

GENERAL NOTES

SPECIFICATIONS: Construction, Public Roads Administration Specification FP41, Design A.3.11.0, Standard Specifications for Highway Bridges 1949.

DEAD LOAD: Concrete = 150# per cu. ft. Paving allowance 25# per square foot of roadway surface.

LIVE LOAD: H15-S12-44 loading, Impact I = $\frac{L}{175}$ (L=loaded length) Maximum I = 30%.

UNIT STRESSES: Concrete $f_c = 1000$ p.s.i. Reinforcing Steel $f_s = 20000$ p.s.i. $n=10$.
Structural Steel (Carbon) $f_s = 18,000$ p.s.i.
Structural Steel (Silicon) $f_s = 24,000$ p.s.i.

CONCRETE: All concrete shall be Class A except footing seals which are Class S. Maximum size of coarse aggregate shall be 1 1/2". All concrete shall be mixed with Type II Portland Cement (low alkali) and, except Class S, with an air entraining agent. All Class A concrete shall be vibrated. All exposed edges shall be chamfered 3/8" unless otherwise shown.

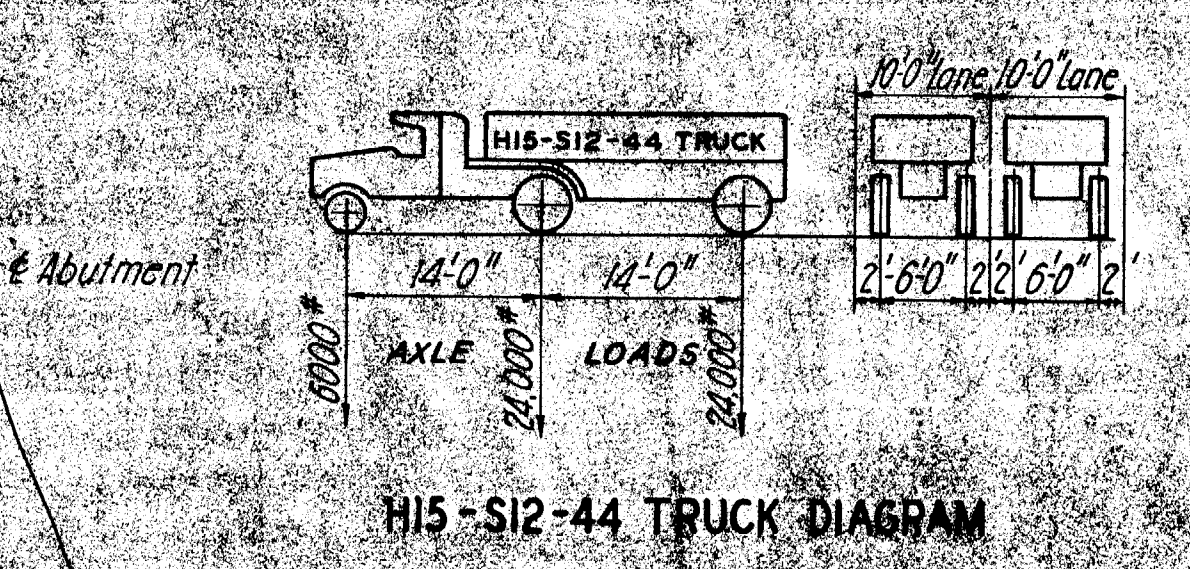
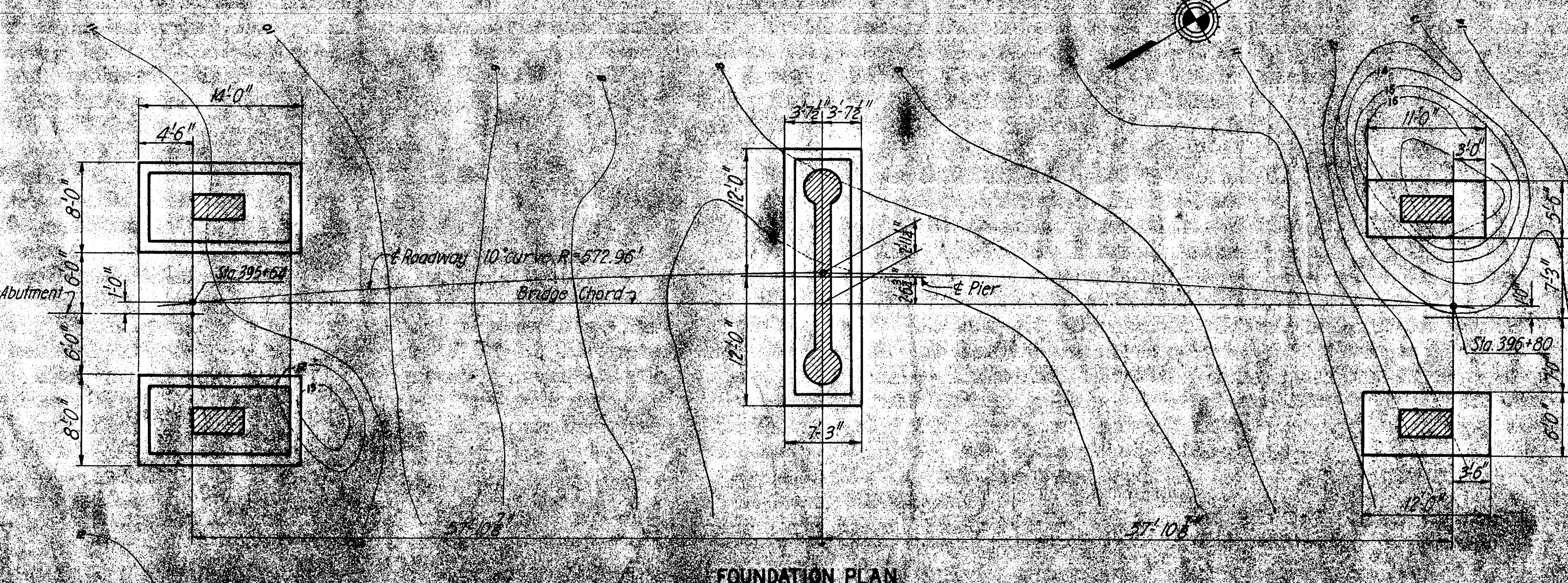
FINISHING CONCRETE: Roadway slabs and curbs are to be finished according to specifications. Outside face of curb and slab are to be given a "rubbed finish." All other concrete to have an "ordinary finish."

REINFORCING STEEL: All bars shall be deformed intermediate grade steel. All bars shall conform to A.S.T.M. Specification A15-39 and A-305-29. Equivalent round bars may be substituted for the square bars shown. All bars in slab shall be supported on metal chairs. All dimensions relating to reinforcing bars are to centers of bars unless otherwise shown.

STRUCTURAL STEEL: All girders are to be Silicon structural steel conforming to A.S.T.M. Specification A94. All other steel shall be carbon structural steel A.S.T.M. Specification A7. All rivets are to be field connections may be turned bolts or an approved type. Rivets shall have lock nuts. Shop plans must be approved by the Engineer before fabrication is started. Steel shall be given one shop and one field coat of red lead paint. Second field coat to be white lead zinc oxide paint, as directed. Shop contact surfaces and surfaces in contact with concrete shall not be painted.

RAILING: The contract item "Railing" includes furnishing and installing the Flex Beam guard rail (or equal), the 2 1/2" pipe railing, rail posts, all bolts and caps and painting. Railing shall be painted the same as the structural steel.

