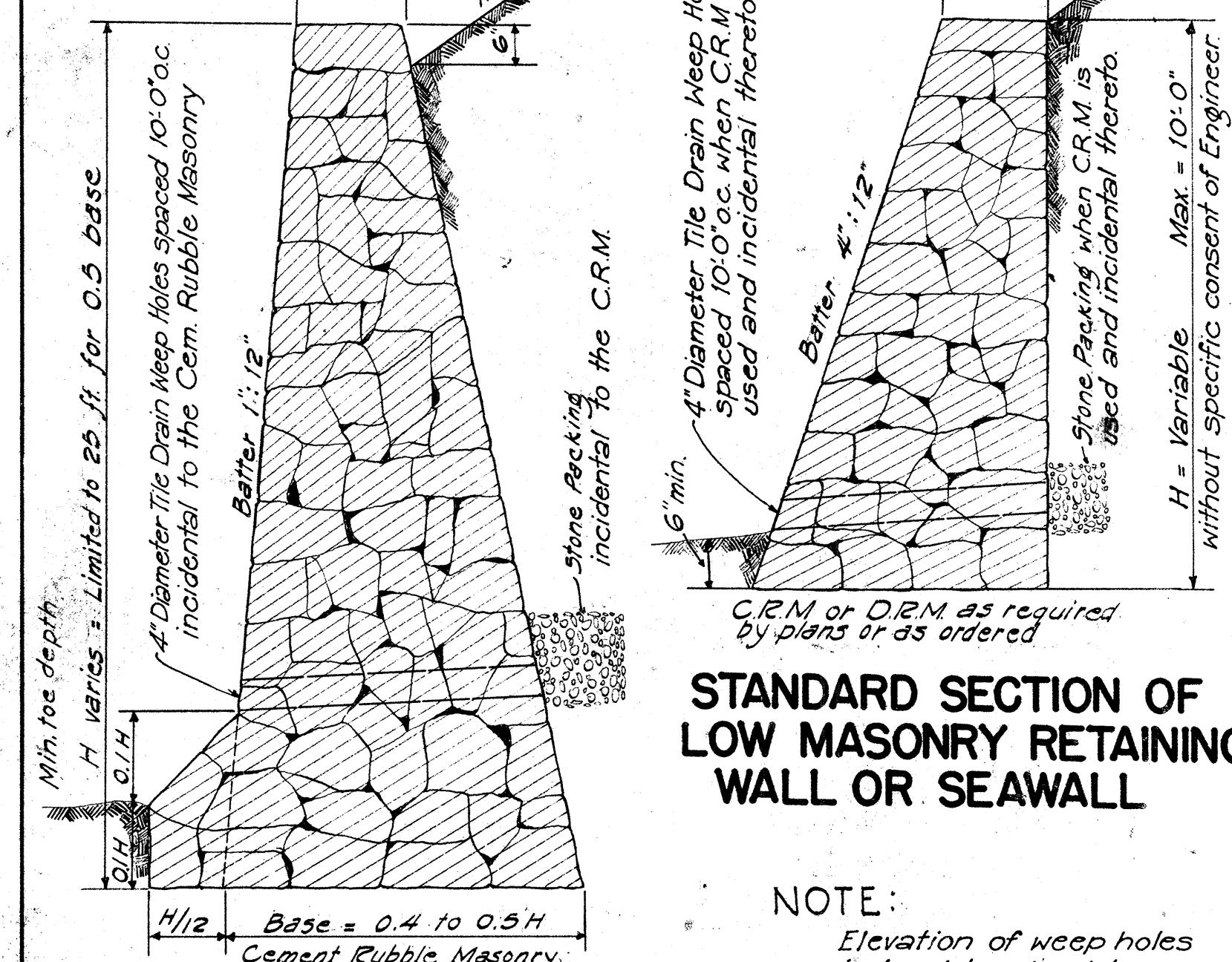
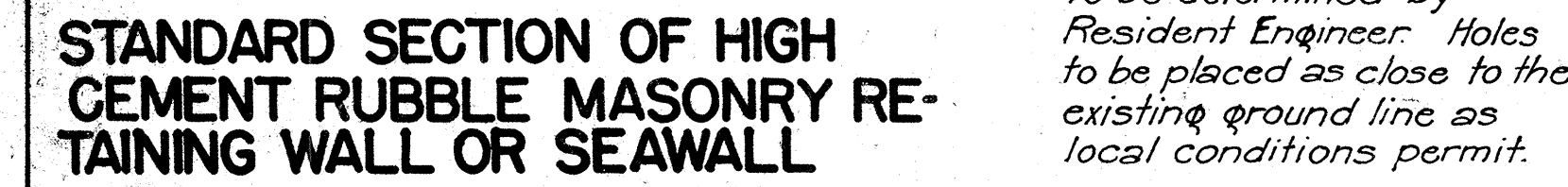


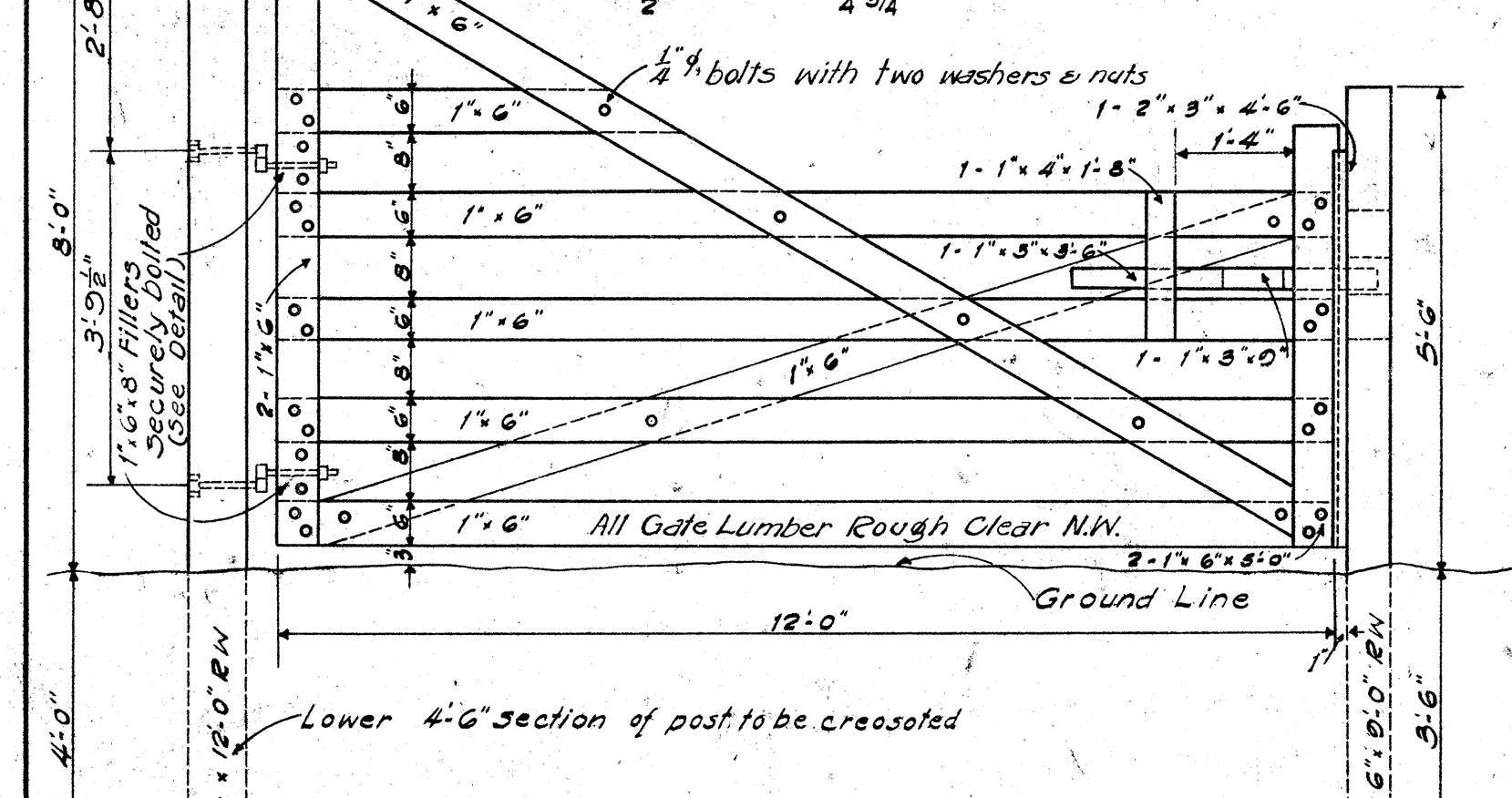
Note: TO RESIDENT ENGINEER
Consider economy of reinf. conc. for high retaining walls which did not originate on plan layout.



