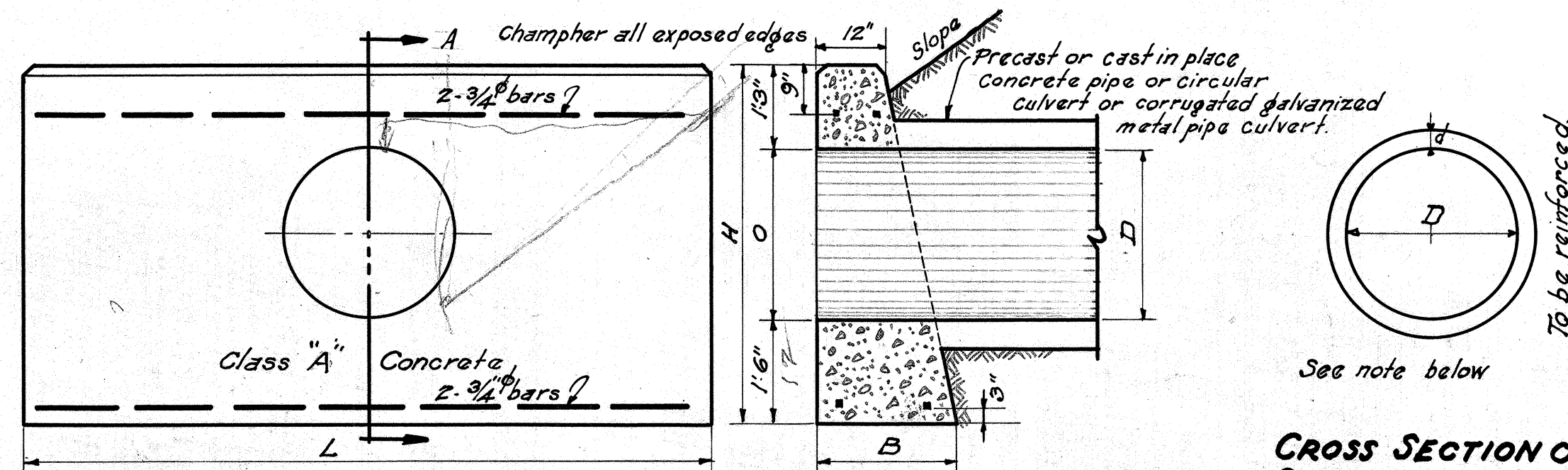
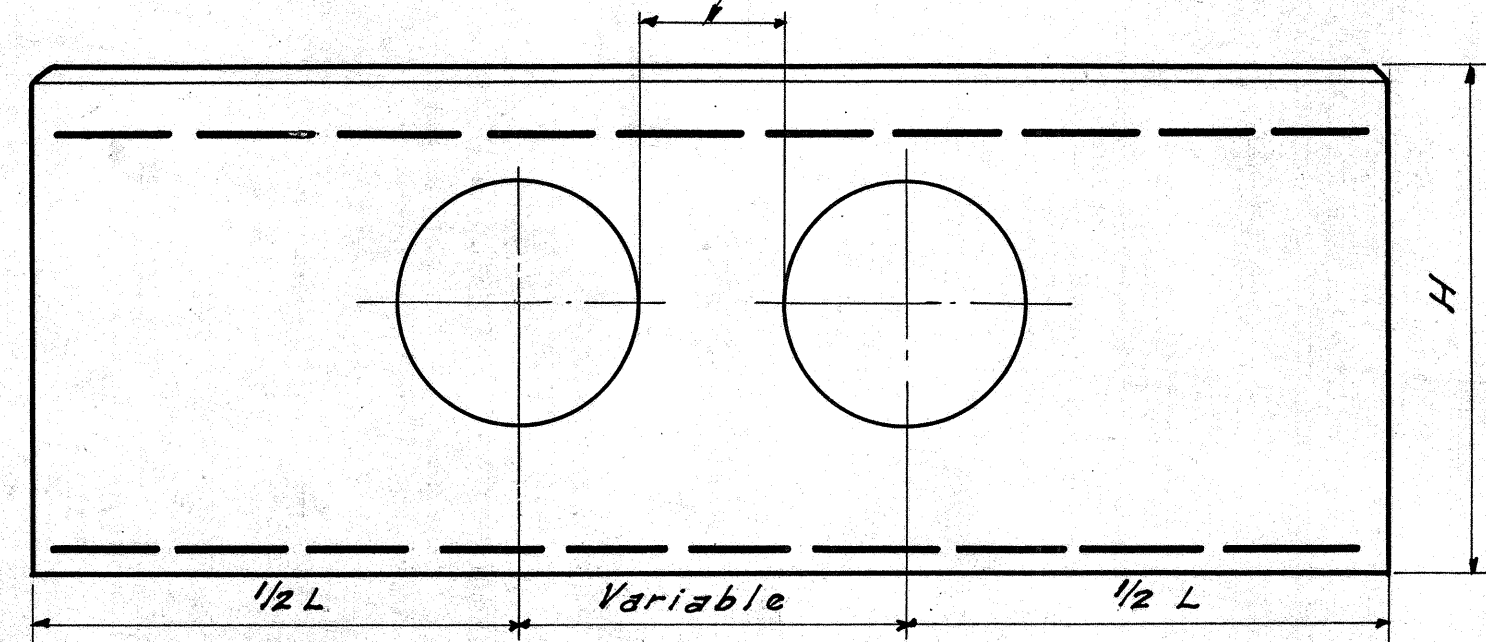




