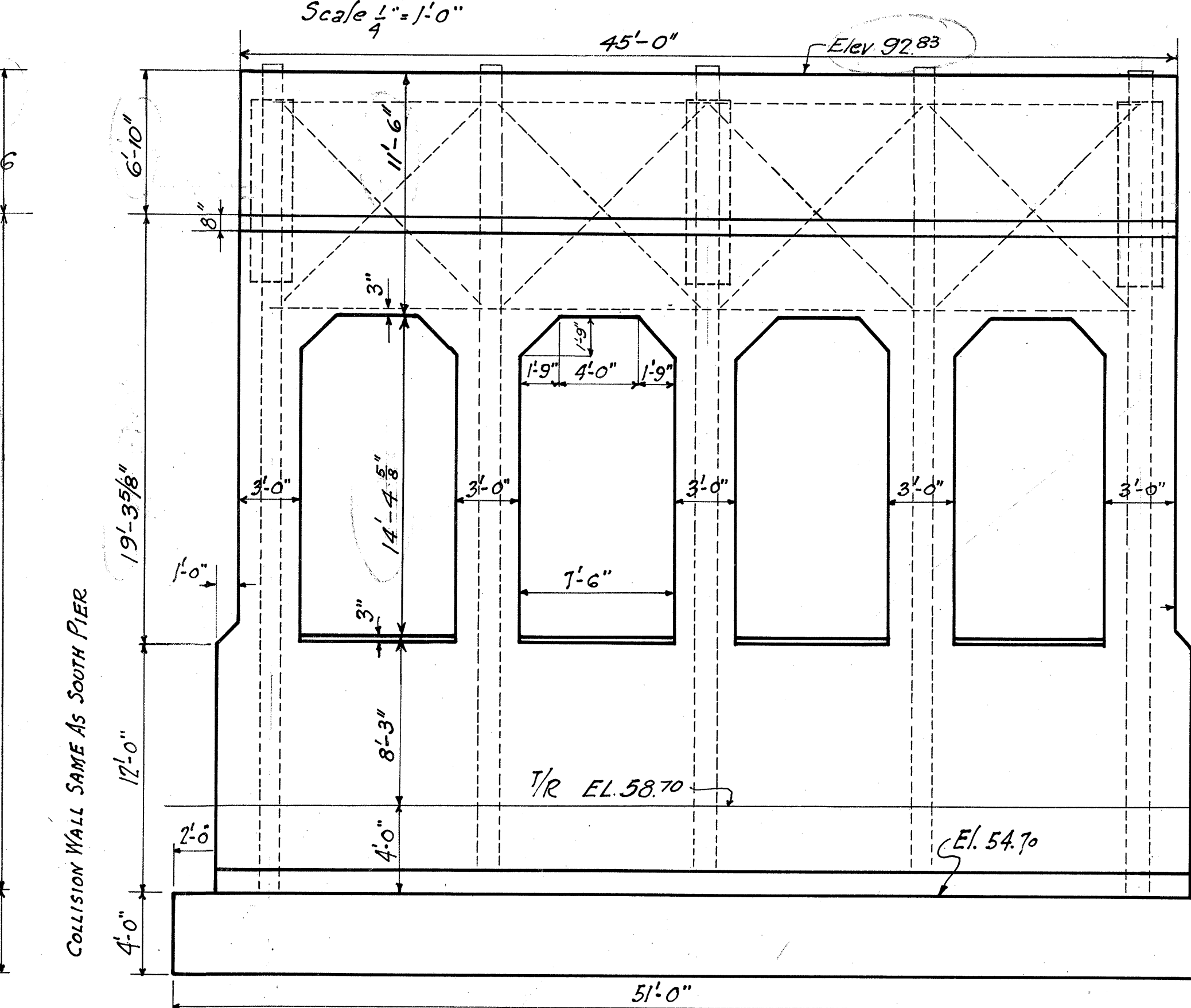
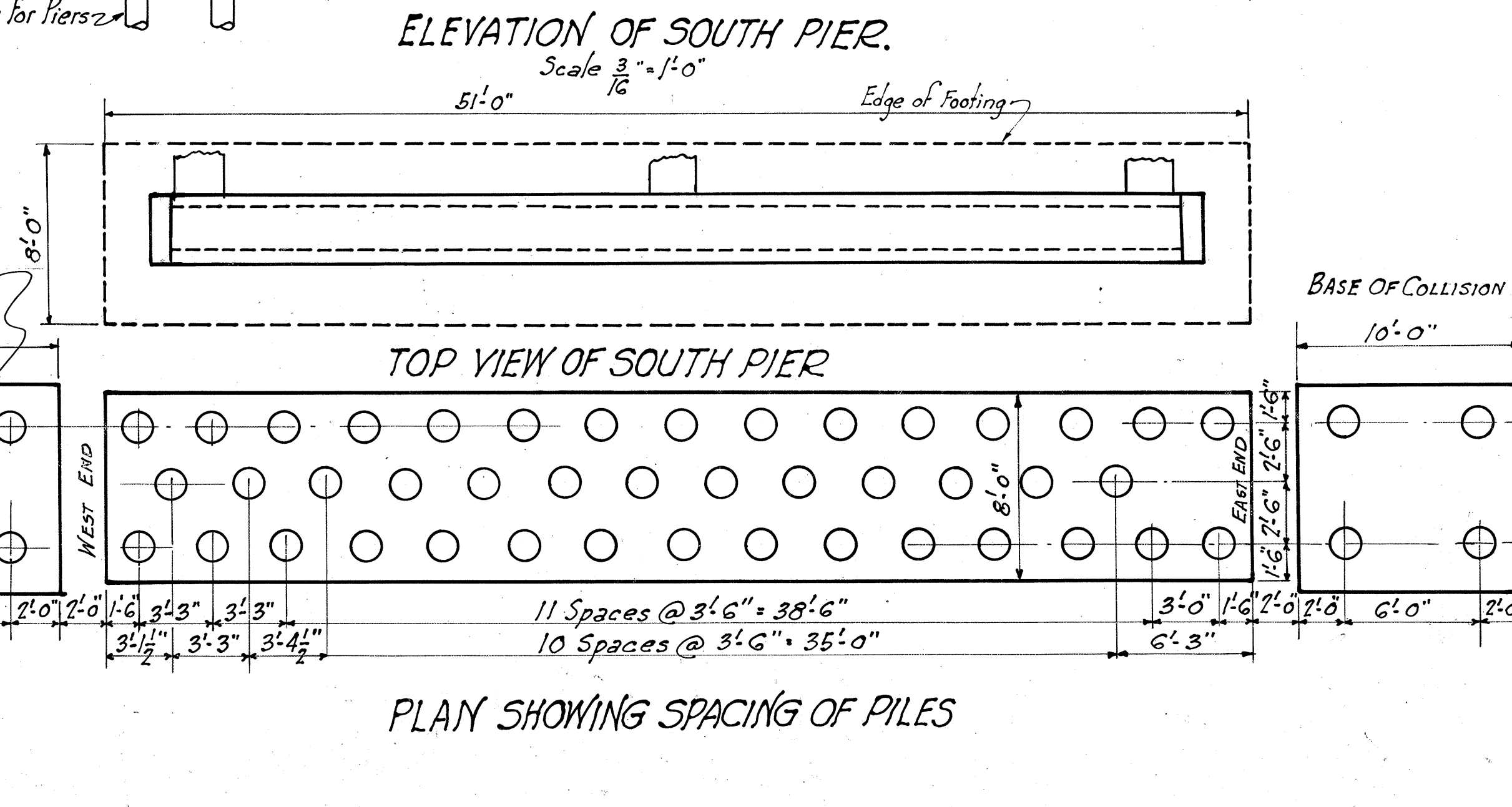
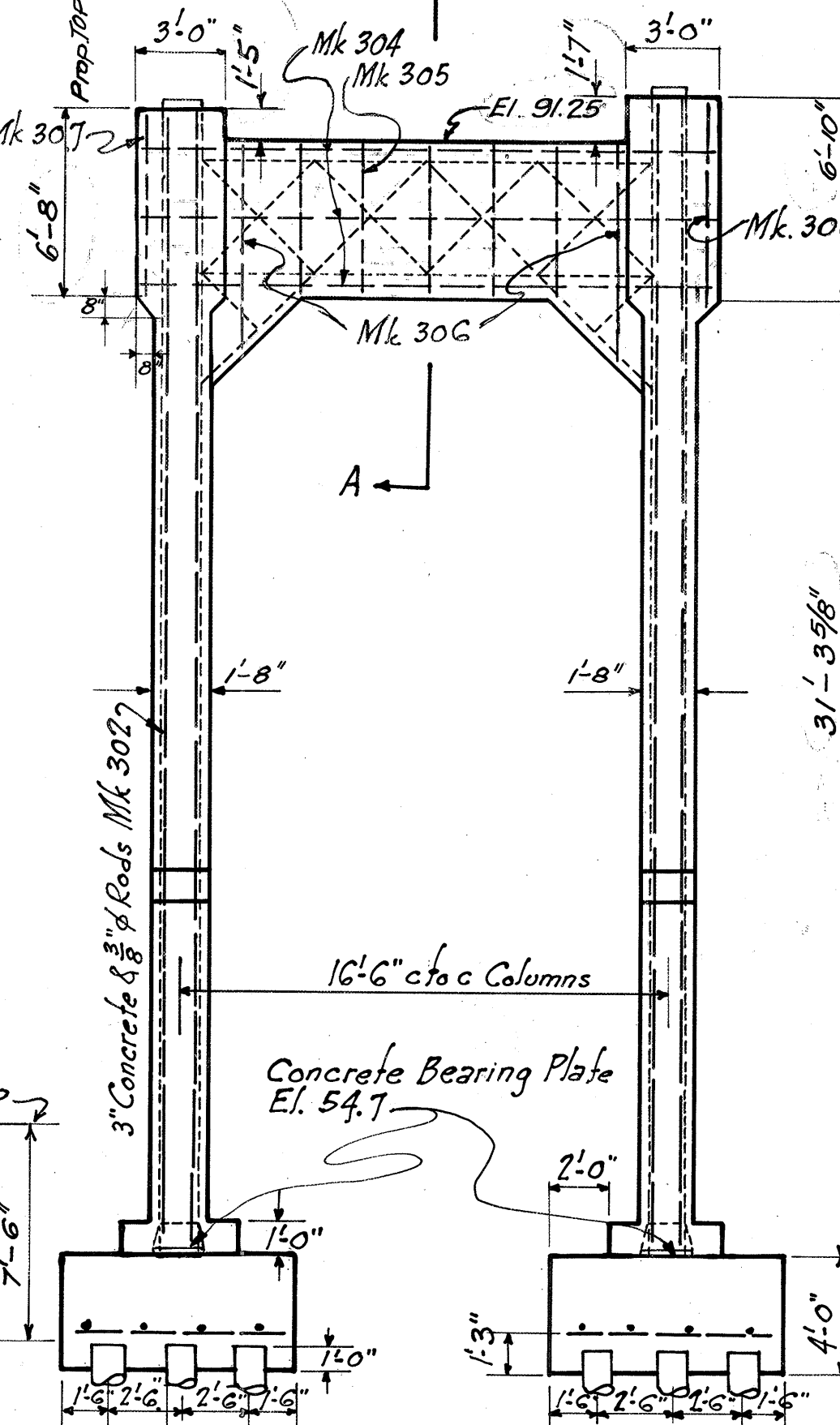
