of each year and May 1 of the following year; except when there is an emergency situation that threatens the

public health and safety, or when the project is granted a variance by the RWQCB Executive Officer.

REQUIRED TEXT:

The Water Pollution Control Schedule (WPCS) is the component of the project WPCP that shows the timeline for when BMPs will be installed so that the project is in compliance with water pollution control requirements. The WPCS provides field staff with the information necessary to plan for adequate materials and crews to install BMPs at the right time so that they are effective. The Water Pollution Control Schedule and Water Pollution Control Drawings provide the necessary tools for a contractor to plan and implement BMPs to meet the requirements of the project WPCP.

The WPCS shall contain an adequate level of detail to show major activities sequenced with implementation of construction site BMPs, including:

- project start and finish dates, including each stage of the project
- WPCP review and acceptance
- mobilization dates
- mass clearing and grubbing/roadside clearing dates
- major grading/excavation dates
- dates named in other permits such as Fish and Game and Army Corps of Engineers Permits

The WPCS shall show implementation dates by location for deployment of:

- temporary soil stabilization BMPs
- temporary sediment control BMPs
- wind erosion control BMPs
- tracking control BMPs
- non-stormwater BMPs
- waste management and materials pollution control BMPs

The WPCS shall include:

- paving, saw-cutting, and any other pavement related operations
- major planned stockpiling operations
- dates for other significant long-term operations or activities that may cause non-stormwater discharges such as dewatering, grinding, etc.
- final stabilization activities for each disturbed soil area of the project

The WPCS when updated shall be filed in WPCP File Category 20.03 Water Pollution Control Schedule Updates.

INSERT ADDITIONAL NARRATIVE TEXT FOR WATER POLLUTION CONTROL DRAWINGS HERE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)

The WPCS is included as Attachment B to this WPCP.

Section 40
WPCP Implementation

40.1 Water Pollution Control Manager Responsibilities

INSTRUCTIONS:

- The person responsible for water pollution control during construction is the Water Pollution Control Manager (WPC Manager).
- The WPC Manager must be a QSD or QSP with a certification or registration listed in Section 10 of this WPCP and Section VII.B.1 of the Construction General Permit. Also, effective September 2, 2011, the QSD or QSP shall have attended a State Water Board-sponsored or approved training course.
- The WPC Manager shall be available at all times throughout the duration of the project.
- Duties of the Contractor's WPC Manager include but are not limited to:
  - ensuring compliance with the WPCP
  - implementing all elements of the WPCP and contract specifications, including but not limited to implementing:
    - prompt and effective erosion and sediment control measures
    - non-stormwater management, and materials and waste management activities such as: monitoring discharges (dewatering, diversion devices); general site clean-up; vehicle and equipment cleaning, fueling and maintenance; spill control; ensuring that no materials other than stormwater are discharged in quantities which, will have an adverse effect on receiving waters or storm drain systems; etc.
  - overseeing and ensuring that the following site inspections and visual monitoring is conducted
    - required daily BMP inspections
    - routine weekly stormwater inspections
    - quarterly non-stormwater inspections
    - pre-storm inspections for forcasted storm events
    - daily inspections during forcasted storm events
    - post-storm inspections for qualifying rain events
  - preparing Amendments to the WPCP when required
  - ensuring elimination of all unauthorized discharges
  - mobilizing crews in order to make immediate repairs to the control measures (the contractor's WPC Manager shall be assigned authority by the contractor to mobilize crews

- coordinating with the Resident Engineer to assure all of the necessary corrections/repairs are made immediately, and that the project complies with the WPCP and accepted water pollution control drawings at all times
- submitting Notices of Discharge and reports of Illicit Connections or Illegal Discharges

■ The contractor's WPC Manager shall have primary responsibility and significant authority for the implementation, maintenance, inspection and amendments to the accepted WPCP.

REQUIRED TEXT:

The Water Pollution Control Manger (WPC Manager) shall have primary responsibility and authority to implement the WPCP. The WPC Manager is reponsible for WPCP implmentation and amending the WPCP when any of the conditions specified in Section 10 are met. The Contractor has assigned authority to the WPC Manager to mobilize crews and subcontractors as necessary for WPCP compliance. The WPC Manager will be available at all times throughout duration of the project.

Duties of the contractor's WPC Manager include but are not limited to:

- ensuring compliance with the WPCP
- implementing all elements of the WPCP and contract specifications , including but not limited to implementing:
  - prompt and effective erosion and sediment control measures
  - non-stormwater management, and materials and waste management activities such as: monitoring discharges (dewatering, diversion devices); general site clean-up; vehicle and equipment cleaning, fueling and maintenance; spill control; ensuring that no materials other than stormwater are discharged in quantities, which will have an adverse effect on receiving waters or storm drain systems, etc.
- overseeing and ensuring that the following site inspections and visual monitoring is conducted:
  - daily required BMP inspections
  - weekly routine stormwater site BMP inspections
  - quarterly non-stormwater site inspections
  - pre-storm inspections for forecasted storm events
  - daily inspections during forcasted storm events
  - post-storm inspections for qualifying rain events that produce project site runoff
- monitoring NWS Forecast Office forecasts for both forecasted storm events and qualifying rain events; these events are defined as follows:
  - a forecasted storm event is defined as a 50% or greater likelihood that 0.10 inches or more of precipitation will fall within a 24-hour period

  - a qualifying rain event is defined as a rain event that may produce or has produced ½ inch or more of precipitation

- preparing Amendments to the WPCP when required
- ensuring elimination of all unauthorized discharges
- mobilizing crews in order to make immediate repairs to the control measures
- coordinating with the Resident Engineer to assure all of the necessary corrections/repairs are made immediately, and that the project complies with the WPCP and approved plans at all times
- preparing and submitting Notices of Discharge Reports
- preparing and submitting Illicit Connections or Illegal Discharge Reports

INSERT ADDITIONAL RESPONSIBILITIES AND/OR NAMES HERE OR DELETE THIS LINE (Use the "FORMATION OPTIONS" button to insert subtitles and/or paragraphs)

40.2 Weather Forecast Monitoring

INSTRUCTIONS:

- The WPC Manager must monitor the National Weather Service Forecast Office and document forecast so that appropriate actions are taken prior to forecasted storm events.
- Enter the project site address or project site latitude and longitude that will be used when obtaining weather forecast information from National Weather Service Forecast Office.
- List actions to be taken when a forecasted storm event is likely.

REQUIRED TEXT:

The Water Pollution Control Manager (WPC Manager) shall have primary responsibility to monitor the National Weather Service Forecast Office for forecasted precipitation based on project site location. Precipitation forecast information shall be obtained from the National Weather service Forecast Office available at:

http://www.srh.noaa.gov/

The project site location to be used for obtaining forecast from National Weather Forecast Office website is INSERT SITE ADDRESS OR SITE LATITUDE AND LONGITUDE

The WPC Manager shall monitor the weather forecast on a daily basis for predicted precipitation within the following 96 hours. The WPC Manager shall monitor the forecast for the next 24, 48, 72 and 96 hours to determine if the forecast for precipitation is 50 percent or greater for any 6-hour period. If the forecast for precipitation is 50 percent or greater, the WPC Manager shall calculate the amount of precipitation forecasted for each 24-hour period and the total precipitation for the forceasted storm event and record the information.

When there is a forecasted fifty percent (50%) or greater chance of likely precipitation of 0.10 inch or more then a pre-storm stormwater site inspection is required and the WPC Manager shall ensure that the site is prepared for the forecasted storm event.. Site preparation for a forecasted storm event shall include, but is not limited to, the installation

of soil stabilization and sediment best management practices on active disturbed soil areas and stockpiles. INSERT ADDITIONAL ACTIONS TO BE TAKEN PRIOR TO A FORECASTED STORM EVENT

Documentation of weather forecast monitoring shall be recorded on CEM-2040 Weather Forecast Monitoring Log form, in Appendix E. The weather monitoring logs shall be filed in WPCP File Category 20.40: Weather Monitoring Logs.

40.3 Best Management Practices Status Report

INSTRUCTIONS:

The WPC Manager must prepare weekly a status of the water pollution control best management practices that are deployed and the water pollution control practices that will be deployed the following week. Water pollution control best management practices weekly status is to be reported on form CEM-2034 Stormwater Best Management Practice Status Report, in Appendix F. Copies of the completed forms shall be kept in WPCP File Category 20.34: Best Management Practices Weekly Status Reports.

REQUIRED TEXT:

The Water Pollution Control Manger (WPC Manager) shall prepare a weekly status report of the water pollution control best management practies installed on the project site and best management practices that will be deployed the following week. Because the WPCP and WPCDs are based on the entire project site and all construction activities, the weekly BMP status report should be a "snapshot" of what best management practices could be expected to be seen on the project site that week. The weekly status report will be used by stormwater inspectors and contractor pesonnel to ensure WPCP compliance.

The weekly status report will be used to ensure that weekly training meetings cover BMPs that are required for work activities during the week. The weekly status report will be provided to regulatory agency staff who visit the project site to indicate which BMPs should be in place and which are schedueled to be implemented during the week

INSERT ADDITIONAL NARRATIVE TEXT HERE OR DELETE THIS LINE (Use the "FORMATION OPTIONS" button to insert subtitles and/or paragraphs)

The weekly status of stormwater BMPs will be documented on CEM-2034 Stormwater Best Management Practices Status Report form, in Appendix F. Completed weekly status reports shall be submitted to the RE 48 hours prior to the beginning of the work week. Copies of the completed reports will be kept in WPCP File Category 20.34: Best Management Practices Weekly Status Reports.

40.4 Stormwater Site Inspections and Site Visual Monitoring

INSTRUCTIONS:

- Site inspections include both BMP inspections and site visual monitoring.
- The purpose of BMP inspections is to:
  - Ensure proper BMP installation
  - BMP maintenance

- Evaluate BMP effectiveness and implement repairs or design changes as soon as feasible

- Inspections shall be conducted by the Contractor's WPC Manager or other Caltrans approved 24-hour trained staff.

- A Stormwater Site Inspection Report must be completed during each inspection. A blank Stormwater Site Inspection Report is included as Appendix G of the WPCP.

- Inspections are required:

  - daily for required BMPs

  - weekly routine inspections of BMPs

  - daily inspections shall be conducted for projects within the Lake Tahoe Hydrologic Unit

- The purpose of site visual monitoring is to:

  - determine whether non-visible pollutants are present at the construction site and could be potentially causing or contributing to exceedances of water quality objectives
  - determine whether immediate corrective actions, additional Best Management Practices (BMP) implementation, or WPCP revisions are necessary to reduce pollutants in storm water discharges and authorized non-storm water discharges
  - document the presence or evidence of any non-storm water discharge (authorized or unauthorized), pollutant characteristics (floating and suspended material, sheen, discoloration, turbidity, odor, etc.), and source, if applicable and the response taken to eliminate unauthorized non-storm water discharges and to reduce or prevent pollutants from contacting non-storm water discharges

- Visual monitoring inspections of the project site shall be conducted:

  - Prior to a forecasted storm event
  - At 24-hour intervals during extended forcasted storm events
  - Post qualifying rain event
  - Quarterly for non-stormwater discharges

- A copy of completed inspection reports shall be submitted to the Resident Engineer within 24 hours of inspection. Completed inspection reports shall be kept in the WPCP File Category 20.31 Contractor Stormwater Site Inspection Reports.

- A Stormwater Site Inspection Report Corrections Summary shall be completed for any inspection that identifies deficiencies in BMPs. Copies of the completed correction summary reports shall be attached to the corresponding Stormwater Site Inspection Report and shall be kept in the WPCP File Category 20.31 Contractor Stormwater Site Inspection Reports.

- Deficiencies identified in visual monitoring site inspection reports and correction of deficiencies will be tracked on CEM-2035 Stormwater Site Inspection Report Corrections Summary form, in Appendix H. Corrections summaries shall be submitted to the Resident Engineer when corrections are completed and must be submitted within 5 days of a site inspection. Copies of the completed correction summary reports shall be attached to the corresponding Stormwater Site Inspection Report and shall be kept in WPCP File Category 20.33 Site Visual Monitoring Inspection Reports.

REQUIRED TEXT

Stormwater site inspections and visual monitoring are necessary to ensure that the project is in compliance with WPCP.

40.5 Stormwater Site Inspections

Project site inspections of stormwater BMPs are conducted to identify and record:

- that BMPs are properly installed
- what BMPs need maintenance to operate effectively
- what BMPs have failed
- what BMPs could fail to operate as intended

Routine stormwater site inspections shall be conducted by the Contractor's WPC Manager or other 24-hour trained staff at the following minimum frequencies:

- daily for required BMPs
- weekly
- daily for projects within the Lake Tahoe Hydrologic Unit.

Stormwater site inspections will be documented on CEM-2030 Stormwater Site Inspection Report in Appendix G. Completed inspection reports shall be submitted to the RE within 24 hours of inspection. Copies of the completed reports will be kept in WPCP File Category 20.31: Contractor Stormwater Site Inspection Reports.

Deficiencies identified in site inspection reports and correction of deficiencies will be tracked on CEM-2035 Stormwater Site Inspection Report Corrective Actions Summary ,in Appendix H. Corrections summaries shall be submitted to the RE when corrections are completed but must be submitted within 5 days of a site inspection. Copies of the completed correction summary reports shall be attached to the corresponding Stormwater Site Inspection Report and shall be kept in WPCP File Category 20.31: Contractor Stormwater Site Inspection Reports.

INSERT ADDITIONAL NARRATIVE TEXT HERE OR DELETE THIS LINE (Use the "FORMATION OPTIONS" button to insert subtitles and/or paragraphs)

40.6 Site Visual Monitoring

Stormwater site visual monitoring inspections shall be conducted at the following minimum frequencies:

- Prior to a forecasted storm event
- At 24-hour intervals during extended forcasted storm events
- Post qualifying rain event that generated site runoff
- Quarterly for non-stormwater discharges

Site visual monitoring inspections for non-stormwater discharges will be conducted once during each of the following periods: January-March, April-June, July-September, and October-December.

If visual monitoring of the site is unsafe because of dangerous weather conditions, such as flooding and electrical storms, the stormwater site inspector shall document the reason for the exception. Documentation that the site visual monitoring inspection could not be performed shall be filed in WPCP File Category 20.33: Site Visual Monitoring Inspection Reports.

INSERT ADDITIONAL NARRATIVE TEXT HERE OR DELETE THIS LINE (Use the "FORMATION OPTIONS" button to insert subtitles and/or paragraphs)

40.6.1 Visual Monitoring Prior To a Forecasted Storm Event

Visual monitoring of the project site is required when the forecast for precipitation is greater than 50 percent within the next 24, 48, 72, or 96 hours and the amount of precipitation forecasted for any 24-hour period during the forecasted storm event is 0.10 inch or greater. Site visual monitoring for precipitation events shall be conducted within 48 hours prior to a forecasted storm event. The pre-storm site visual monitoring inspection shall visual observe:

- all stormwater drainage areas to identify any spills, leaks, or uncontrolled pollutant sources
- any stormwater storage and containment areas to detect leaks and ensure maintenance of adequate freeboard
- all BMPs for proper installation and adequate maintenance

Observations of the site and any recommended corrective actions will be documented on CEM-2030 Stormwater Site Inspection Report. Any photographs used to document observations will be referenced on stormwater site inspection report.

40.6.2 Visual Monitoring During Extended Forecasted Storm Event

Stormwater visual monitoring site inspections shall be conducted at least once each 24-hour period during extended forecasted storm events The during storm site visual monitoring inspection shall visual observe:

- stormwater discharges at all discharge locations
- any stored or contained stormwater that is derived from and discharged subsequent to the forecasted storm event. Stored or contained stormwater that will likely discharge after working hours due to anticipated precipitation shall be observed prior to the discharge during working hours.

Stormwater discharges and stored or contained stormwater will be observed for the presence or absence of floating and suspended materials, sheen on the surface, discolorations, turbidity, odors, and source(s) of any observed pollutants.

A during forecasted rain event visual monitoring site inspection will include observation of all site BMPs for:

- proper installation
- maintenance
- failure

- BMPs that could fail to operate as intended
- effectiveness so that design changes can be implemented as soon as feasible

Observations of the site and any recommended corrective actions will be documented on CEM-2030 Stormwater Site Inspection Report Any photographs used to document observations will be referenced on stormwater site inspection report.

Required corrective actions will be initiated within 72 hours after they are identified and completed as soon as possible.

40.6.3 Visual Monitoring Within 48 Hours After A Qualifying Rain Event Generating Site Runoff

Site visual monitoring post precipitation events shall be conducted within 48 hours of any qualifying rain event that causes site runoff. The post-storm site visual monitoring inspection shall visual observe:

- Stormwater discharges at all discharge locations
- Any stored or contained stormwater that is derived from and discharged subsequent to the qualifying rain event. Stored or contained stormwater that will likely discharge after working hours due to anticipated precipitation shall be observed prior to the discharge during working hours.

Stormwater discharges and stored or contained stormwater will be observed for the presence or absence of floating and suspended materials, sheen on the surface, discolorations, turbidity, odors, and source(s) of any observed pollutants.

Post qualifying rain event stormwater visual monitoring site inspection will include observation of all site BMPs for:

- proper installation
- maintenance
- failure
- BMPs that could fail to operate as intended
- effectiveness so that design changes can be implemented as soon as feasible

Observations of the site and any recommended corrective actions will be documented on fCEM-2030 Stormwater Site Inspection Report. Any photographs used to document observations will be referenced on stormwater site inspection report.

Any corrective actions will be completed as soon as possible but if BMPs require design changes the implementation of changes will begin within 72 hours of identification and the changes will be completed as soon as possible.

40.6.4 Visual Monitoring Non-Stormwater Discharges

Visual monitoring and observations for non-stormwater discharges will be conducted for the presence or indications of prior unauthorized and authorized non-stormwater discharges and their sources. The presence or absence of non-stormwater discharges based on site observations will be documented on CEM-2030 Stormwater Site Inspection Report.

Documentation of observed non-stormwater discharges will include presence or absence of floating and suspended materials, sheen on the surface, discolorations, turbidity, odors, and source(s) of any observed pollutants.

Observations of the site and the response taken to eliminate any unauthorized non-stormwater discharges and to reduce or prevent pollutants from contacting non-stormwater discharges shall be documented on CEM-2030 Stormwater Site Inspection Report. Any photographs used to document observations will be referenced on stormwater site inspection report.

If a discharge or evidence of a prior discharge is discovered reporting will comply with the requirements in Section 50-2 Discharge Reporting Requirements.

If an illicit connection or illegal discharge is discovered reporting will comply with the requirements in Section 50-4 Illicit Connection/Illegal Discharge Reporting.

40.6.5 Visual Monitoring Documentation, Follow-up and Tracking Procedures

Site visual monitoring site inspections will be documented on CEM-2030 Stormwater Site Inspection Report, in Appendix G. Completed inspection reports shall be submitted to the Resident Engineer within 24 hours of inspection. Copies of the completed reports will be kept in WPCP File Category 20.33: Site Visual Monitoring Inspection Reports.

For deficiencies identified by site visual monitoring inspections the required repairs or maintenance of BMPs shall begin and be completed as soon as possible. For deficiencies identified by visual site inspections that require design changes, including additional BMPs, the implementation of changes will begin within 72 hours of identification and be completed as soon as possible. When design changes to BMPs are required the WPCP shall be amended, including Water Pollution Control Drawings.

Deficiencies identified in site visual monitoring inspection reports and correction of deficiencies will be tracked on CEM-2035 Stormwater Site Inspection Report Corrective Actions Summary, in Appendix H. Corrections summaries shall be submitted to the RE when corrections are completed and must be submitted within 5 days of the site inspection.

