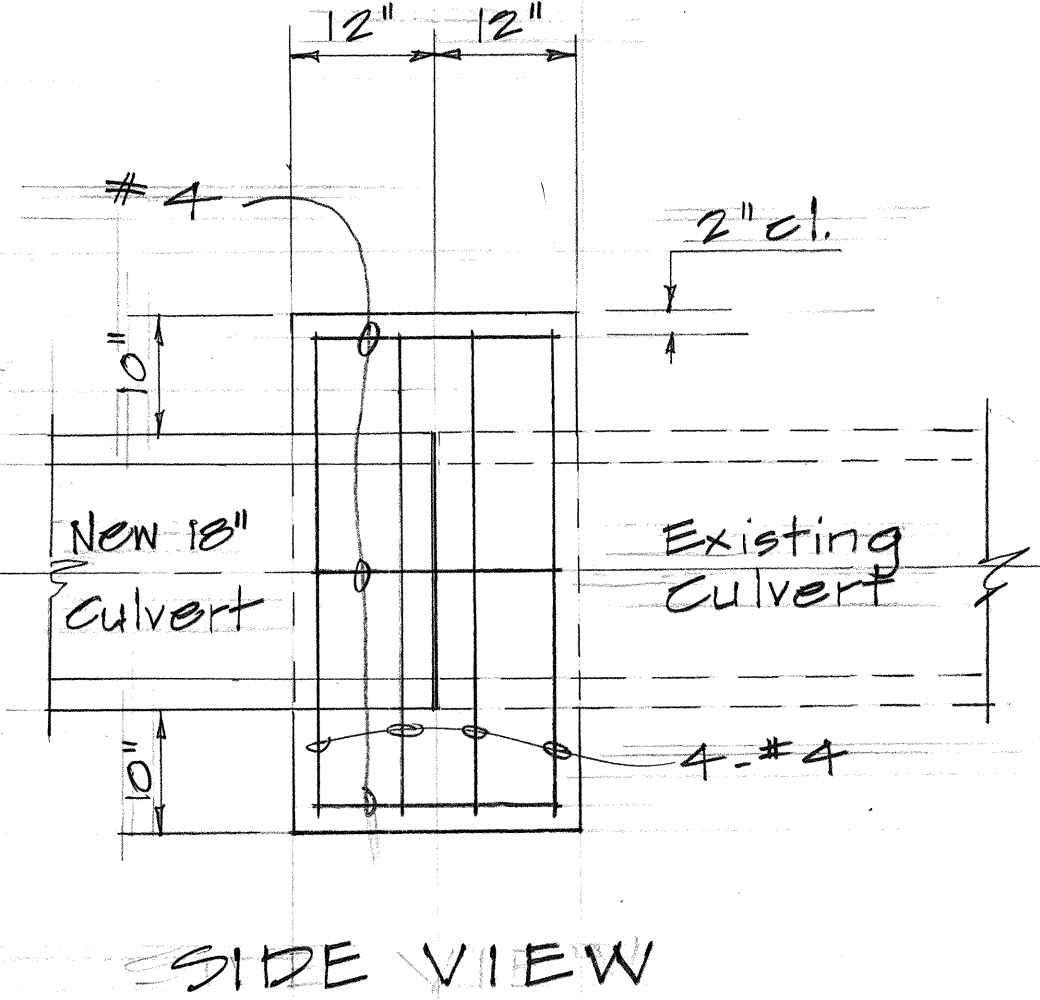
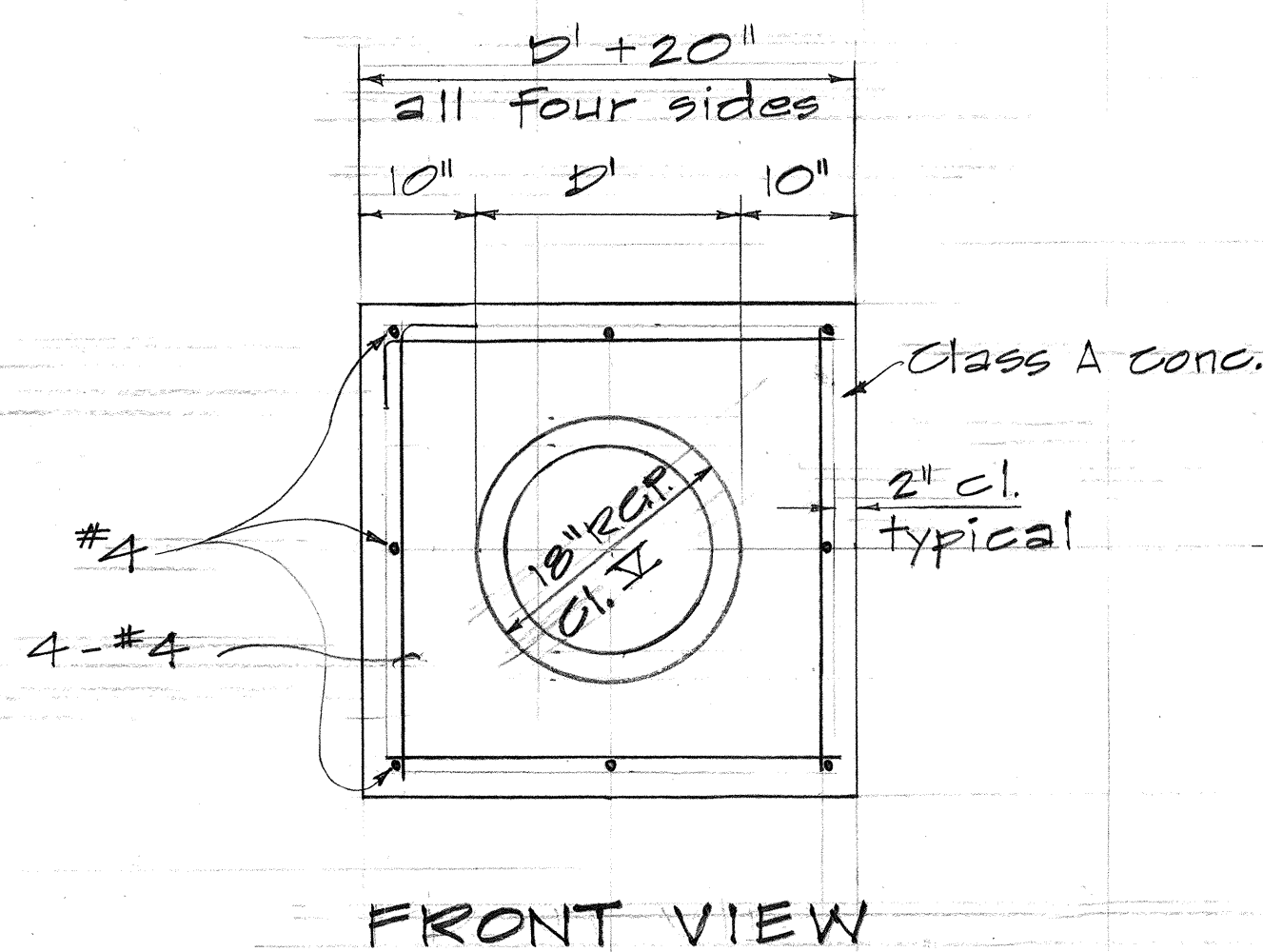