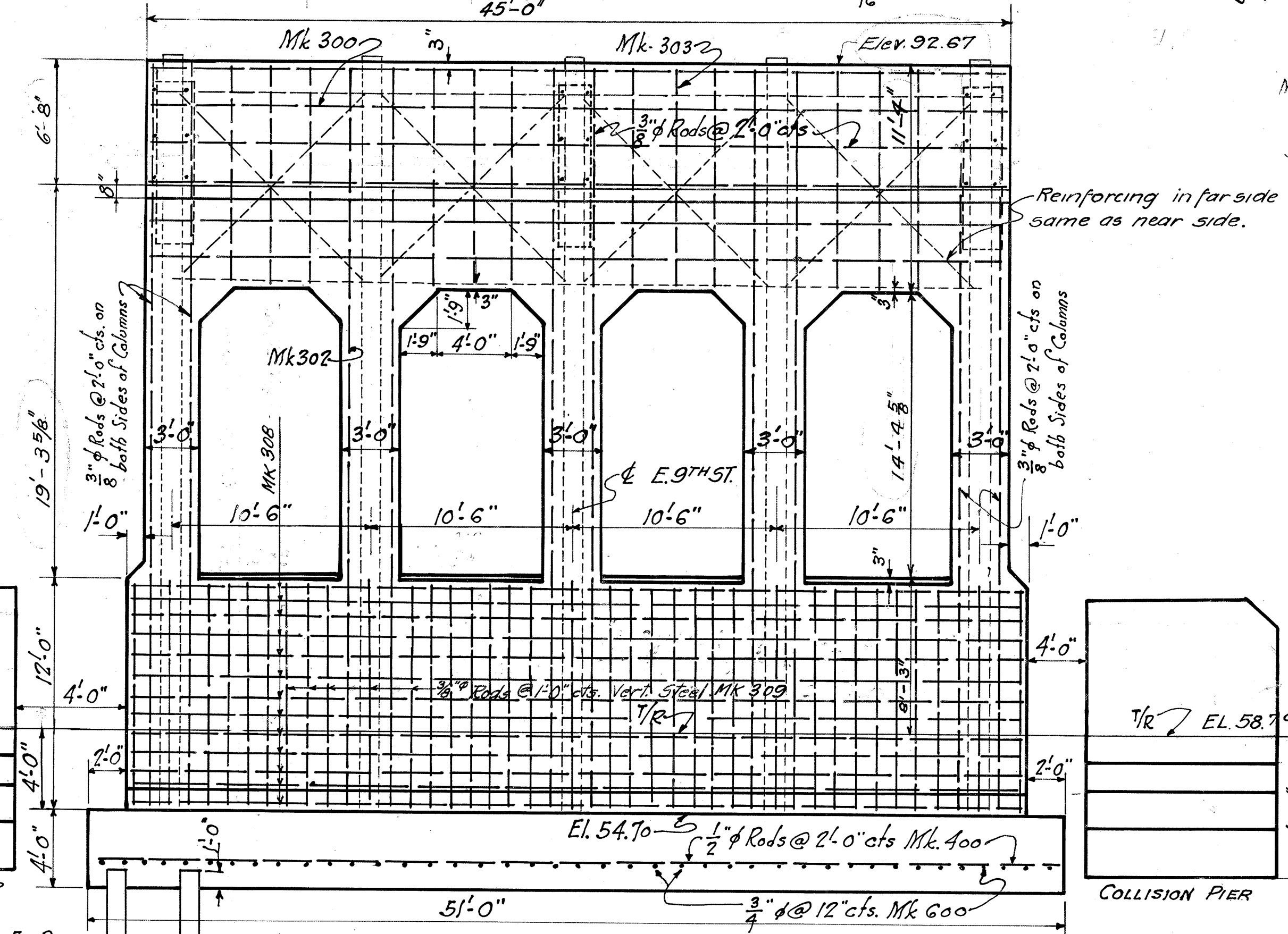
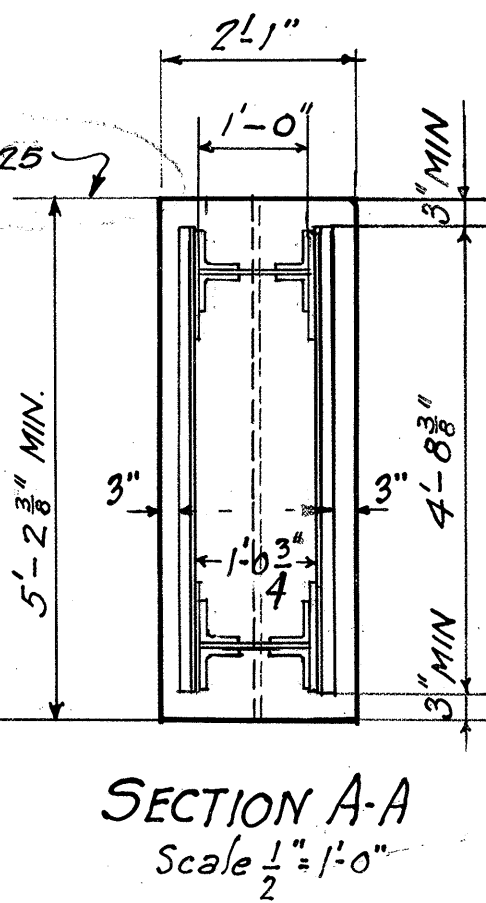
