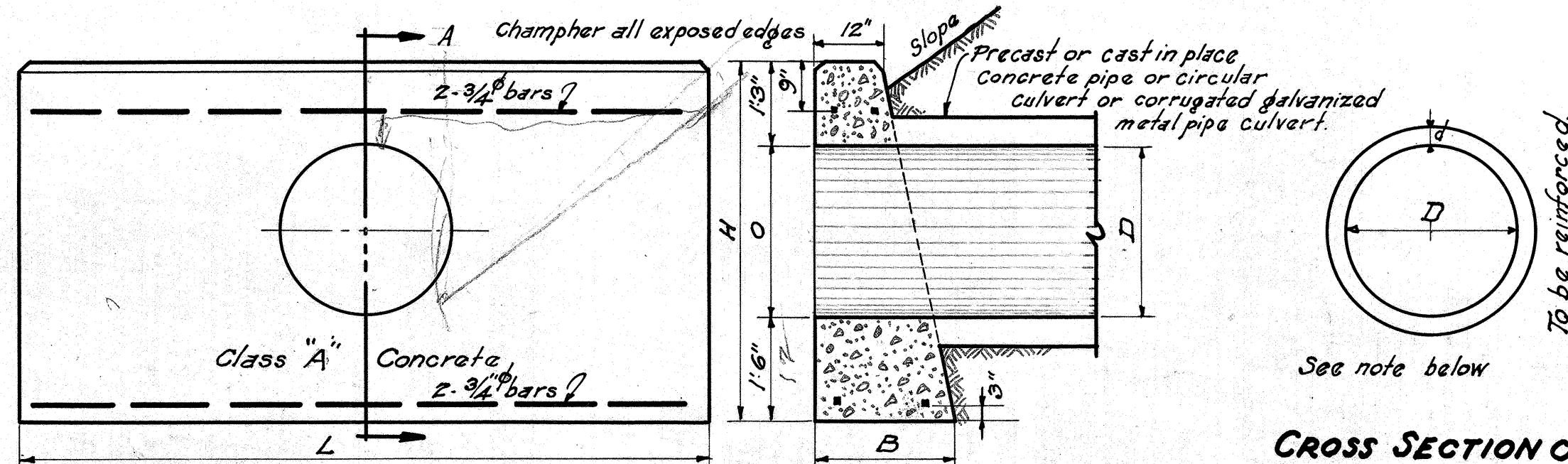


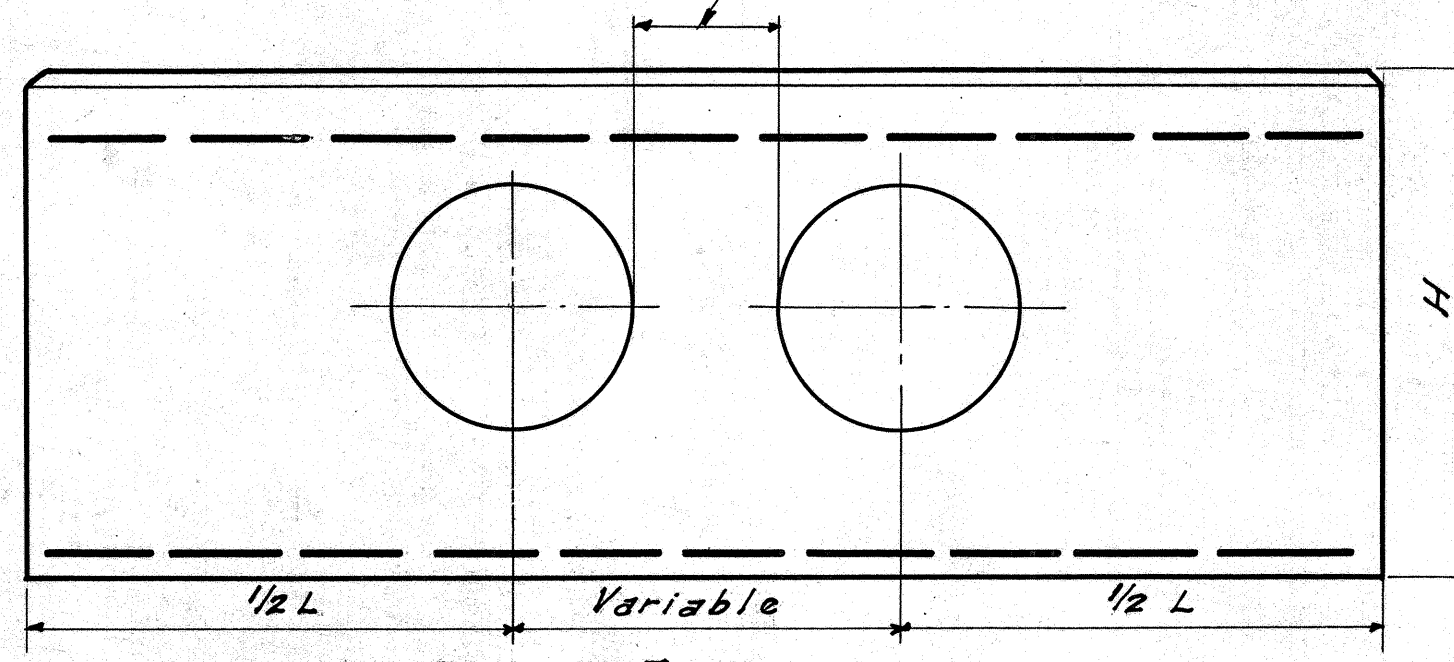


FRONT ELEVATION
SECTION THRU A-A
