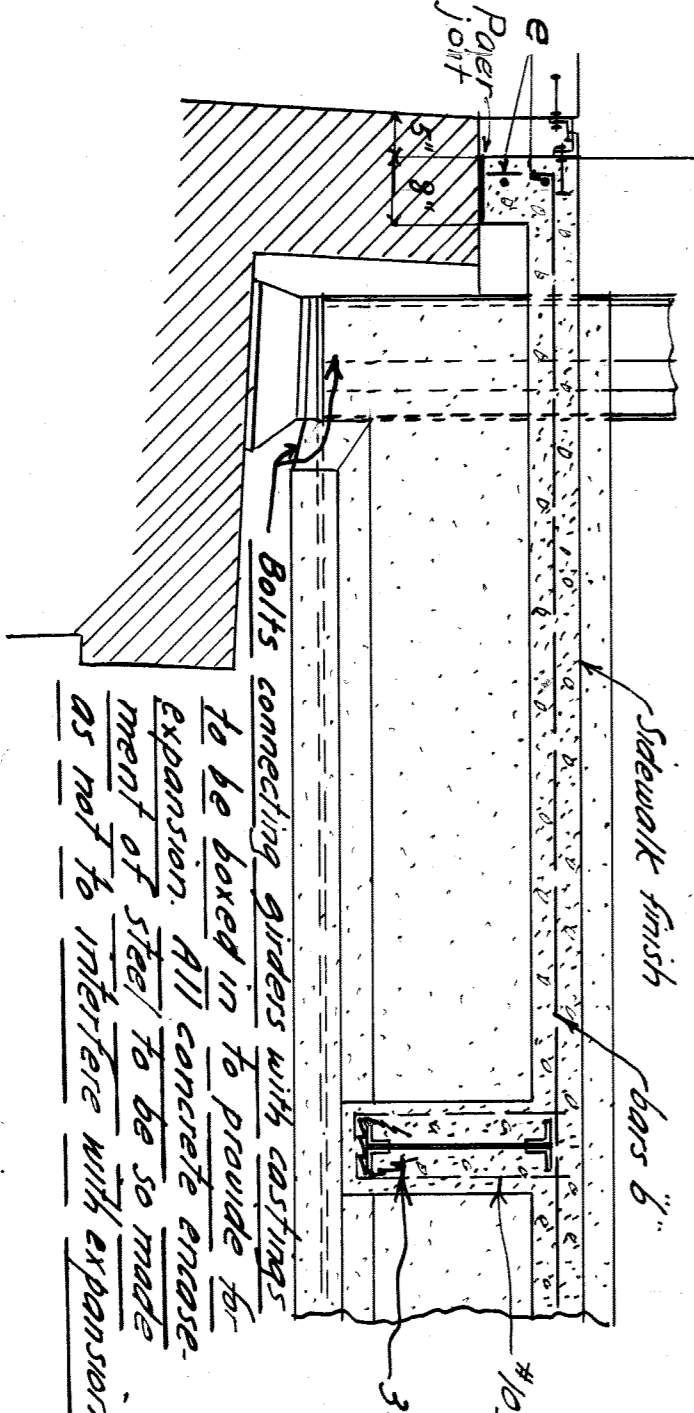
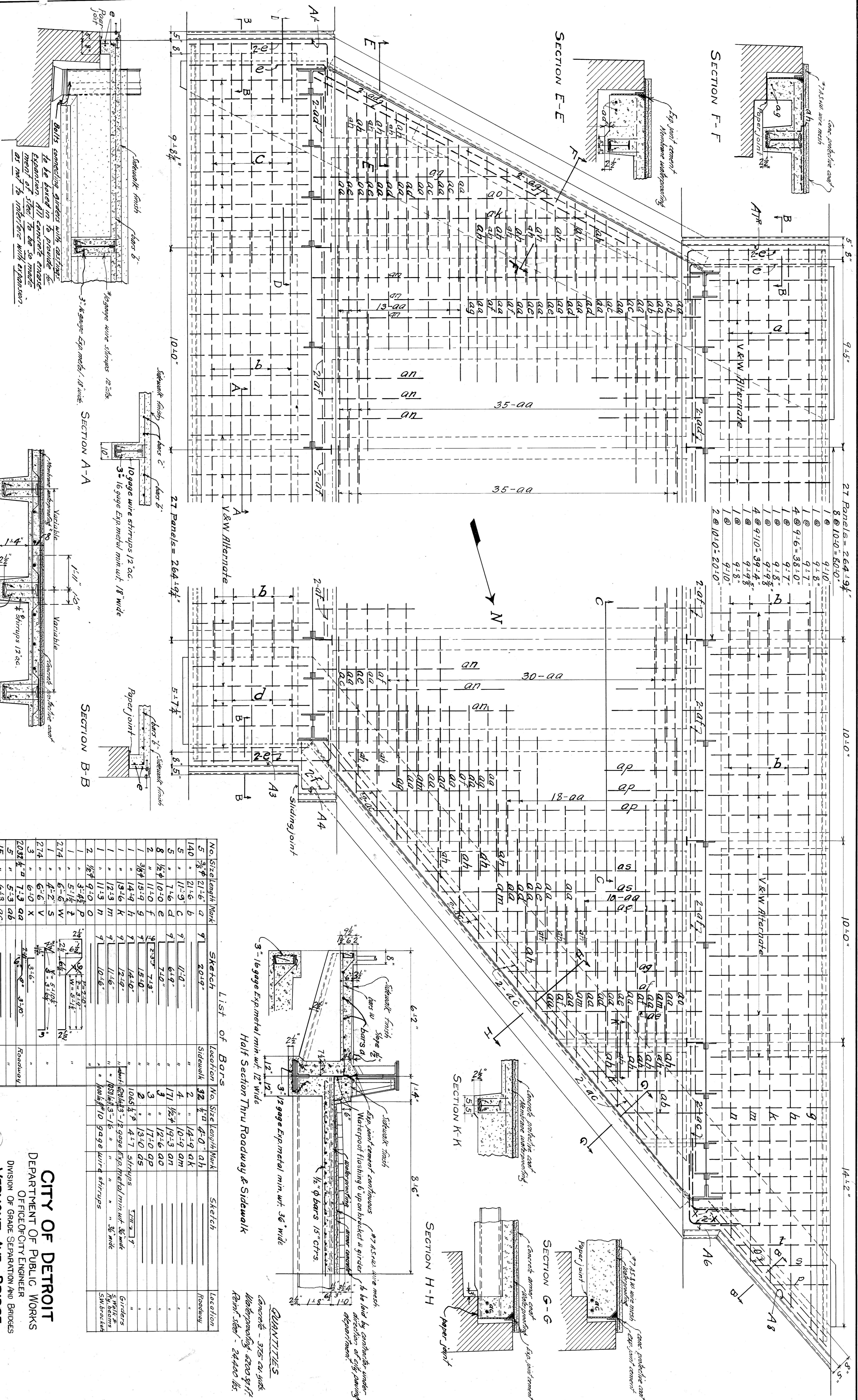


Girder	Span	Web	Flange Is	TOP	Bottom	PLATES Top & Bottom
G7	54'-5"	60 x 3/8"	8 x 8 x 3/8"	18 x 1/2" FL	18 x 1/2" x 41'-0"	18 x 1/2" x 29'-6"
G6	59'-7"	"	"	"	18 x 1/2" x 41'-0"	18 x 1/2" x 29'-6"
G5	55'-0"	"	"	"	18 x 1/2" x 41'-0"	18 x 1/2" x 29'-6"
G4	47'-6"	"	"	"	18 x 1/2" x 29'-6"	18 x 1/2" x 29'-6"
G3	65'-9 1/2"	78 x 3/8"	"	18 x 1/2" "	18 x 1/2" x 50'-6"	18 x 1/2" x 35'-6"
G2	69'-8"	"	"	18 x 1/2" "	18 x 1/2" x 56'-0"	18 x 1/2" x 33'-6"
G1	49'-9 1/2"	60 x 3/8"	8 x 8 x 3/8"	18 x 1/2" "	18 x 1/2" x 31'	

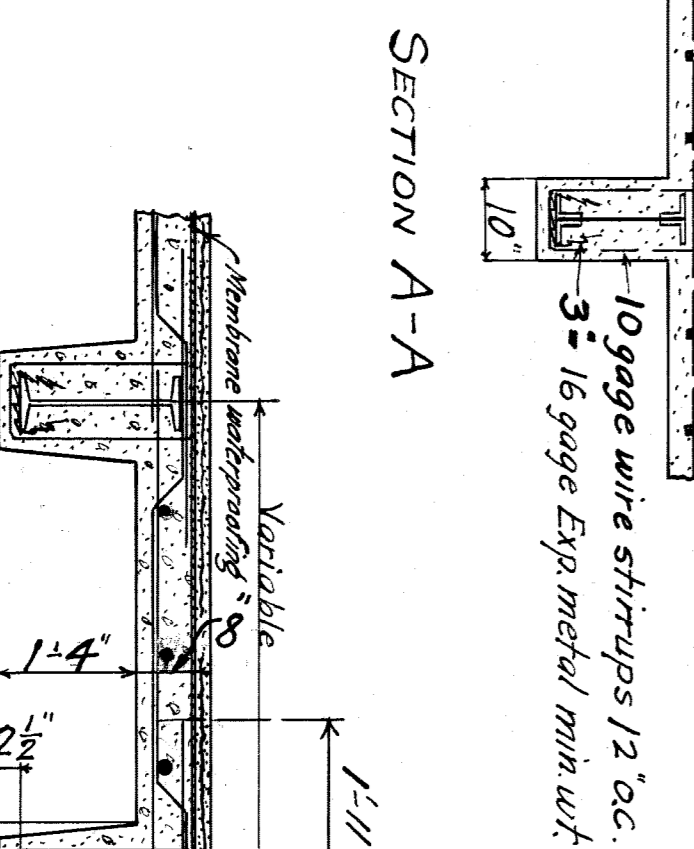
CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
 OFFICE OF CITY ENGINEER
 DIVISION OF GRADE SEPARATION AND BRIDGES
VERMONT AVE. BRIDGE
M.C.R.R. MAIN LINE
 GENERAL DRAWING
 Traced with changes, from M.C.R.R. C&S Sheet No. 41-1-1-0
 Scale 1/8" = 1'-0"
 Revised 7/16/1920 JLB

LOADING:
 18 T. Roller
 100 T. Uniform LL

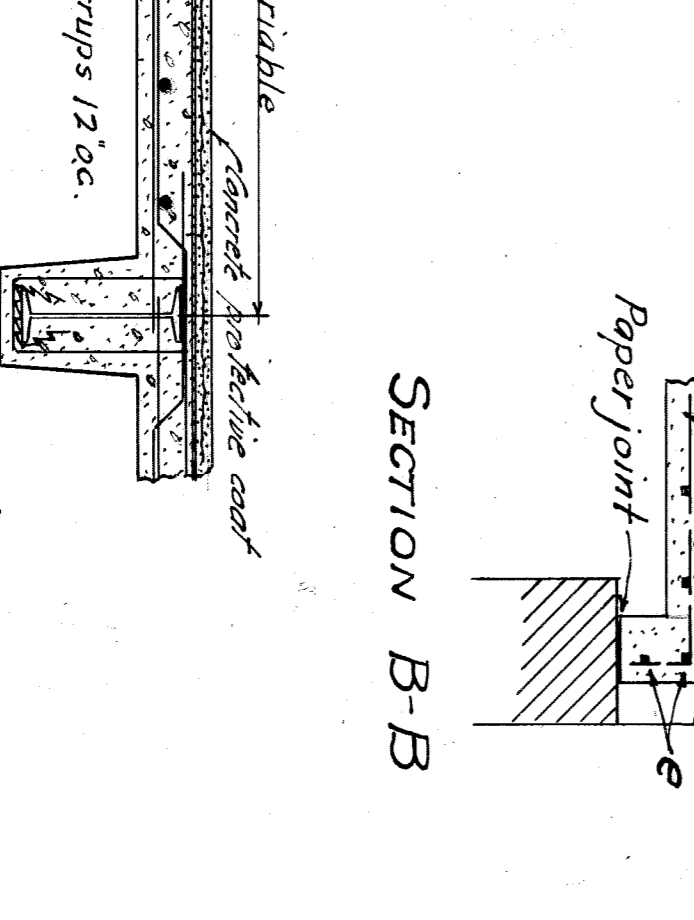
GENERAL NOTES:
 Steelwork - Material and workmanship to be in accordance with The Michigan State Highway Dept. 1920 Specifications
 Concrete - 1 part cement, 2 parts sand, 4 parts stone
 Broken Stone (or gravel) to pass thru 1" screen
 All bars to be of deformed type
 Elevations refer to Detroit City Datum



Ball's connecting sidewalk with expansion metal to be based in to provide for expansion of sidewalk to be so made as not to interfere with expansion.



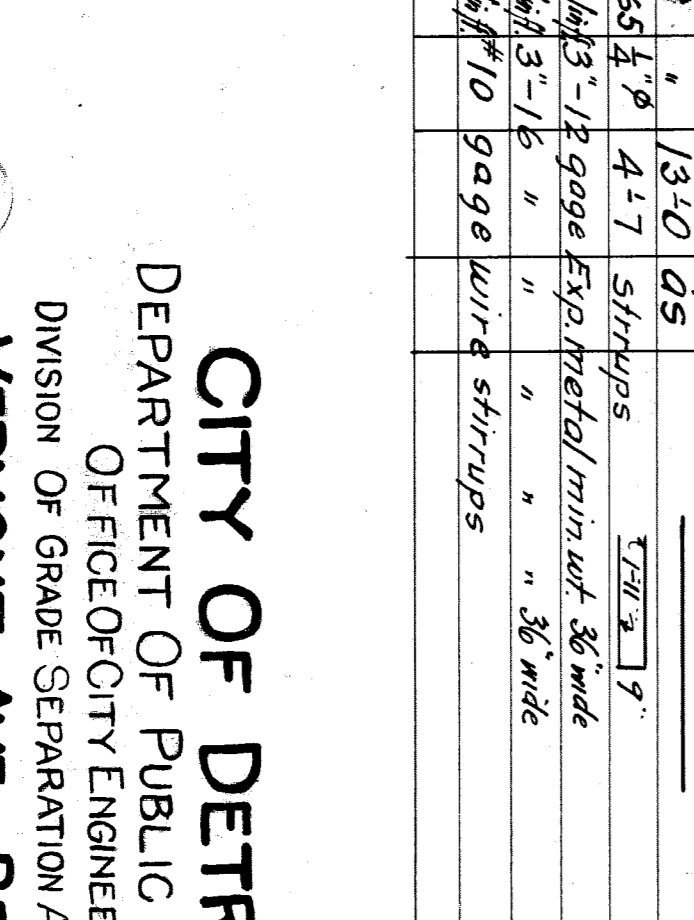
10 gauge wire stirrups 12 oc.
3-16 gauge Exp metal min wt. 18 wide



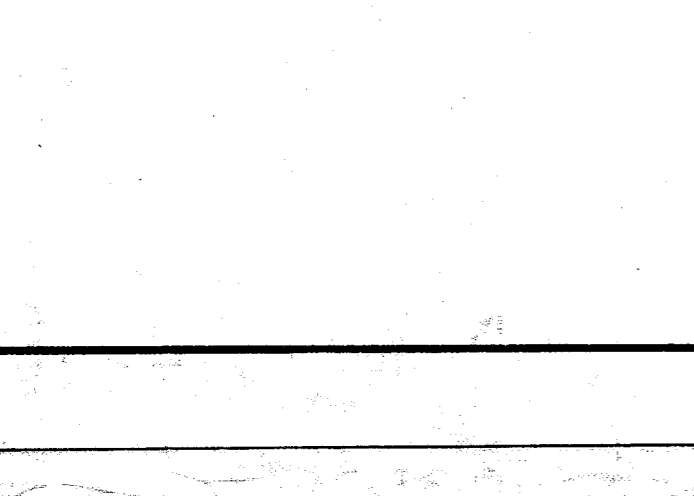
10 gauge wire stirrups 12 oc.
3-16 gauge Exp metal min wt. 18 wide



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3-16 gauge Exp metal min wt. 18 wide



10 gauge wire stirrups 12 oc.
3-16 gauge Exp metal min wt. 18 wide



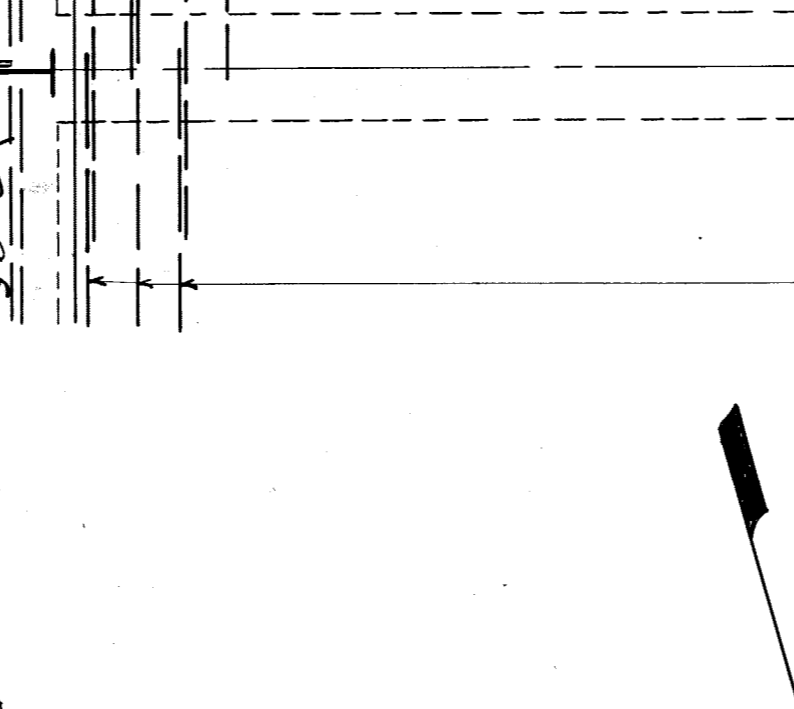
10 gauge wire stirrups 12 oc.
3-16 gauge Exp metal min wt. 18 wide

QUANTITIES

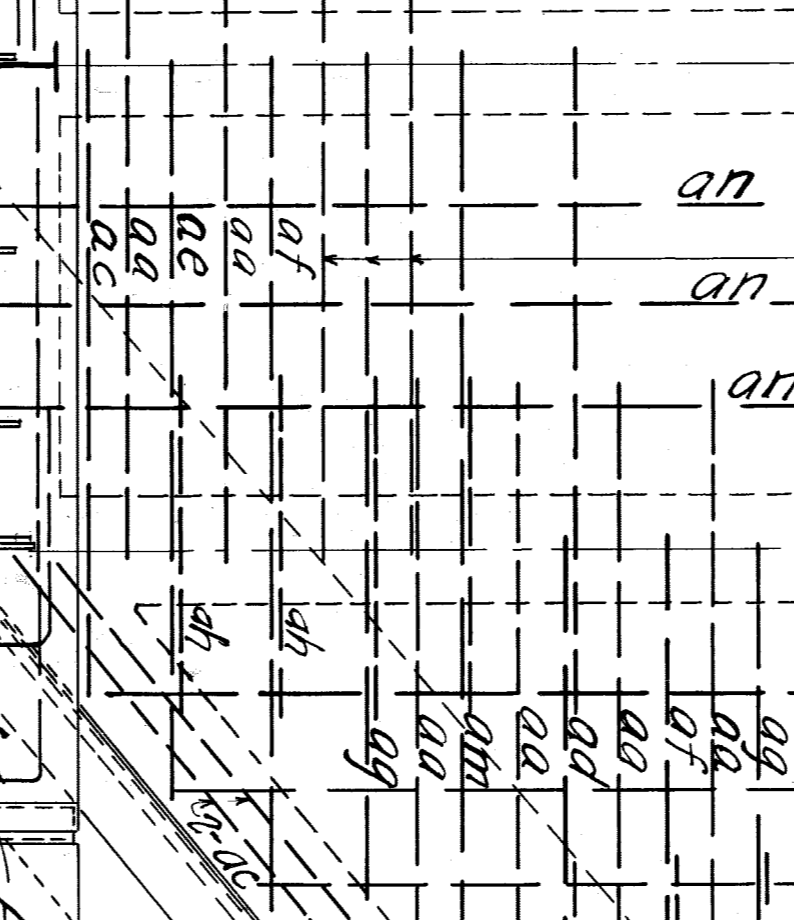
Concrete - 375 cu yds.
Reinforcing - 6200 sq ft.
Rein. steel - 24,400 lbs.

