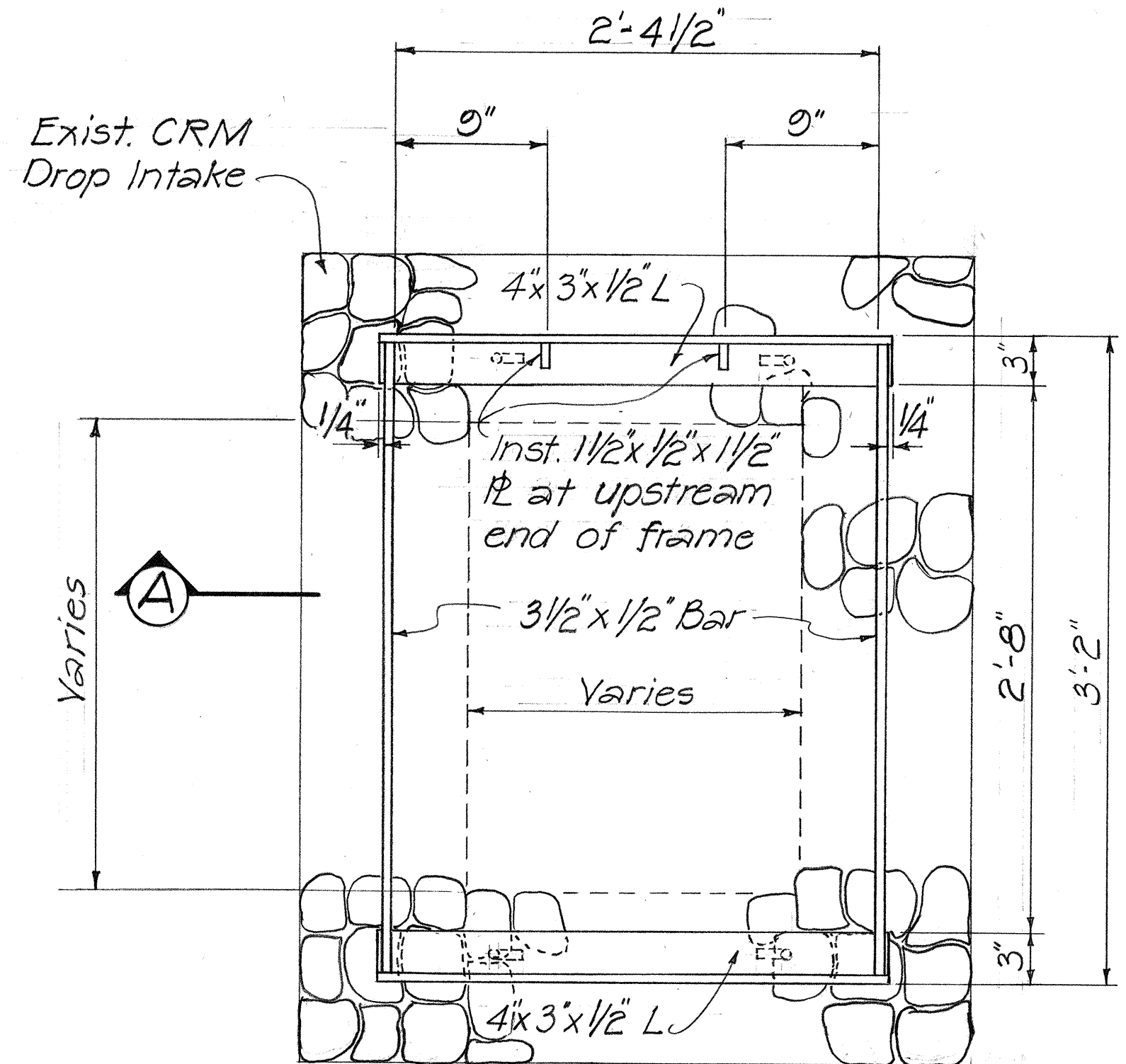
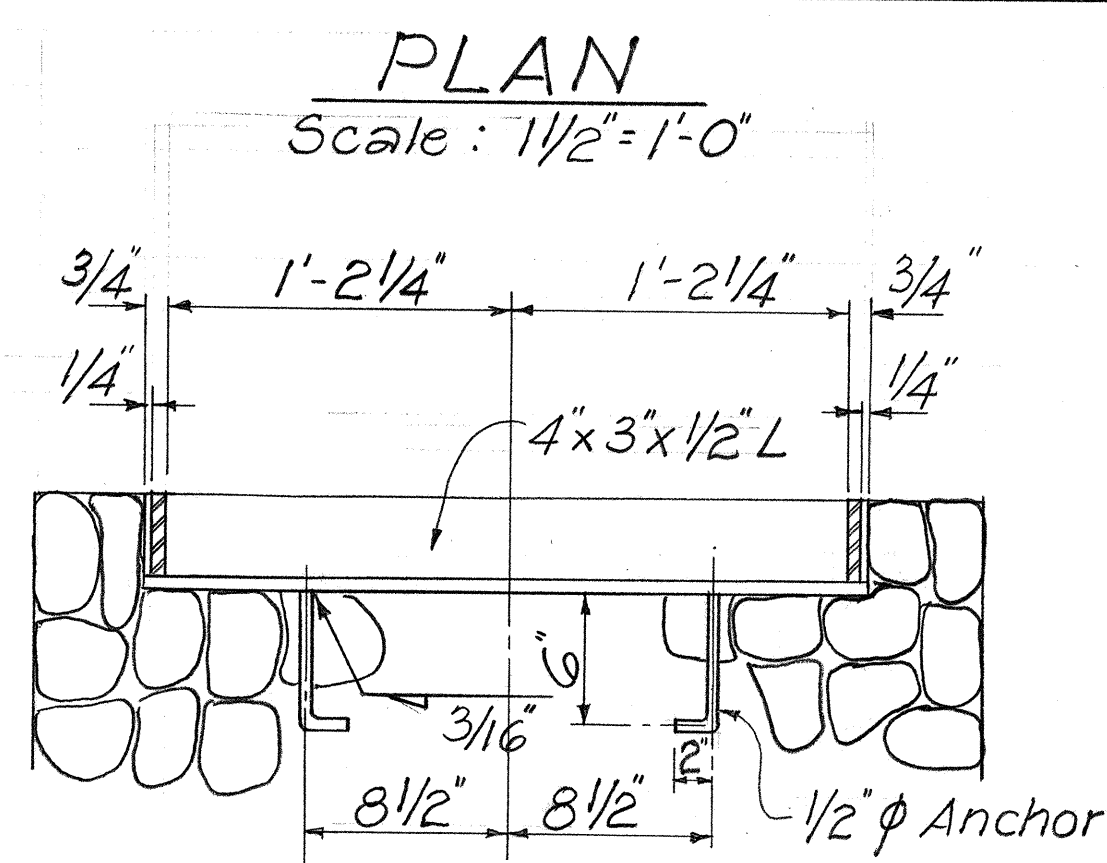


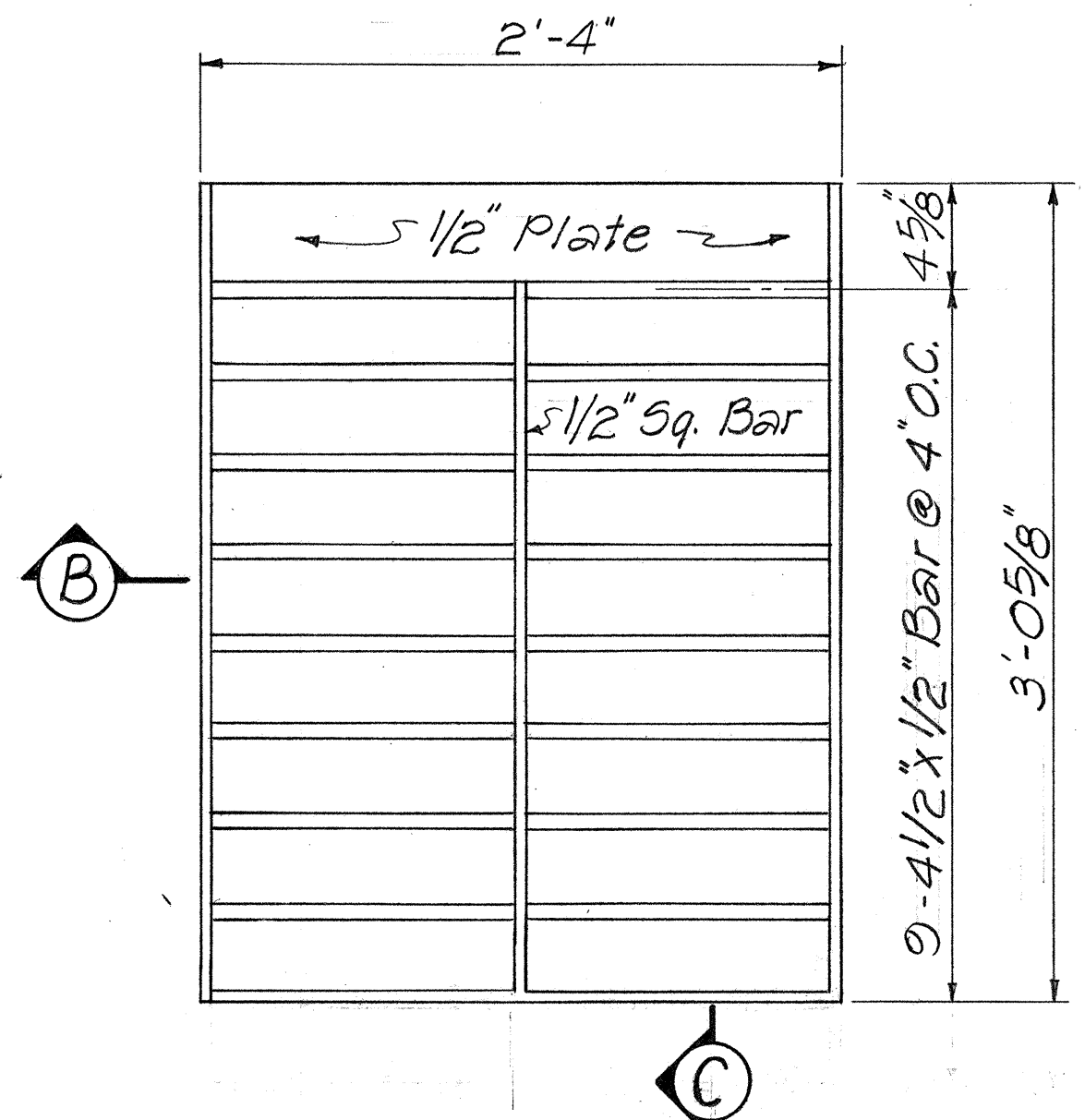
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	37D-01-75	1978	7	24