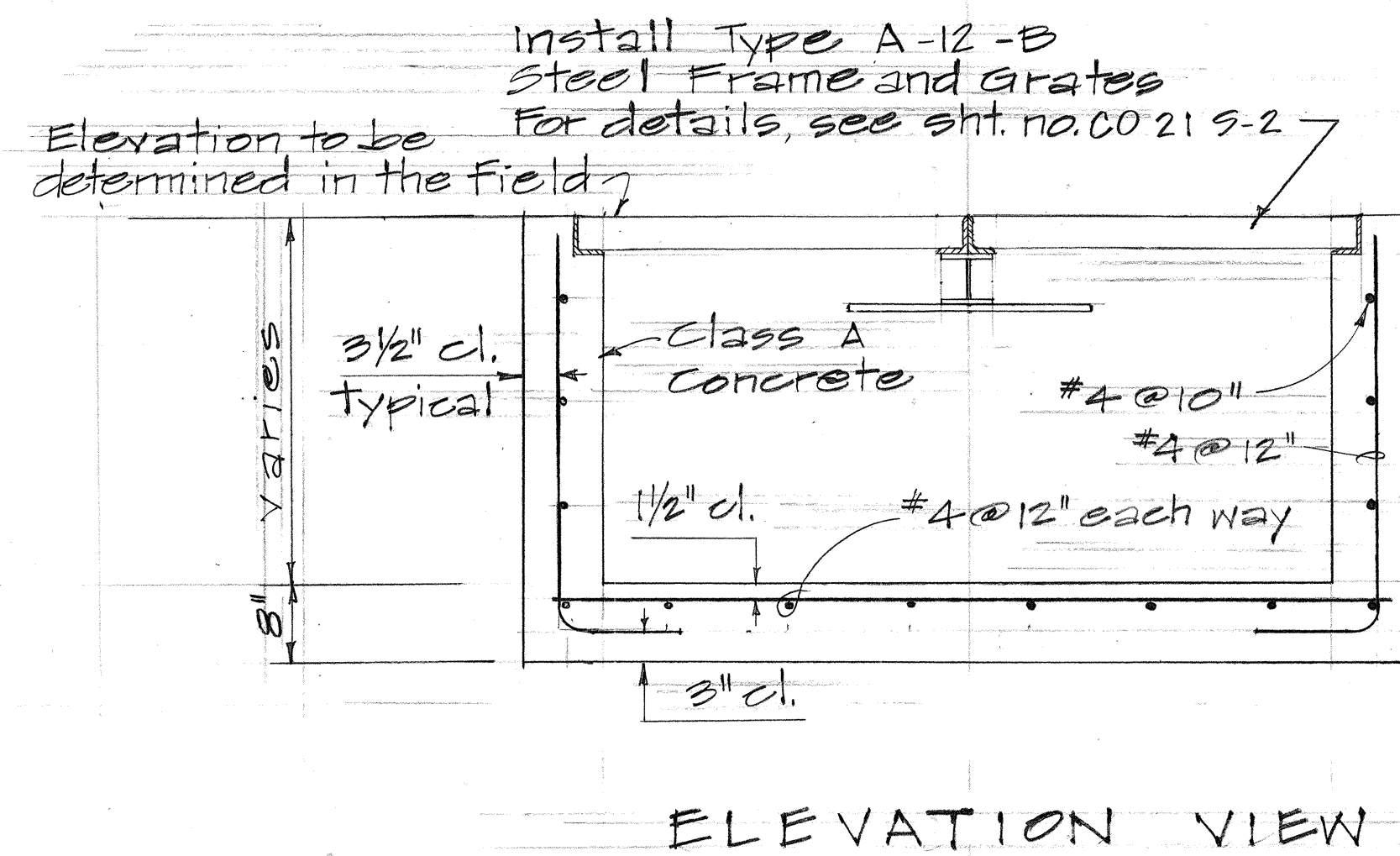
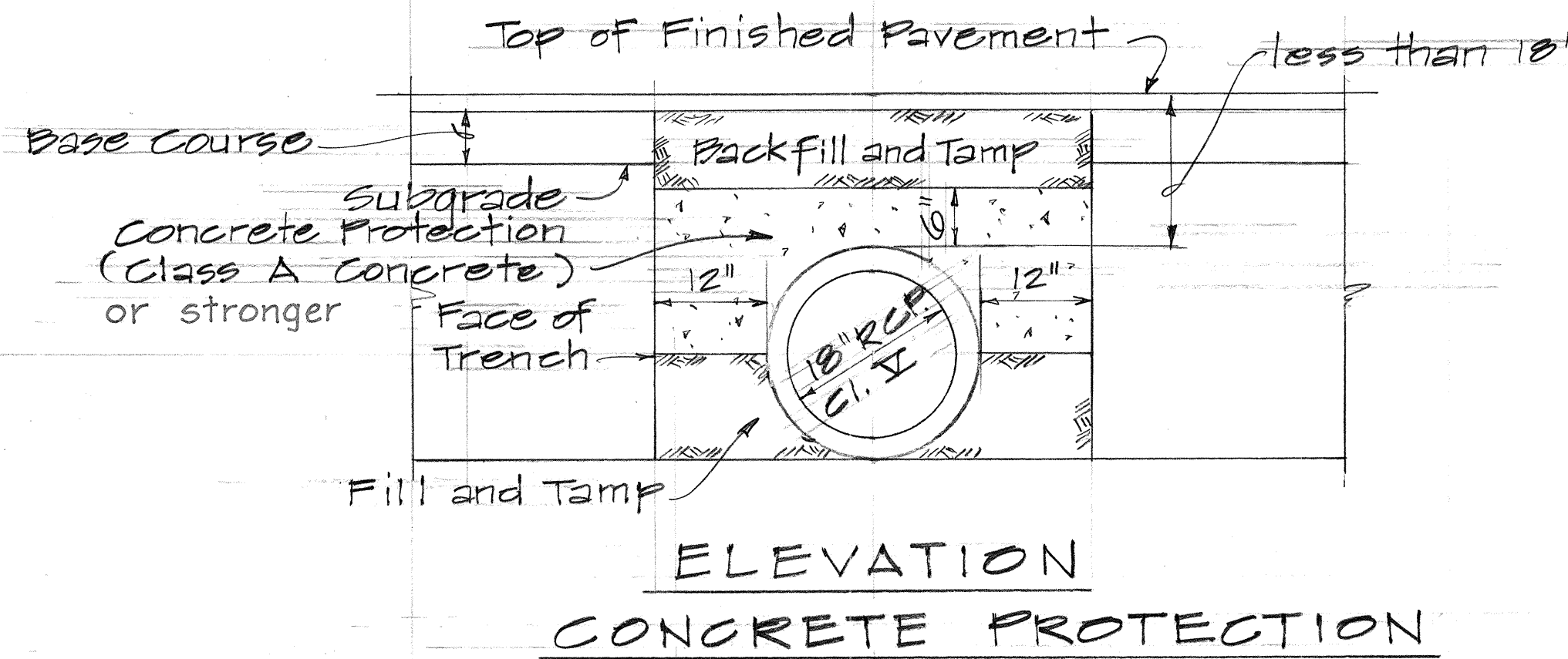
