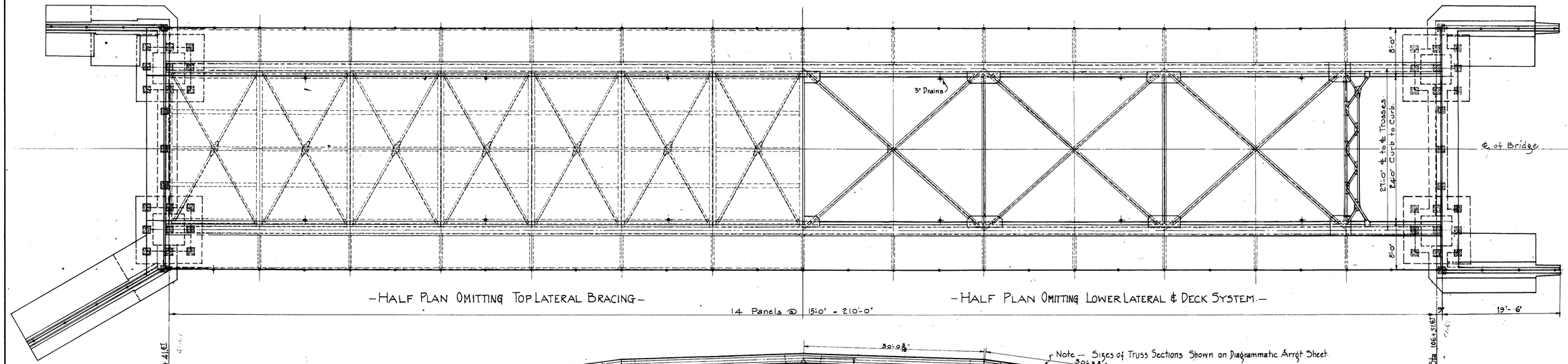
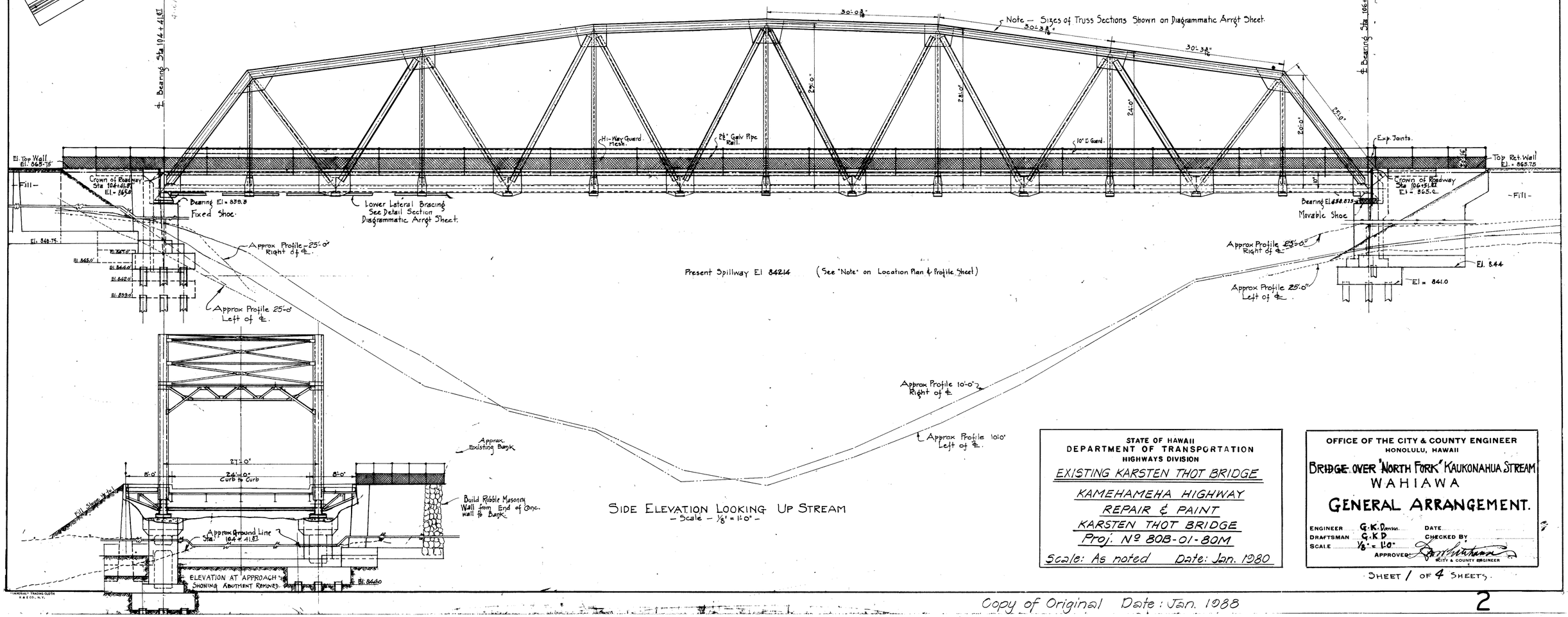
| FED ROAD DIST. NO. | STATE | PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | 80B-01-80M | 1980 | 2 | 5 |