LIST OF BARS

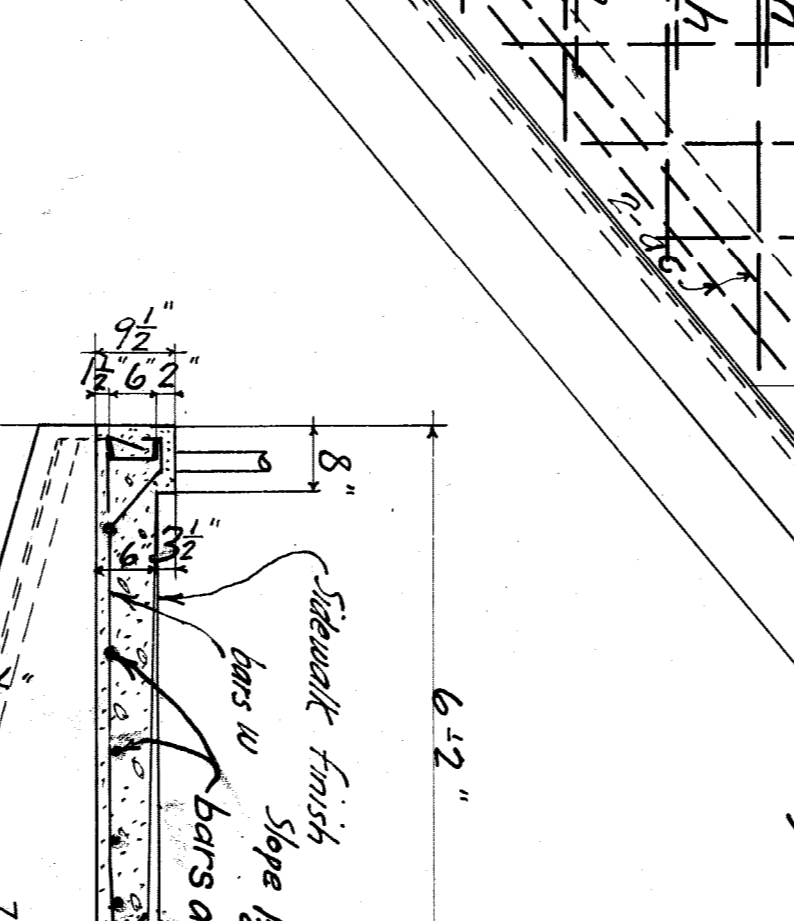
No.	Size	Length	Mark	Sketch	Location
1	3/8"	21'-6"	a	20-19"	Roadway
2	3/8"	21'-6"	b	20-19"	Roadway
3	1/2"	11'-9"	c	11'-0"	"
4	1/2"	11'-9"	d	6'-19"	"
5	1/2"	10'-0"	e	7'-0"	"
6	3/8"	15'-9"	f	7'-3"	"
7	3/8"	14'-9"	g	14'-0"	"
8	3/8"	12'-3"	h	12'-9"	"
9	3/8"	11'-3"	i	11'-6"	"
10	3/8"	9'-0"	j	10'-6"	"
11	3/8"	3'-4 1/2"	k	15'-10"	"
12	3/8"	5'-1 1/2"	l	5'-1 1/2"	"
13	3/8"	6'-6"	m	3'-6"	"
14	3/8"	4'-2"	n	3'-10"	"
15	3/8"	6'-0"	o	3'-10"	"
16	3/8"	7'-3"	p	3'-10"	"
17	3/8"	7'-3"	q	3'-10"	"
18	3/8"	8'-3"	r	3'-10"	"
19	3/8"	9'-3"	s	3'-10"	"
20	3/8"	10'-0"	t	3'-10"	"



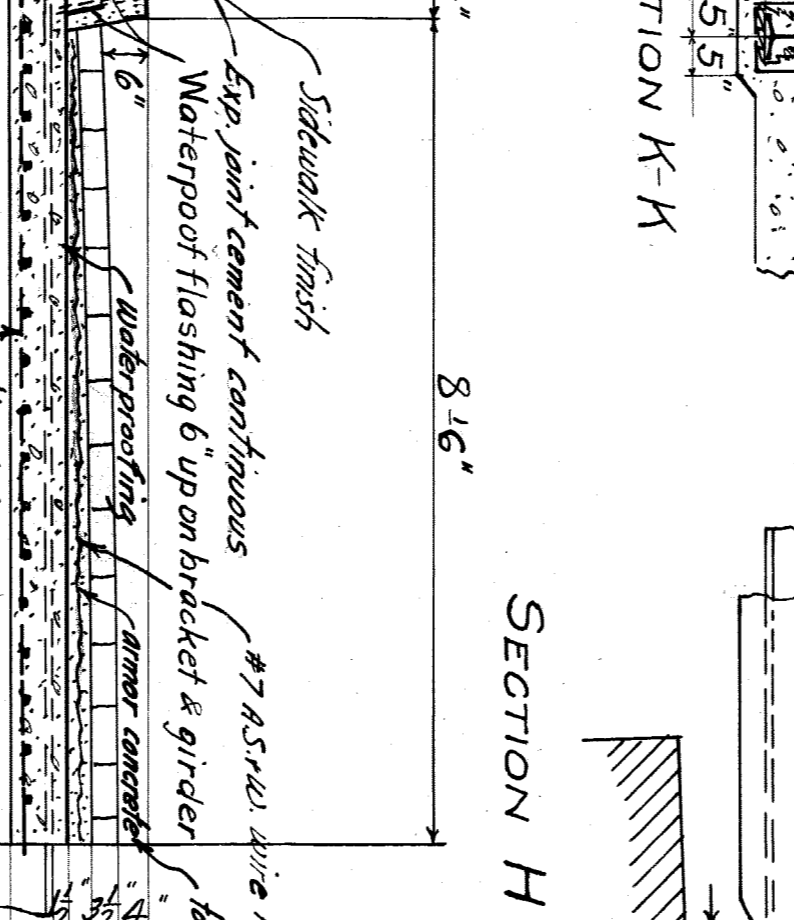
10 gauge wire stirrups 12 oc.
3-16 gauge Exp metal min wt. 18 wide



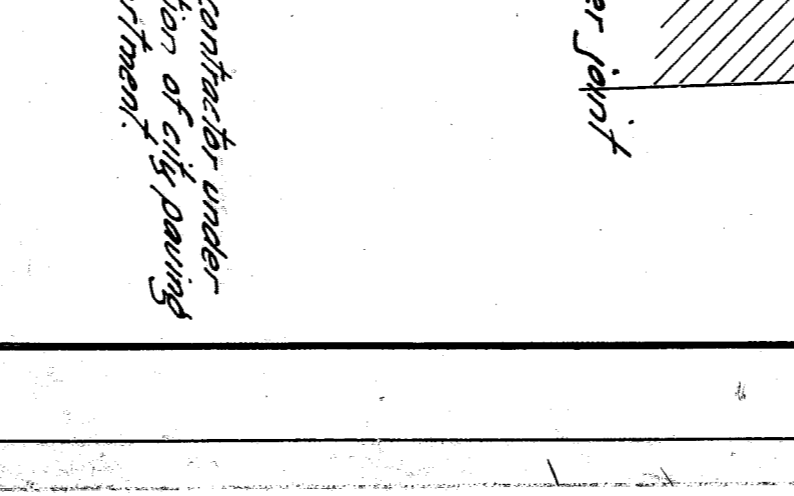
10 gauge wire stirrups 12 oc.
3-16 gauge Exp metal min wt. 18 wide



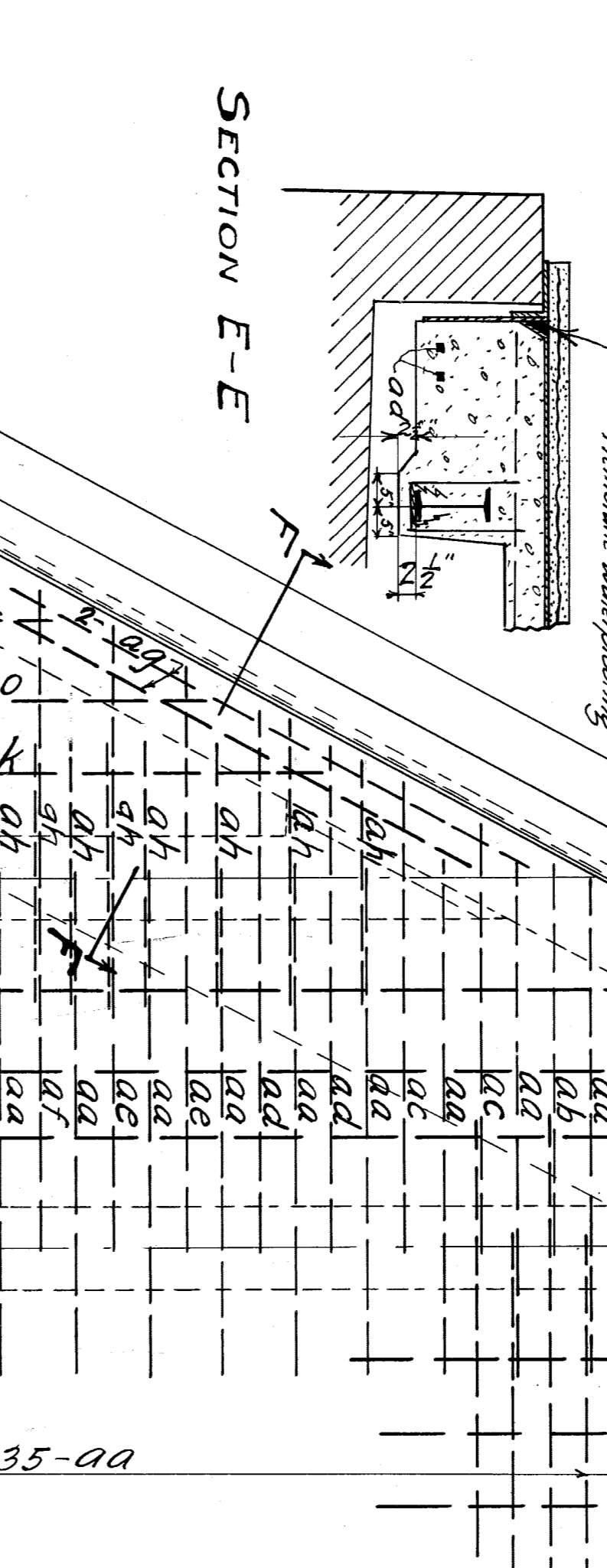
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3-16 gauge Exp metal min wt. 18 wide



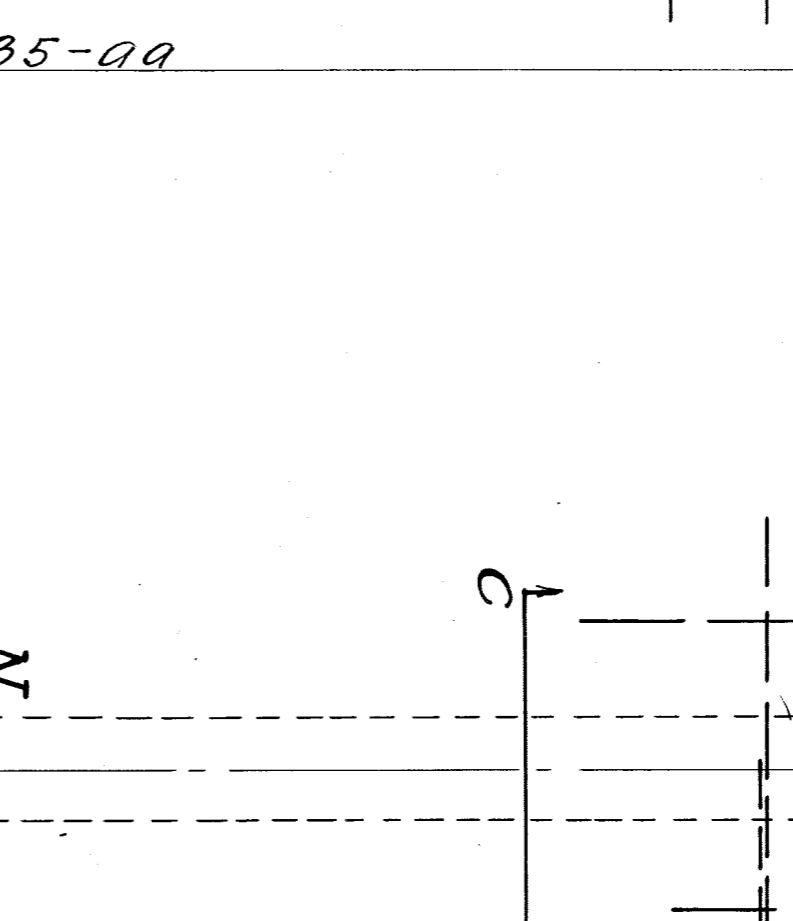
10 gauge wire stirrups 12 oc.
3-16 gauge Exp metal min wt. 18 wide



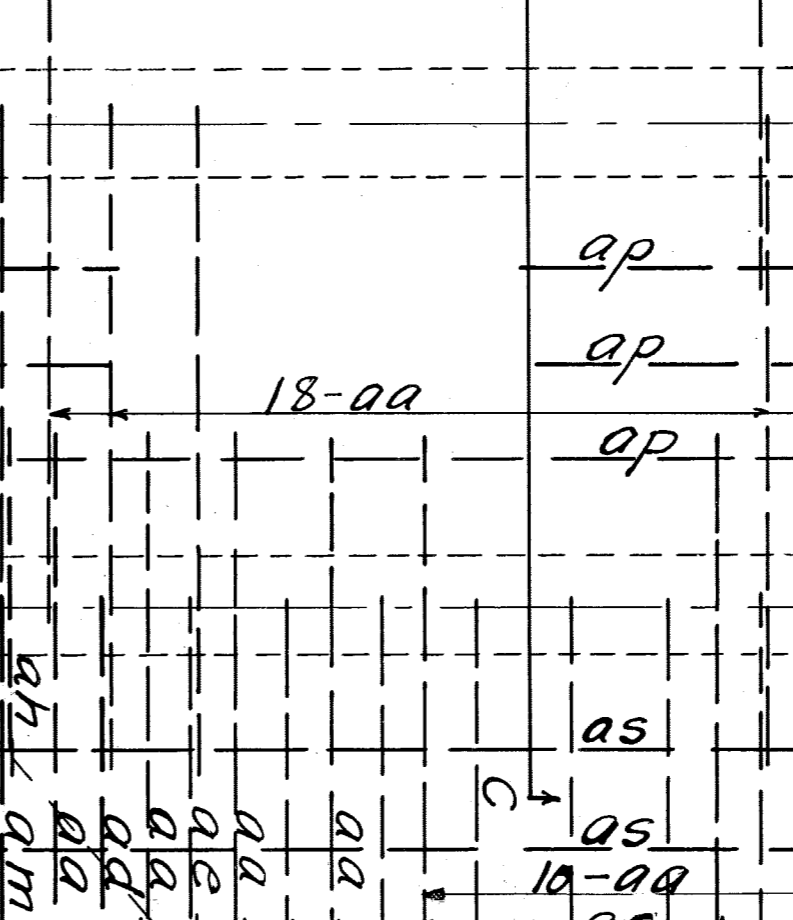
10 gauge wire stirrups 12 oc.
3-16 gauge Exp metal min wt. 18 wide



