

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-019-2(26)	2002	15	155

GENERAL NOTES

1. *The scope of work for this project consists of constructing a replacement bridge along the Hawaii Belt Road in the Kealahaka area, including approach roads, earthwork, cut-off ditches, guardrails, swales, fencing, signs, and striping.*
2. *The Contractor is reminded of the requirements of Subsection 108.01 – Subletting of Contract, which requires him to perform work amounting to not less than 50 percent of the total contract cost less deductible items. Non-compliance with this Subsection may be grounds for rejection of bid.*
3. *The Contractor's attention is directed to the following Sections of the Special Provisions: Subsection 107.13 – Public Convenience and Safety; Subsection 107.21 – Contractor's Responsibility For Utility Property And Services; and Section 645 – Traffic Control Devices.*
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. *Following completion of the bridge and prior to removing appurtenances for the detour road, all pavement markings shall be installed as shown on the pavement marking plans of design as directed by the Engineer. This shall not be paid for separately but shall be considered incidental to the various contract items.*
13. *Upon completion of the bridge and traffic is transferred to the finished permanent roadway, the detour roads including all its appurtenances shall be removed and the construction parcels shall be restored to its original condition or as approved by the Engineer.*

GENERAL DETOUR NOTES

1. Any request for changes to the detour plans shall be made in writing for the Engineer's approval.
2. Detour pavement structure, walls, shorings, and other temporary improvements will not be paid for separately but will be considered incidental to the various items listed in the proposal schedule.
3. Guardrails along the road in good condition shall be salvaged and delivered to the State D.O.T. Waimea Baseyard, 66-2595 Kawaihae Rd. This work will be considered incidental to the various contract items.

CONCRETE BARRIER W/ LAMPS

1. *Providing, transporting, placing, maintaining, relocating, and removal of portable barriers shall be paid under item no. 649.0100.*
2. *Install steady burn amber lamps on portable concrete barrier @ 20.0' o.c. Installing, maintaining, and changing batteries of the Portable Mounted Steady Burn Amber Lamps shall be considered incidental to the various items of work.*

INERTIAL BARRELS (SAND FILLED BARRELS)

1. Typical layout will vary based on speed and manufacturer of system used. Installation shall conform to Manufacturer's recommendations and Roadside Design Guide.
2. Ends of portable barriers shall be protected with Sand Filled Barrels as shown on Construction Phasing Plans.
3. Providing, transporting, placing, relocation of barrels shall be considered incidental to the various items of work.

GENERAL NOTES FOR CONSTRUCTION PHASING PLAN

1. The Contractor shall make minor adjustments at intersections, driveways, bridges, structures, etc., to fit field conditions.
2. Cones or delineators shall be extended to a point where they are visible to approaching traffic.
3. Traffic Control Devices shall be installed such that the sign or device farthest from the work area shall be placed first. The others shall then be placed progressively toward the work area.
4. Regulatory and warning signs within the construction zone that are in conflict with the traffic control plans shall be removed or covered. All signs shall be restored upon completion of the work.
5. Flaggers and/or police officers shall be in sight of each other or in direct communication at all times.
6. When required by the issuing office, the Contractor shall install a Flashing Arrow Signal as shown on the Traffic Control Plans in Section 645 of the Special Provisions.
7. Sign spacings (l), taper lengths (t) and spacings of cones or delineators shall be as shown in table 1, unless otherwise noted on the Traffic Control Plans.
8. All traffic lanes shall be a minimum of 10 feet wide.
9. All construction warning signs shall be promptly removed or covered whenever the message is not applicable or not in use.
10. The backs of all signs used for traffic control shall be appropriately covered to preclude the display of inapplicable sign messages (i.e., When signs have messages on both faces).
11. At the end of each day's work or as soon as the work is completed, the Contractor shall remove all Traffic Control Devices no longer needed to permit free and safe passage of public traffic. Removal shall be in the reverse order of installation.
12. Replace permanent pavement markings and traffic signs upon completion of each phase of work.
13. All traffic control devices including cones, barricades, etc. shall comply with the "Statewide Guideline for Work Zone Traffic Control Devices" dated September 13, 2000.
14. All existing speed limit signs covered during the lane closure period shall be uncovered upon the removal of the lane closure including construction warning/regulatory signs.

