THIS REPORT IS PROVIDED AS AN EXAMPLE ONLY. ALL PROJECT INFORMATION, NAMES, AND DATES ARE FICTITIOUS. THIS IS NOT INTENDED TO BE A FINAL REPRESENTATION OF THE WORK DONE OR RECOMMENDATIONS MADE BY CALTRANS FOR AN ACTUAL PROJECT.

Short Form - Storm Water Data Report

Dist-County-Route: 03-ED-50
Post Mile Limits: 64.40-66.38
Project Type: Culvert Lining and/or Replacement
Project ID (or EA): 03-XXXXXX-PV
Program Identification:
Phase: ☐ PID
☐ PA/ED
☒ PS&E

Regional Water Quality Control Board(s): Central Valley (Region 5)

1.	Is the project required to consider incorporating Treatment BMPs?	Yes ☐	No ☒
2.	Does the project disturb 5 or more acres of soil?	Yes ☐	No ☒
3.	Does the project disturb more than 1 acre of soil and not qualify for the Rainfall Erosivity Waiver?	Yes ☐	No ☒
4.	Does the project potentially create permanent water quality impacts?	Yes ☐	No ☒
5.	Does the project require a notification of ADL reuse	Yes ☐	No ☒

If the answer to any of the preceding questions is "Yes", prepare a Long Form – Storm Water Data Report.

Estimate Construction Start Date: 6/2011 Construction Completion Date: 9/2011
Separate Dewatering Permit (if yes, permit number) Yes ☐ Permit #_____ No ☒
Erosivity Waiver Yes ☐ Date: _____ No ☒

This Short Form – Storm Water Data Report has been prepared under the direction of the following Licensed Person. The Licensed Person attests to the technical information contained herein and the data upon which recommendations, conclusions, and decisions are based. Professional Engineer or Landscape Architect stamp required at PS&E.

REGISTERED PROFESSIONAL ENGINEER
BETSY ROSS
No. CXXXXX
Exp. 09-30-11
CIVIL
STATE OF CALIFORNIA

[Stamp Required for PS&E only)

Betsy Ross 10-8-10

Betsy Ross, Registered Project Engineer/Landscape Architect *Date*

I have reviewed the storm water quality design issues and find this report to be complete, current and accurate:

Friedrich Wilhelm von Steuben 10-8-10

Friedrich Wilhelm von Steuben, District/Regional SW Coordinator or Designee *Date*

EXAMPLE ONLY

1. Project Description

This is a maintenance project located on Route 50 in El Dorado County that includes the rehabilitation of nine culverts. The culverts are located at high elevations and have received traction sand and salt for over 50 years which has caused severe corrosion of the inverts. The culverts are all small, 18-inch or 24-inch diameter, corrugated metal pipe culverts. Failure to replace the culverts may result in sink holes and ultimately complete failure of the road which could discharge large amounts of sediment (among other problems).

The current proposed plan is to line seven culverts and replace two others. The culverts to be lined are located at the following post miles: 64.40, 64.72, 64.97, 65.25, 65.30, 65.40, and 66.38. The culverts to be replaced are located at the following post miles: 65.60 and 65.619. The drainage summary for the site indicates that the small size of the contributing watersheds in relation to the culvert diameters should allow for liners. The liners are expected to cause an insignificant change in capacity of the culverts. The project will maintain original line and grade and original purpose of the facility.

Per the EPA definition for the CGP, this project is considered routine maintenance because it maintains the original line and grade, hydraulic capacity, and original purpose of the facilities. This project provides preventative maintenance to existing highway facilities and will maintain existing facility functions. Since this project is routine maintenance, it is exempt from the Construction General Permit requirements.

There is little chance for negative water quality impacts because there will be no grading and very little soil disturbance. To avoid water quality and other environmental impacts the work will be scheduled for low flow periods, during which time the culverts will have no water. All drainages are ephemeral.

The Project falls within the Central Valley Regional Water Quality Control Board (RWQCB) boundaries. The RWQCB has defined the rainy season as October 15th through April 15th. The project is located in the Kyburz hydrologic sub-area (HSA 514.35) and the receiving waterbody is the South Fork American River. None of the water bodies in this hydrologic sub-area have TMDLs or are 303(d) listed. There are no high risk areas within the vicinity of the project and there are no existing permanent storm water treatment BMPs near or within the project limits.

No permits will be required for this work since all work will occur when the culverts are dry and in areas not meeting the wetlands criteria. The project Initial Site Assessment concluded that there are no significant hazardous waste/material issues for the project as proposed and there is a potential for ADL. The SSP for lead compliance plan will be included in the project documents.

Two of the culverts are within a jurisdictional area and will require 401 certification. One culvert will be lined with Cured In-Place Pipe (CIPP), and the other culvert will be replaced. The permit applications have been submitted and are currently in process. The Storm Water Coordinator has contacted the Regional Water Quality Control Board to determine the additional Project requirements for 401 certification. The following RWQCB requirements have been incorporated into the Project design:

Liner: Per the RWQCB requirements, this work will be scheduled during the non-rainy season. The rainy season is defined by the RWQCB as October 15 through April 15. All

EXAMPLE ONLY

construction is to take place outside of the rainy season. Project specifications have been updated to address proper installation, handling, and inspection of all CIPP liners.

Replacement: The total DSA for the culvert replacement is 0.01 acres. This area has been calculated using AutoCAD software and includes areas required for construction access and construction of headwalls and aprons. Per the RWQCB requirements, this work will be scheduled during the non-rainy season. The rainy season is defined by the RWQCB as October 15 through April 15. All construction is to take place outside of the rainy season.

2. Construction Site BMPs

Preparation of a Water Pollution Control Program (WPCP) is required. This project will require only limited equipment parking areas. However, if the contractor requires additional areas, the contract documents indicate that the contractor will be responsible for securing locations for staging and storage. The Old Echo Summit maintenance station is located adjacent to the project and has a large paved area if storage is needed.

The Construction Site BMP strategy for this project requires the implementation of the Construction Site BMPs identified in this section. Soil stabilization and sediment control shall consist of using straw and temporary check dams to provide run-on and run-off control and to prevent concentrated flow from eroding areas of soil disturbance. The large trees on site will be left in place to assure their roots will hold the stream bank together. In addition, a straw bale barrier, or similar material construct, will be placed in the CIPP work zone prior to beginning the work at the downstream position to ensure capture and sorbance of any potential, minor quantities of non-storm water discharges or debris. Compliance of the CGP can be met through the use of traditional BMPs; therefore, active treatment systems are not required.

