

SECTION 209 - TEMPORARY WATER POLLUTION, DUST, AND EROSION CONTROL

209.01 Description. This section describes the following:

(A) Including detailed plans, diagrams, and written Site-Specific Best Management Practices (BMP); constructing, maintaining, and repairing temporary water pollution, dust, and erosion control measures at the project site, including local material sources, work areas and haul roads; removing and disposing hazardous wastes; control of fugitive dust (defined as uncontrolled emission of solid airborne particulate matter from any source other than combustion); and complying with applicable State and Federal permit conditions.

(B) Work associated with construction storm water, dewatering, and hydrotesting activities and complying with conditions of the National Pollutant Discharge Elimination System (NPDES) permit(s) authorizing discharges associated with construction storm water, dewatering, and hydrotesting activities.

(C) Work associated with U.S. Department of Army, Section 404 Permit, and State Department of Health, Section 401 Water Quality Certification.

(D) Potential pollutant identification and mitigation measures are listed in Appendix A for use in the development of the Contractor's Site-Specific BMP.

Requirements of this section also apply to construction support activities including concrete or asphalt batch plants, rock crushing plants, equipment staging yards/areas, material storage areas, excavated material disposal areas, and borrow areas located outside the State Right-of-Way. For areas serving multiple construction projects, or operating beyond the completion of the construction project in which it supports, the Contractor shall be responsible for securing the necessary permits, clearances, and documents, and following the conditions of the permits and clearances, at no cost to the State.

209.02 Materials. Comply with applicable materials described in Chapters 2 and 3 of the current HDOT "Construction Best Management Practices Field Manual" and the current "An Integrated Storm Water Management Approach and a Summary of Clear Water Diversion and Isolation Best Management Practices for Use in the State of Hawaii, by the Federal Highway Administration and Hawaii Department of Transportation, Practitioners Guide" hereafter called "Practitioners Guide". In addition, the materials shall comply with the following:

(A) **Grass.** Grass shall be a quick growing species such as rye grass, Italian rye grass, or cereal grasses. Grass shall be suitable to the area and

provide a temporary cover that will not compete later with permanent cover. Alternative grasses are allowable if acceptable to the Engineer.

(B) Fertilizer and Soil Conditioners. Fertilizer and soil conditioners shall be a standard commercial grade acceptable to the Engineer. Fertilizer shall conform to Subsection 619.02(H)(1) - Commercial Fertilizer.

(C) Hydro-mulching. Hydro-mulching used as a temporary vegetative stabilization measure shall consist of materials in Subsections 209.02(A) - Grass, and 209.02(B) – Fertilizer and Soil Conditioners. Mulches shall be recycled materials including bagasse, hay, straw, wood cellulose bark, wood chips, or other material acceptable to the Engineer. Mulches shall be clean and free of noxious weeds and deleterious materials. Potable water shall meet the requirements of Subsection 712.01 - Water. Submit alternate sources of irrigation water for the Engineer's acceptance if deviating from 712.01 - Water. Installation and other requirements shall be in accordance with portions of Section 641- Hydro-Mulch Seeding including 641.02(D) - Soil and Mulch Tackifier, 641.03(A) – Seeding, and 641.03(B) - Planting Period. Install non-vegetative controls including mulch or rolled erosion control products while the vegetation is being established. Water and fertilize grass. Apply fertilizer as recommended by the manufacturer. Replace grass the Engineer considers unsuitable or sick. Remove and dispose of trash and debris. Remove invasive species. Mow as needed to prevent site or signage obstructions, fire hazard, or nuisance to the public. Do not remove down stream sediment control measures until the vegetation is uniformly established, including no large bare areas, and provides 70 percent of the density of pre-disturbance vegetation. Obtain Engineer's acceptance prior to removal of BMPs. Temporary vegetative stabilization shall not be used longer than one year.

(D) Silt Fences. Comply with ASTM D6462, Standard Practice for Silt Fence Installation.

(E) Mineral-Based Binder. Apply mineral-based binder for erosion control per manufacturer's requirements or as accepted by the Engineer. Mineral-based binder shall be environmentally benign, harmless to fish, birds, plants, and animals, and shall be nontoxic and noncombustible.

(F) Surfactant. Apply surfactant per manufacturer's requirements or as accepted by the Engineer. Surfactant shall be environmentally benign, harmless to fish, birds, plants, and animals, and shall be nontoxic and noncombustible.

Alternative materials or methods to control, prevent, remove and dispose pollution are allowable if acceptable to the Engineer.

95 **209.03 Construction.**

96
97 **(A) Preconstruction Requirements.**

98
99 **(1) Water Pollution, Dust, and Erosion Control Meeting.**

100 Schedule a water pollution, dust, and erosion control meeting with the
101 Engineer after Site-Specific BMP is accepted in writing by the
102 Engineer. Conduct meeting a minimum of 7 calendar days prior to the
103 Start Work Date. Discuss sequence of work, plans and proposals for
104 water pollution, dust, and erosion control.
105

106 **(2) Water Pollution, Dust, and Erosion Control Submittals.**

107 Submit a Site-Specific BMP Plan and a completed Storm Water
108 Pollution Prevention Plan (SWPPP) or SWPPP/In-Water Pollution
109 Prevention Plan (IWPPP) within 21 calendar days of date of award.
110 The SWPPP is applicable to projects with a NPDES Permit for
111 Construction Activities and for all projects on Oahu. The
112 SWPPP/IWPPP is applicable to projects with an Army Corps 404
113 Permit. Submission of complete and acceptable Site-Specific BMP
114 Plan and SWPPP or SWPPP/IWPPP is the sole responsibility of the
115 Contractor and additional contract time will not be issued for delays
116 due to incompleteness. Include the following:
117

118 **(a)** Written description of activities to reduce erosion and
119 minimize water pollutants entering State waters, drainage or
120 sewer systems. BMP shall include the following:
121

122 **1.** An identification of potential pollutants and their
123 sources.
124

125 **2.** A list of all materials and heavy equipment to be
126 used during construction.
127

128 **3.** Descriptions of the methods and devices used to
129 minimize the discharge of pollutants into State waters,
130 drainage or sewer systems, and/or isolation of In-Water
131 work.
132

133 **4.** Details of the procedures used for the
134 maintenance and subsequent removal of any erosion or
135 siltation control devices.
136

137 **5.** Methods of removing and disposing hazardous
138 wastes encountered or generated during construction.
139

140 **6.** Methods of removing and disposing concrete and
141 asphalt pavement cutting slurry, concrete curing water,

and hydrodemolition water.

7. Spill Control and Prevention and Emergency Spill Response Plan.

8. Fugitive Dust Control Plan, including dust from grinding, sweeping, or brooming off operations or combination thereof containing the following:

a. List of dust producing activities.

b. Method(s) that shall be used to mitigate or eliminate amount of dust produced, such as spraying water from water truck, using misters, chemical dust controlling agents, or combination thereof; hydro-mulching, keeping soil moist, and grassing to minimize project impacts on adjacent properties.

c. Methods to prevent the discharge of fugitive dust from leaving the project site, including project staging areas, onto adjacent properties including details for constructing and maintaining dust screens.