Completed CEM-2035 Stormwater Site Inspection Report Corrective Actions Summary forms shall be filed in WPCP File Category 20.35: Corrective Actions Summary. A copy of the completed CEM-2035 Stormwater Site Inspection Report Corrective Actions Summary form will also be attached to the corresponding visual monitoring inspection report and shall be kept in the WPCP File Category 20.33.

Section 50
WPCP Reporting Requirements

50.1 Record Keeping

REQUIRED TEXT:

To manage the various documents required to by the WPCP and to provide easy access to the documents the following WPCP file categories will be used to file WPCP compliance documents:

- File Category 20.01 Water Pollution Control Program (WPCP)
- File Category 20.03 Water Pollution Control Schedule Updates
- File Category 20.10 Correspondence
- File Category 20.23 Stormwater Training Documentation
- File Category 20.31 Contractor Stormwater Site Inspection Reports
- File Category 20.33 Site Visual Monitoring Inspection Reports
- File Category 20.34 Best Management Practices Weekly Status Report
- File Category 20.40 Weather Monitoring Logs
- File Category 20.61 Notice of Discharge Reports

Records shall be retained for a minimum of three years for the following items:

- accepted WPCP and Amendments
- Stormwater Site Inspection Reports
- Site Inspection Report CorrectiveActions Summary
- Notice of Discharge Reports

50.2 Discharge Reporting

INSTRUCTIONS

- Discharges will be reported in writing to the Resident Engineer verbally upon discovery and in writing within 7 days (3 days for Districts 7 and 11) of occurrence or as required in the Special Provisions. A Notice of Discharge form for reporting discharges shall be included in Appendix

H. A Discharge Reporting Log shall be included in WPCP File Category: 20.61: Notice of Discharge Reports.

- Note: USEPA has issued regulations that define Reportable Quantity (RQ) levels for oil and hazardous substances. These regulations are found in the Code of Federal Regulations at 40 CFR Part 110, Part 117, or Part 302.

REQUIRED TEXT

If a discharge or evidence of a prior discharge is discovered by the contractor, the contractor shall notify the Resident Engineer within 6 hours of the discharge event or discovery, and will file a written report to the Resident Engineer within 48 hours of the discharge event or discovery of evidence of a prior discharge. The written report to the Resident Engineer will contain the following items:

- the date, time, location, and type of unauthorized discharge
- nature of operation that caused the discharge
- initial assessment of any impacts caused by the discharge
- the BMPs deployed before the discharge event
- the date of deployment and type of BMPs deployed after the discharge event, including additional measures installed or planned to reduce or prevent re-occurrence
- steps taken or planned to reduce, eliminate and/or prevent recurrence of the discharge

Reporting of discharges shall be documented on CEM-2065 Notice of Discharge, in Appendix I.Completed CEM-2065 Notice of Discharge reports shall be submitted to the Resident Engineer within 24 hours of discharge event or discovery of evidence of a prior discharge. Copies of the CEM-2065 Notice of Discharge reports will be kept in WPCP File Category 20.61: Notice of Discharge Reports.

50.3 Regulatory Agency Notice or Order Reporting

INSTRUCTIONS

- Regulatory agency notices or orders will be reported to the Resident Engineer verbally upon receiving the notice or order. A written report with a copy of the notice or order shall be submitted to the Resident Engineer within 3 days of receiving a notice or order.

REQUIRED TEXT

If the project receives a written notice or order from any regulatory agency, the contractor will notify the Resident Engineer within 6 hours or receiving the notice or order and will file a written report to the Resident Engineer within 48 hours of receiving the notice, or order. Corrective measures will be implemented immediately following the notice or order.

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

- date, time, location, and cause or nature of the notice or order
- BMPs deployed prior to receiving notice or order
- date of deployment and type of BMPs deployed 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

50.4 Illicit Connection/Illegal Discharge Reporting

INSTRUCTIONS

- If the contractor discovers an illicit connection or illegal discharge during a stormwater site visual monitoring site inspection or while performing work on the project notify the Resident Engineer verbally upon discovering the illicit connection or illegal discharge. A written report about the illicit connection or illegal discharge shall be submitted to the Resident Engineer within 3 days of discovering the illicit connection or illegal discharge.

REQUIRED TEXT

If the contractor discovers an illicit connection to a storm drain system or any pipe discharging on to the project site not shown on the project plans the contractor shall notify the Engineer within 6 hours of the discovery and will file a written report to the Engineer within 48 hours of the discovery.

If the contractor discovers any illegal discharge including illegal dumping of material on the project site the contractor shall immediately notify the Engineer and will file a written report to the Engineer within 3 days of discovery.

The report to the Engineer will contain the following items:

- date, time, and location of the discovery
- details of the illicit connection or illegal discharge, including any photographs taken
- any actions taken to contain illegal discharge
- any sampling and testing to determine material dumped or discharged

4.3 WPCP ATTACHMENTS

WPCP Attachments A-D contains documents referenced by the WPCP. Step-by-step instructions are provided for preparing WPCP Attachments A–D and where appropriate examples of attachments are provided.

Attachment A	Water Pollution Control Drawings
Attachment B	Water Pollution Control Schedule
Attachment C	WPCP Amendments
Attachment D	Contractor Personnel Stormwater Training Subcontractor Personnel Stormwater Training

4.3.1 Attachment A Water Pollution Control Drawings

The Water Pollution Control Drawings (WPCDs) are the component of the project WPCP that show the necessary BMPs by project phase/stage for the project to be in compliance with Caltrans Standard Specificationsand the contract special povisions. The WPCDs shall show all areas that are directly related to the construction activity, including but not limited to staging areas, storage yards, material borrow areas and storage areas, access roads, etc., whether or not they reside within the Caltrans rights-of-way. The WPCDs shall reflect the contractor's phasing and/or construction staging, and shall address the entire scope of the contract work.

When necessary to clearly define water pollution control practices by construction activity phases, the phases that should be shown on the WPCDs are the Preliminary Phase, Grading Phase, Highway Construction Phase, and the Highway Planting / Erosion Control Establishment Phase. These phases are defined below.

Preliminary Phase (Pre-Construction Phase – Part of the Grading Phase)
Construction stage including rough grading/or disking, clearing and grubbing operations, or any soil disturbance prior to mass grading.

Grading Phase
Includes reconfiguring the topography for the project including; excavation for roadway including necessary blasting of hard rock, highway embankment construction (fills); mass grading, and stockpiling of select material for capping operations.

Highway Construction Phase
Highway construction phase includes both highway and structure construction. Highway construction includes final roadway excavation, placement of base materials and highway paving, finish grading, curbs, gutters and sidewalks, public utilities, public water facilities including fire hydrants, public sanitary sewer systems, storm drain systems and/or other drainage improvements, highway lighting, traffic signals and/or other highway electrical work, guardrail, concrete barriers, sign installation, pavement markers, traffic stripping and pavement markings. Structure construction includes structure footings, bridges, retaining walls, major culverts, overhead sign structures and buildings.

Highway Planting / Erosion Control Establishment Phase
Highway planting including clearing and grubbing operations, soil preparation (grading, incorporation of soil amendments, placement of topsoil), irrigation (trenching, installation, trench backfilling), minor grading (top dressing, fine grading lawn and ground cover areas), hardscaping, planting (seeding and planting of plants), mulch (application of wood chips or other mulches) and plant establishment (weeding, plant replacement and if needed: fertilizer application, irrigation maintenance, reapplication of mulch). Erosion control includes placement of permanent erosion control materials and maintenance of temporary sediment controls during the erosion control establishment period.

The WPCDs for grading phase and highway construction phase may need to show different stages to completely identify all required BMPs. The stage construction sheets of the project plans may be used as base sheets for the WPCDs when staging is required.

The WPCDs provide field staff with the information on where to install BMPs so that they are effective. The WPCDs and Water Pollution Control Schedule provide the necessary tools for a contractor to plan and implement BMPs to meet the requirements of the project WPCP.

Prepare Water Pollution Control Drawings (WPCDs) in conformance with the following instructions and requirements. The WPCDs shall be no smaller than the "reduced plans" (approximately 11"x17") issued by Caltrans.

- ❑ The WPCDs shall show locations for the BMPs that will be used.
- ❑ Include cover sheet(s) listing the BMPs that will be used along with the associated BMP symbols used on the WPCDs. Standard symbols and line types are shown in the SWPPP/WPCP Preparation Manual, Appendix D.
- ❑ Temporary WPC details not shown on applicable Standard Plans or contract plans must be shown in Attachment A.
- ❑ Additional BMP details may be necessary to describe site-specific BMP applications. BMP details other than the ones shown in the contract plans and Standard Plans shall be submitted to the RE for approval.

Use project layout, grading, stage construction, drainage sheets and/or erosion sheets as base sheets for the WPCDs. Use Section 30.1.2 as a guide to identify pollutant sources and BMPs for construction activities. Select BMPs that are appropriate for the site and show their locations on the WPCDs. The base sheets shall show the construction project in detail, including:

- ❑ The construction site perimeter
- ❑ Geographic features within or immediately adjacent to the site. Include surface waters such as lakes, streams, springs, wetlands, estuaries, ponds, and the ocean
- ❑ Site topography before and after construction. Include roads, paved areas, buildings, slopes, drainage facilities, and areas of known or suspected contamination
- ❑ Permanent (post-construction) BMPs. These are usually shown on the contract plans

Delineate the following site information on the WPCDs:

- ❑ Discharge points from the project to site storm drain systems or receiving waters
- ❑ Tributary areas and drainage patterns across the project area (show using flow arrows) into each onsite stormwater inlet or receiving water
- ❑ Tributary areas and drainage patterns to each onsite stormwater inlet, receiving water or discharge point
- ❑ Off-site tributary drainage areas that generate run-on to the project. (Where off-site tributary drainage areas are too large to depict on the drawings, use map notes or inserts illustrating the upstream drainage areas)
- ❑ Temporary onsite drainage(s) to carry concentrated flows
- ❑ Drainage patterns and slopes anticipated after major grading activities are completed

- ❑ Outline all areas of existing vegetation, soil cover, or native vegetation that will remain undisturbed during the project
- ❑ Outline all areas of soil disturbance (disturbed soil areas, DSAs)
- ❑ Identify location(s) of contaminated or hazardous soils
- ❑ Locate potential non-stormwater discharges and activities, such as dewatering operations, concrete saw-cutting or coring, pressure washing, waterline flushing, diversions, cofferdams, and vehicle and equipment cleaning. If operations can't be located, provide a narrative description.

Show proposed locations of all construction site BMPs on the WPCDs. Include additional detail drawings if necessary to convey site-specific configurations.

- ❑ Show temporary soil stabilization and temporary sediment control BMPs that will be used during construction. Include temporary onsite drainage(s) to carry concentrated flows, BMPs implemented to divert off-site drainage around or through the construction site, and BMPs that protect stormwater inlets
- ❑ Locate site ingress and egress points and any proposed temporary construction roads
- ❑ Show BMPs to mitigate or eliminate non-stormwater discharges
- ❑ Show BMPs for waste management and materials pollution control, including, but not limited to storage of soil or waste; construction material loading, unloading, storage and access areas; and areas designated for waste handling and disposal
- ❑ Show BMPs for vehicle and equipment storage, fueling, maintenance, and cleaning

Samples of WPCDs are shown on the following pages.

WATER POLLUTION CONTROL DRAWINGS (WPCDs)

FOR

ROUTE BB

STAGE 1

ANYTOWN, ANY COUNTY
CALTRANS CONTRACT NO. 00-00000

PREPARED BY:

ZZZ CONSTRUCTION COMPANY

LEGEND

- CWM — WM-8 Concrete Waste Management
- SC-10 Storm Drain Inlet Protection
- ESA — Environmentally Sensitive Area
- Surface Flow Direction
- Pipe/Underground Flow Direction
- CSM — WM-7 Contaminated Soil Management
- VEC — NS-8 Vehicle & Equipment Cleaning
- VEF — NS-9 Vehicle & Equipment Fueling
- VEM — NS-10 Vehicle & Equipment Maintenance
- PEV — SS-2 Preservation of Existing Vegetation
- TSP — SS-4 Hydroseeding
- S — SS-6 Straw Mulch
- SOS — SS-5 Soil Binders
- PS — Permanent Seeding
- TC-1 Stabilized Construction Entrance/Exit
- TSD — SS-11 Slope drains
- SS-9 Earth Dike/Drainage Swales and Lined Ditches
- CD — SC-4 Check Dams
- SC-1 Silt Fences
- SC-3 Sediment Traps
- FR — SC-5 Fiber Rolls
- SB — SC-8 Sandbag Barrier
- Stormwater Discharge Location

GENERAL WATER POLLUTION CONTROL NOTES

1. THE INFORMATION ON THESE DRAWINGS ARE ACCURATE FOR WATER POLLUTION CONTROL PURPOSES ONLY.
2. THE INFORMATION ON THIS PLAN IS INTENDED TO BE USED AS A GUIDELINE FOR THE CONTRACTOR AND SUBCONTRACTORS TO INSTALL WATER POLLUTION CONTROL DEVICES AT GENERAL LOCATIONS THROUGHOUT THE SITE. THESE DRAWINGS ARE TO BE USED IN CONJUNCTION WITH THE NARRATIVE SECTION OF THE WATER POLLUTION CONTROL PROGRAM (WPCP).
3. FIELD CONDITIONS MAY NECESSITATE MODIFICATIONS TO THESE DRAWINGS.
4. PERMANENT EROSION CONTROL WILL BE INSTALLED AS AREAS ARE DETERMINED TO BE SUBSTANTIALLY COMPLETE.

SAMPLE WPCD NOTE: DO NOT SIMPLY COPY THE FOLLOWING NOTES FOR PROJECT SPECIFIC USE. COPYING TEXT FROM THESE SAMPLE WPCDs DOES NOT NECESSARILY MEET NPDES PERMIT REQUIREMENTS. USE PROJECT SPECIFIC NOTES.

STORM WATER POLLUTION CONTROL CONSTRUCTION NOTES:

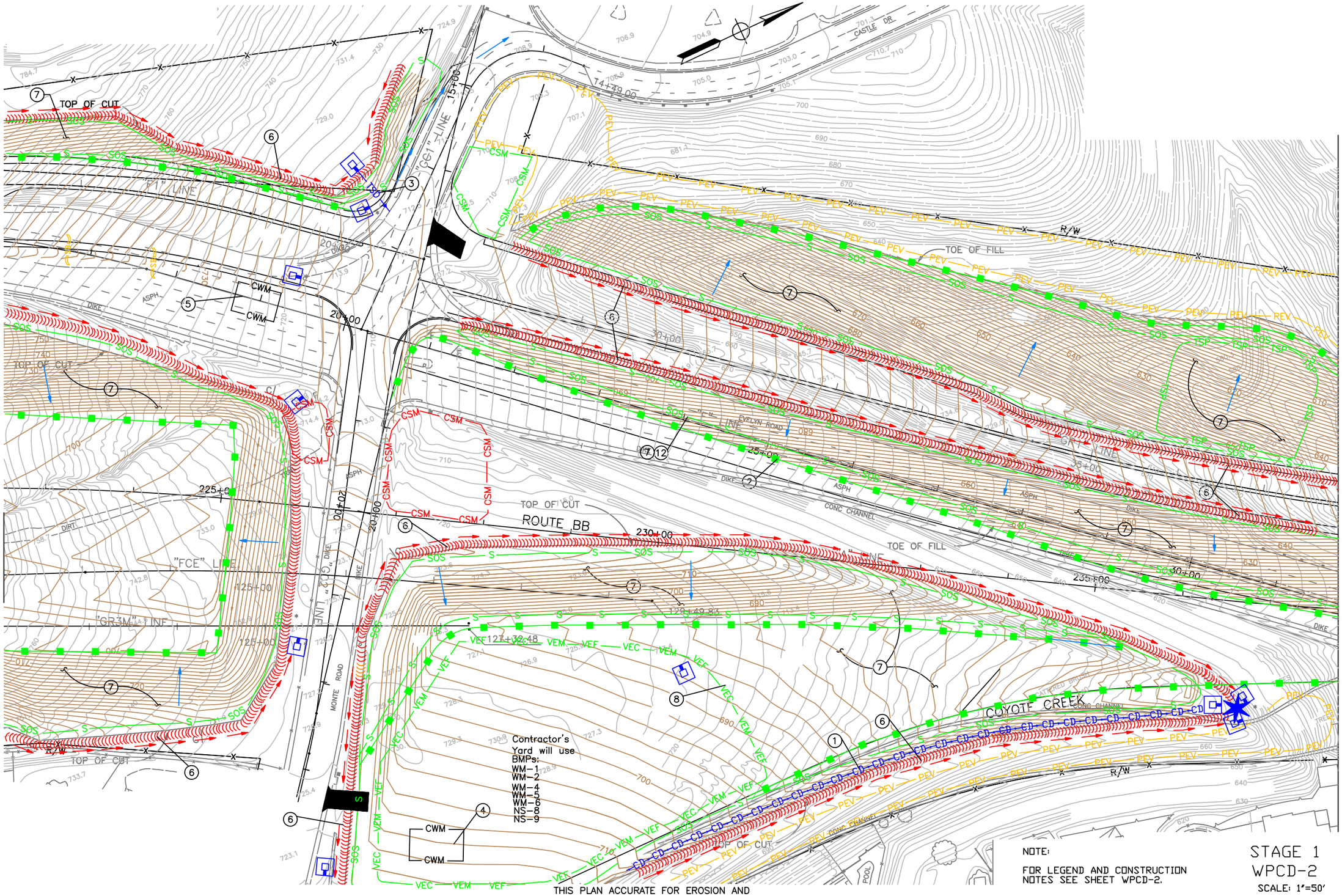
(LOCATIONS OF CIRCLED NUMBERS ARE SHOWN ON THE WPCD SHEETS)

1. Rock check dams.
2. Gravel bag check dams
3. Temporary slope drain without energy dissipation.
4. Contractor proposed alternate concrete washout detail, Type-1 Below Ground. See WPCD-5 for detail.
5. Contractor proposed alternate concrete washout detail, Type-2 Above Ground. See WPCD-5 for detail.
6. Earth berms installed during excavation staging.
7. Surface roughening required on all slope areas before applying soil binders (on active slope or roadway) and/or straw mulch (on inactive slopes only). Inactive slopes greater than 60 feet in height will be hydroseeded.
8. Combined Vehicle Cleaning, Fueling and Maintenance area.

WPCD-1

ZZZ CONSTRUCTION COMPANY	WATER POLLUTION CONTROL DRAWINGS TITLE SHEET				
DRAWN D.J.D					
APPROVED	SIZE A	SCALE NONE	DATE 11/00	REV 0	SHEET 1 OF 5

MATCH LINE SEE SHEET WPCD-3



MATCH LINE SEE SHEET WPCD-5

NOTE:

FOR LEGEND AND CONSTRUCTION NOTES SEE SHEET WPCD-2.

