

GENERAL NOTES

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H3-1(76)	1998	2	7

LEGEND

- d---24--- Existing 24" Drain Line
cdi Existing Concrete Drop Inlet
mon Existing Monument
b Existing Traffic Sign
- - - - - Existing Metal Guardrail

1. This project consist of constructing and maintaining a stream diversion structure, and other pollutant control appurtenances; removing dirt, rust, and other foreign materials from the interior of the pipe; cutting out badly corroded sections of the culvert invert; applying epoxy coating on the cleaned surface; attaching welded wire fabric; filling the voids under the culvert with concrete; and applying concrete to the bottom quarter of the culvert to a depth of four inches throughout the culvert's length.
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.
4. At the end of each day's work, the Contractor shall remove all equipment and other obstructions to permit free and safe passage of public traffic.
5. 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 of his operations.
6. At least one of the 132-inch culverts shall be operational at all times. All other drainage systems will be functional at all times during construction. The Contractor is to furnish materials, equipment, labor, tools and incidentals necessary to maintain flow. This work shall be considered incidental to concrete culvert lining.
7. The contractor shall provide for access to and from all existing ramps at all times.
8. The Engineer shall notify the Department of Health, Clean Water Branch of the start of construction. The notification shall be made by telephone at least three working days before any construction work is to begin. (telephone number: 586-4309)
9. The Contractor shall immediately report any spill or contamination that occur at the project site to the Department of Health and the Engineer. The Contractor shall terminate all work immediately if a physical change is detected in the stream flow and take action to stop the source of pollution.
10. The Contractor shall ensure that all construction debris will be contained and prevented from entering State waters. The Contractor shall also ensure that all materials placed in State waters are free from pollutants at toxic or potentially hazardous concentrations to aquatic life.
11. The Contractor shall comply with all conditions of the Army Corps of Engineer's Nationwide Permit and the Department of Health's Water Quality Certification Waiver. The Contractor shall also comply with the requirements contained in the Nationwide Permit and Water Quality Certification Applications. Any proposed change to either of these applicaions will require the Contractor to file an amended application with both agencies.
12. The Engineer shall conduct a daily monitoring program consisting of visual inspections accompanied by documented photos. Comparison of the upstream and downstream flow will be made. All photos shall be documented with the date and time, weather conditions, and the construction activity being performed.
13. The Contractor shall inspect the sandbag diversion structure daily and before every concrete pour. The Contractor shall repair any leaks in the diversion structure before any construction activity takes place. Construction and maintenance of the diversion structure shall be paid for on a force account basis according to Section 209 - Erosion Control.
14. The Contractor at his own expense shall restore the mobilization and material stockpile areas to their original conditions after completion of the project.
15. The concrete culvert lining shall be allowed to cure for 48 hours before water is allowed to flow through the 132-inch culverts.
16. The culvert surface to be in contact with the concrete shall be clean and dry to the satisfaction of the Engineer. Badly corroded sections shall be cut and removed, provided the structural integrity of the culvert is not compromised. Epoxy shall be neatly applied to the clean metal surface prior to placing concrete.
17. The welded wire fabric steel reinforcement shall be placed two inches above the crest of corrugations by welding to studs or attaching to self tapping screws. Screws shall be tapped or studs shall be welded to the structural plate culvert at two feet on centers longitudinally and one foot on center transversely. If lapping of the welded wire fabric is necessary, it shall be lapped a minimum of six inches.
18. Voids under the structural plate shall be filled with concrete as completely as possible. Care shall be taken to prevent buckling of the culvert due to the buoyant force of the concrete. This work shall be considered incidental to the concrete culvert lining.
19. The pipe ends shall be hand finished to ensure that water does not undermine the lining.
20. The welded wire fabric, studs or screws and epoxy shall not be paid for separately but shall be considered incidental to concrete culvert lining.
21. The concrete culvert lining shall be scored 3/4-inch deep laterally along the crest of corrugations, 20 feet on-center to control cracking.
22. The Contractor shall not discharge concrete wash water into the stream. All concrete pour shall take place during dry weather.
23. Access to the existing inlet structure may require clearing and grubbing. Clearing and grubbing as directed by the Engineer shall be paid for on a force account basis according to Section 209 - Erosion Control.
24. The Contractor's attention is directed to the existing 54-inch culverts shown on Plan Sheet No. 4. The existing 54-inch culverts shall be operational at all times during construction. Construction of the culvert lining shall be done during dry weather periods to minimize flow through the 54-inch culverts.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY A. Manuila	5/4/98
REVISIONS	DESIGNED BY B. Sakamoto	
CHECKED BY	QUANTITIES BY	