SIDE ELEVATION LOOKING UP STREAM
- Scale - ⅛" = 1'-0" -

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

EXISTING KARSTEN THOT BRIDGE

KAMEHAMEHA HIGHWAY
REPAIR & PAINT
KARSTEN THOT BRIDGE
Proj. No 80B-01-80M

Scale: As noted Date: Jan. 1980

OFFICE OF THE CITY & COUNTY ENGINEER
HONOLULU, HAWAII

BRIDGE OVER "NORTH FORK" KAUKONAHUA STREAM
WAHIAWA

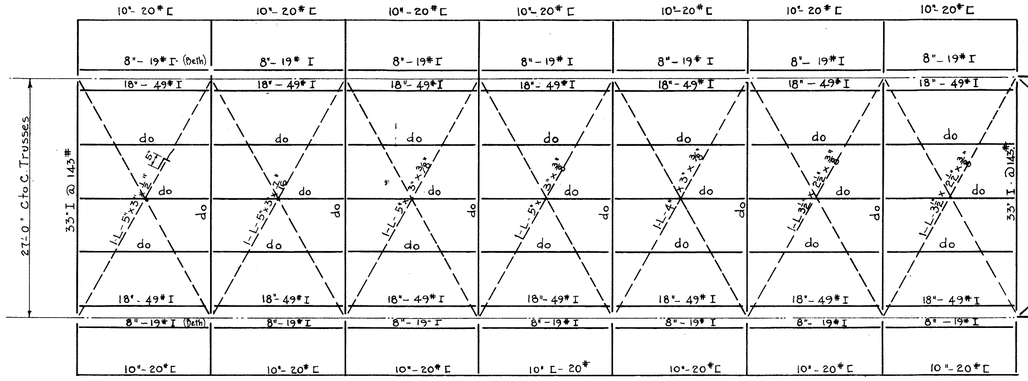
# GENERAL ARRANGEMENT.

ENGINEER G.K.D. DATE
DRAFTSMAN G.K.D CHECKED BY
SCALE ⅛" = 1'-0" APPROVED
CITY & COUNTY ENGINEER

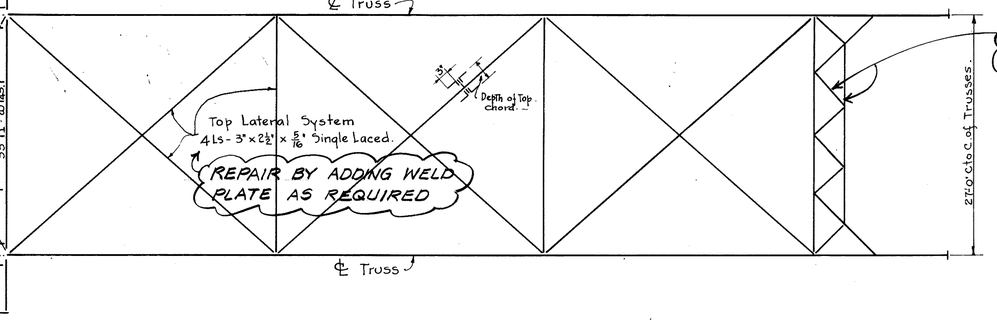
SHEET 1 OF 4 SHEETS.