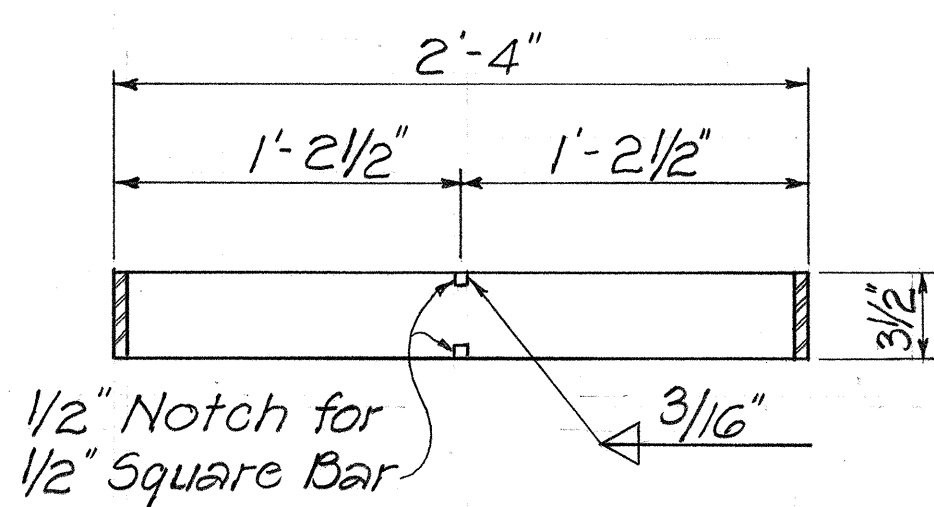
EXISTING CRM DROP INTAKE



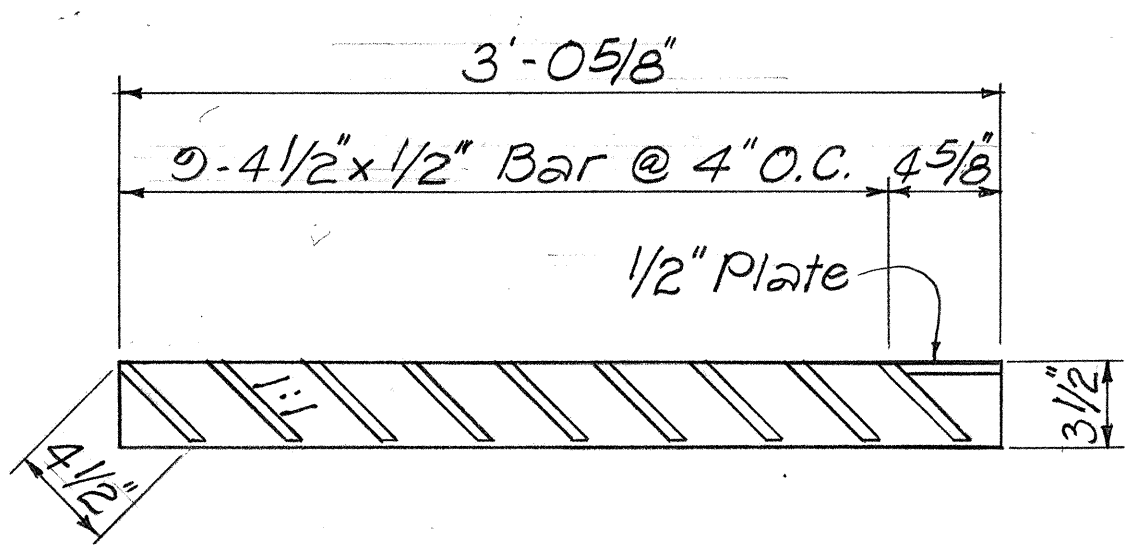
SECTION "A"
Scale: 1 1/2" = 1'-0"



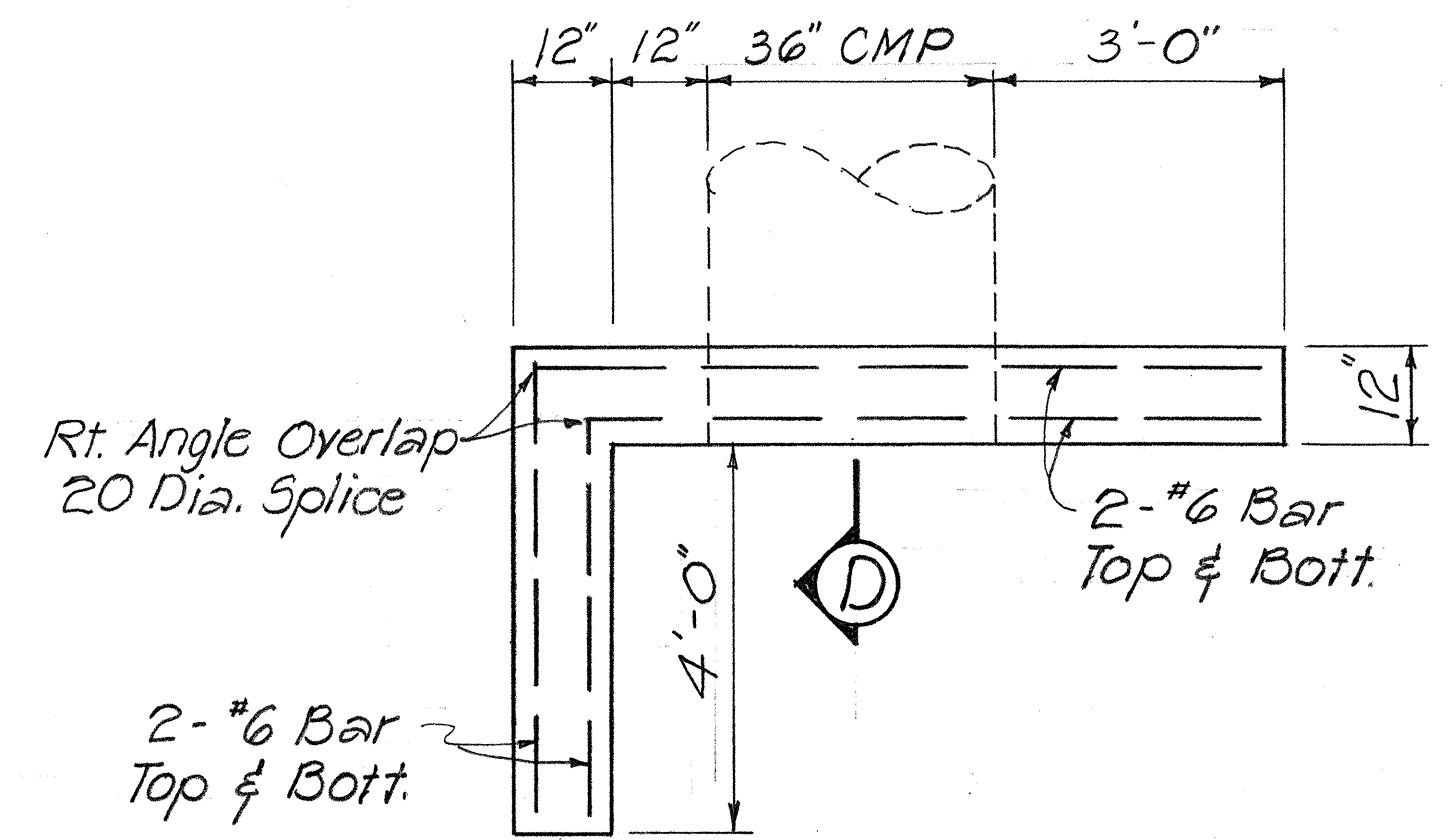
PLAN
Scale: 1 1/2" = 1'-0"



