WATER POLLUTION AND EROSION CONTROL NOTES

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-M-03-21, PHASE 2	2022	5	46

A. GENERAL:

1. Follow the guidelines in the current HDOT Construction Best Management Practices Field Manual in developing, installing and maintaining the BMPs for the project. For any conflicting requirements between the Manual and applicable bid documents, the applicable bid documents will govern. Should a requirement not be clearly described within the applicable bid documents, the Contractor shall notify the Engineer immediately for interpretation. "applicable bid documents" include the construction plans, standard specifications, and Special Provisions.

2. The Engineer will deduct the cost from the progress payment for all citations received by the Department for non-compliance, or the Contractor shall reimburse the State for the full amount of the outstanding cost incurred by the State.

3. The Engineer may assess liquidated damages of up to $27,500 for non-compliance of each BMP requirement and each requirement stated in Specifications, Section 2370 Sediment and Erosion Control, for every day of non-compliance. There is no maximum limit on the amount assessed per day.

4. The Contractor shall consider and install BMP measures which take into account high intensity and prolonged rainfall, and to address the potential problems that may result.

5. All areas used in support of construction activities disturbed or damaged by the Contractor, including but not limited to, staging areas, construction entrance/exit, and travel routes, shall be temporarily stabilized during construction in accordance with Section 209 of the 2005 Hawaii Standard Specifications for Road and Bridge Construction. These areas shall be restored to their original condition or better upon completion of construction. Disturbed and exposed areas shall be permanently stabilized using vegetative cover, pavement, or equivalent to match pre-existing or better condition as approved by the State.

6. Final stabilization and restoration of disturbed or damaged areas shall begin immediately as soon as construction is completed and the construction support areas are no longer used.

7. The State reserves the right to determine the appropriateness and adequacy of proposed and/or implemented BMPs. Additional BMP measures required by the State shall not be paid for by the State.

8. The Contractor shall be responsible for all damages and/or injuries resulting from the BMPs.

9. The Contractor shall be responsible for any citations or fines that may be levied as related to the NPDES program on this permit, whether directly levied against the Contractor or the Department of Transportation.

10. The Contractor may discuss proposed and implemented BMP measures and the adequacy of them, with District Engineer.

B. WASTE DISPOSAL:

1. Waste Materials
Collect and store all waste materials in a securely lidded metal dumpster or roll off container with cover to keep rain out or loss of waste during windy conditions. The dumpster shall meet all local and State solid waste management regulations. Deposit all trash and construction debris from the site in the dumpster. Empty the dumpster weekly or when the container is two-thirds full, whichever is sooner. Do not bury construction waste materials onsite. The Contractor's supervisory personnel shall be instructed regarding the correct procedure for waste disposal. Post notices stating these practices, on a weatherproof bulletin board in an accessible location acceptable to the Engineer. The Contractor shall be responsible for seeing that these procedures are followed. Submit the Solid Waste Disclosure Form for Construction Sites to the Engineer within 30 calendar days of contract execution. Provide a copy of all the disposal receipts, which includes receipts for all excess excavated material, demolished material, etc., from the facility permitted by the Department of Health to receive solid waste to the Engineer monthly. This should also include documentation from any intermediary facility where solid waste is handled or processed.

2. Hazardous Waste
Dispose all hazardous waste materials in the manner specified by local, State, and federal regulations and by the manufacturer. The Contractor's site personnel shall be instructed in these practices and shall be responsible for seeing that these practices are followed.

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. Inspect all control measures weekly.

2. 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.

3. Complete and submit to the Engineer a maintenance inspection report within 24 hours after each inspection.

4. 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 in which the track-out occurs by the end of the day or as directed by the Engineer.

5. Include designated Concrete Washout Area(s) in the Water Pollution, Dust, and Erosion Control submittals.

6. Submit the name of a specific individual designated responsible for inspections, maintenance and repair activities and filling out the inspection and maintenance report.

7. 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.