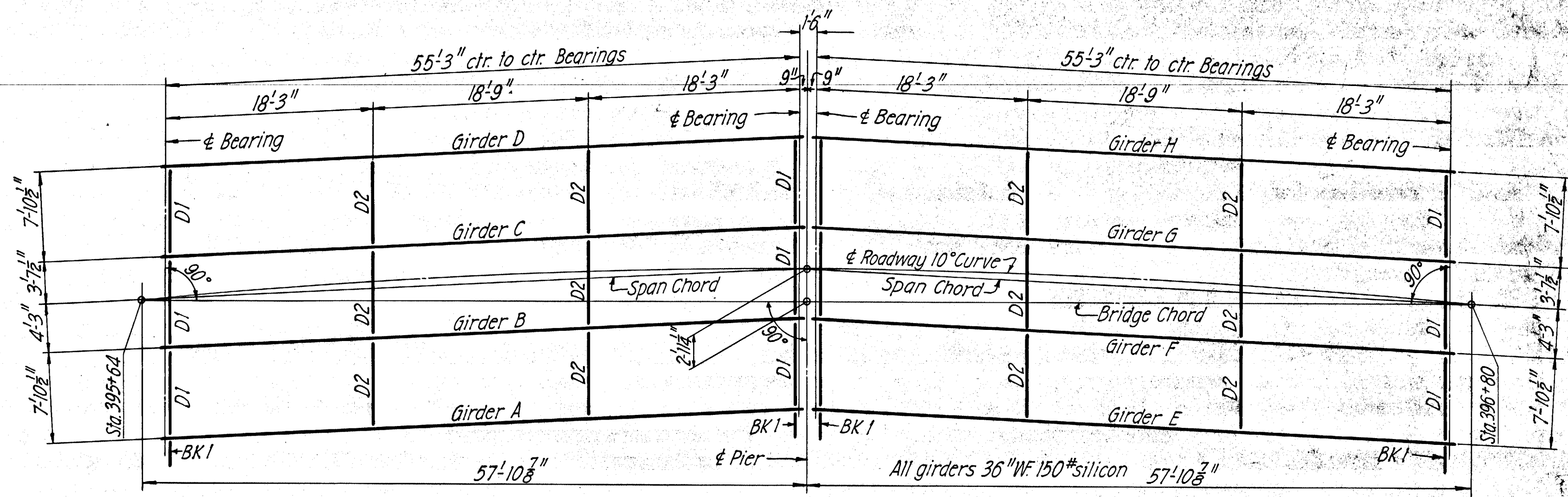
BRIDGE HEAD REFLECTORS: Reflectors will be furnished by the Bureau of Public Roads. Cost of installation shall be included in the contract price for Class A concrete.



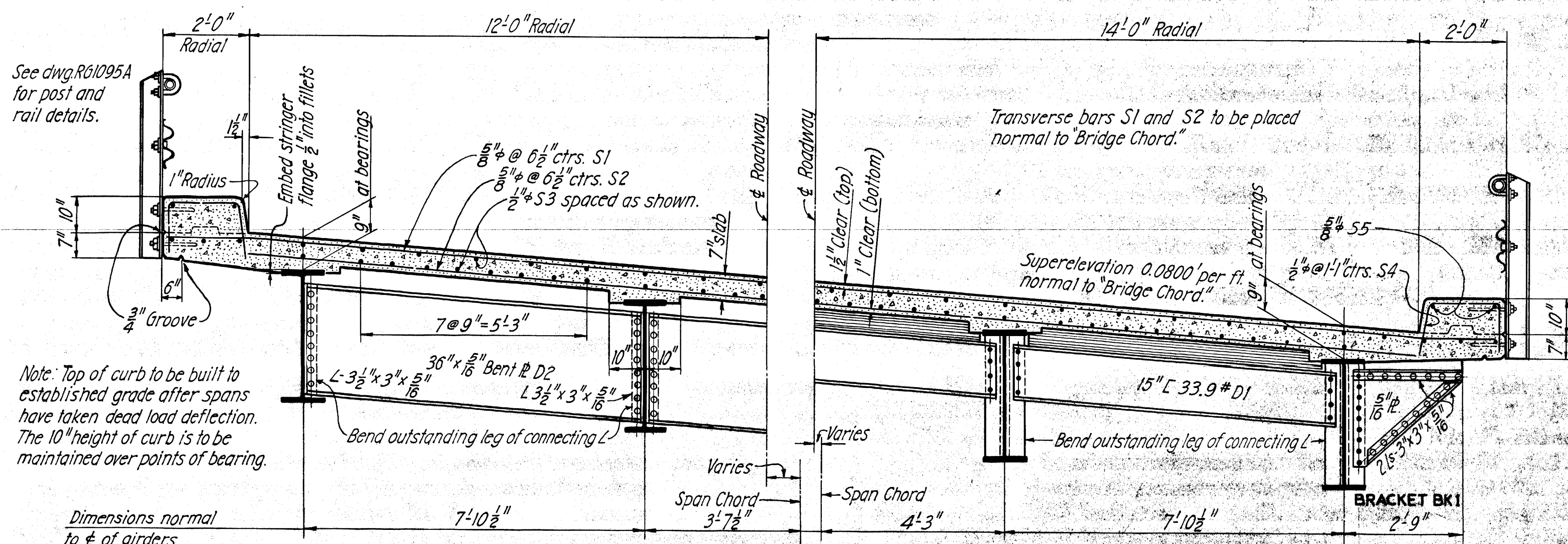
ESTIMATE

Structure Excavation	15000 lbs
Class A Concrete	223 cu. yds
Class S Concrete	46 cu. yds
Reinforcing Steel	28500 lbs
Structural Steel (Carbon A.S.T.M. A7)	12,000 lbs
Structural Steel (Silicon A.S.T.M. A94)	68,000 lbs
Railing	232 lbs

* Includes seals for Abut 1 and Pier
** Includes weight of guard angles and drains