Copy of Original Date: Jan. 1988

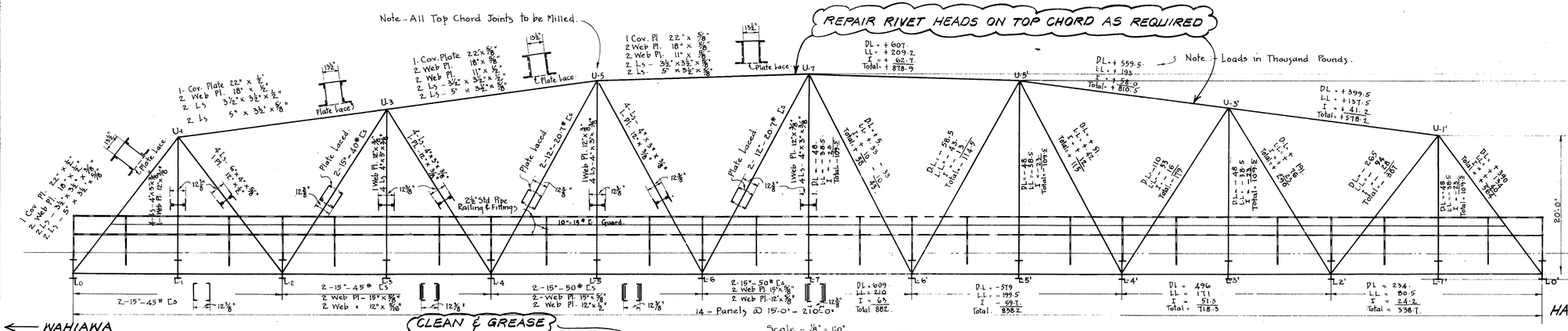
| FED. ROAD DIST. NO. | STATE | PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | 80B-01-80M | 1980 | 3 | 5 |

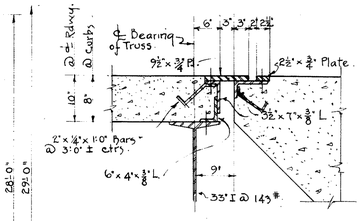



HALF BOTTOM PLAN




HALF TOP PLAN —

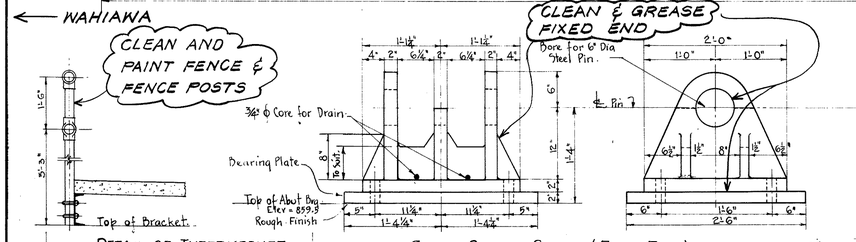


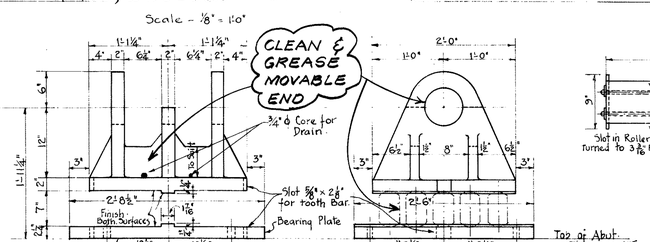



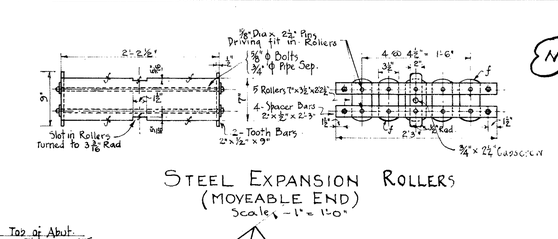

DIAGRAMMATIC ELEVATION OF RAILING SHOWING MESH & METHOD OF FASTENING.