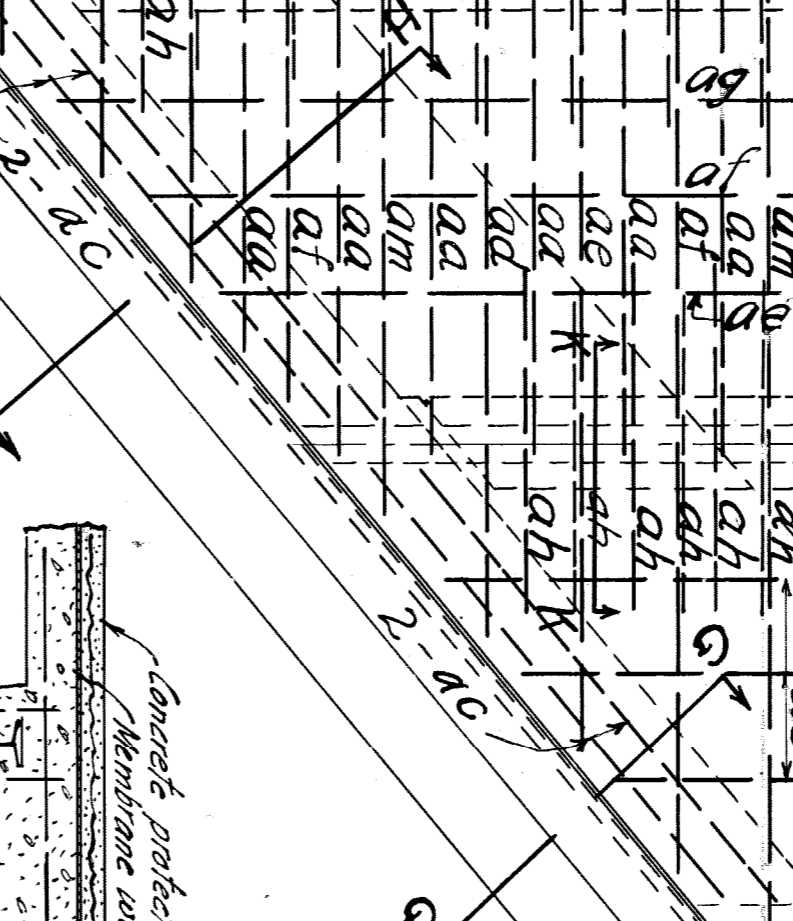
10 gauge wire stirrups 12 oc.
3-16 gauge Exp metal min wt. 18 wide



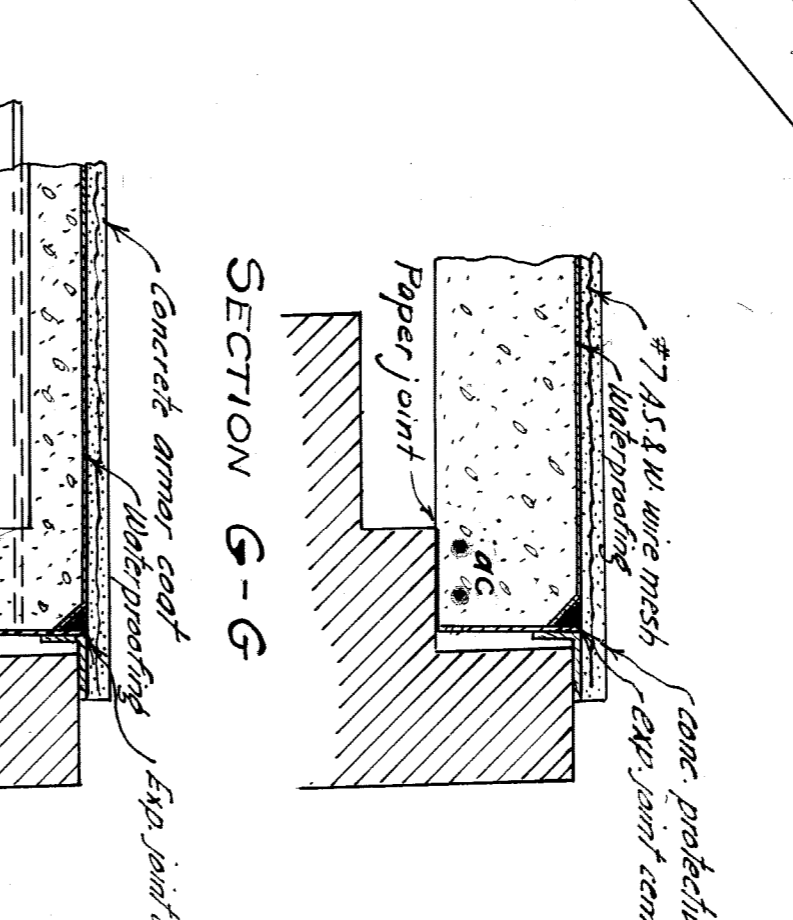
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3-16 gauge Exp metal min wt. 18 wide



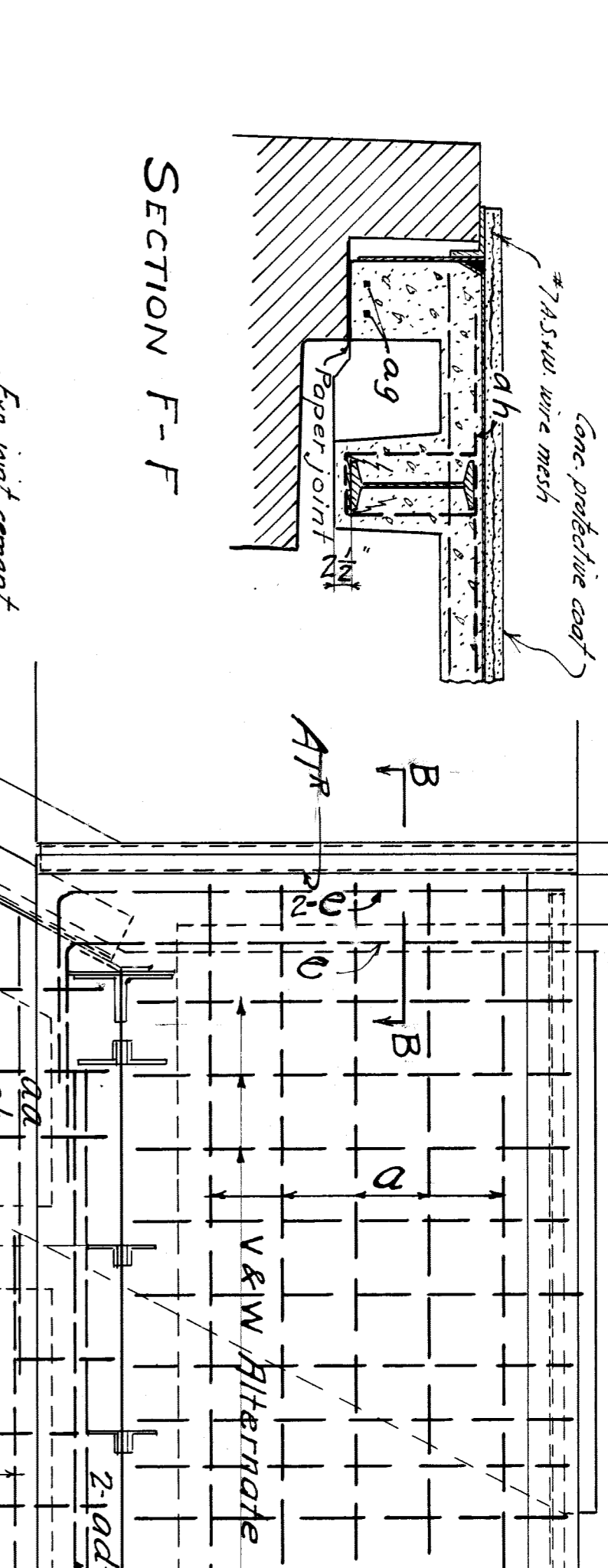
10 gauge wire stirrups 12 oc.
3-16 gauge Exp metal min wt. 18 wide



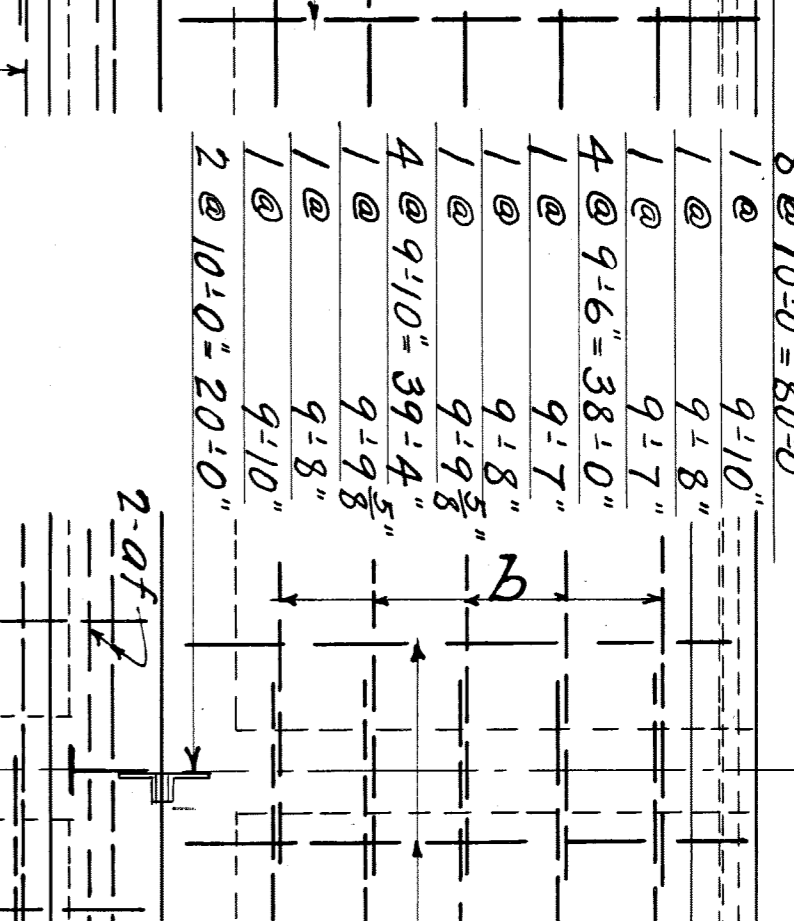
10 gauge wire stirrups 12 oc.
3-16 gauge Exp metal min wt. 18 wide



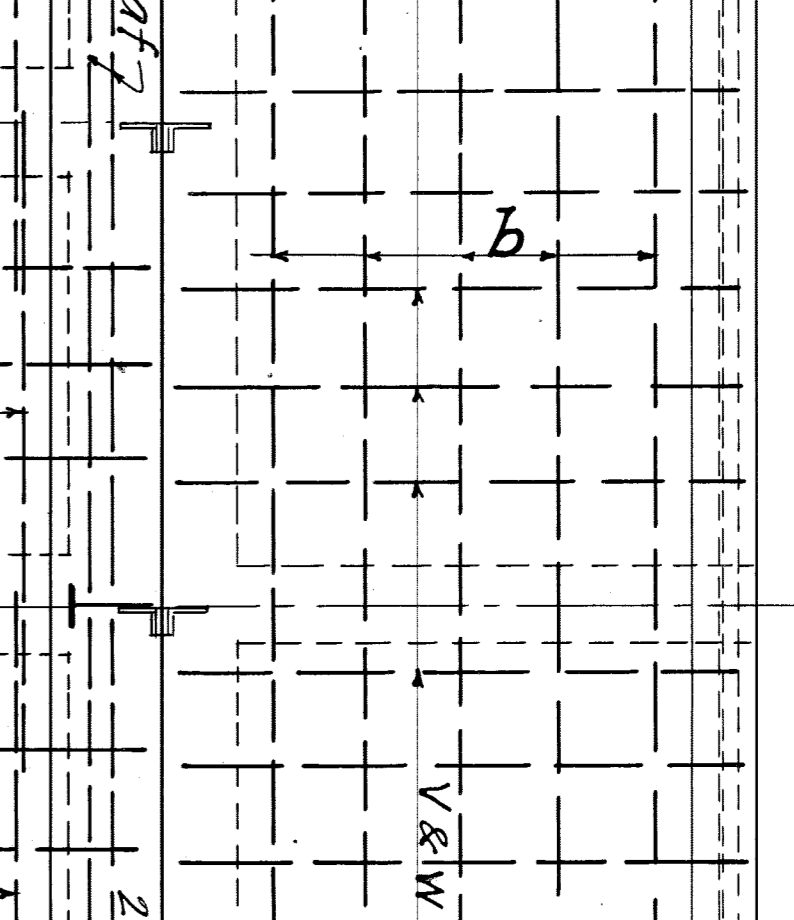
10 gauge wire stirrups 12 oc.
3-16 gauge Exp metal min wt. 18 wide



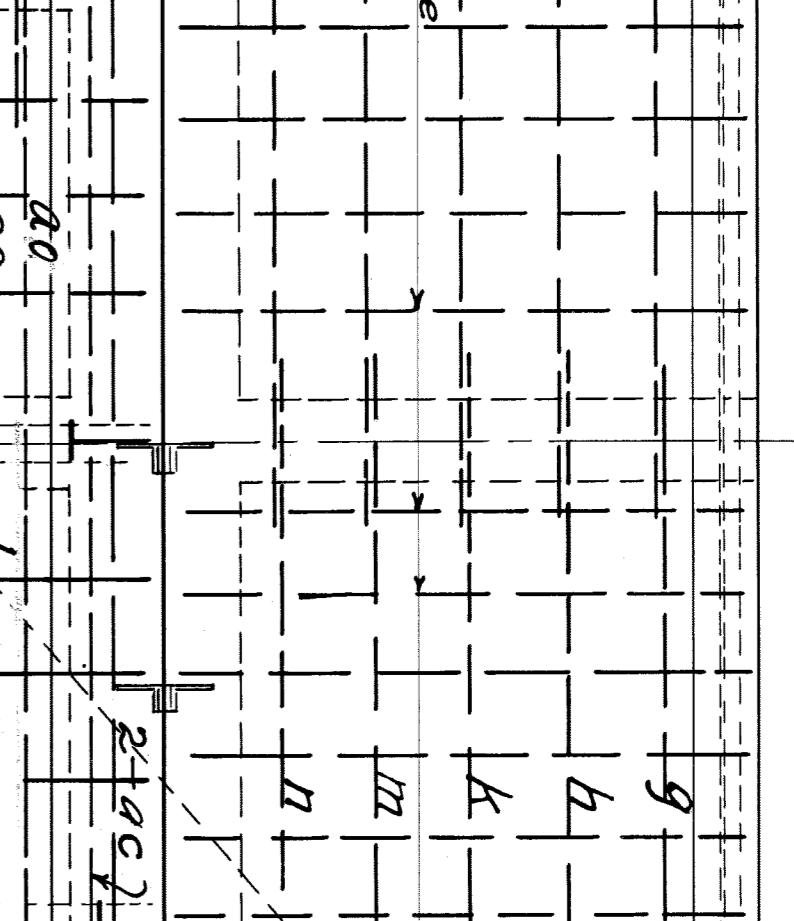
10 gauge wire stirrups 12 oc.
3-16 gauge Exp metal min wt. 18 wide



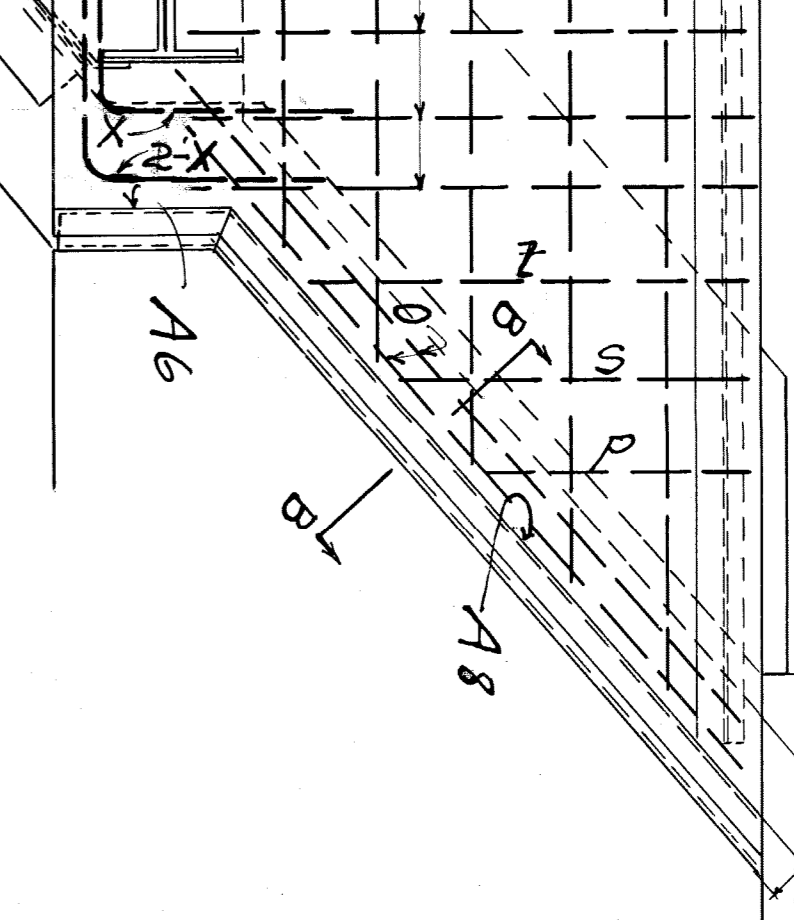
10 gauge wire stirrups 12 oc.
3-16 gauge Exp metal min wt. 18 wide