STANDARD PRECAST
CONC. PIPE CULVERT

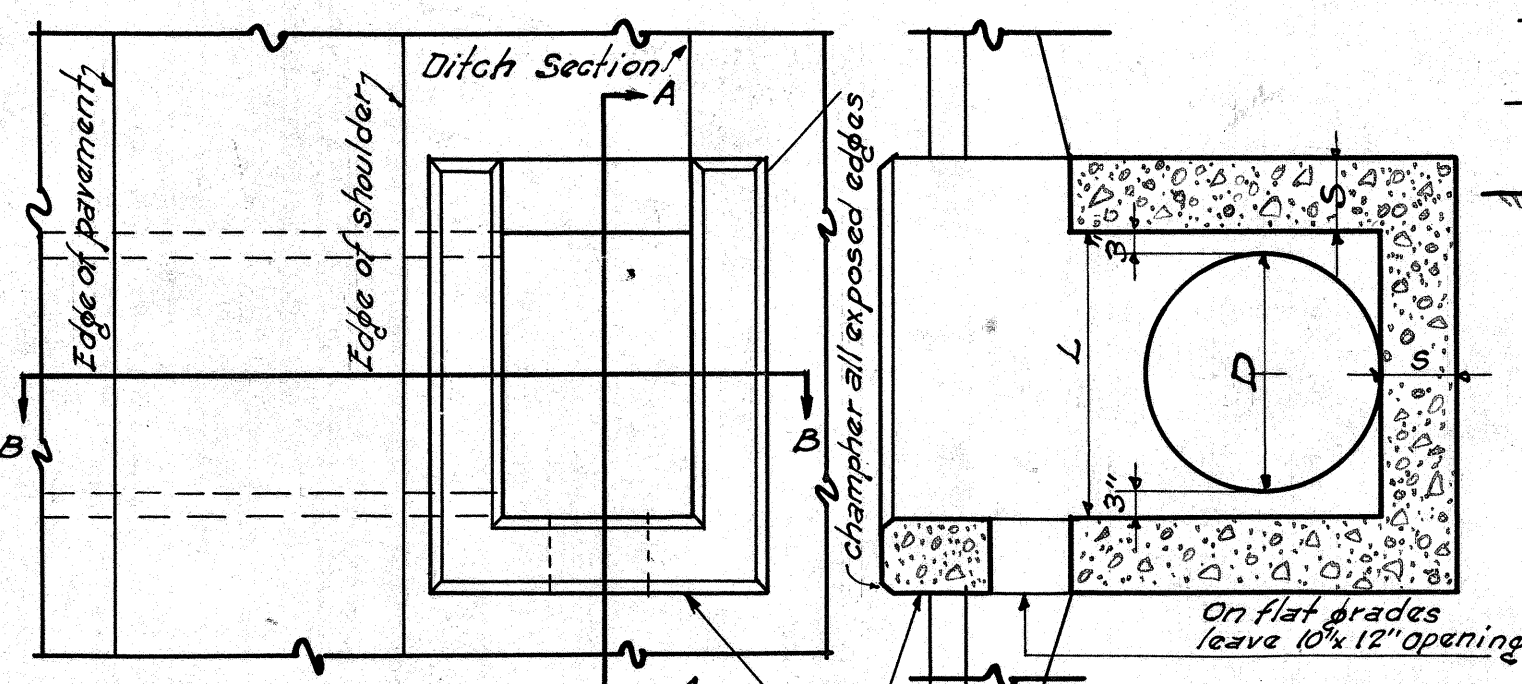
DATA - STANDARD CONCRETE HEADWALL
SCALE - 1/2" = 1' FOOT

