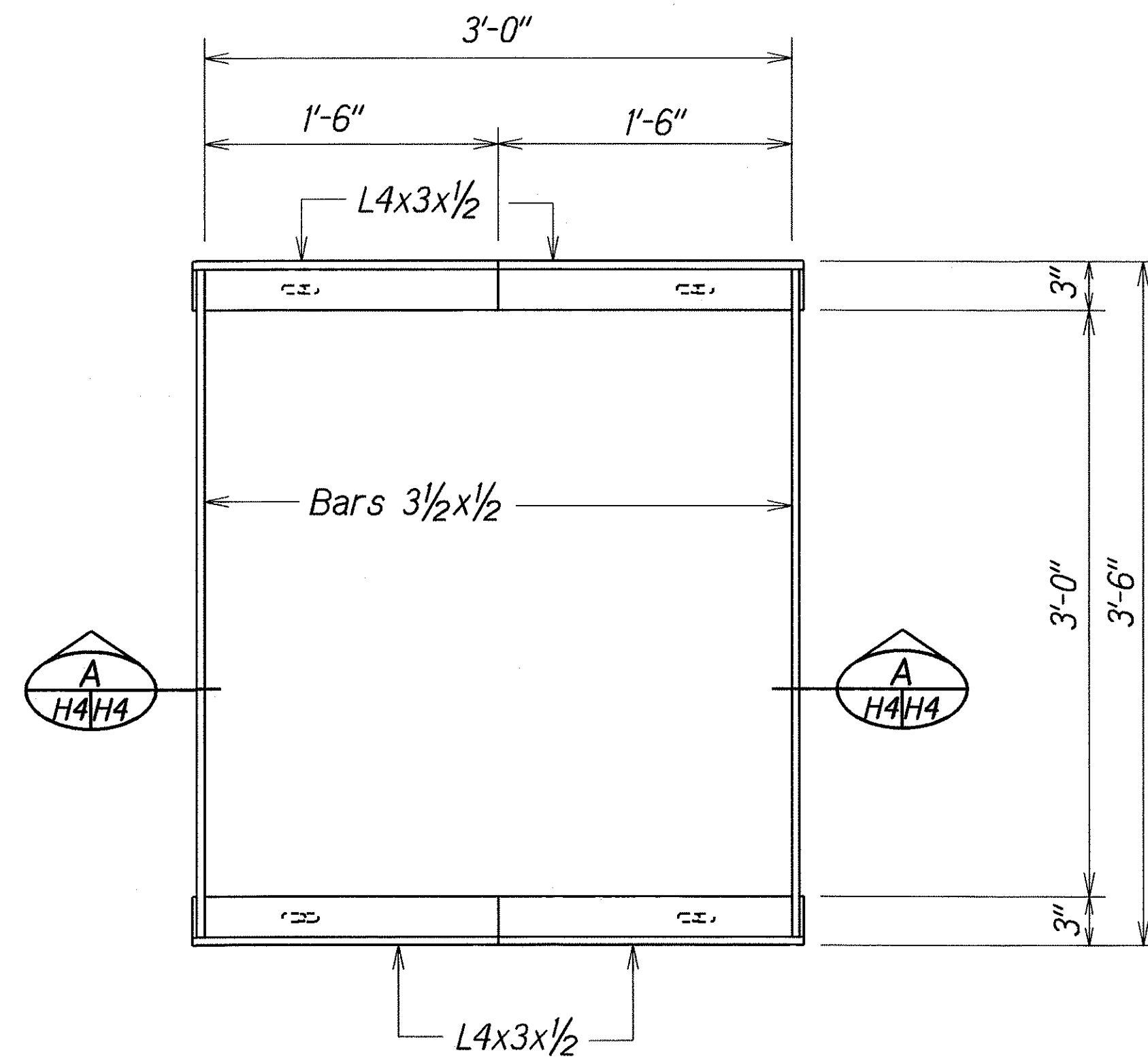
