Site-Specific Construction Best Management Practice Plan

Notice of General Permit Coverage (NGPC) File No. HIR10D928 Preparation Date 01 / 02 /2012

All sections of this template MUST be completed for National Pollutant Discharge Elimination System (NPDES) General Permit compliance. It is highly recommended that all sections of this template are completed in the initial submittal with the CWB Notice of Intent (NOI) General Form.

Please refer to the updated DOH-CWB Best Management Practice (BMP) procedures regarding Storm Water Discharges Associated with Construction Activities:

- DOH-CWB Procedures for the Use of New Technologies as BMPs
- DOH-CWB Procedures for Changing Construction Site-Specific BMPs
- Link to EPA Construction Storm Water Menu of BMPs

You are responsible for the design, implementation, operation, and maintenance of the site-specific BMPs Plan to ensure that storm water discharges associated with construction activities will not cause or contribute to a violation of applicable State water quality standards.

Have you provided appropria	e BMP	options to	satisfy the	e Site-Specific	BMP 1	requirement	s in
Section 3.0?							

- ☐ Yes
- No. If Section 3.0 of this template is not completed in the initial submittal you acknowledge that:
 - The Clean Water Branch (CWB) may not provide comments on information in Section 3.0.
 - You are required to submit Section 3.0 of the SSCBMP Plan to the CWB for comment at least 30 calendar days prior to starting construction activities. All questions/concerns that the DOH may have must be answered to the satisfaction of the CWB.
 - The CWB will review Section 3.0 of the SSCBMP Plan in the order received and will not expedite the review to accommodate your schedule.
 - The CWB has no required time limits to review any SSCBMP Plan after issuance of a Notice of General Permit Coverage (NGPC).
 - You are potentially exposing yourself to significant delays.

As of April 1, 2011, all applicants shall submit the SSCBMP plan using this template instead of the CWB-NOI Form C (Rev. 08/01/2007).

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Project	Inform	ation
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(Item No. 4 of CWB NOI General Form)

Farrington Highway Replac	ement of Maipalaoa Bridge
200 feet north of the intersec	ction between Farrington Highway and Maipalaoa Road
Waianae	Hawaii
96792	Oahu

Estimated Project Dates

Project Estimated Start Date: July 2013

Project Estimated Completion Date: May 2015

Certification of the CWB SSCBMP Plan

(Item Nos. 6.a., 6.b., 6.c., 6.d., or 7 of CWB NOI General Form) The certifying person and duly authorized representative shall meet the requirements of Hawaii Administrative Rules, Section 11-55-07.

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

Signature: Menny Mins	Date: MAR 0 9 2012
Person Name: Glenn M. Okimoto, Ph.D.	
Person Position Title: <u>Director of Transportation</u>	*
Person Company or Agency: State of Hawaii	
Department: <u>Department of Transportation</u>	
Division: <u>N/A</u>	
Phone Number: <u>(808) 587-2150</u>	Fax No.: <u>(808) 587-2167</u>
Person Email: <u>Glenn.M.Okimoto@hawaii.gov</u>	

Owner/Permittee Information

(Item No. 1 of CWB NOI General Form)

The Owner/Permittee Legal Name must be identical to the Certifying Person Company or Agency in Item No. 1 of CWB NOI General Form.

State of Hawaii	
Department of Transportation	Highways Division
869 Punchbowl Street	
Honolulu	HI 96813-5097
Kevin Ito	
Project Manager, Department of Transportation	1
(808) 692-7548	(808) 692-7555
Kevin.Ito@hawaii.gov	
General & Sub-Contractor(s) Infor	mation
	(Item No. 3 of CWB NOI General Form)
Contractor information will be submitted at least	st 30 days before start of construction activities

Complete and attach a Subcontractor Certification/Agreement in Attachment D.

Repeat as needed, at the discretion of the General Contractor.

Section 1.0 - Project/Facility Information

1.1 - Additional Project Information	
	(Item No. 4 of CWB NOI General Form)
County or Similar Subdivision: City and Co	<u>ounty of Honolulu</u>
Facility/Project Front Gate Location Coord	dinate (degrees, minutes, seconds):
Latitude 21 ° 24 '33.54'' N	Longitude 158 ° 10 '37.80" W
Coordinate System Reference Datum (e.g.,	NAD83, WGS84): <u>WGS84</u>
Collection Method for determining coordin	ate : GoogleEarth

Tax Map Key:

Division	Zone	Section	Plat	Parcel or Lot
(3)	8	7	005	003; 004; 005 (parcels adjacent to roadway)
(3)	8	7	023	001; 002; 037; 039; 049; 058; 059 (parcels adjacent to roadway)

Does the Facility/Project include a baseyard/staging area onsite:

⊠ Yes			
	30 days before the so nodification to the N	v	on activities. The Permittee may \$500 Filing Fee.
receiving water d	ischarge point from		area is provided below and the rovided in SSCBMP Section 1.3:
Street Address/Lo	cation:		
<i>City:</i>	State	e:	ZIP Code:
Tax Map Key:			
Division Zo	ne Section	Plat	Parcel or Lot