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



PLAN
SECTION THRU A-A

DATA STD DROP INTAKE

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

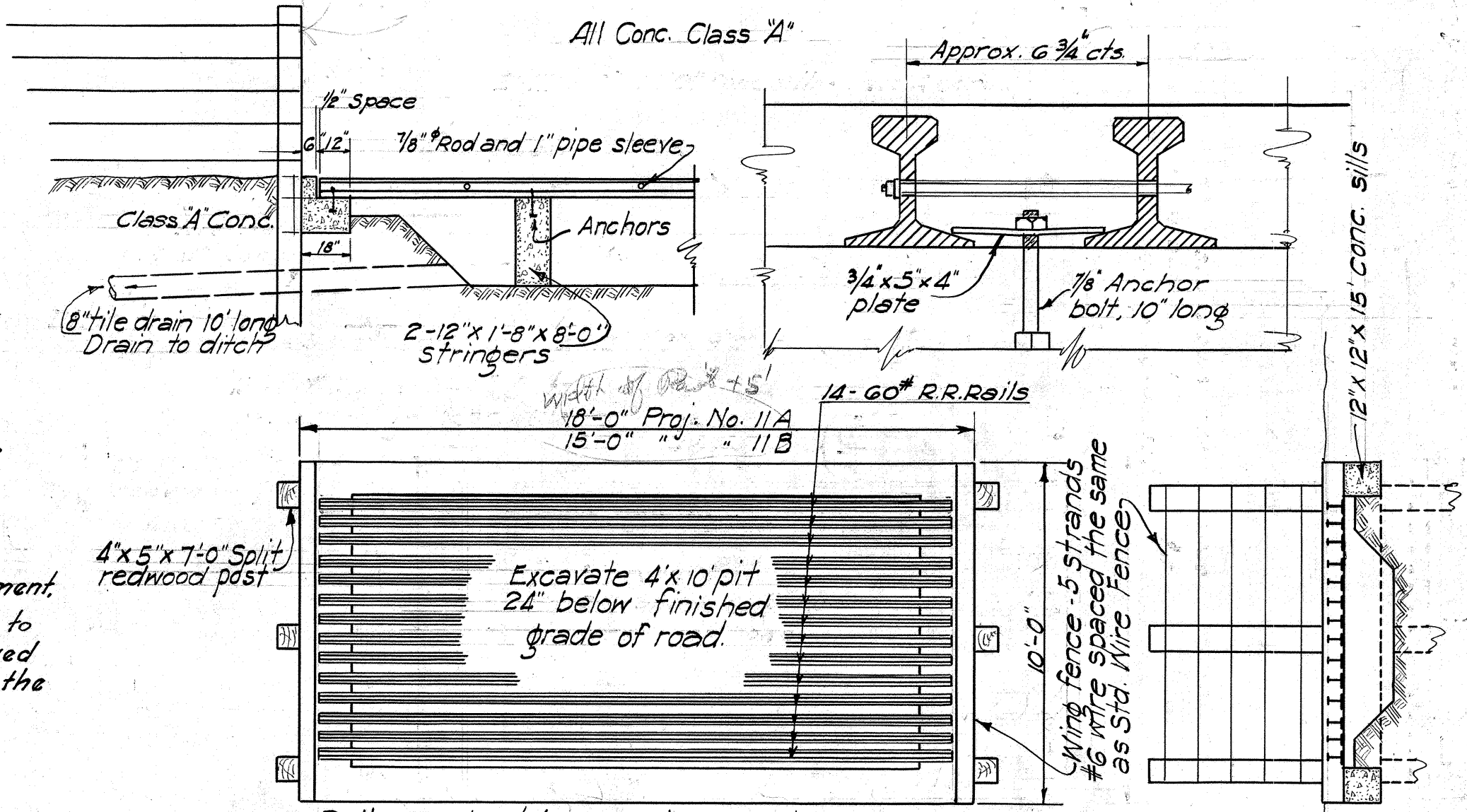
Note: Dimension "x" is assumed as 2'-4" in figuring the above quantities