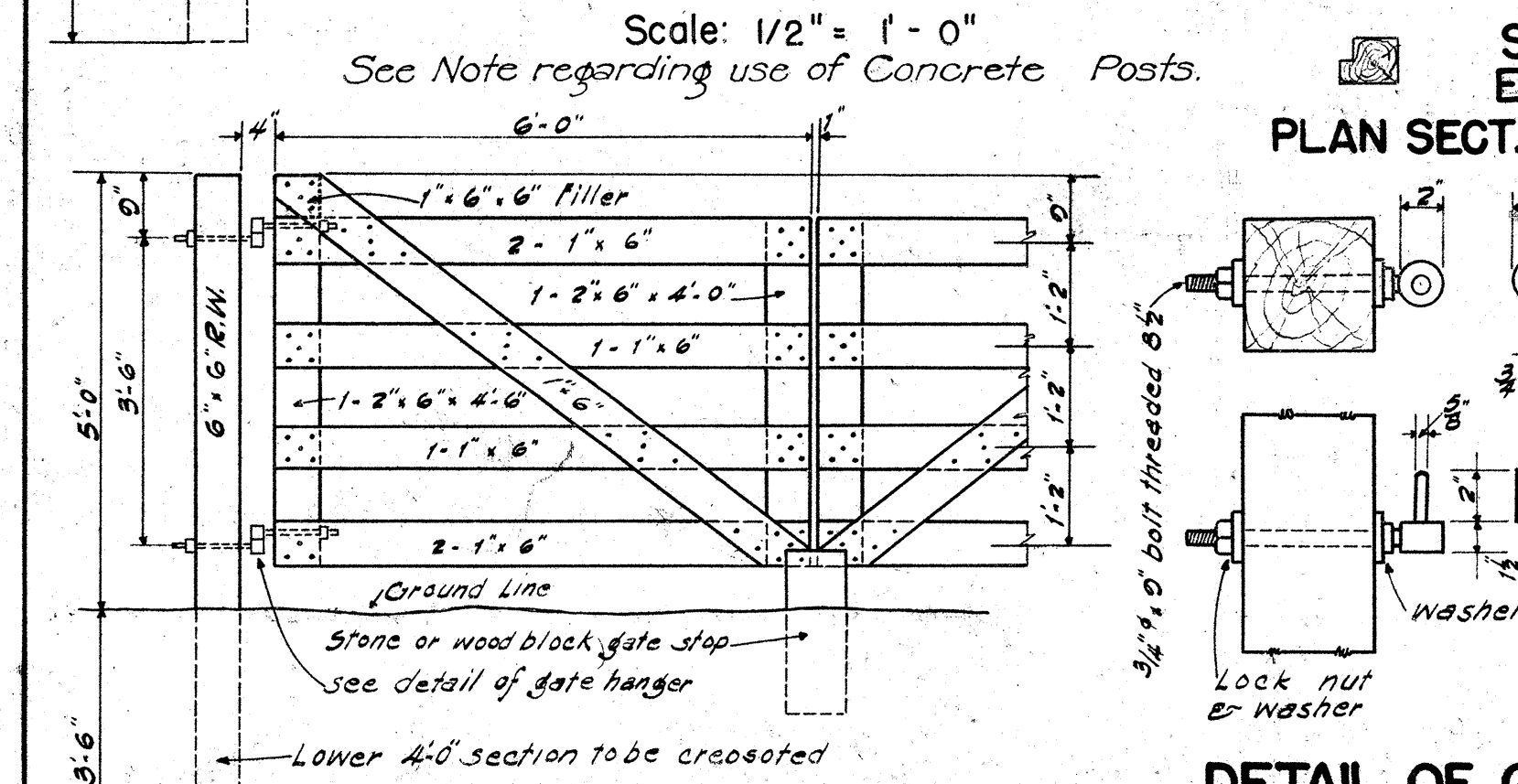
STANDARD SECTION OF LOW MASONRY RETAINING WALL OR SEAWALL



STANDARD SECTION OF HIGH CEMENT RUBBLE MASONRY RETAINING WALL OR SEAWALL



DETAIL OF STANDARD CATTLE GATE



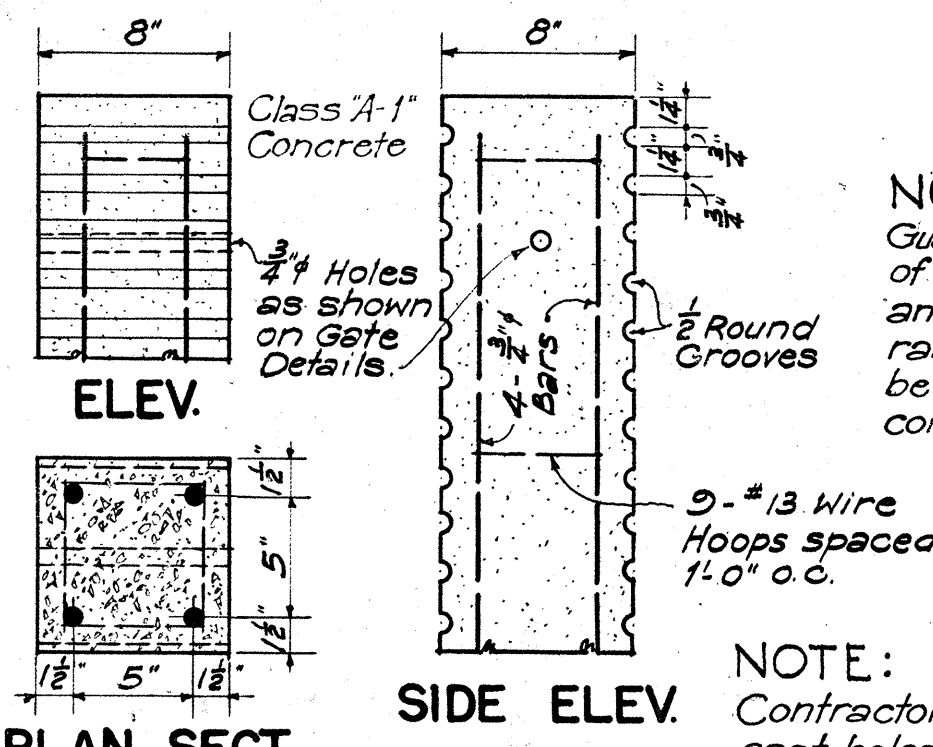
DOUBLE HUNG GATE

DETAIL OF GATE HANGER

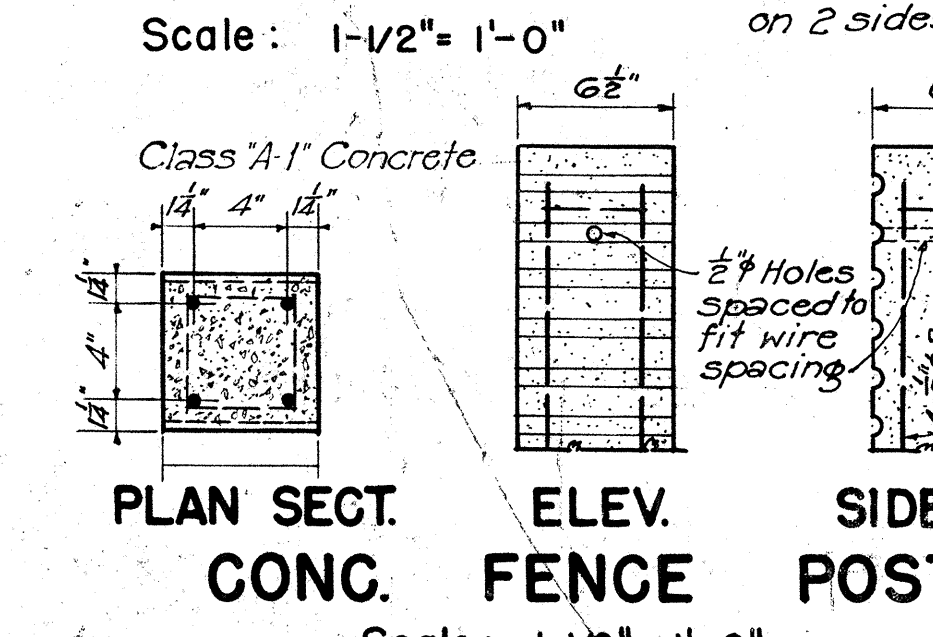
Data Standard Masonry Drop Intake

D	L	Where Variable Equals
22 1/2"	18"	2'-0"
20"	24"	2'-6"
35 1/2"	30"	3'-0"
42"	36"	3'-6"

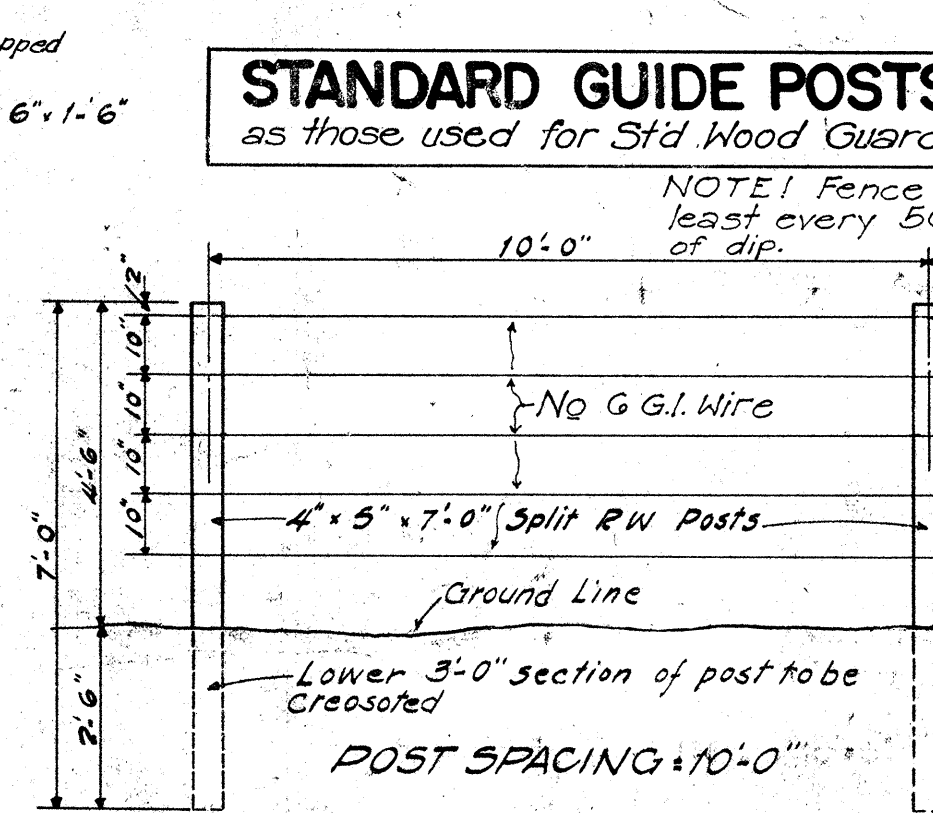
NOTE: Dimension "X" is assumed as 2'-4" in figuring the above quantities.



