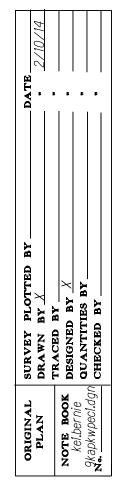
	GENERAL: See Special Provisions Section 209 - Water Pollution describes but is not limited to: submittal requirement and erosion control conference with the Engineer; cor of measurement; and basis of payment. In addition, A sources and corresponding BMPs used to mitigate th
	Follow the guidelines in the current HDOT Construct Field Manual in developing, installing and maintaining (BMP) for the project. For any conflicting requirement applicable bid documents, the applicable bid documents not be clearly described within the applicable bid doc the Engineer immediately for interpretation. For the p Note A.2, "applicable bid documents" include the const specifications, Special Provisions, Permits, and the S Plan (SWPPP) when applicable.
3.	Follow the guidelines in the Honolulu's City & County Standards and Guidelines" along with applicable Soil Maui, Molokai, Kauai, and Hawaii.
	The Engineer may assess liquidated damages of up each BMP requirement and each requirement stated i provisions, for every day of non-compliance. There is assessed per day.
5.	The Engineer will deduct the cost from the progress by the Department for non-compliance, or the Contract amount of the outstanding cost incurred by the State
	If necessary, install a rain gage prior to any field w site-specific best management practices. The rain gage inches of rainfall. Install the rain gage on the project rainfall from entering the gage opening. Do not insta may splash into rain gage. The rain gage installation begin field work until the rain gage is installed and are in-place.
	Submit Site-Specific BMP Plan to the Engineer along Review Checklist within 30 calendar days of contract Checklist may be obtained from <u>http://www.stormwat</u>
1.	WASTE DISPOSAL: Waste Materials Collect and store all waste materials in a securely lic container with cover to keep rain out or loss of wast shall meet all local and State solid waste managemen construction debris from the site in the dumpster. En container is two-thirds full, whichever is sooner. Do onsite. The Contractor's supervisory personnel shall b for waste disposal. Post notices stating these practic bulletin board, or other accessible location acceptable responsible for seeing that these procedures are foll Form for Construction Sites to the Engineer within 3 a copy of all the disposal receipts from the facility p receive solid waste to the Engineer monthly. This sho intermediary facility where solid waste is handled or
2.	Hazardous Waste Dispose all hazardous waste materials in the manner by the manufacturer. The Contractor's site personnel shall be responsible for seeing that these practices a



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L NOTES:	FED. R ⁽ DIST.	DAD NO. STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
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Erosion Control. Section 209 heduling of a water pollution ction requirements; method dix A lists potential pollutant 'utants.

Best Management Practices Best Management Practices etween the Manual and govern. Should a requirement ts, the Contractor shall notify ses of clarification under on plans, standard Water Pollution Prevention

les Relating to Soil Erosion ion Guidelines for projects on

7,500 for non-compliance of ction 209 and special aximum limit on the amount

ment for all citations received hall reimburse the State for the full

including the installation of any all have a tolerance of at least 0.05 ite in an area that will not deter a location where rain water all be stable and plumbed. Do not specific best management practices

a completed Site-Specific BMP cution. The Site-Specific BMP Review vaii.com.

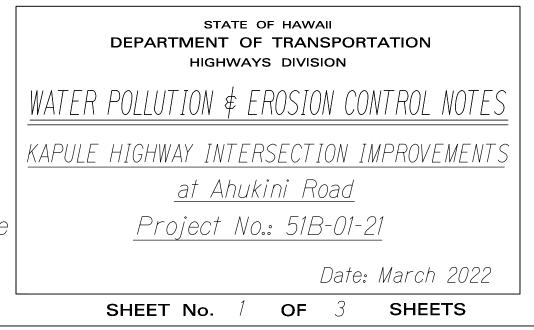
metal dumpster or roll off ring windy conditions. The dumpster ulations. Deposit all trash and the dumpster weekly or when the ury construction waste materials tructed regarding the correct procedure the office trailer, on a weatherproof ne Engineer. The Contractor shall be Submit the Solid Waste Disclosure lendar days of contract execution. Provide tted by the Department of Health to also include documentation from any essed.

rified by local or State regulations and be instructed in these practices and ollowed.

3. Sanitary Waste Collect all sanitary waste from the portable units a minimum of once per week, or as required. Position sanitary facilities where they are secure and will not be tipped over or knocked down.

