Attachment A – 5: Storm Water Pollution Prevention Plan (SWPPP) and In-Water Pollution Prevention Plan (IWPPP)

STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND IN-WATER POLLUTION PREVENTION PLAN (IWPPP)

Project Title: Kaipapa'u Stream Bridge Replacement

Federal Aid Project No. BR-083-1(48)

DOH WQC0808
DA File No. POH-2005-00342
DOH NGPC File No. HNH-E2T4-KBTK9
Prepared by: Department of Transportation, Highways Division, Design Branch
Date: November 30, 2018

Storm Water Pollution Prevention Plan (SWPPP) and In-Water Pollution Prevention Plan (IWPPP)

DOH WQC0808

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Notice of General Permit Coverage (NGPC) File No. HNH-E2T4-KBTK9
Preparation Date 11/30/2018

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7.0 Preface

The following documents are referenced throughout the SWPPP/IWPPP:

1) *Hawaii Administrative Rules, Chapter 11-55*
2) *HDOT Construction Best Management Practices Field Manual*
3) *Hawaii Standard Specifications for Road and Bridge Construction dated 2005 and applicable special provisions.*
4) *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 Department of Transportation and Federal Highway Administration, Practitioners Guide (Practitioners Guide), April 2016 (Version 1, Draft)*

7.0.1 Notes for Contractor/HDOT Construction Personnel

Items in red need to be updated by the Contractor once the project is awarded prior to construction. The Contractor shall be responsible for updating the SWPPP/IWPPP during construction.

The Contractor shall implement or modify structural BMPs identified by designer in site plan. The Contractor shall design and implement the in water isolation and confinement BMPs for areas within the Army Corps Jurisdiction.

The Contractor shall keep an accurate account of the type(s) and estimated quantities (in cubic yards) of the BMPs placed and/or installed within the in-water work area (i.e. canal, stream, river), particularly any type of dredged and/or fill material (e.g., sand, soil, rock, gravel, concrete, etc.) discharged below the HTL/MHHW elevation used to divert flow/tidal waters away from in-water work areas, or to construct temporary access ramps, or for any other purpose in-water work areas. Submit to the Engineer within 7 calendar days of the reporting date.

Note: HDOT has permitted all outfalls and disturbed potential Contractor Staging/Storage Areas within the project limits. The Contractor may use any disturbed area acceptable to the Engineer for Staging/Storage. Staging/Storage Areas outside disturbed areas or outside the project limits may require a new National Pollutant Discharge Elimination System (NPDES) Permit submittal. See permitting requirements in Section 209 of the Special Provisions.

Outfall 1 & 2 (Kaipapa'u Stream) discharges to waters not impaired for nutrients or sediments. The following applies to construction areas discharging to these outfalls:

1) *Construction BMPs shall be inspected weekly. For more details see Section 7.2.12 of this SWPPP/IWPPP.*

2) *Immediately initiate and complete stabilization within 14 calendar days on areas of the site in which earth-disturbing activities have temporarily or permanently ceased. For more details see Section 7.2.10.2 of the SWPPP/IWPPP.*

The following applies to construction areas discharging to Kaipapa'u Stream:

A variety of best management practices (BMPs) will be implemented to protect Waters of the U.S. from stormwater and non-stormwater related discharge or discharge from the construction site. In addition to the BMPs listed below, refer to BMPs identified in the Practitioners Guide. BMPs will be detailed in the storm water pollution prevention plan (SWPPP) and updated In-water pollution prevention plan (IWPPP) processes. These include:

1) *Comply with all requirements of the water quality standards in the Hawaii Administrative Rules (HAR), Chapter 11-54, and the Section 401 Water Quality Criteria (WQC) and all information submitted to the State of Hawaii Department of Health-Clean Water Brank (DOH-CWB) for compliance with the Notification and Reporting Requirements. Ensure that the activity will not result in non-compliance or violations to the applicable State WQS. Discharges associated with the proposed construction activities will be conducted in a manner that complies with "Basic Water Quality Criteria Applicable to All Waters" as specified in HAR, Chapter 11-54-4.*

2) *Obtain NPDES permit for storm water discharges associated with construction activities when the proposed construction activities will disturb one (1) or more acres of land area before initiating any construction activities.*

3) *Apply best degree of treatment or control measures to the potential water pollutant discharges associated with the proposed construction activity (ies) that assures the discharges will meet requirements compatible with the basic water quality criteria applicable to all waters, uses and specific water quality criteria and recreational criteria established for the class of the receiving State waters. Best Management Practices (BMPs) shall be properly implemented and maintained during the entire construction period. Isolate and confine all in-water work areas throughout the entire water column (surface to bottom) such that all potential water pollutants will not leave or enter the work area. The entire volume of water in the in-water work area*

needs to be isolated and confined. Utilize BMPs that are inert and not themselves sources of pollution. (Examples of inappropriate in-water BMPs include, but are not limited to: compost biosocks since it is a source of nutrients; silt fence since the material is porous; and a soil berm since the soil particles will erode away). Ensure that all material(s) placed or to be placed in State waters are free of waste material, heavy metals, organic materials, debris and ay water pollutants at toxic or potentially hazardous concentrations to aquatic life as specified in HAR, 11-54-4(b).

4) *Deploy all BMPs around the perimeter of the project prior to the commencement of any construction work. These BMPs will be properly maintained throughout the entire period of in-water work and will not be removed until the in-water work is completed and the water quality in the in-water work area has returned to its pre-construction condition as demonstrated by the monitoring results (if applicable).*

5) *Isolate and confine in-channel construction activities using a stream diversion method chosen by the contractor within the Practitioners Guide.*

6) *Isolate and confine all upland activity to contain and retain water pollutants upland and not allow them to enter State waters, including the designated in-water work area. When it is necessary to conduct stream work, the workspace shall be isolated to avoid construction activities in flowing water in compliance with Practitioners Guide. The proposed project shall maintain aquatic organism passage (AOP) through the project area. Adequate water depth and channel width must be maintained at all times for passing design flood discharges. Prior to construction activities, isolate the workspace from flowing water to prevent sedimentation and turbidity and avoid impacts to aquatic organisms and water quality. The diversion or isolation BMPs shall remain in place during the life of the project and be removed immediately after work is completed in a manner that would allow flow to resume with the least disturbance to the substrate.*

7) *For a stream, ditch, or gulch allow unimpeded flow around the isolated and confined in-water work area to allow for aquatic animal migration and/or to prevent downstream flooding situations. The unimpeded flow shall be equivalent to the 2-year 24-hour duration storm event and/or the existing flow capacity of the waterbody, whichever is smaller.*

8) *Collect water pollutants from localized work areas and do not allow these water pollutants to enter or re-enter State waters, including the in-water work area. Examples of water pollutants include, but are not limited to, airborne particulate,*

dust, concrete slurry, concrete chips, concrete surface preparation washing effluent, construction debris, etc.

9) *Construction debris will be contained and prevented from entering or re-entering State waters. During bridge removal, construct structurally adequate debris shields to contain debris. Do not permit debris to enter waterways, travel lanes open to public traffic, or areas designated not to be disturbed. If portions of the existing bridge do fall into a stream during demolition, they will be removed from the stream without dragging the material along the streambed.*

10) *Immediately cease construction work if water quality monitoring or daily inspection or observation results indicate that noncompliance to HAR, Chapter 11-54-4(a) or Chapter 11-54-4(b), will occur or is occurring. The construction activity shall not resume until adequate measures are implemented and appropriate corrective actions are taken and water quality monitoring demonstrates that the non-compliance has ceased. Note: These actions shall not preclude the DOH-CWB from taking enforcement action authorized by law.*

11) *Do not disturb the area beyond the construction limits. Trees, shrubs or vegetated areas temporarily damaged by construction operations will be re-vegetated.*

12) *Apply permanent soil stabilization as soon as practicable after final grading but no later than 14 days, or 7 days for impaired waters, after completion of earth disturbing activities.*

13) *Apply turf establishment to finished slopes and ditches immediately but no later than 7 days after completion of earth disturbing activities.*

14) *Provide certified weed free permanent and temporary erosion control measures to minimize erosion and sedimentation during and after construction according to the contract erosion control plan, contract permits, and Special Provision Sections 209, 619 and 641).*

15) *Protect and care for seeded areas, including watering when needed until final acceptance. Repair all damages to seeded areas by reseeding, re-fertilizing and re-mulching.*

16) *Ensure that all temporarily constructed structures, such as the silt containment device(s), floating oil and grease as well as construction debris containment device(s), berm, cofferdam, sheet pile, stream flow diversion structure(s), and/or sediment and soil erosion control structure(s), etc., are properly removed immediately after the completion of the construction work and when the affected*

water body has returned to its pre-construction condition or better, as demonstrated by the monitoring results, including color photographs.

17) *Ensure that the proposed construction activities related discharges not covered under the NWPs will also comply with State water pollution control permitting requirements under NPDES as established in HAR, Chapter 11-55.*

18) *Pesticide application in State waters shall comply with HAR, §§11-54-4(a), 11-54-4(b), 11-54-4(c), 11-54-4(f) and/or Chapter 11-55, Appendix M - NPDES General Permit Authorizing Point Source Discharges from the Application of Pesticides.*

19) *Ensure that no concrete truck wash water is disposed by percolation into the ground.*

20) *Maintain and require all of their contractor(s) and the subcontractor(s) that are performing work covered under this Section 401 WQC, to maintain at the construction site or in the nearby field office, a copy of this letter, all Notification and Compliance Reporting Requirements, and all records demonstrating that every requirement of this Section 401 WQC has been complied with.*

21) *Ensure that all areas temporarily impacted, either directly or indirectly, by the project construction activities are fully restored to its pre-construction conditions. For example: Incidental construction debris is cleaned up prior to removal of BMPs.*

22) *Discontinue work during storm events or during flood condition.*

23) *Modify environmental protection measures, including BMPs and monitoring requirements, when instructed by the DOH-CWB for corrective action/remedial actions.*

24) *Allow the DOH-CWB to conduct routine inspections of the construction site in accordance with Hawaii Revised Statutes (HRS) §342D-8.*

25) *Complete and submit a Solid Waste Disclosure Form for Construction Sites to the DOH, Solid and Hazardous Waste Branch, Solid Waste Section. The form can be downloaded at: http://health.hawaii.gov/shwb/files/2013/06/swdiscformnov2008.pdf.*

26) *Do not stockpile, store, or place construction material or construction activity-related materials in State waters or in ways that will disturb or adversely impact the aquatic environment.*

27) *Dispose of construction debris, waste products, vegetation and/or dredged material removed from the construction site at upland State and County approved sites.*

28) *Contain on land and not allow to enter or re-enter State waters any runoff, return flow, or airborne particulate pollutants, if any, from the excavated/dredged material dewatering process or from the stockpiling site.*

29) *Ensure that their discharge activity shall not interfere with or become injurious to any designated uses (HAR, §11-54-1 and HAR, §11-54-3), or existing uses (HAR, § 11-54-1 and HAR, § 11-54-1 .1). The owner of the discharge shall maintain and protect all designated and existing uses.*

30) *Do not discharge any effluent associated with the proposed construction activities, such as dewatering effluent, effluent resulting from hydroblasting, saw cutting, concrete surface preparation, rock washing, concrete and rock truck washing effluent or any other similar regulated activity(ies) shall be properly contained, collected and prevented from entering, either directly or indirectly, State waters, except for those discharges that have received authorization issued by the DOH-CWB under the NPDES Permit as applicable.*

31) *Implement appropriate and effective measure(s) to properly contain/collect the potential water pollutant discharges resulting from the application of concrete corrosion inhibitor; or from the scrubbing, chipping, cutting, rebar reinforcing, grouting, filling activities needed for the permitted construction activity (ies).*

32) *In Hawaii, the Commission on Water Resource Management (CWRM) issues permits regulating withdrawals of surface and groundwater. If water drafting is necessary, the Contractor will ensure this water use is approved in accordance with a stormwater use permit obtained from the CWRM (HRS §174C-48(1987)).*

33) *Structures designed to minimize sediment and pollutant runoff from sensitive areas such vehicle and fuel storage areas, hazardous materials storage sites, and erosion control structures shall be visually monitored daily, especially following precipitation events to ensure these structures are functioning properly.*

34) *Maintain temporary erosion control measures in working condition until the project is complete or the measures are no longer needed as outlined in Special Provision Section 209 and the SWPPP/IWPPP.*

35) *For dewatering that may be required during excavation or construction of the project, a NPDES General Permit for Construction Activity Dewatering would be required for discharging dewatering effluent into waters of the US. The permit will require appropriate BMPs, an erosion control plan, and a water quality monitoring plan to mitigate any impacts on receiving waters.*