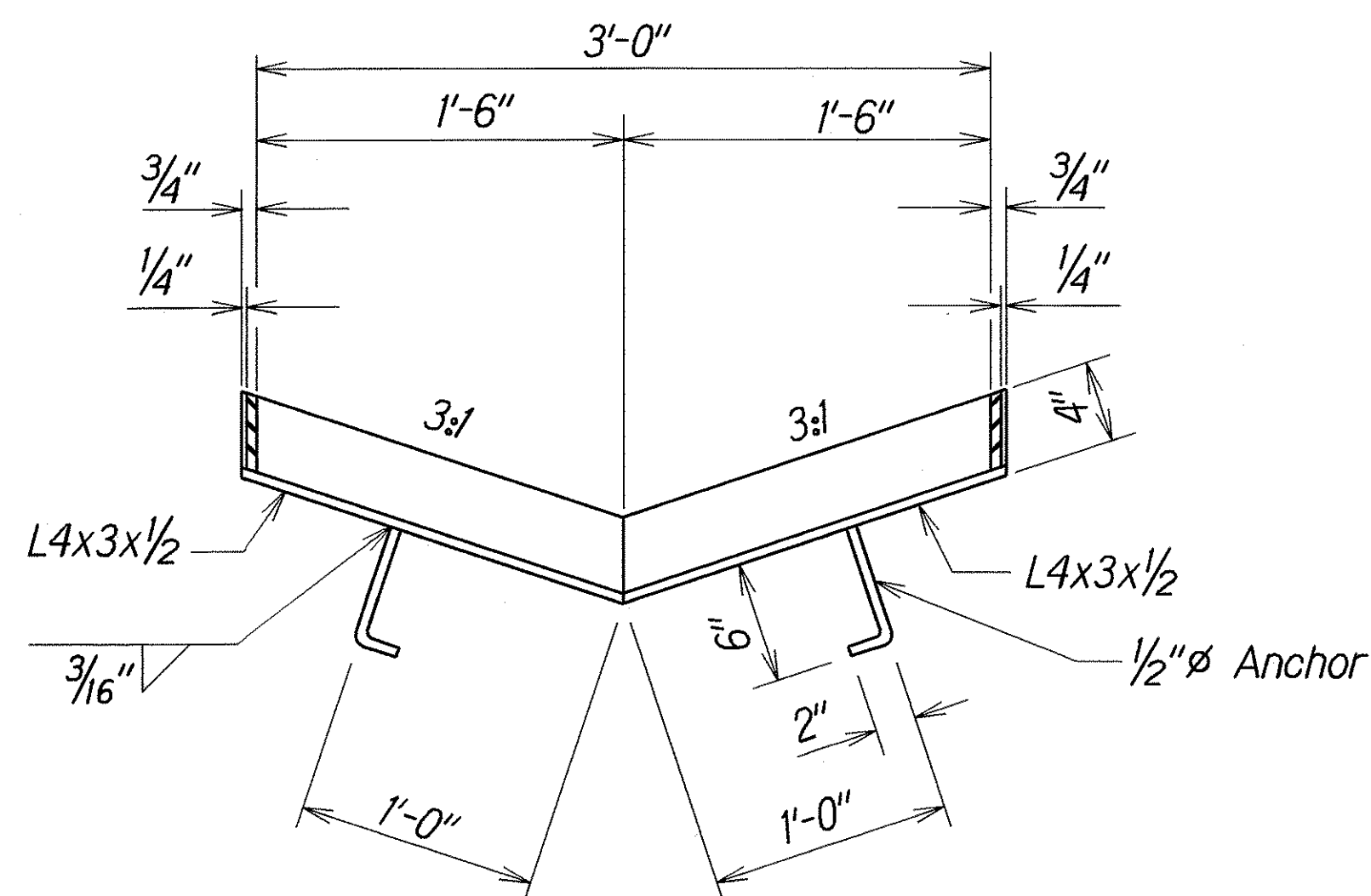