Various non-storm water management, waste management, and housekeeping BMPs shall be used throughout the duration of the project and will be included in the Construction Site Management cost item. Any grout wastes shall be managed through the use of concrete washout facilities.

The following BMPs are included as separate bid line items: scheduling, temporary fence (type ESA), temporary tacked straw, temporary check dams, temporary gravel bag berm, temporary straw bale barrier, temporary concrete washout, pavements, preparation of a Water Pollution Control Program, and storm water sampling and analysis. Supplemental funds for stormwater sampling and analysis (BEES item 066597) has been included to ensure that chemicals from the CIPP liner do not leach into surface water. The following BMPs are included as a lump sum under the Construction Site Management item: spill prevention control, concrete waste management, paving & grinding operations, concrete curing, and concrete finishing.

The Actual Unit Cost Method (Option 4) was used to estimate costs for Construction Site BMPs. The following quantities for the selected Construction Site BMPs were estimated from take-off measurements using the layout sheets.

EXAMPLE ONLY

BEES	Temporary BMPs - PPDG Appendix C	Quantity	Unit
	Scheduling	1	LS
071325	Temporary Fence (Type ESA)	1,400	ft
074054	Temporary Tacked Straw	1,800	ft^2
074035	Temporary Check Dams	36	EA
074031	Temporary Gravel Bag Berm	350	ft
074030	Temporary Straw Bale Barrier	50	ft
074042	Temporary Concrete Washout (Portable)	2	LS
	Pavements	1	LS
074017	Water Pollution Control Program (WPCP)	1	LS
066597	Storm Water Sampling and Analysis	1	LS
074016	***Construction Site Management**	1	LS
*CSM**	*Spill Prevention and Control*	*1*	*LS*
*CSM**	*Concrete Waste Management*	*1*	*LS*
*CSM**	*Paving & Grinding Operations*	*1*	*LS*
*CSM**	*Concrete Curing*	*1*	*LS*
*CSM**	*Concrete Finishing*	*1*	*LS*

A meeting was held with the District Construction Stormwater Coordinator (CSWC), William Alexander, on September 10, 2010. The meeting was held on site to discuss the temporary construction site BMP implementation strategy and was attended by Betsy Ross (Project Engineer), William Alexander (CSWC), and Paul Revere (District Maintenance Stormwater Coordinator). Topics discussed at the coordination meeting include: construction site BMP selection and construction site BMP quantity estimating strategy. Following this meeting, email communication was maintained between all parties until concurrence was reached.

Concurrence on the implementation strategy was obtained on September 30, 2010 from William Alexander via an email to Betsy Ross.

3. Required Attachments

- Vicinity Map
- Evaluation Documentation Form
- Construction Site BMP Consideration Form

4. Supplemental Attachments

- SWDR Tracking Form
- Storm Water BMP Cost Summary
- Partial Project Plans (2)
- Checklist CS-1, Parts 1-6 [only those parts that are applicable]

EXAMPLE ONLY

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	64.4/66.4	1	1

STATE OF CALIFORNIA

DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON

STATE HIGHWAY

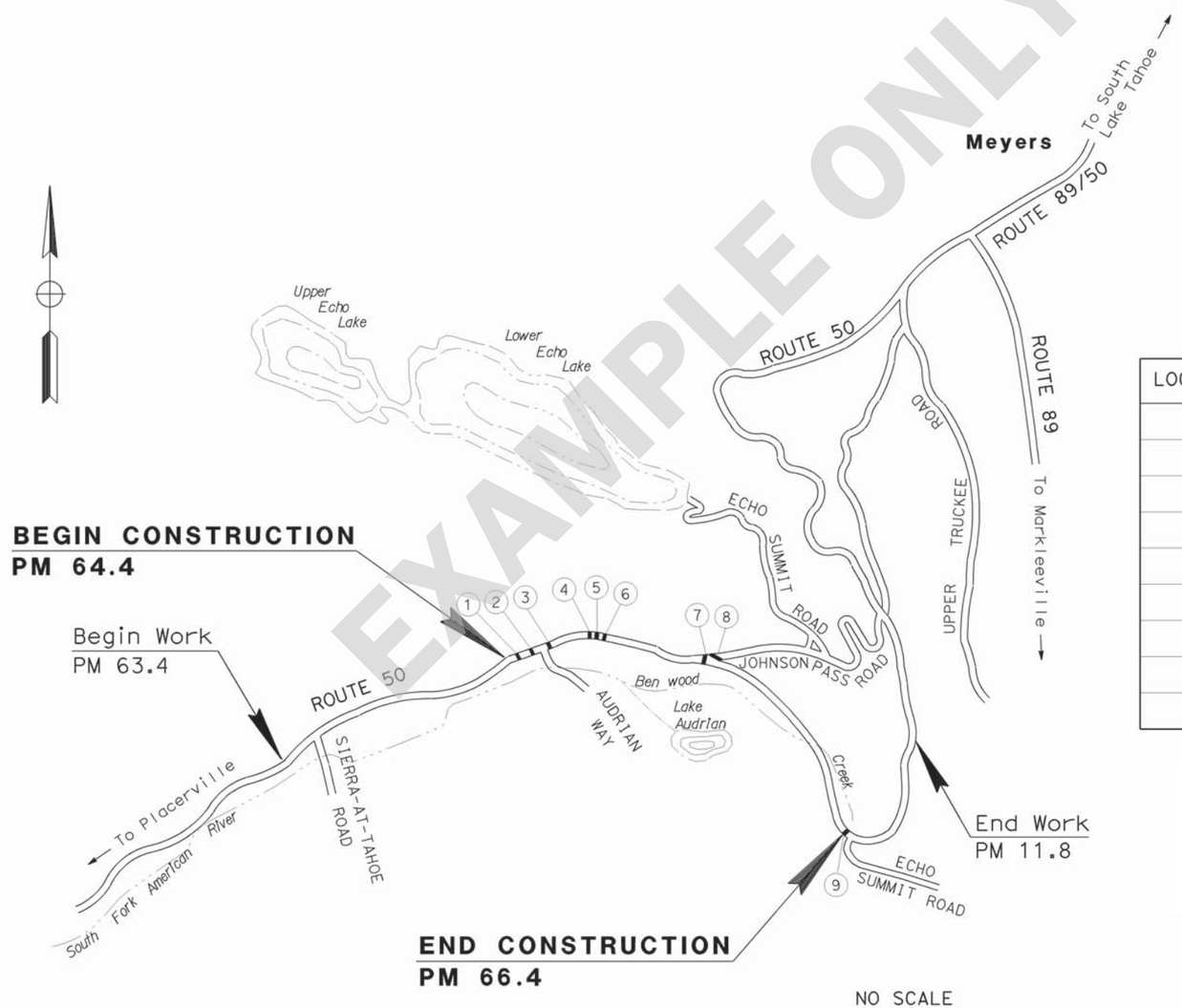
IN EL DORADO COUNTY

ABOUT 5 MILES WEST OF MEYERS AT VARIOUS LOCATIONS FROM 0.4 MILE WEST OF AUDRIAN WAY TO 0.8 MILE EAST OF JOHNSON PASS ROAD