36) *Develop a Rain Event Action Plan (REAP) prior to Notice to Proceed. The REAP will be reviewed and structured to address project specific actions that are needed to prevent pollutants from reaching the creeks and rivers during the rain event. The REAP will be executed within 48 hours prior to a forecast rain event of 50% chance of precipitation or more. BMPs in the REAP include:*

    a. *When the trees are cleared, the slash will be chipped and placed as mulch on the area that has been cleared to prevent raindrop erosion.*

    b. *Any area that has soil disturbances will be stabilized prior to rain events with mulch, wood chips, or other protective covers.*

    c. *Sediment traps will be placed to collect the water and allow sediment to settle out. If sediment traps are not possible, other settling and filtering devices will be used to slow water down and remove sediments.*

    d. *Operations will shut down during extreme rain events.*

    e. *Fueling and repair areas will be covered and surrounded by a berm.*

    f. *Exposed soil will be covered and stabilized.*

    g. *Treated materials will be covered or placed in a shed.*

    h. *Dumpsters will be covered at all times.*

    i. *Drain holes will be plugged.*

    j. *Control perimeters will be established around stockpiles of material.*

37) *Submit a Spill Prevention, Control, and Countermeasure (SPCC) Plan with the Water Pollution, Dust, and Erosion Control Submittals.*

38) *Any spill of petroleum products, hazardous materials, or other chemical or biological products released from stationary sources or construction, fleet, or other support vehicles shall be properly cleaned, mitigated, and remedied, if necessary. Any spill of petroleum products or a hazardous material shall be reported to the appropriate federal, state, and local authorities, if the spill is a reportable quantity. Response shall occur in accordance with federal, state, and local regulations.*

39) *In general, when gasoline, diesel fuel, antifreeze, hydraulic fluid or any other chemical contained within the vehicle is released to the pavement or the ground, proper, corrective, clean-up and safety actions specified in the SPCC and SWPPP will be immediately implemented. All vehicles with load rating of two tons or greater*

will carry, at minimum, enough absorbent materials to effectively immobilize the total volume of fluids contained within the vehicle.

40) *Repair leaks immediately on discovery. Equipment that leaks will not be used. Oil pans and absorbent material will be in place prior to beginning repair work. The contractor will be required to provide the "on-scene" capability of catching and absorbing leaks or spillage of petroleum products including antifreeze from breakdowns or repair actions with approved absorbent materials. A supply of acceptable absorbent materials at the job site in the vent of spills, as defined in the SWPPP will be available. Sand and soil are not approved absorbent materials. Soils contaminated with fluids will be removed, placed in appropriate safety containers, and disposed of according to state and/or federal regulations.*

41) *Collect and dispose of all waste fuels, lubricating fluids, and other chemicals in a manner that ensures that no adverse environmental impact will occur. Construction equipment will be inspected daily to ensure hydraulic, fuel and lubrication systems are in good condition and free of leaks to prevent these materials from entering any stream. Vehicle servicing and refueling areas, fuel storage areas, and construction staging and materials storage areas will be sited a minimum of (50 feet) 15 meters from ordinary high water, typically referred to as the Q2 elevation, wetlands, and contained properly to ensure that spilled fluids or stored materials do not enter any stream or wetland.*

42) *Attachment A shows the locations of sediment and erosion control features. The Contractor shall add additional BMPs to facilitate different phases of construction or to accommodate Contractor's means and methods. These BMPs shall be tracked on the projects SWPPP/IWPPP.*

7.2.1A (WQC Section 5) - Emergency Contacts

Provide the name and two (2) phone numbers of at least two persons who may be contacted in case of emergency regarding "discharges" into the navigable waters. The Contractor shall include their personnel information once the project is awarded.

1) Name: George Abcede

Company: Hawaii Department of Transportation

Position: O'ahu District Engineer

Contact Number: (808) 831-6700 Ext. 126

2) Name: Contractor Representative

Company: Contractor

Position: Contractor

Contact Number: (808)692-XXXX Contact Alternate (Cell) Phone number: (808)xxx-xxxx

7.2.1 Storm Water Team

The permittee shall assemble and oversee a "storm water team," which is responsible for the development of the SWPPP/IWPPP, any later modifications to it, and for compliance with the requirements in this permit.

The SWPPP/IWPPP must identify the personnel (by name or position) that are part of the storm water team, as well as their individual responsibilities. Each member of the storm water team must have ready access to an electronic or paper copy of applicable portions of this permit, the most updated copy of the SWPPP/IWPPP, and other relevant documents or information that must be kept with the SWPPP/IWPPP.

The Contractor shall include their personnel information once the project is awarded.

1) Name: : Li Nah Okita

Company: Hawaii Department of Transportation

Position: HDOT Project Manager

Contact Number: (808) 692-7581

Responsibilities: Develop SWPPP/IWPPP during the design process

2) Name: George Abcede

Company: Hawaii Department of Transportation

Position: O'ahu District Engineer

Contact Number: (808) 831-6700 Ext. 126

Responsibilities: Authorized Representative for the project

3) Name:

Company: Hawaii Department of Transportation

Position: HDOT Construction Project Engineer

Contact Number: (808)xxx-xxxx

Responsibilities:

4) Name:

Company: Hawaii Department of Transportation

Position: HDOT Construction Project Engineer

Contact Number: (808)xxx-xxxx

Responsibilities:

5) Name:

Company: Contractor

Position: Contractor Designated Representative

Contact Number: (808)xxx-xxxx

Responsibilities:

6) Name:

Company: Contractor

Position: Contractor

Contact Number: (808)xxx-xxxx

Responsibilities:

7) Name:

Company: Contractor

Position: Contractor

Contact Number: (808)xxx-xxxx

Responsibilities:

7.2.2A (WQC Section 1) - Army Corps Pre-Construction Notification

Check all NWP or Federal Authorization Applicable for this project:

☑ *NWP 3 – Maintenance*

☐ *NWP 5 – Scientific Measurement Devices*

☐ *NWP 6 – Survey Activities*
☐ *NWP 12 – Utility Line Activities*
☐ *NWP 13 – Bank Stabilization Activities*
☑ *NWP 14 – Linear Transportation Projects*
☐ *NWP 23 – Approved Categorical Exclusions*
☐ *NWP 33 – Temporary Construction Access and Dewatering*
☐ *Section 10 Rivers and Harbors Act Authorizations*
☐ *Individual 404 Permit Authorizations*
☐ *Other* _____

See Attachment K for PCN

Are there any Special Conditions?
☒ *Yes (See Attachment K for Special Conditions)*
☐ *No*

7.2.2 Nature of Construction Activities Individual Form C.6

What is the function of the construction activity (Please check all applicable activity(ies))?
☐ *Residential* ☐ *Commercial* ☐ *Industrial* ☑ *Road Construction* ☐ *Linear Utility*
☐ *Other (please specify):*_____

For construction site estimates, see NPDES Individual Form C, Section C.3.

What is being constructed? *The existing Kaipapa'u Stream Bridge is deficient due to age and dilapidation, and requires demolition and replacement. The project area required for construction would be approximately 1.6 acres. The project's scope of work includes installation of erosion controls, clearing, grubbing, grading, temporary placement of sand bags to redirect the stream during construction relocation and installation of waterlines and electrical lines, construction and use of a temporary detour roadway and Acrow bridge, demolition of the existing bridge and construction of a new bridge, partial demolition and reconstruction of the abutments, removal of the existing center pier wall, excavation & construction of eight new drilled shafts outside the stream channel, maintenance dredging, and bank stabilization with shotcrete and dumped rip-rap. All excavated material (soils & dewatering effluent) will be placed in a temporary retention area for treatment and disposal. No excavated material will discharge to the stream.*

The replacement of the Kaipapa‘u Stream Bridge and maintenance work will be completed through phased construction and demolition. Silt fences will be installed on down slope portions of the project site. A staging area, temporary dewatering basin, temporary concrete wash-out basin, and stabilized construction entrances will be prepared.

Sandbags will be used to divert normal-stream flow around the work area. The temporary placement of sandbags to redirect the stream during construction of the temporary detour road (sandbag diversion approximately 610 feet long) and new bridge (sandbag diversion approximately 600 feet long) and will be designed based on the Contractor's means and methods. It is assumed that 7 sandbags (1-foot-wide each) will be placed at the base (4 sandbags on the side of the channel closer to the work area, and 3 sandbags on the other side of the temporary channel). Placement of the temporary sandbag diversion will require approximately 25 cubic yards (CY) of temporary fill placed within the Mean Higher High Water (MHHW) and 5 CY of temporary fill placed within the Ordinary High Water Mark (OHWM).

A temporary construction entrance ramp will be constructed on the mauka and makai portions of the stream comprised of dumped rip-rap. There will be no interruption of stream flow. In-stream work will be completed during the low rainfall season (August to October), and during fair weather conditions.

Approximately 270 CY of maintenance dredging will be performed to remove accumulated sediment and debris from under and around the bridge partially within the MHHW. Approximately 5 CY is located within the MHHW of Kaipapa‘u Stream. The excavated spoils and demolition debris will not be discharged into the stream. Spoils will be dewatered in a detention basin and dried debris will be disposed of off-site at a County-approved landfill. Removed material will be contained in a temporary stockpile site with implemented BMPs to contain and prevent material from comingling with storm water runoff and entering into State waters. A solid waste disclosure form will be submitted to the Department of Health (DOH) Solid Waste Branch.

The temporary Acrow bridge will be 90 feet long by 42 feet wide, or approximately 3,780 square feet, and constructed with pre-cast concrete pier columns supporting the steel deck. The bridge will be comprised of two lanes and a pedestrian walkway on the makai side of the Kaipapa‘u Stream Bridge to mitigate traffic impacts during construction. The Acrow bridge will be constructed and installed in two 45-foot spans and supported by five pre-cast concrete piers, one of which is located within the MHHW. Placement of the one pier in the MHHW will require 1 CY of temporary fill below the MHHW. Temporary dumped rip-rap will be placed around the Acrow bridge pier within the MHHW and be sized approximately 54 feet long by 15 feet wide by 2 feet

deep, or 810 square feet, with a volume of 50 CY. A 6-foot temporary layer of filter rock will be placed under the rip-rap with a volume of approximately 13 CY. Upon completion of the bridge replacement, the Acrow bridge and piers will be removed and disturbed areas restored to their pre-construction condition.

Demolition of the existing Kaipapa'u Stream Bridge will include the removal of the existing concrete center pier wall, of which approximately 5 CY is located within the MHHW (26 feet long by 4 feet wide or approximately 104 square feet).

The new replacement bridge will be 110 feet long by 57 feet wide, or approximately 6,270 square feet, and include two 12-foot travel lanes plus two 8.5-foot shoulders, two 5-foot pedestrian walkways/bicycle lanes, reinforced guardrails, and drainage features. The new bridge will be constructed using prestressed concrete planks and cast-in-place bridge decks. The new right-of-way (ROW) will be 66 feet wide. The project will involve partial demolition and reconstruction of the abutments requiring excavation and construction of eight new 4-foot drilled shafts outside of the OHWM and MHHW. All work proposed for the reconstruction of the Kaipapa'u Stream Bridge would be completed above and along the outer banks of the streams and no work is proposed within the stream. The new bridge would accommodate utilities currently attached to the existing bridge. No debris would be allowed to fall into or enter the stream.

The north bank makai of the bridge will be stabilized with dumped rip-rap outside of the MHHW. In addition to stabilization, the dumped rip-rap will provide construction access to the stream for mechanical equipment.

A section of the existing wall running along the northern bank mauka of the bridge collapsed during a major storm in 2008. Emergency repairs were conducted to create a wall of sandbags. The existing sandbag wall, located outside the OHWM, will be stabilized with the placement of basalt boulders at the toe of the sandbags. The existing sandbags will then be covered with shotcrete. Work for the stabilization of the wall will be performed above the OHWM. No debris would be allowed to fall into or enter the stream.

Portions of an existing 12-inch diameter waterline beneath Kaipapa'u Stream will be repaired. The portions of the 12-inch waterline to be replaced are located outside the stream (see Attachment B, Construction Drawings, C-20, C-28) and will be repaired via open trench (approximately 85 linear feet). The existing 12-inch waterline under the stream will be temporarily removed from service during the repairs and then reconnected and placed back into service following completion of the 12-inch waterline work. During repairs a temporary 12-inch 125-foot-long or 125 square foot waterline will be placed on the existing pedestrian bridge.

The replacement of an existing 16-inch diameter will require the removal of the existing waterline, placement of a temporary waterline, and installation of the new 16-inch diameter waterline over the stream. The temporary 16-inch diameter 250-foot-long or 333 square foot waterline will be placed on the temporary detour bridge during construction. The new permanent 16-inch diameter 155 feet long or 207 square feet waterline will be installed over the stream within the new bridge 3.2-foot-wide concrete bridge encasement. Following the installation of the 16-inch permanent waterline the temporary waterline will be removed.