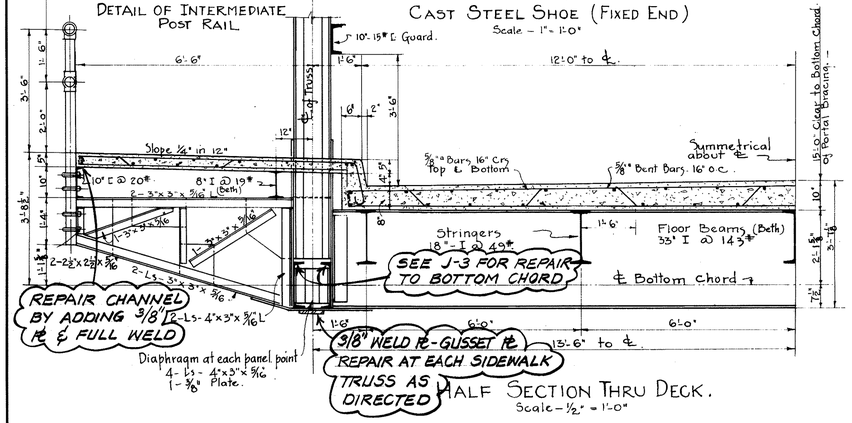

DETAIL AT EXPANSION JOINT AT ABUTMENT. (See Sheet 6.)
Use asphaltic Joint at Sidewalk where shown on Sheet 6.
Scale - 3/4" = 1'-0"

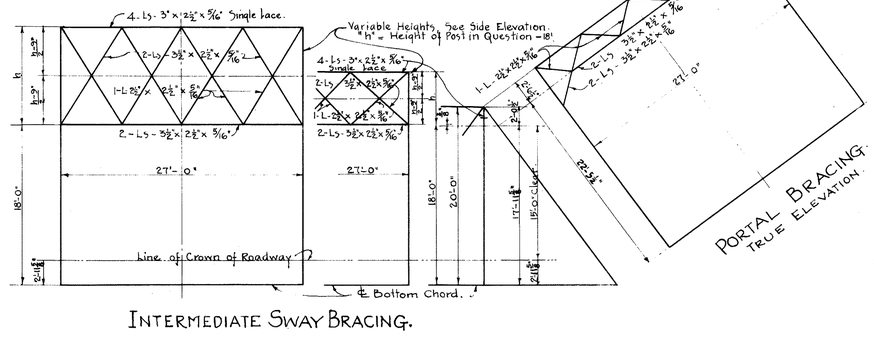


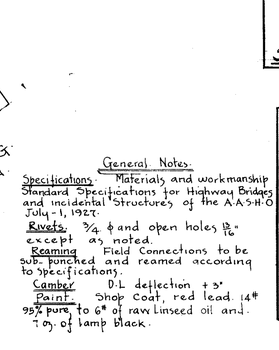




NOTE DENOTES CLEANING OR REPAIR WORK OF EXISTING KARSTEN THOT BRIDGE STRUCTURE.




General Notes

Specifications: Materials and workmanship Standard Specifications for Highway Bridges and incidental Structures of the A.A.S.H.O July - 1, 1927.

Rivets. ¾ ϕ and open holes 13/16" except as noted.

Reaming Field Connections to be sub-punched and reamed according to specifications.

Camber D.L. deflection + 3".

Paint. Shop Coat, red lead 14# 95% pure to 6 gal of raw linseed oil and 1 oz. of lamp black.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# TYPICAL REPAIR DETAILS