GRADING NOTES

1. All grading work shall conform to Chapter 10 of the Hawaii County Code and the Soils Report by Geolabs-Hawaii, dated October 1998.
2. 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 DPW shall be payable by the Contractor.
3. 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.
4. All grading operations shall be performed in conformance with the applicable Provisions of the Hawaii Administrative Rules, Title 11, Chapter 55, Water Pollution Control Rules of the State Department of Public Works, County of Hawaii.
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 DPW 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, and holidays 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.


STAGING AREA

1. Contractor shall provide for his own staging area. These areas shall be located in the Right-of-Way and shall not impede the existing traffic. The areas shall be approved by the Engineer.

CONSTRUCTION ACCESS

1. *For bidding purposes, the Contractor shall not assume that a temporary access road(s) through State of Hawaii properties will be allowed outside of the indicated right-of-way. The Contractor shall prepare the bid based on either providing temporary access to the piers and abutments within the indicated right-of-way or through acquiring construction easements from private landowners. The cost of constructing temporary access will not be paid for separately but will be considered incidental to the various items of the proposal unless noted otherwise.*

ORIGINAL PLAN	SURVEY PLOTTED BY _____	DATE _____
NOTE BOOK	DRAWN BY _____	_____
	TRACED BY _____	_____
	DESIGNED BY _____	_____
	QUANTITIES BY _____	_____
No. _____	CHECKED BY _____	_____

	<p>STATE OF HAWAII</p> <p>DEPARTMENT OF TRANSPORTATION</p> <p>HIGHWAYS DIVISION</p>
	<p>GENERAL NOTES</p>
	<p><u>HAWAII BELT ROAD</u></p>
	<p><u>KEALAKAHA STREAM BRIDGE REPLACEMENT</u></p> <p><u>PROJECT NO. BR-019-2 (26)</u></p>
<p><i>Liana S.F. Choy</i> SATO & ASSOCIATES, INC.</p>	<p>SCALE: AS NOTED DATE: NOVEMBER 2001</p>
<p>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION</p>	<p>SHEET No. 1 OF 2 SHEETS</p>

11/17/98

Proj. No. 96048-00

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ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DESIGNED BY	
	QUANTITIES BY	
	CHECKED BY	
No.		

WATER POLLUTION AND EROSION CONTROL

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
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A. General:

- The Contractor is reminded of the requirements of Section 209 – Water Pollution and Erosion Control, in the "Hawaii Standard Specifications for Road, Bridge and Public Works Construction". Section 209 describes but is not limited to: submittal requirements; scheduling of a water pollution and erosion control conference with the Engineer; construction requirements; method of measurement; and basis of payment.
- The Contractor shall comply with the requirements of the project's NPDES permit as outlined in the Dept. of Health's notice of general permit coverage. Copies are available at the Engineer's Honolulu and Maui District office.
- The Contractor shall follow the guidelines in the "Best Management Practices Manual for Construction Sites in Honolulu", dated May 1999 in developing, installing and maintaining the Best Management Practices (BMP) for the project.
- The Engineer may assess liquidated damages of up to \$25,000 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.
- 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.

B. Waste Disposal:

- Waste Materials**
All waste materials shall be collected and stored in a securely lidded metal dumpster. The dumpster shall meet all local and State solid waste management regulations. All trash and construction debris from the site shall be deposited in the dumpster. The dumpster shall be emptied a minimum of twice per week or as often as is deemed necessary. No construction waste materials shall be buried onsite. The Contractor's supervisory personnel shall be instructed regarding the correct procedure for waste disposal. Notices stating these practices shall be posted in the office trailer and the Contractor shall be responsible for seeing that these procedures are followed.
- Hazardous Waste**
All hazardous waste materials shall be disposed of in the manner specified by local or State regulation or 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.
- Sanitary Waste**
All sanitary waste shall be collected from the portable units a minimum of once per week, or as required.

C. Erosion and Sediment Control Inspection and Maintenance Practices:

- All control measures shall be inspected as related in Section 209.
- All measures shall be maintained in good working order. If repair is necessary, it shall be initiated within 24 hours after inspection.
- Built-up sediment shall be removed from silt fence when it has reached one-third the height of the fence.
- Silt screen or fence shall be inspected 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.
- Temporary and permanent seeding and planting shall be inspected for bare spots, washouts and healthy growth.
- A maintenance and inspection report shall be made and submitted as related in in Section 209.
- The contractor shall select a minimum of three personnel who shall be responsible for inspections, maintenance and repair activities and filling out the inspection and maintenance report.
- 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.