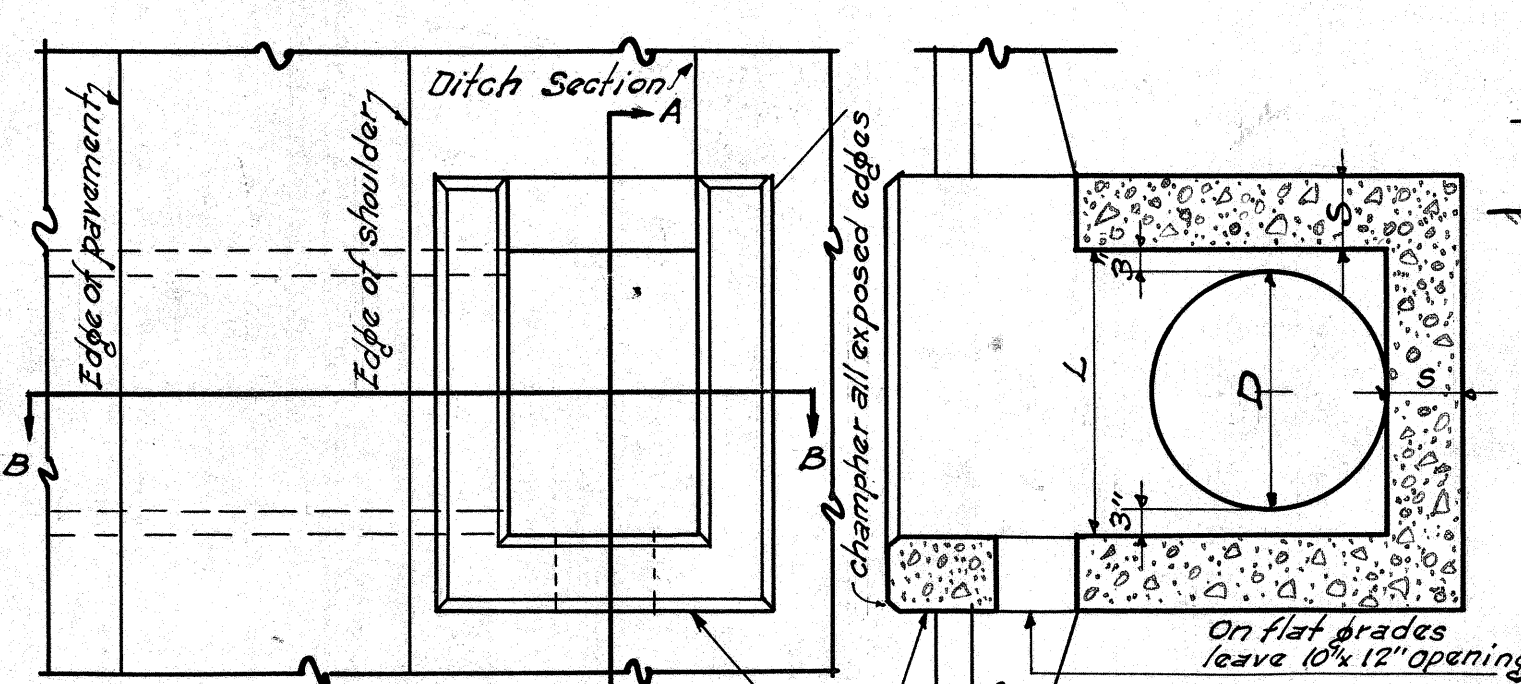
**FRONT ELEVATION
SECTION THRU A-A
STANDARD PRECAST
CONCRETE HEADWALL**
SCALE - 1/2" = 1' FOOT