LOCATION MAP

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To get to the Caltrans web site, go to: http://www.dot.ca.gov



EXAMPLE ONLY

LOCATIONS OF CONSTRUCTION

LOCATION	COUNTY	ROUTE	POST MILE	LEFT/RIGHT
1	ED	50	64.40	L†/R†
2	ED	50	64.72	L†/R†
3	ED	50	64.98	L†/R†
4	ED	50	65.25	L†/R†
5	ED	50	65.30	L†/R†
6	ED	50	65.40	L†/R†
7	ED	50	65.60	L†/R†
8	ED	50	65.62	L†
9	ED	50	66.38	L†/R†

Betsy Ross 10-8-10
Project Engineer Date
Registered Civil Engineer

REGISTERED PROFESSIONAL ENGINEER
BETSY ROSS
No. CXXXXX
Exp. 9-30-11
CIVIL
STATE OF CALIFORNIA

Plans Approval Date

The Contractor shall possess the class (or Classes) of license as specified in the ''Notice to Contractors.''

PROJECT ENGINEER	DATE	PROJECT MANAGER	DATE
B. Ross	10/10	G. Washington	10/10

Contract No. 03-XXXXXX

LAST REVISION 10-01-10

EXAMPLE ONLY

DATE: _____10-08-10_____

Project ID (or EA): _____03-XXXXXX-PV_____

NO.	CRITERIA	YES ✓	NO ✓	SUPPLEMENTAL INFORMATION FOR EVALUATION
1.	Begin Project Evaluation regarding requirement for consideration of Treatment BMPs	✓		See Figure 4-1, Project Evaluation Process for Consideration of Permanent Treatment BMPs. Go to 2
2.	Is this an emergency project?		✓	If **Yes**, go to 10. If **No**, continue to 3.
3.	Have TMDLs or other Pollution Control Requirements been established for surface waters within the project limits? Information provided in the water quality assessment or equivalent document.		✓	If **Yes**, contact the District/Regional NPDES Coordinator to discuss the Department's obligations under the TMDL (if Applicable) or Pollution Control Requirements, go to 9 or 4. _____ *(Dist./Reg. SW Coordinator initials*) If **No**, continue to 4.
4.	Is the project located within an area of a local MS4 Permittee?		✓	If **Yes**. *(NA)*, go to 5. If **No**, document in SWDR go to 5.
5.	Is the project directly or indirectly discharging to surface waters?	✓		If **Yes**, continue to 6. If **No**, go to 10.
6.	Is it a new facility or major reconstruction?		✓	If **Yes**, continue to 8. If **No**, go to 7.
7.	Will there be a change in line/grade or hydraulic capacity?		✓	If **Yes**, continue to 8. If **No**, go to 10.
8.	Does the project result in a net increase of one acre or more of new impervious surface?			If **Yes**, continue to 9. If **No**, go to 10. *0 (Net Increase New Impervious Surface)*
9.	Project is required to consider approved Treatment BMPs.		See Sections 2.4 and either Section 5.5or 6.5 for BMP Evaluation and Selection Process. Complete Checklist T-1 in this Appendix E.	
10.	Project is not required to consider Treatment BMPs. AWX *(Dist./Reg. Design SW Coord. Initials)* BK *(Project Engineer Initials)* 10-8-10 *(Date)*	✓	Document for Project Files by completing this form, and attaching it to the SWDR.	

EXAMPLE ONLY

See Figure 4-1, Project Evaluation Process for Consideration of Permanent Treatment BMPs

DATE: _____10-08-10_____

Project ID (or EA): ___03-XXXXXX-PV_____

Project Evaluation Process for the Consideration of Construction Site BMPs

NO.	CRITERIA	YES ✓	NO ✓	SUPPLEMENTAL INFORMATION
1.	Will construction of the project result in areas of disturbed soil as defined by the Project Planning and Design Guide (PPDG)?	✓		If Yes, Construction Site BMPs for Soil Stabilization (SS) will be required. Complete CS-1, Part 1. Continue to 2. If No, Continue to 3.
2.	Is there a potential for disturbed soil areas within the project to discharge to storm drain inlets, drainage ditches, areas outside the right-of-way, etc?	✓		If Yes, Construction Site BMPs for Sediment Control (SC) will be required. Complete CS-1, Part 2. Continue to 3.
3.	Is there a potential for sediment or construction related materials and wastes to be tracked offsite and deposited on private or public paved roads by construction vehicles and equipment?		✓	If Yes, Construction Site BMPs for Tracking Control (TC) will be required. Complete CS-1, Part 3. Continue to 4.
4.	Is there a potential for wind to transport soil and dust offsite during the period of construction?		✓	If Yes, Construction Site BMPs for Wind Erosion Control (WE) will be required. Complete CS-1, Part 4. Continue to 5.
5.	Is dewatering anticipated or will construction activities occur within or adjacent to a live channel or stream?		✓	If Yes, Construction Site BMPs for Non-Storm Water Management (NS) will be required. Complete CS-1, Part 5. Continue to 6.
6.	Will construction include saw-cutting, grinding, drilling, concrete or mortar mixing, hydro-demolition, blasting, sandblasting, painting, paving, or other activities that produce residues?	✓		If Yes, Construction Site BMPs for Non-Storm Water Management (NS) will be required. Complete CS-1, Parts 5 & 6. Continue to 7.
7.	Are stockpiles of soil, construction related materials, and/or wastes anticipated?		✓	If Yes, Construction Site BMPs for Waste Management and Materials Pollution Control (WM) will be required. Complete CS-1, Part 6. Continue to 8.
8.	Is there a potential for construction related materials and wastes to have direct contact with precipitation; stormwater run-on, or stormwater runoff; be dispersed by wind; be dumped and/or spilled into storm drain systems?	✓		If Yes, Construction Site BMPs for Waste Management and Materials Pollution Control (WM) will be required. Complete CS-1, Part 6. Continue to 9.
9.	End of checklist.	✓	Document for Project Files by completing this form, and attaching it to the SWDR.	