1.2 - Auth	orized .	Represent	ative I	nformation
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Gene	(Item No. 6.b., 6.c., or 6.d. of CWB NOI General Form) blete this section only if different from Certifying Person listed in Item No. 7 of CWB NOI ral Form and not the Duly Authorized Representative listed in Item No. 6.a. of CWB NOI ral Form.
	pany or Organization Name: <u>Department of Transportation, Highways Division</u>
Conto	act Person Name: <u>Pratt M. Kinimaka</u>
Conto	act Person Title: Oahu District Engineer
Maili	ng Address: 727 Kakoi Street
City:_	Honolulu State: HI ZIP Code: 96819-2017
Геlер	hone Number: (808) 831-6700 Fax: (808) 831-6725
Emai	l: <u>Pratt.Kinimaka@hawaii.gov</u>
13.	- Receiving Water(s) Information
1.5	(Item No. 5.a.iiii. of CWB NOI General Form)
Vumb	per of Receiving Water Discharge Points (may be multiple for same water body):
<i>a</i> .	Receiving Water Name: <u>Maili Stream Discharge Point #1, See Attachment A.3 Item 1.9.d.</u> Topographic Map
	Receiving Water Classification: Class 2
	Receiving Water Discharge Point Coordinates (degrees, minutes, seconds): Latitude 21 ° 24 ' 34" N Longitude 158 ° 10 ' 38" W
	On the Section 303(d) List? See http://hawaii.gov/health/environmental/env-
	planning/wqm/2006 Integrated Report/2006 Chapter IV Assessment of Waters.pdf. ——————————————————————————————————
b.	Receiving Water Name: <u>Maili Stream Discharge Point #2, See Attachment A.3 Item 1.9.d</u> Topographic Map
	Receiving Water Classification: <u>Class 2</u>
	Receiving Water Discharge Point Coordinates (degrees, minutes, seconds):
	Latitude 21 ° 24 ′ 32" N Longitude 158 ° 10 ′ 38" W
	On the Section 303(d) List? \square Yes \square No
a	Wanga A Wanga A Wanga A
Coord	dinate System Reference Datum (e.g., NAD83, WGS84): WGS84

Collection Method for determining coordinate (e.g., Google Earth, handheld GPS unit): <u>Google Earth</u>

1.4 - Receiving Separate Drainage System

(Item No. 5.b. of CWB NOI General Form)

Complete the following if the discharge from your facility or project first enters a separate storm drainage system (e.g., City and County of Honolulu Municipal Separate Storm Sewer System [MS4], State Department of Transportation-Highways Division MS4, other) prior to the State waters.

- a. Separate Drainage System Owner Name: <u>Inlet 1, State of Hawaii. Department of Transportation, See Attachment A.3 Item 1.9.d Topographic Map</u>
 Discharge Point Coordinates (degrees, minutes, seconds) into the Separate Drainage
 System: Latitude 21 ° 24 ' 33.18" N Longitude 158 ° 10 ' 37.15" W
- b. Separate Drainage System Owner Name: Inlet 2, State of Hawaii. Department of

 <u>Transportation, See Attachment A.3 Item 1.9.d Topographic Map</u>

 Discharge Point Coordinates (degrees, minutes, seconds) into the Separate Drainage

 System: Latitude 21 ° 24 ' 33.52" N Longitude 158 ° 10 ' 37.76" W
- c. Separate Drainage System Owner Name: <u>Inlet 3, State of Hawaii. Department of Transportation, See Attachment A.3 Item 1.9.d Topographic Map</u>
 Discharge Point Coordinates (degrees, minutes, seconds) into the Separate Drainage
 System: Latitude 21 ° 24 ' 31.58" N Longitude 158 ° 10' 37.39" W
- d. Separate Drainage System Owner Name: Inlet 4, State of Hawaii. Department of

 Transportation, See Attachment A.3 Item 1.9.d Topographic Map

 Discharge Point Coordinates (degrees, minutes, seconds) into the Separate Drainage

 System: Latitude 21 ° 24 ' 31.70" N Longitude 158 ° 10 ' 38.10" W

Coordinate System Reference Datum (e.g., NAD83, WGS84): <u>WGS84</u>
Collection Method for determining coordinate (e.g., Google Earth, handheld GPS unit): <u>Google</u>
Earth

☐ Attach the Drainage System Owner(s) Approval to Discharge, in Attachment____

☑ Check this box if the Certifying Person is responsible for the overall operation and maintenance of the Separate Drainage System and approves of the storm water discharge into their drainage system.

1.5 - Existing Pollution Sources/ History of Land Use

Describe the history of land use at the existing Facility/Project site:

Until 1940, sugar was cultivated around the project site by Waianae Sugar Company. A salt pond once existed to the mauka side of the bridge where concrete lined Maili stream now lies. It was drained and filled sometime before 1974. The new bridge will be installed within the State Right of Way. Within the right-of-way, the site includes the existing bridge to be replaced, AC pavement and concrete sidewalks. Existing soil within the project area primarily consists of Keaau clay, saline Soil Type (KmbA). Surrounding land use along the roadway corridors is mixed residential and commercial along the mauka side of the roadway corridor while the makai side is a City beach park. Maili Stream (City and County MS4 drainage channel) runs upstream of the bridge.

Determine if the existing Facility/Project site may contain any existing pollution source(s) by using the following references. Place a check next to all references you utilized to determine existing pollution source(s).

