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

CTSW-RT-24-425.07.01
Agreement No.: 43A0425 | Task Order 07

September 2024

California Department of Transportation
Division of Environmental Analysis, Stormwater Program
1120 N Street
Sacramento, California 95814
https://dot.ca.gov/programs/environmental-analysis/stormwater-management-program

Caltrans Technical Report Documentation Page

1.	Report No.:	CTSW-RT-24-425.07.01
2.	Type of Report:	Guidance Manual
3.	Title and Subtitle:	Stormwater Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual
4.	Report Date:	September 2024
5.	Copyright Owner(s):	California Department of Transportation
6.	Caltrans Project Coordinator(s):	Katharine Perrin and Andrew Bui
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8.	Contract No.:	43A0425
9.	Task Order No.:	07
10.	Sponsoring Agency Name and Address:	California Department of Transportation Division of Environmental Analysis Stormwater Program MS-27 1120 N Street Sacramento, CA 95814 www.dot.ca.gov/hq/env/stormwater/index.htm
11.	Caltrans Functional Reviewer(s):	
12.	Supplementary Notes:	None
13.	External Reviewer(s):	
14.	Key Words:	Stormwater, guidance, manual, SWPPP, WPCP, BMPs
15.	Distribution Statement:	
16.	No. of pages:	295
17.	Abstract:	The Manual presents guidance for California Department of Transportation (Caltrans) staff, consultants and contractors to use when preparing or reviewing SWPPPs or WPCPs for implementation in construction projects

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List of Abbreviations, Terms

ºC	Degrees Celsius
cfs	cubic feet per second
ºF	Degrees Fahrenheit
kg	kilogram
L	liter
lf	linear feet
mph	miles per hour
s	second
AC	Asphalt Concrete
ADL	Aerially Deposited Lead
AS	Approved Signatory
ASBS	Areas of Special Biological Significance
ASTM	American Society of Testing Materials
ATS	Active Treatment System
BAT	Best Available Technology
BCT	Best Conventional Technology
BMPs	Best Management Practice
BOD	Biochemical Oxygen Demand
CASQA	California Stormwater Quality Association
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
COC	Chain of Custody
CPESC	Certified Professional in Erosion and Sediment Control
CSMP	Construction Site Monitoring Program
CSWPPP	Conceptual Stormwater Pollution Prevention Plan
CWA	Clean Water Act
DFW	Department of Fish and Wildlife
DHS	Department of Health Services
DSA	Disturbed Soil Area
DTSC	Department of Toxic Substance Control
DWQ	Division of Water Quality
DAR	Duly Authorized Representative
ELAP	Environmental Laboratory Accreditation Program
ESA	Environmentally Sensitive Area
IH	Information Handout
JTU	Jackson Turbidity Units
LID	Low Impact Development
LRP	Legally Responsible Person
LTCGP	Lake Tahoe Hydrologic Unit Construction General Permit
LUP	Linear Underground/Overhead Projects
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer System
NAL	Numeric Action Level
NEL	Numeric Effluent Limitation
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System

NTU	Nephelometric Turbidity Units
NWS	National Weather Service
O&M	Operation and Maintenance
PCC	Portland Cement Concrete
POC	Pollutants of Concern
PoP	Probability of Precipitation
PRDs	Permit Registration Documents
QA/QC	Quality Assurance/Quality Control
QPE	Qualifying Precipitation Event
QPF	Quantitative Precipitation Forecast
QSD	Qualified SWPPP Developer
QSP	Qualified SWPPP Practitioner
RE	Resident Engineer
REAP	Rain Event Action Plan
ROWD	Report of Waste Discharge
RUSLE	Revised Universal Soil Loss Equation
RW	Receiving Water
RWQCB	Regional Water Quality Control Board
SAP	Sampling and Analysis Plan
SMARTS	Stormwater Multi Application Reporting and Tracking System
SSC	Suspended Sediment Concentration
SWAMP	Surface Water Ambient Monitoring Program
SWMP	Stormwater Management Program
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TMDL	Total Maximum Daily Load
TSS	Total Suspended Solids
USACOE	U.S. Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USGS	United States Geological Service
V:H	Vertical versus Horizontal
WDID	Waste Discharge Identification Number
WDR	Waste Discharge Requirement
WPCD	Water Pollution Control Drawing
WPC Manager	Water Pollution Control Manager
WPCP	Water Pollution Control Program
WRCC	Western Regional Climate Center

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 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 including the Caltrans Statewide NPDES Permit, the Construction General Permit and the Lake Tahoe Hydrologic Unit Construction General 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 definitions of terms used throughout this Manual.
- Appendix B provides a list of standard Caltrans Construction Site BMP symbols to be used on Water Pollution Control Drawings (WPCDs).

1.1.1 Stormwater Pollution Prevention Plan

The Stormwater Pollution Prevention Plan (SWPPP) is a document that addresses water pollution control for a construction project. The Construction General Permit (CGP) and the Lake Tahoe Construction General Permit (LTCGP) require 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 or the LTCGP and have a fully developed site SWPPP on-site prior to beginning any soil disturbing activities. Caltrans or the Regional Board may require the development of a SWPPP for projects with disturbed soil areas (DSAs) of less than one acre if it is determined that the project pose a significant water quality risk.

The CGP and the LTCGP require the development of a project-specific SWPPP. The SWPPP must include the information needed to demonstrate compliance with all the requirements of the CGP or the LTCGP. 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 Section 3 of this Preparation Manual. The SWPPP document must be prepared 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 qualifications of a Qualified SWPPP Practitioner (QSP).

Details pertaining to training requirements for the personnel responsible for SWPPP development and implementation are explained in Section 1.4.1. The SWPPP template in accordance with the Caltrans specifications allows for an alternate WPC manager to be included in case the site's WPC manager is unavailable. This alternate WPC manager must have the training and qualifications necessary to ensure the SWPPP is in full compliance. An assistant WPC manager for WPCP projects or a QSP delegate for SWPPP projects may be assigned to act under the supervision of the WPC manager. More than one assistant WPC manager or QSP delegate may be assigned.

If a project is located in a tribal land, a project must comply with USEPA CGP, and this preparation manual should not be used as the requirements are not the same as CGP or LTCGP. The contract special provisions will dictate specific requirements.

For Middle-Mile Broadband Network (MMBN) projects, Caltrans has prepared a common SWPPP, and each individual project prepares a Linear Construction Activity Notification (LCAN). This preparation manual does not include MMBN projects, see the MMBN user guide for specific requirements.

Projects that have a DSA between one (1) and less than five (5) acres might qualify for an erosivity waiver; see section 1.4.4 of this manual for more information. Also, if a construction project exceeds 1 acre of DSA but it is not hydrologically connected to Waters of the United States, it can be exempted from CGP coverage as it meets the Notice of Non-applicability (NONA) requirements. The project must be certified in SMARTS and a Technical Report must be submitted, see PPDG Section 1.4.4 for more information.

Any construction projects with a DSA of less than one acre (or with an erosivity waiver or a NONA) do not require coverage under the USEPA CGP, CGP or the LTCGP. However, Caltrans requires that a WPCP be prepared for construction projects with less than one acre of DSA. Caltrans specifications require that the project specific WPCP be prepared by a QSP. The WPC Manager responsible for implementation of the WPCP must have the same qualifications or as a minimum those of a QSP.

1.2 Federal Regulations

Federal regulations for controlling discharges of pollutants from municipal separate storm sewer systems (MS4), 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

The SWRCB issued a Statewide Stormwater NPDES Permit (Caltrans Permit) to Caltrans, to regulate stormwater and non-stormwater discharges from Caltrans properties and facilities, and discharges associated with operation and maintenance of the State highway system. The Caltrans Permit contains three basic requirements:

1. Caltrans must comply with the requirements of the CGP or the LTCGP;
2. Caltrans must implement a year-round program in all parts of the State to effectively control stormwater and non-stormwater discharges; and

3. Caltrans stormwater discharges must meet water quality standards through implementation of permanent and temporary (Construction Site) BMPs and other measures.

The Caltrans 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. See Table 1-5 of this manual to determine which Regional Board your project falls into and obtain link to the specific Basin Plan. Copies of the Caltrans Permit can be downloaded from the SWRCB website, at:

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

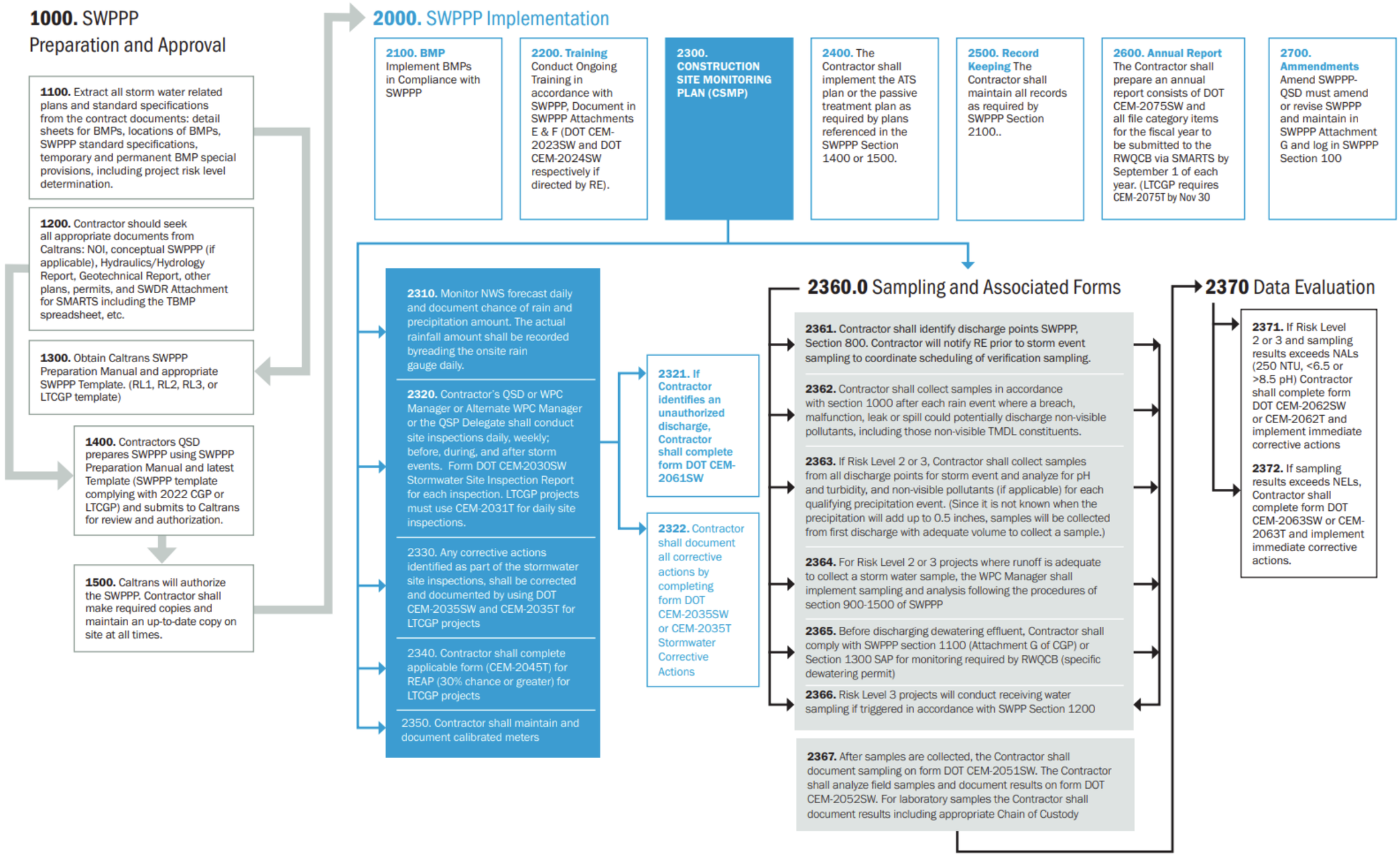


Figure 1-1. Caltrans SWPPP Process Flow Chart

For applicable construction projects, the Caltrans Permit requires projects to obtain coverage for stormwater discharges associated with construction activities under Order WQ 2022-0057-DWQ- NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (CGP), or for construction projects within the Lake Tahoe Hydrologic Unit, the Caltrans Permit requires Caltrans to obtain coverage for stormwater discharges associated with construction activities under the Lake Tahoe Construction General Permit (LTCGP) Order No. R6T-2016-0010 NPDES No. CAG616002. The CGP or LTCGP Permits impose electronic filing, notification, reporting and contractor requirements for construction projects, and imposes limitations on types of materials that may be used during construction which may have an impact on post-construction discharges. Furthermore, the Caltrans Permit requires Caltrans to meet water quality standards for any discharges from a site through implementation of treatment BMPs and other measures. The Caltrans Permit requires Caltrans to install best management practices and controls specific to construction activities including at pavement grinding (Portland cement concrete or asphalt concrete) stockpiles to prevent: (1) stormwater run-on to, and run-off from, pavement grindings stockpiles, and (2) discharges of leachate, polluted stormwater, and non-stormwater.

This manual does not intend to include all permit requirements. For information and complete listing of all requirements, refer to the Caltrans, the CGP or the LTCGP Permits.

Caltrans has developed the Stormwater templates to comply with the requirements of the Caltrans Permit, the CGP and the LTCGP. Table 1-1 shows where Caltrans Permit requirements are incorporated into the SWPPP.

Table 1-1. Caltrans Permit Requirements

Caltrans Permit Reference	Requirement	SWPPP Section
C3.3	SWPPP contains all elements required in the Construction Stormwater General Permit(CGP) and Lake Tahoe Construction General Permit(LTCGP)	100 – 2100 and 100-900 respectively
C3.3.1	Construction related activities will obtain coverage under the CGP	100-2100
C3.3.1	Construction related activities in the Lake Tahoe Hydrologic Unit will obtain coverage under the LTCGP	100-900 and Tahoe SWPPP Template
C3.3.1	Construction related activities not subject to the CGP are required to implement BMPs to control the discharge of pollutants to the Maximum Extent Practicable (MEP) and will implement region specific WDRs	Section 4 of this Manual, WPCP template
C3.3.2	The SWPPP contains RWQCB WDR requirements for projects that reuse Aerially Deposited Lead (ADL). (Applicable only for projects that stockpile, dispose, track, transport and/or final placement of ADL soils.)	300
C3.3.5.1	SWPPP BMPs will not constitute a hazard for wildlife	500
C3.3.5.2	SWPPP will utilize wildlife friendly 100 percent biodegradable erosion control products wherever feasible	600

Caltrans Permit Reference	Requirement	SWPPP Section
C3.4	Industrial facilities as defined in the Statewide Industrial General Permit (IGP) will obtain coverage under the IGP for each batch plant and industrial facility (please check with your NPDES Coordinator to determine applicability in your District)	IGP site-specific SWPPP

1.4 Construction Stormwater General Permits

The Caltrans Permit requires Caltrans projects to comply with the Construction Stormwater General Permit and/or the Lake Tahoe Construction General Permit. In 2022, the SWRCB adopted "NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order WQ 2022-0057-DWQ, NPDES No. CAS000002)", commonly referred to as Construction General Permit (CGP). Summaries of the significant aspects of the CGP Order WQ 2022-0057-DWQ, NPDES No. CAS000002 are listed in Table 1-2.

Table 1-2. Significant Aspects of the CGP

Aspect	Summary
Qualifications for Certification and Training Requirements	Requires that the QSD, QSP and other stormwater compliance staff 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 erodibility of soil and receiving water impairments.
Receiving Water Limitations	Requires construction –related activities that cause or contribute to an exceedance of a water quality standard must be addressed.
Effluent Standards and Monitoring	Requires effluent monitoring for pH and turbidity in stormwater discharges from Qualifying Precipitation Events (QPEs). Monitoring is used to evaluate compliance with Numeric Action Levels (NALs) and Numeric Effluent Limitations (NELs) included in the GGP.
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.
Active Treatment System (ATS) Requirements	Discharges choosing to implement an ATS on construction site shall comply with all the requirements of CGP Attachment F.
Passive Treatment Technologies Requirements	Discharges choosing to implement Passive Treatment Technologies on construction site shall comply with all the requirements of CGP Attachment G.

Aspect	Summary
Total Maximum Daily Load (TMDL) Implementation Requirements	Projects that discharge to TMDL watershed or waterbody with a pollutant applicable to construction shall comply with the requirements of CGP Attachment H.
Areas of Special Biological Significance (ASBS) Requirements	Dischargers who have been granted a California Ocean Plan exception for discharges to an ASBS shall comply with the requirements of CGP Attachment I.
Dewatering Requirements	Dischargers with dewatering activities not subject to a separate NPDES permit shall comply with the requirements of CGP Attachment J.
Annual Reporting	Requires all projects with an active WDID number for at least 90 days within the reporting 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, to avoid, minimize and/or mitigate post-construction stormwater runoff impacts.

In 2016, the Lahontan Regional Board adopted “General Waste Discharge Requirements (WDRs) and NPDES Permit for Storm Water Discharges Associated with Construction Activity in The Lake Tahoe Hydrologic Unit, Counties of Alpine, Eldorado, And Placer”, commonly referred to as the Lake Tahoe Construction General Permit (LTCGP) Order No. R6T-2016-0010 NPDES No. CAG616002. Summaries of the significant aspects of the LTCGP are listed in Table 1-3.

Table 1-3. Significant Aspects of the LTCGP

Aspect	Summary
Qualifications for Certification and Training Requirements	Requires that the QSD, implementer and inspector have documented qualifications and training. Requires a QSP Management Plan to show how QSP will meet all requirements. See Section 1.4.1 for elaboration of training requirements.
Receiving Water Limitations	Requires construction –related activities, wastes and materials that cause or contribute to an exceedance of a water quality standard must be addressed.
Effluent Standards and Monitoring	Requires effluent monitoring for turbidity in stormwater discharges. Monitoring is used to evaluate compliance with NELs and NAL for pH included in the General Permit.
Numeric Effluent Limits	Includes Maximum Daily Effluent Limitations for Discharge to Surface Waters or MS4s for Total Nitrogen, Total Phosphorus, Total Iron, Turbidity, Grease and Oil.
Monitoring, Sampling, Reporting and Record Keeping	Requires visual site monitoring and monitoring effluent for water quality standards. The LTCGP has specific reporting and record keeping requirements.
Minimum Requirements Specified	Imposes and specifies minimum BMPs requirements.
REAP	Requires projects to develop and implement a REAP that is designed to protect all exposed areas of the project within 24 hours prior to any anticipated precipitation as rainfall.

Aspect	Summary
Active Treatment System (ATS) Requirements	Dischargers choosing to implement an ATS on construction site shall comply with all the requirements of LTCGP Attachment E.
Annual Reporting	Requires all projects that are enrolled to submit information and annually certify that the project has remained in compliance. Must be submitted annually on or before November 30.
Post-Construction Stormwater Performance Standards	Must meet the requirements in the respective MS4 permits. Dischargers shall implement Low Impact Development (LID) techniques. At a minimum, permanent stormwater infiltration facilities must be designed and constructed to infiltrate runoff generated by the 20 year, 1-hour storm which equates to approximately one inch of runoff during a 1-hour period.
Final Report	All requirements of the Annual Report and any modifications to the proposed stormwater collection treatment, or disposal facilities or restoration work, changes in amount of impervious area.
Restoration Projects	Specific Pre- and Post-project requirements as outlined in Section IX .

The Regional Water Boards are responsible for implementation and enforcement of the CGP and the LTCGP. Therefore, the CGP and the LTCGP recognize 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 and the LTCGP.

1.4.1 Qualifications for Certification and Training Requirements

The CGP and the LTCGP require certification of the SWPPP and mandates that all persons responsible for implementing the requirements of the CGP and the LTCGP 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 certifications required by the CGP or the LTCGP. Moreover, the QSD must have Caltrans approved stormwater management training described on the Department's Construction Stormwater and Water Pollution Control website.

The Caltrans specifications outline the requirements for field implementation. Table 1-4 below provides a general listing of stormwater staff who can implement water pollution control requirements along with their minimum qualifications required.

Table 1-4. Caltrans General Water Pollution Control Field Requirements

Stormwater Document		Minimum Certification
SWPPP	WPCP	
WPC Manager	WPC Manager	QSP
Alternate WPC Manager	Alternate WPC Manager	QSP
QSP Delegate	Assistant WPC Manager	None

1.4.1.2 Training Requirements

The CGP and the LTCGP require training for all individuals responsible for:

- Activities associated with compliance with the CGP or the LTCGP,
- BMP installation, maintenance and repair, and
- 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 involved in WPC work, including project managers, supervisory personnel, and subcontractor's employees, must be trained in the following subjects:

- Water pollution control rules and regulations
- 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 meetings that cover:

- Deficiencies and corrective actions for WPC practices,
- WPC practices that are required for work activities during the week,
- Spill prevention and control,
- Material delivery, storage, use, and disposal,
- Waste management, and
- Non-stormwater management procedures.

An assistant WPC manager for WPCP projects or a QSP delegate for SWPPP projects may be assigned to act under the supervision of the WPC manager to inspect, repair, and maintain WPC practices, collect water quality samples, and record water quality data. There may be more than one assistant WPC manager or QSP delegate.

The WPC manager must ensure that the assistant WPC manager or QSP delegate has a competent understanding of visual inspections, sampling procedures, SWPPP and WPC implementation tasks prior to delegating the responsibility to the individual.

The training for assistant WPC managers must comply with the requirements for WPC manager training including obtaining a certificate by completing the 8-hour WPC manager training and reviewing updates, revisions, and amendments to the training. The assistant WPC Manager and the QSP delegate must be trained by the WPC Manager. Training for the assistant WPC managers and the QSP delegate who inspect, repair, and maintain WPC practices, collect water quality samples, and record water quality data must include review of the sampling and analysis plan and the management, and *Construction Site Monitoring Program (CSMP) Guidance Manual*, health and safety review, and sampling simulations.

Sampling and analysis training requirements are explained in this manual and further discussed in the Caltrans *CSMP 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 and the LTCGP 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 that is regulated under the CGP is the calculation of the project's sediment risk and receiving water risk during periods of Disturbed Soil Areas (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.

The project's risk level determination(s) must be reported to the SWRCB as part of the Permit Registration Documents (PRDs) via the Stormwater Multi-Application Reporting and Tracking System (SMARTS). If the project is determined to have more than one Risk Level, it is up to the discretion of the RWQCB to break the project into separate levels of implementation. The calculation can be done within SMARTS or independently and uploaded to SMARTS. SMARTS will assign the higher Risk Type to the entire site for any site spanning two or more planning watersheds.

The project's Risk Level will be identified in the contract special provisions. 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 increases the 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 Rainfall Erosivity Waiver

Projects that have a DSA between one (1) and less than five (5) acres and a duration of less than one year may qualify for a rainfall erosivity waiver under the CGP if the rainfall erosivity factor (R factor) is less than a value of 5. The R factor takes into account project location, length of construction period, and time of year, so projects that begin and complete construction within a short period are likely to qualify for a rainfall erosivity waiver.

Projects that qualify for a rainfall erosivity waiver do not need to prepare a SWPPP but must file proper PRD documents via SMARTS. The project will be issued a waiver identification number which must be posted on-site for the duration of construction. In addition, a WPCP must be

prepared by the Contractor as outlined in Section 4 of this Manual. Caltrans specifications do not allow jobs to start site activities until (1) the WPCP is authorized and for projects with an erosivity waiver, (2) a waiver identification number has been issued.

The R factor is calculated using the *EPA Rainfall Erosivity Calculator* at:

https://lew.epa.gov/

Although use of the EPA Rainfall Calculator for Erosivity Waiver and the R Factor calculation is required by the CGP, the link is not always available. Use the manual tabular method as described in EPA 833-F-00-014 USEPA Fact Sheet 3.1 available at:

https://www.epa.gov/sites/production/files/2015-10/documents/fact3-1.pdf

1.4.2.2 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 sediment risk determination is defined as the relative amount of sediment that can be discharged, given project and location details. The receiving water risk is determined by assessing the risk sediment discharges pose to receiving waters.

Caltrans has stand-alone guidance for assessing risk required by the CGP. The CGP is a risk-based permit that establishes three levels of environmental risk possible for a construction site. Caltrans PEs and Consultants should use this guidance to determine if a project has a Risk Level 1, 2 or 3. The CGP Risk Level determination quantifies sediment and receiving water characteristics and uses these results to determine the project's overall Risk Level. Highly erodible soils, in higher rainfall areas, on steep slopes increase the 'sediment risk'. Monitoring and reporting requirements increase as the Risk Level goes from 1 to 3. Refer to the Caltrans *Project Risk Level Determination Guidance* document at the following web page for information on determining the project risk level:

https://dot.ca.gov/programs/design/hydraulics-stormwater/bsdd-project-risk-level-determination-guidance

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

Receiving Water Risk	Sediment Risk Low	Sediment Risk Medium	Sediment Risk High
Low	Level 1	Level 2	Level 2
High	Level 2	Level 2	Level 3

Risk Level requirement details are included in Table 1-6.

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 and the LTCGP 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 stormwater 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 and the LTCGP require that projects ensure 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-stormwater 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 RWQCB, the California Toxics Rule (CTR), the National Toxics Rule (NTR), and the Ocean Plan. Projects that discharge to watersheds identified in a U.S. EPA approved total maximum daily load (TMDL) with a waste load allocation assigned to construction stormwater sources; and have one or more TMDL-specific pollutant sources present on-site with the potential to enter construction stormwater discharge shall comply with the applicable TMDL implementation requirements in Attachment H of the CGP, including TMDL-specific additional BMPs and site pollutant modeling, numeric action levels, and/or numeric effluent limitations. A list of applicable TMDLs is in Table A-1, Attachment A of the CGP. TMDL requirements specific to projects are also identified in the special provisions.

Projects can determine the applicable water quality standards by contacting the RWQCB 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 RWQCB for regional plans or the SWRCB for statewide plans. A map displaying the different RWQCB areas is provided as Figure 1-2. Additional information is provided in the Table 1-5.

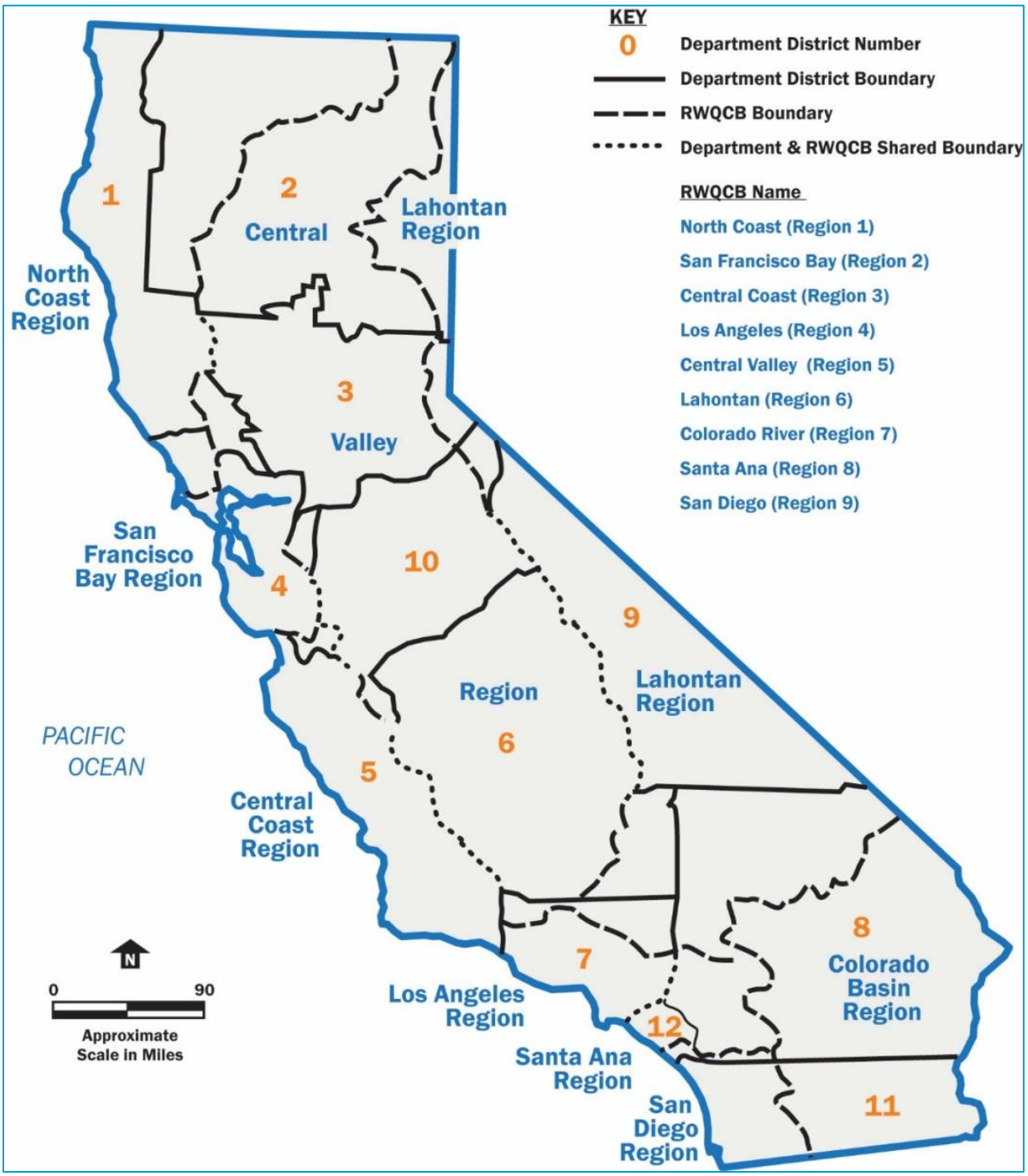


Figure 1-2. RWQCB Map

Table 1-5. 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, 6 & 10	http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/
6	Lahontan	2,3,8, 9 &10	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&12	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 and the LTCGP. The narrative effluent limitations require that stormwater discharges and authorized non-stormwater discharges regulated by the CGP or LTCGP shall not contain a hazardous substance equal to or in excess of reportable quantities established in 40 Code of Federal Regulations §§ 117.3 and 302.4, unless a separate NPDES Permit has been issued to regulate those discharges. These regulations 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-stormwater discharges regulated by the CGP as shown in Table 1-6 and Table 1-7 for LTCGP 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.

Table 1-6. Effluent Standards and Limitations Required under the CGP[a]

Parameter	Test Method	Discharge Type	Min. Detection Limit	Units	Numeric Action Level	NEL	Receiving Water Monitoring Trigger
pH	Field test with calibrated portable instrument	Risk Level 2	0.2	pH Units	Lower NAL= 6.5 Upper NAL= 8.5	N/A	N/A
pH	Field test with calibrated portable instrument	Risk Level 3	0.2	pH Units	Lower NAL= 6.5 Upper NAL= 8.5	N/A	Lower NEL= 6.0 Upper NEL= 9.0
pH	Field test with calibrated portable instrument	For ATS discharges	0.2	pH Units	N/A	Lower = 6.0 Upper= 9.0	N/A
Turbidity	EPA 0180.1 and/or field test with calibrated portable instrument	Risk Level 2	1	NTU	250 NTU	N/A	N/A
Turbidity	EPA 0180.1 and/or field test with calibrated portable instrument	Risk Level 3	1	NTU	250 NTU	N/A	500 NTU
Turbidity	EPA 0180.1 and/or field test with calibrated portable instrument	For ATS discharges	1	NTU	N/A	10 NTU for Daily Weighted Average & 20 NTU for any Single Sample	10 NTU for Daily Weighted Average & 20 NTU for any Single Sample

Parameter	Test Method			Discharge Type		Min. Detection Limit	Units	Numeric Action Level	NEL	Receiving Water Monitoring Trigger
Residual Chemicals	U.S. EPA-approved test method for specific pollutant parameter			For ATS discharges		< 10% MATC for most sensitive species to chemical used	Varies	N/A	< 10% MATC for most sensitive species to chemical used	N/A
Residual Chemicals	U.S. EPA-approved test method for specific pollutant parameter	TMDL or other CT ROW discharges	Varies	Varies	Varies	Varies	N/A			

a. For TMDL-related Pollutants with a project of any Risk Level, Refer to Table H-2 in Attachment H of the CGP for Effluent Standards or the contract special provisions.

Table 1-7. Effluent Standards and Limitations Required under the LTCGP

Parameter	Test Method	Discharge Type	Min. Detection Limit	Units	Numeric Action Level	NEL	Receiving Water Monitoring Trigger
pH	Field test with calibrated portable instrument	All SWPPP Projects	0.2	pH Units	Lower NAL= 6 Upper NAL=9	N/A	Lower NEL= 6.0 Upper NEL=9.0
Turbidity	EPA 0180.1 and/or field test with calibrated portable instrument	All SWPPP Projects	1	NTU	N/A	20	N/A

Parameter	Test Method	Discharge Type		Min. Detection Limit		Units	Numeric Action Level	NEL	Receiving Water Monitoring Trigger
Turbidity	EPA 0180.1 and/or field test with calibrated portable instrument	For ATS discharges		1		NTU	N/A	10 NTU for Daily Weighted Average & 20 NTU for any Single Sample	10 NTU for Daily Weighted Average & 20 NTU for any Single Sample
SSC	ASTM Method D3977-97	(If Receiving Water Monitoring Trigger is Exceeded)		5		mg/L	N/A	N/A	N/A
Total Nitrogen (as N)	See Table Notes	All SWPPP Projects	See Table Notes	mg/L	N/A	0.5	N/A		
Total Phosphorus (as P)	See Table Notes	All SWPPP Projects	See Table Notes	mg/L	N/A	0.1	N/A		
Total Iron	See Table Notes	All SWPPP Projects	See Table Notes	mg/L	N/A	0.5	N/A		
Grease and Oil	EPA 1664 w/silica gel treatment (SGT)	All SWPPP Projects	2	mg/L	N/A	0.5	N/A		

Notes: The units, test method, and minimum detection limit shall be identified in the discharger's Construction Site Monitoring and Reporting Program for each non- visible pollutant identified by the discharger. Analytical methods shall be in accordance with 40 CFR Part 136. Monitoring for non-visible pollutants shall be conducted as specified in section IV.C.2 of the Construction Site Monitoring and Reporting Program (when suspected in the discharge or when the potential to discharge has been determined).

The SWPPP must minimize or prevent pollutants in stormwater discharges and authorized 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.

Risk Level 2 projects that pose a medium risk to water quality are subject to technology-based NALs for pH and turbidity. Risk level 3 projects that pose a high risk to water quality are subject to technology-based NALs for pH and turbidity.

ATS discharges are subject to NELs for pH, turbidity, and residual chemicals. Residual chemicals are coagulants or flocculants used in ATS, see Attachment F of the CGP for additional requirements.

Watersheds listed for TMDLs may have exceedance limits for NALs and NELs. If nonvisible pollutant sampling is triggered for the TMDL-listed constituents, then reporting the exceedance is required, as well as reporting for the unauthorized discharge. See Appendix A Table A-1 and Attachment H of the CGP for additional requirements.

1.4.4.2 Effluent Monitoring

CGP Risk Level 2 and 3 projects must perform sampling and analysis of effluent discharges to characterize discharges associated with construction activity from the entire project disturbed area. The same is true for all SWPPP projects in the Lake Tahoe Hydrologic Unit. Samples must be collected for a Qualifying Precipitation Event (QPE) under the CGP. A QPE is any weather pattern that is forecast to have a 50 percent or greater Probability of Precipitation (PoP) and a Quantitative Precipitation Forecast (QPF) of 0.5 inches or more within a 24-hour period. The event begins with the 24-hour period when 0.5 inches has been forecast and continues on subsequent 24-hour periods when 0.25 inches of precipitation or more is forecast. A Qualifying Rain Event (QRE) in the Lake Tahoe Hydrologic Unit is any rain event that causes stormwater runoff from the project site. Sampling results are part of the Annual Report and must be reported to the Resident Engineer (RE).

1.4.5 Monitoring, Sampling, Reporting and Record Keeping

The CGP and LTCGP require that a 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 for projects regulated under the CGP. Sampling and Analysis Plan (SAP) requirements for each risk level are listed below in Table 1-8 and requirements for projects regulated under the LTCGP are listed in Table 1-9.

Table 1-8. Monitoring Requirements for CGP

Risk Level	Visual Inspection	Non-visible Pollutant Sampling	Effluent Sampling	Receiving Water Sampling
1	QSD-Specific,, weekly, pre-QPE, during QPE, post-QPE, and non-stormwater	SAP required	Where applicable	Not required
2	QSD-Specific, weekly, pre-QPE, during QPE, post-QPE, and non-stormwater	SAP required	pH and turbidity SAP required	Not required

Risk Level	Visual Inspection	Non-visible Pollutant Sampling	Effluent Sampling	Receiving Water Sampling
3	QSD-Specific, weekly, pre-QPE, during QPE, post-QPE, and non-stormwater	SAP required	pH, turbidity SAP required	If receiving water monitoring trigger exceeded (pH, and Turbidity). SAP required
N/A-WPCP	Weekly, during, post-storm event. Stormwater and non-stormwater	N/A	N/A	N/A

For TMDL-related pollutants with a project of any Risk Level, refer to Table H-2 in Attachment H for sampling requirements and the contract special provisions.

The QSD is required to perform the following site inspections: 1) Once within 30 days of construction activities starting, 2) Once withing 30 days of a new site QSD, 3) Once between August 1 and October 31 of each year, 4) Once between January 1 and March 31 of each year, 5) Within 14 calendar days after an NAL exceedance, 6) Within 14 calendar days of an inactive project status, 7) As requested by Water Board staff.

The QSP must perform the following visual inspections: 1) once every calendar month, 2) once within 2 business days of a storm event 3) Within 14 days after a NAL exceedance, and 4) before the final NOT or COI of all or part of the site. A QSP delegate cannot perform the above listed QSD and QSP inspection reports.

Other routine Visual Inspections may be performed by the QSD, QSP, or QSP delegate. A pre-, during storm event, or post-QPE inspection also satisfies the weekly visual inspection requirement. Visual inspections are not required during dangerous weather conditions or when access to the site is infeasible (e.g., due to snow accumulation) or unsafe.

Table 1-9. Monitoring Requirements for LTCGP

Visual Inspection	Non-visible Pollutant	Effluent	Receiving Water
Non-stormwater, daily, weekly, pre-storm, during (daily storm BMP) and post-qualifying rain events.	SAP required	pH, turbidity and ATS SAP required	If receiving water monitoring trigger exceeded (pH and Turbidity), bioassessment for sites 30 acres or greater. SAP required

1.4.6 Visual Site Monitoring

All construction projects are required to conduct non-stormwater visual site monitoring inspections as a part of all routine visual inspections. 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-stormwater discharges and identification of their sources. BMPs must be assessed for effectiveness and integrity. Observations of stormwater or non- stormwater conveyed through and discharged from 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.

The specific requirements under the CGP or the LTCGP are included in the Construction Site Monitoring Guidance Manual (CSMGM). 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. The contractor is required to complete CEM forms to document site operations, BMPs and visual observations and test results.

CEM Form Number and Name	Inspection by		Required by		
	CT	Contractor Staff	SWPPP (CGP)	SWPPP (LTCGP)	WPCP
DOT CEM -2030SW Stormwater Site Inspection Report Form	Yes	QSD, QSP or trained QSP Delegate	Yes	Yes	Yes
CEM-2031T, Daily Stormwater Site Inspection Report - Lake Tahoe Hydrologic Unit (PDF)	Yes	QSD, QSP		Yes	
DOT CEM -2032SW Permanent Erosion Control Establishment (PECE) Report Form	Yes	QSD	Yes	Yes	Yes
DOT CEM -2033SW Dewatering Operations Sampling Report Form1	Yes	QSD or QSP	Yes		Yes
DOT CEM -2035SW Stormwater Corrective Actions Summary Form	Yes	QSD, QSP or trained QSP Delegate	Yes		Yes
CEM-2035T, Stormwater Corrective Actions Summary – Lake Tahoe Hydrologic Unit (PDF)	Yes	QSD or QSP		Yes	
CEM-2045T, Rain Event Action Plan—Lake Tahoe Hydrologic Unit (PDF)	Yes	QSD or QSP		Yes	
DOT CEM -2090SW Notice of Termination and Final Inspection Report Form	Yes	QSD or QSP	Yes		No

The CSMP, required for SWPPP projects, must include the SAPs necessary to monitor the effectiveness of the WPC practices and meet the CGP and LTCGP monitoring requirements. As many as six separate SAPs may be required as part of the CSMP. All CSMPs shall have the following SAPs:

- General,
- Non-visible Pollutants, and
- Non-stormwater Discharges

If applicable, the CSMP will include SAPs:

- Stormwater pH and Turbidity,
- Receiving water monitoring,
- Monitoring Required by Regional Board,
- Monitoring of ATS
- Monitoring of Passive Treatment

The SAPs must include or reference 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, O&M of the sampling equipment that will be used for sample collection. Procedures that must be described in the SAPs include:

- Laboratory selection and certification,
- Sampling equipment, containers, sample preparation, collection, holding times, labeling and preservation,
- Sample collection and chain-of-custody (COC) documentation,
- Collection documentation, including the names of personnel collecting samples and their training
- Field measurement methods and parameters,
- Analytical methods,
- Data management and reporting,
- Quality assurance and quality control,
- Precautions from the construction site health and safety plan, including procedures for collecting samples during precipitation, and
- Procedures for collecting and analyzing samples at all required locations and times.

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 on the SWRCB's website at:

https://www.waterboards.ca.gov/drinking_water/certlic/labs/

Sample collection or no sample collection must be documented during precipitation. The SAPs must describe the conditions under which you are not required to collect samples, such as dangerous weather, flooding or electrical storms, times outside of normal working hours, however, documentation must show/support the weather conditions were too dangerous to sample. To support QPE or QRE reporting, a rain gauge must be installed and maintained on the project site.

Sample locations must be identified on SWPPP drawings (WPCDs). If discharge or sampling locations change due to work activities or a change in site conditions, the QSD in coordination with the WPC manager must update the potential sampling locations list and update the WPCDs.

1.4.6.2 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 (POC) 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. Examples of construction non-visible pollutants include, but are not limited to, bacteria and viruses, fertilizers or nutrients, herbicides, greases, lubricants, oils, metals, synthetic chemicals, and pesticides. The CSMGM includes tables of construction materials and the constituents of concern that might require sampling.

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. When materials or wastes are not stored under watertight conditions, sampling for non-visible pollutants such as, but not limited to, asbestos or Poly Chlorinated Biphenyls (PCBs) is required. Some of these constituents might be present in demolition sites and minimizing their exposure can reduce potential for sampling. 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. Chemical applications including fertilizer, pesticide, herbicide, methyl methacrylate concrete sealant, or nonpigmented curing compound must also be included in the SAP.

The SAP for non-visible pollutants must include sampling procedures and a schedule for sample collection. Specifically, sample collection should be conducted as follows: during the first eight hours of QPEs that generate runoff, during work hours, from each discharge location hydraulically down-gradient from the observed triggering event or location, 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 DSAs within the project site limits. Additional samples should be collected for each 24-hour period that there is discharge until the necessary corrective actions are completed to control further discharge of the pollutant(s).

1.4.6.3 Receiving Water Monitoring

For Risk Level 3 projects receiving water monitoring triggers were identified for pH and Turbidity as shown in Table1.4-5. Projects with temporary Active Treatment Systems (ATS) that discharge directly into a receiving water, are subject to NELs. When a receiving water monitoring trigger or ATS NEL is exceeded, upstream and downstream receiving water monitoring for pH, turbidity, residual chemicals is required. For TMDL-related pollutants with a project of any Risk Level, refer to Table H-2 in Attachment H of the CGP for sampling requirements. The sampling locations must be indicated on the WPCDs.

1.4.6.4 Bioassessment Monitoring

Bioassessment monitoring is required only for LTCGP projects that 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 found online at:

https://www.waterboards.ca.gov/water_issues/programs/swamp/bioassessment/

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

1.4.6.5 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 or if the project is in the Lake Tahoe Hydrologic Unit. Applicable records that must be 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, TMDLs and reporting units, and the analytical techniques or methods used
- Rain gauge readings taken at project site
- Quality assurance/quality control records and results which must document the:

  - Sample ID number
  - Contract number
  - Constituent
  - Reported value
  - Analytical method
  - Method detection limit
  - Reported limit
- Non-stormwater discharge visual monitoring inspections and stormwater discharge visual monitoring inspection records
- Visual inspection and sample collection exception records
- Photographs of areas of concern, 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 & Wildlife permits, US Army Corps of Engineers (USACOE) permits, RWQCB 401 Certifications, and Docket No. ESPO-SMA 15/16-001 Soil Management Agreement for Aerially Deposited Lead-Contaminated Soils with the DTSC (ADL Agreement), ADL Agreement notification, and RWQCB waste discharge requirements for reuse of aerially deposited lead, etc.

1.4.6.5.1 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 to the RE by completing and submitting DOT CEM-2052SW Storm Event Sampling or Receiving Water Monitoring Report. 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 2022 Quality Assurance Program Plan. A separate Stormwater Sample Laboratory Analysis Report shall be completed for each sampling location daily.

1.4.6.5.2 NAL and NEL Exceedance Report

If the effluent sample exceeds an NAL for projects or an NEL for projects with ATS or TMDLs, then the RE must be notified and an NAL or NEL Exceedance Report must be submitted within 48 hours. When the field sampling is conducted by the QSP delegate, the QSP must be notified within 24 hours of the exceedance. For projects with TMDL-specific sampling requirements, analytical results shall be submitted within 10 days of receiving results above an applicable numeric action level.

1.4.7 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 minimum required BMPs (based on project’s Risk Level) for:

- Good Site Management “Housekeeping”
- Non-stormwater Management
- Erosion Control

- Sediment Controls
- Run-on and Runoff Controls

The CGP and the LTCGP specify requirements for BMP inspection, maintenance and repair. Inspections must be performed weekly and at least once each 24-hour period during extended QPEs or QREs. Some BMPs need to be inspected daily under the CGP, as well as, all BMPs need to be inspected daily under the LTCGP. Additional inspections to be performed solely by the QSD and/or QSP are also required. Caltrans specifications and plans, and SWPPP Section 600 include the CGP and the LTCGP minimum required BMPs.

1.4.8 Rain Event Action Plan

For projects subject to the LTCGP only, a 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. A REAP is required during any period in which construction activity is ongoing. A WPC Manager must submit a REAP no later than 24 hours prior to any weather pattern that is forecast to have a 30 percent or greater chance of producing precipitation as rainfall in the project area. The QSP shall obtain, for each day of construction operations, a printed copy of precipitation forecast information from the National Weather Service (NWS) Forecast Office and keep the copy with the SWPPP monitoring records.. NWS real-time forecasts are available online at:

https://www.weather.gov/

The REAP must be available on-site at least 48 hours prior to a forecasted storm event. A printed copy of each REAP (CEM-2045T) 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
  - Stormwater 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 DSAs
- Stockpile management
- Corrective actions for deficiencies identified during pre-storm visual inspection
- Time of crew deployment

– 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 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.

1.4.9 ATS Requirements

An ATS is one that uses chemical coagulant, chemical flocculation, or electrocoagulation in order to reduce turbidity caused by fine suspended sediment. ATS may be 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.

The CGP and the LTCGP 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 CGP also establishes an NEL for residual chemicals used in the ATS. 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 and the LTCGP require that all ATS operators have training specific to using ATS's liquid coagulants. Additional information is included in the PPDG Section 6.4.4.4 and its Appendix C.3.

1.4.10 Passive Treatment Technologies Requirements

Passive treatment is the application of natural or synthetic chemicals and products to reduce turbidity in discharges through coagulation and flocculation. Passive treatment does not rely on computerized, enclosed systems with pumps, filters, and real-time controls. Passive treatment

may include pumps where they are necessary to move water around the construction site. Passive treatment products are available in a variety of forms and may be land-applied for soil stabilization (e.g., bonded fiber matrixes, hydromulches) or water-applied for sediment removal (e.g., liquid treatment chemicals, powders, slow-releasing solid blocks/socks).

Passive treatment chemicals and products bind fine soil particles together through chemical ionic processes allowing heavy particles to settle out of solution without a fully mechanical or engineered system. Passive treatment technologies in the construction industry typically use coagulants and flocculants such as polyacrylamides (PAMs).

Passive treatment is used to reduce the turbidity in construction stormwater runoff. These products are a cost-effective method of reducing turbidity for compliance with turbidity numeric action levels of the CGP, especially compared to active treatment systems. Examples of chemically enhanced BMPs used to meet CGP turbidity numeric action levels are blocks, wattles, or water-applied products containing flocculants and coagulants.

Many types of passive treatment chemicals are toxic to fish and other aquatic organisms. Cationic PAM-based flocculants are acutely toxic to aquatic species in small quantities and are neurotoxins. Other flocculant products such as anionic PAM-based flocculants are chronically toxic to aquatic species in large quantities. Consequently, PAMs should not be used on slopes that flow into a water body without passing through a sediment trap, sediment basin, or other sediment controls.

Passive Treatment under the CGP is strictly used for the treatment of stormwater discharges generated from precipitation that falls on the construction area during a storm event. Other water generated from construction operations is considered non-stormwater and is not applicable without permit authorization and consideration of additional design parameters.

Under the CGP, Passive Treatment may be used in place of an ATS at the Dischargers option if conditions in the CGP for materials, monitoring, and post treatment are met.

1.4.11 TMDL Implementation Requirements

Attachment H of the CGP includes list of applicable TMDLs and the associated pollutant ranging from sediment, temperature, bacteria, metals, toxics and pesticides. There are specific requirements for projects within a TMDL watershed. These additional requirements can include:

- Specific erosion and sediment control
- Post-construction
- Flow estimate calculations
- Non-visible sampling (Section 1000 of the SWPPP) and subject to NAL/NELs (per table H-2).
- RUSLE2 modeling (Section 1902 of the SWPPP)

1.4.12 Dewatering Requirements

Dewatering operations can be included as part of the SWPPP if it falls under CGP attachment J. For specific dewatering requirements see Caltrans' *Field Guide to Construction Site Dewatering*.

1.4.13 Stormwater Annual Reporting Requirements

The Contractor must prepare a Stormwater Annual Report each year and submit it to Caltrans by July 15. The RE forwards it to the DCWSC who electronically submits it by September 1 of

each year to the SWRCB for all projects enrolled for more than one continuous three-month period (active for at least 90 days) under the CGP. 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. The LTCGP requires an Annual Report for all projects enrolled in Stormwater Multi Application Reporting and Tracking System (SMARTS) and it must be submitted by November 30 of each year.

1.4.14 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 and supporting information or explanation for all missed inspections, sampling, or compliance activities
- A summary of any Notice Of Violations of the General Permit issued by the Water Board 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 measured in inches (rain gauge)
- Visual inspection and sample collection exception records and reports that are determined by the Risk Level of the project site
- For projects requiring TMDL-specific sampling, a representative flow estimate from their construction site for at least one precipitation event that generates discharge within the reporting year for the Los Penasquitos Lagoon watershed.

1.4.15 Post-Construction Requirements

The CGP and LTCGP require stormwater performance standards that specifically address water quality and channel protection for forecasted 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 MS4 permit that has an authorized Stormwater Management Program (SWMP).

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 Caltrans Permit is an active MS4 permit that incorporates post-construction treatment control requirements specific to Caltrans projects statewide. Caltrans projects are therefore exempt from the post-construction requirements of the CGP. Non-Caltrans projects must still

comply with the CGP post-construction requirements (such as encroachment permits or locally funded projects). The projects' SWDR will provide the analysis and form the basis for the inclusion of appropriate Treatment (post-construction) BMPs. All projects subject to an active MS4 permit must upload post-construction plans, calculations, and other supporting documentation as an attachment in SMARTS. In addition to the plans, Caltrans projects supporting documentation can be found in the TMT Tab of the SWDR spreadsheet.

1.5 Stormwater Multiple Application and Report Tracking System

All projects subject to the CGP or LTCGP are required to upload relevant documents (including SWPPPs) to the online SMARTS developed and managed by the SWRCB. Typically, the DSWC, as the designated contact with the Water Board, uploads SMARTS entries, after the RE reviews and signs off on them. The Contractor's prepared documents such as the submitted SWPPP, REAPs, Inspection reports, Corrective Action Reports are reviewed and accepted by Caltrans and subsequently uploaded to SMARTS as required by the CGP, the LTCGP and/or the Caltrans Permit. Other reports such as effluent or non-visible sampling, Rainfall Erosivity Waivers, or IGP NOI might also be required based on site conditions or as directed by the RE.

Caltrans has developed a SMARTS manual to assist staff when filling or preparing PRDs or other SMARTS's submittals, it is located here:

https://dot.ca.gov/programs/construction/storm-water-and-water-pollution-control/manuals-and-handbooks

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 BMPs Manual* should be used as guidance for determining project site BMPs. Contract special provisions and plans may impose more stringent requirements on a project-by-project basis. Any significant 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 Stormwater Discharge

Stormwater discharges consist only of those discharges that originate from precipitation events. Stormwater is defined in the CFRs (40 C.F.R. § 122.26(b)(13)) as stormwater runoff, snowmelt runoff, and surface runoff and drainage. During precipitation events, stormwater picks up and transports pollutants into and through MS4s and ultimately to waters of the United States.

2.1.2 Non-Stormwater Discharge

Non-stormwater discharges consist of all discharges that do not originate from precipitation events. Generally, non-stormwater discharges to an MS4 are prohibited, conditionally exempt from prohibition, or regulated separately by an NPDES permit. The categories of conditionally exempt non-stormwater discharge are specified at 40 CFRs section 122.26(d)(2)(iv)(B)(1) and CGP list of Authorized Non-Stormwater Discharges listed in IV.A.

Non-stormwater discharges that are regulated by a separate NPDES permit are not subject to the discharge prohibition. Prohibited non-stormwater discharges include conditionally exempt discharges that are found to be a source of pollutants to waters of the United States. Illicit discharges must also be prohibited. An illicit discharge is defined in 40 CFRs section 122.26(b)(2) as "any discharge to a municipal storm sewer that is not composed entirely of stormwater except discharges pursuant to an NPDES permit (other than the NPDES Permit for discharges from the MS4) and discharges resulting from firefighting activities." Section 3.9 of the Caltrans Permit addresses non-stormwater discharge. Non-stormwater discharges to an MS4 with a discharge to an Areas of Special Biological Significance (ASBS) are subject to a different set of conditions as stated in Section 3.2 of the Caltrans Permit.

2.1.3 Disturbed Soil Area (DSA)

DSAs are areas of exposed, erodible soil that are within the construction limits and that result from construction activities. This can include access, staging, storage like stockpile areas. 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 by one of the following methods:
  - **70 percent final cover method**. When a uniform vegetative cover equivalent to 70 percent of the native background vegetation coverage has been established evenly over all disturbed and exposed areas of soil. In areas that naturally have low vegetative coverage (e.g. deserts), 70 percent of natural conditions of local undisturbed areas is acceptable. Photos of all site areas are required to verify compliance; or
  - **Revised Universal Soil Loss Equation (RUSLE or RUSLE2) method.** Computational proof required. Site conditions shall match values used in method computation. Photos of all site areas are required to verify pre-construction and post-construction conditions used in the computations; or
  - **Custom method**. Request approval from the Regional Water Board to use a method or analytical model other than RUSLE or RUSLE2 above to demonstrate that the site complies with the final stabilization requirements. Photos of all site areas are required to verify the custom method used.

2.1.4 Active Areas Inactive Areas, and Inactive Projects

Active Areas are construction areas where soil-disturbing work activities have occurred at least once within 14 days. **Inactive Areas** are areas where soil-disturbing work activities have not occurred within 14 days. The SWPPP applies to all areas and item work of the project. A water pollution control schedule must be submitted with the SWPPP and must be updated regularly to ensure all areas, item work and associated temporary BMPs are adequately installed, maintained and documented. The RE will conduct a review of the existing water pollution control schedule and active areas on a regular basis to determine if an inactive status should be applied to some DSAs.

Inactive Projects are projects where all construction activities are fully stabilized and will be suspended for 30 days or more. For inactive projects, visual inspection frequency may be reduced and sampling may be suspended. When projects begin or end inactive project status, the QSD shall prepare and submit to the RE an inactive project plan which includes:

- Updated schedule
- Site stabilization measures
- Construction activity status
- Revised site map with current site conditions
- Photographs showing stabilization WPC practices
- Changes to WPC management and inspections

The QSD also submits a DOT CEM-2080SW Change of Information (COI), processed by Caltrans through SMARTS to revise the SWPPP including the above revised site map and photographs. Upon RWQCB approval of the COI, sampling may be suspended and monitoring and inspections may be reduced as follows:

- A QSD shall visit the inactive project within 14 days of the approval of the COI to verify that the SWPPP is being implemented accordingly. If necessary, the QSD shall amend the SWPPP to address all new conditions not previously considered through a COI in SMARTS.
- A QSP or QSP delegate shall visually inspect the inactive project at least once per month and prior to and forecasted QPE. The inspection shall verify WPC practices are functioning in accordance with the SWPPP and implement corrective actions where necessary.

If the project or area becomes active again, a COI must be submitted to reactivate the project or area in SMARTS. All required inspections and sampling must take place, and a SWPPP amendment might be required.

2.1.5 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, break up slope lengths 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.

Risk Level 2 and 3 projects are required to implement additional erosion and sediment control BMPs for areas under active construction including designing and constructing cut and fill slopes in a manner to ensure slope stability and to minimize erosion including, but not limited to, these practices: reduce continuous slope length using terracing and diversions; reduce slope steepness; and roughen slope surfaces with large cobble or track walking.

Install linear sediment controls along the toe of the slope, face of the slope, and at the grade breaks of exposed slopes according to sheet flow lengths until the slope has reached Notice of Termination conditions for erosion protection. When infeasible to comply with Table 1 due to site-specific geology or topography, the QSD shall include in the SWPPP a justification for the use of an alternative method to protect slopes from erosion and sediment loss.

Table 2-1 CGP Critical Slope and Sheet Flow Length Combinations for Linear Sediment Reduction Barrier

Slope Ratio (Vertical to Horizontal)	Sheet flow length not to exceed
≤ 1:20	Per QSD's specification.
>1:20 to ≤ 1:4	35 feet
>1:4 to ≤ 1:3	20 feet
>1:3 to≤ 1:2	15 feet
>1:2	10 feet

2.1.6 Surface Water Buffers

A surface water buffer is a 50-foot undisturbed natural buffer from the edge of disturbed soil areas to any receiving water's top of bank. Where surface water buffers cannot be maintained, the project shall provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by erosion and sediment controls that achieve, in combination, the sediment load reduction equivalent to a 50-foot undisturbed natural buffer. The equivalent sediment load may be calculated using RUSLE2 or another method approved by the Regional Water Board.

If a project is a subject to Clean Water Act (CWA) §401 or 404, or where no natural buffer exists, the project is exempt from surface water buffer. The specific CWA §401 or 404 will determine if specific requirements will be imposed and therefore, not required under CGP.

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 2-2 for a summary of the required temporary soil stabilization and sediment control BMPs.

Table 2-2. Required Temporary Soil Stabilization and Sediment Control BMPs[a]

Risk Level	Temporary BMP Type	Options for Temporary BMPs BMP Number[b]
1	SOIL STABILIZATION[c]	SS-2, SS-3, SS-4, SS-5, SS-6, SS-7, SS-8
1	PERIMETER SEDIMENT BARRIER[d]	SC-1, SC-5, SC-6, SC-8, SC-9
1	RUN-ON	SC-5, SC-6, SC-8, SS-9
1	RUN-OFF	SC-4, SS-9, SS-10, SS-11, SS-12
1	TRACKING	TC-1 (at minimum), TC-2, TC-3, SC-7
2	SOIL STABILIZATION[c, e]	SS-2, SS-3, SS-4, SS-5, SS-6, SS-7, SS-8
2	SEDIMENT BARRIER[d]	SC-1, SC-5, SC-6, SC-8, SC-9
2	RUN-ON	SC-5, SC-6, SC-8, SS-9
2	RUN-OFF	SC-4, SS-9, SS-10, SS-11, SS-12
2	TRACKING	TC-1 (at minimum), TC-2, TC-3
2	GRADE BREAK[f]	SC-5 or SC-6
3	SOIL STABILIZATION[d, e]	SS-2, SS-3, SS-4, SS-5, SS-6, SS-7, SS-8
3	SEDIMENT BARRIER[d]	SC-1, SC-5, SC-6, SC-8, SC-9
3	RUN-ON	SC-5, SC-6, SC-8, SS-9
3	RUN-OFF	SC-4, SS-9, SS-10, SS-11, SS-12
3	TRACKING	TC-1 (at minimum), TC-2, TC-3
3	GRADE BREAK[f]	SC-5 or SC-6

a. BMPs requirements of the CGP with associated Caltrans approved BMP options to meet the requirements.

b. BMP numbers from the Caltrans Construction Site BMPs Manual.

c. Required immediately for inactive DSAs which include all finished slopes and disturbed areas of construction not scheduled to be re-disturbed for at least 14 days.

d. Sediment controls and barriers include all temporary sediment control construction BMPs identified in the SWMP.

e. Required for active areas at least 24 hours prior to a forecasted storm event.

f. Grade break BMPs are linear barriers that must be installed perpendicular to flow in accordance with Table 2-1 above.

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 DSA during the time of the year when rainfall can be expected. A graphical water pollution control schedule (WPCS) shall be prepared that shows the sequencing of construction activities with the installation and maintenance of soil stabilization and sediment control BMPs. The WPCS should be updated routinely to ensure it reflects site conditions.

Caltrans standard specifications require at a minimum an annual update as part of the winterization plan. The WPCS should be updated in the SWPPP and reflect site operations.

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 high-visibility fencing should be installed, along ESAs and where the project plans show ESA fence, 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.