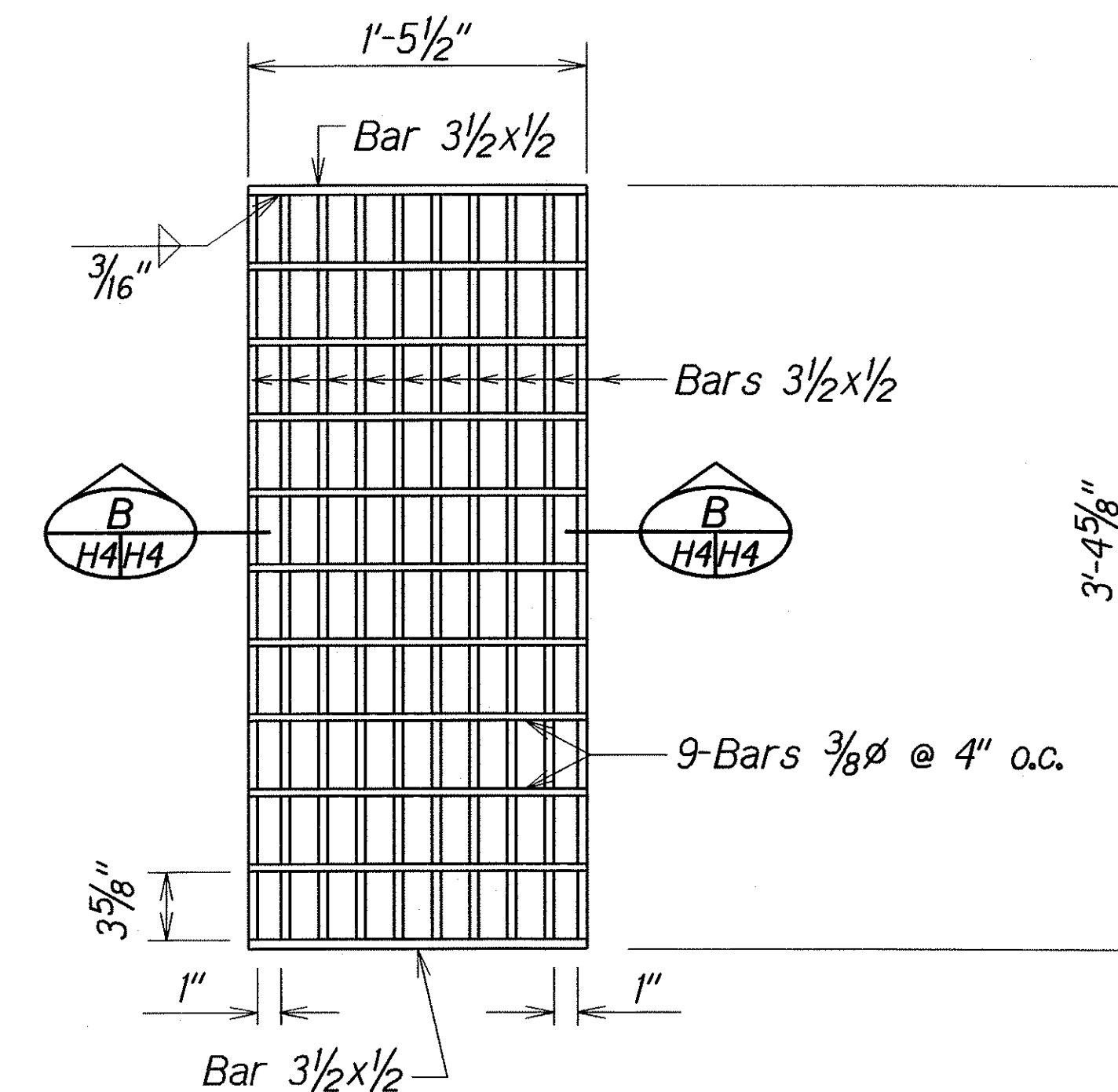
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	460A-01-02	2003	9	12