\square a.	DOH, Solid and Hazardous Waste Branch-Hawaii Underground Storage Tank- Leaking
	Underground Storage Tank database
\Box b.	DOH, Hazard Evaluation and Emergency Response Office records
\square c.	Phase I and/or Phase II Environmental Site Assessments, as applicable
$\square d$.	Recent site inspections
∡ e.	Past land use history
$\square f$.	Soil sampling data, if available
Æ g.	Other (specify):

Describe any existing pollution source(s) identified in the references you checked above:

a. Within areas surrounding roadway corridors, potential pollution sources most likely consist of those associated with roadways and vehicular traffic such as petroleum releases from cars, rubber from tires and asphalt or gravel materials.

Describe any corrective measures that have been undertaken for any existing pollution source(s):

a. <u>Corrective measures to minimize pollution sources would consist of implementing best</u>
<u>management practices during construction activities in accordance with the plans</u>
<u>described in this application. Such measures would consist of preventing storm water</u>

flow from leaving the site by not conducting work during anticipated storm events or repaying the area after backfilling. Concrete wash water may also be a potential pollution source. If concrete is utilized, the contractor will be required to wash concrete within the base yard, and contain such wash water within the base yard area using site-specific BMPs to be developed for the base yard.

1.6 - Construction Site Estimates			
Please provide the following estimates	for the construction site.		
Total project area including areas to b	be left undisturbed:	1.15	acres
Construction site area to be disturbed	including storage and staging areas:	1.00	_acres
Impervious area before construction:		0.70	_acres
Impervious area after construction:		0.80	_acres
1.6.a - Quantity of Storm Water Run	noff		
1 · · ·	unoff during construction when the grea Provide the supporting calculations in		ent or
N/A	Millions of Gallo	ns per Day (l	MGD)
or			
4.39	Cubic Fee	t per Second	(CFS)

Describe the nature of the soil on the project site (including the potential to encounter contaminated soil) and the nature of the fill material to be used:

The soil in the project site consists primarily of Keaau cla, saline soil Type(KmbA). Keaau clay is poorly drained with slow to medium runoff and slow permeability. Select borrow materials may be made up of stone, rock, concrete, or other materials not larger than 6 inches in diameter. Pipe cushion material will be composed of natural sand, manufactured sand, or coral. The fill material may be the same material as the excavation material or select borrow material. Fill material shall be in accordance with the construction drawings and with specifications for construction of such facilities by the State and County. The contractor shall obtain the Engineer's approval for all fill materials. During construction, the appropriate BMP measures will be installed to ensure that all sediments will be retained on site and will not be permitted to

1.6.b - Soil Characterization

enter any adjacent storm drainage systems. No materials containing contaminated soils or other hazardous wastes will be permitted for use. Sufficient water should be used by the contractor so that minimal dust is created by compaction. No change to the quality of discharge is expected.

1.7 - Nature and Sequence of Construction Activity				
What is the func	tion of the construc	ction activity (Ple	ease check all applicable a	activity(ies))?
☐ Residential	Commercial	$oldsymbol{arDelta}$ Industrial	Road Construction	Linear Utility
☒ Other (please	specify): <u>Bridge (</u>	Construction		
What is bains as	on structs 12 Constr	untion of no ad an	ad hwida a	
what is being co	onstructed? <u>Constr</u>	uction of road an	ia vriage	

Describe the scope of work and major construction activities you wish to be covered in this NOI: The project involves the demolition and replacement of Maipalaoa Bridge in Waianae on the island of Oahu. The existing bridge supports four lanes of traffic on Farrington Highway and crosses Maili Stream. The existing bridge is approximately 101 feet measured from abutment to abutment with a width of approximately 64 feet and consist of two span supported by a center pier. The existing bridge is to be demolished and a new bridge structure constructed. The new bridge will be about 112 feet long by 78 feet wide. The project also involves the relocation of the existing 8" waterline to the makai edge of the bridge span and the construction of new drainage outlet structures. Also included in the work is the construction of approximately 360 lineal feet of roadway approaches to the bridge.

The construction sequence will begin with the installation of sediment and erosion control measures. Sediment and erosion control devices shall include inlet protection, silt fencing and dust control by watering. Construction shall continue with the installation of a temporary pedestrian bridge, which will overhang on the outer edge of the mauka side of the bridge. This work involves installing temporary concrete bridge abutments and excavating and paving the approaches to the temporary bridge to maintain ADA-compliant access. Next, the makai sidewalk portion of the bridge is to be demolished and the approaches are to be excavated and paved. Best Management Practice (BMP) devices for Maili Stream are then to be installed, and thereafter a water diversion all is to be constructed and dewatering activities are to be conducted. It is at this time that the invert concrete lining will be inspected and the decision whether or not to replace it will be made.

The makai portion of the bridge will be demolished and new abutment and drilled shafts will be installed. If the concrete lining needs to be replaced, it is at this time that the new concrete lining will be installed. Girders, diaphragms and decking will then be installed across new

abutments. Approaches to new abutments will be excavated and paved. This sequence will repeat for three different traffic control plans to minimize the impact to traffic flow. For clarification, see Attachment A Construction Drawings, Sheets 32 – 35 Traffic Control Plans. Water service is to remain uninterrupted throughout the construction. New drainage outlet structures are then to be installed on the makai side of the bridge and connected to existing drainage facilities. The new 8" waterline will then be constructed under the makai edge of the bridge and after successful hydrotesting, connected to existing water main. The by-passed waterline and the temporary pedestrian bridge will then be demolished. The project shall be completed with the removal of sediment and erosion control measures.