Run-on water flowing onto a site from off-site areas may be separated from a site's stormwater discharge to eliminate comingled contribution. Run-on flow diversion shall be conveyed through or around the construction activity in a plastic pipe or engineered channel in a manner than will not cause erosion due to flow diversion. Run-on combined with a site's stormwater discharge is considered a stormwater discharge. Slope drains and clear water diversions should be considered if not already included as part of the project plans.

2.2.4 DSA 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 and sediment control measures.

2.2.5 DSA Size Limitations

Limiting the amount of disturbed soil is a critical component in conducting an effective stormwater management program. The less area that is disturbed, the less area that requires implementation of BMPs.

The Caltrans Standard Specifications place no direct limitations on the size of the project's total DSA. The limitation on DSA has been removed because of the risk-based approach taken by the CGP and the requirements for year round sediment and erosion control BMPs. The contractor can opt to utilize DSA size limitations as a BMP.

DSAs shall be protected as follows:

- Temporary control practices for inactive DSAs shall be implemented in accordance with Table 2-1 of this Manual and shown on the water pollution control schedule.
- Temporary control practices for active DSAs shall be implemented in accordance with Table 2-1 of this Manual.

For inactive DSAs, limit the erosive effects of stormwater flow on slopes by implementing BMPs such as fiber rolls to break up the slope lengths in accordance with Table 2-1 above.

For-inactive 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 per Caltrans Standard Specifications and Standard Plans. Section 600 of the SWPPP or Section 30 of the WPCP lists various materials that can be used for soil stockpile management.

Caltrans specifications require Contractors to cover active and inactive soil stockpiles with soil stabilization material or a temporary cover and surround them with a linear sediment barrier.

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. In addition, depending on the soil type, settling time might make it impractical. Sediment basins shall, at minimum, be designed according to Caltrans requirements or the method provided in California Stormwater Quality Association's (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.

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.

The Caltrans Permit requires Caltrans to obtain coverage for any stormwater discharges associated with industrial activities under the Statewide Industrial General Permit for each batch plant and industrial facility, as defined in the Statewide Industrial General Permit. Please check with your District NPDES coordinator to determine specific regional requirements or exemptions.

The State Board website specifically addresses this issue noting that: "…if a contractor plans to operate: (1) a batch plant to manufacture Portland Cement Concrete, Hot Mixed Asphalt, or other material, or (2) a crushing plant to produce rock or aggregate, as part of a Caltrans project, either outside the job site or within the job site, that serves 1 or more contracts, the contractor must obtain coverage under the Industrial General Permit."[1].

2.3.2 Wind Erosion Controls

Wind erosion controls shall be considered for all DSAs 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 Caltrans Standard Specifications for BMP line items for Wind Erosion Control BMPs, Caltrans Standard Specifications and for further reference see the *Construction Site BMPs Manual*.

[1] State Water Resources Control Board, Frequently Asked Questions, Caltrans Construction, available at https://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/caltrans/caltrans_qa.pdf

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 Caltrans Standard Specifications for BMP line items for Tracking Control BMPs (including Street Sweeping), Caltrans Standard Plans and for further reference, see the *Construction Site BMPs Manual*.

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

The objective of the job 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 Caltrans Standard Specifications and for further reference see the *Construction Site BMPs Manual*.

Section 3

Preparing Stormwater Pollution Prevention Plan

3.1 Preparation and Authorization of a SWPPP

The contractor prepares a Stormwater Pollution Prevention Plan (SWPPP) for projects that will create one acre or more of soil disturbance. For projects that are less than five acres and qualify for an EPA Rainfall Erosivity Waiver (see Section 1.4.2.1 of this Manual), the contractor prepares a WPCP. The SWPPP must comply with the USEPA CGP, CGP or the LTCGP, Contract Special Provisions, Caltrans 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. Refer to the following website for more information on Caltrans Construction Contract Standards:

https://dot.ca.gov/programs/design/ccs-standard-plans-and-standard-specifications

This section provides instructions for QSDs to use while preparing a 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 solely for the project, staging areas, storage yards, material borrow areas, and access roads, whether or not they reside within the Caltrans rights-of-way. The Caltrans permit does not cover industrial activities at facilities subject to coverage under the Industrial General Permit (IGP); however, some of the activities listed could require compliance with the IGP. The IGP requires a separate IGP SWPPP for those industrial areas or activities. These situations include industrial operations (e.g. batch plants) located within the project limits regardless of whether the facility is within or outside of Caltrans's right-of-way and outside Caltrans' right-of-way but within the project limits. For these situations, Caltrans contracts include language requiring the contractor operating the facility to apply for and operate under the IGP. Compliance with the specifics of the IGP is the responsibility of the contractor.

The contractor's QSD prepares and submits a complete SWPPP to the RE for review and authorization. If revisions are required, as determined by the RE, the contractor's QSD revises the SWPPP as noted. The time frames for SWPPP submittal, review, and resubmittal are specified in the contract special provisions or Caltrans 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 authorized by the RE and a Waste Discharge ID has been issued (WDID).

After the SWPPP has been authorized, it will require updates and may require amendments or revisions. Amendments, revisions, or minor updates may be made by the WPC Manager and then submitted to the RE for approval. Updates to the SWPPP may include but are not limited to:

- Adding information into SWPPP file categories such as inactive project status via a change of information, REAPs (LTCGP only), schedule updates and stormwater site inspection reports
- There are increases in the quantity of a BMP used. This change should also be shown in the SWPPP's WPCDs.
- There are changes in the location of a BMP. This change should also be shown on the SWPPP's WPCDs.

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 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

Revisions of the SWPPP are required when:

- The number of SWPPP amendments or the amount of information contained in the amendments makes implementation of the SWPPP confusing
- The 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
- An additional Sampling and Analysis Plan is required based on project activities or location.

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 (IH) and contract documents. The following sections describe the information provided by Caltrans via the IH and contract documents.

3.2.1 Stormwater IH for SWPPP Preparation

The following stormwater information necessary for the preparation of a project SWPPP should be provided in the project IH or should be requested from the project RE. Pertinent information used to develop the stormwater BMP strategy and quantities must be provided in the Resident Engineer file and made available in the Information Handout. The SWDR can be a micro, short, or long form, depending on the size and complexity of the project. The SWDR will have more or less information accordingly. The following is information that may be included in the SWDR, or may be available in the contract documents or supplemental information.

Vicinity Map. A vicinity map that clearly identifies the location and limits of a project should be included. When available, the use of the title and location map (cover page) from the contract plans is recommended. If not shown on the cover page, or if an independent vicinity map is prepared, the following are recommended items that should be provided:

- Legend
- Begin and end workstations, and begin and end construction stations and post miles
- Project ID (EA)
- Name and flow directions of nearby creeks, streams, and rivers
- North arrow and scale
- Adjacent roads, routes, or landmarks to assist in location of the project
- Name of the county, city, or identification of nearest city

Risk Level. Caltrans will provide the Risk Level Determination for the projects regulated under the CGP, which will dictate the type of BMPs that must be implemented on the site and CSMP Requirements. Attention must be paid to the construction dates used for the calculation for the R value, if the dates have changed, the values should be recalculated to ensure Risk Level is still applicable. The Project Engineer will prepare the SWDR Attachment for SMARTS

List of Pre-Construction (Existing) 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 should be provided. These pre-construction BMPs may consist of rock slope protection, infiltration basins, detention basins, biofiltration swales and strips, and media filters. If there are no pre-construction BMPs, then this may be indicated.

List of Treatment (Post-Construction) Stormwater BMPs. The SDWR should also include a written list and narrative descriptions of Treatment BMPs that have been included and incorporated in the project. Narrative descriptions may also include O&M procedures for the Treatment BMPs. Treatment BMPs will be included in the PS&E plans and the TMT spreadsheet (covered as part of the SWDR) provided which is required as part of the SMARTS attachments to the SWPPP.

Water Pollution Control Sheets Showing Suggested Temporary BMP Locations. The contract plan sheets will show the location of anticipated construction site BMPs or the BMPs will be shown on contract plan quantity summary sheets. The water pollution control sheets may show suggested location of anticipated contractor staging areas and other contractor support facilities. It should be noted that the location of BMPs shown on the plans are approximate. The actual locations are determined by the contractor and shown on SWPPP Attachment H, WPCDs. The Contractor can augment the BMPs selected and make them site specific based on the project schedule and operations that will take place. Many BMPs will be staked by state personnel, at least the limits of the BMP will be identified. The WPCDs should show the general plan for implementation for the various phases of construction.

Explanation of Construction Site (Temporary) BMPs. A brief narrative explanation of the various temporary BMPs that may be implemented in the project is included. The narrative includes information about the construction site BMP consideration, as well as any existing permanent BMPs that may be present within the project limits that can be used during construction. The narrative also describes any Treatment 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. Run-on information for designing BMPs, such as temporary conveyances, should also be included, if applicable.

RUSLE2 Model runs. Certain projects that are in a TMDL watershed or will conduct activities within a surface water buffer require the preparation of RUSLE2 modeling. The pre-and post-

construction modeling as well as any required during construction is to be included as part of the SWPPP Attachments.

Other Plans/Permits/Agreements. Other agencies may have issued permits or agreements (such as USACOE permit or California Department of Fish and Wildlife agreement), 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. All copies of the Caltrans approved plans such as Demolition or Temporary Creek Diversion Plan, are listed in Section 500 and included as Attachment L 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. In these cases, the Local Agency / Private Entity who administers the project provides copies of the permit/agreement to be included in Attachment F of the SWPPP.

Construction Site Estimates. The IH may contain the SWDR Attachment 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

3.2.1.1 Other Stormwater Information

The IH 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; and any specific BMP deployments that are considered to be critical to the success of the contractor’s SWPPP.

Drainage Information. The IH 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.

Information 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 should be consulted. To the extent information is available from these documents, the IH 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 WDRs issued by the RWQCB related to toxic materials.

The Nature of Fill Material and Existing Data Describing the Soil. The IH may include a copy of the geotechnical report. The QSD 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).

3.2.2 Contract Bid Items, Specifications, and Details

Most temporary BMPs are paid for as separate contract bid items, such as silt fences. Others are paid for as lump sum bid items, such as job site management. If BMPs and water pollution control measures are needed that are not paid for under separate bid items, then the payment for these is included in the bid item cost for the item(s) of work. BMPs can also be added as part of the lump sum job site management.

Job Site Management 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.

3.3 SWPPP Builder

This section provides step-by-step SWPPP preparation procedures, Caltrans SWPPP Builder Instructions, and examples / example text. The SWPPP Builder has been developed in Microsoft® Access with the following objectives:

1. Provide easy data entry for contractor's QSD to prepare SWPPPs (instructions can be viewed in the SWPPP Builder sections 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 Builder:

1. Download the appropriate SWPPP Builder from the Caltrans website at: https://dot.ca.gov/programs/construction/storm-water-and-water-pollution-control
2. Complete all applicable sections of the SWPPP Builder. Sections contain fields for information entry that will populate the necessary fields in Adobe® PDF. A preview section of the SWPPP with completed text for each section, including instructions, can be printed.
3. The final SWPPP can be viewed to perform final edits, as necessary. Individual PDF sections need to be merged to create a single file to submit to Caltrans.

3.3.1 SWPPP Builder Instructions

This section provides instructions on how to begin the preparation of a SWPPP using the Caltrans SWPPP Builder. The SWPPP Builder uses the primary entry information to create necessary SWPPP sections to populate. Information given within the first two windows will hide unnecessary sections or provide necessary information. Information is used to automate section text within portions of the SWPPP Builder. Information used to generate potions of the SWPPP is the following inputs control the sections of the SWPPP that are to be completed:

- Administering entity:
    - Caltrans;
    - Local; or
- Private entity
    - Risk Level
    - Risk Level 1
    - Risk Level 2

- Risk Level 3
- 'Yes' or 'No' answers to Quick Answers.

The SWPPP Access template is available in the Caltrans Construction Stormwater and Water Pollution Control site, https://dot.ca.gov/programs/construction/storm-water-and-water-pollution-control, scroll down and select the SWPPP Template February 2024.

For the remainder of Section 3, SWPPP Builder Instructions are displayed in **blue text**. Examples and Example Text are displayed in **green text**.

Getting Started Instructions

Open the Microsoft Access-based SWPPP Builder application and click OK

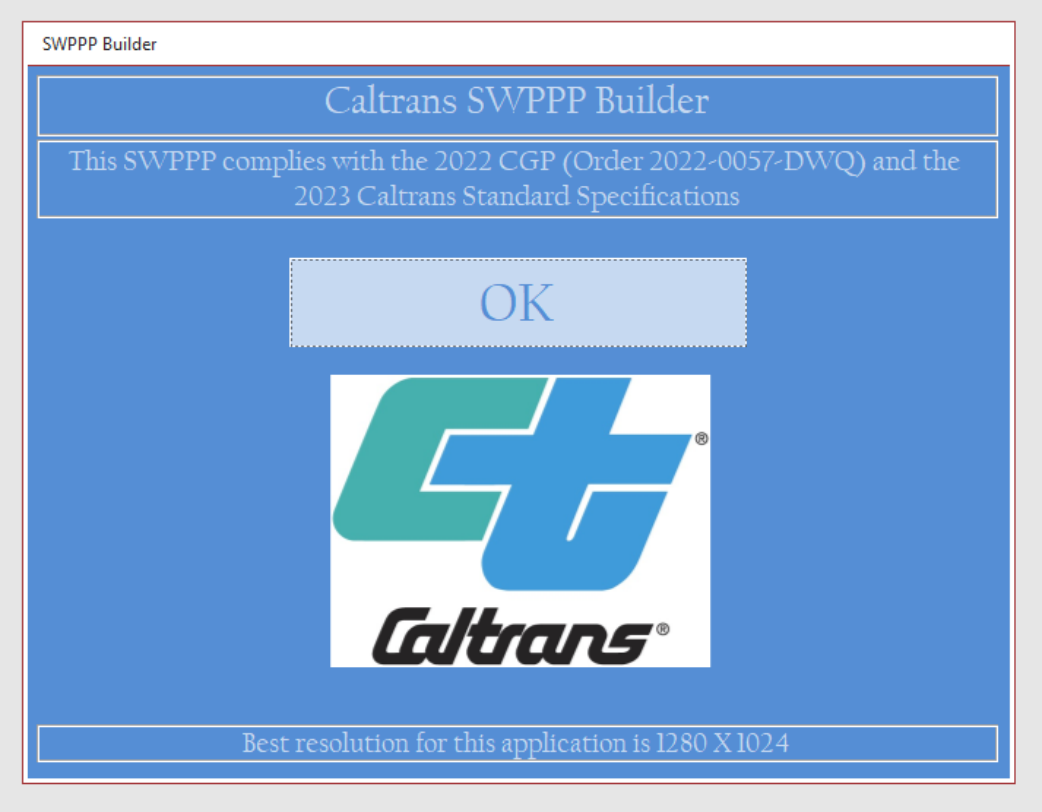


Figure 3-0. Caltrans SWPPP Main Screen

Getting Started Instructions

The SWPPP Builder application will open and the Home Screen will appear (Figure 3-1). Use the computer mouse and click on Create a New SWPPP.

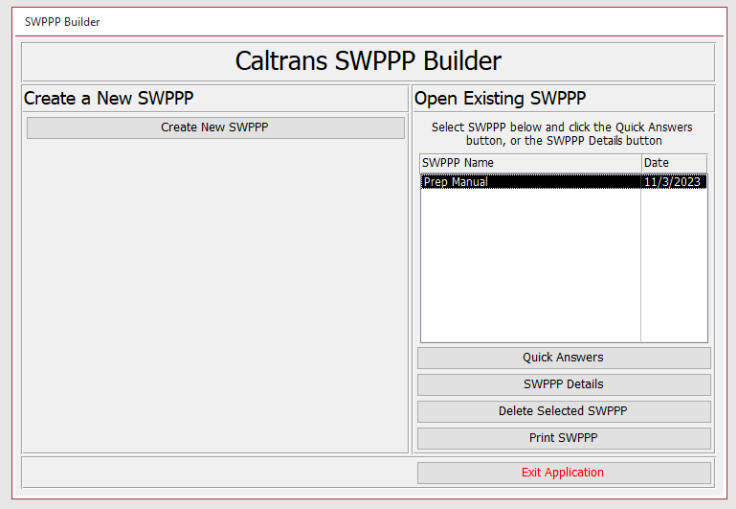


Figure 3-1. Caltrans SWPPP Builder Home Screen

The window will change to a new window to populate initial project information (Figure 3-2). The date that the SWPPP was created will automatically populate. Enter the project name in SWPPP Name box and press enter on your keyboard. Select the Administrator and Risk Level from the pull down menus. Then, click on Quick Answers.

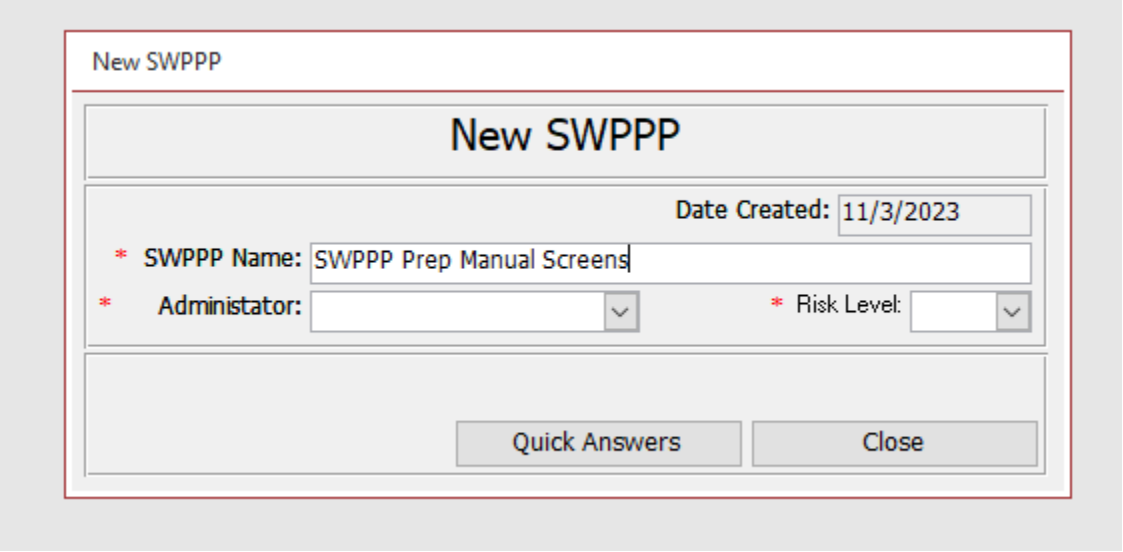


Figure 3-2. New SWPPP Form

Select the Quick Answers to continue creating the SWPPP (Figure 3-3). The window will change to a series of ‘yes’ or ‘no’ checkboxes that are based on SWPPP section-specific questions. Based on the whether ‘yes’ or ‘no’ are checked, different sections will be made available. The process is described below.

Quick Answers			
Section #	Section Title	Question	Answer
Title	Title	Is there a separate QSD who will be tasked with the QSD-required inspections?	☐ Yes ☑ No
300.3	Construction Sites Estimates	Does the project site receive run-on from offsite areas?	☑ Yes ☐ No
400.1	Contact Information for Responsible Parties	Does the Contractor have a site manager separate from the WPC Manager?	☑ Yes ☐ No
300.6	Potential Pollutants from Site Features or Known Contaminants	Did the project site have Former Industrial Operations?	☐ Yes ☑ No
300.6	Potential Pollutants from Site Features or Known Contaminants	Did the project site have Historic Contamination?	☐ Yes ☑ No
400.3.1	Additional QSP Delegate(s)	Is there more than one QSP Delegate?	☐ Yes ☑ No
1005	Sample Analysis	Will some non-visible pollutant measurements be taken in the field (e.g., chlorine by field test kit)?	☐ Yes ☑ No
1100	Sampling and Analysis Plan for Non-Stormwater Discharges	Does the project have a separate dewatering permit issued by a RWQCB?	☑ Yes ☐ No
1200	Sampling and Analysis Plan for Stormwater pH and Turbidity	Is the risk level determination for this project based on high receiving water risk?	☑ Yes ☐ No
1203.2	Potential Sampling Locations	Does the project site have discharge locations that discharge directly to a sediment-sensitive-listed water body?	☐ Yes ☑ No
1203.2	Potential Sampling Locations	Does the project receive run-on with the potential to combine with stormwater discharges?	☑ Yes ☐ No
1901	Surface Water Buffer	Does the project trigger the Surface Water Buffer requirement of the CGP?	☐ Yes ☑ No
1300	Sampling and Analysis Plan for Monitoring Required by Regional Board	Is the RWQCB requiring additional monitoring, such as a dewatering permit or a 401 WQ Certification?	☑ Yes ☐ No
1400	Sampling and Analysis Plan for Monitoring of Active Treatment System	Is an ATS to be deployed on site?	☐ Yes ☑ No
1101	Scope of Monitoring Activities	Does this project have dewatering operations that will be subject to the CGP Attachment J?	☑ Yes ☐ No
1902	TMDL RUSLE2 evaluation	Is the project in a TMDL watershed requiring RUSLE2 modeling?	☐ Yes ☑ No
100.1	Legally Responsible Person Certification and Caltrans Authorization	Has the Local Agency LRP authorized the RE as Duly Authorized Representative?	☑ Yes ☐ No

Figure 3-3. Example Quick Answers Screen (selected answers are not **appropriate for every project**)

Upon completing all the Quick Answers, click SWPPP Details to continue to the inputs required for the various sections of the SWPPP. See instructions in Figure 3-4 below.

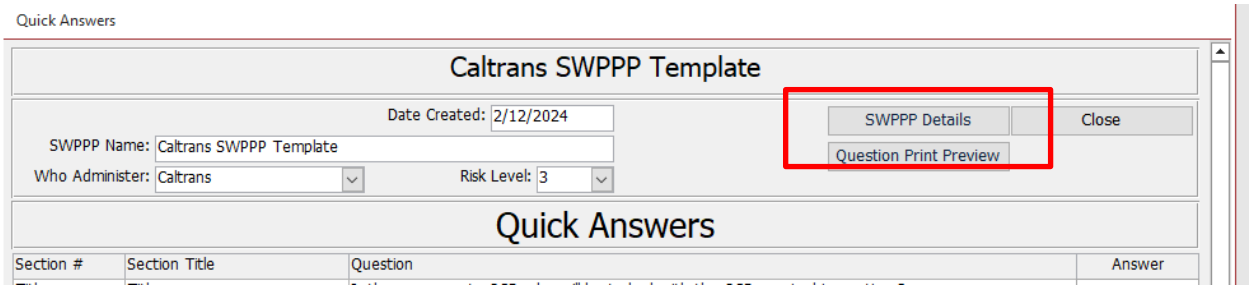


Figure 3-4. Close Quick Answers Screen

Printing Instructions

From the SWPPP Builder Home Screen, select Print SWPPP (Figure 3-5).

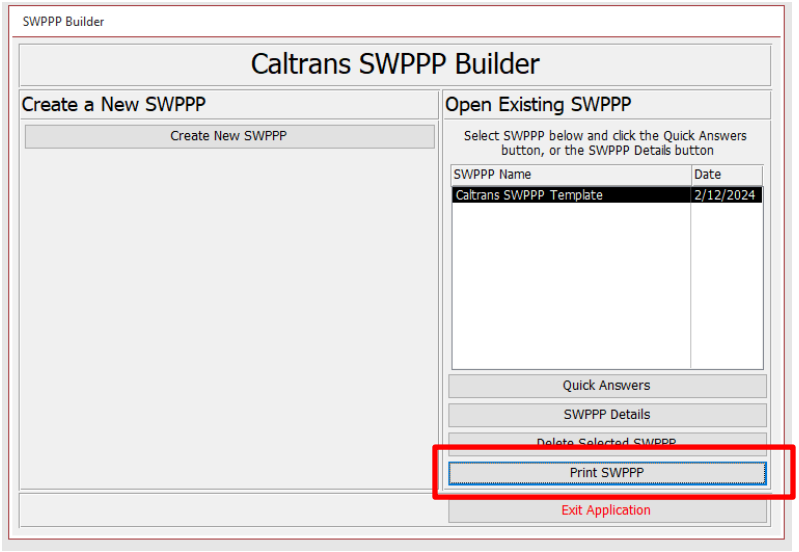


Figure 3-5. Access Print Screen Window

From the Print Screen, the SWPPP Sections can be previewed or printed in sections to the folder specified at the bottom. Use the “Change PDF folder Location” button to browse to a different location for printing the section (Figure 3-6).

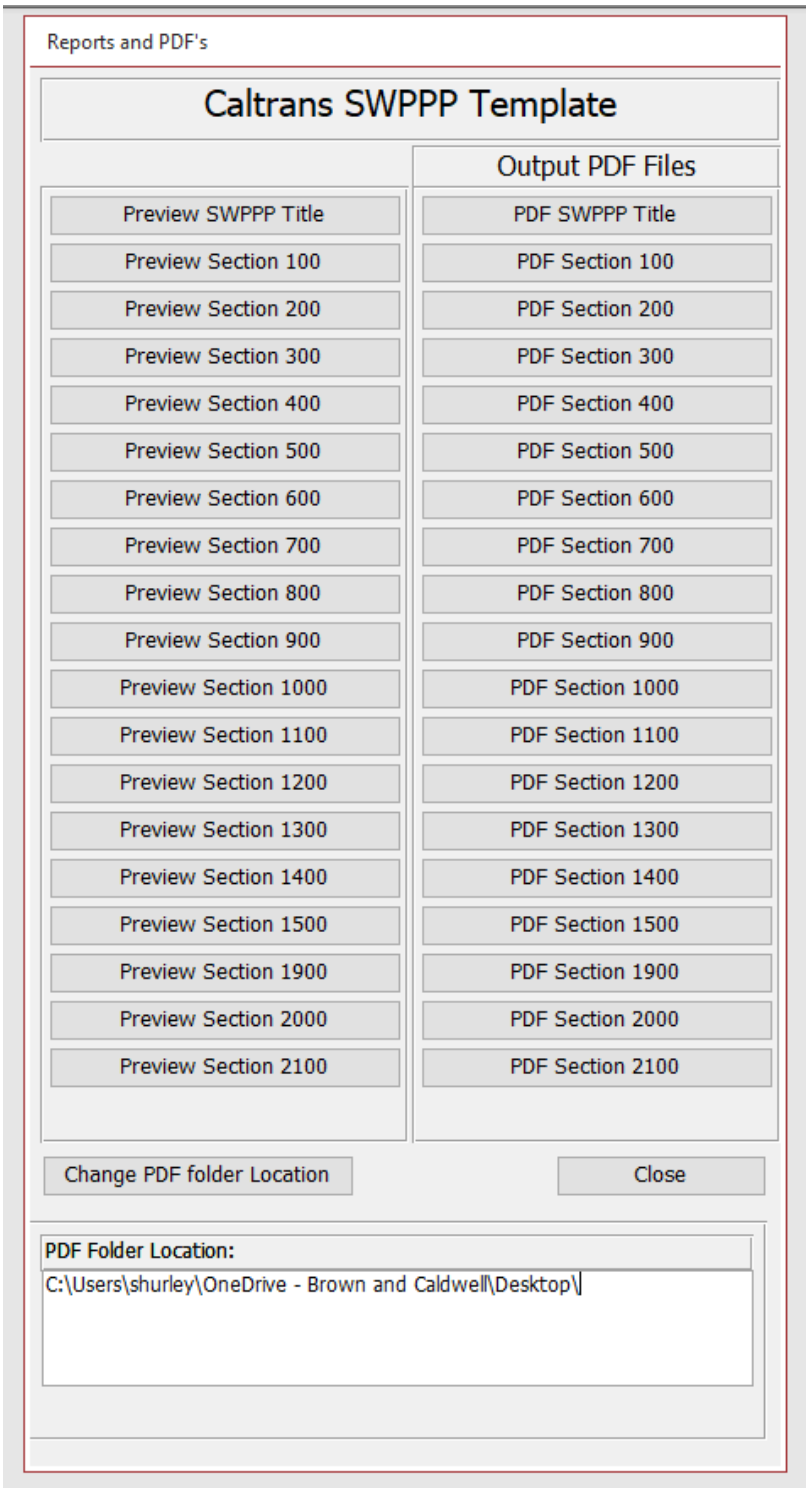


Figure 3-6. Print Screen Window

SWPPP Detail Instructions

The SWPPP Detail section is used to develop the various applicable sections of the SWPPP. Individual sections can be previewed before moving on to the next section. The selection window at the right can be used to jump to any SWPPP section.

SWPPP Detail can be accessed from either the startup window or the Quick Answers window (Figure 3-7).

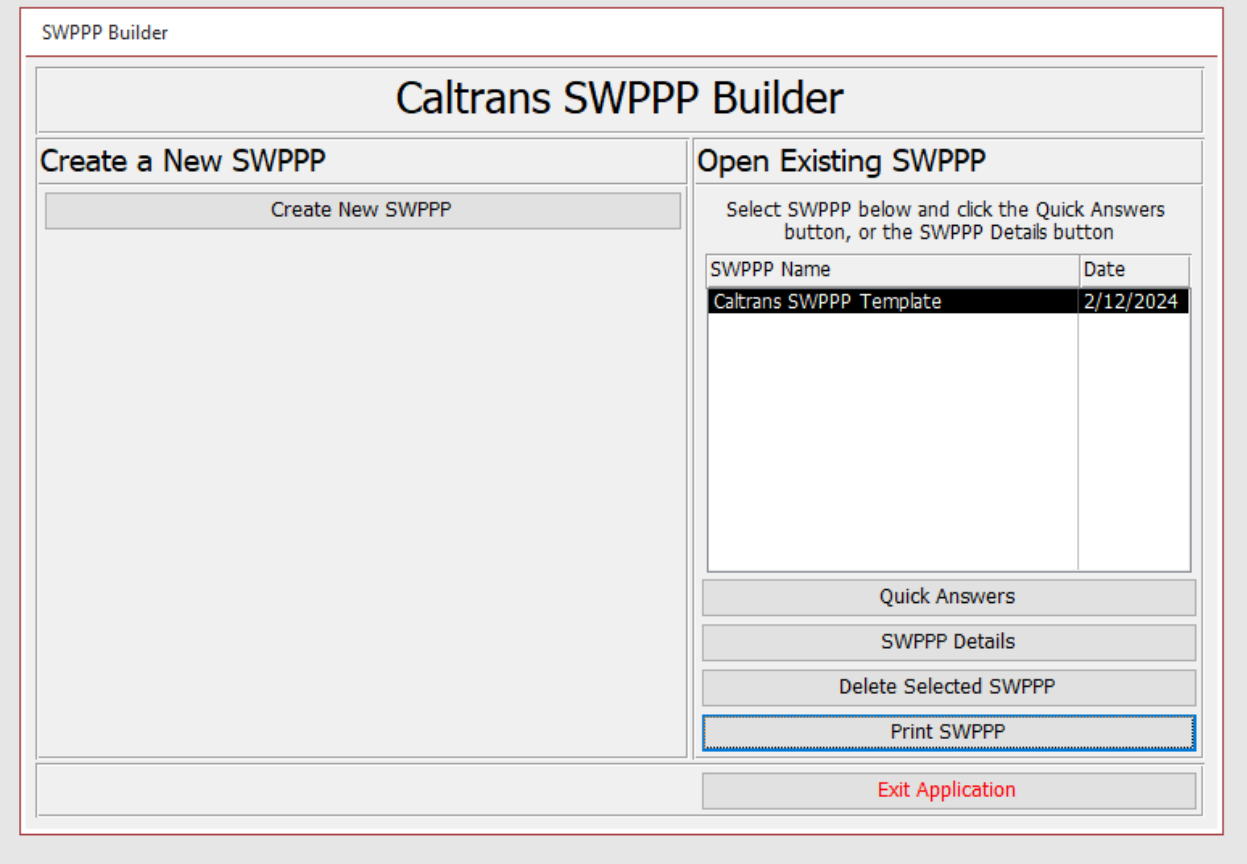


Figure 3-7. Startup Window

Click on “SWPPP Details” button. A new entry window will appear that shows the different required sections to populate for the SWPPP (Figure 3-8). Sections contain automated required text. Each listed section will either have narrative text, lists, and/or tables to populate for section completion. This manual addresses the required information needed to complete listed SWPPP sections.

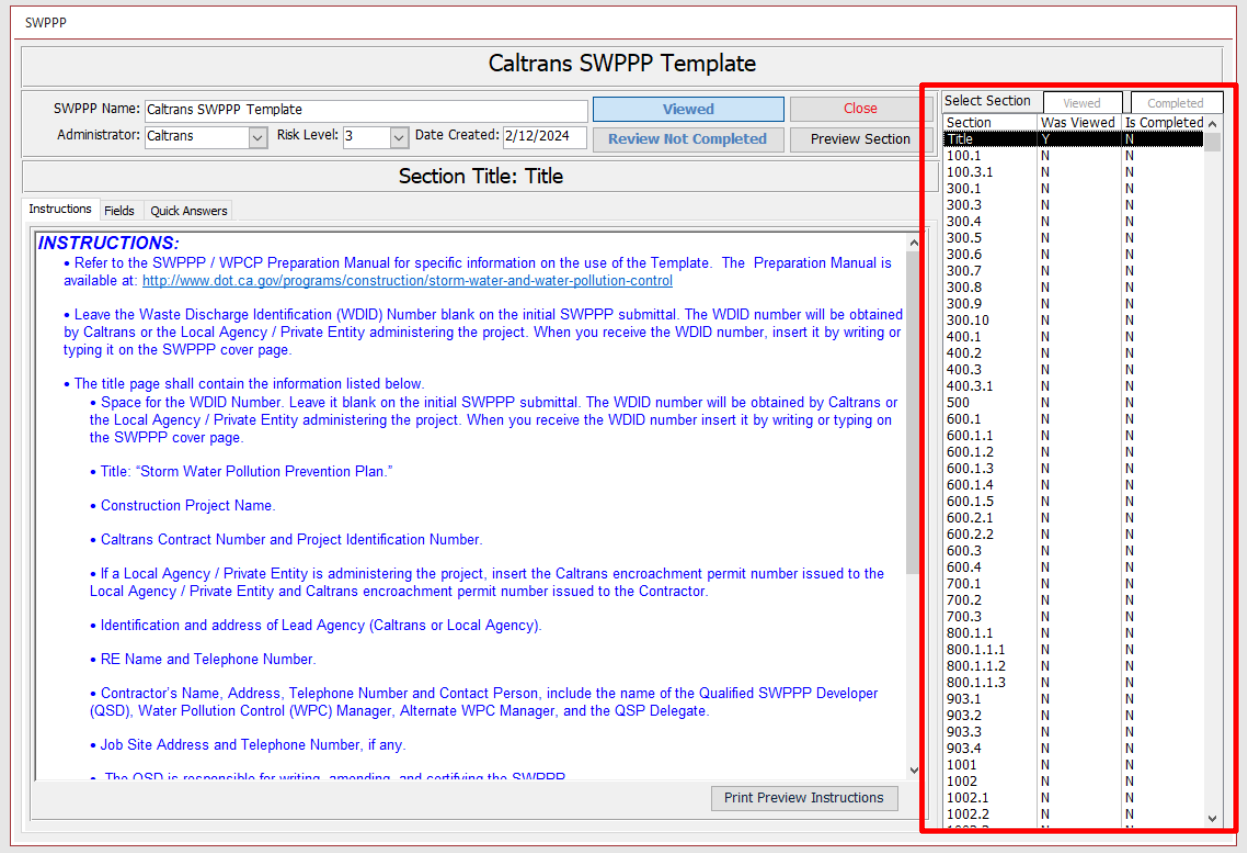


Figure 3-8. SWPPP Details Screen

Main Menu

Once the SWPPP Details Screen is open (Figure 3-8), the list of sections is available for viewing and editing. This menu will also indicate if a section is completed.

To View a Section:

To navigate from section to section click on the Section Number listed on the right of the screen. Once a section has been viewed, a Y will appear in the Was Viewed column (Figure 3-9).

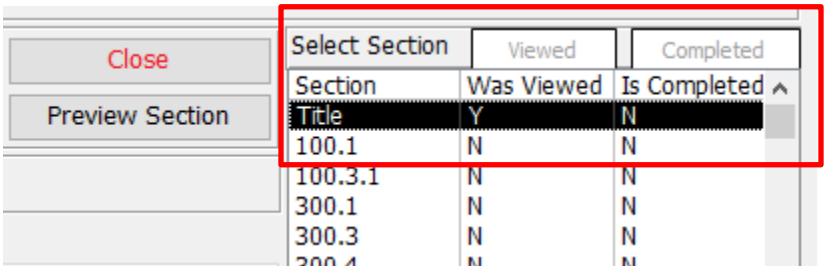


Figure 3-9. Section Navigation

The section will appear in the window (Figure 3-10). Sections typically have tabs for Instructions and for information entry on the upper left side of the viewing window.

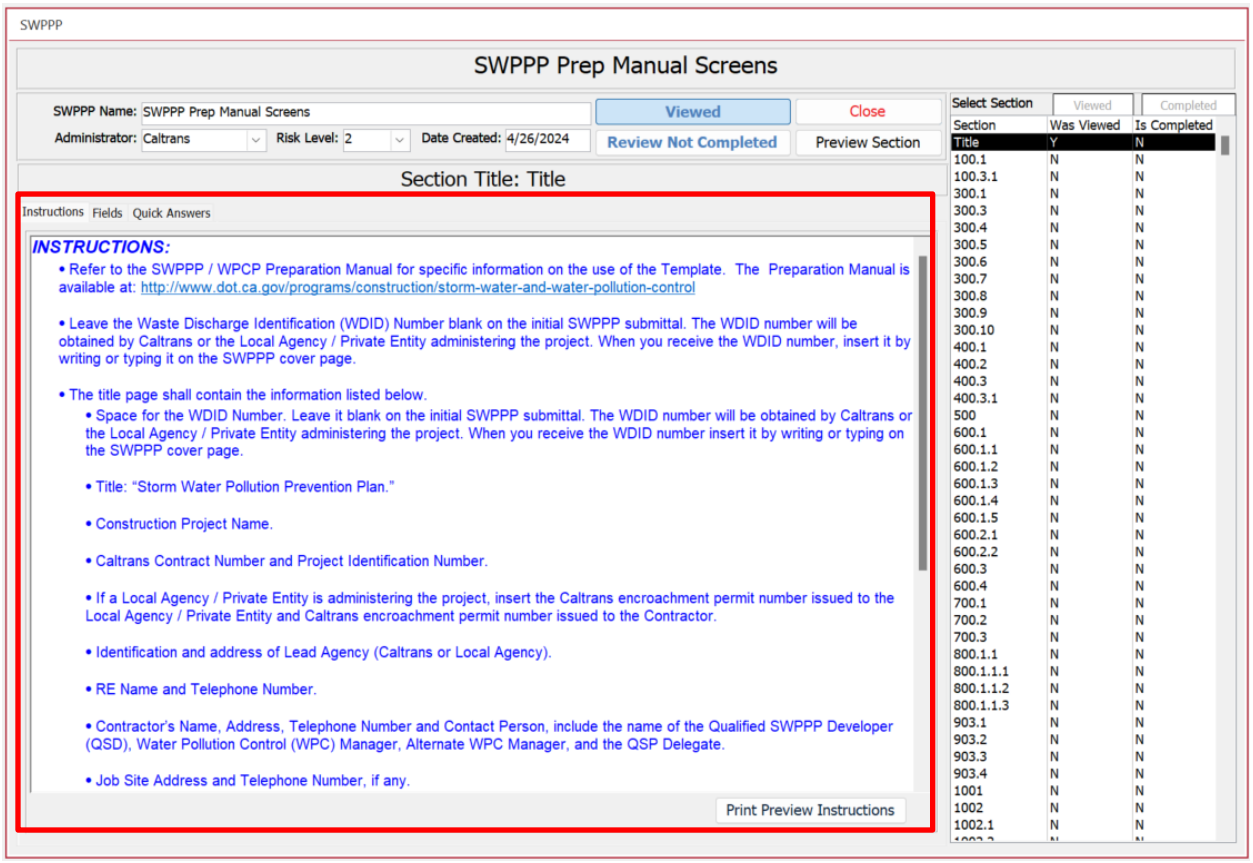


Figure 3-10. Section Instructions Tab

The user can go back to sections to make edits at any time.

To Review a Section:

Once the information has been entered, the user can click on "Preview Section". A pop-up window will appear (Figure 3-11). At the bottom of the pop-up window, the user can click forward to review additional pages.

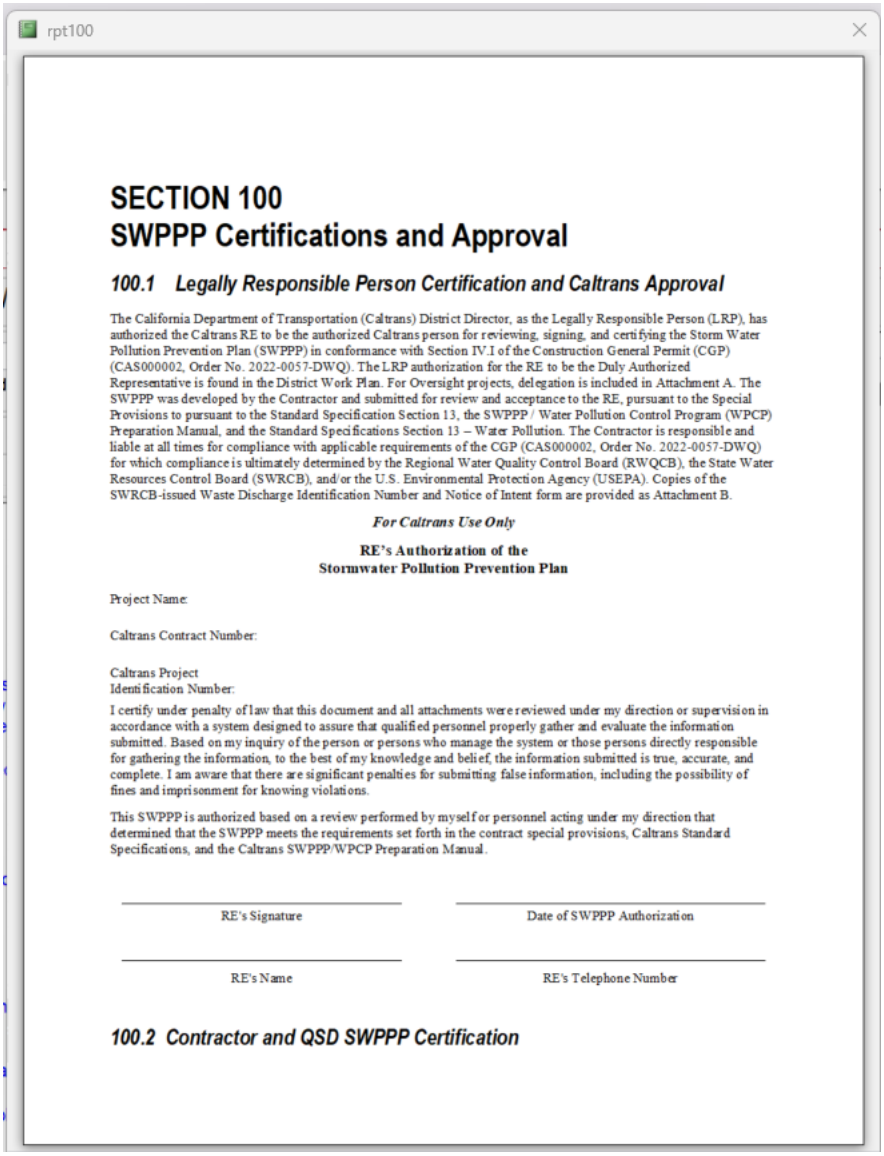


Figure 3-11. Preview Section Screen

To Complete a Section:

Once a section has been completed, the user can click on the "Review Not Completed" box to toggle it to "Review Completed" (Figure 3-12). The user can then check the box for Section Completed. Once this box has been checked, a Y will appear in the Is Completed column associated with the section. This assists in keeping track of which sections have been completed.

The user may then either close the window, which saves information added to be continued at a later date, or select another Section to complete. The user may continue completing remaining sections by selecting the various sections from the Select Section menu along the right. Input will be saved as the information is added. The user can close the entire Detail section by clicking on the red "Close" button.

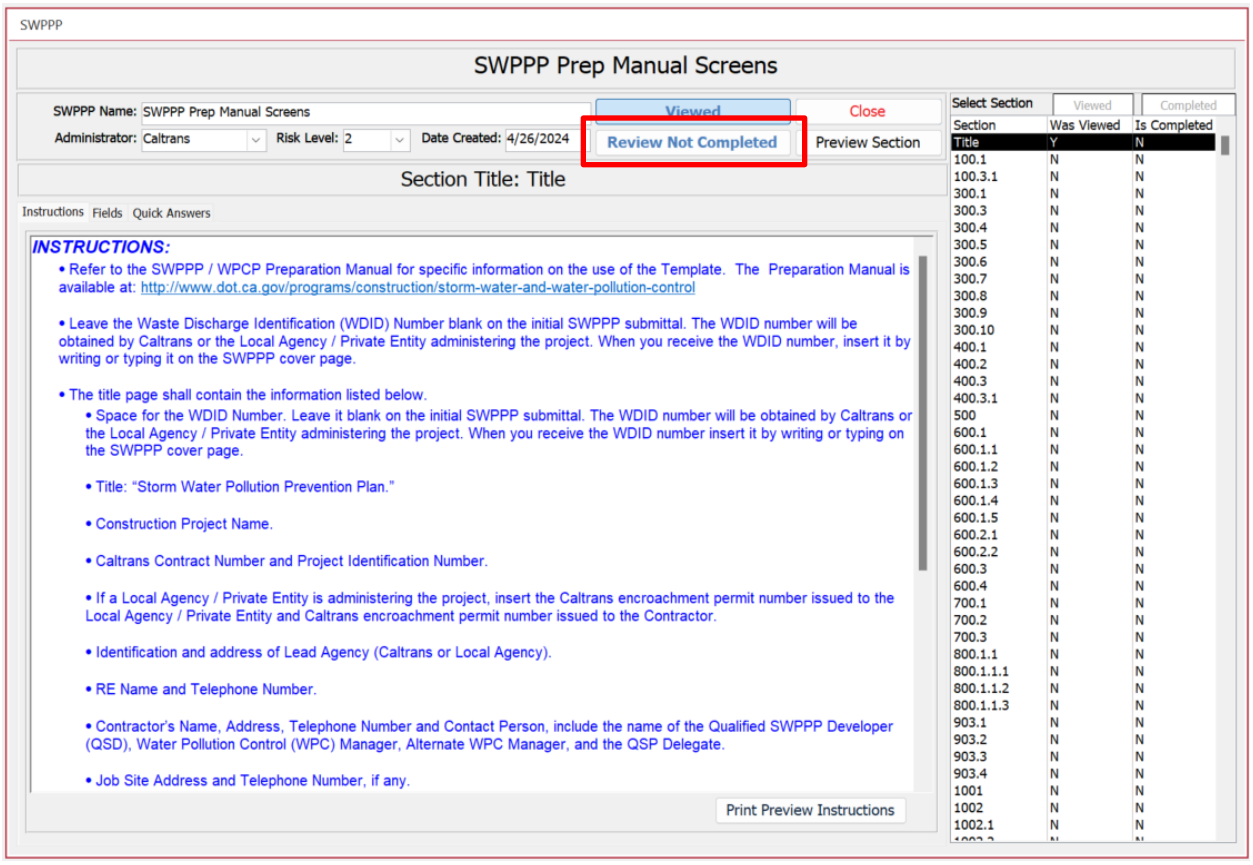


Figure 3-12. Section Instructions Tab

3.3.2 SWPPP Sections

The SWPPP Builder shown in this section includes step-by-step instructions and section examples for specific sections of the SWPPP and SWPPP Builder 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	Contract Information
Section 500	References Other Plans, Permits and Agreements
Section 600	Determination of Construction Site BMPs
Section 700	Project Site Implementation Program
Section 800	Construction Site Visual Monitoring Program
Section 900	Sampling and Analysis Plan
Section 1000	Sampling and Analysis Plan for Non-visible Pollutants
Section 1100	Sampling and Analysis Plan for Non-stormwater Discharges
Section 1200	Sampling and Analysis Plan for Stormwater pH and Turbidity
Section 1300	Sampling and Analysis Plan for Monitoring required by the RWQCB
Section 1400	Sampling and Analysis Plan for Monitoring of Active Treatment System
Section 1500	Sampling and Analysis Plan for Monitoring Passive Treatment System
Section 1900	RUSLE2 Requirements
Section 2000	Post-Construction Control Practices
Section 2100	SWPPP Reporting Requirements

Guidance for preparing SWPPP Section 700-1500 CSMP is available in the Caltrans *Construction Site Monitoring Program Guidance Manual*. Step-by-step CSMP template instructions and SAP examples are provided where appropriate in the Caltrans *Construction Site Monitoring Program Guidance Manual*.

The SWPPP Builder includes instructions within the database. Sample text are generally included with instructions. The SWPPP Builder is the Caltrans SWPPP Template to be used by QSDs to meet the permit requirements and ensure consistency among all construction projects. The template is reviewed and updated continuously; the QSD should check the Caltrans construction website to download the latest template when creating a SWPPP.

The following sections correspond to sections of the SWPPP and SWPPP Builder.

Title

SWPPP GUIDANCE INSTRUCTIONS

Refer to the SWPPP / WPCP Preparation Manual for specific information on the use of the Template. The Preparation Manual is available at:
http://www.dot.ca.gov/programs/construction/storm-water-and-water-pollution-control

The title page contains the information listed below.

- Space for the 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 Identification 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.
- Identification and address of Lead Agency (Caltrans or Local Agency).
- RE Name and Telephone Number.
- Contractor’s Name, Address, Telephone Number and Contact Person, include the name of the QSD, WPC Manager, Alternate WPC Manager, and the QSP Delegate.
- Job Site Address and Telephone Number, if any.
- The QSD is responsible for writing, amending, and certifying the SWPPP.
- 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 QSD listed above.
- The CGP requires certain inspections be completed by the QSD, if there is a QSD who will be conducting the inspections different from the QSD Preparer or there is a new QSD, insert the name and details on the QSD_inspection fields (based on quick answers).
- You must specify an alternate WPC Manager for the project who can assist the WPC Manager. Provide the name and title of the alternate WPC Manager. The alternate WPC Manager must be a certified QSP and have comparable experience as the WPC Manager.

- If there is a QSP Delegate appointed for the project, the QSD or the WPC Manager must train the QSP Delegate prior to any delegation of duties/responsibilities for SWPPP implementation, inspection or sampling.
- SWPPP Date.

SECTION 100
SWPPP Certifications and Acceptance

100.1 Legally Responsible Person (LRP) Certification and Caltrans Acceptance

SWPPP GUIDANCE INSTRUCTIONS

Include a Separator and Tab for Section 100 for ready reference.

CALTRANS ADMINISTERED PROJECTS

- The SWPPP, as part of the Permit Registration Documents (PRDs), must be certified by the Legally Responsible Person (LRP) (District Director) or a person legally authorized to sign and certify PRDs (the LRPs Duly Authorized Representative).
- The LRP (District Director), or RE when delegated as the Duly Authorized Representative, signs and dates the SWPPP approval certification. This approval is documented in SMARTS.
- Print the name and telephone number of the LRP (District Director), or RE, when delegated as the Duly Authorized Representative.
- Include a copy of the California State Water Resources Control Board (SWRCB)-issued Waste Discharge Identification (WDID) Number and Notice of Intent (NOI) form as Attachment B.

LOCAL AGENCY 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 Duly Authorized Representative); in conformance with Section I.L and Section II.E of the CGP (CAS000002, Order 2022-0057-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 signs and dates 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; in conformance with Section I.L and Section II.E of the CGP (CAS000002, Order No. 2022-0057-DWQ).
- The Private Entity LRP signs and dates the approval certification.
- Print the Private Entity LRP name, title and telephone number.
- The Caltrans Oversight Engineer signs and dates 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.
- Is a Local Agency administering the project?
- Has the Local Agency LRP authorized the RE as the Duly Authorized Representative?

100.2 Contractor and QSD SWPPP Certification

SWPPP GUIDANCE INSTRUCTIONS

- The Contractor is required to certify the SWPPP.
- The Contractor is required by the Standard Specifications/Special Provisions to have a QSD write, amend, and certify the SWPPP, and have a QSD/QSP implement the SWPPP.
- The SWPPP is required to be submitted to the RE for review and authorization.
- If a Local Agency/Private Entity is administering the project, ensure that 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.

This section contains required text that has been automated into the SWPPP process. There is no additional information needed to be entered in the SWPPP Builder for this section.

Once the SWPPP is printed, print the name, title and telephone number of the person signing the certification for the Contractor.

The certification statement ***is*** signed and dated by Contractor's QSD; specifically, the person appointed to write, amend, and/or certify the SWPPP with one of the qualifications identified in the CGP.

100.3 Amendments

100.3.1 SWPPP Amendments Certification and Acceptance

SWPPP GUIDANCE INSTRUCTIONS

When changes in the authorized SWPPP are required, the Contractor's QSD prepares changes to the SWPPP.

- The SWPPP Preparer must be a qualified QSD and maintain one of the registrations or certifications required by the CGP for a QSD.
- The QSD certifies SWPPP amendments and submit them to the RE for review and approval.
- The DOT CEM-2008SW SWPPP/WPCP Amendment Certification and Approval form, available in Appendix A, is used as the cover sheet for each amendment.
- All amendments shall be recorded in the 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 G.
- Approved amendments should be inserted into the appropriate SWPPP section or attachment when possible and a copy shall be kept in Attachment G.
- The Contractor amendment certification and Caltrans amendment approval by the LRP, or RE if the RE is the Duly Authorized Representative, as provided in the DOT CEM-2008SW SWPPP/WPCP Amendment Certification and Approval form, shall be attached to the SWPPP amendment and inserted into Attachment G.
- 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; and
  - any existing implemented BMP(s).

The annual SWPPP amendment must include an annual winterization plan. The annual winterization plan must describe the preparation for the upcoming rainy season including:

1. Updated schedule
2. Materials and labor
3. Management of stormwater through the job site including:
   3.1. Run-on

3.2. Run-off

3.3. Conveyance downslope

4. Management of areas within the job site including:

4.1 Areas where work is suspended

4.2 Areas of soil stabilization

4.2 New disturbed soil areas

5. Changes to monitoring locations
6. Slope stabilization
7. Management of dewatering discharges

Submit a revised SWPPP annually before September 15th

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; and
- the printed name of the Caltrans LRP, or RE if the RE is the Duly Authorized Representative, and telephone number.

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

- Approved amendments shall be inserted into the SWPPP in Attachment G. Approved SWPPP Amendment Certification and Approval forms also should be included in Attachment G.

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 G.

SWPPP Builder Instructions

Enter narrative text for SWPPP Amendments Certification and Accepted Section. When an amendment is made it should include who requested the amendment, the location of proposed change, the original BMP proposed, if any, the new BMP proposed, and any existing implemented BMP(s).

SECTION 200
Objectives

SWPPP GUIDANCE INSTRUCTIONS

This section contains required text that has been automated into the SWPPP process. There is no additional information needed to be entered in the SWPPP Builder for this section. For SWPPP submission:

- Include a Separator and Tab for Section 200 for ready reference.
- Pollutant source identification and BMP selections shall be documented in the SWPPP to support the SWPPP objectives.

If the project falls under the LTCGP, the four primary SWPPP objectives are described in the LTCGP Section IX and are automatically populated in this section. Pollutant source identification and BMP selections shall be documented in the SWPPP to support the four SWPPP objectives.

SECTION 300
Project Information

SWPPP GUIDANCE INSTRUCTIONS

For the printed submission of this section 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.)

Provide details of what the project purpose is, such as rehabilitate pavement, construct drainage system, etc.

300.1 Project Description

SWPPP Builder Instructions

In the narrative text area, 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) (Figure 3-13). An example of a project description is provided below.

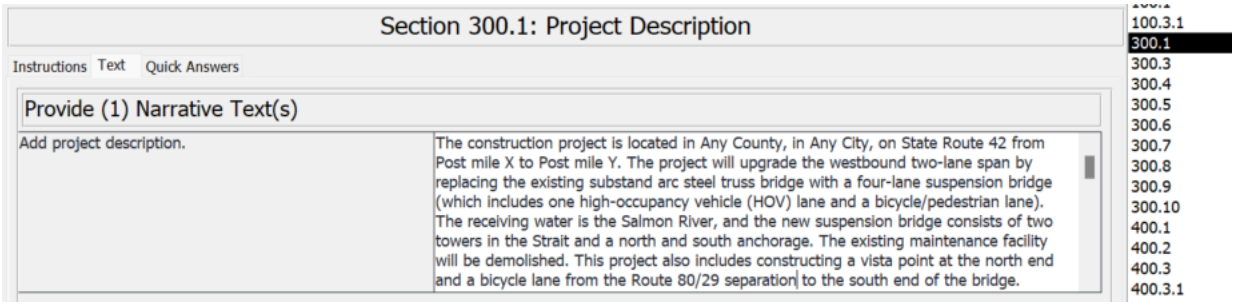


Figure 3-13. Section 300.1 Project Description

EXAMPLE TEXT

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.

300.2 Project Risk Level

The previously entered Risk Level is automatically inserted into the required text that has been automated into the SWPPP process. There is no additional information needed to be entered in the SWPPP Builder for this section.

300.3 Construction Sites Estimates

In order to manage stormwater and size BMPs, it is important to estimate the run-on and runoff flows that could be expected. This information may be found in the drainage report in the Information Handout, or may be calculated as inputs to the SWPPP. It is important to note that any systems requiring design based on flows should have a plan included in "other" plans, identified in Section 500, and attached in Attachment F.

If the calculations are needed to design conveyances and size BMPs, and there is more than one drainage area, include the most significant drainage area in this section, and include similar calculations in plans in Attachment F.

SWPPP GUIDANCE 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/hour (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*.

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, USACOE 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.

- QSD 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, Seventh Edition, Section 819.2.*
- The QSD will calculate the 10-yr run-on flow, if applicable for SW management, BMP sizing, or conveyance design, and if it's not included in the Information Handout/supplemental project info.

Table 3-1. 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 - 0.22
Heavy soil, steep, 7%	0.25 - 0.35

Type of Drainage Area	Runoff Coefficient
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

Taken from the Caltrans Highway Design Manual (HDM) Figure 819.2B

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 600.1.1 for the run-on control BMPs that will be designed to control the calculated run-on.

EXAMPLE CALCULATION:

Existing Site Conditions:

Area Runoff Coefficient = 0.32 (A)

Area Rainfall Intensity = 0.50 in/hour (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/hour for the site area.

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

Table 3.3-1. 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 percent	0.20 - 0.28 Hilly, with average slopes of 10 to 30 percent	0.14 - 0.20 Rolling, with average slopes of 5 to 10 percent	0.08 - 0.14 Relatively flat land with average slopes of 0 to 5 percent
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 percent of drainage area with good cover)	0.06 - 0.08 Fair to good plant cover; ~50 percent of area with good grassland or woodland cover, not more than 50 percent of area in cultivated crops	0.04 - 0.06 Good to excellent plant cover; ~90 percent of area with good grassland, woodland or equivalent cover
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 percent
2) clay type soils
3) good grassland area, and
4) normal surface depressions.

Find: *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*

SWPPP Builder Instructions

Fields text boxes have been provided to provide runoff estimates for the construction site. Use the example calculation provided above to complete this section.

300.4 Vicinity and Site Map

SWPPP GUIDANCE 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 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). The Office of Water

Programs, Water Quality Planning Tool website can be used to obtain images of USGS topographic maps by selecting the 'USGS Topo Maps' option on the webpage at: http://svctenvims.dot.ca.gov/wqpt/wqpt.aspx

- 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. Reference to it is made 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 MS4 or other water body
- General topography.

SWPPP Builder Instructions

A narrative text box has been provided to enter a brief narrative that describes the vicinity to support the map in Attachment D. The brief narrative should describe important features, drainage areas, or receiving waters that could not be shown on the map. The brief narrative automatically populates Section 300.4 along with required text.

300.5 Unique Site Features

SWPPP GUIDANCE INSTRUCTIONS

The QSD should use this section to document any site features for the project site that might trigger specific requirements or additional BMPs.

- 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, 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.
- The hydrologic soil group (HSG) should be determined from online sources if not provided in the geotechnical report or in an environmental document. The

information gathered for HSG is related to the soil erodibility on the project. This information will be useful when determining appropriate combination of sediment and soil stabilization BMPs.

- 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).
- For RUSLE2 requirements, describe if the project is disturbing surface water buffer or is in a TMDL watershed that requires TMDL RUSLE2 modeling.

For TMDLs, the SWPPP Preparer should refer to the 2022 Construction Stormwater General Permit TMDL Map Tool available at: https://gispublic.waterboards.ca.gov/portal/home/item.html?id=4220e74487744f6cad19326bb978c9bc to determine if the project is located within a TMDL watershed. This will be further defined under the pollutant site assessment (SWPPP section 300.8) and SAP for Non-visible pollutants under Section 1000 of this SWPPP. You can select the map and then click on the attribute table to determine what pollutants list the project is subject to.

SWPPP Builder Instructions

Section 300.5 has two separate tabs for information entry: Text and 300.5 Tab (Figure 3-14).