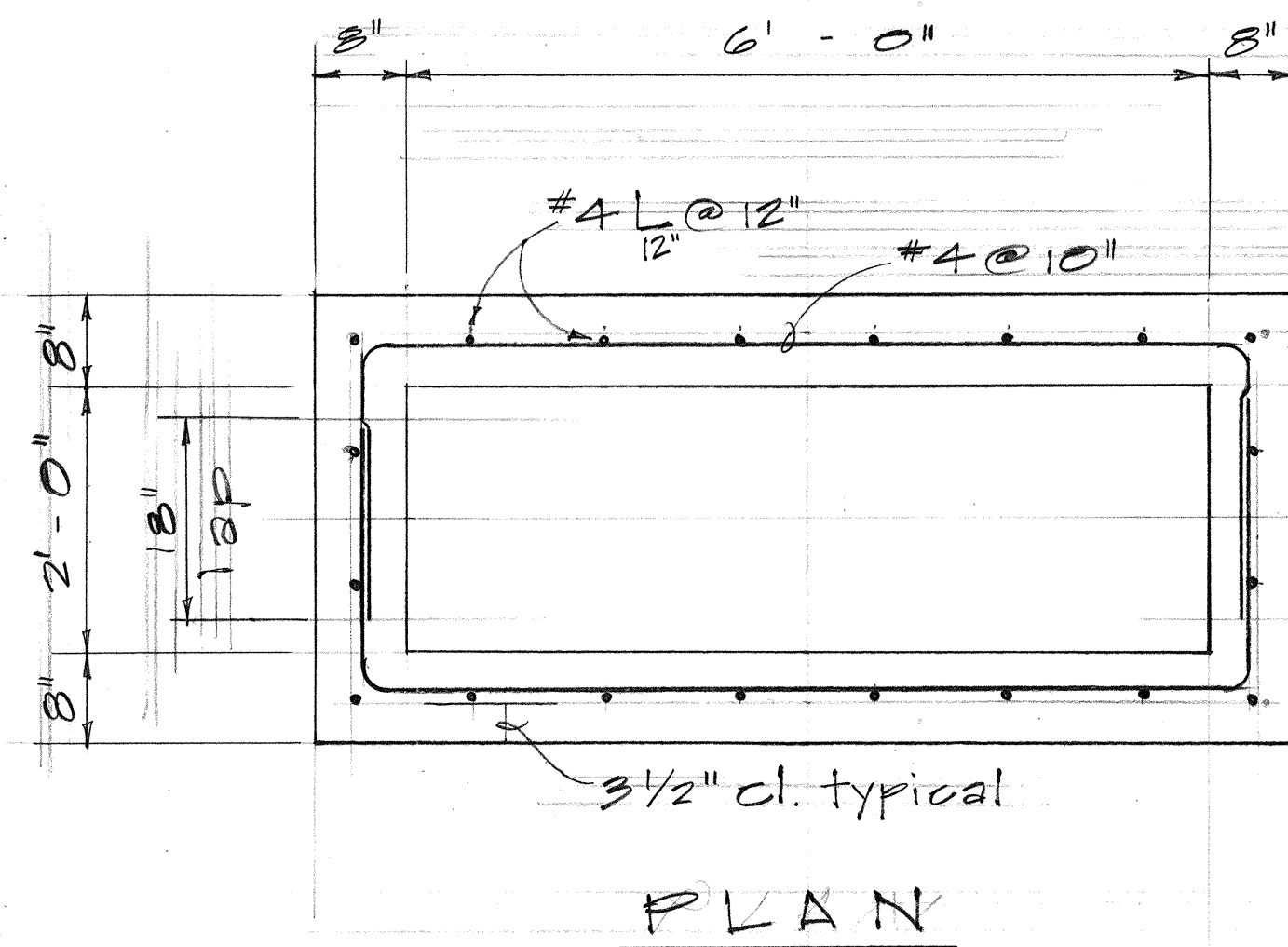