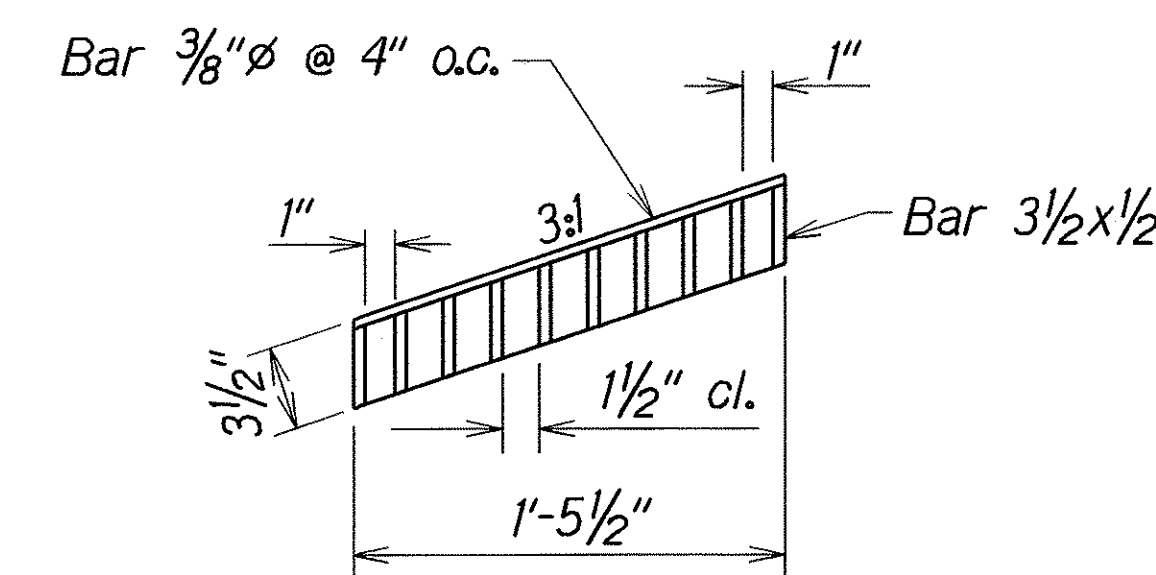
PLAN



SECTION A-A
FRAME

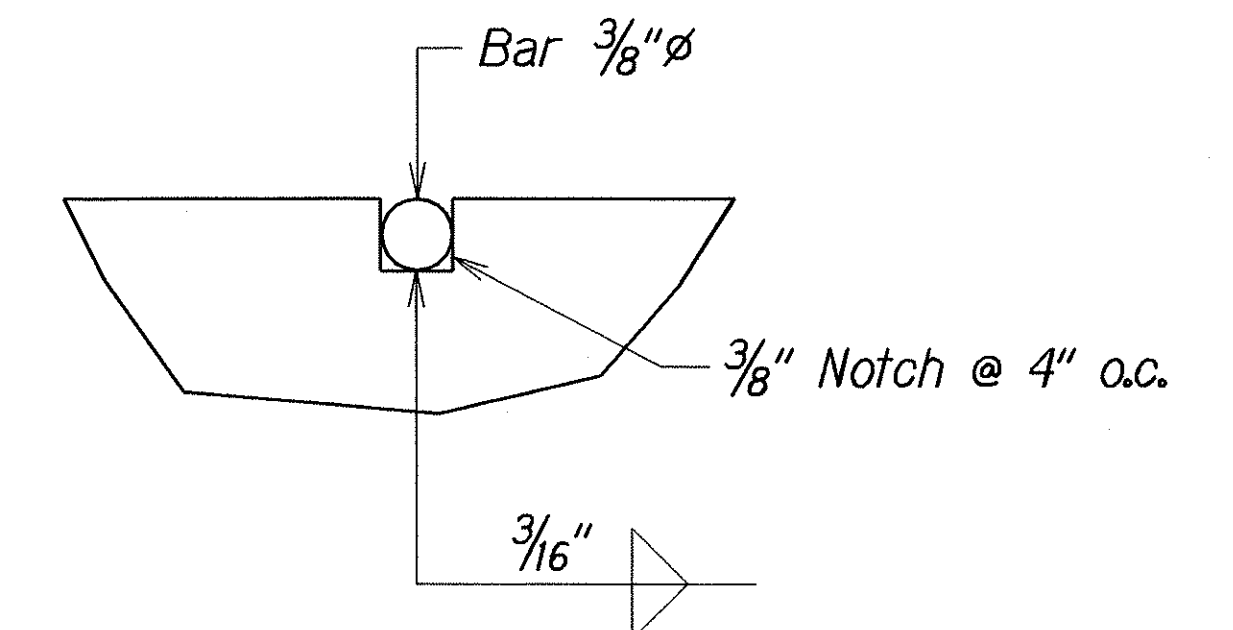


PLAN



SECTION B-B
GRATES

- NOTE:
1. All welds $\frac{3}{8}$ " unless otherwise noted.
 2. Grates and Frames shall be hot dip galvanized after fabrication.