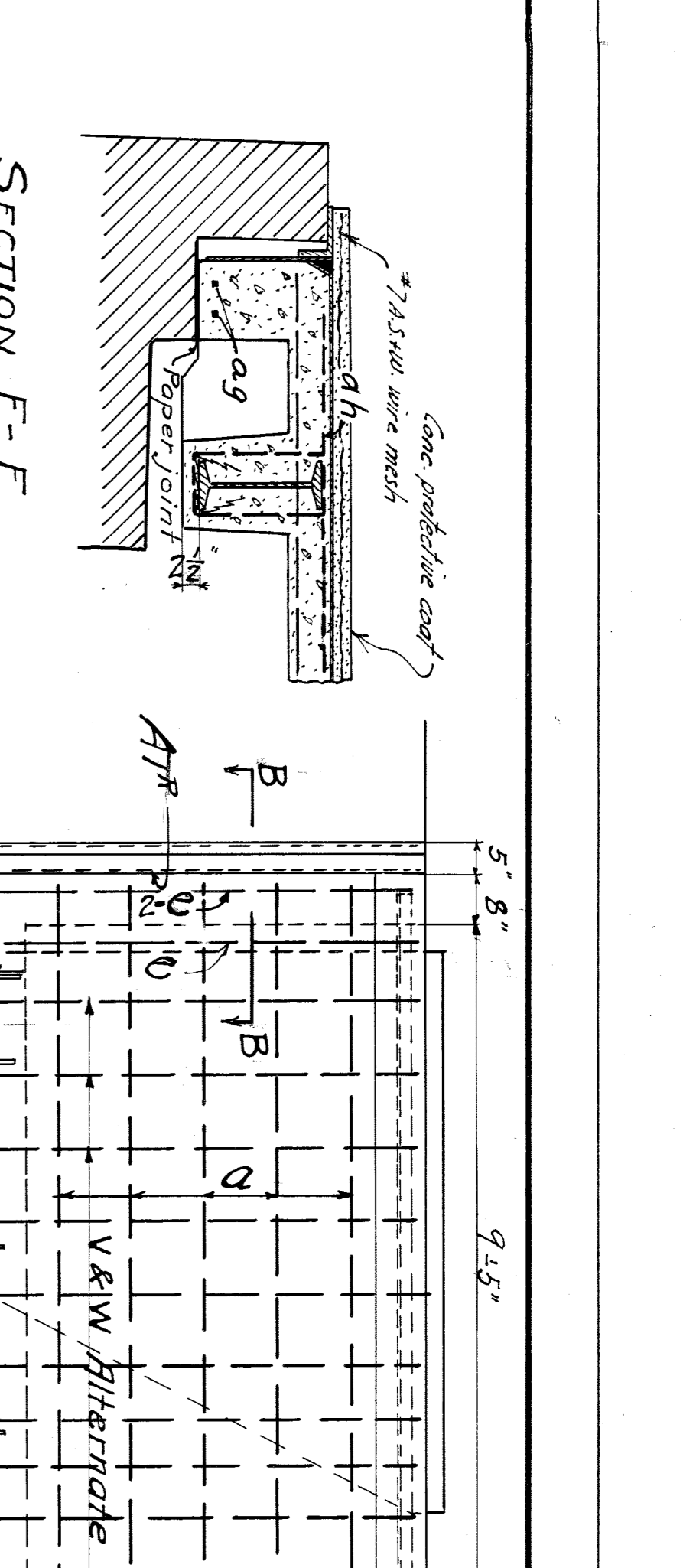
10 gauge wire stirrups 12 oc.
3-16 gauge Exp metal min wt. 18 wide



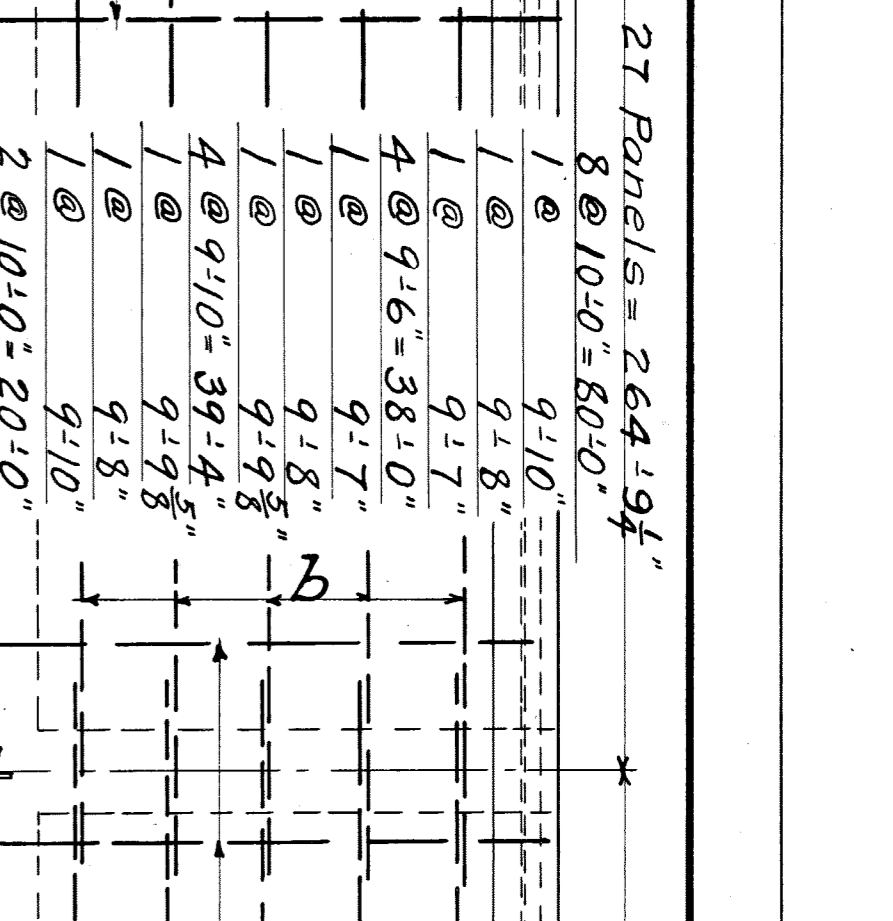
10 gauge wire stirrups 12 oc.
3-16 gauge Exp metal min wt. 18 wide



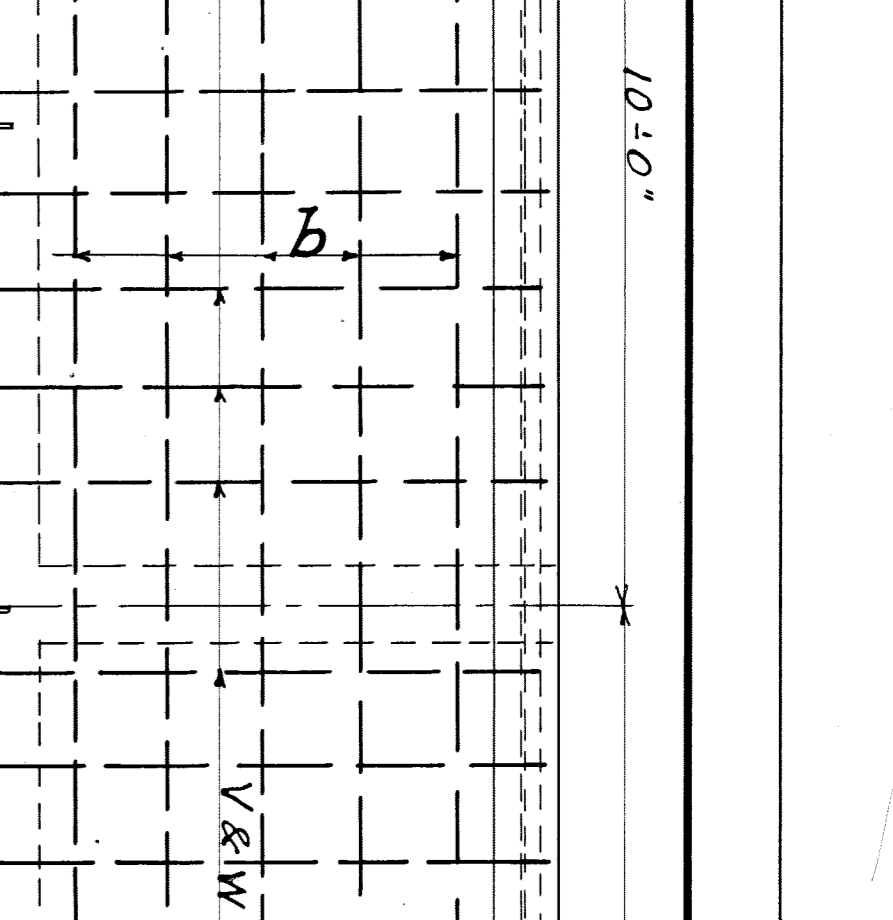
10 gauge wire stirrups 12 oc.
3-16 gauge Exp metal min wt. 18 wide



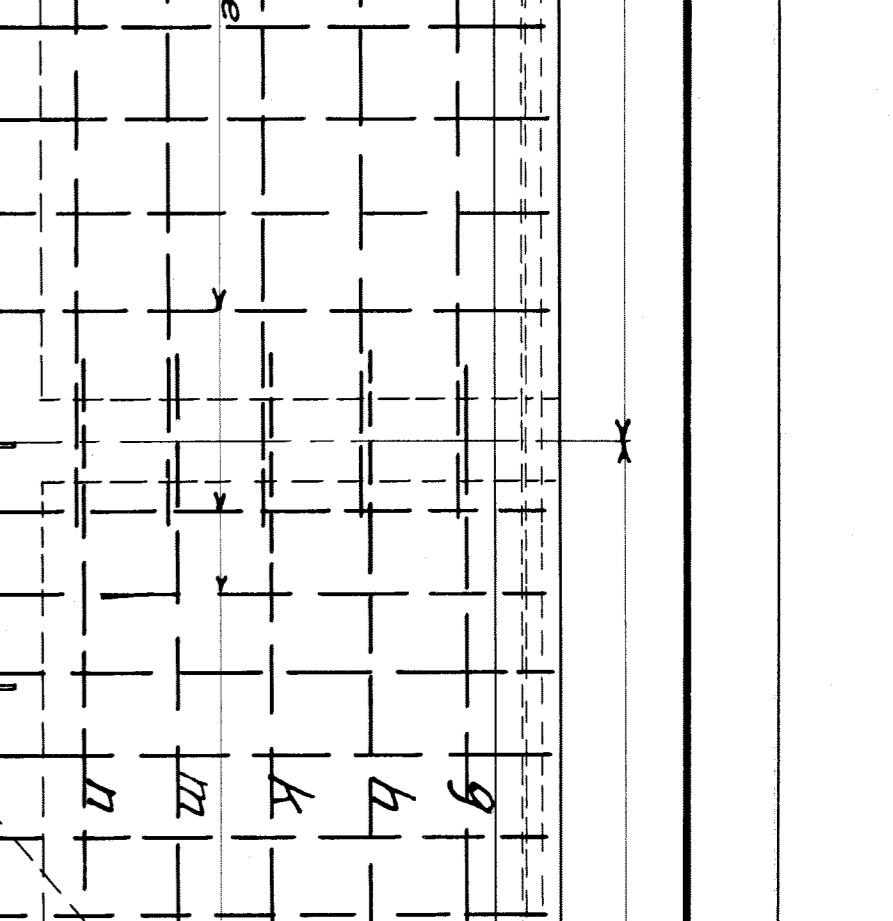
10 gauge wire stirrups 12 oc.
3-16 gauge Exp metal min wt. 18 wide



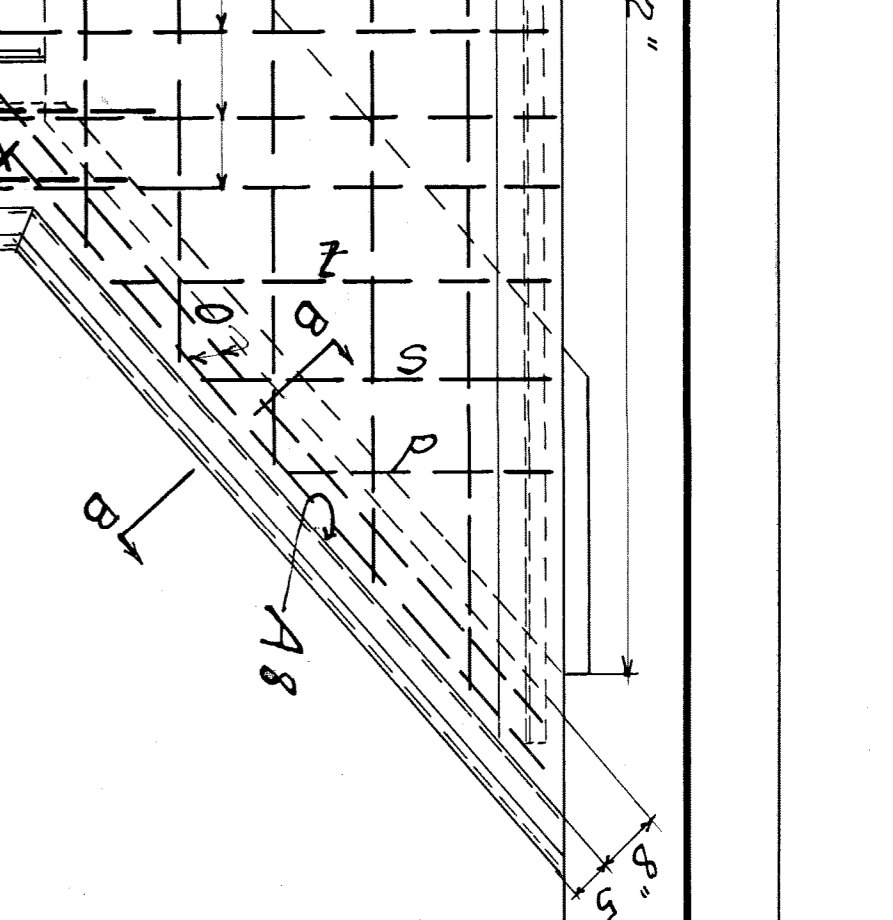
10 gauge wire stirrups 12 oc.
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10 gauge wire stirrups 12 oc.
3-16 gauge Exp metal min wt. 18 wide



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3-16 gauge Exp metal min wt. 18 wide



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3-16 gauge Exp metal min wt. 18 wide

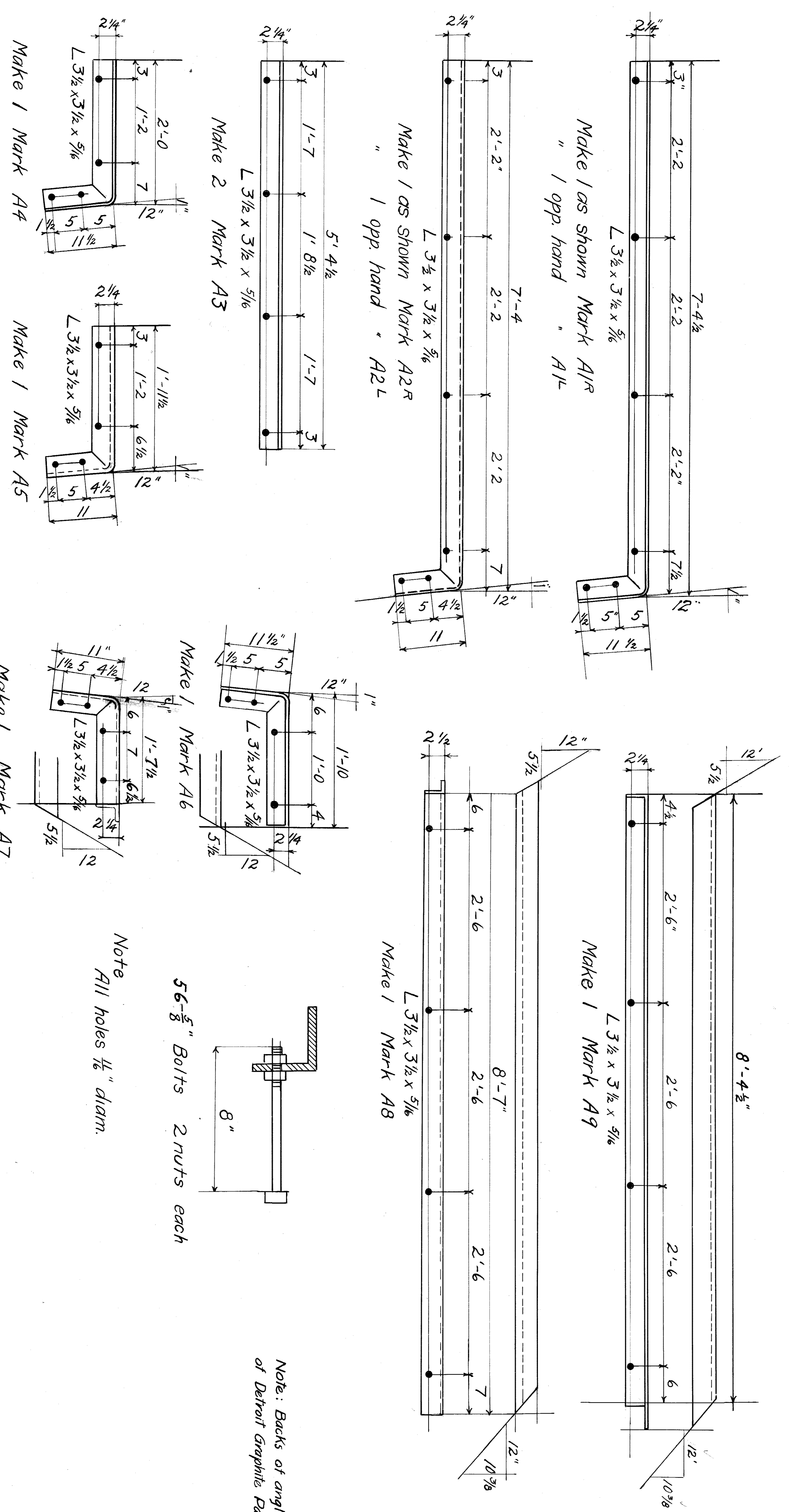
NOTE: All concrete 1-2-4 Mix.
All exposed corners rounded off to 1" radius.

CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
OFFICE OF CITY ENGINEER
DIVISION OF GRADE SEPARATION AND BRIDGES
VERMONT AVE. BRIDGE
M.C.R.R. MAIN LINE
CONCRETE DETAILS
Scale 3/4" = 1'-0"

19-6-12/27
C.E. R.S.

Sheet No. 1 of Concrete
File No. 38-2

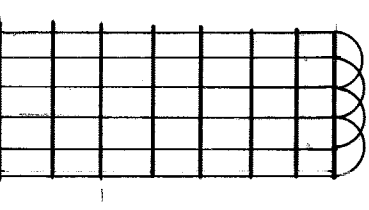
NOTE: 1- each angles A28, A24, A3, A5, A7 & A9 to be furnished by contractor for concrete work and to be set by City.



Note: Backs of angles are to receive two coats of Detroit Graphite Paint before shipping.

Note All holes 1/2\" diam.

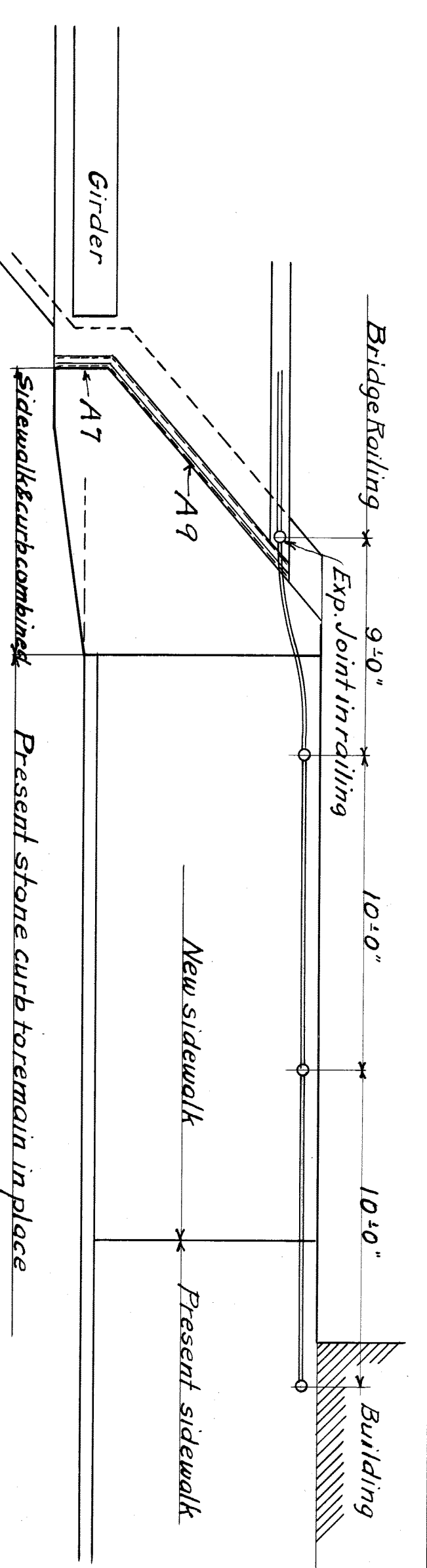
56-5/8\" Bolts 2 nuts each



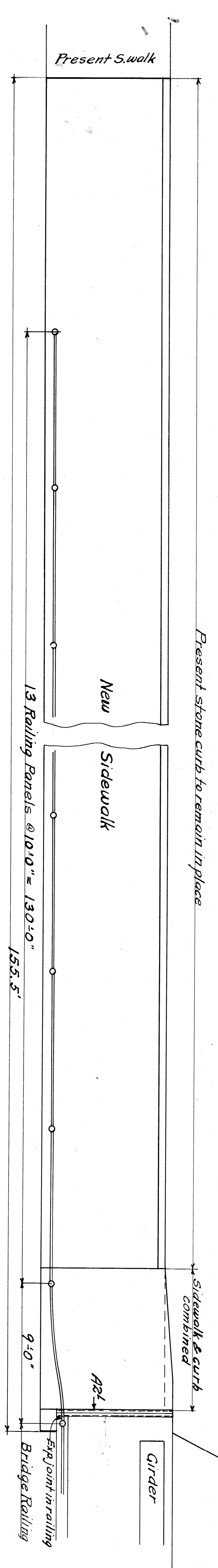
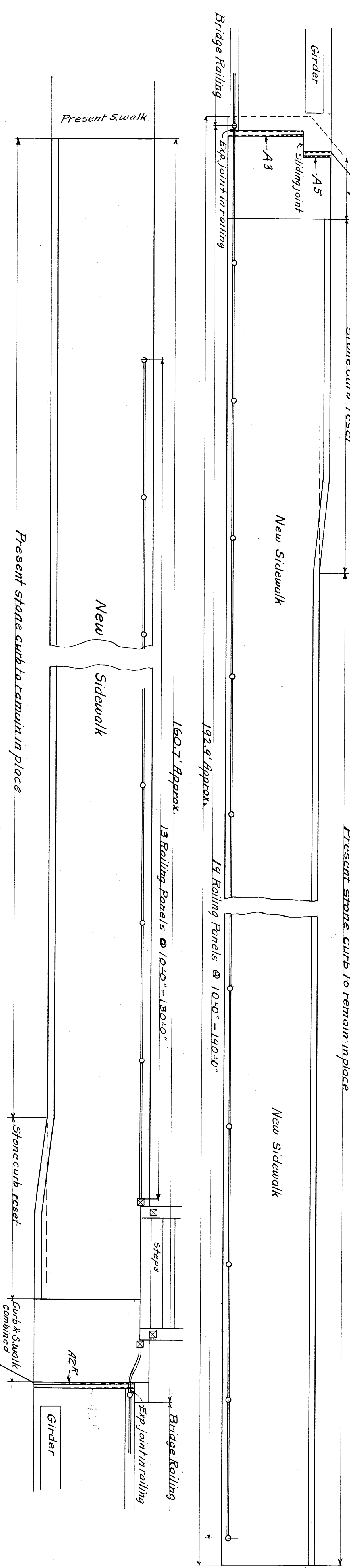
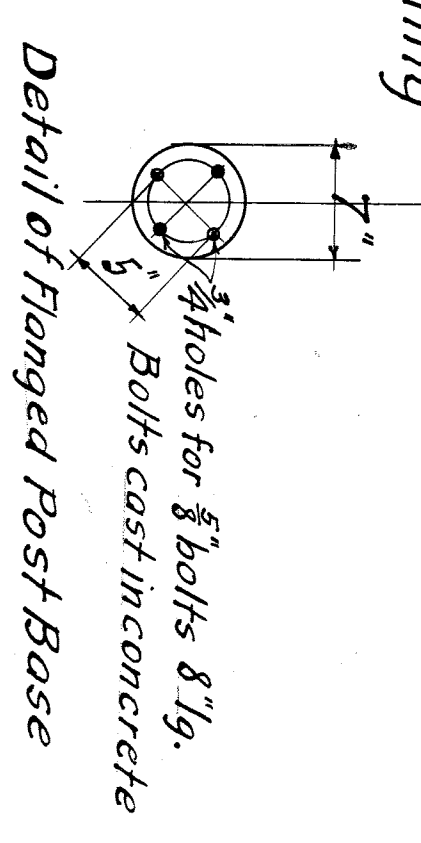
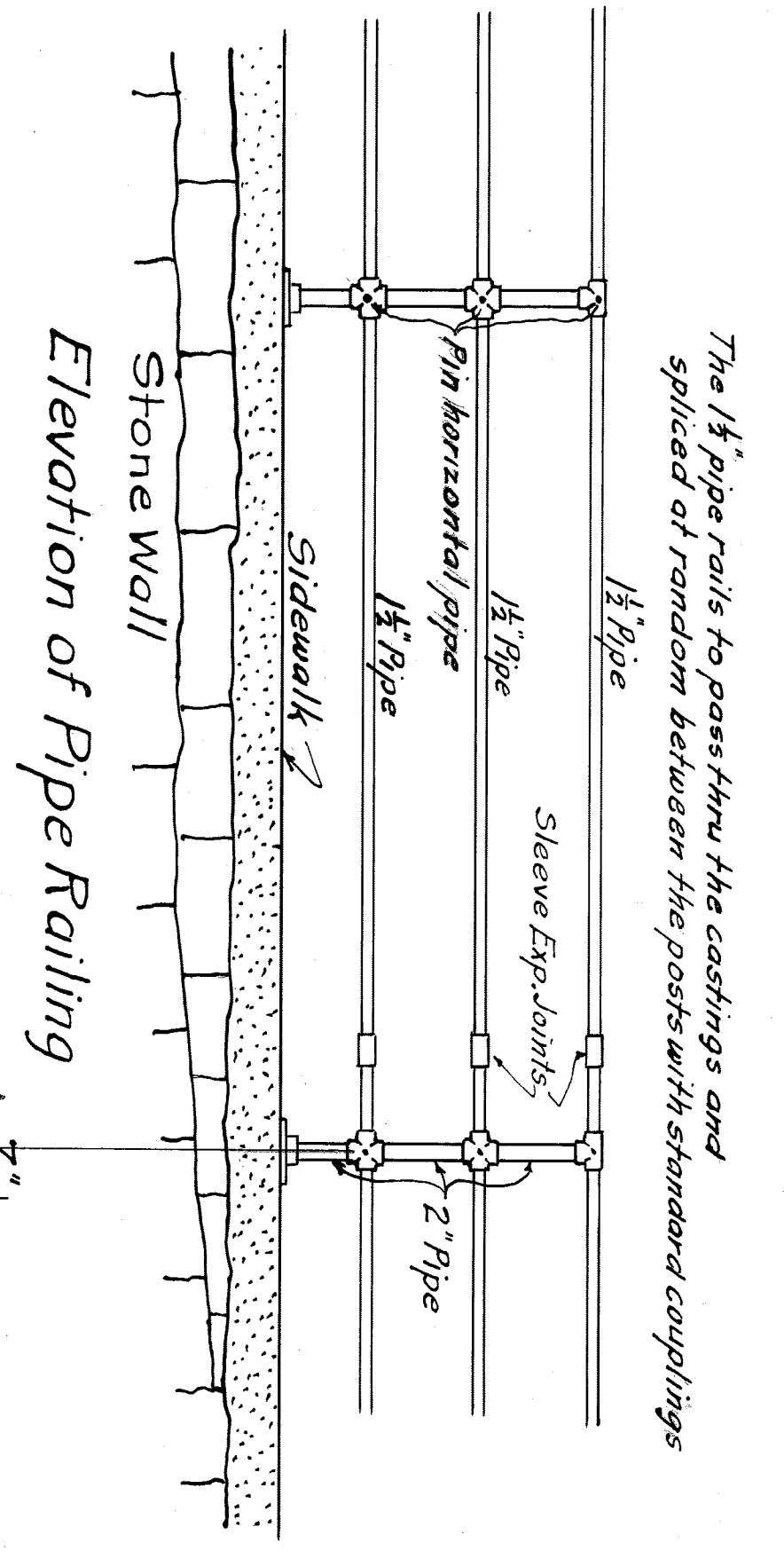
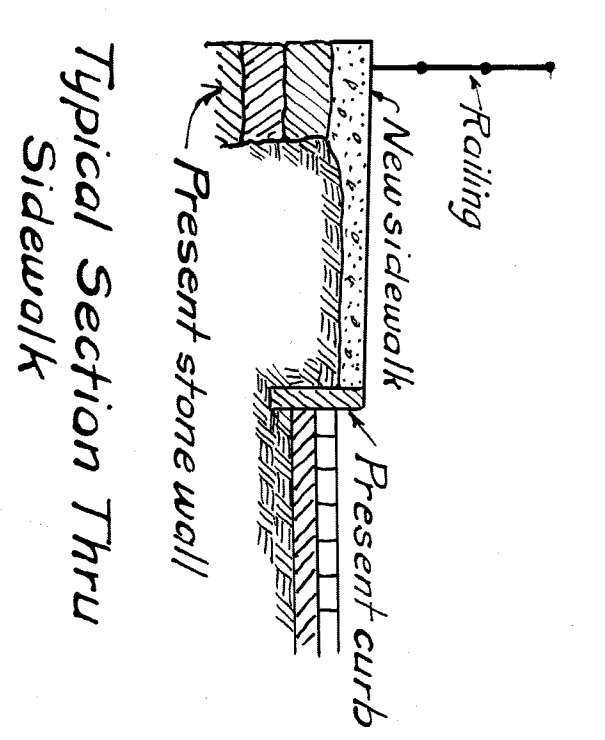
TYPE OF WIRE FABRIC FOR HANDRAIL

Galvanized Wire Fabric for handrail, 42\" wide, No. 3 Grippped Wire pockets spaced 1 1/2\", Two ply cables, No. 12 1/2 Wires, spaced 6\".

CITY OF DETROIT
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 OFFICE OF CITY ENGINEER
 DIVISION OF GRADE SEPARATION AND BRIDGES
VERMONT AVE. BRIDGE
 M.C.R.R. MAIN LINE
 DETAILS SIDEWALK
 EXPANSION JOINTS