Is t	he Project Phased? ✓ Yes (Select this if separate general contractors for each phase. Owner acknowledges that a separate NOI package and filing fee shall be submitted for each phase.) ✓ No (Select this for construction phasing due to scheduling only.)
1.	8 - Existing or Pending Permits, Licenses, or Approvals
Pla	ce a check next to all applicable Federal, State, or County permits, Licenses, or approvals for
the	project.
X	Other NPDES Permit or NGPC File No.: <u>CWB-NOI Form G will be submitted</u>
X	Department of the Army Permit (Section 404): will be submitted
	If your project requires work in, above, under or adjacent to State waters, please contact the
	Army Corps of Engineers (COE) Regulatory Branch at (808) 438-9258 regarding their
	permitting requirements. Provide a copy of the COE permitting jurisdictional determination
	(JD) or the JD with COE Person's Name, Phone Number, and Date Contacted.
	Facility on SARA 313 List (identify SARA 313 chemicals on project site: N/A
	RCRA Permit (Hazardous Wastes): N/A
X	Section 401 Water Quality Certification: will be submitted
	Other: <u>N/A</u>
×	County-approved Erosion and Sediment Control Plan and/or Grading Permit
	a. Is a County-approved Erosion and Sediment Control Plan and/or Grading Permit, where applicable for the activity and schedule for implementing each control, required?

	b.	Is a copy County-approved Erosion and Sediment Control Plan and/or Grading Permit, as appropriate for the activity and schedule for implementing each control, attached? ———————————————————————————————————
		☑ No, the County-approved Erosion and Sediment Control Plan and/or Grading Permit, as appropriate for the activity and schedule for implementing each control, will be submitted at least 30 calendar days before the start of construction activities.
	c.	Please select and complete at least one (1) of the following items to demonstrate that a County-approved Erosion and Sediment Control Plan and/or Grading Permit, as appropriate for the activity and schedule for implementing each control, is not required. ☐ See Attachment for the County written determination. ☐ Provide the County contact person information (Name, Department, Phone Number, and Date Contacted):
		☐ The project is a Federal Project and does not require County approval. ☐ Other (specify):
1	9 -	Project Site Maps and Construction Plans/Drawings
		t, title, and identify all maps (pdf - minimum 300 dpi) listed below, in Attachment A.
Ple	ease	reference which maps account for the features listed below.
a.	Isl	and on which the project is located. <u>Oahu, see Attachment A.2, Item 1.9.a – Location Map</u>
b.	Vic	cinity of the project on the island. <u>see Attachment A.2, Item 1.9.a – Location Map</u>
<i>c</i> .		gal boundaries of the project. <u>see Attachment A.2, Item 1.9.a – Location Map and</u> tachment A.3, Item 1.9.d – Topographic Map
d.		ceiving State water(s) from Section 1.3 and receiving separate drainage system(s) from ction 1.4, identified and labeled. <u>see Attachment A.3, Item 1.9.d – Topographic Map</u>
e.	AL	L discharge points from Sections 1.3 and 1.4 with identification numbers and coordinates. Attachment A.3, Item 1.9.d – Topographic Map; Attachment A.8, Construction Drawing
	she	eet 18 Drainage Relocation Plan
f.		oundaries of 100-Year flood plans. <u>Zone AE — entire project area determined to be outside</u> 2 0.2% annual chance floodplain. See Attachment A.4, Item 1.9.e — FEMA Flood Insurance
		te Map No. 15003C0195G
g.	Ar	eas of soil disturbance. see Attachment A.8, Construction Drawings Sheet 09 Existing,
	<u>De</u>	emolition Plan and Erosion Control Plan-1, 10 Existing, Demolition Plan and Erosion
	<u>Co</u>	ontrol Plan-2 and 17 Grading Plan
h.		cation(s) of impervious structures (including buildings, roads, parking lots, etc.) after

<u>Plan</u>

- i. Pre-Construction Topography including approximate slopes and drainage patterns for the entire Facility/Project site to the receiving storm water drainage system (if applicable) or to the receiving State water(s) (with flow arrows). see Attachment A.8, Construction Drawings, Sheet 09 Existing, Demolition Plan and Erosion Control Plan-1, 10 Existing, Demolition Plan and Erosion Control Plan-2
- j. During-Construction Topography (after major grading activities) including approximate slopes and drainage patterns for the entire Facility/Project site to the receiving storm water drainage system (if applicable) or to the receiving State water(s) (with flow arrows). see Attachment A.8, Construction Drawings, Sheet 09 Existing, Demolition Plan and Erosion Control Plan-1, 10 Existing, Demolition Plan and Erosion Control Plan-2 and 17 Grading Plan; see Attachment A.3, Item 1.9.d—Topographic Map
- k. Post-Construction Topography including approximate slopes and drainage patterns for the entire Facility/Project site to the receiving storm water drainage system (if applicable) or to the receiving State water(s) (with flow arrows). see Attachment A.8, Construction Drawing, Sheet 17 Grading Plan