Class "A" Concrete
2 in. Maximum aggregate

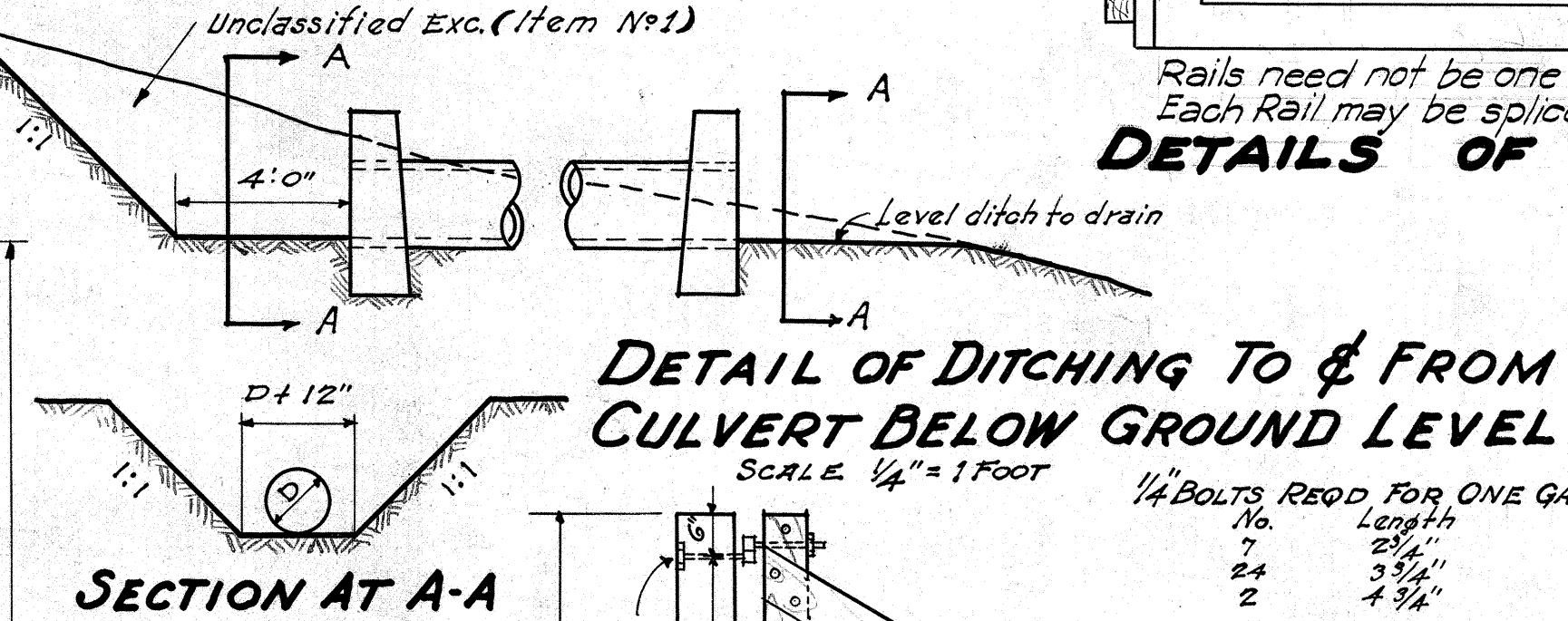
SECTION THRU B-B
STANDARD CONCRETE DROP
INTAKE

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.