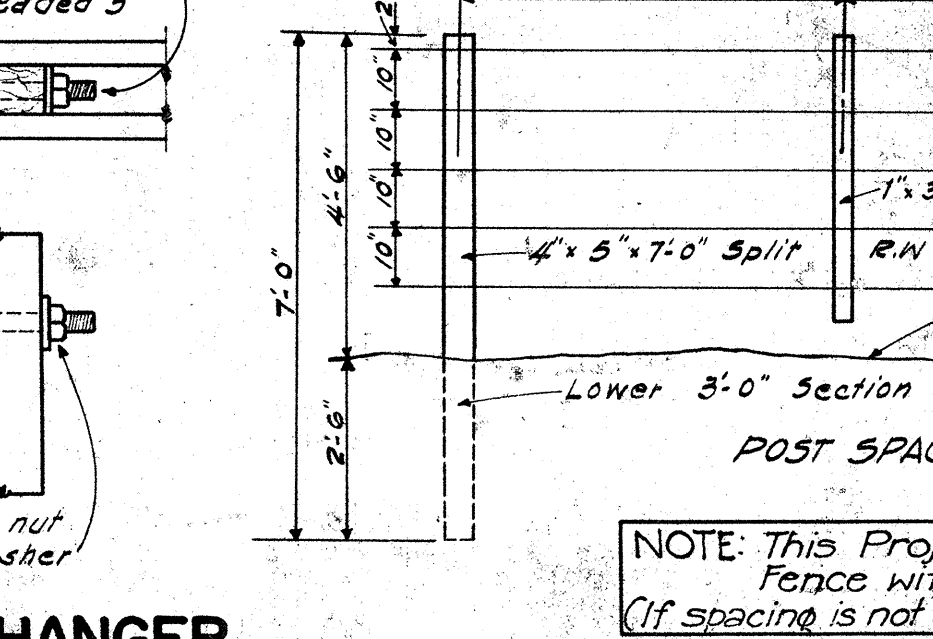
STANDARD MASONRY DROP INTAKE



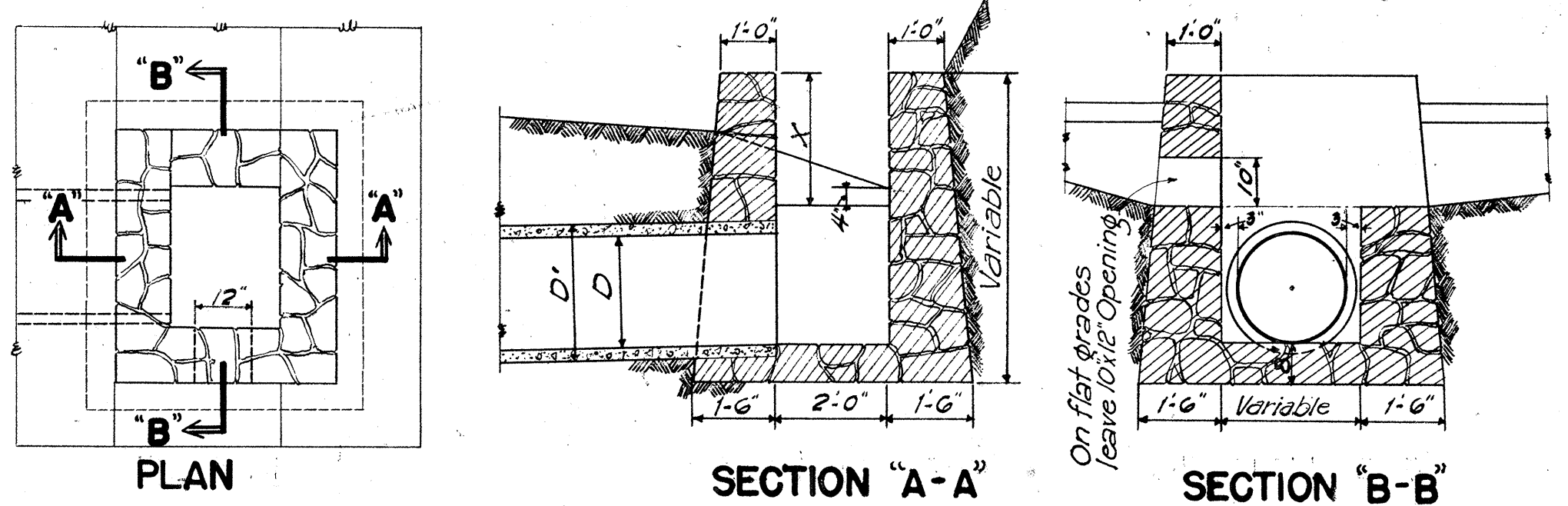
CONC. GATE POST



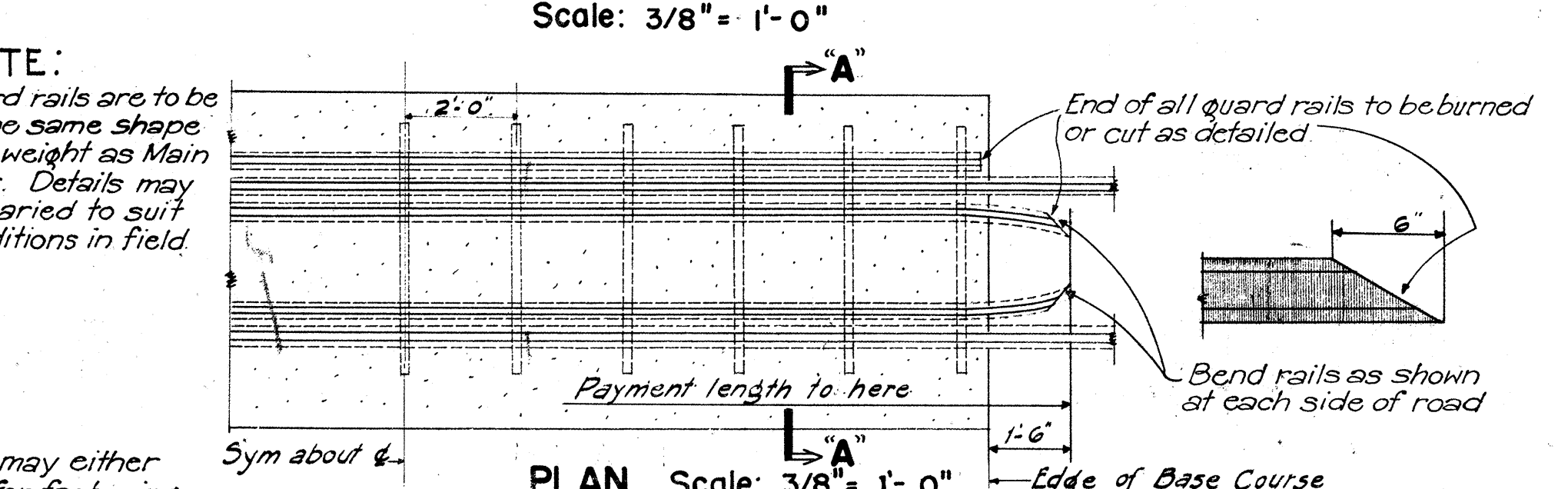
STANDARD GUIDE POSTS



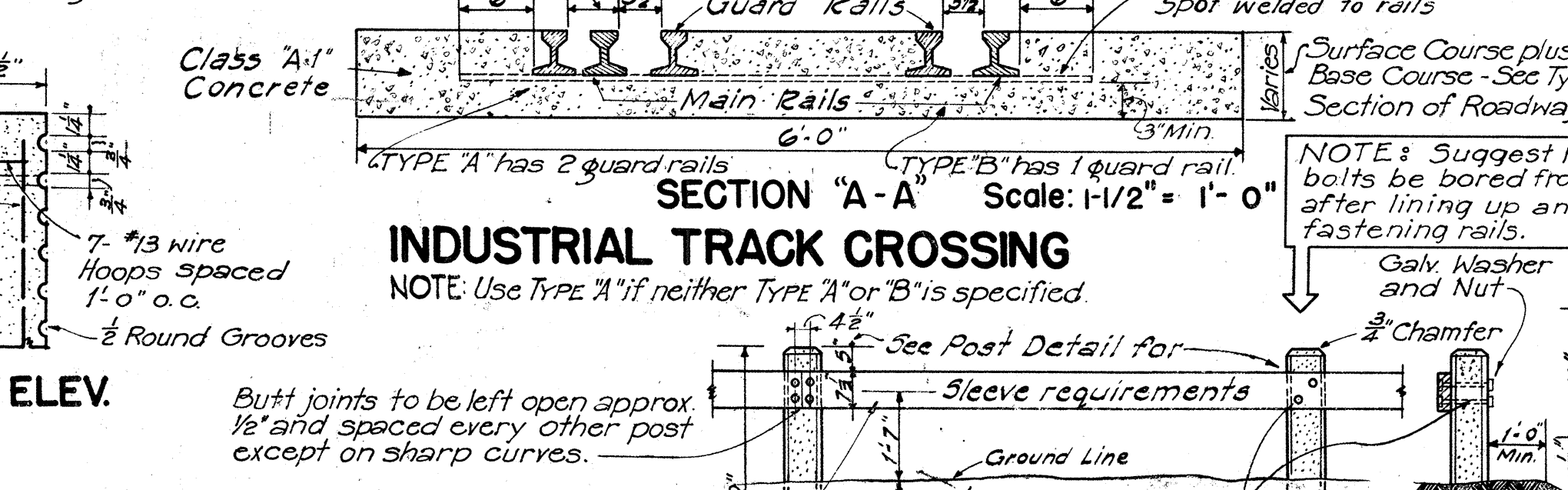
DETAILS OF STANDARD WIRE FENCE WITH WOODEN POSTS