KAMEHAMEHA HIGHWAY
REPAIR & PAINT
KARSTEN THOT BRIDGE
Proj. Nº 80B-01-80M

Scale: As noted Date: Jan. 1980

OFFICE OF THE CITY & COUNTY ENGINEER
HONOLULU, HAWAII

BRIDGE OVER NORTH FORK "KAUKONAHUA STREAM"
WAHIAWA

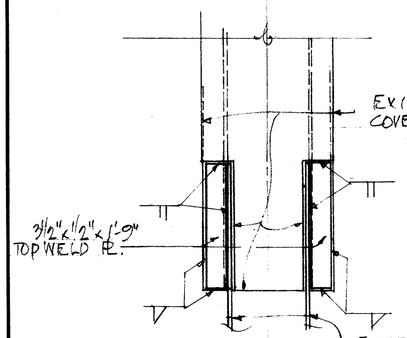
STRUCTURAL STEEL DESIGN

ENGINEER G.K. Dawson DATE
DRAFTSMAN G.K. Dawson CHECKED BY
SCALE As Noted APPROVED: CITY & COUNTY ENGINEER

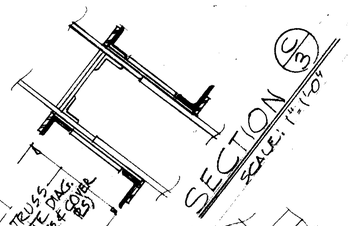
SHEET 2 OF 4 SHEETS

Copy of Original Date: Jan. 1988

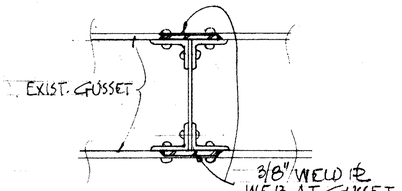
| FED. ROAD DIST. NO. | STATE | PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | 80B-01-80M | 80 | 4 | 5 |




SECTION (B/3)
SCALE: 1"=1'-0"

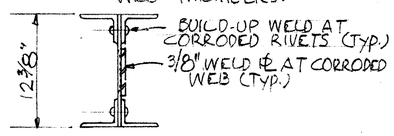



SECTION (U/3)
SCALE: 1"=1'-0"

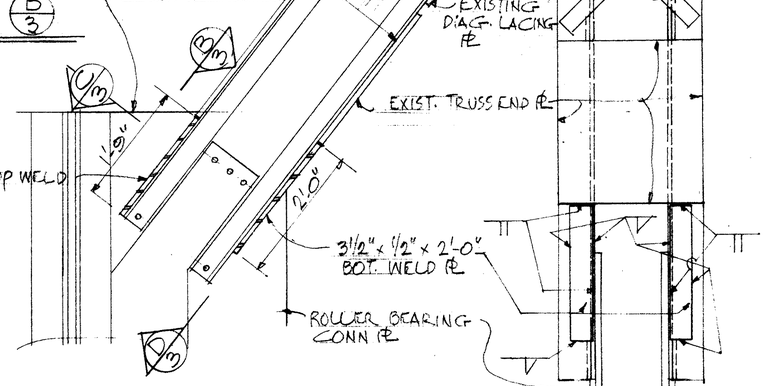



SECTION (E/3)
SCALE: 1 1/2"=1'-0"

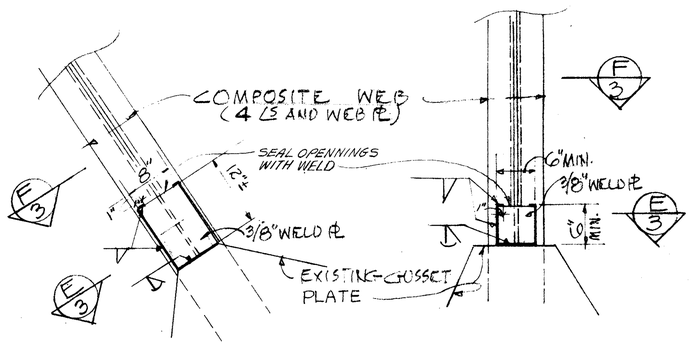
NOTE:
REFER TO SHEET #4 FOR DETAILS OF REPAIRS TO EXISTING VERTICAL & DIAGONAL WEB MEMBERS.