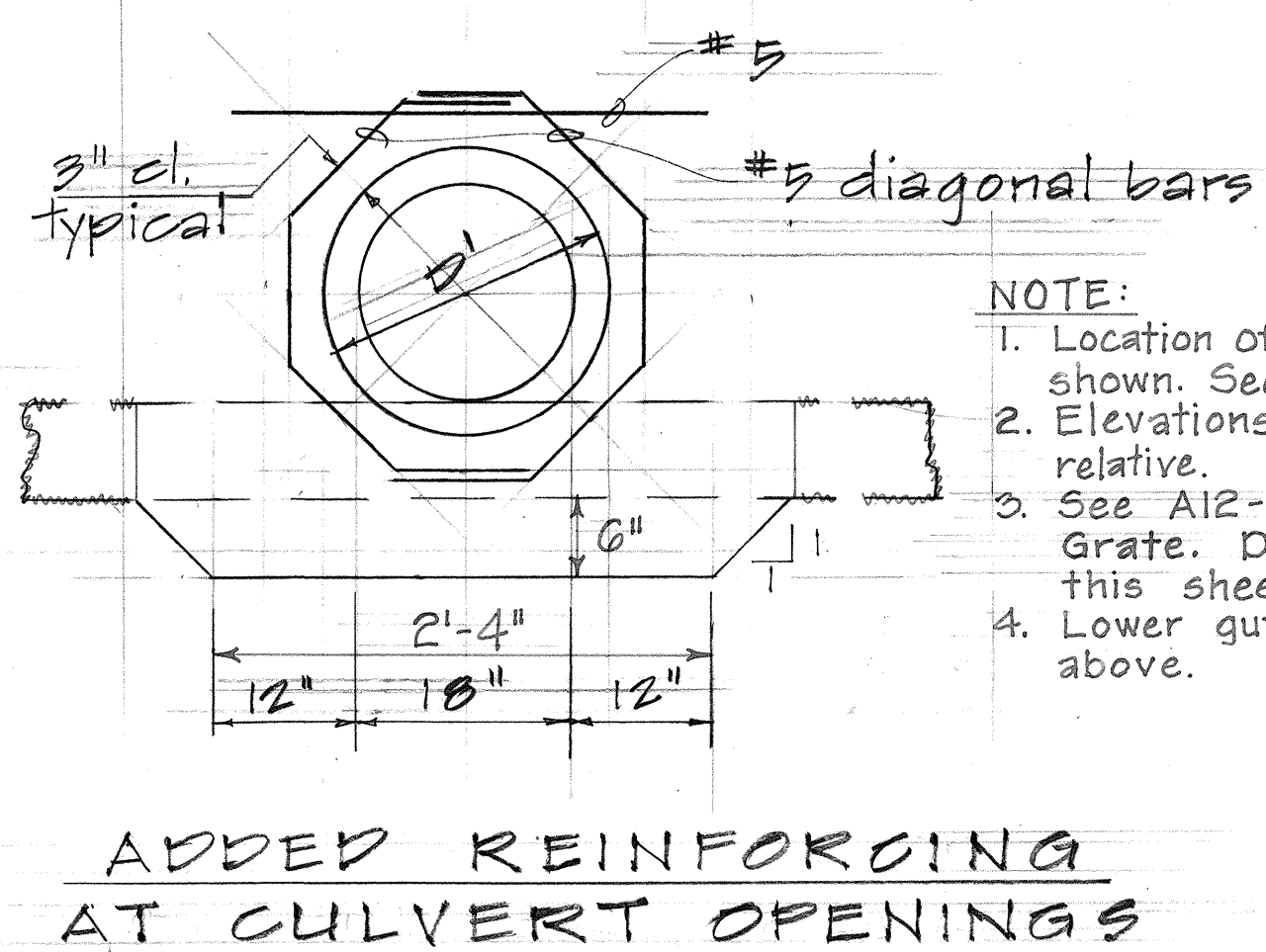
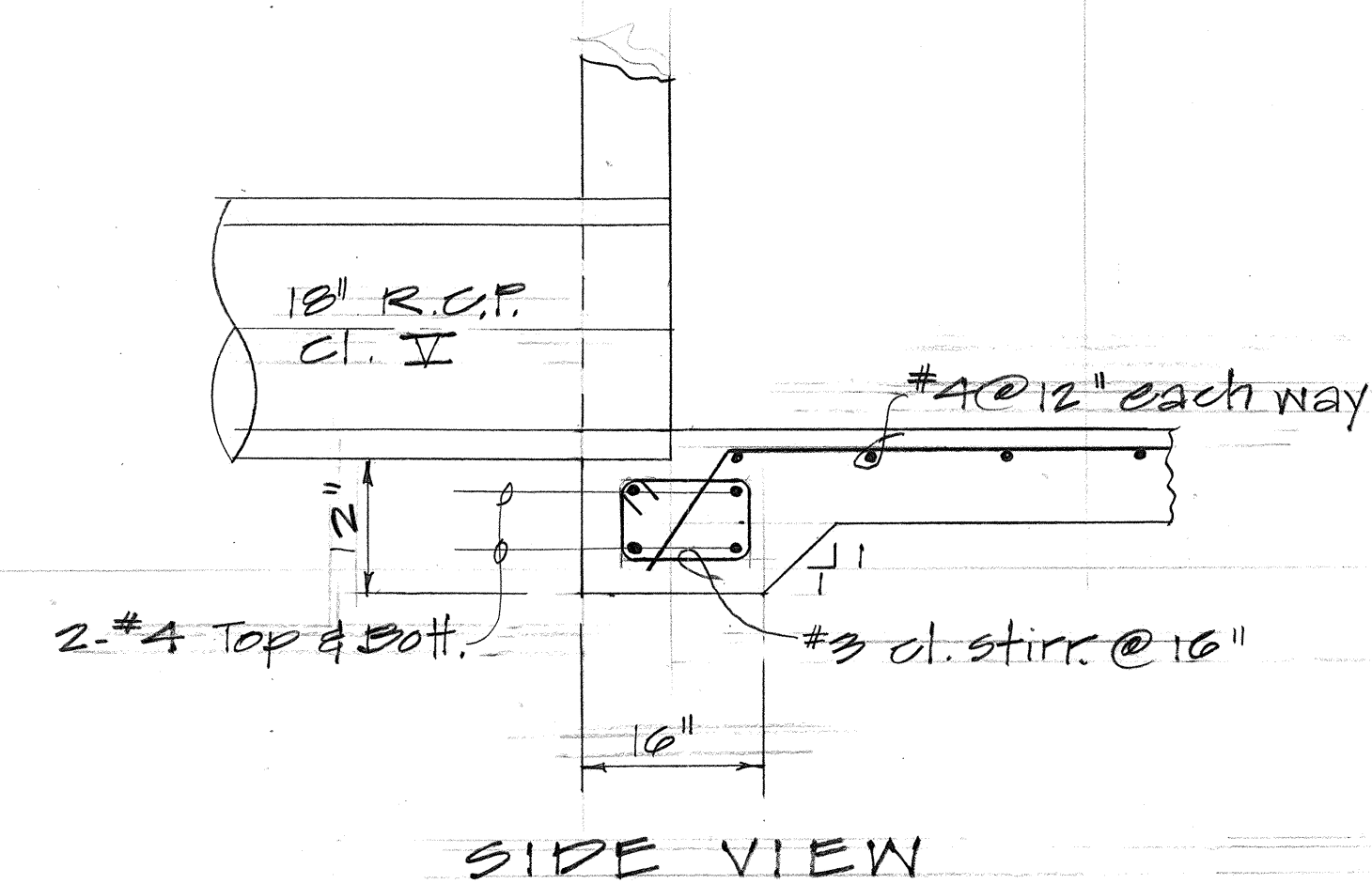