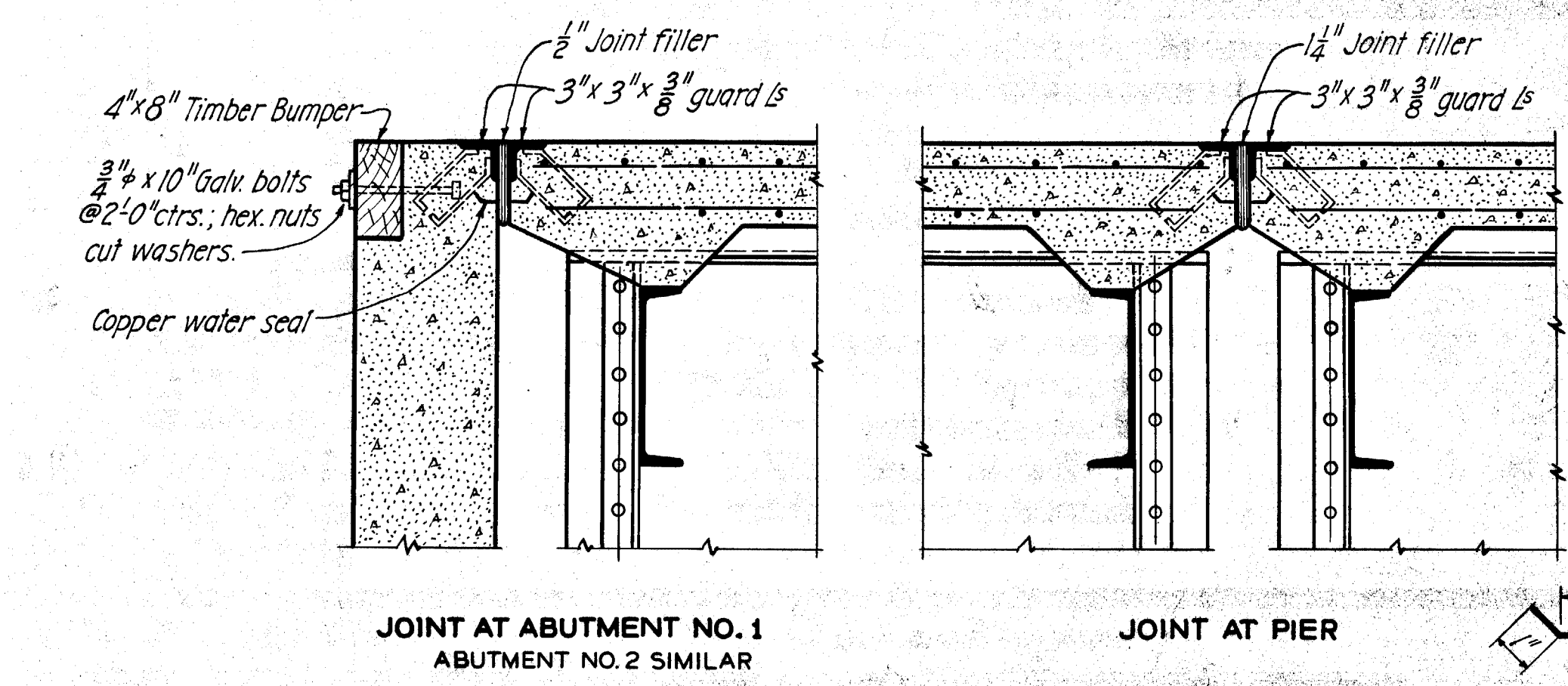


STEEL LAYOUT
SCALE: $\frac{1}{8}'' = 1'-0''$

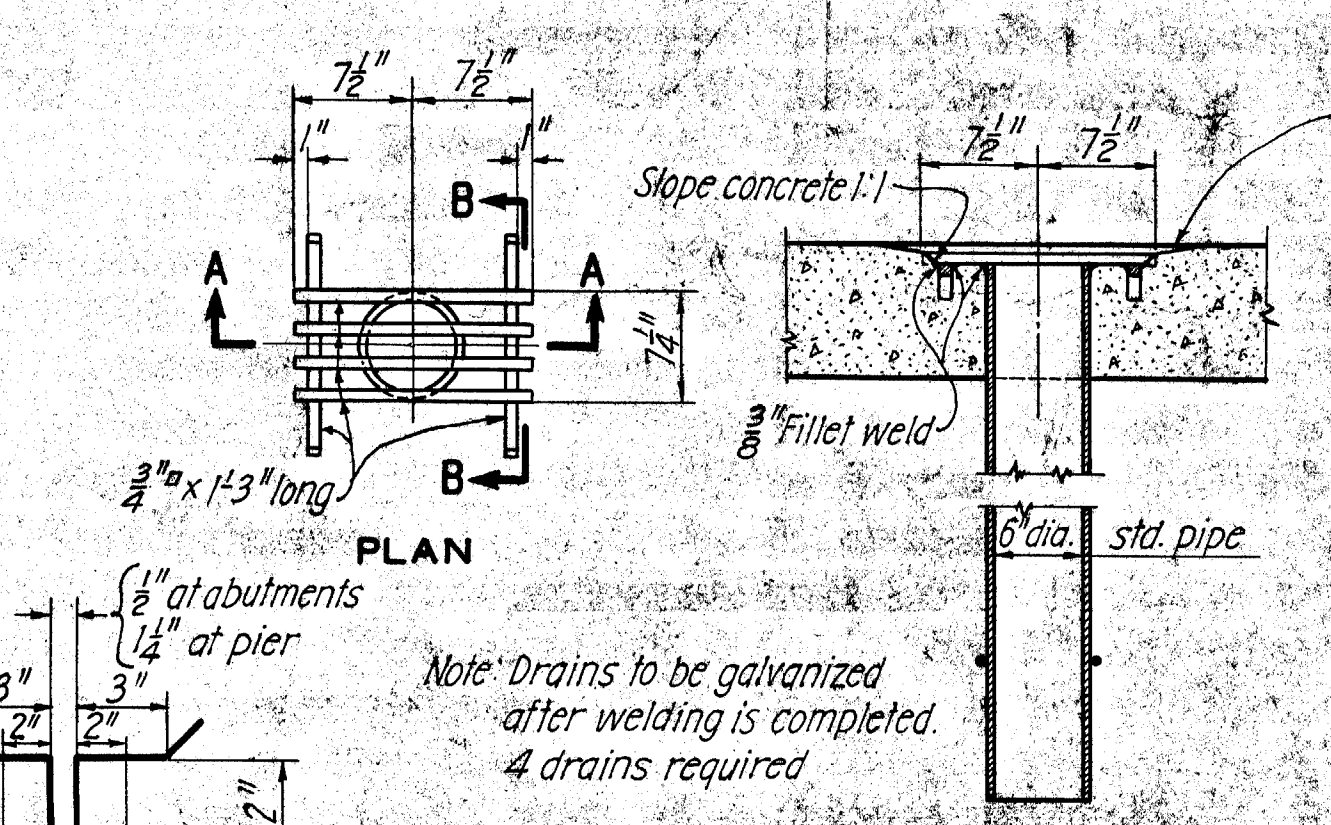


HALF SECTION NEAR INTERMEDIATE DIAPHRAGM D2
SCALE: $\frac{1}{2}'' = 1'-0''$

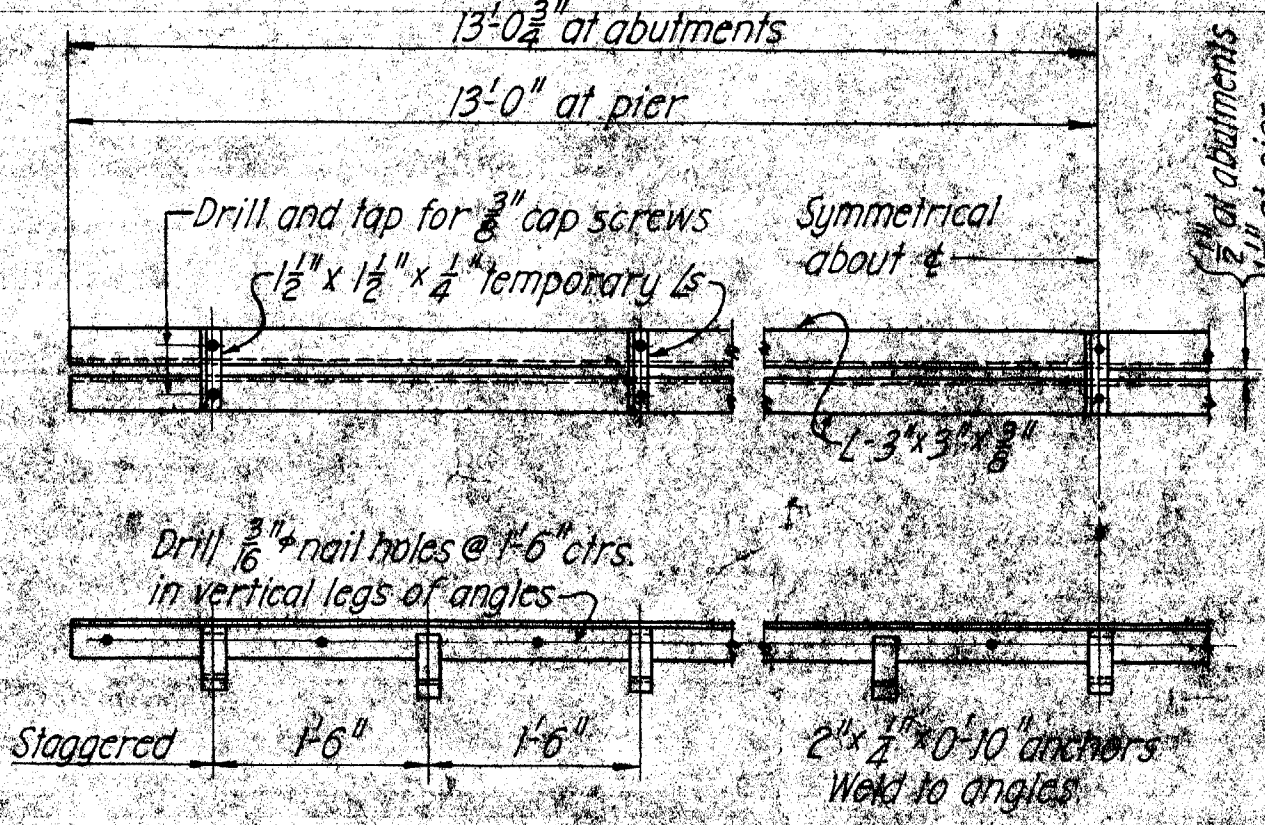
