GENERAL NOTES

- The scope of work for this project consists of rehabilitation of Uma'uma Stream bridge along Hawaii Belt Road, including bridge widening, new concrete piers, approach roads, earthwork, guardrails, signs, and striping.
- 2. All construction work is to be constructed in accordance with the publications "Hawaii Standard Specifications for Road and Bridge Construction, 2005" and its amendments.
- 3. The Contractors attention is directed to the following Sections of the Special Provisions: Subsection 107.06 Contractor Duty Regarding Public Convenience; Subsection 107.12 Protection of Persons and Property; and Section 645 Work Zone Traffice Control.
- 4. The existence and location of underground utilities, manholes, monuments and structures as shown on the plans are from the latest available data but the accuracy is not guaranteed. The encountering of other obstacles during the course of work is possible. The Contractor shall be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations.
- 5. The exact locations of limits or areas to be reconstructed shall be determined in the field by the Engineer.
- 6. The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting paving operations.
- 7. Smooth riding connections shall be constructed at all limits of resurfacing, including the beginning and end of project, connecting approaches, side streets and driveways as shown on the plans and/or as directed by the Engineer.
- 8. The Contractor shall provide for access to and from all existing driveways at all times.
- 9. All saw cutting work shall be considered incidental to Roadway Excavation.
- 10. No section of incomplete guardrail, footing, and/or excavation shall be left unshielded at the end of each work day.
- 11. All construction signs shall be left in place until all construction items have been completed. Contractor shall obtain prior approval from the Engineer to remove construction signs.
- 12. The Contractor shall exercise care to minimize damages to existing highway improvements. All damages shall be repaired by the Contractor, at his expense, to the satisfaction of the District Engineer.
- 13. For Benchmark, see sheet C-12.

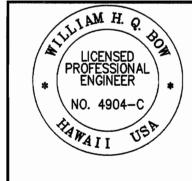
GRADING NOTES

- 1. All grading work shall conform to Chapter 10 of the Hawaii County Code and the Soils Report by Hirata ♦ Associates, dated April 28, 2011.
- 2. The Contractor, at his expense, shall keep the project and surrounding areas free from dust nuisances. The work shall be in conformance with the Air Pollution Control Rules of the State Department of Health, HAR 11-60. 1, fugitive dust.
- 3. The Contractor shall remove all silt and debris deposited in drainage facilities, roadways, and other areas resulting from his work. The costs incurred for any necessary remedial action by the Department of Public Works shall be payable by the Contractor.
- 4. All grading operations shall be performed in conformance with the applicable Provisions of the Hawai'i Administrative Rules, Title II, Chapter 55, Water Pollution Control Rules of the State Department of Public Works, County of Hawai'i.
- 5. The Contractor shall sod or plant all slopes and exposed areas immediately after the grading work has been completed. Grassing shall be in accordance with the Standard Specifications for Public Works Construction, dated September 1986, as applicable to the County of Hawaii. Payment shall be incidental to the various items of the proposal.
- 6. Fills on slopes steeper than 5:1 shall be keyed.
- 7. The Contractor shall inform the Department of Public Works of the location of the disposal and/or borrow site(s) required for this project when an application for a grading permit is made. The disposal and/or borrow site(s) must also fulfill the requirements of the Grading Ordinance.
- 8. No grading work shall be done on Saturdays, Sundays, holidays, and furlough days anytime without prior approval from the Department of Public Works. Grading work on normal working days shall be between the hours of 8:00 a.m. to 4:30 p.m.
- 9. Fills shall be compacted to 90 percent (90%) of maximum density per ASTM D1557 test.
- 10. The Contractor shall remove all vegetation before placing fills on natural ground surface.
- 11. No material and/or equipment shall be stockpiled or otherwise stored within the highway right-of-way, except at locations designated in writing and approved by the District Engineer.

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HISTORICAL PRESERVATION NOTES

Should historic remains such as artifacts, burials, concentrations of shell or charcoal be encountered during construction activities, work shall cease immediately in the immediate vicinity of the find. The Contractor shall immediately notify the Planning Department (808) 961-8288 and State Historic Preservation Division at (808) 933-7650, which will assess the significance of the find and recommend the appropriate mitigation measures, if necessary.