THIS PLAN ACCURATE FOR EROSION AND SEDIMENT CONTROL WORK ONLY

STAGE 1
WPCD-2
SCALE: 1"=50'

DATE	REVISED BY	DATE REVISED

CALCULATED/DESIGNED BY

CHECKED BY

PROJECT ENGINEER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

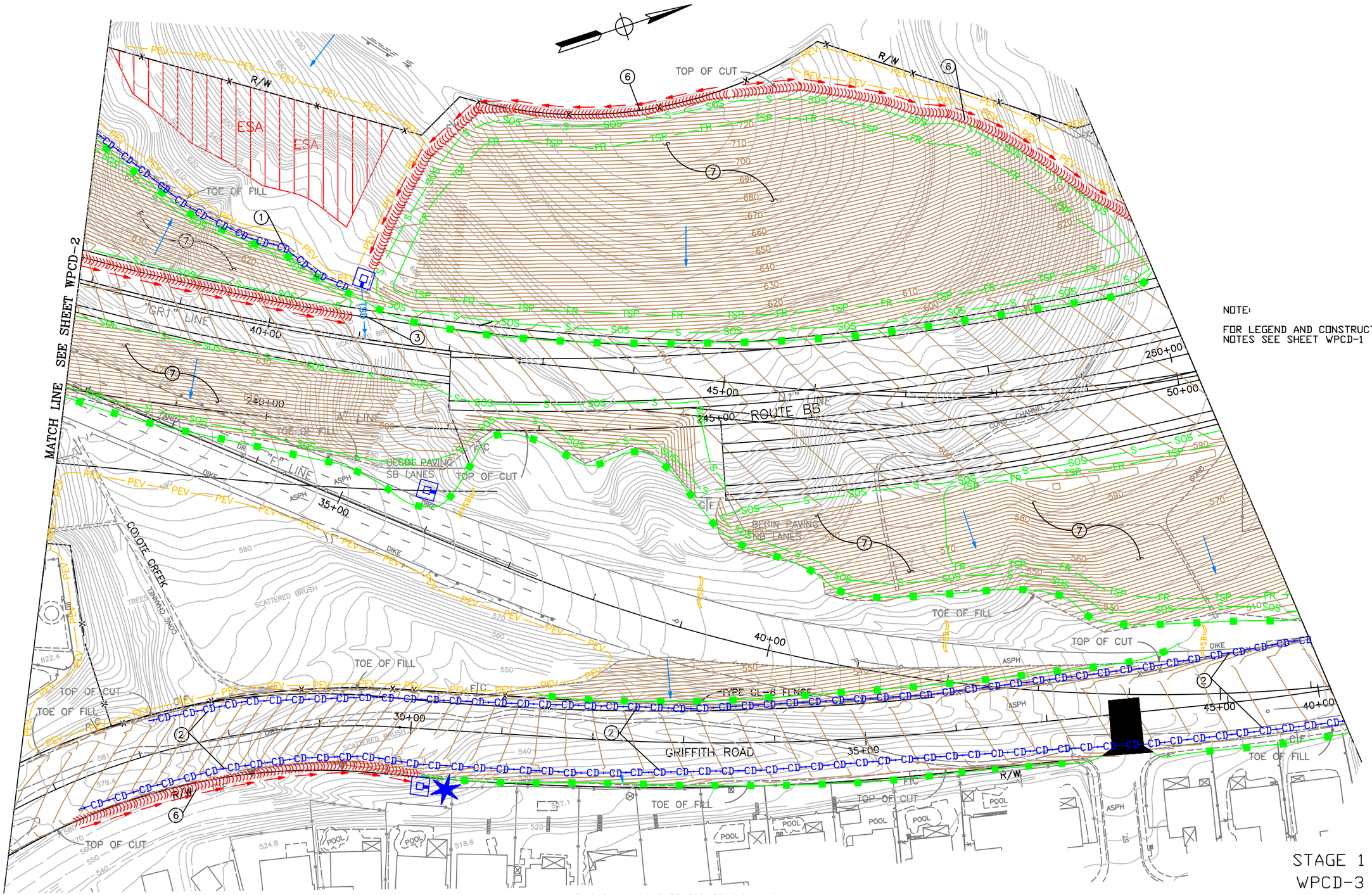
FORM DC-OE-92-PF (REV. 3/88)

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

CU

EA

LAST REVISION



NOTE:

FOR LEGEND AND CONSTRUCTION NOTES SEE SHEET WPCD-1

STAGE 1
WPCD-3
SCALE: 1"=50'

THIS PLAN ACCURATE FOR EROSION AND SEDIMENT CONTROL WORK ONLY

DATE	REVISED BY	DATE	REVISED BY

CALCULATED/DESIGNED BY

CHECKED BY

PROJECT ENGINEER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

LAST REVISION

FORM DC-OE-92-PF (REV. 3/88)

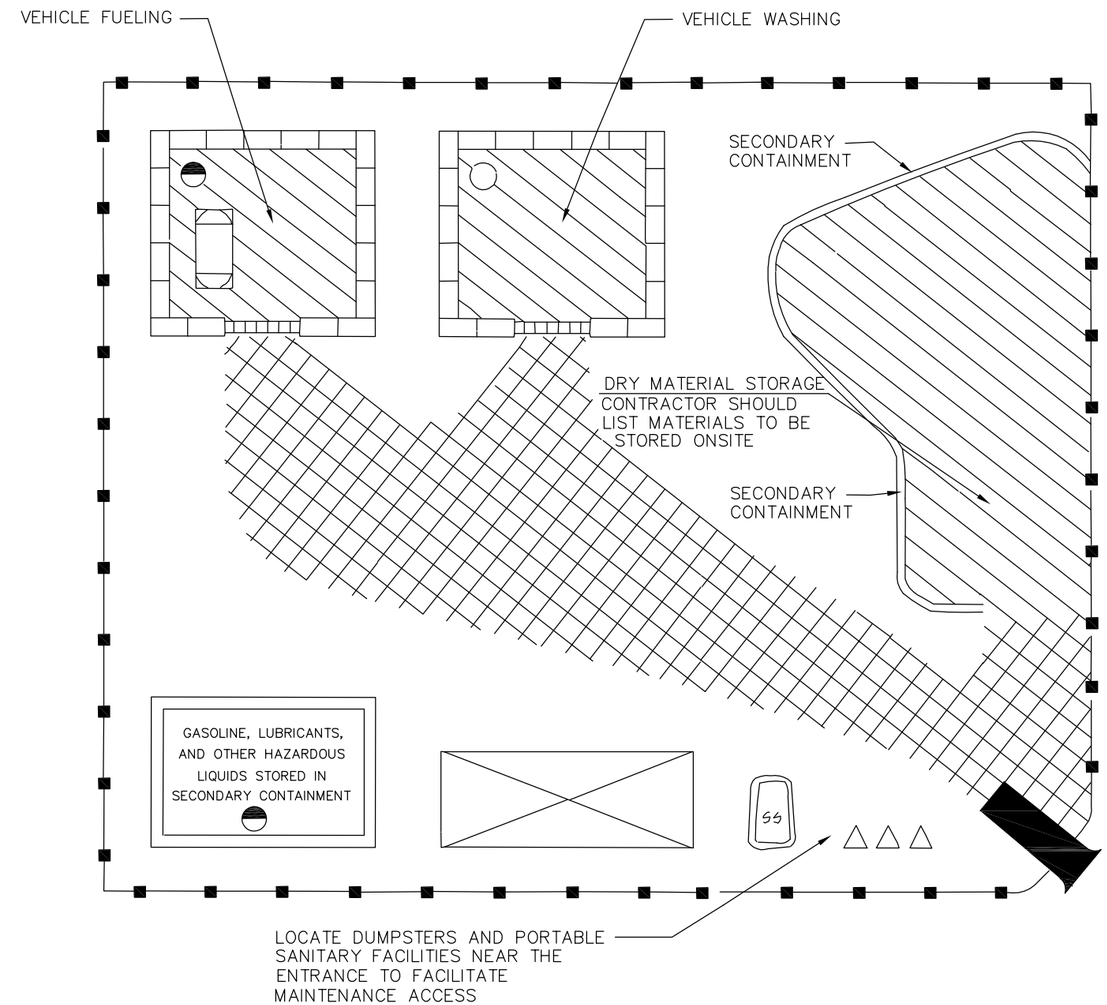
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

CU

EA

LEGEND

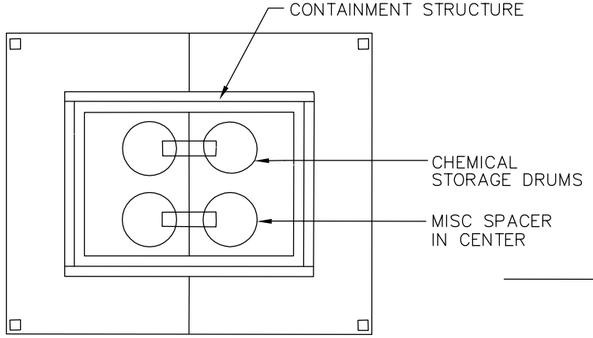
- COVERED STORAGE AREA
- PORTABLE SANITARY FACILITY CONSTRUTED TO RESIST TIPPING
- DUMPSTER
- STRAW BALE BARRIER OR GRAVEL BAG BARRIER
- ABSORBENT MATERIAL
- SUMP
- SILT FENCE AROUND ENTIRE PERIMETER
- STABLIZED CONSTRUCTION ENTRANCE
- STABILIZED CONSTRUCTION ROADWAY
- CONCRETE PAD OR OTHER IMPERVIOUS MATERIAL
- FUELING TANK WITH SECONDARY CONTAINMENT



SAMPLE CONTRACTOR'S CONSTRUCTION YARD

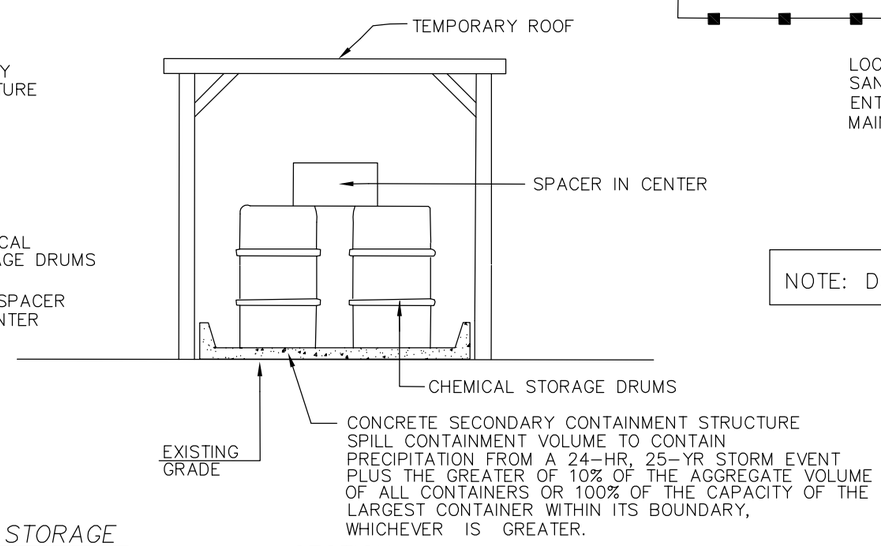
NO SCALE

NOTE: DO NOT COPY THIS SAMPLE ONTO PROJECT SPECIFIC DRAWINGS



PLAN

NO SCALE



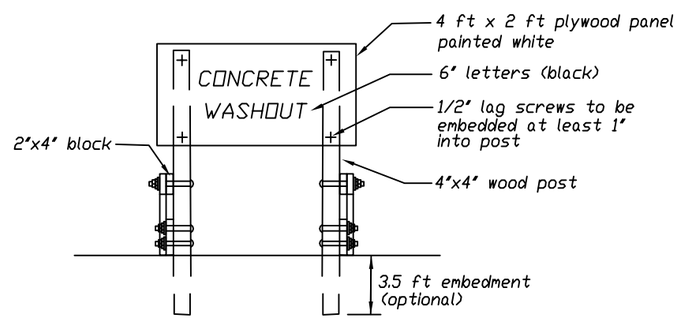
CHEMICAL STORAGE

SECTION

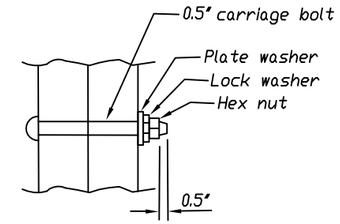
NO SCALE

WPCD-4

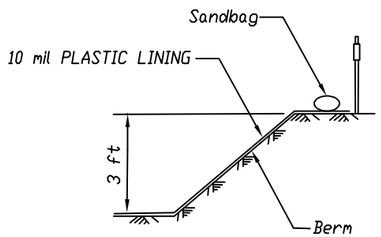
ZZZ CONSTRUCTION COMPANY	WATER POLLUTION CONTROL DRAWINGS CONSTRUCTION DETAILS				
DRAWN D.J.D.					
APPROVED	SIZE A	SCALE NONE	DATE 11/00	REV 0	SHEET 4 OF 5



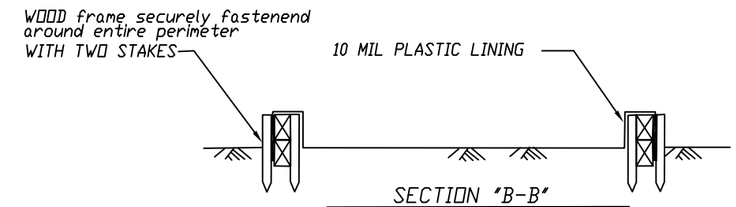
SIGN ELEVATION
NOT TO SCALE



BOLT CONNECTION DETAIL
NOT TO SCALE



SECTION A-A



SECTION "B-B"
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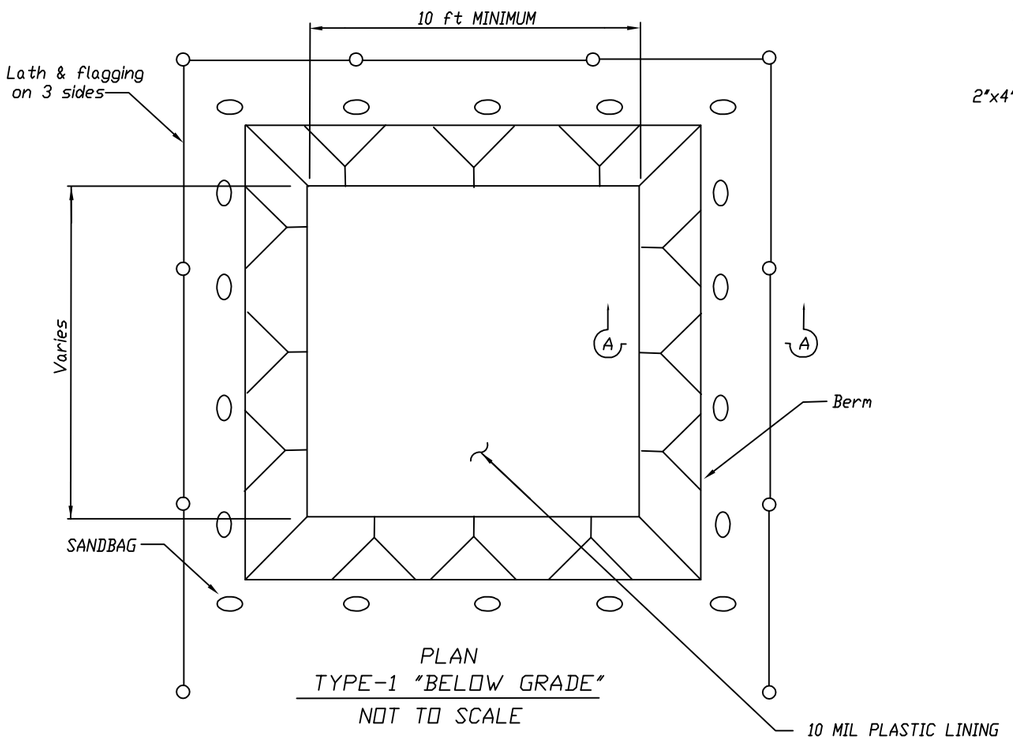
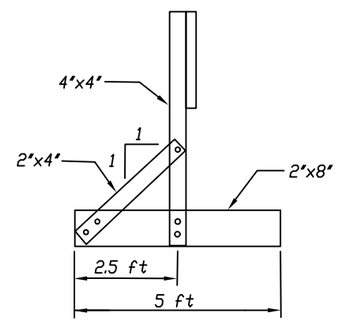
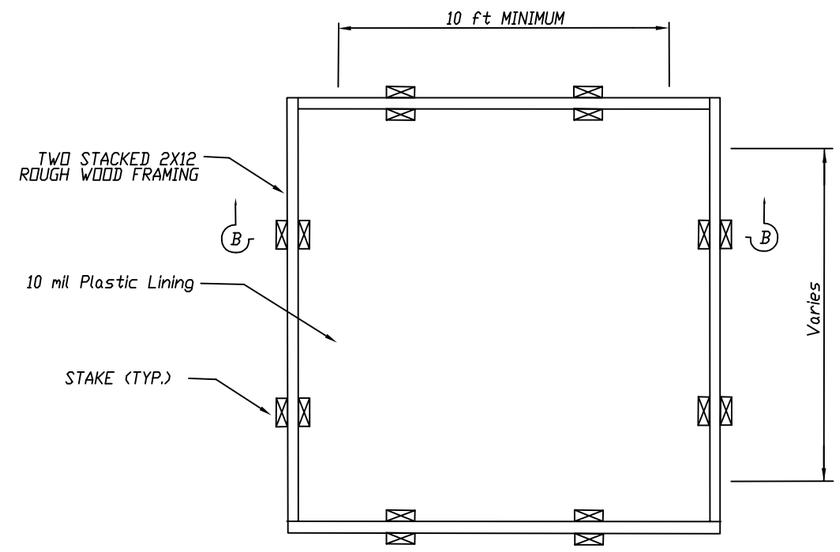


PLAN
TYPE-1 "BELOW GRADE"
NOT TO SCALE





PLAN
TYPE-2 "ABOVE GRADE"
NOT TO SCALE

WPCD-5

NOTE:

ACTUAL LAYOUT DETERMINED IN THE FIELD

THE CONCRETE WASHOUT SIGN (SEE PAGE 6) TO BE INSTALLED WITHIN 30 FT OF THE TEMPORARY CONCRETE WASHOUT FACILITY

ZZZ CONSTRUCTION COMPANY	WATER POLLUTION CONTROL DRAWINGS CONCRETE WASHOUT DETAILS (CONTRACTOR PROPOSED ALTERNATE)				
DRAWN D.J.D.					
APPROVED	SIZE A	SCALE NONE	DATE 11/00	REV 0	SHEET 5 OF 5

4.3.2 Attachment B Water Pollution Control Schedule

The Water Pollution Control Schedule (WPCS) is the component of the project WPCP that shows the timeline for when BMPs will be installed so that the project is in compliance with the with Caltrans Standard Specificationsand the contract special provisions. The WPCS provides field staff with the information necessary to plan for adequate materials and crews to install BMPs at the right time so that they are effective. The Water Pollution Control Schedule and Water Pollution Control Drawings provide the necessary tools for a contractor to plan and implement BMPs to meet the requirements of the project WPCP.