Above the MHHW and OHWM, the project will also include the reconstruction of the 6-foot-high concrete wall with wood fence panels on the northern side of the bridge, replacement of fencing, acquisition of two properties (Tax Map Keys (TMKs) 5-4-18: 3 and 5-4-11: 20), removal of an existing septic system and leaching field on TMK: 5-4-11: 20, and demolition of two buildings on TMK 5-4-18: 3 and one building on TMK 5-4-11: 20. Acquisition of property and demolition of structures is required for construction access and for the installation of waterlines to be supported on the outside edges of the new bridge.

In-water work would only be required for the minor maintenance dredging, removal of the existing bridge center pier wall, temporary placement of sandbags to divert the steam around the open work area, and temporary placement of one Acrow bridge pier within Kaipapa'u Stream.

The sequencing of construction activity is as follows:

- *Install best management practices (BMPs)/erosion control measures (see Attachment A-1, Sheet C-17).*
- *Install temporary 12" water line and relocate existing 12" water line (see Attachment A-1, Sheets C-20, C-28, and C-29).*
- *Relocate electrical utilities.*
- *Construct trial and load test drilled shafts and perform load test.*
- *Construct detour roadway and temporary Acrow bridge.*
- *Demolish existing Kaipapa'u Stream Bridge. Expose existing 16" water line jacket and concrete support system.*
- *Construct Phase 1 of new Kaipapa'u Stream Bridge (see Attachment A-1, Sheets S0.7, S0.7A, S0.7B).*
- *Partially remove detour roadway and temporary bridge. Construct temporary pavement transitions, signing and pavement markings.*
- *Construct Phase 2 of new Kaipapa'u Stream Bridge (see Attachment A-1, Sheets S0.8, S0.8A, S0.8B).*
- *Remove remainder of detour roadway and temporary bridge.*

- *Construct sand bags and shotcrete lining along north bank above stream, upstream of Kaipapa‘u Stream Bridge (see Attachment A-1, Sheet C-18).*
- *Construct dumped riprap along north and south bank above stream, downstream of Kaipapa‘u Stream Bridge (see Attachment A-1, Sheets C-16 and C-18).*
- *Construct AC pavement (see Attachment A-1, Sheet C-16).*
- *Construct final signing and pavement markings.*
- *Remove temporary BMPs.*

On-site staging areas will be used as designated areas where vehicles, supplies and construction equipment are positioned for access and use during the construction process. The locations of the staging and storage areas may be changed by the Contractor depending on his construction means and methods. Equipment may include, but is not limited to: bulldozers, excavators, drilling rig, loaders, grader, compaction rollers, backhoe, cranes, trucks delivering supplies, pneumatic hand-operated tools, dewatering pumps, asphaltic rock products and fill material, and related construction materials which will include the following: Concrete and shotcrete, asphaltic Concrete, precast structures, pipes, paints (enamel and latex), cleaning solvents, rebar, wood, tar, masonry block, steel sheet piles, rocks/boulders, sandbags, soil fill material, and acrow steel bridge deck.

7.2.2B (WQC Section 10 and Section 12) – Receiving State Water(s) Information

a. Identify the receiving State water which the project will be conducted in. The receiving State water must be a surface water. This should include only the coordinates of the work subject to the Army Corps 404 Permit/Section 10 Rivers and Harbors Act Authorization. Use Section B below for the coordinates of discharges from areas not associated with the federal permit or license (Staging and Storage Areas, other work such as resurfacing, etc.) or refer to the NPDES Documents if there is a NPDES Permit/NGPC.

1) Discharge Point Label: Outfalls 1 & 2 (Kaipapa'u Stream)

Latitude: 21.61717846380141 ° N Longitude: -157.9142857880188 ° W to
Latitude: 21.617151034652878 ° N Longitude: -157.91334701486358 ° W

Receiving Water Name: Kaipapa'u Stream
Receiving State Waters Classification: Class 2, Inland
Is the receiving State Water on the Section 303(d) List?: ☑ Yes ❑ No
If the Receiving Water is on the Section 303(d) List, provide the impairment pollutants: Insufficient data.

b. Provide the Outfall coordinates of any outfalls for work outside of the Army Corps 404 Permit/Section 10 Rivers and Harbors Act Authorization. Indicate if the Receiving State Water is on the Section 303(d) list and the impairment pollutants if any.

N/A

☒ *The Topographic Map showing the Locations of the Outfalls is included in Attachment A-2*

7.2.2C (WQC Section 12) – Project Scope

Describe the overall project scope and activities.
a. The overall project description should include: the project activities both in and out of the navigable waters, the construction or operation of facilities which may result in any direct and/or indirect "discharges" into State waters.

The proposed project includes replacing the existing bridge with a new bridge that will be 110 feet long by 57 feet wide and include two 12-foot travel lanes plus two 8.5-foot shoulders, two 5-foot pedestrian walkways/bicycle lanes, reinforced guardrails, and drainage features. The new bridge will be constructed using prestressed concrete planks and cast-in-place bridge decks. The new right-of-way (ROW) will be 66 feet wide. The project will involve partial demolition and reconstruction of the abutments. The new bridge will include excavation & construction of eight new 4-foot drilled shafts outside of the Ordinary High Water Mark (OHWM) and Mean Higher High Water (MHHW).

Demolition of the existing Kaipapa'u Stream Bridge will include the removal of the existing concrete center pier wall, of which approximately 5 cubic yards (CY) is located within the MHHW.

Approximately 270 CY of maintenance dredging will be performed to remove accumulated sediment and debris from under and around the bridge partially within the MHHW. Approximately 5 CY is located within the MHHW of Kaipapa'u Stream.

The replacement of the Kaipapa'u Stream Bridge and maintenance work will be completed through phased construction and demolition. The stream will be diverted around the work area. The temporary placement of sand bags will be used to redirect the stream during construction, with 25 CY of temporary fill placed within the MHHW and 5 CY of temporary fill placed within the OHWM. There will be no interruption of stream flow. In-stream work will be completed during the low rainfall season (August to October), and during fair weather conditions.

The construction of a temporary Acrow bridge makai of the bridge will facilitate the movement of vehicular and pedestrian traffic during construction. The temporary bridge will be comprised of two lanes and a pedestrian walkway on the makai side of the Kaipapa'u Stream Bridge to mitigate traffic impacts during construction. The Acrow bridge will be constructed and installed in two segments supported by five pre-cast concrete piers, one of which is located within the

MHHW and will require 1 CY of temporary fill below the MHHW. Temporary dumped rip-rap will be placed around the Acrow bridge pier within the MHHW and be sized approximately 54 feet long by 15 feet wide by 2 feet deep, or 810 square feet, with a volume of 50 CY. A 6-foot temporary layer of filter rock will be placed under the rip-rap with a volume of approximately 13 CY. Upon completion of the bridge replacement, the Acrow bridge and piers and sand bags used to redirect the stream will be removed and disturbed areas restored to their pre-construction condition.

The stream bank will be stabilized on the north bank downstream of the bridge outside of the MHHW. In addition to stabilization, dumped rip-rap will provide access to the stream for mechanical equipment.

A section of an existing wall running along the northern bank upstream of the bridge collapsed during a major storm in 2008. Emergency repairs were conducted to create a wall of sand bags. The existing sandbag wall will be stabilized with the placement of basalt boulders at the toe of the sandbags. The existing sandbags will then be covered with shotcrete. Work on the stabilization of the stream wall will be performed above the OHWM.

Portions of an existing 12-inch diameter waterline beneath Kaipapa'u Stream will need to be repaired. The portions of the 12-inch waterline to be replaced are located outside the stream (see Attachment B, Construction Drawings, C-20, C-28) and will be repaired via open trench (approximately 85 linear feet). The existing 12-inch waterline under the stream will be temporarily removed from service during the repairs and then reconnected and placed back into service following completion of the 12-inch waterline work. During repairs a temporary 12-inch 125-foot-long or 125 square foot waterline will be placed on the existing pedestrian bridge.

The replacement of an existing 16-inch diameter will require the removal of the existing waterline, placement of a temporary waterline, and installation of the new 16-inch diameter waterline over the stream. The temporary 16-inch diameter 250-foot-long or 333 square foot waterline will be placed on the temporary detour bridge during construction. The new permanent 16-inch diameter 155 feet long or 207 square feet waterline will be installed over the stream within the new bridge 3.2-foot-wide concrete bridge encasement. Following the installation of the 16-insh permanent waterline the temporary waterline will be removed.

Above the MHHW and OHWM, the project will also include the reconstruction of the 6-foot-high concrete wall with wood fence panels on the northern side of the bridge, replacement of fencing, acquisition of two properties (Tax Map Keys (TMKs) 5-4-18: 3 and 5-4-11: 20), removal of an existing septic system and leaching field on TMK: 5-4-11: 20, and demolition of two buildings on TMK 5-4-18: 3 and one building on TMK 5-4-11: 20. Acquisition of property and demolition of structures is required for construction access and for the installation of waterlines to be supported on the outside edges of the new bridge.

In-water work would only be required for the minor maintenance dredging, removal of the existing bridge center pier wall, temporary placement of sandbags to divert the steam around the open work area, and temporary placement of one Acrow bridge pier within Kaipapa'u Stream.

7.2.3 Emergency Related Projects

Note: This Section is only applicable to Construction Activities NPDES/NGPC Permits

☒ *Not Applicable*
☐ *Applicable (If this box is checked, provide additional information as described below)*

If conducting earth-disturbing activities in response to a public emergency (see section 1.3.), the permittee shall document the cause of the public emergency (e.g., natural disaster, extreme flooding conditions, etc.), information substantiating its occurrence (e.g., state disaster declaration or similar state declaration), and a description of the construction necessary to reestablish effected public services. The declaration of emergency or imminent threat to public health is required to be from the state governor or the director. See Attachment H for additional information.

7.2.4 Identification of Prime Contractor and Other Site Contractors

The SWPPP/IWPPP must include a list of both the prime contractor and all other contractors (e.g., sub-contractors) who will be engaged in construction activities at the site, and the areas of the site over which each contractor has control. List prime contractor and sub-contractors below and attach map showing areas of control in ***Attachment A. Complete and attach a Subcontractor Certification/Agreement in Attachment D.***

The general contractor information will be submitted at least 30 calendar days before the start of construction activities.	
(General Contractor Company Name)	
(General Contractor Contact Person Name)	
(General Contractor Mailing Address)	
(General Contractor Mailing City)	*(General Contractor Mailing State and Zip Code)*
(General Contractor Telephone Number)	
(General Contractor Email Address)	

(Sub-Contractor #1 Company Name, as needed)	
(Sub-Contractor Contact Person Name)	
(Sub-Contractor Mailing Address)	
(Sub-Contractor Mailing City)	*(Sub-Contractor Mailing State and Zip Code)*
(Sub-Contractor Telephone Number)	
(Sub-Contractor Email Address)	

(Sub-Contractor #2 Company Name, as needed)	
(Sub-Contractor Contact Person Name)	
(Sub-Contractor Mailing Address)	
(Sub-Contractor Mailing City)	*(Sub-Contractor Mailing State and Zip Code)*
(Sub-Contractor Telephone Number)	
(Sub-Contractor Email Address)	

(Sub-Contractor #3 Company Name, as needed)	
(Sub-Contractor Contact Person Name)	
(Sub-Contractor Mailing Address)	
(Sub-Contractor Mailing City)	*(Sub-Contractor Mailing State and Zip Code)*
(Sub-Contractor Telephone Number)	
(Sub-Contractor Email Address)	

❑ *Attach maps showing areas of Contractor/Subcontractor Control in Attachment A.*

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

7.2.5 Sequence and Estimated Dates of Construction Activities

Separate the schedule for In-Water and Land-Based work. In Attachment C, attach the proposed construction schedule which shall include, at a minimum:
The Contractor shall submit to the Engineer an update of the dates in the SWPPP/IWPPP once the project is awarded.