1.10 - Flow Chart or Line Drawing

Attach or insert in Attachment A, a flow chart showing the following (Check each item, as applicable):

- ☐ a. Storm water entering the project from off-site areas
- ☑ b. General route taken by storm water through the project (show the routes through different drainage areas)
- ☑ c. Treatment system(s) utilized for the reduction of sediment (e.g., silt fence, earth berm, detention basin, vegetated swale, etc.)
- ☑ d. Best Management Practices (BMPs) utilized to prevent erosion (e.g., erosion control mats, reduced open area, revegetation, etc.)
- ☑ e. Quantity of flow through each applicable route from upslope to the receiving State water
- ☑ f. Drainage system(s) receiving storm water from the project, as applicable (e.g., City and County of Honolulu Municipal Separate Storm Sewer System (MS4), etc.)
- \square g. State water name(s) receiving storm water from the project

Indicate which item(s) are not identified <u>Items not identified - box 'a' Storm water entering the project from off-site areas.</u>

Section 2.0 - Construction Activity Best Management Practices

2.1 - Special Conditions for Land Disturbances

By submitting this section the owner and/or general contractor agrees that at a minimum, they will comply with all conditions as stated below from Section No. 11 of HAR, Chapter 11-55, Appendix C, under Special Conditions for Land Disturbances.

- "(a) Construction Management Techniques
 - (1) Clearing and grubbing shall be held to the minimum necessary for grading and equipment operation.
 - (2) Construction shall be sequenced to minimize the exposure time of the cleared surface area.
 - (3) Construction shall be staged or phased for large projects. Areas of one phase shall be stabilized before another phase is initiated. Stabilization shall be accomplished by temporarily or permanently protecting the disturbed soil surface from rainfall impacts and runoff.
 - (4) Erosion and sediment control measures shall be in place and functional before earth moving operations begin. These measures shall be properly constructed and maintained throughout the construction period.
 - (5) All control measures shall be checked and repaired as necessary, for example, weekly in dry periods and within twenty-four hours after any rainfall of 0.5 inches or greater within a 24-hour period. During prolonged rainfall, daily checking is necessary. The permittee shall maintain records of checks and repairs.
 - (6) The permittee shall maintain records of the duration and estimated volume of storm water discharge(s).
 - (7) A specific individual shall be designated to be responsible for erosion and sediment controls on each project site.

(b) Vegetation Controls

- (1) Pre-construction vegetative ground cover shall not be destroyed, removed, or disturbed more than twenty calendar days prior to land disturbance.
- (2) Temporary soil stabilization with appropriate vegetation shall be applied on areas that will remain unfinished for more than thirty calendar days.
- (3) Permanent soil stabilization with perennial vegetation or pavement shall be applied as soon as practical after final grading. Irrigation and maintenance of the perennial vegetation shall be provided for thirty calendar days or until the vegetation takes root, whichever is shorter.

(c) Structural Controls

- (1) Storm water flowing toward the construction area shall be diverted by using appropriate control measures, as practical.
- (2) Erosion control measures shall be designed according to the size of disturbed or drainage areas to detain runoff and trap sediment.

(3) Water must be discharged in a manner that the discharge shall not cause or contribute to a violation of the basic water quality criteria as specified in HAR, Chapter 11-54, Section 11-54-4."

2.2 - Construction Schedule

In Attachment C, attach the proposed construction schedule which shall include, at a minimum:

- The date when the SSCBMP Plan, including erosion control measures will be implemented
- In the date when the general contractor will begin the site disturbance
- ☑ The date when each major construction activity begins
- In the proposed timetable for each major activity
- In the date when each major construction activity ends
- The date when the general contractor will end site disturbance
- The date when erosion control measures will be removed
- The date when the Notice of Cessation form will be submitted

2.3.a - Potential Storm Water Pollutant Sources

This general permit covers discharges composed entirely of storm water runoff associated with construction activities. Discharges to State waters composed of pollutants associated with construction activities and/or storm water that commingles with these pollutants shall comply with HAR, Chapter 11-55, Appendix A, Section 1 (Basic Water Quality Criteria).

Identify the potential storm water pollution sources for each major construction activity based on the submitted construction schedule. Account for all potential sources of water pollution associated with construction activities including but not limited to the contents of the table below. Describe how discharges from the potential sources of pollution associated with construction activities will comply with the Basic Water Quality Criteria.

All solid waste shall be disposed of at DOH, Solid and Hazardous Waste Branch (SHWB), Solid Waste Section (SWS) permitted facilities. If not, contact the SHWB-SWS at (808) 586-4226 as additional permits may be required.