HALF SECTION NEAR END DIAPHRAGM D-1
SCALE: $\frac{1}{2}'' = 1'-0''$



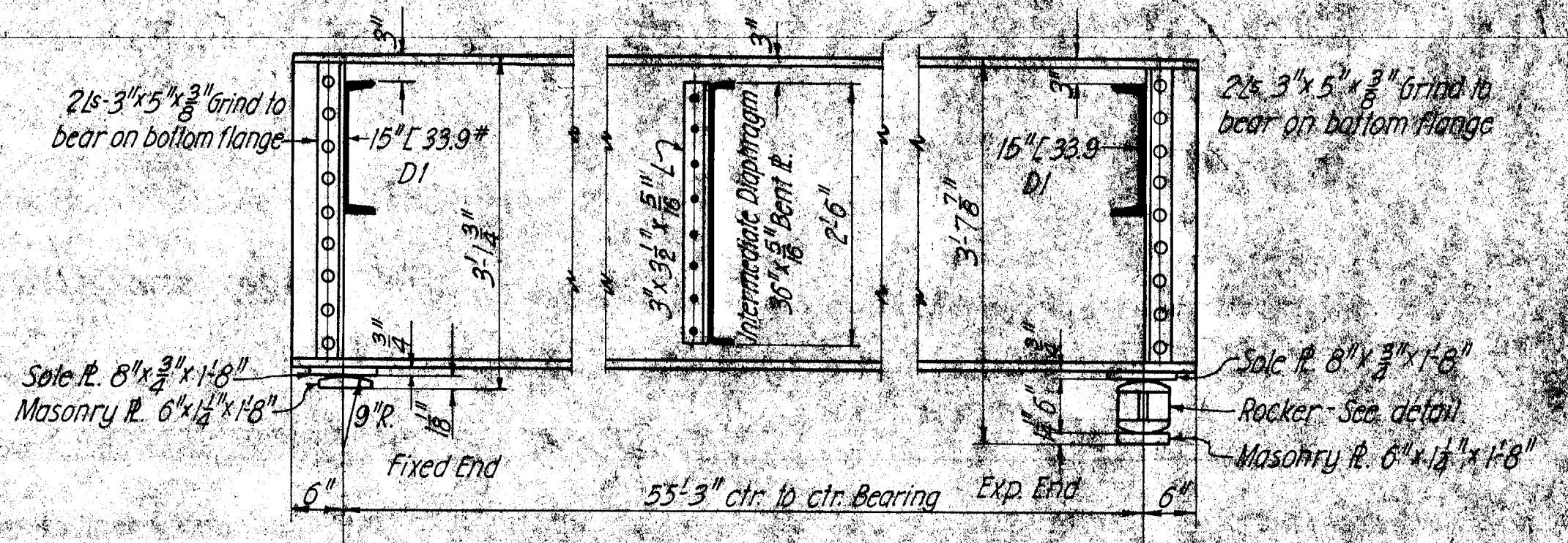
PART LONGITUDINAL SECTION
SCALE: $1'' = 1'-0''$



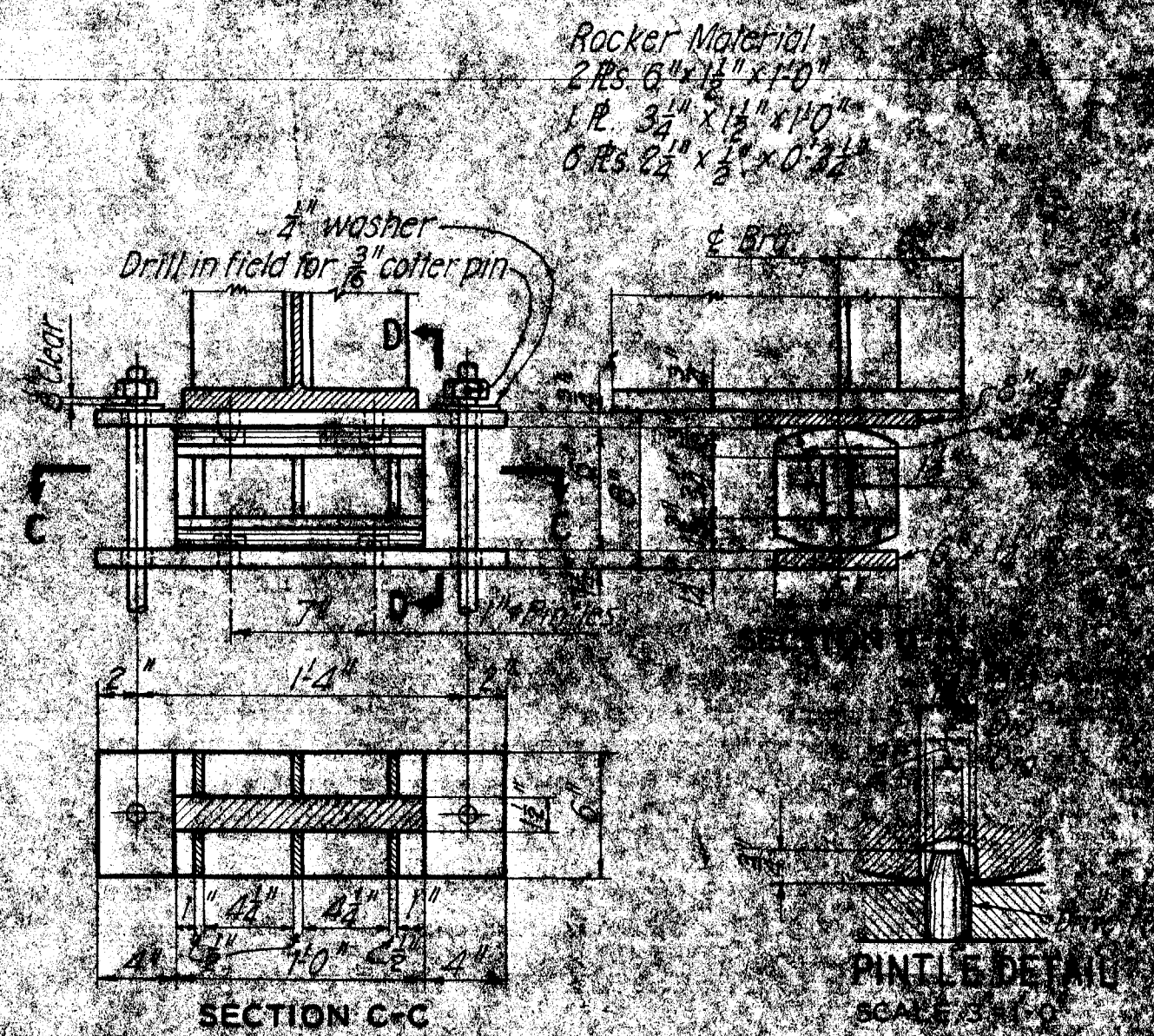
ROADWAY DRAIN DETAILS
SCALE: $1'' = 1'-0''$