Land Based (HAR 11-55)

☒ *Installation of storm water control measures, and when they will be made operational, including an explanation of how the sequence and schedule for installation of storm water control measures complies with section 5.1.1.3.1. and of any departures from manufacturer specifications pursuant to section 5.1.1.3.2., including removal procedures of the storm water control measures after construction has ceased.*

☒ *Commencement and duration of earth-disturbing activities, including clearing and grubbing, mass grading, site preparation (i.e., excavating, cutting and filling), final grading, and creation of soil and vegetation stockpiles requiring stabilization.*

☒ *Cessation, temporarily or permanently, of construction activities on the site, or in designated portions of the site.*

☒ *Final or temporary stabilization of areas of exposed soil. The dates for stabilization must reflect the applicable deadlines to which the permittee is subject to in section 5.2.1.*

☒ *Removal of temporary storm water conveyances/channels and other storm water control measures, removal of construction equipment and vehicles, and cessation of any pollutant-generating activities.*

In-Water (CWA Section 404 and Section 401 WQC and HAR 11-54)

☒ *Date BMP measures to isolate and contain work areas are installed.*

☒ *Commencement and duration of In-Water construction activities.*

☒ *Cessation, temporarily or permanently, of construction activities on the site, or in designated portions of the site.*

☒ *Removal of temporary storm water conveyances/channels and other storm water control measures, removal of construction equipment and vehicles, and cessation of any pollutant-generating activities.*

7.2.6.1 Property Boundary Maps

Boundaries of the property and of the locations where construction activities will occur. Attach, title, and identify all maps (pdf - minimum 300 dpi) listed below, in Attachment A.

a. *Legal boundaries of the project. See NPDES Form C, Section C.8 or See Attachment A-1 Erosion and Sediment Control Plan Sheets*
b. *Locations where earth-disturbing activities will occur, noting any sequencing of construction activities. See NPDES Form C, Section C.8 or See Attachment A-1 Erosion and Sediment Control Plan Sheets*
c. *Pre-Construction Topography including approximate slopes and drainage patterns for the entire Facility/Project site to the receiving storm water drainage system (if applicable) or to the receiving State water(s) (with flow arrows). Note areas of steep slopes (15% or greater in grade). See NPDES Form C, Section C.8 or See Attachment A-1 Erosion and Sediment Control Plan Sheets*
d. *During-Construction Topography (after major grading activities) including approximate slopes and drainage patterns for the entire Facility/Project site to the receiving storm water drainage system (if applicable) or to the receiving State water(s) (with flow arrows) Note areas of steep slopes (15% or greater in grade). See NPDES Form C, Section C.8 or See Attachment A-1 Erosion and Sediment Control Plan Sheets*
e. *Post-Construction Topography including approximate slopes and drainage patterns for the entire Facility/Project site to the receiving storm water drainage system (if applicable) or to the receiving State water(s) (with flow arrows). Note areas of steep slopes (15% or greater in grade). See NPDES Form C , Section C.8 or See Attachment A-1 Erosion and Sediment Control Plan Sheets*
f. *Locations where sediment, soil, or other construction materials will be stockpiled 7.2.6.1c. See SWPPP/IWPPP Attachment A. Stockpile locations may be changed by the Contractor depending on his construction means and methods. The Contractor shall submit to the Engineer for his review and acceptance the locations of stockpiles once the project is awarded and will be included in the SWPPP/IWPPP. The Contractor shall submit to the Engineer for his review and acceptance any updates/changes to stockpile areas during construction for inclusion in the SWPPP/IWPPP.*
g. *Locations of any contaminated soil or contaminated soil stockpiles 7.2.6.1d. No areas of contaminated soil are expected to be encountered in the area. If any areas are encountered, the locations will be included in the SWPPP/IWPPP.*

h. *Locations of any crossings of state waters 7.2.6.1e. Kaipapa'u Stream is shown in NPDES Form C, Attachment A or See Attachment A-1 Erosion and Sediment Control Plan Sheets .*

i. *Designated points on the site where vehicles will exit onto paved roads 7.2.6.1f. See SWPPP/IWPPP Attachment A. Stabilized entrance locations may be changed by the Contractor depending on his construction means and methods. The Contractor shall submit to the Engineer the locations of stabilized entrances once the project is awarded for his review and acceptance and will be included in the SWPPP/IWPPP. The Contractor shall submit to the Engineer for his review and acceptance any updates/changes to stabilized entrances during construction for inclusion in the SWPPP/IWPPP.*

j. *Location(s) of impervious structures (including buildings, roads, parking lots, etc.) after construction is completed 7.2.6.1g. See NPDES Form C, Section C.8 or See Attachment A-1 Erosion and Sediment Control Plan Sheets*

k. *Locations of construction support activity areas covered by this permit 7.2.6.1h. See SWPPP/IWPPP Attachment A. The locations of the staging and storage areas may be changed by the Contractor depending on his construction means and methods. The Contractor shall submit to the Engineer the locations of his staging and storage areas for his review and acceptance once the project is awarded. The Contractor shall submit to the Engineer any updates/changes to staging and storage areas during construction for his review and acceptance and inclusion in the SWPPP/IWPPP.*

7.2.6.1A (WQC Section 1) - Jurisdictional Waters of the U.S. (Army Corps Jurisdiction) Boundary Maps

Boundaries of the property and of the locations where construction activities will occur. Attach, title, and identify all maps (pdf - minimum 300 dpi) listed below, in Attachment A.

a. *Map showing the Jurisdiction Line between In-Water and Land Based BMPs See Attachment A-3 Army Corps Jurisdictional Boundary Map*

Note: The Army Corps Jurisdiction Boundary distinguishes where In-Water and Land-Based BMPs (and the associated Inspection, Stabilization Schedules, etc.) apply.

Prior to commencement of the authorized work in wetlands, other special aquatic sites and other waters, the Contractor shall clearly identify (demarcate) in the field the geographic limits of such waters (i.e., High Tide Line, Mean High Water Mark, Ordinary High Water Mark, approved wetland boundary) affected by the authorized work and as approved by the Army Corps and demarcated above. The delineation of these geographic bounds shall be accomplished by staking, flagging, painting, silt fencing, signage, buoys, etc. and in all cases shall be maintained and remain observable throughout the construction period. The Contractor shall

also demarcate in the field the project limits of the Corps-authorized fill footprint to ensure that dredged or fill material is not discharged beyond the authorized limits. The permittee is prohibited from conducting any activity occurring in or affecting wetlands, other special aquatic sites and other waters that requires prior authorization from the Corps, outside of the permitted limits of disturbance (as shown on the permit drawings).

7.2.6.2 to 7.2.6.8 State Waters and BMP Maps

Attach, title, and identify all maps (pdf - minimum 300 dpi) listed below, in Attachment A.

Please reference which maps account for the features listed below.

a. *Locations of all state waters, including wetlands that exist within or in the immediate vicinity of the site and indicate which waterbodies are listed as impaired 7.2.6.2. See NPDES Form C, Section C.8 or See Attachment A-1 Erosion and Sediment Control Plan Sheets*
b. *The boundary lines of any natural buffers provided consistent with section 5.1.2.1.1, 7.2.6.3. Natural buffers are not feasible in the vicinity of Kaipapa'u Stream. See Section 7.2.9.*
c. *Topography of the site, existing vegetative cover (e.g., forest, pasture, pavement, structures), and drainage pattern(s) of storm water onto, over, and from the site property before and after major grading activities 7.2.6.4. See NPDES Form C, Section C.8 or See Attachment A-1 Erosion and Sediment Control Plan Sheets*
d. *Storm water discharge locations, including: a) Locations of any storm drain inlets on the site and in the immediate vicinity of the site to receive storm water runoff from the project; See NPDES Form C, Section C.8 or See Attachment A-1 Erosion and Sediment Control Plan Sheets.*

   and b) Locations where storm water will be discharged to state waters (including wetlands)7.2.6.5. See NPDES Form C, Section C.8 or See Attachment A-1 Erosion and Sediment Control Plan Sheets.
e. *Locations of all potential pollutant-generating activities identified in section 7.2.7, 7.2.6.6. See SWPPP/IWPPP Attachment A (Construction Activity BMP Map – See Attachment A-1 Erosion and Sediment Control Plan Sheets)*
f. *Locations of storm water control measures 7.2.6.7. See SWPPP/IWPPP Attachment A. The Contractor may change the locations of storm water control measures by construction activity and construction sequence depending on his construction means and methods. The Contractor shall submit changes to the Engineer for his review and acceptance once the project is awarded. The Contractor shall submit a separate map for each phase of construction which changes the drainage pattern. The Contractor shall submit to the Engineer for his review and acceptance any updates/changes to storm water control*

measures during construction for inclusion in the SWPPP/IWPPP. (For maps by Construction Activity and Construction Sequence see Attachment A-1 Erosion and Sediment Control Plan Sheets)

g. *Locations where chemicals will be used and stored 7.2.6.8. For locations where chemicals will be used, see SWPPP/IWPPP Attachment A Plan Sheets. The table below shows possible chemicals which may be used on site and which construction activity they are associated with. The locations where chemicals may be used and stored may be changed by the Contractor depending on his construction means and methods. The Contractor shall submit to the Engineer for his review and acceptance any updates/changes to locations where chemicals will be used and stored during construction for inclusion in the SWPPP/IWPPP.*

Chemical	***Location***	***Major Construction Activity***
Hydraulic oils/ fluids	• *Vehicle Refueling area* • *Leaks from broken hoses on equipment* • *Vehicles shall be maintained off site. If a maintenance area is necessary on-site, the Contractor shall submit to the Engineer the locations and BMPs for his review and acceptance for inclusion in the SWPPP/IWPPP.*	*Bridge Demolition and Construction*
Antifreeze/Coolants	• *Vehicle Refueling area* • *Leaks from broken hoses on equipment* • *Vehicles shall be maintained off site. If a maintenance area is necessary on-site, the Contractor shall submit to the Engineer the locations and BMPs for his review and acceptance for inclusion in the SWPPP/IWPPP.*	*Bridge Demolition and Construction*
Glue, Adhesives	• *Bridge construction*	*Bridge Demolition and Construction*
Concrete Curing Compounds/ Form Release Oils	• *Bridge construction involving concrete*	*Bridge Demolition and Construction*
Pesticides	• *Landscaping areas*	*Landscaping*
Herbicides	• *Landscaping areas*	*Landscaping*
Insecticides	• *Landscaping areas*	*Landscaping*
Fertilizers	• *Landscaping areas*	*Landscaping*

7.2.7 Construction Site Pollutants

For each pollutant-generating activity, an inventory of pollutants or pollutant constituents (e.g., sediment, fertilizers and/or pesticides, paints, solvents, fuels) associated with that activity, which could be exposed to rainfall and could be discharged from the construction site. The Contractor shall take into account where potential spills and leaks could occur that contribute pollutants to storm water discharges. The Contractor shall also document for the Engineer's review and acceptance any departures from the manufacturer's specifications for applying fertilizers containing nitrogen and phosphorus, as required in Section 5.3.5.1 under Attachment H.

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

Source/Material	***Description of How Potential Pollutant Source will be Prevented from Discharging with Storm Water Runoff***	***Major Construction Activity***
Construction debris, green waste, general litter	• *See Section 7.2.10 for Site Specific BMPs*	*Bridge Demolition and Construction*
Materials associated with the operation and maintenance of equipment, such as oil, fuel, and hydraulic fluid leakage	• *See Section 7.2.10 for Site Specific BMPs*	*Bridge Demolition and Construction*
Soil erosion from the disturbed areas	• *See Section 7.2.10 for Site Specific BMPs*	*Bridge Demolition and Construction*
Sediment from soil stockpiles	• *See Section 7.2.10 for Site Specific BMPs*	*Bridge Demolition and Construction*
Emulsified asphalt or prime/tack coat	• *See Section 7.2.10 for Site Specific BMPs*	*Bridge Demolition and Construction*

Materials associated with painting, such as paint and paint wash solvent	• *See Section 7.2.10 for Site Specific BMPs*	*Bridge Demolition and Construction*
Industrial chemicals, fertilizers, and/or pesticides	• *See Section 7.2.10 for Site Specific BMPs*	*Bridge Demolition and Construction*
Hazardous waste (Batteries, Solvents, Treated Lumber, etc.)	• *See Section 7.2.10 for Site Specific BMPs*	*Bridge Demolition and Construction*
Metals and Building Materials	• *See Section 7.2.10 for Site Specific BMPs*	*Bridge Demolition and Construction*
Existing Pollution Sources	• *See Section 7.2.10 for Site Specific BMPs*	*Bridge Demolition and Construction*
Other (Contaminated Soil)	• *See Section 7.2.10 for Site Specific BMPs*	*Bridge Demolition and Construction*

7.2.8 –Sources of Non-Storm Water

The SWPPP/IWPPP must also identify all sources of non-storm water and information, including, but not limited to, the design, installation, and maintenance of the control measures to prevent its discharge.

All solid waste shall be disposed of at DOH, Solid and Hazardous Waste Branch (SHWB), Solid Waste Section (SWS) permitted facilities. If not, the Contractor shall contact the SHWB-SWS at (808) 586-4226 and notify the Engineer for his agreement the disposal locations. Additional permits may be required.