SCALE 1" = 1'-0"									
DATA - STANDARD CONCRETE HEADWALL					STEEL ONE H.W.				
D	B	L	H	O	CONC. ONE H.W.	Nº BARS	SIZE	LENGTH	WT. LB.
18"	1'-6"	6'-6"	4'-3"	18"	1.14 Cu.Yds.	4	3/4"	6'-0"	36.5
24"	1'-6"	8'-0"	4'-9"	24"	1.53 " "	4	3/4"	7'-6"	45.6
30"	2'-0"	10'-0"	5'-3"	30"	2.48 " "	4	3/4"	9'-6"	57.8
36"	2'-0"	12'-0"	5'-9"	36"	3.46 " "	4	3/4"	11'-6"	69.9

Use dimension which will give 12" clear between outside of pipes used



**FRONT ELEVATION
STANDARD CONCRETE HEADWALLS
ADAPTED TO DOUBLE PIPES**



DATA STD DROP INTAKE

D	D	L-D+6"	S	Cu. Yds.	Where Variable equals
22 1/2	18"	2'-0"	8"	1.10	4'-6"
29	24"	2'-6"	8"	1.33	5'-0"
35 1/2	30"	3'-0"	9"	1.79	5'-6"
42	36"	3'-6"	9"	2.07	6'-0"

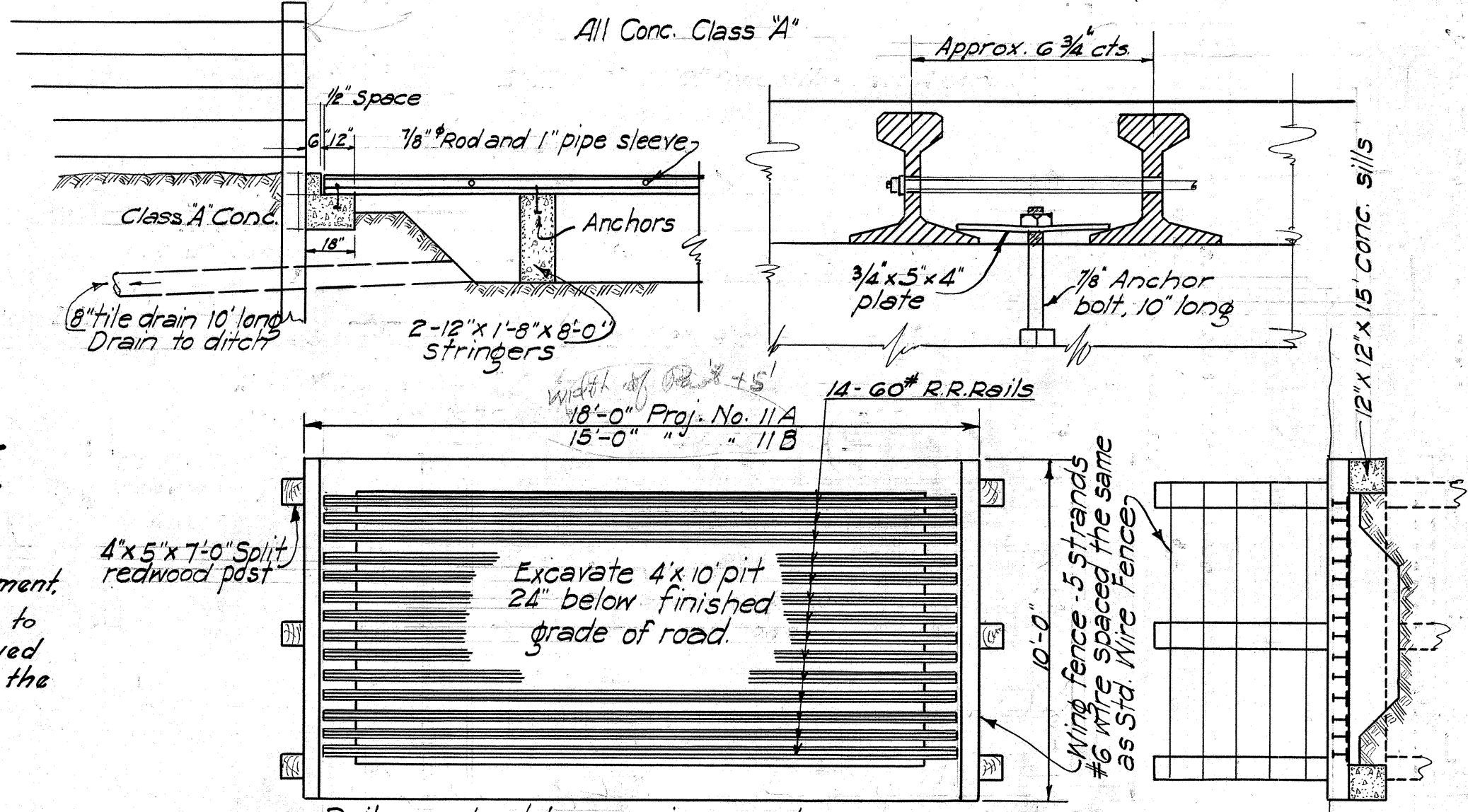
Note: Dimension "x" is assumed as 2'-4" in figuring the above quantities