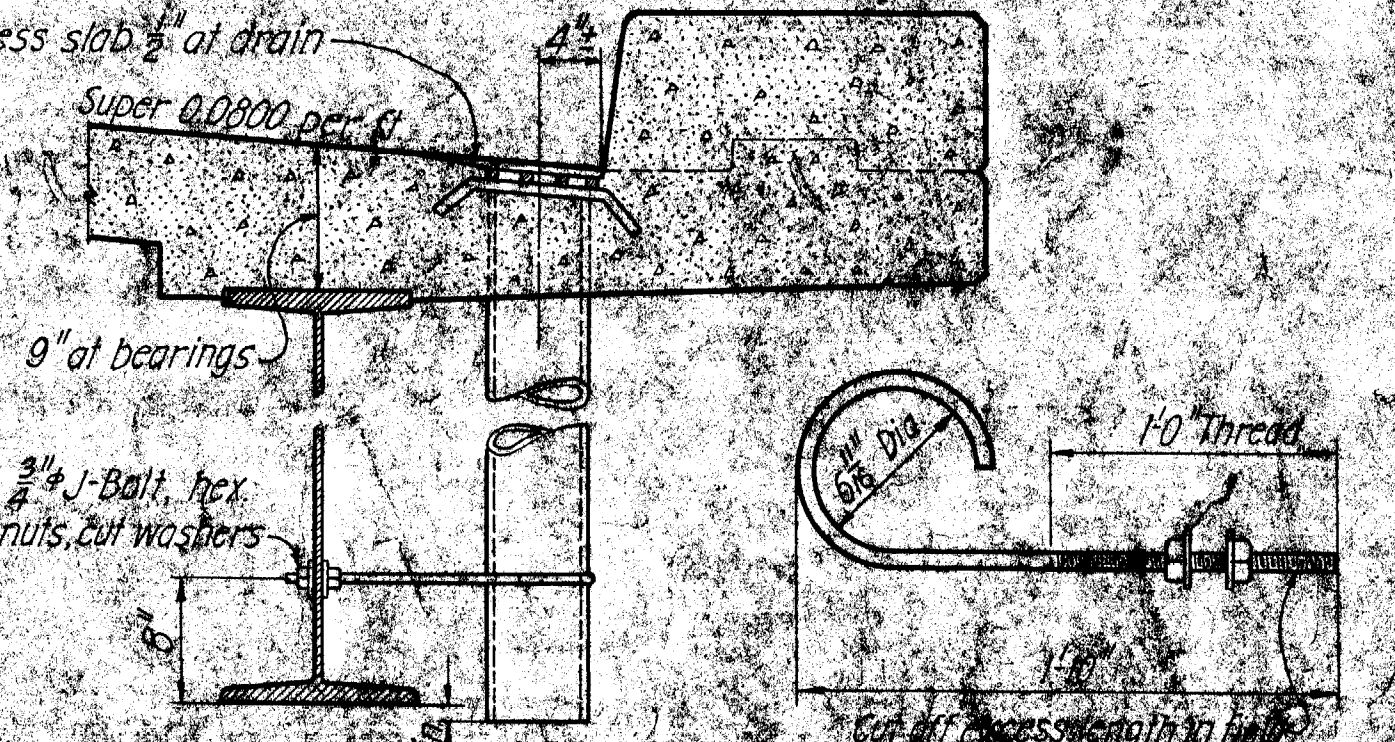
GUARD ANGLES
SCALE: $\frac{3}{4}'' = 1'-0''$



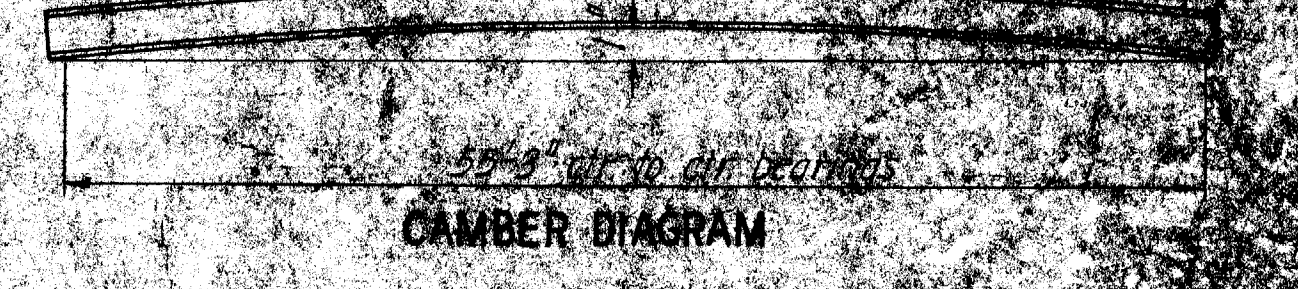
PART GIRDER ELEVATION AND PLAN
SCALE: $\frac{3}{4}'' = 1'-0''$