Source	***Description of How Potential Non-Storm Water Pollution Source will not be Discharged to State Waters***	***Major Construction Activity***
Dust Control Water	• *See Section 7.2.10 for Site Specific BMPs*	*Bridge Demolition and Construction*

Source	***Description of How Potential Non-Storm Water Pollution Source will not be Discharged to State Waters***	***Major Construction Activity***
Concrete Truck Wash Water	• *See Section 7.2.10 for Site Specific BMPs*	*Bridge Demolition and Construction*
Sediment Track Out	• *See Section 7.2.10 for Site Specific BMPs*	*Bridge Demolition and Construction*
Irrigation Water	• *See Section 7.2.10 for Site Specific BMPs*	*Bridge Demolition and Construction*
Hydrotesting Effluent	• *See Section 7.2.10 for Site Specific BMPs*	*Bridge Demolition and Construction*
Dewatering Effluent	• *See Section 7.2.10 for Site Specific BMPs*	*Bridge Demolition and Construction*
Saw-cutting Slurry	• *See Section 7.2.10 for Site Specific BMPs*	*Bridge Demolition and Construction*
Concrete Curing Water	• *See Section 7.2.10 for Site Specific BMPs*	*Bridge Demolition and Construction*
Plaster Waste Water	• *See Section 7.2.10 for Site Specific BMPs*	*Bridge Demolition and Construction*
Water-Jet Wash Water	• *See Section 7.2.10 for Site Specific BMPs*	*Bridge Demolition and Construction*
Sanitary/Septic Waste	• *See Section 7.2.10 for Site Specific BMPs*	*Bridge Demolition and Construction*

7.2.9 –Buffer Documentation

Note Exception 3 exempts Buffers for areas subject to an Army Corps 404 Permit. For project work outside of the Army Corps Jurisdiction, the Designer needs to document buffer requirements.

If required to comply with section 5.1.2.1. because a state water is located within 50 feet of the project's earth disturbances, describe which compliance alternative has been selected for the site, and comply with any additional requirements to provide documentation in Section 5.1.2.1. Delineate, and clearly mark off, with flags, tape, or other similar marking device all natural buffer areas. Use velocity dissipation devices if necessary to prevent erosion caused by storm water within the buffer. Ensure all discharges are first treated by erosion and sediment controls.

☐ *Option 1*

Provide and maintain a 50-foot undisturbed natural buffer and sediment control.
Note: If the earth disturbances are located 50 feet or further from a state water and have installed sediment control, then the permittee has complied with this alternative. If the buffer is located outside State Highways Right of Way, include written permission from the owner of the land in SWPPP/IWPPP Attachment H.

Width of Buffer_____feet

☐ *Option 2*

Provide and maintain an undisturbed natural buffer that is less than 50 feet and double sediment control (e.g., double perimeter control) spaced a minimum of 5 feet apart.

Width of Buffer_____feet

☒ *Option 3*

If it is infeasible to provide and maintain an undisturbed natural buffer of any size, the permittee shall provide and maintain double sediment control (e.g., perimeter control) spaced a minimum of 5 feet apart and complete stabilization within 7 calendar days of the temporary or permanent cessation of earth-disturbing activities. <u>See Exceptions below.</u>

☐ *Exception 1*

There is no discharge of storm water to state waters through the area between the site and any state waters located within 50 feet of the site, the permittee is not required to comply with the requirements in this section. This includes situations where control measures have been implemented, such as a berm or other barrier, that will prevent such discharges.

☒ *Exception 2*

For "linear construction projects" where "linear construction projects" means the construction of roads, bridges, conduits, substructures, pipelines, sewer lines, towers, poles, cables, wires,

connectors, switching, regulating and transforming equipment and associated ancillary facilities in a long, narrow area, the permittee is not required to comply with the requirements in this section if site constraints (e.g., limited right-of-way) prevent the permittee from meeting any of the compliance alternatives in section 5.1.2.1.1., provided that, to the extent practicable, the permittee limit disturbances within 50 feet of state waters and/or the permittee provide erosion and sediment controls to treat storm water discharges from earth disturbances within 50 feet of the state water. The permittee shall also document below the rationale as to why it is infeasible to comply with the requirements in section 5.1.2.1.1., and describe any buffer width retained and/or erosion and sediment controls installed below.

The Kaipapa'u Stream Bridge crosses Kaipapa'u Stream. The existing bridge will be demolished and a new bridge constructed. The bridge work over the Kaipapa'u Stream is covered by the Army Corps 404 permit. Disturbance will be limited to that required to complete the project and erosion and sediment BMPs applied.

☒ *Exception 3*

The following disturbances within 50 feet of a state water are exempt from the requirements in this Part: construction approved under a CWA 404 permit; or construction of a water-dependent structure or water access area (e.g., pier, boat ramp, trail).

The minor maintenance dredging along the stream channel banks of Kaipapa'u Stream, reconstruction of Kaipapa'u Stream Bridge and associated in-water work is covered by the Army Corps 404 permit.

The permittee shall document in the SWPPP/IWPPP if any of the above disturbances will occur within the buffer area on the site below.
N/A

7.2.10 Storm Water Control Measures

Please refer to Hawaii Department of Transportation Construction Best Management Practices Field Manual dated January 2008 and Supplemental Sheets. 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. For the purposes of clarification under "applicable bid documents" include the construction plans, standard specifications, Special Provisions, Permits, and the SWPPP/IWPPP.

Land Based BMP Details

Complete the table below. Note: Bold text in the table are requirements of HAR 11-55. The Designer will provide an installation detail of all proposed BMPs (From HDOT Construction BMP Field Manual) identified in Section 7.2.6.7, including the proposed BMPs that will be used to mitigate the potential pollutants identified in Sections 7.2.7 and 7.2.8. Attach the details and design calculations, if applicable, in SWPPP/IWPPP Attachment A (7.2.10.1a). The Contractor shall include the specific product sheets (e.g. Tru-Dam or Gutter Buddy, etc.) and any changes to the proposed BMPs above for the Engineer's review and acceptance.

Check the appropriate boxes below verifying the following requirements are met. If not applicable indicate on the blank lines below (7.2.10.1):

☒ *The specific perimeter sediment controls will be installed and made operational prior to conducting earth-disturbing activities in any given portion of the site that will receive storm water from earth-disturbing activities are described below (7.2.10.1b). Perimeter sediment control devices will be made operational or See below.*

☒ *If contaminated soil exists on-site, control measures will be taken to either prevent the contact of storm water with the contaminated soil, including any contaminated soil stockpiles, or prevent the discharge of any storm water runoff which has contacted contaminated soil or any contaminated soil stockpiles are described below (7.210.1.c). N/A Soil contamination is not anticipated on site. The Contractor shall add the BMP measures and locations if any contamination is found on-site for the Engineer's review and acceptance.*

☒ *For exit points on the site (or any areas which exit onto a paved street), stabilization techniques and any additional controls that are planned to remove sediment prior to vehicle exit consistent with Section 5.1.2.3 will be taken and are described below (7.2.10.1d). Stabilized entrance locations may be changed by the Contractor depending on his construction means and methods. The Contractor shall submit to the Engineer for his review and acceptance the locations of stabilized entrances once the project is awarded for inclusion in the SWPPP/IWPPP. The Contractor shall submit to the Engineer for his review and acceptance any updates/changes to stabilized entrances during construction for inclusion in the SWPPP/IWPPP.*

☒ *The project is linear, and the use of perimeter controls on portions of the site is impracticable for the following reasons (7.2.10.1e): N/A or the limits of the site (State Highways Right of Way) include connections to other C&C of Honolulu or HDOT roadways. Installing sediment controls in these areas would not be possible without closing vehicle traffic.*

Pollutant Source	***Appropriate Site-Specific BMP to be Implemented***	***BMP Requirements***
Construction debris, green waste, general litter	• *Separate contaminated clean up materials from construction and demolition (C&D) wastes.* • ***Provide waste containers (e.g., dumpster or trash receptacle) of sufficient size and number to contain construction and domestic wastes.*** • *Inspect construction waste and recycling areas regularly.* • *Schedule solid waste collection regularly.* • *Schedule recycling activities based on construction/demolition phases.* • *Empty waste containers weekly or when they are two-thirds full, whichever is sooner.* • ***Do not allow containers to overflow. Clean up immediately if they do.*** • ***On work days, clean up and dispose of waste in designated waste containers.*** • *See Solid Waste Management Section SM-6 for additional requirements.* • *Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.* • *The Contractor shall submit for the Engineer's review and acceptance and SWPPP/IWPPP inclusion a Litter Management Plan.*	*See Solid Waste Management Section SM-6. Protect Storm Drain Inlets SC-2, and Perimeter Sediment Controls where applicable.* *Contractor to include Litter Management plan once the project is awarded.*
Materials associated with the operation and maintenance of equipment, such as oil, fuel, and hydraulic fluid leakage	• *Use off-site wash racks, repair and maintenance facilities, and fueling sites when practical.* • ***Designate bermed wash area if cleaning on site is necessary.*** • ***Place drip pans or drop cloths under vehicles and equipment to absorb spills or leaks.*** • ***Provide an ample supply of readily available spill cleanup materials.*** • ***Clean up spills immediately, using dry clean-up methods where possible, and dispose of used***	*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 Prevention and Control SM-10.***

Pollutant Source	***Appropriate Site-Specific BMP to be Implemented***	***BMP Requirements***
	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 continuation of an ongoing discharge.*** • *Inspect on-site vehicles and equipment regularly and immediately repair leaks.* • *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.*	
Soil erosion from the disturbed areas	• *Provide Soil Stabilization, Slope Protection, Storm Drain Inlet Protection SC-2, Perimeter Controls and Sediment Barriers, Sediment*	*Soil Stabilization* 1. *SM-21 Topsoil Management* 2. *EC-5 Seeding and*

Pollutant Source	***Appropriate Site-Specific BMP to be Implemented***	***BMP Requirements***
	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/IWPPP.*** • ***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.***	*Planting* 3. *EC-6 Mulching* 4. *EC-7 Geotextiles and Mats* *Slope Protection* 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 and Berms* 7. *SC-2 Storm Drain Inlet Protection* *Perimeter Controls and Sediment Barriers* 1. *SC-1 Silt Fence* 2. *SC-5 Vegetated Filter Strips and Buffers* 3. *SC-8 Compost Filter Berm* 4. *SC-13 Sandbag Barrier* 5. *SC-14 Brush/Rock Filter* *Sediment Basins and Detention Ponds* 1. *SC-15 Sediment Trap* 2. *SC-16 Sediment Basin* 3. *SC-9 Check Dams* 4. *SC-10 Level Spreader* 5. *SM-19 Paving Operations EC-1 Construction Road Stabilization* *Controlling Storm Water Flowing onto and Through*

Pollutant Source	***Appropriate Site-Specific BMP to be Implemented***	***BMP Requirements***
	• ***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 designed for steep grades.*** • ***For temporary drains and swales use velocity dissipation devices within and at the outlet to minimize erosive flow velocities.***	*the Project* 1. *EC-8 Run-On Diversion* 2. *SC-6 Earth Dike* 3. *SC-7 Temporary Drains and Swales* *Post Construction BMPs* 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* 4. *SM-21 Topsoil Management* *Non-Structural BMPs* 1. *SM-1 Employee Training* 2. *SM-14 Scheduling* 3. *SM-15 Location of Potential Sources of Sediment* 4. *SM-16 Preservation of Existing Vegetation*
Sediment from soil stockpiles	• *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/IWPPP****.* • *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,***	*See Protection of Stockpiles Section SM-4. Protect Storm Drain Inlets SC-2, and Perimeter Sediment Controls where applicable.*

Pollutant Source	***Appropriate Site-Specific BMP to be Implemented***	***BMP Requirements***
	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.*	
Emulsified asphalt or prime/tack coat	• *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 Perimeter Sediment Controls as applicable.*	*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 applicable.*
Materials associated with painting, such as paint and paint wash solvent	• *Hazardous chemicals shall be well-labeled and stored in original containers.* • ***Keep ample supply of cleanup materials on site.*** • *Dispose container only after all of the product has been used.* • *Remove as much paint from brushes*	*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*

Pollutant Source	***Appropriate Site-Specific BMP to be Implemented***	***BMP Requirements***
	on painted surface. • *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.*** • ***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.*** • ***Do not dump liquid wastes into the storm drainage system.*** • *Filter and re-use solvents and thinners.* • *Dispose of oil-based paints and residue as a hazardous waste.* • *Ensure collection, removal, and disposal of hazardous waste complies with regulations.* • ***Immediately clean up spills and leaks.*** • *Properly store paints, solvents, and epoxy compounds.* • *Properly store and dispose waste materials generated from painting and structure repair and construction activities.* • *Mix paints in a covered and contained area when possible to minimize adverse impacts from spills.* • *Do not apply traffic paint or thermoplastic if rain is forecasted.* • *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.*	*Construction and Painting Section SM-20, Protect Storm Drain Inlets SC-2, and Perimeter Sediment Controls where applicable.*