8. Contain, remove, and dispose slurry generated from saw cutting of pavement in accordance with approved BMP practices. Do not allow discharge into the drainage system or State waters.

9. Complete initial stabilization within 14 calendar days after the temporary and permanent cessation of earth-disturbing activities.

D. GOOD HOUSEKEEPING BEST MANAGEMENT PRACTICES:

1. Materials Pollution Prevention Plan
   a. Applicable materials or substances listed below are expected to be present onsite during construction. Other materials and substances not listed below shall be added to the inventory.

Concrete	Detergents
Paints (enamel and latex)	Tar
Cleaning Solvents	Petroleum Based Products
Curing Compounds	Adhesives

   b. Use Material Management Practices to reduce the risk of spills or other accidental exposure of materials and substances to storm water runoff. Make an effort to store only enough product as is required to do the job.

   c. Store all materials stored onsite in a neat, orderly manner in their appropriate containers and if possible under a roof or other enclosure.

   d. Keep products in their original containers with the original manufacturer's label.

   e. Do not mix substances with one another unless recommended by the manufacturer.

   f. Whenever possible, use a product up completely before disposing of the container.

   g. Follow manufacturer's recommendations for proper use and disposal.

   h. Conduct a daily inspection to ensure proper use and disposal of materials onsite.

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LICENSED PROFESSIONAL ENGINEER
No. 11144-C
HAWAII U.S.A.
4/30/24
EXP. DATE
This work was prepared by me or under my supervision.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WATER POLLUTION AND EROSION CONTROL NOTES

MAUI DISTRICT BASEYARD OFFICE EXPANSION & RENOVATION, PART 2
Project No. HWY-M-03-21, Phase 2
Scale: None Date: July 2022

SHEET No. C002 OF 4 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-M-03-21, PHASE 2	2022	6	46

WATER POLLUTION AND EROSION CONTROL NOTES (CON'T.)

D. GOOD HOUSEKEEPING BEST MANAGEMENT PRACTICES:

2. Hazardous Material Pollution Prevention Plan
   a. Keep products in original containers unless they are not resealable.
   b. Retain original labels and safety data sheets (SDS) formerly material safety data sheets (MSDS).
   c. Dispose of surplus products according to manufacturers' instructions and local, State, and federal regulations.

3. Onsite and Offsite Product Specific Plan The following product specific practices shall be followed onsite:
   a. Petroleum Based Products:
      Monitor all onsite vehicles for leaks and perform regular preventive maintenance to reduce the chance of leakage. Store petroleum products in tightly sealed containers which are clearly labeled. Apply asphalt substances used onsite according to the manufacturer's recommendation.
   b. 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 or State and local regulations.
   c. 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.
   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. 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. Note that the reportable quantity for oil and fuel products is a spill of 25 gallons or more, a spill not cleaned within 72 hours, or a spill that threatens ground or surface waters. The Engineer will notify the National Response Center (NRC) at (800) 424-8802, the Clean Water Branch during regular business hours at (808) 586-4309, the Clean Water Branch (DOH-CWB) via email at cleanwaterbranch@doh.hawaii.gov during non-business hours, the DOH Hazard Evaluation and Emergency Response Office at (808) 586-4249, the Coast Guard Maui Station at (808) 986-0023 and the local Emergency Planning Committee at (808) 720-7285. The Contractor shall also provide to the Engineer, within 1 calendar day 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.

E. PERMIT REQUIREMENTS:

1. The calculated land disturbance area for this project based on the construction plans is 0.16 acres not including Contractor Staging and Storage areas. If the total of the disturbed area and the Contractor Staging and Storage area is one acre or greater, the Contractor shall obtain the NPDES Construction Activities Permit using HDOT's latest SWPPP template. See Hawaii Administrative Rules Chapter 11-55, Appendix C for the definition of land disturbance. The Contractor shall be responsible for obtaining the required NPDES Construction Activities Permit and complying with the requirements of HAR 11-55 including, but not limited to:
   a. Deadlines for initiation and completing initial stabilization.
   b. Increased inspection frequency and installation of rain gage if applicable.
   c. Deadlines to initiate and complete repairs to BMPs.
   d. Reporting requirements and corrective action reports.