D. Good Housekeeping Best Management Practices:

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

Concrete
Detergents
Paints (enamel and latex)
Metal Studs
Tar

Fertilizers
Petroleum Based Products
Cleaning Solvents
Wood
Masonry Blocks

- Material Management Practices shall be used to reduce the risk of spills or other accidental exposure of materials and substances to storm water runoff. An effort shall be made to store only enough product as is required to do the job.
- All materials stored onsite shall be stored in a neat, orderly manner in their appropriate containers and if possible under a roof or other enclosure.
- Products shall be kept in their original containers with the original manufacturer's label.
- Substances shall not be mixed with one another unless recommended by the manufacturer.
- Whenever possible, a product shall be used up completely before disposing of the container.
- Manufacturer's recommendations for proper use and disposal shall be followed.
- The Contractor shall conduct a daily inspection to ensure proper use and disposal of materials onsite.

2. Hazardous Material Pollution Prevention Plan

- Products shall be kept in original containers unless they are not resealable.
- Original labels and material safety data sheets (MSDS) shall be retained.
- Surplus products shall be disposed of according to manufacturers' instructions or local and State recommended methods.

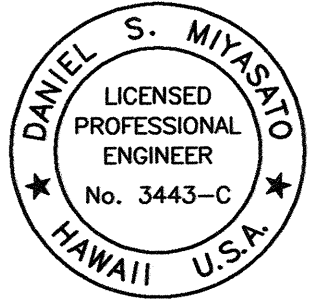

3. Onsite and Offsite Product Specific Plan

- The following product specific practices shall be followed onsite:
 - Petroleum Based Products:**
All onsite vehicles shall be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products shall be stored in tightly sealed containers which are clearly labeled. Any asphalt substances used onsite shall be applied according to the manufacturer's recommendation.
 - Fertilizers:**
Fertilizers used shall be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer shall be worked into the soil to limit exposure to storm water. Storage shall be in a covered shed. The contents of any partially used bags of fertilizer shall be transferred to a sealable plastic bin to avoid spills.
 - Paints:**
All containers shall be tightly sealed and stored when not required for use. Excess paint shall not discharged to the highway drainage system but shall be properly disposed of according to manufacturers' instructions or State and local regulations.
 - Concrete Trucks:**
Concrete trucks shall be allowed to wash out or drum wash water only at designated site. Water shall not be discharged in the highway drainage system or waters of the United States. The Contractor shall contact Drinking Water Branch, Department of Health at 586-4258 to receive permission to designate a disposal site. The Contractor shall clean disposal site as required or as requested by the Owner's representative.
- Offsite Vehicle Tracking:**
A stabilized construction entrance shall be provided to help reduce vehicle tracking of sediments. The paved street adjacent to the site entrance shall be cleaned daily or as required to remove any excess mud, cold planed materials, dirt or rock tracked from the site. Dump trucks hauling material from the construction site shall be covered with a tarpaulin.

4. Spill Control Plan

- A spill prevention plan shall be posted and adjusted to include a description and cause of each spill, measures to prevent and clean up each spill.
- The Contractor shall be the spill prevention and cleanup coordinator. The Contractor shall 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. The names of responsible spill personnel shall be posted in the material storage area and in the office trailer onsite.
- Manufacturers' recommended methods for spill cleanup shall be clearly posted and site personnel shall be made aware of the procedures and the location of the information and cleanup supplies.

- Materials and equipment necessary for spill cleanup shall be kept in the material storage area onsite.
 - All spills shall be cleaned up immediately after discovery.
 - The spill area shall be kept well ventilated and personnel shall wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
 - Spills of toxic hazardous material shall be reported to the appropriate State or local government agency, regardless of the size.
- E. Permit Requirements:
- A National Pollution Discharge Elimination System (NPDES) Permit for construction activities has been or will be obtained for this project. The contractor shall comply with all conditions of the permit.
 - If a NPDES permit for construction dewatering is required, the Contractor shall be responsible to obtain the permit from the Department of Health, Clean Water Branch.
 - The Contractor shall comply with all applicable State and Federal permit conditions. Permits may include but are not limited to the following:
 - NPDES permit for construction activities
 - NPDES permit for construction dewatering

  SATO & ASSOCIATES, INC. THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION	STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION GENERAL NOTES HAWAII BELT ROAD KEALAKAHA STREAM BRIDGE REPLACEMENT PROJECT NO. BR-019-2 (26) SCALE: AS NOTED DATE: NOVEMBER 2001 SHEET No. 2 OF 2 SHEETS
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