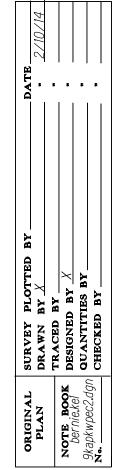
C. EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES:

- 1. For projects with an NPDES Permit for Construction Activities, inspect at the following intervals. For construction areas discharging to nutrient or sediment impaired waters, inspect all control measures at least once each week and within 24 hours of any rainfall event of 0.25 inches or greater within a 24 hour period. For construction areas discharging to waters not impaired for nutrient or sediments, inspect all control measures weekly. Inspections are only required during the project's normal working hours. The discharge point water classification may be found in the SWPPP.
- 2. For projects without an NPDES Permit for Construction Activities, inspect all control measures weekly.
- 3. Maintain all erosion and sediment control measures in good working order. If repair is necessary, initiate repair immediately and complete by the close of the next work day if the problem does not require significant repair or replacement, or if the problem can be corrected through routine maintenance. When installation of a new erosion or sediment control or a significant repair is needed, install the new or modified control or complete the repair no later than 7 calendar days from the time of discovery. "Immediately" means the Contractor shall take all reasonable measures to minimize or prevent discharge of pollutants until a permanent solution is installed and made operational. If a problem is identified at a time in the day in which it is too late to initiate repair, initiation of repair shall begin on the following work day.
- 4. Remove built-up sediment from silt fence when it has reached one-third the height of the fence. Remove sediment from other perimeter sediment control devices when it has reached one-half the height of the device.
- 5. Inspect silt screen or fence for depth of sediment, tears, to verify that the fabric is securely attached to the fence posts or concrete slab and to verify that the fence posts are firmly in the ground. Inspect and verify the bottom of the silt screen is buried a minimum of 6 inches below the existing ground.
- 6. Inspect temporary and permanent seeding and planting for bare spots, washouts and healthy growth.
- 7. Complete and submit to the Engineer a maintenance inspection report within 24 hours after each inspection.
- 8. Provide a stabilized construction entrance at all points of exit onto paved roads to reduce vehicle tracking of sediments. Include stabilized construction entrance in the Water Pollution, Dust, and Erosion Control submittals. Minimum length should be 50 feet. Minimum width should be 30 feet. Minimum depth should be 12 inches or as recommended by the soils engineer and underlain with geo-textile fabric. If minimum dimensions cannot be met, provide other stabilization techniques that remove sediment prior to exit. Clean the paved street adjacent to the site entrance daily or as required to remove any excess mud, cold-planed materials, dirt or rock tracked from the site. Do not hose down the street without containing or vacuuming wash water. Cover dump trucks hauling material from the construction site with a tarpaulin. Remove sediment tracked onto the street, sidewalk, or other paved area by the end of the day in which the track-out occurs.
- 9. Include designated Concrete Washout Area(s) in the Water Pollution, Dust, and Erosion Control submittals.
- 10. Submit the name of a specific individual designated responsible for inspections, maintenance and repair activities and filling out the inspection and maintenance report.
- 11. Personnel selected for the inspection and maintenance responsibilities shall receive training from the Contractor. They shall be trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment controls used onsite in good working order.



4

 <u>ATER POLLUTION AND ER</u>	
12. Contain, remove, and dispose s accordance with approved BMF system or State waters.	
13. For projects with an NPDES stabilizing exposed soil areas where earth-disturbing activity activities have permanently cea construction site that will not disturbing activities have temp any area of the site that will land will be idle) for a period resume in the future. For con nutrients sediments, complete temporary or permanent cessa discharging into nutrient or s within 7 calendar days after to activities. Classification of wa	upon completion of earth-divides have permanently or tem ased when clearing and exc include permanent structur porarily ceased when clearing not include permanent structur of 14 or more calendar day struction areas discharging initial stabilization within 14 tion of earth-disturbing act the temporary or permanent
14. For projects without an NPDE stabilization within 14 calenda earth-disturbing activities.	
D. GOOD HOUSEKEEPING BEST .	MANAGEMENT PRACTICES:
1. Materials Pollution Prevention F a. Applicable materials or subsiduring construction. Other ma to the inventory.	tances listed below are expe
Concrete Detergents Paints (enamel and latex) Metal Studs Tar Fertilizers Petroleum Based Products	Cleaning Solvents Wood Masonry Block Herbicides and Pest Curing Compounds Adhesives
b. Use Material Management Pro exposure of materials and su only enough product as is re c. Store all materials stored or containers and if possible un d. Keep products in their origin e. Do not mix substances with f. Whenever possible, use a pro g. Follow manufacturer's recom h. Conduct a daily inspection to	ubstances to storm water ru quired to do the job. Insite in a neat, orderly mani Inder a roof or other enclosu Inal containers with the origonal containers with the origon Inde another unless recommendations for proper use
2. Hazardous Material Pollution F a. Keep products in original con b. Retain original labels and Sa Sheets (MSDS). c. Dispose of surplus products State regulations.	ntainers unless they are no: afety Data Sheets (SDS), fo
3. Onsite and Offsite Product Sp The following product specific	
a. Petroleum Based Products: Monitor all onsite vehicles for reduce the chance of leakage are clearly labeled. Apply asp recommendation.	e. Store petroleum products