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

<u>GENERAL NOTES</u>

HAWAII BELT ROAD

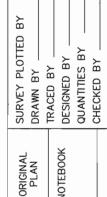
Rehabilitation of Umauma Stream Bridge
Federal Aid Project No. BR-019-2(61)

Scale: None

Date: July 25, 2012

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SHEET No. C-1 OF 19 SHEETS



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FED. ROAD	STATE	FED. AID	FISCAL	SHEET	TOTAL
DIST. NO.		PROJ. NO.	YEAR	NO.	SHEETS
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WATER POLLUTION AND EROSION CONTROL NOTES:

GENERAL:

- 1. See Section 209 Temporary Water Pollution, Dust, and Erosion Control. Section 209 describes but is not limited to: submittal requirements; scheduling of a waterpollution and erosion control conference with the Engineer; construction requirements; method of measurement; and basis of payment.
- 2. Effective October 1, 2008, follow the guidelines in the "Construction" Best Management Practices Field Manual", dated January 2008 in developing, installing and maintaining the Best Management Practices (BMP) for the project.
- 3. Follow the guidelines in the Honolulu's City and County "Rules Relating to Soil Erosion Standards and Guidelines" along with applicable Soil Erosion Guidelines for projects on Maui, Molokai, Kauai, and Hawaii.
- 4. The Engineer may assess liquidated damages of up to \$27,500 for non-compliance of each BMP requirement and each requirement stated in Section 209, for every day of non-compliance. There is no maximum limit on the amount assessed per day.
- 5. The Engineer will deduct the cost from the progress payment for all citations received by the Department for non-compliance, or the Contractor shall reimburse the State for the full amount of the outstanding cost incurred by the State.
- 6. 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 stable and plumbed. Do not begin field work until the rain gage is installed and site-specific best management practices are in-place.

B. WASTE DISPOSAL:

Waste Materials

Collect and store all waste materials in a securely lidded metal dumpster. The dumpster shall meet all local and State solid waste management regulations. Deposit all trash and construction debris from the site in the dumpster. Empty the dumpster a minimum of twice per week or as often as is deemed necessary. Do not bury construction waste materials onsite. The Contractor's supervisory personnel shall be instructed regarding the correct procedure for waste disposal. Post notices stating these practices in the office trailer and the Contractor shall be responsible for seeing that these procedures are followed.

2. Hazardous Waste

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

3. Sanitary Waste

Collect all sanitary waste from the portable units a minimum of once per week, or as required.

- C. EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES:
- 1. Inspect all control measures at least once each week and within 24 hours of any rainfall event of 0.5 inches or greater within a 24 hour
- 2. Maintain all measures in good working order. If repair is necessary, it shall be initiated within 24 hours after the inspection.
- 3. Remove built-up sediment from silt fence when it has reached one-third the height of the fence.
- 4. Inspect silt screen or fence for depth of sediment, tears, to verify that the fabric is securely attached to the fence posts or concrete slab, and to verify that the fence posts are firmly in the ground. Inspect and verify the bottom of the silt screen is buried a minimum of 6 inches below the existing ground.
- 5. Inspect temporary and permanent seeding and planting for bare spots, washouts, and healthy growth.
- 6. Make a maintenance inspection report promptly after each inspection. Submit a copy to the Engineer no later than one week from the date of the inspection.
- 7. Provide a stabilized construction entrance to reduce vehicle tracking of sediments. Include stabilized construction entrance in the Water Pollution, Dust, and Erosion Control submittals. Minimum length should be 50 feet. Minimum width should be 30 feet. Minimum depth should be 12 inches or as recommended by the soils engineer and underlain with geo-textile fabric. Clean the paved street adjacent to the site entrance daily or as required to remove any excess mud, cold planed materials, dirt, or rock tracked from the site. Cover dump trucks hauling material from the construction site with a tarpaulin.
- 8. Include designated Concrete Washout Area(s) in the Water Pollution, Dust, and Erosion Control submittals.
- 9. Submit the name of a specific individual designated responsible for inspections, maintenance and repair activities and filling out the inspection and maintenance report.
- 10. Personnel selected for the inspection and maintenance responsibilities shall receive training from the Contractor. They shall be trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment controls used onsite in good working order.
- 11. Contain, remove, and dispose slurry generated from saw cutting of pavement in accordance with approved BMP practices. Payment for confinement, removal, and disposal of slurry shall be considered incidental to the various contract items.