TYPICAL SECTION (F/3)
SCALE: 1 1/2"=1'-0"



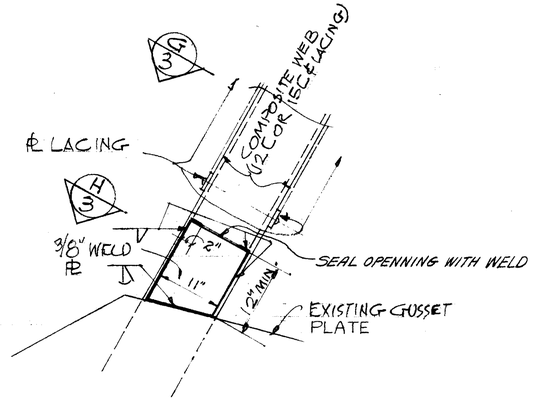

CONNECTION DETAIL (A/3)
SCALE: 1"=1'-0"




AT DIAGONAL MEMBER (MOST DIAGONALS HAD BEEN REPAIRED BUT ADDITIONAL WELD MAY BE REQUIRED)

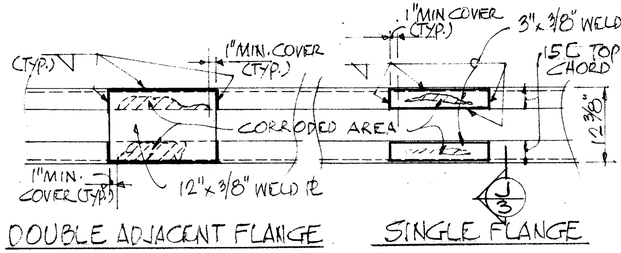
AT VERTICAL MEMBER

ELEVATION - TRUSS COMPOSITE MEMBER
BASE CONNECTION (4 L's AND WEB PL)
SCALE: 1"=1'-0"




ELEVATION - TRUSS COMPOSITE MEMBER
BASE CONNECTION (2 L's AND LACE PL's)
SCALE: 1"=1'-0"

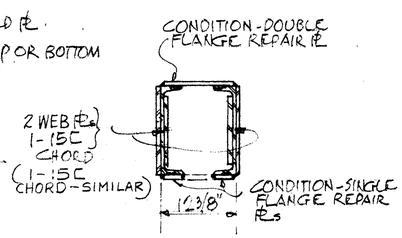
SECTION (D/3)
SCALE: 1"=1'-0"



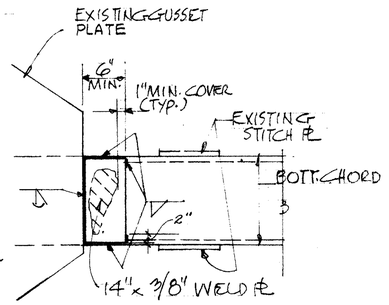

DOUBLE ADJACENT FLANGE

SINGLE FLANGE

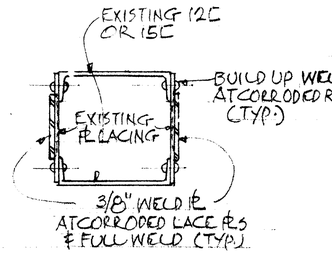
PLAN - TOP OR BOTTOM 15C FLANGE



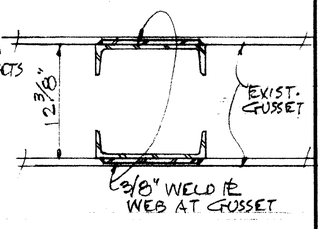

SECTION (J/3)




AT VERTICAL OR DIAGONAL PANEL CONNECTIONS




TYPICAL SECTION (G/3)
SCALE: 1 1/2"=1'-0"




SECTION (H/3)
SCALE: 1 1/2"=1'-0"

TRUSS COMPOSITE BOTTOM CHORD REPAIRS SCALE: 1"=1'-0"

NOTES:
1. REFER TO SHT. #4 REPAIR DETAILS FOR APPLICABLE REPAIR WORKS OR DETAILS NOT COVERED BY THIS SHEET.
2. REFER TO SHT. # 1 EXISTING KARSTEN THOT BRIDGE FOR LOCATIONS OF THE VARIOUS APPLICABLE DETAILS OF THIS DRAWING.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL REPAIR DETAILS