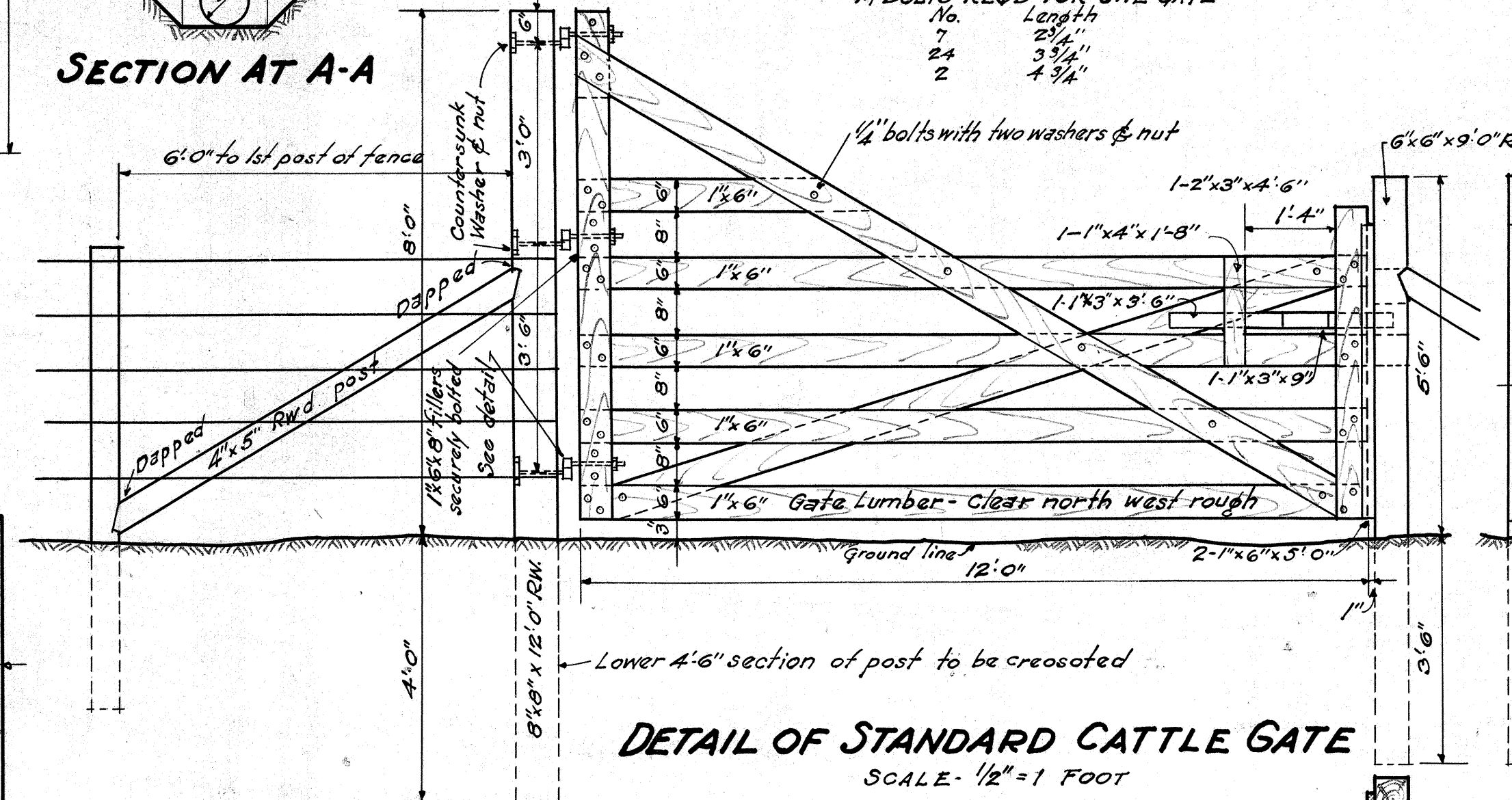
DETAILS OF CATTLE GUARD



DETAIL OF DITCHING TO & FROM
CULVERT BELOW GROUND LEVEL

DETAIL OF CENTER LINE MONUMENTS

