Amend **Section 639 - Water Pollution Control** to read as follows:

"SECTION 209 - WATER POLLUTION AND EROSION CONTROL

209.01 Description. This section is for submitting detailed plans, diagrams, and written site-specific best management practices (BMP); constructing, maintaining, and repairing temporary and permanent water pollution and erosion control measures at the project site, including local material sources, work areas and haul roads; removing and disposing potential hazardous wastes; and complying with applicable State and Federal Permit conditions.

The requirements of this section also apply to borrow pit operations, haul roads and/or Contractor's storage sites located outside the State right-of-way.

The requirements of this section do not apply to dewatering activities. Dewatering activities shall be according to Section 206 - Excavation and Backfill for Conduits and Structures.

209.02 Materials. Materials shall conform to the following:

(A) Slope Drains. The Contractor may construct slope drains of pipe, fiber, mats, erosion control fabric, geotextiles, rubble, portland cement concrete, bituminous concrete, plastic sheets, or other materials accepted by the Engineer.

(B) Mulches. Mulches may be bagasse, hay, straw, fiber mats, netting, wood cellulose, bark, wood chips, or other materials accepted by the Engineer. Mulches shall be clean and free of noxious weeds and deleterious materials. Spray mulches at a rate of 2000 pounds per acre. Add tackifier to the mix at a rate of 85 pounds per acre.

(C) Grass. Grass shall be a quick growing species such as rye grass, Italian rye grass, or cereal grasses. The grass shall be suitable to the area and provide a temporary cover that will not later compete with the permanent cover. Alternate grasses are allowable if accepted by the Engineer. Apply seeds at a rate of 125 pounds per acre.

(D) Fertilizer and Soil Conditioners. Fertilizer and soil conditioners shall be a standard commercial grade accepted by the Engineer. Fertilizer shall conform to Subsection 712.18(A) - Commercial Fertilizer. Apply fertilizer at a rate of 450 pounds an acre. Apply an additional 250 pounds per acre every 90 calendar days.

(E) Hydromulch. Hydromulch used as a BMP shall use the ingredients and at the rates required in Subsections 209.02(B), 209.02(C), and 209.02(D).

(F) Silt Fences. Silt fences shall be constructed with a synthetic filter fabric mounted on posts and embedded in the ground.

(G) Berms. Berms shall consist of gravel or sand wrapped with geotextile material. Alternate materials are allowable if accepted by the Engineer.

209.03 Water Pollution and Erosion Control Conference. Schedule a water pollution and erosion control conference with the Engineer at least 14 calendar days before the start of construction work to discuss the sequence of work, plans and proposals for water pollution and erosion control. Submit a water pollution and erosion control plan, as detailed in Subsection 209.04 a minimum of 10 calendar days before the scheduled conference.

209.04 Water Pollution and Erosion Control Submittals. Submit the following:

(A) A written site-specific BMP describing activities to minimize water pollution and soil erosion into State waters, drainage or sewer systems. The BMP shall include: an identification of potential pollutants and their sources, a list of all materials and heavy equipment to be used during construction; descriptions of the methods and devices used to minimize the discharge of pollutants into State waters, drainage or sewer systems; details of the procedures used for the maintenance and subsequent removal of any erosion or siltation control devices; methods of removing and disposing hazardous wastes encountered or created during construction; concrete and asphalt concrete pavement cutting slurry, concrete curing water, hydrodemolition water, and methods of storing and handling of oils, paints and other products used for the project.

At minimum, show or address the following to the Engineer: material storage and handling areas, and other staging areas; concrete truck washouts; fueling and maintenance vehicles and other equipment; use of form oils, paints and other products on the job site; tracking of sediment offsite from project entries and exits; litter management; dust control; concrete and asphalt concrete pavement cutting slurry, concrete curing water, hydrodemolition water, and spill control.

The BMP must be signed and a copy kept on site throughout the duration of the project. Any revisions to the BMP shall be included with the original BMP, and all drawings, documentations modified to reflect the revisions. This shall include the date of installation of the BMP as well as its removal.

(B) Plans indicating location of water pollution and erosion control devices; plans and details of BMPs to be installed or utilized; areas of soil disturbance in cut and fill, areas used for the storage of soil or waste, and areas where vegetative practices are to be implemented. The plans shall indicate the intended drainage pattern. Submit a separate drawing for each phase of construction which alters the drainage patterns;

(C) Construction schedule;

(D) The name(s) of the specific individual(s) designated to be responsible for the water pollution and erosion controls on the project site along with the home and business telephone, fax numbers and e-mail address..