Source/Material	Description of How Potential Pollutant Source will be Prevented from Discharging with Storm Water Runoff	Major Construction Activity
Construction and vegetative debris	Vegetation and construction debris may occur during the clearing, grubbing, and demolition of the project. The Contractor shall promptly dispose the debris off-site at DOH, Solid and Hazardous Waste Branch (SHWB), Solid Waste Section (SWS) permitted facilities. If not, contact the SHWB-SWS at (808) 586-4226 as additional permits may be required.	Demolition, Finish Grading, Trenching and Bridge Construction
Materials associated with the operation and maintenance of equipment, such as oil, fuel, and hydraulic fluid leakage	Vehicles/equipment shall be checked regularly for leakage and repaired immediately in a designated staging area such that any contaminated runoff does not leave the site.	General Construction
Soil erosion from the disturbed areas	Standard BMP measures such as silt fence and drain inlet protection shall be used to mitigate this problem.	General Construction

	Description of How Potential Pollutant Source	Major
Source/Material	will be Prevented from Discharging with	Construction
	Storm Water Runoff	Activity
Sediment from soil stockpiles	Provide adequate setback from waterways. Provide earth dikes or other diversion to keep runoff away from stockpiles. Provide silt fences at the toe of the stockpile to mitigate runoff during rain events. Cover, grass or provide other stabilization measures. Provide adequate setback distance from lot lines. Provide silt basins where required. Stockpiles are for temporary storage of material only. Provisions should be made for permanent movement of stockpiled material. Failure to contain stockpiled material may cause downstream erosion or flood damage. Stockpiles not properly stabilized may cause fugitive dust problems.	Finish Grading, and Trenching
Emulsified asphalt or prime/tack coat	Discharges associated with emulsified asphalt or prime/tack coat will be contained on-site and removed in accordance with proper procedure.	Finish Grading
Materials associated with painting, such as paint and paint wash solvent	Discharges associated with painting and paint wash solvent/water will be contained on-site and removed in accordance with proper procedure.	General Construction
Industrial chemicals, fertilizers, and or pesticides	N/A	
Hazardous waste (Batteries, Solvents, Treated Lumber, etc.)	N/A	
Metals	N/A	
Existing Pollution Sources from Section 1.5 above	Pollution sources brought about by petroleum releases from vehicular traffic, rubber from tires and asphalt or gravel materials will be contained on-site using Standard BMP measures such as silt fence and drain inlet protection.	General Construction
Other	N/A	

2.3.b - Potential Non- Storm Water Pollutant Sources

This general permit covers discharges composed entirely of storm water runoff associated with construction activities. Discharges of non-storm water and/or non-storm water that have commingled with storm water are not covered under this general permit. If the non-storm water is discharged to State waters, the construction activity may require a separate NPDES permit.

Identify the potential non-storm water pollution sources for each major construction activity based on the submitted construction schedule. Account for all applicable non-storm water discharges including but not limited to the contents of the table below. Describe how the potential non-storm water pollution source will not be discharged to State waters.

All solid waste shall be disposed of at DOH, Solid and Hazardous Waste Branch (SHWB), Solid Waste Section (SWS) permitted facilities. If not, contact the SHWB-SWS at (808) 586-4226 as additional permits may be required.

Source	Description of How Potential Non-Storm Water Pollution Source will not be Discharged to State Waters	Major Construction Activity
Dust Control Water	The water to be used for dust control shall not exceed required amounts in order to rapidly prevent any erosion caused by overwatering. Water will percolate into the soil on which it is applied will infiltrate completely. Discharge of this water offsite, to the storm drainage system, or State waters is prohibited.	Demolition, Finish Grading, Trenching and Bridge Construction
Concrete Truck Wash Water	Concrete truck drum/chute or concrete pumping equipment wash water shall be contained into an impermeable bermed perimeter, to prevent concrete wash water from percolating/filtering into the ground. The concrete wash water will not be allowed to overflow, and will either be disposed of into an approved facility, immediately after the washing operations, or allowed to evaporate and the remainder disposed into an approved facility.	Concreting works
Construction Exit Wash Water	Washing of construction equipment will be permitted only in designated areas away from State waters. Water from this activity will not be allowed off of the construction limits and will not be allowed into State waters.	Demolition, Finish Grading and Trenching

Source	Description of How Potential Non-Storm Water Pollution Source will not be Discharged to State Waters	Major Construction Activity
Irrigation Water	N/A	
Hydrotesting Effluent	Hydrotesting effluent will either be de-chlorinated in the pipe and discharged to the stabilized construction entrance, where water will infiltrate completely, or reclaimed into a water truck for use as dust control.	Waterline installation
Dewatering Effluent	Refer to CWB NOI Form G application, to be submitted	Utility trenching and Foundation works
Saw-cutting Slurry	The water shall not be allowed to enter storm drainage system or any other natural outlet. Use as little cooling water as possible during saw-cutting. Shovel or vacuum saw-cut slurry, then dispose into an approved facility.	Pavement Construction
Concrete Curing Water	Curing water shall be applied close to the concrete surface and shall not exceed the required amounts in order to prevent any runoff.	Pavement Construction
Plaster Waste Water	N/A	
Water-Jet Wash Water	N/A	
Existing Pollution Sources from Section 1.5 above	N/A	
Other (as identified)	N/A	

Section 3.0 - Best Management Practice Location and Details

Please refer to the <u>EPA Construction Storm Water Menu of BMPs</u>. You are responsible for the design, implementation, operation, and maintenance of the site-specific BMPs Plan to ensure that storm water discharges associated with construction activities will not cause or contribute to a violation of applicable State Water Quality Standards.

The contractor may augment or improve BMPs to mitigate pollutant discharges to State waters. Amendments to the SSCBMP Plan shall be identified in Attachment G and certified on page 3 of the SSCBMP Plan. Please refer to the updated DOH-CWB BMP procedures regarding storm water discharges associated with construction activities:

- DOH-CWB Procedures for the Use of New Technologies as BMPs
- DOH-CWB Procedures for Changing Construction Site-Specific BMPs

3.1 – BMP Location Maps

Show the location of all proposed BMPs. Attach, title, and identify all maps (pdf - minimum 300 dpi) listed below, in Attachment A. Please reference which maps account for the features listed below.