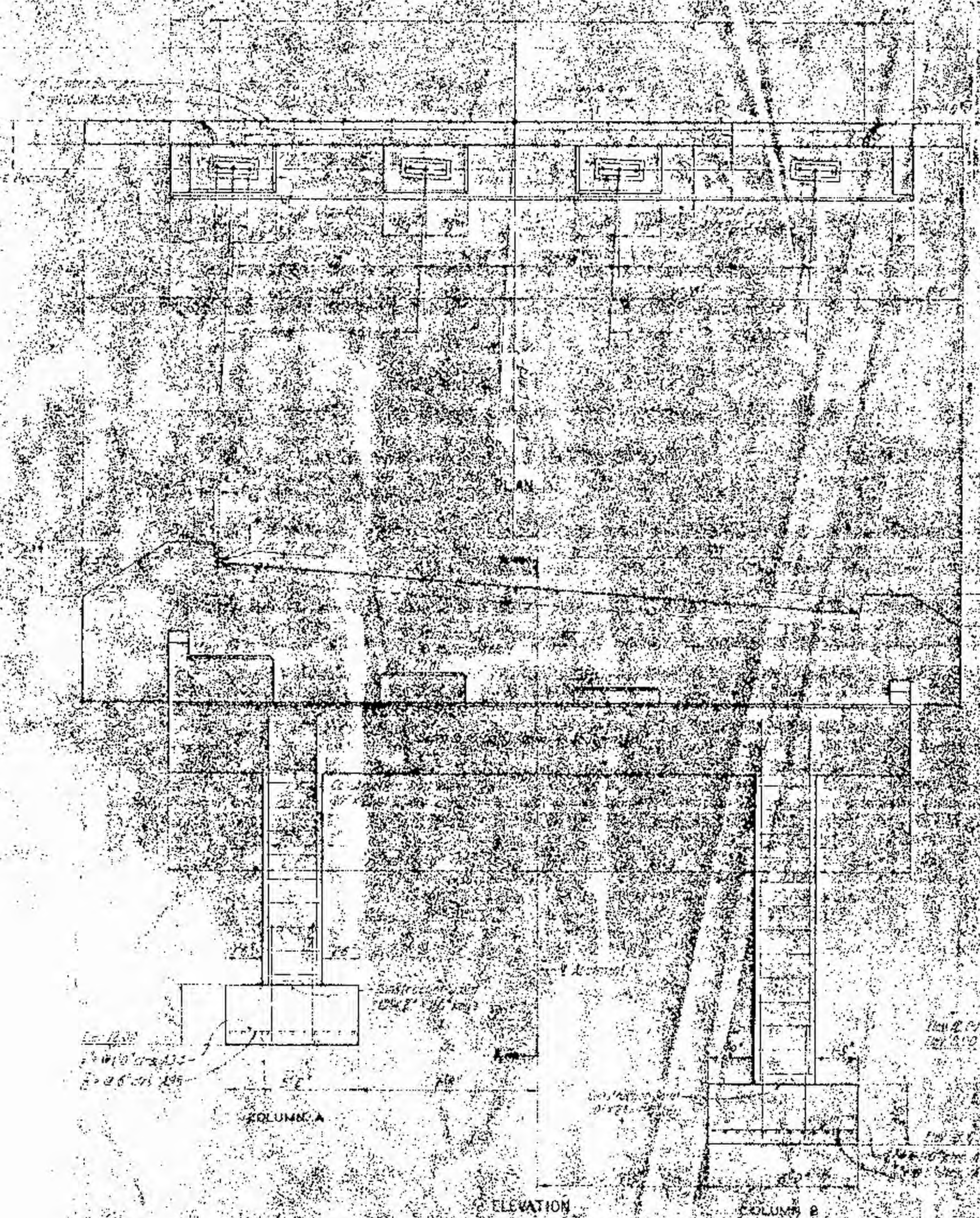
SECTION C-C DETAIL OF EXPANSION ROCKER
SCALE: $1 1/2'' = 1'-0''$