Class "A" Concrete
2 in. Maximum aggregate

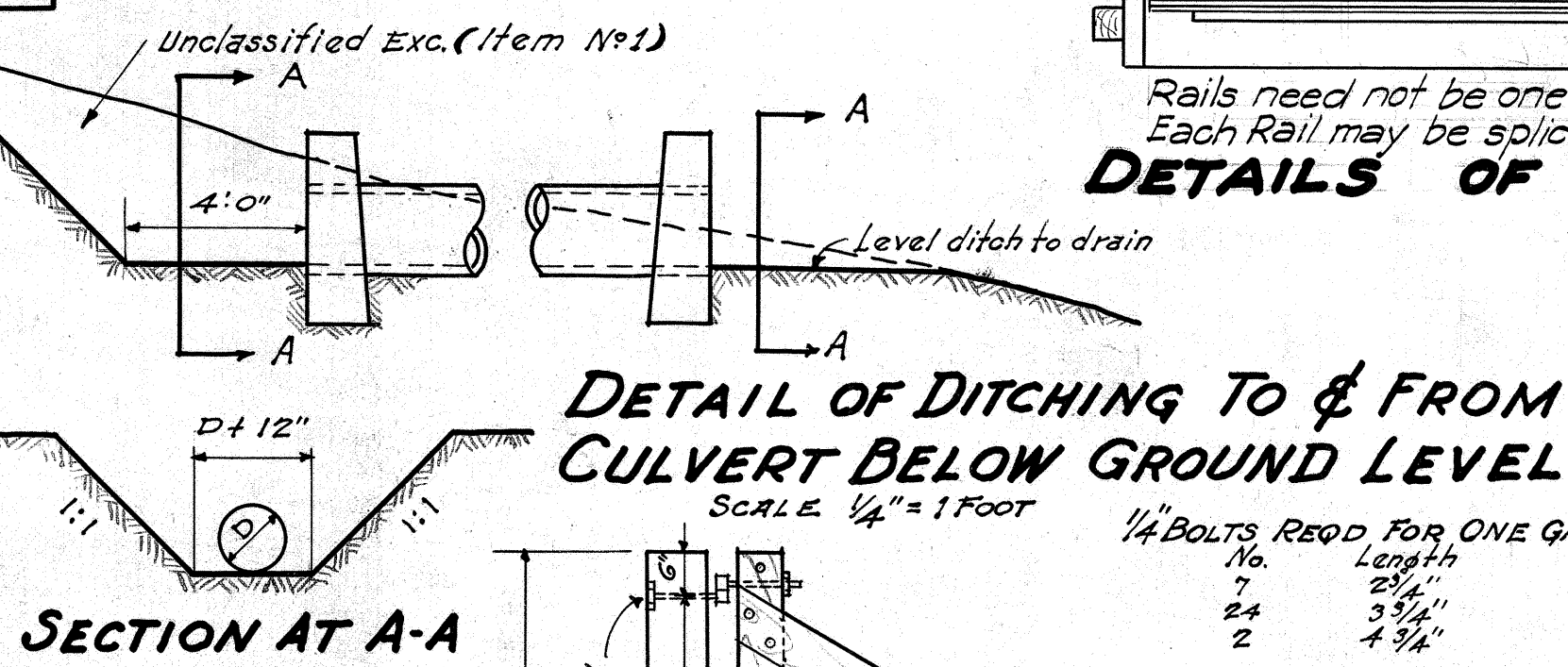
**SECTION THRU B-B
STANDARD CONCRETE DROP
INTAKE**