Pollutant Source	***Appropriate Site-Specific BMP to be Implemented***	***BMP Requirements***
	• *Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.*	
Industrial chemicals, fertilizers, and/or pesticides	• *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 safety data sheets (formerly MSDS) 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 stormwater conveyance channels with flowing water*** • ***Comply with fertilizer and pesticide manufacturer's recommended usage and disposal instructions. Document departures from manufacturer's specifications in Attachment H.*** • ***Apply fertilizers at the appropriate time of year for the location, and preferably timed to coincide as closely as possible to the period of***	*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***
	maximum vegetation uptake and growth. • ***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, Material Use SM-3, and Waste Management, Hazardous Waste Management Section SM-9 for additional requirements.*	
Hazardous waste (Batteries, Solvents, Treated Lumber, etc.)	• *Do not dispose of toxic materials 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.*** • *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.* • ***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,***	*See Hazardous Waste Management Section SM-9 and Vehicle and Equipment Maintenance SM-12*

Pollutant Source	***Appropriate Site-Specific BMP to be Implemented***	***BMP Requirements***
	state, and local requirements. • ***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.*** • ***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 continuation of an ongoing discharge.*** • ***Ensure collection, removal, and disposal of hazardous waste complies with manufacturer's recommendations and is in compliance with federal, state, and local requirements.*** • *See Hazardous Waste Management Section SM-9 and Vehicle and Equipment Management, Vehicle and Equipment Maintenance SM-12 for additional requirements.*	
Metals and Building Materials	• *Inspect construction waste and recycling areas regularly.* • *Schedule solid waste collection regularly.* • ***If building materials or metals are stored on site (such as rebar or galvanized poles) store under cover under tarps or in containers.*** • *Minimize the amount of material stored on site.* • ***Do not stockpile uncovered metals or other building materials in close proximity to discharge points.*** • *See Solid Waste Management Section SM-6 for additional requirements.*	*See Solid Waste Management Section SM-6*
Contaminated Soil	• *See Waste Management,*	*See Waste Management,*

Pollutant Source	***Appropriate Site-Specific BMP to be Implemented***	***BMP Requirements***
	Contaminated Soil Management Section SM-8 and/or Hazardous Waste Management Section SM-9 for additional requirements. • ***At minimum contain contaminated material soil by surrounding with impermeable lined berms or cover exposed contaminated material with plastic sheets.***	*Contaminated Soil Management Section SM-8 and/or Hazardous Waste Management Section SM-9*
Dust Control Water	• *Do not over spray water for dust control purposes which will result in runoff from the area.* • ***Apply water as conditions require.*** • *Washing down of debris or dirt into drainage, sewage systems, or State waters is not allowed.* • *See Dust Control Section SM-18 for additional requirements.*	*See Dust Control Section SM-18*
Concrete Truck Wash Water	• *Disposal of concrete truck wash water via percolation is prohibited.* • *Wash concrete-coated vehicles or equipment off-site or in the designated wash area.* • *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.* • *Runoff from the on-site concrete wash area shall be contained in a temporary pit or level bermed area where the concrete can set.* • ***Design the area so that no overflow can occur due to inadequate wash area sizing or precipitation.*** • *The temporary pit shall be lined with plastic to prevent seepage of wash*	*See Waste Management, Concrete Waste Management Section SM-5*

Pollutant Source	***Appropriate Site-Specific BMP to be Implemented***	***BMP Requirements***
	water into the ground. • *Allow wash water to evaporate or collect wash water and all concrete debris in a concrete washout system bin.* • ***Do not dump liquid wastes into storm drainage system.*** • ***Dispose of liquid and solid concrete wastes in compliance with federal, state, and local standards.*** • *See Waste Management, Concrete Waste Management Section SM-5 for additional requirements.*	
Sediment Track-Out	• ***Include Stabilized Construction Entrance at all points that exit onto paved roads.*** • *A sediment trapping device is required if a wash rack is used in conjunction with the stabilized construction entrance/exit.* • *The pavement shall not be cleaned by washing down the street.* • *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.* • *Use BMPs for adjacent drainage structures.* • ***Remove sediment tracked onto the street by the end of the day in which the track-out occurs.*** • ***Restrict vehicle use to properly designated exit points.*** • *Include additional BMPs that remove*	*See Stabilized Construction Entrance Section EC-2*

Pollutant Source	***Appropriate Site-Specific BMP to be Implemented***	***BMP Requirements***
	sediment prior to exit when minimum dimensions can not be met. • *See Stabilized Construction Entrance Section EC-2 for additional requirements.*	
Irrigation Water	• *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 Stormwater BMP Handbook SD-12 Efficient Irrigation included in SWPPP/IWPPP Attachment A for additional requirements.*	*See Seeding and Planting Section EC-5 and California Stormwater BMP Handbook SD-12 Efficient Irrigation*
Hydrotesting Effluent	• *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.*
Dewatering Effluent	• *If excavation or backfilling operations require dewatering, and Contractor elects to discharge*	*See Dewatering Operations SM-17. Site specific BMPs will be included in the*

Pollutant Source	***Appropriate Site-Specific BMP to be Implemented***	***BMP Requirements***
	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.	*NOI/NPDES Permit Form G submittal.*
Saw-cutting Slurry	• *Saw cut slurry shall be removed from the site by vacuuming.* • *Provide storm drain protection during saw cutting. See Paving Operations Section SM-19 for additional requirements.* • *Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.*	*See Paving Operations Section SM-19, Storm Drain Inlet Protection SC-2, Perimeter sediment controls where applicable*
Concrete Curing Water	• *Avoid overspraying of curing compounds.* • *Apply an amount of compound that covers the surface, but does not allow any runoff of the compound.* • *See California Stormwater BMP Handbook NS-12 Concrete Curing included in SWPPP/IWPPP Attachment A for additional requirements.*	*See California Stormwater BMP Handbook NS-12 Concrete Curing*
Plaster Waste Water	• ***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.***	*See Material Delivery and Storage Section SM-2, Material Use Section SM-3, and Hazardous Waste Management Section SM-9*

Pollutant Source	***Appropriate Site-Specific BMP to be Implemented***	***BMP Requirements***
	• ***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.*** • *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.* • ***Plaster waste water shall not be allowed to flow into drainage structures or State waters.*** • *See Material Delivery and Storage Section SM-2, Material Use SM-3, and Hazardous Waste Management Section SM-9 for additional requirements.*	
Water-Jet Wash Water	• *For Water-Jet Wash Water used to clean vehicles, use off site wash racks or commercial washing facilities when practical.* • *See Vehicle and Equipment Cleaning Section SM-11 for additional information.* • *For Water-Jet Wash Water used to clean impervious surfaces, the runoff shall not be allowed to flow into drainage structures or State Waters.*	*See Vehicle and Equipment Cleaning Section SM-11*
Sanitary/Septic Waste	• *Locate Sanitary facilities in a convenient place away from drainage facilities.* • ***Position sanitary facilities so they are secure and will not be tipped over or knocked down.***	*See Sanitary/Septic Waste Section SM-7.*

Pollutant Source	***Appropriate Site-Specific BMP to be Implemented***	***BMP Requirements***
	• *Wastewater shall not be discharged to the ground or buried.* • *A licensed service provider shall maintain sanitary/septic facilities in good working order.* • *Schedule regular waste collection by a licensed transporter.* • *See Sanitary/Septic Waste Section SM-7 for additional requirements.*	

In-Water BMP Details (WQC)

Complete the table below.

These BMPs are meant to be used in areas within the Army Corps Jurisdiction. These BMPs include operations over State Waters.

The Contractor shall include the Site-Specific BMP Plan for the Engineer's review and acceptance. The plan should be based on the approved BMPs listed in the "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 Department of Transportation and the Federal Highways Administration Practitioners Guide and applicable sections of the latest HDOT Construction Best Management Practices Field Manual. Submit BMPs not included in the Practitioners Guide to the HDOT Engineer for acceptance.

Pollutant Source	***Appropriate Site-Specific BMP to be Implemented***	***BMP Requirements***
Construction debris (including demolition debris), general litter	• *Keep work area clean of all trash and potential pollutants.* • *Use containment systems which prevent pollutants from reaching State Waters* • *Stockpile accumulated debris and waste generated during demolition away from watercourses.*	*See Section 5.1- Working on or Over Water; Including Material and Equipment Use on Water, and Section 5.2 - Demolition Over or Adjacent to Water*
Materials associated with the operation and maintenance of	• *Heavy equipment driven in wet portions of a water body to accomplish work should be completely clean of petroleum residue, and water levels*	*See Section 5.1 – Working on or Over Water; Including Material and*

Pollutant Source	***Appropriate Site-Specific BMP to be Implemented***	***BMP Requirements***
equipment, such as oil, fuel, and hydraulic fluid leakage	*should be below the fuel tanks, gearboxes, and axles of the equipment unless lubricants and fuels are sealed such that inundation by water will not result in discharges of fuels, oils, greases, or hydraulic fluids.* • *Excavation equipment buckets may reach out into the water for the purpose of removing or placing fill materials. Only the bucket of the crane/ excavator/backhoe may operate in a water body. The main body of the crane/excavator/backhoe should not enter the water body except as necessary to cross the stream to access the work site.* • *Stationary equipment such as motors and pumps located within or adjacent to a water body, should be positioned over drip pans.* • *The exterior of vehicles and equipment that will encroach on a water body within the project should be maintained free of grease, oil, fuel, and residues and may require vegetable based hydraulic oil.* • *Equipment should not be parked below the high water mark unless allowed by a permit.* • *See Clear Water Diversion (Limitations) for additional requirements.*	*Equipment Use on Water and Sections 5.5.5 and 5.5.6 - Clear Water Diversions (Standards and Specifications and General Considerations)*
Soil and sediment from the disturbed areas including dredged spoils and rock/sand fill	• *Streambank Stabilization Techniques* • *Clear Water Diversion and Isolation Techniques* • *Stream Diversion Techniques* • *In-Stream Construction Sediment Control*	*See: Section 5.4 - Streambank Stabilization* *Section 5.6 – Filter Fabric Isolation Technique* *Section 5.7 – Turbidity Curtain Isolation Technique*

Pollutant Source	***Appropriate Site-Specific BMP to be Implemented***	***BMP Requirements***
		Section 5.8 – K-Rail (Jersey Barrier) River Isolation Technique *Section 5.9 – Cofferdam and/or Sheet Pile Isolation technique* *Section 5.10 - Gravel/Rock Berm with Impermeable Membrane Isolation Technique* *Section 5.11 – Gravel bag or Sandbag Isolation Technique* *Section 5.12 – Pipe Piles and Caisson Isolation Technique* *Section 5.13 - Stream Diversion Techniques: Pumped, Pipe/Flume, and Excavated* *Section 5.14 – In-stream Construction Sediment Control* *Section 5.15 – Washing Fines (Streambed Restoration Technique)*
Materials associated with painting, such as paint and paint wash solvent	• *Properly design and install containment systems prior to work* • *Shrouds of appropriate material should be used to prevent paint overspray from entering surface waters* • *Special attention should be given to existing and forecasted wind and weather conditions to prevent pollutant discharges to surface waters*	*See Section 5.1 – Working On or Over Water; Including Material and Equipment Use on Water*

Pollutant Source	***Appropriate Site-Specific BMP to be Implemented***	***BMP Requirements***
Concrete	• *Clear Water Diversion and Isolation Techniques* • *Stream Diversion Techniques*	*Section 5.6 – Filter Fabric Isolation Technique* *Section 5.7 – Turbidity Curtain Isolation Technique* *Section 5.8 – K-Rail (Jersey Barrier) River Isolation Technique* *Section 5.9 – Cofferdam and/or Sheet Pile Isolation technique* *Section 5.10 - Gravel/Rock Berm with Impermeable Membrane Isolation Technique* *Section 5.11 – Gravel bag or Sandbag Isolation Technique* *Section 5.12 – Pipe Piles and Caisson Isolation Technique* *Section 5.13 - Stream Diversion Techniques: Pumped, Pipe/Flume, and Excavated*
Hydrotesting Effluent	• *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*	*N/A*

Pollutant Source	***Appropriate Site-Specific BMP to be Implemented***	***BMP Requirements***
	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.	
Dewatering Effluent	• *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.*
Other Pollutants (Including Chemicals and Pesticides)	• *If the Contractor elects to apply pesticides directly over water, Contractor shall prepare and obtain HDOT acceptance of a NOI/NPDES Permit Form M application for HDOT submittal to DOH CWB at least 30 days prior to the start of pesticide application activities.*	*N/A*

7.2.10.2 – Stabilization Practices

(Note: See Army Corps 2017 Nationwide Permit Honolulu District, Regional Condition 8, Section 3a. Post-Construction BMPs regarding use of native plants appropriate for current site conditions to be used for re-vegetation for the purposes of restoring areas temporarily disturbed by the authorized work.)