NOTCH DETAIL
Full Size

DETAILS OF TYPE 3131P STEEL FRAME AND GRATES

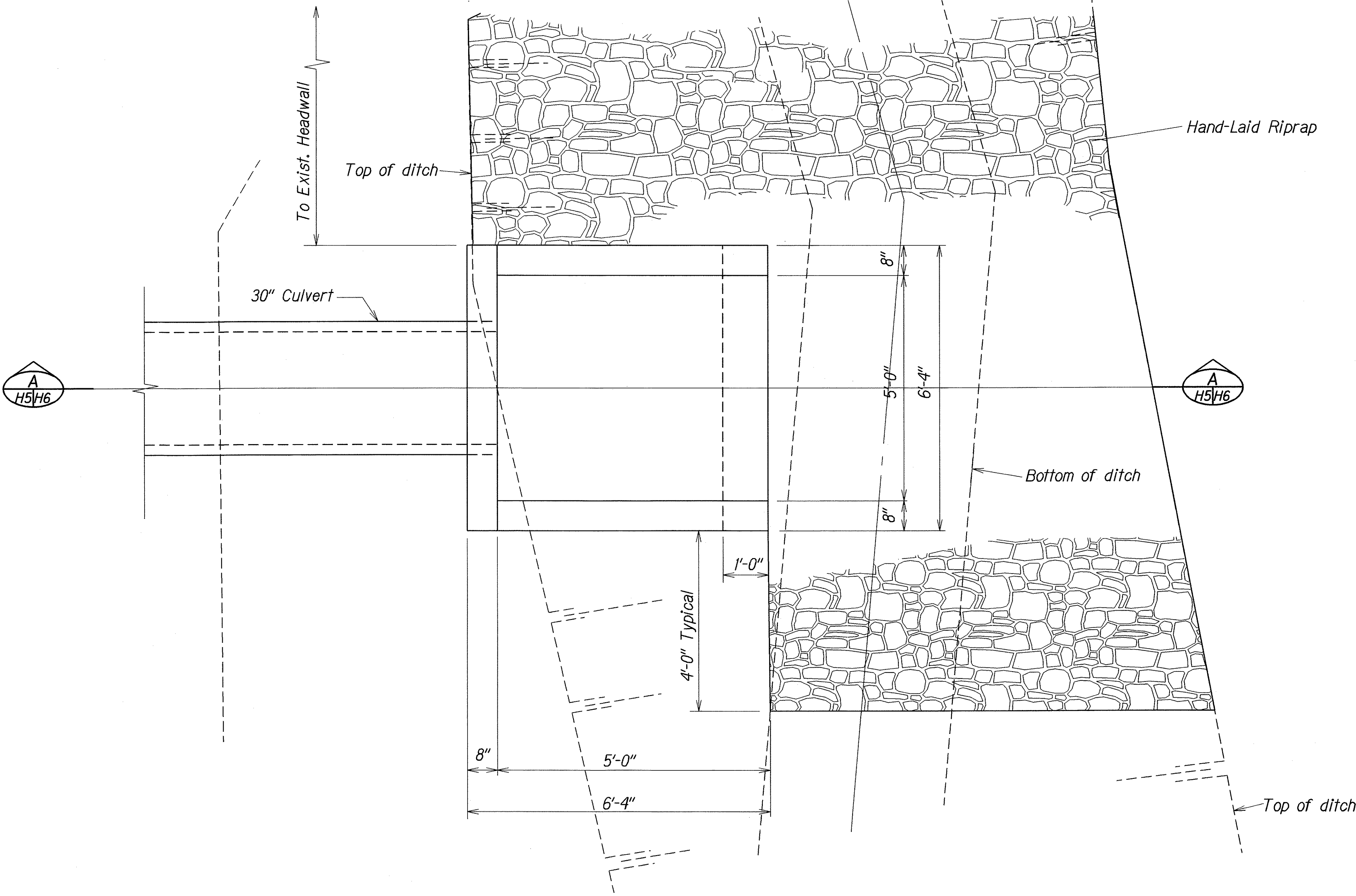
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS
MAUNALO A HIGHWAY
DRAINAGE IMPROVEMENTS
Vicinity of Hoolehua
Project No. 460A-01-02