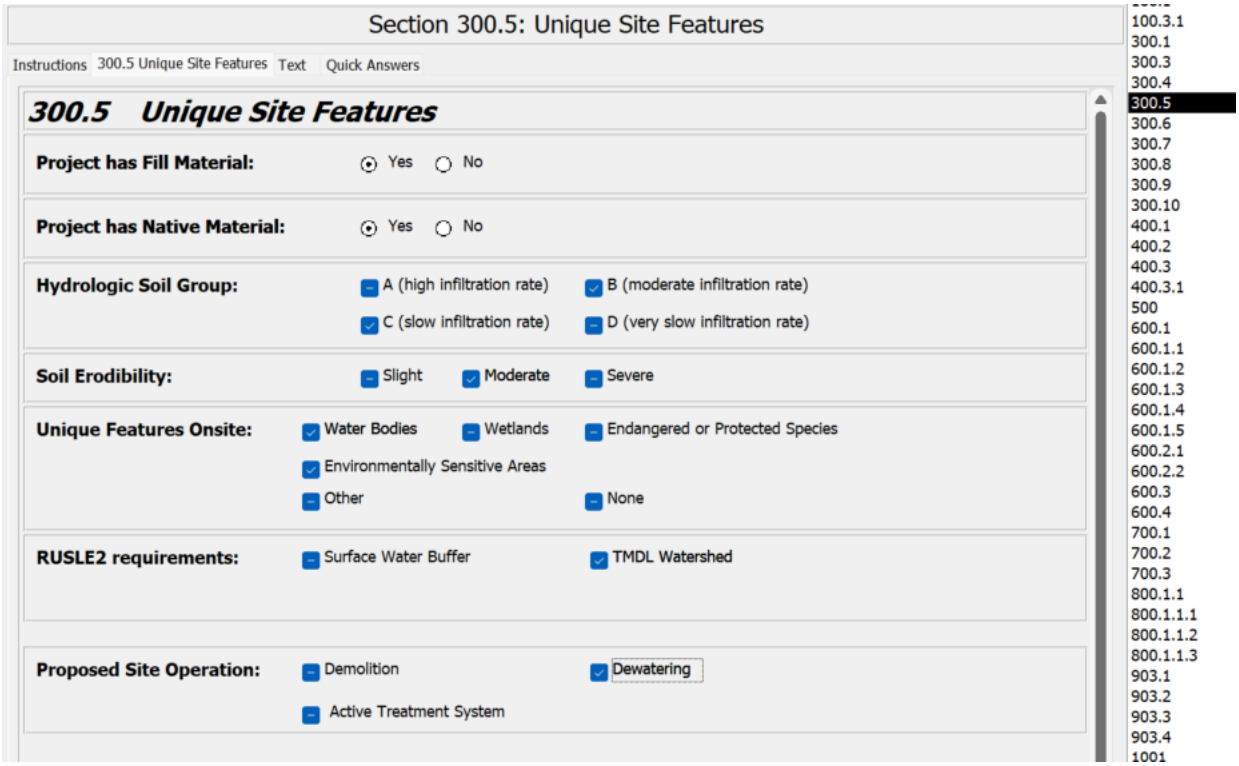


Figure 3-14. Section 300.5 Unique Site Features Tab

Narrative Text Tab:

If there are unique site features, add narrative text describing those features.

EXAMPLE TEXT

Per the Natural Resource Conservation District's Web Soil Survey website, the site is underlain by Huerhuero loam, Olivenhain cobbly loam, Redding-Urban land complex, Riverwash, Terrace escarpments, and Urban land (fill of unknown origin).

Huerhuero loam is described as loam, underlain by clay to clay loam and is classified as Hydrologic Soil Group (HSG) D. The Olivenhain cobbly loam is described as cobbly loam, underlain by very cobbly loam and clay and is classified as HSG D. Redding-Urban land complex is described as gravelly loam, underlain by gravelly clay and loam and is classified as HSG D. 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. Redding-Urban land complex, Riverwash, Terrace escarpments, and Urban land have not been assigned to any HSGs.

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 CWA Section 404 Permit requirements. The permit application (33 CFR 325) is available for review.

300.5 Tab: Select in the check boxes the fill material, HSG, soil erodibility, and the unique features on-site. Click on the top of the tab to move between entry windows (Figure 3-15).

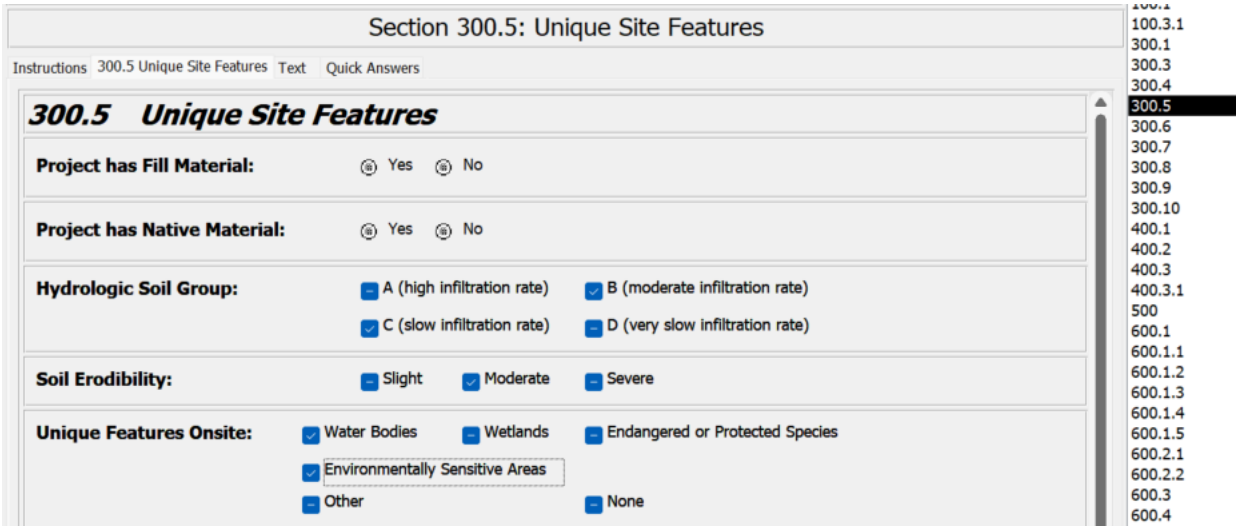


Figure 3-15. Section 300.5 Unique Site Features Tab

The combined tabs will automatically populate the section and can be previewed before finalizing Section 300.5.

300.6 Potential Pollutants from Site Features or Known Contaminants

SWPPP GUIDANCE 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.

SWPPP Builder Instructions

Section 300.6 has two separate tabs for information entry: Lists and Text (Figure 3-16).

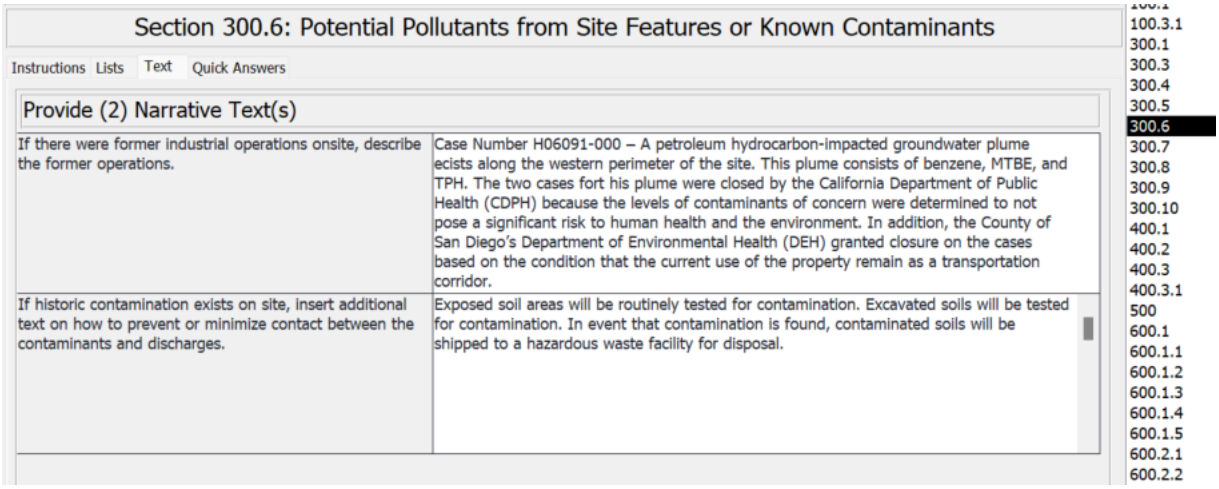


Figure 3-16. Section 300.6 Potential Pollutants from Site Features or Known Contaminants

Text Tab: The text tab provides two separate text areas for entering information regarding former industrial operations of a site and actions that will be taken in event of known historic contamination.

If the project area was a site of former industrial operations, provide the narrative as to the type of operations conducted there. In addition, if the site also contains known contamination due to the industrial operations, include in the narrative the nature of the contamination.

If historic contamination exists on site, provide narrative text on how to prevent or minimize contact between the contaminants and stormwater/non- stormwater discharges, otherwise do not enter any text.

Lists Tab: When a project site has known contaminants, enter the list of all contaminants known. Examples of known contaminants are:

- Lead
- TPH
- Diesel
- Benzene

300.7 Construction Support Activities

SWPPP GUIDANCE INSTRUCTIONS

- Select the construction support activities that will be needed for the project.
- Review the contract documents and associated environmental documents to determine if additional agency(ies) approvals or permits are required.

SWPPP Builder Instructions

Section 300.7 has two separate tabs for information entry: 300.7 Tab and Text (Figure 3-17).

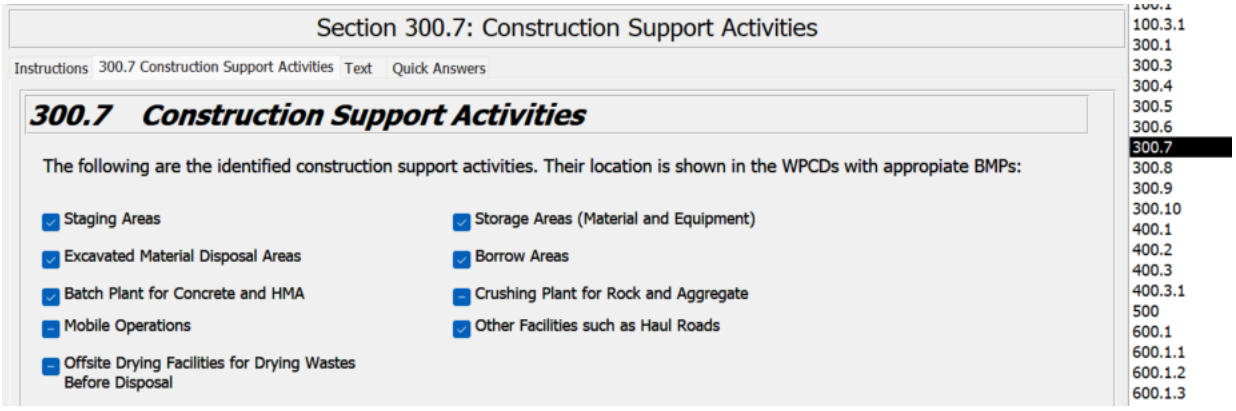


Figure 3-17. Section 300.7 List of Existing (Pre-Construction) Stormwater Control Measures

300.7 Tab: Select in the check boxes which construction support activities will be used on-site. Click the top of the tab to move between entry windows.

Text Tab: Add any additional narrative text for construction support activities.

300.8 Inventory of Materials and Activities that May Pollute Stormwater

SWPPP GUIDANCE INSTRUCTIONS

The QSD is required to conduct a comprehensive pollutant source assessment which must include a list of potential pollutant sources and identification of site areas where additional BMPs are necessary to reduce or prevent pollutants in stormwater and authorized non-stormwater discharges:

- For Table 300.8, select all anticipated construction activities that have the potential to contribute sediment or other pollutants to stormwater discharges.
- Consider all potential sources of pollutants, including non-visible pollutants which are known, or should be known to occur on-site including those that:
  - Are used in construction activities;
  - Are stored on-site;
  - Were spilled or released during construction activities or past land use activities and not cleaned up; and
  - Were applied to land as part of past land use activities.

- Consider the quantity, physical characteristics (e.g., liquid, powder, solid), and locations of each potential pollutant exposed, source handled, produced, stored, recycled, or disposed of on-site;
- Consider the degree to which pollutants associated with those materials may be exposed to and mobilized by contact with stormwater;
- Consider the direct and indirect pathways that pollutants may be exposed to stormwater or authorized non-stormwater discharges including an assessment of past spills or leaks, non-stormwater discharges, and discharges from adjoining areas.
- ADL-contaminated material (if hazardous)
- Segregate wastes and be aware that dumpsters must be covered prior to likely precipitation events and at the end of every business day.

The following table lists the TMDL non-visible pollutants that could require sampling if the site specific BMPs deployed to protect runoff from coming into contact are deficient or there are leaks or breaches where the products are stored for use and the areas are not properly cleaned up or corrected prior to a storm event that can discharge off the Caltrans project limits:

Table 3-2. Non-Visible constituents from TMDL Table H-2.

4,4'-DDD	Copper	DDT	Total Coliform
4,4'-DDE	DDT	PAHs	Enterococcus
4,4'-DDT	Lead	Chlorine	Nitrate-Nitrogen
Bifenthrin	Silver	Nickel	Nitrate-Nitrogen+
Chlordane	Zinc	Selenium	Orthophosphate
Chlorpyrifos	Mercury	Diazinon	Total Cadmium
Dieldrin	Chromium	Dissolved Copper	Total Copper
PCBs	p,p'-DDE	Dissolved Lead	Total Lead
Toxaphene	Total DDTs	Dissolved Zinc	Total Nitrogen
Cadmium	DDE	Fecal Coliform	Total Phosphorus
Ammonia	DDD	E. coli	Total Zinc
Un-ionized Ammonia	Phosphorus		

This section should be completed after reviewing the *Construction Site Monitoring Program Guidance Manual*. Additional guidance is available by reviewing the *Construction Site Monitoring Program Guidance Manual* for TMDL constituents.

The QSD must describe as part of the narrative text the materials and operations that will form part of the pollutant source assessment. BMPs from Section 600 should be selected to minimize potential for breaches, leaks, spills or malfunctions that could trigger the sampling. This is the summary of the findings from the tables, the lists and the WPCDs.

SWPPP Builder Instructions

Section 300.8 has three separate tabs for information entry: Text, Lists, and Table 300.8 (Figure 3-18).

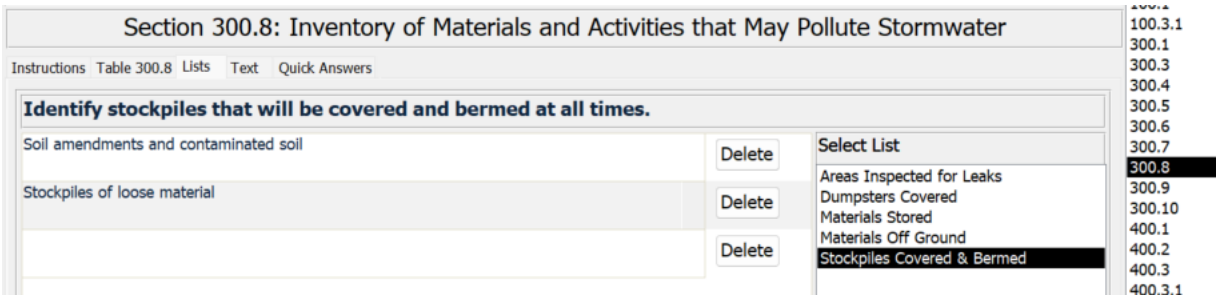


Figure 3-18. Section 300.8 List of Covered Stockpiles Before Precipitation Event

Text Tab: Include text regarding the assessment of all potential pollutants and the material management plan to be implemented on-site. Example entries are provided below.

EXAMPLE TEXT

Vehicles and equipment area 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

If leaks cannot be repaired immediately, remove the vehicle or equipment from the job site.

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. Dumpsters will be emptied when waste reaches the fill line. Waste- containing asbestos shall be properly handled and contained at all times.

Lists Tab: For the List tab, there are five categories of lists to be completed. Complete the lists for:

1. Areas inspected for leaks;
2. Dumpsters covered;
3. Materials stored;
4. Materials off ground; and
5. Stockpiles covered and bermed.

To select a list, click on the list title and entry fields will appear to the left.

List the inventory of materials and activities that pose a pollutant stormwater risk. 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. 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. Examples for list entries are provided below.

EXAMPLE TEXT

Stockpiles covered, bermed, and protected with a linear barrier on the downhill side:

- Contaminated soil
- Soil amendments

Materials off ground in watertight containers with secondary containment:

- Calcium chloride
- Portland cement

Materials Stored in watertight containers with secondary containment:

- Acetone
- Methyl ethyl ketone
- Diesel
- Fuel oil

Dumpsters covered:

- Dumpsters containing hazardous particulate
- Roll off bins containing concrete washout

Areas inspected for leaks:

- Vehicle and equipment storage and maintenance areas
- Portable toilets

Table 300.8 Tab: The following table contains a list of construction activities that have the potential to contribute pollutants to stormwater discharges, including sediment. 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 H. Details for controlling these pollutants using soil stabilization and sediment control BMPs are discussed in Section 600.1. Potential non-stormwater and waste management-related discharges are further described in Section 600.2, respectively. The WPC Manager shall update the list of potential pollutants 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 are potential sources of stormwater contamination.

Complete Tab 300.8 by checking the categories of work that is to be performed and include activities which have the potential to discharge pollutants (Figure 3-19).

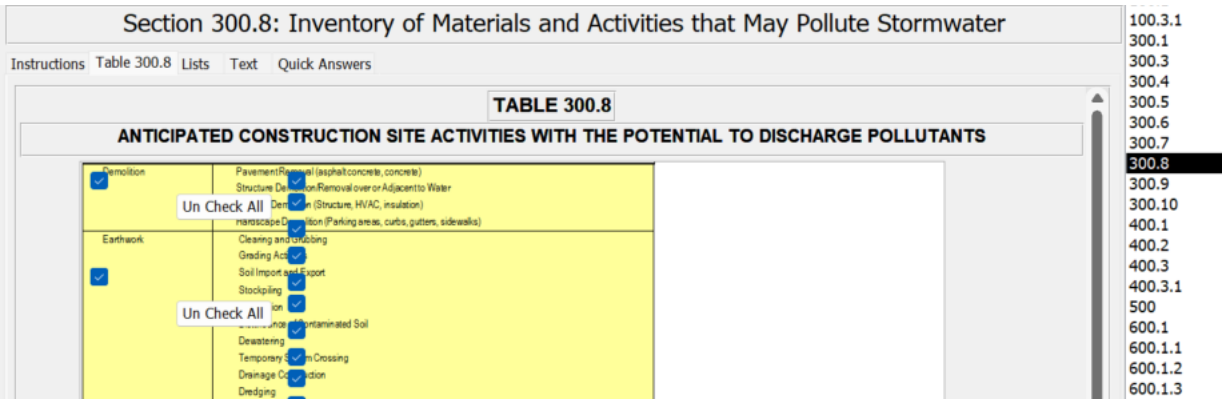


Figure 3-19. Section 300.8 Tab Anticipated Construction Site Activities with the Potential to Discharge Pollutants

300.9 Pre-Construction Existing Stormwater Control Measures

SWPPP GUIDANCE 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: 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.

SWPPP Builder Instructions

Section 300.9 has two separate tabs for information entry: Text and Lists (Figure 3-20).

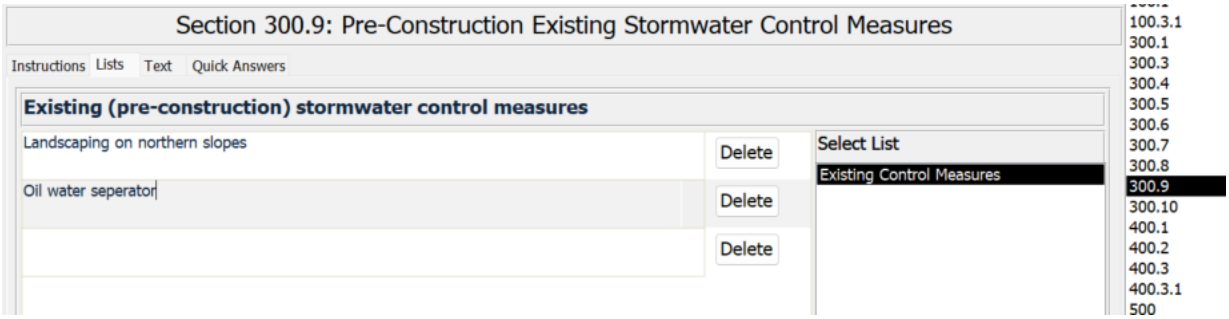


Figure 3-20. Section 300.9 List of Existing (Pre-Construction) Stormwater Control Measures

Lists Tab: In the fields provided, list existing stormwater control measures that are present in the project area.

EXAMPLE TEXT

- Existing riparian vegetation will be protected using temporary high visible fencing. No disturbance to riparian habitat is anticipated.
- 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 WPCD 6. No disturbance is anticipated on these slopes.

Text Tab: If there are no pre-construction existing stormwater control measures, provide narrative text explanation.

300.10 Risk Level Determination

SWPPP GUIDANCE 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 1.4.2 of the SWPPP/WPCP Preparation Manual.

- Attach a copy of the sediment risk factor worksheet from Attachment D.1 (Risk Determination Worksheet) of the CGP available at:

  https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction/docs/2022-0057-dwq-with-attachments/cgp2022_att_d1.pdf

- Attach a copy of the USEPA Rainfall Erosivity Factor Calculator Pages to document the R factor used http://lew.epa.gov. Include the Date Entry and Location pages as well as the R values pages.
- Note: Changing the dates of construction and/or an increase or reduction of total area of disturbance can significantly change the R value, if the DSA or duration decreases; it might 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 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).
  - Attach a copy of the Receiving Water Risk Factor Worksheet Attachment D.1 of the CGP.
  - Attach a copy of the Combined Risk Level Matrix Attachment D.1 of the CGP.

SWPPP Builder Instructions

Enter narrative text in the text area provided that addresses the risk level determination. An example is provided below.

EXAMPLE TEXT

Using the proposed construction schedule of 10/10/2026 to 10/10/2027, the calculated R factor for the project 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). The project's receiving water risk is low. Using the combined risk level matrix, the Project Combined Risk is Level 2. Copies of the Erosivity Index Calculator Results, the KLS map, the Sediment Risk Factor and Receiving Water Risk Worksheets, and the Combined Risk Level Matrix are included in Attachment C.

SECTION 400
Contractor Information

400.1 Contact Information for Responsible Parties

SWPPP GUIDANCE INSTRUCTIONS

Include a Separator and Tab for Section 400 for ready reference.

- For the following responsible parties, provide name, title, company or agency, address, phone number, emergency phone number (24/7), and email address:
  - Resident Engineer;
  - Contractor;
  - Contractor Site Manager (if different than Contractor);
  - Qualified SWPPP Developer, QSD;
  - QSD who will conduct QSD-required inspections (if different than SWPPP Preparer)
  - WPC Manager (must be at a minimum a QSP);
  - Alternate WPC Manager (must be at a minimum a QSP);
  - Trained QSP Delegate;
  - Erosion (Soil Stabilization) Control Provider.
  - Provide contact information for the WPC Manager who is responsible for field stormwater compliance as outlined in Section 13 of the Standard Specifications. Edit the template below to enter the name, title, company, address, telephone number, emergency telephone number (24/7), and email address.
- Provide contact information for the Alternate WPC Manager who will assist the Contractor's WPC Manager in performing the WPC Manager duties. 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 by using DOT-CEM20DSW Contractor Personnel Training Record.
- 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 SWPPP must include a list of names of all contractors, subcontractors, and individuals who will be directed by the WPC Manager.

SWPPP Builder Instructions

Section 400.1 has two separate tabs for information entry: Text and Field Tab.

This section provides two tabs to enter required information. Click on the top of the tab to move between the entry windows.

Field Tab: Enter the contact information for the primary contacts for SWPPP implementation. Required information is to include:

- Provide name, title, company or agency, address, phone number, emergency phone number (24/7), and email address for the erosion control provider and construction site manager.

Text Tab: Include additional names, their associated responsibilities, and contact information for parties responsible for the SWPPP. Required information is to include:

- Provide contact information for anyone who will assist the Contractor's WPC Manager in performing the WPC Manager duties, such as an alternate, a QSP 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 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 SWPPP must include a list of names of all contractors, subcontractors, and individuals who will be directed by the WPC Manager.

400.2 List of Subcontractor and Material Suppliers

SWPPP GUIDANCE 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).
- A sample subcontractor SWPPP Notification letter and sample subcontractor contact log are provided in Attachment K. 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, and
- 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 include copies in SWPPP File Category 20.22: Material Supplier Contact Information and Notification Letters.

SWPPP Builder Instructions

This section provides one tab with separate field lists to enter required information. The **Subcontractor List** is to enter the subcontractor Name/Company and SWPPP Responsibility List (Figure 3-21). The second list, **Material Suppliers**, is to include the material suppliers name or company (Figure 3-22). Click on the list in the "Select List" column to move between the entry windows.

Figure 3-21. Section 400.2 Subcontractor Name/Company

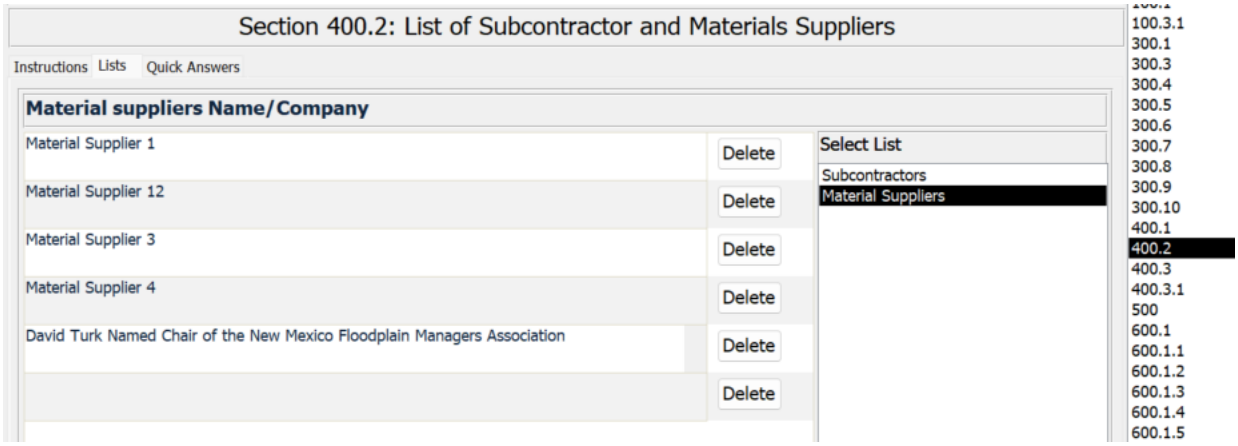


Figure 3-22. Section 400.2 List of Material Suppliers

400.3 Training

SWPPP GUIDANCE INSTRUCTIONS

- Describe the training for the following individuals responsible for the SWPPP:
    - SWPPP Preparer, QSD;
    - WPC Manager;
    - Alternate WPC Manager;
    - QSP Delegate;

  The Contractor's WPC Manager (QSD) shall have stormwater pollution prevention training and required qualifications and training under the CGP and LTCGP, Section VII, Training Qualifications and Certification Requirements or the LTCGP, Section VII.
- The Contractor's WPC Manager (QSP) and alternate WPC Manager (QSP) shall have formal stormwater pollution prevention training and required qualifications and training under the Construction General Permit (CAS000002), Fact Sheet, Section I.P, Training Qualifications Requirements.
- The WPC Manager, QSP, must have appropriate SWRCB-sponsored or approved QSD/QSP training course, this could include the Qualified Stormwater Pollution Prevention Plan Developer/ Practitioner Training Program for Professionals Licensed by the California Board of Professional Engineers, Land Surveyors and Geologist or via CASQA.
- The WPC Manager, the Alternate WPC Manager, and the QSP Delegate must complete the Caltrans 8-hr WPC Manager Training. Training of water quality sampling personnel shall be in accordance with the latest Caltrans *Construction Site Monitoring Program Guidance Manual*.
- Informal stormwater training shall be documented using the sample training log sheet provided in Appendix E.
- Formal stormwater training shall be documented by providing a list of classes and copies of class completion documentation. Documentation shall be submitted to the RE within 24 hours of completion of training.
- Training records shall be updated, documented and reported 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; and
    - documentation of all training for individuals responsible for overseeing, revising, and amending the SWPPP.

SWPPP Builder Instructions

Section 400.3 has one tab for information entry: Lists Tab (Figure 3-23).

Lists Tab: Provide the qualification and training information of all personnel that are responsible for the SWPPP in the fields provided. Click on the top of the tab to move between the entry windows.

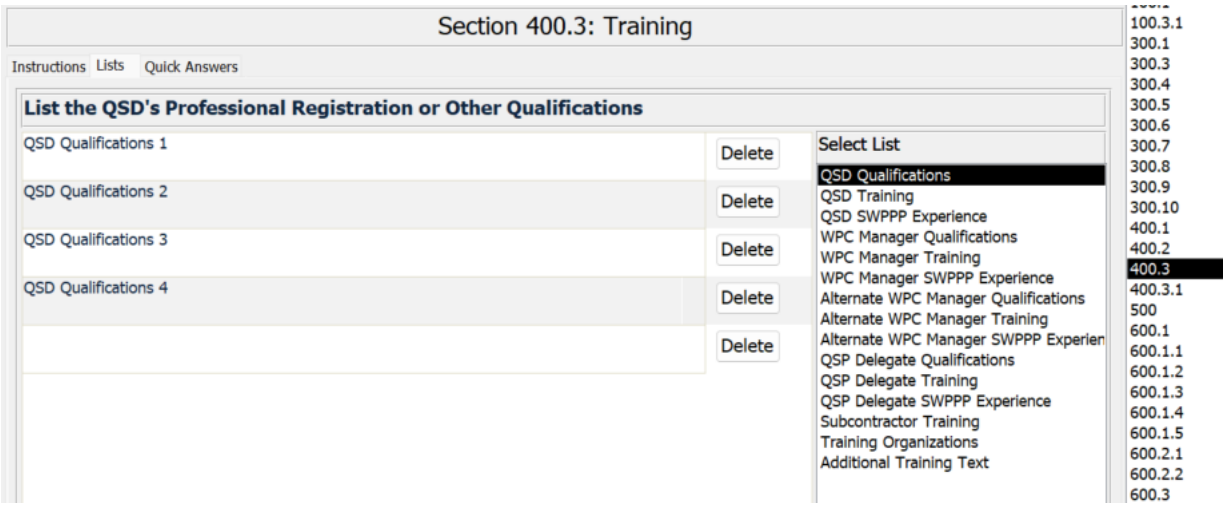


Figure 3-23. Section 400.3 Training Lists Tab

400.3.1 Additional QSP Delegate(s)

SWPPP GUIDANCE INSTRUCTIONS

If there is more than one QSP delegate, complete Table 400.3.1 listing the names of the QSP Delegates and whether they have received the training necessary to assist the WPC Manager oversee stormwater compliance. Complete the last column showing whether the DOT CEM-2020SW form has been completed and submitted to Caltrans and is attached to the SWPPP.

SWPPP Builder Instructions

Section 400.3.1 has one tab for information entry: Table 400.3.1 (Figure 3-24).

Table 400.3.1 Tab: Provide the contact information for the additional QSP delegates. Click on the top of the tab to move between the entry windows.

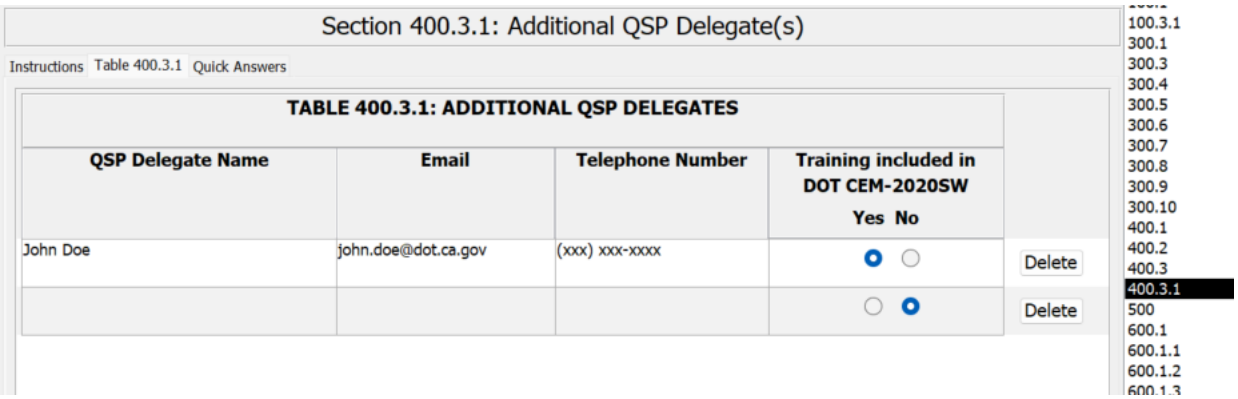


Figure 3-24. Section 400.3.1 Training Lists Tab

SECTION 500
References, Other Plans, Permits and Agreements

SWPPP GUIDANCE INSTRUCTIONS

Include a Separator and Tab for Section 500 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 Wildlife, 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, 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; and
    - 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.
- Any special requirements for each permit shall be described. Additional bullets should be inserted as needed. Bullets should be deleted if not needed.
- Include copies of any required contractor submitted plans. If there are some that are not listed, check the box for other Plan and include the name of it in the Fields tab.

Electronic copies of all other plans/permits/agreements shall be included in Attachment F of the SWPPP.

SWPPP Builder Instructions

Section 500 has three separate tabs for information entry: 500 Contractor Submitted Plans, Field, and Lists Tab. Check all contractor submitted plans which apply (Figure 3-25). Use the Section 500 SWPPP guidance information to populate the necessary fields (Figure 3-26).

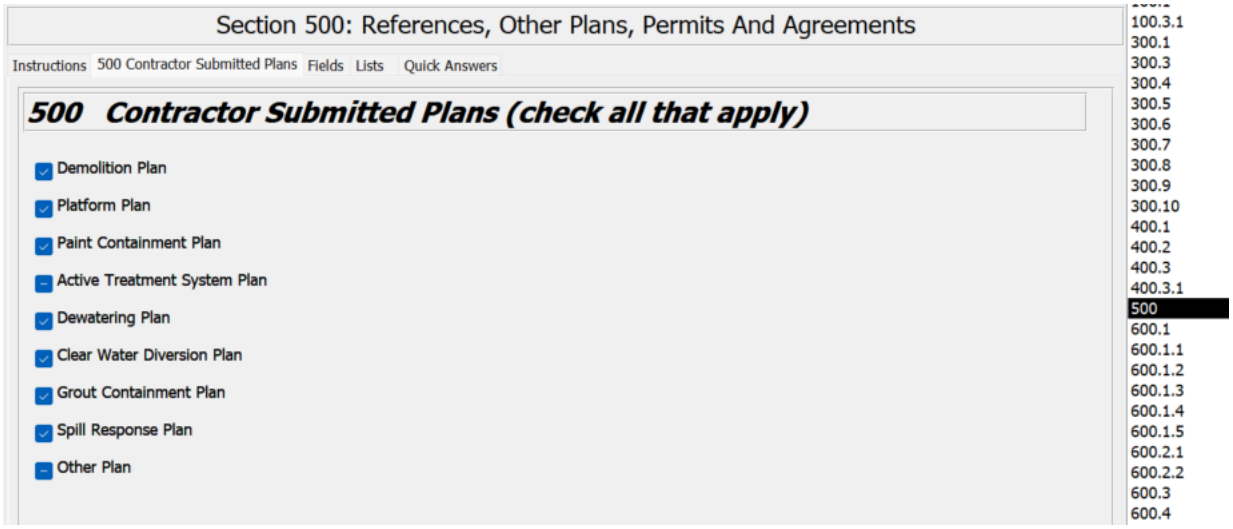


Figure 3-25. Section 500 References, Other Plans, Permits and Agreements

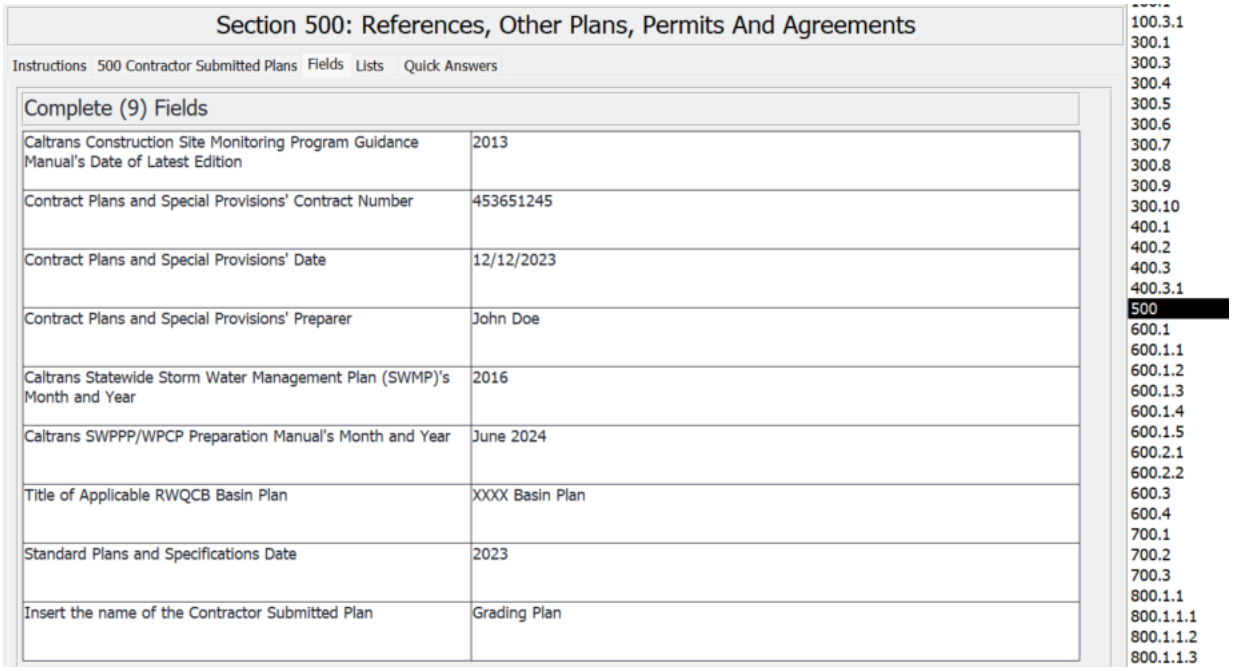


Figure 3-26. Section 500 References, Other Plans, Permits and Agreements Fields Tab

List Tab: Click on the list's titles to enter the reference(s), plan(s) and permit(s) information for the project (Figure 3-27). Use the general SWPPP instructions provided above as guidance.

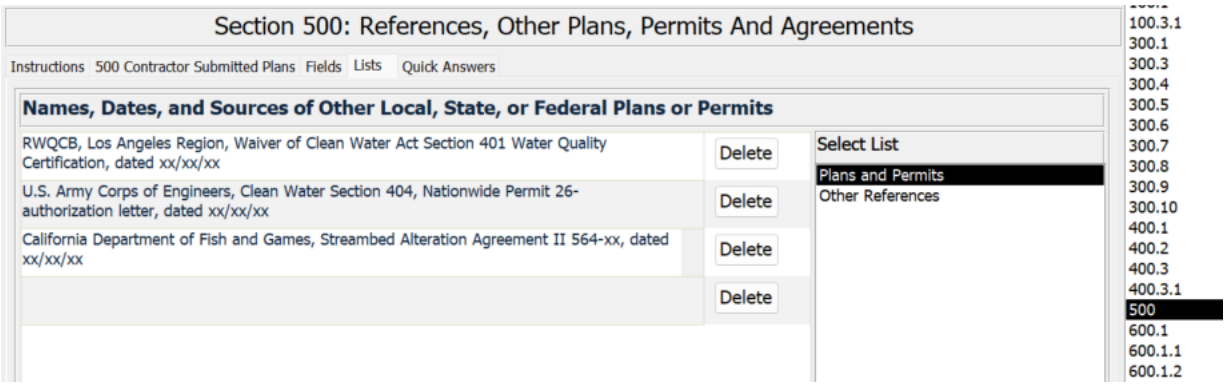


Figure 3-27. Section 500 References, Other Plants, Permits and Agreements Lists Tab

The combined tabs with automatically populate the section and can be previewed before finalizing the section.

SECTION 600
Determination of Construction Site Best Management Practices

600.1 BMP Selection for Erosion and Sediment Control

SWPPP GUIDANCE INSTRUCTIONS

Include a Separator and Tab for Section 600 for ready reference.

SECTIONS 600.1

BMP SELECTION PROCESS

Erosion Control Principles:

- The QSD shall determine the optimal processes that will be implemented and when those processes and their timeframe will occur to control erosion and retain soil on slopes and disturbed areas. This will include any sediment and soil stabilization BMPs as well as planting and other permanent vegetative cover included as contract items.

Soil Cover Areas:

- Include a list of all areas that are disturbed or will be disturbed within the project limits and therefore will require the implementation of soil cover to prevent sediment deposition or detachment.

SECTIONS 600.1 TO 600.1.5:

BMP SELECTION PROCESS

Erosion Control Principles:

- The QSD shall determine the optimal processes that will be implemented and when those processes and their timeframe will occur to control erosion and retain soil on slopes and disturbed areas. This will include any sediment and soil stabilization BMPs as well as planting and other permanent vegetative cover included as contract items.

Soil Cover Areas:

- Include a list of all areas that are disturbed or will be disturbed within the project limits and therefore will require the implementation of soil cover to prevent sediment deposition or detachment.

SECTIONS 600.1.1 TO 600.1.5:

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 600.1, 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.
  - 600.1.1 Temporary Run-on Control BMPs
  - 600.1.2 Soil Stabilization (Erosion Control) BMPs
  - 600.1.3 Sediment Control BMPs
  - 600.1.4 Tracking Control BMPs
  - 600.1.5 Wind Erosion Control
- 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 BMP requirements are included. The BMP selection table in each of the sub-sections of Section 600.1 shall be completed and a narrative description shall be provided for each of the BMPs selected.

Identify selected BMPs on the WPCDs, which are to be included as SWPPP Attachment H.

SWPPP Builder Instructions

Section 600.1 has two separate tabs for information entry: Text and Lists (Figure 3-28).

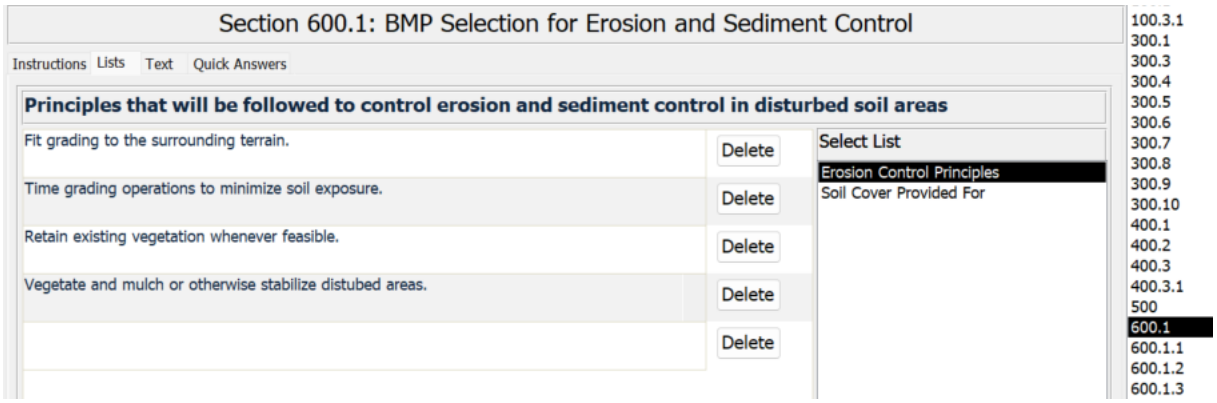


Figure 3-28. Section 600.1 List of Principles to Control Erosion and Sediment in DSAs

Lists Tab: In the fields provided, erosion and sediment control measures that will be employed on-site are included. Examples of erosion control principles are:

- 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.

Text Tab: Provide additional narrative text regarding BMP selection. If there is no additional text to include, leave the text area blank. An example of additional narrative text is:

EXAMPLE TEXT

Temporary erosion and sediment control BMPs shall be deployed according to limit soil erosion and maintain water quality. Stabilized construction entrances/exits will be used at all construction site entrances. All slopes will be protected with fiber rolls and silt fences and all drainage inlets will be protected with filter fabric and gravel bag berms. Chemicals, oils, hazardous materials, and portable toilets will be stored with secondary containment to prevent discharges of pollutants to the stormwater drainage system or receiving water. Additional materials, such as temporary covers and linear sediment barriers will be stored within the staging area and used as needed. Move-in and move-out will be used when work phases affect the application of erosion control.

600.1.1 Temporary Run-On Controls

SWPPP GUIDANCE 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 incorporate sediment control.
- 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 (if needed, as applicable); and
    - Standard Specifications (if needed, as applicable).

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 Construction Site Best Management Practices 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; and
    - 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 on-site 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.

- Show the BMPs selected to divert run-on flows around and/or through the construction project on the WPCDs from Attachment H. Show or note any additional BMPs used to protect disturbed soil from run-on.
- If temporary diversions are necessary, include clear water diversion plan in Attachment L, and check the box in Section 500. Whenever controls are needed to divert run-on from an area of the project, it must be managed through the site. The discharge must be directed to an authorized location. If drainage patterns or discharge locations are proposed to be temporarily altered, dissipators and wildlife impacts may need to be considered.

SWPPP Builder Instructions

Section 600.1.1 has three separate tabs for information entry: Table 600.1.1, Text, and Lists (Figure 3-29). When selecting BMPs for the project site, consider:

- The estimated volume of potential run-on for the 10 year storm;
- The run-on locations for concentrated flows; and
- The existing, and possible temporary flow paths and discharge points of the run-on.

Table 600.1.1 Tab: Complete the table by checking off which temporary run-on control BMPs will be incorporated into the project as required. Select the BMPs based on minimum requirements, bid items, or as needed.

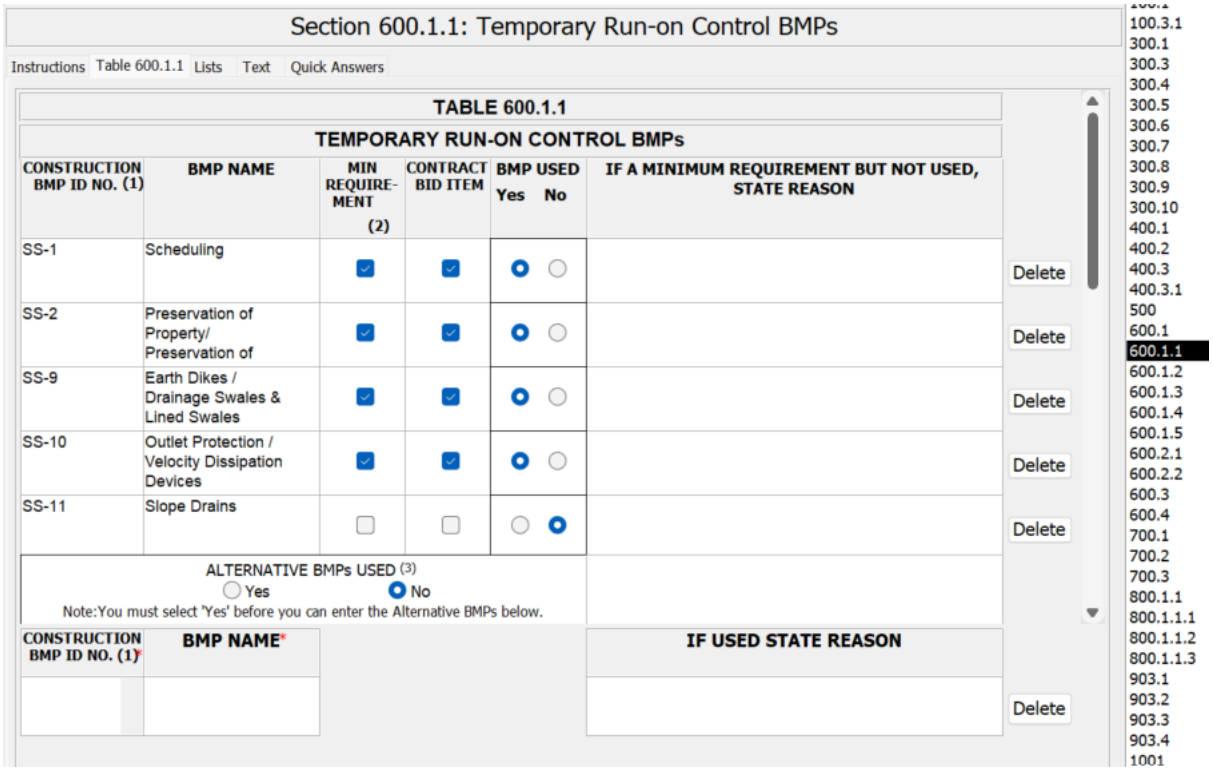


Figure 3-29. Section 600.1.1 Table of Temporary Run-on Control BMPs

The database will automatically ask for a reason to be stated in the appropriate column for any Contract Minimum BMP that is not used.

Choose 'yes' or 'no' if Alternative BMPs will be used on the project. This section of the table will not be functional or show up in the SWPPP if Yes is not checked.

Lists Tab: List the different temporary run-on control BMPs checked in the standard table. Example entries and narratives are provided below.

EXAMPLE TEXT

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 (lf) of fiber roll shall be stored on site for mobilization prior to forecasted 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. 500 lf 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.

Text Tab: The text tab provides two separate text areas for entering information regarding CGP and LTCGP run-on requirements and selected temporary run-on control BMPs.

Narrative Text (1) run-on requirements:

Enter narrative text regarding CGP run-on requirements with respect to the project risk level following the provided SWPPP Guidance instructions and example. An example of narrative text is:

EXAMPLE TEXT

The CGP states that sites must manage all run-on and runoff from a project site to reduce excessive physical and chemical impacts to receiving waters from sediment and increased flows. 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 H.

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

Slope drains will be used to intercept and direct surface runoff from newly stabilized areas into vegetated areas protected with rock slope protection. Surface run-on will be diverted towards storm drains using interceptor dikes.

Narrative Text (2)-Selected temporary run-on control BMPs:

Enter detailed narrative text regarding project specific BMP implementation following the provided SWPPP Guidance instructions and example. Explain the general approach of how selected BMPs will be implemented at points of potential run-on. See Section 300.3 for estimated run-on flow rate(s), including the calculations. An example of narrative text is:

EXAMPLE TEXT

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

600.1.2 Soil Stabilization (Erosion Control)

SWPPP GUIDANCE 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 and contract plans.

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 *Construction Site Best Management Practices 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 degree to which pollutants associated with those materials may be exposed to and mobilized by contact with stormwater; and
    - 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 (eg. “Not applicable at this time”). 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.

- Show the locations or make a note of the selected soil stabilization BMPs on the WPCDs from Attachment H.

SWPPP Builder Instructions

Section 600.1.2 has three separate tabs for information entry: Text, Lists, and Standard Table (Figure 3-30).

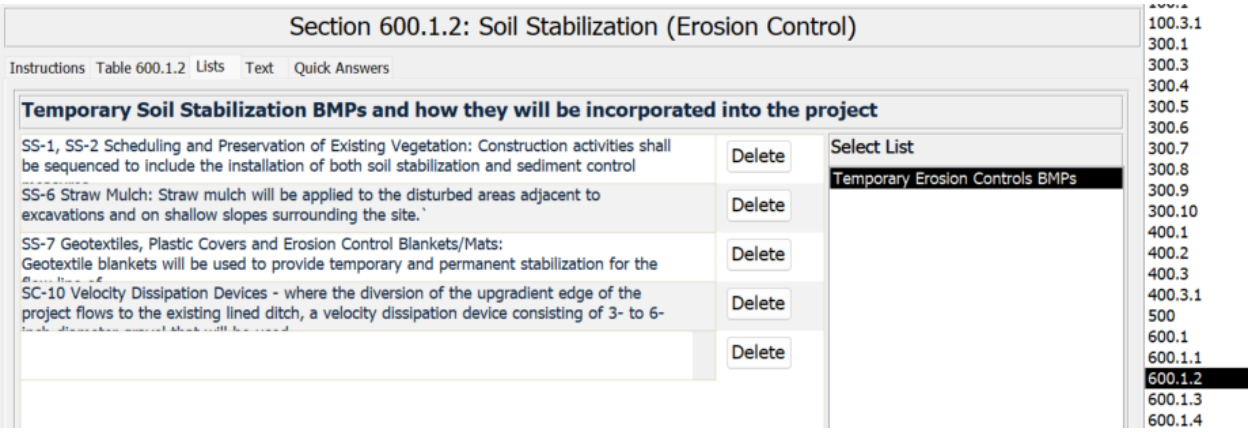


Figure 3-30. Section 600.1.2 List of Soil Stabilization BMPs Used

Text Tab: Add a detailed narrative description of temporary soil stabilization BMPs that were selected for use on the project. Give a general approach on how BMPs will function and comply with CGP requirements. Discuss on-site availability of BMP materials and implementation of BMPs. Examples of narrative text entries are:

EXAMPLE TEXT

- DSAs will be stabilized with temporary or permanent soil stabilization (erosion control) within 14 days of when an area becomes inactive.
- DSAs will be stabilized with temporary or permanent soil stabilization (erosion control) before forecasted storm events.
- DSAs 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, inspected and maintained to Caltrans Standard Specifications and Standard Plans prior to forecasted storm events.
- 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 forecasted 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 DSAs 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 inactive 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 inactive areas as required. Such measures shall be redeployed as necessary to maintain effectiveness.

– The application of any erodible landscape material shall be discontinued within two days prior to a forecasted storm event or during periods of precipitation.

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

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 and shown on the current water pollution control schedule. 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.

Lists Tab: List the different temporary soil stabilization BMPs checked in the standard table. Example entries and narratives are:

EXAMPLE TEXT

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 and will be shown on a current water pollution control schedule as described in section 600.4 of this Manual. Linear sediment barriers, with vegetation above, will be installed prior to disturbance. Sediment control BMPs will be installed to stabilized DSAs prior to the storms. 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 per Standard Specifications to the disturbed areas adjacent to excavations and on shallow slopes surrounding the site. See the WPCDs in Attachment H 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 per Standard Plan T 55. Polyethylene covers will be used throughout the project area to cover small exposed soil areas prior to forecasted storm events, and will be anchored to prevent damage by wind per Standard Plan T 53. 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 per Standard Plan T 53.

Standard Table Tab: Complete the table by checking off which soil stabilization BMPs will be incorporated into the project as required (Figure 3-31). Select the BMPs based on minimum requirements, bid items, or as needed.

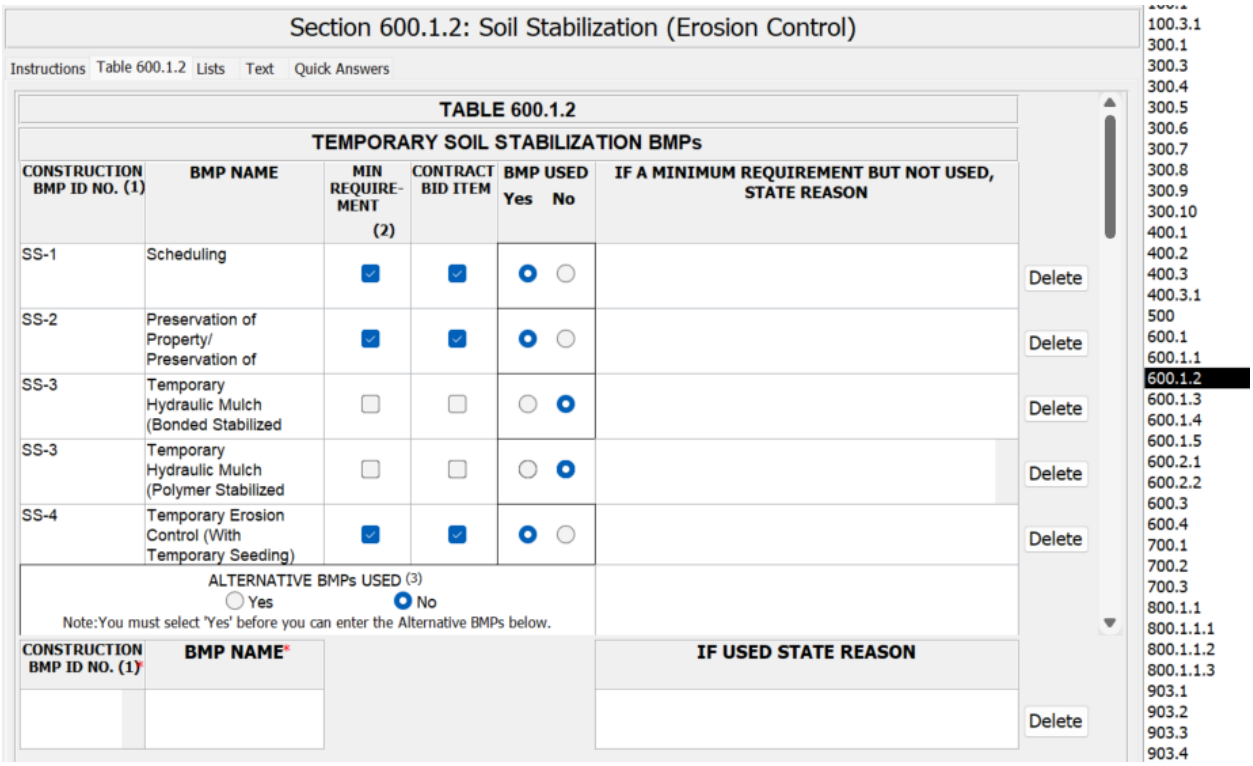


Figure 3-31. Section 600.1.2 Table of Temporary Erosion Control BMPs

The database will automatically ask for a reason to be stated in the appropriate column for any Contract Minimum BMP that is not used. Choose 'yes' or 'no' if Alternative BMPs will be used on the project. This section of the table will not be functional or show up in the SWPPP if Yes is not checked.

600.1.3 Sediment Control

SWPPP GUIDANCE 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; and
    - 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 Caltrans *Construction Site Best Management Practices 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.
- Show selected temporary sediment control BMPs on the WPCDs from Attachment H. 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.

SWPPP Builder Instructions

Section 600.1.3 has three separate tabs for information entry: Text, Lists, and Table 600.1.3 (Figure 3-32).

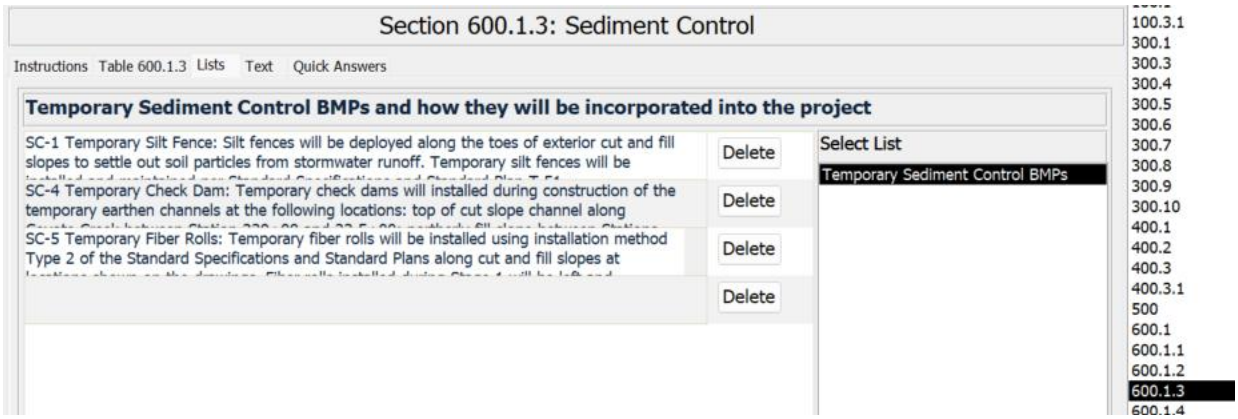


Figure 3-32. Section 600.1.3 List of Temporary Sediment Control BMPs

Text Tab: Add a detailed narrative description of temporary sediment control BMPs. Give a general approach on how BMPs will be implemented on the project, on the on-site availability, and proposed mobilization and implementation of BMPs.

Lists Tab: Provide narrative descriptions of the sediment control BMPs chosen in the Standard Table that will be incorporated into the project. Below are examples of entries for the List tab.

EXAMPLE TEXT

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. Temporary silt fences will be installed on contour and maintained per Standard Specifications and Standard Plan T 51.

SC-4 Temporary Check Dam: Temporary check dams will be 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 using installation method Type 2 of the Standard Specifications and Standard Plans 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.

Table 600.1.3 Tab: Complete the table by checking off which sediment controls will be incorporated into the project (Figure 3-33). Select the BMPs based on minimum requirements, bid items, or as needed.