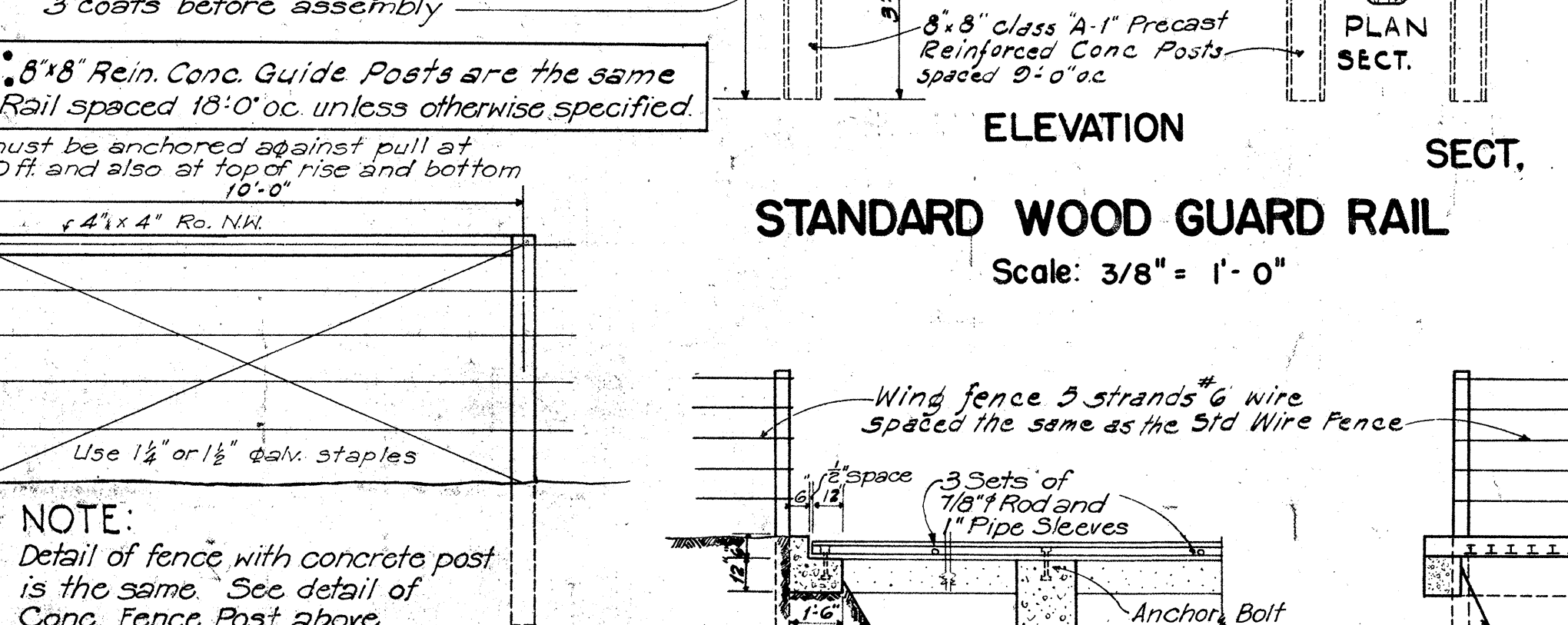
STANDARD MASONRY DROP INTAKE



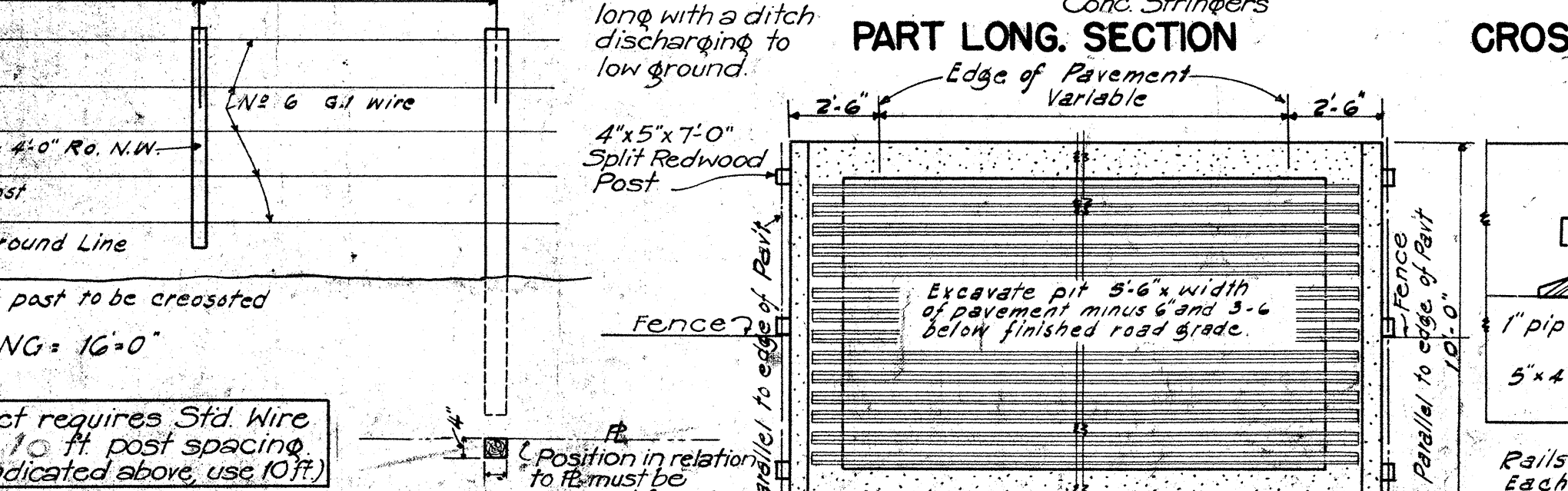
INDUSTRIAL TRACK CROSSING



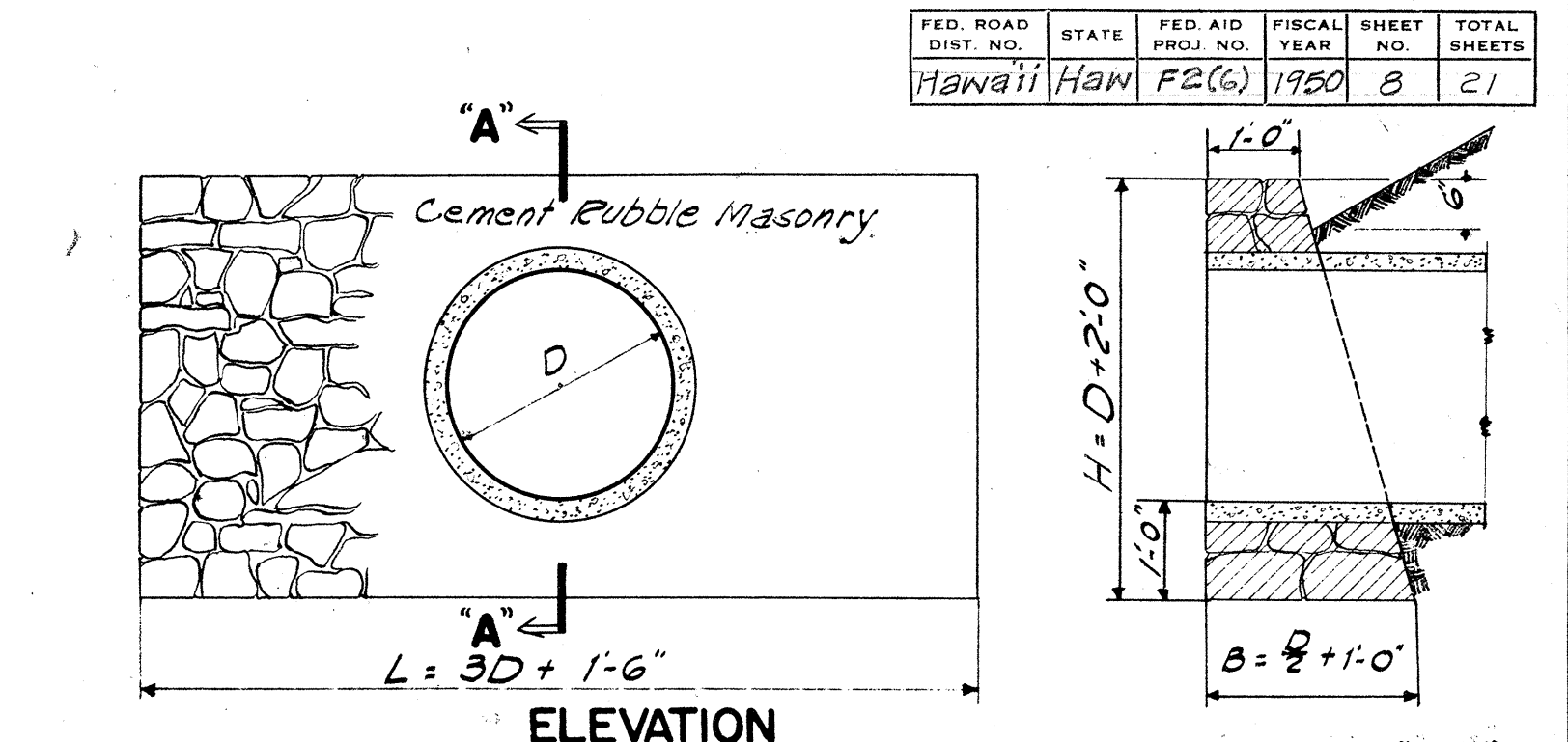
STANDARD WOOD GUARD RAIL



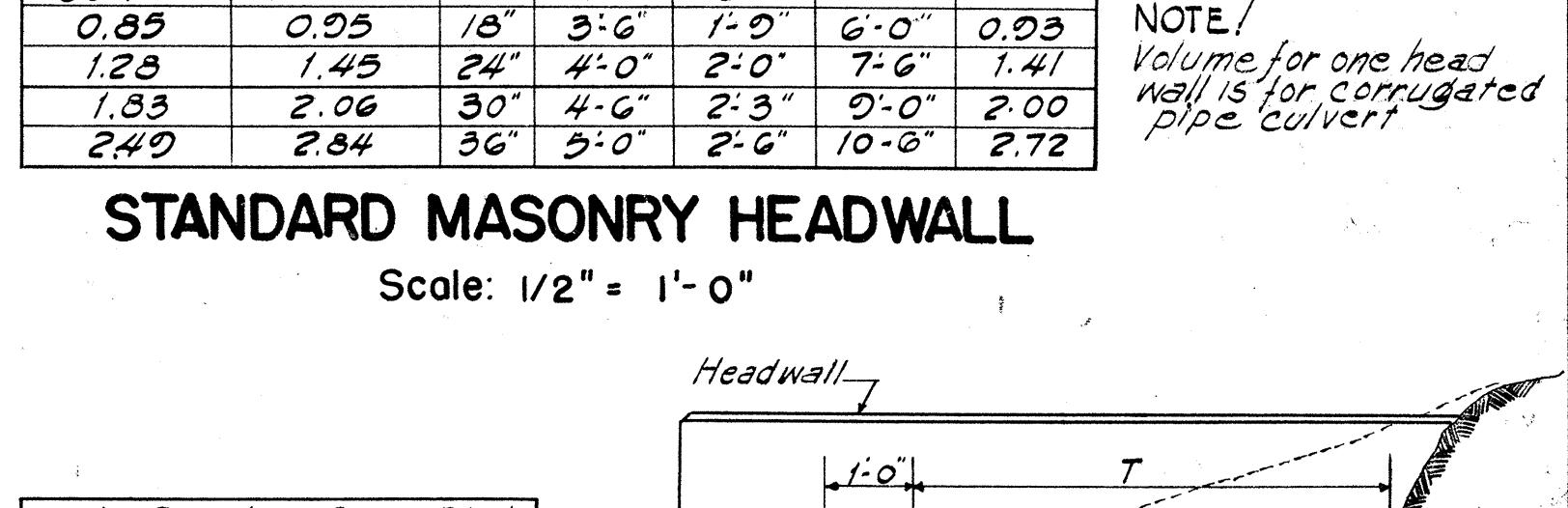