DETAIL OF DRAIN BOLT



CAMBER DIAGRAM

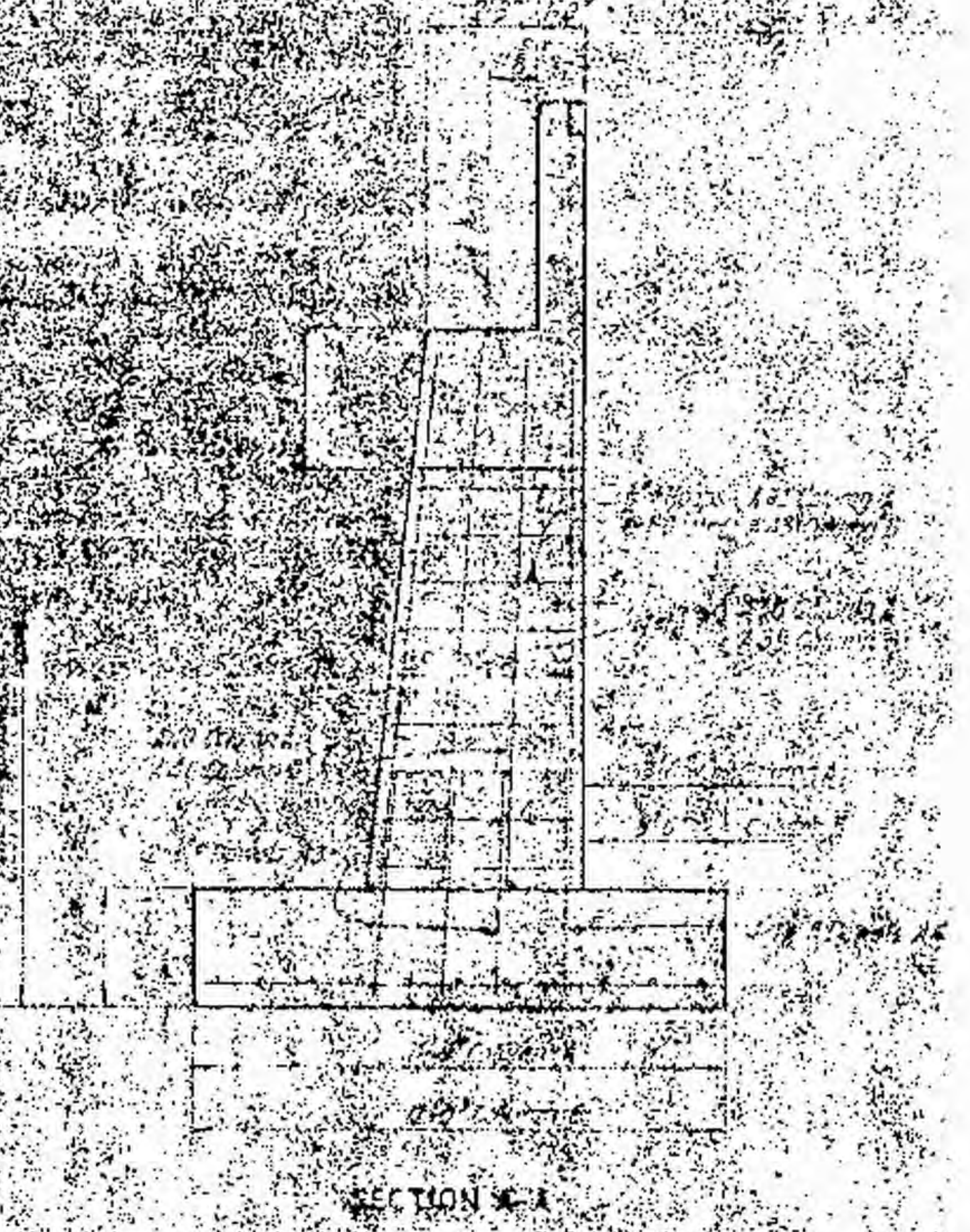


COLUMN A

ELEVATION

COLUMN B

EQUIPMENT NO. 2 DETAILS



SECTION A-A

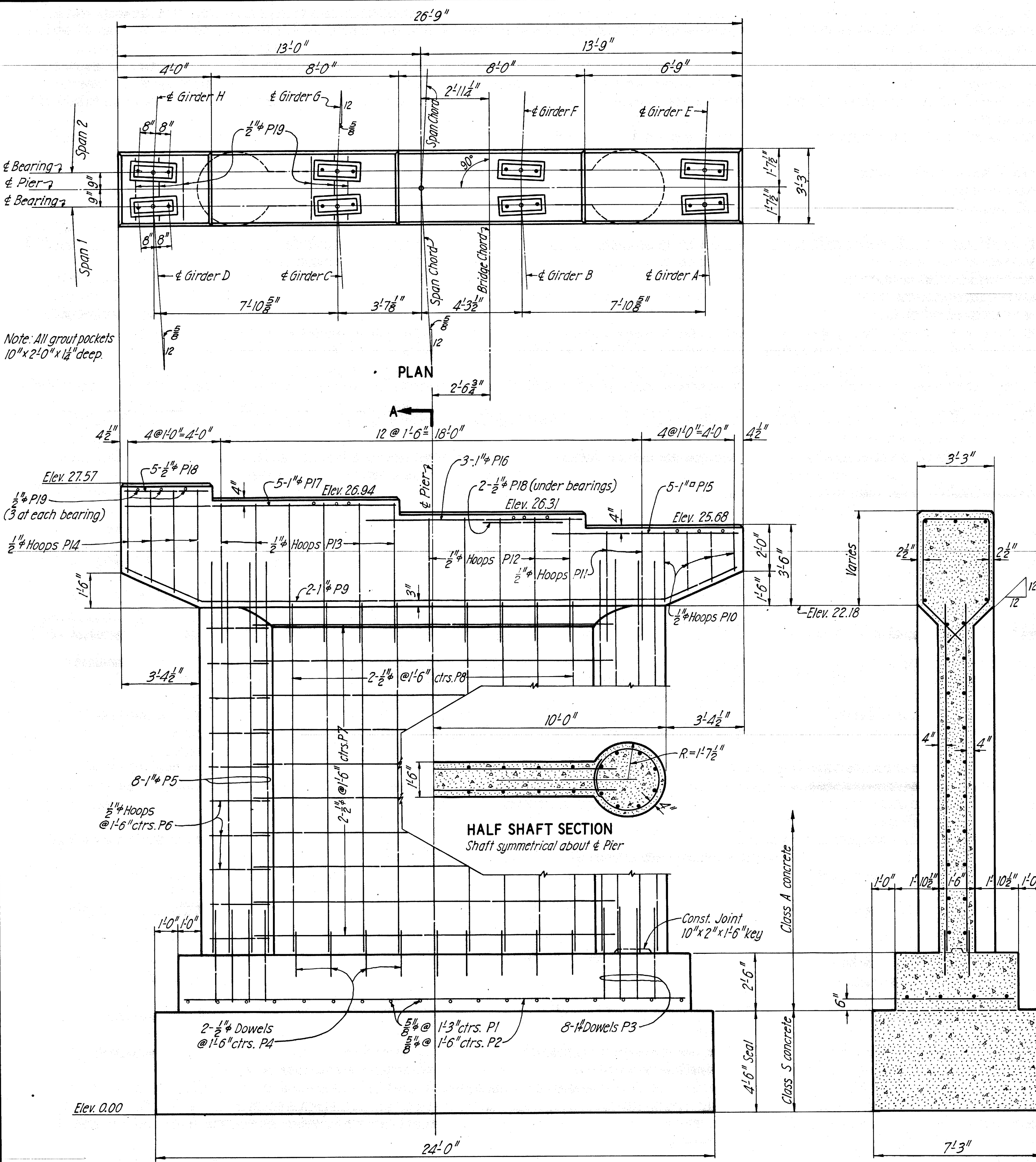
CIRCUER	1	2	3	4	5	6	7	8	9	10
ELEVATION										
MASONRY PLATE										

DEPARTMENT OF COMMERCE
 BUREAU OF PUBLIC ROADS - WESTERN HEADQUARTERS
HERRING BAY BRIDGE
 TONGASS HIGHWAY
 ALASKA POWER HIGHWAY
 SCALE 1/4" = 1'-0"
 DRAWN BY J. W. BROWN
 CHECKED BY J. W. BROWN
 FEBRUARY 1934
 PG 1095-E

REINFORCING STEEL BAR LIST

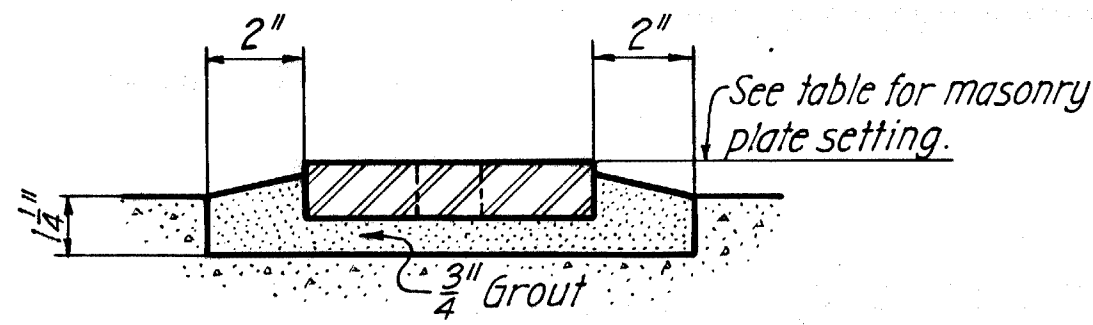
MARK	LOCATION	NO.	SIZE	LENGTH	X	Y	TYPE
SUPERSTRUCTURE							
S1	Slab	210	5/8"	29'-6"			A
S2	"	202	5/8"	26'-0"			A
S3	"	216	1/2"	28'-9"			A
S4	Curb	212	1/2"	3'-9"			D
S5	"	16	5/8"	28'-9"			A
ABUTMENTS AND PIER							
A1	Abutment 1 Footings	20	1"	12'-6"			A
A2	" " "	26	1/2"	6'-2"			A
A3	" 1 and 2 Dowels	24	1"	5'-0"			A
A4	" 1 and 2 "	16	1/4"	5'-0"			A
A5	" 1 Columns	12	1"	15'-0"			A
A6	" 1 "	8	1/4"	15'-0"			A
A7	" 1 "	2 ea @ 14 = 28	1/2"	11'-10" to 14'-6"	2'-2"	3'-4" to 4'-8"	B
A8	" 1 and 2 Beam	8	1/2"	29'-8"			A
A9	" 1 and 2 Beam	6	1/2"	15'-6"			A
A10	" 1 and 2 "	6	1"	29'-8"			A
A11	" 1 and 2 "	8	1"	10'-0"			A
A12	" 1 and 2 "	30	1/2"	12'-1"			C
A13	" 1 and 2 Backwall	2 ea @ 26 = 52	1/2"	4'-0" to 6'-1"			A
A14	" 1 and 2 "	2 ea @ 17 = 34	1/2"	4'-6" to 6'-7"			A
A15	" 1 and 2 "	8	1/2"	35'-3"			A
A16	" 1 and 2 "	4	1/2"	34'-3"			A
A17	" 1 and 2 "	8	1/2"	5'-4"			A
A18	" 1 and 2 "	4 ea @ 2 = 8	1/2"	3'-1" and 3'-11"			A
A19	" 1 and 2 "	4	1/2"	4'-0"			A
A20	" 1 and 2 "	2	1/2"	3'-9"	1'-6"	2'-3"	E
A21	" 1 and 2 "	2	1/2"	3'-0"	0'-9"	2'-3"	E
A22	" 1 and 2 "	8	1/2"	7'-6"			A
A23	" 1 and 2 "	4 ea @ 3 = 12	1/2"	4'-3" to 5'-11"			A
A24	" 1 and 2 "	16	1/2"	5'-6"			A
A25	" 1 and 2 "	2	1/2"	5'-6"	1'-6"	4'-0"	E
A26	" 1 and 2 "	2	1/2"	4'-9"	0'-9"	4'-0"	E
A27	" 1 and 2 Beam	8	1/2"	3'-11"	1'-3"	2'-8"	F
A28	" 1 and 2 "	12	1/2"	2'-8"			A
A29	" 1 and 2 "	12	1/2"	2'-0"			A
A30	" 1 and 2 "	40	1/2"	3'-1"			G
A31	" 1 and 2 "	8	1/2"	3'-10"			A
A32	" 1 and 2 "	16	1/2"	3'-2"			A
A33	" 1 and 2 "	2	1/2"	14'-0"	2'-8"	3'-11"	B
A34	Abutment 2 Footing	11	1/2"	5'-2"			A