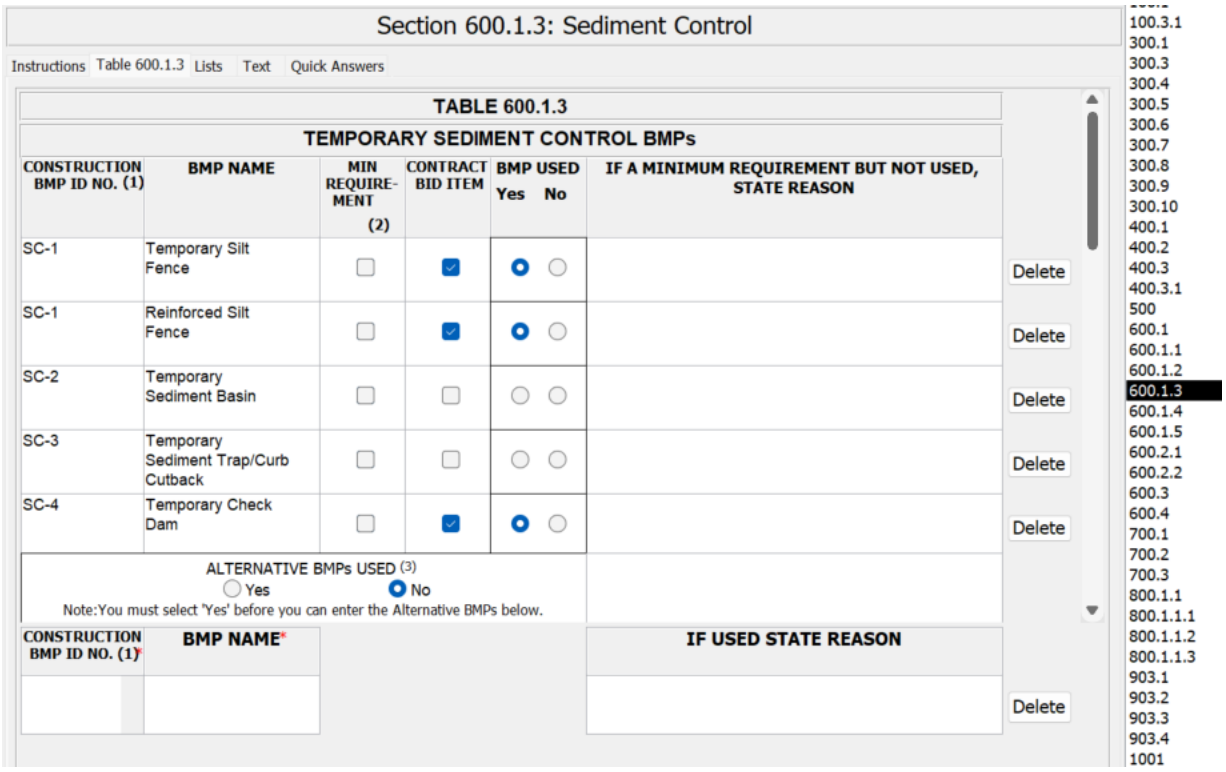


Figure 3-33. Section 600.1.3 Table of Temporary Sediment Control BMPs

The database will automatically ask for a reason to be stated in the appropriate column for any Contract Minimum BMP that is not used.

Choose 'yes' or 'no' if Alternative BMPs will be used on the project. This section of the table will not be functional or show up in the SWPPP if Yes is not checked.

600.1.4 Tracking Control

SWPPP GUIDANCE 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; and
    - 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 the Caltrans *Construction Site Best Management Practices 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 (e.g. “Not anticipated at this time”). Include non-standard or alternative BMPs selected for the project in the BMP selection table.
- 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 H. Select BMPs as necessary to protect the site at every stage of the work from tracking from the project site. Use the bid items in the locations identified in the plans. Show the location on the WPCDs or describe the use or identify the area that the BMP could be used. Consider the various stages, and the possible places the BMPs could be needed.
- Tracking controls are needed for sediments, aggregates, chips, tack oils, paving residues, erosion control materials, striping materials, and any other materials that could be tracked from the project site.
- On paving projects, plan the measures for preventing the oils from tracking, particularly for areas that will not be resurfaced. These may include wetting or sanding bridges between paving areas.

- 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.

SWPPP Builder Instructions

Section 600.1.4 has three separate tabs for information entry: Text, Lists, and Standard Table (Figure 3-34).

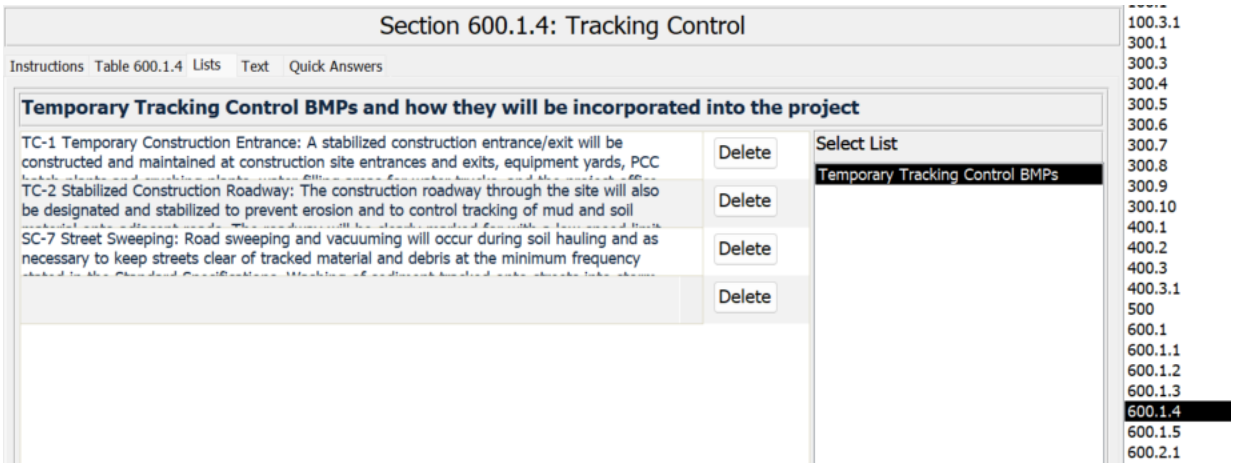


Figure 3-34. Section 600.1.4 List of Temporary Tracking Control BMPs

Text Tab: Add a detailed narrative description of tracking control BMPs. Give a general approach on how BMPs will be implemented on the project following the section instructions.

Lists Tab: Provide a detailed narrative descriptions of the tracking control BMPs chosen in the Standard Table that will be incorporated into the project. Below are examples of entries for the List tab.

EXAMPLE TEXT

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, per Standard Plan T 58 as shown on the site map, where needed to control tracking from DSAs. The entrances are built before the DSA, and only removed after the DSA is stabilized, or no further work is planned in the DSA.

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 Type A rock. 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 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. Regular maintenance will be conducted to replace sediment-clogged stabilization material with new stabilization material. Construction roadways will be inspected before and after each rainfall event, and weekly year-round. Immediate site access roadways will be inspected daily and street sweeping will be performed as needed. All temporary roadway ditches will be kept clear. When construction roadways are no longer required, they will be removed, re-graded, and re-vegetated as necessary.

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 at the minimum frequency stated in the Standard Specifications. Washing of sediment tracked onto streets into storm drains will not occur.

Standard Table: Complete the table by checking off which tracking controls will be incorporated into the project (Figure 3-35). Select the BMPs based on minimum requirements, bid items, or as needed.

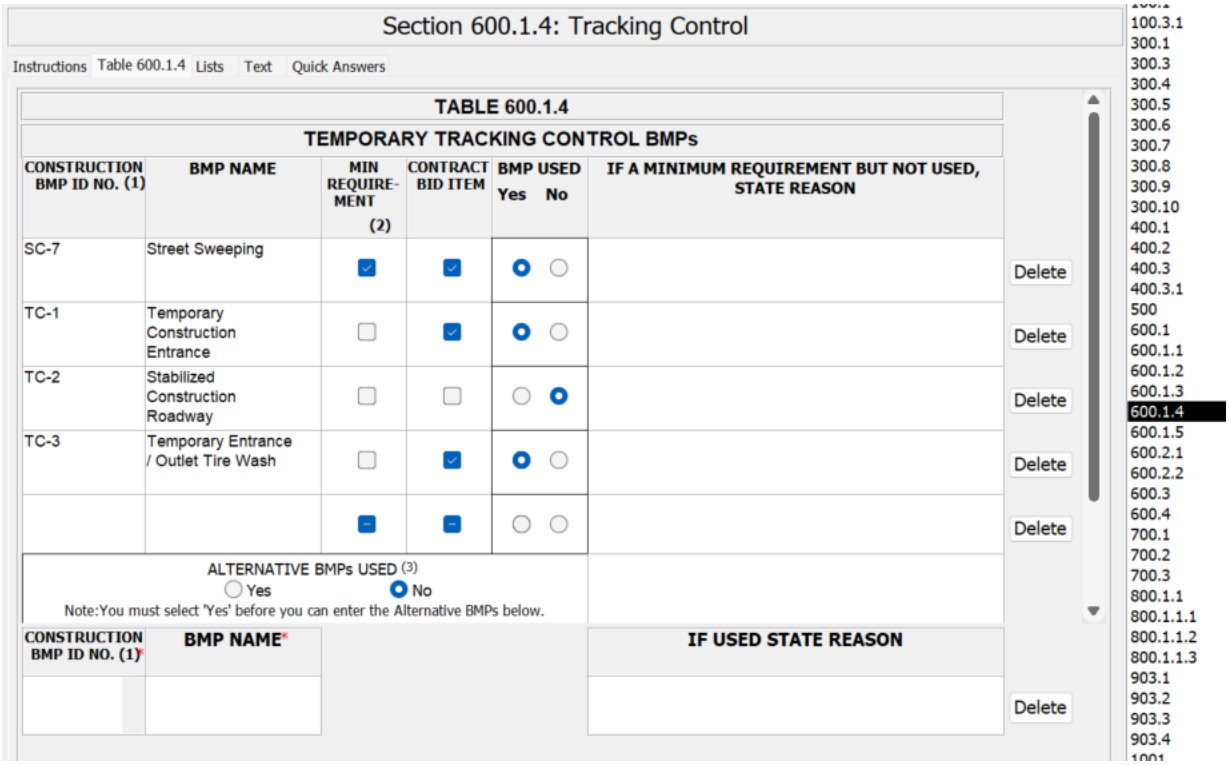


Figure 3-35. Section 600.1.4 Table of Temporary Tracking Control BMPs

The database will automatically ask for a reason to be stated in the appropriate column for any Contract Minimum BMP that is not used.

Choose 'yes' or 'no' if Alternative BMPs will be used on the project. This section of the table will not be functional or show up in the SWPPP if Yes is not checked.

600.1.5 Wind Erosion Control

SWPPP GUIDANCE 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; and
    - 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 Caltrans *Construction Site Best Management Practices 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.
- 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.

SWPPP Builder Instructions

Section 600.1.5 has three separate tabs for information entry: Text, Lists, and Standard Table (Figure 3-36).

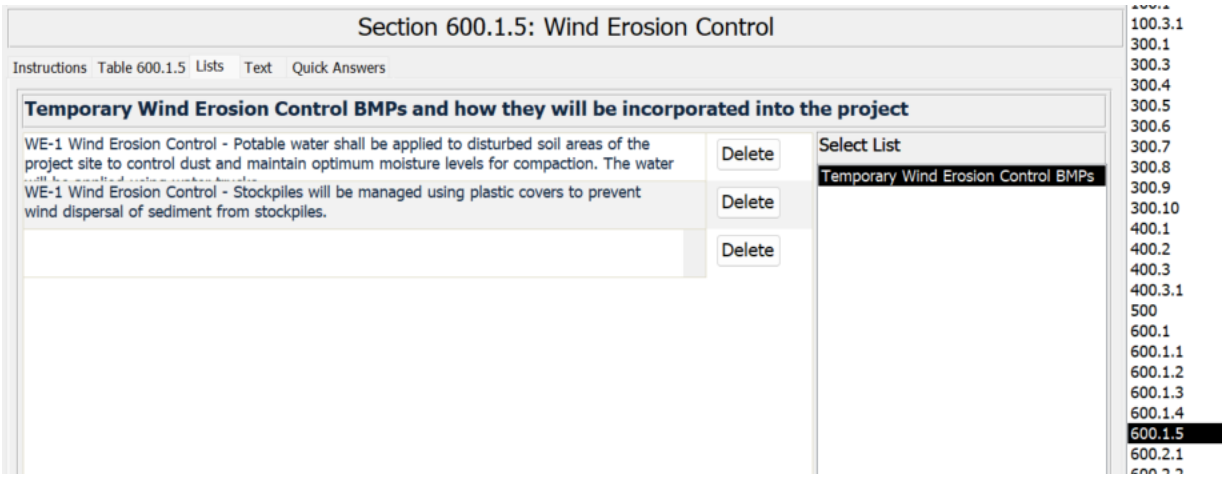


Figure 3-36. Section 600.1.5 List of Temporary Wind Erosion Control BMPs

Text Tab: Add a detailed narrative description of wind erosion BMPs. Give a general approach on how BMPs will be implemented on the project following the section instructions. Select the BMPs based on minimum requirements, bid items, or as needed.

EXAMPLE TEXT

Potable water shall be applied to DSAs 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. Water will be applied with a fog nozzle or mister sprinkler to maximize its effectiveness and prevent runoff.

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.

Additional BMPs may be used in conjunction with Wind Erosion Control (WE-1) to prevent wind erosion outside of working hours. Stockpiles will be managed using plastic covers to prevent wind dispersal of sediment from stockpiles. Street streeping will be done as needed and before precipitation events. Temporary hydraulic mulch, temporary hydroseed, and temporary soil binders may also be used to provide wind erosion control.

Lists Tab: Provide narrative descriptions of the wind erosion BMPs chosen in the Standard Table that will be incorporated into the project.

Standard Table: Complete the table by checking off which wind erosion controls will be incorporated into the project (Figure 3-37).

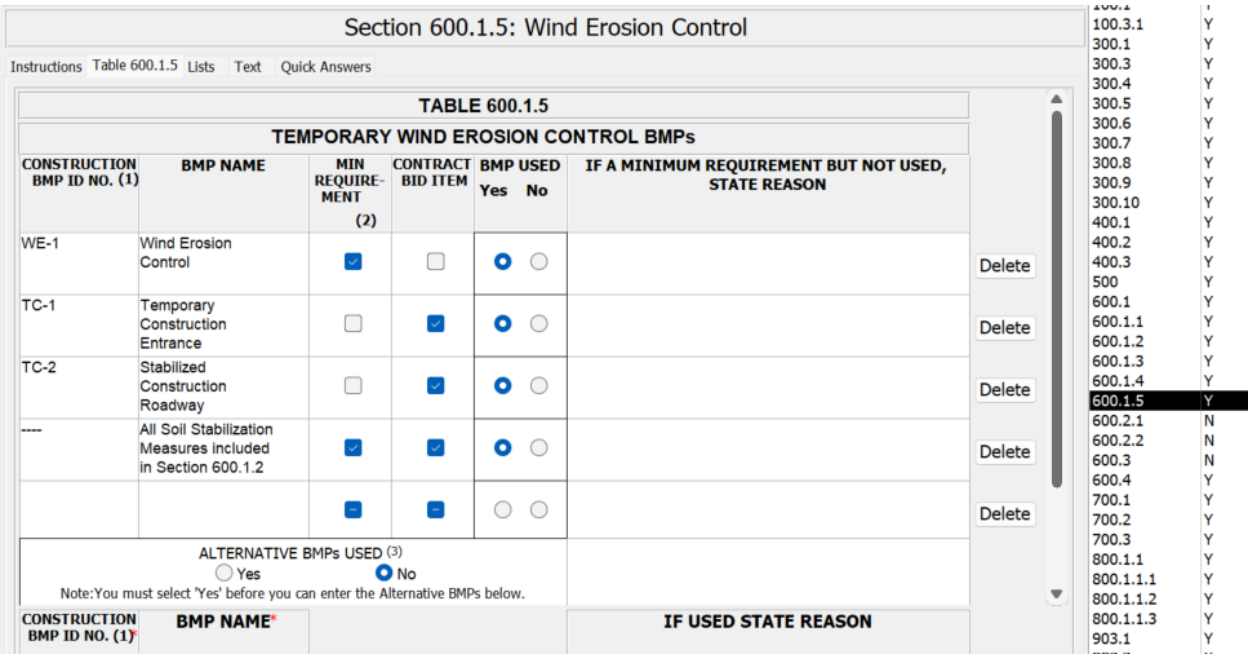


Figure 3-37. Section 600.1.5 Table of Temporary Wind Erosion Control BMPs

The database will automatically ask for a reason to be stated in the appropriate column for any Contract Minimum BMP that is not used.

Choose 'yes' or 'no' if Alternative BMPs will be used on the project. This section of the table will not be functional or show up in the SWPPP if Yes is not checked.

600.2 BMP Selection for Job Site Management

GENERAL SWPPP GUIDANCE INSTRUCTIONS FOR SECTIONS 600.2.1 TO 600.2.2:

BMP SELECTION PROCESS

- Using the identified potential pollutant sources in Section 300.8, the BMP selection process identifies the BMPs necessary to reduce or eliminate pollutant discharges from the 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.
- 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.
- BMPs will be selected to eliminate or reduce the pollutants identified in the Section 300.8: Materials Management. The BMP consideration checklists in each of the following sections will be completed to assist in the selection of project-specific BMPs.
    - 600.2.1: Non-Stormwater Control

- 600.2.2: Waste Management and Materials Pollution Control

- The selected BMPs shall be identified in the WPCDs. The instructions in Section 600.4 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.
- All projects will 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.

600.2.1 Non-Stormwater Site Management

SWPPP GUIDANCE INSTRUCTIONS

- The CGP prohibits all discharges except for the stormwater and non-stormwater discharges specifically authorized by the CGP or another NPDES permit.
- The CGP defines non-stormwater discharges as follows: "(Non- Stormwater) Discharges are discharges that do not originate from precipitation 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-stormwater discharges include a wide variety of sources, including improper dumping, spills, or leakage from storage tanks or transfer areas. Non-stormwater discharges may contribute significant pollutant loads to receiving waters. Measures to control spills, leakage, and dumping, and to prevent illicit connections during construction must be addressed through structural as well as non-structural Best Management Practices (BMPs). The State Water Board recognizes, however, that certain non-stormwater discharges may be necessary for the completion of construction and authorized certain non-stormwater discharges.
- The CGP states that "Authorized non-stormwater discharges may include those from de-chlorinated potable water sources such as: fire hydrant flushing, irrigation of vegetative erosion control measures, pipe flushing and testing, water to control dust, uncontaminated ground water dewatering, and other discharges not subject to a separate general NPDES permit adopted by a region."
- Therefore the CGP authorizes such discharges provided these authorized non-stormwater discharges must:

    1. be infeasible to eliminate;
    2. comply with BMPs as described in the SWPPP;
    3. filter or treat, using appropriate technology, all dewatering discharges from sedimentation basins;
    4. meet the NALs for pH and turbidity; and
    5. not cause or contribute to a violation of water quality standards.

- Non-stormwater discharges into storm drainage systems or waterways, which are not authorized under the CGP 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 palliatives;
    - sanitary and septic wastes; and
    - chemical leaks and/or spills of any kind including but not limited to petroleum, paints, cure compounds.
- 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; and
    - 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 6.6 of the SWMP. To reference these BMPs, see the *Construction Site Best Management Practices 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 could result in unauthorized 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;
- bridge cleaning;
- painting;
- hydro-demolition; and
- mortar mixing.

- Complete the BMP selection table in this section to indicate the BMPs selected. Identify all contract-required minimum BMPs and any other BMPs required by the 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.
- If authorized non-stormwater discharges from the project are expected, they should either be documented in the SWPPP, and checked in the box in Section 500 or they should be minimal and inadvertent (such as dust control runoff).
- Describe each construction and support activities that require non-stormwater management BMPs. The WPCPs will show potential flow paths.
- Describe applicable non-stormwater control BMPs and practices required by Caltrans, the RWQCB (such as WDR requirements for projects that require dewatering), other permits, or other federal, state, or local agencies. If construction activities are expected to generate wastes or residues with the potential to discharge pollutants. Provide details and schedules, as appropriate. Include maintenance, inspection, testing, and reporting requirements. Provide permit information for discharges covered by a separate NPDES permit.
- Identify potential pollutants associated with the anticipated construction activity and select the corresponding BMP such as Water Conservation Practices, Dewatering Operations, Paving and Grinding Operations, Potable Water/Irrigation, Vehicle and Equipment Cleaning, Vehicle and Equipment Fueling, Vehicle and Equipment Maintenance, Pile Driving Operations, Concrete Curing, Material and Equipment Use Over Water, Concrete Finishing, and Structure Demolition/Removal Over or Adjacent to Water. Designate BMP as a separate contract bid item if the requirements in Job Site Management Standard Specifications Section 13 are anticipated to be inadequate or if requested by Construction. If

construction activities occur within a water body or watercourse, select from types offered in Temporary Stream Crossing to provide access through watercourses consistent with permits and agreements and from types offered in Clear Water Diversion to divert watercourse consistent with permits and agreements. Designate as a separate contract bid item.

- 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.
- Indicate how illicit connections and illegal discharges will be handled.

SWPPP Builder Instructions

Section 600.2.1 has three separate tabs for information entry: Text, Lists, and Table 600.2.1 (Figure 3-38).

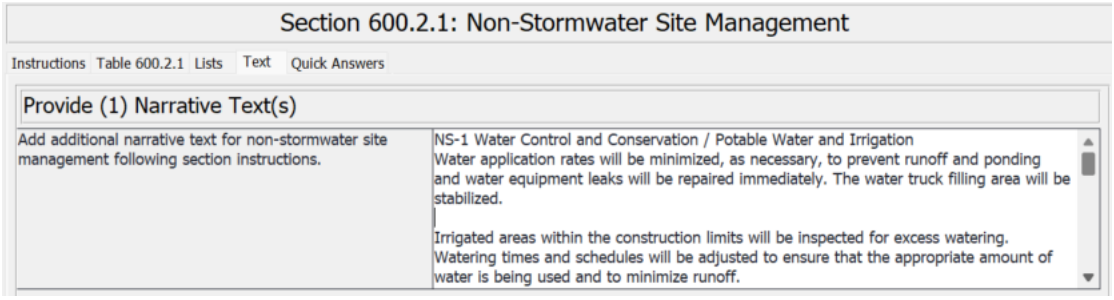


Figure 3-38. Text Tab of Non-Stormwater Site Management BMPs

Text Tab: Add a detailed narrative description of temporary non-stormwater site management BMPs to be implemented. Provide a narrative text listing BMPs checked in the Standard Table. Give a general approach on how BMPs will be implemented on the project following the section instructions.

EXAMPLE TEXT

NS-1 Water Conservation Practices

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 in accordance with TC-2 Stabilized Temporary Construction Roadway.

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.

NS-3 Paving, Sealing, Sawcutting, and Grinding Operations

The project will include paving 20 lane miles. 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 600.4. 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. Paving equipment will placed on plastic drip protection when no actively being used. Paving equipment will be brought to the project site in a clean condition. HMA release agents will be non foaming and non toxic materials.

The project includes approximately 1,000 linear 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 600.4. 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 up immediately when produced 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. If IC/ID is found or observed on the project, the RE will be notified immediately.

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.

Fueling areas are located within 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 off-site 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. A vacuum and screens will be used for concrete finishing operations to contain the dust during sanding finishing operations.

Standard Table: Complete the table by checking off which non-stormwater site management strategies will be incorporated into the project (Figure 3-39).

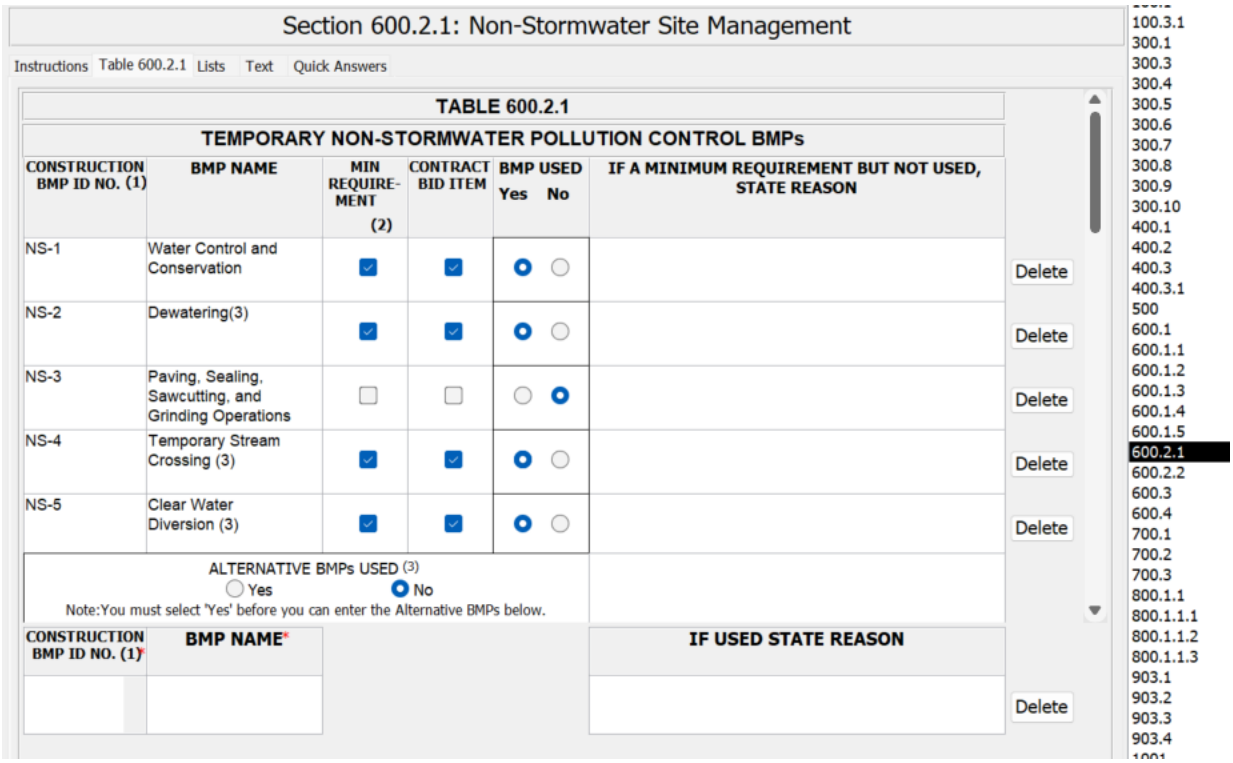


Figure 3-39. Section 600.2.1 Table Non-Stormwater Site Management

The database will automatically ask for a reason to be stated in the appropriate column for any Contract Minimum BMP that is not used.

Choose 'Yes' or 'No' if Alternative BMPs will be used on the project. This section of the table will not be functional or show up in the SWPPP if Yes is not checked.

600.2.2 Waste Management and Materials Pollution Control

SWPPP GUIDANCE 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; and
    - 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 which must be prevented.
- Rinse water shall be minimized, infiltrated, or evaporated. If rinse water contains soaps or solvents, it should be properly disposed of within sanitary facilities.
- 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 if broken beyond repair, 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 covered as necessary and protected with downstream linear barrier to protect from wind or other erosive forces, and to prevent sedimentation.
- Procedures shall be implemented that effectively address hazardous and nonhazardous spills.
- Containment of concrete washout areas and other washout areas, or materials, or waste storage 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; and
    - 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 6.6 of the SWMP. For a list of these BMPs, see the *Construction Site Best Management Practices 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.
    - 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.

SWPPP Builder Instructions

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.

SWPPP Builder Instructions

Section 600.2.2 has three separate tabs for information entry: List, Text and Standard Table (Figure 3-40).

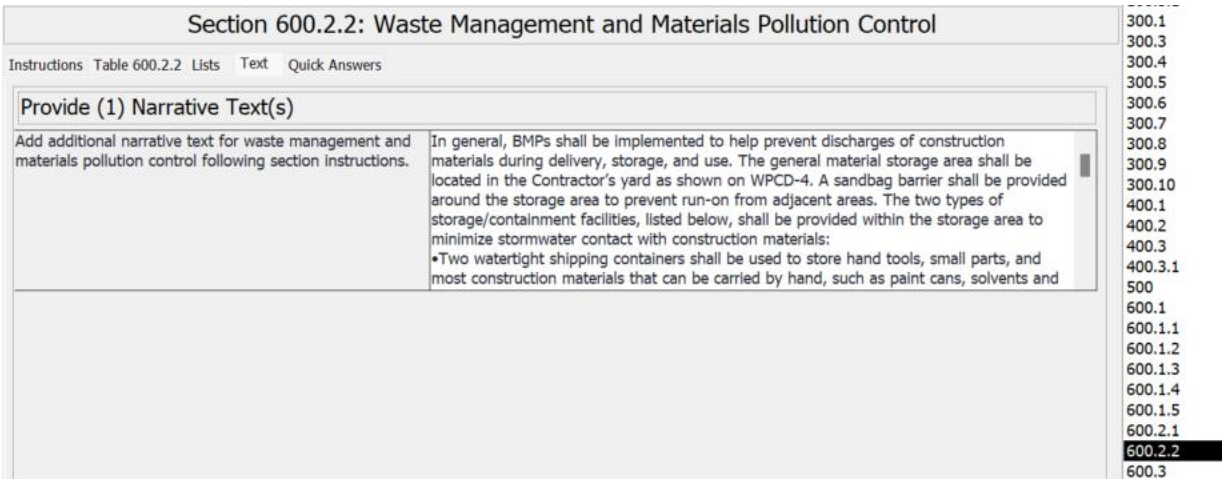


Figure 3-40. Section 600.2.2 Waste Management and Materials Pollution Control

Text Tab: Add a detailed narrative description of waste management controls to be implemented. Provide a detailed narrative text listing waste management controls checked in the Standard Table. Give a general approach on how waste management controls will be conducted on the project following the section instructions. Example of narrative text is provided below.

EXAMPLE TEXT

An inventory of activities and materials is provided in Section 300.8. 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 H and are listed by location in the SWPPP. 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.

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-hour, 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 sub-base, 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. Stockpile BMPs shall be installed and maintained per the Standard Specifications and Standard Plan T 53.

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. The WPC manager will be trained in spill response and proactive in ensuring controls are in place and adequate to contain and prevent further issues. Spill kits and absorbent materials will be stored on fueling trucks, waste storage areas, and within the contractor’s staging area. Waste storage areas shall be kept clean, well-organized, and equipped with ample clean-up supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners shall be repaired or replaced as needed to maintain proper function. Used clean-up materials, contaminated materials, and recovered spill material that are no longer suitable for the intended purpose shall be stored and properly disposed. Water used for cleaning and decontamination shall not be allowed to enter storm drains or watercourses and shall be collected and disposed in accordance with WM-10, “Liquid Waste Management.”

Minor spills will be cleaned using absorbent materials on small spills rather than hosing down or burying the spill. First, the spread of spills will be contained, then, the spilled materials will be recovered. Then the area will be cleaned and the contaminated materials will be properly disposed of off-site. Semi-significant spills will be controlled by the first responder along with the aid of other personnel such as laborers and the foreman. The WPC Manager will be notified immediately. The WPC Manager shall notify the RE and prepare the proper notifications as

required. If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (absorbent materials, cat litter, and/or rags). Contain the spill by encircling with absorbent materials. If the spill occurs in dirt areas, immediately contain the spill. Dig up and properly dispose contaminated soil. If the spill occurs during rain, cover spill with tarps to prevent contaminating runoff.

For significant or hazardous spills that cannot be controlled by personnel in the immediate vicinity, the following steps shall be taken:

- Notify the RE immediately and follow up with a written report.

- Notify the local emergency response by dialing 911. In addition to 911, the Contractor will notify the proper county officials. It is the Contractor's responsibility to have all emergency phone numbers at the construction site.

- Notify the Governor's Office of Emergency Services Warning Center, (800) 852-7550 or 1- (916) 845-8911.

- For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110,119, and 302, the Contractor shall notify the National Response Center at (800) 424-8802.

- Notification shall first be made by telephone and followed up with a written report. The reporting form is located at: https://www.caloes.ca.gov/wp-content/uploads/FireRescue/Documents/304-Written-Report-Form.pdf

- The services of a spill contractor or a Haz-Mat team shall be obtained immediately. Construction personnel shall not attempt to clean up the spill until the appropriate and qualified staff have arrived at the job site.

- Other agencies that may need to be consulted include, but are not limited to, the Fire Department, Public Works Department, the Coast Guard, Highway Patrol, the City/County Police Department, Department of Toxic Substances, California Division of Oil and Gas, Cal/OSHA, and RWQCB.

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

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 California Code of Regulations (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 known 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 CY of concrete in four separate pours, the largest pour being approximately 50 CY. The estimated maximum washout volume is 3.5 CF.

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 600.4. 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 per Standard Detail T59, above grade. The concrete supplier and delivery personnel will be notified to rinse their chutes out in the washout. It will be maintained with at least 6 inches of freeboard. It will be pumped as necessary. Concrete rubble stockpiles from demolition will be in the staging area, as shown on the project plans and will be covered and surrounded with a fiber roll.

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.

Standard Table: Complete the table by checking off which waste management strategies will be incorporated into the project (Figure 3-41).

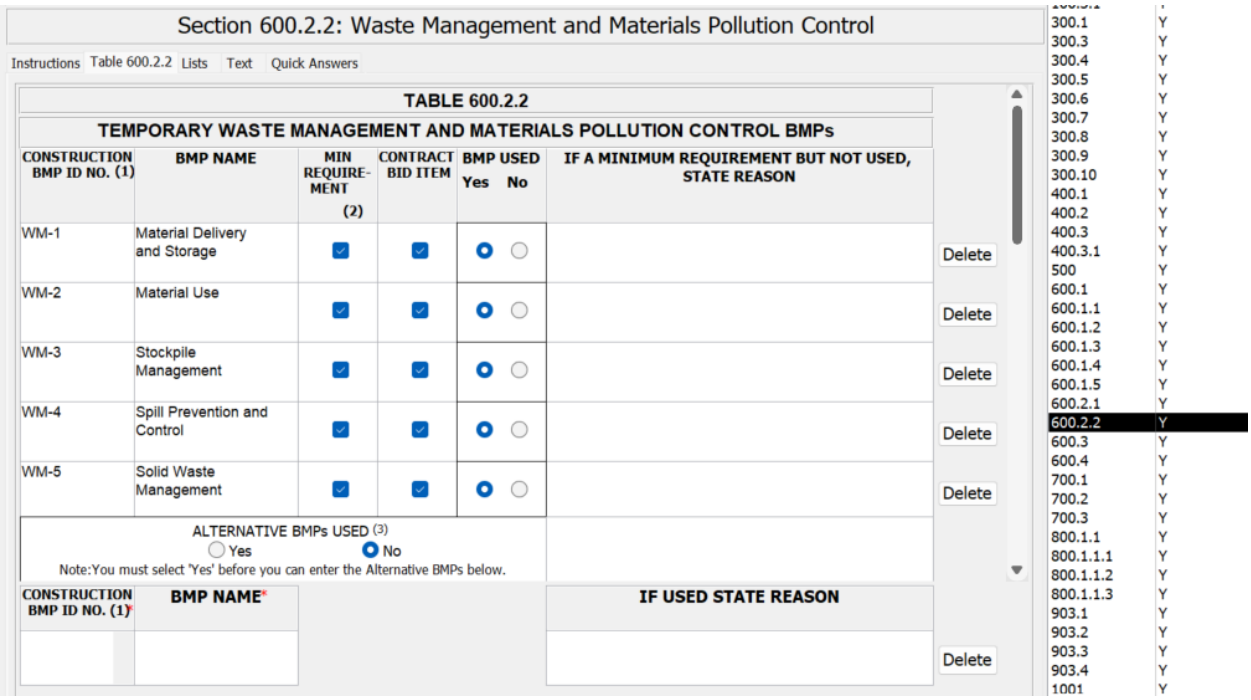


Figure 3-41. Table 600.2.2 Table: Temporary Waste Management and Materials Pollution Control BMPs

The database will automatically ask for a reason to be stated in the appropriate column for any Contract Minimum BMP that is not used.

Choose 'Yes' or 'No' if Alternative BMPs will be used on the project. This section of the table will not be functional or show up in the SWPPP if Yes is not checked.

600.3 WPCDs

SWPPP GUIDANCE INSTRUCTIONS

- Prepare WPCDs in conformance with the following instructions and requirements of the CGP. Include the WPCDs as Attachment H to the SWPPP. The WPCDs shall be no smaller than the "reduced plans" issued by Caltrans (approximately 11" x 17").
- The WPCDs includes all areas that are directly related to the construction activity, including but not limited to existing features, staging areas, storage yards, material borrow areas and storage areas, access roads, whether or not they reside within the Caltrans right-of-way based on the CGP.
- 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 title sheet(s) listing the project name, project location, preliminary schedule of activities, site operating hours, index of attachments, contact information for QSD(s), QSP(s), and trained delegates, and the signature of the QSD who prepared the SWPPP.
- Temporary WPC details are included in the applicable Standard Plans, contract plans and Attachment F.
- 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 300 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 pre-earthwork drawings shall show:
    - Site and project boundaries;
    - Areas disturbed during geotechnical or other preconstruction investigation work;
    - Existing roads and trails;
    - Drainage areas;
    - system if applicable; and
    - Proposed locations of storage areas for waste, construction materials, project staging areas, stockpiles, vehicles, equipment and vehicle maintenance, loading/unloading of materials, site access (entrance/exits), fueling, water storage, water transfer for dust control, demolition, and areas of other construction support activities.
- The construction and earthwork drawings shall show:
    - Site layout (grading plans) including roads;

- Site and project boundaries;
- Drainage areas;
- Discharge locations;
- Sampling locations;
- Areas of soil disturbance (temporary or permanent);
- Proposed active areas of soil disturbance (cut or fill);
- Proposed locations of erosion control BMPs;
- Proposed locations of sediment control BMPs;
- Proposed locations of runoff BMPs;
- Temporary and/or permanent run-on conveyance (if applicable);
- Proposed locations of active treatment systems(s) (if applicable);
- Locations of storage areas for waste, construction materials, project staging areas, stockpiles, vehicles, equipment and vehicle maintenance, loading/unloading of materials, site access (entrance/exits), fueling, water storage, water transfer for dust control, demolition, and areas of other construction support activities; and
- Site-specific procedures to implement final stabilization BMPs as soon as reasonably practicable.

SWPPP Builder Instructions

Insert additional narrative text for WPCDs here in the text area provided. Automated text will populate the SWPPP and can be viewed in Preview Section. Include the WPCDs as Attachment H to the SWPPP.

600.4 Water Pollution Control Schedule

SWPPP GUIDANCE INSTRUCTIONS

- A graphical project schedule shall be provided. The project schedule (e.g. critical path management) 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 and permit restriction milestones named in other permits such as RWQCB, Fish and Wildlife and Army Corps of Engineers Permits;
- dates for submittal SWPPP amendments as required in the Special Provisions;
- implementation schedule, by location, activities associated with, and 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.; and
- final stabilization activities staged over time for each area of the project.
  - Deployment of Dewatering Operations
  - Deployment of ATS (based on approved ATS Plan)
  - Deployment of Passive Treatment (based on approved Passive Treatment Plan)

Winterization Plan

- The SWPPP requires an annual winterization plan which must describe the preparation for the upcoming rainy season including:

1. Updated schedule
2. Materials and labor
3. Management of stormwater through the job site including:
   - 3.1. Run-on
   - 3.2. Runoff
   - 3.3. Conveyance downslope
4. Management of areas within the job site including:
   - 4.1. Areas where work is suspended
   - 4.2. Areas of soil stabilization
   - 4.3. New disturbed soil areas

5. Changes to monitoring locations
6. Slope stabilization

Ensure schedule shows all work activities that could cause the discharge of pollutants into stormwater will be performed and when those will take place and all WPC practices, including soil stabilization and sediment control, that will be used in the work.

SWPPP Builder Instructions

Insert additional narrative text for WPCS here in the text area provided. Automated text will populate the SWPPP and can be viewed in Preview Section.

SECTION 700
Project Site Implementation Program

700.1 WPC Manager Responsibilities

SWPPP GUIDANCE INSTRUCTIONS

- Include a Separator and Tab for Section 700 for ready reference.
- The WPC Manager is responsible for water pollution control during construction.
- The WPC Manager must be a QSP 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. The WPC Manager must also complete the Caltrans required 8 hour WPC Manager Training. 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:
    - Be the primary contact person responsible for Water pollution control work
    - Oversee water pollution control work including:
        - Maintenance of WPC practices
        - Inspections of WPC practices identified in the SWPPP
        - Inspections and reports for visual monitoring
        - Sampling and analysis
        - Preparation and submittal of:
            - NAL exceedance reports
            - violation reports for the receiving water monitoring trigger
            - annual reports
            - WPC-practice status reports
    - Oversee and enforce hazardous waste management practices under section 14-11, including spill prevention and control measures
    - Have the authority to
        - mobilize crews for repairs to WPC practices

- stop construction activities damaging WPC practices or causing water pollution
- ensure all employees have current WPC training and provide training if collecting water quality samples is delegated
- implement the authorized SWPPP
- recommend changes to the SWPPP
- be at the job site within 2 hours of being contacted.

- Specific inspections and who must perform those inspections in accordance with the CGP are outlined in Section 800.1.3

SWPPP Builder Instructions

Insert additional narrative text for WPC Manager responsibilities in the text area provided. Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section.

700.2 Site Inspections

SWPPP GUIDANCE INSTRUCTIONS

- Site inspections include both BMP inspections and visual monitoring inspections, shown in Section 800-1600 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:
  - QSD
  - WPC Manager
  - Alternate WPC Manager
  - Trained QSP Delegate
- Site inspections shall be documented on Stormwater Site Inspection Report forms (DOT CEM-2030SW) in Appendix F of the SWPPP.
- Site inspections shall be performed at the following frequencies:
  - daily inspections of the following BMPs when applicable (as per Standard Specifications 13-1.03C):
    - inspections of access roadways

- storage areas for hazardous materials and waste
- hazardous waste disposal and transporting activities
- hazardous material delivery and storage activities
- vehicle and equipment cleaning facilities
- vehicle and equipment maintenance and fueling areas
- 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
- temporary concrete washouts
- paved roads at job site access points for street sweeping
- dewatering work (this is to be documented on (DOT CEM-2033SW Dewatering Operation Sampling Report)
- temporary active treatment system activities
- work over water

  - Weekly routine inspection of BMPs documented on Stormwater Site Inspection Reports (DOT CEM-2030SW). This form should also be used for pre-storm, during storm and post-storm inspections as required under Standard Specifications Section 13.

- Completed Stormwater Site Inspection Reports (DOT CEM-2030SW) 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 Corrections Summary (DOT CEM-2035SW) 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 the appropriate SWPPP file category 20.31: Contractor Stormwater Site Inspection Reports. The original DOT CEM-2035SW forms shall be kept in SWPPP File Category 20.35: Corrective Actions Summary.

The following site inspection reports must be performed by the QSD:

1. One within 30 days of construction activities starting
2. One within 30 days of a new site QSD
3. Once between August 1 and October 31 of each year
4. Once between January 1 and March 31 of each year
5. Within 14 calendar days after a NAL exceedance
6. Within 14 calendar days of an inactive project status

7. As requested by Water Board staff

The following site inspection report frequencies must be fulfilled by the QSD/QSP:

1. Once every calendar month
2. Once within 72 hours of each forecasted qualifying precipitation event
3. Within 14 days after a NAL exceedance
4. Before the final Notice of Termination or Change of Information of all or part of the site

A QSP delegate cannot perform the above listed QSD and QSP inspection reports.

- Contractor personnel, during inspections, shall be observant of any discharge or evidence of a prior discharge that could cause adverse conditions in the storm sewer system or the receiving water. Discharges will be reported to the RE verbally upon discovery and in writing within 24 hours of discovery or occurrence. Form DOT CEM-2061SW for reporting discharges is shown in Appendix M.

One-time discharges of non-stormwater shall be inspected when such discharges occur. Additional follow up might be required depending on whether the non-stormwater is authorized under the CGP or Caltrans MS4 NPDES Permits.

SWPPP Builder Instructions

Insert additional narrative text, as-needed, in the text area provided. Automated text will populate the SWPPP and can be viewed in Preview Section.

700.3 Weather Forecast Monitoring

SWPPP GUIDANCE INSTRUCTIONS

- The WPC Manager must monitor the National Weather Service Forecast Office (https://www.weather.gov) and document forecasts so that appropriate actions are taken prior to a forecasted storm event.

The WPC Manager must maintain electronic or hard copy of the forecast in the SWPPP files.

- The WPC Manager must monitor the weather at the project site and maintain appropriate documentation of weather conditions. This is to be completed on DOT CEM-2051SW Storm Event SWPPP Sampling Log, including the amount of precipitation for each 24-hour period and the total amount of precipitation for each from forecasted storm events.
- Weather monitoring shall be recorded and 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 DOT CEM-2051SW Storm Event SWPPP Sampling Log "Rain Gauge Reading (inches)."

SWPPP Builder Instructions

Text tab: Insert additional narrative text with any additional actions to be taken prior to a storm event, as needed, in the text area provided. Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section.

Fields tab: Enter the name of the National Weather service location closest to the site.

Enter the project's latitude and longitude that will be used when obtaining weather forecast information from National Weather Service Forecast Office.

SECTION 800
Construction Site Monitoring Program

SWPPP GUIDANCE INSTRUCTIONS

- Include a Separator and Tab for Section 800 for ready reference.
- The Construction Site Monitoring Program (CSMP) shall be developed based on a project's Risk Level, TMDL requirements, Dewatering Operations, any RWQCB monitoring requirements and whether an Active or Passive 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.

800.1 Site Visual Monitoring Inspection

SWPPP GUIDANCE 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, including maintenance, 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 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, and
  - determine whether the project triggers any non-visible pollutant sampling, particularly if the project is subject to a TMDL.

800.1.1 Visual Monitoring Locations

SWPPP GUIDANCE INSTRUCTIONS

- The visual monitoring requirements, which must be performed within 72 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 0.5 inches or more of precipitation in the project area within a 24 hour period), are to visually observe:
  - stormwater drainage areas to identify any spills, leaks, or uncontrolled pollutant sources,
  - all BMPs to identify whether they have been properly implemented, and
  - 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 96 hours after qualifying precipitation events (defined as a rain event that has produced ½ inch or more of precipitation at the time of discharge), that generate runoff, are to 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,
  - dewatering discharge,
  - The daily visual monitoring requirement for access roadways consists of visually observing all immediate access roads, and
  - The daily or weekly inspections during applicable activities (see Standard Specifications13-1.03C) consists of: visually observing the activities and BMPs and documenting them in the appropriate DOT CEM-2030SW form.
- The discharger shall ensure that a QSD performs on-site visual inspections at the following frequencies.
  - Within 30 days of construction activities commencing on a site;
  - Within 30 days of a discharger replacing the QSD;
  - Twice annually, once August through October and once January through March;
  - Within 14 calendar days after a numeric action level exceedance; and
  - Within the time period requested in writing from Water Board staff.

SWPPP Builder Instructions

Enter the number of stormwater drainage areas for the entire project, the number of stormwater storage and containment areas that will require dewatering, and the number of stormwater discharge locations for the entire project.

800.1.1. Drainage Areas

SWPPP GUIDANCE INSTRUCTIONS

Complete table showing all the drainage areas within the project limits.

The drainage areas should be listed by the project location, latitude and longitude and drawn in the WPCDs with enough specificity for anyone reviewing the information to be able to discern the specific areas and determine their accuracy and completeness.

If additional areas are added to the project through a Change Of Information (COI), the information in this table should be updated.

If temporary drainage is used during construction; that should be shown here and described in the SWPPP. The WPCS should list the timeline for when temporary drainage will be in place and when it is to be removed.

SWPPP Builder Instructions

Provide the unique identifier(s) and location(s) for the drainage, storage, and discharge area(s) numbered in Section 800.1.1.1. Refer to SWPPP Guidance Instructions for more information (Figure 3-42).

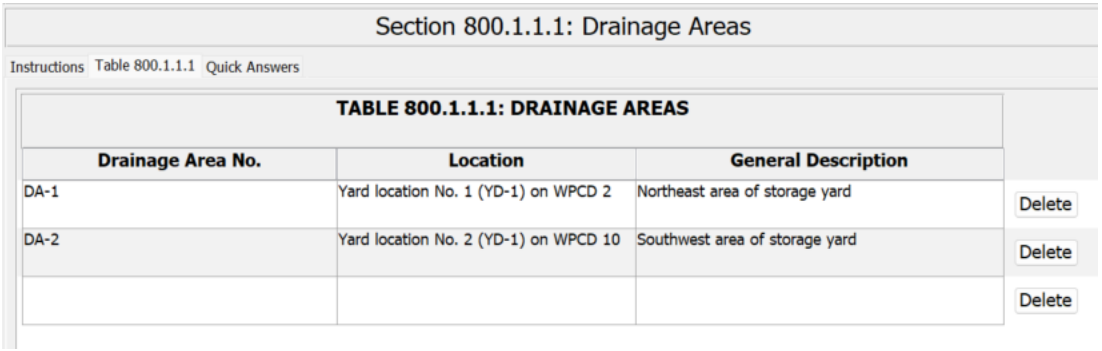


Figure 3-42. Section 800.1.1.1 Drainage Areas

800.1.1.2 Stormwater Storage and Containment Areas

SWPPP GUIDANCE INSTRUCTIONS

Complete table showing any areas where the project has created temporary sediment traps, construction detention basin or low lying areas that will be used by construction to contain stormwater and thereafter conduct dewatering operations.

The dewatering operations should be assessed and be in compliance with the Caltrans *Field Guide to Construction Site Dewatering*. Any dewatering operation conducted under the CGP (Attachment J) and not under a separate Dewatering Permit must be documented in the DOT CEM-2033SW Dewatering Operations Sampling Report.

The location number to identify these areas should be carried over to the sampling ID if field or lab sampling is conducted.

SWPPP Builder Instructions

Enter the location ID, location, longitude and latitude of stormwater storage containment areas (Figure 3-43).

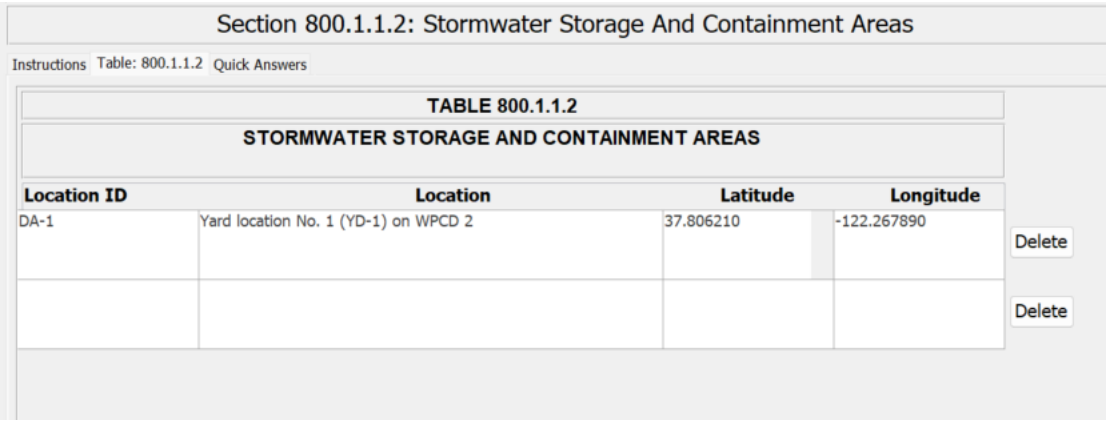


Figure 3-43. Section 800.1.1.2 Stormwater Storage and Containment Areas

800.1.1.3 Stormwater Discharge Locations

SWPPP GUIDANCE INSTRUCTIONS

Complete the table to identify all the locations where stormwater discharges from the Caltrans construction project (even if some areas will be inactive for a period of time).

Each sampling location should have a specific ID, a Unique Sampling Location Identifier, that is to be listed in the WPCDs. Any modifications to the discharge locations, additions or deletions should be promptly documented.

This Unique Sampling Location Identifier is carried over in the Storm Event Sampling or Receiving Water Monitoring Report Form DOT CEM-2052SW, the DOT CEM-2062SW or CEM-2063SW form if there are Exceedances.

SWPPP Builder Instructions

Enter the location ID, location, longitude and latitude of stormwater storage discharge locations.

SECTION 900
Sampling and Analysis Plan

901 General SAP

SWPPP GUIDANCE INSTRUCTIONS

This section contains required text that has been automated into the SWPPP process. There is no additional information needed to be entered in the SWPPP Builder for this section.

902 Scope of Monitoring Activities

SWPPP GUIDANCE INSTRUCTIONS

This section contains required text that has been automated into the SWPPP process. There is no additional information needed to be entered in the SWPPP Builder for this section.

903 Monitoring Preparation

SWPPP GUIDANCE INSTRUCTIONS

This section contains required text that has been automated into the SWPPP process. There is no additional information needed to be entered in the SWPPP Builder for this section.

903.1 Qualified Sampling Personnel

- Although the Contractor is required to follow Caltrans' Code of Safe Practices, the Contractor should include their own specific health and safety procedures for sampling personnel
- Complete the table to show staff name and title of the person responsible for providing monitoring supplies and equipment.
- The Primary sampler's experience and training must be listed to show that the person charged with sampling has adequate training to conduct the required sampling. If the sampler is a QSP Delegate, their training information must also be included in the SWPPP and in DOT CEM-2020SW.
- Identify alternate sampling personnel in case of emergency, sick leave, and/or vacations during stormwater monitoring. Provide their name and phone number.

- In addition, the Alternate Sampler's experience and training must be listed to show that the alternate person has comparable training and experience to conduct the required sampling.

SWPPP Builder Instructions

Section 903.1 has two separate tabs for information entry: Fields and Lists

Lists Tab: In the field provided, list the primary sampler's experience and training and the alternate sampler's experience and training.

Fields Tab: Insert additional information here pertaining to the qualified sampling personnel.

903.2 Monitoring Supplies

SWPPP GUIDANCE INSTRUCTIONS

- Monitoring Supplies are based on the potential constituents used on-site. The QSD in coordination with the WPC Manager and other stormwater trained staff must assess the project and the ongoing activities taking place on-site to determine if there could be sampling requirements for any of the non-visible constituents.
- The QSD in coordination with the WPC Manager should identify whether the primary sampler is associated with a laboratory, the environmental consultant, or the contractor's staff.
- The WPC Manager must ensure that enough monitoring stock is available on-site; some bottles might have reactants or chemicals that expire; if the project will extend for several years, replacement of some of the bottles might be necessary.

SWPPP Builder Instructions

Insert additional narrative text for monitoring supplies for the monitoring of additional RWQCB specified parameter(s), as needed. If no entry is necessary, leave blank. Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section 900, when preparing to Print the SWPPP.

903.3 Field Instruments

SWPPP GUIDANCE INSTRUCTIONS

Complete the table listing all the field instruments that will be used for the project including brand of meter, serial and model number. If additional or replacement instrument are required, update the text to ensure it reflects site conditions and operations taking place.

Any additional information can be included in the narrative field. For example, describe that the field instruments need to be calibrated every time they are used and must be kept to current calibration standards. A Standard Operating Procedure for calibration and maintenance of field instruments should be implemented based on the meter manufacturer's instructions.

SWPPP Builder Instructions

Section 903.3 has two separate tabs for information entry: Text and Lists (Figure 3-44).

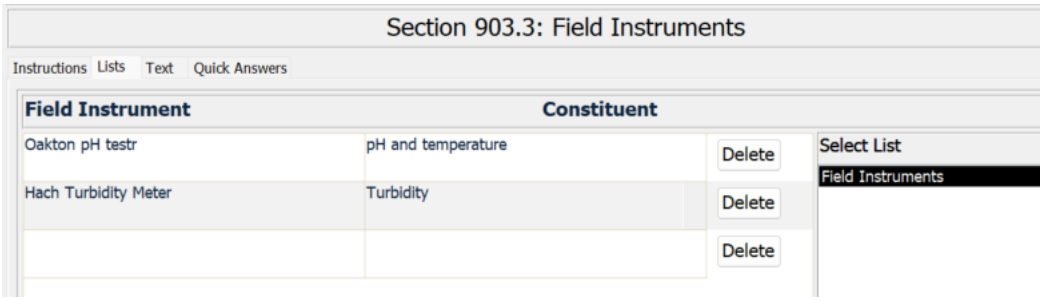


Figure 3-44. Section 903.3 Field Instruments

Lists Tab: In the field provided, list field instruments that will be used and the constituents that will be tested by that instrument. Refer to the example provided above.

Text Tab: Insert additional information here pertaining to field instrumentation. Leave blank if there is no additional information to add.

903.4 Testing Laboratory

SWPPP GUIDANCE INSTRUCTIONS

Complete the table listing all the laboratory contact information.

While most construction projects conduct operations during regular lab operating hours; there might be instances where emergencies arise in the field that require the drop off of samples at odd hours. Include laboratory phone numbers for off hours in case those emergencies arise.

SWPPP Builder Instructions

Samples collected on the project site which requires laboratory testing must be tested by a laboratory certified by the State Department of Health Services (DHS) (Figure 3-45). Provide the:

- Laboratory name, address, email, phone number, and emergency phone number
- Laboratory contact name and title

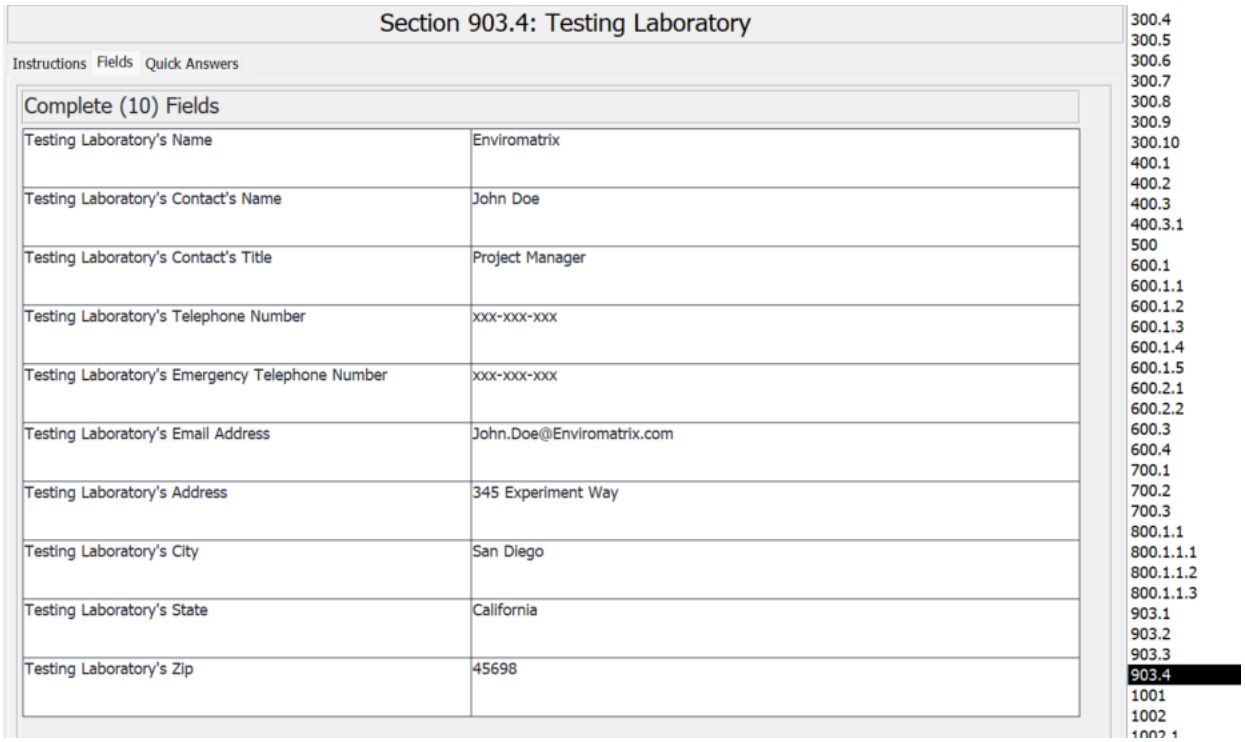


Figure 3-45. Section 903.4 Testing Laboratory

904 Monitoring Strategy

SWPPP GUIDANCE INSTRUCTIONS

This section contains required text that has been automated into the SWPPP process. There is no additional information needed to be entered in the SWPPP Builder for this section.

905 Sample Collection and Handling

SWPPP GUIDANCE INSTRUCTIONS

This section contains required text that has been automated into the SWPPP process. There is no additional information needed to be entered in the SWPPP Builder for this section.

906 Sample Analysis

SWPPP GUIDANCE INSTRUCTIONS

This section contains required text that has been automated into the SWPPP process. There is no additional information needed to be entered in the SWPPP Builder for this section.

907 Quality Assurance/Quality Control

SWPPP GUIDANCE INSTRUCTIONS

This section contains required text that has been automated into the SWPPP process. There is no additional information needed to be entered in the SWPPP Builder for this section.

908 Data Management and Reporting

SWPPP GUIDANCE INSTRUCTIONS

This section contains required text that has been automated into the SWPPP process. There is no additional information needed to be entered in the SWPPP Builder for this section.

909 Data Evaluation

SWPPP GUIDANCE INSTRUCTIONS

This section contains required text that has been automated into the SWPPP process. There is no additional information needed to be entered in the SWPPP Builder for this section.

910 Change of Conditions

SWPPP GUIDANCE INSTRUCTIONS

This section contains required text that has been automated into the SWPPP process. There is no additional information needed to be entered in the SWPPP Builder for this section.

SECTION 1000
Sampling and Analysis Plan for Non-Visible Pollutants

1001 Scope of Monitoring Activities

SWPPP GUIDANCE INSTRUCTIONS

- The CGP requires that effluent monitoring from Caltrans conveyances 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 300.8 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 objectives.
- All project risk levels are required to include a non-visible pollutant SAP; however, non-visible pollutant monitoring is only required when 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 their cure times the past 24 hours that may contribute non-visible pollutants
    - there is a breach, malfunction leak or spill from a BMP
- If a project is subject to a Total Maximum Daily Load, review section 300 to ensure that all constituents subject to TMDL have been evaluated and their storage and uses are appropriate to minimize the potential for required sampling.