**CROSS SECTION OF
STANDARD PRECAST
CONC. PIPE CULVERT**

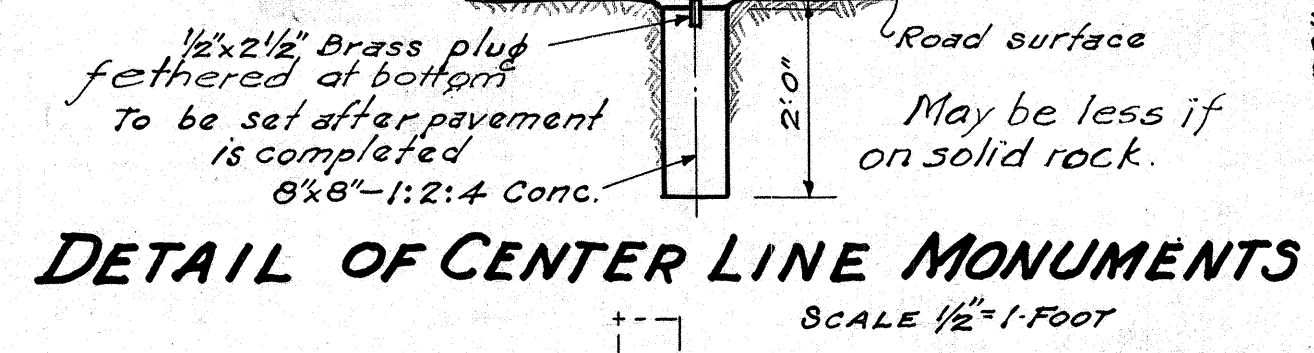
Note: Thickness "d" reinforcement and concrete used are to conform with the approved design as provided by the specifications.