KAMEHAMEHA HIGHWAY
REPAIR & PAINT
KARSTEN THOT BRIDGE
Proj. No. 80B-01-80M

Scale: As Noted Date: Jan. 1980

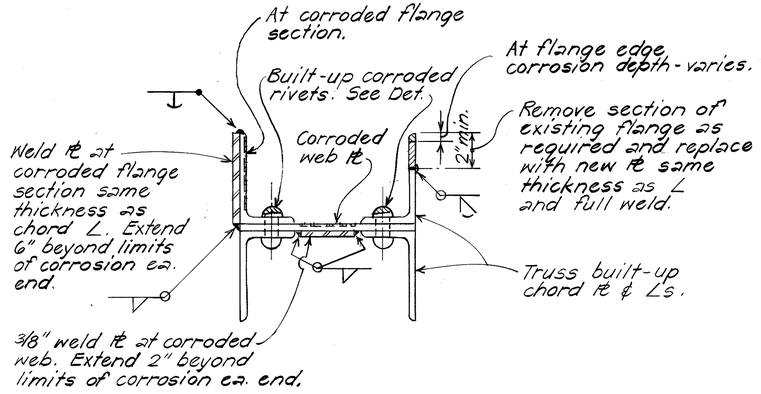
SHEET No. 3 OF 4 SHEETS

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

PRINTED ON NO. 1000H CLEARPRINT

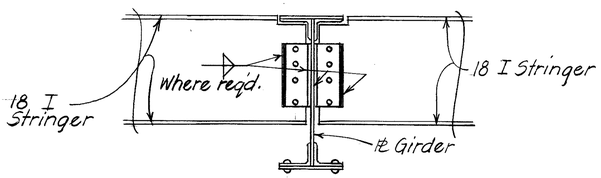
Copy of Original Date: Jan. 1988

| FED. ROAD DIST. NO. | STATE | PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | 80B-01-80M | 1980 | 5 | 5 |




## TYPICAL TRUSS REPAIRS (VERTICAL & DIAGONAL WEB MEMBERS)

No Scale

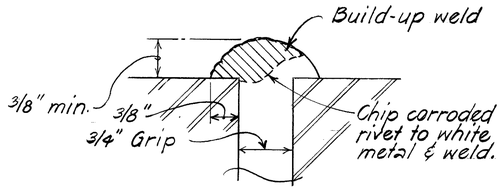



## TYPICAL FLOOR STRINGER CONNECTION AT ℄ GIRDER

Scale: 1" = 1'-0"

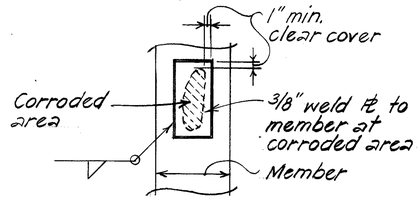
## GENERAL NOTES:

1. All structural steel shall be A-36 and all new plates shall be 3/8" minimum thickness unless otherwise shown in the drawings or as directed by the Engineer.
2. All welding shall conform to section 501.03 (D) of the Standard Specifications for Roads and Bridge Construction, 1976 edition, by the Department of Transportation, State of Hawaii. All welding shall be 5/16" unless otherwise shown in the plans or as directed.
3. For vertical and diagonal members which are not badly corroded, the 3/8" plate may not be required as shown. Strengthen connections with fillet weld as directed by the Engineer.
4. Some members had been repaired similar to these details in the past. However additional weld may be needed to strengthen these connections.
5. Repairs shall be made to members as shown and anywhere else on the structure as directed by the Engineer though not specifically indicated on the plans.
6. The Engineer shall be the sole judge in determining the adequacy of the welding connections and repairs.




## TYPICAL REPAIRS TO CORRODED RIVET HEADS

Scale: Full Size




## TYPICAL REPAIR TO CORRODED AREA OF OTHER MEMBERS

No Scale

| ORIGINAL PLAN | | |
|---|---|---|
| NOTE BOOK | SURVEY PLOTTED BY | DATE |
| | DRAWN BY TED | " |
| | TRACED BY TED | " |
| | DESIGNED BY KBV | " |
| | QUANTITIES BY | " |
| No. | CHECKED BY | " |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

TYPICAL REPAIR DETAILS

KAMEHAMEHA HIGHWAY
REPAIR & PAINT
KARSTEN THOT BRIDGE
Proj. No 80B-01-80M

Scale: As Noted Date: Jan. 1980

SHEET No. 4 OF 4 SHEETS