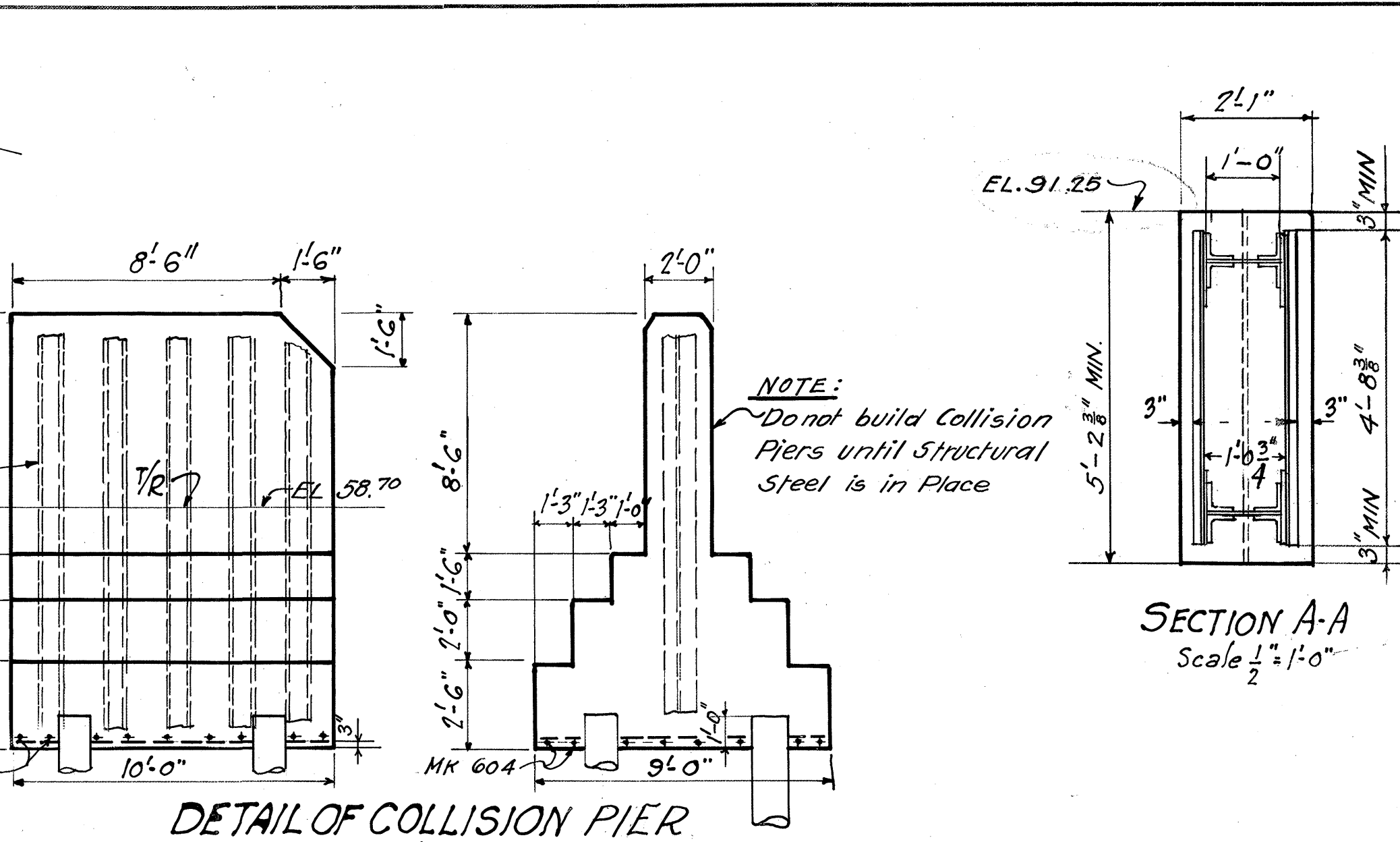
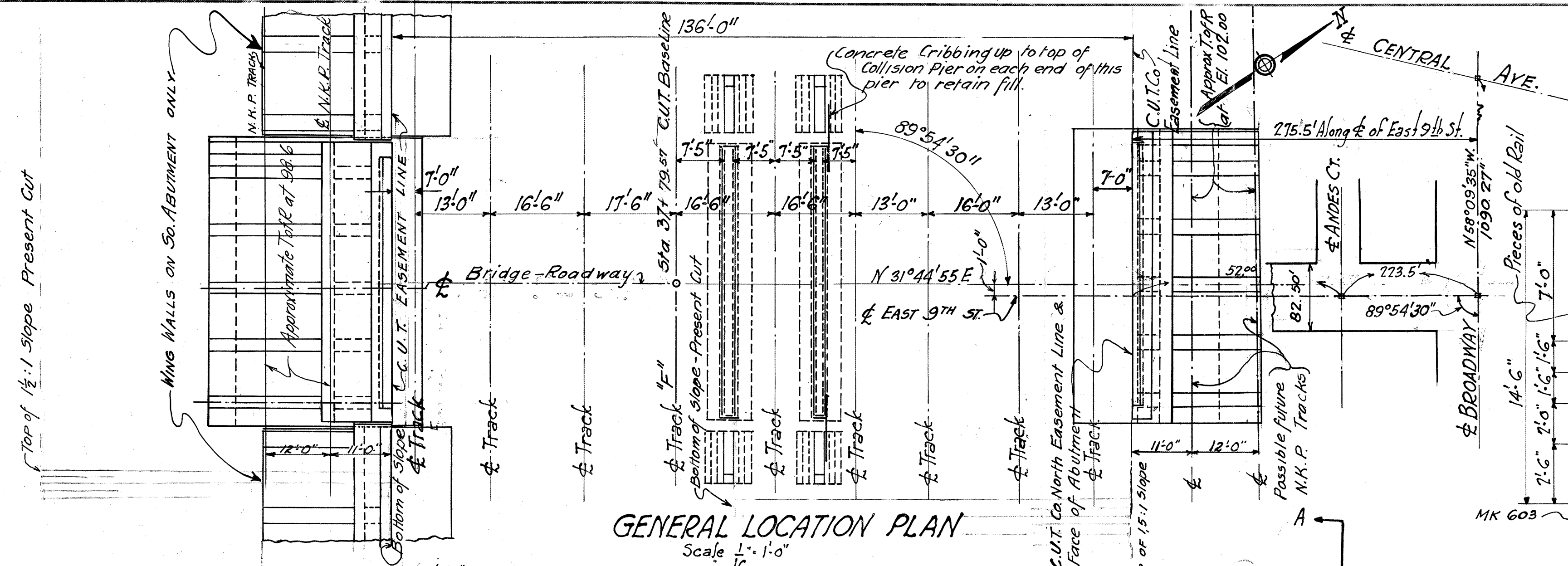


LIST OF PLANS	
SHEET	TITLE
1	N.S. Piers & Location Plan
2	North Abutment
3	Barlist N-Abut.
4	South Abutment
5	Barlist So. Abut.
6	File Plan, File Chart & Details
7	STEEL PLAN NO. 1
8	STEEL PLAN NO. 2
9	BRIDGE DECK PLAN
1	FILE 108-022-CUT. CO. WING WALLS - SO. ABUTMENT



**APPROXIMATIVE QUANTITIES FOR PIERS**

445 CU Yds. Concrete  
102-25'-0" Lg. Y.P. Piles.  