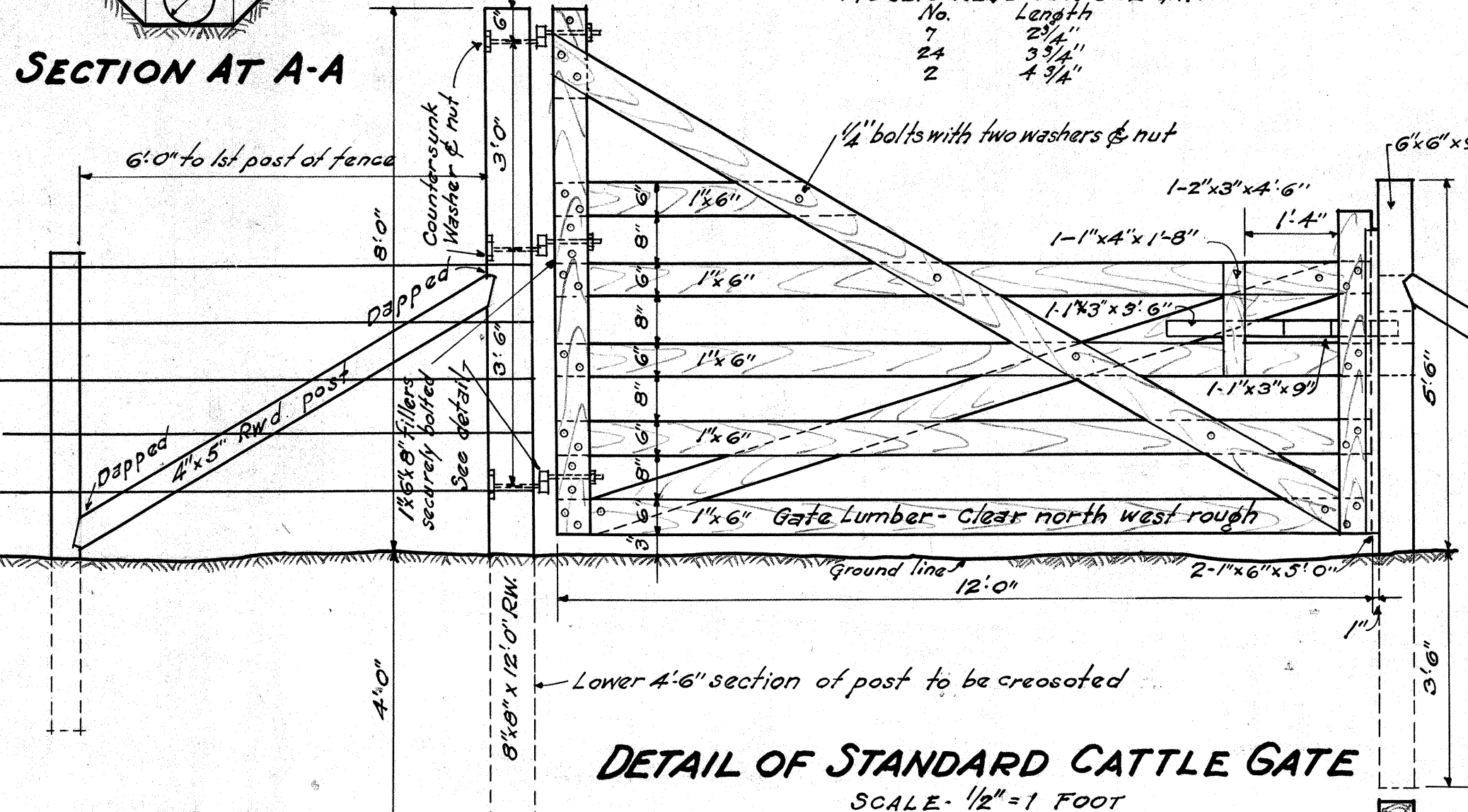
DETAILS OF CATTLE GUARD



**DETAIL OF DITCHING TO & FROM
CULVERT BELOW GROUND LEVEL**
SCALE 1/4" = 1' FOOT



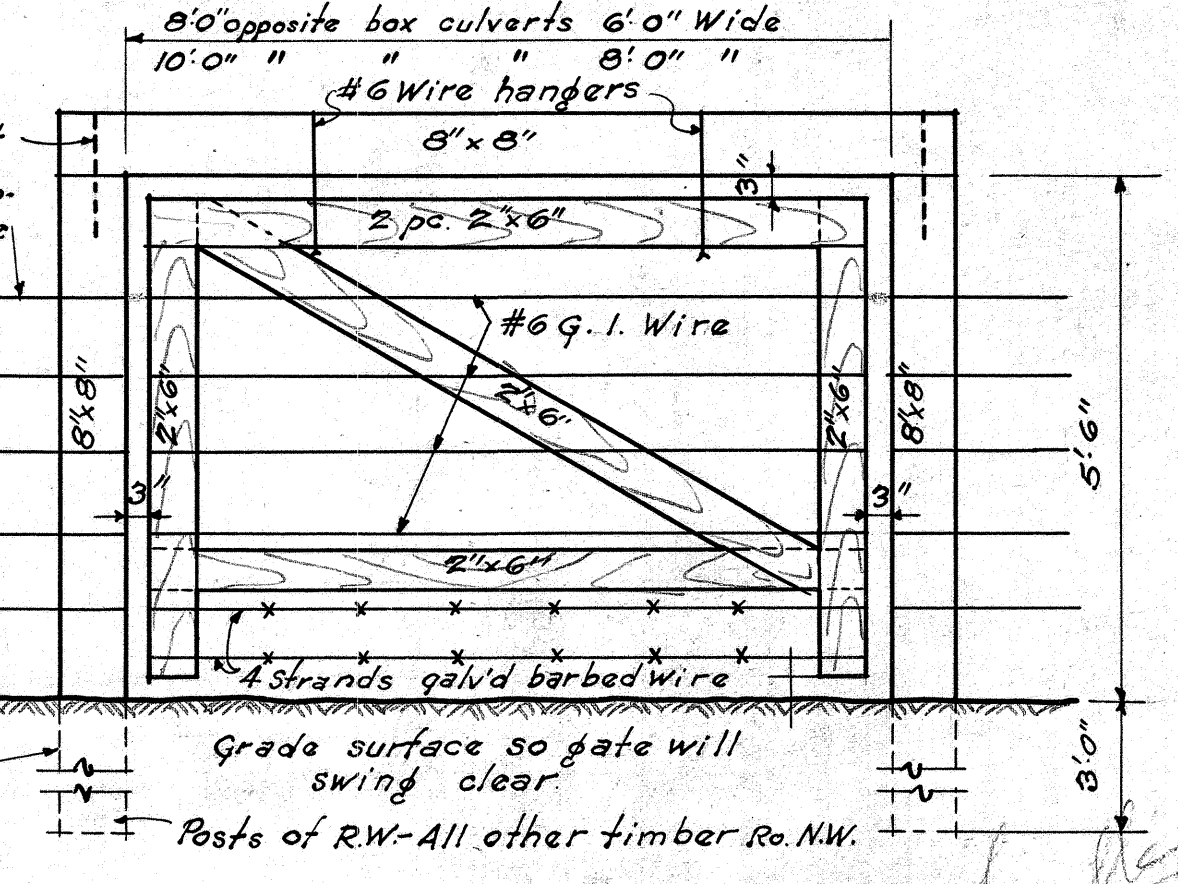
DETAIL OF CENTER LINE MONUMENTS
SCALE 1/2" = 1' FOOT