MARK	LOCATION	NO.	SIZE	LENGTH	X	Y	TYPE
ABUTMENTS AND PIER CONTINUED							
A35	Abutment 2 Footing	11	3/8"	10'-6"			A
A36	" 2 "	12	1/2"	5'-8"			A
A37	" 2 "	12	3/8"	11'-6"			A
A38	" 2 Column	4	1/4"	11'-3"			A
A39	" 2 "	4	1/4"	15'-3"			A
A40	" 2 "	6	1"	11'-3"			A
A41	" 2 "	6	1"	15'-3"			A
A42	" 2 "	9	1/2"	11'-9" to 13'-5"	2'-2"	3'-3 1/2" to 4'-1 1/2"	B
A43	" 2 "	13	1/2"	11'-9" to 14'-3"	2'-2"	3'-3 1/2" to 4'-6 1/2"	B
P1	Pier Footing	18	5/8"	4'-9"			A
P2	" "	4	5/8"	21'-6"			A
P3	" " Dowels	16	1"	4'-0"			A
P4	" " "	18	1/2"	2'-0"			A
P5	" Shaft	16	1"	17'-0"			A
P6	" "	20	1/2"	9'-2"			J
P7	" "	20	1/2"	16'-0"			A
P8	" "	18	1/2"	15'-0"			A
P9	" Cap	2	1"	26'-8"			H
P10	" "	4	1/2"	10'-1" to 12'-9"	2'-10 1/2"	1'-9" to 3'-1"	B
P11	" "	2	1/2"	14'-0"	2'-10 1/2"	3'-1"	I
P12	" "	5	1/2"	15'-3"	2'-10 1/2"	3'-8 1/2"	I
P13	" "	6	1/2"	16'-6"	2'-10 1/2"	4'-4"	I
P14	" "	4	1/2"	13'-10" to 16'-6"	2'-10 1/2"	3'-7 1/2" to 4'-1 1/2"	B
P15	" "	5	1"	8'-0"			A
P16	" "	3	1"	9'-3"			A
P17	" "	5	1"	11'-6"			A
P18	" "	7	1/2"	3'-6"			A
P19	" "	12	1/2"	2'-9"			A

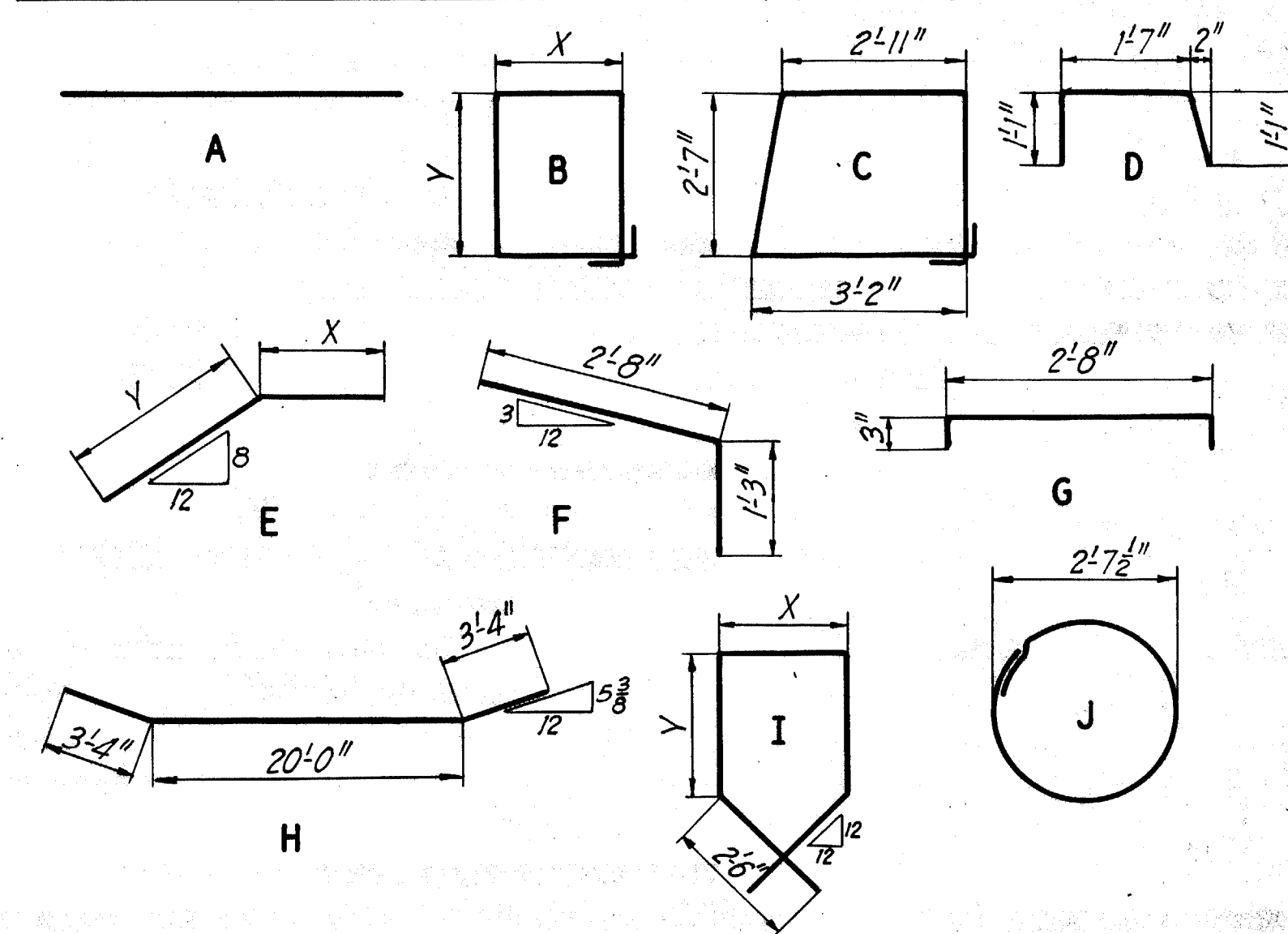


Note: All grout pockets 10" x 2'-0" x 1/4" deep.

Footings Seal: Caution, Depth of seal may be varied by the Engineer to suit field conditions. Depth of seal shown is based on a water elevation of 10.0'. Depth of seal = 0.44 x head of water on bottom of footing. Since seal thickness shown is designed for maximum uplift due to a ten foot head of water ample vents must be provided in coffer dam at elevation 10.0. See tide table for scheduling operations.



DETAIL OF GROUT POCKET
SCALE: 3" = 1'-0"



BAR TYPES

GIRDER	A	E	B	F	C	G	D	H
ELEV. TOP OF MASONRY PLATE	25.74	26.37	27.00	27.63				