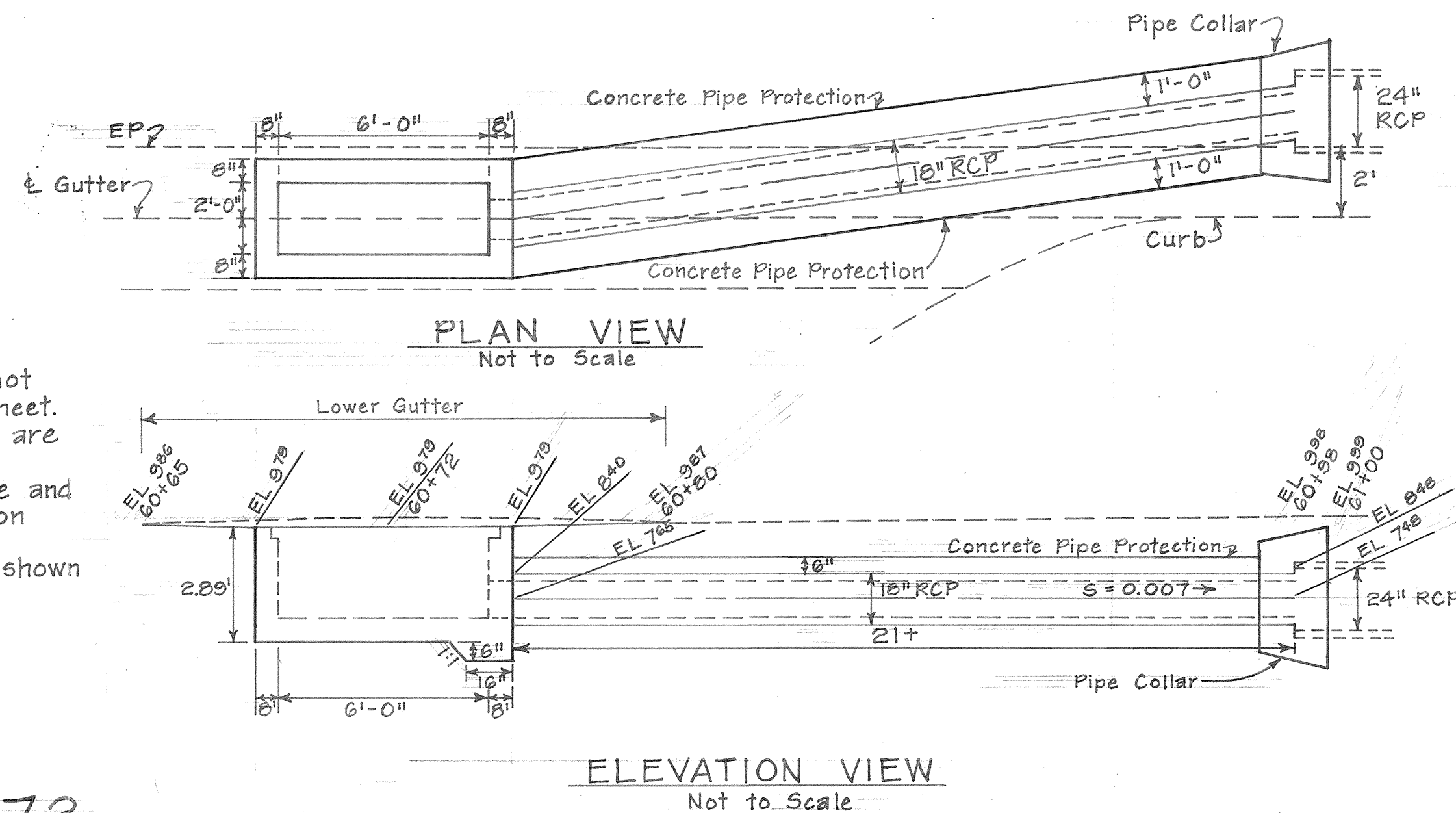
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-092-1(15)	1980	00215-1	21