9. Methods of storing and handling of oils, paints and other products used for the project.

10. Material storage and handling areas, and other staging areas.

11. Concrete truck washouts.

12. Concrete waste control.

13. Fueling and maintenance of vehicles and other equipment.

14. Tracking of sediment off-site from project entries and exits.

15. Litter management.

16. Toilet facilities.

17. Other factors that may cause water pollution, dust and erosion control.

(b) Provide plans indicating location of water pollution, dust and erosion control devices; provide plans and details of BMPs to be installed or utilized; show areas of soil disturbance in cut and fill, indicate areas used for construction staging and storage including items (1) through (17) above, storage of aggregate (indicate type of aggregate), asphalt cold mix, soil or solid waste, equipment and vehicle parking, and show areas where vegetative practices are to be implemented. Indicate intended drainage pattern on plans. Include flow arrows. Include separate drawing for each phase of construction that alters drainage patterns or Contractor's sequencing for In-Water work. Indicate approximate date when device will be installed and removed.

(c) Construction schedule.

(d) Name(s) of specific individual(s) designated responsible for water pollution, dust, and erosion controls on the project site. Include home, cellular, and business telephone numbers, fax numbers, and e-mail addresses. Individual(s) shall have authority to resolve complaints and inquiries. The Engineer will forward public complaints and inquiries regarding dust from construction activities to the representative(s).

(e) Description of fill material to be used.

(f) For projects with an NPDES Permit for Construction Activities and for projects on Oahu, complete all sections in the SWPPP.

(g) For projects with an Army Corps 404 Permit, complete all sections in the SWPPP/IWPPP.

(h) For projects with an NPDES Permit, information required for compliance with the conditions of the Notice of General Permit Coverage (NGPC)/NPDES Permit.

(i) Site-Specific BMP Review Checklist. The checklist may be downloaded from HDOT's Storm Water Management website at <http://stormwaterhawaii.com>.

Date and sign Site-Specific BMP Plan. Keep accepted copy of Site-Specific BMP Plan, SWPPP, or SWPPP/IWPPP on-site or at an accessible location so that it can be made available at the time of an on-site inspection or upon request by the Engineer, HDOT Third-Party Inspector, and/or

DOH/EPA Representative. Amendments to the Site-Specific BMP Plan shall be included with original Site-Specific BMP Plan. Modify SWPPP or SWPPP/IWPPP if necessary to conform to revisions. Include date of installation and removal of Site-Specific BMP measures. Obtain written acceptance by the Engineer before implementing revised Site-Specific BMPs in the field.

Follow the guidelines in the current HDOT "Construction Best Management Practices Field Manual", in developing, installing, and maintaining land-based Site-Specific BMPs for all projects.

Follow the guidelines in the current HDOT "Practitioners Guide" in developing, installing, and maintaining in-water or over water Site-Specific BMPs. BMPs in Sections 5.5 to 5.13 of the Practitioners Guide describe BMPs which are authorized clear water isolation techniques within the Temporary Impact Area described in the Army Corps 404 Permit application and/or other contract documents. Notify the Engineer of request to include other clear water isolation techniques not included in the manual when submitting SWPPP/IWPPP.

For any conflicting requirements between the Manual(s) and applicable bid documents, the applicable bid documents will govern. Should a requirement not be clearly described within the applicable bid documents, notify the Engineer immediately for interpretation. For the purposes of clarification "applicable bid documents" include the construction plans, standard specifications, special provisions, permits, and the SWPPP or SWPPP/IWPPP when applicable.

Use respective Soil Erosion Guidelines for Oahu, Maui, Kauai and Hawai'i projects.

(B) Construction Requirements.

(1) General.

Do not begin work until submittals detailed in Subsection 209.03(A)(2) - Water Pollution, Dust, and Erosion Control Submittals are completed and accepted in writing by the Engineer.

Install, maintain, monitor, repair and replace Site-Specific BMP measures, such as for water pollution, dust and erosion control; installation, monitoring, and operation of hydrotesting activities; removal and disposal of hazardous waste indicated on plans, concrete

cutting slurry, concrete curing water; or hydrodemolition water. Site-Specific BMP measures shall be in place, functional and accepted by HDOT personnel prior to initiating any ground disturbing or In-Water activities.

If necessary, furnish and install rain gage in a secure location prior to field work including installation of Site-Specific BMP. Provide rain gage with a tolerance of at least 0.05 inches of rainfall. Install rain gage on project site in an area that will not deter rainfall from entering the gate opening. Do not install in a location where rain water may splash into rain gage. The rain gage installation shall be stable and plumbed. Maintain rain gage and replace rain gage that is stolen, does not function properly or accurately, is worn out, or needs to be relocated. Do not begin field work until rain gage is installed and Site-Specific BMPs are in place. Rain gage data logs shall be readily available. Submit rain gage data logs weekly to the Engineer.

Address all comments received from the Engineer.

Modify and resubmit plans and construction schedules to correct conditions that develop during construction which were unforeseen during the design and pre-construction stages. Include changes in the SWPPP or SWPPP/IWPPP.

BMP measures shall be in place and operational at the end of work day or as required by Section 209.03(B) – Construction Requirements.

Install and maintain either or both stabilized construction entrances and wheel washes to minimize tracking of dirt and mud onto roadways. Restrict traffic to stabilized construction areas only. Clean dirt, mud, or other material tracked onto the road, sidewalk, or other paved area by the end of the same day in which the track-out occurs. Modify stabilized construction entrances to prevent mud from being tracked onto road. Stabilize entire access roads if necessary.

Coordinate temporary control provisions with permanent control features throughout the construction and post-construction period.

Limit maximum surface area of earth material exposed at any time to 300,000 square feet. Do not expose or disturb surface area of earth material (including clearing and grubbing) until BMP measures are installed and accepted in writing by the Engineer. Protect temporarily or permanently disturbed soil surface from rainfall impact, runoff and wind before end of the work day.

(2) Stabilization.

330
331 Immediately initiate stabilizing exposed soil areas upon
332 completion of earth disturbing activities for areas permanently or
333 temporarily ceased on any portion of the site. Earth-disturbing
334 activities have permanently ceased when clearing and excavation
335 within any area of the construction site that will not include permanent
336 structures has been completed. Earth-disturbing activities have
337 temporarily ceased when clearing, grading, and excavation within any
338 area of the site that will not include permanent structures will not
339 resume for a period of 14 or more calendar days, but such activities
340 will resume in the future. The term "immediately" is used in this
341 section to define the deadline for initiating stabilization measures.
342 "Immediately" means as soon as practicable, but no later than the end
343 of the next work day, following the day when the earth-disturbing
344 activities have temporarily or permanently ceased.