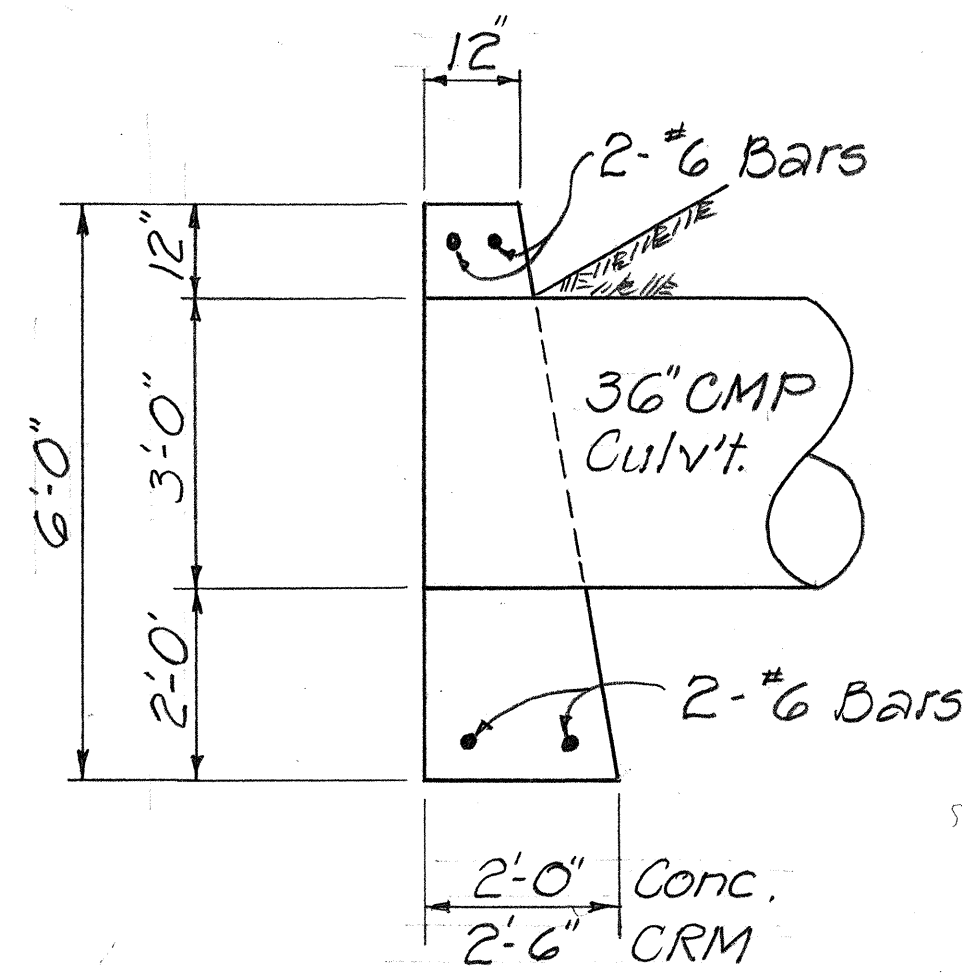
SECTION "B"
Scale: 1 1/2" = 1'-0"



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



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



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

DETAIL OF HEADWALL
Scale as shown
STA. 66+62 Rt.

NOTES :

1. Grates and Frames shall be hot dip galvanized after fabrication. See Specification.
2. All welds 3/8" unless otherwise noted.
3. The Frame and Grate materials conform to the specifications of ASTM Designation Structural Steel A 283, Grade D and the Standard Specifications.
4. Finish grade elevations of CRM Drop Intake to be reconstructed are designated on plans, height on top of grating from existing pipe inverts.

DETAILS OF TYPE 61614-45° FRAME AND GRATES
Scale: As Shown

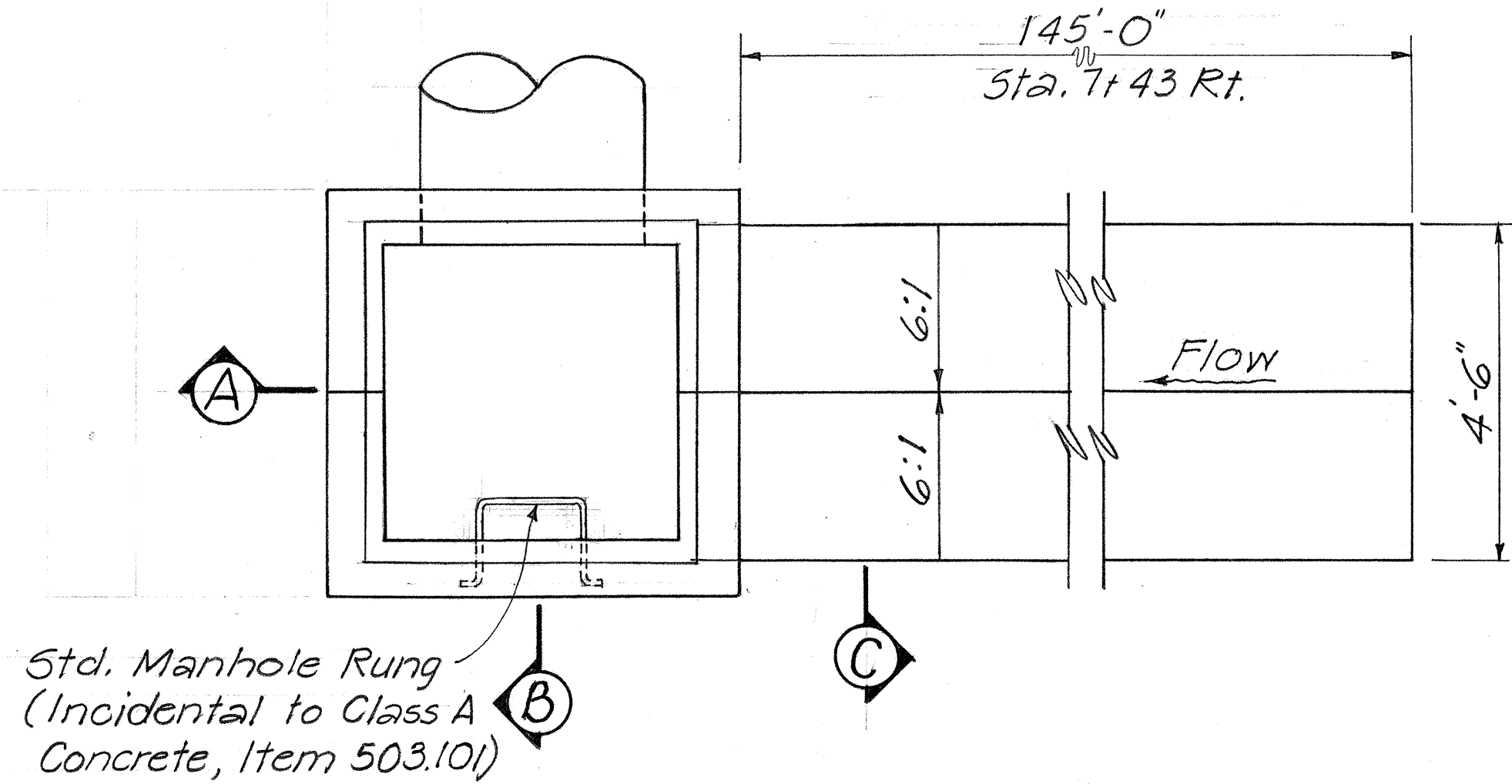
STA. 26+00 Rt.
STA. 39+50 Rt.
STA. 117+35 Rt.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

