

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-H1-1(227)	1998	3	13

GENERAL NOTES

1. The scope of work for this project consists of seismic retrofitting bridges 3a/3b, 4a/4b and Structure 15 at Waiawa Interchange.
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 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.
6. The Contractor shall notify in writing, the Oahu Transit Services, Inc. Roads Supervision Office, 811 Middle St., Hon., HI 96819 (ph. #848-4571) seven (7) days prior to any retrofitting operations.
7. The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting paving operations.
8. The Contractor shall erect construction warning signs approximately 500 feet before the beginning of project and 500 feet after the end of project or as directed by the Engineer

MATERIALS

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|--|-------------------------------|
| 1. Concrete 28-Day Strength : | $f'c = 3000$ PSI (Class A) |
| 2. Reinforcing Steel: | Astm A615, Grade 60 |
| 3. Pipe: | Astm A53, Grade B, Galvanized |
| 4. Plate And Miscellaneous Components: | Astm A36, Galvanized |
| 5. Anchor Bolts: | Astm A307, Galvanized |

DESIGN CRITERIA

- A. Analysis design of rest of bridges to withstand seismic forces.
- A. Seismic Performance Category (SPC) "B"
- B. Acceleration Coefficient (A) 0.16

CABLE RESTRAINER ASSEMBLY NOTES

1. Before commencing with drilling operation through existing concrete, the Contractor shall verify the locations of each hole to be drilled so that it will clear the girder located on an adjacent span. The Contractor will use access doors to enter the inside of box girders.
2. Prior to drilling holes through the existing concrete, the Contractor shall use a metal detecting device to locate and avoid the cutting of existing reinforcing bars as much as possible.
3. Where restrainer cables bend and contact existing concrete, edges of drilled holes shall be chipped to a smooth curved surface with a radius of four (4) inches.
4. All cut and/or exposed reinforcing shall be embedded into the concrete a minimum of two (2) inches below the existing concrete surface. Unless otherwise indicated, the surface shall be finished by applying mortar cement.
5. Install Cable Yield Indicator, Spherical Washers and Disc Springs on either anchorage. Install Spherical Washers and Disc Springs on the remaining anchorage. Place thread locking system on disc spring stud and set the nut. Only one Cable Yield Indicator per cable. Disc's shall be Installed front to front as shown in "Disc Spring" detail on sheet S10.
6. Tighten the cable until the disc springs collapse and there is no disc gap remaining between the discs. Both anchorages of a single cable unit shall be adjusted simultaneously
7. Place thread locking system on remaining stud. Back off the nut of the anchorage a distance equal to 1/2".
8. Anchor bolts for plates shall be 3/4" diameter and shall meet the requirements of ASTM A 307. All anchor bolts placed into the concrete shall be 6" in depth measured from the concrete surface. Where drilled hole is made, the diameter of the hole shall be anchor bolt diameter plus 1/8". Epoxy shall be premixed type. Adhesive anchors shall be installed in accordance with the manufacturer's recommendation.
9. Drilling of holes through existing concrete structure shall be done in such a manner as to avoid any damages to the existing structure. Any damage incurred throughout the work shall be borne by the Contractor and shall be repaired at the Contractor's expense, to the satisfaction of the Engineer.
10. Payment for drilled holes will not be made separately and shall be considered incidental to Restrainer Item.
11. The Contractor shall measure cable length in the field.

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

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State Of Hawaii
Department of Transportation
Highways Division

GENERAL NOTES

Interstate Route H-1, Seismic
Retrofit, Waiawa Interchange
FAIP No. BR-H1-1(227)

Scale: as noted Date: March 1998

SHEET No. 1 OF 1 SHEETS