PART LONG SECTION AND CROSS SECTION



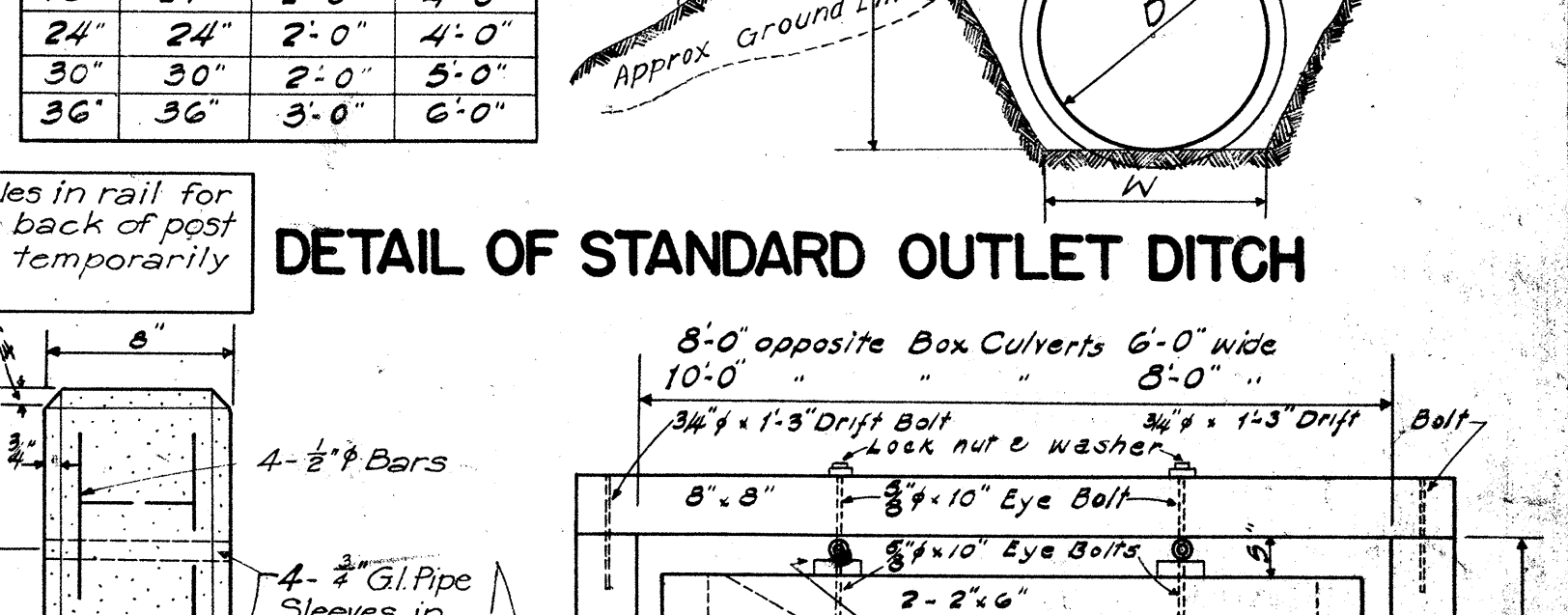
DETAILS OF CATTLE GUARD



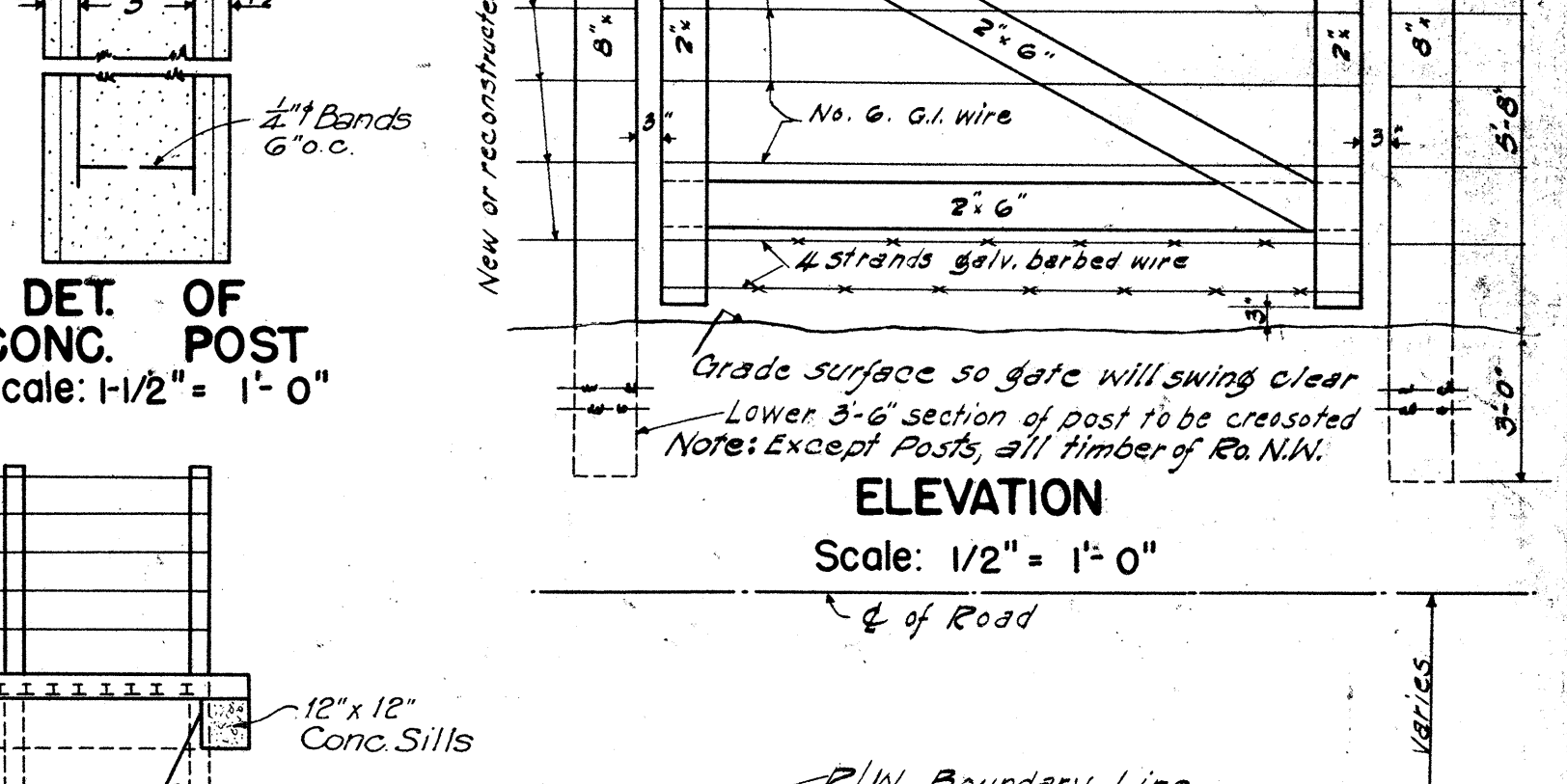
STANDARD MASONRY HEADWALL



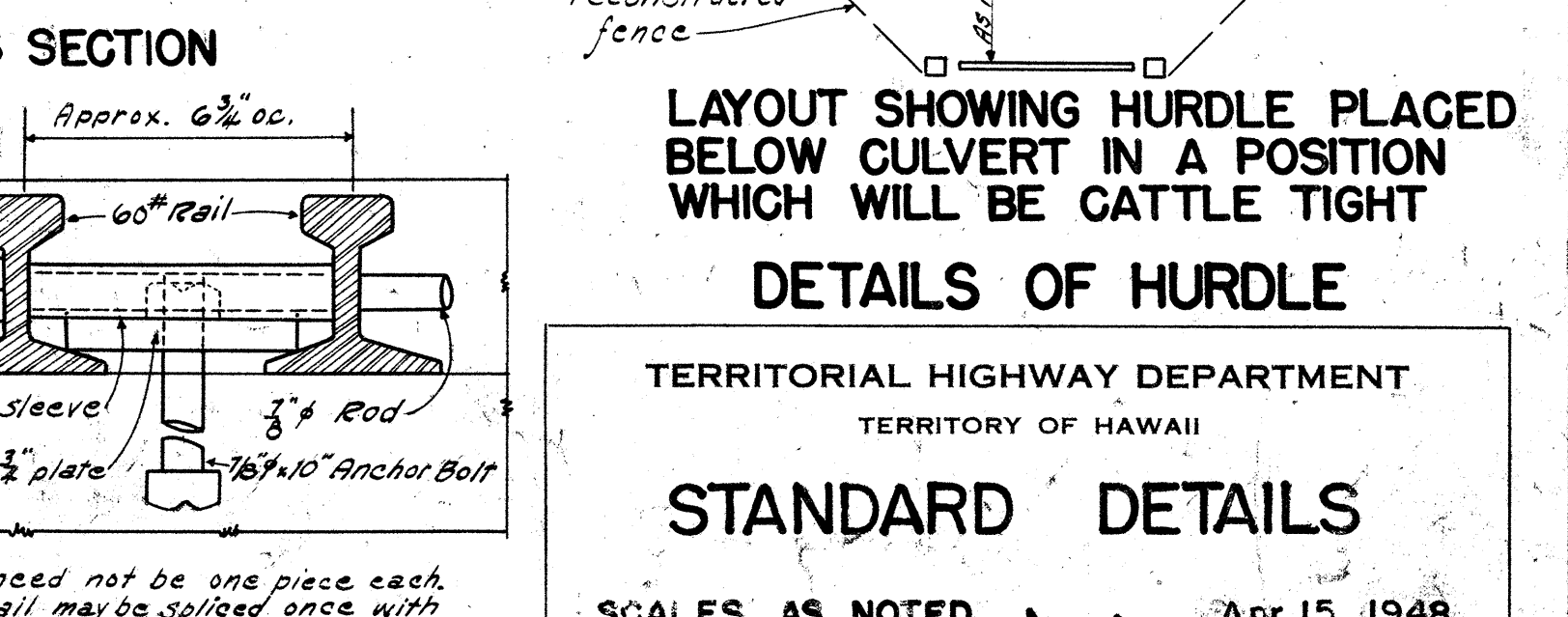
DETAIL OF STANDARD OUTLET DITCH