345
346 **(a)** For projects with an NPDES Permit for Construction
347 activities:

348
349 1. For construction areas discharging into waters
350 not impaired for nutrients or sediments, complete initial
351 stabilization within 14 calendar days after the temporary
352 or permanent cessation of earth-disturbing activities.

353
354 2. For construction areas discharging into nutrient
355 or sediment impaired waters, complete initial
356 stabilization within 7 calendar days after the temporary
357 or permanent cessation of earth-disturbing activities.

358
359 **(b)** For projects without an NPDES Permit for Construction
360 activities, complete initial stabilization within 14 calendar days
361 after the temporary or permanent cessation of earth-disturbing
362 activities.

363
364 **(c)** Any of the following types of activities constitutes
365 initiation of stabilization:

366
367 1. Prepping the soil for vegetative or non-vegetative
368 stabilization;

369
370 2. Applying mulch or other non-vegetative product
371 to the exposed area;

372
373 3. Seeding or planting the exposed area;
374

375 4. Starting any of the activities in items (1) – (3)
376 above on a portion of the area to be stabilized, but not
377 on the entire area; and
378

379 5. Finalizing arrangements to have stabilization
380 product fully installed in compliance with the deadline
381 for completing initial stabilization activities.
382

383 (d) Any of the following types of activities constitutes
384 completion of initial stabilization activities:
385

386 1. For vegetative stabilization, all activities
387 necessary to initially seed or plant the area to be
388 stabilized; and/or
389

390 2. For non-vegetative stabilization, the installation
391 or application of all such non-vegetative measures.
392

393 (e) If the Contractor is unable to meet the deadlines above
394 due to circumstances beyond the Contractor's control, and the
395 Contractor is using vegetative cover for temporary or
396 permanent stabilization, the Contractor may comply with the
397 following stabilization deadlines instead as agreed to by the
398 Engineer:
399

400 1. Immediately initiate, and complete within the
401 timeframe shown above, the installation of temporary
402 non-vegetative stabilization measures to prevent
403 erosion;
404

405 2. Complete all soil conditioning, seeding, watering
406 or irrigation installation, mulching, and other required
407 activities related to the planting and initial establishment
408 of vegetation as soon as conditions or circumstances
409 allow it on the site; and
410

411 3. Notify and provide documentation to the
412 Engineer the circumstances that prevent the Contractor
413 from meeting the deadlines above for stabilization and
414 the schedule the Contractor will follow for initiating and
415 completing initial stabilization and as agreed to by the
416 Engineer.
417

418 Follow the applicable requirements of the specifications
419 and special provisions including Section 619 - Planting and
420 Section 641 – Hydro-Mulch Seeding.
421

422 Immediately after seeding or planting the area to be
423 vegetatively stabilized, to the extent necessary to prevent
424 erosion on the seeded or planted area, select, design, and
425 install non-vegetative erosion controls that provide cover (e.g.,
426 mulch, rolled erosion control products) to the area while
427 vegetation is becoming established.

428
429 Protect exposed or disturbed surface area with mulches,
430 grass seeds or hydromulch. Spray mulches at a rate of 2,000
431 pounds per acre. Add tackifier to mix at a rate of 85 pounds
432 per acre. Apply grass seeds at a rate of 125 pounds per acre.
433 For hydromulch, use the ingredients and rates required for
434 mulches and grass seeds. Submit recommendations from a
435 licensed Landscape Architect when deviating from the
436 application rates above.

437
438 Apply fertilizer to mulches, grass seed or hydromulch
439 per manufacturer's recommendations. Submit
440 recommendations from a licensed Landscape Architect when
441 deviating from the manufacturer's recommendations.

442
443 Install velocity dissipation measures when exposing
444 erodible surfaces greater than 15 feet in height.

445 **(3) Dust Control.**

446
447
448 Chemicals may be used as soil stabilizers for either or both
449 erosion and dust control if acceptable to the Engineer. Chemicals
450 may include mineral-based binders with surfactants to minimize water
451 consumption.

452
453 If dust screens are required, maintain dust screens until
454 permanent ground cover has been established. Revise dust screen
455 installations, as necessary, to complete work and to meet
456 environmental and climate changes.

457
458 When applying water for dust control comply with the following:

459
460 **(a)** Apply water uniformly by pressure-type tank truck
461 equipped with spray system and adequate control apparatus.
462 Ensure uniform application of water. Use watering systems
463 such as pipe, hose, and spray apparatus, only if uniform
464 application of water can be ensured.

465
466 **(b)** Apply water as conditions require. Prevent water from
467 wetting vehicles, pedestrians, and existing pavements. Repair
468 or compensate for damages caused by watering.

(c) Employ best management practices (BMP's) with regard to dust control water leaving project site or entering into drainage or sewer systems, or State waters. Washing down of debris or dirt into drainage or sewer systems, or State waters will not be allowed.

Continue monitoring for dust until the Substantial Completion Date.

Cover exposed surface of materials completely with tarpaulin or similar device when transporting aggregate, soil, excavated material or material that may be source of fugitive dust.

(4) Maintenance and Inspection.

Install or modify Site-Specific BMP measures due to change in the Contractor's means and methods, or for omitted condition that should have been allowed for in the accepted Site-Specific BMP or a Site-Specific BMP that replaces an accepted Site-Specific BMP that is not satisfactorily performing. Modifications to Site-Specific BMP measures shall be accepted in writing by the Engineer and updated in the SWPPP or SWPPP/IWPPP prior to implementation.

Properly maintain all Site-Specific BMP measures.

Obtain Engineer's acceptance prior to removing BMPs.

Cleanup and remove any pollutant that can be attributed to the Contractor.

(a) For projects with an NPDES Permit for Construction Activities:

1. For construction areas discharging into nutrient or sediment impaired waters, inspect, prepare a written report, and make repairs to BMP measures at the following intervals:

a. Weekly.

b. Within 24 hours of any rainfall of 0.25 inch or greater which occurs in a 24-hour period.

c. When existing erosion control measures are damaged or not operating properly as required by Site-Specific BMP.

2. For construction areas discharging to waters not impaired for nutrients or sediments, inspect, prepare a written report, and make repairs to BMP measures at the following intervals:

a. Weekly.

b. When existing erosion control measures are damaged or not operating properly as required by Site-Specific BMP.

(b) For projects without an NPDES Permit for Construction activities, inspect, prepare a written report, and make repairs to BMP measures at the following intervals:

1. Weekly.

2. When existing erosion control measures are damaged or not operating properly as required by Site-Specific BMP.

Temporarily remove, replace or relocate any Site-Specific BMP that must be removed, replaced or relocated due to potential or actual flooding, or potential danger or damage to project or public as directed by the Engineer. Reinstall once flooding, or potential danger or damage to project or public is no longer a risk.