The WPCS shall be a graphical project schedule. The project schedule may be used for the WPCS if the project schedule includes all WPCS requirements. The schedule shall contain an adequate level of detail to show major activities sequenced with implementation of construction site BMPs, including:

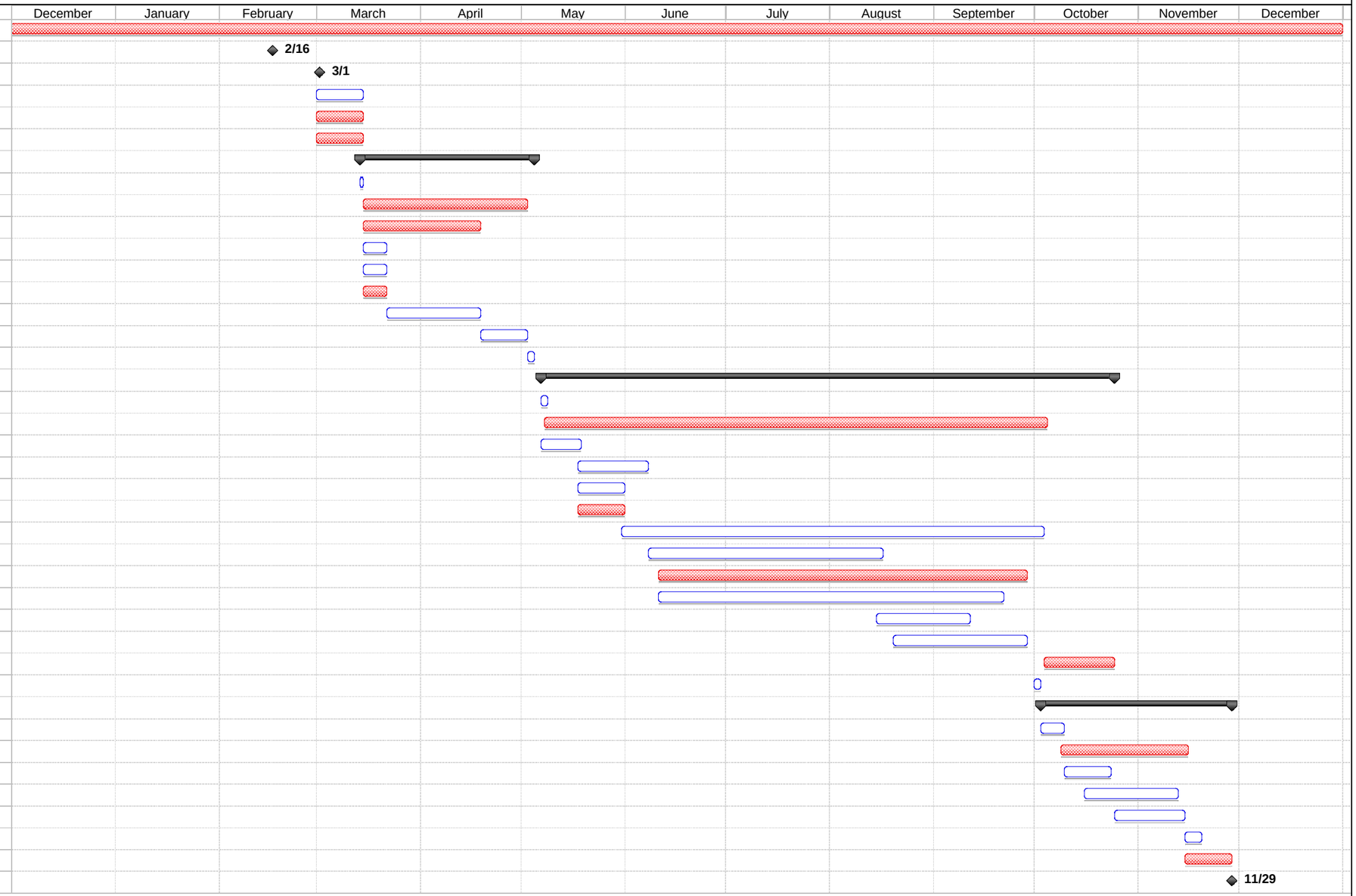
- project start and finish dates, including each stage of the project
- WPCP review and approval
- annual certifications
- mobilization dates
- mass clearing and grubbing/roadside clearing dates
- major grading/excavation dates
- special dates named in other permits such as Fish and Game and Army Corps of Engineers Permits
- dates for submittal WPCP Amendments required by the contract specifications
- implementation schedule dates by location for deployment of:
  - temporary soil stabilization BMPs
  - temporary sediment control BMPs
  - wind erosion control BMPs
  - tracking control BMPs
  - non-stormwater BMPs
  - waste management and materials pollution control BMPs
- paving, saw-cutting, and any other pavement related operations
- major planned stockpiling operations
- dates for other significant long-term operations or activities that may cause non-stormwater discharges such as dewatering, grinding, etc.
- final stabilization activities staged over time for each area of the project

Projects located in the Lake Tahoe, Truckee River, East Fork Carson River, or West Fork Carson River Hydrologic Units, and projects above 5,000 ft in elevations in the portions of Mono County or Inyo County within the Lahontan RWQCB are not allowed to perform removal of vegetation nor disturbance of existing ground surface conditions between October 15 of each year and May 1 of the following year; except when there is an emergency situation that threatens the public health or welfare, or when the project is granted a variance by the RWQCB Executive Officer.

A sample WPCS is shown on the next page.

SAMPLE
WATER POLLUTION CONTROL IMPLEMENTATION SCHEDULE

ID	Task Name
1	Rainy Season
2	SWPPP Approved
3	**Project Start Date**
4	Mobilization
5	Construct Material/Waste Storage Facilities
6	Construct Stabilized Access
7	**Add Temporary Lane in Median (Sta 400-900)**
8	Install Median K-rail
9	Install/Maintain Temporary Sediment Controls
10	Install/Maintain Temporary Soil Stabilization
11	Demolish Median
12	PCC Sawcutting
13	Non-storm water BMPs for Sawcutting
14	Median Grading
15	Median Base/ AC Paving
16	Restripe Mainline, Remove K-rail
17	**Lane Addition (Sta 500-800)**
18	Install K-rail and Traffic Control
19	Install/Maintain Temporary Sediment Controls
20	Clearing/Grubbing
21	Demolition
22	PCC Sawcutting
23	Non-storm water BMPs for Sawcutting
24	Grading
25	Drainage
26	Install/Maintain Temporary Concrete Washouts
27	Sound Wall Construction
28	Base
29	PCC Paving
30	Permanent Erosion Control/Landscaping
31	Restripe Mainline, Remove K-rail
32	**Remove Temporary Median Lane**
33	Install K-Rail and Traffic Control
34	Install/Maintain Temporary Sediment Controls
35	Demolition
36	Grading
37	Drainage
38	Remove K-rail
39	Install Permanent Erosion Control Type D
40	Project Completion



Implementation of Construction Site BMPs shown in red

Task | Progress | Summary | External Tasks | Deadline
Split | Milestone | Project Summary | External Milestone

4.3.3 Attachment C WPCP Amendments

When changes in the approved WPCP are required, the contractor's Water Pollution Control Manager (WPC Manager) shall prepare changes to the WPCP. Amendments to the WPCP require the following:

- The WPC Manager shall certify WPCP amendments.
- The contractor shall certify the WPCP amendment and submit them to the RE for review and acceptance.
- The WPCP Amendment certification and approval form shall be used as the cover sheet for each amendment. A copy of the form is shown in WPCP Appendix
- All amendments shall be recorded in the WPCP amendment log in Attachment C.
- Approved amendments should be inserted into the appropriate WPCP Section or Attachment when possible and a copy shall be kept in Attachment C.
- When an amendment is accepted by the RE, form CEM-2008 SWPPP/WPCP Amendment Certification and Acceptance shall be attached to the WPCP amendment and inserted into Attachment C.

All approved and certified WPCP amendments shall be shown on the WPCP Amendment Log in Attachment C. The amendment log shall include:

- amendment number
- date
- brief description of the amendment
- requested by
- amendment approval date

Caltrans form CEM-2009 SWPPP/WPCP Amendment Log shown on the next page shall be used to record WPCP Amendments.

Include in Attachment C the following:

- ❑ Form CEM- 2009 SWPPP/WPCP Amendment Log. Enter the project name, Caltrans contract number, Caltrans project identifier number. For non-Caltrans projects enter the encroachment permit number in the contract number box.

ATTACHMENT C
CEM-2009 SWPPP/WPCP Amendment Log

PROJECT NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER
	WDID NUMBER:
CONTRACTOR NAME AND ADDRESS	PROJECT SITE RISK LEVEL ☐ Risk Level 1 (WPCP) ☐ Not Applicable ☐ Risk Level 2 ☐ Risk Level 3
Submitted by Contractor (Print Name and Sign)	Date

AMENDMENTS LOG

Amendment Number	Date	Brief Description of Amendment	Requested By	Approval Date

Page __ of __

ATTACHMENT C
CEM-2009 SWPPP/WPCP Amendment Log

GENERAL INFORMATION

- The information shown on this form is required for projects with either a Stormwater Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP) to document amendments.
- Attach a completed copy of this form to each approved SWPPP/WPCP amendment and include in SWPPP Attachment DD or WPCP Attachment C.

.

FORM

- Contract Number/Co/Rte/PM: For local agency encroachment permit projects write the encroachment permit number in the Contract Number field.
- Project Identifier Number: Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number write N/A in the field.
- WDID Number: For projects with Water Pollution Control Program (WPCP) enter "WPCP" in this field.
- When SWPPP or WPCP amendments are approved by the Resident Engineer enter:
  - The Amendment Number
  - Date
  - Brief description of the amendment
  - Name and title of person who requested the amendment
  - Approval date by the Resident Engineer
-

4.3.4 Attachment D Contractor Personnel Training Records

A summary of formal stormwater training for the project manager/superintendent, WPC Manager, Qualified SWPPP Practitioner, stormwater inspector, stormwater discharge sampler and tester, employees responsible for BMP installation, maintenance and repair and all contractor employees must be included in Attachment D.

For subcontractors a summary of formal stormwater training for subcontractor foreman and all subcontractor employees must be included in Attachment D.

A Contractor Personnel Stormwater Training Record and Subcontractor Personnel Stormwater Training Record template is available that may be used for creating Attachment D. The Contractor Personnel Stormwater Training Record and Subcontractor Personnel Stormwater Training Record template is available to download at Caltrans Web site at::

http://www.dot.ca.gov/hq/construc/stormwater/templates.htm

The format and information shown on Attachment D should follow the sample shown on the following pages.

WPCP ATTACHMENT D
CONTRACTOR PERSONNEL STORMWATER TRAINING RECORD

PROJECT NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM	
	PROJECT IDENTIFIER NUMBER	
CONTRACTOR NAME AND ADDRESS	PROJECT WATER POLLUTION CONTROL ☐ WPCP ☐ SWPPP	PROJECT SITE RISK LEVEL ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
Submitted by Contractor (Print Name and Sign)		Date

CONTRACTOR PERSONNEL STORMWATER TRAINING RECORD

Project Manager

NAME	TITLE		PHONE
Training Course Title	**Training Objective**	**Date Training Completed**	**Course Length (Hours)**

Water Pollution Control Manager

NAME	COMPANY		PHONE
TITLE			PHONE 24/7
Training Course Title	**Training Objective**	**Date Training Completed**	**Course Length (Hours)**

WPCP ATTACHMENT D
CONTRACTOR PERSONNEL STORMWATER TRAINING RECORD

PROJECT NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER

STORMWATER TRAINING RECORD CONTINUED

Include the following when a Qualified SWPPP Practitioner will be assisting the WPC manager with SWPPP/WPCP implementation.

Qualifier SWPPP Practitioner			
NAME	COMPANY		PHONE
TITLE			PHONE 24/7
Training Course Title	**Training Objective**	**Date Training Completed**	**Course Length (Hours)**

Include the following training record information when a stormwater inspector will be assisting the WPC manager.

Stormwater Inspector			
NAME	COMPANY		PHONE
TITLE			PHONE 24/7
Training Course Title	**Training Objective**	**Date Training Completed**	**Course Length (Hours)**

WPCP ATTACHMENT D
CONTRACTOR PERSONNEL STORMWATER TRAINING RECORD

PROJECT NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER

STORMWATER TRAINING RECORD CONTINUED

Include the following when contractor employees will be responsible for BMP installation, maintenance and repair.

Employees Responsible for BMP Installation, Maintenance and Repair			
EMPLOYEE NAME			
Training Course Title	**Training Objective**	**Date Training Completed**	**Course Length (Hours)**
EMPLOYEE NAME			
Training Course Title	**Training Objective**	**Date Training Completed**	**Course Length (Hours)**
EMPLOYEE NAME			
Training Course Title	**Training Objective**	**Date Training Completed**	**Course Length (Hours)**

WPCP ATTACHMENT D
CONTRACTOR STORMWATER TRAINING RECORD

PROJECT NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER

STORMWATER TRAINING RECORD CONTINUED

CONTRACTOR EMPLOYEES STORMWATER TRAINING RECORD

Employee Name	Title of Training Course	Date Training Completed	Course Length (Hours)

I have reviewed this document and based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is, true accurate, and complete.

Water Pollution Control Manager Name	Date
Water Pollution Control Manager Signature	

WPCP ATTACHMENT D
SUBCONTRACTOR PERSONNEL STORMWATER TRAINING RECORD

PROJECT NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM	
	PROJECT IDENTIFIER NUMBER	
CONTRACTOR NAME AND ADDRESS	PROJECT WATER POLLUTION CONTROL ☐ WPCP ☐ SWPPP	PROJECT SITE RISK LEVEL ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
SUBCONTRACTOR NAME AND ADDRESS		

Subcontractor (Print Name and Sign)	Date
Submitted by Contractor (Print Name and Sign)	Date

SUBCONTRACTOR PERSONNEL STORMWATER TRAINING RECORD

Subcontractor Superintendent/Foreman

NAME	TITLE	PHONE

Training Course Title	**Training Objective**	**Date Training Completed**	**Course Length (Hours)**

SUBCONTRACTOR EMPLOYEES STORMWATER TRAINING RECORD

Employee Name	**Title of Training Course**	**Date Training Completed**	**Course Length (Hours)**

WPCP ATTACHMENT D
SUBCONTRACTOR PERSONNEL STORMWATER TRAINING RECORD

PROJECT NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER

STORMWATER TRAINING RECORD CONTINUED

Include the following when subcontractor employees will be responsible for BMP installation, maintenance and repair.

Employees Responsible for BMP Installation, Maintenance and Repair			
EMPLOYEE NAME			
Training Course Title	**Training Objective**	**Date Training Completed**	**Course Length (Hours)**
EMPLOYEE NAME			
Training Course Title	**Training Objective**	**Date Training Completed**	**Course Length (Hours)**
EMPLOYEE NAME			
Training Course Title	**Training Objective**	**Date Training Completed**	**Course Length (Hours)**

WPCP ATTACHMENT D
SUBCONTRACTOR PERSONNEL STORMWATER TRAINING RECORD

PROJECT NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER

STORMWATER TRAINING RECORD CONTINUED

SUBCONTRACTOR EMPLOYEES STORMWATER TRAINING RECORD

Employee Name	Title of Training Course	Date Training Completed	Course Length (Hours)

4.4 WPCP APPENDICES

4.4.1 WPCP Appendices A-K

WPCP Appendices A-K are Caltrans Construction Engineering Management (CEM) forms used to document and report information necessary for WPCP implementation. A copy of these documents must be included in the WPCP binder and a file containing Appendices A-K is available for contractors to download at :

http://www.dot.ca.gov/hq/construc/stormwater/templates.htm

For implementing the WPCP the contractor must use the most recent Caltrans forms available at:

http://www.dot.ca.gov/hq/construc/forms.htm

The following Caltrans forms shall be included as appendices to the WPCP:

Appendix A	CEM-2008 SWPPP/WPCP Amendment Certification and Acceptance
Appendix B	CEM-2009 SWPPP/WPCP Amendment Log
Appendix C	CEM-2023 Stormwater Training Record
Appendix D	CEM-2024 Stormwater Training Log
Appendix E	CEM-2040 Weather Forecast Monitoring Form
Appendix F	CEM-2034 Stormwater Best Management Status Report
Appendix G	CEM-2030 Stormwater Site Inspection Report
Appendix H	CEM-2035 Stormwater Site Inspection Report Corrective Actions Summary
Appendix I	CEM-2061 Notice of Discharge Report
Appendix J	CEM-2065 Notice of Discharge Log
Appendix K	CEM-2070 SWPPP/WPCP Annual Certification of Compliance

Appendix A CEM-2008 SWPPP/WPCP Amendment Log Form

- Required for projects with either a Stormwater Pollution Prevention Plan (SWPPP) to document approved amendments.
- To be approved by the Resident Engineer.

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:
Contractor Name and Address:	Project Site Risk Level: ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
Submitted by Contractor (Print Name and Sign):	Date:

AMENDMENTS LOG

Amendment Number	Date	Brief Description of Amendment	Requested By	Approval Date

Page __ of __

Form instructions are currently being developed based on form review comments.

GENERAL INFORMATION

- The information shown on this form is required for projects with either a Stormwater Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP) to document amendments.
- Attach a completed copy of this form to each approved SWPPP/WPCP amendment and include in SWPPP Attachment DD or WPCP Attachment C.

.

FORM

- Contract Number/Co/Rte/PM: For local agency encroachment permit projects write the encroachment permit number in the Contract Number field.
- Project Identifier Number: Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number write N/A in the field.
- WDID Number: For projects with Water Pollution Control Program (WPCP) enter "WPCP" in this field.
- When SWPPP or WPCP amendments are approved by the Resident Engineer enter:

11. The Amendment Number
12. Date
13. Brief description of the amendment
14. Name and title of person who requested the amendment
15. Approval date by the Resident Engineer

-

Appendix B CEM-2009-SWPPP Amendment Log Form

- Required for projects with either a Stormwater Pollution Prevention Plan (SWPPP) to document approved amendments.
- To be approved by the Resident Engineer.

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:
Contractor Name and Address:	Project Site Risk Level: ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
Submitted by Contractor (Print Name and Sign):	Date:

AMENDMENTS LOG

Amendment Number	Date	Brief Description of Amendment	Requested By	Approval Date

Page __ of __

Form instructions are currently being developed based on form review comments.

GENERAL INFORMATION

- The information shown on this form is required for projects with either a Stormwater Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP) to document amendments.
- Attach a completed copy of this form to each approved SWPPP/WPCP amendment and include in SWPPP Attachment DD or WPCP Attachment C.

.

FORM

- Contract Number/Co/Rte/PM: For local agency encroachment permit projects write the encroachment permit number in the Contract Number field.
- Project Identifier Number: Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number write N/A in the field.
- WDID Number: For projects with Water Pollution Control Program (WPCP) enter "WPCP" in this field.
- When SWPPP or WPCP amendments are approved by the Resident Engineer enter:

16. The Amendment Number
17. Date
18. Brief description of the amendment
19. Name and title of person who requested the amendment
20. Approval date by the Resident Engineer

-

Appendix C CEM-2023 Stormwater Training Record Form

- To be submitted to Caltrans for annual compliance.
- To document stormwater training for all employees with compliance with the construction general permit and contract specifications.
- To ensure review and record keeping of stormwater training logs.

Project Information Name and Site Address	Contract Number/Co/Rte/PM
	Project Identifier Number
	WDID Number
Contractor Name and Address	Project Site Risk Level ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
Submitted by Contractor (Print Name and Sign):	Date:

STORMWATER TRAINING RECORD

Training Course Title / Specific Training Objective	Location	Date of Training
Stormwater Topic(s) ☐ Temporary Soil Stabilization ☐ Temporary Sediment Control ☐ Tracking Controls ☐ Wind Erosion Control ☐ Non-stormwater Management ☐ Stormwater Discharge Sampling ☐ Waste Management and Materials Pollution Control ☐ Spill Prevention and Control ☐ BMPs required for Work Activities Current Week ☐ Stormwater Pollution Prevention Plan ☐ Water Pollution Control Program	Instructor Name Instructor Title Phone Course Length (hours)	Type of Training ☐ Formal ☐ Informal Training Audience ☐ General ☐ BMPs ☐ SWPPP

ATTENDEE ROSTER

Name	Company	Phone

Project Information Name and Site Address	Contract Number/Co/Rte/PM
	Project Identifier Number
	WDID Number

ATTENDEE ROSTER

Name	Company	Phone

Review and Record Keeping

Training information has been entered into the Stormwater Training Log?