D. GOOD HOUSEKEEPING BEST MANAGEMENT PRACTICES:

1. Materials Pollution Prevention Plan

a. Applicable materials or substances listed below are expected to be present onsite during construction. Other materials and substances not listed below shall be added to the inventory. Concrete

Detergents

Fertilizers

Paints (enamel and latex)

Petroleum Based Products

Cleaning Solvents

Metal Studs Tar

Wood

Masonry Block

- b. Use Material Management Practices to reduce the risk of spills or other accidental exposure of materials and substances to storm water runoff. Make an effort to store only enough product as is required to do the job.
- c. Store all materials stored onsite in a neat, orderly manner in their appropriate containers and if possible under a roof or other enclosure.
- d. Keep products in their original containers with the original manufacturer's label.
- e. Do not mix substances with one another unless recommended by the manufacturer.
- f. Whenever possible, use a product up completely before disposing of the container.
- g. Follow manufacturer's recommendations for proper use and disposal.
- h. Conduct a daily inspection to ensure proper use and disposal of materials onsite.

2. Hazardous Material Pollution Prevention Plan

- a. Keep products in original containers unless they are not resealable.
- b. Retain original labels and material safety data sheets (MSDS).
- c. Dispose of surplus products according to manufacturer's instructions and local and State regulations.

∖NO. 4904-C/

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

WATER POLLUTION AND EROSION CONTROL NOTES

HAWAII BELT ROAD LICENSE EXPIRES: 4/30/14 Rehabilitation of Umauma Stream Bridge THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION Federal Aid Project No. BR-019-2(61) willinga pow

Scale: None

Date: July 25, 2012

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ORIGINAL PLAN NOTEBOOK

3. Onsite and Offsite Product Specific Plan

The following product specific practices shall be followed onsite:

a. Petroleum Based Products:

Monitor all onsite vehicles for leaks and perform regular preventive maintenance to reduce the chance of leakage. Store petroleum products in tightly sealed containers which are clearly labeled. Apply asphalt substances used onsite according to the manufacturer's recommendation.

b. Fertilizers:

Apply fertilizers used only in the minimum amounts recommended by the manufacturer. Once applied, work fertilizer into the soil to limit exposure to storm water. Storage shall be in a covered shed. Transfer the contents of any partially used bags of fertilizer to a sealable plastic bin to avoid spills.

c. Paints:

Seal and store all containers when not required for use. Do not discharge excess paint to the highway drainage system. Dispose properly according to manufacturer's instructions or State and local regulations.

d. Concrete Trucks:

Wash out or discharge concrete truck drum wash water only at a designated site. Do not discharge water in the highway drainage system or waters of the United States. Contact Drinking Water Branch, Department of Health at 586-4258 to receive permission to designate a disposal site. Clean disposal site as required or as requested by the Owner's representative.

4. Spill Control Plan

- a. Post a spill prevention plan to include measures to prevent and clean up each spill.
- b. The Contractor shall be the spill prevention and cleanup coordinator. Designate at least three site personnel who shall receive spill prevention and cleanup training. These individuals shall each become responsible for a particular phase of prevention and cleanup. Post the names of responsible spill personnel in the material storage area and in the office trailer onsite.
- c. Clearly post manufacturers' recommended methods for spill cleanup. Make site personnel aware of the procedures and the location of the information and cleanup supplies.
- d. Keep materials and equipment necessary for spill cleanup in the material storage area onsite.
- e. Clean up all spills immediately after discovery.
- f. Keep the spill area well ventilated. Personnel shall wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- g. Report spills of toxic hazardous material to the appropriate State or local government agency, regardless of the size.

E. Permit Requirements:

- 1. If a National Pollutant Discharge Elimination System (NPDES) Permit is required for construction activities of one acre or more, submit to the Engineer six sets of the Water Pollution and Erosion Control submittals as detailed in Subsection 209.03 of the specifications.
- 2. If an NPDES Permit for Construction Dewatering is required, the Contractor shall be responsible to obtain the Permit from the Department of Health, Clean Water Branch.

3. Comply with all applicable State and Federal Permit conditions. Permits may include but are not limited to the following:

- a. Section 401 Water Quality Certification
- b. Stream Channel Alteration Permit
- c. Section 404 Army Corps of Engineer Permit

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STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

WATER POLLUTION AND EROSION CONTROL NOTES

HAWAII BELT ROAD

LICENSE EXPIRES: 4/30/14 THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION willinga pow

Rehabilitation of Umauma Stream Bridge Federal Aid Project No. BR-019-2(61) Scale: None Date: July 25, 2012

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