BR 10-8-10

PE to initialize after concurrence with Construction (PS&E only) *Date*

EXAMPLE ONLY

Rpt_to_hq	Dist_EA	District	EA	County	Route	Beg_PM	End_PM	Descrip	Phase	LongSWDR	PhaseRptDate	Exempt	TBMP	Pollution_Program	Disturbance Acr	AddImpArea	PercentTreated	MS4Area	MS4CiCo	ter Bodies Affec	Criteria	BioStrip	BioSwale	Detention	Infiltration	InfilTrench	GSRD	TST	DryWeath	MedFilter	MCTT	WetBasin	Const_Start	Const_Comp	SWComment
08-Oct-10	03-XXXXXX	3	XXXXXX	ED	50	64.4	66.38	Culvert Lining and/or Replacement	PID	FALSE	08-Oct-10	TRUE	FALSE	SWPPP	1	0	FALSE			South Fork		0	0	0	0	0	0	0	0	0	0	0	01-Jun-11	01-Sep-11	

EXAMPLE ONLY

EXAMPLE ONLY

Storm Water BMP Cost Summary - PS&E
THIS INFORMATION IS FOR **CALTRANS INTERNAL USE ONLY**

Temporary Construction Site BMPs

BEES	Temporary BMPs - PPDG Appendix C	SSP/nSSP (#, Y or N)	STD. Det. (Y or N)	Quantity	Unit	Unit Cost ($/Unit)	Cost ($)
	Temporary Soil Stabilization						
	Scheduling		No	1	LS	500	$ 500
071325	Temporary Fence (Type ESA)	07-446	Yes	1,400	ft	3	$ 4,284
074054	Temporary Tacked Straw	07-354		1,800	ft^2	3	$ 4,500
074035	Temporary Check Dams	07-415	Yes	36	EA	50	$ 1,800
						Subtotal Soil Stabilization BMPs	**$ 11,084**

	Temporary Sediment Control	SSP/nSSP (#, Y or N)	STD. Det. (Y or N)	Quantity	Unit	Unit Cost ($/Unit)	Cost
074031	Temporary Gravel Bag Berm	07-470	No	350	ft	10	$ 3,500
074030	Temporary Straw Bale Barrier	07-460	Yes	50	ft	15	$ 750
						Subtotal Sediment Control BMPs	**$ 4,250**

BEES	***Temporary Waste Management Control***	SSP/nSSP (#, Y or N)	STD. Det. (Y or N)	Quantity	Unit	Unit Cost ($/Unit)	Cost
CSM*	Spill Prevention and Control	07-346	No	1	LS		$ -
	Concrete Waste Management	07-346	No	1	LS	500	$ 500
074042	Temp. Concrete Washout (Portable)	07-406	No	2	LS	1,100	$ 2,200
						Subtotal Waste Management & Materials Handling BMPs	**$ 2,700**

BEES	***Temporary Non-Storm Water Management***	SSP/nSSP (#, Y or N)	STD. Det. (Y or N)	Quantity	Unit	Unit Cost ($/Unit)	Cost
CSM*	Paving & Grinding Operations			1			$ -
	Pavements	S5-250	No	1	LS	4,000	$ 4,000
CSM*	Concrete Curing	07-346	No	1	LS		$ -
CSM*	Concrete Finishing	07-346	No	1	LS		$ -
074016	***Construction Site Management**	07-346	No	1	LS	10,000	$ 10,000
						Subtotal Non-Storm Water Management	**$ 16,000**

BEES	***Miscellaneous Items***	SSP/nSSP (#, Y or N)	STD. Det. (Y or N)	Quantity	Unit	Unit Cost ($/Unit)	Cost
074017	Water Pollution Control Program (WPCP)	07-340	No	1	LS	1,800	$ 1,800
066597	Storm Water Sampling and Analysis		No	1	LS	2,800	$ 2,800
						Subtotal Miscellaneous Items	**$ 4,600**

Total Construction Site BMP Costs	**$ 38,634**

EXAMPLE ONLY

EXAMPLE ONLY

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	ED	50	64.4/66.4	1	2

REGISTERED CIVIL ENGINEER 10-8-10

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER BETSY ROSS No. CXXXXX Exp. 09-30-11 CIVIL STATE OF CALIFORNIA