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 300.8 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 their curing periods, or within 24 hours preceding a forecasted 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 300.
- 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).
- 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.

SWPPP Builder Instructions

Lists Tab: In the field provided, list soil amendments that are potential sources of non-visible pollutants (Figure 3-46).

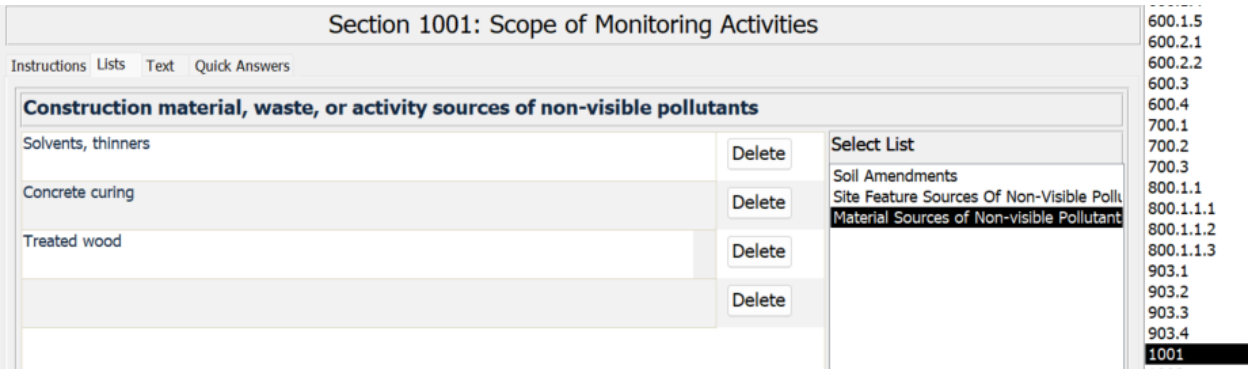


Figure 3-46. Section 1001 Scope of Monitoring Activities

EXAMPLE TEXT

Material potential sources of non-visible pollutants:

- Solvents, thinners
- Concrete curing
- Treated wood

- Soil stabilizers
- Lime treated subgrade
- Fertilizers, herbicides, and pesticides

Site feature sources of non-visible pollutants:

- 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.

Soil amendments:

- Potash

Text Tab: Add any additional information here pertaining to scope of monitoring activities for non-visible pollutants. Discuss if non-visible pollutants could be mistaken for those that come from the project site.

EXAMPLE TEXT

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 H. The potential stormwater run-on locations to the project site are:

- Downgradient of the Millennium Chemical Company chemical plant and the Progress Industrial Park
- Two locations along the eastern edge of the construction site boundary
- One location at the northern boundary of the construction site

If non-visible pollutant sampling is triggered for this project, and the run-on may contain the same constituents as the potential non-visible pollutants being sampled, then the run-on will also be sampled to assess the background levels of the potential non-visible pollutants.

1002 Monitoring Preparation

SWPPP GUIDANCE INSTRUCTIONS

- Train water quality sampling personnel in accordance with the latest Caltrans *Construction Site Monitoring Program Guidance Manual.* At the time this Manual was published, the latest version of the Caltrans *Construction Site Monitoring Program Guidance Manual* was dated June 2024.
- Identify who will collect samples.
- Identify training and experience of individuals responsible for collecting water samples.
- Identify alternate sampling personnel in case of emergency, sick leave, and/or vacations during stormwater monitoring. Identify training of the alternate sampler.
- Identify the state-certified laboratory(ies) (ELAP) that will analyze samples for non-visible, non-stormwater, dewatering permit-required constituents, ATS or Passive

Treatment Chemical or additives. For a the list of California state-certified laboratories that are accepted by Caltrans, access the following website: https://waterboards.maps.arcgis.com/apps/webappviewer/index.html?id=bd0bd8b42b1944058244337bd2a4ebfa

- 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.

If additional requirements are necessary for monitoring preparation, insert additional text in this section.

SWPPP Builder Instructions

Insert additional narrative text for non-visible pollutant monitoring and preparation.

1002.1 Qualified Sampling Personnel

SWPPP GUIDANCE INSTRUCTIONS

Include any additional text for the sampling personnel who will be conducting the non-visible sampling.

Depending on the constituents identified in Section 300.8 and in Section 1000; there might be additional measures of which it is necessary for the personnel be aware. Coordination with the laboratory for all the constituents must take place.

SWPPP Builder Instructions

Insert additional narrative text for non-visible pollutant qualified sampling personnel.

1002.2 Monitoring Supplies

SWPPP GUIDANCE INSTRUCTIONS

Include any additional text for the monitoring supplies for conducting the non-visible sampling.

Depending on the constituents identified in Section 300.8 and in Section 1000; there might be additional supplies/containers of which it is necessary for the personnel to be aware. Coordination with the laboratory for all the constituents must take place.

SWPPP Builder Instructions

Insert additional narrative text for non-visible pollutant monitoring supplies in the area provided, as needed.

1002.3 Field Instruments

SWPPP GUIDANCE INSTRUCTIONS

Include any additional text regarding field instruments for conducting the non-visible sampling. It is unlikely that field instruments will be used for most non-visible pollutants.

Depending on the constituents identified in Section 300.8 and in Section 1000, most samples will be taken to the laboratory for analysis.

SWPPP Builder Instructions

Insert additional narrative text for non-visible pollutant field instruments in the area provided, as needed.

1002.4 Testing Laboratory

SWPPP GUIDANCE INSTRUCTIONS

Depending on the constituents identified in Section 300.8 and in Section 1000, it is likely that samples will be taken to more than one laboratory for analysis. Include any specific labs and the constituents to be taken there for analysis.

SWPPP Builder Instructions

Insert additional narrative text for the non-visible pollutant testing laboratory in the area provided, as needed.

1003.1 Analytical Constituents

SWPPP GUIDANCE INSTRUCTIONS

- Identify the specific non-visible pollutants on the project site and list the non-visible pollutants in Table 1000.3.1: 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*, 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

SWPPP Builder Instructions

Section 1003.1 consists of completing the table shown below (Figure 3-45). Use the SWPPP guidance instructions provided as a reference.

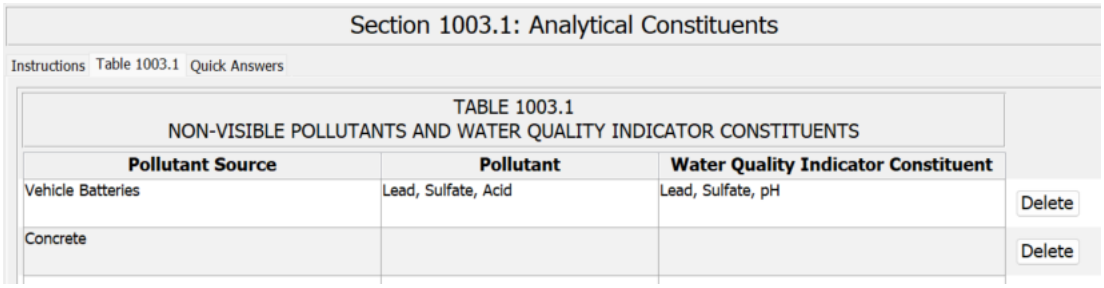


Figure 3-45. Section 1003.1 Analytical Constituents

1003.2 Sampling Locations

SWPPP GUIDANCE INSTRUCTIONS

- Identify the number of uncontaminated sampling locations that will be used for comparison
- Identify the number of non-visible sampling locations based on site operations and materials used

SWPPP Builder Instructions

Complete table by providing the number of non-visible pollutant sampling locations and the number of uncontaminated sampling locations (Figure 3-48). Use the SWPPP guidance instructions provided as a reference.

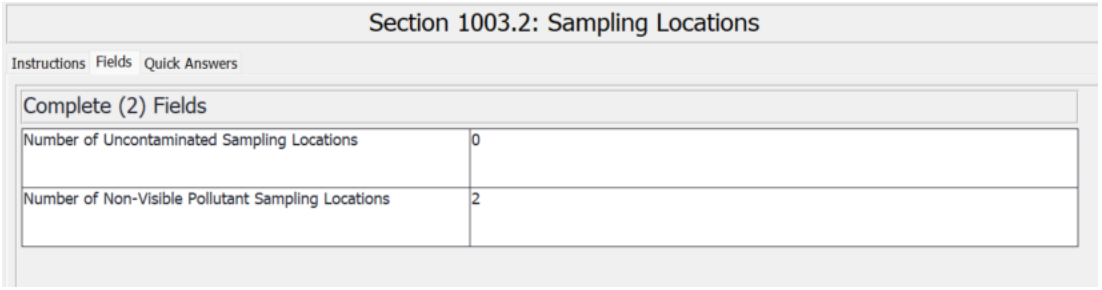


Figure 3-48. Section 1003.2 Potential Sampling Locations

1003.2.1 Non-Visible Pollutant Sampling Locations

SWPPP GUIDANCE INSTRUCTIONS

Complete table listing the non-visible pollutant location ID, location and the corresponding latitude and longitude for each location.

SWPPP Builder Instructions

Complete table by providing the unique sampling location identifier and narrative text location description (Figure 3-49).

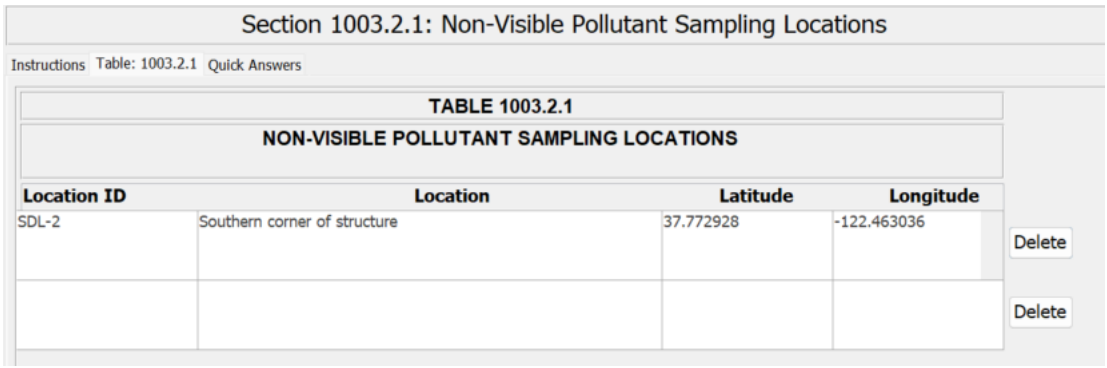


Figure 3-49. Section 1003.2.1 Potential Non-Visible Pollutant Sampling Locations

1003.2.2 Uncontaminated Non-Visible Pollutant Sampling Locations

SWPPP GUIDANCE INSTRUCTIONS

Complete the table listing the uncontaminated non-visible pollutant location ID, location and the corresponding latitude and longitude for each location that will be used for comparison.

SWPPP Builder Instructions

Complete table by providing the unique sampling location identifier and narrative text location description (Figure 3-50).

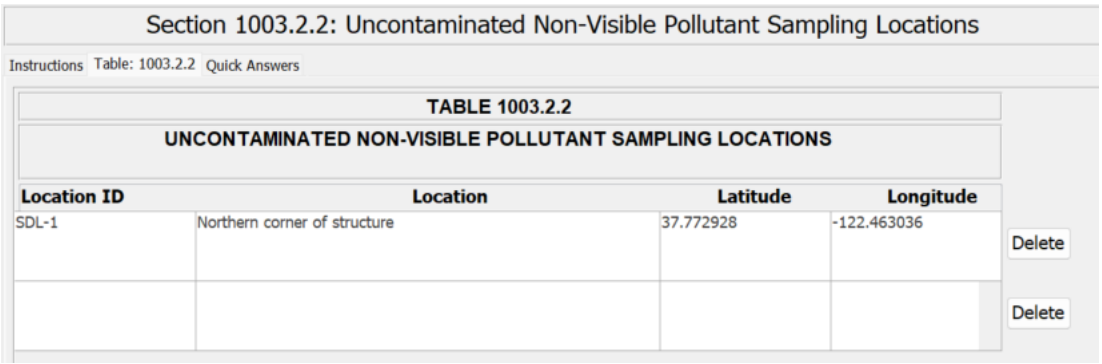


Figure 3-50. Section 1003.2.2 Potential Uncontaminated Non-Visible Pollutant Sampling Locations

1003.3 Sampling Schedule

SWPPP GUIDANCE INSTRUCTIONS

Add any additional text regarding schedule for non-visible pollutant sampling.

SWPPP Builder Instructions

Insert additional narrative text for non-visible pollutant sampling schedule in the area provided, as needed.

1004 Sample Collection and Handling

SWPPP GUIDANCE INSTRUCTIONS

Refer to the general sample collection and handling instructions in General SAP Section 901. If additional requirements are necessary for sample collection and handling, insert additional text in this section.

SWPPP Builder Instructions

Refer to the general sample collection and handling instructions in General SAP Section 901. If additional requirements are necessary for sample collection and handling, insert additional text in this section.

1004.1 Sample Collection Procedures

SWPPP GUIDANCE INSTRUCTIONS

Refer to the general sample collection and handling instructions in General SAP Section 901. If additional requirements are necessary for sample collection, insert additional text in this section.

SWPPP Builder Instructions

Insert additional narrative text for non-visible pollutant sample collection procedures in the area provided, as needed.

1004.2 Sample Handling Procedures

SWPPP GUIDANCE INSTRUCTIONS

Refer to the general sample collection and handling instructions in General SAP Section 901. If additional requirements are necessary for sample handling, insert additional text in this section.

SWPPP Builder Instructions

Insert additional narrative text for non-visible pollutant sample handling procedures in the area provided, as needed.

1004.3 Sample Documentation Procedures

SWPPP GUIDANCE INSTRUCTIONS

Refer to the general sample collection and handling instructions in General SAP Section 901. If additional requirements are necessary for sample documentation, insert additional text in this section.

SWPPP Builder Instructions

Insert additional narrative text for non-visible pollutant sample documentation procedures in the area provided, as needed.

1005 Sample Analysis

SWPPP GUIDANCE INSTRUCTIONS

- Identify the test method and specifications to be used to monitor the non-visible pollutants included in Table 1003.1: Potential Non-Visible Pollutants and Water Quality Indicator Constituents.
- Coordination with the lab must take place to ensure adequate supplies are at hand based on operations and materials taking place. A Chain of Custody (CoC) form shall be requested from the lab to be completed and submitted with the samples collected.

Table 3-3. 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	01µg/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, H2SO4 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
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, HNO3 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

H2SO4 – sulfuric acid

SVOC – semivolatile organic compound

BOD – biochemical oxygen demand

L – liter µg/L – micrograms per liter

COD – chemical oxygen demand

mg/L – milligrams per liter

VOA – volatile organic analysis

DO – dissolved oxygen

mL – milliliter

VOC – volatile organic compound

USEPA – United States EPA

PCB – polychlorinated biphenyls

HCl – HNO3 – hydrochloric acid nitric acid

SM – Standard Method

SWPPP Builder Instructions

Fill in the table following the example presented above.

1006 Quality Assurance/Quality Control

SWPPP GUIDANCE INSTRUCTIONS

Refer to general instructions about Quality Assurance/Quality Control (QA/QC) of SAPs in Section 907. If additional requirements are necessary for QA/QC, insert additional text in this section.

SWPPP Builder Instructions

Insert additional quality control/quality assurance narrative text for non-visible pollutant quality control/quality assurance, as needed.

1007 Data Management and Reporting

SWPPP GUIDANCE INSTRUCTIONS

Refer to general data management and reporting instructions in General SAP Section 908. If additional requirements are necessary for data management and reporting, insert additional text in this section.

SWPPP Builder Instructions

Insert additional data management and reporting narrative text for non-visible pollutant data management and reporting, as needed.

1007.1 NALs and NELs for Non-Visibles

SWPPP GUIDANCE INSTRUCTIONS

Review CGP TMDL Table H-2 and include the specific NAL or NELs for the constituents that have been identified for the project based on site operations or activities per SWPPP Section 300.

SWPPP Builder Instructions

1008 Data Evaluation

SWPPP GUIDANCE 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 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 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.

SWPPP Builder Instructions

Insert additional narrative text for non-visible pollutant data evaluation, as needed. If no additional text is necessary, leave blank. Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section 1008, when preparing to Print the SWPPP.

1009 Change of Conditions

SWPPP GUIDANCE INSTRUCTIONS

Refer to the general instructions for change of conditions in General SAP Section 910. If additional requirements are necessary for changes of conditions, then insert additional text in this section.

SWPPP Builder Instructions

Insert additional narrative text for non-visible pollutant change of conditions, as needed. If no additional text is necessary, leave blank. Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section 1009, when preparing to Print the SWPPP.

SECTION 1100
Sampling and Analysis Plan for Non-Stormwater Discharges

1101 Scope of Monitoring Activities

SWPPP GUIDANCE 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

For projects with dewatering under this CGP, state so.

SWPPP Builder Instructions

Provide the additional narrative text for non-stormwater discharges scope of monitoring activities.

1102 Monitoring Preparation

SWPPP GUIDANCE INSTRUCTIONS

- Train water quality sampling personnel in accordance with the latest Caltrans *Construction Site Monitoring Program Guidance Manual*. At the time this Manual was published, the latest version of the Caltrans *Construction Site Monitoring Program Guidance Manual* was dated June 2024.
- Identify who will collect samples.
- Identify training and experience of individuals responsible for collecting water samples.

- Identify alternate sampling personnel in case of emergency, sick leave, and/or vacations during stormwater monitoring. Identify training of the alternate sampler.
- Identify the state-certified laboratory(ies) (ELAP) that will analyze samples for non-visible, non-stormwater, dewatering permit-required constituents, ATS or Passive Treatment Chemical or additives. For a the list of California state-certified laboratories that are accepted by Caltrans, access the following web site: https://waterboards.maps.arcgis.com/apps/webappviewer/index.html?id=bd0bd8b42b1944058244337bd2a4ebfa
- 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.
- If additional requirements are necessary for monitoring preparation, insert additional text in this section.

SWPPP Builder Instructions

Insert additional narrative text for non-stormwater discharge sample collection and handling, as needed. If no additional text is necessary, leave blank. Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section 1102, when preparing to Print the SWPPP.

1102.1 Qualified Sampling Personnel

SWPPP GUIDANCE INSTRUCTIONS

Include any additional text for the sampling personnel who will be conducting the non-stormwater or dewatering sampling.

SWPPP Builder Instructions

Insert additional narrative text for non-stormwater discharge qualified sampling personnel, as needed. If no additional text is necessary, leave blank. Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section 1102.1, when preparing to Print the SWPPP.

1102.2 Monitoring Supplies

SWPPP GUIDANCE INSTRUCTIONS

Include any additional monitoring supplies needed based on constituents identified for non-stormwater or dewatering monitoring.

SWPPP Builder Instructions

Insert additional narrative text for non-stormwater discharge monitoring supplies, as needed. If no additional text is necessary, leave blank. Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section 1102.2, when preparing to Print the SWPPP.

1102.3 Field Instruments

SWPPP GUIDANCE INSTRUCTIONS

Identify any deviations or additional text needed regarding field instruments for monitoring non-stormwater discharges. It is possible that not all the constituents identified can be collected by a field instrument.

SWPPP Builder Instructions

Insert additional narrative text for non-stormwater discharge field instruments, as needed. If no additional text is necessary, leave blank. Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section 1102.3, when preparing to Print the SWPPP.

1102.3 Testing Laboratory

SWPPP GUIDANCE INSTRUCTIONS

Identify any deviations or additional text needed regarding lab testing of non-stormwater discharges.

SWPPP Builder Instructions

Insert additional narrative text for non-stormwater discharge testing laboratory, as needed. If no additional text is necessary, leave blank. Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section 1102.3, when preparing to Print the SWPPP.

1103 Monitoring Strategy

SWPPP GUIDANCE INSTRUCTIONS

If additional monitoring strategy requirements are necessary, insert additional text in this section.

SWPPP Builder Instructions

Insert additional narrative text for non-stormwater discharge monitoring strategy, as needed. If no additional text is necessary, leave blank. Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section 1103, when preparing to Print the SWPPP.

1103.1 Analytical Constituents

SWPPP GUIDANCE INSTRUCTIONS

- Identify the specific pollutants on the project site and list them in Table 1103.1: Potential Non-Stormwater Constituents.
- List the constituents related to the non-stormwater discharge that require sampling.

SWPPP Builder Instructions

Section 1103.1 has two separate tabs for information entry: Text, and Lists (Figure 3-51).

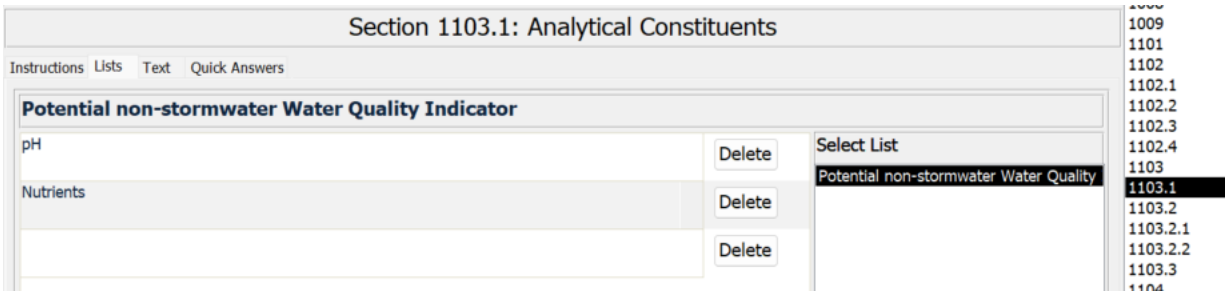


Figure 3-51. Section 1103.1 Analytical Constituents

Text Tab: Provide the additional narrative text for non-stormwater discharges analytical constituents and additional text for dewatering permit analytical constituents.

Lists Tab: Complete the two lists for analytical constituents for non-stormwater discharge. Click on the title of the Select List to navigate from list to list. The lists are for potential non-visible pollutant water quality indicator and dewatering constituents. Use the reference SWPPP guidance instructions.

1103.2 Sampling Locations

SWPPP GUIDANCE INSTRUCTIONS

List any specific variation from the previously identified sampling locations identified based on site operations.

SWPPP Builder Instructions

Section 1103.2 has two separate tabs for information entry: Fields and Text (Figure 3-52).

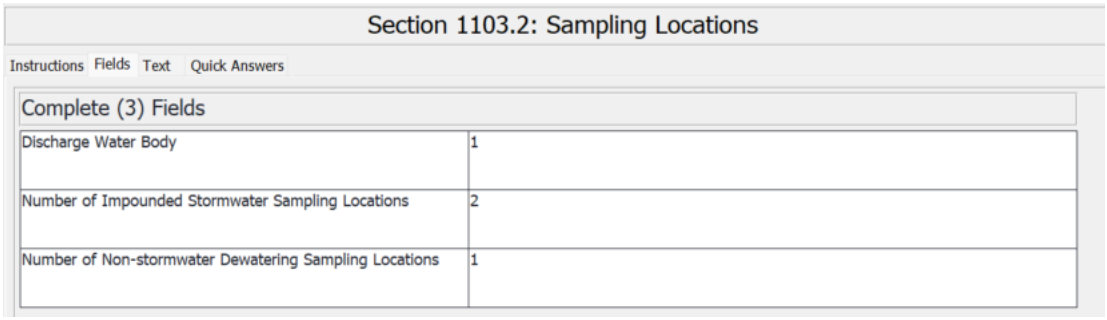


Figure 3-52. Section 1103.2 Sampling Locations

Fields Tab: Enter the information, as needed, for:

- Number of sampling location(s) on the project site have been identified as potential locations for the collection of non-stormwater dewatering samples.
- Number of sampling location(s) on the project site been identified as potential locations for the collection of discharge samples of impounded stormwater.
- The name of the water body that will receive discharge. If there isn't one, leave blank.

Text Tab: Provide the additional narrative text for non-stormwater discharges potential sampling locations.

1103.2.1 Non-Stormwater Dewatering Sampling Locations

SWPPP GUIDANCE INSTRUCTIONS

Complete table listing the non-stormwater dewatering sampling locations.

SWPPP Builder Instructions

Complete table by providing the unique sampling location identifier and narrative text location description (Figure 3-53).

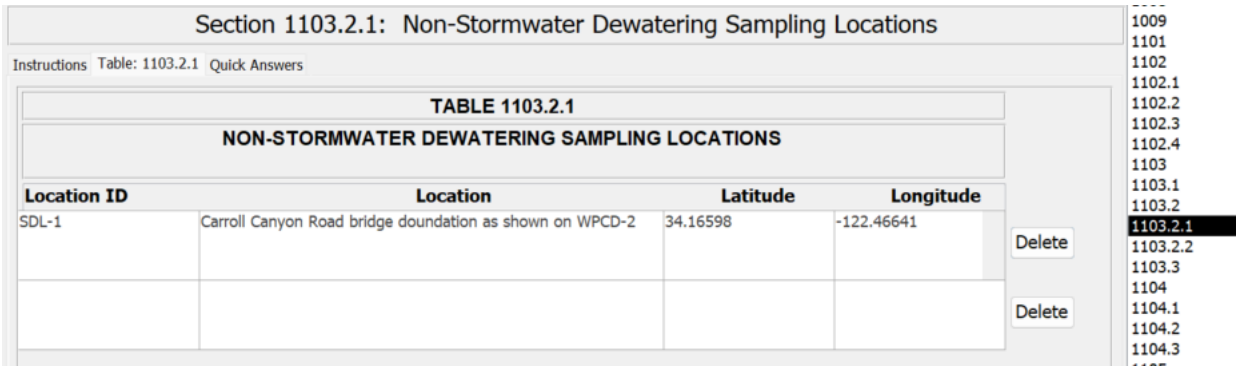


Figure 3-53. Section 1103.2.1 Potential Non-Stormwater Dewatering Sampling Locations

1103.2.2 Impounded Stormwater Discharge Sampling Locations

SWPPP GUIDANCE INSTRUCTIONS

Complete table listing the dewatering discharge sampling locations.

SWPPP Builder Instructions

Complete table by providing the unique sampling location identifier and narrative text location description (Figure 3-54).

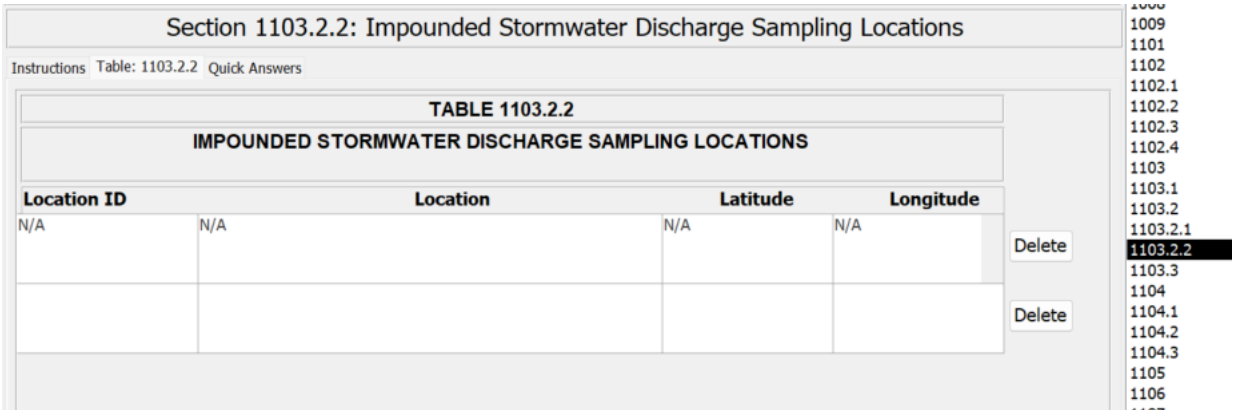


Figure 3-54. Section 1103.2.2 Potential Impounded Stormwater Discharge Sampling Locations

1103.3 Sampling Schedule

SWPPP GUIDANCE INSTRUCTIONS

Complete this section if there are any deviations from the sampling schedule for non-stormwater and dewatering sampling locations identified in Section 1103.

SWPPP Builder Instructions

Insert additional narrative text for non-stormwater discharge sampling schedule and for dewatering permit actual sampling locations, as needed. If no additional text is necessary, leave blank. Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section 1103, when preparing to Print the SWPPP.

1103.4 Sample Collection and Handling

SWPPP GUIDANCE INSTRUCTIONS

Refer to the general sample collection and handling in General SAP Section 901. Samples shall be collected, maintained and shipped in accordance with the SWPPP, the *Construction Site Monitoring Program Guidance Manual*, and State Water Board Surface Water Ambient Monitoring Program (SWAMP) guidance.

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.

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;
- Placing a decontaminated or sterile bailer or other sterile collection device 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.
- If additional requirements are necessary for sample collection and handling, insert additional text in this section.

SWPPP Builder Instructions

Insert additional narrative text for non-stormwater discharge sample collection and handling, as needed. If no additional text is necessary, leave blank. Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section 1103, when preparing to Print the SWPPP.

1104.1 Sample Collection Procedures

SWPPP GUIDANCE INSTRUCTIONS

Include any additional requirements are necessary for sample collection and handling.

SWPPP Builder Instructions

Insert additional narrative text for non-stormwater discharge sample collection procedures, as needed. If no additional text is necessary, leave blank. Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section 1104.1, when preparing to Print the SWPPP.

1104.2 Sample Handling Procedures

SWPPP GUIDANCE INSTRUCTIONS

- Refer to the general sample collection and handling in Section 1104 instructions.
- If additional requirements are necessary for sample handling, insert additional text in this section.

SWPPP Builder Instructions

Insert additional narrative text for non-stormwater discharge sample handling procedures, as needed. If no additional text is necessary, leave blank. Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section 1104.2, when preparing to Print the SWPPP.

1104.3 Sample Documentation Procedures

SWPPP GUIDANCE INSTRUCTIONS

- If additional requirements are necessary for sample documentation, insert additional text in this section.

SWPPP Builder Instructions

Insert additional narrative text for non-stormwater discharge sample documentation procedures, as needed. If no additional text is necessary, leave blank. Automated text will populate the

SWPPP based on Risk Level and can be viewed in Preview Section 1104.3, when preparing to Print the SWPPP.

1105 Sample Analysis

SWPPP GUIDANCE INSTRUCTIONS

- Specific analyses to be performed on samples collected from the project site are listed in Table 1105: Sample Collection, Preservation and Analysis for Monitoring Water Extracted by Dewatering.
- Non-stormwater may be polluted with visible or non-visible pollutants. Section 1000 provides additional guidance for sample analysis of non-visible pollutants.

SWPPP Builder Instructions

Complete table by providing the parameter, test method, sample preservation requirement, minimum sample volume, sample bottle, holding time, and detection limit (Figure 3-55).

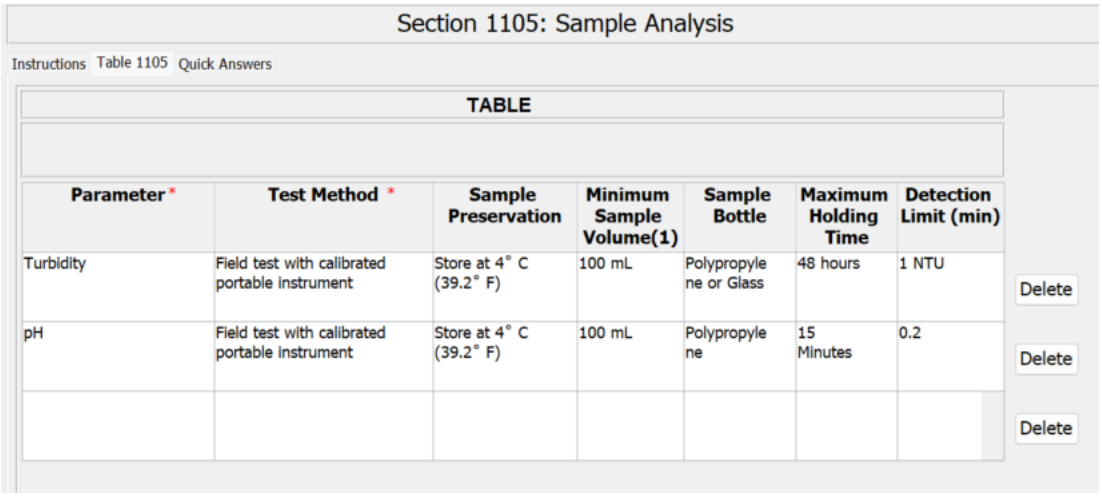


Figure 3-55. Section 1105 Sample Analysis

1106 Quality Assurance/Quality Control

SWPPP GUIDANCE INSTRUCTIONS

Refer to general instructions below about Quality Assurance/Quality Control (QA/QC):

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.

If additional requirements are necessary for QA/QC, insert additional text in this section.

SWPPP Builder Instructions

Insert additional non-stormwater discharges quality control/quality assurance narrative text, as needed. If no additional text is necessary, leave blank. Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section 1106, when preparing to Print the SWPPP.

1107 Data Management and Reporting

SWPPP GUIDANCE INSTRUCTIONS

Refer to the following data management and reporting instructions:

All test results shall be documented on either the DOT CEM-2052SW Storm Event Sampling or Receiving Water Monitoring Report form and all sampling events shall be recorded on the DOT CEM-2051SW Storm Event SWPPP Sampling Log form. 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 laboratory testing, all laboratory analysis results shall be reviewed for consistency among laboratory methods, sample identifications, dates, and times for both primary samples and QA/QC samples.

All sampling and testing documentation, including the Chain-of-Custody, DOT CEM-2051SW Storm Event SWPPP Sampling Logs, DOT CEM-2052SW Storm Event Sampling or Receiving Water Monitoring Reports, and Laboratory Test Reports shall be kept in the appropriate SWPPP file category.

If additional requirements are necessary for data management and reporting, insert additional text in this section.

SWPPP Builder Instructions

Insert additional narrative text for non-stormwater discharge data management and reporting, as needed. If no additional text is necessary, leave blank. Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section 1107, when preparing to Print the SWPPP.

1108 Data Evaluation

SWPPP GUIDANCE INSTRUCTIONS

This section contains required text that has been automated into the SWPPP process. There is no additional information needed to be entered in the SWPPP Builder for this section.

1109 Changes of Conditions

SWPPP GUIDANCE INSTRUCTIONS

Refer to the general instructions for stormwater-related 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 shall be amended.

If additional requirements are necessary for Change of Conditions, then insert additional text in this section.

SWPPP Builder Instructions

Insert additional narrative text for non-stormwater discharges change of conditions, as needed. If no additional text is necessary, leave blank. Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section 1109, when preparing to Print the SWPPP.

SECTION 1200
Sampling and Analysis Plan for Stormwater pH and Turbidity

1201 Scope of Monitoring Activities

SWPPP GUIDANCE INSTRUCTIONS

SWPPP Builder Instructions

No action required. Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section 1201, when preparing to Print the SWPPP.

1202 Monitoring Preparation

SWPPP GUIDANCE INSTRUCTIONS

- Train water quality sampling personnel in accordance with the Caltrans *Construction Site Monitoring Program Guidance Manual*. At the time this Manual was published, the latest version of the Caltrans *Construction Site Monitoring Program Guidance Manual* was dated June 2024.
- Identify who will collect samples.
- Identify training and experience of individuals responsible for collecting water samples.
- Identify alternate sampling personnel in case of emergency, sick leave, and/or vacations during stormwater monitoring. Identify training of the alternate sampler.
- Identify the state-certified laboratory(ies) (ELAP) that will analyze samples for non-visible, non-stormwater, dewatering permit-required constituents, ATS or Passive Treatment Chemical or additives. 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.

If additional requirements are necessary for monitoring preparation, insert additional text in this section.

SWPPP Builder Instructions

In the text area provided, insert additional narrative text for stormwater pH and turbidity monitoring preparation, as needed.

1202.1 Qualified Sampling Personnel

SWPPP GUIDANCE INSTRUCTIONS

Refer to the general instructions for monitoring sample personnel. If additional requirements or deviations, insert additional text in this section.

SWPPP Builder Instructions

Insert additional narrative text for stormwater pH and turbidity qualified sampling personnel in the area provided, as needed.

1202.2 Monitoring Supplies

SWPPP GUIDANCE INSTRUCTIONS

Refer to the general instructions for monitoring preparation in General SAP Section 903.

If deviations were noted in 1202.1, then insert the additional qualifications in this section.

SWPPP Builder Instructions

Insert additional narrative text for stormwater pH and turbidity monitoring supplies in the area provided, as needed.

1202.3 Monitoring Supplies

SWPPP GUIDANCE INSTRUCTIONS

Refer to the general instructions for monitoring preparation. If additional requirements are necessary for monitoring instruments, insert additional text in this section.

SWPPP Builder Instructions

Insert additional narrative text for stormwater pH and turbidity field instruments in the area provided, as needed.

1202.4 Testing Laboratory

SWPPP GUIDANCE INSTRUCTIONS

Refer to the general instructions for monitoring preparation. If additional requirements are necessary for the laboratory that will analyze the monitoring samples, insert additional text in this section.

SWPPP Builder Instructions

Insert additional narrative text for stormwater pH and turbidity testing laboratory in the area provided, as needed.

1203.1 Analytical Constituents

SWPPP GUIDANCE 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 waterbody.
- Describe potential sampling locations where run-on enters the project site.
- Describe how actual sampling locations will be selected for every storm event/ qualifying precipitation event, QPE.

SWPPP Builder Instructions

Insert additional narrative text for stormwater pH and turbidity analytical constituents, as needed. If no additional text is necessary, leave blank. Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section 1203.1, when preparing to print the SWPPP.

1203.2 Potential Sampling Locations

SWPPP GUIDANCE INSTRUCTIONS

- Provide location identifier(s) and describe the location(s) of project site discharges and show the discharge locations on the WPCDs in Attachment H.
- 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*.
- 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 300 and then identify run-on sampling location(s).
- Does the project site have discharge locations that discharge directly to the waterbody?
- Does the project receive run-on with the potential to combine with stormwater discharges?

SWPPP Builder Instructions

Insert additional narrative text for: stormwater discharge locations; stormwater direct discharge to receiving water sampling locations; stormwater discharge to receiving water sampling locations; run-on sampling locations; and stormwater discharge to receiving water sampling locations. If no additional text is necessary in any category, leave blank. Additional entry requirements are required for projects with direct discharge to sediment-sensitive receiving water. Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section 1203.2, when preparing to print the SWPPP.

1203.2.1 Stormwater Discharge Locations

SWPPP GUIDANCE INSTRUCTIONS

Complete the table listing the stormwater discharge locations if there are any additions or revisions from Stormwater Discharge Locations Table in Section 904.

SWPPP Builder Instructions

Complete table by providing the unique sampling location identifier, narrative text location description, and coordinates (Figure 3-56).

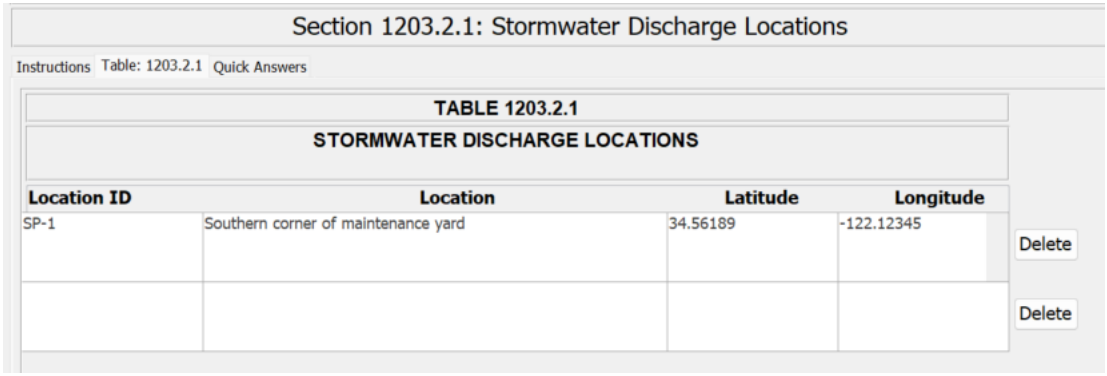


Figure 3-56. Section 1203.2.1 Stormwater Discharge Locations

1203.2.3 Receiving Water Sampling Locations

SWPPP GUIDANCE INSTRUCTIONS

Complete table listing the receiving water sampling locations including latitude and longitude. These locations must be shown in the WPCDs.

SWPPP Builder Instructions

Complete table by providing the unique sampling location identifier and narrative text location description (Figure 3-57).

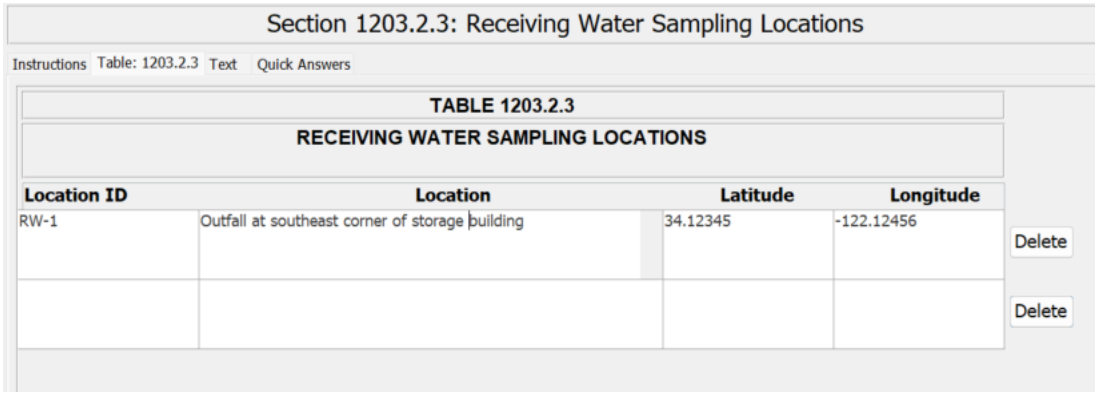


Figure 3-57. Section 1203.2.3 Table

Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section 1203.2.3, when preparing to Print the SWPPP.

1203.3 Actual Sampling Locations

SWPPP GUIDANCE INSTRUCTIONS

- The locations from which samples are collected are selected to characterize discharges associated with the construction activity from the entire project site. The sampling locations are based on drainage areas that have disturbed soil area.
- 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 Receiving Water Monitoring Trigger for pH or turbidity.
- Insert run-on sampling locations as identified locations of run-on to the Caltrans right-of-way.

SWPPP Builder Instructions

Insert additional narrative text for: stormwater discharge actual sampling locations and additional text for actual run-on sampling locations.

1203.4 Sampling Schedule

SWPPP GUIDANCE INSTRUCTIONS

Include a description if there are any revisions or deviations to the sampling schedule.

SWPPP Builder Instructions

Insert additional narrative text for the stormwater pH and turbidity sampling schedule in the area provided, as needed.

1204 Sample Collection and Handing

SWPPP GUIDANCE INSTRUCTIONS

Refer to the general sample collection and handling instructions in General SAP Section 901. If additional requirements are necessary for sample collection and handling, insert additional text in this section.

SWPPP Builder Instructions

Insert additional narrative text for the stormwater pH and turbidity sample collection and handling in the area provided, as needed.

1204.1 Sample Collection Procedures

SWPPP GUIDANCE INSTRUCTIONS

If additional requirements are necessary for sample collection procedures, insert additional text in this section.

SWPPP Builder Instructions

Insert additional narrative text for the stormwater pH and turbidity sample collection procedures in the area provided, as needed.

1204.2 Sample Handing Procedures

SWPPP GUIDANCE INSTRUCTIONS

If additional requirements are necessary for sample handling procedures, insert additional text in this section.

SWPPP Builder Instructions

Insert additional narrative text for the stormwater pH and turbidity sample handling procedures in the area provided, as needed.

1204.3 Sample Documentation Procedures

SWPPP GUIDANCE INSTRUCTIONS

If additional requirements are necessary for sample documentation procedures, insert additional text in this section.

SWPPP Builder Instructions

Insert additional narrative text for the stormwater pH and turbidity sample documentation procedures in the area provided, as needed.

1205 Sample Analysis

SWPPP GUIDANCE INSTRUCTIONS

- Analytical tests to be used on the project are listed in Table 1205.1: Sample Collection, Preservation and Analysis for Monitoring pH and Turbidity.

SWPPP Builder Instructions

Insert additional narrative text for the stormwater pH and turbidity sample analysis and sample field analysis in the area provided, as needed.

1206 Quality Assurance/Quality Control

SWPPP GUIDANCE INSTRUCTIONS

Refer to general instructions about QA/QC in General SAP Section 907. If additional requirements are necessary for QA/QC, insert additional text in this section.

SWPPP Builder Instructions

Insert additional narrative text for stormwater pH and turbidity QA/QC, as needed.

1207 Data Management and Reporting

SWPPP GUIDANCE INSTRUCTIONS

Refer to general data management and reporting instructions in General SAP Section 908. If additional requirements are necessary for data management and reporting, insert additional text in this section.

SWPPP Builder Instructions

Insert additional narrative text for the stormwater pH and turbidity data management and reporting in the area provided, as needed.

1207.1 NALs for Monitoring pH

SWPPP Builder Instructions

No action required. Automated text will populate the SWPPP and can be viewed in Preview Section 1207, when preparing to Print the SWPPP.

1208 Data Evaluation

SWPPP GUIDANCE 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.

SWPPP Builder Instructions

Insert additional narrative text for non-visible pollutant data evaluation, as needed. If no additional text is necessary, leave blank. Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section 1208, when preparing to Print the SWPPP.

1209 Change of Condition

SWPPP GUIDANCE INSTRUCTIONS

Refer to the general instructions for changes of conditions with regard to SAPs in Section 910. If additional requirements are necessary for a Change of Conditions, then insert additional text in this section.

SWPPP Builder Instructions

Insert additional narrative text for changes of conditions, as needed. If no additional text is necessary, leave blank. Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section 1209, when preparing to Print the SWPPP.

SECTION 1300
Sampling and Analysis Plan for Monitoring Required by the RWQCB

SWPPP GUIDANCE INSTRUCTIONS

- The CGP requires stormwater effluent monitoring for any additional parameters required by a RWQCB.
- Complete this section if the RWQCB requires additional monitoring.
- If there are no additional parameters shown in the contract special provisions, then the RWQCB has not specified any additional parameters and Sections 1300-1309 shall be deleted.

SWPPP Builder Instructions

No action required. Automated text will populate the SWPPP and can be viewed in Preview Section 1300, when preparing to Print the SWPPP.

1301 Scope of Monitoring Activities

SWPPP GUIDANCE INSTRUCTIONS

Provide the RWQCB monitoring frequency requirements (daily, weekly, monthly, when actively working in area, etc.).

SWPPP Builder Instructions

Provide in the field monitoring requirements for additional RWQCB specified parameter(s), as needed. If no entry is necessary, leave blank. Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section 1301, when preparing to Print the SWPPP.

1302 Monitoring Preparation

SWPPP GUIDANCE INSTRUCTIONS

Refer to the general instructions for monitoring preparation in General SAP Section 900. If additional requirements are necessary for monitoring preparation, insert additional text in this section.

SWPPP Builder Instructions

Insert additional narrative text for monitoring preparation for additional RWQCB specified parameter(s), as needed. If no entry is necessary, leave blank. Automated text will populate the

SWPPP based on Risk Level and can be viewed in Preview Section 1302, when preparing to Print the SWPPP.

1302.1 Qualified Sampling Personnel

SWPPP GUIDANCE INSTRUCTIONS

If additional requirements or deviations for the qualified sampling personnel, insert additional text in this section.

SWPPP Builder Instructions

Insert additional narrative text for qualified sampling personnel for the monitoring of additional RWQCB specified parameter(s), as needed. If no entry is necessary, leave blank. Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section 1302.1, when preparing to Print the SWPPP.

1302.2 Monitoring Supplies

SWPPP GUIDANCE INSTRUCTIONS

If additional requirements or deviations for the monitoring supplies, insert additional text in this section.

SWPPP Builder Instructions

Insert additional narrative text for monitoring supplies for the monitoring of additional RWQCB specified parameter(s), as needed. If no entry is necessary, leave blank. Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section 1302.2, when preparing to Print the SWPPP.

1302.3 Field Instruments

SWPPP GUIDANCE INSTRUCTIONS

If additional requirements or deviations for the field instruments used for monitoring, insert additional text in this section.

SWPPP Builder Instructions

Insert additional narrative text for field instruments for the monitoring of additional RWQCB specified parameter(s), as needed. If no entry is necessary, leave blank. Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section 1302.3, when preparing to Print the SWPPP.

1302.4 Testing Laboratory

SWPPP GUIDANCE INSTRUCTIONS

If additional requirements or deviations for the laboratory analyzing the samples, insert additional text in this section.

SWPPP Builder Instructions

Insert additional narrative text for the testing laboratory for the monitoring of additional RWQCB specified parameter(s), as needed. If no entry is necessary, leave blank. Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section 1302.4, when preparing to Print the SWPPP.

1303 Monitoring Strategy

SWPPP GUIDANCE INSTRUCTIONS

Describe the constituents for which the stormwater discharge samples must be analyzed.

Describe the potential stormwater discharge sampling locations.

Describe how actual sampling locations will be selected for every qualifying precipitation event.

SWPPP Builder Instructions

Insert additional narrative text on impaired water body for monitoring required by the RWQCB in an impaired water body, as needed. If no entry is necessary, leave blank. Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section 1303, when preparing to Print the SWPPP.

1303.1 Analytical Constituents

SWPPP GUIDANCE INSTRUCTIONS

Identify the specific RWQCB- required analytical constituents SWPPP Builder Instructions.

SWPPP Builder Instructions

Section 1303.1 has two separate tabs for information entry: Text, and Lists.

Text Tab: Insert additional narrative text on analytical constituents for monitoring required by the RWQCB in an impaired water body, as needed. If no entry is necessary, leave blank.

Lists Tab: Complete the list for analytical constituents required by the RWQCB. Tab at the end of each analytical constituents entry to navigate to the next row for multiple analytical constituents.

Automated text will populate the SWPPP based on Risk Level and can be viewed in Preview Section 1303.1, when preparing to Print the SWPPP.

1303.2 Potential Sampling Locations

SWPPP GUIDANCE 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 300.3 and 600.1.1 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, that may contribute run-on sediment to the site.

To minimize backwater effects 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, [latest edition].

Does the project receive run-on with the potential to combine with stormwater that discharges directly to the impaired water body?

SWPPP Builder Instructions

Add additional text for monitoring required by the RWQCB for stormwater discharge locations, for direct discharges to receiving water sampling locations, and for monitoring required by the RWQCB receiving water sampling locations.

1303.2.1 Stormwater Discharge Locations Required to be Monitored by RWQCB

SWPPP GUIDANCE INSTRUCTIONS

Complete table of stormwater discharge locations.

SWPPP Builder Instructions

Complete table by providing the unique sampling locations of receiving water sampling locations required by the RWQCB, as needed.

1303.2.2 Stormwater Discharge Locations to Receiving Water

SWPPP GUIDANCE INSTRUCTIONS

Complete table of stormwater discharges to receiving waters.

SWPPP Builder Instructions

Complete table by providing the unique discharge locations to receiving water, as needed.

1303.2.3 Receiving Water Sampling Locations Required to be Monitored by RWQCB

SWPPP GUIDANCE INSTRUCTIONS

Complete table of receiving water sampling locations.

SWPPP Builder Instructions

Complete table by providing the unique sampling location identifier and narrative text location description of receiving water sampling locations required by the RWQCB, as needed.

1303.2.4 Run-on Locations with Potential to Combine with Stormwater Discharge

SWPPP GUIDANCE INSTRUCTIONS

Complete table of run-on locations.

SWPPP Builder Instructions

Complete table by providing the unique sampling location identifier and narrative text location description of run-on sampling locations with potential to combine with stormwater discharge, as needed.

1303 Sampling Locations

SWPPP GUIDANCE INSTRUCTIONS

This section contains required text that has been automated into the SWPPP process. There is no additional information needed to be entered in the SWPPP Builder for this section.

1303.4 Sampling Schedule

SWPPP GUIDANCE INSTRUCTIONS

If additional requirements or deviations for the sampling schedule, insert additional text in this section.

SWPPP Builder Instructions

Add additional text for monitoring required by the RWQCB sampling schedule, as needed.

1304 Sample Collection and Handling

SWPPP GUIDANCE INSTRUCTIONS

Refer to the general sample collection and handling instructions in General SAP Section 900.4. If additional requirements are necessary for sample collection and handling, insert additional text in this section.

SWPPP Builder Instructions

Add additional text for monitoring required by the RWQCB sample collection and handling, as needed.

1304.1 Sample Collection Procedures

SWPPP Builder Instructions

Add additional text for monitoring required by the RWQCB sample collection procedures, as needed.

1304.2 Sample Handling Procedures

SWPPP Builder Instructions

Add additional text for monitoring required by the RWQCB sample handling procedures, as needed.

1304.3 Sample Documentation Procedures

SWPPP Builder Instructions

Add additional text for monitoring required by the RWQCB sample documentation procedures, as needed.

1305 Sample Analysis

SWPPP GUIDANCE INSTRUCTIONS

Insert parameters and tests to be used into Table 1305: Sample Collection, Preservation and Analysis for Monitoring [specify parameters].

SWPPP Builder Instructions

Complete table by providing the parameters and tests to be used and narrative text of the parameters and tests required by the RWQCB, as needed.

1306 Quality Assurance/Quality Control

SWPPP GUIDANCE INSTRUCTIONS

Refer to the general instructions about QA/QC in General SAP Section 907. If additional requirements are necessary for QA/QC, insert additional text in this section.

SWPPP Builder Instructions

Add additional text for monitoring required by the RWQCB for quality assurance/quality control, as needed.

1307 Data Management and Reporting

SWPPP GUIDANCE INSTRUCTIONS

Refer to general data management and reporting instructions in General SAP Section 908. If additional requirements are necessary for data management and reporting, insert additional text in this section.

SWPPP Builder Instructions

Add additional text for monitoring required by the RWQCB for data management and reporting, as needed.

1308 Data Evaluation

SWPPP GUIDANCE INSTRUCTIONS

Sample results from stormwater discharges shall be evaluated to determine if the concentrations of the RWQCB-requested parameters 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.

SWPPP Builder Instructions

Add additional text for monitoring required by the RWQCB for data evaluation, as needed.

1309 Change of Condition

SWPPP GUIDANCE INSTRUCTIONS

Refer to the general instructions for changes of conditions in General SAP Section 910. If additional requirements are necessary for Changes of Conditions, then insert additional text in this section.

SWPPP Builder Instructions

Add additional text for monitoring required by the RWQCB change of conditions, as needed.

SECTION 2000
Post-Construction Control Practices

2000.1 Post-Construction Control Practices

SWPPP GUIDANCE 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.

Provide descriptions of the BMPs employed after all construction stages have been completed at the site (Post-Construction BMPs). Separate post-construction measures into Design Pollution Prevention (DPPs) and Approved Treatment BMPs:

Approved Treatment BMPs include:

- DPPIA
- Infiltration Devices
- Detention Basins
- Biofiltration Strips and/or Swales
- Traction Sand Traps
- Dry Weather Flow Diversion
- Gross Solids Removal Devices (GSRDs)
- Media Filters (Austin and Delaware)

DPPs include:

- Concentrated Flow Conveyances
- Vegetated Surfaces
- Slope/Surface Protection Systems

SWPPP Builder Instructions

Section 2000.1 has two separate tabs for information entry: Text and Lists (Figure 3-58).

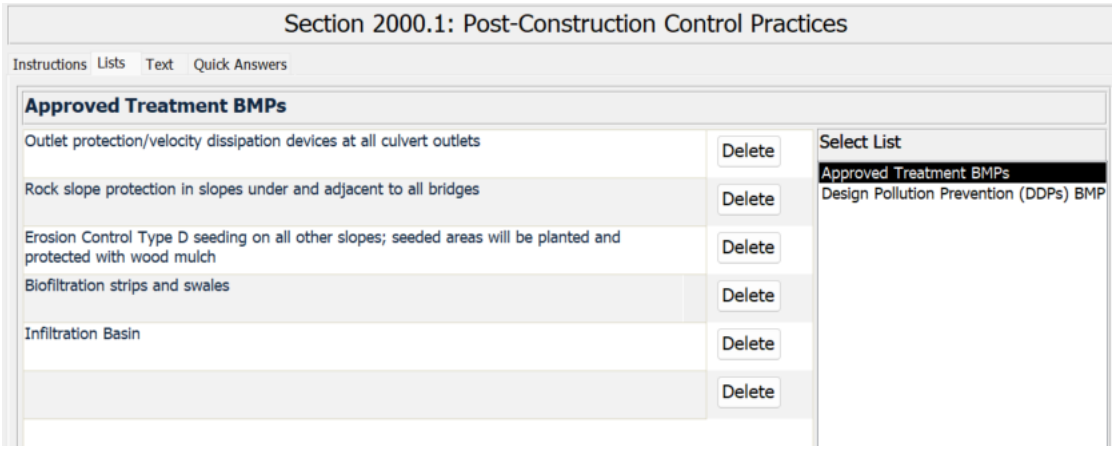


Figure 3-58. Section 2000.1 Post-Construction Control Practices

Text Tab: Insert additional narrative text in the text area provided, as needed. Otherwise leave blank.

Lists Tab: Use the SWPPP Guidance Instructions to provide the list for post-construction BMPs for the project site.

Refer to the SWDR for a complete summary and description of post-construction BMPs.

2000.2 Post-Construction Operation/ Maintenance

SWPPP GUIDANCE 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. 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).

SWPPP Builder Instructions

Section 2000.2 has two separate tabs for information entry: Text and Fields (Figure 3-59).

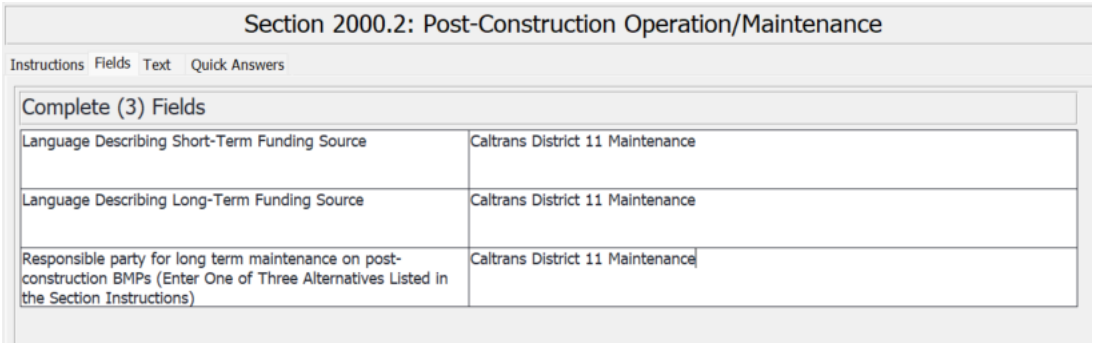


Figure 3-59. Section 2000.2 Post-Construction Operation/Maintenance

Fields Tab: Provide the list of parties responsible for long-term maintenance and the short- and long-term funding for the maintenance of the post-construction BMPs. Refer to the example provided in the figure above.

Text Tab: Provide narrative text that describes the short- and long-term funding and maintenance. If needed, enter additional language provided by Caltrans or Local agency or private entity administering the project.

3.4 SWPPP Attachments

SWPPP Attachments are attachments that are included in the SWPPP but are distinct from the template report. These attachments are relevant from the beginning of the project but may be updated infrequently or not at all. These are separate from the Appendices, which are ongoing, or updated on a more regular basis.

3.4.1 Attachment A: LRP Authorization of Approved Signatory

The CGP Section VII B. SWPPP Certification Requirements states that the LRP shall list in the SWPPP, the name of the AS, 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 delegations that are not covered in the District Work Plan to be an AS is DOT CEM-2006SW Legally Responsible Person Authorization of Duly Authorized Representative. Request a copy of completed form CEM-2006SW from the RE and include it in Attachment A. For projects subject to LTCGP, use CEM 2006-T and include it in Attachment A.

For non-Caltrans projects, the Local Agency must provide a written agreement for LRP Authorization of AS. Caltrans does not allow the LRP for a Private Entity to delegate responsibility to an AS.

If the LRP has not authorized an AS then the following statement should be included in Attachment A.

“The LRP 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 LRP Authorization of AS.
- Local Agency written agreement for LRP Authorization of AS.
- LRP statement that there is no Approved Signatory for the project.

Caltrans Forms are located at:

http://www.dot.ca.gov/hq/construc/forms.htm

3.4.2 Attachment B: NOI

For Caltrans projects, a copy of the NOI and the WDID Number issued for the project should be requested from the RE for the project.

For non-Caltrans projects, the Local Agency or Private Entity administering the project should have submitted a NOI for the project to the SWRCB. This attachment will need to be left blank for the original submittal until the SWPPP is authorized and the WDID number is received from SWRCB. A copy of the NOI and the WDID Number issued for the project should be requested from the RE for the project.

Include in Attachment B the NOI and WDID Number.

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 is calculated in two parts: Part 1. project sediment risk, and Part 2. receiving water risk. Part 1 quantifies sediment and Part 2 characterizes the receiving water. The results are used to determine the overall site Risk Level, defined as either Level 1, 2 or 3. Level 3 is the highest Risk Level and requires more extensive monitoring and reporting compared to Level 1. The complete methodology used by Caltrans for determining the Risk Level for a project is available at:

http://www.dot.ca.gov/hq/oppd/stormwtr/risk-guidance.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.