Scale: $1\frac{1}{2}"=1'-0"$ Date: June, 2002

SHEET No. H4 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	460A-01-02	2003	10	12



PLAN

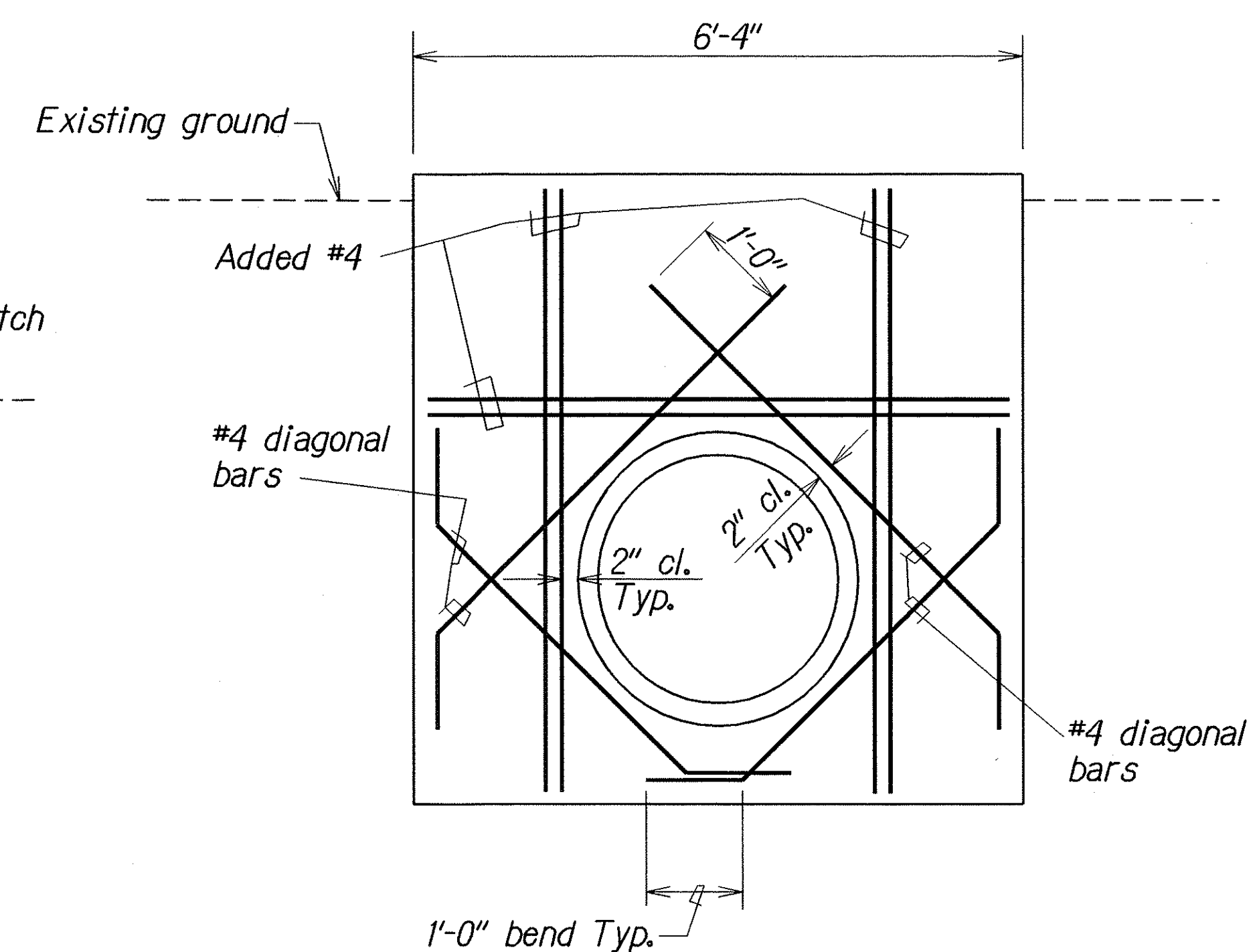
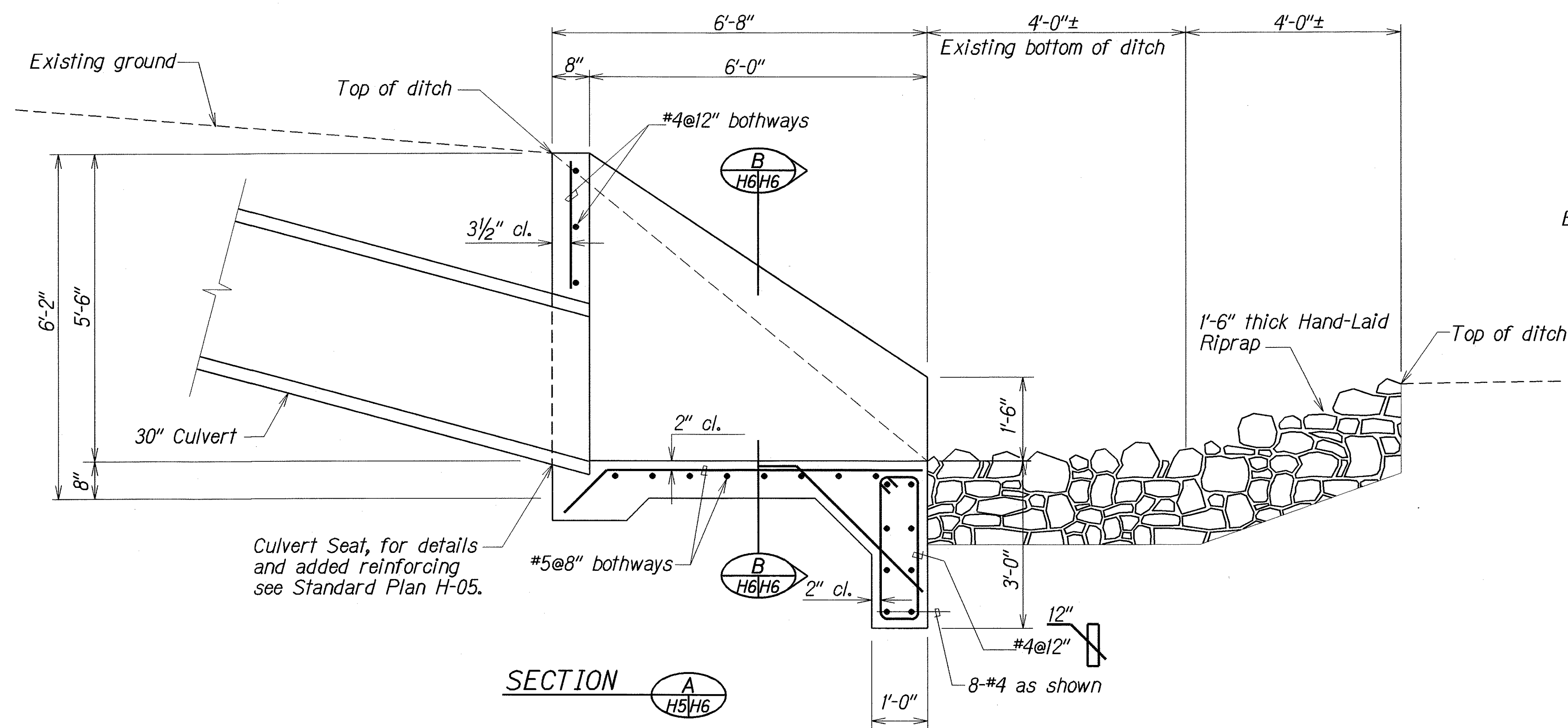
DETAILS OF TYPE "1" OUTLET STRUCTURE