☐ Yes ☐ No

I have reviewed this document and based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is, true accurate, and complete.

Water Pollution Control Manager (Name):	Date

Water Pollution Control Manager Signature:

GENERAL INFORMATION

- The information shown on this form is required for projects with either a Stormwater Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP) to document stormwater training for contractor and subcontractor managers, supervisors and employees. This information shown on this form and required training documentation will be included in the stormwater annual report for SWPPP projects.
- This form to be used to document training for all employees responsible for activities associated with compliance with the Construction General Permit and contract specifications. Required weekly informal stormwater training shall be documented by using this form.
- Provide this training record and an updated copy of the Stormwater Training Log to the Resident Engineer within 5 days of date of training.
- Attach additional copies of page 2 of this form if necessary to record all attendees attending training.

FORM

- Contract Number/Co/Rte/PM: For local agency encroachment permit projects write the encroachment permit number in the Contract Number field.
- Project Identifier Number: Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number write N/A in the field.
- WDID Number: For projects with Water Pollution Control Program (WPCP) enter "WPCP" in this field.
- Attendee Roster: Enter employee name, contractor or subcontractor company name and employee phone number.
- Training Audience: Enter one of the following responses:
  - General – Training for individuals responsible for all activities associated with compliance with the General Construction Permit
  - BMPs – Training for individuals responsible for BMP installation, inspection, maintenance and repair.
  - SWPPP – Training for individuals responsible for overseeing revising and amending the SWPPP.

Appendix D CEM-2024 Stormwater Training Log Form

- To be submitted to Caltrans for annual compliance.
- Required for projects with either a Stormwater Prevention Plan (SWPPP).
- Documents stormwater training for contractors and subcontractor managers, supervisors, and employees.

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	Project Identifier Number:
	WDID Number:
Contractor Name and Address:	Project Site Risk Level: ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
Submitted by Contractor (Print Name and Sign):	Date:

STORMWATER TRAINING LOG

Date of Training	Training Audience	Number of Training Attendees	Stormwater Training Course Title or Stormwater Topics Covered by Training	Date Training Documentation Provided to Resident Engineer
	☐ General ☐ BMPs ☐ SWPPP			
	☐ General ☐ BMPs ☐ SWPPP			
	☐ General ☐ BMPs ☐ SWPPP			
	☐ General ☐ BMPs ☐ SWPPP			
	☐ General ☐ BMPs ☐ SWPPP			

Form instructions are currently being developed based on form review comments.

GENERAL INFORMATION

- The information shown on this form is required for projects with either a Stormwater Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP) to document stormwater training for contractor and subcontractor managers, supervisors and employees. This information shown on this form and required training documentation will be included in the stormwater annual report for SWPPP projects.
- Provide an updated copy of this form with attached training documentation to the Resident Engineer within 5 days of date of training.

.

FORM

- Contract Number/Co/Rte/PM: For local agency encroachment permit projects write the encroachment permit number in the Contract Number field.
- Project Identifier Number: Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number write N/A in the field.
- WDID Number: For projects with Water Pollution Control Program (WPCP) enter "WPCP" in this field.
- Training Audience: Enter one of the following responses:
  - General – Training for individuals responsible for all activities associated with compliance with the General Construction Permit
  - BMPs – training for individuals responsible for BMP installation, inspection, maintenance and repair.
  - SWPPP – training for individuals responsible for overseeing revising and amending the SWPPP.
-

Appendix E CEM-2040 Weather Forecast Monitoring Form

- Weather forecasts for project sites with either a SWPPP or a WPCP to be documented daily.
- Weather Monitoring Logs shall be submitted to the Resident Engineer within 5 working days of the ending date shown on the weather monitoring log.
- Locate the National Weather Service (NWS) automated weather station nearest the project site. For exceedance of compliance storm verification.

PROJECT INFORMATION NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER
	WDID NUMBER
CONTRACTOR NAME AND ADDRESS	PROJECT SITE RISK LEVEL ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
SUBMITTED BY CONTRACTOR (PRINTNAME AND SIGN)	DATE

WEATHER MONITORING LOG

WEEK OF __/__/__ - __/__/__

Weather Information for __/__/__

Weather Condition	Temperature	Precipitation Condition ☐ None		Wind Condition
☐ Clear	Maximum _____ °F	☐ Misty	☐ Heavy Rain	☐ None
☐ Partly Cloudy	Minimum _____ °F	☐ Light Rain	☐ Hail	☐ Less than 5 MPH
☐ Cloudy		☐ Rain	☐ Snow	☐ Greater than 5 MPH

Storm Precipitation Information

Complete the following when there is any precipitation within the 24 hour period.

Time	Project Site Rain Gauge (inches)	Amount Of Precip (inches)	Storm Event Information		
			Storm event began? _____ on _____ *(time)* *(date)* Cumulative amount of precipitation from previous day? _____ inches	Storm event ended? _____ on _____ *(time)* *(date)* ☐ Extended duration storm event.	What is the cumulative amount of precipitation for storm event to date? _____ inches What is the 24 hour cumulative amount of precipitation? _____ inches
			Is the cumulative amount of precipitation for storm event ½ inch or greater? ☐ Yes ☐ No If yes for Risk level 2 and 3 projects are stormwater discharges being sampled and analyzed? ☐ Yes ☐ No		

Additional Storm Event Information

Compliance Storm Event		ATS Compliance Storm Event *Complete the following when ATS is used on project site*	
The compliance storm event (5 year 24 hour storm) for this project site is? _____ inches	Has the storm event exceeded the compliance storm event? ☐ Yes ☐ No	The compliance storm event (10 year 24 hour storm) for this project site is? _____ inches	Has the storm event exceeded the compliance storm event? ☐ Yes ☐ No

If yes to exceedance of the compliance storm event based on project site rain gauge readings, attach printout of precipitation data from nearest National Weather Service weather station as verification of compliance storm exceedance.

National Weather Service verification of project site compliance storm event exceedance from weather station

_____ is based on project site _____

(*NWS Weather Station*) (*Address or Latitude and Longitude*).

Weather information input by (print name and sign)

Page __ of __

PROJECT INFORMATION NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER
	WDID NUMBER

Weather Information for __/__/__

Weather Condition	Temperature	Precipitation Condition	Wind Condition
☐ Clear	Maximum _____ °F	☐ None	☐ None
☐ Partly Cloudy	Minimum _____ °F	☐ Misty ☐ Heavy Rain	☐ Less than 5 MPH
☐ Cloudy		☐ Light Rain ☐ Hail	☐ Greater than 5 MPH
		☐ Rain ☐ Snow	

Storm Precipitation Information

Complete the following when there is any precipitation within the 24 hour period.

Time	Project Site Rain Gauge Reading (inches)	Cumulative Amount Of Precipitation (inches)	Storm Event Information		
			Storm event began? _____ on _____ *(time)* *(date)* Cumulative amount of precipitation from previous day? _____ inches	Storm event ended? _____ on _____ *(time)* *(date)* ☐ Extended duration storm event.	What is the cumulative amount of precipitation for storm event to date? _____ inches What is the 24 hour cumulative amount of precipitation? _____ inches
			Is the cumulative amount of precipitation for storm event ½ inch or greater? ☐ Yes ☐ No If yes for Risk level 2 and 3 projects are stormwater discharges being sampled and analyzed? ☐ Yes ☐ No		

Additional Storm Event Information

Compliance Storm Event		ATS Compliance Storm Event *Complete the following when ATS is used on project site*	
The compliance storm event (5 year 24 hour storm) for this project site is? _____ inches	Has the storm event exceeded the compliance storm event? ☐ Yes ☐ No	The compliance storm event (10 year 24 hour storm) for this project site is? _____ inches	Has the storm event exceeded the compliance storm event? ☐ Yes ☐ No

If yes to exceedance of the compliance storm event based on project site rain gauge readings, attach printout of precipitation data from nearest National Weather Service weather station as verification of compliance storm exceedance.

National Weather Service verification of project site compliance storm event exceedance from weather station

_____ is based on project site _____

(*NWS Weather Station*) (*Address or Latitude and Longitude*).

Weather information input by (print name and sign)

Page __ of __

PROJECT INFORMATION NAME AND SITE ADDRESS	CONTRACT NUMBER/CO/RTE/PM
	PROJECT IDENTIFIER NUMBER
	WDID NUMBER

Weather Information for __/__/__

Weather Condition	Temperature	Precipitation Condition ☐ None		Wind Condition
☐ Clear	Maximum _____ °F	☐ Misty	☐ Heavy Rain	☐ None
☐ Partly Cloudy	Minimum _____ °F	☐ Light Rain	☐ Hail	☐ Less than 5 MPH
☐ Cloudy		☐ Rain	☐ Snow	☐ Greater than 5 MPH

Storm Precipitation Information

Complete the following when there is any precipitation within the 24 hour period.

Time	Project Site Rain Gauge Reading (inches)	Cumulative Amount Of Precipitation(inches)	Storm Event Information		
			Storm event began? _____ on _____ *(time)* *(date)* Cumulative amount of precipitation from previous day? _____ inches	Storm event ended? _____ on _____ *(time)* *(date)* ☐ Extended duration storm event.	What is the cumulative amount of precipitation for storm event to date? _____ inches What is the 24 hour cumulative amount of precipitation? _____ inches
			Is the cumulative amount of precipitation for storm event ½ inch or greater? ☐ Yes ☐ No If yes for Risk level 2 and 3 projects are stormwater discharges being sampled and analyzed? ☐ Yes ☐ No		

Additional Storm Event Information

Compliance Storm Event		Active Treatment system(ATS) Compliance Storm Event *Complete the following when ATS is used on project site*	
The compliance storm event (5 year 24 hour storm) for this project site is? _____ inches	Has the storm event exceeded the compliance storm event? ☐ Yes ☐ No	The compliance storm event (10 year 24 hour storm) for this project site is? _____ inches	Has the storm event exceeded the compliance storm event? ☐ Yes ☐ No

If yes to exceedance of the compliance storm event based on project site rain gauge readings, attach printout of precipitation data from nearest National Weather Service weather station as verification of compliance storm exceedance.

National Weather Service verification of project site compliance storm event exceedance from weather station

_____ is based on project site _____

(*NWS Weather Station*) (*Address or Latitude and Longitude*).

Weather information input by (print name and sign)

WEATHER MONITORING LOG REVIEW

I have reviewed this document and based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is, true accurate, and complete.

Water pollution control manager name	National Weather Service precipitation data for compliance storm exceedances attached to this log submittal? ☐ Yes ☐ No
Water pollution control manager signature	Date

Page __ of __

Form instructions are currently being developed based on form review comments.

GENERAL INFORMATION

- The information shown on this form is required for projects with either a Stormwater Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP) to document weather forecast for the project site.
- This form is used to record daily weather information for the project site location.
- The weather monitoring log must be completed each working day. If the project is a calendar day project (seven working days week) attached additional copy of page two of the form so that all seven days can be reported.
- Weather Monitoring Logs shall be submitted to the Resident Engineer within 5 working days of the ending date shown on the weather monitoring log.
- For verifying exceedance of compliance storm locate the National Weather Service (NWS) automated weather station nearest the project site. NWS weather station locations are available at: http://www.wrh.noaa.gov/sto/obsmap.php.
- Print out precipitation data for the nearest NWS weather station for any storm event that exceeds the compliance storm event. NWS weather station precipitation data is available at: http://www.cnrfc.noaa.gov/awipsProducts/RNOHYDRSA.php .

FORM

- Contract Number/Co/Rte/PM: For local agency encroachment permit projects write the encroachment permit number in the Contract Number field.
- Project Identifier Number: Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number write N/A in the field.
- WDID Number: For projects with Water Pollution Control Program (WPCP) enter "WPCP" in this field.
- Enter the project site street address, including city and State, or latitude and longitude used to obtain National Weather Service forecast.
- Weekly Reporting Period: Enter the first and last working day for the reporting period
- Enter weather monitoring information.
- Enter precipitation information during working hours at least every two hours:
  4. Time
  5. Rain gauge reading
  6. Storm event cumulative precipitation amount
- Using the amounts of precipitation for each 2 hour period during working hours and the amount of precipitation during non-working hours to determine the cumulative amount of precipitation for a storm event and record the amount on the form. Determine if the forecasted cumulative amount of precipitation for the storm event is ½ inch or greater and check the appropriate box.
- Compliance Storm Event: Compliance Storm Event for Risk Level 3 project site discharges is determined by using the following maps:
  http://www.wrcc.dri.edu/pcpnfreq/nca5y24.gif
  http:///www.wrcc.dri.edu/pcpnfreq/sca5y24.gif
- ATS Compliance Storm Event: Compliance Storm Event for ATS discharge compliance is determined using the following maps:
  http://www.wrcc.dri.edu/pcpnfreq/nca10y24.gif
  http:///www.wrcc.dri.edu/pcpnfreq/sca10y24.gif
- If the storm event exceeds the compliance storm event, verification of compliance storm event is required based on nearby governmental rain gauge readings. Enter the project site street address, including city and State, or latitude and longitude used to determine National Weather Service nearest weather station and weather station identification.

Appendix F CEM-2034 Stormwater Best Management Practices Status Report

- To be submitted weekly to the Resident Engineer within 48 hours prior to beginning the work week.
- Includes the status of all required locations of BMPs

Insert CEM-2034 Stormwater Best Management Practices Status Report Form

Page 1

Page 2

Page 3

Page4

Appendix G CEM-2030 Stormwater Site Inspection Report

- All areas of a jobsite to be reported and inspected.
- Risk level 1, 2 and 3 requirement.
- Complete BMP repair or design changes within 72 hours of identifications.
- To be submitted to the Resident Engineer within 24 hours of inspection.

Project Information Name and Site Address:	Contract Number/Co/Rte/PM: WDID Number:
Contractor Name and Address:	Project Site Risk Level: ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
Submitted by Contractor (Print Name and Sign):	Date:
Implementation of required actions identified in a Stormwater Site Inspection Report must be made as soon as possible but must begin within 72 hours of the site inspection	Date of Site Inspection:

No.	Verification of Stormwater Site Inspection Corrective Actions		
1	BMP Type:	Location:	
	Required Action:	Comments:	
	Date Completed:	Verified by Print Name:	Verified by Signature:
2	BMP Type:	Location:	
	Required Action:	Comments:	
	Date Completed:	Verified by Print Name:	Verified by Signature:
3	BMP Type:	Location:	
	Required Action:	Comments:	
	Date Completed:	Verified by Print Name:	Verified by Signature:

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:

No.	Verification of Stormwater Site Inspection Corrective Actions		
___	BMP Type:	Location:	
	Required Action:	Comments:	
	Date Completed:	Verified by Print Name:	Verified by Signature:
___	BMP Type:	Location:	
	Required Action:	Comments:	
	Date Completed:	Verified by Print Name:	Verified by Signature:
___	BMP Type:	Location:	
	Required Action:	Comments:	
	Date Completed:	Verified by Print Name:	Verified by Signature:
___	BMP Type:	Location:	
	Required Action:	Comments:	
	Date Completed:	Verified by Print Name:	Verified by Signature:

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:

Stormwater Site Inspection Report Summary Certification

I certify under penalty of law that this Stormwater Site Inspection Report Summary was prepared by me or under my direction or supervision. The information contained in the summary was gathered and evaluated by qualified personnel prior to submittal. Based on my review of the information and inquiry of those who gathered and evaluated the information, the information submitted is, to the best of my knowledge and belief, true accurate, and complete.
I am aware that Section 309 (c)(4) of the Clean Water Act (CWA) provides for significant penalties, including fines and imprisonment for knowingly submitting false material statement, representation or certification.

Water Pollution Control Manager (Name):	Date:
Water Pollution Control Manager Signature:	

Stormwater Site Inspection Report Summary Acceptance

Accepted by Resident Engineer (Name):	Date:
Resident Engineer Signature:	

Form instructions are currently being developed based on form review comments.

GENERAL INFORMATION

- The information shown on this form is required by CGP Attachments C, D and E, Section G., 5.,g.
- If the summary form does not contain enough lines to report all required actions shown on CEM-2030 Stormwater Site Inspection Report attached use additional copies of page 2 of this form so that all required actions from an inspection form are reported.
- On page 2 of this form, and additional copies of page 2, insert consecutive numbers for each required action. .

REQUIRED ACTIONS

- Locations identified where BMP's are failing or have other shortcomings require implementation of repairs or design changes within 72 hours of identification and complete BMP repairs or other changes as soon as possible
- Comments must be provided when the required action is changed from that shown on Stormwater Site Inspection Report

Appendix H CEM-2035 Stormwater Site Inspection Report Corrective Actions Summary

- Required by the construction general permit.
- Verifies stormwater site inspection corrective actions identified in a site inspection report summary.
- Corrective actions must begin within 72 hours of the site inspection.

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:
Contractor Name and Address:	Project Site Risk Level: ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
Submitted by Contractor (Print Name and Sign):	Date:
Implementation of required actions identified in a Stormwater Site Inspection Report must be made as soon as possible but must begin within 72 hours of the site inspection	Date of Site Inspection:

No.	Verification of Stormwater Site Inspection Corrective Actions		
1	BMP Type:	Location:	
	Required Action:	Comments:	
	Date Completed:	Verified by Print Name:	Verified by Signature:
2	BMP Type:	Location:	
	Required Action:	Comments:	
	Date Completed:	Verified by Print Name:	Verified by Signature:
3	BMP Type:	Location:	
	Required Action:	Comments:	
	Date Completed:	Verified by Print Name:	Verified by Signature:

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:

No.	Verification of Stormwater Site Inspection Corrective Actions		
___	BMP Type:	Location:	
	Required Action:	Comments:	
	Date Completed:	Verified by Print Name:	Verified by Signature:
___	BMP Type:	Location:	
	Required Action:	Comments:	
	Date Completed:	Verified by Print Name:	Verified by Signature:
___	BMP Type:	Location:	
	Required Action:	Comments:	
	Date Completed:	Verified by Print Name:	Verified by Signature:
___	BMP Type:	Location:	
	Required Action:	Comments:	
	Date Completed:	Verified by Print Name:	Verified by Signature:

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	WDID Number:

Stormwater Site Inspection Report Summary Certification

I certify under penalty of law that this Stormwater Site Inspection Report Summary was prepared by me or under my direction or supervision. The information contained in the summary was gathered and evaluated by qualified personnel prior to submittal. Based on my review of the information and inquiry of those who gathered and evaluated the information, the information submitted is, to the best of my knowledge and belief, true accurate, and complete.
I am aware that Section 309 (c)(4) of the Clean Water Act (CWA) provides for significant penalties, including fines and imprisonment for knowingly submitting false material statement, representation or certification.

Water Pollution Control Manager (Name):	Date:
Water Pollution Control Manager Signature:	

Stormwater Site Inspection Report Summary Acceptance

Accepted by Resident Engineer (Name):	Date:
Resident Engineer Signature:	

Form instructions are currently being developed based on form review comments.

GENERAL INFORMATION

- The information shown on this form is required by CGP Attachments C, D and E, Section G., 5.,g.
- If the summary form does not contain enough lines to report all required actions shown on CEM-2035 Stormwater Site Inspection Report attached use additional copies of page 2 of this form so that all required actions from an inspection form are reported.
- On page 2 of this form, and additional copies of page 2, insert consecutive numbers for each required action.