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 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:

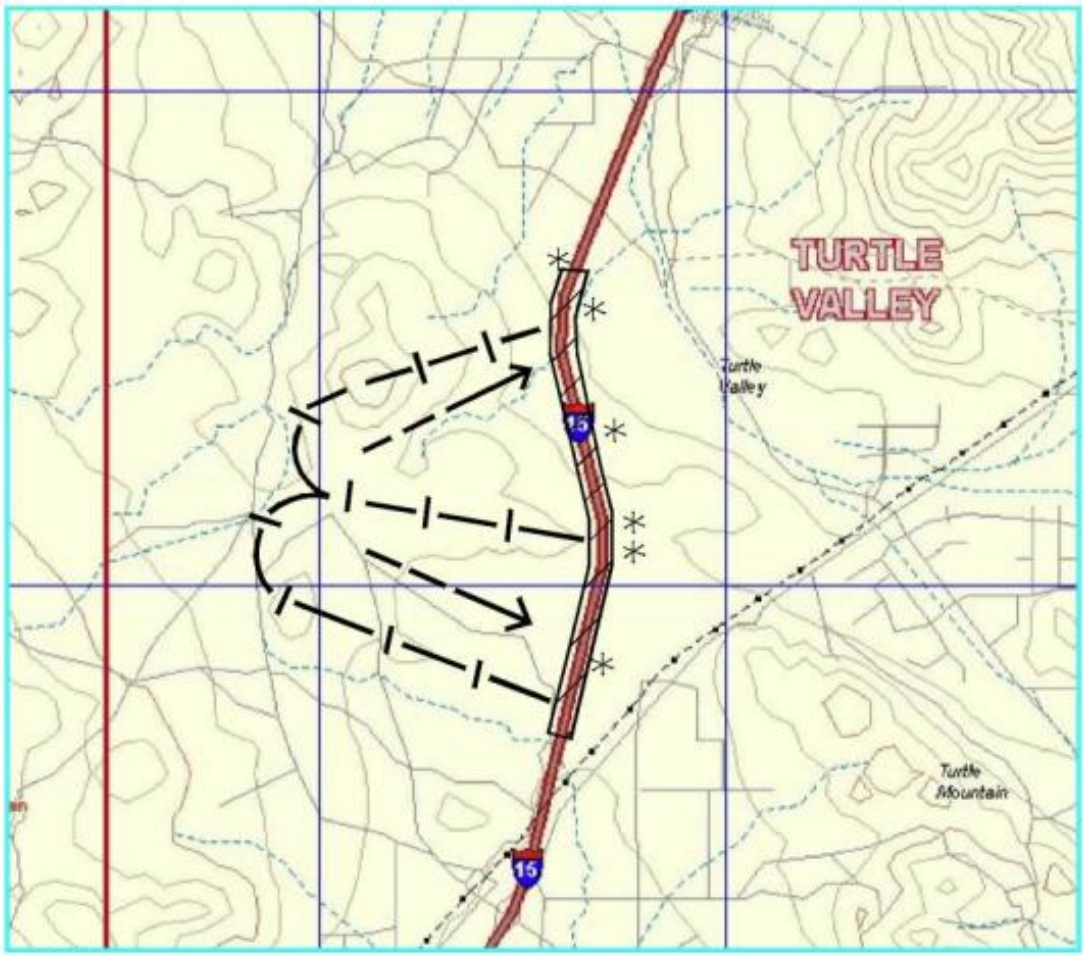
- Easily identifiable major roadways
- Geographic features or landmarks
- Water bodies within or adjacent to the construction limits
- Construction site perimeter
- Staging areas and storage yards
- Known wells
- Outline of the off-site drainage area(s) that discharge into the construction site
- Identification of anticipated discharge location(s) where the stormwater from the construction site discharges to a MS4 or other water body
- General topography

Attachment D
Vicinity Map

SAMPLE VICINITY MAP

FOR

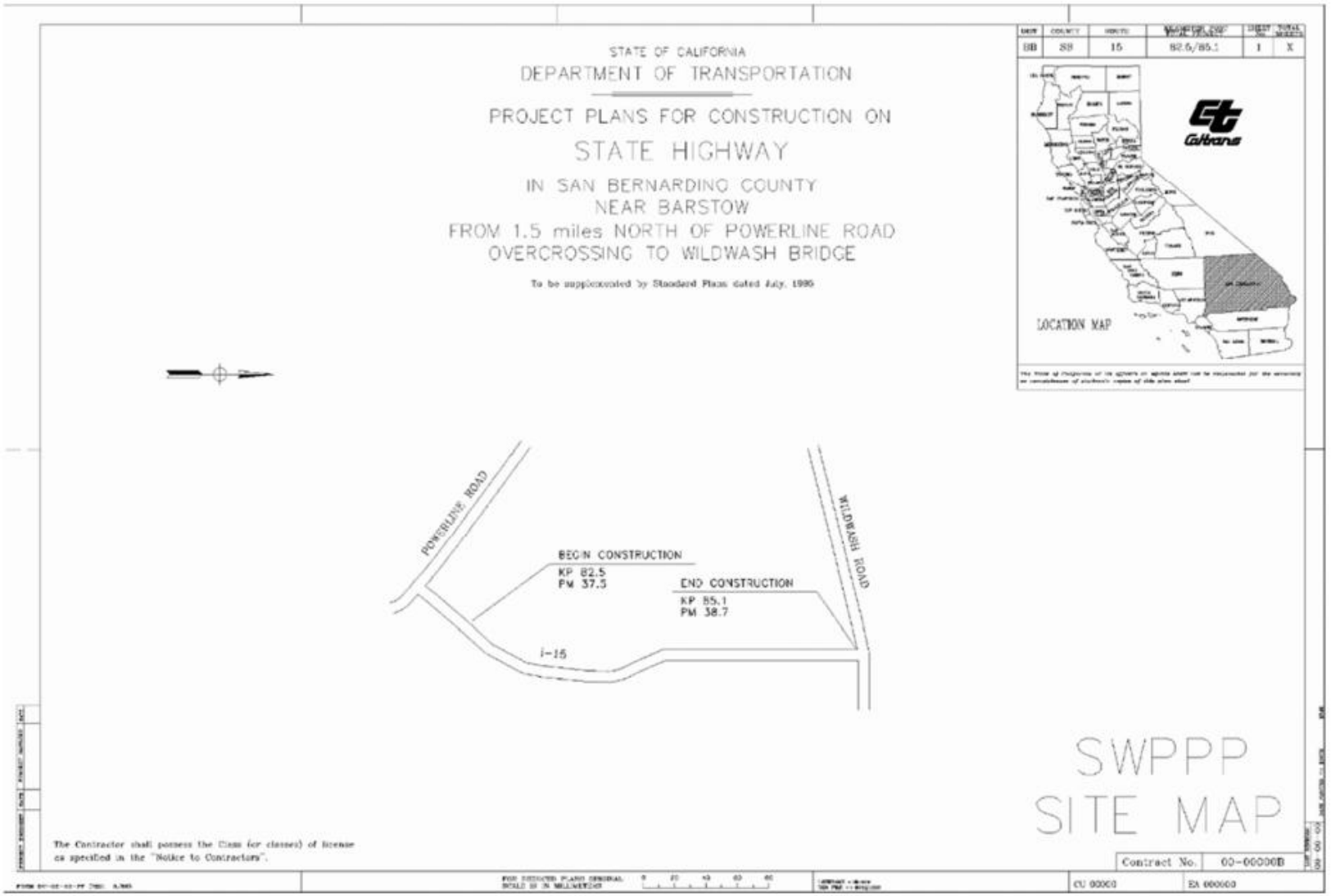
THE CONSTRUCTION ON STATE HIGHWAY 15
IN SAN BERNARDINO COUNTY NEAR BARSTOW
FROM 1.5 miles NORTH OF POWERLINE ROAD
OVERCROSSING TO WILDWASH BRIDGE



LEGEND:
- PROJECT AREA
- * DISCHARGE POINTS
- OFFSITE DRAINAGE AREAS DISCHARGING ON TO SITE

N.T.S.

Attachment D
Site Map Sample



3.4.5 Attachment E: Contractor Personnel Stormwater Training

A summary of formal stormwater training for the project manager/superintendent, WPC Manager, QSP, stormwater inspector, stormwater discharge sampler and tester, and their respective alternates, as well as other employees responsible for BMP installation, maintenance and repair and all contractor employees must be included in Attachment E. Use Caltrans Form DOT CEM-20DCONSW Contractor Stormwater Personnel Training Records.

For subcontractors a summary of formal stormwater training, for subcontractor foreman and all subcontractor employees responsible for BMP installation, maintenance and repair must be included in Attachment E. Use Caltrans Form CEM-20DSUB.

Caltrans Forms are located at:

http://www.dot.ca.gov/hq/construc/forms.htm

3.4.6 Attachment F: Other Plans/Permits/Agreements

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 CWA Section 401 Water Quality Certification
- USACOE, CWA Section 404, Nationwide Permit 26-authorization letter
- California Department of Fish and Wildlife (DFW) Streambed Alteration
- General Dewatering Permit issued by a RWQCB

3.4.7 Attachment G: SWPPP Amendments

When changes in the authorized SWPPP are required, the contractor's 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 RE for review and acceptance.
- The SWPPP Amendment Certification and Acceptance 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 G.
- Accepted amendments should be inserted into the appropriate SWPPP Section or Attachment when possible and a copy shall be kept in Attachment G.
- When an amendment to the SWPPP is accepted by the LRP, or RE if authorized AS, form DOT CEM-2008SW SWPPP/WPCP Amendment Certification and Authorization shall be attached to the SWPPP amendment and inserted into Attachment G.

All accepted SWPPP amendments shall be shown on DOT CEM-2009SW SWPPP/WPCP Amendment Log form in Attachment G. The amendment log shall include:

- Amendment number
- Date
- Brief description of the amendment
- Requested by

- Amendment approval date

Caltrans form DOT CEM-2009SW SWPPP/WPCP Amendment Log shall be used to record SWPPP amendments.

Include in Attachment G the following:

- Form DOT CEM- 2009SW 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.

Caltrans Forms are located at:

http://www.dot.ca.gov/hq/construc/forms.htm

3.4.8 Attachment H: WPCDs

The WPCDs are the component of the project SWPPP that show the necessary 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.

3.4.8.1 Preliminary Phase (Pre-Construction Phase)

Construction stage, including rough grading or disking, clearing and grubbing operations, or any soil disturbance prior to mass grading.

3.4.8.2 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.

3.4.8.3 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.

3.4.8.4 Highway Planting/Erosion Control Establishment Phase

Highway planting includes 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 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 this Manual, Appendix B.
- Temporary WPC details are included in the applicable Standard Plans, contract plans and Attachment H.
- 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 CSMP requires information for stormwater and non-stormwater monitoring be shown on the WPCDs. See Caltrans *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 on-site stormwater inlet or receiving water
- Tributary areas and drainage patterns to each on-site stormwater inlet, receiving water or discharge point

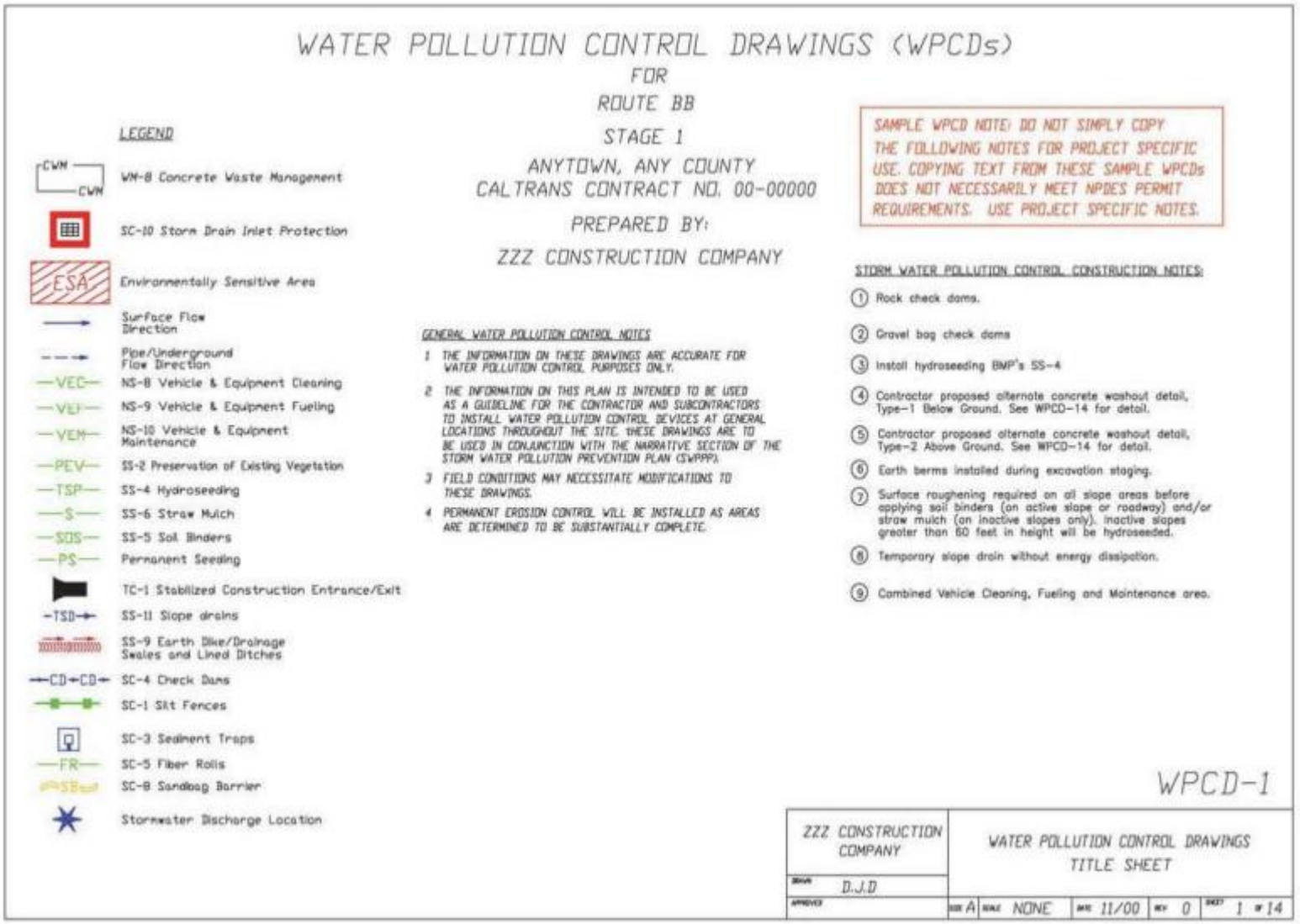
- Off-site tributary drainage areas that generate run-on to the project. (Where off-site tributary drainage areas are too large to depict on the drawings, use map notes or inserts illustrating the upstream drainage areas)
- Temporary on-site drainage(s) to carry concentrated flows
- Drainage patterns 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, 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 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 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

Sample WPCDs are shown on the following pages.

Attachment H
WPCDs Example 1



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
- 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
- SDS — 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.

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.

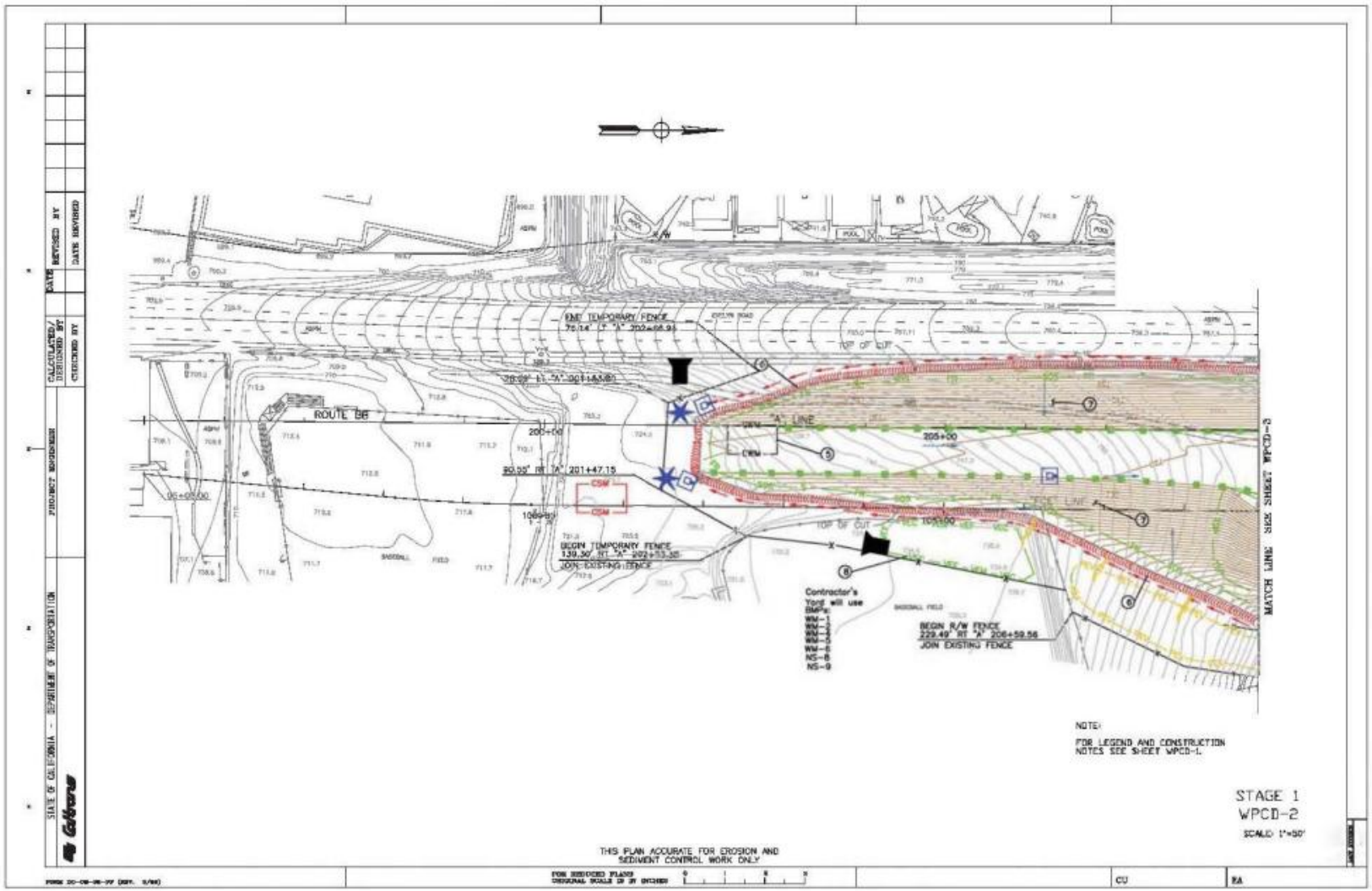
STORM WATER POLLUTION CONTROL CONSTRUCTION NOTES:

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.

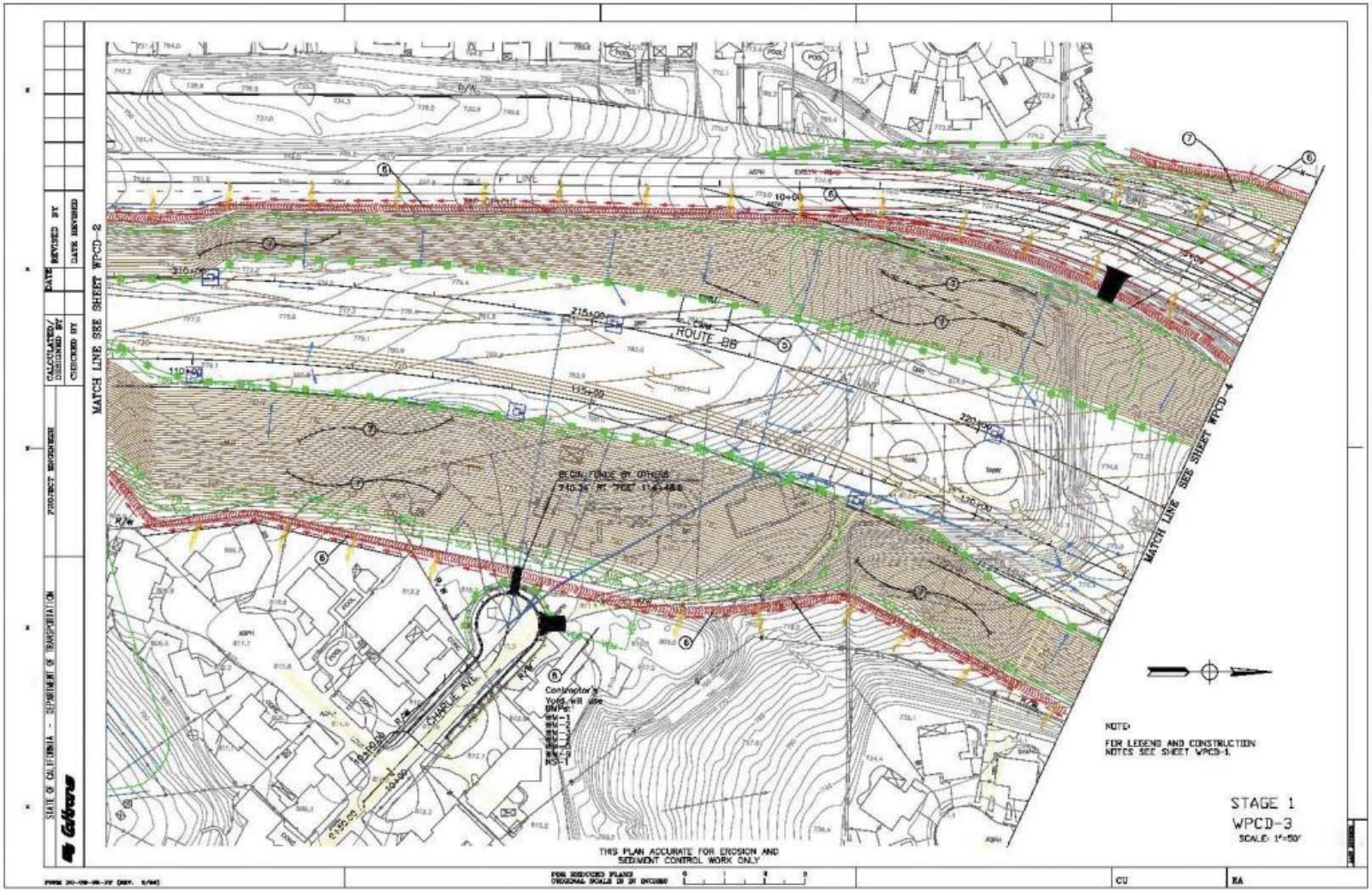
WPCD-1

ZZZ CONSTRUCTION COMPANY	WATER POLLUTION CONTROL DRAWINGS TITLE SHEET
D.J.D	SIZE A · SCALE NONE · DATE 11/00 · REV 0 · SHEET 1 of 14

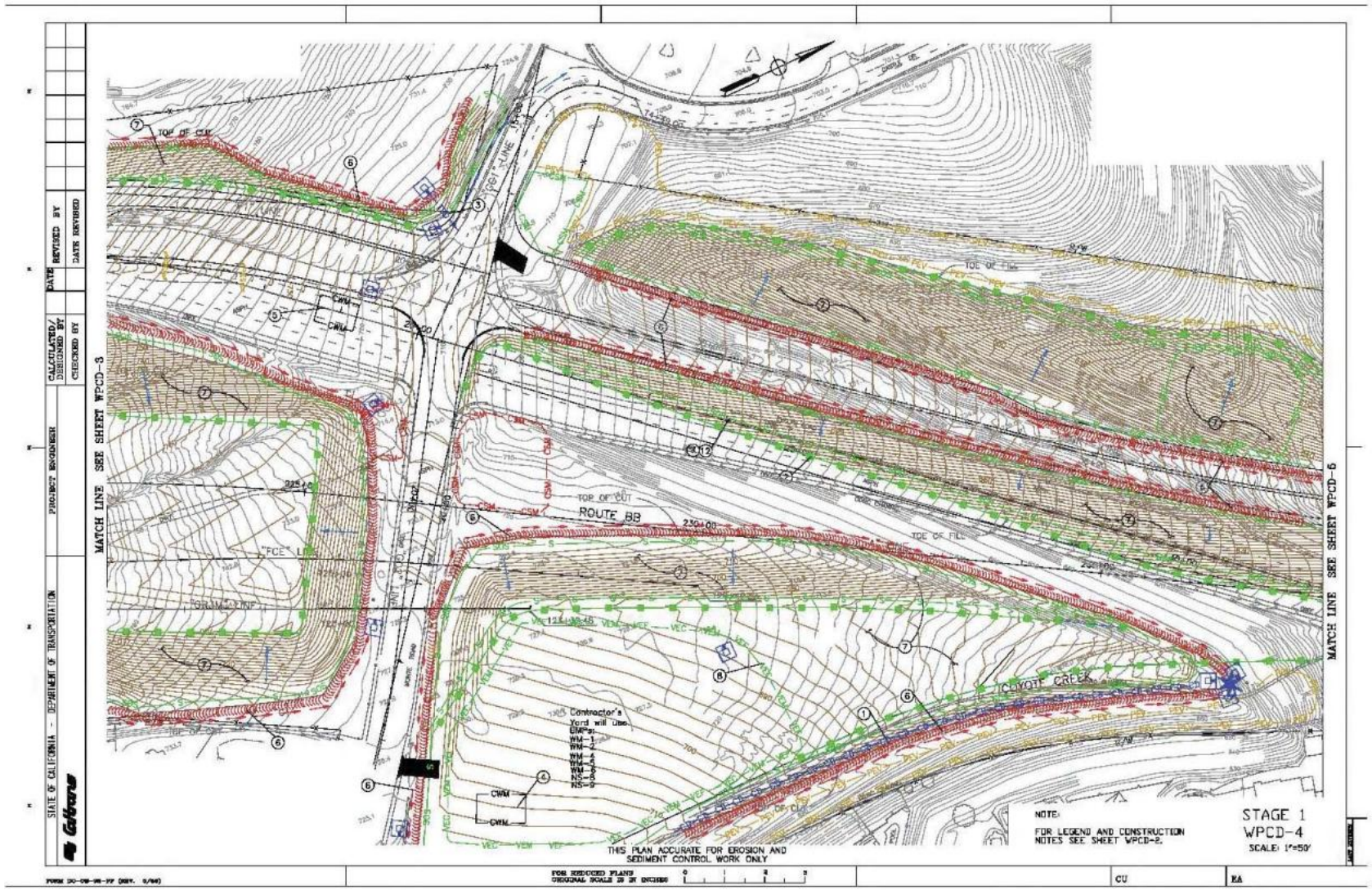
Attachment H
WPCDs Example 2



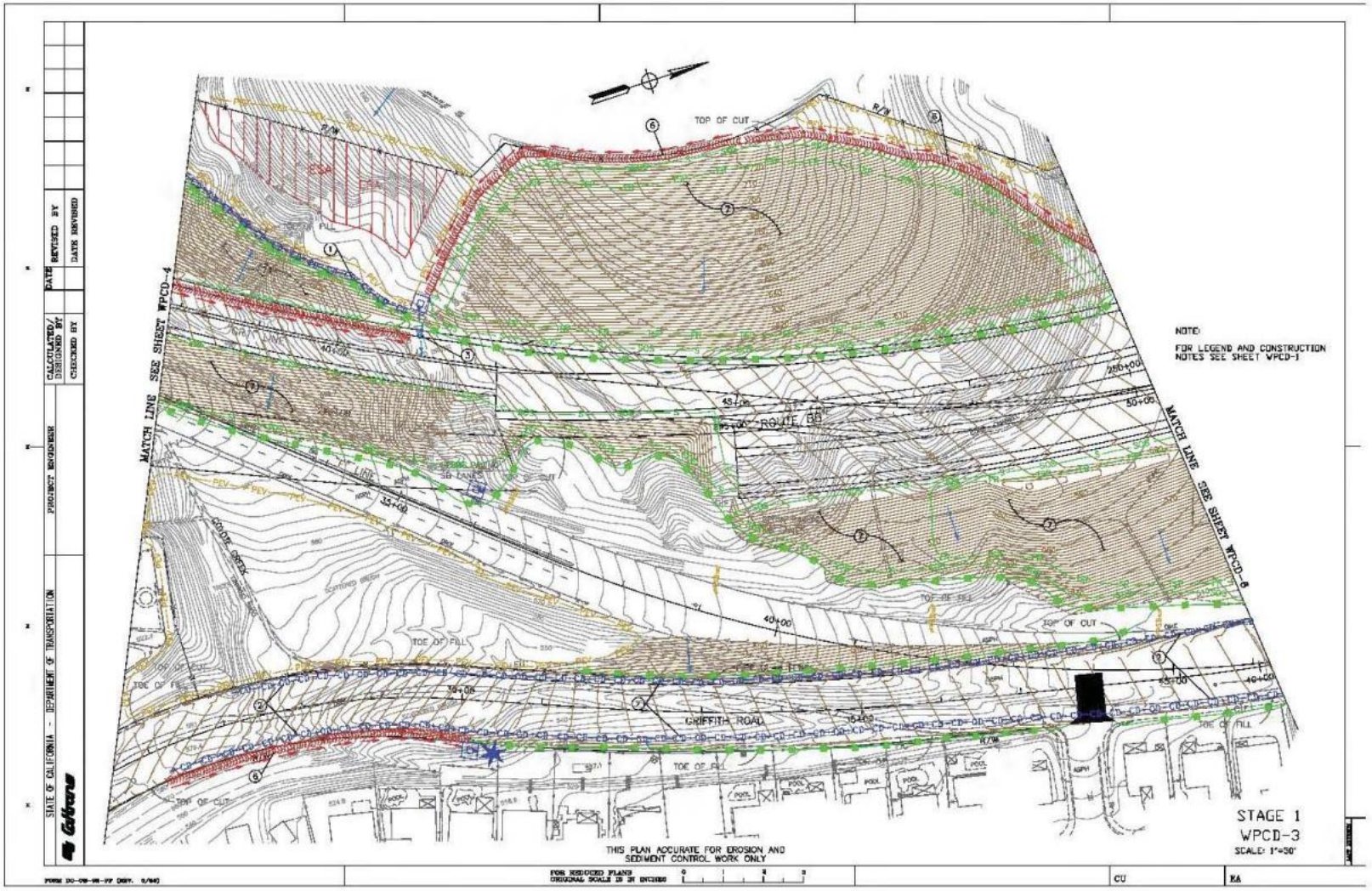
Attachment H
WPCDs Example 3



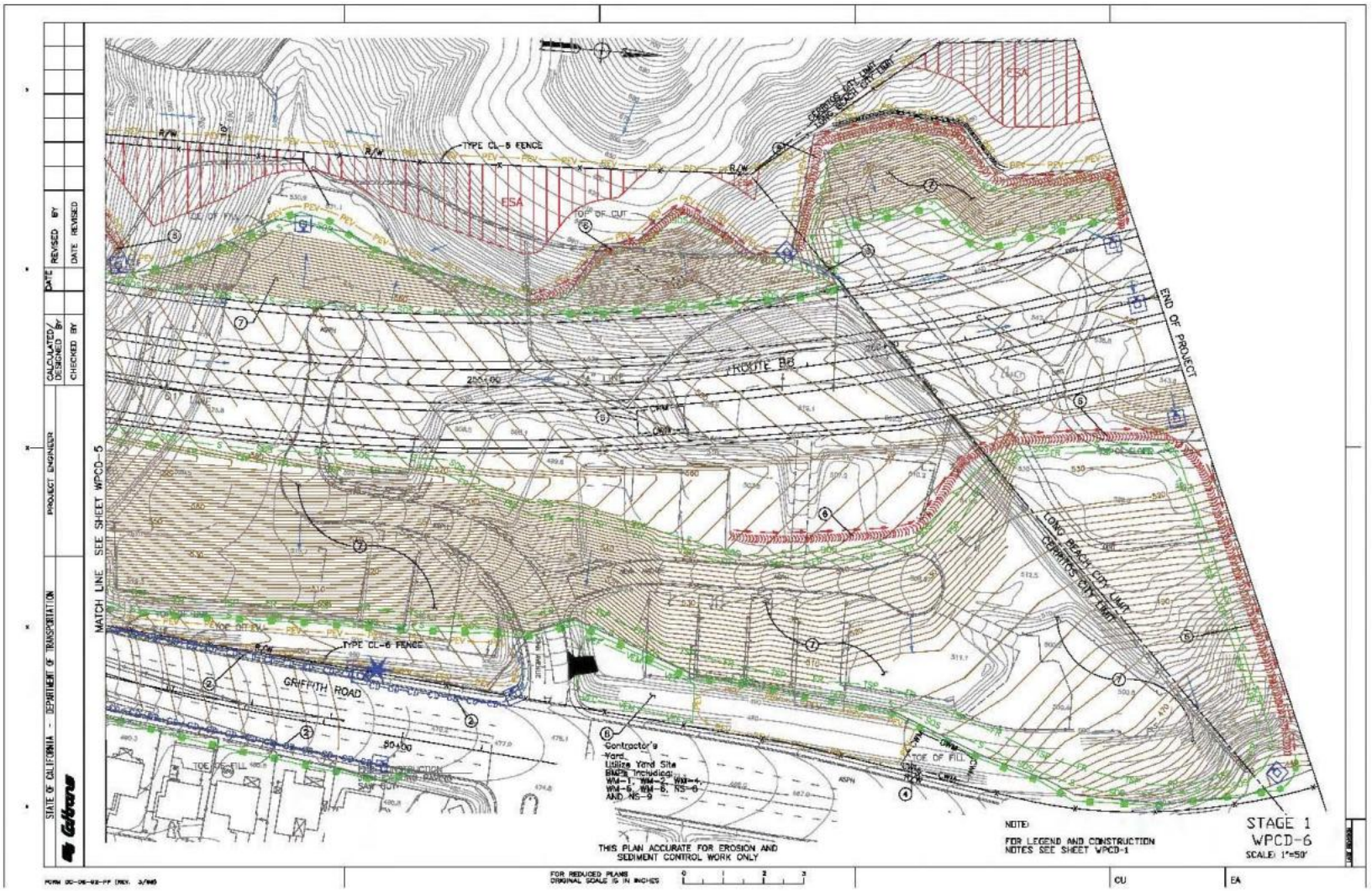
Attachment H
WPCDs Example 4



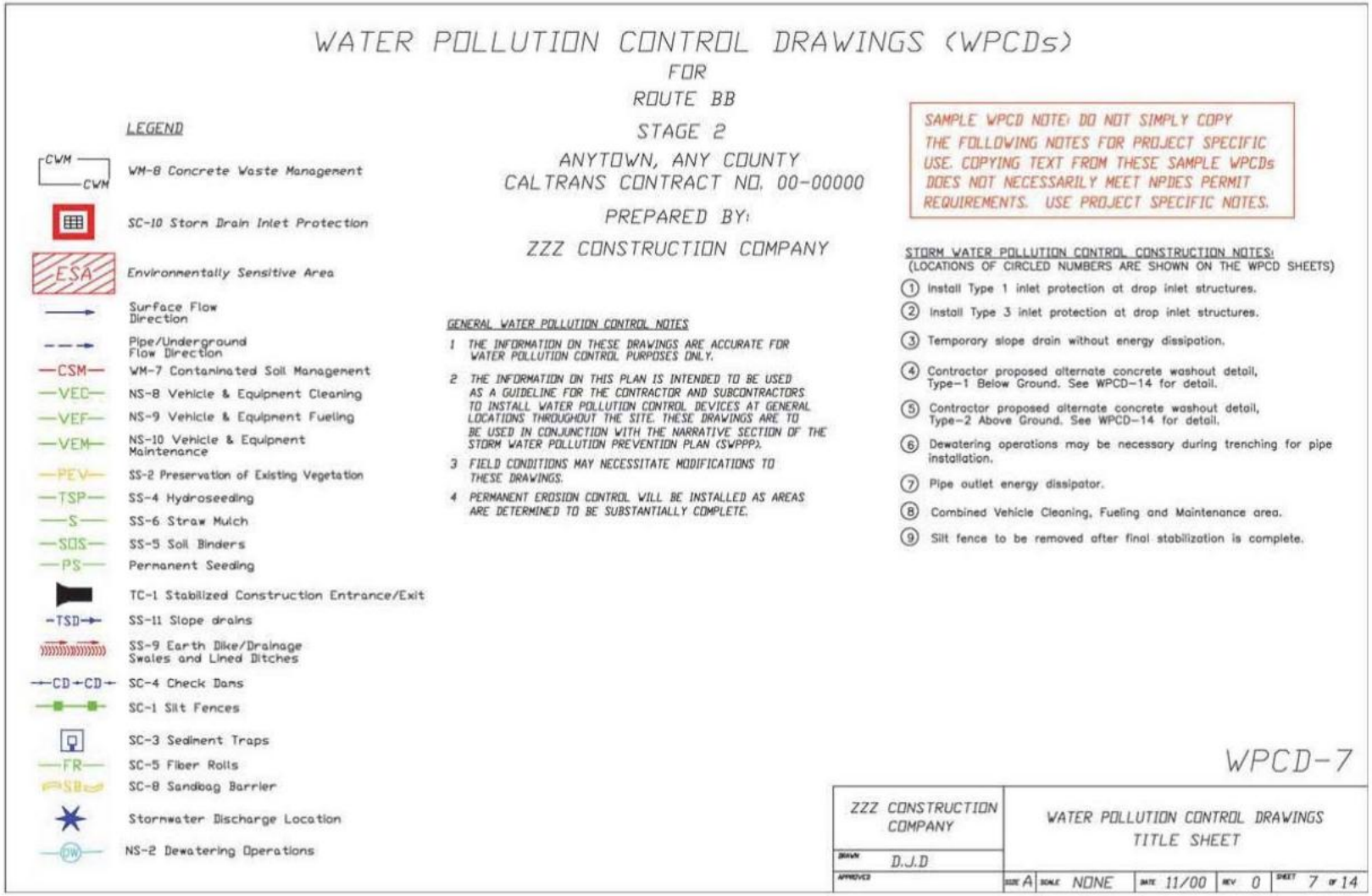
Attachment H
WPCDs Example 5



Attachment H
WPCDs Example 6



Attachment H
WPCDs Example 7



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 — 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—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

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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)

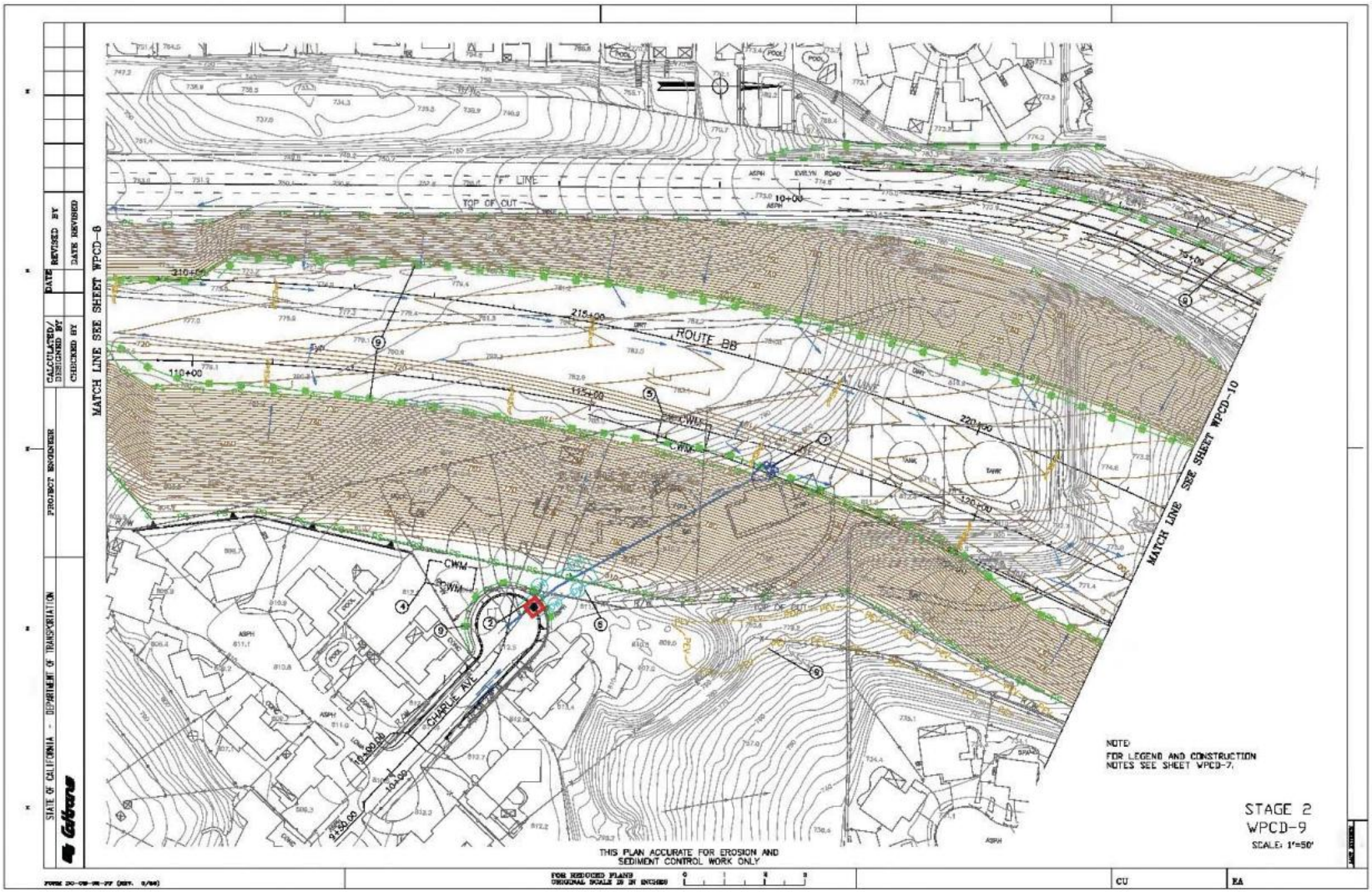
(1) Install Type 1 inlet protection at drop inlet structures.
(2) Install Type 3 inlet protection at drop inlet structures.
(3) Temporary slope drain without energy dissipation.
(4) Contractor proposed alternate concrete washout detail, Type-1 Below Ground. See WPCD-14 for detail.
(5) Contractor proposed 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

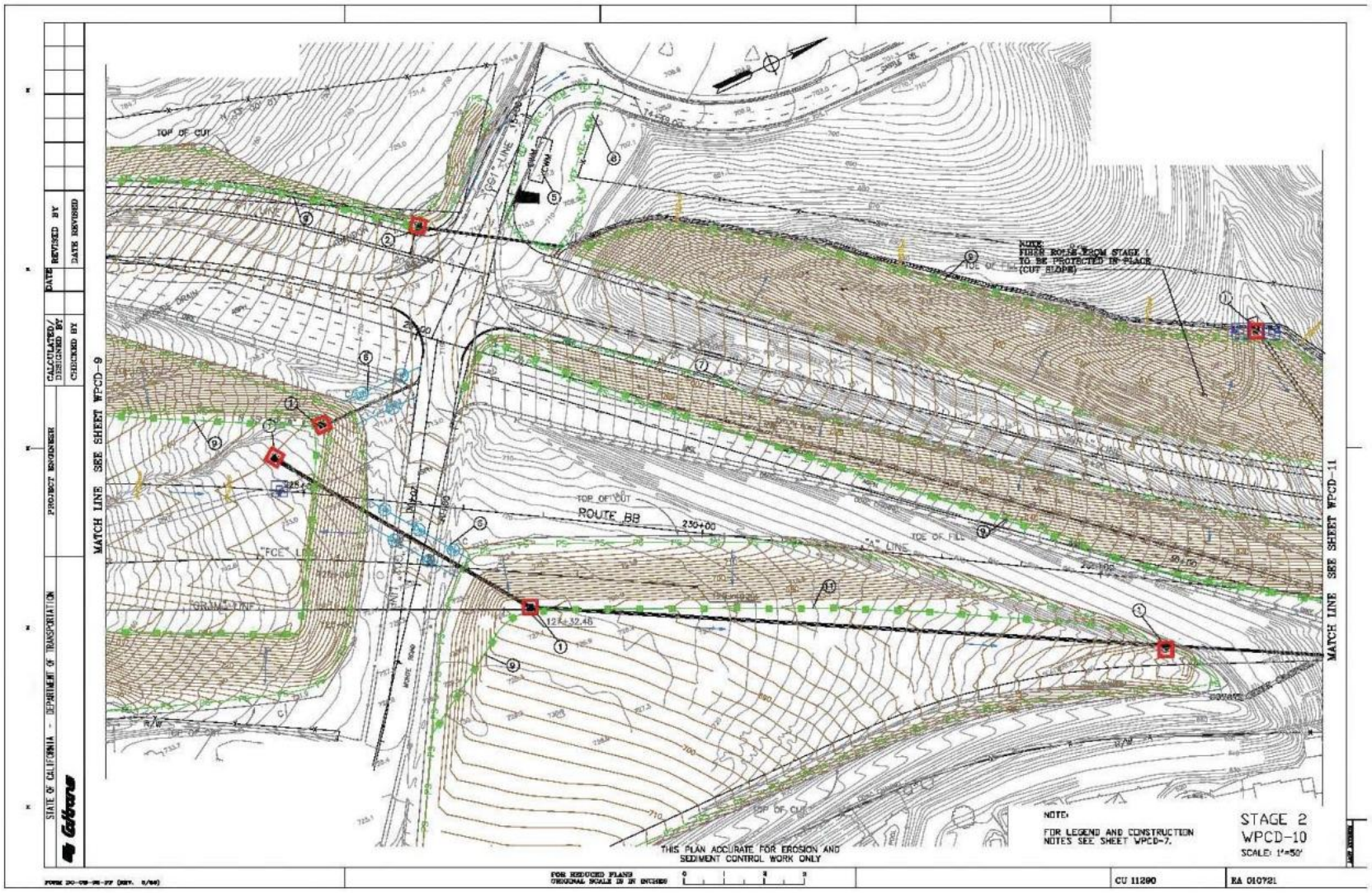
ZZZ CONSTRUCTION COMPANY	WATER POLLUTION CONTROL DRAWINGS TITLE SHEET				
DRAWN D.J.D					
APPROVED	SIZE A	SCALE NONE	DATE 11/00	REV 0	SHEET 7 OF 14

Attachment H
WPCDs Example 8

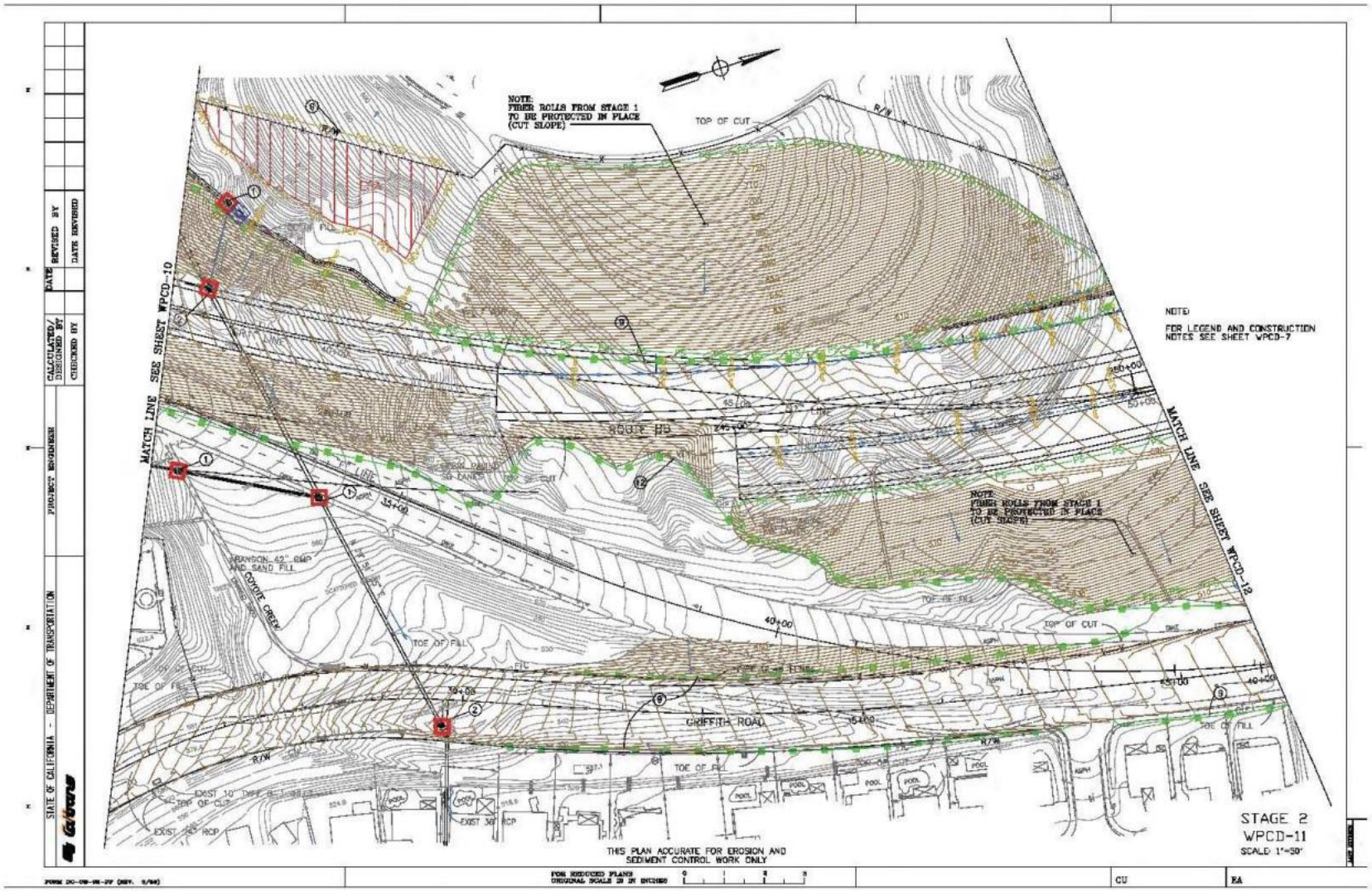
Attachment H
WPCDs Example 9



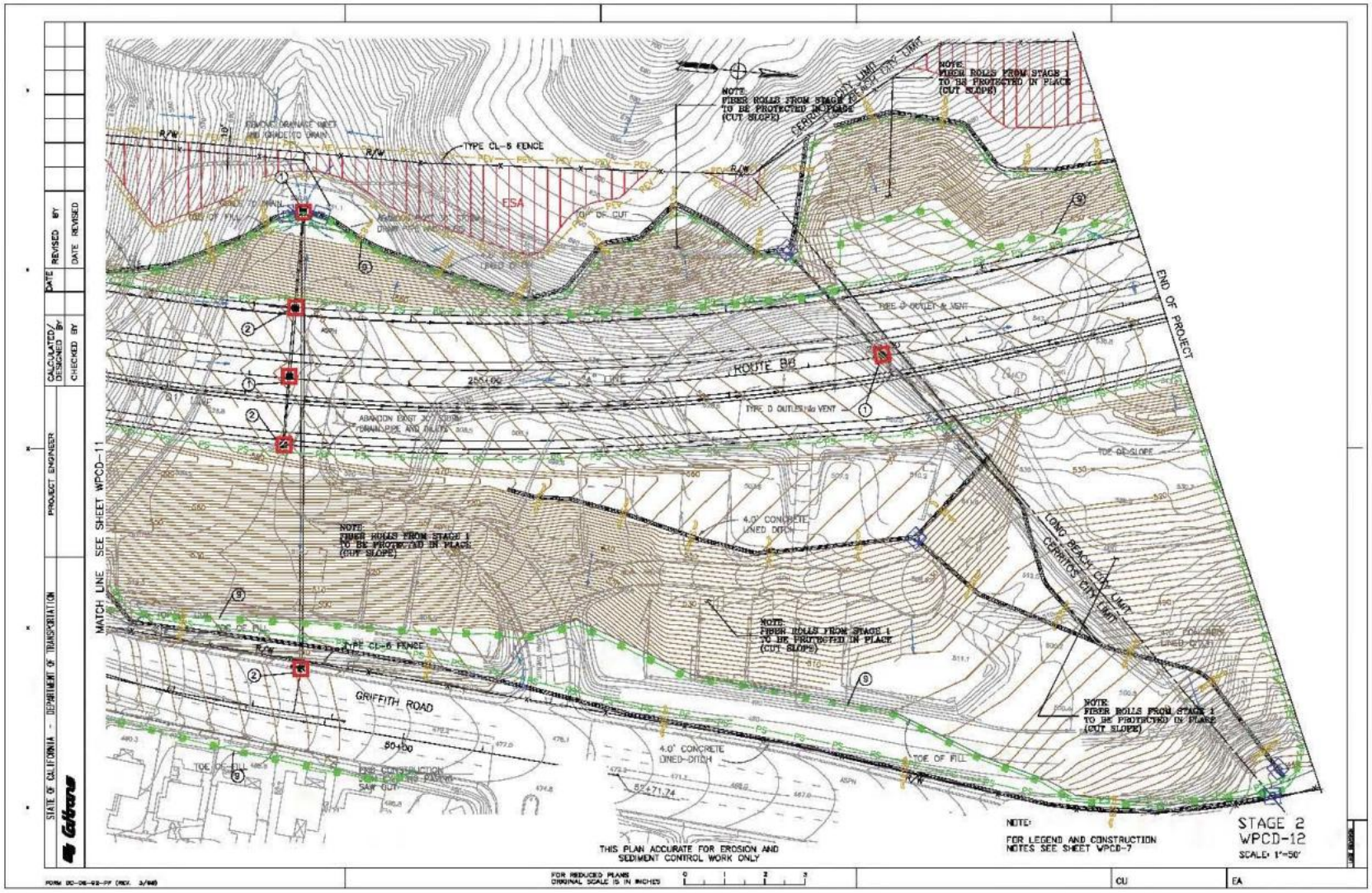
Attachment H
WPCDs Example 10



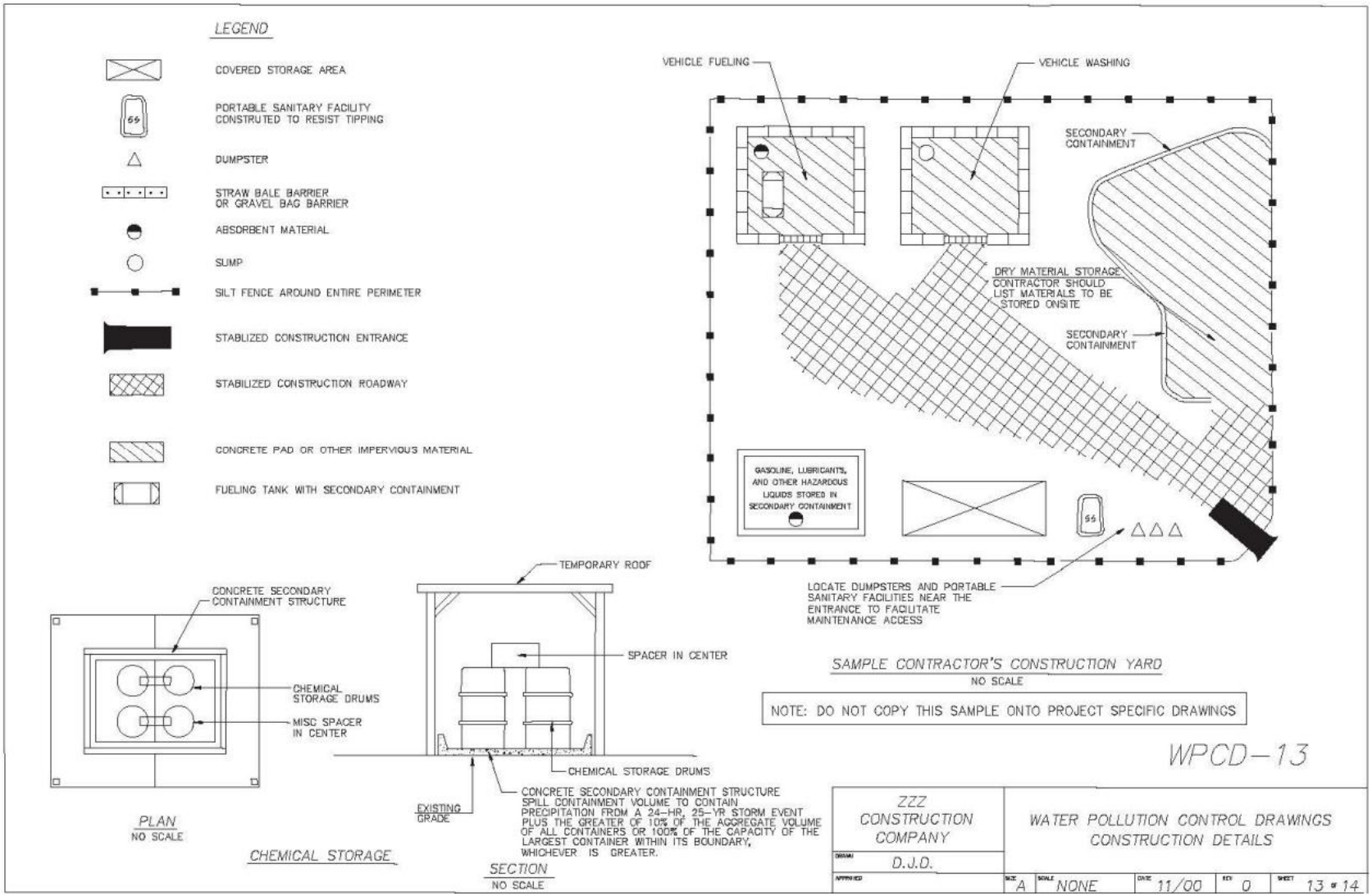
Attachment H
WPCDs Example 11



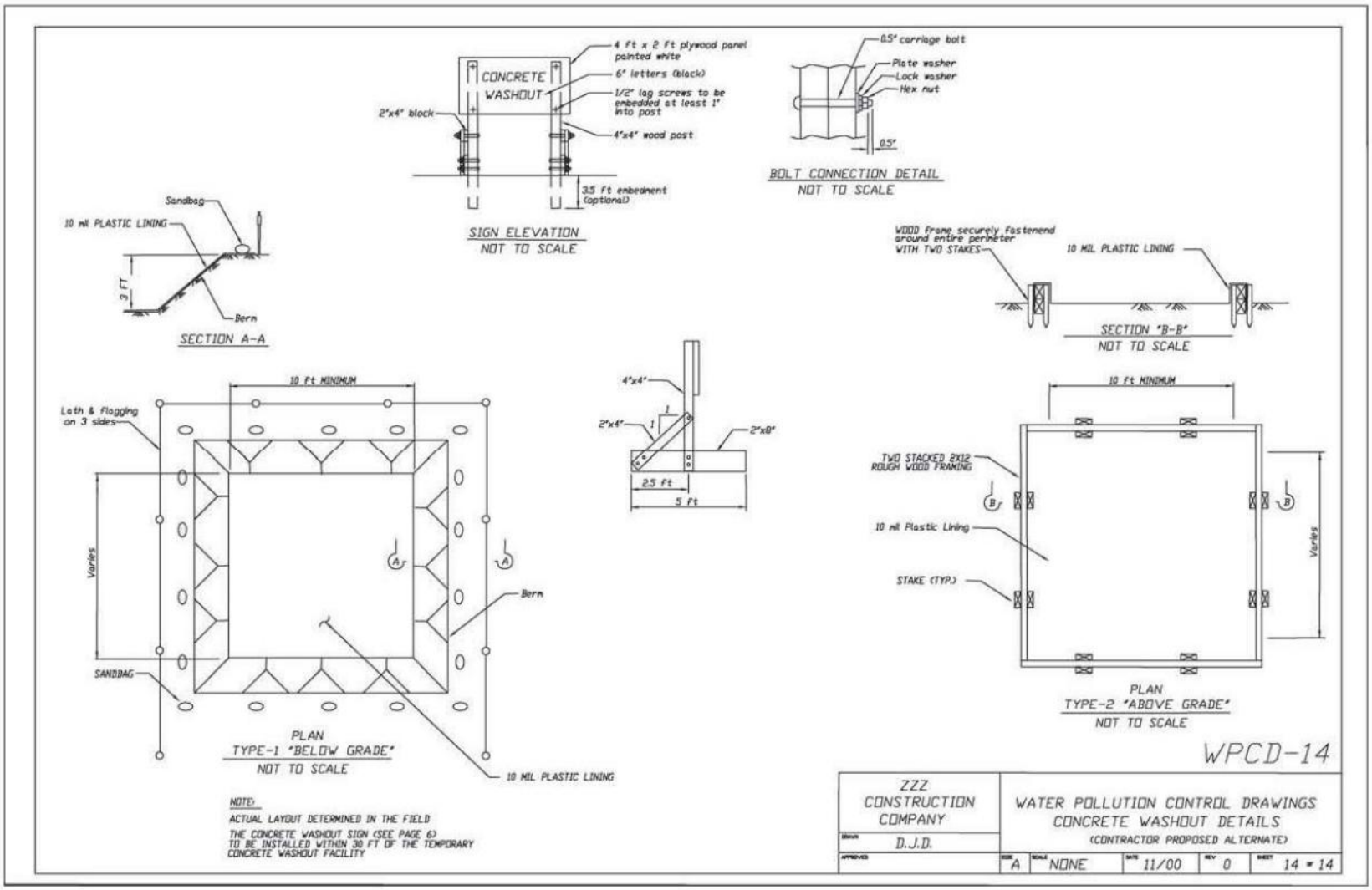
Attachment H
WPCDs Example 12



Attachment H
WPCDs Example 13



Attachment H
WPCDs Example 14



3.4.9 Attachment I: Water Pollution Control Schedule

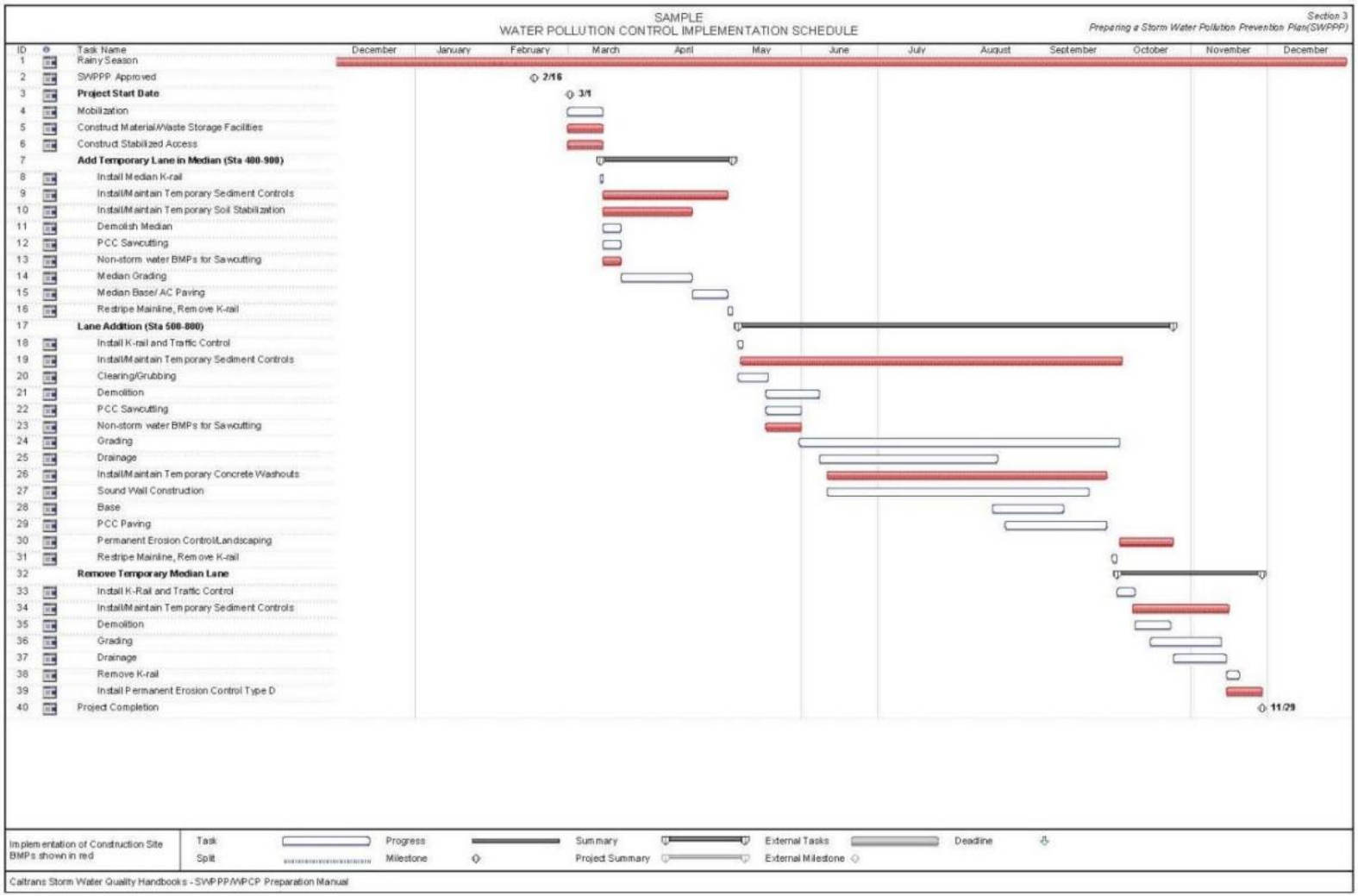
The Water Pollution Control Schedule (WPCS) is the component of the project SWPPP that shows the timeline for when BMPs will be installed so that the project is in compliance with the CGP or the LTCGP. The WPCS provides field staff with the information necessary to plan for adequate materials and crews to install BMPs at the right time so that they are effective. The WPCS and WPCDs 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 Wildlife and USACOE Permits
- Dates for submittal SWPPP Amendments required by the contract specifications
- Dates for major construction activities, including earthwork activities. The WPCS shall show in the schedule, or confirm in the narrative, that the associated BMPs will be installed before the activities that require them, be maintained throughout the duration of the activities, and removed after the completion of the activities and prior to project completion.
- 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 feet 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.