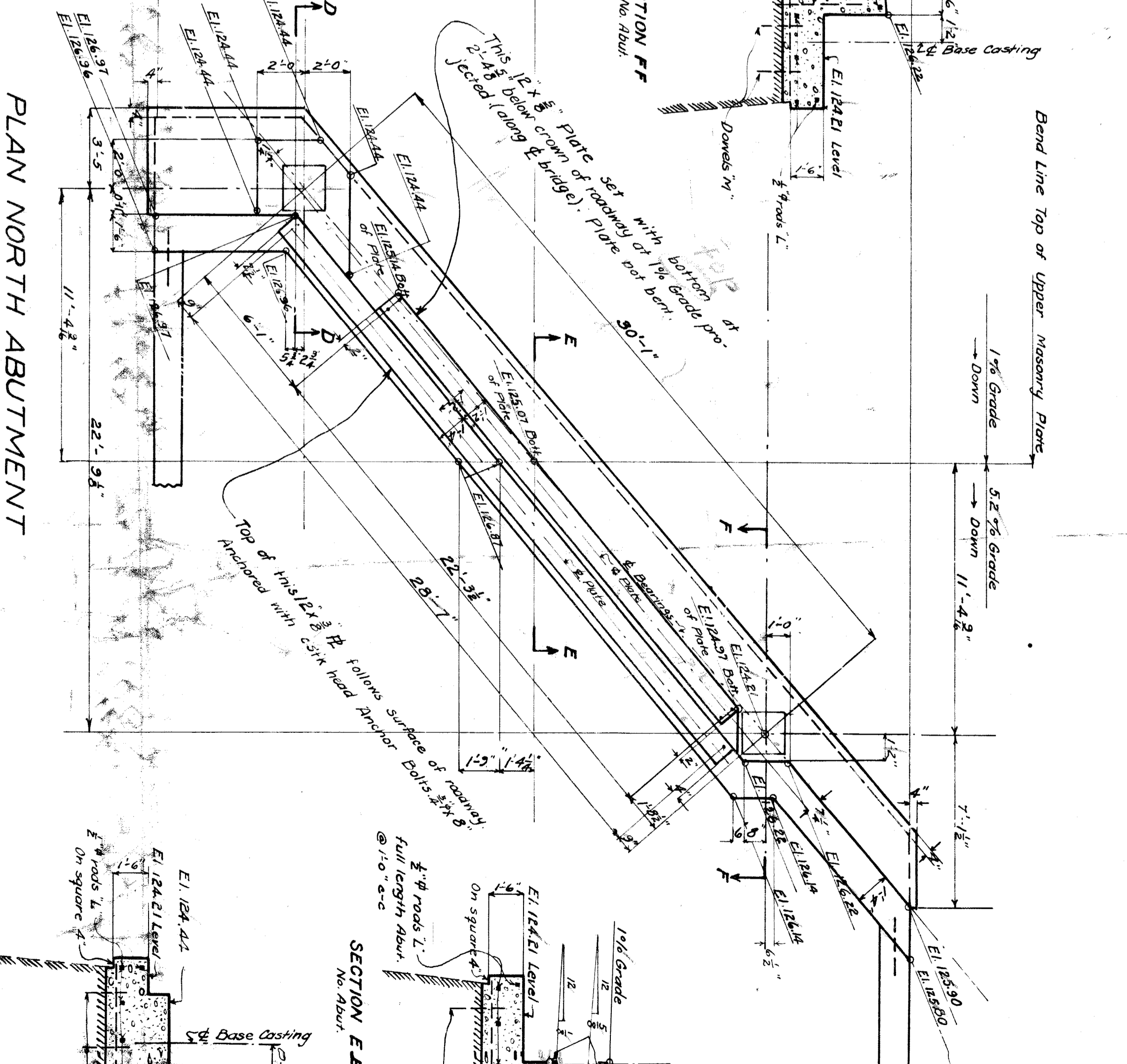
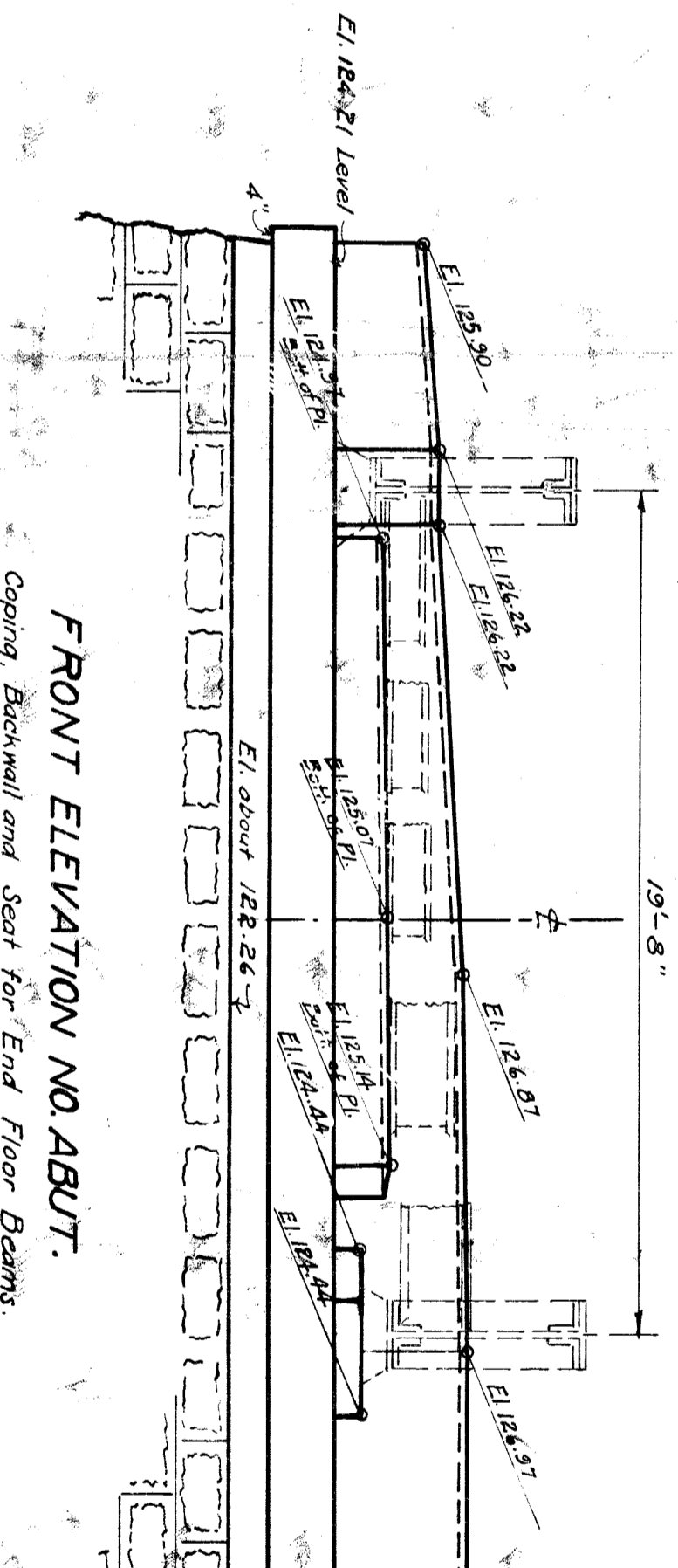
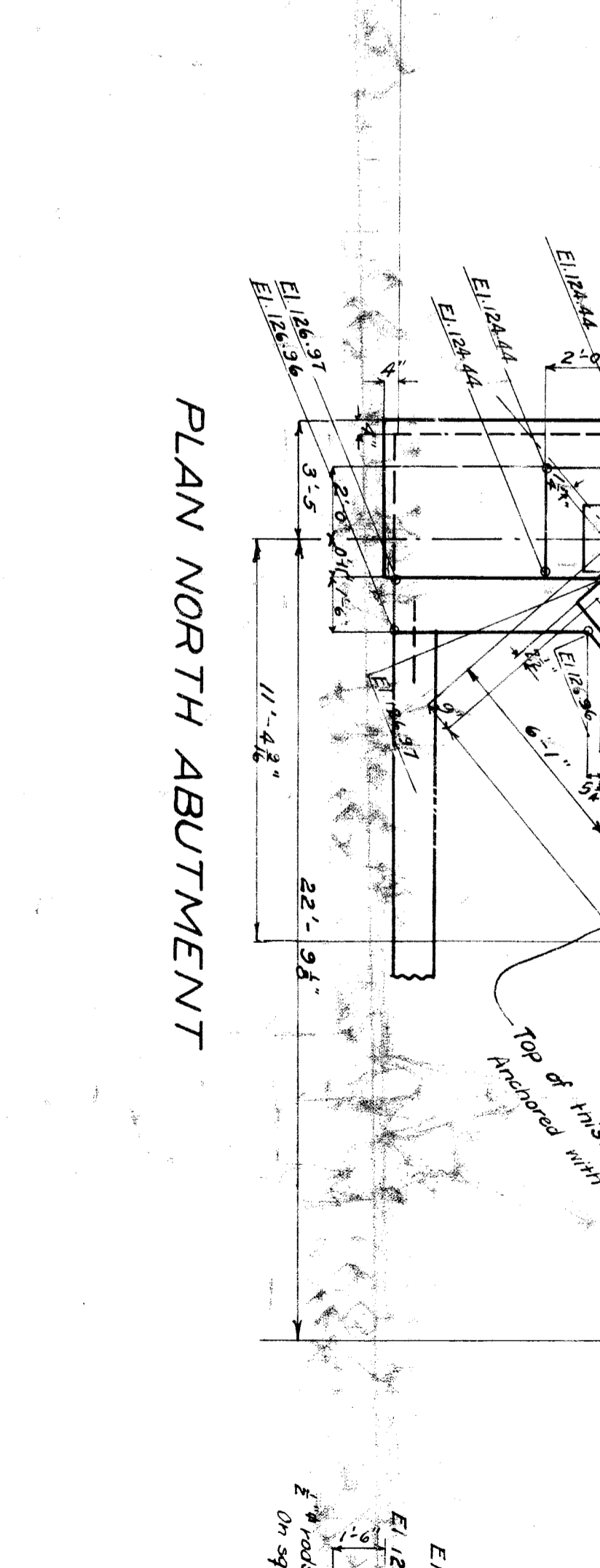
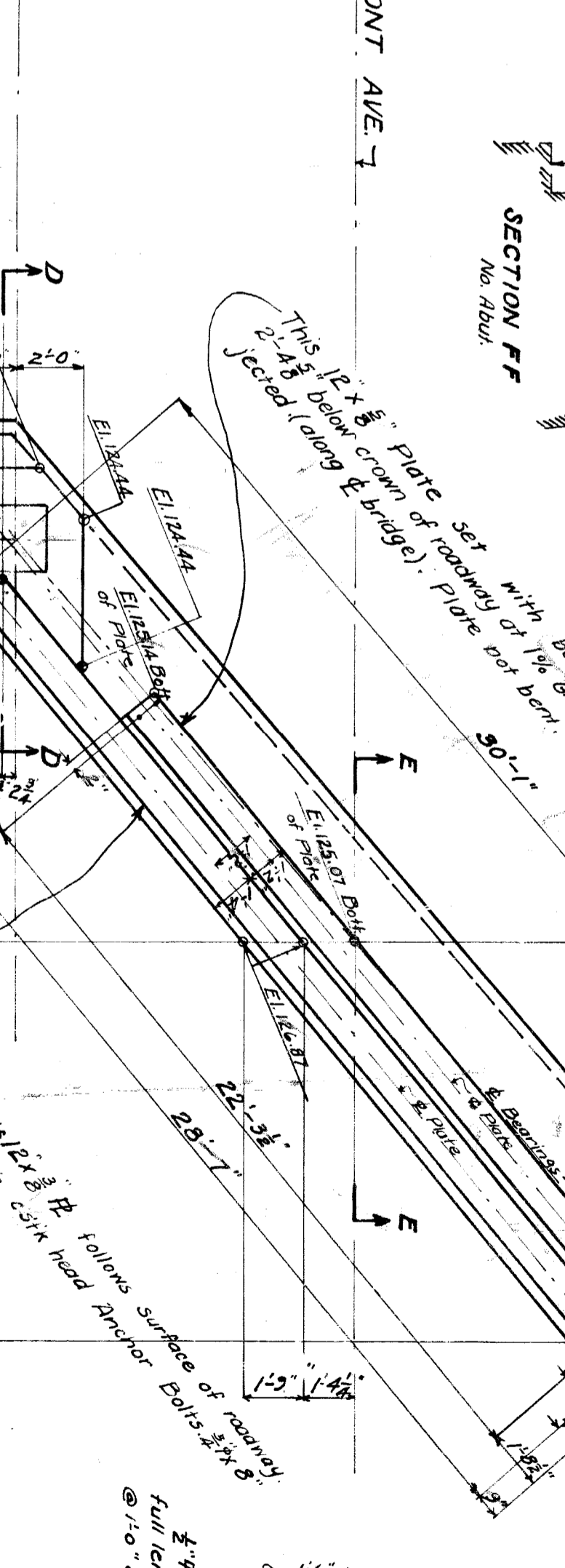
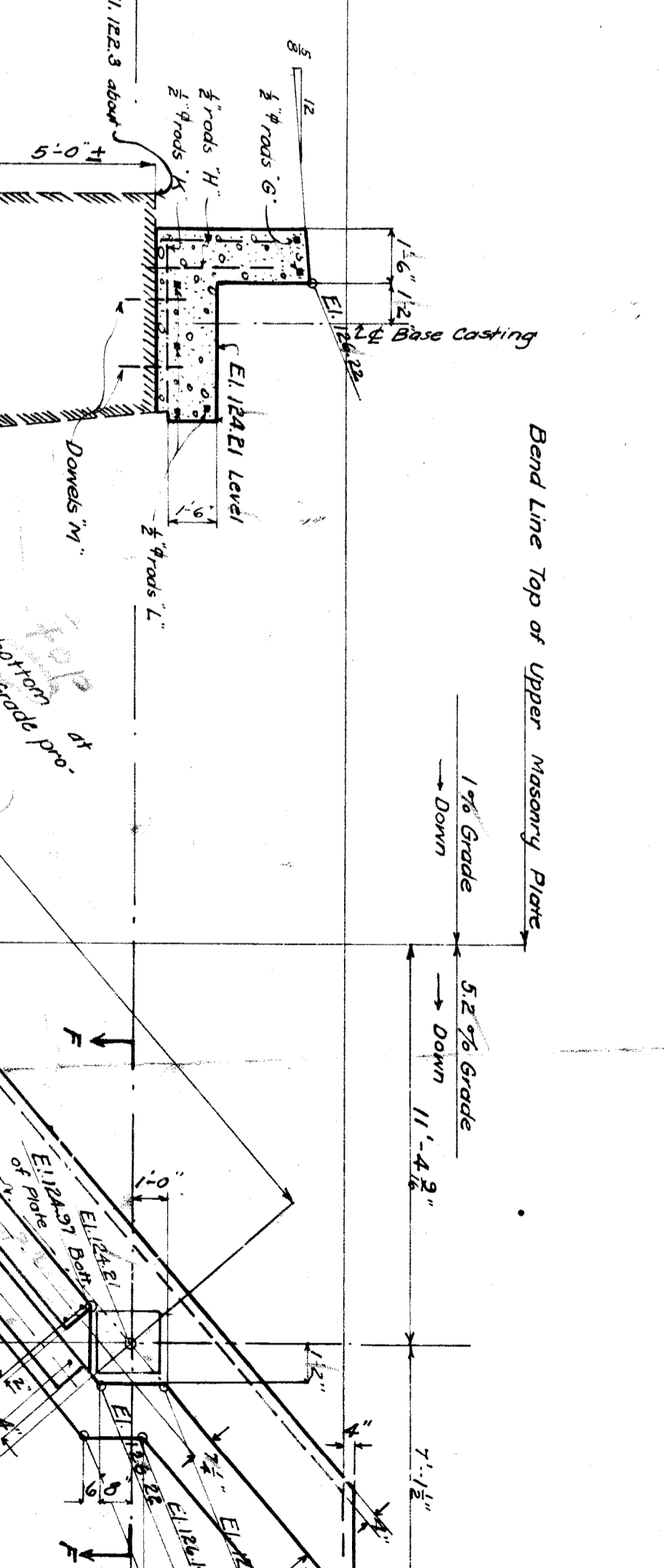