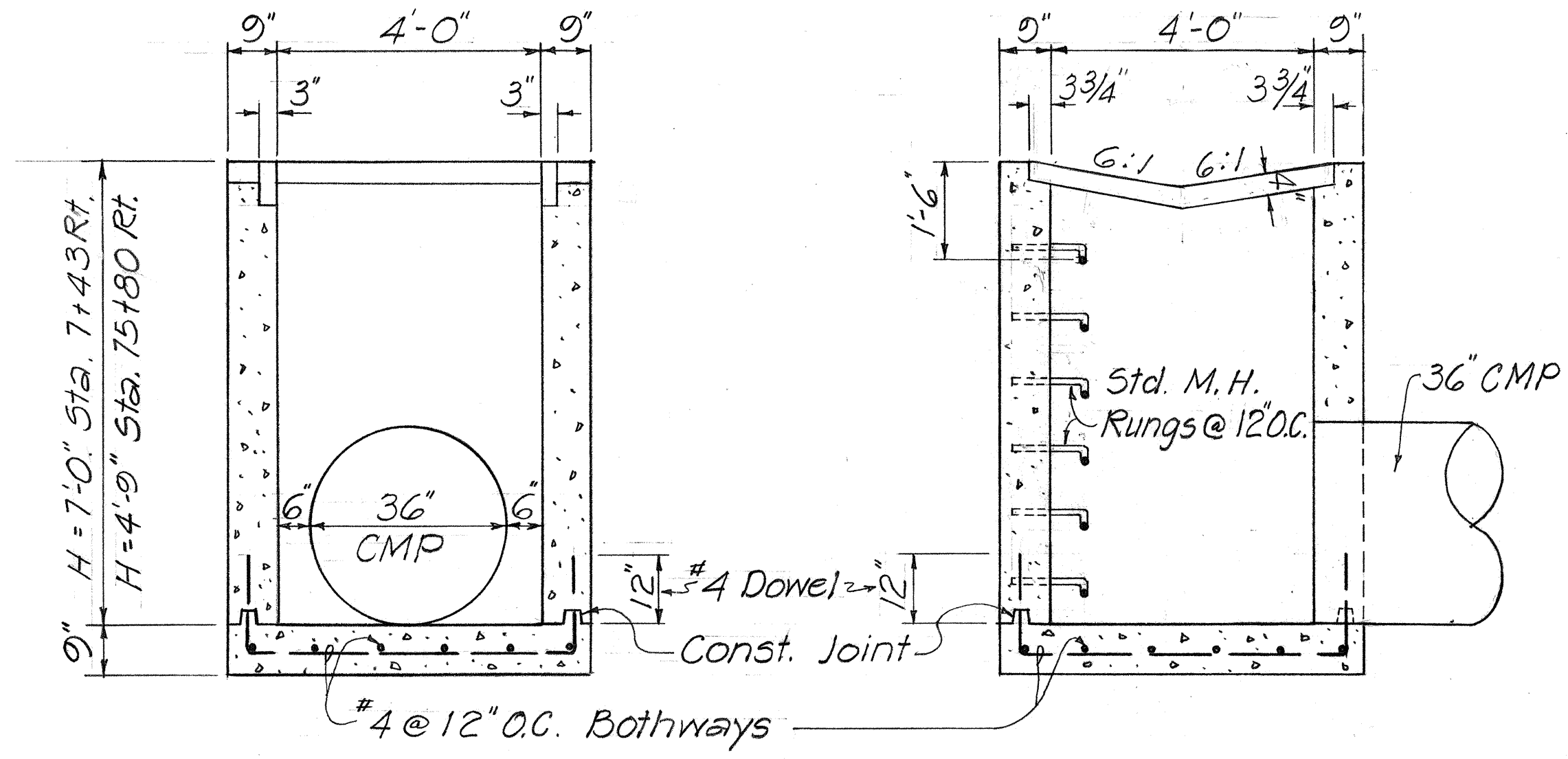
DRAINAGE DETAILS
CRM DROP INTAKE, FRAME AND GRATE, AND HEADWALL
KULA HIGHWAY
PROJ. NO 37D-01-75
SCALE: AS SHOWN
JULY 1976
SHEET NO. 1 OF 3 SHEETS

ORIGINAL PLAN	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
NOTED BY	
NO.	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	37D-01-75	1978	8	24

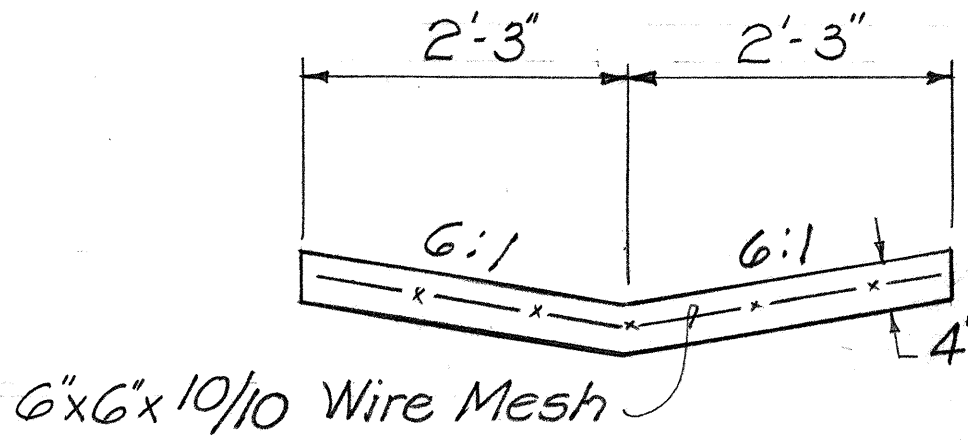


PLAN
Scale: 1/2"=1'-0"



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

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

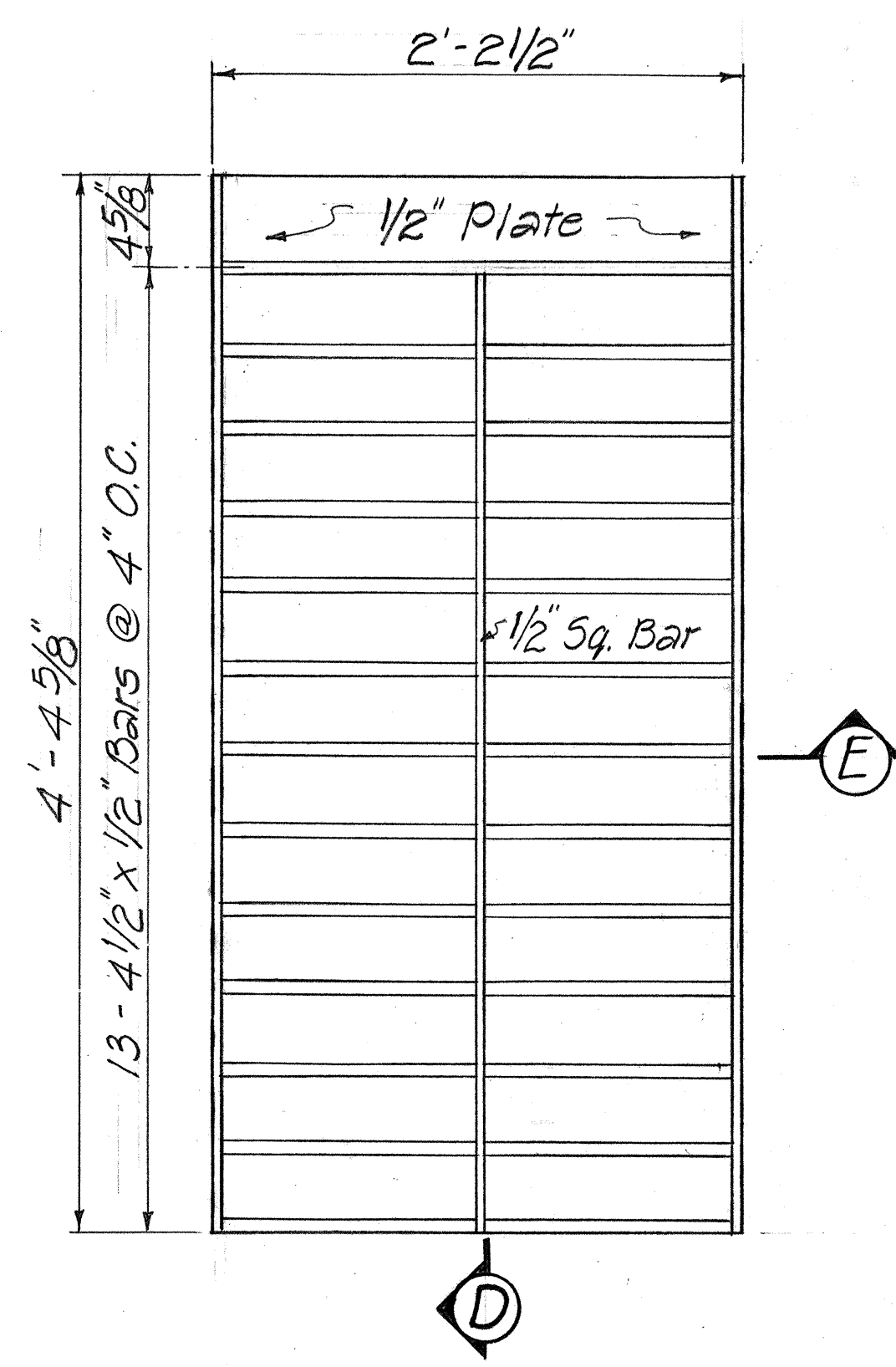


SECTION "C"
Scale: 3/4"=1'-0"