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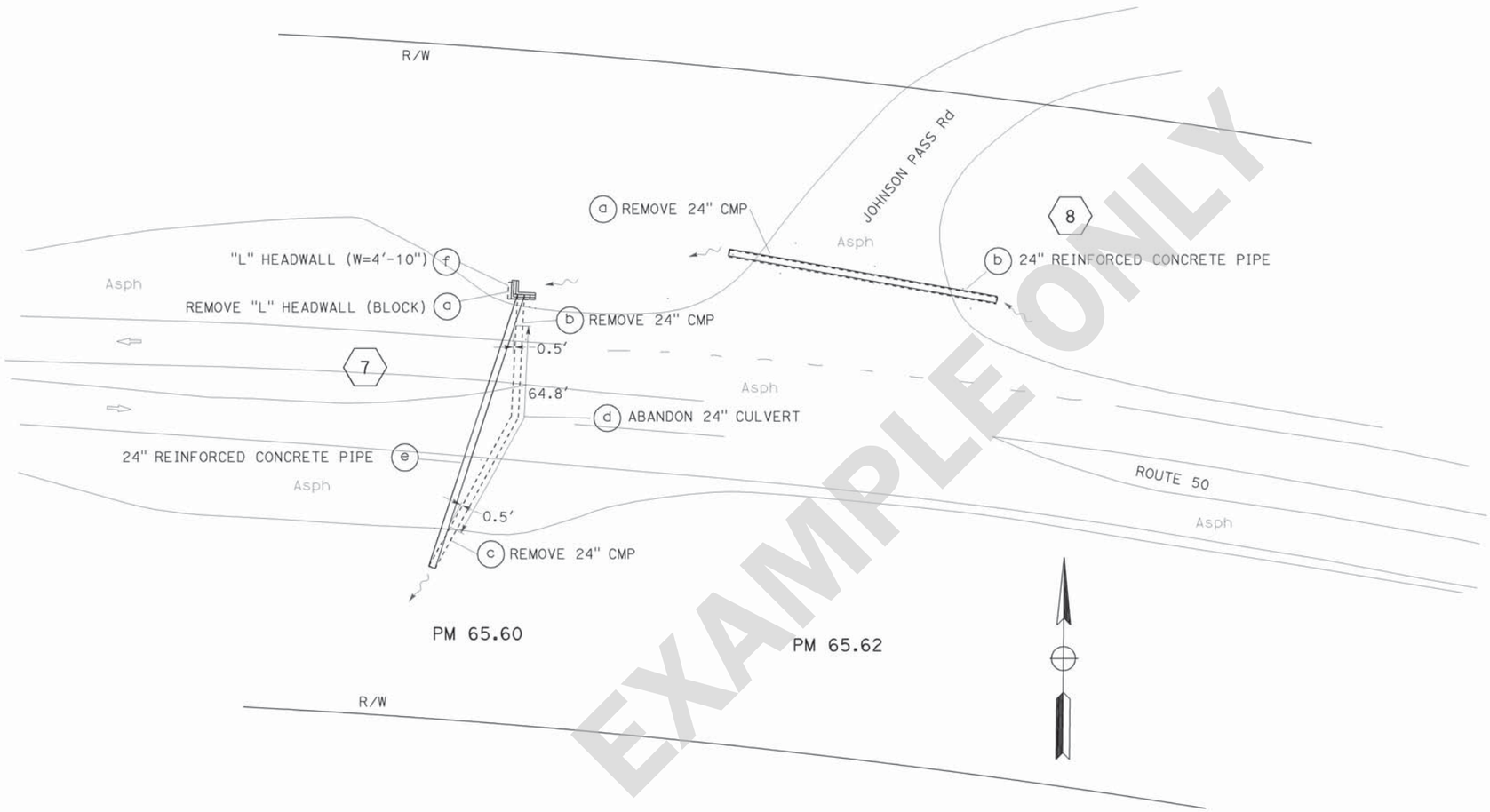
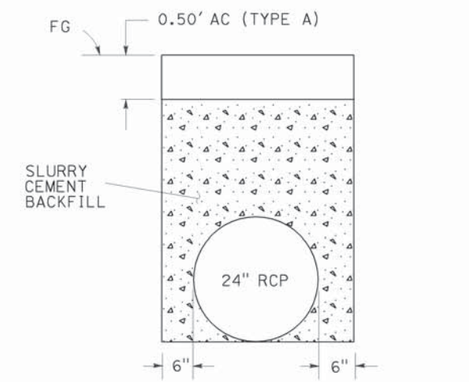
NOTES:

1. FOR COMPLETE R/W, SEE R/W RECORD MAPS AT DISTRICT OFFICE.
2. DRAINAGE SYSTEM No. 7 - "L" HEADWALL SKEWED 15° FROM RCP CULVERT.
3. *SLURRY CEMENT MAY BE USED FOR BACKFILL AT CULVERT REMOVAL LOCATIONS AT DRAINAGE SYSTEM No. 7.





STRUCTURAL BACKFILL (CULVERT)*

NO SCALE

EXAMPLE ONLY

CONSTRUCTION DETAILS

SCALE 1"=20'

C-1

DATE	REVISED BY	DATE REVISED

CALCULATED/DESIGNED BY

CHECKED BY

PROJECT ENGINEER BETSY ROSS

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans NORTH REGION-DISTRICT 3 DIVISION OF MAINTENANCE

LAST REVISION 10-01-10

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => s128033
DGN FILE => 032m580ga001.dgn

CU XXXXX

EA XXXXXX

EXAMPLE ONLY

NOTE:
FOR COMPLETE R/W, SEE R/W RECORD MAPS AT DISTRICT OFFICE.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	ED	50	64.4/66.4	2	2

REGISTERED CIVIL ENGINEER 10-8-10

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER BETSY ROSS No. CXXXXX Exp. 09-30-11 CIVIL STATE OF CALIFORNIA

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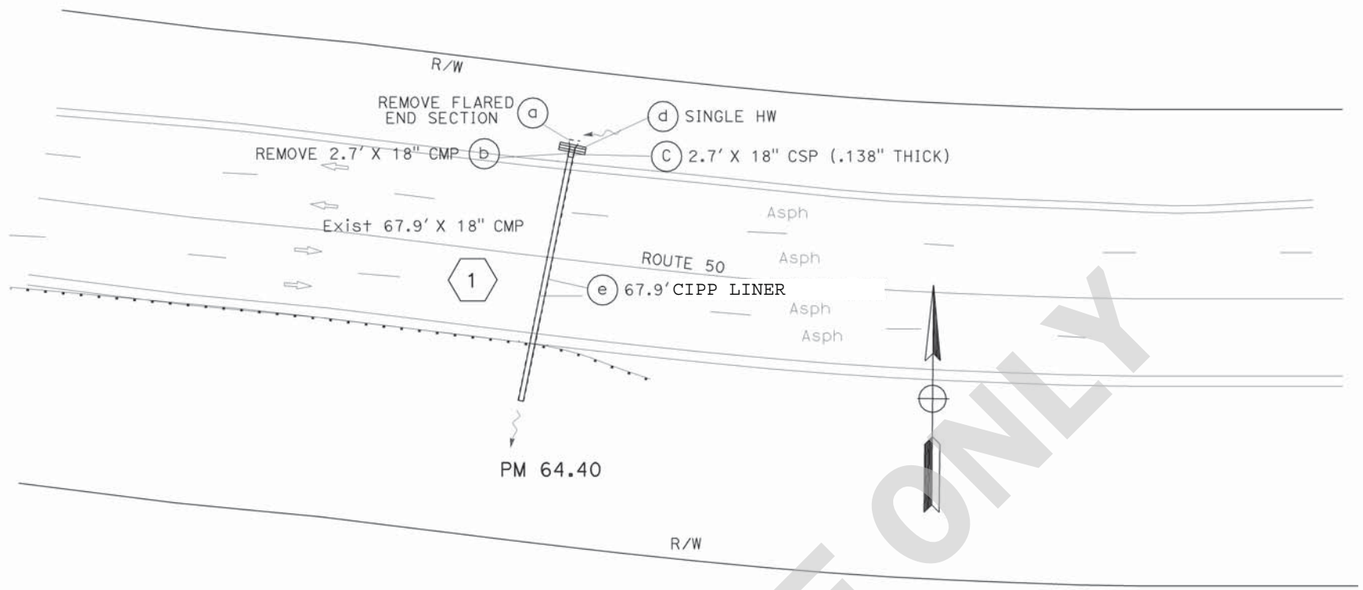