(E) Description of the nature of fill material to be used on the project.

Follow the guidelines in the "Best Management Practices Manual for Construction Sites in Honolulu", dated May 1999 in developing, installing, and maintaining the BMPs for the project.

209.05 Construction Requirements. Do not begin work on the project until the submittals detailed in Subsection 209.04 - Water Pollution and Erosion Control Submittals are completed and accepted by the Engineer.

For projects that require an NPDES Permit from the Department of Health, install a rain gage prior to any field work including the installation of any site-specific best management practices. The rain gage shall have a tolerance of at least 0.05 inches of rainfall, and have an opening of at least one inch in diameter. Install the rain gage on the project site in an area that will not deter rainfall from entering the gage opening. The rain gage installation shall be secure, stable, and plumbed. The Contractor shall maintain and if needed replace any rain gauge that is stolen or does not function properly or accurately or is worn out.

Do not begin field work until the rain gage is installed and site-specific best management practices are in-place.

Address all comments subsequently received from the Engineer.

Modify and resubmit the plans and construction schedules to correct conditions that develop during construction which were unforeseen during the design and pre-construction stages.

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

The maximum surface area of earth material exposed at any time is 300,000 square feet. Do not expose earth material until the BMP are installed and accepted by the Engineer. Temporarily or permanently protect the disturbed soil surface from rainfall impact and runoff.

Install and maintain stabilized construction entrances and/or wheel washes to minimize tracking of dirt, and mud onto the roadways. Install and maintain stabilized construction entrances and/or wheel washes at all locations where vehicular traffic is entering and leaving the work area. Restrict traffic to these areas only. Clean road immediately of all dirt, mud, or other material track onto the road.

Do not expose erodible surfaces greater than 15 feet in height.

Apply accepted BMP measures to all exposed erodible material within 15 calendar days of exposure. If after 15 days, a directed additional BMP measures have not been applied, apply an accepted BMP measure on the sixteenth day at no cost to the State.

At the end of each workday, the BMP shall be in place and operational, e.g., shape the earthwork to control and direct the runoff. If accepted by the Engineer, shaping the earthwork may include constructing earth berms along the top edges of embankments.

If accepted by the Engineer, chemicals may be used as soil stabilizers or erosion and/or dust control.

Use the materials listed in Subsection 209.02 - Materials and other material the Engineer has reviewed and accepted.

Provide temporary slope drains of rigid or flexible conduits to carry runoff from cuts and embankments. Provide a portable flume at the entrance and shorten (or extend) the temporary slope drains as necessary to ensure proper function.

Protect ditches, channels, and other drainage ways leading away from cuts and fills at all times by either:

(1) Hydro-mulching the lower region of embankments in the immediate area, or;

(2) Placing an 8 to 15 inch layer of excavated rock (if available on-site) without reducing the cross section of the drainage way. The rocks shall be less than 4 inches in diameter.

Provide for controlled discharge of waters impounded, directed, or controlled by project activities or erosion control measures.

Properly maintain all BMP features. Inspect and make necessary repairs to all BMP measures at the following intervals:

(1) Weekly during dry periods;

(2) Within 24 hours of any rainfall of 0.5 inch or greater which occurs in a 24-hour period;

(3) Daily during periods of prolonged rainfall and;

(4) When existing erosion control measures are damaged or not operating properly as specified by the Engineer.

Maintain records of the inspections and repairs made. These records shall be continuous for the entire duration of the project. Submit a copy of the records to the Engineer weekly.

In addition to the weekly reports, submit to the Engineer all amounts spent initializing and maintaining the BMP during the previous week. The amount spent includes but not limited to: purchases of erosion control material, construction of storage areas, and installation of water pollution, erosion and dust control measures. Record the amount on the same form as the force account item of work. Submit the report weekly along with the site inspection report.

Protect finished and previously seeded areas from damage and from spillover materials placed in the upper lifts of the embankment.