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REQUIRED ACTIONS

- Locations identified where BMP's are failing or have other shortcomings require implementation of repairs or design changes within 72 hours of identification and complete BMP repairs or other changes as soon as possible
- Comments must be provided when the required action is changed from that shown on Stormwater Site Inspection Report

Appendix I CEM-2061 Notice of Discharge Report

- Required by Caltrans for compliance.
- To be completed when discharges are causing or contributing to an exceedance of an applicable water quality standard.
- Sampling guidance is found in the current edition of the Construction Site Monitoring Program Guidance Manual.

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	Project Identifier Number:
	WDID Number:
Contractor Name and Address:	Project Site Risk Level: ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
Submitted by Contractor (Print Name and Sign):	Date:

Notice of Discharge General Information

Location:			Date Discharge Discovered:	
Discharge identified by stormwater visual site inspection? ☐ Yes ☐ No	Discharge discovered by contractor during daily work? ☐ Yes ☐ No	Discharge samples taken? ☐ Yes ☐ No	Discharge Type: ☐ Stormwater ☐ Authorized Non-Stormwater ☐ Non-authorized Non-Stormwater	Exceedance of Applicable Water Quality Standard: ☐ Turbidity ☐ pH ☐ _____
Discharge identified by Regional Water Quality Control Board? ☐ Yes ☐ No	Discharge identified by State Water Resources Control Board? ☐ Yes ☐ No		Date and Time Water Pollution Control Manager Notified of Discharge: Date and Time Resident Engineer Notified of Discharge:	

Storm Event Information

Complete this section for stormwater discharges.

Start of storm event: _____ *Date* _____ *Time*	Start of storm event: _____ *Date* _____ *Time*	Duration of storm event: _____ *Hours-Minutes.*	Precipitation Amount from Storm Recorded From Site Rain Gauge: _____ inch(es)	Storm event precipitation amount from governmental rain gauge: _____ inch(es)

Project Information Name and Site Address:	***Contract Number/Co/Rte/PM:***
	Project Identifier Number:
	WDID Number:

Notice of Discharge Information	
Based on a visual observation of the discharge location the nature and cause of the water quality standard exceedance is:	Photographs: ☐ Yes ☐ No
The BMPs currently installed at the location of the discharge:	Photographs: ☐ Yes ☐ No
Any additional BMPs which will be implemented to prevent or reduce pollutants that are causing or contributing to the exceedance of a water quality standard: Implementation schedule for additional BMPs:	Photographs: ☐ Yes ☐ No
Any maintenance or repair of BMPs: Implementation schedule for BMPs maintenance or repair:	Photographs: ☐ Yes ☐ No
Any other required corrective actions: Implementation schedule for corrective actions:	Photographs: ☐ Yes ☐ No

Summary of actions taken to reduce the pollutants causing or contributing to the water quality standard exceedance:	Photographs: ☐ Yes ☐ No

Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	Project Identifier Number:
	WDID Number:

Sampling and Analyses Results:

Required when discharge samples are taken.

Sample Location Identification Number:	Date of Sampling:
Samples Collected by:	Date of Analyses:
Samples Analyses by:	Date and Time Water Pollution Control Manager Notified of Results:
Analyzer Phone Number:	Date and Time Resident Engineer Notified of Results:

Sample Identification	**Sample Collection Time**	**Storm Event Precipitation Amount at Sample Time**	**Analyses (_____)**

Analyses Information

Meter Manufacturer:	Model Number:	Serial Number:	Calibration Date:

Analytical Method:	Method Reporting Unit	Method Detection Limit:

Note: Meter calibration information available in the SWPPP files.

Additional Information

Run-on Samples Taken? ☐ Yes ☐ No	Run-on Sample(s) Identification
Project Information Name and Site Address:	Contract Number/Co/Rte/PM:
	Project Identifier Number:
	WDID Number:

Notice of Discharge Report Certification		
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure 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, to the best of my knowledge and belief, the information submitted is, true accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.		
Water Pollution Control Manager (Name):	Date:	
Water Pollution Control Manager Signature:		
Accepted by Resident Engineer (Name):	Date:	
Resident Engineer Signature:		
Discharge reported by telephone or e-mail to the Regional water Quality Control Board (RWQCB) within 48 hours of discharge discovery? ☐ Yes ☐ No	Date Discharge Reported to RWQCB:	Resident Engineer Initials:
Notice of Discharge Report submitted to RWQCB within 14 days (3 days for District 7 and District 11)? ☐ Yes ☐ No	Date Report Submitted to RWQCB:	Resident Engineer Initials:

GENERAL INFORMATION

- This form is required for compliance with provisions in Section C-2-Receiving Water Limitations for Construction of the National Pollutant Discharge Elimination System (NPDES) Permit Statewide Storm Water Permit and Waste Discharge requirements (WDRs) for the State of California, Department of Transportation (Caltrans), Order No. 99-06-DWQ, NPDES No. CAS000003.
- This form is to be completed when the Contractor, Caltrans, State Water Resources Control Board, or Regional Water Quality Control Board staff determines that stormwater discharges and/or authorized non-stormwater discharges are causing or contributing to an exceedance of an applicable water quality standard.
- Water quality standards are contained in the Statewide Water Quality Control Plan and/or applicable Regional water Quality Control Boards (RWQCBs) Basin Plan.
- Sampling guidance is found in Construction Site Monitoring Program Guidance Manual, dated July 2010 or current edition.
- Included a copy of the completed form in the project Storm Water Pollution Prevention Plan (SWPPP) files.

FORM

- Project Identifier Number: Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number write N/A in the field.
- Contract Number/Co/Rte/PM: For local agency encroachment permit projects write the encroachment permit number in the Contract Number field.
- Storm Event Information: Leave section blank if box is checked for either Authorized Non-stormwater Discharge or Non-authorized Non-stormwater Discharge.
- Discharge Information: Do not leave any sub-section blank, Caltrans Permit specifically requires Caltrans to submit the information in this section to RWQCBs.
- Discharge Information: For non-stormwater discharges describe the construction operation or activity that caused the discharge.
- Sampling and Analyses Results: Leave section blank if the no box is checked for Discharge samples taken?
- Analyses Results: Analytical results that are less than the method detection limit shall be reported as “Less than the method detection limit.”
- Analyses Information: Leave section blank if the no box is checked for Discharge samples taken?
- Addition Information: Leave Run-on Sample identification blank if no box is checked for Run-on Samples Taken?

Appendix J CEM-2065 Notice of Discharge Log

- Required by (NPDES) Permit for compliance.
- To be completed when discharges are causing or contributing to an exceedance of an applicable water quality standard.
- Water quality standards are contained in the Statewide Water Quality Control Plan and/or applicable Regional water Quality Control Boards (RWQCBs) Basin Plan.

Project Information Name and Site Address:	Contract Number/Co/Rte/PM: WDID Number:
Contractor Name and Address:	Project Site Risk Level: ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3
Submitted by Contractor (Print Name and Sign):	Date:

NOTICE OF DISCHARGE LOG

Date	Discharge Location	Cause of Discharge	Description of Material(s) Discharged	Estimated Quantity of Discharge	Date RWQCB Notified

Page __ of __

Form instructions are currently being developed based on form review comments.

GENERAL INFORMATION

- The information shown on this form is required for projects with either a Stormwater Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP) to document discharges.
- This form is used to log discharges including stormwater, authorized non-stormwater and non-authorized non-stormwater dischages that have an exceedance of an Applicable Water Quality Standard.
- Log all discharge incidents reported on forms:
  - CEM-2061 Notice of Discharge Report
  - CEM-2062 Numeric Action Level Exceedance Report
  - CEM-2063 Numeric Effluent Limitation Violation Report
- An updated Notice of Discharge Log is to be submitted to the Resident Engineer with each Notice of Discharge Report, Numeric Action Level Exceedance Report or Numeric Effluent Limitation Violation Report.

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FORM

- Contract Number/Co/Rte/PM: For local agency encroachment permit projects write the encroachment permit number in the Contract Number field.
- Project Identifier Number: Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number write N/A in the field.
- WDID Number: For projects with Water Pollution Control Program (WPCP) enter “WPCP” in this field.
- Enter information about discharge incidents from forms:
  - CEM-2061 Notice of Discharge Report
  - CEM-2062 Numeric Action Level Exceedance Report
  - CEM-2063 Numeric Effluent Limitation Violation Report
- The Resident Engineer will notify the Regional Water Quality Control Board and record the Date RWQCB Notified.

Appendix K CEM-2070 SWPPP Annual Certification of Compliance

- To be submitted to Caltrans for Annual Compliance.
- Ensures that the project site and activities are in compliance with the NPDES General permit for storm water dischargers.
- Ensures that water pollution control measures are being implemented in accordance with the SWPPP.

Project Information Name and Site Address	Contract Number/Co/Rte/PM	
	Project Identifier Number	
	WDID Number:	
Contractor Name and Address	Project Site Water Pollution Control ☐ WPCP ☐ SWPPP	SWPPP Project Site Risk Level ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3

Stormwater Pollution Prevention Plan (SWPPP) / Water Pollution Control Program (WPCP) Annual Certification of Compliance

Water Pollution Control Manager Certification

This certification for the project site is based on an inspection of the project site conducted on (date)

"I certify based on my inspection of the project site that:"

☐ Yes ☐ No Water pollution control measures are being implemented in accordance with the SWPPP or WPCP approved for the project, including approved SWPPP/WPCP amendments.

☐ Yes ☐ No The project site and activities thereon are in compliance with the Caltrans Statewide NPDES Permit No. CAS000003, the NPDES General Permit for Storm water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-00009-DWQ, NPDES Permit No. CAS000002, or local NPDES permit, whichever is applicable.

Contractor Water Pollution Control Manger Signature	Date
Contractor Water Pollution Control Manger Name	Telephone Number

Contractor Annual Certification of Compliance

"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."

Contractor Signature	Date
Contractor Name	Telephone Number
Title	

Project Information Name and Site Address	Contract Number/Co/Rte/PM	
	Project Identifier Number	
	WDID Number	
Contractor Name and Address	Project Site Water Pollution Control ☐ WPCP ☐ SWPPP	SWPPP Project Site Risk Level ☐ Risk Level 1 ☐ Risk Level 2 ☐ Risk Level 3

Stormwater Pollution Prevention Plan (SWPPP) /

Water Pollution Control Program (WPCP)
Annual Certification of Compliance

Required for Private Entity Administered Projects

Private Entity Legally Responsible Person Annual Certification of Compliance

"I certify that the project is in compliance with the project site approved Stormwater Pollution Prevention Plan or Water Pollution Control Program including approved amendments. The project site and activities thereon are in compliance with the Caltrans Statewide NPDES Permit No. CAS000003, the NPDES General Permit for Storm water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-00009-DWQ, NPDES Permit No. CAS000002, or local NPDES permit, whichever is applicable.

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."

Legally Responsible Person Signature	Date
Legally Responsible Person Name	Telephone Number
Title	

Project Information Name and Site Address	Contract Number/Co/Rte/PM
	Project Identifier Number
	WDID Number

Resident Engineer Approval of Annual Certification of Compliance

An inspection of the project site for annual certification of compliance was conducted on (date)	Annual Certification of Compliance project site inspection conducted by

"I certify that I and /or personnel acting under my direction and supervision, have inspected the project site and find the following:"

☐ Yes ☐ No Water pollution control measures are being implemented in accordance with the SWPPP or WPCP approved for the project, including approved SWPPP/WPCP amendments.

☐ Yes ☐ No The project site and activities thereon are in compliance with the Caltrans Statewide NPDES Permit No. CAS000003, the NPDES General Permit for Storm water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-00009-DWQ, NPDES Permit No. CAS000002, or local NPDES permit, whichever is applicable.

The box above is checked "no" based on the project site annual certification inspection and the following corrective actions are necessary for the project to be in compliance with SWPPP/WPCP or NPDES Permits:

"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, 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."

Resident Engineer Signature	Date of Approval
Resident Engineer Name	Telephone Number

Required for Local Agency/ Private Entity Administered Project

Caltrans Oversight Engineer's Concurrence With Annual Certification of Compliance

I, and/or personnel acting under my direction and supervision, have reviewed this Annual Certification of Compliance and concur that the project is in compliance with SWPPP or WPCP approved for the project, including approved SWPPP/WPCP amendments, and applicable NPDES Permits.

Oversight Engineer Signature	Date of Concurrence
Oversight Engineer Name	Telephone Number

GENERAL INFORMATION

- By July 15 of each year, an Annual Certification of Compliance is required for projects with either a Stormwater Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP)
- The project site inspection for annual certification should be documented on form CEM-2030 Stormwater Site Inspection Report
- Stormwater Pollution Prevention Plan (SWPPP) Annual Certification of Compliance must be certified by a Legally Responsible Person (LRP) or Approved Signatory approved by the LRP.
  - For Caltrans the LRP is the District Director. The LRP may authorize the project resident engineer to be Approved Signatory.
  - For a local agency the LRP is either a principal executive officer or ranking elected official. The local agency LRP may authorize the project resident engineer to be the Approved Signatory. If the local agency LRP has not approved the local agency resident engineer to be an approved signatory then the local agency LRP must sign in the resident engineer signature box in section Resident Engineer Approval of Annual Certification of Compliance.
  - For a private entity performing work in the State right-of-way under an encroachment permit the LRP must be one of the following:
    a. For a corporation: a responsible corporate officer.
    b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively.
    The private entity LRP may not authorize an Approved Signatory.
- A completed copy of this form shall be filed in SWPPP/WPCP file category 20.70 Annual Certification of Compliance.

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FORM

- Contract Number/Co/Rte/PM: For local agency encroachment permit projects write the encroachment permit number in the Contract Number field.
- Project Identifier Number: Caltrans projects starting July 1, 2010 will have a Project Identifier Number. For projects without a project identifier number write N/A in the field.
- WDID Number: For projects that have Water Pollution Control Program (WPCP) enter “WPCP” in this field.
- Project Site Water Pollution Control: Check appropriate box for Water Pollution Control Program (WPCP) or Stormwater Pollution Prevention Plan.
- SWPPP Project Site Risk Level: Check the box for the appropriate SWPPP risk level.

Appendix A
Abbreviations and Acronyms

ac	acre
ºC	Degrees Celsius
cfs	cubic feet per second
cy	cubic yards
ºF	Degrees Fahrenheit
ft	feet
g	gram
gal	gallon
gpm	gallons per minute
hr	hour
in	inches
kg	kilogram
L	liter
lbs	pound
lf	linear feet
mph	miles per hour
psi	pounds per square inch
s	second
yd	yard
y^2	square yards
y^3	cubic yards
AC	Asphalt Concrete
ABS	Acrylonitrile Butadiene Styrene
ADL	Aerially Deposited Lead
AQMD	Air Quality Management District
ASBS	Areas of Special Biological Significance
ASTM	American Society of Testing Materials
ATS	Active Treatment System
BASMAA	Bay Area Stormwater Management Agencies Association
BAT	Best Available Technology
BCT	Best Conventional Technology
BMP	Best Management Practice
BOD	Biochemical Oxygen Demand
BPJ	Best Professional Judgment
CAFO	Confined Animal Feeding Operation
CAL EPA	California Environmental Protection Agency
CAL OSHA	California Occupation Safety and Health Association
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CGP	NPDES General Permit for Storm Water Discharges Associated with Construction Activities
CIWQS	California Integrated Water Quality System
CKD	Cement Kiln Dust
CMP	Corrugated Metal Pipe
COC	Chain of Custody
CPESC	Certified Professional in Erosion and Sediment Control
CPSWQ	Certified Professional in Storm Water Quality
CSMP	Construction Site Monitoring Program

CSWPPP	Conceptual Stormwater Pollution Prevention Plan
CTB	Cement Treated Base
CTR	California Tax Rule
CWA	Clean Water Act
CWC	California Water Code
CWP	Center for Watershed Protection
DADMAC	Diallyldimethyl-ammonium chloride
DDNR	Delaware Department of Natural Resources
DFG	Department of Fish and Game
DHS	Department of Health Services
DSA	Disturbed Soil Area
DWQ	Division of Water Quality
EC	Electrical Conductivity
ELAP	Environmental Laboratory Accreditation Program
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area
ESC	Erosion and Sediment Control
FEMA	Federal Emergency Management Agency
HSPF	Hydrologic Simulation Program Fortran
JTU	Jackson Turbidity Units
L:W	Length versus Width
LID	Low Impact Development
LOEC	Lowest Observed Effect Concentration
LRP	Legally Responsible Person
LUP	Linear Underground/Overhead Projects
MATC	Maximum Allowable Threshold Concentration
MDL	Method Detection Limits
MEP	Maximum Extent Practicable
MRR	Monitoring and Reporting Requirements
MS4	Municipal Separate Storm Sewer System
MSDS	Material Safety Data Sheet
MUSLE	Modified Universal Soil Loss Equation
NAL	Numeric Action Level
NCC	Notice of Completion of Construction
NEL	Numeric Effluent Limitation
NICET	National Institute of Certification In Engineering Technologies
NOAA	National Oceanic and Atmospheric Administration
NOC	Notice of Construction
NOEC	No Observed Effect Concentration
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System

NRCS	Natural Resources Conservation Service
NTR	National Toxics Rule
NTU	Nephelometric Turbidity Units
O&M	Operation and Maintenance
OSHA	Occupation Safety and Health
PAC	Polyaluminum chloride
PAM	Polyacrylamide
PASS	Polyaluminum chloride Silica Sulfate
PCC	Portland Cement Concrete
PE	Project Engineer
POC	Pollutants of Concern
PoP	Probability of Precipitation
POTW	Publicly Owned Treatment Works
PRDs	Permit Registration Documents
PVC	Polyvinyl Chloride
PWS	Planning Watershed
QAMP	Quality Assurance Management Plan
QA/QC	Quality Assurance/Quality Control
QSD	Qualified SWPPP Developer
QSP	Qualified SWPPP Practitioner
RE	Resident Engineer
REAP	Rain Event Action Plan
Regional Board	Regional Water Quality Control Board
ROWD	Report of Waste Discharge
RULSE	Revised Universal Soil Loss Equation
RW	Receiving Water
RWQCB	California Regional Water Quality Control Board
SAP	Sampling and Analysis Plan
SMARTS	Storm Water Multi Application Reporting and Tracking System
SS	Settleable Solids
SSC	Suspended Sediment Concentration
SSP	Standard Special Provisions
SUSMP	Standard Urban Storm Water Mitigation Plan Drawing
SW	Storm Water
SWARM	Storm Water Annual Report Module
SWAMP	Surface Water Ambient Monitoring Program
SWMM	Storm Water Management Model
SWMP	Storm Water Management Program
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	California State Water Resources Control Board
TC	Treatment Control
TDS	Total Dissolved Solids
TMDL	Total Maximum Daily Load
TSS	Total Suspended Solids

USACOE	U.S. Army Corps of Engineers
USC	United States Code
USDA	United States Department of Agriculture
USDOT	United States Department of Transportation
US EPA	United States Environmental Protection Agency
USGS	United States Geological Service
USLE	Universal Soil Loss Equation
V:H	Vertical versus Horizontal
WPC Manager	Water Pollution Control Manager
WPCP	Water Pollution Control Program
WRCC	Western regional Climate Center
WQBEL	Water Quality Based Effluent Limitation
WQO	Water Quality Objective
WQS	Water Quality Standard Number
WDID	Waste Discharge Identification Number
WDR	Waste Discharge Requirement
WET	Whole Effluent Toxicity
WLA	Waste Load Allocation
WPCD	Water Pollution Control

Appendix B
Definition of Terms

Active Areas

An area where soil disturbing activities have occurred at least once within 14 days.