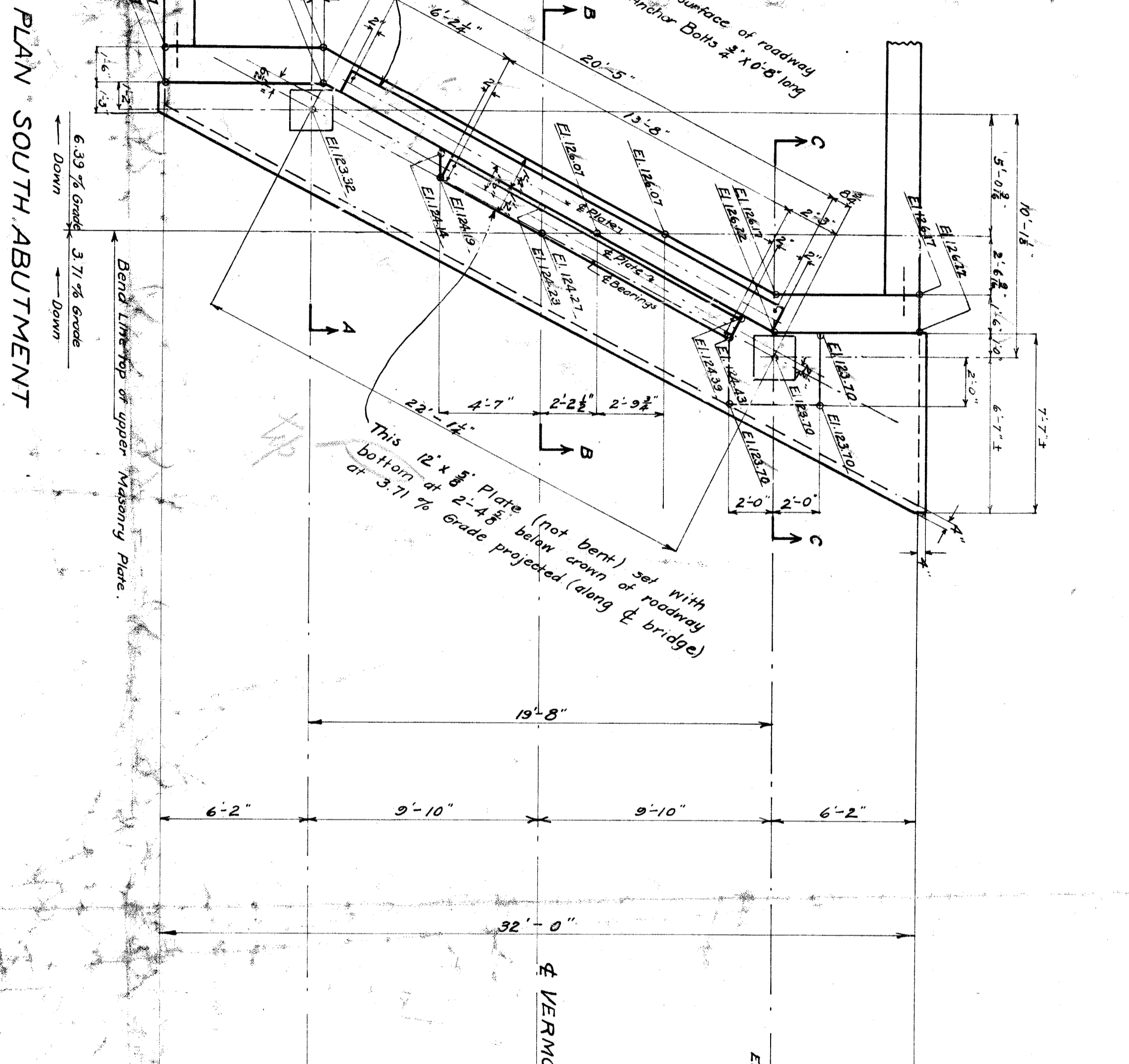
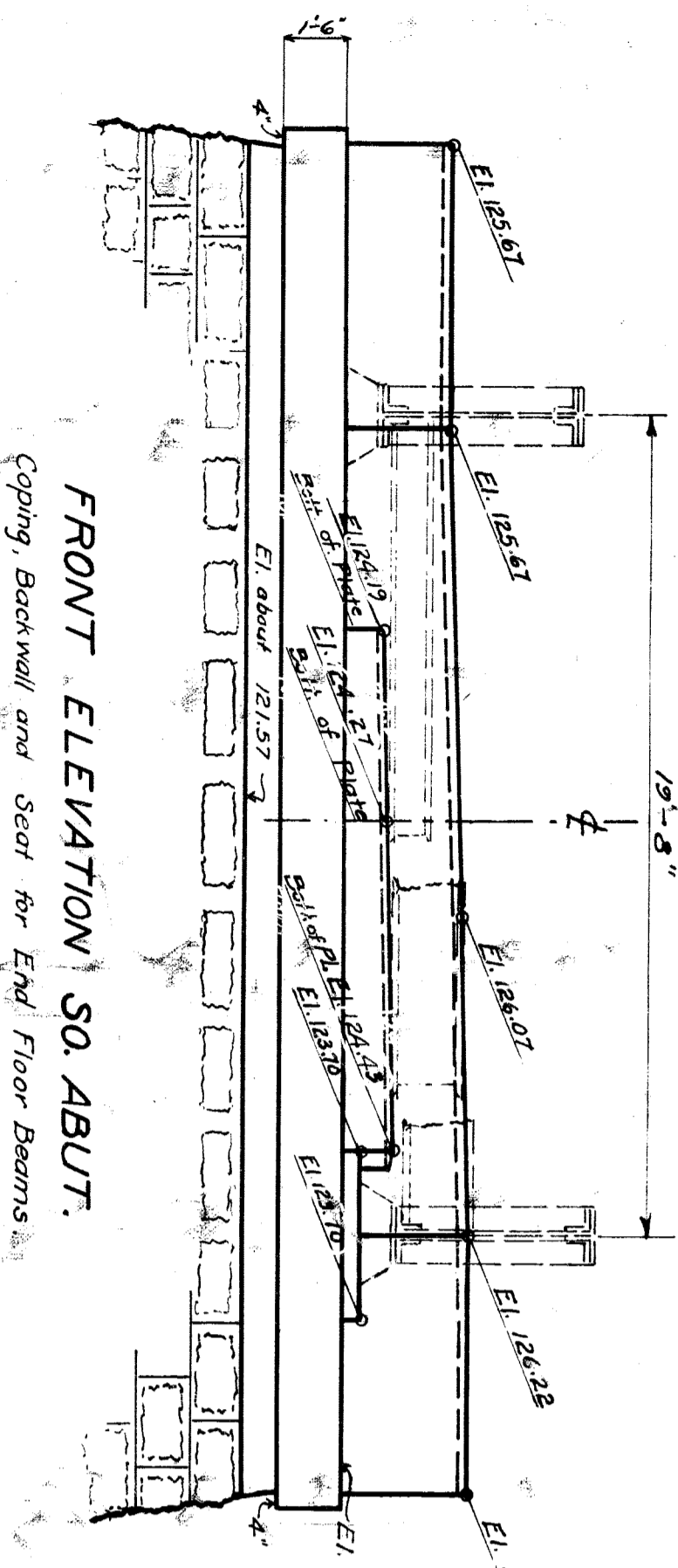
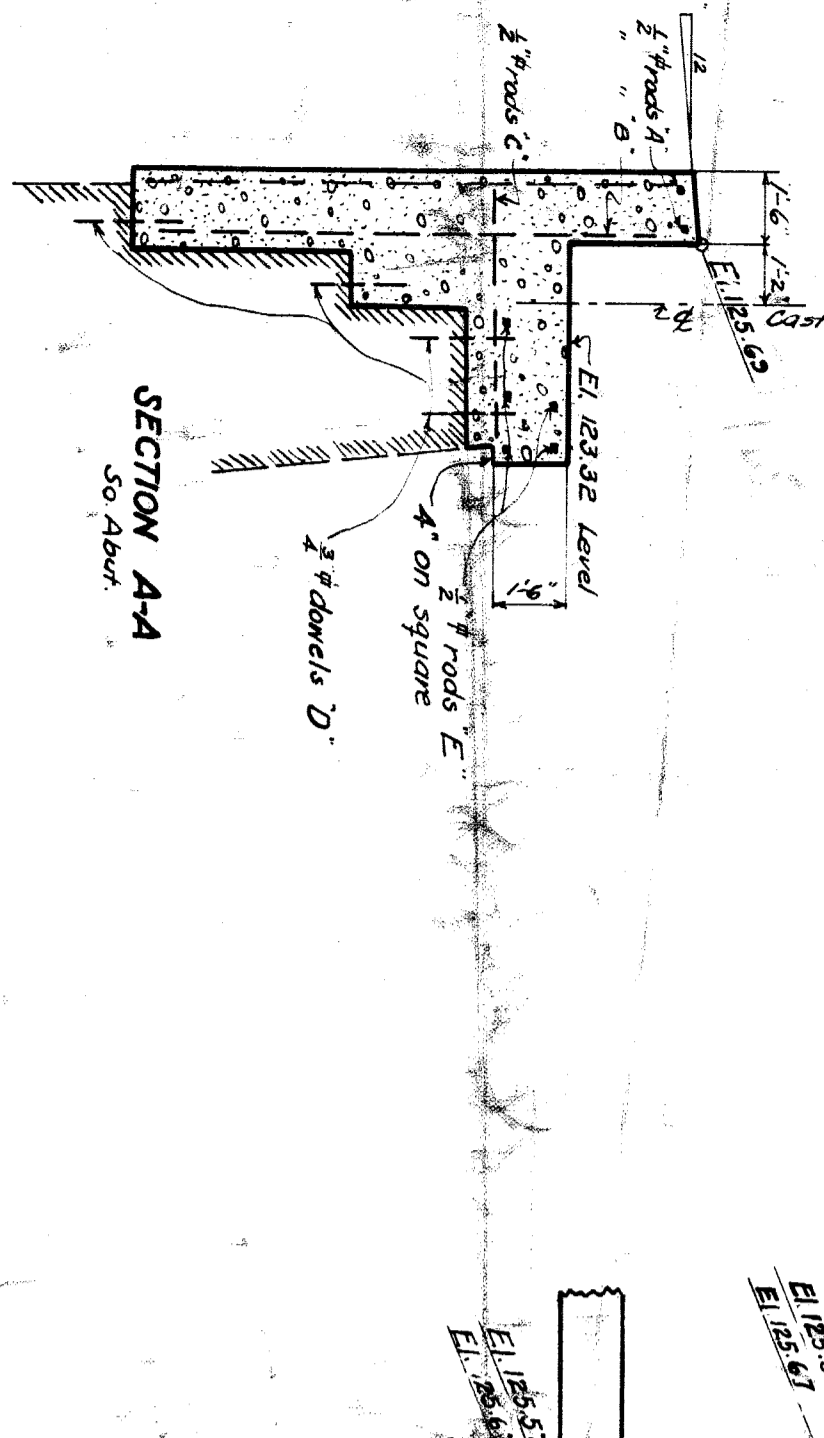
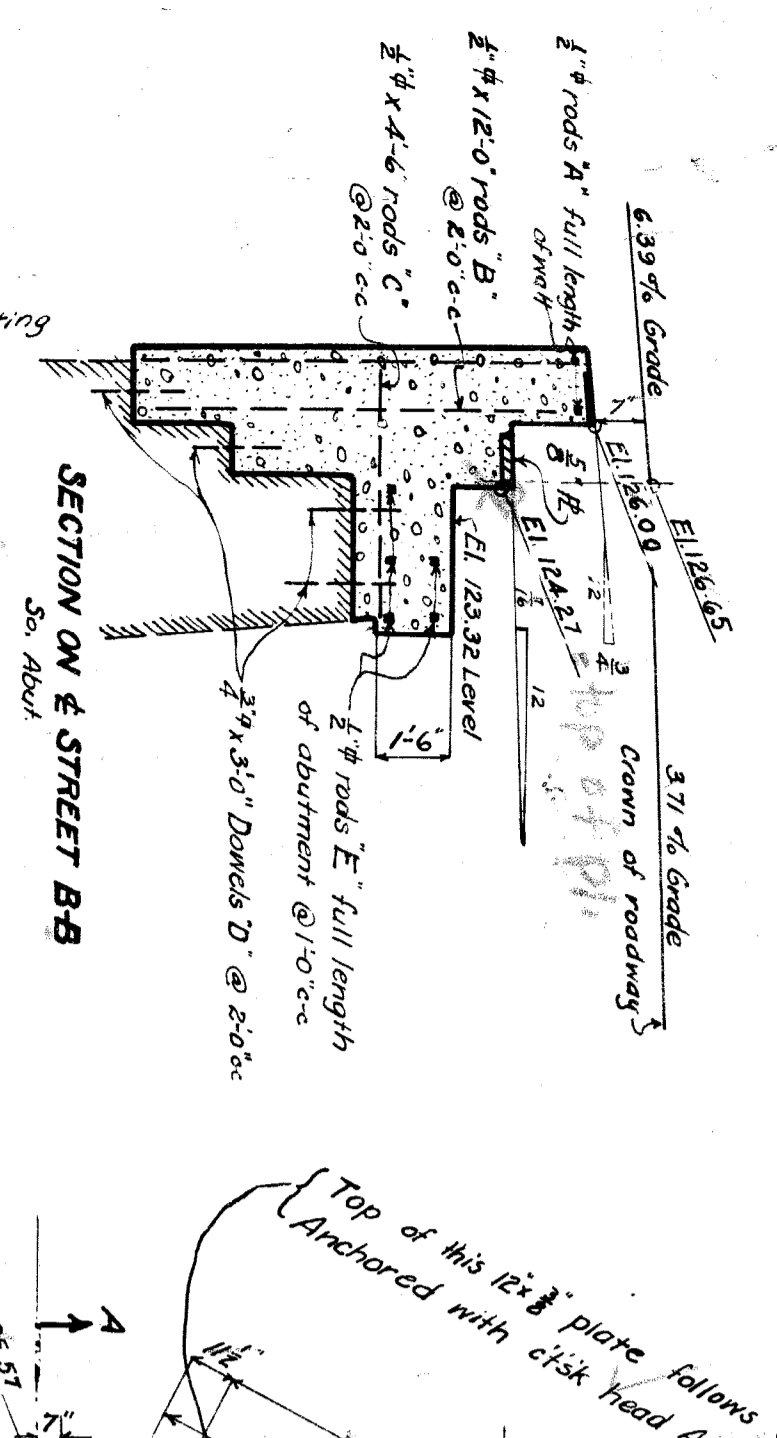
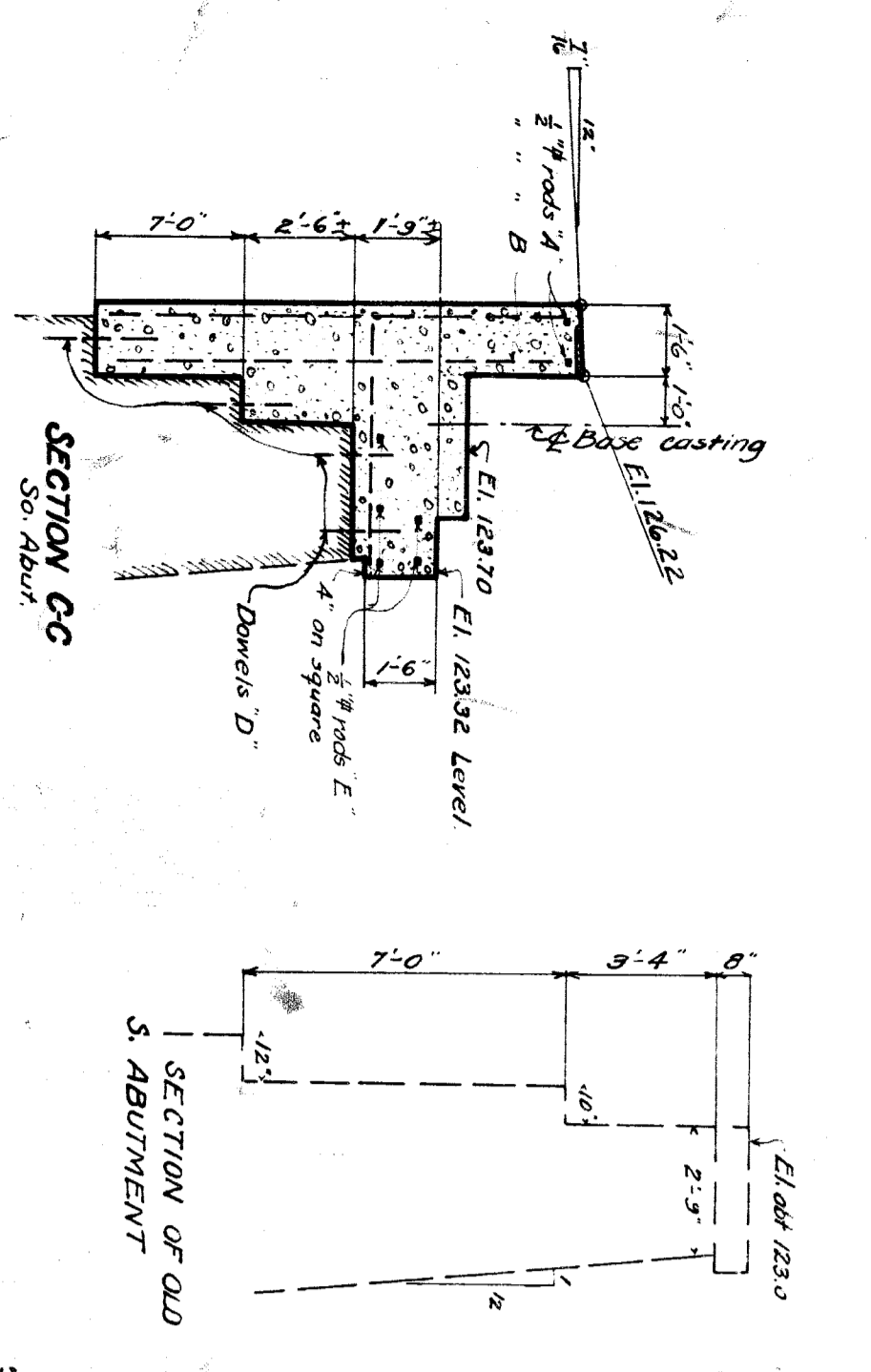