REINFORCED CONCRETE PIPE COLLAR

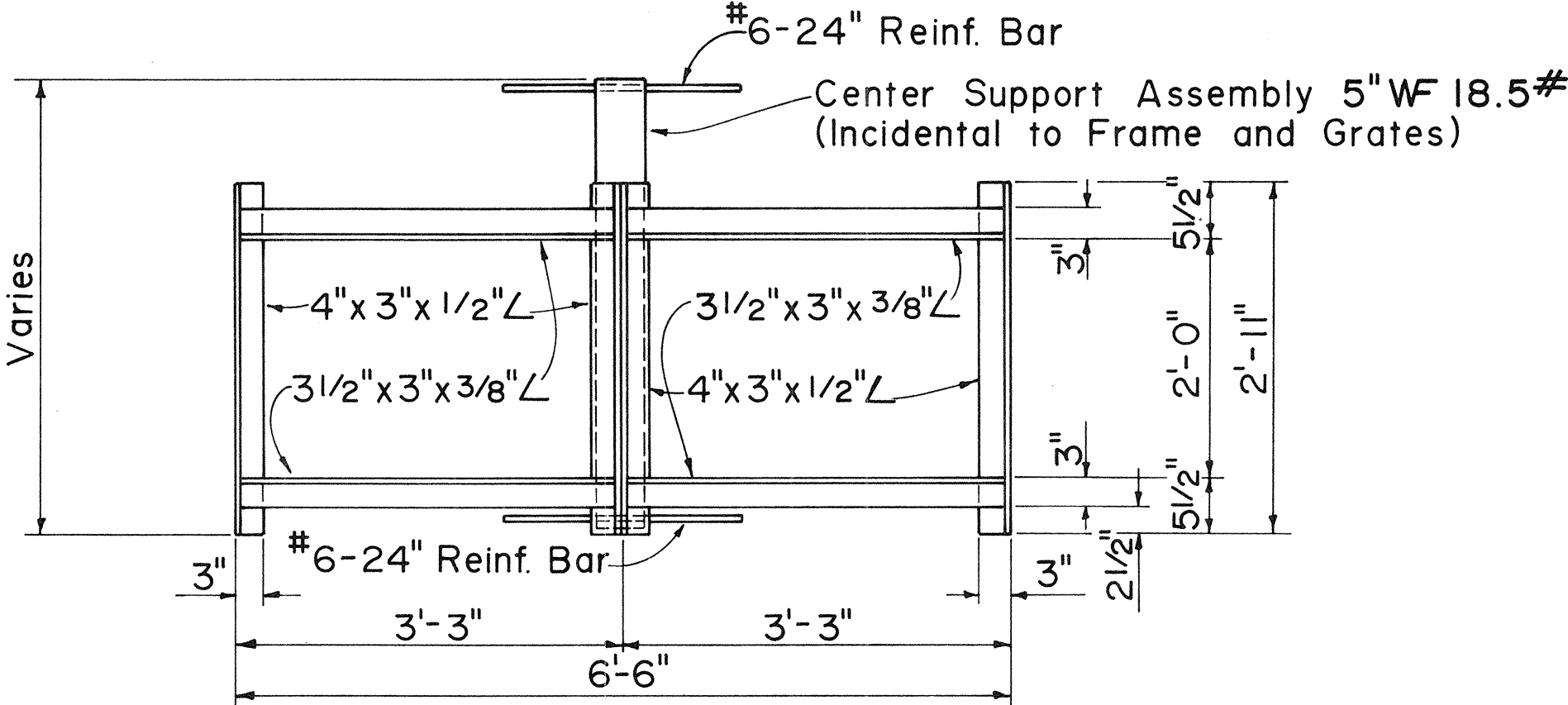


- NOTE:
1. Location of steel not shown. See this sheet.
 2. Elevations shown are relative.
 3. See A12-B Frame and Grate. Details on this sheet.
 4. Lower gutter as shown above.



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-002-1(15)	1981	C0215-2	21

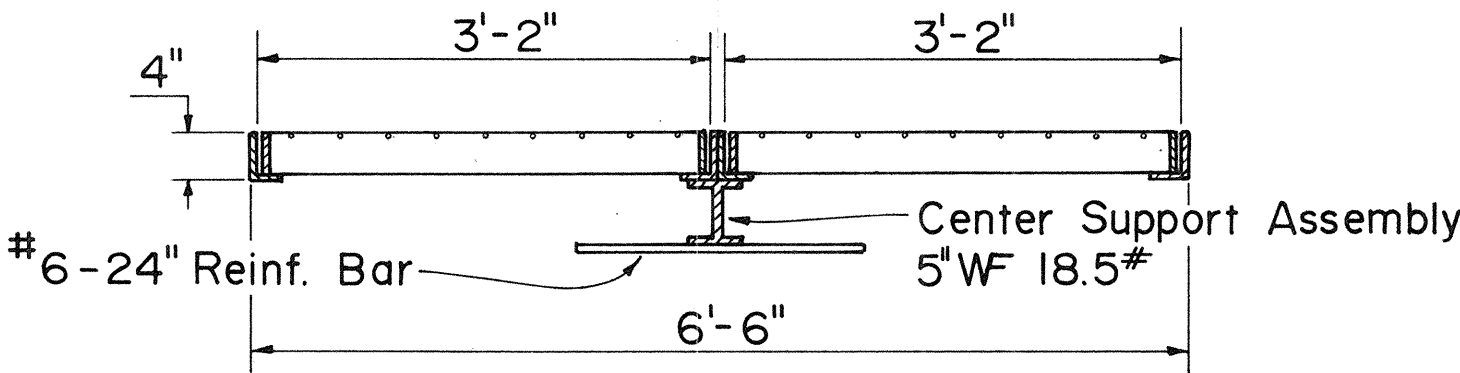
NOTE:
1. All welds $\frac{3}{8}$ " unless otherwise noted.