Areas of Construction

All areas subject to land surface disturbance activities related to the project including, but not limited to, project staging areas, immediate access areas and storage areas.

Active Treatment System (ATS)

A treatment system that employs chemical coagulation, chemical flocculation, or electrocoagulation to aid in the reduction of turbidity caused by fine suspended sediment.

Acute Toxicity Test

A chemical stimulus severe enough to rapidly induce a negative effect; in aquatic toxicity tests, an effect observed within 96 hours or less is considered acute.

Air Deposition

Airborne particulates from construction activities.

Antecedent Moisture

Amount of moisture present in soil prior to the application of a soil stabilization product.

Approved Signatory

A person who has legal authority to sign, certify, and electronically submit Permit Registration Documents and Notices of Termination on behalf of the Legally Responsible Person.

Beneficial Uses

As defined in the California Water Code, beneficial uses of the waters of the state that may be protected against quality degradation include, but are not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.

Best Available Technology Economically Achievable (BAT)

As defined by USEPA, BAT is a technology-based standard established by the Clean Water Act (CWA) as the most appropriate means available on a national basis for controlling the direct discharge of toxic and nonconventional pollutants to navigable waters. The BAT effluent limitations guidelines, in general, represent the best existing performance of treatment technologies that are economically achievable within an industrial point source category or subcategory.

Best Conventional Pollutant Control Technology (BCT)

As defined by USEPA, BCT is a technology-based standard for the discharge from existing industrial point sources of conventional pollutants including biochemical oxygen demand (BOD), total suspended sediment (TSS), fecal coliform, pH, oil and grease.

Best Professional Judgment (BPJ)

The method used by permit writers to develop technology-based NPDES permit conditions on a case-by-case basis using all reasonably available and relevant data.

Best Management Practices (BMPs)

BMPs are scheduling of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants. BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Chain of Custody (COC)

Form used to track sample handling as samples progress from sample collection to the analytical laboratory. The COC is then used to track the resulting analytical data from the laboratory to the client. COC forms can be obtained from an analytical laboratory upon request.

Coagulation
The clumping of particles in a discharge to settle out impurities, often induced by chemicals such as lime, alum, and iron salts.

Common Plan of Development
Generally a contiguous area where multiple, distinct construction activities may be taking place at different times under one plan. A plan is generally defined as any piece of documentation or physical demarcation that indicates that construction activities may occur on a common plot. Such documentation could consist of a tract map, parcel map, demolition plans, grading plans or contract documents. Any of these documents could delineate the boundaries of a common plan area. However, broad planning documents, such as land use master plans, conceptual master plans, or broad-based CEQA or NEPA documents that identify potential projects for an agency or facility are not considered common plans of development.

Construction Activity
Includes clearing, grading, or excavation and contractor activities that result in soil disturbance.

Construction Site
The area involved in a construction project as a whole.

Construction Site BMPs
Temporary control practices (BMPs) that are required only temporarily to address a short-term stormwater contamination threat. For example, silt fences are located near the base of newly graded slopes that have substantial area of exposed soil. Then, during rainfall, the silt fences allow capture sediment from erosion of the slopes.

Contamination
An impairment of the quality of the waters of the state by waste to a degree that creates a hazard to the public health through poisoning or through the spread of disease including any equivalent effect resulting from the disposal of waste, whether or not waters of the state are affected.

Contractor
Party responsible for carrying out the contract per plans and specifications. The Standard Specifications and contract special provisions contain stormwater protection requirements the contractor must address.

Contractor-Support Facilities
Contractor-support facilities include: Staging areas, storage yards for equipment and materials, mobile operations, batch plants for PCC and HMA, crushing plants for rock and aggregate, other facilities installed for contractor convenience such as haul roads.

Daily Average Discharge
The discharge of a pollutant measured during any 24-hour period that reasonably represents a calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged during the day. For pollutants with limitations expressed in other units of measurement (e.g., concentration) the daily discharge is calculated as the average measurement of the pollutant throughout the day (40 CFR 122.2). In the case of pH, the pH must first be converted from a log scale.

Debris
Litter, rubble, discarded refuse, and remains of destroyed inorganic anthropogenic waste.

Degradability
Method by which the chemical components of a soil stabilization product are degraded over time.

Desert Areas
Areas within the Colorado River Basin RWQCB and the North and South Lahontan RWQCB jurisdictions (excluding the Mono and Antelope areas, East and West Walker River, East and West Carson

River, and the Truckee and Little Truckee River).

Direct Discharge
A discharge that is routed directly to waters of the United States by means of a pipe, channel, or ditch (including a municipal storm sewer system), or through surface runoff.

Discharger
The Legally Responsible Person (see definition) or entity subject to this General Permit.

Discharge
Any release, spill, leak, pump, flow, escape, dumping, or disposal of any liquid, semi-solid or solid substance.

Disturbed Soil Areas (DSAs)
Areas of exposed, erodible soil, including stockpiles, that are within the construction limits and that result from construction activities.

Dose Rate (for ATS)
In exposure assessment, dose (e.g. of a chemical) per time unit (e.g. mg/day), sometimes also called dosage.

Drainage Area
The area of land that drains water, sediment, pollutants, and dissolved materials to a common outlet.

Drying Time
Time it takes for a soil stabilization product to dry or cure for it to become erosion control effective.

Effluent
Any discharge of water by a discharger either to the receiving water or beyond the property boundary controlled by the discharger.

Effluent Limitation
Any numeric or narrative restriction imposed on quantities, discharge rates, and concentrations of pollutants which are discharged from point sources into waters of the United States, the waters of the contiguous zone, or the ocean.

Environmental Protection Agency (EPA)
Agency that issued the regulations to control pollutants in stormwater runoff discharges (The Clean Water Act and NPDES permit requirements).

Erosion
The process, by which soil particles are detached and transported by the actions of wind, water, or gravity.

Erosion Control BMPs
Vegetation, such as grasses and wildflowers, and other materials, such as straw, fiber, stabilizing emulsion, protective blankets, etc., placed to stabilize areas of disturbed soils, reduce loss of soil due to the action of water or wind, and prevent water pollution.

Erosion Control Effectiveness
The ability of a particular product to reduce soil erosion relative to the amount of erosion measured for bare soil. Percentage of erosion that would be reduced as compared to an untreated or control condition.

Exempt Construction Activities
Activities exempt from the General Permit, including routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of the facility; and emergency construction activities required to protect public health and safety. Local permits may not exempt these activities.

Existing vegetation
Any vegetated area that has not already been cleared and grubbed.

Fair Weather Prediction

When there is no precipitation in the forecast between the current calendar day and the next working day. The National Weather Service NOAA Weather Radio forecast shall be used. The contractor may propose an alternative forecast for use if approved by the Resident Engineer.

Feasible

Economically achievable or cost-effective measures, which reflect a reasonable degree of pollutant reduction achievable through the application of available nonpoint pollution control practices, technologies, processes, site criteria, operating methods, or other alternatives.

Field Measurements

Testing procedures performed in the field with portable field-testing kits or meters.

Final Stabilization

All soil disturbing activities at each individual parcel within the site have been completed in a manner consistent with the requirements in this General Permit.

First Order Stream

Stream with no tributaries.

Flocculants

Substances that interact with suspended particles and bind them together to form flocs.

Forecasted Storm Event

A storm that produces or is forecasted to produce at least 0.10 inch of precipitation within a 24-hour period.

General Permit

The Construction General Permit for Storm Water Discharges Associated with Construction Activity (Order No. 99-08-DWQ, NPDES Permit CAS000002) issued by the State Water Resources Control Board.

Good Housekeeping

A common practice related to the storage, use, or cleanup of materials, performed in a manner that minimizes the discharge of pollutants.

Good Housekeeping BMPs

BMPs designed to reduce or eliminate the addition of pollutants to construction site runoff through analysis of pollutant sources, implementation of proper handling/disposal practices, employee education, and other actions. Grading Phase (part of the Grading and Land Development Phase) Includes reconfiguring the topography and slope including; alluvium removals; canyon cleanouts; rock undercuts; keyway excavations; land form grading; and stockpiling of select material for capping operations.

Grading Phase

Includes reconfiguring the topography for the project including; excavation for roadway including necessary blasting of hard rock, highway embankment construction (fills); mass grading, and stockpiling of select material for capping operations.

Highway Construction Phase

Highway construction phase includes both highway and structure construction. Highway construction includes final roadway excavation, placement of base materials and highway paving, finish grading, curbs, gutters and sidewalks, public utilities, public water facilities including fire hydrants, public sanitary sewer systems, storm drain systems and/or other drainage improvements, highway lighting, traffic signals and/or other highway electrical work, guardrail, concrete barriers, sign installation, pavement markers, traffic stripping and pavement markings. Structure construction includes structure footings, bridges, retaining walls, major culverts, overhead sign structures and buildings.

Highway Planting / Erosion Control Establishment Phase

Highway planting including clearing and grubbing operations, soil preparation (grading, incorporation of soil amendments, placement of topsoil), irrigation (trenching, installation, trench backfilling), minor grading (top dressing, fine grading lawn and ground cover areas), hardscaping, planting (seeding and planting of plants), mulch (application of wood chips or other mulches) and plant establishment (weeding, plant replacement and if needed: fertilizer application, irrigation maintenance, reapplication of mulch). Erosion control includes placement of permanent erosion control materials and maintenance of temporary sediment controls during the erosion control establishment period.

Hydromodification

Hydromodification is the alteration of the hydrologic characteristics of coastal and non-coastal waters, which in turn could cause degradation of water resources. Hydromodification can cause excessive erosion and/or sedimentation rates, causing excessive turbidity, channel aggradation and/or degradation.

Identified Organisms

Organisms within a sub-sample that is specifically identified and counted.

Inactive Areas of Construction

Areas of construction activity that are not active and those that have been active and are not scheduled to be re-disturbed for at least 14 days.

Index Period

The period of time during which bioassessment samples must be collected to produce results suitable for assessing the biological integrity of streams and rivers. Instream communities naturally vary over the course of a year, and sampling during the index period ensures that samples are collected during a time frame when communities are stable so that year-to-year consistency is obtained. The index period approach provides a cost-effective alternative to year round sampling. Furthermore, sampling within the appropriate index period will yield results that are comparable to the assessment thresholds or criteria for a given region, which are established for the same index period. Because index periods differ for different parts of the state, it is essential to know the index period for your area.

K Factor

The soil erodibility factor used in the Revised Universal Soil Loss Equation (RUSLE). It represents the combination of detachability of the soil, runoff potential of the soil, and the transportability of the sediment eroded from the soil.

Legally Responsible Person

The person who possesses the title of the land or the leasehold interest of a mineral estate upon which the construction activities will occur for the regulated site. For linear underground/overhead projects, it is in the person in charge of the utility company, municipality, or other public or private company or agency that owns or operates the LUP.

Likely Precipitation Event

Any weather pattern that is forecasted to have a 50% or greater chance of producing precipitation in the project area. The discharger shall obtain likely precipitation forecast information from the National Weather Service Forecast Office (e.g., by entering the zip code of the project's location at http://www.srh.noaa.gov/forecast).

Local permit

An NPDES stormwater permit issued to a District by the RWQCB having jurisdiction over the job site. Requirements of the local permit are generally similar to, but supersede the requirements of the General Permit. The District Stormwater Coordinator should be consulted to identify and to incorporate variances between the local permit and General Permit.

Longevity

The time the soil erosion product maintains its erosion control effectiveness.

Maximum Allowable Threshold Concentration (MATC)

The allowable concentration of residual, or dissolved, coagulant/flocculant in effluent. The MATC shall be coagulant/flocculant-specific, and based on toxicity testing conducted by an independent, third-party laboratory. A typical MATC would be:
The MATC is equal to the geometric mean of the NOEC (No Observed Effect Concentration) and LOEC (Lowest Observed Effect Concentration) Acute and Chronic toxicity results for most sensitive species determined for the specific coagulant. The most sensitive species test shall be used to determine the MATC.

Mode of Application

Type of labor or equipment that is required to install the product or technique.

National Pollutant Discharge Elimination System (NPDES) Permit

A permit issued pursuant to the Clean Water Act that requires the discharge of pollutants to waters of the United States from stormwater be controlled.

Natural Channel Evolution

The physical trend in channel adjustments following a disturbance that causes the river to have more energy and degrade or aggrade more sediment. Channels have been observed to pass through 5 to 9 evolution types. Once they pass though the suite of evolution stages, they will rest in a new state of equilibrium.

Native

Living or growing naturally in a particular region. Compatibility and competitiveness of selected plant materials with the environment.

Non-active Construction Area

Any area not considered to be an active construction area. Active construction areas become non-active construction areas whenever construction activities are expected to be discontinued for a period of 14 days or longer.

Non-Storm Water Discharges

Non-Storm Water Discharges are discharges that do not originate from forcasted storm events. They can include, but are not limited to, discharges of process water, air conditioner condensate, non-contact cooling water, vehicle wash water, sanitary wastes, concrete washout water, paint wash water, irrigation water, or pipe testing water.

Non-Visible Pollutants

Pollutants associated with a specific site or activity that can have a negative impact on water quality, but cannot be seen though observation (ex: chlorine). Such pollutants being discharged are not authorized.

Numeric Action Level (NAL)

Level is used as a warning to evaluate if best management practices are effective and take necessary corrective actions. Not an effluent limit.

Original Sample Material

The material (i.e., macroinvertebrates, organic material, gravel, etc.) remaining after the subsample has been removed for identification.

Permit

The Caltrans Statewide NPDES Permit for discharges from Caltrans properties, facilities, and activities (Order No. 99-06-DWQ, NPDES No. CAS000003), issues by the State Water Resources Control Board.

pH

Unit universally used to express the intensity of the acid or alkaline condition of a water sample. The pH of natural waters tends to range between 6 and 9, with neutral being 7. Extremes of pH can have deleterious effects on aquatic systems.

Pollution
The man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water. An alteration of the quality of the water of the state by waste to a degree, which unreasonably affects either the waters for beneficial uses or facilities that serve these beneficial uses.

Post-Construction BMPs
Structural and non-structural controls which detain, retain, or filter the release of pollutants to receiving waters after final stabilization is attained.

Preliminary Phase (Pre-Construction Phase - Part of the Grading and Land Development Phase)
Construction stage including rough grading and/or disking, clearing and grubbing operations, or any soil disturbance prior to mass grading.

Qualified SWPPP Developer
Individual who is authorized to develop and revise SWPPPs.

Qualified SWPPP Practitioner
Individual assigned responsibility for non-storm water and storm water visual observations, sampling and analysis, and responsibility to ensure full compliance with the permit and implementation of all elements of the SWPPP, including the preparation of the annual compliance evaluation and the elimination of all unauthorized discharges.

Qualifying Rain Event
Any event that produces 0.5 inches or more precipitation at the time of discharge with a 72 hour or greater period between rain events.

R Factor
Erosivity factor used in the Revised Universal Soil Loss Equation (RUSLE). The R factor represents the erosivity of the climate at a particular location. An average annual value of R is determined from historical weather records using erosivity values determined for individual storms. The erosivity of an individual storm is computed as the product of the storm's total energy, which is closely related to storm amount, and the storm's maximum 30-minute intensity.

Rain Event Action Plan (REAP)
Written document, specific for each forecasted storm event, that when implemented is designed to protect all exposed portions of the site within 48 hours of any likely forecasted storm event.

Receiving Waters
All surface water bodies within the permit area.

Regional Water Quality Control Board (RWQCB)
California agencies that implement and enforce Clean Water Act Section 402(p) NPDES permit requirements, and are issuers and administrators of these permits as delegated by EPA. There are nine regional boards working with the State Water Resources Control Board.

Remaining Sub-sampled Material
The material (e.g., organic material, gravel, etc.) that remains after the organisms to be identified have been removed from the subsample for identification. (Generally, no macroinvertebrates are present in the remaining subsampled material, but the sample needs to be checked and verified using a complete Quality Assurance (QA) plan)

Resident Engineer (RE)
The Caltrans representative charged with administration of construction contracts. The RE decides questions regarding acceptability of material furnished and work performed. The RE has "contractual authority" to direct the contractor and impose sanctions if the contractor fails to take prompt and appropriate action to correct deficiencies. The following contractual sanctions can be imposed by the

RE: (a) withholding payments (or portions of payments), (b) suspending work, (c) bringing in a separate contractor to complete work items (the contractor is billed for such costs), (d) assessing liquidated damages including passing along fines for permit violations, (e) initiating cancellation of the construction contract.

Residual Impact
The impact that a particular practice might have on construction activities once they are resumed on the area that was temporarily stabilized.

Routine Maintenance
Activities intended to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

Runoff Control BMPs

Measures used to divert run-on from off-site and runoff within the site.

Runoff Effect
The effect that a particular soil stabilization product has on the production of stormwater runoff. Runoff from an area protected by a particular product may be compared to the amount of runoff measured for bare soil

Run-on

Discharges that originate off-site and flow onto the property of a separate project site.

Revised Universal Soil Loss Equation (RUSLE)
Empirical model that calculates average annual soil loss as a function of rainfall and runoff erosivity, soil erodibility, topography, erosion controls, and sediment controls.

Sampling and Analysis Plan
Document that describes how the samples will be collected, under what conditions, where and when the samples will be collected, what the sample will be tested for, what test methods and detection limits will be used, and what methods/procedures will be maintained to ensure the integrity of the sample during collection, storage, shipping and testing (i.e., quality assurance/quality control protocols).

Sediment
Solid particulate matter, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by air, water, gravity, or ice and has come to rest on the earth's surface either above or below sea level.

Sedimentation
Process of deposition of suspended matter carried by water, wastewater, or other liquids, by gravity. It is usually accomplished by reducing the velocity of the liquid below the point at which it can transport the suspended material.

Sediment Control BMPs
Practices that trap soil particles after they have been eroded by rain, flowing water, or wind. They include those practices that intercept and slow or detain the flow of storm water to allow sediment to settle and be trapped (e.g., silt fence, sediment basin, fiber rolls, etc.).

Settleable Solids (SS)
Solid material that can be settled within a water column during a specified time frame. It is typically tested by placing a water sample into an Imhoff settling cone and then allowing the solids to settle by gravity for a given length of time. Results are reported either as a volume (mL/L) or a mass (mg/L) concentration.

Sheet Flow
Flow of water that occurs overland in areas where there are no defined channels where the water spreads out over a large area at a uniform depth.

Soil Amendment

Any material that is added to the soil to change its chemical properties, engineering properties, or erosion resistance that could become mobilized by storm water.

State Water Resources Control Board (SWRCB)

California agency that implements and enforces Clean Water Act Section 402(p) NPDES permit requirements, is issuer and administrator of these permits as delegated by EPA. Works with the nine Regional Water Quality Control Boards.

Storm Drain System

Streets, gutters, inlets, conduits, natural or artificial drains, channels and watercourses, or other facilities that are owned, operated, maintained and used for the purpose of collecting, storing, transporting, or disposing of stormwater.

Stormwater

Rainfall runoff, snow melt runoff, and surface runoff and drainage. It excludes infiltration and runoff from agricultural land.

Stormwater Inspector

Contractor's staff member who provides support to the WPC Manager. Performs activities related to WPCP and SWPPP implementation.

Stormwater Pollution Prevention Plan (SWPPP)

A plan required by the Permit that includes site map(s), an identification of construction/contractor activities that could cause pollutants in the stormwater, and a description of measures or practices to control these pollutants. It must be prepared and approved before construction begins. A SWPPP prepared in accordance with the Special Provisions and the Handbooks will satisfy Standard Specifications Section 7-1.01G - Water Pollution, requirement for preparation of a program to control water pollution.