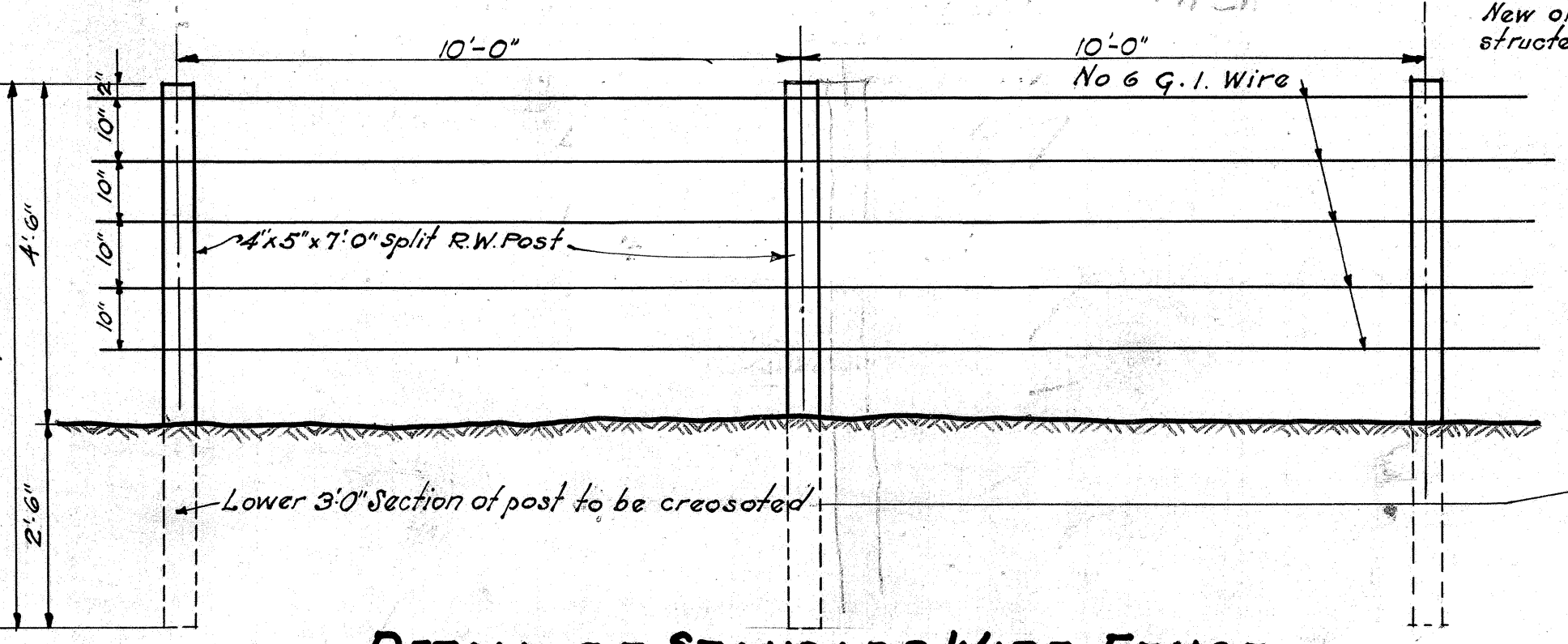
DETAIL OF STANDARD CATTLE GATE
SCALE - 1/2" = 1' FOOT