Maintain records of inspections of Site-Specific BMP work. Keep continuous records for duration of the project. Submit copy of Inspection Report to the Engineer within 24 hours after each inspection. Inspection reports shall be completed after initial inspection and after deficiencies have been corrected. Keep copies on-site or at an accessible location so that it can be made available at the time of an on-site inspection or upon request by the Engineer, HDOT Third-Party Inspector, and/or DOH/EPA Representative.

The Contractor's designated representative specified in Subsection 209.03(A)(2)(d) shall address any Site-Specific BMP deficiencies brought up by the Engineer immediately, including weekends and holidays, and complete work to fix the deficiencies 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. Address any Site-Specific BMP deficiencies brought up by the State's Third-Party Inspector in the timeframe above or as specified in the MS4 NPDES Permit or Enforcement Response Plan Construction Site Runoff Control,

563 whichever is more stringent. The MS4 NPDES Permits only apply to
564 Oahu and Maui (Kahului). The Enforcement Response Plan
565 Construction Site Runoff Control only applies to Oahu. In this section,
566 "immediately" means the Contractor shall take all reasonable
567 measures to minimize or prevent discharge of pollutants until a
568 permanent solution is installed and made operational. If a problem is
569 identified at a time in the day in which it is too late to initiate repair,
570 initiation of repair shall begin on the following work day. When
571 installation of a new pollution prevention control or a significant repair
572 is needed, complete installation or repair no later than seven calendar
573 days from the time of notification/Contractor discovery. Notify the
574 Engineer and document why it is infeasible to complete the installation
575 or repair within seven calendar days and complete the work as soon
576 as practicable and as agreed to by the Engineer. Address Site-
577 Specific BMP deficiencies discovered by the Contractor within the
578 timeframe above. Address any inquiries or complaints forwarded by
579 the Engineer from the public regarding dust from construction
580 activities and correct deficiencies in dust control methods immediately
581 or by the next working day if a problem is identified at a time in the
582 day in which it is too late to respond or initiate correcting deficiencies
583 or as directed by the Engineer. If the Contractor fails to satisfactorily
584 address these Site-Specific BMP deficiencies, the Engineer reserves
585 the right to employ outside assistance or use the Engineer's own labor
586 forces to provide necessary corrective measures. The Engineer will
587 charge the Contractor such incurred costs plus any associated project
588 engineering costs. The Engineer will make appropriate deductions
589 from the Contractor's monthly progress estimate. Failure to apply
590 Site-Specific BMP measures may result in one or more of the
591 following: assessment of liquidated damages, suspension, or
592 cancellation of Contract with the Contractor being fully responsible for
593 all additional costs incurred by the State.

594
595 **(C) Additional Construction Requirements for In-Water Work.**
596

597 Coordinate site access, schedule of construction activities,
598 Site-Specific BMPs measures, erosion and sediment control
599 measures, and document visual observations, and comply with all
600 requirements and conditions of the Section 401 WQC/Army Corps 404
601 Permit.

602
603 Obtain site photographs of the construction site including the
604 in-water work area daily. All photographs shall be prepared, labeled
605 and annotated with appropriate captions on the HDOT Inspection
606 Report for In-Water Work. Submit the photographs to the Engineer by
607 the close of the next business day. A site plan showing the location
608 and orientation of the photographs shall also be included. The digital
609 files of the photographs and/or documents containing the

photographs, the site plan and other accompanying documents, if necessary, shall be placed on a CD and submitted to the Engineer. The file format shall be acceptable to the Engineer.

Obtain and submit to the Engineer post-construction site photographs on the HDOT Inspection Report for In-Water Work within two (2) working days after the completion of each phase of the proposed construction activities. The photographs, site plan, digital files and other accompanying documents shall be submitted to the Engineer.

The Contractor shall be responsible for the effectiveness and adequacy of the implemented Site-Specific BMP measures, and other environmental protection measures. The Contractor shall review and assess these measures daily or as required by the permits. If there are any indications of a discharge at any time, including a turbidity plume, stop work immediately and investigate the source of the plume. The Contractor shall immediately notify the Engineer. If possible contain the area where the plume is emanating from. If the discharge poses an immediate threat to the public or environment, call 911 immediately.

(1) If the BMPs require reinstallation in accordance with the accepted Site-Specific BMP Plan, the Contractor shall cease activities, take immediate corrective action, document the corrective action taken, and provide a written report to the Engineer by the close of the work day.

(2) If the BMPs do not require repair or modification, determine what activities are causing the discharges and provide a report to the Engineer proposing corrective action. Monitor following corrective action to ensure the effectiveness of the corrective action.

(3) If the BMPs require modification, the Contractor shall cease activities, and submit an amendment to the Site-Specific BMP Plan within 24 hours to the Engineer for review. Do not resume work until the proposed amendments are accepted by the Engineer. Upon the Engineer's acceptance, the Contractor shall take immediate corrective action, and document the corrective action taken.

Section 404 Department of the Army Permit.

Implement only the Site-Specific BMPs on the Site-Specific BMP Plan/Erosion Control Plan accepted by the Engineer and included in the certified SWPPP/IWPPP. Immediately notify the

Engineer if the BMPs are insufficient for preventing discharge of pollutants. The Contractor shall adhere to the restrictions in the Section 404 Permit. The Contractor shall be responsible for any revisions required to modify the 404 Permit at no additional cost to the State and no extension of time if the Contractor discharges unauthorized fill.

Notify the Engineer immediately if BMPs have been damaged or displaced, or result in a discharge of material. The Engineer must notify the USACE and obtain approval prior to recovery of discharged materials outside the Temporary Impact Area.

Severe Storm Contingency Plan

Provide a Severe Storm Contingency Plan and implement each response appropriately.

(D) Discharges of Storm Water Associated with Construction Activities. If work includes disturbance of one acre or more, an NPDES Permit authorizing Discharges of Storm Water Associated with Construction Activity (CWB-NOI Form C) or Individual Permit authorizing storm water discharges associated with construction activity is required from the Department of Health Clean Water Branch (DOH-CWB).

Do not begin construction activities until all required conditions of the permit are met and submittals detailed in Subsection 209.03(A)(2) – Water Pollution, Dust, and Erosion Control Submittals are completed and accepted in writing by the Engineer.

(E) Discharges Associated with Hydrotesting Activities. If hydrotesting activities require effluent discharge into State waters or drainage systems, an NPDES Hydrotesting Waters Permit (CWB-NOI Form F) or Individual Permit authorizing discharges associated with hydrotesting from DOH-CWB is required from the DOH-CWB.

Do not begin hydrotesting activities until the DOH-CWB has issued an Individual NPDES Permit or Notice of General Permit Coverage (NGPC). Conduct Hydrotesting operations in accordance with the conditions of the permit or NGPC.