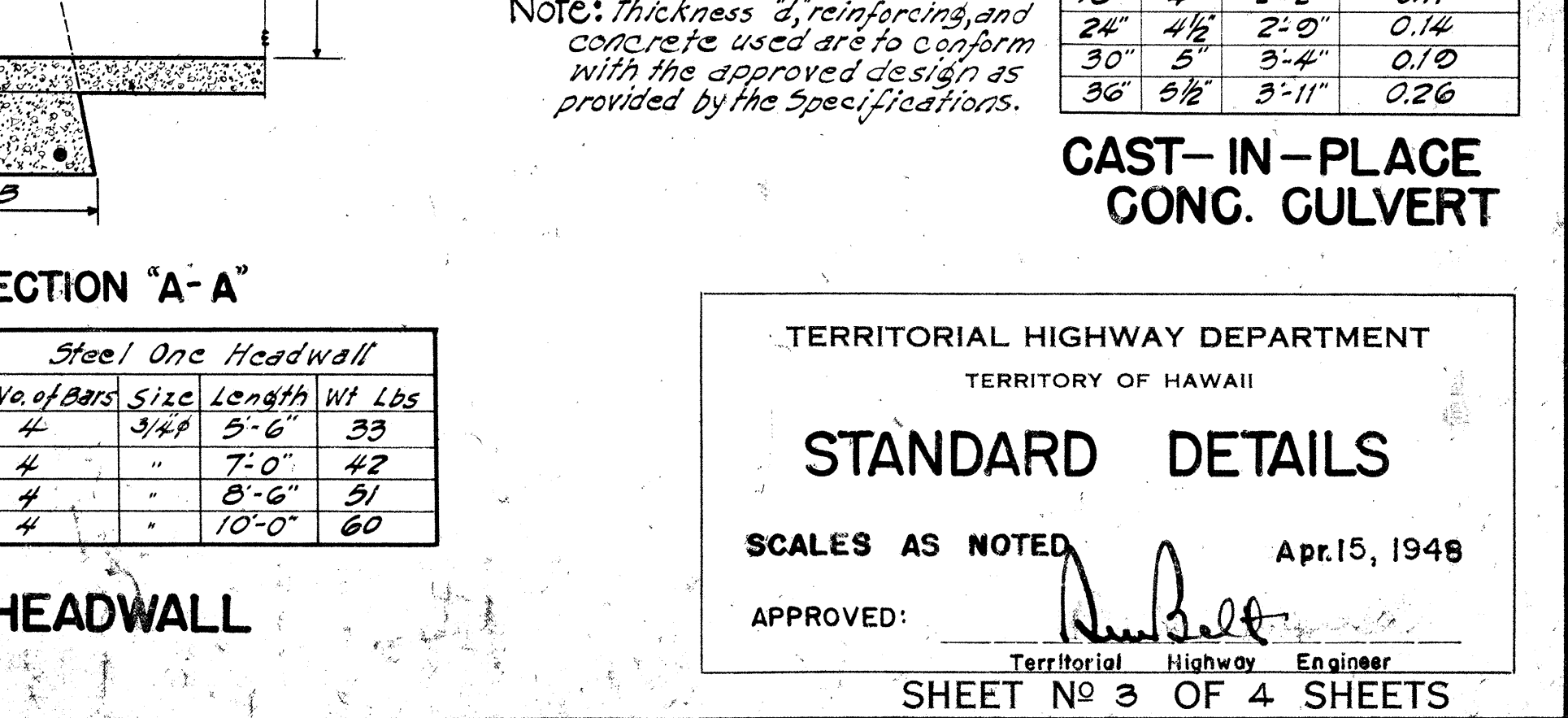
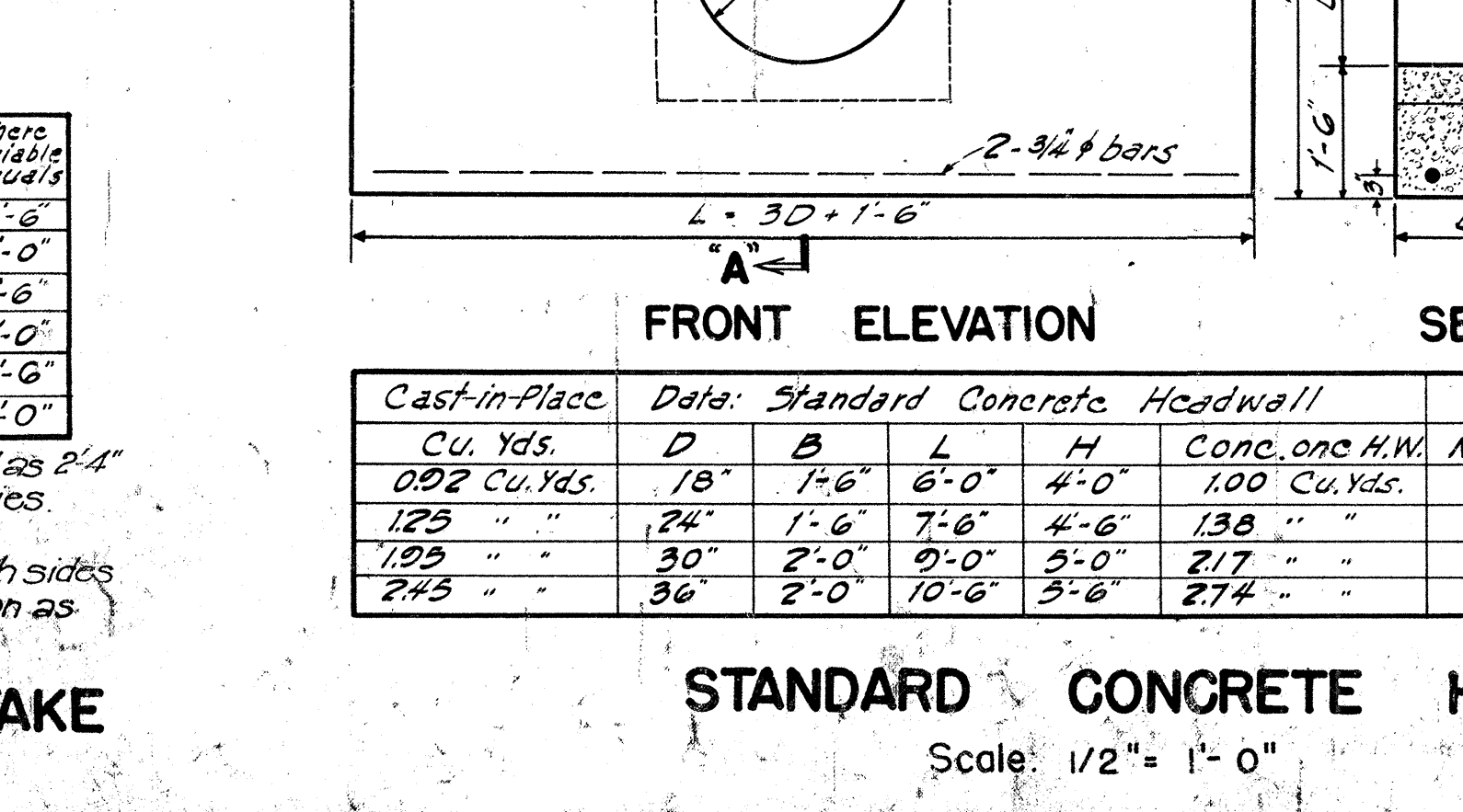
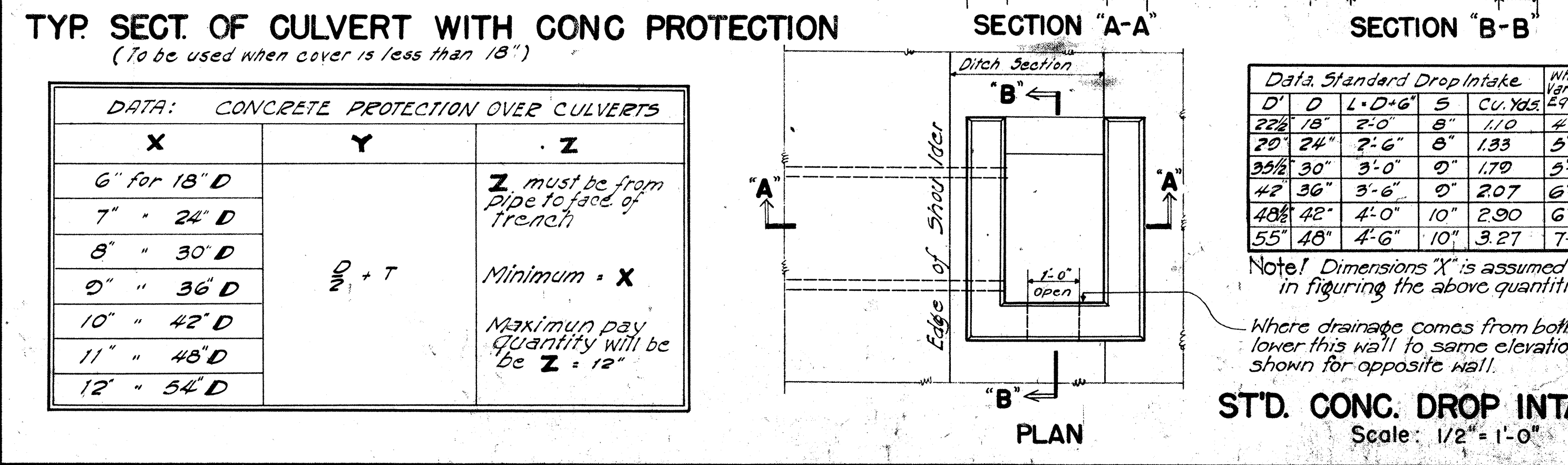
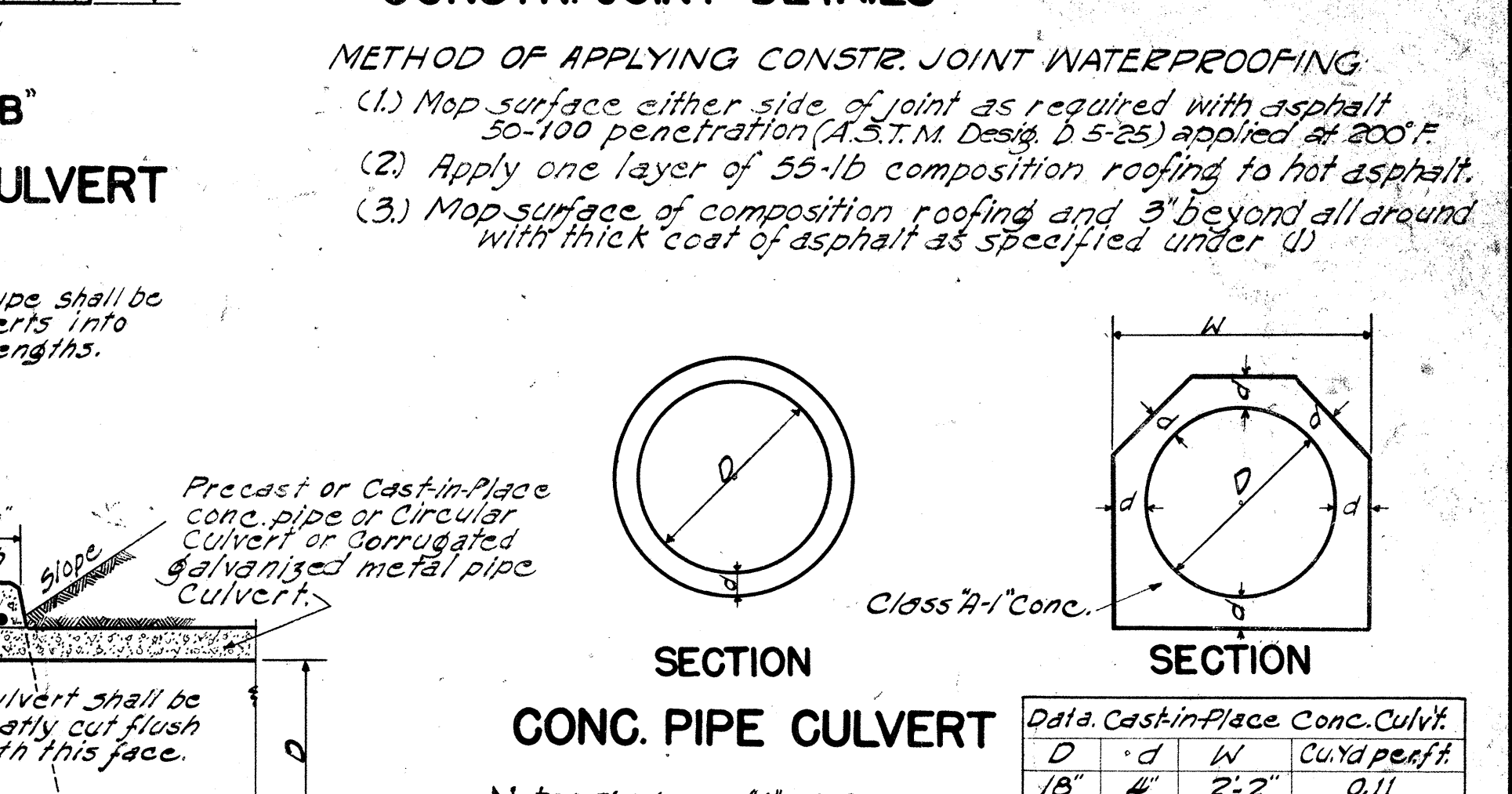
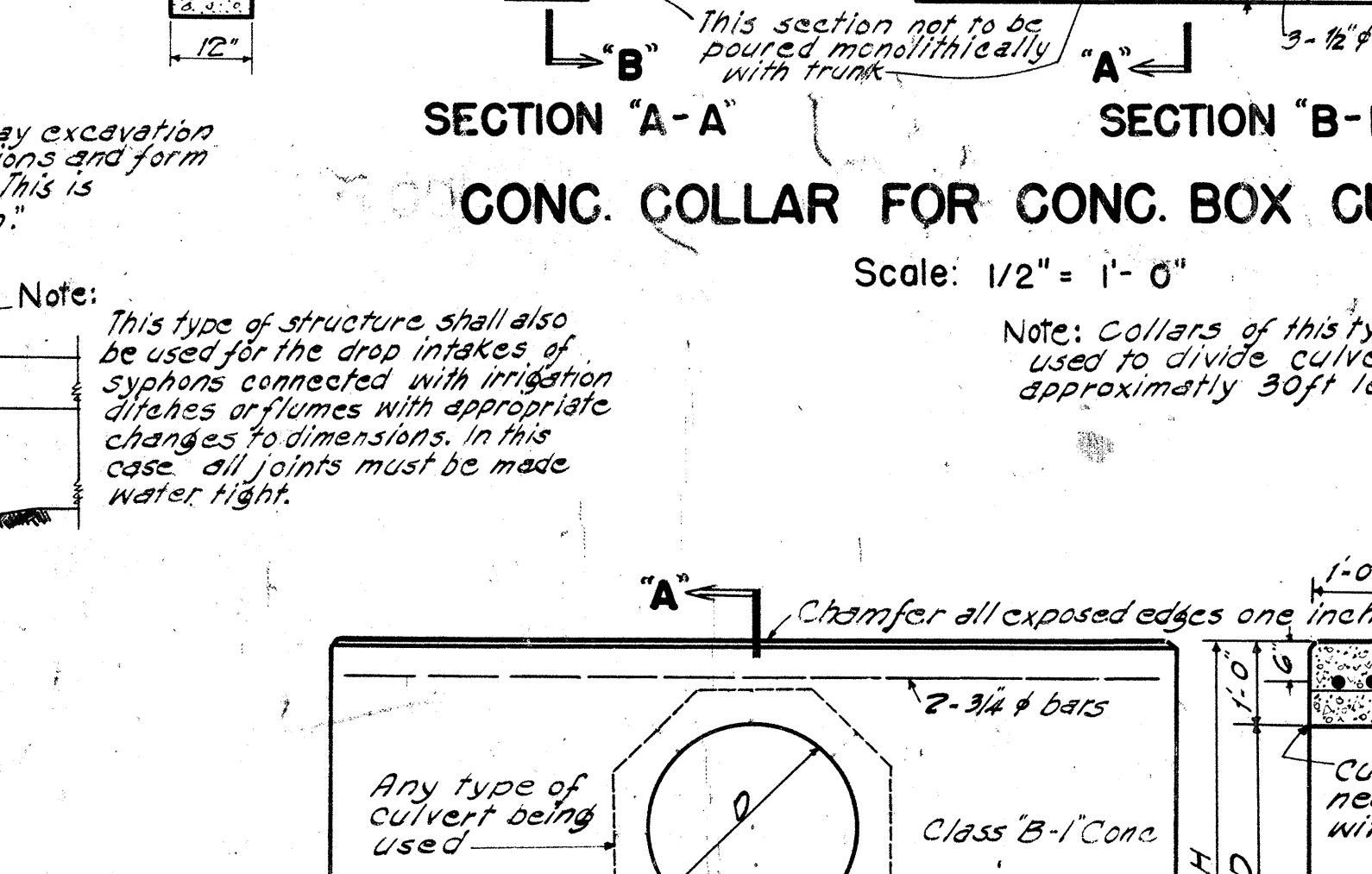
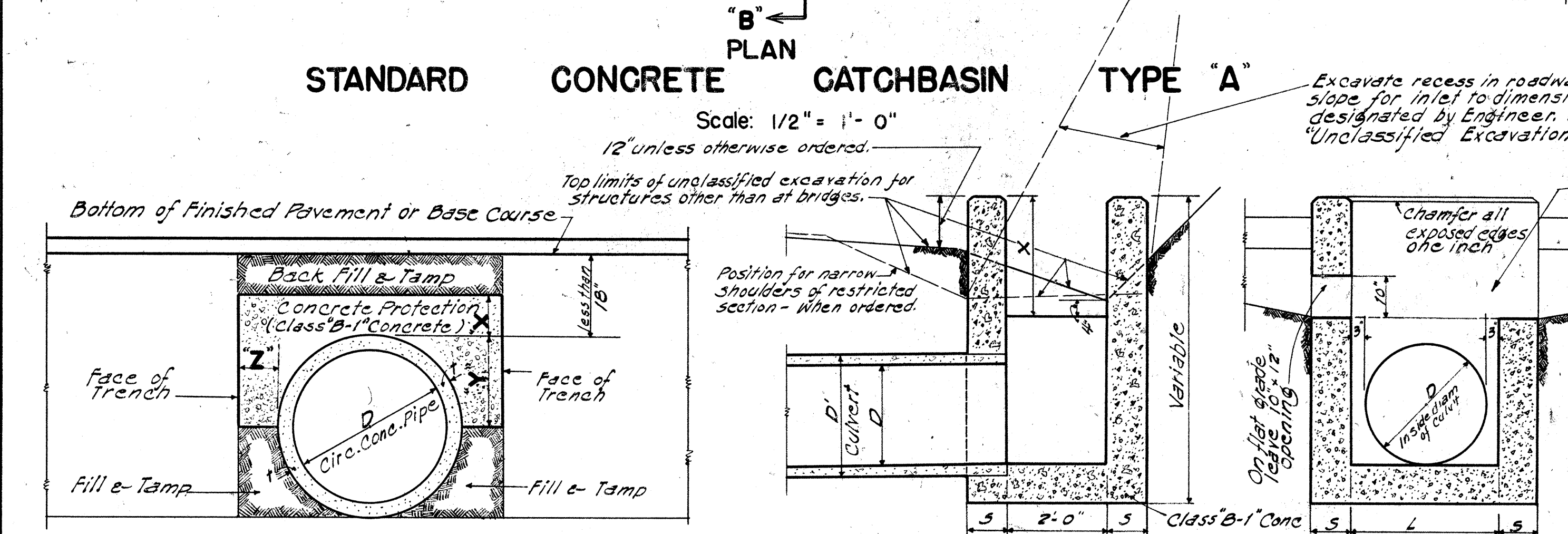
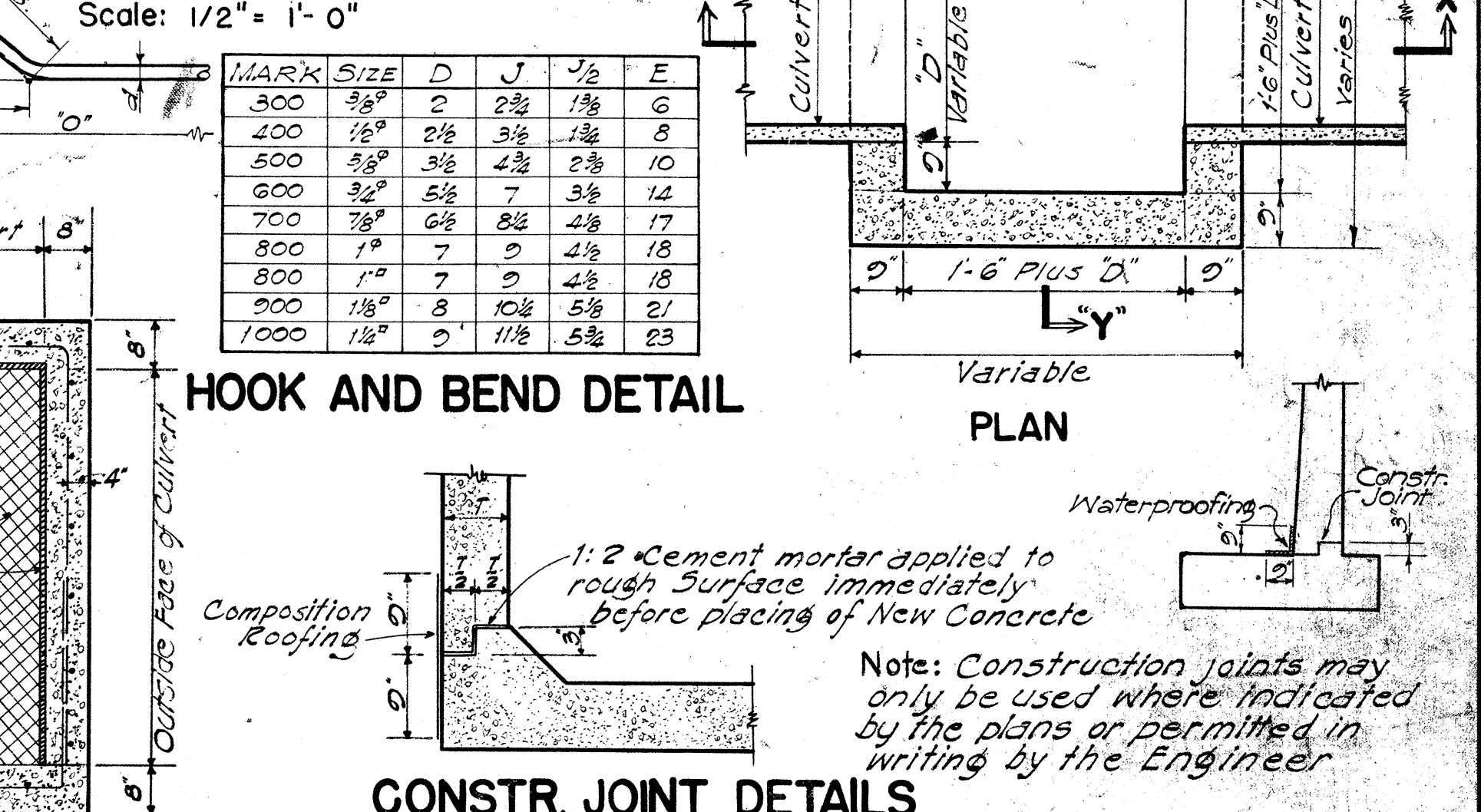