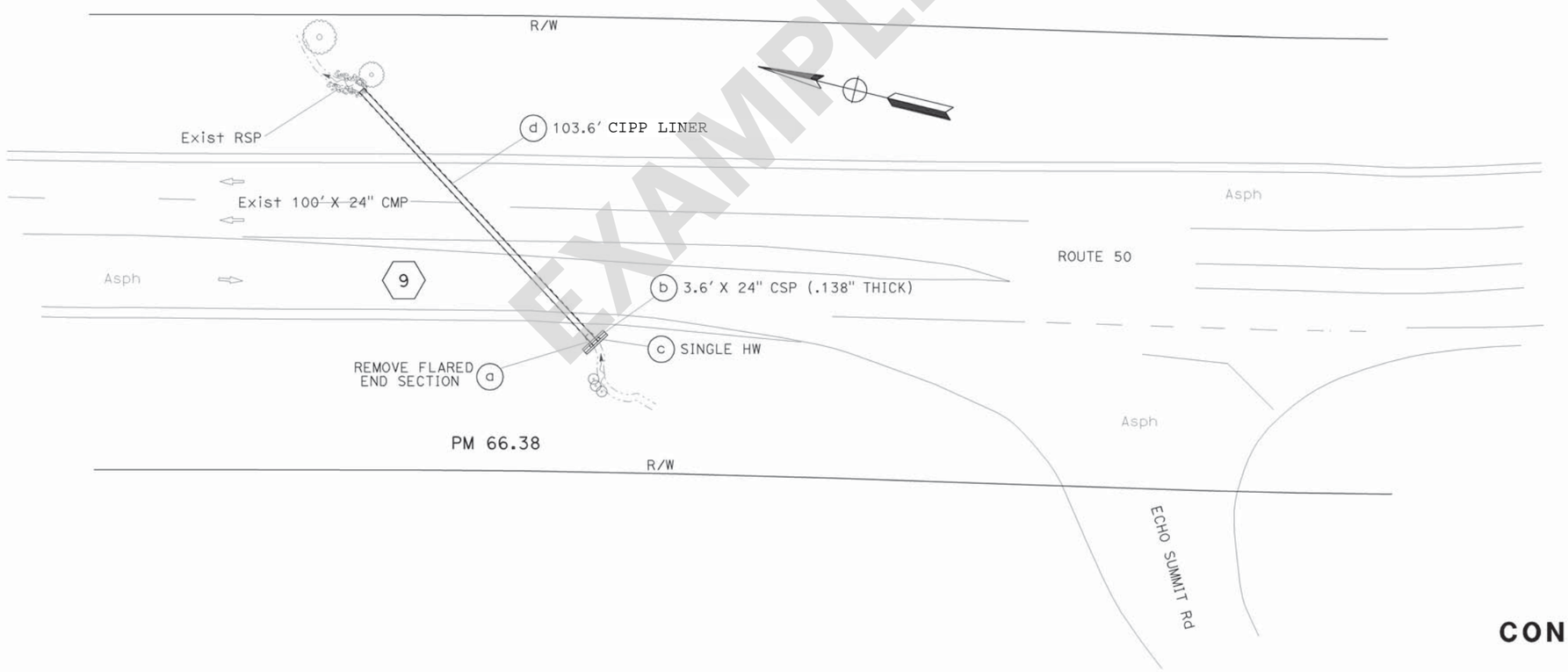

EXAMPLE ONLY

CONSTRUCTION DETAILS

SCALE 1"=20'

C-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans NORTH REGION-DISTRICT 3
DIVISION OF MAINTENANCE

PROJECT ENGINEER BETSY ROSS

CALCULATED/DESIGNED BY
CHECKED BY
REVISED BY
DATE REVISED
DATE

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => s128033
DGN FILE => 032m580ga002.dgn

CU XXXXX
EA XXXXXX

LAST REVISION 10-01-10

EXAMPLE ONLY

Construction Site BMPs
Checklist CS-1, Part 1

Prepared by: B. Ross Date: 10-08-10 District-Co-Route: 03-ED-50

PM : 64.40-66.38 Project ID (or EA): 03-XXXXXX-PV RWQCB: Central Valley (5)

Soil Stabilization

General Parameters

1. How many rainy seasons are anticipated between begin and end of construction? 0
2. What is the total disturbed soil area for the project? (ac) 0.05
   (a) How much of the project DSA consists of slopes 4:1 (h:v) or flatter? (ac) 0.05
   (b) How much of the project DSA consists of 4:1 (h:v) < slopes < 2:1 (h:v)? (ac) 0
   (c) How much of the project DSA consists of slopes 2:1 (h:v) and steeper? (ac) 0
   (d) How much of the project DSA consists of slopes with slope lengths longer than 20 ft? (ac) 0
3. What rainfall area does the project lie within? (Refer to Table 2-1 of the Construction Site Best Management Practices Manual) 3
4. Review the required combination of temporary soil stabilization and temporary sediment controls and barriers for area, slope inclinations, rainy and non-rainy season, and active and non-active disturbed soil areas. (Refer to Tables 2-2, and 2-3 of the Construction Site Best Management Practices Manual for Rainfall Area requirements.) ☒ Complete

Scheduling (SS-1)

5. Does the project have a duration of more than one rainy season and have disturbed soil area in excess of 25 acres? ☐ Yes ☒ No
   (a) Include multiple mobilizations (Move-in/Move-out) as a separate contract bid line item to implement permanent erosion control or revegetation work on slopes that are substantially complete. (Estimate at least 6 mobilizations for each additional rainy season. Designated Construction Representative may suggest an alternate number of mobilizations.) ☐ Complete
   (b) Edit Order of Work specifications for permanent erosion control or revegetation work to be implemented on slopes that are substantially complete. ☐ Complete

EXAMPLE ONLY

(c) Edit permanent erosion control or revegetation specifications to require seeding and planting work to be performed when optimal. ☐Complete

Preservation of Existing Vegetation (SS-2)

6. Do Environmentally Sensitive Areas (ESAs) exist within or adjacent to the project limits? (Verify the completion of DPP-1, Part 5) ☒Yes ☐No

   (a) Verify the protection of ESAs through delineation on all project plans. ☒Complete

   (b) Protect from clearing and grubbing and other construction disturbance by enclosing the ESA perimeter with high visibility plastic fence or other BMP. ☒Complete