Structural Controls

Any structural facility designed and constructed to mitigate the adverse impacts of storm water and urban runoff pollution

Suspended Sediment Concentration (SSC)

The measure of the concentration of suspended solid material in a water sample by measuring the dry weight of all of the solid material from a known volume of a collected water sample. Results are reported in mg/L.

Temporary Construction Site BMPs

Construction Site BMPs that are required only temporarily to address a short-term stormwater contamination threat. For example, silt fences are located near the base of newly graded slopes that have a substantial area of exposed soil. Then, during rainfall, the silt fences filter and collect sediment from runoff flowing off the slope.

Total Suspended Solids (TSS)

The measure of the suspended solids in a water sample includes inorganic substances, such as soil particles and organic substances, such as algae, aquatic plant/animal waste, particles related to industrial/sewage waste, etc. The TSS test measures the concentration of suspended solids in water by measuring the dry weight of a solid material contained in a known volume of a sub-sample of a collected water sample. Results are reported in mg/L.

Toxicity

The adverse response(s) of organisms to chemicals or physical agents ranging from mortality to physiological responses such as impaired reproduction or growth anomalies.

Turbidity

The cloudiness of water quantified by the degree to which light traveling through a water column is scattered by the suspended organic and inorganic particles it contains. The turbidity test is reported in Nephelometric Turbidity Units (NTU) or Jackson Turbidity Units (JTU).

Waste Discharge Identification Number (WDID)

The unique project number issued by the SWRCB upon receipt of the notice of intent (NOI).

Water Pollution Control Manager (WPC Manager)

The person responsible for the implementation of the SWPPPP or WPCP, whichever is applicable for the project. The WPC manager must be a QSP whenever the project requires a WPCP. The WPC manager must be a QSD whenever the project requires a SWPPP.

Water Pollution Control Program (WPCP)

A program that must be prepared and implemented by the construction contractor for preventing, controlling and abating water pollution to streams, waterways and other bodies of water.. The contractor must implement a WPCP on projects where soil disturbance from work activities will be one of the following:

1. Less than 1 acre
2. Less than 5 acres if the project has an *Environmental Protection Agency Small Construction Project Erosivity Waiver* hereinafter called the "Erosivity Waiver."

Waters of the United States

Generally refers to surface waters, as defined by the federal Environmental Water quality objectives are defined in the California Water Code as limits or levels of water quality constituents or characteristics, which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area.

Appendix C
Selection of Temporary Soil Stabilization Controls

There are many treatments available to provide soil stabilization. A group of criteria was developed to allow for comparison and differentiation among the product types that are available. These criteria include erosion control effectiveness, drying time, and others. For some criteria, values have been assigned by characteristics: an example would be mode of application (e.g., hydraulic seeder, water truck, and hand labor). For other criteria, actual numeric values should be considered based on available data, such as drying time in hours. Refer to Table D-1 for a summary of selection criteria information and ratings for temporary soil stabilization BMPs.

C.1 Antecedent Moisture

This criterion relates to the effect of existing soil moisture on the effectiveness of a soil stabilization method. While antecedent soil moisture conditions can have an effect on the performance of some methods, (e.g., hydraulic soil stabilizers, temporary seeding) other methods, such as erosion control blankets or impervious covers, are not affected – except perhaps in their ease of installation. Suppliers of manufactured soil stabilization products affected by antecedent soil moisture specify the conditions under which their products are to be applied. For example, some products clearly benefit from having the soil "pre-wetted" before application of the hydraulic soil stabilizer and as a result, some manufacturers recommend application of water by itself as a first step. Conversely, the binding action of some adhesives on soil particles (and thereby their erosion control effectiveness) can be affected by excessive soil moisture. Therefore, some manufacturers recommend that their products not be applied when the soil is visibly saturated or when standing water is present.

C.2 Availability

A critical aspect of product specification and use is whether or not a soil stabilization product is readily available. While local sources may be preferable, the seasonal nature of soil stabilization work can create localized shortages of materials. In these cases, usually the material that can be delivered to the job most quickly is the material that is selected for application.

C.3 Ease of Clean-Up

This criterion applies primarily to the hydraulically-applied soil stabilization materials, but there may be clean-up issues associated with some of the other categories as well (e.g., packaging materials, disposal of excess product, etc.).

All of the approved hydraulic soil stabilization products are typically applied using water as a carrier, and to varying degrees, these products can be removed from application machinery and overspray areas with the application of clean water as well. However, cleaning must occur before the material sets or dries, otherwise stronger cleaning solutions of detergent, a strong alkali solution, or a petrochemical solvent must be used. A prudent contractor will take precautions when working with hydraulic products that have some clean-up limitations, and must follow the BMPs in the SWPPP or WPCP for cleaning of equipment on site.

Regardless of which approach is used for temporary soil stabilization, site clean-up can be problematic due to the following:

- Added time to dispose of waste materials
- Added time to clean hydraulic equipment before the material sets or dries
- Additional quantities of water needed for cleaning operations
- Impact of quick-setting materials on overspray areas such as sidewalks, roads, vehicles
- Contractor resistance to products that require excessive clean-up
- Additional operation and maintenance costs included in contractor's bid.

C.4 Degradability

Degradability relates to the method by which the chemical components of a soil stabilization product are degraded over time. As might be expected, the way in which a product degrades is related to longevity, which is another selection criterion. Both degradability and longevity are sometimes key issues in temporary soil stabilization and long term erosion and sediment control planning. Soil properties, climate, existing vegetation as well as slope aspect contribute to the degradation of soil stabilization materials. Knowing something about the physical and chemical properties of a product and how these characteristics might interact with site conditions is important when selecting a particular material.

C.5 Length of Drying Time
Not all materials require drying time, and the drying criterion may be used to differentiate categorical approaches as well as a final screen for the various types of materials within a class of approaches. The drying time shall be based upon manufacturer's recommendations and specifications.

C.6 Time to Effectiveness

Not all soil stabilization products are immediately effective in controlling erosion: some take time to dry (e.g., hydraulic soil stabilizers) and others take time to grow (e.g., temporary seeding). However, when some treatments are applied (e.g., rolled erosion control products, plastic sheeting, and straw mulch) they are immediately effective.

C.7 Erosion Control Effectiveness

This criterion measures the ability of a particular product to reduce soil erosion relative to the amount of erosion measured for bare soil. Erosion control effectiveness is described as a percentage the erosion would be reduced as compared to an untreated or control condition.

C.8 Longevity

This criterion simply considers the time that a soil stabilization product maintains its erosion control effectiveness.

C.9 Mode of Application

The mode of application criterion refers to the type of labor or equipment that is required to install the product or technique.
C.10 Residual Impact

This criterion relates to the impact that a particular practice might have on construction activities once they are resumed on the area that was temporarily stabilized. Some examples include:

- Temporary vegetation covers or standard biodegradable mulches might create problems with achieving final slope stability or compaction due to their organic content, and therefore would require removal and disposal.
- Applications of straw or hay fibers might keep soil from drying out as quickly as it might if it was bare.
- Plastic sheeting, netting or materials used in a soil stabilization product might persist longer than needed on or in the soil.

C.11 Native

This criterion relates primarily to selection of plant materials and is important from the standpoint of environmental compatibility and competitiveness.

C.12 Runoff Effect

This criterion measures the effect that a particular soil stabilization product has on the production of stormwater runoff. Similar to the erosion control effectiveness criterion, runoff from an area protected by a particular product may be compared to the amount of runoff measured for bare soil and is presented in the matrix as a percentage of the runoff that would occur in an untreated, or control condition.

Table C-1
Temporary Soil Stabilization Criteria Matrix

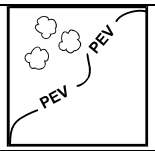
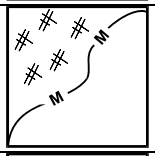
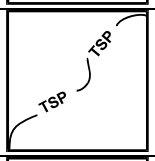
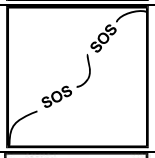
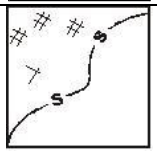
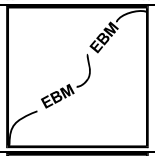
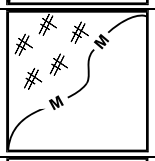
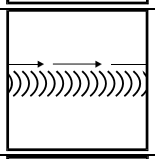
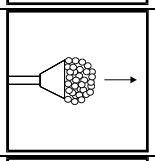
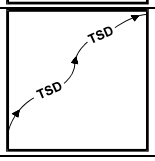
CLASS	TYPE	Antecedent Moisture	Availability	Ease of Clean-Up	EC Effectiveness (%)	Degradability	Length of Drying Time (hrs)	Time to Effectiveness	Longevity	Mode of Application	Residual Impact	Native	Runoff Effect
Straw Mulch	Wheat Straw	D	S	H	90-95	B	0	1	M	L/M	M		+
	Rice Straw	D	S	H	90-95	B	0	1	M	L/M	M		+
Wood Fiber Mulch	Wood Fiber	D	S	H	50-60	B	0-4	1	M	H	L		+
Recycled Paper Mulch	Cellulose Fiber	D	S	H	50-60	B	0-4	1	S	H	L		+
Bonded Fiber Matrix	Biodegradable	D	S	H	90-95	B	12-18	1	M	H	M		+
Biodegradable	Jute Mesh	D	S	H	65-70	B		1	M	L	M		+
	Curled Wood Fiber	D	S	H	85-90	P/B		1	M	L	M		+
	Straw	D	S	H	85-90	P/B		1	M	L	M		+
	Wood Fiber	D	S	H	85-90	P/B		1	M	L	M		+
	Coconut Fiber	D	S	H	90-95	P/B		1	L	L	M		+
	Coconut Fiber Mesh	D	S	H	85-90	B		1	L	L	M		+
	Straw Coconut Fiber	D	S	H	90-95	P/B		1	L	L	M		+
Non-Biodegradable	Plastic Netting	D	M	H	<50	P		1	L	L	H		+
	Plastic Mesh	D	M	H	75-80	P		1	L	L	H		+
	Synthetic Fiber with Netting	D	M	H	90-95	P		1	L	L	H		+
	Bonded Synthetic Fibers	D	M	H	90-95	P		1	L	L	H		+
	Combination with Biodegradable	D	M	H	85-90	P		1	L	L	H		+
High-Density	Ornamentals		S-M	H	50-60			28	M-L	H	L-M	N/E	+
	Turf species		S	H	50-60			28	L	H	M-H	N/E	+
	Bunch grasses		S-M	H	50-60			28	L	H	L-M	N	+
Fast-Growing	Annual		S	H	50-60			28	L	H	L-H	N/E	+
	Perennial		S	H	50-60			28	L	H	M	N/E	+
Non-Competing	Native		S-M	H	50-60			28	L	H	L-M	N	+
	Non-Native		S-M	H	50-60			28	L	H	L-H	E	+
Sterile	Cereal Grain		S	H	50-60			28	L	H	L	E	+
Plastic	Rolled Plastic Sheeting		S		100	P		1	M	L	H		-
	Geotextile (Woven)		S		90-95	P		1	M	L	H		-
(PBS) Plant Material Based- Short Lived	Guar	D	S	H	80-85	B	12-18	Same as Length of Drying Time.	S	B	L		0/+
	Psyllium	P	S	H	25-35	B	12-18		M	B	L		0
	Starches	D	S	H	25-30	B	9-12		S	H	L		0
(PBL) Plant Material Based- Long Lived	Pitch/ Rosin Emulsion	D	S	M	60-75	B	19-24		M	B	M		-
(PEB) Polymeric Emulsion Blends	Acrylic polymers and copolymers	D	S	M	35-70	P/C	19-24		L	B	M		+/-
	Methacrylates and acrylates	D	M	M	35-40	P/C	12-18		S	W	L		0/+
	Sodium acrylates and acrylamides	D	M	M	20-70	P/C	12-18		S	H	L		+/-
	Polyacrylamide	D	M	M	55-65	P/C	4-8		M	H	L		0/+
	Hydro-colloid polymers	D	M	H	25-40	P/C	0-4		M	H	L		0/+
(PRB) Petroleum/ Resin-Based Emulsions	Emulsified Petroleum Resin	D	M	L	10-50	P/C	0-4		M	B	M		0/-
(CBB) Cementitious Based Binders	Gypsum	D	S	M	75-85	P/C	4-8		M	H	L		-
	= not applicable for category, class or type												
UNK	= unknown												

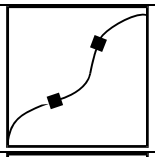
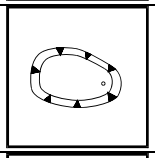
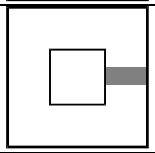
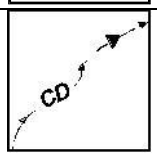
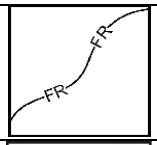
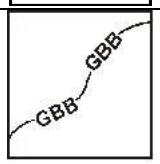
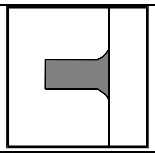
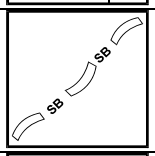
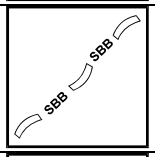
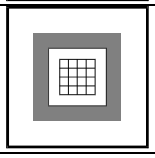
Source: *Guidance Document – Soil Stabilization for Temporary Slopes*, URS Greiner Woodward Clyde, November 1999.

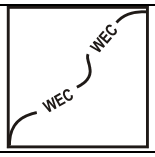
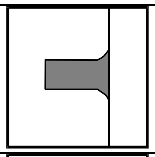
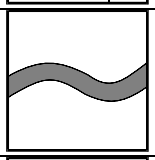
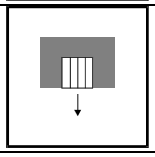
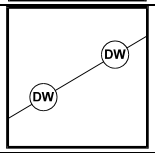
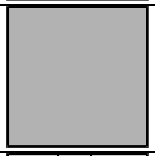
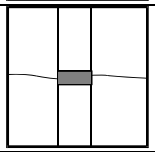
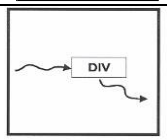
Table C-1 (Definitions of Symbols)
TEMPORARY SOIL STABILIZATION CRITERIA MATRIX

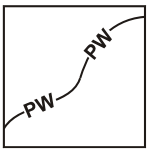
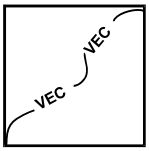
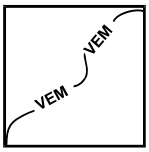
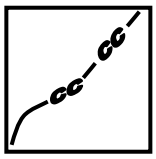
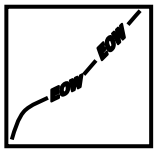
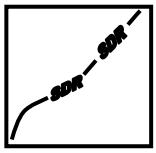
Antecedent Moisture	**D** **P**	Soil should be relatively dry before application Soil should be pre-wetted before application
Availability	**S** **M**	A short turn-around time between order and delivery, usually 3-5 days A moderate turnaround time, between 1-2 weeks
Ease of Clean-Up	**L** **M** **H**	Require pressure washing, a strong alkali solution, or solvent to clean up Requires cleanup with water while wet; more difficult to clean up once dry May be easily removed from equipment and overspray areas by a strong stream of water
Erosion Control Effectiveness		Percent reduction in soil loss over bare soil condition.
Degradability	**C** **P** **B**	Chemically degradable Photodegradable Biodegradable
Length of Drying Time		Estimated hours
Time to Effectiveness		Estimated days
Longevity	**S** **M** **L**	1 - 3 months 3 – 12 months > than 12 months
Application Mode	**L** **W** **H** **B** **M**	Applied by hand labor Applied by water truck Applied by hydraulic mulcher Applied by either water truck or hydraulic mulcher Applied by a mechanical method other than those listed above (e.g., straw blower)
Residual Impact	**L** **M** **H**	Projected to have a low impact on future construction activities Projected to have a moderate impact on future construction activities Projected to have a significant impact on future construction activities
Native	**N** **E**	Plant or plant material native to the State of California Exotic plant not native to the State of California
Runoff Effect	**+** **0** **-**	Runoff is decreased over baseline (bare soil) No change in runoff from baseline Runoff is increased over baseline

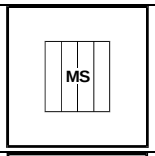
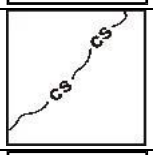
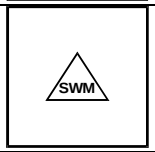
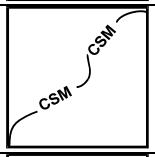
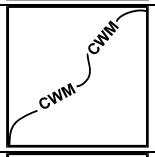
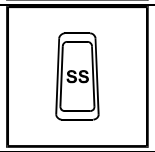
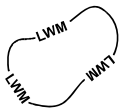
Appendix D
List of Standard BMP Symbols

WATER POLLUTION CONTROL BMP SYBMOLS	
SOIL STABILIZATION	
SS-2: Preservation of Existing Vegetation	
SS-3: Hydraulic Mulch (Note: Symbol -M- is generic Hydraulic Mulch symbol. Use linetype symbol -BFM- for Bonded Fiber Matrix, and -PSFM- for Polymer Stabilized Fiber Matrix)	
SS-4: Hydroseeding	
SS-5: Soil Binders	
SS-6: Straw Mulch	
SS-7: Geotextiles, Mats, Plastic Covers and Erosion Control Blankets	
SS-8: Wood Mulching	
SS-9: Earth Dikes/Drainage Swales and Lined ditches	
SS-10: Outlet Protection/Velocity Dissipation Devices	
SS-11: Slope Drains	

SS-12: Streambank Stabilization	
SEDIMENT CONTROL	
SC-1: Silt Fence	
SC-2: Sediment/Desilting Basin	
SC-3: Sediment Trap	
SC-4: Check Dams	
SC-5: Fiber Rolls	
SC-6: Gravel Bag Berm	
SC-7: Street Sweeping and Vacuuming	
SC-8: Sandbag Barrier	
SC-9: Straw Bale Barrier	
SC-10: Storm Drain Inlet Protection	

WIND EROSION CONTROL	
WE-1: Wind Erosion Control	
TRACKING CONTROL	
TC-1: Stabilized Construction Entrance/Exit	
TC-2: Stabilized Construction Roadway	
TC-3: Entrance/Outlet Tire Wash	
NON-STORMWATER MANAGEMENT	
NS-1: Water Conservation Practices	
NS-2: Dewatering Operations	
NS-3: Paving and Grinding Operations	
NS-4: Temporary Stream Crossing	
NS-5: Clear Water Diversion	

NS-6: Illicit Connection/Illegal Discharge	
NS-7: Potable Water/Irrigation	
NS-8: Vehicle and Equipment Cleaning	
NS-9: Vehicle and Equipment Fueling	
NS-10: Vehicle and Equipment Maintenance	
NS-11: Pile Driving Operations	
NS-12: Concrete Curing	
NS-13: Material and Equipment Use Over Water	
NS-14: Concrete Finishing	
NS-15: Structure Demolition Over or Adjacent to Water	

WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL	
WM-1: Material Delivery and Storage	
WM-2: Material Use	
WM-3: Stockpile Management	
WM-4: Spill Prevention and Control	
WM-5: Solid Waste Management	
WM-6: Hazardous Waste Management	
WM-7: Contaminated Soil Management	
WM-8: Concrete Waste Management	
WM-9: Sanitary/Septic Waste Management	
WM-10: Liquid Waste Management