

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	56D-01-87M	1988	2	9

GENERAL NOTES:

Design Specifications
AASHTO Standard Specifications for Highway Bridges (1983 Edition) with Interim Specifications.

Design Live Load
A) Deck, Stringers and Floorbeams : H15-44
B) Warren Trusses : H20-44 (truck or lane loading, whichever governs)
C) Pratt Trusses: self weight only (no live load)

Construction Specifications:
Hawaii Standard Specifications for Road and Bridge Construction (1985 Edition) with Revisions and Special Provisions.

Materials
A) Structural Steel shapes and plates shall conform to ASTM A36 (latest issue)
B) High Strength Bolts shall be 7/8" ϕ and conform to ASTM A325, friction type connection.
C) Timber Planks for the wearing surface, shall be treated Douglas Fir, No. 1 grade.
D) Timber for Transverse Deck, Stringers, Diaphragms, Header and Sills shall be treated Douglas Fir, select structural.

Fabrication and erection:
1) The Contractor must field verify all existing dimensions, member sizes and elevations before submitting shop drawings.
2) Faying surfaces of high strength bolted connections shall be free of all dirt, grease, paint, mill scale weld metal and other foreign material prior to assembly.
3) Welding shall conform to AASHTO/AWS D1.5-88.
4) Welds, bolts, nuts and washers, nails, etc., shall be considered incidental to the various pay items and shall not be paid separately.

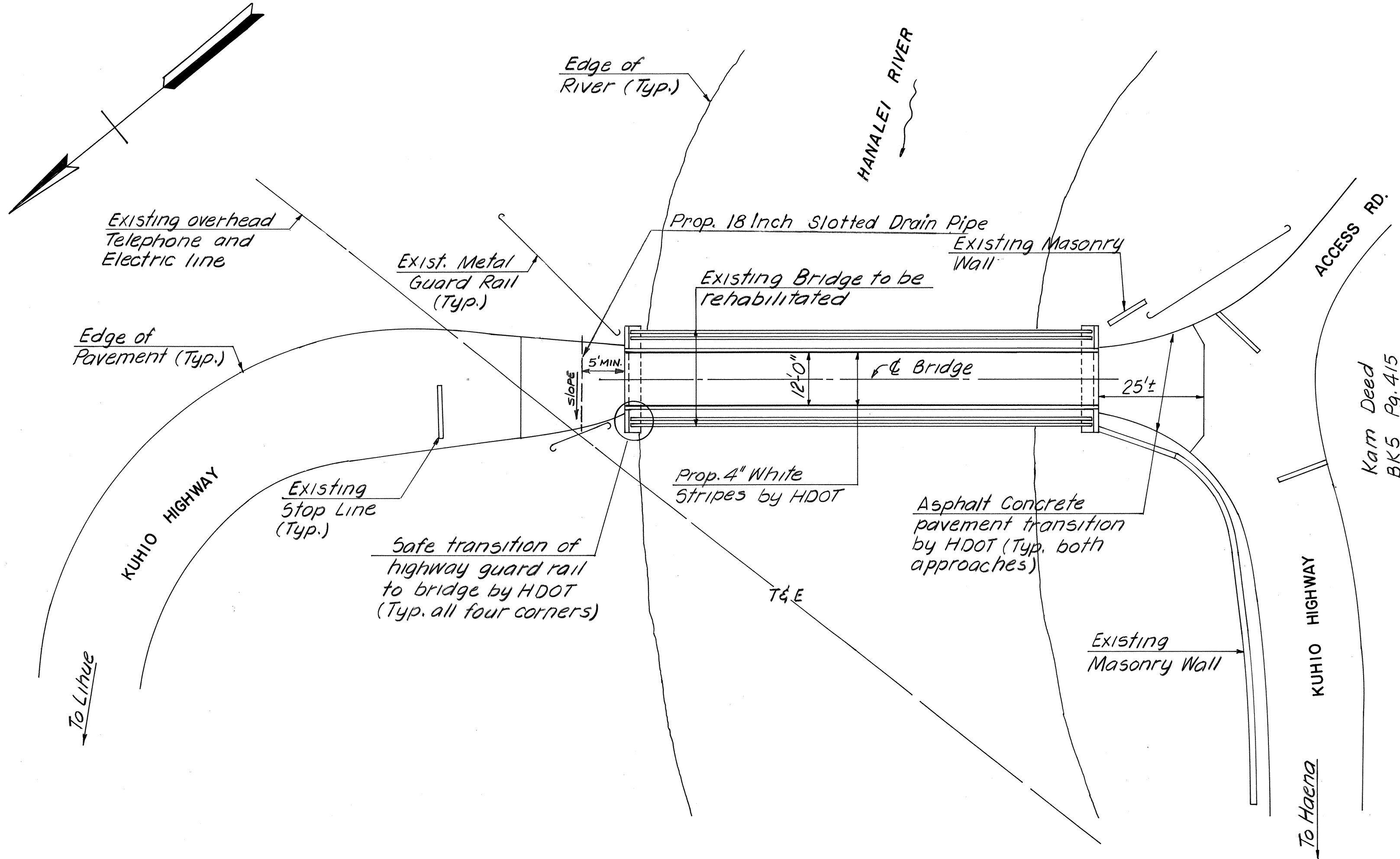
Prestressing Data:
1" ϕ stress rod under each floorbeam shall be adjusted to a final tension of 72 Kips.

Cleaning and Painting:
All steel surfaces shall be cleaned by water blasting and painted (3 coats). Finish coat color to match existing.

Traffic:
See Sheet No. 3

Construction Schedule:
See Sheet No. 4

Miscellaneous
Remove vegetation, debris, loose material and foreign matter from abutments, truss panel points and floorbeams. Work considered incidental to the various pay items and will not be paid separately.



LAYOUT PLAN
Scale: 1"=20'0"

ESTIMATED QUANTITIES			
ITEM NO.	ITEM	UNIT	QUANTITY
202.0000	Removal of Structures and Obstructions	Lump Sum	
501.0100	strengthening of Warren Trusses	Lump Sum	
501.0200	Adjustments to Pratt Trusses	Lump Sum	
501.0300	Cleaning and Painting of Structural Steel	Lump Sum	
502.0100	Treated Timber, Wearing Surface	M. F. B. M.	3.5
502.0200	Treated Timber, Select Structural	M. F. B. M.	28
611.0000	Sacked Concrete Riprap	C.Y.	12
501.0400	Miscellaneous Structural Steel (If and where directed)	Pound	1000
645.0100	Police Officers and/or Additional Traffic Control Devices	Force Account	
637.000	18 Inch Slotted Drain Pipe	Linear Foot	25

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
NOTES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
NO.	

THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION

ABBA G. LICHENSTEIN, P.E.
HAWAII LICENSE NO. 6112

A.G. LICHENSTEIN & ASSOC. INC.
CONSULTING ENGINEERS
FAIR LAWN, NEW JERSEY
HONOLULU, HAWAII

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
KUHIO HIGHWAY
REHABILITATION OF THE HANALEI BRIDGE
LAYOUT PLAN, NOTES & ESTIMATE
PROJECT NO. 56D-01-87M
SCALE: AS SHOWN
DATE: MAY, 1988
SHEET NO. 1 OF 8 SHEETS