(F) Discharges Associated with Dewatering Activities. If dewatering activities require effluent discharge into State waters or drainage systems, an NPDES Dewatering Permit (CWB-NOI Form G) or Individual Permit authorizing discharges associated with dewatering from DOH-CWB is required from the DOH-CWB.

Do not begin dewatering activities until the DOH-CWB has issued an Individual NPDES Permit or Notice of General Permit Coverage (NGPC). Conduct dewatering operations in accordance with the conditions of the permit or NGPC.

(G) Solid Waste. Submit the Solid Waste Disclosure Form for Construction Sites to the Engineer within 21 calendar days of date of award. Keep copies on-site or at an accessible location so that it can be made available at the time of an on-site inspection or upon request by the Engineer, HDOT Third-Party Inspector, and/or DOH/EPA Representative. Provide a copy of all the disposal receipts 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, haul tags as applicable, or any documentation as requested by the Engineer. Notify Engineer at minimum 48 hours prior to removal of material from site. All material not used on the project shall be considered solid waste.

(H) Construction BMP Training. The Contractor's representative responsible for development of the Site-Specific BMP Plan and implementation of Site-Specific BMPs in the field shall attend the State's Construction Best Management Practices Training. The Contractor shall keep training logs updated and readily available.

209.04 Measurement.

(A) Installation, maintenance, monitoring, and removal of BMP will be paid on a lump sum basis. Measurement for payment will not apply.

(B) The Engineer will only measure additional water pollution, dust and erosion control required and requested by the Engineer on a force account basis in accordance with Subsection 109.08 – Force Account Provisions and Compensation.

209.05 Payment. The Engineer will pay for accepted pay items listed below at contract price per pay unit, as shown in the proposal schedule. Payment will be full compensation for work prescribed in this section and contract documents.

The Engineer will pay for each of the following pay items when included in proposal schedule:

Pay Item	Pay Unit
Installation, Maintenance, Monitoring, and Removal of BMP	Lump Sum

Payment for all work prescribed in this section including: submittals, sampling, testing, reporting, dust control measures, installation, maintenance,

monitoring, and removal of BMP's shall be paid for under the lump sum pay item shown in the proposal schedule. This includes payment for installation or modification of Site-Specific BMP measures due to change in the Contractor's means and methods, or for omitted condition that should have been allowed for in the accepted Site-Specific BMP or a Site-Specific BMP that requires repair or replacement of an accepted Site-Specific BMP that is not satisfactorily performing.

Additional Water Pollution, Dust, and Erosion Control Force Account

An estimated amount for force account is allocated in proposal schedule under 'Additional Water Pollution, Dust, and Erosion Control', but actual amount to be paid will be the sum shown on accepted force account records, whether this sum be more or less than estimated amount allocated in proposal schedule. The Engineer will pay for BMP measures requested by the Engineer that are beyond scope of accepted Site-Specific BMP for the original contract work on a force account basis.

No progress payment will be authorized until the Engineer accepts in writing Site-Specific BMP or when the Contractor fails to maintain project site in accordance with accepted BMP.

For all citations or fines received by the Department for non-compliance, including compliance with NPDES Permit and Army Corps 404 Permit conditions, the Contractor shall reimburse State within 30 calendar days for full amount of outstanding cost State has incurred, or the Engineer will deduct cost from progress payment.

The Engineer will not pay for work to repair or to compensate for damages caused by dust or water.

The Engineer may assess liquidated damages up to \$27,500 per day for non-compliance of each BMP requirement and all other requirements in this section.

Appendix A

The following list identifies potential pollutant sources and corresponding BMPs used to mitigate the pollutants. Each BMP is referenced to the corresponding section of the current HDOT Construction Best Management Practices Field Manual or appropriate Supplemental Sheets. The Manual may be obtained from the HDOT Statewide Storm Water Management Program Website at <http://www.stormwaterhawaii.com/resources/contractors-and-consultants/> under Construction Best Management Practices Field Manual. Supplemental BMP sheets are located at <http://www.stormwaterhawaii.com/resources/contractors-and-consultants/storm-water-pollution-prevention-plan-swppp/> under Concrete Curing and Irrigation Water.

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
<i>Construction debris, green waste, general litter</i>	<ul style="list-style-type: none"> • <i>Separate contaminated clean up materials from construction and demolition (C&D) wastes.</i> • <i>Provide waste containers (e.g., dumpster or trash receptacle) of sufficient size and number to contain construction and domestic wastes.</i> • <i>Inspect construction waste and recycling areas regularly.</i> • <i>Schedule solid waste collection regularly.</i> • <i>Schedule recycling activities based on construction/demolition phases.</i> • <i>Empty waste containers weekly or when they are two-thirds full, whichever is sooner.</i> • <i>Do not allow containers to overflow. Clean up immediately if they do.</i> • <i>On work days, clean up and dispose of waste in designated waste containers.</i> • <i>Cover dumpster or trash receptacle with impermeable cover at the end of the workday.</i> • <i>See Solid Waste Management Section SM-6 for additional requirements.</i> • <i>Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.</i> 	<i>See Solid Waste Management Section SM-6. Protect Storm Drain Inlets SC-2, and Perimeter Sediment Controls where applicable.</i>
<i>Materials associated with the operation and maintenance of equipment, such as oil, fuel, and hydraulic fluid leakage</i>	<ul style="list-style-type: none"> • <i>Use off-site wash racks, repair and maintenance facilities, and fueling sites when practical.</i> • <i>Designate bermed wash area if cleaning on-site is necessary.</i> • <i>Place drip pans or drop cloths under vehicles and equipment to absorb spills or leaks.</i> • <i>Provide an ample supply of readily available spill cleanup materials.</i> • <i>Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly.</i> • <i>Do not clean surfaces or spills by hosing the area down.</i> • <i>Eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge.</i> • <i>Inspect on-site vehicles and equipment regularly and immediately repair leaks.</i> 	<i>See Vehicle and Equipment Cleaning, Maintenance, and Refueling, Sections SM-11, SM-12, and SM-13, and Material Delivery, Storage and Material Use Sections SM-2 and SM-3, and Spill</i>

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
	<ul style="list-style-type: none"> • Regularly inspect fueling areas and storage tanks. • Train employees on proper maintenance and spill practices and procedures and fueling and cleanup procedures. • Store diesel fuel, oil, hydraulic fluid, or other petroleum products or other chemicals in water-tight containers and provide cover or secondary containment. • Do not remove original product labels and comply with manufacturer's labels for proper disposal. • Dispose of containers only after all the product has been used. • Dispose of or recycle oil or oily wastes according to Federal, State, and Local requirements. • Store soaps, detergents, or solvents under cover or other means to prevent contact with rainwater. • See Vehicle and Equipment Cleaning, Maintenance, and Refueling, Sections SM-11, SM-12, and SM-13 and Material Use Section SM-3 for additional requirements. 	Prevention and Control SM-10.