2. Comply with all applicable State and Federal Permit conditions.

   Each BMP below is referenced to the corresponding section of the current HDOT Construction Best Management Practices Field Manual dated October 2021 and appropriate Supplemental Sheets. The Manual may be obtained from the HDOT Statewide Stormwater Management Program Website at http://www.stormwaterhawaii.com/resources/ contractors-and-consultants/ under Construction Best Management Practices Field Manual.

   The requirements for Water Pollution, Dust, and Erosion Control submittals are included in Section 209 of the Hawaii Standard Specifications for Road and Bridge Construction dated 2005 and applicable Special Provisions. A list of pollutant sources and corresponding BMP used to mitigate the pollutants are included 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-1).
   2. Contain on-site runoff using Perimeter Sediment Controls
      a. SC-11 Construction Roads and Parking Area Stabilization
   3. Incorporate applicable Site Management BMP
      a. SM-1 Construction BMP Training
      b. SM-2 Material Storage and Handling
      c. SM-3 Stockpile Management
      d. SM-4 Concrete Wash and Waste Management
      e. SM-6 Solid Waste Management
      f. SM-7 Sanitary Waste Management
      g. SM-9 Hazardous Materials and Waste Management
      h. SM-10 Spill Prevention and Control
      i. SM-11 Vehicle and Equipment Cleaning
      j. SM-12 Vehicle and Equipment Maintenance
      k. SM-13 Vehicle and Equipment Refueling
      l. SM-14 Scheduling
      m. SM-15 Location of Potential Sources of Sediment
      n. SM-16 Staging Area
      o. SM-19 Dust Control
      p. SM-20 Paving Operations
      q. SM-21 Structure Construction and Painting
   4. Contain pollutants within the Construction Staging/Storage Area BMP with applicable Perimeter Sediment Controls and Site Management BMP.
   5. Manage Concrete Waste including installing a Concrete Washout Area (SM-4) and properly disposing of Concrete Curing Water (California Stormwater BMP Handbook NS-12 Concrete Curing).
   6. Remove saw cut slurry and hydrodemolition water from the site by vacuuming. Provide storm drain protection and/or perimeter sediment controls during saw cutting and hydrodemolition work.

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4/30/24 EXP. DATE
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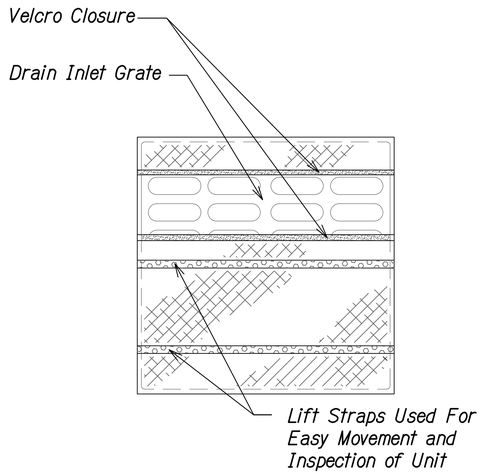
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WATER POLLUTION AND EROSION CONTROL NOTES

MAUI DISTRICT BASEYARD OFFICE EXPANSION & RENOVATION, PART 2
Project No. HWY-M-03-21, Phase 2
Scale: None Date: July 2022

SHEET No. C003 OF 4 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-M-03-21, PHASE 2	2022	7	46



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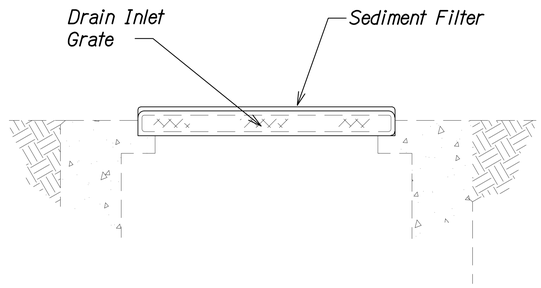