PLAN

(Two or More Grates)

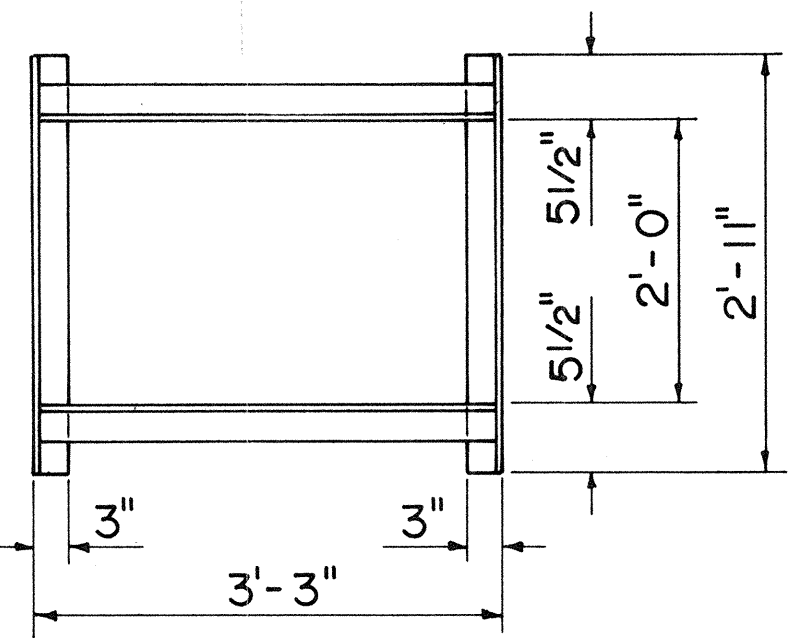
Scale: $\frac{3}{4}$ " = 1'-0"



LONGITUDINAL SECTION

(Thru Frame & Grate)

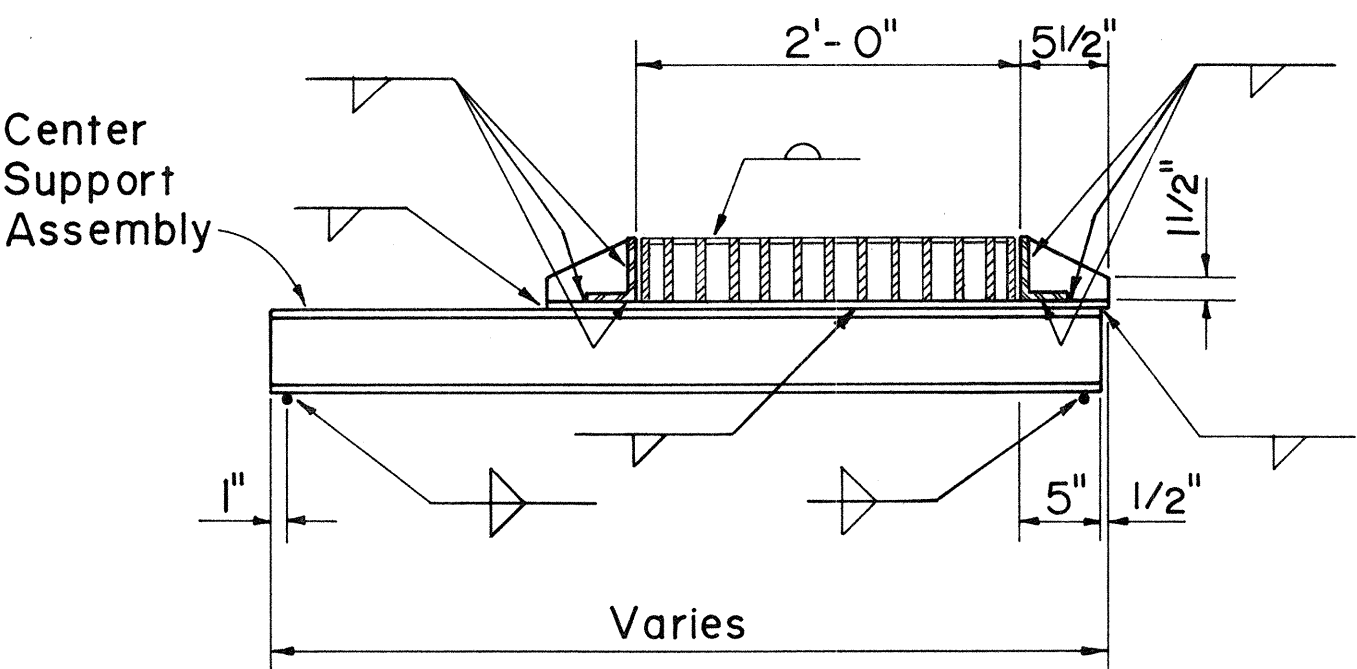
Scale: $\frac{3}{4}$ " = 1'-0"



PLAN

(Single Grate)