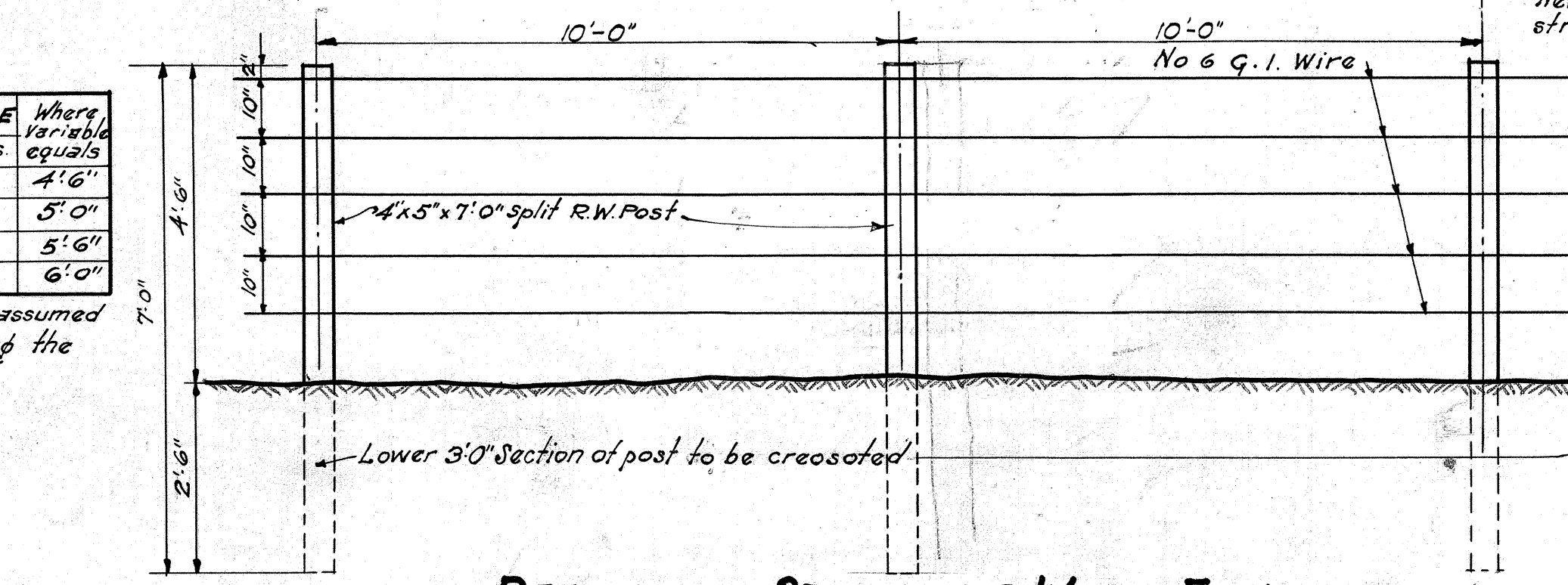
DETAIL OF
REINFORCED
CONCRETE MILE
POST



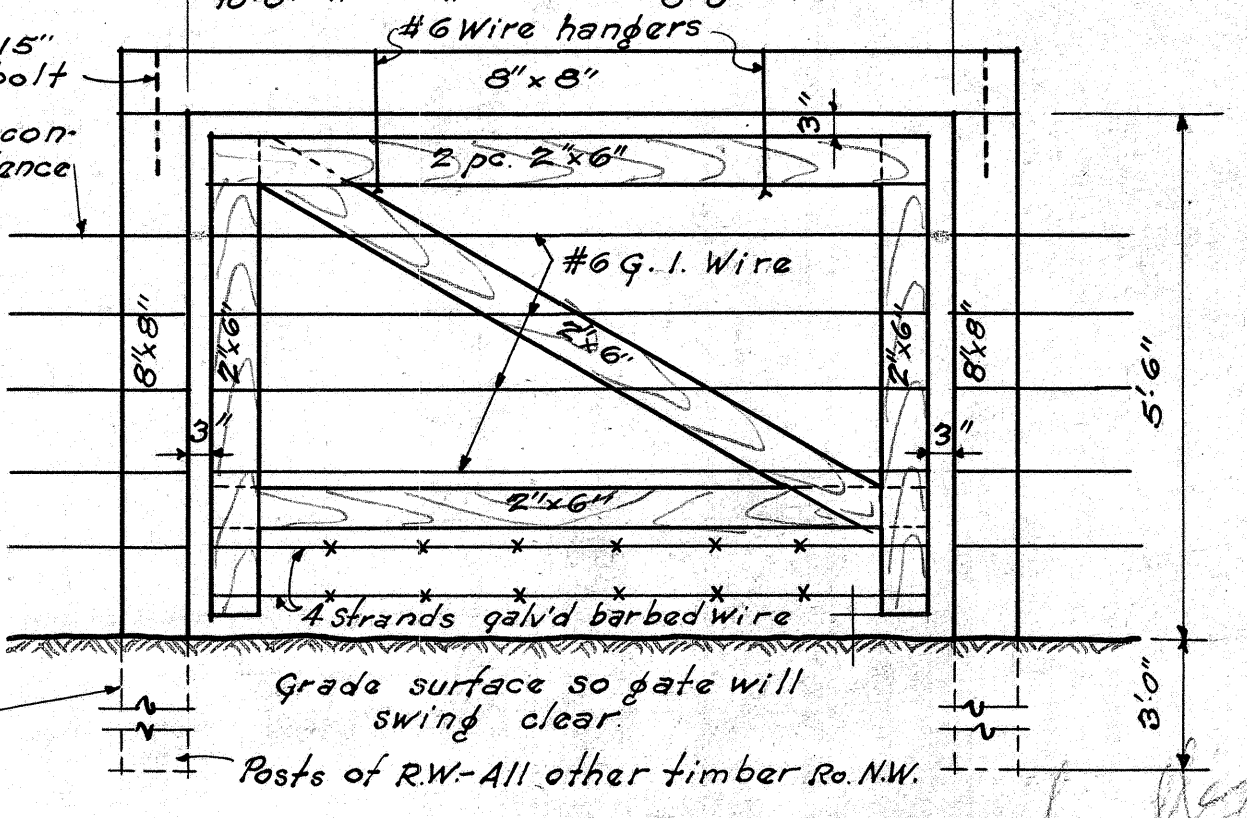
DETAIL OF STANDARD CATTLE GATE