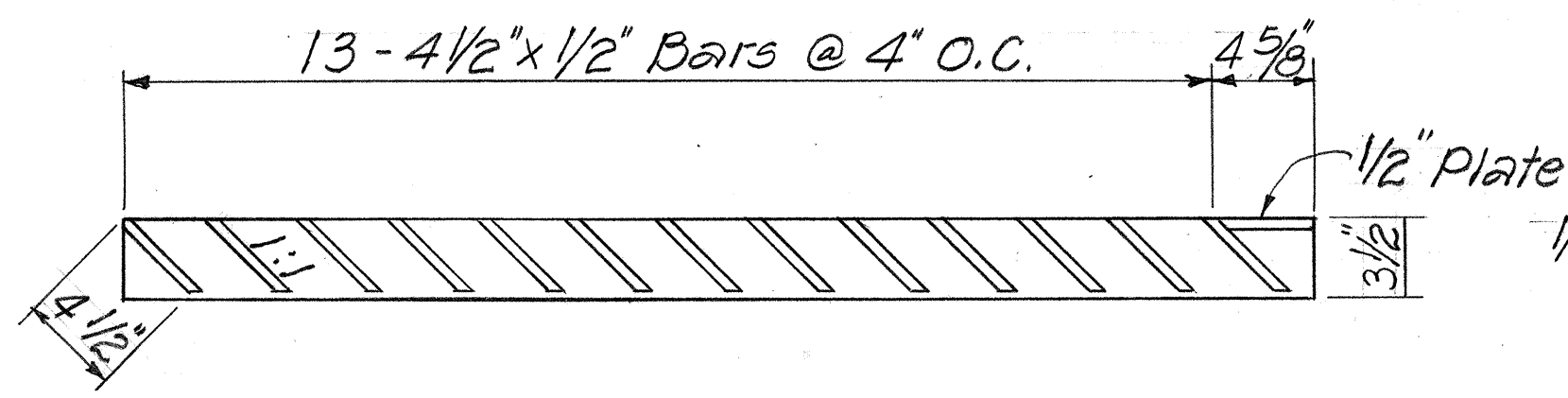
GUTTER NOTES

- Concrete shall be Class B with a thickness of 4".
- Wire Mesh Reinforcement shall be 6"x6"x10/10 and shall be considered to be incidental to gutter.
- For additional requirements, see Section 609 of the Specifications.

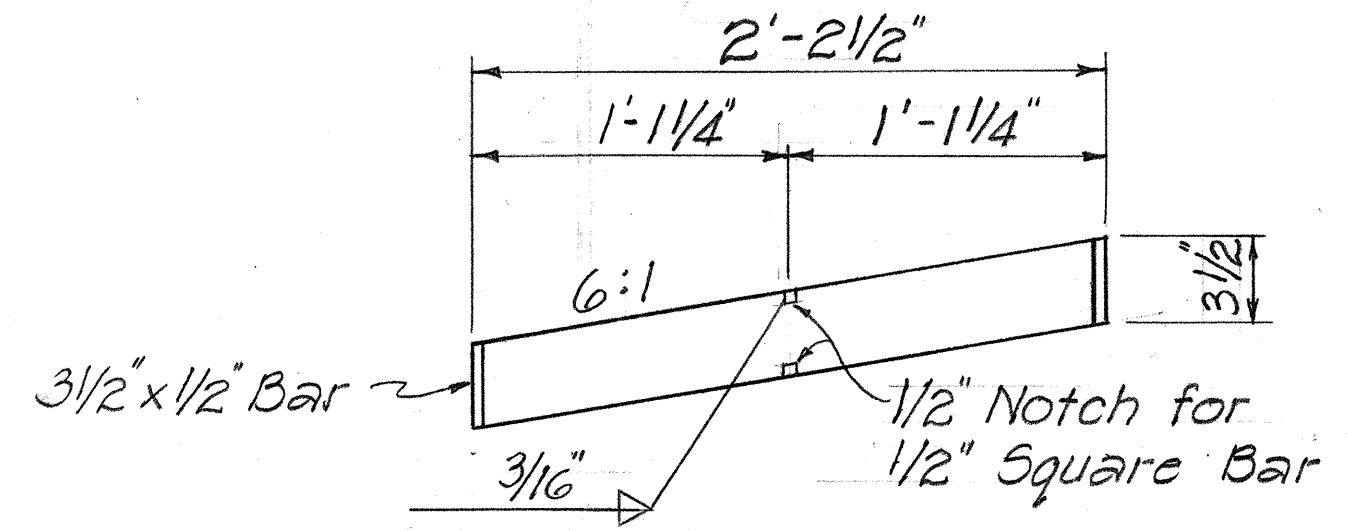
CONC. DROP INTAKE AT
STA. 7+43 RT. W/ GUTTER
STA. 75+80 RT. WITHOUT GUTTER



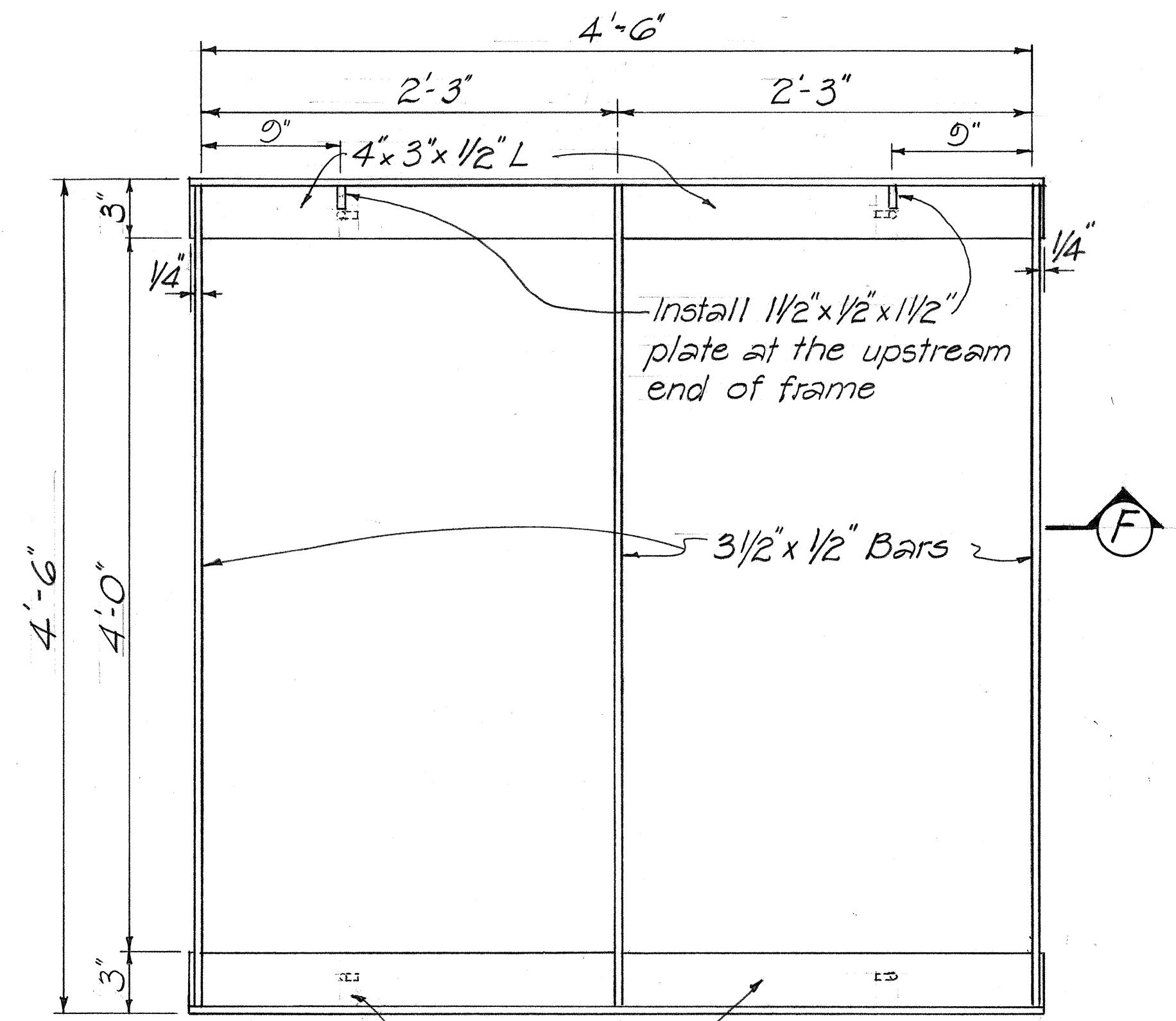
PLAN - GRATE
Scale: 1/2"=1'-0"