The Contractor's designated representative specified in Section 209.04(D) shall address any BMP concerns brought up by the Engineer within 24 hours of notification. If the Contractor fails to satisfactorily address these concerns, the Engineer reserves the right to employ outside assistance or use the Engineer's own labor forces to provide the necessary corrective measures. The Engineer will charge the Contractor such incurred costs plus any associated project engineering costs. The Engineer will make appropriate deductions from the Contractor's monthly progress estimate. Failure to apply BMP measures will result in the establishment or increase in the amount of retainage due to unsatisfactory progress and/or the withholding of the monthly progress payment. Continued failure to apply BMP measures may result in the suspension or cancellation of the contract with the Contractor being fully responsible for all additional cost incurred by the State.

When there are conflicts between these requirements and laws, rules, or regulations of other Federal or State local agencies, the more restrictive laws, rules, or regulations shall apply.

Failure to conform with the above requirements and regulations of the Federal or State local agencies will be cause for temporary or permanent suspension of operations. If operations are suspended due to the Contractor's failure to conform, the Contractor shall maintain the project during the period of suspension at no cost to the State.

209.06 Hydrotesting Activities. If the work includes removing, relocating or installing waterlines, and the Contractor elects to discharge hydrotesting effluent into Waters of the United States or drainage systems, the Contractor shall obtain a National Pollutant Discharge Elimination System (NPDES) Hydrotesting Waters Permit from the Department of Health, Clean Water Branch (DOH-CWB).

Do not begin hydrotesting activities until the DOH-CWB has issued a Notice of General Permit Coverage (NGPC). Hydrotesting operations shall according to the conditions in the NGPC. Submit a copy of the NPDES Hydrotesting Waters Application and Permit to the Engineer.

209.07 Method of Measurement. The Engineer will only measure water pollution and erosion control required and requested by the Engineer on a force account basis according to Subsection 109.04 - Extra and Force Account Work.

The Engineer will not measure for the installation, maintenance, repair, and replacement of site-specific BMP measures, e.g., water pollution, dust and erosion control; installation, monitoring, and the operation of hydrotesting activities; removal and disposal of hazardous waste, concrete and asphalt concrete cutting slurry, concrete curing water; or hydrodemolition water for payment.

209.08 Basis of Payment. The Engineer will only pay for the accepted water pollution and erosion control required and requested by the Engineer on a force account basis in accordance with Subsection 109.04- Payment for Additional and Force Account Work. An estimated amount for the force account is allocated in the proposal schedule under 'Water Pollution and Erosion Control, but the actual amount to be paid will be the sum shown on the accepted force account records, whether this sum be more or less than the estimated amount allocated in the proposal schedule.

The Engineer will pay for litter management due to rubbish created by the public but not for any liter created by the Contractor.

Payment will be full compensation for the work prescribed in this section, by the Engineer, and the contract documents.

The Engineer will make payment under:

Pay Item	Pay Unit
Water Pollution and Erosion Control	Force Account

The Engineer will not pay for the installation, maintenance, repair, and replacement of site-specific BMP measures, e.g., water pollution, dust and erosion control; installation, monitoring, and the operation of hydrotesting activities; removal and disposal of hazardous waste, concrete and asphalt concrete cutting slurry, concrete curing water; or hydrodemolition water separately. The Engineer will consider the cost for them as included in the contract price for the various contract items. The cost is for the work prescribed in this section, by the Engineer, and the contract documents.

The Engineer will not pay for work required that is due to the Contractor's convenience, negligence, carelessness or failure to install permanent controls.

The Engineer will not pay for the removal, replacement, cleanup, disposal, material for any BMP that is required to be removed or destroyed or relocated due to potential or actual flooding or danger, damage to the project or public it may cause.

The Engineer will not pay for erosion control work that is not implemented within 15 days of exposure.

The Engineer will not pay for the development, submittals, or any additional modification of the Contractor's Water Pollution and Erosion Control Plan, BMP, sequence of operations, and methods of operations plan.

The Engineer will not pay for preparing the NPDES Hydrotesting Waters Permit Application, and obtaining the NPDES Hydrotesting Waters Permit from DOH-CWB.

No progress payment will be authorized until the Engineer accepts the site-specific BMP or when the Contractor fails to maintain the project site according to the accepted BMP.

For all citations or fines received by the Department for non-compliance with the Notice of General Permit Coverage (NGPC), the Contractor shall reimburse the State within 30 calendar days for the full amount of the outstanding cost the State has incurred, or the Engineer will deduct the cost from the progress payment.

The Engineer will assess liquidated damages up to $27,500 for non-compliance of each BMP requirement and all other requirements in this section. There is no maximum limit on the amount assessed per day."

END OF SECTION