Note:-
Sidewalk slabs to be laid in alternate sections, lengths to be about 10'-0"



Concrete Work to be done by
City Forces

CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
OFFICE OF CITY ENGINEER
DIVISION OF GRADE SEPARATION AND BRIDGES
VERMONT AVE. BRIDGE
M.C.R.R. MAIN LINE
SIDEWALK AND RAILING DETAILS
VIADUCT APPROACHES



REINFORCING			
Mark	No.	Size	Location
"A"	2	1/2"	Top Backwall S. Abut.
"E"	3	"	Lengthwise coping "
"C"	17	"	Crosswise "
"B"	34	"	Vertical Backwall "
"D"	68	3/4"	Dowels "
"G"	2	3/4"	Top Backwall No. Abut.
"H"	2	1/2"	" "
"I"	46	"	Vertical Dowels "
"K"	41	"	Crosswise coping "
"L"	2	3/4"	Lengthwise "
"N"	48	3/4"	Dowels "

Note: Length of above bars is approximate. Cut to proper length in field.

NOTES

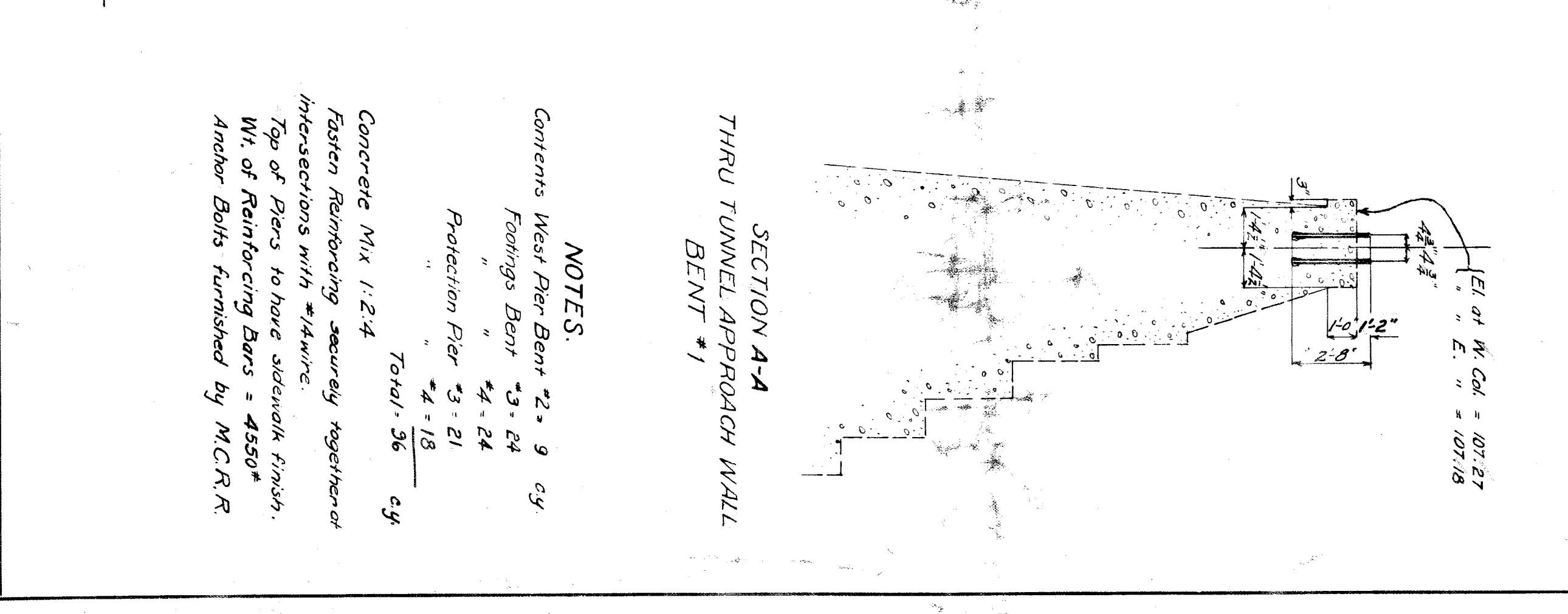
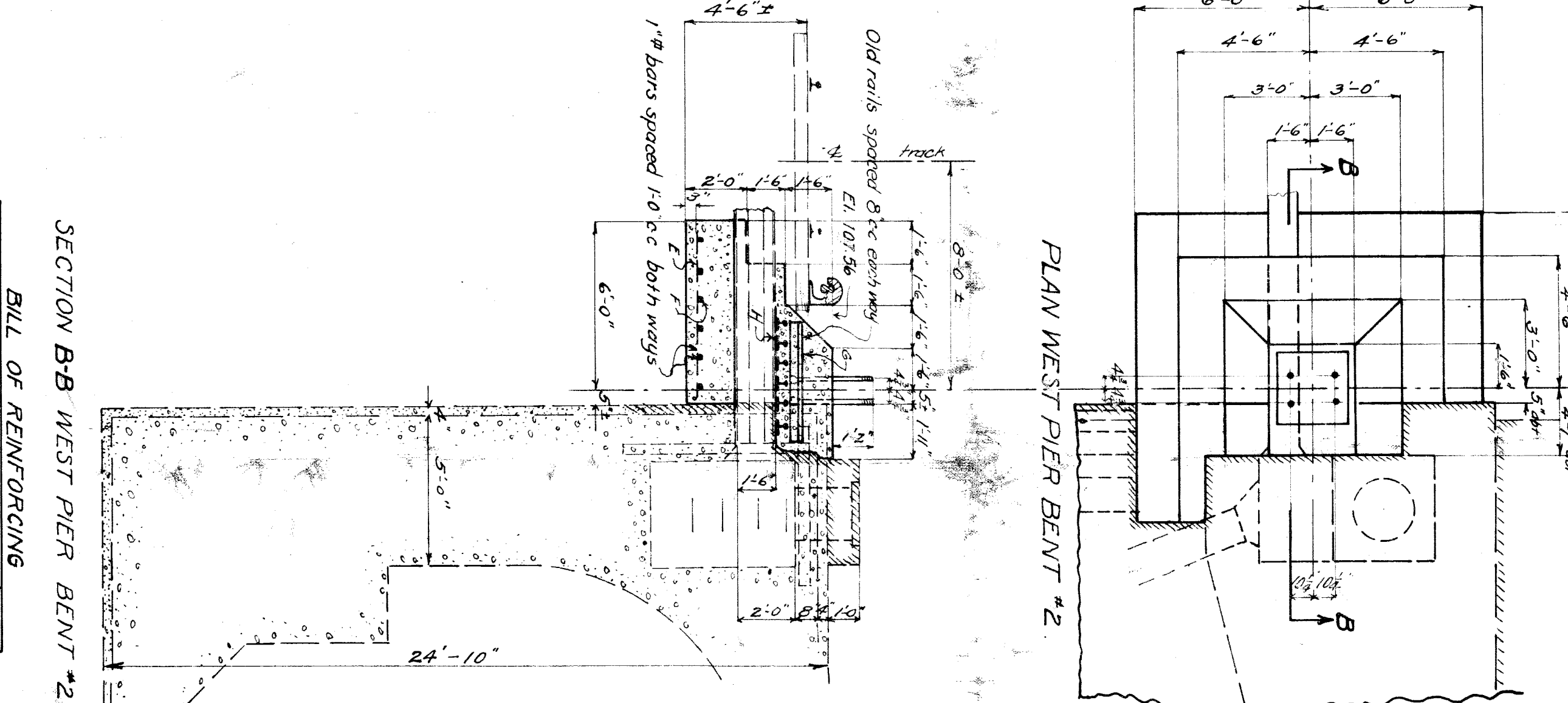
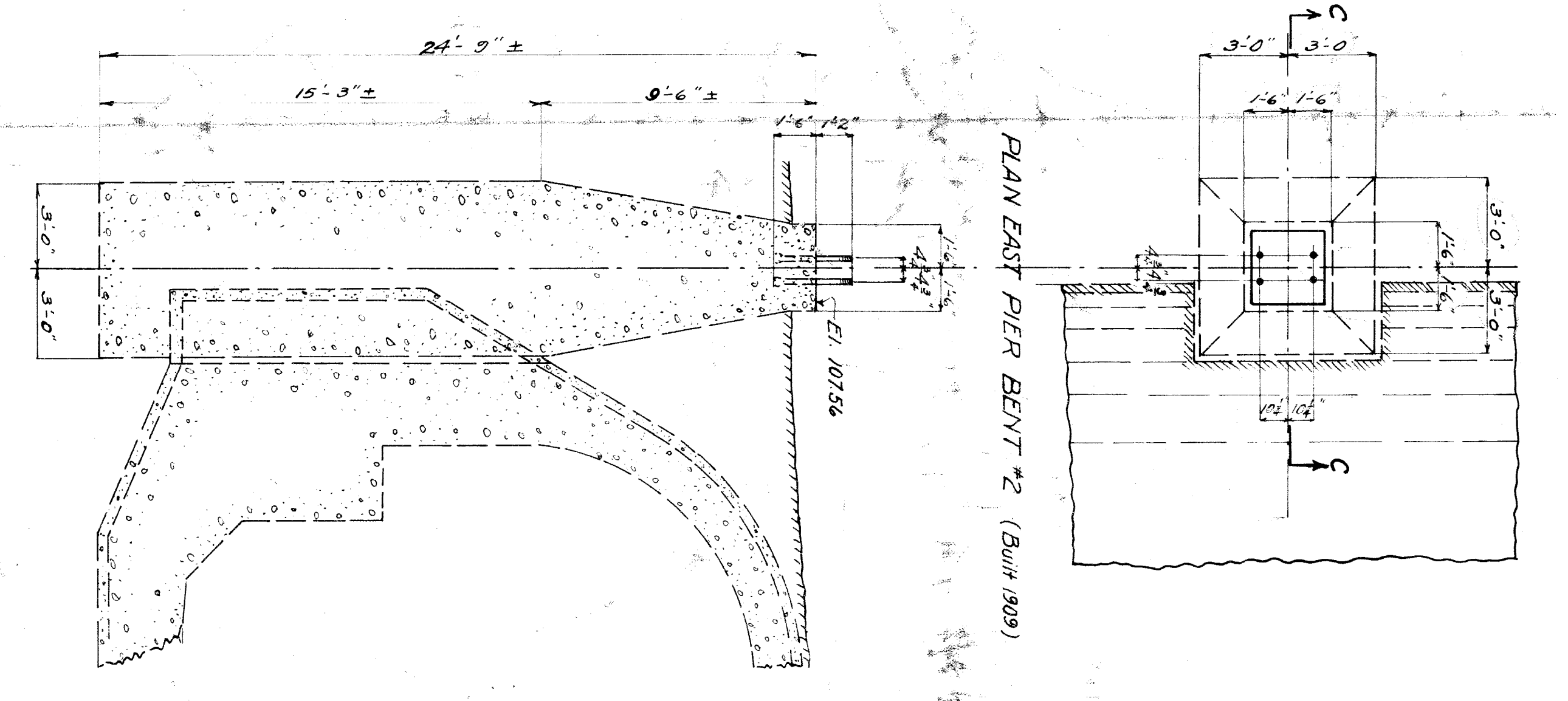
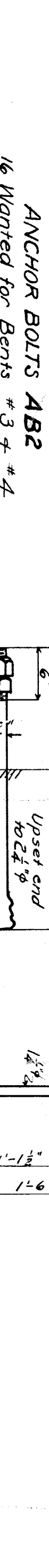
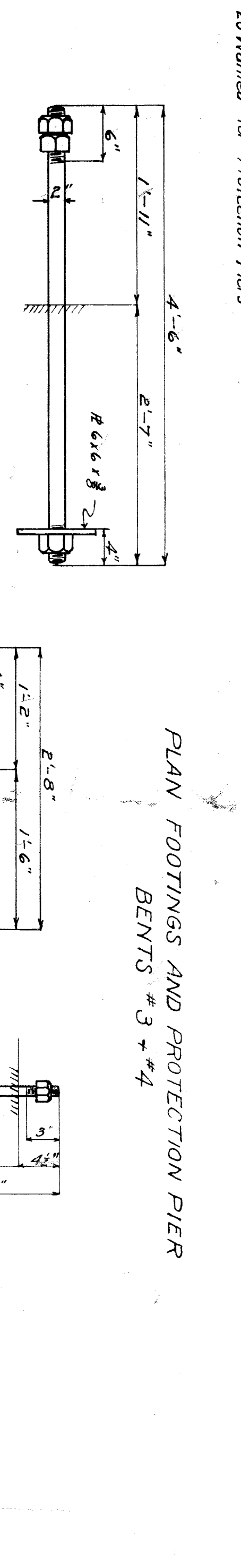
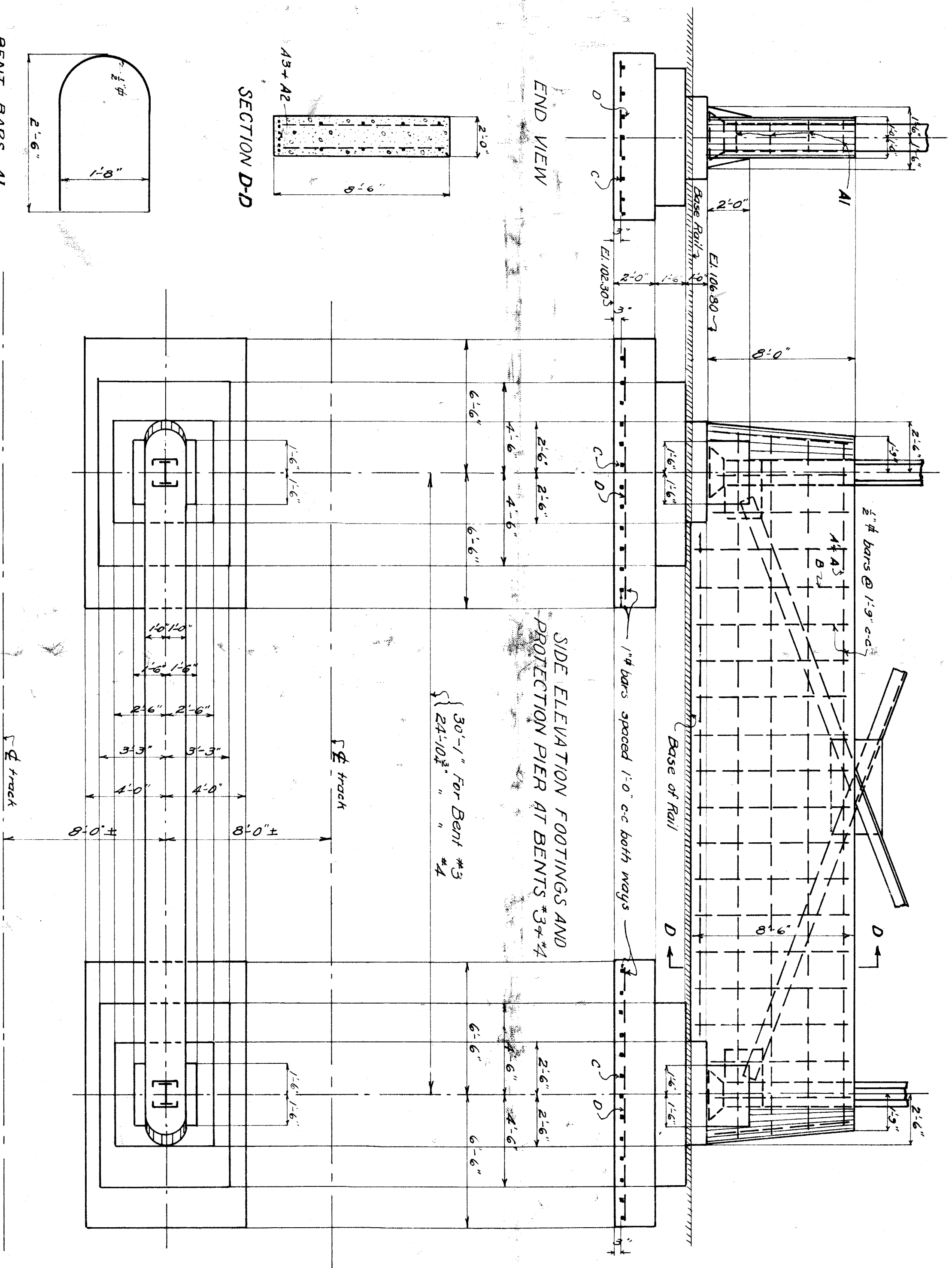
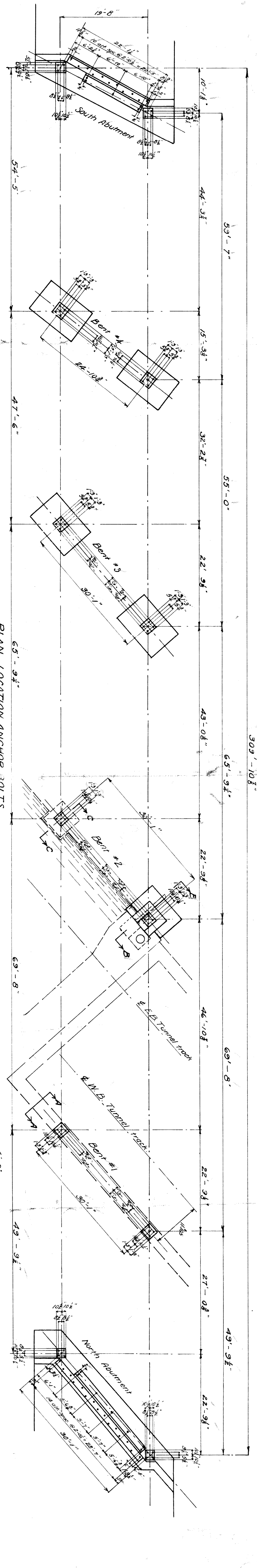
1. Concrete to be composed of 1 part cement, 2 parts sand and 3 parts stone. Exposed surfaces to be rubbed as soon as forms are removed. Top of bridge seat to have sidewalk finish and bearing blocks for castings to be finished to steel grade or some better integral with top. Reinforcing bars to be secured by providing 90 degree intersections with No. 14 wire. All joints shall lap for a length of 24 diameters and shall be wired together with 24 turns of No. 14 wire.

Anchor Bolts furnished by M.C.R.R. Masonry Plates furnished by Wisconsin Bridge Co.

M.C.R.R. will build benches as corrected above 10-5-32

M.C.R.R. - MAINLINE DIV.
BRIDGE - 0.91 VERMONT AVE.
ABUTMENT DETAILS

SCALE: 1/4" = 1'-0"
 DRAWN BY: M.C.M.
 CHECKED BY: J.C.M.
 TRACED BY: M.C.M.
 REVISION: 2 OF 3



SECTION CC EAST PIER BENT #2
NOTE: Details of this Pier taken from Detroit River Tunnel Drawing #152. O.H. Bridge Changes At Vermont Ave. (Built 1909)

SECTION BB WEST PIER BENT #2

BILL OF REINFORCING

No.	Size	Length	Location	Mark
1	#4	4'-0"	Footings Bent #2	A1
2	#4	19'-6"	" "	A2
3	#4	24'-0"	" "	A3
4	#4	3'-0"	" "	A4
5	#4	7'-9"	" "	A5
6	#4	7'-6"	" "	A6
7	#4	7'-6"	" "	A7
8	#4	7'-6"	" "	A8
9	#4	7'-6"	" "	A9
10	#4	7'-6"	" "	A10
11	#4	7'-6"	" "	A11
12	#4	7'-6"	" "	A12
13	#4	7'-6"	" "	A13
14	#4	7'-6"	" "	A14
15	#4	7'-6"	" "	A15
16	#4	7'-6"	" "	A16
17	#4	7'-6"	" "	A17
18	#4	7'-6"	" "	A18
19	#4	7'-6"	" "	A19
20	#4	7'-6"	" "	A20
21	#4	7'-6"	" "	A21
22	#4	7'-6"	" "	A22
23	#4	7'-6"	" "	A23
24	#4	7'-6"	" "	A24
25	#4	7'-6"	" "	A25
26	#4	7'-6"	" "	A26
27	#4	7'-6"	" "	A27
28	#4	7'-6"	" "	A28
29	#4	7'-6"	" "	A29
30	#4	7'-6"	" "	A30
31	#4	7'-6"	" "	A31
32	#4	7'-6"	" "	A32
33	#4	7'-6"	" "	A33
34	#4	7'-6"	" "	A34
35	#4	7'-6"	" "	A35
36	#4	7'-6"	" "	A36
37	#4	7'-6"	" "	A37
38	#4	7'-6"	" "	A38
39	#4	7'-6"	" "	A39
40	#4	7'-6"	" "	A40
41	#4	7'-6"	" "	A41
42	#4	7'-6"	" "	A42
43	#4	7'-6"	" "	A43
44	#4	7'-6"	" "	A44
45	#4	7'-6"	" "	A45
46	#4	7'-6"	" "	A46
47	#4	7'-6"	" "	A47
48	#4	7'-6"	" "	A48
49	#4	7'-6"	" "	A49
50	#4	7'-6"	" "	A50
51	#4	7'-6"	" "	A51
52	#4	7'-6"	" "	A52
53	#4	7'-6"	" "	A53
54	#4	7'-6"	" "	A54
55	#4	7'-6"	" "	A55
56	#4	7'-6"	" "	A56
57	#4	7'-6"	" "	A57
58	#4	7'-6"	" "	A58
59	#4	7'-6"	" "	A59
60	#4	7'-6"	" "	A60
61	#4	7'-6"	" "	A61
62	#4	7'-6"	" "	A62
63	#4	7'-6"	" "	A63
64	#4	7'-6"	" "	A64
65	#4	7'-6"	" "	A65
66	#4	7'-6"	" "	A66
67	#4	7'-6"	" "	A67
68	#4	7'-6"	" "	A68
69	#4	7'-6"	" "	A69
70	#4	7'-6"	" "	A70
71	#4	7'-6"	" "	A71
72	#4	7'-6"	" "	A72
73	#4	7'-6"	" "	A73
74	#4	7'-6"	" "	A74
75	#4	7'-6"	" "	A75
76	#4	7'-6"	" "	A76
77	#4	7'-6"	" "	A77
78	#4	7'-6"	" "	A78
79	#4	7'-6"	" "	A79
80	#4	7'-6"	" "	A80
81	#4	7'-6"	" "	A81
82	#4	7'-6"	" "	A82
83	#4	7'-6"	" "	A83
84	#4	7'-6"	" "	A84
85	#4	7'-6"	" "	A85
86	#4	7'-6"	" "	A86
87	#4	7'-6"	" "	A87
88	#4	7'-6"	" "	A88
89	#4	7'-6"	" "	A89
90	#4	7'-6"	" "	A90
91	#4	7'-6"	" "	A91
92	#4	7'-6"	" "	A92
93	#4	7'-6"	" "	A93
94	#4	7'-6"	" "	A94
95	#4	7'-6"	" "	A95
96	#4	7'-6"	" "	A96
97	#4	7'-6"	" "	A97
98	#4	7'-6"	" "	A98
99	#4	7'-6"	" "	A99
100	#4	7'-6"	" "	A100

NOTES:
 Contents West Pier-Bent #2. 9 cy
 Footings Bent #2. 24
 Protection Pier #3. 21
 Total: 54
 Concrete Mix 1:2:4
 Fasten Reinforcing securely together at intersections with #4 wire.
 Top of Piers to have sidewalk finish.
 Wt. of Reinforcing Bars = 4550 lbs
 Anchor Bolts furnished by M.C.R.R.

M.C.R.R.-MAINLINE DIV.
 BRIDGE-091 VERMONT AVE. O.H.
 MASONRY DETAILS

SCALE: 1" = 3'-0"
 1" = 1'-0"
 DRAWN BY: N.D.V. Sept 1922
 CHECKED BY: J.S.M. Sept 1922
 TRACED BY: M.B.J. Sept 1922
 APPROVED: [Signature]
 REVISIONS: [Table]
 SHEET 3 OF 19