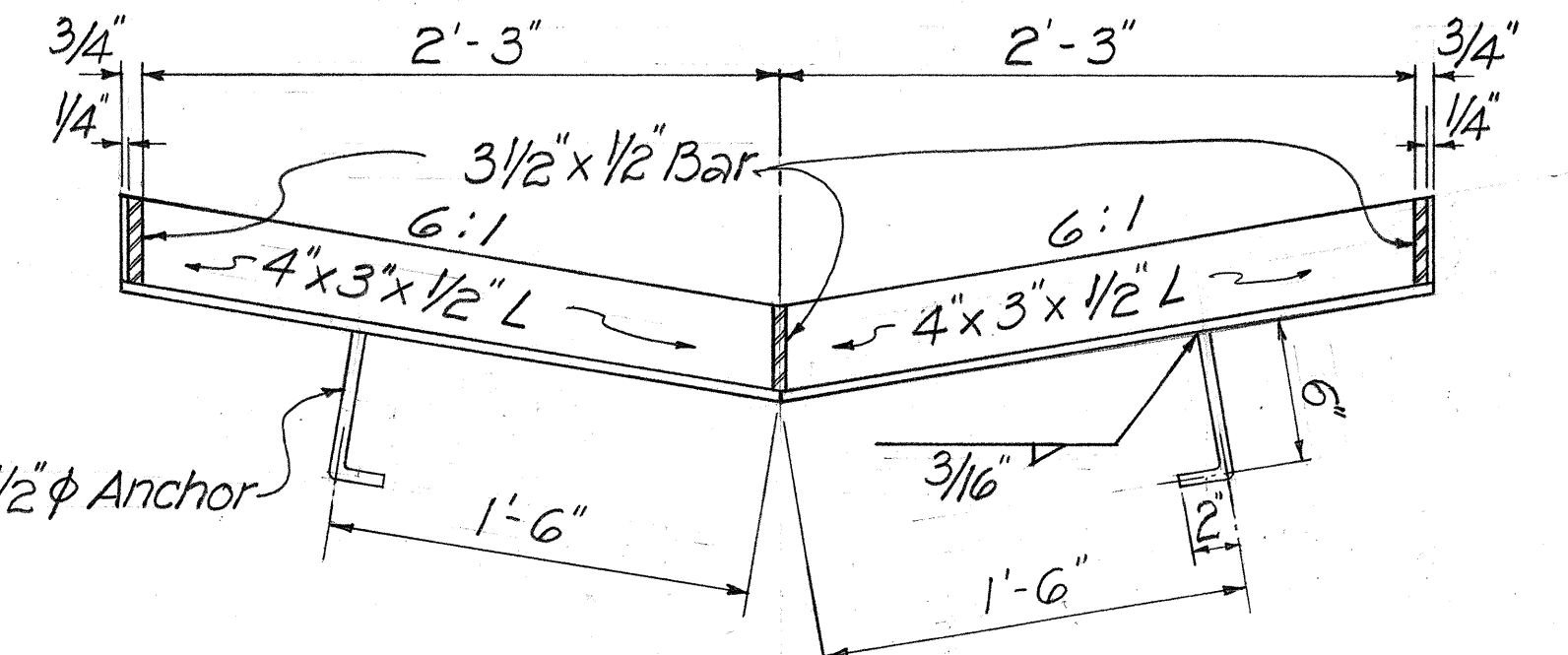
SECTION "D"
Scale: 1/2"=1'-0"



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



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



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

NOTES

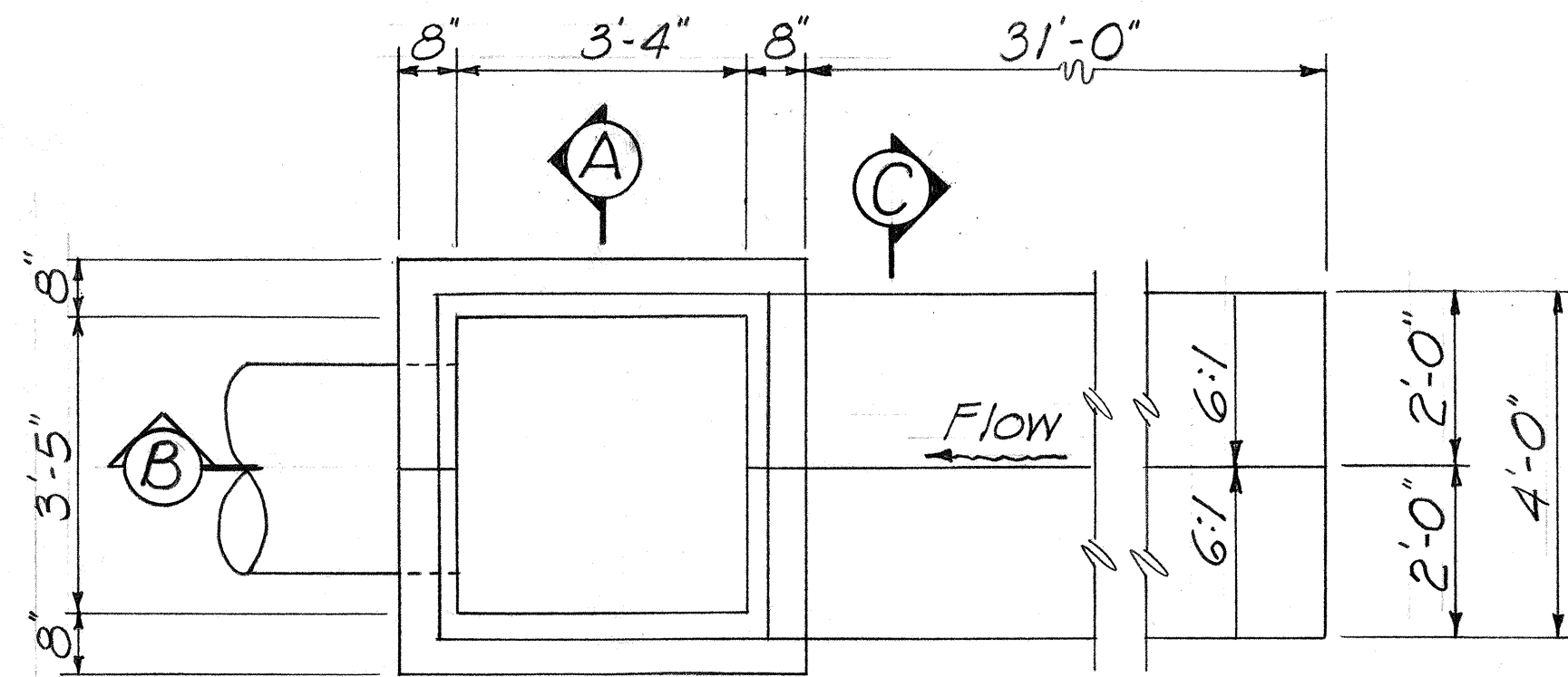
- All concrete shall be Class A unless otherwise noted.
- Exposed edges of all drainage structures shall be chamfered one inch.
- Culvert shall enter and leave Drop Intake from any position and in the direction indicated by the plans or ordered by the Engineer.
- Manhole Rungs (12" o.c.) are required when "H" is greater than 4'-6". Only one rung (16" from the bottom) is required if "H" is 4'-6" or less. Manhole Rungs may be placed at any location as ordered by the Engineer.
- See sht. No. 7 for additional Notes.
- All reinforced steel to be incidental to Class A Concrete, Item 503.101 or Class B Concrete, Item 503.201

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

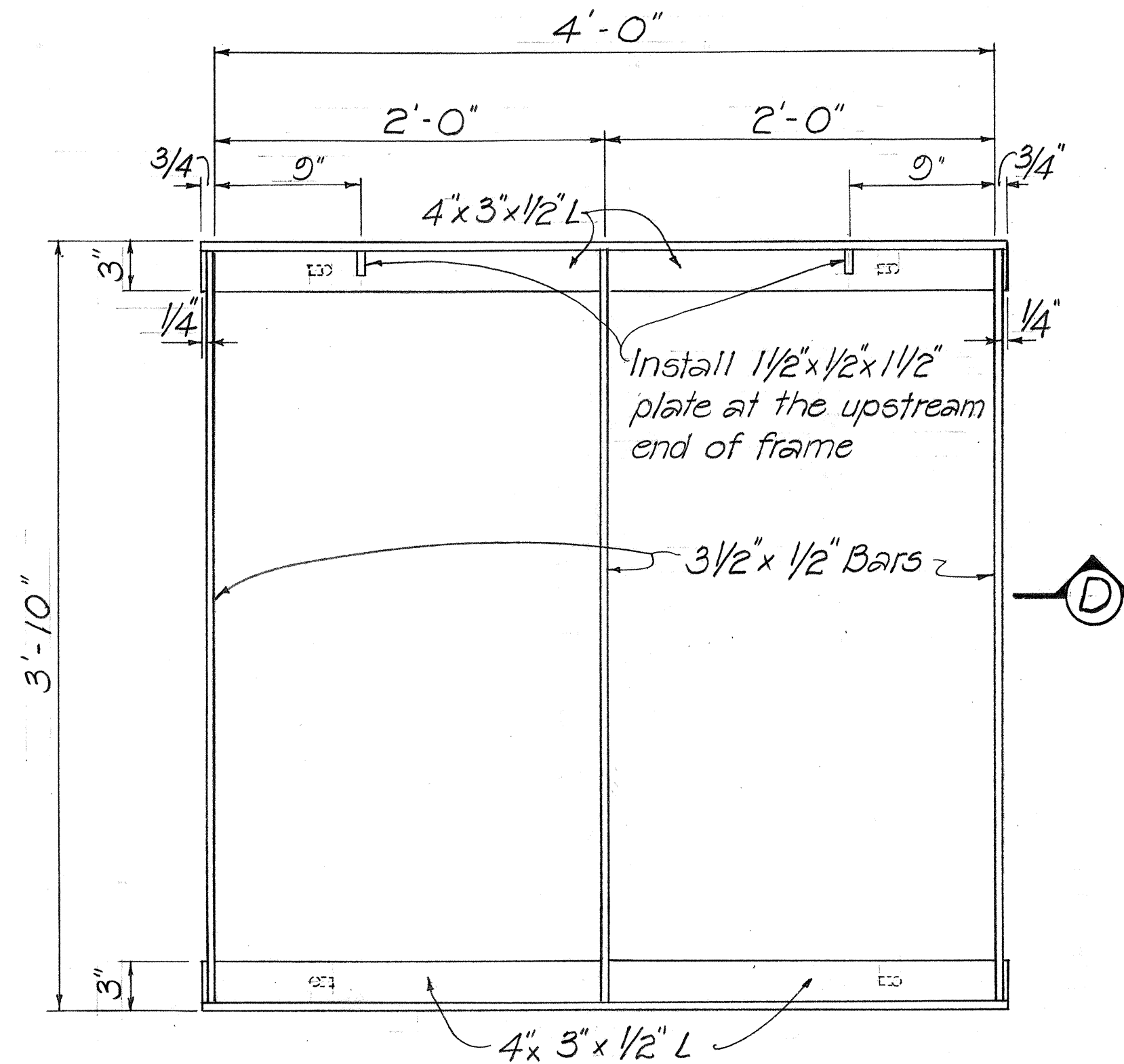
DRAINAGE DETAILS
CONC. DROP INTAKE, FRAME &
GRATE, AND GUTTER
KULA HIGHWAY
PROJ. NO 37D-01-75
SCALE AS SHOWN JULY 1976
SHEET NO. 2 OF 3 SHEETS