7. Are there areas of existing vegetation (mature trees, native vegetation, landscape planting, etc.) that need not be disturbed by project construction? Will areas designated for proposed treatment BMPs need protection (infiltration characteristics, vegetative cover, etc.)? (Coordinate with District Environmental and Construction to determine limits of work necessary to preserve existing vegetation to the maximum extent practicable.) ☒Yes ☐No

   (a) Designate as outside of limits of work (or designate as ESAs) and show on all project plans. ☒Complete

   (b) Protect with high visibility plastic fence or other BMP. ☒Complete

8. If yes for 6, 7, or both, then designate ESA fencing as a separate contract bid line item, *if not already incorporated as part of design pollution prevention work (See DPP-1, Part 5).* ☒Complete

Slope Protection

9. Provide a soil stabilization BMP(s) appropriate for the DSA, slope steepness, slope length, and soil erodibility. (Consult with District/Regional Landscape Architect.) **NA**

   (a) Select SS-3 (Hydraulic Mulch), SS-4 (Hydroseeding), SS-5 (Soil Binders), SS-6 (Straw Mulch), SS-7 (Geotextiles, Mats, Plastic Covers, and Erosion Control Blankets), SS-8 (Wood Mulching), other BMPs or a combination to cover the DSA throughout the project's rainy season. ☐Complete

   (b) Increase the quantities by 25% for each additional rainy season. (Designated Construction Representative may suggest an alternate increase.) ☐Complete

   (c) Designate as a separate contract bid line item. ☐Complete

EXAMPLE ONLY

Slope Interrupter Devices

10. Provide slope interrupter devices for all slopes with slope lengths equal to or greater than of 20 ft in length. (Consult with District/Regional Landscape Architect and Designated Construction Representative.) **NA**

    (a) Select SC-5 (Fiber Rolls) or other BMPs to protect slopes throughout the project's rainy season. ☐Complete

    (b) For slope inclination of 4:1 (h:v) and flatter, SC-5 (Fiber Rolls) or other BMPs shall be placed along the contour and spaced 20 ft on center. ☐Complete

    (c) For slope inclination between 4:1 (h:v) and 2:1 (h:v), SC-5 (Fiber Rolls) or other BMPs shall be placed along the contour and spaced 15 ft on center. ☐Complete

    (d) For slope inclination of 2:1 (h:v) and greater, SC-5 (Fiber Rolls) or other BMPs shall be placed along the contour and spaced 10 ft on center. ☐Complete

    (e) Increase the quantities by 25% for each additional rainy season. (Designated Construction Representative may suggest alternate increase.) ☐Complete

    (f) Designate as a separate contract bid line item. ☐Complete

Channelized Flow

11. Identify locations within the project site where concentrated flow from stormwater runoff can erode areas of soil disturbance. Identify locations of concentrated flow that enters the site from outside of the right-of-way (off-site run-on). ☒Complete

    (a) Utilize SS-7 (Geotextiles, Mats, Plastic Covers, and Erosion Control Blankets), SS-9 (Earth Dikes/Swales, Ditches), SS-10 (Outlet Protection/Velocity Dissipation), SS-11 (Slope Drains), SC-4 (Check Dams), or other BMPs to convey concentrated flows in a non-erosive manner. **Check dams** ☒Complete

    (b) Designate as a separate contract bid line item. ☒Complete

EXAMPLE ONLY

Construction Site BMPs
Checklist CS-1, Part 2

Prepared by: B. Ross Date: 10-08-10 District-Co-Route: 03-ED-50

PM : 64.40-66.38 Project ID (or EA): 03-XXXXXX-PV RWQCB: Central Valley (5)

Sediment Control

Perimeter Controls - Run-off Control

1. Is there a potential for sediment laden sheet and concentrated flows to discharge offsite from runoff cleared and grubbed areas, below cut slopes, embankment slopes, etc.? ☐Yes ☒No

   (a) Select linear sediment barrier such as SC-1 (Silt Fence), SC-5 (Fiber Rolls), SC-6 (Gravel Bag Berm), SC-8 (Sand Bag Barrier), SC-9 (Straw Bale Barrier), or a combination to protect wetlands, water courses, roads (paved and unpaved), construction activities, and adjacent properties. (Coordinate with District Construction for selection and preference of linear sediment barrier BMPs.) ☐Complete

   (b) Increase the quantities by 25% for each additional rainy season. (Designated Construction Representative may suggest an alternate increase.) ☐Complete

   (c) Designate as a separate contract bid line item. ☐Complete

Perimeter Controls - Run-on Control

2. Do locations exist where sheet flow upslope of the project site and where concentrated flow upstream of the project site may contact DSA and construction activities? ☒Yes ☐No

   (a) Utilize linear sediment barriers such as SS-9 (Earth Dike/Drainage Swales and Lined Ditches), SC-5 (Fiber Rolls), SC-6 (Gravel Bag Berm), SC-8 (Sand Bag Barrier), SC-9 (Straw Bale Barrier), or other BMPs to convey flows through and/or around the project site. (Coordinate with District Construction for selection and preference of perimeter control BMPs.) **Temporary check dams** ☒Complete

   (b) Designate as a separate contract bid line item. ☒Complete

EXAMPLE ONLY

Storm Drain Inlets

3. Do existing or proposed drainage inlets exist within the project limits? ☐Yes ☒No

   (a) Select SC-10 (Storm Drain Inlet Protection) to protect municipal storm drain systems or receiving waters wetlands at each drainage inlet. (Coordinate with District Construction for selection and preference of inlet protection BMPs.) ☐Complete

   (b) Designate as a separate contract bid line item. ☐Complete

4. Can existing or proposed drainage inlets utilize an excavated sediment trap as described in SC-10 (Storm Drain Inlet Protection- Type 2)? ☐Yes ☐No

   (a) Include with other types of SC-10 (Storm Drain Inlet Protection). ☐Complete

Sediment/Desilting Basin (SC-2)

5. Does the project lie within a Rainfall Area where the required combination of temporary soil stabilization and sediment control BMPs includes desilting basins? (Refer to Tables 2-1, 2-2, and 2-3 of the Construction Site Best Management Practices Manual for Rainfall Area requirements.) ☐Yes ☒No

   (a) Consider feasibility for desilting basin allowing for available right-of-way within the project limits, topography, soil type, disturbed soil area within the watershed, and climate conditions. Document if the inclusion of sediment/desilting basins is infeasible. ☐Complete