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
Soil erosion from the disturbed areas	<ul style="list-style-type: none"> • Provide Soil Stabilization, Slope Protection, Storm Drain Inlet Protection SC-2, Perimeter Controls and Sediment Barriers, Sediment Basins and Detention Ponds, Check Dams SC-9 ,Level Spreader SC-10, Paving Operations SM-19, Construction Road Stabilization EC-1, Controlling Storm Water Flowing Onto and Through the Project, Post-Construction BMPs, and Non-Structural BMPs (Employee Training SM-1, Scheduling SM-14, Location of Potential Sources of Sediment SM-15, Preservation of Existing Vegetation SM-16) . • Delineate, and clearly mark off, with flags, tape, or other similar marking device all natural buffer areas defined in the SWPPP. • Preserve native topsoil where practicable. • In areas where vegetative stabilization will occur, restrict vehicle/equipment use in areas to avoid soil compaction or condition soil to promote vegetative growth. • For Storm Drain Inlet Protection, clean, or remove and replace, the protection measures as sediment accumulates, the filter becomes clogged, and/or performance is compromised. • Where there is evidence of sediment accumulation adjacent to the inlet protection measure, remove the deposited sediment by the end of the same day in which it is found or by the end of the following work day if removal by the same day is not feasible. • Sediment basins shall be designed and maintained in accordance with HAR 11-55. • Minimize disturbance on steep slopes (Greater than 15% in grade). • If disturbance of steep slopes are unavoidable, phase disturbances and use stabilization techniques 	<p>Soil Stabilization</p> <ol style="list-style-type: none"> 1. SM-21 Topsoil Management 2. EC-5 Seeding and Planting 3. EC-6 Mulching 4. EC-7 Geotextiles and Mats <p>Slope Protection</p> <ol style="list-style-type: none"> 1. EC-5 Seeding and Planting 2. EC-6 Mulching 3. EC-7 Geotextiles and Mats 4. EC-9 Slope Roughening, Terracing, and Rounding 5. SC-11 Slope Drains and Subsurface Drains 6. SC-12 Top and Toe of Slope Diversion Ditches

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
	<p><i>designed for steep grades.</i></p> <ul style="list-style-type: none"> • <i>For temporary drains and swales use velocity dissipation devices within and at the outlet to minimize erosive flow velocities.</i> 	<p><i>and Berms</i></p> <p><i>SC-2 Storm Drain Inlet Protection</i></p> <p><i>Perimeter Controls and Sediment Barriers</i></p> <ol style="list-style-type: none"> <i>1. SC-1 Silt Fence</i> <i>2. SC-5 Vegetated Filter Strips and Buffers</i> <i>3. SC-8 Compost Filter Berm</i> <i>4. SC-13 Sandbag Barrier</i> <i>5. SC-14 Brush or Rock Filter</i> <p><i>Sediment Basins and Detention Ponds</i></p> <ol style="list-style-type: none"> <i>1. SC-15 Sediment Trap</i> <i>2. SC-16 Sediment Basin</i> <p><i>SC-9 Check Dams</i></p> <p><i>SC-10 Level Spreader</i></p>

<i>Pollutant Source</i>	<i>Appropriate Site-Specific BMP to be Implemented</i>	<i>BMP Requirements</i>
		<p>SM-19 Paving Operations</p> <p>EC-1 Construction Road Stabilization</p> <p>Controlling Storm Water Flowing onto and Through the Project</p> <ol style="list-style-type: none"> 1. EC-8 Run-On Diversion 2. SC-6 Earth Dike 3. SC-7 Temporary Drains and Swales <p>Post Construction BMPs</p> <ol style="list-style-type: none"> 1. EC-4 Flared Culvert End Sections 2. SC-3 Rip-Rap and Gabion Inflow Protection 3. SC-4 Outlet Protection and Velocity Dissipation Devices

<i>Pollutant Source</i>	<i>Appropriate Site-Specific BMP to be Implemented</i>	<i>BMP Requirements</i>
		<p>4. SM-21 Topsoil Manageme nt</p> <p><i>Non-Structural BMPs</i></p> <p>1. SM-1 Employee Training</p> <p>2. SM-14 Scheduling</p> <p>3. SM-15 Location of Potential Sources of Sediment</p> <p>4. SM-16 Preservatio n of Existing Vegetation</p>

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
Sediment from soil stockpiles	<ul style="list-style-type: none"> • Locate stockpiles a minimum of 50 feet or as far as practicable from concentrated runoff or outside of any natural buffers identified on the SWPPP. • Place bagged materials on pallets and under cover. • Provide physical diversion to protect stockpiles from concentrated runoff. • Cover stockpiles with plastic or comparable material when practicable. • Place silt fence, fiber filtration tubes, or straw wattles around stockpiles. • Do not hose down or sweep soil or sediment accumulated on pavement or other impervious surfaces into any storm water conveyance (unless connected to a sediment basin, sediment trap, or similarly effective control), storm drain inlet, or state water. • Unless infeasible, contain and securely protect stockpiles from the wind. • Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable. • See Protection of Stockpiles Section SM-4 for additional requirements. 	<p>See Protection of Stockpiles Section SM-4. Protect Storm Drain Inlets SC-2, and Perimeter Sediment Controls where applicable.</p> <p>Note: Stockpiles include soil or sediment material stored for multiple days awaiting transportation for disposal.</p>
Emulsified asphalt or prime/tack coat	<ul style="list-style-type: none"> • Provide training for employees and contractors on proper material delivery and storage practices and procedures. • Restrict paving operations during wet weather to prevent paving materials from being discharged. • Use asphalt emulsions such as prime coat when possible. • Protect drain inlet structures and manholes during application of tack coat, seal coat, slurry seal, and fog seal. • Keep ample supplies of drip pans and absorbent materials on-site. • Inspect inlet protection devices. • See Material Delivery and Storage Section SM-2 and Paving Operations Section SM-19 for additional requirements. • Provide Storm Drain Inlet Protection and/or 	<p>See Material Delivery and Storage Section SM-2 and Material Use Section SM-3, Paving Operations Section SM-19, Protect Storm Drain Inlets SC-2, and Perimeter Sediment Controls where</p>