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	TRACED BY	
	CHECKED BY	

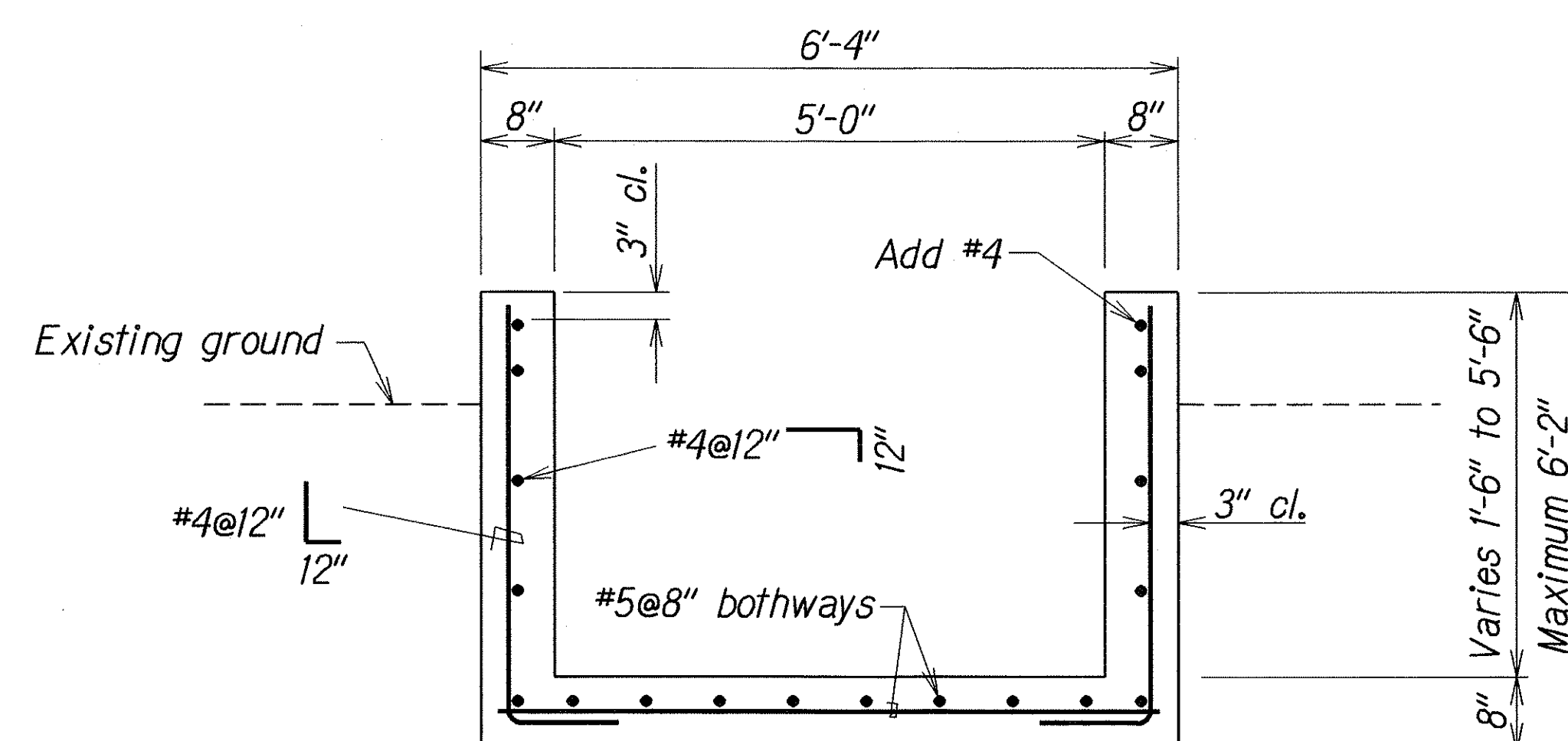
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS
MAUNALO A HIGHWAY
DRAINAGE IMPROVEMENTS
Vicinity of Hoolehua
Project No. 460A-01-02
Scale: 3/4" = 1'-0" Date: June, 2002
SHEET No. H5 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	460A-01-02	2003	11	12



ADDED REINFORCING AROUND CULVERT



SECTION B

DETAILS OF TYPE "I" OUTLET STRUCTURE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS
MAUNALO A HIGHWAY
DRAINAGE IMPROVEMENTS
Vicinity of Hoolehua
Project No. 460A-01-02

Scale: 3/4" = 1'-0" Date: June, 2002

SHEET No. H6 OF 7 SHEETS