**STD CATTLE GATE POSTS
IN STONE WALL FENCES**
SCALE 1/2" = 1' FOOT

**STD SECTION OF
RECONST. & NEW
STONE WALL FENCE**
SCALE - 1/2" = 1' FOOT



DETAIL OF HURDLE
Scale 1/2" = 1' FOOT



**DETAIL OF STANDARD WIRE FENCE
WITH WOODEN POSTS**

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	E-11A	1932	13	41

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	11B	1933	13	50

This sheet is common to F.A.R. 11A & F.A.P. 11B & F.A.P. 11C

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	11C	1933	11	28

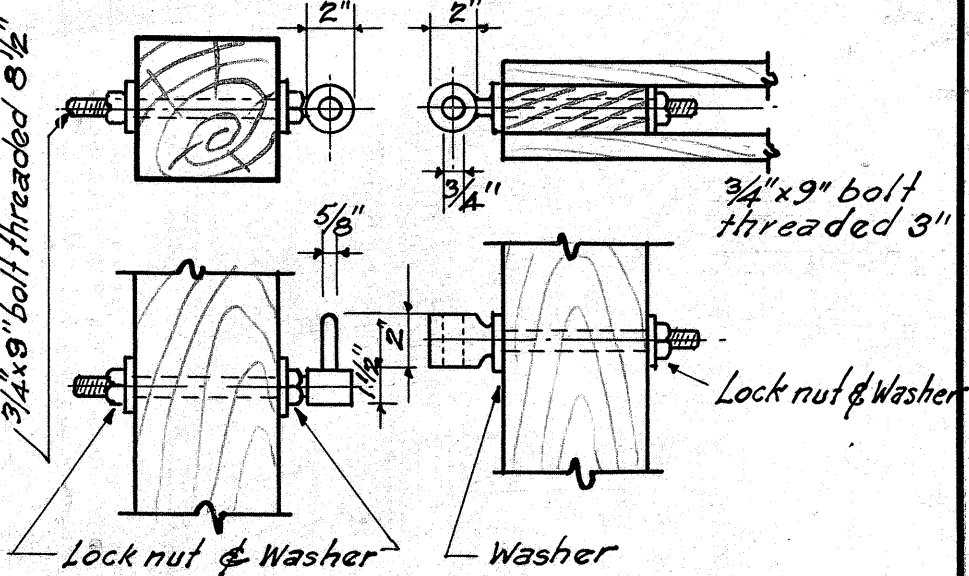
ARRANGEMENT OF MARKERS

One F.A.R. or T.P. Marker and one plate shall be placed at the beginning and end of each isolated F.A. or Terr. Project. Where two F.A. or Terr. Projects adjoin, a single marker and two number plates shall be placed, each number plate pointing in the direction of the project to which it refers. Where a F.A. Project adjoins a Terr. Project or vice versa, both the F.A. Project Marker and the Terr. Project Marker with their respective number plates shall be placed.

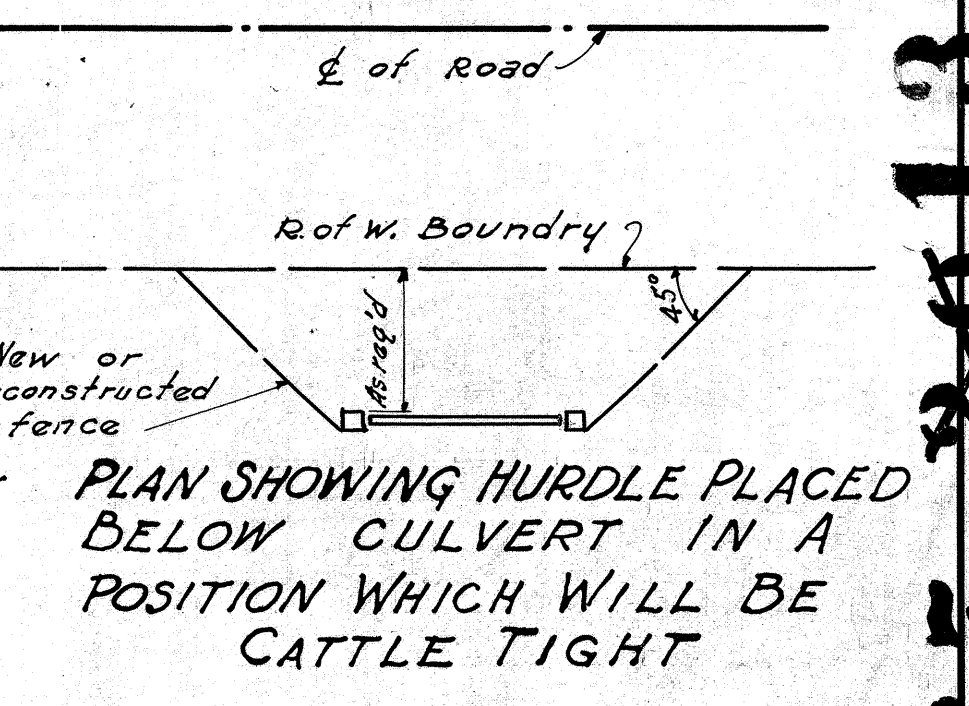
Post in place complete with one F.A.R. Marker and its respective number plate will be paid for as one item. Each additional Marker or number plate will be paid for separately.

Markers and number plates shall be No. 16 galvanized iron with 3/16 inch holes for fastening as shown on sketch. Markers and number plates shall be given one coat of best Chromate Primer and two coats of White Marine Enamel. Before painting they shall be given a wash of 6 ounces copper sulphate in one gallon water. The lettering shall be in black or Blackletter Enamel. Markers and plates shall be fastened with 3/8 inch Galvanized Expansion bolts and lead washers on both sides of plate.

FEDERAL AID MARKER
Scale 1/2" = 1'-0"



DET. OF GATE HANGERS
SCALE - 1/2" = 1' FOOT



**PLAN SHOWING HURDLE PLACED
BELOW CULVERT IN A
POSITION WHICH WILL BE
CATTLE TIGHT**

**4293.11
MISCELLANEOUS DETAILS**