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
	<i>Perimeter Sediment Controls as applicable.</i>	<i>applicable.</i>
<i>Materials associated with painting, such as paint and paint wash solvent</i>	<ul style="list-style-type: none"> • <i>Hazardous chemicals shall be well-labeled and stored in original containers.</i> • <i>Keep ample supply of cleanup materials on-site.</i> • <i>Dispose container only after all of the product has been used.</i> • <i>Remove as much paint from brushes on painted surface.</i> • <i>Rinse from water-based paints shall be discharged into the sanitary sewer system where possible. If not, direct all washwater into a leak-proof container or leak-proof pit. The container or pit must be designed so that no overflows can occur due to inadequate sizing or precipitation.</i> • <i>Locate on-site wash area a minimum of 50 feet away or as far as practicable from storm drain inlets, open drainage facilities, or water bodies.</i> • <i>. Do not dump liquid wastes into the storm drainage system.</i> • <i>Filter and re-use solvents and thinners.</i> • <i>Dispose of oil-based paints and residue as a hazardous waste.</i> • <i>Ensure collection, removal, and disposal of hazardous waste complies with regulations.</i> • <i>Immediately clean up spills and leaks.</i> • <i>Properly store paints, solvents, and epoxy compounds.</i> • <i>Properly store and dispose waste materials generated from painting and structure repair and construction activities.</i> • <i>Mix paints in a covered and contained area when possible to minimize adverse impacts from spills.</i> • <i>Do not apply traffic paint or thermoplastic if rain is forecasted.</i> • <i>See Material Delivery and Storage Section SM-2, Material Use SM-3, Waste Management, Hazardous Waste Management Section SM-9, Waste Management, Spill Prevention and Control Section SM-10, and Structure Construction and Painting Section SM-20 for additional requirements.</i> 	<i>See Material Delivery and Storage Section SM-2, Material Use Section SM-3, Hazardous Waste Management Section SM-9, Waste Management, Spill Prevention and Control Section SM-10, and Structure Construction and Painting Section SM-20, Protect Storm Drain Inlets SC-2, and Perimeter Sediment Controls where applicable.</i>

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
	<ul style="list-style-type: none"> • Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable. 	
Industrial chemicals, fertilizers, and/or pesticides	<ul style="list-style-type: none"> • Hazardous chemicals shall be well-labeled and stored in original containers. • Keep ample supply of cleanup materials on-site. • Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly. • Do not clean surfaces or spills by hosing the area down. • Eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge. • Dispose container only after all of the product has been used. • Retain a complete set of material safety data sheets on-site. • Store industrial chemicals in water-tight containers and provide either cover or secondary containment. • Provide cover when storing fertilizers or pesticides to prevent these chemicals from coming into contact with rainwater. • Restrict amount of pesticide prepared to quantity necessary for the current application. • Do not apply fertilizers or pesticides during or just before a rain event. • Do not apply to storm water conveyance channels with flowing water. • Comply with fertilizer and pesticide manufacturer's recommended usage instructions. • Follow federal, state, and local laws regarding fertilizer application. • Do not dispose of toxic liquid wastes (solvents, used oils, and paints) or chemicals (additives, acids, and curing compounds) in dumpsters allocated for construction debris. • Ensure collection, removal, and disposal of hazardous waste complies with regulations. Hazardous waste that cannot be reused or recycled shall be disposed of by a licensed hazardous waste hauler. • See Material Delivery and Storage Section SM2, 	See Material Delivery and Storage Section SM-2, Material Use Section SM-3, and Hazardous Waste Management Section SM-9, and Spill Prevention and Control SM-10

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
	<i>Material Use SM-3, and Waste Management, Hazardous Waste Management Section SM-9 for additional requirements.</i>	
<i>Hazardous waste (Batteries, Solvents, Treated Lumber, etc.)</i>	<ul style="list-style-type: none"> • <i>Do not dispose of toxic materials in dumpsters allocated for construction debris.</i> • <i>Ensure collection, removal, and disposal of hazardous waste complies with regulations.</i> • <i>Hazardous waste that cannot be reused or recycled shall be disposed of by a licensed hazardous waste hauler.</i> • <i>Segregate and recycle wastes from vehicle/equipment maintenance activities such as used oil or oil filters, greases, cleaning solutions, antifreeze, automotive batteries, and hydraulic and transmission fluids.</i> • <i>Store waste in sealed containers, which are constructed of suitable materials to prevent leakage and corrosion, and which are labeled in accordance with applicable Resource Conservation and Recovery Act (RCRA) requirements and all other applicable federal, state, and local requirements.</i> • <i>All containers stored outside shall be kept away from surface waters and within appropriately-sized secondary containment (e.g., spill berms, decks, spill containment pallets). Provide cover if possible.</i> • <i>Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly.</i> • <i>Do not clean surfaces or spills by hosing the area down.</i> • <i>Eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge.</i> • <i>Ensure collection, removal, and disposal of hazardous waste complies with manufacturer's recommendations and is in compliance with federal, state, and local requirements.</i> • <i>See Hazardous Waste Management Section SM-9 and Vehicle and Equipment Management, Vehicle and Equipment Maintenance SM-12 for additional requirements.</i> 	<i>See Hazardous Waste Management Section SM-9 and Vehicle and Equipment Maintenance SM-12</i>
<i>Metals and</i>	<ul style="list-style-type: none"> • <i>Inspect construction waste and recycling areas</i> 	<i>See Solid</i>

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
<i>Building Materials</i>	<p><i>regularly.</i></p> <ul style="list-style-type: none"> <i>Schedule solid waste collection regularly.</i> <i>If building materials or metals are stored on-site (such as rebar) store under cover under tarps or in containers.</i> <i>Minimize the amount of material stored on-site.</i> <i>Do not stockpile uncovered metals or other building materials in close proximity to discharge points.</i> <i>See Solid Waste Management Section SM-6 for additional requirements.</i> 	<i>Waste Management Section SM-6</i>
<i>Contaminated Soil</i>	<ul style="list-style-type: none"> <i>See Waste Management, Contaminated Soil Management Section SM-8 and/or Hazardous Waste Management Section SM-9 for additional requirements.</i> <i>At minimum contain contaminated material soil by surrounding with impermeable lined berms or cover exposed contaminated material with plastic sheets.</i> 	<i>See Waste Management, Contaminated Soil Management Section SM-8 and/or Hazardous Waste Management Section SM-9</i>
<i>Fugitive Dust Control and Dust Control Water</i>	<ul style="list-style-type: none"> <i>Do not over spray water for dust control purposes which will result in runoff from the area.</i> <i>Apply water as conditions require.</i> <i>Washing down of debris or dirt into drainage, sewage systems, or State waters is not allowed.</i> <i>Minimize exposed areas through the schedule of construction activities.</i> <i>Utilize vegetation, mulching, sprinkling, and stone/gravel layering to quickly stabilize exposed soil.</i> <i>Direct construction vehicle traffic to stabilized roadways.</i> <i>Cover dump trucks hauling material from the site with a tarpaulin. See Dust Control Section SM-18 for</i> 	<i>See Dust Control Section SM-18 and DOH Clean Air Branch Fugitive Dust Fact Sheet</i>