Scale: $\frac{3}{4}$ " = 1'-0"

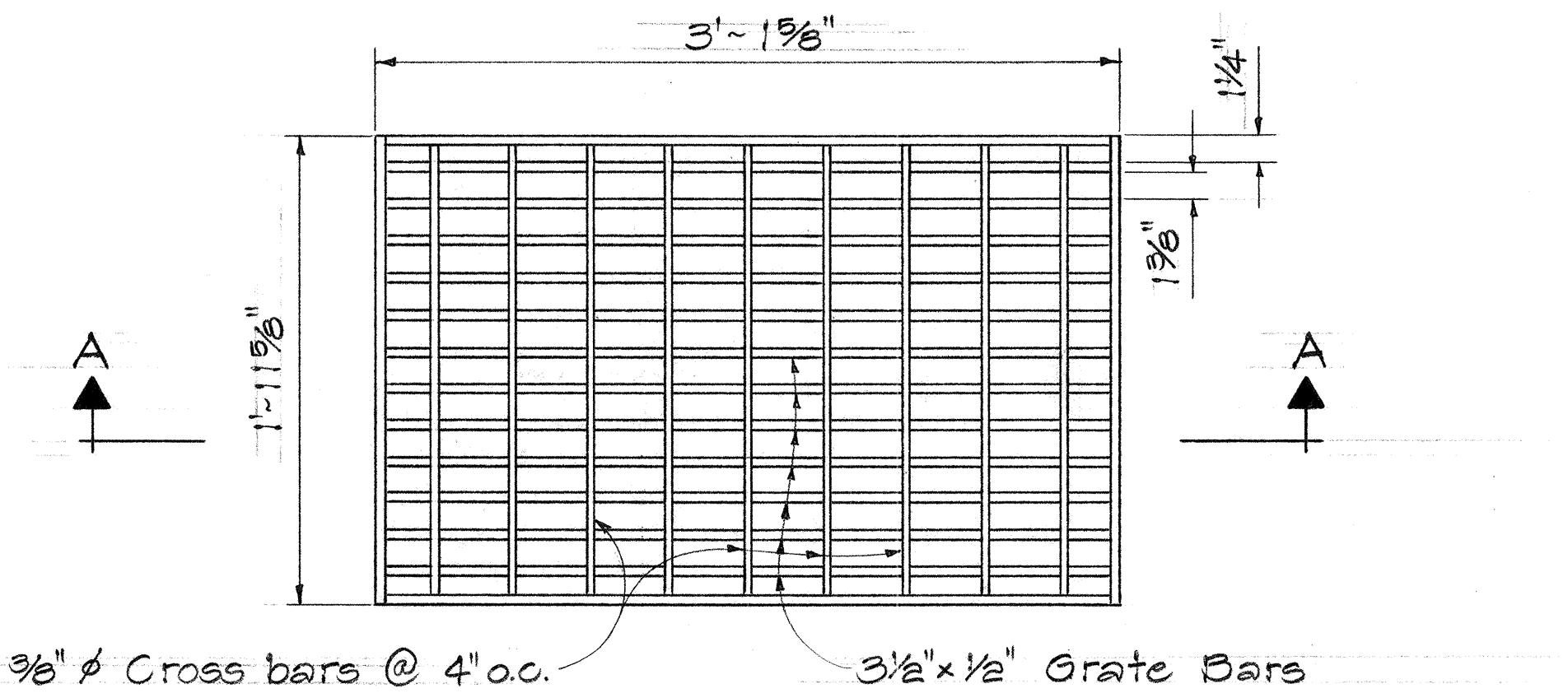


CROSS SECTION

(Thru Frame & Grate)

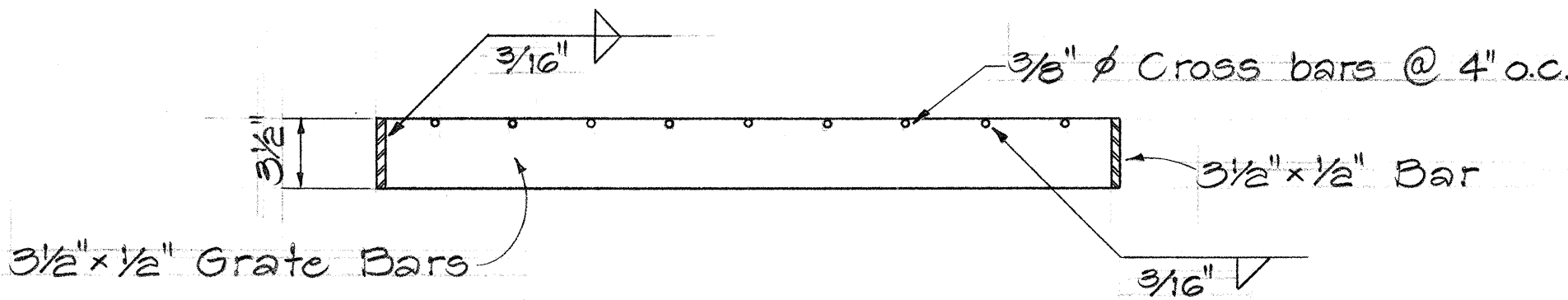
Scale: 1" = 1'-0"

FRAME DETAILS



PLAN

Scale: 1 1/2" = 1'-0"



SECTION "A-A"

Scale: 1 1/2" = 1'-0"

GRATE DETAILS

ORIGINAL PLAN	DATE
DRAWN BY	
TRACED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
NO.	

2/19/81	Details of A-12-B Frame and Grates
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
DRAINAGE DETAILS
OF
A-12-B FRAMES AND GRATES
ALA MOANA BLVD. RESURFACING
KEAWE ST. TO ALA WAI CANAL BRIDGE
PROJ. NO. F-002-1(15)
Scale: As Noted Date: Feb. 1981

SHEET NO. OF SHEETS

C0 215-2