STD CATTLE GATE POSTS
IN STONE WALL FENCES

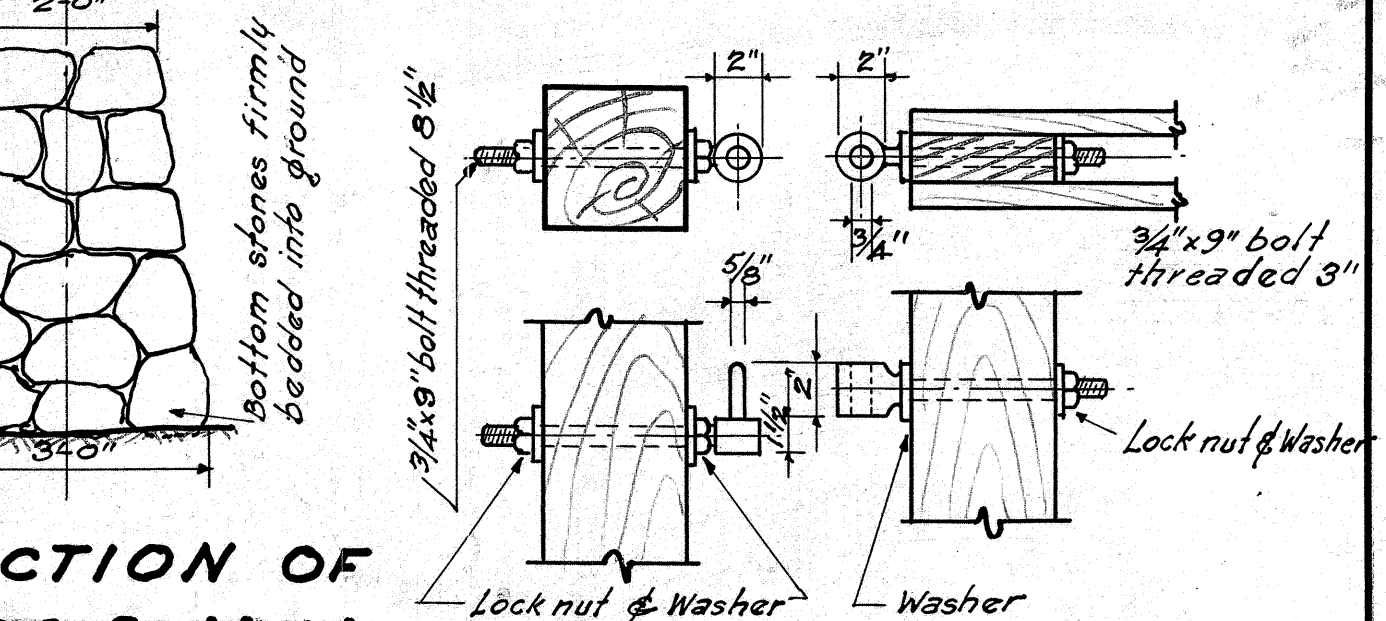
STD SECTION OF
RECONST. & NEW
STONE WALL FENCE