Describe the specific vegetative and/or non-vegetative practices that will be used to comply with the requirements in HAR 11-55, section 5.2., including if the permittee will be complying with the stabilization deadlines specified in HAR 11-55, section 5.2.1.3.2. Document the circumstances that prevent the permittee from meeting the deadlines specified in sections 5.2.1.1. and/or 5.2.1.2.

The term "immediately" is used to define the deadline for initiating stabilization measures. In the context of this SWPPP/IWPPP section, "immediately" means as soon as practicable, but no later than the end of the next work day, following the day when the earth-disturbing activities have temporarily or permanently ceased (5.2.1.1).

For the purposes of this SWPPP/IWPPP section, any of the following types of activities constitutes initiation of stabilization (5.2.1.1):

a) Prepping the soil for vegetative or non-vegetative stabilization;
b) Applying mulch or other non-vegetative product to the exposed area;
c) Seeding or planting the exposed area;
d) Starting any of the activities in a) – c) on a portion of the area to be stabilized, but not on the entire area; and
e) Finalizing arrangements to have stabilization product fully installed in compliance with the applicable deadline for completing initial stabilization activities.

For the purposes of this SWPPP/IWPPP section, any of the following types of activities constitutes completion of initial stabilization activities (5.2.1.1):

a) For vegetative stabilization, all activities necessary to initially seed or plant the area to be stabilized; and/or
b) For non-vegetative stabilization, the installation or application of all such non-vegetative measures.

If the Contractor is unable to meet the deadlines above due to circumstances beyond the Contractor's control, and the Contractor is using vegetative cover for temporary or permanent stabilization, the Contractor may comply with the following stabilization deadlines instead as agreed to by the Engineer (5.2.1.3.1):

5.2.1.3.1.1.
Immediately initiate, and complete within the timeframe shown below, the installation of temporary non-vegetative stabilization measures to prevent erosion;

5.2.1.3.1.2.
Complete all soil conditioning, seeding, watering or irrigation installation, mulching, and other required activities related to the planting and initial establishment of vegetation as soon as conditions or circumstances allow it on the site; and

5.2.1.3.1.3.
The Contractor shall notify and provide documentation to the Engineer the circumstances that prevent the Contractor from meeting the deadlines required in sections 5.2.1.1. and/or 5.2.1.2. and the schedule the Contractor will follow for initiating and completing initial stabilization and as agreed to by the Engineer. Include this information in the SWPPP/IWPPP below.

The Contractor shall follow the applicable requirements of the specifications and special provisions including Sections 209, 619 and 641.

Final Stabilization
To be considered adequately stabilized, the permittee shall meet the criteria below depending on the type of cover the permittee is using, either vegetative or non-vegetative.

5.2.2.1. Vegetative stabilization.

5.2.2.1.1.1.
If the permittee is stabilizing any exposed portion of the site through the use of seed or planted vegetation, the permittee shall provide established uniform vegetation (e.g., evenly distributed without large bare areas), which provides 70 percent or more of the density of coverage that was provided by vegetation prior to commencing earth-disturbing activities. The permittee should avoid the use of invasive species; (HDOT requires 98% coverage for permanent hydromulch per specification and special provision sections 619 and 641.) The Designer needs to meet the 70% requirement above when designing plantings and ground cover which do not involve hydromulch. If the Designer uses a soil test to determine amounts, rates, and type of fertilizer, and the amount and rate is not consistent with manufacturer's specifications, the Designer should document this in the SWPPP/IWPPP in Attachment H.

5.2.2.1.1.2.
For final stabilization, vegetative cover must be perennial; and

5.2.2.1.1.3.
Immediately after seeding or planting the area to be vegetatively stabilized, to the extent necessary to prevent erosion on the seeded or planted area, the Contractor shall install non-vegetative erosion controls that provide cover (e.g., mulch, rolled erosion control products) to the area while vegetation is becoming established.

5.2.2.2. Non-Vegetative Stabilization.
If the permittee is using non-vegetative controls to stabilize exposed portions of the site, or if the Contractor is using such controls to temporarily protect areas that are being vegetatively stabilized, the Contractor shall provide effective non-vegetative cover.

The stabilization schedule for this project is:
Outfalls 1 &, 2 (Kaipapa'u Stream) discharges to waters not impaired for nutrients or sediments. The following applies to construction areas discharging to these outfalls:

> *Immediately initiate and complete stabilization within 14 calendar days on areas of the site in which earth-disturbing activities have temporarily or permanently ceased.*

All areas of soil disturbance will be stabilized. Kaipapa'u Stream while listed on the Hawai'i Department of Health (DOH) 2018 list of impaired waters in Hawai'i, prepared under Clean Water Act §303(d) (DOH, 2018), has not been evaluated as there is insufficient data. HDOT will comply with the deadlines in HAR Section 5.2.1.3.2, with completion of initial plantings within 14 calendar days of completion of prepping the soil for planting.

The Contractor shall notify the Engineer for his agreement if any stabilization practices or timetables to complete stated above will not be followed and document the reasons in the SWPPP/IWPPP below.

The deadlines for initiating and completing stabilization in sections 5.2.1.1. and/or 5.2.1.2. cannot be met because of the following (Note: Document location(s), reasons, and schedule) N/A

7.2.10.3 – Post Construction Measures

Descriptions of measures that will minimize the discharge of pollutants via storm water discharges after construction operations have been finished. Examples include: open, vegetated swales and natural depressions; structures for storm water retention, detention, or recycle; velocity dissipation devices to be placed at the outfalls of detention structures or along with the length of outfall channels; and other appropriate measures. All projects require post construction BMPs to minimize the discharge of pollutants via storm water discharges after construction operations have been finished. Examples include: open, vegetated swales and natural depressions; structures for storm water retention, detention, or recycle; velocity dissipation devices to be placed at the outfalls of detention structures or along with the length of outfall channels; and other appropriate measures. All projects require post-construction BMPs to minimize the discharges of pollutants via storm water discharges after construction operations have finished.

Following the reconstruction of the Kaipapa'u Stream Bridge storm water discharges are not expected to generate significant concentrations of runoff that would adversely affect surrounding

or coastal ecosystems. Storm water will sheet-flow off the bridge surface and percolate into adjacent groundcover areas.

7.2.11.1 – Spill Prevention and Response Procedures

The SWPPP/IWPPP must describe procedures that the permittee will follow to prevent and respond to spills and leaks consistent with section 5.3., including:

a. Procedures for expeditiously stopping, containing, and cleaning up spills, leaks, and other releases. Identify the name or position of the employee(s) responsible for detection and response of spills or leaks; and

b. Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies 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 consistent with section 5.3.4. and 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 post contact information in locations that are readily accessible and available.

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 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, the Clean Water Branch (DOH-CWB) via email at cleanwaterbranch@doh.hawaii.gov during non-business hours immediately, and the Engineer. 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 and local requirements may necessitate additional reporting of spills or discharges to local emergency response, public health, or drinking water supply agencies (HAR 11-55 5.3.4). The Contractor shall submit to the Engineer information necessary to complete the reporting requirements.

☒ *The Spill Prevention and Response Procedures are included in SWPPP/IWPPP Attachment F.*

The Contractor shall update the Spill Prevention and Response Procedures in the SWPPP/IWPPP once the project is awarded for the Engineer's review and acceptance.

7.2.11.2 – Waste Management Procedures

The SWPPP/IWPPP must describe procedures for how the permittee will handle and dispose of all wastes generated at the site, including, but not limited to, clearing and demolition debris, sediment removed from the site, construction and domestic waste, hazardous or toxic waste, and sanitary waste.

☒ *The Waste Management Procedures are included in SWPPP/IWPPP Attachment G.*

The Contractor shall update the Waste Management Procedures in the SWPPP/IWPPP once the project is awarded for the Engineer's review and acceptance.

7.2.12 – Procedures for Inspection, Maintenance, and Corrective Action for Land-Based Work Areas

The SWPPP/IWPPP must describe the procedures the permittee will follow for maintaining the storm water control measures, conducting site inspections, and, where necessary, taking corrective actions, in accordance with section 5.1.1.4., section 5.3.2., section 9, and section 10 of the permit. The following information must also be included in the SWPPP/IWPPP:

a. Personnel responsible for conducting inspections: Field Office Engineer and/or Inspector, and/or Contractor Representatives. Field Office Engineer and/or Inspector, and/or Contractor Representatives will be included in the SWPPP/IWPPP once the contract is awarded.

Qualifications: HDOT construction staff and HDOT Contractors attend Stormwater BMP Classes annually. Contractor representatives selected for the inspection and maintenance responsibilities shall receive training from the Contractor. The Contractor's Representatives shall be trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment controls used onsite in good working order. The Contractor's Representative(s) inspecting the site shall be knowledgeable in the principles and practice of erosion and sediment controls and pollution prevention, who possesses the skills to assess conditions at the construction site that could impact storm water quality, and the skills to assess the effectiveness of any storm water controls selected and installed to meet the requirements of this permit.

b. The inspection schedule the permittee will be as follows, which is based on whether the site is subject to section 9.1.2. or section 9.1.3., and whether the site qualifies for any of the allowances for reduced inspection frequencies in 9.1.4. If the permittee will be conducting inspections in accordance with the inspection schedule in section 9.1.2.a. or section 9.1.2.b., the location of the rain gauge on the site or the address of the weather station the permittee will be using to obtain rainfall data;

Describe the inspection schedules and procedures you have developed for the site. Include the maintenance requirements for each BMP (e.g., level of sediment buildup allowed):

All Construction BMPs shall be inspected weekly, and within 24 hours of any rainfall event of 0.25 inches or greater in a 24 hour period. The Contractor shall submit a copy of the SWPPP/IWPPP Inspection and Maintenance Report Form to the Engineer within 24 hours of the inspection.

Maintenance requirements for specific BMPs are included in the HDOT Construction BMP Field Manual, Practitioner's Guide, and/or manufacturer's specification. The Contractor shall initiate work to fix the problem immediately after discovering the problem, and complete such work 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. In this section, 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. When installation of a new pollution prevention control or a significant repair is needed, the Contractor shall install the new or modified control and make it operational, or complete the repair, by no later than 7 calendar days from the time of discovery. If it is infeasible to complete the installation or repair within 7 calendar days, the Contractor shall provide notice to the Engineer and document why it is infeasible to complete the installation or repair within the 7 calendar day timeframe and document the schedule for installing the storm water control(s) and making it operational as soon as practicable after the 7 calendar day timeframe and as agreed to by the Engineer. Where these actions result in changes to any of the pollution prevention controls or procedures documented in the SWPPP/IWPPP, modify the SWPPP/IWPPP accordingly. The Contractor will attach product specific maintenance practices in the SWPPP/IWPPP once the project is awarded.

c. Use the Corrective Action Report Form for any the following (10.2.1 and 10.4.1):

- *A required storm water control was never installed, was installed incorrectly, or not in accordance with the requirements in HAR sections 5 and/or 6.*

- *The Contractor/Engineer becomes aware that the storm water controls installed and being maintained are not effective enough for the discharge to meet applicable water quality standards or applicable requirements in HAR section 6.1.*
- *One of the prohibited discharges below is occurring or has occurred:*
    - *Wastewater from washout of concrete*
    - *Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials*
    - *Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance*
    - *Soaps, solvents, or detergents used in vehicle and equipment washing*
    - *Toxic or hazardous substances from a spill or other release*
- *Corrective actions required by the Department of Health or EPA*

Note: Corrective actions must be included with the monthly compliance report in Attachment J.

d. Any inspection or maintenance checklists or other forms that will be used.

☒ *The Inspection Report Form provided in SWPPP/IWPPP Attachment E will be used.*

☒ *The Corrective Action Report Form provided in SWPPP/IWPPP Attachment I will be used.*

7.2.12A (WQC) – Procedures for Inspection, Maintenance, and Corrective Action for In-Water Work Areas

Maintenance requirements for specific BMPs are included in the Practitioners Guide and/or manufacturer specification.

a. Personnel responsible for conducting inspections: *Field Office Engineer and/or Inspector, and/or Contractor Representatives. Field Office Engineer and/or Inspector, and/or Contractor Representatives will be included in the SWPPP/IWPPP once the contract is awarded.*

Qualifications: HDOT construction staff and HDOT Contractors attend Stormwater BMP Classes annually. Contractor representatives selected for the inspection and maintenance responsibilities shall receive training from the Contractor. The Contractor's Representatives shall be trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment controls used onsite in good working order. The Contractor's Representative(s) inspecting the site shall be knowledgeable in the principles and practice of erosion and sediment controls and pollution prevention, who possesses the skills to assess conditions at the construction site that could impact storm water quality, and the skills to assess the

effectiveness of any storm water controls selected and installed to meet the requirements of this permit.

b. Schedule for Inspection of In-Water work.