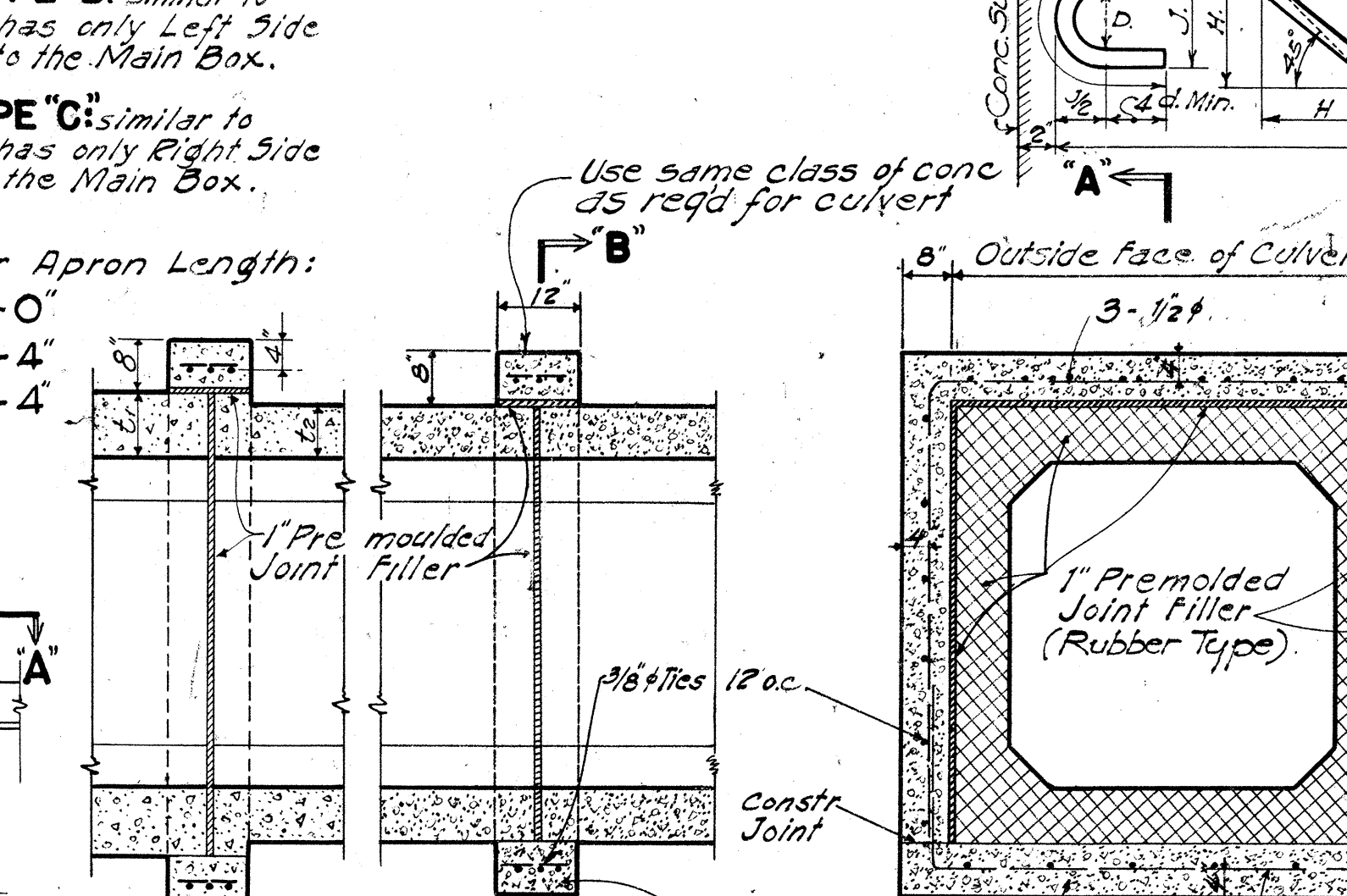
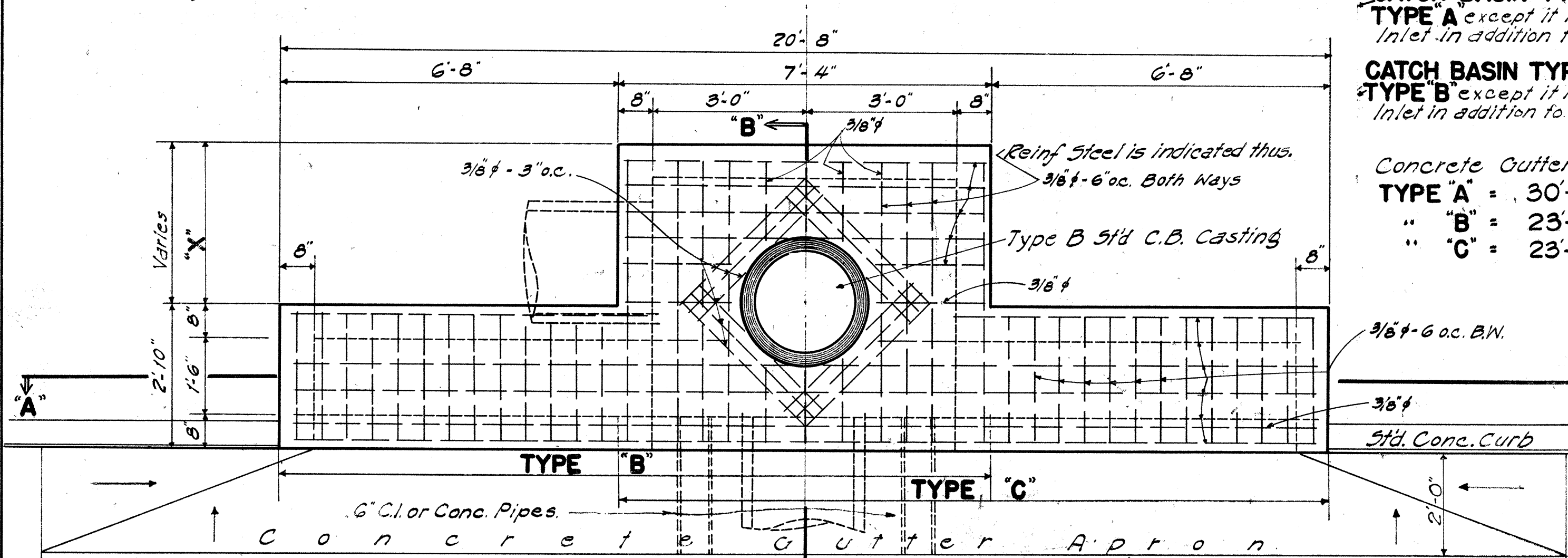
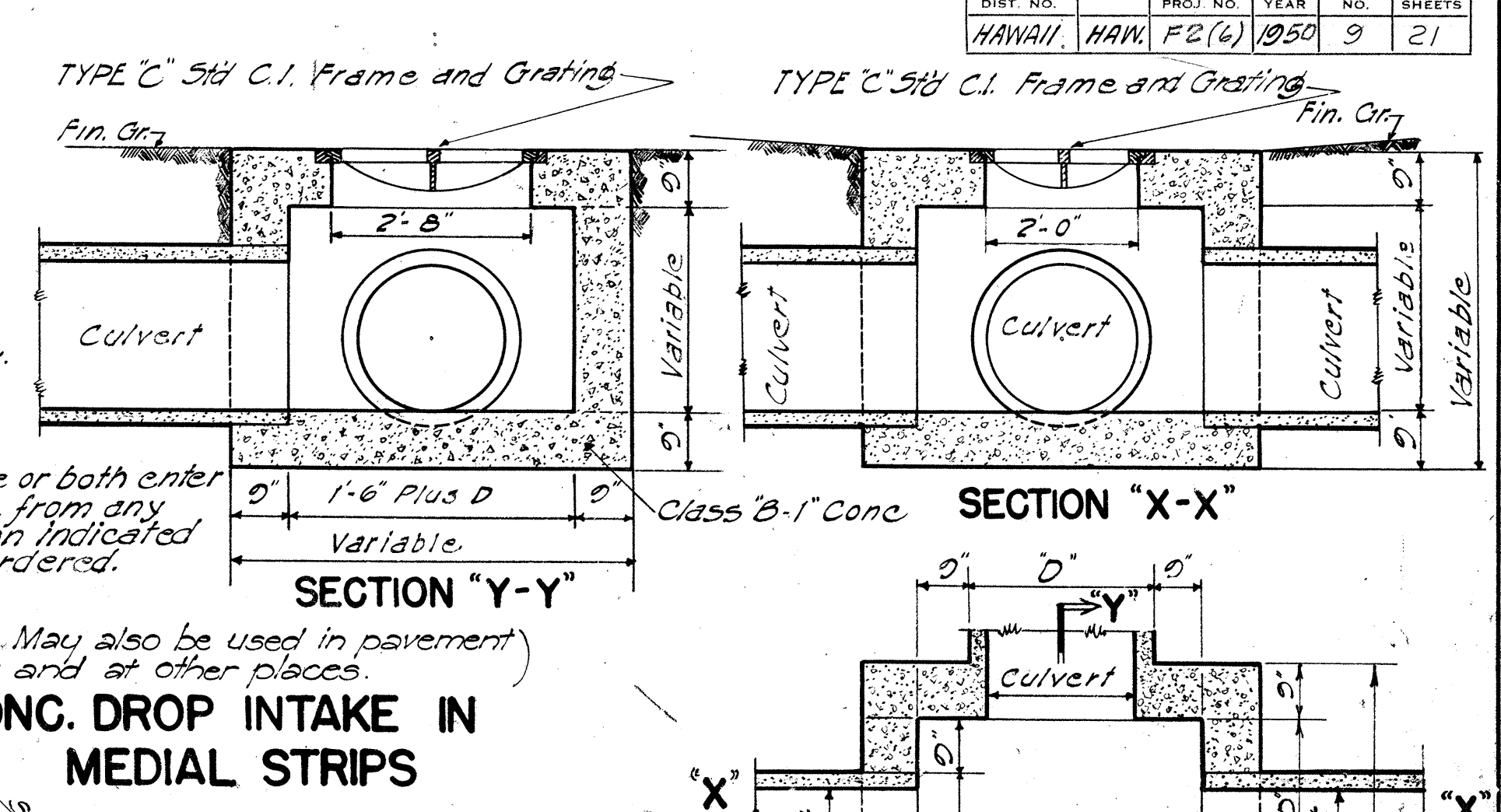
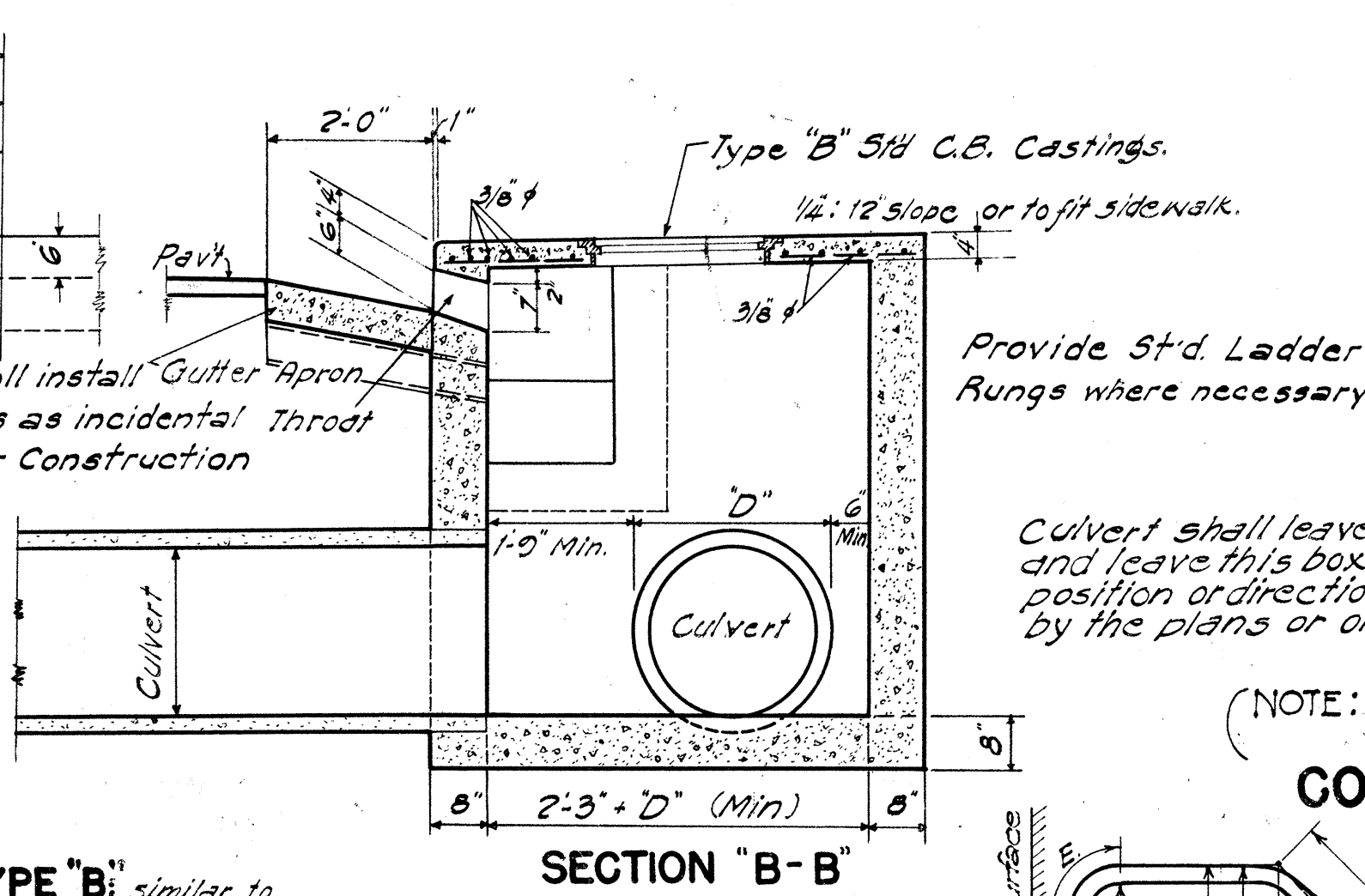
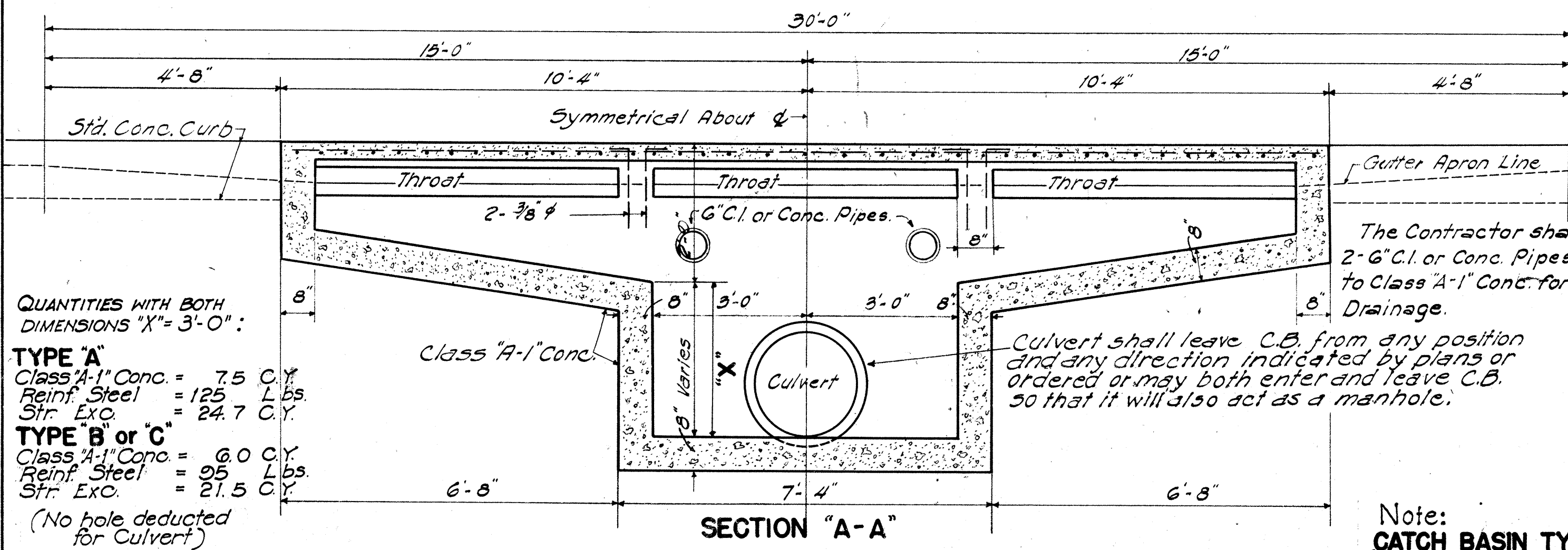
DETAIL OF STANDARD OUTLET DITCH