- a. Construction sequence diagrams showing the location of specific BMPs (including stabilization BMPs) that will be implemented at different sequences of construction. <u>Refer to Attachment A.6</u>, Item 2.4.a Construction Sequence Diagram
- b. Additional Maps for each major construction activity that show all BMPs employed for activity specific pollution prevention. Please have at least one (1) map per major construction activity (e.g., Demolition, Mass Grading, Trenching, Vertical Construction, Landscaping, etc.) Refer to Attachment A.8, Construction Drawings Sheet 09-10 Existing, Demolition Plan and Erosion Control Plan and 17 Grading Plan for all construction activities.
- c. Construction Baseyard and/or staging areas including remote/off-site areas. Areas used for the storage of soils, construction materials, or wastes and areas for the disposal of wash water from washing down of construction equipment and vehicles, concrete truck drum wash water, treated dewatering effluent, hydrotesting effluent discharge, etc. Refer to Attachment A.7, Item 2.4.c Construction Baseyard and/or staging areas.
- d. Location(s) where stabilization practices are expected to occur <u>Refer to Attachment A.7,</u>

 Item 2.4.c Construction Baseyard and/or staging areas.
- e. Location(s) of all structural controls including those that will be used to divert the offsite storm water from flowing into the construction site and design details Refer to Attachment A.8, Construction Drawings Sheet 09-10 Existing, Demolition Plan and Erosion Control Plan and Sheet 7 Water Pollution, Erosion Control Notes and Details-2

f.	Areas where vegetative practices are to be implemented Refer to Attachment A.8,
	Construction Drawings Sheets 9 and 10 Existing Condition, Demolition and Erosion
	Control Plan
g.	Post Construction Final Stabilization BMP Plan Refer to Attachment A.8, Construction
	Drawings Sheets 9 and 10 Existing Condition, Demolition and Erosion Control Plan

3.2 - BMP Details

Complete the table below. Provide an installation detail with dimensions and product data sheet of all proposed BMPs identified in Section 3.1, including the proposed BMPs that will be used to mitigate the potential pollutants identified in Sections 2.3a and 2.3b. Attach the details and product data sheets in Attachment A.

Pollutant Source as Identified in Sections 2.3.a and 2.3.b	Appropriate Site-Specific BMP to be Implemented	BMP Installation Detail with Dimensions and Product Data Sheet Attachment A Reference
Construction and vegetative debris	Construction and vegetation debris may occur during the clearing, grading and trenching of the project. The Contractor shall promptly dispose the debris off-site at DOH, Solid and Hazardous Waste Branch (SHWB), Solid Waste Section (SWS) permitted facilities. If not, contact the SHWB-SWS at (808) 586-4226 as additional permits may be required.	See Attachment A.9, Items 3.2.5
Materials associated with the operation and maintenance of equipment, such as oil, fuel, and hydraulic fluid leakage	Discharge from any construction equipment and personal vehicles will not be allowed on site. Any and all spills that may accidentally occur shall be cleaned immediately.	See Attachment A.9, Items 3.2.6 and 3.2.8
Soil erosion from the disturbed areas	Soil erosion from disturbed areas shall be controlled by sediment and erosion control measures. Silt fence shall prevent pollutants from leaving the site.	See Attachment A.9, Item 3.2.3
Sediment from soil stockpiles	Provide adequate setback from waterways. Provide earth dikes or other diversion to keep runoff away from stockpile to mitigate runoff during rain events. Cover, grass or provide other stabilization measures. Provide adequate setback distance from lot lines. Provide	See Attachment A.9, Item 3.2.3

Pollutant Source as Identified in Sections 2.3.a and 2.3.b	Appropriate Site-Specific BMP to be Implemented	BMP Installation Detail with Dimensions and Product Data Sheet Attachment A Reference
	silt basins where required. Stockpiles are for temporary storage of material only. Provisions should be made for permanent movement of stockpiled material. Failure to contain stockpiled material may cause downstream erosion or flood damage. Stockpiles not properly stabilized may cause fugitive dust problems.	
Materials associated with painting, such as paint and paint wash solvent	Do not clean out brushes or rinse paint containers into the dirt, street, gutter, storm drain, or stream. "Paint out" brushes as much as possible. Rinse water-based paints to the sanitary sewer. Filter and re-use thinners and solvents. Dispose of excess oil based paints and sludge as hazardous waste.	See Attachment A.9, Items 3.2.5