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
	<i>additional requirements.</i>	
Concrete Truck Wash Water	<ul style="list-style-type: none"> • <i>Disposal of concrete truck wash water via percolation is prohibited.</i> • <i>Wash concrete-coated vehicles or equipment off-site or in the designated wash area.</i> • <i>Locate on-site wash area a minimum of 50 feet away or as far as practicable from storm drain inlets, open drainage facilities, or water bodies.</i> • <i>Runoff from the on-site concrete wash area shall be contained in a temporary pit or level bermed area where the concrete can set.</i> • <i>Design the area so that no overflow can occur due to inadequate wash area sizing or precipitation.</i> • <i>The temporary pit shall be lined with plastic to prevent seepage of wash water into the ground.</i> • <i>Allow wash water to evaporate or collect wash water and all concrete debris in a concrete washout system bin.</i> • <i>Do not dump liquid wastes into storm drainage system.</i> • <i>Dispose of liquid and solid concrete wastes in compliance with federal, state, and local standards.</i> • <i>See Waste Management, Concrete Waste Management Section SM-5 for additional requirements.</i> 	<i>See Waste Management, Concrete Waste Management Section SM-5</i>
Sediment Track-Out	<ul style="list-style-type: none"> • <i>Include Stabilized Construction Entrance at all points that exit onto paved roads.</i> • <i>A sediment trapping device is required if a wash rack is used in conjunction with the stabilized construction entrance/exit.</i> • <i>The pavement shall not be cleaned by washing</i> 	<i>See Stabilized Construction Entrance Section EC-2</i>

<i>Pollutant Source</i>	<i>Appropriate Site-Specific BMP to be Implemented</i>	<i>BMP Requirements</i>
	<p><i>down the street.</i></p> <ul style="list-style-type: none"> • <i>If sweeping is ineffective or it is necessary to wash the streets, wash water must be contained either by construction of a sump, diverting the water to an acceptable disposal area, or vacuuming the wash water.</i> • <i>Use BMPs for adjacent drainage structures.</i> • <i>Remove sediment tracked onto the street by the end of the day in which the track-out occurs.</i> • <i>Restrict vehicle use to properly designated exit points.</i> • <i>Include additional BMPs which remove sediment prior to exit when minimum dimensions can not be met.</i> • <i>See Stabilized Construction Entrance Section EC-2 for additional requirements.</i> 	

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
<i>Irrigation Water</i>	<ul style="list-style-type: none"> Consider irrigation requirements. Where possible, avoid species which require irrigation. Design timing and application methods of irrigation water to eliminate the runoff of excess irrigation water into the storm water drainage system. See Seeding and Planting Section EC-5 and California Storm Water BMP Handbook SD-12 Efficient Irrigation at http://www.stormwaterhawaii.com/resources/contractors-and-consultants/storm-water-pollution-prevention-plan-swppp/ under Irrigation Water for additional requirements. 	See Seeding and Planting Section EC-5 and California Storm Water BMP Handbook SD-12 Efficient Irrigation
<i>Hydrotesting Effluent</i>	<ul style="list-style-type: none"> If work includes removing, relocation or installing waterlines, and Contractor elects to flush waterline or discharge hydrotesting effluent into State waters or drainage systems, the Contractor shall prepare and obtain HDOT acceptance of a NOI/NPDES Permit Form F application for HDOT submittal to DOH CWB at least 30 calendar days prior to the start of Hydrotesting Activities if necessary. Site-Specific BMPs will be included in the NOI/NPDES Permit Form F submittal. 	Site-Specific BMPs will be included in the NOI/NPDES Permit Form F submittal.
<i>Dewatering Effluent</i>	<ul style="list-style-type: none"> If excavation or backfilling operations require dewatering, and Contractor elects to discharge dewatering effluent into State waters or existing drainage systems, Contractor shall prepare and obtain HDOT acceptance of a NOI/NPDES Permit Form G application for HDOT submittal to DOH CWB at least 30 calendar days prior to the start of Dewatering Activities if necessary. See Site Planning and General Practices, Dewatering Operations Section SM-17 for additional requirements. 	See Dewatering Operations SM-17. Site-Specific BMPs will be included in the NOI/NPDES Permit Form G submittal.

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
<i>Saw-cutting Slurry</i>	<ul style="list-style-type: none"> • <i>Saw cut slurry shall be removed from the site by vacuuming.</i> • <i>Provide storm drain protection during saw cutting. See Paving Operations Section SM-19 for additional requirements.</i> • <i>Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.</i> 	<i>See Paving Operations Section SM-19, Storm Drain Inlet Protection SC-2, Perimeter sediment controls where applicable</i>
<i>Concrete Curing Water</i>	<ul style="list-style-type: none"> • <i>Avoid overspraying of curing compounds.</i> • <i>Apply an amount of compound that covers the surface, but does not allow any runoff of the compound.</i> • <i>See California Storm Water BMP Handbook NS-12 Concrete Curing at http://www.stormwaterhawaii.com/resources/contractors-and-consultants/storm-water-pollution-prevention-plan-swppp/ under Concrete Curing for additional requirements.</i> 	<i>See California Storm Water BMP Handbook NS-12 Concrete Curing</i>
<i>Plaster Waste Water</i>	<ul style="list-style-type: none"> • <i>Direct all washwater into a leak-proof container or leak-proof pit. The container or pit must be designed so that no overflows can occur due to inadequate sizing or precipitation.</i> • <i>Locate on-site wash area a minimum of 50 feet away or as far as practicable from storm drain inlets, open drainage facilities, or water bodies.</i> • <i>Any significant residual materials remaining on the ground after the completion of construction shall be removed and properly disposed. If the residual materials contaminate the soil, then the contaminated soil shall also be removed and properly disposed of.</i> • <i>Plaster waste water shall not be allowed to flow</i> 	<i>See Material Delivery and Storage Section SM-2, Material Use Section SM-3, and Hazardous Waste Management Section SM-9</i>

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
	<p><i>into drainage structures or State waters.</i></p> <ul style="list-style-type: none"> • <i>See Material Delivery and Storage Section SM-2, Material Use SM-3, and Hazardous Waste Management Section SM-9 for additional requirements.</i> 	
<i>Water-Jet Wash Water</i>	<ul style="list-style-type: none"> • <i>For Water-Jet Wash Water used to clean vehicles, use off-site wash racks or commercial washing facilities when practical.</i> • <i>See Vehicle and Equipment Cleaning Section SM-11 for additional information.</i> • <i>For Water-Jet Wash Water used to clean impervious surfaces, the runoff shall not be allowed to flow into drainage structures or State Waters.</i> 	<i>See Vehicle and Equipment Cleaning Section SM-11</i>
<i>Sanitary/Septic Waste</i>	<ul style="list-style-type: none"> • <i>Locate Sanitary facilities in a convenient place away from drainage facilities.</i> • <i>Position sanitary facilities so they are secure and will not be tipped over or knocked down.</i> • <i>Wastewater shall not be discharged to the ground or buried.</i> • <i>A licensed service provider shall maintain sanitary/septic facilities in good working order.</i> • <i>Schedule regular waste collection by a licensed transporter.</i> • <i>See Sanitary/Septic Waste Section SM-7 for additional requirements.</i> 	<i>See Sanitary/Septic Waste Section SM-7.</i>

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END OF SECTION 209