DATE	_____
DESIGNED BY	_____
CHECKED BY	_____
NO.	_____

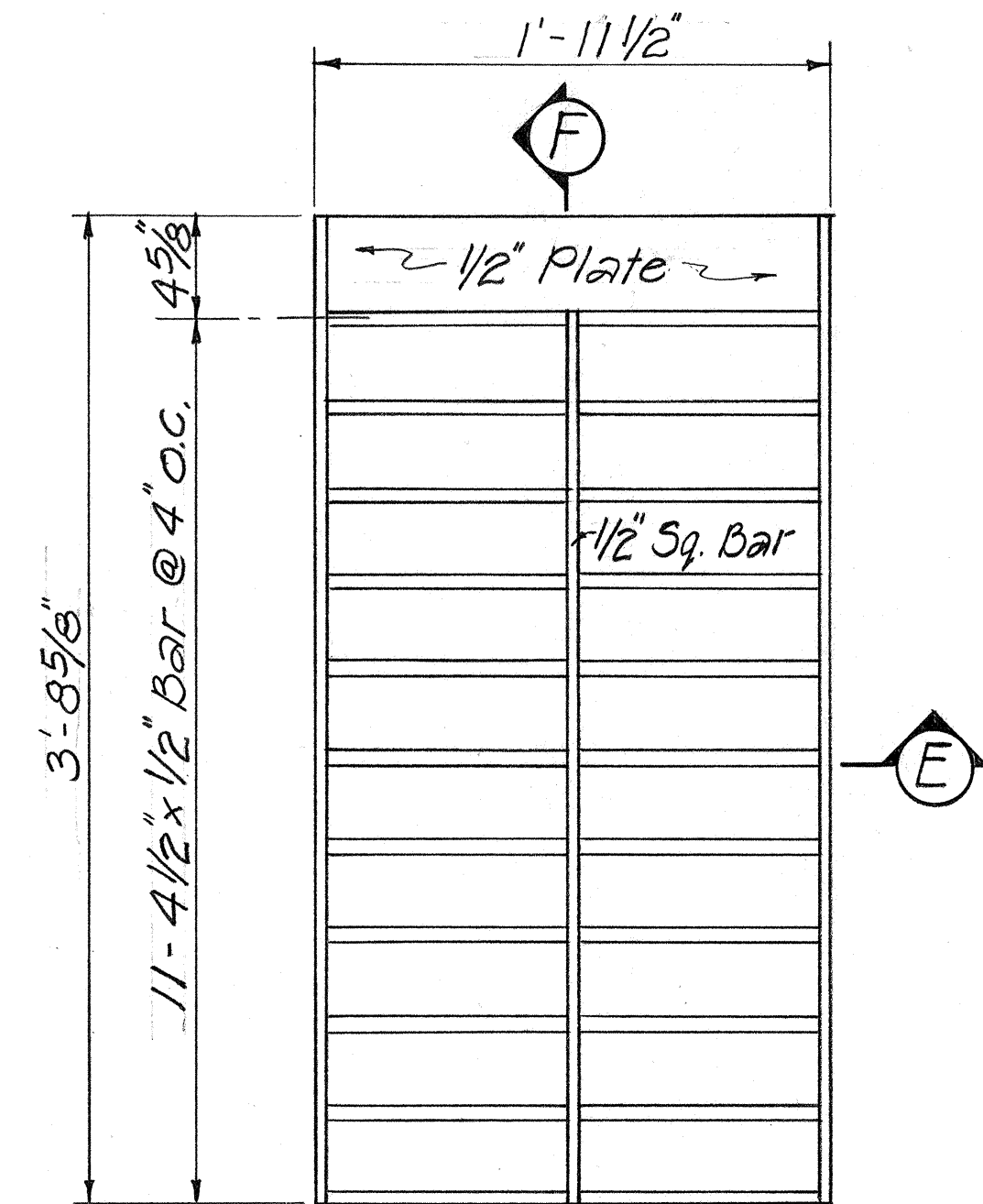
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	37D-01-75	1978	9	24



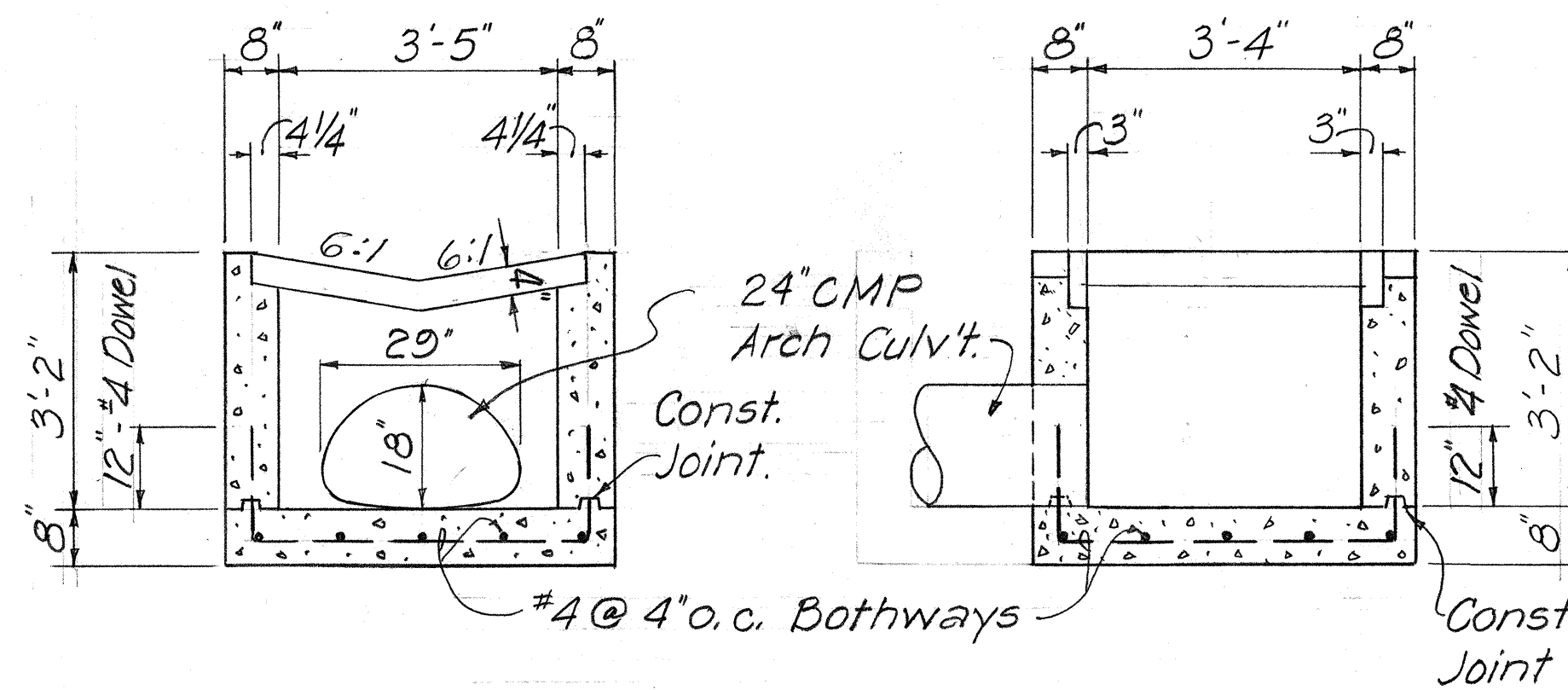
PLAN
Scale: 1/2" = 1'-0"