5/4/98	Revised General Notes No. 13 through 15. Added General Notes No. 23 & 24.
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION GENERAL NOTES AND LEGEND INTERSTATE ROUTE H-3 Halekou Interchange Drainage Improvements Fed. Aid Project No. IM-H3-1(76) Date: Jan. 1998	
SHEET No. 1 OF 1 SHEETS	

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
GENERAL NOTES

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H3-1(76)	1998	3	7

(A) Erosion and Sediment Control Inspection and Maintenance Practices.

(1) The Contractor shall inspect the erosion and sediment control measures at least once a week or after 0.5 inches of rainfall.

(2) The Contractor shall maintain the erosion and sediment control measures according to the contract. If a repair is necessary, the Contractor shall initiate the repairs within twenty-four (24) hours after the inspection such as:

(a) When sediment build-up reaches one-third (1/3) the height of the silt fence, the Contractor shall remove and dispose of the sediment build-up from the silt fence.

(b) When the depth of the sediment basin reaches ten percent (10%) of the design capacity, the Contractor shall remove and dispose of the sediment build-up.

(c) When tears are found on the silt fence, the Contractor shall replace the fabric.

(d) The Contractor shall check to see if the fabric is securely attached to the fence posts and to see that the fence posts are firmly in the ground.

(e) The Contractor shall inspect the diversion dike and repair the breaches.

(f) The Contractor shall inspect temporary and permanent seeding and planting for bare spots, washouts, and healthy growth.

(3) The Contractor shall have its personnel make a maintenance inspection report promptly after each inspection. The Contractor shall select a minimum of three (3) personnel who will be responsible for inspection, maintenance, repair activities, and filling out the inspection and maintenance report. Personnel selected for the inspection and maintenance responsibilities will receive training from the Contractor. The Contractor shall train these personnel in the inspection and maintenance practices necessary for keeping the erosion and sediment used onsite according to the contract.

(B) Submittal Requirements:

(1) Construction activities of five (5) acres or more.

(a) Storm water discharges into State waters due to construction activities of five (5) acres or more, will require an NPDES permit from the Department of Health (DOH). The Contractor shall submit to the Engineer four (4) sets of Site-Specific Best Management Plans (BMP). The Plans shall be submitted no later than thirty (30) calendar days after the award of Contract.

(b) No construction activities will be authorized until the Contractor's Site-Specific BMP has been approved by the Highways Division.

(2) Construction activities dewatering and/or hydrotesting water.

(a) Discharges into State waters due to dewatering and/or hydrotesting activities will require NPDES Permits(s) from DOH. If the Contractor options to discharge dewatering and/or hydrotesting effluent into State waters, the Contractor shall submit to the Engineer four (4) sets of Site-Specific Dewatering and/or Hydrotesting BMP, and four (4) copies of the Quality of Discharge Test results. The Plans and test results shall be submitted no later than thirty (30) calendar days after the award of Contract.

(b) No dewatering and/or hydrotesting activities will be authorized until the receipt of the NPDES Permit(s) from DOH.

ORIGINAL PLAN	SURVEY PLOTTED BY PLAN	DATE 1/1/98
NOTE BOOK initials	DRAWN BY A. Kono	
initials	TRACED BY B. Sakano	
initials	QUANTITIES BY	
initials	CHECKED BY	

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION NPDES GENERAL NOTES <u>INTERSTATE ROUTE H-3</u> <u>Halekou Interchange</u> <u>Drainage Improvements</u> <u>Fed. Aid Project No. IM-H3-1(76)</u> Date: Jan. 1998 SHEET No. 1 OF 1 SHEETS
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