Attachment I
Water Pollution Control Schedule



3.4.10 Attachment J: RUSLE2 Outputs

- Certain projects that are in a TMDL watershed or will conduct activities within a surface water buffer require the preparation of RUSLE2 modeling.
- Include the pre-and post-construction modeling as well as any required during construction modeling.

3.4.11 Attachment K: SWPPP Notification Letter

- 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.

3.4.12 Attachment L: Contractor Submitted Plans

- Include pertinent contractor submitted plans, such as the demolition plan, platform plan, paint containment plan, active treatment system plan, dewatering plan, clear water diversion plan, grout containment plan, spill response plan, or other pertinent plans.

3.5 SWPPP Appendices

The SWPPP Appendices include various forms which detail information required for SWPPP implementation. The Appendices listed below are for forms that would be expected to be submitted throughout the life of the project.

3.5.1 SWPPP Appendices A through P

SWPPP Appendices A through C and E through P shall contain Caltrans CEM forms used to document and report information necessary for SWPPP implementation. A copy of these documents must be included in the SWPPP binder. For implementing the SWPPP the contractor must use the most recent Caltrans CEM forms available at:

http://www.dot.ca.gov/hq/construc/forms.htm

The following appendices are to be included in the SWPPP:

Appendix A	DOT CEM-2008SW SWPPP/WPCP Amendment Certification and Acceptance Form
Appendix B	DOT CEM-2009SW SWPPP/WPCP Amendment Log Form
Appendix C	DOT CEM-2020SW QSP Delegate Training Form
Appendix D	DOT CEM- CEM-2023SW Stormwater Training Record Form
Appendix E	DOT CEM-2024SW Stormwater Training Log Form
Appendix F	DOT CEM-2030SW Stormwater Site Inspection Report
Appendix G	CEM 2031 Daily Stormwater Site Inspection Report-- Lake Tahoe Hydrologic Unit
Appendix H	DOT CEM-2032SW Permanent Erosion Control Establishment (PECE) Report Form
Appendix I	DOT CEM-2033SW Dewatering Operations Sampling Report
Appendix J	DOT CEM-2035SW Stormwater Corrective Actions Summary

Appendix K	DOT CEM-2051SW Storm Event SWPPP Sampling Log Form
Appendix L	DOT CEM-2052SW Storm Event Sampling Or Receiving Water Monitoring Report Form
Appendix M	DOT CEM-2061SW Notice of Discharge Form or CEM-2061T Notice of Discharge Report - Lake Tahoe Hydrologic Unit Stormwater Sample Field Test Report/Receiving Water Monitoring Report
Appendix N	DOT CEM-2062SW NAL Exceedance Report Form or CEM-2062T NAL Exceedance Report Form- Lake Tahoe Hydrologic Unit
Appendix O	DOT CEM-2063SW NEL Violation Report Form or CEM-2063T NEL Violation Report Form- Lake Tahoe Hydrologic Unit
Appendix P	DOT CEM-2075SW Project Stormwater Annual Report Form
Appendix Q	DOT CEM-2080SW Stormwater Change of Information Form
Appendix R	DOT CEM-2090SW Notice of Termination and Final Inspection Report Form

Appendix A
DOT CEM-2008SW SWPPP/WPCP Amendment Certification and Acceptance Form

- Required for projects with a SWPPP (or WPCP) to document amendments approval.
- Caltrans, Local and private agencies have a LRP authorize the project RE to be the AS for SWPPP Amendment acceptance.

Appendix B
DOT CEM-2009SW SWPPP/WPCP Amendments Log Form

- Required for projects with a SWPPP to document authorized amendments.
- To be authorized by the RE.

Appendix C
Form DOT CEM-2020SW QSP Delegate Training Form

- Required for all projects to document the training required to be a QSP Delegate on SWPPP projects.

Appendix D
DOT CEM-2023SW Stormwater Training Record Form

- Required for all projects to document the required weekly training and initial project training for all employees working at the site.

Appendix E
DOT CEM2024SW Stormwater Training Log Form

- Required for all projects to log the weekly and initial project training for all employees working at the site.

Appendix F
DOT CEM-2030SW Stormwater Site Inspection Report Form

- Required for all projects to document the weekly, pre-, during, and post- storm site inspections, as well as daily inspections (except in the Lahontan Region.)

Appendix G
CEM-2031 Daily Stormwater Site Inspection Report– Lake Tahoe Hydrologic Unit

- Required for LTCGP projects, to document daily inspections.

Appendix H
DOT CEM-2032SW Permanent Erosion Control Establishment (PECE) Report Form

- Documents the status of permanent erosion control.
- Required for contracts with a bid item for Permanent Erosion Control Establishment, under the 2022 Construction General Permit.

Appendix I
DOT CEM-2033SW Dewatering Operations Sampling Report

- Documents dewatering operations, both ones that are reused or contained within the site, and those discharged from the project site, subject to Attachment J of the 2022 CGP.
- If dewatering discharges are subject to a project-specific NPDES permit, replace or modify this form as necessary.

Appendix J
DOT CEM-2035SW Stormwater Corrective Actions Summary

- Documents the corrective actions from the weekly, pre-, during, and post- storm site inspections.
- This form, along with DOT CEM-2030SW, “Stormwater Site Inspection Report,” comprise a visual monitoring report.

Appendix K
DOT CEM-2051SW Storm Event SWPPP Sampling Log Form

- Tracks the sampling events and storm data.

Appendix L
DOT CEM-2052SW Storm Event Sampling Or Receiving Water Monitoring Report Form

- Required by the Caltrans Permit, CGP or LTCGP to document compliance with permit requirements.
- 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 2013 Quality Assurance Program Plan.
- A separate Stormwater Sample Laboratory Analysis Report shall be completed for each sampling location daily.

Appendix M
DOT CEM-2061SW Notice of Discharge Form

- Required by Caltrans to document compliance with the Caltrans Permit and CGP or LTCGP.
- To be completed when discharges occur.
- For LTCGP projects, use CEM-2061T

Appendix N
DOT CEM-2062SW NAL Exceedance Report Form

- Required by the Caltrans Permit, CGP or LTCGP to document compliance with permit requirements.
- To be submitted after an NAL exceedance is noted in the sampling results.
- For projects subject to the LTCGP, use CEM-2062T NAL Exceedance Report, Lake Tahoe Hydrologic Unit

Appendix O
DOT CEM-2063SW NEL Violation Report Form

- Required by the Caltrans Permit, CGP or LTCGP to document compliance with permit requirements.
- To be submitted to the State Water Board within 24-hours after an NEL Exceedance has been identified.

- Can be submitted to RWQCB in place of a Notice of Discharge Report.
- For projects subject to the LTCGP, use CEM-2063T NEL Violation Report, Lake Tahoe Hydrologic Unit

Appendix P
DOT CEM-2075SW Project Stormwater Annual Report Form

- The Contractor must prepare a Stormwater Annual Report each year and submit it to Caltrans by July 15.
- The RE forwards it to the DCWSC who electronically submits it by September 1 of each year to the SWRCB for all projects enrolled for more than one continuous three-month period (active for at least 90 days) under the CGP.
- The Annual Report serves to annually certify project compliance. Management of documentation and thorough record keeping are required to ensure compliance with reporting requirements.

Appendix Q
DOT CEM-2080SW Stormwater Change of Information Form

- Required to be submitted through SMARTS to revise the construction start or end dates, reduce or increase the acreage, remove residential lots from coverage, document a change in inactive status, document a change in dewatering operations, or document revised treatment BMPs.

Appendix R
DOT CEM-2090SW Notice of Termination and Final Inspection Report Form

- Required by the CGP to request termination of coverage under the CGP.
- May be submitted when
    - A construction site is complete and final stabilization is achieved
    - A construction site is suspended and final stabilization is achieved
    - The property was transferred to a new owner
    - A site's conditions changed and are no longer subject to the CGP, or
    - The site is subject to another NPDES permit or Notice of Non-Applicability.

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 WPCP for each project where the construction work results in less than 1 acre of soil disturbance or for small construction projects (1 to 5 acres of DSA) that have an approved Rainfall Erosivity Waiver and therefore not subject to the requirements of the CGP or the LTCGP. The WPCP prepared for a project must comply with Caltrans Standard Specifications Section 13 Water Pollution Control and the contract special provisions following the procedures and format set forth in this Manual.

This section provides detailed, step-by-step procedures and instructions 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 RE for review and authorization. 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 provisions or Caltrans 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 authorized 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 template allows for an alternate WPC manager, Alternate WPC manager and an Assistant WPC manager to be included in case the primary designees are unavailable. The Alternate WPC manager and the Assistant WPC manager must have the training and qualifications necessary to ensure the WPCP is in full compliance.

The WPCP shall be submitted to Caltrans via one printed copy and an electronic copy on a read-only data-storage device.

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 (IH) or should be requested from the project RE. The contractor shall use this information to prepare the WPCP, as appropriate.

4.1.1.1 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.

4.1.1.2 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 IH 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 IH 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).

4.1.1.3 List of Pre-Construction (Existing) BMPs

The IH 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 and media filters. Indicate whether there are existing pre-construction BMPs.

4.1.1.4 List of Permanent (Post-Construction) Stormwater Control Measures (BMPs)

The IH 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.

4.1.1.5 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.

4.1.1.6 Explanation of Construction Site (Temporary) BMPs

The IH 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.

4.1.1.7 Drainage Report

The IH 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.

4.1.1.8 Construction Site Estimates

The IH may contain the project site 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.

4.1.1.9 Other Information

The IH 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 proposed staging of the project and estimated time of year for those stages, and any specific BMP deployments that are considered to be critical to the success of the contractor's WPCP.

4.1.1.10 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 Wildlife 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 as 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 *Construction Site Best Management Practices Manual*.

4.2 WPCP Builder

This section provides step-by-step WPCP preparation guidelines, WPCP Builder instructions (in blue), and examples / example text (in green). The WPCP Builder has been developed in Microsoft® Access 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 builder:

1. Download the appropriate template from the Caltrans Web site at: https://dot.ca.gov/programs/construction/storm-water-and-water-pollution-control
2. Complete all applicable sections of the WPCP Builder and you may insert additional text where allowed in the builder. A draft WPCP with completed text for each section can be printed from the “Print WPCP” button on the WPCP Builder home screen.

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

Section 10	WPCP Certification and Authorization
Section 20	Project and Contractor Information
Section 30	Pollution Sources and Control Measures
Section 40	WPCP Implementation
Section 50	WPCP Reporting Requirements

The WPCP Builder includes instructions within the database.

Once you download the WPCP Template, click on the name and the following screen will appear, click ok to get started (Figure 4-0). This WPCP Template has been revised to comply with the 2022 Caltrans Permit and Section 13, Water Pollution Control of the 2023 Standard Specifications.

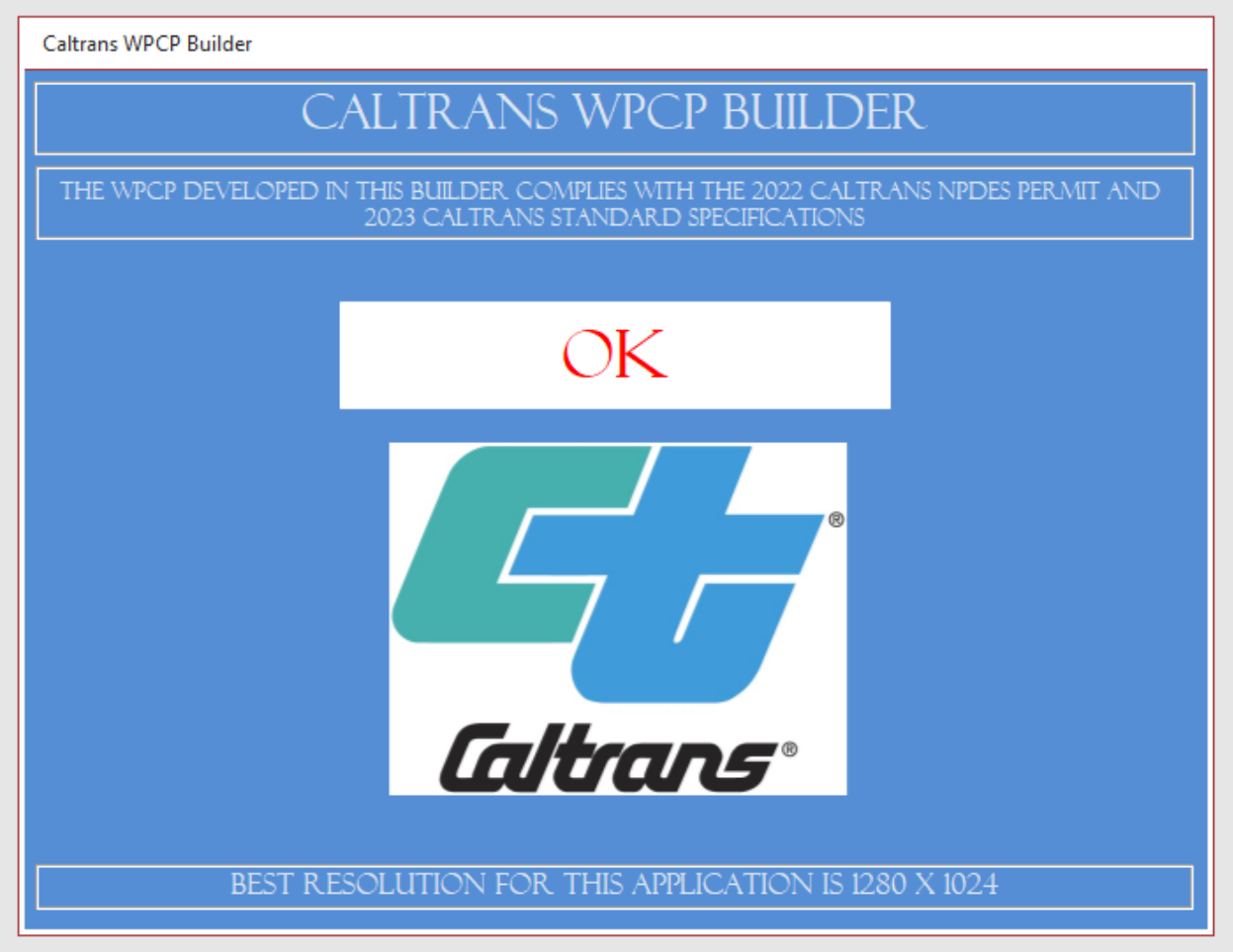


Figure 4-0 Caltrans WPCP Builder main screen

Getting Started Instructions

Open the WPCP Builder application (Figure 4-1). When the application has been opened the home Screen will appear. Use the computer mouse, click on “Create New WPCP”.

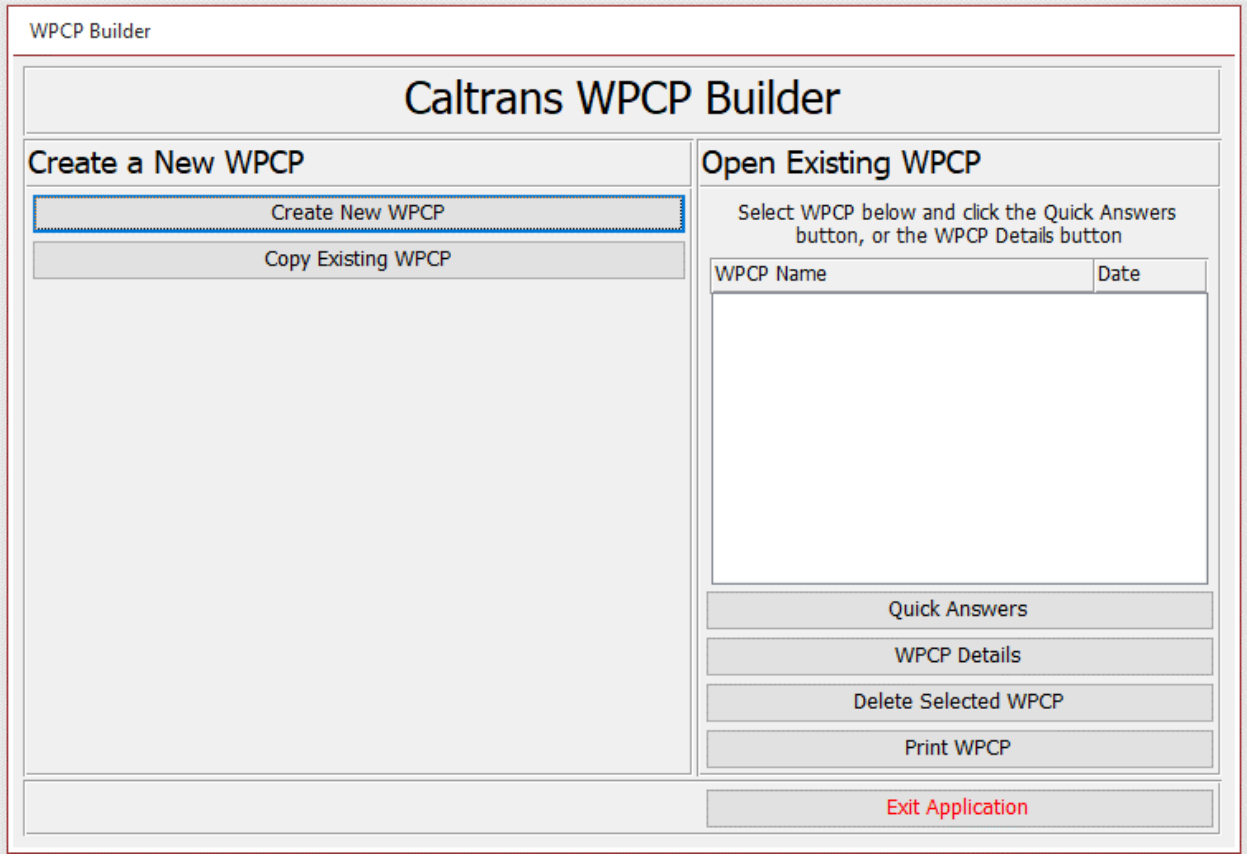


Figure 4-1. WPCP Builder Home Screen

The window will change to a new window to populate initial project information. The date that the SWPPP was created will automatically populate. Enter the project name in WPCP Name and press enter.

Use the drop-down windows to choose project administrator (Figure 4-2). Choose who will administer the WPCP. Depending on the entity, the WPCP Builder will provide fields for the information.

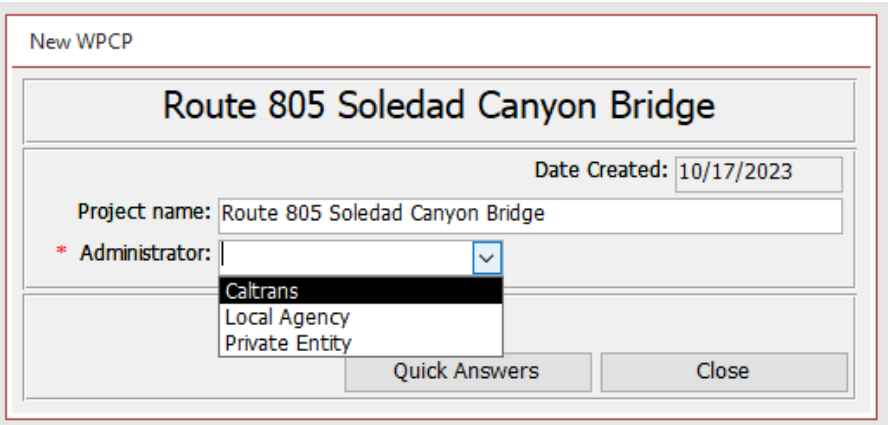


Figure 4-2. WPCP Administration Selection Screen

Click on “Quick Answers” to continue creating the WPCP. The window will change to a series of yes or no checkboxes that are based on section specific questions. Based on the whether yes or no are checked, different sections will be made available. The process is described below. You must complete the Quick Answers to ensure the WPCP is saved and the correct sections will be made available for you to enter information.

Quick Answers Instructions

Quick Answers pop-up window consists of five questions which determine which sections will be available to populate during WPCP Detail Population (Figure 4-3). The questions are yes or no questions. These questions are to be answered first.

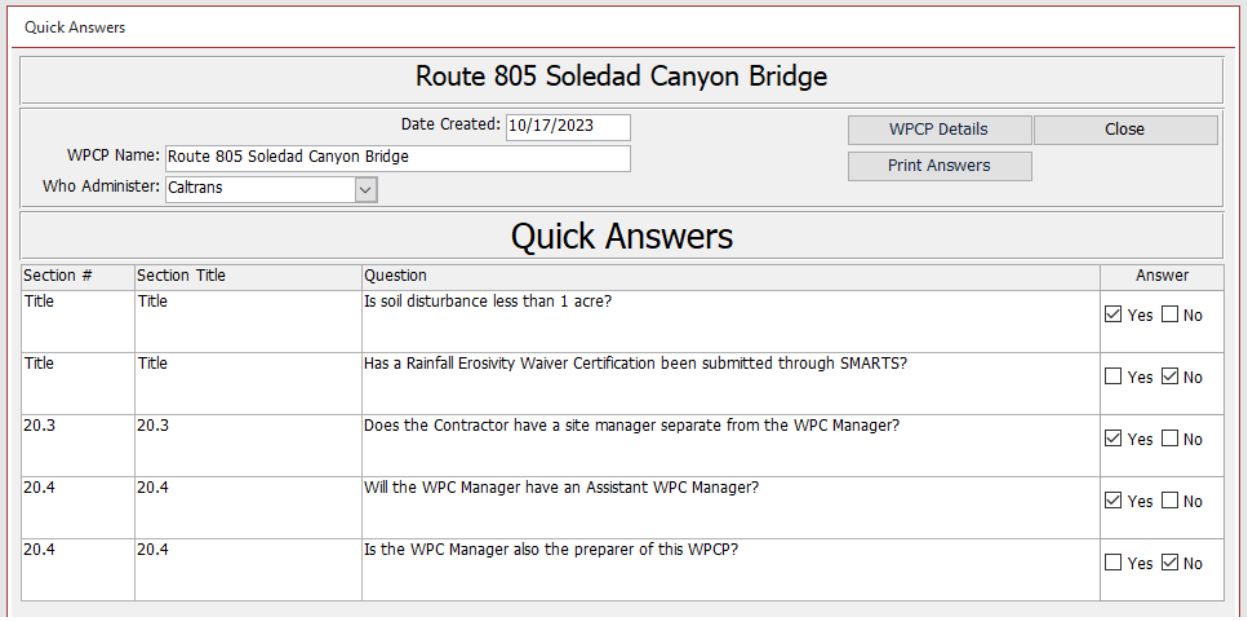


Figure 4-3. Quick Answers Screen

For the first two questions, only one can be answered yes. Either the project is less than one acre or the project has a Rainfall Erosivity Wavier Certification for projects one to five acres in size.

Once the Quick Answers have been completed, the user has the option to close out of the window by clicking-on Close or continue to populate WPCP sections with the necessary information. See instructions below.

Printing Instructions

From the WPCP Builder Home Screen (Figure 4-4), select Print WPCP.

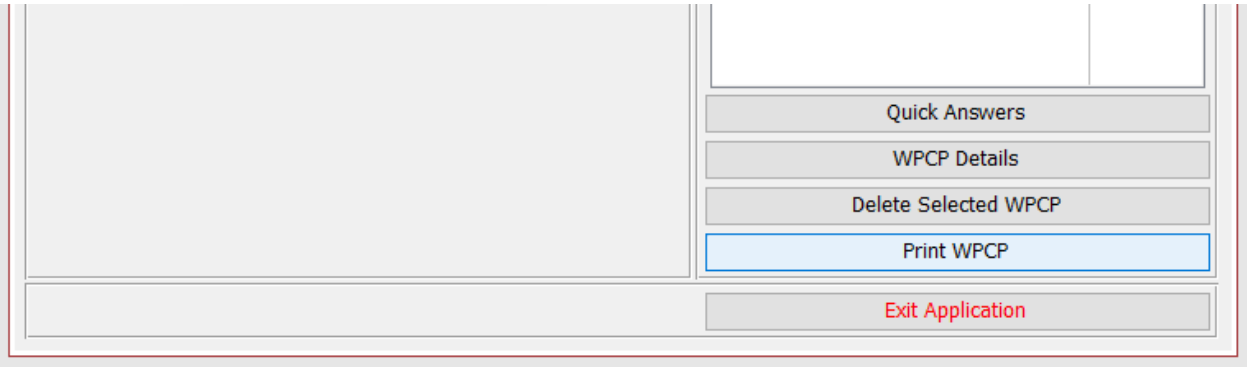


Figure 4-4. Access Print Screen Window

From the Print Screen, the WPCP Sections can be previewed or a PDF of a section can be created and saved in the PDF Folder Location shown at the bottom of the window (Figure 4-5).

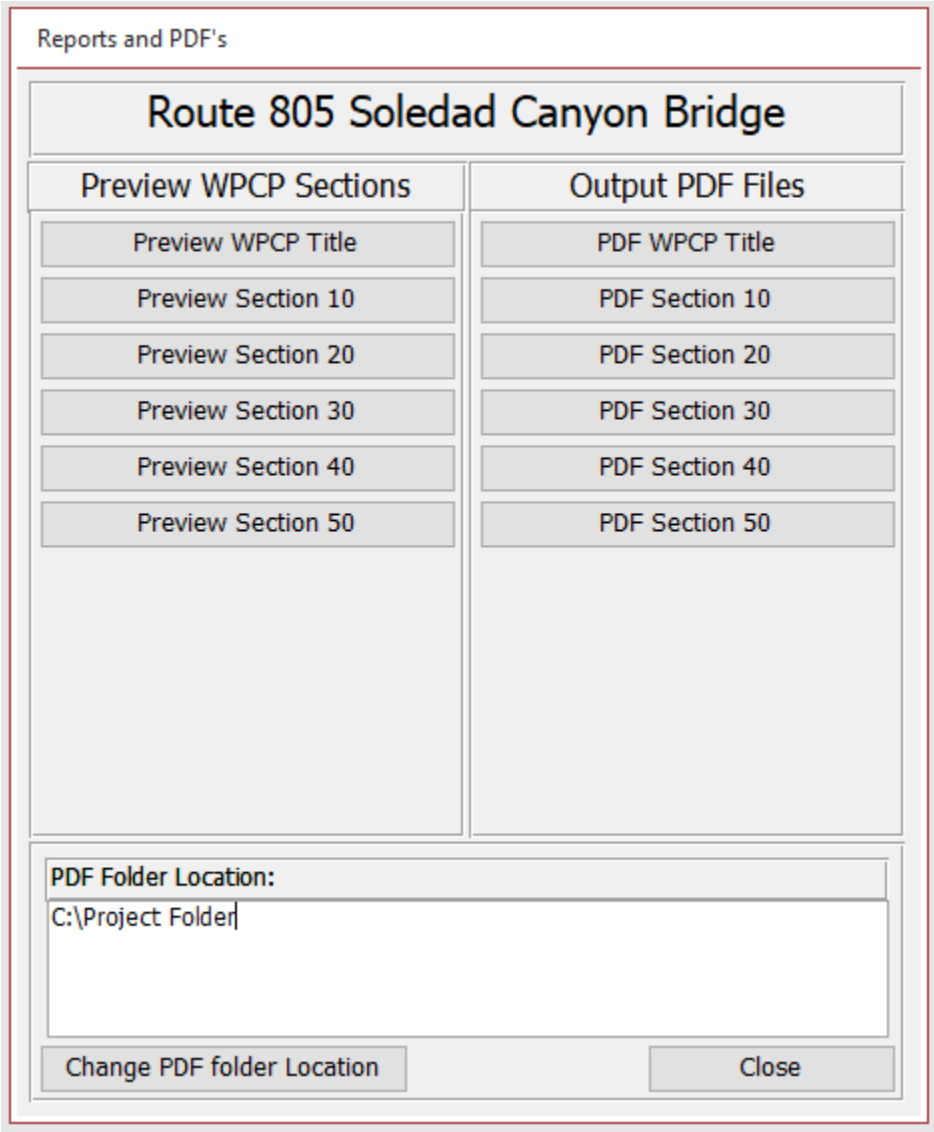


Figure 4-5. Print Screen Window

A warning will come up when the a PDF of a WPCP section is selected that the process will re-create (overwrite) that specific section PDF's in the folder. Select Yes to continue saving the file or No to cancel.

WPCP Detail Instructions

The WPCP Detail section provides the framework for the WPCP document. The Quick Answer based section is provided to populate with project information. Entered information can be viewed and changed throughout the process.

WPCP Detail can be accessed from either the Quick Answers window (Figure 4-6) or the Startup Window (Figure 4-7).

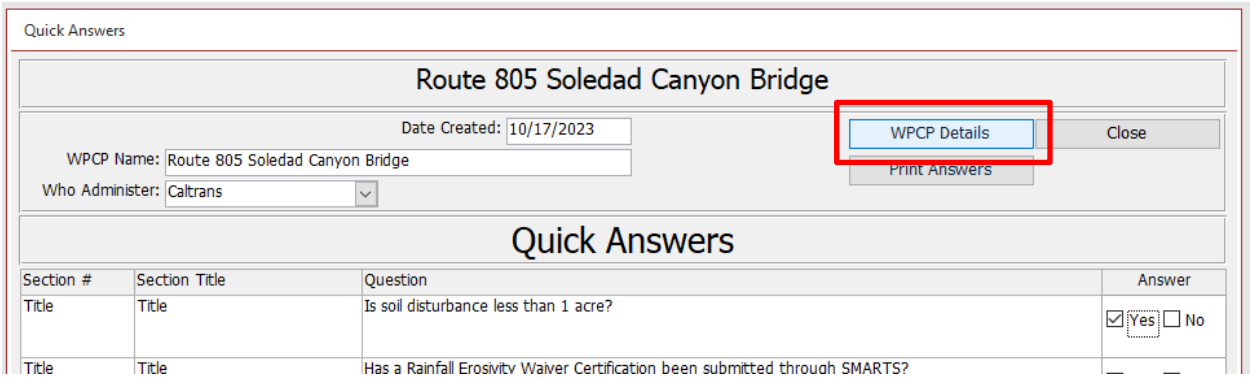


Figure 4-6. WPCP Detail Accessed from Quick Answers Window

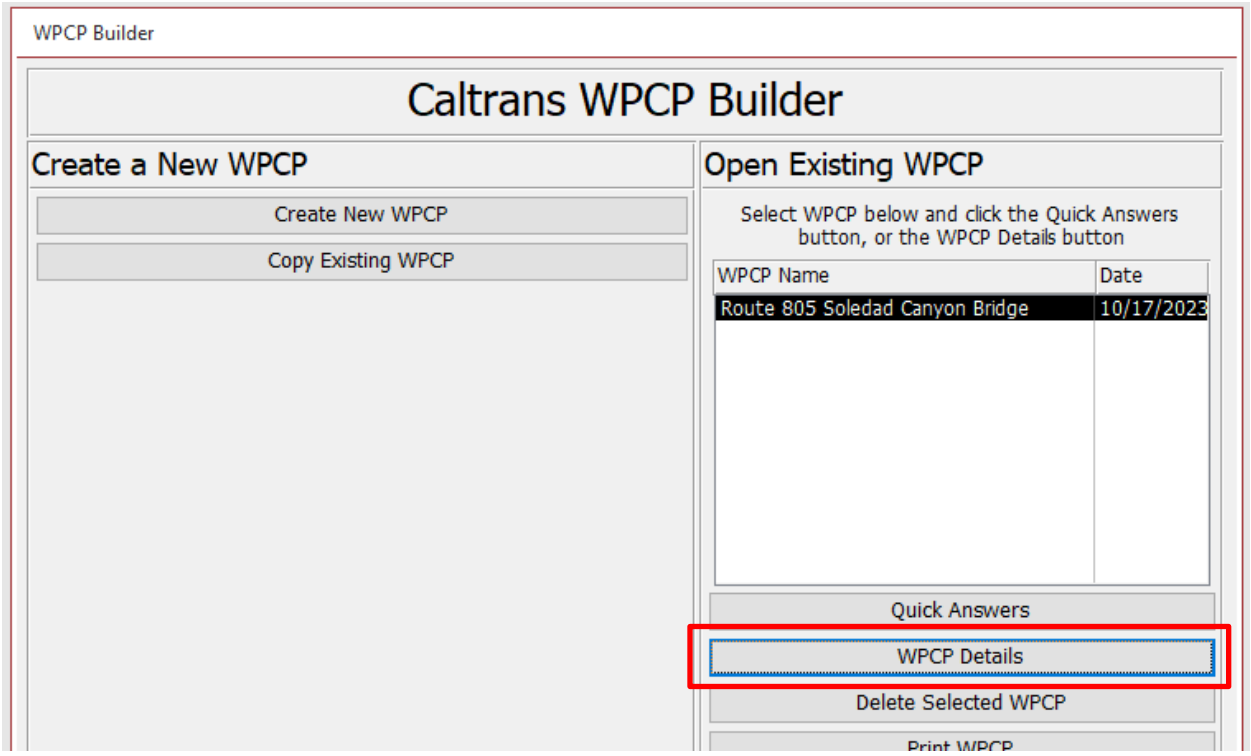


Figure 4-7. Startup Window

Click on “WPCP Details” button. A new entry window will appear (Figure 4-8) that shows the different required sections to populate for the WPCP. Sections contain automated required text. Each listed section will either have narrative text, lists, and/or tables to populate for section completion. This Manual addresses the required information needed to complete listed WPCP sections.

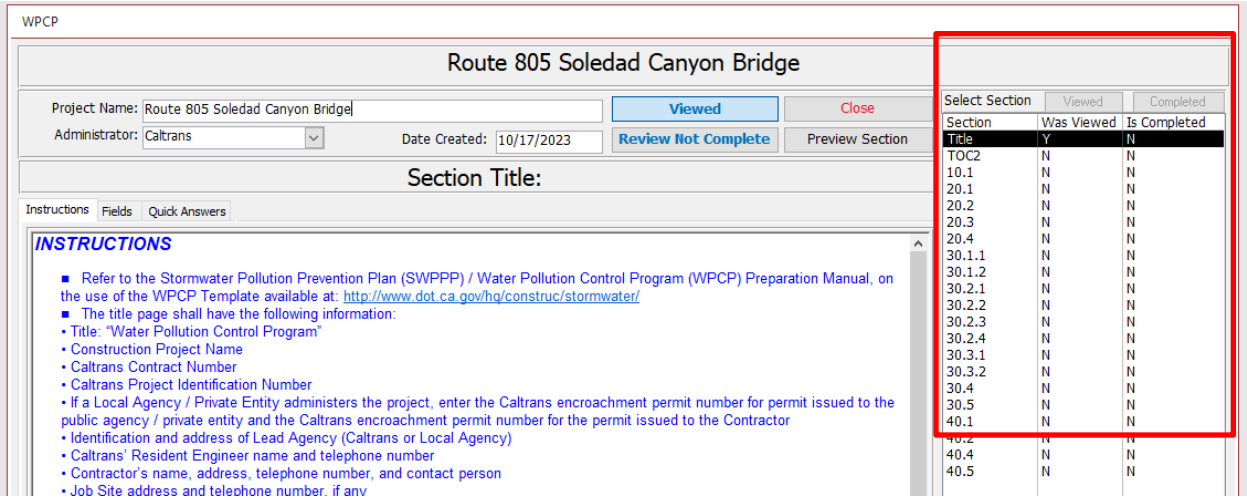


Figure 4-8. WPCP Details Main Menu

Main Menu

Once the WPCP Details Main Menu is open, the list of sections is available for viewing and editing. This menu will also indicate if a section is completed.

To View a Section

To navigate from section to section click on the “Section Number” listed on the right of the screen. Once a section has been viewed, a Y will appear in the Was Viewed column (Figure 4-9).

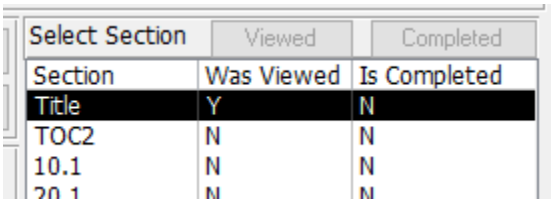


Figure 4-9. Section Navigation

The section will appear in the window (Figure 4-10). Sections typically have tabs for Instructions and for information entry (Fields, Text or Tables tab) on the upper left side of the viewing window. The Quick Answers tab is included for reference only.

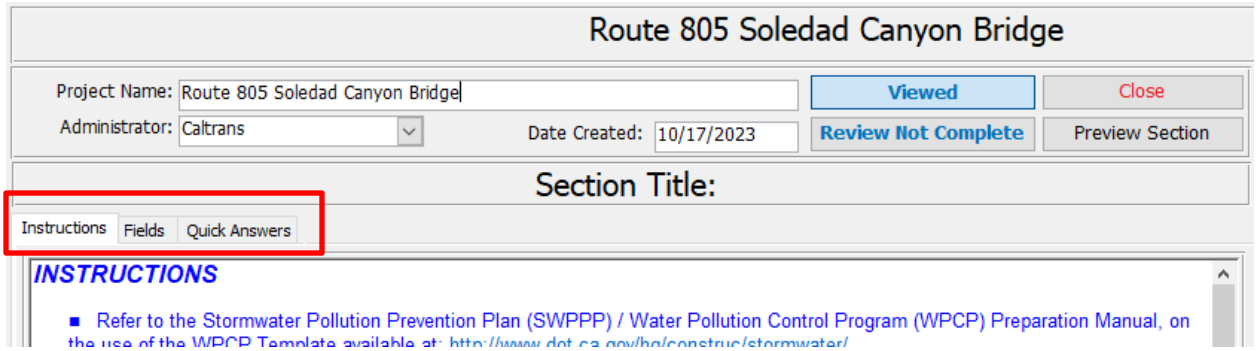


Figure 4-10. Section Instructions Tab

The user can go back to sections to make edits at any time, including the Quick Answers (viewing only, you must go back to the Startup window (Figure 4-7) to make changes).

To Review a Section

Once the information has been entered, the user can click on “Preview Section” (Figure 4-11). A pop-up window will appear with the automated required WPCP text which is populated with the construction site specific information entered by the user. At the bottom of the pop-up window, the user can click forward to review additional pages.

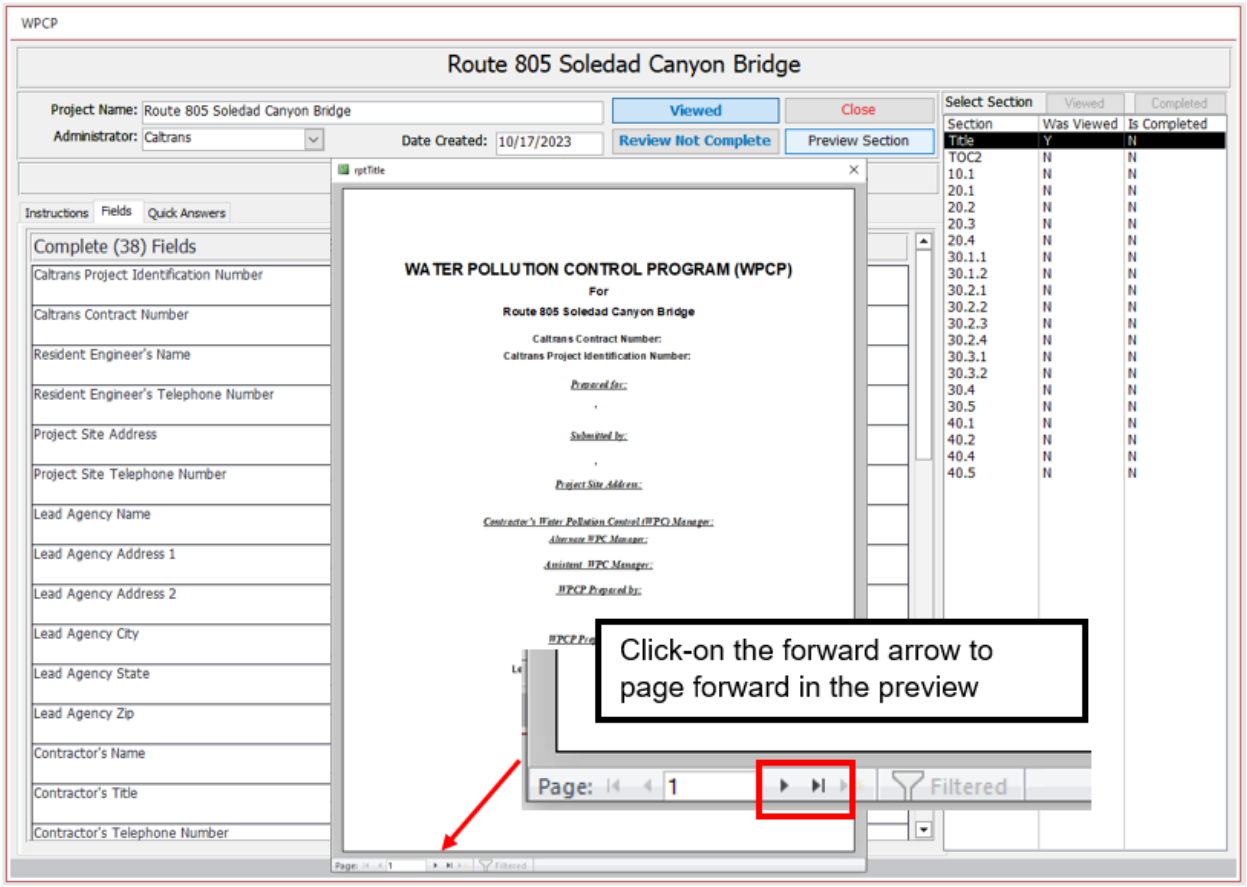


Figure 4-11. Pop-Up Screen with Automated Text

To Complete a Section

Once a section has been completed and reviewed, the user can click on the button for "Review Not Complete" and it changes to Review Completed (Figure 4-12). Once this button has been selected, a Y will appear in the Is Completed column associated with the section. This assists in keeping track of which sections have been completed.

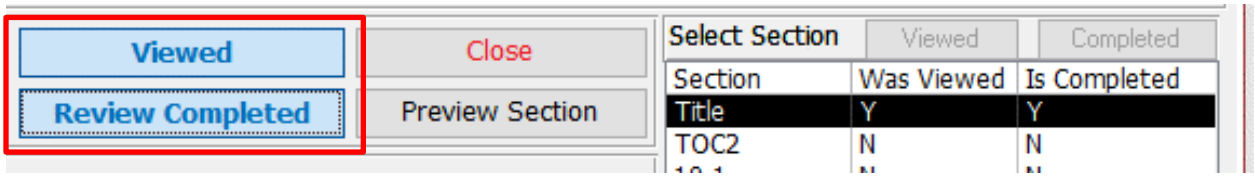


Figure 4-12. Section Completed Screen

The user then may then either "Close" the window, which saves information added to continue at a later date, or select another Section to complete.

WPCP Builder Section Instructions

This section provides the instructions for each Section listed in the WPCP Detail window. WPCP Detail sections are based on Quick Answer selection. Instructions provided (unless indicated) are included in the associated section of the WPCP Detail.

Title

To complete this section, the user must enter the following information in the provided fields. The title page shall have the following information:

- Caltrans contract number
- Caltrans project identifier number
- Contractor's name, address, telephone number and Contractor's Owner/Representative's Name
- Inspector's name and telephone number
- Identification and address of Lead Agency (Caltrans or Local Agency)
- 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
- Project name, site address, and telephone number.
- Caltrans' RE name and telephone number
- Name of the Contractor's WPC manager and telephone number and Alternate WPC manager. The WPC manager and alternate must be at a minimum a QSP
- If an Assistant WPC manager will be assisting the WPC manager and the Alternate WPC Manager is then insert the 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

Section TOC2

WPCP Builder Instructions

As needed, use this section to insert additional attachments and appendices to the WPCP (Figure 4-13). These can include but not limited to:

List any applicable permits obtained by the Department, such as:

- Department of Fish and Wildlife permits;
- US Army Corps of Engineers permits;
- RWQCB 401 certifications;
- Docket No. ESPO-SMA 15/16-001 Soil Management Agreement for Aerially Deposited Lead-Contaminated Soils with the DTSC (ADL Agreement);
- ADL Agreement notification, and RWQCB waste discharge requirements for reuse of aerially deposited lead

If there are no specific environmental permits, state so in the narrative portion. When you submit the WPCP to the Resident Engineer for review and authorization, attach copies of the permits listed to the electronic (PDF) and printed copy.

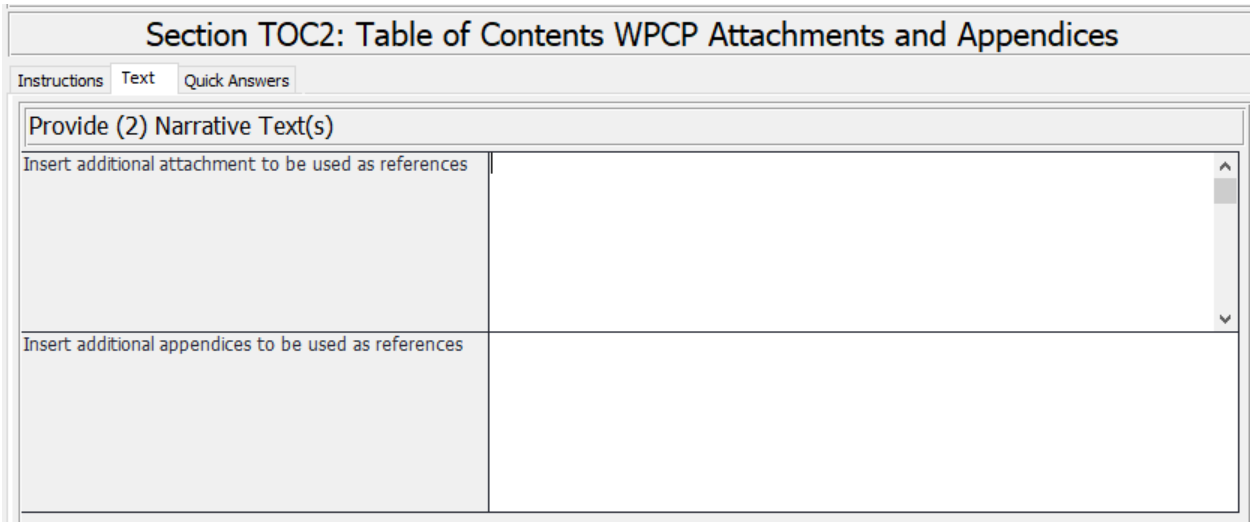


Figure 4-13. Section TOC2 Attachments and Appendices Screen

The standard attachment and appendix lists are:

Attachments:

Attachment A	WPC Drawings
Attachment B	WPC Schedule
Attachment C	WPCP Amendments
Attachment D	DOT CEM-20DCONSW Contractor Stormwater Personnel Training

Appendices:

Appendix A	DOT CEM-2008SW SWPPP/WPCP Amendment Certification and Authorization
Appendix B	DOT CEM-2009SW SWPPP/WPCP Amendment Log
Appendix C	DOT CEM-2023SW Stormwater Training Record
Appendix D	DOT CEM-2024SW Stormwater Training Log
Appendix E	DOT CEM-2030 Stormwater Site Inspection Report
Appendix F	CEM-2031T Daily Stormwater Site Inspection Report-Lake Tahoe Hydrologic Unit
Appendix G	DOT CEM-2035SW Stormwater Corrective Actions Summary or CEM-2035T Stormwater Corrective Actions Summary- Lake Tahoe Hydrologic Unit
Appendix H	DOT CEM-2061SW Notice of Discharge Report or CEM-2061T Notice of Discharge Report – Lake Tahoe Hydrologic Unit Stormwater Sample Field Test Report/Receiving Water Monitoring Report

SECTION 10
WPCP Certification and Acceptance

10.1 Contractor's Certification and Acceptance by the RE

The selection made in the Quick Questions determines the certification and acceptance statements required in this section.

WPCP GUIDANCE 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.
- The WPCP shall be submitted to the RE for review and authorization

WPCP Builder Instructions

Section 10.1 is for information only. The data for this section has already been entered as part of the Title Section(Figure 4-14).

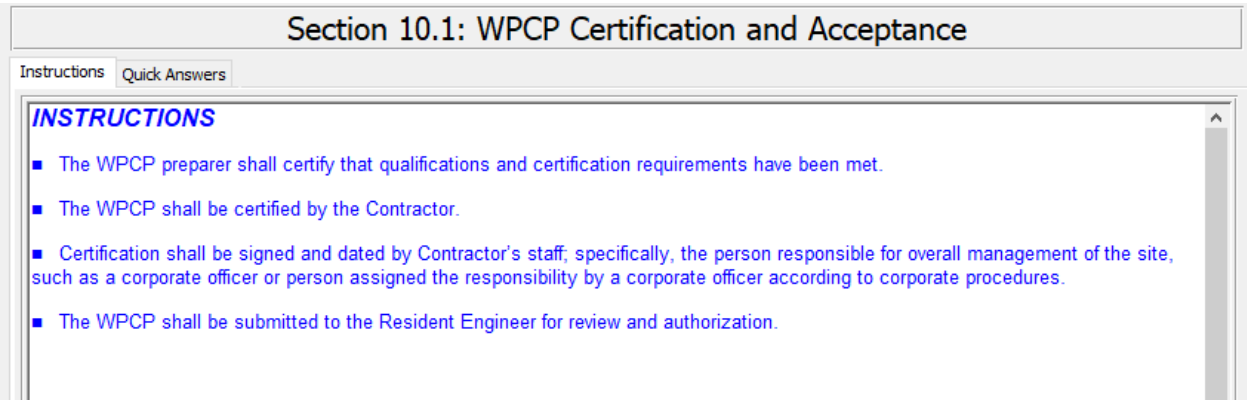


Figure 4-14. WPCP Certification and Acceptance

10.2 Amendments

An amendment log should be included in Attachment C however no other documentation is required for the initial WPCP preparation.

WPCP GUIDANCE 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 RE. 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 acceptance by the Caltrans or Local Agency / Private Entity RE (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:
  - Location of proposed change
  - Reason for amendment such as winterization plan, change of information, etc.
  - 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 the RE (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 RE, as the Duly 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 RE shall be responsible for reviewing and accepting. When the amendment is accepted by the Local Agency / Private Entity RE, then form DOT CEM-2008SW SWPPP or WPCP Amendment Certification and Acceptance shall be provided to the Caltrans Oversight Engineer for concurrence.
- Amendments shall be documented on DOT CEM-2009SW SWPPP OR WPCP Amendments 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 DOT CEM-2009SW SWPPP OR WPCP Amendment Log in WPCP Attachment C.

EXAMPLE AMENDMENT LOG

Table 4.2-1 Example Amendment Log

AMENDMENT NO.	DATE PREPARED	BRIEF DESCRIPTION OF AMENDMENT	REQUESTED BY	ACCEPTED DATE
001	8/10/2023	Grading schedule changed to begin on Sept.10, 2023, and will include additional 0.2 acres. Amended water pollution control drawings showing 0.2 additional acres.	John Doe, Superintendent	8/20/2023

WPCP Builder Instructions

No action required. Required text will automatically populate the WPCP and can be viewed in Preview Section 10, when preparing to print the WPCP.

10.3 Contractor's Annual Certification and Acceptance by the RE

WPCP GUIDANCE INSTRUCTIONS

- Annually the WPCP shall be certified by the contractor as part of the required Winterization Plan as required by Section 13 of the 2023 Standard Specifications.
- 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.

WPCP Builder Instructions

No action required. Required text will automatically populate the WPCP and can be viewed in Preview Section 10, when preparing to print the WPCP. No documentation is required for the initial WPCP preparation.

SECTION 20
Project and Contractor Information

WPCP GUIDANCE 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.

WPCP Builder Instructions

No action required. Required text will automatically populate the WPCP and can be viewed in Preview Section 20, when preparing to print the WPCP. No documentation is required for the initial WPCP preparation.

20.1 Project Description

WPCP Builder Instructions

Provide narrative text with the following types of information:

- 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 TEXT

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 0.8 acres.

20.2 Unique Site Features

WPCP Builder Instructions

Provide narrative text with the following types of information:

- Provide a brief description of any unique site features (water bodies, wetlands, ESAs, 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 TEXT

The project site is within 1,000 feet of the Calaveras and San Joaquin Rivers.

20.3 Contact Information for Responsible Parties

WPCP Builder Instructions

Section 20.3 has two separate tabs for information entry: Fields and Text (Figure 4-15).

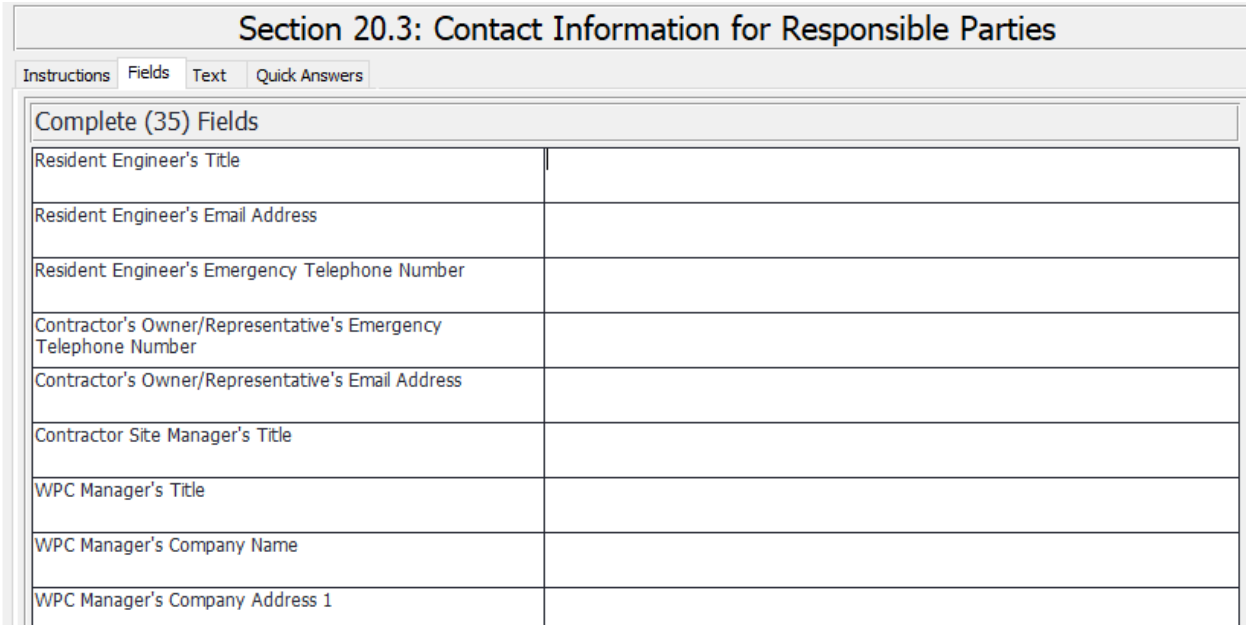


Figure 4-15. WPCP Selection Tab Options

Fields Tab: For the following responsible parties provide name, title, company or agency, address, telephone number, emergency phone number (24/7), email address:

- WPC Manager
- Alternate WPC Manager
- Assistant WPC Manager
- WPCP Preparer (if WPC Manager did not develop the WPCP)
- RE
- Contractor Manager responsible for WPCP Certification

- Contractor Site Manager (if different from Contractor Manager)

Text Tab: If there are additional responsibilities associated with the WPCP implementation, insert additional responsibilities and/or names of those who will oversee these responsibilities. Examples of text to add are:

- If an additional Assistant WPC manager will assist the Contractor's WPC Manager, provide contact information.
- If ATS is used, provide contact information for person responsible for ATS.

20.4 Training

WPCP GUIDANCE 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.
- Caltrans, as of April 2020, requires Water Pollution Control (WPC) managers and alternate WPC managers complete the 8-hour WPC manager training. In 2023, Caltrans included this requirement for Assistant WPC Managers. The 8-hr WPC Manager certificate must be attached to this WPCP.
- Describe the training for the following individuals responsible for the WPCP:

• WPCP Preparer, if WPCP not developed by WPC Manager

• WPC Manager

• Alternate WPC Manager

• Assistant WPC Manager

- List the primary person, and their title, who will be responsible for providing the training that the Contractor's or Subcontractor's personnel have received or will receive.
- 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 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 (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 State Water Resources Control Board (SWRCB), Regional Water Quality Control Board (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 available at http://www.dot.ca.gov/hq/construc/stormwater/stormwater1.html
- The Contractor's WPC Manager shall the training and required qualifications and training for (QSD) or QSP under the Construction General Permit (CAS000002).
- On-site 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 D.
- 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.
    - Specific WPC Training for all Assistant WPC Managers shall include:
        - SWPPP roles and responsibilities
        - Forecast information
        - Documentation and reporting procedures
    - Provide site-specific training for:
        - Visual inspections
        - Sampling procedures
        - SWPPP and WPCP implementation activities relevant to the QSP delegate's assigned responsibilities

WPCP Builder Instructions

Section 20.4 has one tab for information entry: Lists (Figure 4-16).