DETAIL OF STANDARD WIRE FENCE
WITH WOODEN POSTS

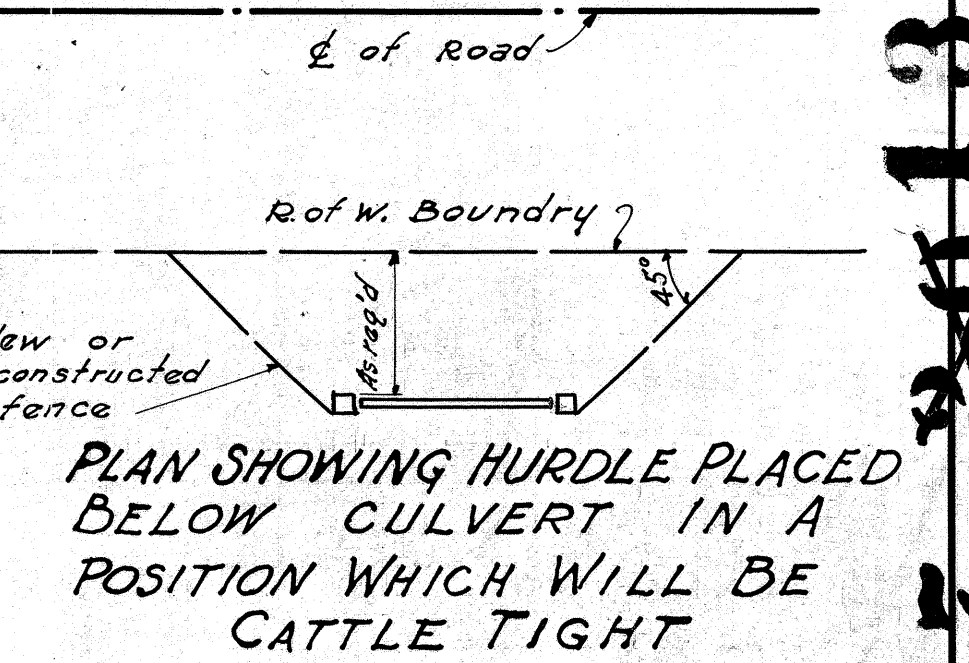


DETAIL OF HURDLE



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

DET. OF GATE HANGERS



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

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	NH-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 gage galvanized iron with 3/8 inch holes for fastenings 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 of two coats of Blackletter Enamel. Markers and plates shall be fastened with 3/8 Galvanized Expansion bolts and lead washers on both sides of plate.

Note: Use 3/4" x 11" bolts for cattle gates

DET. OF GATE HANGERS

SCALE - 1/2" = 1 FOOT

SCALE - 1/2" = 1 FOOT

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SCALE - 1/2" = 1 FOOT

SCALE - 1/2" = 1 FOOT

SCALE - 1/2" = 1 FOOT

4293.11

MISCELLANEOUS DETAILS

4267.13

Plan File	Pocket	Folder	Page
No. 1	No. 2	No. 3	No. 4