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NOTES (Cont.):		FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
aw cutting of pavement in		HAWAII	HAW.	51B-01-21	2022	5	13

ischarge into the drainage

tivities, immediately initiate isturbing activities for areas mporarily ceased. Earth-disturbing cavation within any area of the res has been completed. Earthing, grading, and excavation within ictures will not resume (i.e., the ays, but such activities will into waters not impaired for 14 calendar days after the tivities. For construction areas complete initial stabilization cessation of earth-disturbing may be found in the SWPPP.

Activities, complete initial or permanent cessation of

pected to be present onsite listed below shall be added

ticides

of spills or other accidental unoff. Make an effort to store

ner in their appropriate ure. ginal manufacturer's label.

ended by the manufacturer. disposing of the container.

and disposal. sposal of materials onsite.

ot resealable. prmerly Material Safety Data

rs' instructions and local and

onsite:

ar preventive maintenance to in tightly sealed containers which e according to the manufacturer's

b. Fertilizers:

Apply fertilizers used only in the minimum amounts recommended by the manufacturer and federal, state, and local requirements. Avoid applying just before a heavy rain event. Apply at the appropriate time of year for the location, and preferably timed to coincide as closely as possible to the period of maximum vegetation uptake and growth. Once applied, work fertilizer into the soil to limit exposure to storm water. Do not apply to storm conveyance channels with flowing water. Storage shall be in a covered shed or in an area where fertilizer will not come into contact with precipitation or stormwater. Transfer the contents of any partially used bags of fertilizer to a sealable plastic bin to avoid spills.

c. Paints:

Seal and store all containers when not required for use. Do not discharge excess paint to the drainage system, sanitary sewer system, or State waters. Dispose properly according to manufacturers' instructions and State and local regulations.

d. Concrete Trucks:

Washout or discharge concrete truck drum wash water only at a designated site as far as practicable from storm drain inlets or State waters. Do not discharge water in the drainage system or State waters. Disposal by percolation is prohibited. Clean disposal site as required or as requested by the Engineer.

4. Spill Control Plan

a. Post a spill prevention plan to include measures to prevent and clean up each spill. b. The Contractor shall be the spill prevention and cleanup coordinator. Designate at least three site personnel who shall receive spill prevention and cleanup training. These individuals shall each become responsible for a particular phase of prevention and cleanup. Post the names of responsible spill personnel in the material storage area on a weatherproof bulletin board or other accessible location acceptable to the Engineer and in the office trailer onsite.

- c. Clearly post manufacturers' recommended methods for spill cleanup. Make site personnel aware of the procedures and the location of the information and cleanup supplies.
- d. Keep ample materials and equipment necessary for spill cleanup in the material storage area onsite.
- e. Clean up all spills immediately after discovery.

f. Keep the spill area well ventilated. Personnel shall wear appropriate protective clothing to prevent injury from contact with a hazardous substance. g. Report spills of toxic hazardous material to the appropriate State or local government agency, regardless of the size. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302 occurs during a 24-hour period, the Contractor shall notify the Engineer as soon as the Contractor has knowledge of the discharge. The Engineer will notify the National Response Center (NRC) at (800) 424-8802, the Clean Water Branch during regular business hours at 586-4309, and the Hawaii State Hospital Operator at 247-2191 and the Clean Water Branch (DOH-CWB) via email at <u>cleanwaterbranch@doh.hawaii.gov</u> during non-business hours immediately. The Contractor shall also provide to the Engineer, within 7 calendar days of knowledge of the release, a description of the release, the circumstances leading to the release, and the date of the release. The Engineer will provide this information to the DOH-CWB. The Engineer will provide information to the NRC if requested.