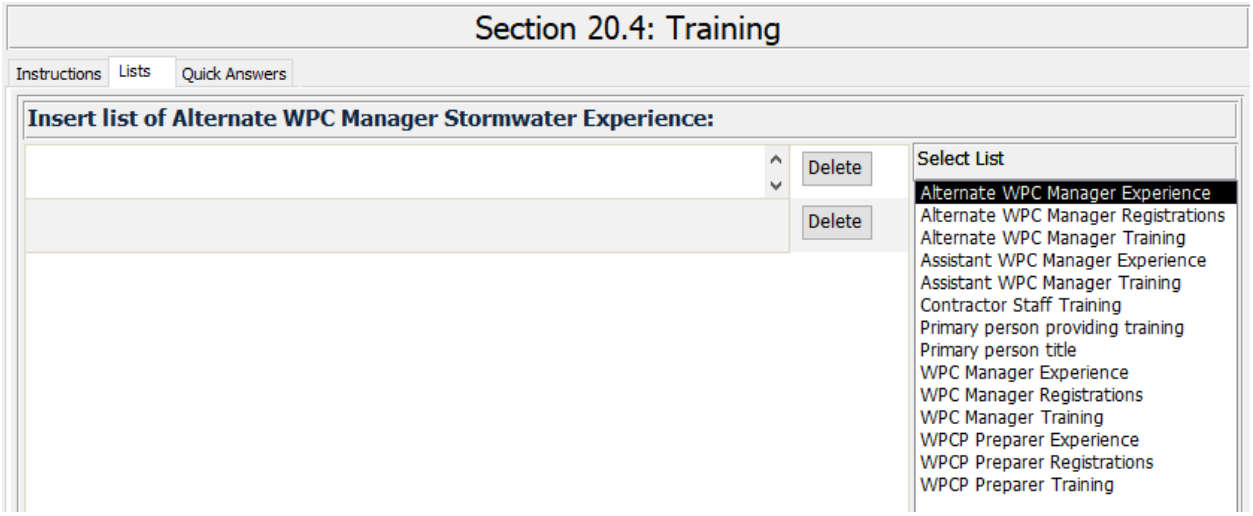


Figure 4-16. List of Stormwater Experience, Registrations, and Training

Select from the list on the left by clicking on title to insert:

- Types of training that the contractor's or subcontractor's BMP inspection, maintenance, and repair personnel have received or will receive;
- 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 RE within five days of training; and
- Training, experience and qualifications for the WPCP Preparer, the WPC manager, and the Alternate WPC manager as applicable (Figure 4-17).

EXAMPLE

WPC manager Registration: California Registered Professional Civil Engineer, C 0000A

- **WPC manager Training:** Caltrans WPC Manager Training provided by ABC Consultant

WPC manager Experience:

Has developed 24 WPCPs

Has 15 years of experience as a WPC Manager working on 14 project sites

Alternate WPC manager Training:

Certified Erosion, Sediment and Stormwater Inspector (CESSWI) registered through Enviro Cert International, Inc.

Caltrans WPC Manager Training

Contractor Staff Training: BMP Best Practices Provided by ABC Consultants

Required text will automatically populate the WPCP and can be viewed in Preview Section 20, when preparing to print the WPCP.

SECTION 30
Pollution Sources and Control Measures

WPCP GUIDANCE INSTRUCTIONS

Include a Separator and Tab for Section 30 for ready reference.

WPCP Builder Instructions

No action required. Required text will automatically populate the WPCP and can be viewed in Preview Section 10, when preparing to print the WPCP.

30.1 Pollutant Sources

WPCP Builder Instructions

No action required. Required text will automatically populate the WPCP and can be viewed in Preview Section 10, when preparing to print the WPCP.

30.1.1 Inventory of Materials and Activities that May Pollute Stormwater

WPCP Builder Instructions

Section 30.1.1 has two separate tabs for information entry: Texts and Lists (Figure 4-18).

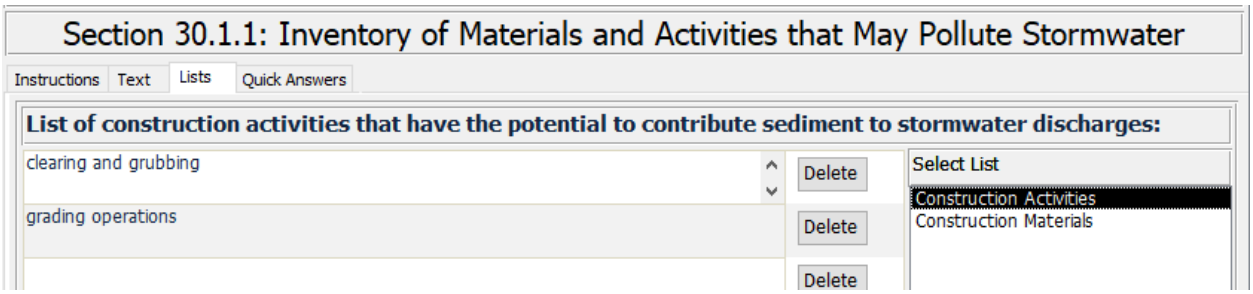


Figure 4-18. Section 30.1.1 Lists Screen

Text Tab: Insert additional narrative text for inventory of materials, as needed. If no additional text is necessary, leave blank. Automated text will populate the WPCP and can be viewed in Preview Section 30, when preparing to print the WPCP.

Lists Tab: This tab has two separate lists to select from to enter required information. Click on the list in the Select List column to move between the entries windows.

- **Construction Activities:** 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.

- **Construction Materials:** 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.

Insert as many lines 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

30.1.2 Potential Pollutants from Site Features or Known Contaminants

WPCP GUIDANCE INSTRUCTIONS

Review the contract documents and associated environmental documents to determine the known site contaminants.

WPCP Builder Instructions

Section 30.1.2 has two separate tabs for information entry: Texts and Lists (Figure 4-19).

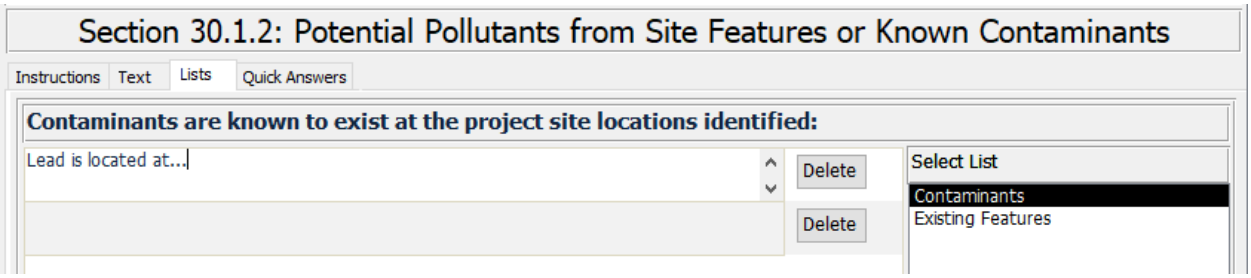


Figure 4-19. Section 30.1.2 Lists Screen

Text Tab: Insert additional narrative text for contaminants and existing features, as needed. If no additional text is necessary, leave blank. Automated text will populate the WPCP and can be viewed in Preview Section 30, when preparing to print the WPCP.

List Tab: This tab has two separate lists to select from to enter required information. Click on the list in the Select List column to move between the entries windows.

- Contaminants: Describe the known contaminants identified and list them in this section.
- Existing Features: 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).

Insert as many lines as necessary to complete the inventory.

EXAMPLE

Existing site features: This site includes aerially deposited lead. The lead is located along the right shoulders of both the eastbound and westbound directions primarily as a result of vehicle exhaust containing lead from the combustion of leaded gasoline.

The DTSC issued a statewide Variance regarding the reuse of ADL-impacted soils within Caltrans right-of-way. According to the Variance, soil classified as a non-RCRA hazardous waste (based primarily on ADL content) may be suitable for reuse within Caltrans right-of-way.

ADL-impacted soil reused under the Variance must always be at least 5 feet above the highest groundwater elevation and, depending on lead concentrations, must be covered with at least one foot of non-hazardous soil or a pavement structure.

The ADL study conducted for the proposed project determined that soil conditions encountered at the site generally ranged from very dark brown sandy silt with gravel to very dark brown clayey sand. Surface and groundwater was not encountered at the boring locations.

The concentrations of metals that were detected in the soil samples are within the reported range of background concentrations for California soils. Based on the reported concentrations, off-site reuse and disposal of excavated soil may not be restricted based on lead content.

30.2 Soil Stabilization (Erosion Control) and Sediment Control

WPCP GUIDANCE INSTRUCTIONS

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 this 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 the SWMP. For reference on these BMPs see the *Construction Site BMPs 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

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

WPCP Builder Instructions

No action required. Required text will automatically populate the WPCP and can be viewed in Preview Section 30, when preparing to print the WPCP.

30.2.1 Soil Stabilization BMP

WPCP GUIDANCE 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.
- Show the limits of the soil-disturbed areas on the WPCDs.

WPCP Builder Instructions

Section 30.2.1 has two separate tabs for information entry: Text and Table 30.2.1 (Figure 4-20).

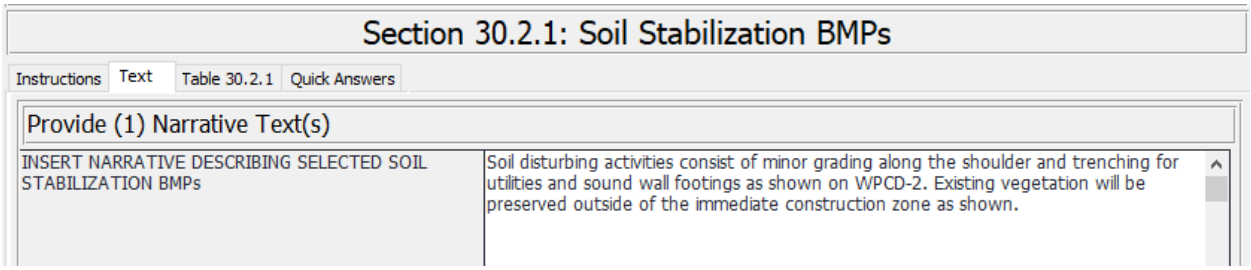
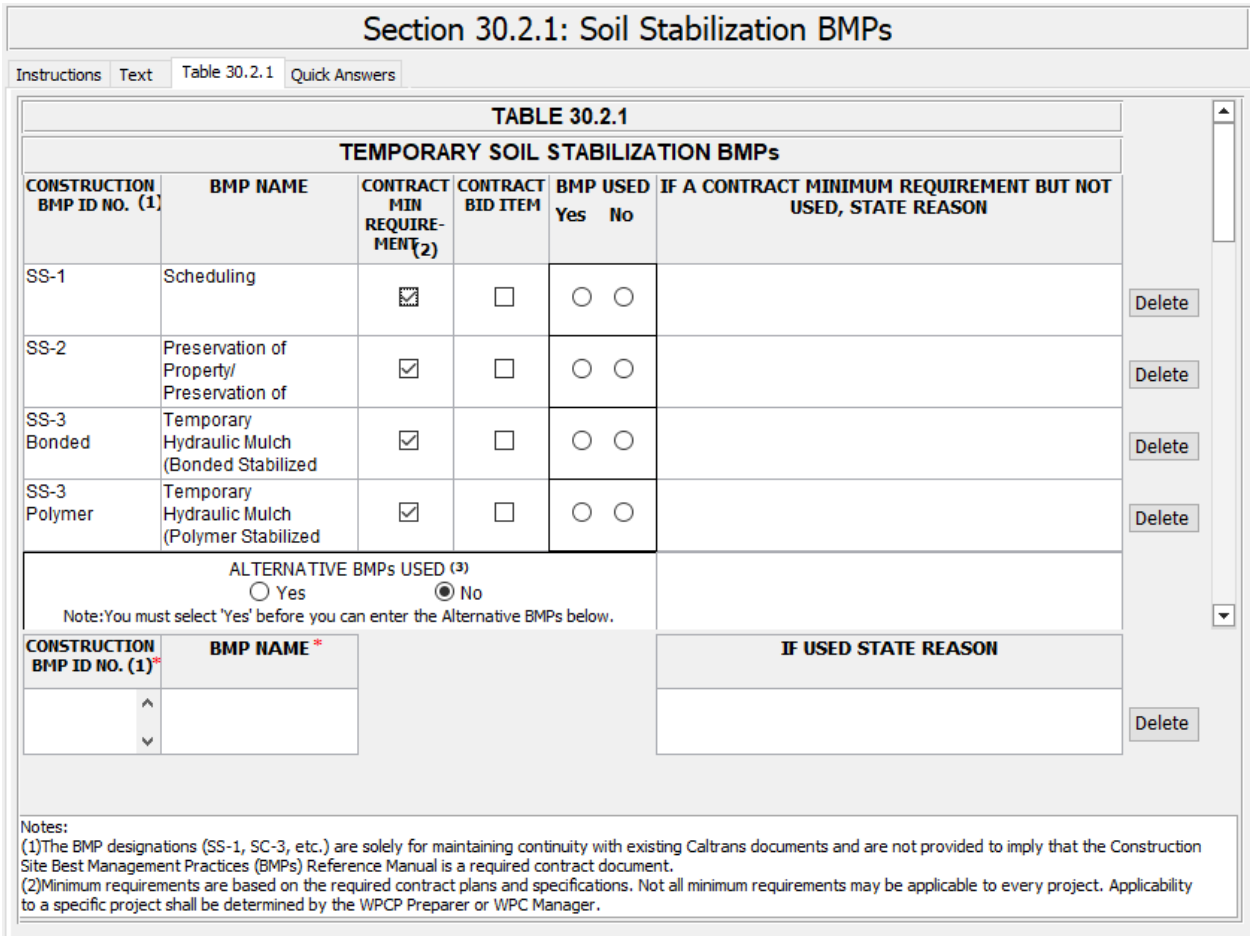


Figure 4-20. Section 30.2.1 Soil Stabilization BMPs

Text Tab: Provide a brief description of soil-disturbing activities, such as clearing and grubbing, grading, excavation, trenching, etc. Describe the locations and scheduled installations for each selected soil stabilization BMP.

Table 30.2.1: Complete the BMP implementation table for temporary soil stabilization BMPs (Figure 4-21).



Section 30.2.1: Soil Stabilization BMPs

Instructions | Text | Table 30.2.1 | Quick Answers

TABLE 30.2.1

TEMPORARY SOIL STABILIZATION BMPs

CONSTRUCTION BMP ID NO. (1)	BMP NAME	CONTRACT MIN REQUIRE-MENT (2)	CONTRACT BID ITEM	BMP USED Yes	BMP USED No	IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON	
SS-1	Scheduling	☑	☐	○	○		Delete
SS-2	Preservation of Property/ Preservation of	☑	☐	○	○		Delete
SS-3 Bonded	Temporary Hydraulic Mulch (Bonded Stabilized	☑	☐	○	○		Delete
SS-3 Polymer	Temporary Hydraulic Mulch (Polymer Stabilized	☑	☐	○	○		Delete

ALTERNATIVE BMPs USED (3)
○ Yes ◉ No
Note:You must select 'Yes' before you can enter the Alternative BMPs below.

CONSTRUCTION BMP ID NO. (1)*	BMP NAME *	IF USED STATE REASON	
			Delete

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.

Figure 4-21. Table 30.2.1 Soil Stabilization BMPs

- The database will automatically ask for a reason to be stated in the appropriate column for any Contract Minimum BMP that is not used.
- If the project will not create DSAs, 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.
- Choose Yes or No if Alternative BMPs will be used on the project. This section of the table will not be functional or show up in the WPCP if Yes is not checked.

EXAMPLE

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 B WPCS. Temporary soil stabilization, sediment control, tracking control, wind erosion control, non-stormwater 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 inactive DSAs. Soil binders will be installed within 15 days from when DSAs become inactive and before forecasted storm events on active DSAs.

30.2.2 Sediment Control BMPs

WPCP GUIDANCE 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.
- Show selected BMPs on the WPCDs.

WPCP Builder Instructions

Section 30.2.2 has two separate tabs for information entry: Text and Table 30.2.2.

Text Tab: Provide a description of the soil-disturbed areas that will necessitate sediment control BMPs. References to the WPCDs and/or Section 30.2.1 are often sufficient. Describe the locations and scheduled installations for each selected sediment control BMP.

Table 30.2.2: Complete the BMP implementation table for temporary soil control BMPs (Figure 4-22).

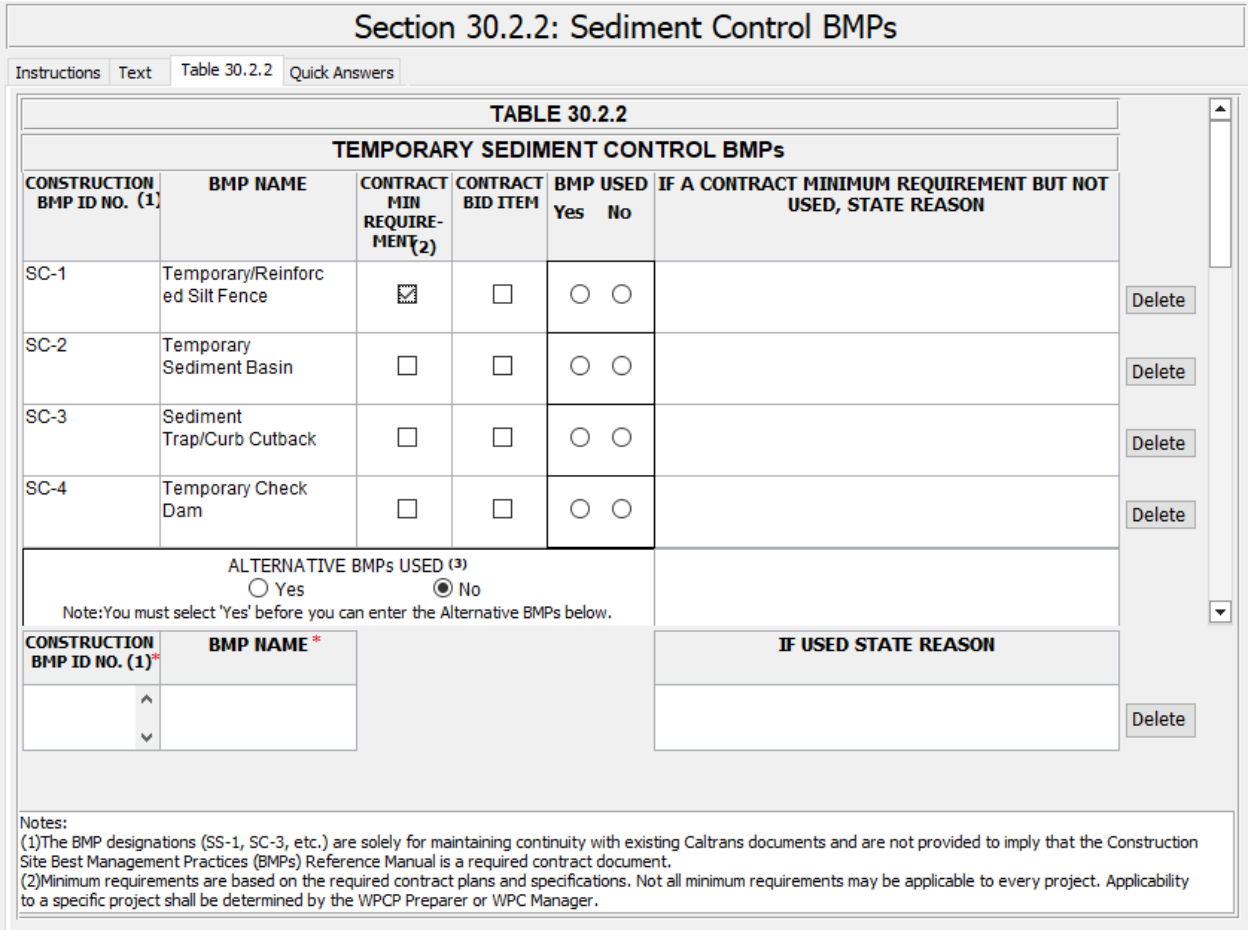


Figure 4-22. Table 30.2.2 Sediment Control BMPs

- The database will automatically ask for a reason to be stated in the appropriate column for any Contract Minimum BMP that is not used.
- If the project will not create DSAs, 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.
- Choose Yes or No if Alternative BMPs will be used on the project. This section of the table will not be functional or show up in the WPCP if Yes is not checked.

EXAMPLE

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 15 days from when DSAs become inactive and before forecasted storm events on active DSAs. 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.

- Under the Standard Table Tab, complete the BMP implementation table for temporary sediment control BMPs. All listed BMPs shall be considered for the project.
  - The database will automatically ask for a reason to be stated in the appropriate column for any Contract Minimum BMP that is not used.
  - Choose Yes or No if Alternative BMPs will be used on the project. This section of the table will not be functional or show up in the WPCP if Yes is not checked.

30.2.3 Tracking Control BMPs

WPCP GUIDANCE INSTRUCTIONS

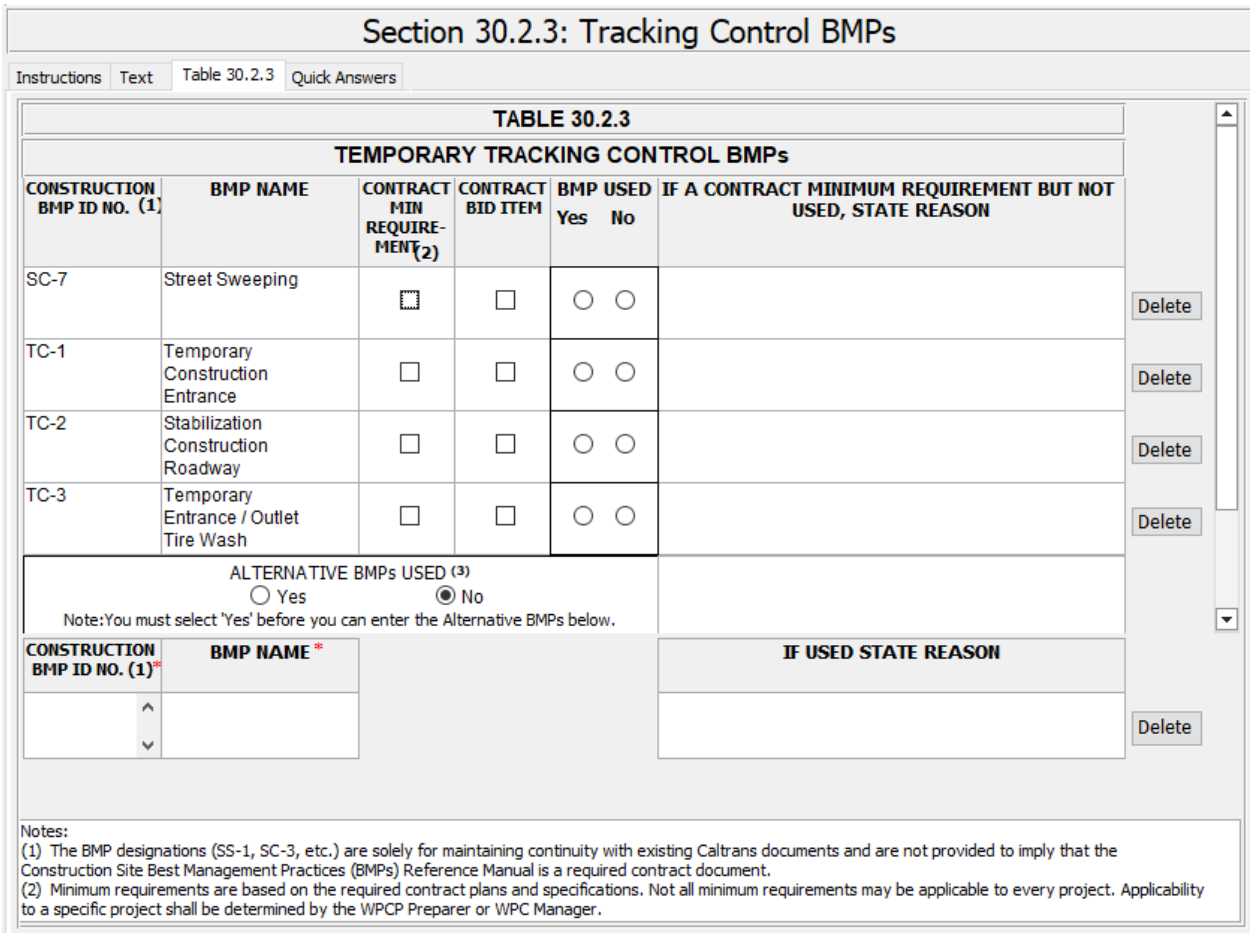
- Tracking controls shall be considered and implemented year-round and throughout the duration of the project.
- Show selected sediment tracking control BMPs on the WPCDs in Attachment A.

WPCP Builder Instructions

Section 30.2.3 has two separate tabs for information entry: Text and Table 30.2.3.

Text Tab: Provide a description of the tracking controls BMPs to be used. References to the WPCDs and/or Section 30.2.1 are often sufficient. Describe the locations and scheduled installations for each selected sediment control BMP.

Table 30.2.3: Complete the BMP implementation table for temporary soil control BMPs (Figure 4-23).



Section 30.2.3: Tracking Control BMPs

Instructions | Text | Table 30.2.3 | Quick Answers

TABLE 30.2.3

TEMPORARY TRACKING CONTROL BMPs

CONSTRUCTION BMP ID NO. (1)	BMP NAME	CONTRACT MIN REQUIRE-MENT (2)	CONTRACT BID ITEM	BMP USED Yes	BMP USED No	IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON	
SC-7	Street Sweeping	☐	☐	○	○		Delete
TC-1	Temporary Construction Entrance	☐	☐	○	○		Delete
TC-2	Stabilization Construction Roadway	☐	☐	○	○		Delete
TC-3	Temporary Entrance / Outlet Tire Wash	☐	☐	○	○		Delete

ALTERNATIVE BMPs USED (3)
○ Yes ◉ No
Note:You must select 'Yes' before you can enter the Alternative BMPs below.

CONSTRUCTION BMP ID NO. (1)*	BMP NAME *	IF USED STATE REASON	
			Delete

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.

Figure 4-23. Table 30.2.3 Tracking Control BMPs

- The database will automatically ask for a reason to be stated in the appropriate column for any Contract Minimum BMP that is not used.
- If the project will not create DSAs, 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.
- Choose Yes or No if Alternative BMPs will be used on the project. This section of the table will not be functional or show up in the WPCP if Yes is not checked.

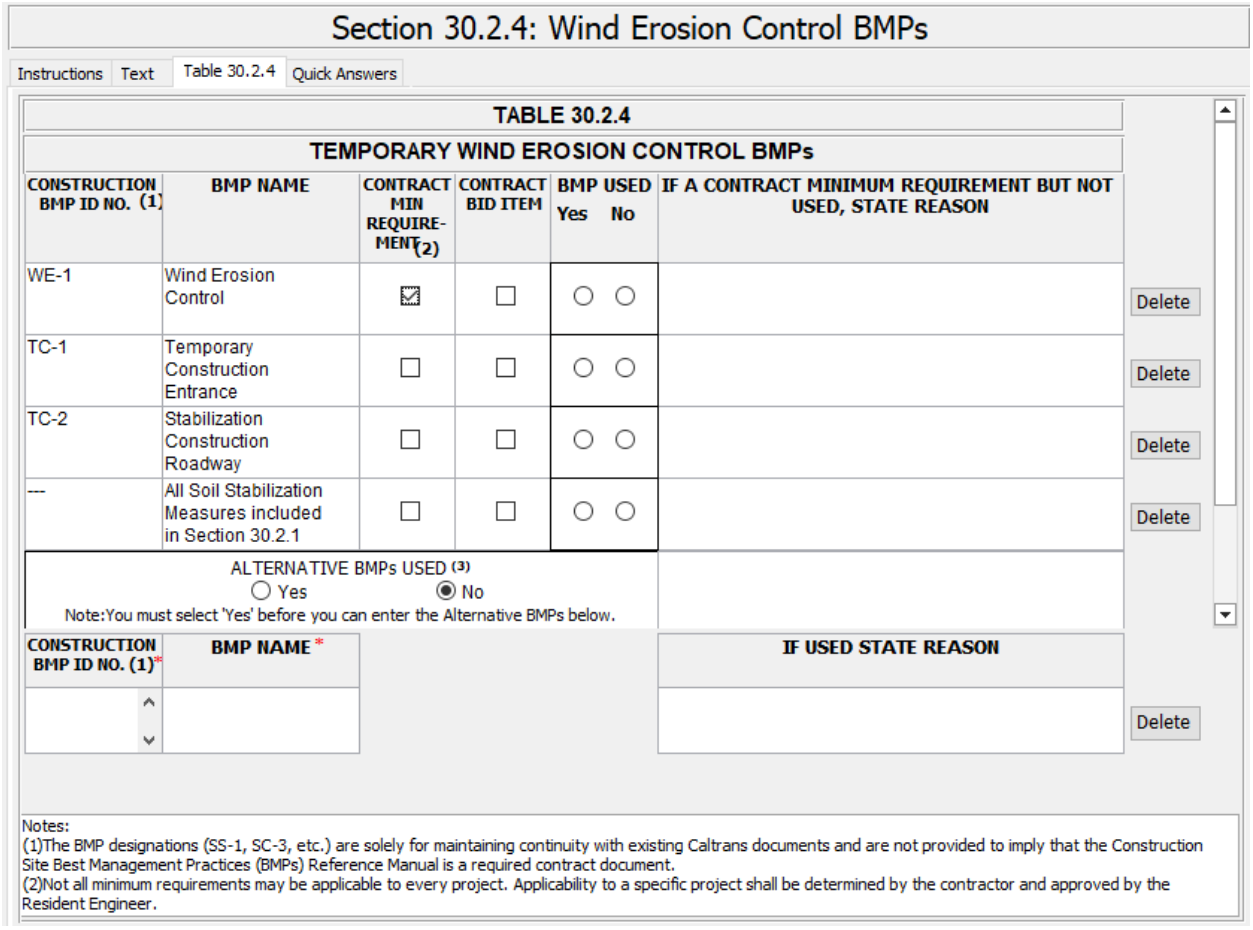
30.2.4 Wind Erosion Control BMPs

WPCP Builder Instructions

Section 30.2.4 has two separate tabs for information entry: Text and Table 30.2.4.

Text Tab: Provide a description of wind erosion control BMPs to be used. 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 DSAs, indicate this in the narrative description.

Table 30.2.4: Complete the BMP implementation table for wind erosion control BMPs (Figure 4-24).



Section 30.2.4: Wind Erosion Control BMPs

Instructions | Text | Table 30.2.4 | Quick Answers

TABLE 30.2.4

TEMPORARY WIND EROSION CONTROL BMPs

CONSTRUCTION BMP ID NO. (1)	BMP NAME	CONTRACT MIN REQUIRE-MENT (2)	CONTRACT BID ITEM	BMP USED Yes	BMP USED No	IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON	
WE-1	Wind Erosion Control	☑	☐	○	○		Delete
TC-1	Temporary Construction Entrance	☐	☐	○	○		Delete
TC-2	Stabilization Construction Roadway	☐	☐	○	○		Delete
---	All Soil Stabilization Measures included in Section 30.2.1	☐	☐	○	○		Delete

ALTERNATIVE BMPs USED (3)
○ Yes ◉ No
Note:You must select 'Yes' before you can enter the Alternative BMPs below.

CONSTRUCTION BMP ID NO. (1)*	BMP NAME *	IF USED STATE REASON	
			Delete

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.

Figure 4-24. Table 30.2.4 Wind Erosion Control BMPs

- The database will automatically ask for a reason to be stated in the appropriate column for any Contract Minimum BMP that is not used.
- If the project will not create DSAs, 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.
- Choose Yes or No if Alternative BMPs will be used on the project. This section of the table will not be functional or show up in the WPCP if Yes is not checked.

30.3 Construction Site Management

30.3.1 Non-Stormwater Management BMPs

WPCP GUIDANCE 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

WPCP Builder Instructions

Section 30.3.1 has two separate tabs for information entry: Text and Table 30.3.1.

Text Tab: Provide a description narrative description of the non-stormwater management BMPs to be used. Give a general approach on how non-stormwater management BMPs will be implemented on the project.

- 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 RE 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.
- Describe the locations and scheduled installations for each selected Non-Stormwater Management BMPs

Table 30.3.1: Complete the BMP implementation table for non-stormwater management BMPs (Figure 4-25).

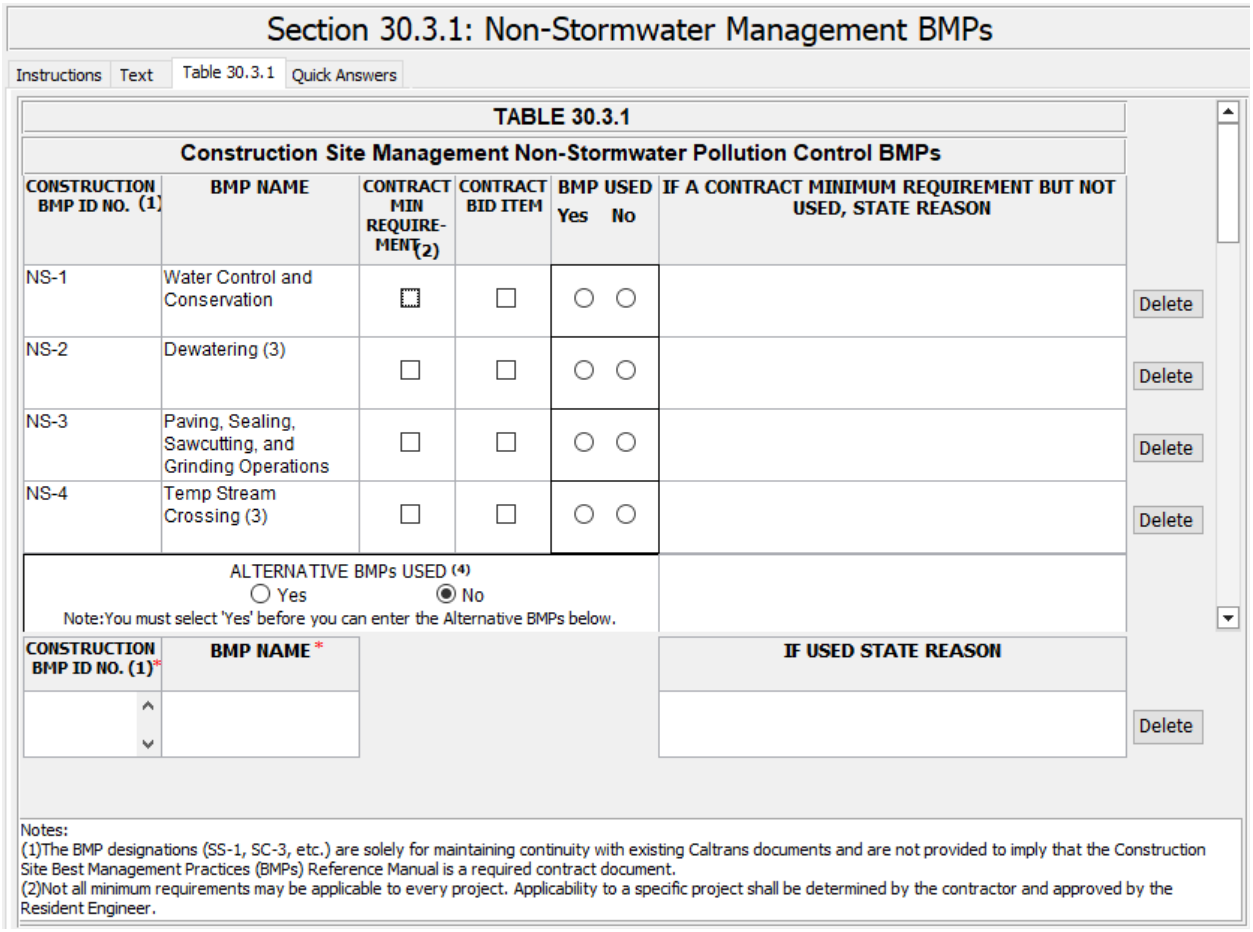


Figure 4-25. Table 30.3.1 Non-Stormwater Management BMPs

- The database will automatically ask for a reason to be stated in the appropriate column for any Contract Minimum BMP that is not used.
- If the project will not create DSAs, 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.
- Choose Yes or No if Alternative BMPs will be used on the project. This section of the table will not be functional or show up in the WPCP if Yes is not checked.

30.3.2 Waste Management and Materials Pollution Control BMPs

WPCP GUIDANCE 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 to the text tab.

■ Based on the listed materials and wastes, use the following waste management and materials pollution controls BMP consideration checklist to select appropriate BMPs.

■ Describe 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.

WPCP Builder Instructions

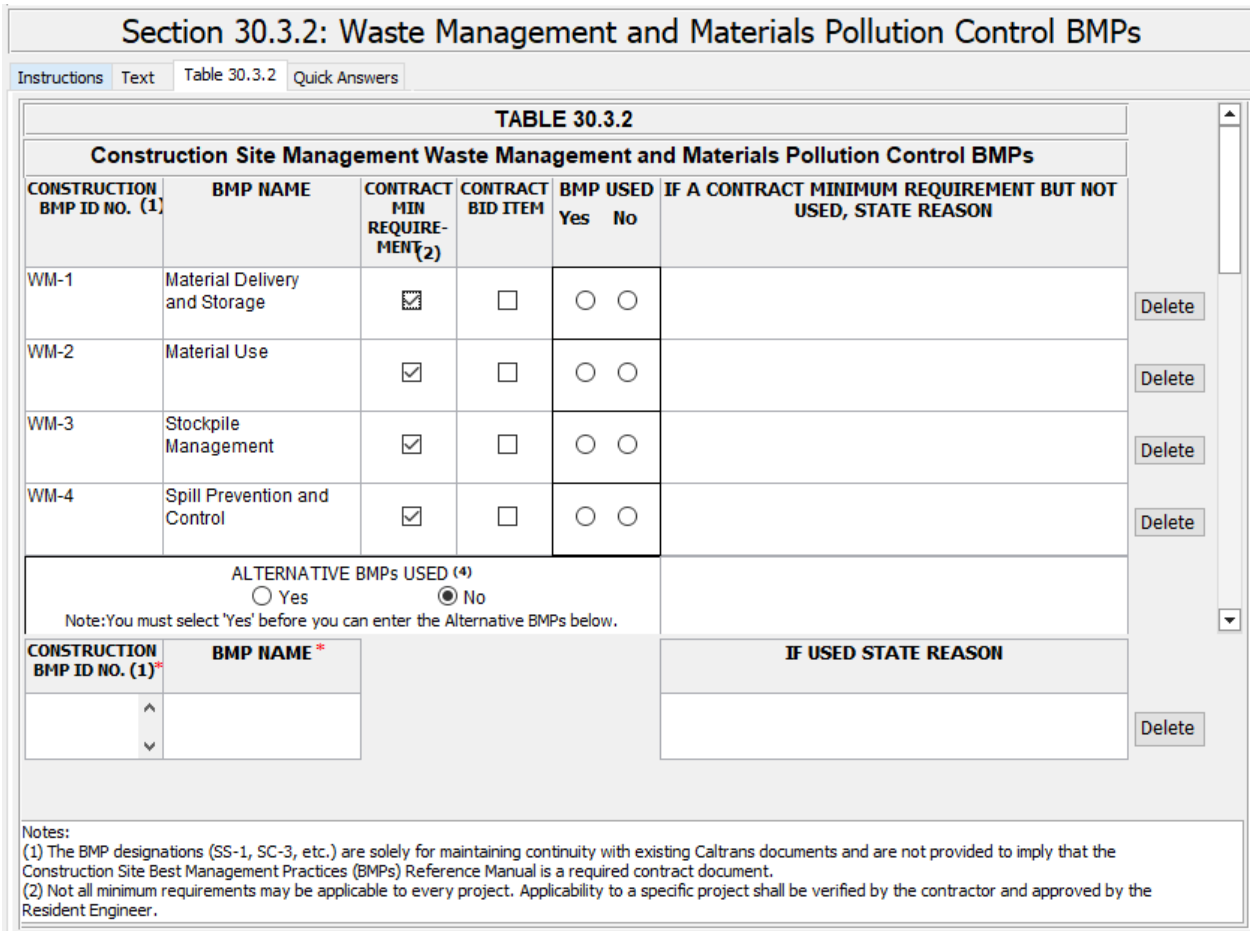
Section 30.3.2 has two separate tabs for information entry: Text and Table 30.3.2.

Text Tab: Provide a narrative description of the waste management and material pollution control BMPs. Give a general approach on how waste management and material pollution control BMPs will be implemented on the project.

- Describe the locations and scheduled installations for each selected waste management and materials pollution control BMPs.
- 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.
- 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.

Table 30.3.2: Complete the BMP implementation table for waste management and materials pollution control BMPs.

- Based on the listed materials and wastes, use the following waste management and materials pollution controls BMP consideration checklist to select appropriate BMPs (Figure 4-26).



Section 30.3.2: Waste Management and Materials Pollution Control BMPs

Instructions | Text | Table 30.3.2 | Quick Answers

TABLE 30.3.2

Construction Site Management Waste Management and Materials Pollution Control BMPs

CONSTRUCTION BMP ID NO. (1)	BMP NAME	CONTRACT MIN REQUIRE-MENT (2)	CONTRACT BID ITEM	BMP USED Yes	BMP USED No	IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON	
WM-1	Material Delivery and Storage	☑	☐	○	○		Delete
WM-2	Material Use	☑	☐	○	○		Delete
WM-3	Stockpile Management	☑	☐	○	○		Delete
WM-4	Spill Prevention and Control	☑	☐	○	○		Delete

ALTERNATIVE BMPs USED (4)
○ Yes ◉ No
Note:You must select 'Yes' before you can enter the Alternative BMPs below.

CONSTRUCTION BMP ID NO. (1)*	BMP NAME *	IF USED STATE REASON	
			Delete

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.

Figure 4-26. Table 30.3.2 Waste Management and Materials Pollution Control BMPs

- The database will automatically ask for a reason to be stated in the appropriate column for any Contract Minimum BMP that is not used.
- If the project will not create DSAs, 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.
- Choose Yes or No if Alternative BMPs will be used on the project. This section of the table will not be functional or show up in the WPCP if Yes is not checked.

30.4 Water Pollution Control Drawings (WPCDs)

WPCP GUIDANCE 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 A of this 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.
- Areas used for staging of equipment, materials or wastes (prior to their proper disposal).

WPCP Builder Instructions

Text Tab: Insert additional narrative text for Water Pollution Control Drawings, as needed. If no additional text is necessary, leave blank. Automated text will populate the WPCP and can be viewed in Preview Section 30, when preparing to print the WPCP.

30.5 Water Pollution Control Schedule

WPCP GUIDANCE 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, saw-cutting, 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 and grinding.

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 feet 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.

WPCP Builder Instructions

Text Tab: Insert additional narrative text for Water Pollution Control Schedules, as needed. If no additional text is necessary, leave blank. Automated text will populate the WPCP and can be viewed in Preview Section 30, when preparing to print the WPCP.

SECTION 40
WPCP Implementation

40.1 WPC Manager Responsibilities

WPCP GUIDANCE INSTRUCTIONS:

- The WPC Manager (or their alternate) is responsible for WPC during construction.
- The WPC Manager (or their alternate) 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 (or their alternate) shall be available at all times throughout the duration of the project.
- Duties of the Contractor's WPC Manager (or their alternate) include (but are not limited to):
- Ensuring WPCP compliance
- Implementing all elements of the WPCP and contract specifications, including (but not limited to):
- 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 are conducted:
    - Required daily BMP inspections
    - Routine weekly stormwater inspections
    - Pre-storm inspections for forecasted storm events
    - Daily inspections during forecasted 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 (or their alternate) shall have primary responsibility and significant authority for the implementation, maintenance, inspection, and amendments to the accepted WPCP.

WPCP Builder Instructions

Text Tab: Insert additional narrative text for additional responsibilities and/ or names, as needed. If no additional text is necessary, leave blank. Automated text will populate the WPCP and can be viewed in Preview Section 40, when preparing to print the WPCP.

40.2 Weather Forecast Monitoring

WPCP GUIDANCE 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.

WPCP Builder Instructions

Fields Tab: Enter the project site address that will be used when obtaining weather forecast information from National Weather Service Forecast Office.

Include the Latitude and Longitude corresponding to the site address.

Lists Tab: Enter in the list the actions to be taken prior toa forecasted storm event. Additional list field is created based on the information typed.

- The WPC Manager (or their alternate) 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 to be used when obtaining weather forecast information from National Weather Service Forecast Office.
- Enter the project's latitude and longitude used when obtaining weather forecast information from National Weather Service Forecast Office.
- List actions to be taken when a forecasted storm event is likely.

40.3 Stormwater Site Inspection and Site Visual Monitoring

WPCP GUIDANCE INSTRUCTIONS

WPCP Builder Instructions

No action required. Required text will automatically populate the WPCP and can be viewed in Preview Section 40, when preparing to print the WPCP.

40.4 Stormwater Site Inspections

WPCP GUIDANCE 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 trained staff.
- A Stormwater Site Inspection Report must be completed during each inspection. A blank Stormwater Site Inspection Report is included as Appendix E 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 and documented on CEM-2031
- 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 BMPs implementation, or WPCP revisions are necessary to reduce pollutants in stormwater discharges and authorized non-stormwater discharges
  - 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
- Visual monitoring inspections of the project site shall be conducted:

- Prior to a forecasted storm event
- At 24-hour intervals during extended storm events
- Post qualifying precipitation event

- A copy of completed inspection reports shall be submitted to the RE 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 Corrective Actions 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 DOT CEM-2035SW Stormwater Corrective Actions Summary form in Appendix G. Corrections summaries shall be submitted to the RE when corrections are completed and must be submitted within five 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.

WPCP Builder Instructions

Text Tab: Insert additional narrative text for additional stormwater site inspections that will take place. If no additional text is necessary, leave blank. Automated text will populate the WPCP and can be viewed in Preview Section 40, when preparing to print the WPCP.

40.5 Site Visual Monitoring

WPCP GUIDANCE INSTRUCTIONS

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 forecasted storm events
- Post qualifying precipitation event that generated site runoff

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.

WPCP Builder Instructions

Text Tab: Insert additional narrative text for additional site visual inspections that will take place. If no additional text is necessary, leave blank. Automated text will populate the WPCP and can be viewed in Preview Section 40, when preparing to print the WPCP.

40.5.1 Visual Monitoring Prior to a Forecasted Storm Event

WPCP GUIDANCE INSTRUCTIONS

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:

- the entire project site, including any staging areas that serve the construction project to identify any spills, leaks, or uncontrolled pollutant sources
- all BMPs for proper installation and adequate maintenance
- identify active areas and stockpiles that need sediment controls prior to precipitation

Observations of the site and any recommended corrective actions will be documented on DOT CEM-2030SW Stormwater Site Inspection Report and DOT CEM-2035SW Stormwater Corrective Actions Summary.

Document all corrective actions needed with photographs on the Stormwater Site Inspection Report.

40.5.2 Visual Monitoring During Extended Forecasted Storm Event

WPCP GUIDANCE INSTRUCTIONS

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 DOT CEM-2030SW Stormwater Site Inspection Report. Document all corrective actions needed with photographs on the Stormwater Site Inspection Report.

40.5.3 Visual Monitoring Within 48 Hours After a QPE Generating Site Runoff

WPCP GUIDANCE INSTRUCTIONS

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 precipitation 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 DOT CEM-2030SW Stormwater Site Inspection Report and DOT CEM-2035SW Stormwater Corrective Actions Summary. Document all corrective actions needed with photographs on the 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.

40.5.4 Visual Monitoring Non-Stormwater Discharges

WPCP GUIDANCE INSTRUCTIONS

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 DOT CEM-2030SW 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 DOT CEM-2030SW Stormwater Site Inspection Report. Any photographs used to document observations will be referenced on the 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 illegal connection or illicit discharge is discovered, reporting will comply with the requirements in Section 50-4 Illegal Connection/ Illicit Discharge Reporting.

40.5.5 Visual Monitoring Documentation, Follow-up and Tracking Procedures

WPCP GUIDANCE INSTRUCTIONS

Site visual monitoring site inspections will be documented on DOT CEM-2030SW Stormwater Site Inspection Report, in Appendix E. Completed inspection reports shall be submitted to the RE. 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. When design changes to BMPs are required the WPCP shall be amended, including the appropriate Water Pollution Control Drawings.

Deficiencies identified in site visual monitoring inspection reports and correction of deficiencies will be tracked on DOT CEM-2035SW Stormwater Corrective Actions Summary, in Appendix G. Corrective actions summaries shall be properly addressed and signed off by the WPC manager and submitted to the RE within five business days of the site inspection or prior to a forecasted precipitation event.

Completed DOT CEM-2035SW Stormwater Corrective Actions Summary forms shall be filed in WPCP File Category 20.35: Corrective Actions Summary. A copy of the completed DOT CEM-

2035SW Stormwater 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

WPCP Builder Instructions

No action required. Required text will automatically populate the WPCP and can be viewed in Preview Section 50, when preparing to print the WPCP. This applies to all subsections of 50. WPCP Guidance Instructions consist of required text that is automated within WPCP Builder.

50.2 Discharge Reporting

WPCP GUIDANCE INSTRUCTIONS

- Discharges will be reported in writing to the RE verbally upon discovery and in writing within 48 hours of occurrence or as required in the Special Provisions. A Notice of Discharge form for reporting discharges shall be included in Appendix H and 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 CFRs at 40CFR Part 110, Part 117, or Part 302.

50.3 Regulatory Agency Notice or Order Reporting

- 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 three days of receiving a notice or order.

50.4 Illicit Connection/Illegal Discharge Reporting

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 RE verbally upon discovering the illicit connection or illegal discharge.

4.3 WPCP Attachments

WPCP Attachments A-D contain 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 WPCDs

Attachment B Water Pollution Control Schedule

Attachment C WPCP Amendments

Attachment D Contractor and Subcontractor Personnel Stormwater Training

4.3.1 Attachment A WPCDs

The 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 Specifications and the contract special provisions. 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, 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.

4.3.1.1 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.

4.3.1.2 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.

4.3.1.3 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.

4.3.1.4 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 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 this Manual, Appendix B.
- 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 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

- Outline all areas of existing vegetation, soil cover, or native vegetation that will remain undisturbed during the project
- Outline all areas of soil disturbance (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 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

Samples of WPCDs are shown on the following pages.

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 Caltrans Standard Specifications and 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 WPCS and WPCDs 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 USACOE 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 and grinding.
- 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 feet 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.

4.3.3 Attachment C WPCP Amendments

When changes in the authorized WPCP are required, the contractor's WPC Manager or alternate 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 Acceptance form shall be used as the cover sheet for each amendment. A copy of the form is shown in WPCP Appendix B.
- All amendments shall be recorded in the WPCP amendment log in Attachment B.
- When an amendment is accepted by the RE, Form DOT CEM-2008SW, SWPPP or WPCP Amendment Certification and Acceptance shall be attached to the WPCP amendment and inserted into Attachment B.

All accepted WPCP amendments shall be shown on the WPCP Amendment Log in Attachment B. The amendment log shall include:

- Amendment number
- Date
- Brief description of the amendment
- Requested by
- Amendment approval date

Caltrans form DOT CEM-2009SW, SWPPP or WPCP Amendment Log shall be used to record WPCP Amendments.

Caltrans Forms are located at:

http://www.dot.ca.gov/hq/construc/forms.htm

4.3.4 Attachment D Contractor Personnel Training Records

A summary of formal stormwater training for the project manager/superintendent, WPC Manager and alternate if one is designated, QSP and alternate if one is designated, stormwater inspector and alternate if one is designated, stormwater discharge sampler and tester and alternate if one is designated, 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.

Caltrans Forms are located at:

http://www.dot.ca.gov/hq/construc/forms.htm

4.4 WPCP Appendices

4.4.1 WPCP Appendices A through I

WPCP Appendices A through I are Caltrans 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 available for contractors to download at:

http://www.dot.ca.gov/hq/construc/stormwater/

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	DOT CEM-2008SW, SWPPP or WPCP Amendment Certification and Acceptance Form
Appendix B	DOT CEM-2009SW, SWPPP or WPCP Amendment Log
Appendix C	DOT CEM-2023SW, Stormwater Training Record
Appendix D	DOT CEM-2024SW, Stormwater Training Log
Appendix E	CEM-2034 Stormwater Best Management Status Report (Optional)
Appendix F	DOT CEM-2030SW, Stormwater Site Inspection Report
Appendix G	DOT CEM-2035SW, Stormwater Corrective Actions Summary or CEM-2035T Stormwater Corrective Actions Summary- Lake Tahoe Hydrologic Unit
Appendix H	CEM-2061SW, Notice of Discharge Report or CEM-2061T Notice of Discharge Report - Lake Tahoe Hydrologic Unit Stormwater Sample Field Test Report/Receiving Water Monitoring Report
Appendix I	CEM-2070 SWPPP/WPCP Annual Certification of Compliance

Appendix A
DOT CEM-2008SW, SWPPP or WPCP Amendment Certification and Acceptance Form

- Required for projects with a Water Pollution Control Plan (WPCP) to document accepted amendments.
- To be accepted by the RE.

Appendix B
DOT CEM-2009SW, SWPPP or WPCP Amendment Log

- Required for projects with a Water Pollution Control Plan (WPCP) to document authorized amendments.
- To be authorized by the RE.

Appendix C
DOT CEM-2023SW, Stormwater Training Record

- To be submitted to Caltrans to document compliance.
- To ensure review and record keeping of stormwater training.

Appendix D
DOT CEM-2024SW, Stormwater Training Log

- To be submitted to Caltrans for annual compliance. The form is optional, the RE will determine its use on this contract.
- Required for projects with a Water Pollution Control Plan (WPCP).
- Documents stormwater training for contractors and subcontractor managers, supervisors, and employees.

Appendix E
CEM-2034 Monthly Stormwater BMPs & Material Inventory Report

- This form is optional; the RE will determine whether it should be used for this contract.
- To be submitted monthly to the RE.
- Includes the status of all required locations of BMPs.

Appendix F
DOT CEM-2030SW, Stormwater Site Inspection Report

- All areas of a jobsite to be reported and inspected.
- Complete BMP repair or design changes within 72 hours of identifications.
- To be submitted to the RE within 24 hours of inspection.

Appendix G
DOT CEM-2035SW, Stormwater Corrective Actions Summary or

CEM-2035T Stormwater Corrective Actions Summary- Lake Tahoe Hydrologic Unit

- Verifies stormwater site inspection corrective actions identified in a site inspection report were completed.
- Corrective actions must begin within 72 hours of the site inspection or before a rain event.

Appendix H
CEM-2061SW, Notice of Discharge Report or CEM-2061T Notice of Discharge Report - Lake Tahoe Hydrologic Unit Stormwater Sample Field Test Report/Receiving Water Monitoring Report

- Required by Caltrans to document compliance with Caltrans Permit.
- 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 Caltrans *Construction Site Monitoring Program Guidance Manual*.

Appendix I
CEM-2070 SWPPP/WPCP Annual Certification of Compliance

- To be submitted to Caltrans to document Annual Compliance.
- Ensures that water pollution control measures are being implemented in accordance with the WPCP.

Appendix A: Definition of Terms

Active Areas. An area where soil disturbing activities have occurred at least once within 15 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.

Approved Signatory. A person who has legal authority to sign, certify, and electronically submit PRDs and Notices of Termination on behalf of the LRP.

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 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 BOD, total suspended sediment (TSS), fecal coliform, pH, oil and grease.

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.

Caltrans Permit. The Caltrans Statewide NPDES Permit for discharges from Caltrans properties, facilities, and activities (Order No. 2012-011-DWQ, NPDES No. CAS000003), issues by the SWRCB.

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.

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 LRP (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.

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.

Exempt Construction Activities. Activities exempt from the CGP, 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 National Oceanic and Atmospheric Administration (NOAA) Weather Radio forecast shall be used. The contractor may propose an alternative forecast for use if authorized by the RE.

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. 2009-000-DWQ, NPDES Permit CAS000002) and amendments (Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ) issued by the SWRCB.

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 where soil-disturbing work activities have not occurred within the last 15 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 (LRP). 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 (LUP), 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 percent 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.

National Pollutant Discharge Elimination System (NPDES) Permit. A permit issued pursuant to the CWA that requires the discharge of pollutants to waters of the United States from stormwater be controlled.

Inactive Construction Area. Any area not considered to be an active construction area. Active construction areas become inactive construction areas whenever construction activities are expected to be discontinued for a period of 14 days or longer.

Non-Stormwater Discharges. Non-Stormwater Discharges are discharges that do not originate from forecasted 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.

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 (QSD). Individual who is authorized to develop and revise SWPPPs.

Qualified SWPPP Practitioner (QSP). Individual assigned responsibility for non-stormwater and stormwater 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 48 hour or greater period between rain events. (2010 standard specification text defines it as a 72 hour 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 CWA Section 402(p) NPDES permit requirements, and are issuers and administrators of these permits as delegated by USEPA. There are nine regional boards working with the SWRCB.

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.

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 (SAP). 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 stormwater 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 stormwater.

State Water Resources Control Board (SWRCB). California agency that implements and enforces CWA 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 authorized before construction begins. A SWPPP prepared in accordance with the Special Provisions and the Handbooks will satisfy Standard Specifications Section 13 Water Pollution Control

Structural Controls. Any structural facility designed and constructed to mitigate the adverse impacts of stormwater 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 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 WPCP is a plan to identify water quality management practices to be implemented that must be prepared for all construction projects that do not require preparation of a SWPPP. For Caltrans projects disturbing more than one acre, a SWPPP satisfies the requirement for a WPCP.

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 B: List of Standard BMP Symbols

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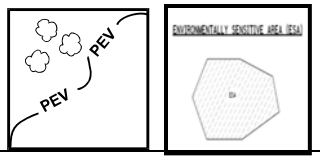
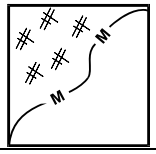
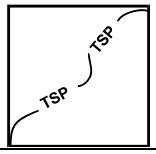
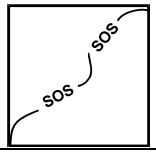
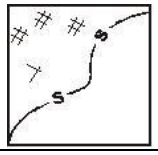
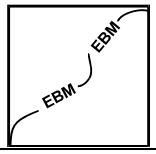
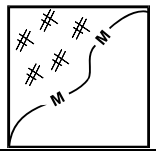
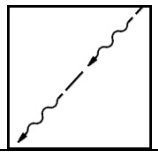
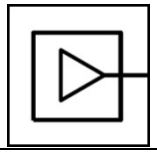
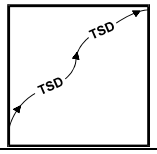
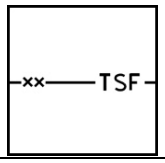
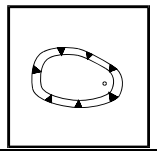
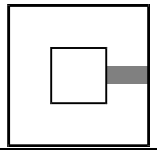
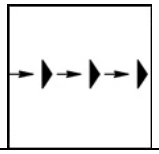
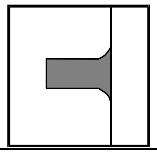
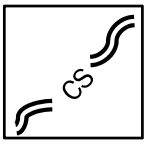
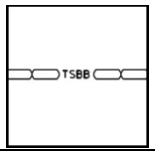
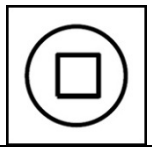
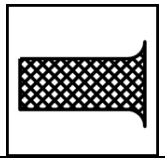
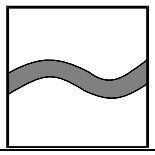
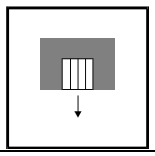
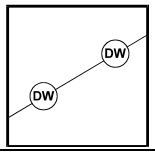
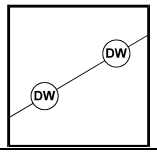
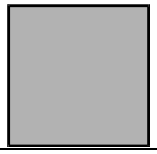
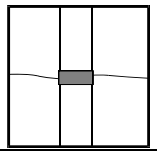
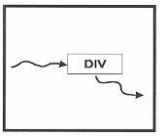
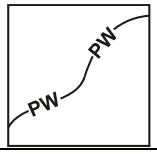
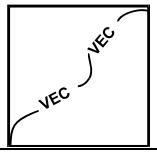
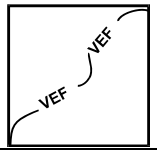
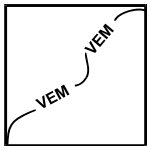
Appendix B

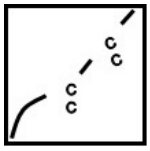
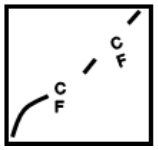
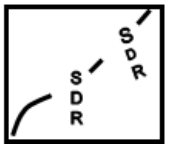
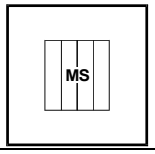
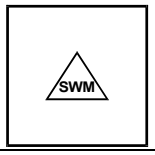
List of Standard BMP Symbols

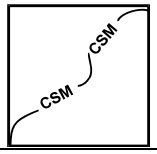
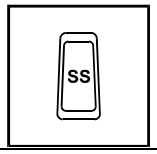
Water Pollution Control BMP Symbols	
Soil Stabilization	
SS-2: Preservation of Existing Vegetation	
SS-3: Hydraulic Mulch (Note: Symbol -M- is generic Hydraulic Mulch symbol. Use line type symbol -BFM- for Bonded Fiber Matrix, and - CBHM- for Cementitious Binder Hydraulic Mulch)	
SS-4: Hydroseeding	
SS-5: Soil Binders	
SS-6: Straw Mulch	
SS-7: Plastic Cover and Rolled Erosion Control Products	
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: Compost Sock	
SC-9: Straw Bale Barrier	
SC-10: Temporary Drainage Inlet Protection	
Wind Erosion Control	
WE-1: Wind Erosion Control	
Tracking Control	
TC-1: Temporary Construction Entrance	
TC-2: Temporary Construction Roadway	
TC-3: Temporary Entrance/Outlet Tire Wash	
Non-Stormwater Management	
NS-1: Water Conservation Practices	
NS-2: Dewatering Operations	

NS-2: Dewatering Operations	
NS-3: Paving, Sealing, Sawcutting 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 and Septic Waste Management	
WM-10: Liquid Waste Management