1) Inspect In-Water areas Daily using the Inspection Form in Attachment E-4.

c. Procedures for Corrective Actions for In-Water Work

Procedures for Action When a Plume is Observed

1) If a Plume is observed outside the confined work area, the Contractor shall stop work immediately and investigate the cause of the problem.

2) If possible, isolate and contain the area where the plume is emanating from.

3) If the discharge poses an immediate threat to the public or environment call 911 immediately and follow the procedures in the project's Emergency Spill Response Plan.

4) HDOT will notify DOH CWB within 24 hours on the E-permitting Portal any instance of non-compliance.

5) The Contractor shall initiate work to fix the problem immediately after discovering the problem, and complete such work 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. In this section, 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. When installation of a new pollution prevention control or a significant repair is needed, the Contractor shall install the new or modified control and make it operational, or complete the repair, by no later than 7 calendar days from the time of discovery. If it is infeasible to complete the installation or repair within 7 calendar days, the Contractor shall provide notice to the Engineer and document why it is infeasible to complete the installation or repair within the 7 calendar day timeframe and document the schedule for installing the storm water control(s) and making it operational as soon as practicable after the 7 calendar day timeframe and as agreed to by the Engineer. Where these actions result in changes to any of the pollution prevention controls or procedures documented in the IWPPP, modify the IWPPP accordingly. In-Water work shall not resume until repairs are completed. The Contractor will attach product specific maintenance practices in the IWPPP once the project is awarded.
Note: A plume is defined as an event in which a project discharge violates the State Water Quality Standards. See the Practitioner's Guide Sections 2.5 and 2.6 for further guidance.

Procedures for Action When a Storm Water Control or BMP is damaged or needs maintenance

1) If a discharge is occurring, follow the course of action above for when a plume is observed.

2) If no discharge is occurring, the Contractor shall initiate work to fix the problem immediately after discovering the problem, and complete such work 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. In this section, 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. When installation of a new pollution prevention control or a significant repair is needed, the Contractor shall install the new or modified control and make it operational, or complete the repair, by no later than 7 calendar days from the time of discovery. If it is infeasible to complete the installation or repair within 7 calendar days, the Contractor shall provide notice to the Engineer and document why it is infeasible to complete the installation or repair within the 7 calendar day timeframe and document the schedule for installing the storm water control(s) and making it operational as soon as practicable after the 7 calendar day timeframe and as agreed to by the Engineer. Where these actions result in changes to any of the pollution prevention controls or procedures documented in the IWPPP, modify the IWPPP accordingly. The Contractor shall attach product specific maintenance practices in the IWPPP once the project is awarded.

d. Use the Corrective Action Report Form for any the following (HAR 10.2.1 and 10.4.1):

- *One of the prohibited discharges below is occurring or has occurred:*
  - *A plume is observed*
  - *Wastewater from washout of concrete*
  - *Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials*
  - *Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance*
  - *Soaps, solvents, or detergents used in vehicle and equipment washing*
  - *Toxic or hazardous substances from a spill or other release*
- *Corrective actions required by the Department of Health or EPA*

Note: Corrective actions must be included with the monthly compliance report in Attachment J and be submitted on the E-Permitting Portal.

e. Any inspection or maintenance checklists or other forms that will be used.

☒ *The Inspection Report Form provided in SWPPP/IWPPP Attachment E-4 will be used.*

☒ *The Corrective Action Report Form provided in SWPPP/IWPPP Attachment I will be used.*

7.2.13 – Staff Training

The SWPPP/IWPPP must include documentation that the required personnel were trained in accordance with the following:

Prior to the commencement of earth-disturbing activities or pollutant-generating activities, whichever occurs first, the permittee shall ensure that the following personnel understand the requirements of this permit and their specific responsibilities with respect to those requirements:

a. Personnel who are responsible for the design, installation, maintenance, and/or repair of storm water controls (including pollution prevention measures);

b. Personnel who are responsible for the application and storage of chemicals (if applicable);

c. Personnel who are responsible for conducting inspections as required in Part 4.1.1; and

d. Personnel who are responsible for taking corrective actions as required in Part 5.

The Contractor is responsible for ensuring that all activities on the site comply with the requirements of this permit. The Contractor is not required to provide or document formal training for subcontractors or other outside service providers, but must ensure that such personnel understand any requirements of the permit that may be affected by the work they are subcontracted to perform.

At a minimum, personnel must be trained to understand the following if related to the scope of their job duties (e.g., only personnel responsible for conducting inspections need to understand how to conduct inspections):
a. The location of all storm water controls on the site required by this permit, and how they are to be maintained;
b. The proper procedures to follow with respect to the permit's pollution prevention requirements; and
c. When and how to conduct inspections, record applicable findings, and take corrective actions.

The Engineer will discuss the roles and responsibilities of HDOT and the Contractor in the SWPPP/IWPPP during the Water Pollution, Dust, and Erosion Control Meeting.

☒ *The Contractor Certification is included in Attachment B.*

7.2.14 – Documentation of Compliance with Safe Drinking Water Act Underground Injection Control (UIC) Requirements for Certain Subsurface Storm Water Controls

Document any contact with the DOH Safe Drinking Water Branch if any of the following storm water controls are used at the site:

❑ *Infiltration trenches (if storm water is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system);*

❑ *Commercially manufactured precast or pre-built proprietary subsurface detention vaults, chambers, or other devices designed to capture and infiltrate storm water flow;*

❑ *Drywells, seepage pits, or improved sinkholes (if storm water is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system).*

If any of the boxes above are checked, attach documentation in SWPPP/IWPPP Attachment H.

These devices are not part of the design plans. If the Contractor elects to install any of these devices for erosion control purposes, the Contractor shall attach the necessary documentation once the project is awarded.

7.2.15 –Other State, Federal, or County Permits

Note: Army Corps Permit and 401 WQC are included previously.

Include in SWPPP/IWPPP Attachment H any of the following permits or approvals:

❑ *Attach the Drainage System Owner(s) Approval to Discharge, in Attachment N/A.*

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

County-approved Erosion and Sediment Control Plan and/or Grading Permit

a. *Is a County-approved Erosion and Sediment Control Plan and/or Grading Permit, where applicable for the activity and schedule for implementing each control, required?*
   - ☑ *Yes. Please complete Section b below and skip Section c.*
   - ☐ *No. Please complete Section c below and skip Section b.*

b. *Is a copy County-approved Erosion and Sediment Control Plan and/or Grading Permit, as appropriate for the activity and schedule for implementing each control, attached?*
   - ☐ *Yes, see Attachment* _____
   - ☑ *No, the County-approved Erosion and Sediment Control Plan and/or Grading Permit, as appropriate for the activity and schedule for implementing each control, will be submitted at least 30 calendar days before the start of construction activities.*

c. *Please select and complete at least one (1) of the following items to demonstrate that a County-approved Erosion and Sediment Control Plan and/or Grading Permit, as appropriate for the activity and schedule for implementing each control, is not required.*
   - ☐ *See Attachment* _____ *for the County written determination.*
   - ☐ *Provide the County contact person information (Name, Department, Phone Number, and Date Contacted):* _____
   - ☐ *Other (specify):* _____

☑ *NPDES Permit or NGPC for Hydrotesting Activities (Form F)*

☑ *NPDES Permit or NGPC for Dewatering Activities (Form G)*

☑ *List other permits below (No copy necessary in Attachment H)*
- ☐ *Stream Channel Alteration Permit*
- ☐ *Conservation District Use Permit (CDUP)*
- ☒ *Other Permit(s) (<u>List below</u>)*

<u>POH-2005-00342 (pending); Special Management Permit (Resolution 278-CD1); U. S. Coast Guard Clearance (obtained); Section 106, National Historic Preservation Act, Consultation (completed); Section 7, Endangered Species Act, Consultation (completed); Section 4(f) Department of Transportation Act, Consultation (completed); Stream Channel Alteration Permit (exempt per Senate Bill 1016 SD1 HD1); Section 401 Water Quality Certification (exempt per Senate Bill 1016 SD1 HD1); HDOT Plan Review (pending); Grading Permit (pending); Coastal Zone Management Federal Consistency Review (pending)</u>

7.2.16 –Other Information As Requested by the Director

☒ *Does DOH require any additional information per section 7.2.16? If so attach in Attachment H.*

N/A

7.2.17 Certification of the CWB SWPPP/IWPPP

The certifying person and duly authorized representative shall meet the requirements of Hawaii Administrative Rules 11-55, Appendix A, Section 15.

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

Signature: _____ *Date:* _____

Person Name: Jade T. Butay

Person Position Title: Director of Transportation

Person Company or Agency: Department of Transportation

Department: Department of Transportation

Division: Department of Transportation, Highways Division

Phone Number: (808) 587-2150 *Fax No.:* (808) 587-2167

Person Email: Jade.Butay@hawaii.gov

7.2.18 Post-Authorization Additions to the SWPPP/IWPPP

After the issuance of the NGPC include the following documents as part of the SWPPP/IWPPP in Attachment K:

a. A copy of the NPDES submitted to the department along with any correspondence exchanged between HDOT and DOH related to coverage under this permit;

b. A copy of the NGPC and all attachments included with the NGPC (an electronic copy easily available to the storm water team is acceptable)

c. A copy of the 401 WQC submitted to the department along with any correspondence exchanged between HDOT and DOH related to coverage under this permit;

d. A copy of the 401 WQC and all attachments included with the 401 WQC (an electronic copy easily available to the storm water team is acceptable)

7.4 Required SWPPP/IWPPP Modifications

Modify the SWPPP/IWPPP, including the site map(s), in response to any of the following conditions:

7.4.1.1.
Whenever new contractors become active in construction activities on the site, or changes are made to the construction plans, storm water control measures, pollution prevention measures, or other activities at the site that are no longer accurately reflected in the SWPPP/IWPPP. This includes changes made in response to corrective actions triggered under section 10. The permittee does not need to modify the SWPPP/IWPPP if the estimated dates in section 7.2.5. change during the course of construction;

7.4.1.2.
To reflect areas on the site map where operational control has been transferred (and the date of transfer) since initiating permit coverage;

7.4.1.3.
If inspections or investigations by site staff, or by local, state, or federal officials determine that SWPPP/IWPPP modifications are necessary for compliance with this permit;

7.4.1.4.
Where DOH determines it is necessary to impose additional requirements on the discharge, the following must be included in the SWPPP/IWPPP:

a. A copy of any correspondence describing such requirements; and

b. A description of the storm water control measures that will be used to meet such requirements.

7.4.1.5.
To reflect any revisions to applicable federal, state, and local requirements that affect the storm water control measures implemented at the site; and

7.4.2. Deadlines for SWPPP/IWPPP modifications.
The permittee shall complete required revisions to the SWPPP/IWPPP within 7 calendar days following the occurrence of any of the conditions listed in section 7.4.1.

7.4.3. SWPPP/IWPPP modification records.
The permittee shall maintain records showing the dates of all SWPPP/IWPPP modifications. The records must include a signature of the person authorizing each change (see section 7.2.17), date, and a brief summary of all changes. Log all changes and include relevant attachments in Attachment L.

7.4.4. Certification requirements.
All modifications made to the SWPPP/IWPPP consistent with section 7.4. must be certified, signed, and dated by the Certifying Person that meets the requirements in section 15 of appendix A, chapter 11-55 or the duly authorized representative that meets the requirements of 11-55-07(b). (See section 7.2.17)

7.4.5. Required notice to other contractors.
Upon determining that a modification to the SWPPP/IWPPP is required, if there are multiple contractors covered under this permit, the Contractor shall immediately notify any contractors who may be impacted by the change to the SWPPP/IWPPP.

13.0 Monthly Compliance Report Submittal Requirements

Submit to the Engineer a monthly compliance report, which shall include but is not limited to information as required in the NGPC, any updates to NOI information already on file with DOH, and any incidences of non-compliance and corrective actions. Submit this information within 2 working days of the end of the month. The monthly compliance report shall be kept on-site and available by the end of the next business day when requested by DOH. Upon DOH receiving EPA's Cross-Media Electronic Reporting Regulation (CROMERR), the monthly compliance reports shall be submitted through the e-Permitting Portal. Any comments provided by DOH shall be answered in the time specified and to the satisfaction of DOH. If the activity is in compliance and none of the information on file with DOH requires updating, or there were no incidences of non-compliance, preparation of the monthly compliance information is still required which states that there were "no changes, updates, or any incidences of non-compliance to report.

Note: EPA's Cross-Media Electronic Reporting Regulation (CROMERR) sets performance-based, technology-neutral standards for systems that states, tribes, and local governments use to receive electronic reports from facilities they regulate under EPA-authorized programs and requires program modifications or revisions to incorporate electronic reporting. CROMERR also addresses electronic reporting directly to EPA.

☒ *HDOT's form in Attachment J will be used.*