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

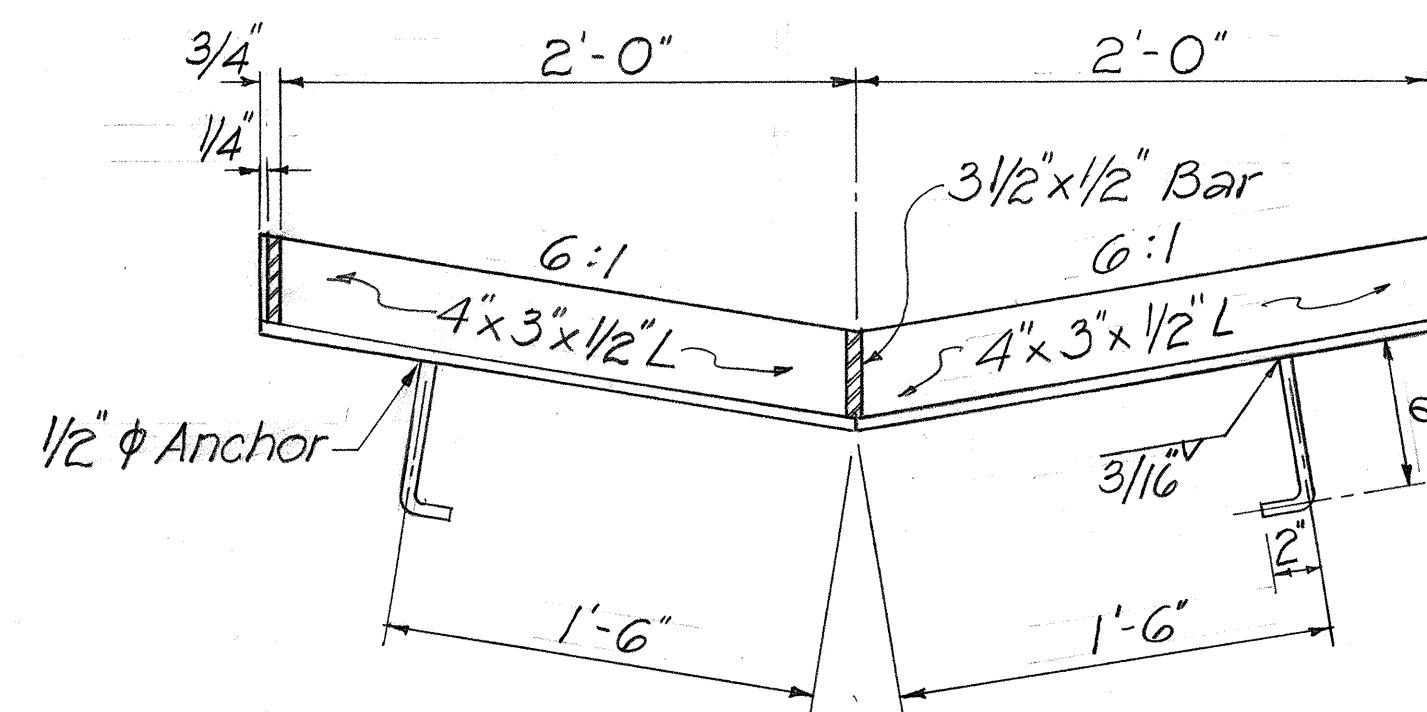


PLAN - GRATE
Scale: 1 1/2" = 1'-0"

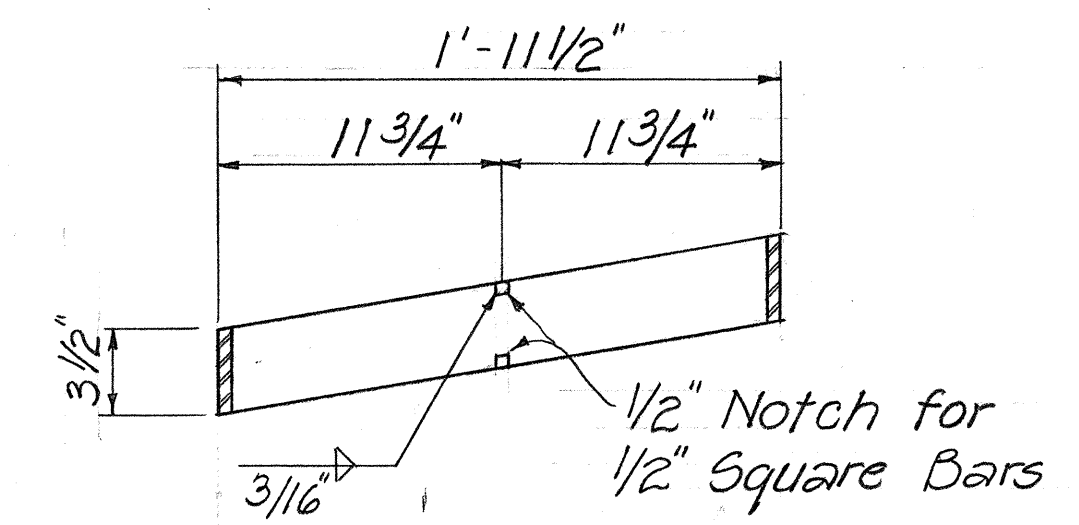


SECTION "A"
Scale: 1/2" = 1'-0"

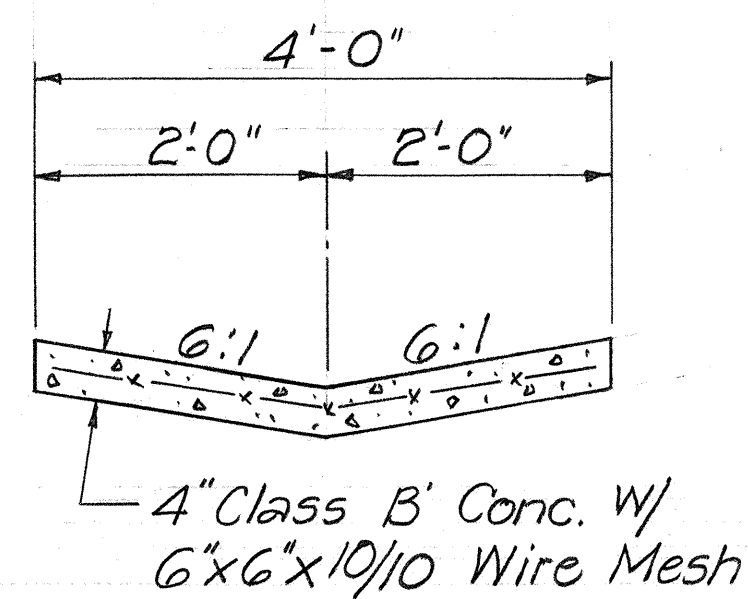
SECTION "B"
Scale: 1/2" = 1'-0"



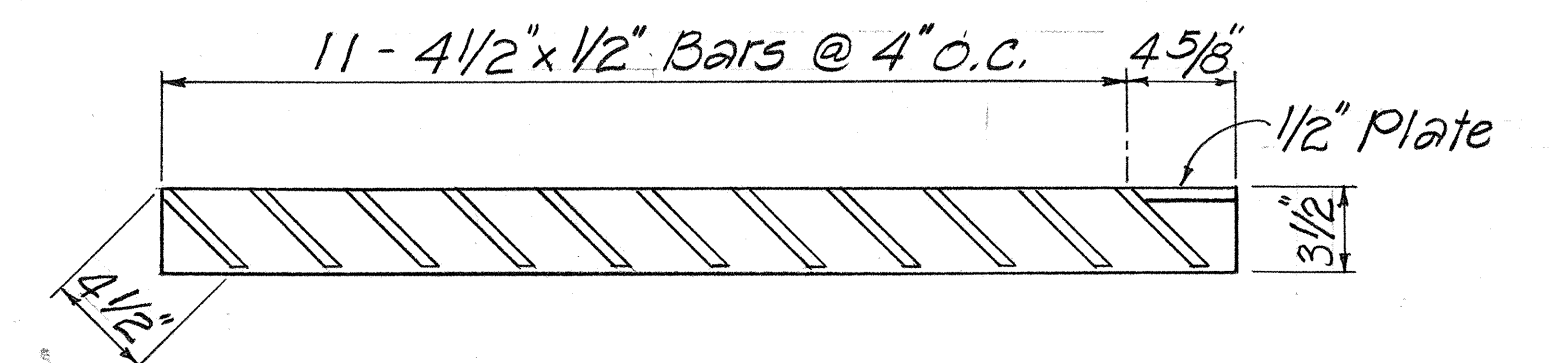
SECTION "D"
Scale: 1 1/2" = 1'-0"



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



SECTION "C"
Scale: 3/4" = 1'-0"



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

CONC. DROP INTAKE W/ FRAME AND GRATE @ STA. 18+84 RT.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
DRAINAGE DETAILS
DROP INTAKE, FRAME & GRATE
KULA HIGHWAY
PROJ. NO 37D-01-75
SCALE: AS SHOWN
AUG. 1976
SHEET NO. 3 OF 3 SHEETS

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