Pollutant Source as Identified in Sections 2.3.a and 2.3.b	Appropriate Site-Specific BMP to be Implemented	BMP Installation Detail with Dimensions and Product Data Sheet Attachment A Reference
Dust Control Water	The water to be used for dust control shall not exceed required amounts in order to rapidly prevent any erosion caused by overwatering. Water is expected to percolate into the soil on which it is applied. Discharge of this water offsite, to the storm drainage system, or State waters is prohibited.	See Attachment A.9, Item 3.2.1
Uncompacted or loose soil	Perimeter controls, and inlet protection will help with preventing loose grading materials from entering storm drain or water courses. Mass grading shall not be done if rainfall is predicted to occur during the application period.	See Attachment A.9, Items 3.2.2 and 3.2.3
Silt from excavated material	Perimeter controls and inlet protection will help with preventing loose grading materials from entering storm drain or water courses. Mass grading shall not be done if rainfall is predicted to occur during the application period.	See Attachment A.9, Items 3.2.2 and 3.2.3
Sawcut Slurry	The water shall not be allowed to enter the sewer, storm drain, or any other natural outlet. Use as little cooling water as possible during saw-cutting. Shovel or vacuum saw-cut slurry, then dispose of into a holding area until the slurry dries and the remainder disposed into an approved facility.	See Attachment A.9, Item 3.2.9
Concrete truck wash water	Concrete truck drum/chute or concrete pumping equipment wash water shall be contained into an impermeable bermed perimeter, to prevent the concrete wash	See Attachment A.9, Item 3.2.7

Pollutant Source as Identified in Sections 2.3.a and 2.3.b	Appropriate Site-Specific BMP to be Implemented	BMP Installation Detail with Dimensions and Product Data Sheet Attachment A Reference
	water from percolating/filtering into the ground. The concrete wash water will not be allowed to overflow, and will either be disposed of into an approved facility, immediately after the washing operations, or allowed to evaporate and the remainder disposed into an approved facility	
Construction Exit Wash Water	Washing of construction equipment will be permitted only at the stabilized construction entrance away from State waters. Water from this activity will not be allowed into State waters.	See Attachment A.9, Item 3.2.4
Irrigation Water	The water shall not exceed minimum amounts necessary to irrigate any revegetated areas. Water is expected to percolate into the soil on which it is applied.	See Attachment A.9, Item 3.2.12
Hydrotesting Effluent	Hydrotesting effluent will either be de- chlorinated in the pipe and discharged to the stabilized construction entrance or reclaimed into a water truck for use as an irrigation and/or dust control.	See Attachment A.9, Items 3.2.1 and 3.2.4
Dewatering Effluent	The details of handling dewatering effluent will be covered in the CWB-NOI Form G, which is being prepared for the subject project and will be submitted to CWB.	
Concrete Curing Water	Curing water shall be applied close to the concrete surface and shall not exceed	See Attachment A.9, Item

Pollutant Source as Identified in Sections 2.3.a and 2.3.b	Appropriate Site-Specific BMP to be Implemented	BMP Installation Detail with Dimensions and Product Data Sheet Attachment A Reference
	the required amounts in order to prevent any runoff.	3.2.11
Vegetative Debris	Vegetative debris may occur during landscaping. The Contractor shall promptly dispose the debris off-site at DOH, Solid and Hazardous Waste Branch (SHWB), Solid Waste Section (SWS) permitted facilities. If not, contact the SHWB-SWS at (808) 586-4226 as additional permits may be required.	See Attachment A.9, Items 3.2.5

3.3 - Training and Record Keeping

Training your onsite staff, general contractor, and subcontractors is a required BMP. Storm water pollution prevention training is required as part of this SSCBMP plan. By selecting one of the following options, you are certifying that the storm water pollution prevention training will be conducted.

Please select one of the following options for storm water training record keeping:

- ▼ The Storm Water Pollution Prevention Training Log provided in Attachment B will be used
- ☐ A self-developed storm water pollution prevention training log is attached as Attachment B.

3.4 - Site Inspections, Inspection Schedules, and Procedures

Site inspections ensure NPDES compliance and adequate implementation of the SSCBMP Plan. Site inspections are required components of the SSCBMP Plan. Site inspection details are as follows:

Personnel responsible for conducting inspections: <u>Owner will select a qualified Inspector.</u>

Qualifications: <u>Inspector shall meet the minimum qualifications as required by the owner.</u>

Describe the inspection schedules and procedures you have developed for your site. Include the frequency of inspections for each BMP or group of BMPs and indicate when you will inspect (e.g., before/during/and after rain events, spot inspections). Include the maintenance requirements for each BMP (e.g., level of sediment buildup allowed):

The BMPs deployed on construction sites will be inspected on a frequency as described below. Improperly installed or damaged practices shall be corrected immediately, or by a later date and time if requested by the Contractor and approved by the Resident Engineer in writing, but not later than the onset of forecasted rain events. Inspections of construction site BMPs are conducted as follows:

- -Prior to a forecast storm.
- -After a rain event that causes runoff from the construction site.
- -At 24-hour intervals during extended rain events.
- -As specified in the project Special Provisions.
- -Every two weeks during the non-rainy season.
- -Weekly during the rainy season.
- -Or as directed by BMP Inspection Requirements or the Engineer.

Describe the general procedures for correcting problems when they are identified. Include the name and contact numbers for responsible staff and time frames for making corrections:

Problems shall be corrected after they are identified during inspections and before the next forecasted storm.

Please select one of the following options:

- **▼** The Inspection Report Form provided in Attachment E will be used.
- ☐ A self-developed Inspection Report Form is attached as Attachment E.

3.5 – Contingency Plan

Provide a contingency plan in Attachment F to ensure that even under the worst case scenario, the construction activity will have a minimal adverse impact to State water(s).

The Contingency Plan is attached as Attachment F