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
WATER POLLUTION & EROSION CONTROL NOTES
KAPULE HIGHWAY INTERSECTION IMPROVEMENTS
<u>at Ahukini Road</u>
<u>Project No.: 51B-01-21</u>
Date: March 2022
SHEET No. 2 OF 3 SHEETS
5

	WAT	ER POLLU	TION AND	EROSIO	V CONTRO	L NOT
	E	. Permit re	QUIREMENTS	:		
	1.	of the distur the Contracto SWPPP temp definition of required NPL	ed land distu b acre not inc bed area and br shall obtai blate. See Haw land disturb DES Construc cluding, but r	cluding Contract the Contract n the NPDES vaii Administi ance. The Contract ance. The Contract	actor Staging tor Staging a Construction rative Rules (ntractor shall s Permit and	and St and Stor Activit Chapter be res
		b. Increased c. Deadlines	for initiating inspection fr to initiate an requirements	equency and d complete re	installation c epairs to BMA	of rain (⁻ s
	2.	. Comply with	all applicable	e State and F	ederal Permi	t condit
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OTES (Cont.):		FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAI SHEET
ased on the construction Storage areas. If the total torage area is one acre or greater, vities Permit using HDOT's latest er 11-55, Appendix C for the responsible for obtaining the olying with the requirements of ation n gage if applicable	F. SITE-SPECIFIC BMP REQUIREMENTS: Each BMP below is referenced to the corresponding section of the current HDOT Co Practices Field Manual and appropriate Supplemental Sheets. The Manual may be ob Statewide Stormwater Management Program Website at <u>http://www.stormwaterhawaii.and-consultants</u> under Construction Best Management Practices Field Manual. Supple at <u>http://stormwaterhawali.com/resources/contractors-and-consultants/storm-water-p</u> under Concrete Curing and Irrigation Water. The requirements for Water Pollution, Dust, and Erosion Control submittals are inclu- the Hawaii Standard Specifications for Road and Bridge Construction dated 2005 a Provisions. A list of pollutant sources and corresponding BMP used to mitigate the in Section 209 of the Special Provisions under Appendix A. Follow the requirements below: 1. Protect all Drainage Inlets receiving runoff from disturbed areas (SC-2). 2. Contain on-site runoff using Perimeter Sediment Controls	Hawaii onstruction Be tained from th com/resource emental BMP s pollutionpreven uded in Section and applicable	HAW. est Mar be HDO <u>s/cont</u> heets a tion-pla n 209 Specia	51B-01-21 Tagement T <u>actors-</u> are located <u>an-swppp/</u> of	2022 1	NO. 6	SHEET 13
	 Contain on-site runoff using Perimeter Sediment Controls a. SC-1 Silt Fence b. SC-5 Vegetated Filter Strips and Buffers c. SC-8 Compost Filter Berm d. SC-13 Sandbag Barrier e. SC-14 Brush or Rock Filter Control offsite runoff from entering construction area 						
	 a. EC-8 Run-On Diversion b. SC-6 Earth Dike c. SC-7 Temporary Drains and Swales 4. Incorporate applicable Sile Management BMP a. SM-1 Employee Training b. SM-2 Material Delivery and Storage c. SM-3 Material Use d. SM-4 Protection of Stockpiles e. SM-6 Solid Waste Management f. SM-7 Sanitary/Septic Waste Management g. SM-9 Hazardous Waste Management h. SM-10 Spill Prevention and Control i. SM-11 Vehicle and Equipment Refueling j. SM-14 Scheduling m. SM-15 Location of Potential Sources of Sediment n. SM-16 Preservation of Existing Vegetation o. SM-18 Dust Control 5. Contain pollutants within the Construction Staging/Storage Area BMP with application application waste and Storage Area BMP with application application	struction					
	Entrance/Exit (EC-2) for all areas which exit onto a paved street. Restrict vehic to these points. 6. Manage Concrete Waste including installing a Concrete Washout Area (SM-5) and p disposing of Concrete Curing Water (California Stormwater BMP Handbook NS-12 (7. Remove saw cut slurry and hydrodemolition water from the site by vacuuming. Pro storm drain protection and/or perimeter sediment controls during saw cutting and hydrodemolition work.	properly Concrete Curir ovide	ng).				
			<u>POLLUT</u> HIGHW,	state of F FMENT OF TH HIGHWAYS C ION & ERO AY INTERSE at Ahukini	RANSPORT Division SION CON CTION IM Road	TROL N PROVEM	ENTS