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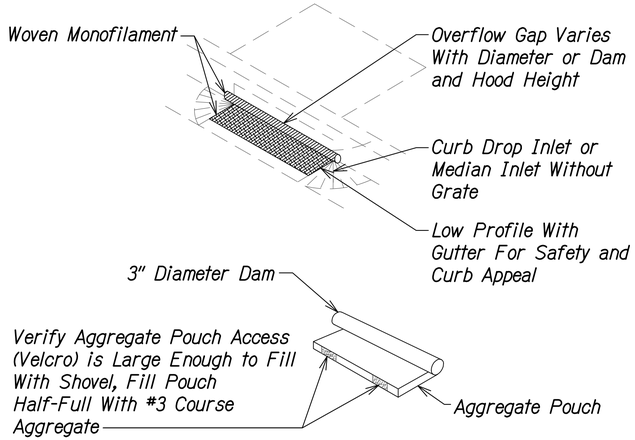

Note:
1. Sediment filter for catch basins shall meet the requirements of the State Construction BMP Field Manual, SC-1.

TEMPORARY CATCH BASIN PROTECTION DETAIL

Scale: Not to Scale

2 C101 C004

Note:
1. Drain inlet protection shall meet the requirements of the State Construction BMP Field Manual, SC-1.

TEMPORARY DRAIN INLET PROTECTION DETAIL

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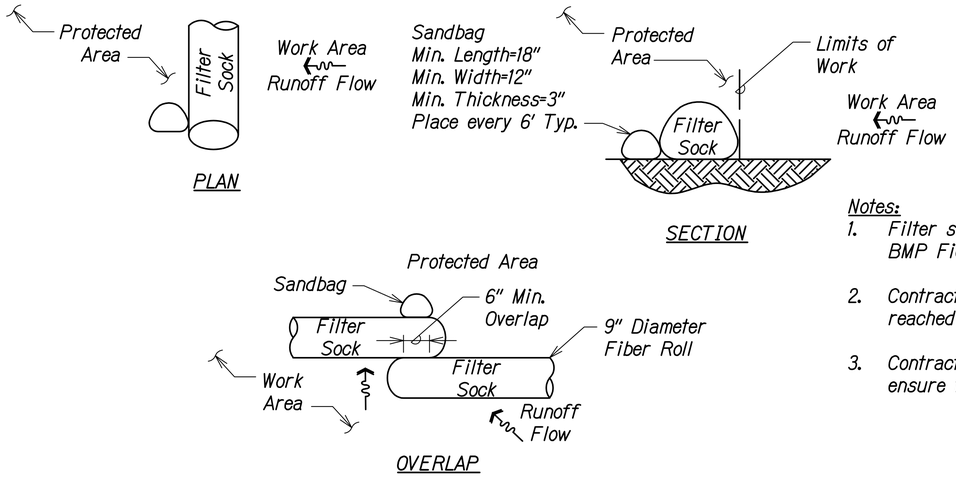
1 C101 C004



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Notes:
1. Filter sock shall meet the requirements of the State Construction BMP Field Manual, SC-6 Compost Filter Berm/Sock.
2. Contractor shall remove debris behind filter sock when it has reached one-half the height of the fiber roll.
3. Contractor is not required to stake compost filter socks but shall ensure filter socks remain in place to provide adequate protection.

TEMPORARY FILTER SOCK DETAIL

Scale: Not to Scale

3 C101 C004

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WATER POLLUTION AND EROSION CONTROL DETAILS

MAUI DISTRICT BASEYARD OFFICE EXPANSION & RENOVATION, PART 2
Project No. HWY-M-03-21, Phase 2
Scale: Not to Scale Date: July 2022

SHEET No. C004 OF 4 SHEETS