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



DETAILS OF HURDLE



DATA: CONCRETE PROTECTION OVER CULVERTS

X	Y	Z
6" for 18" D		
7" " 24" D		
8" " 30" D		
9" " 36" D		
10" " 42" D		
11" " 48" D		
12" " 54" D		

NOTE: Z must be from Pipe to face of Trench
 Minimum = X
 Maximum pay quantity will be Z = 12"

Data, Standard Drop Intake

D'	D	L-D+6"	S	Cu. Yds.	Where Variable Equals
22"	18"	2'-0"	8"	1.10	4'-6"
20"	24"	2'-6"	8"	1.33	5'-0"
35"	30"	3'-0"	8"	1.79	5'-6"
42"	36"	3'-6"	8"	2.07	6'-0"
48"	42"	4'-0"	10"	2.90	6'-6"
55"	48"	4'-6"	10"	3.27	7'-0"

Note: Dimensions "X" is assumed as 2'-4" in figuring the above quantities.

Where drainage comes from both sides lower this wall to same elevation as shown for opposite wall.

Cast-in-Place Data: Standard Concrete Headwall

Cu. Yds.	D	B	L	H	Conc. one H.W.	No. of Bars	Size	Length	Wt. Lbs.
0.02	18"	1'-6"	6'-0"	4'-0"	100	4	3/4"	5'-6"	33
1.23	"	24"	1'-6"	7'-0"	138	"	"	7'-0"	42
1.99	"	30"	2'-0"	9'-0"	217	"	"	8'-6"	51
2.43	"	36"	2'-0"	10'-6"	274	"	"	10'-0"	60

Steel One Headwall

Cu. Yds.	D	B	L	H	Conc. one H.W.	No. of Bars	Size	Length	Wt. Lbs.
0.02	18"	1'-6"	6'-0"	4'-0"	100	4	3/4"	5'-6"	33
1.23	"	24"	1'-6"	7'-0"	138	"	"	7'-0"	42
1.99	"	30"	2'-0"	9'-0"	217	"	"	8'-6"	51
2.43	"	36"	2'-0"	10'-6"	274	"	"	10'-0"	60

TERRITORIAL HIGHWAY DEPARTMENT
 TERRITORY OF HAWAII

STANDARD DETAILS

SCALES AS NOTED
 Apr. 15, 1948

APPROVED: *[Signature]*
 Territorial Highway Engineer

SHEET No 3 OF 4 SHEETS

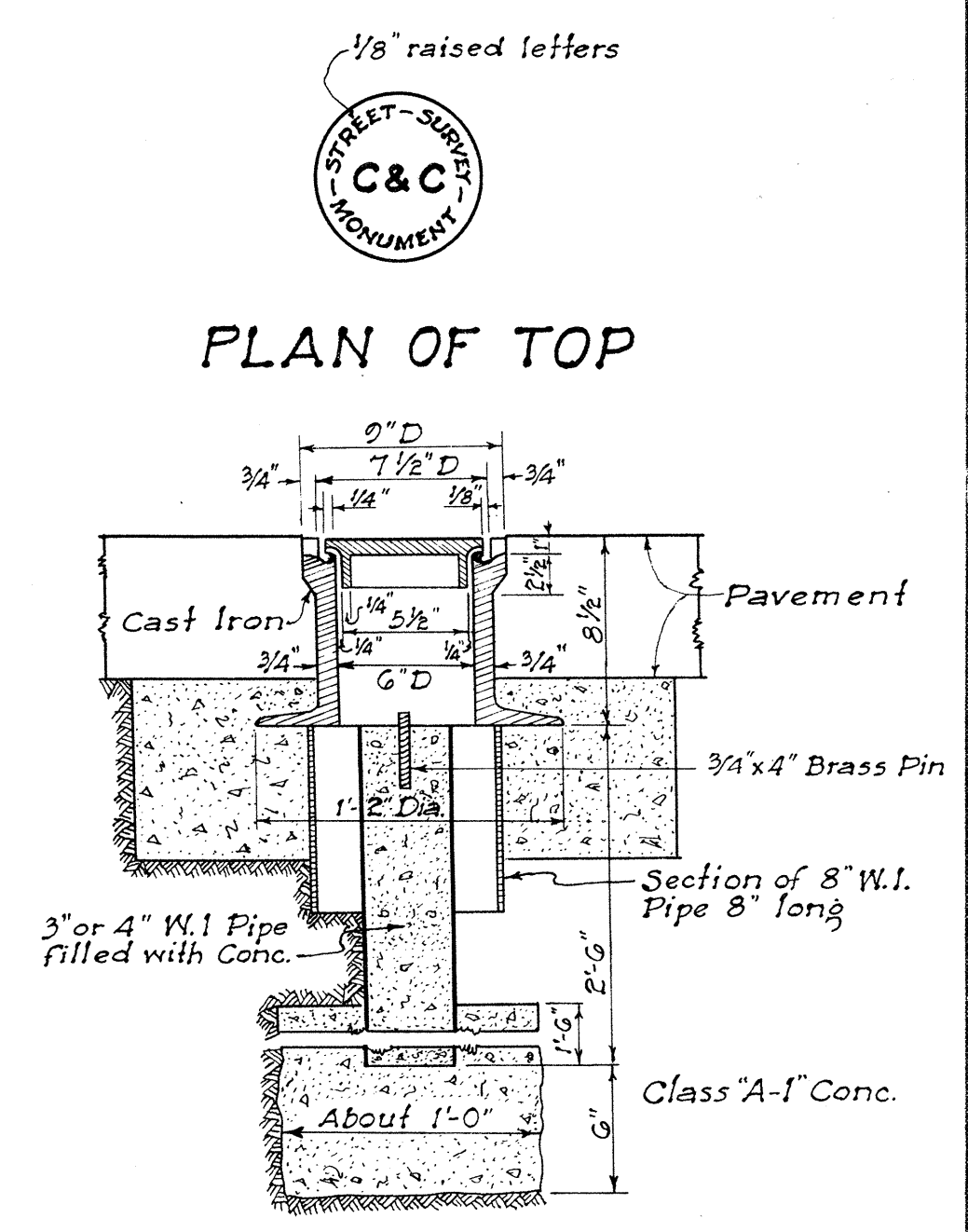


Diagram illustrating the curb construction details:

- Top layer: $\frac{1}{2}'' \times 2\frac{1}{2}''$ Brass Plug feathered at bottom to be set after Pavement is completed.
- Height: 2'-0"
- Material: 8" x 8" Class "A-1" Conc.
- Location: Road Surface
- Note: May be less if on solid rock

Figure 10 is a plan view of a rectangular plate. The overall dimensions are 25 inches in width and 15 inches in height. The plate has a central rectangular area with a width of 25 inches and a height of 15 inches, defined by a double-line border. There are four small circles, one in each corner of the central area. The corners of the outer plate are rounded. Section lines A-A are indicated on the left and right sides.

A detailed cross-section diagram of a trench wall and bottom construction. The diagram shows a trench with a sloped wall on the left and a vertical wall on the right. The bottom of the trench is filled with 'Clean Crushed Rock Size No. 12'. A '3/4" Drain' pipe runs horizontally across the trench, resting on the rock. Above the drain, a '1" Conduit' is shown. The trench walls are constructed with 'Precast Reinf. Concrete'. A 'Wire Mesh' is embedded in the concrete at the top. The top surface is labeled 'Finished Grade'. Vertical dimensions on the left indicate a height of '12" 1/2' from the rock to the top of the wall and a total height of '12" 1/2' from the rock to the top of the wall. The label 'Roofing Paper' is positioned near the bottom right corner of the trench wall.

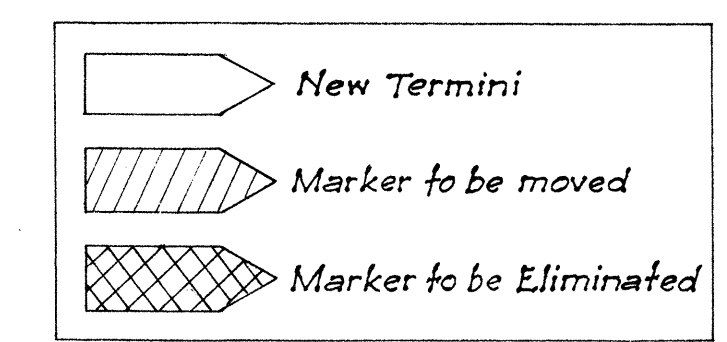
SECTION A-A

7'-0"

1'-8"

DETOUR

STANDARD DETOUR SIGN



TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

STANDARD DETAILS

SCALES AS NOTED *Neil Belt* May 31, 1949

APPROVED: _____
Territorial Highway Engineer

SHEET N^o OF SHEETS