   (b) If feasible, design desilting basin(s) per the guidance in SC-2 Sediment/ Desilting Basins of the Construction Site BMP Manual to maximize capture of sediment-laden runoff. ☐Complete

   Designate as a separate contract bid item. ☐Complete

6. Is ATS to be used for controlling sediment? ☐Yes ☒No

   (a) If "yes", then will desilting basin or other means of natural storage be used? ☐Yes ☐No

   (b) If "no", then plan for storage tanks sufficient to hold treatment volume. ☐Complet

7. Will the project benefit from the early implementation of proposed permanent Treatment BMPs? (Coordinate with District Construction.) **NA** ☐Yes ☐No

   (a) Edit Order of Work specifications for permanent treatment BMP work to be implemented in a manner that will allow its use as a construction site BMP. ☐Complete

Sediment Trap (SC-3)

8. Can sediment traps be located to collect channelized runoff from disturbed soil areas prior to discharge? **NA** ☐Yes ☐No

   (a) Design sediment traps in accordance with the Construction Site BMP Manual. ☐Complete

   (b) Designate as a separate contract bid line item. ☐Complete

EXAMPLE ONLY

Construction Site BMPs
Checklist CS-1, Part 5

Prepared by: B. Ross Date: 10-08-10 District-Co-Route: 03-ED-50

PM : 64.40-66.38 Project ID (or EA): 03-XXXXXX-PV RWQCB: Central Valley (5)

Non-Storm Water Management

Temporary Stream Crossing (NS-4) & *Clear Water Diversion* (NS-5)

1. Will construction activities occur within a waterbody or watercourse such as a lake, wetland, or stream? (Coordinate with District Construction for selection and preference for stream crossing and clear water diversion BMPs.) ☒Yes ☐No

   (a) Select from types offered in NS-4 (Temporary Stream Crossing) to provide access through watercourses consistent with permits and agreements.[1] ☒Complete

   (b) Select from types offered in NS-5 (Clear Water Diversion) to divert watercourse consistent with permits and agreements.[1] ☒Complete

   (c) Designate as a separate contract bid line item(s). ☒Complete

Other Non-Storm Water Management BMPs

2. Are construction activities anticipated that will generate wastes or residues with the potential to discharge pollutants? ☒Yes ☐No

   (a) Identify potential pollutants associated with the anticipated construction activity and select the corresponding BMP such as NS-1 (Water Conservation Practices), NS-2 (Dewatering Operations), NS-3 (Paving and Grinding Operations), 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), and NS-15 (Structure Demolition/Removal Over or Adjacent to Water).[1] **Paving and grinding operations, concrete curing and finishing** ☒Complete

   (b) Verify that costs for non-stormwater management BMPs are identified in the contract documents. Designate BMP as a separate contract bid line item if the requirements in Construction Site Management (SSP 07-346) are anticipated to be inadequate or if requested by Construction. **CSM requirements are adequate** ☒Complete

EXAMPLE ONLY

[1] Coordinate with District Environmental for consistency with US Army Corps of Engineers 404 and 401 permits and Dept. of Fish and Game 1601 Streambed alteration Agreements.

Construction Site BMPs
Checklist CS-1, Part 6

Prepared by: B. Ross Date: 10-08-10 District-Co-Route: 03-ED-50

PM : 64.40-66.38 Project ID (or EA): 03-XXXXXX-PV RWQCB: Central Valley (5)

Waste Management & Materials Pollution Control

Concrete Waste Management (WM-8)

1. Does the project include concrete placement or mortar mixing? ☒Yes ☐No

   (a) Select from types offered in WM-8 (Concrete Waste Management) to provide concrete washout facilities. In addition, consider portable concrete washouts and vendor supplied concrete waste management services. (Coordinate with District Construction for selection and preference of waste management and materials pollution control BMPs.) **temporary concrete washout (portable)** ☒Complete

   (b) Designate as a separate contract bid line item if the quantity of concrete waste and washout are anticipated to exceed 5.2 yd^3 or if requested by Construction. ☒Complete

Other Waste Management and Materials Pollution Controls

2. Are construction activities anticipated that will generate wastes or residues with the potential to discharge pollutants? ☒Yes ☐No

   (a) Identify potential pollutants associated with the anticipated construction activity and select the corresponding BMP such as WM-1 (Material Delivery and Storage), WM-2 (Material Use), WM-4 (Spill Prevention and Control), WM-5 (Solid Waste Management), WM-6 (Hazardous Waste Management), WM-7 (Contaminated Soil Management), WM-9 (Sanitary/Septic Waste Management) and WM-10 (Liquid Waste Management) **Included under concrete waste management in the construction site management item** ☒Complete

   (b) Verify that costs for waste management and materials pollution control BMPs are identified in the contract documents. Designate BMP as a separate contract bid line item if the requirements in Construction Site Management (SSP 07-346) are anticipated to be inadequate or if requested by Construction. **CSM requirements are adequate** ☒Complete

Temporary Stockpiles (Soil, Materials, and Wastes)

3. Are stockpiles of soil, etc. anticipated during construction? ☐Yes ☒No

   (a) Select WM-3 (Stockpile Management), SS-3 (Hydraulic Mulch), SS-4 (Hydroseeding), SS-5 (Soil Binders), SS-7 (Geotextiles, Mats, Plastic Covers, and Erosion Control Blankets), or a combination as appropriate to cover temporary stockpiles of soil, etc. ☐Complete

EXAMPLE ONLY

(b) Select linear sediment barrier such as SC-1 (Silt Fence), SC-5 (Fiber Rolls), SC-6 (Gravel Bag Berm), SC-8 (Sand Bag Barrier), SC-9 (Straw Bale Barrier), or a combination to encircle temporary stockpiles of soil, etc. (Coordinate with District Construction for selection and preference of BMPs related to stockpiles.) ☐ Complete

(c) Designate as a separate contract bid line item if the requirements in Construction Site Management (SSP 07-346) are anticipated to be inadequate or if requested by Construction. ☐ Complete

4. Is there a potential for dust and debris from construction material (fill material, etc.) and waste (concrete, contaminated soil, etc.) stockpiles to be transported offsite by wind? ☐ Yes ☒ No

(a) Select SS-7, temporary cover, plastic sheeting or other BMP to cover stockpiles subject to wind erosion year-round, especially when significant wind and dry conditions are anticipated during project construction. (Coordinate with District Construction for selection and preference of wind erosion control BMPs.) ☐ Complete

(b) Designate as a separate contract bid line item. ☐ Complete

EXAMPLE ONLY