5350 Lbs. Reinforcing Steel  
240 sq. ft. concrete Cribbing  
121 cu. yd. Excavation

**BAR LIST**

MARK	No. Req'd.	Size	Length
300	48	3/8" φ	23'-6"
309	140	3/8" φ	11'-6"
302	80	3/8" φ	20'-6"
303	48	"	11'-0"
304	18	"	19'-0"
305	30	"	5'-0"
306	6	"	6'-6"
307	6	"	6'-0"
400	16	1/2" φ	27'-0"
600	102	3/4" φ	7'-6"
308	104	3/8" φ	24'-0"
603	36	3/4" φ	8'-6"
604	32	3/4" φ	9'-6"

APPROVED *M. J. Burgen* DATE 4/18/29  
ENGINEERING ASSIST. TO THE PRESIDENT N.Y.C. & S.L.R.R.

APPROVED *H. D. JOUETT* DATE APR. 17, 1929  
CHIEF ENGINEER CLEVELAND UNION TERMINAL CO.

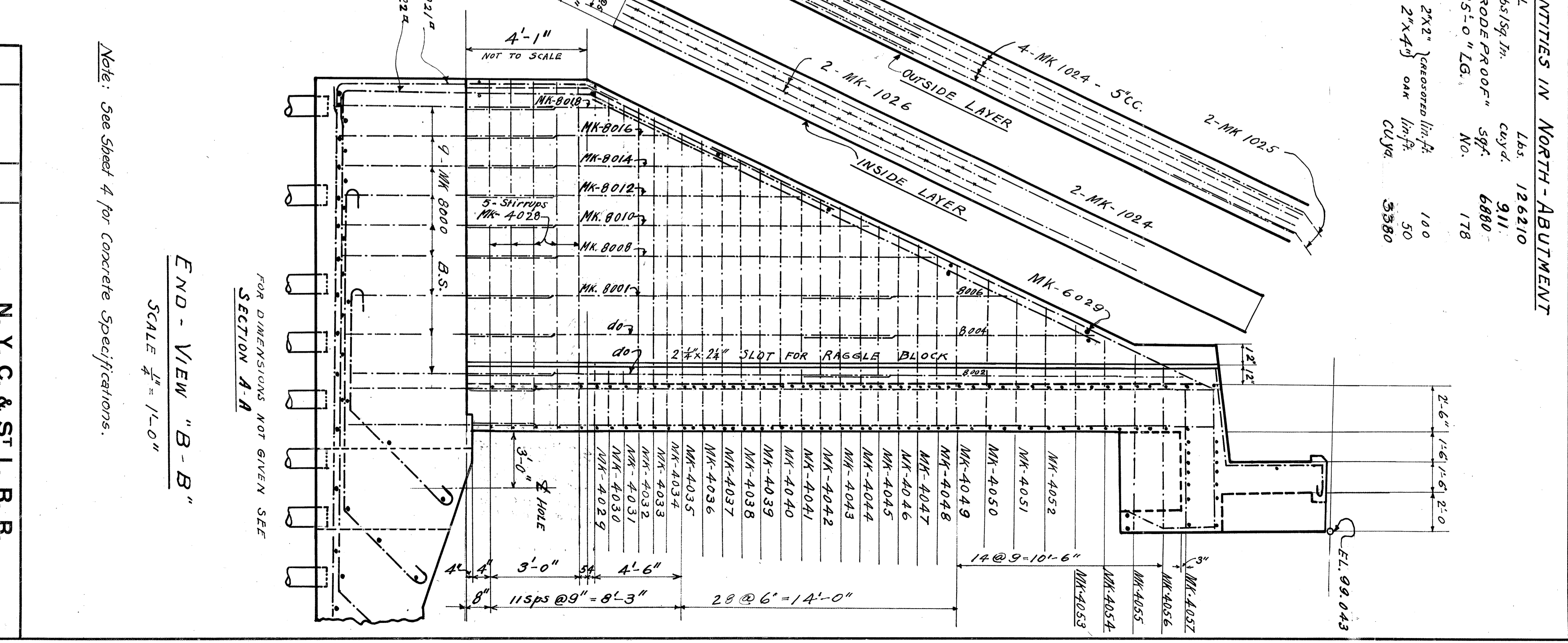
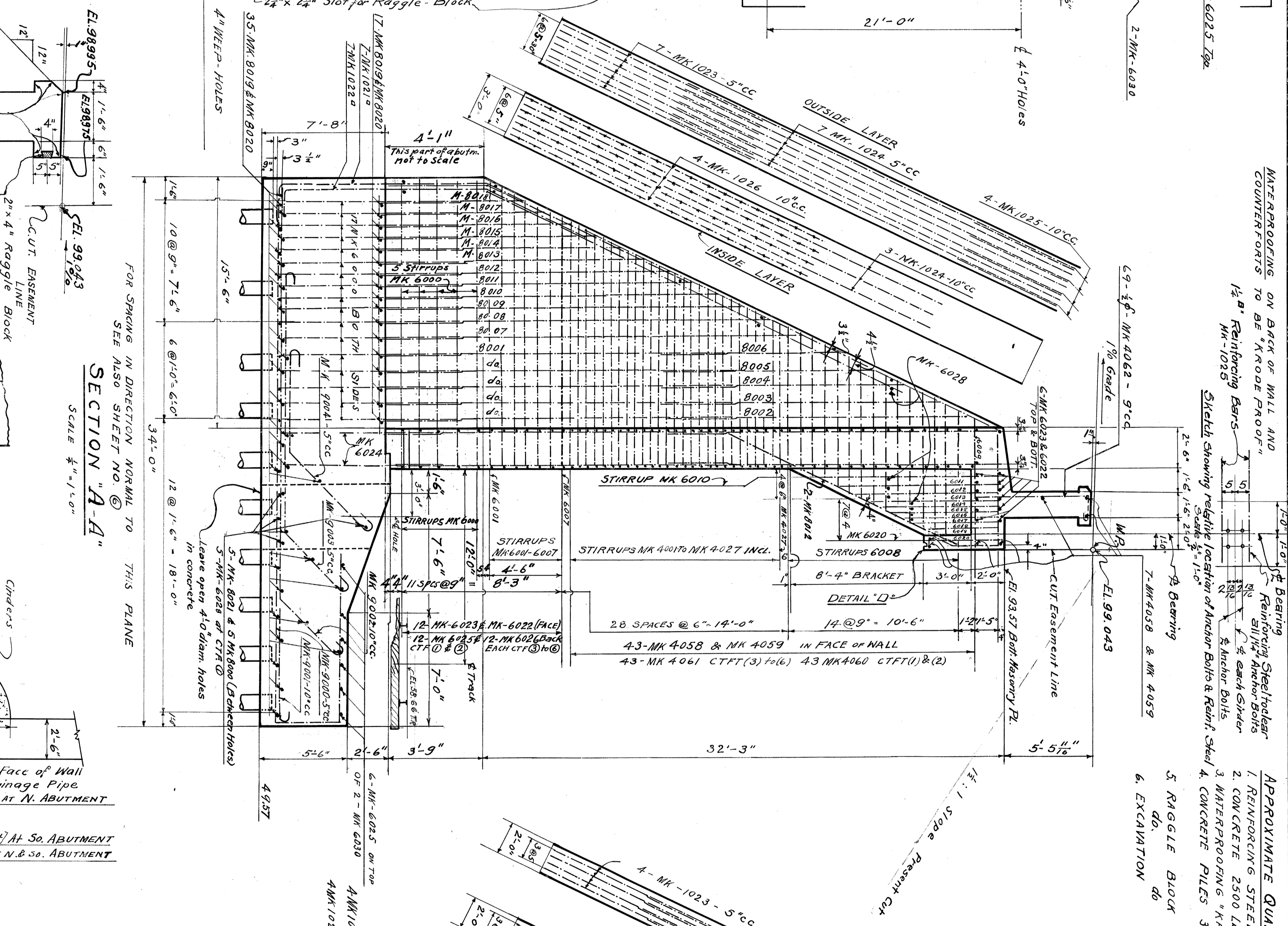
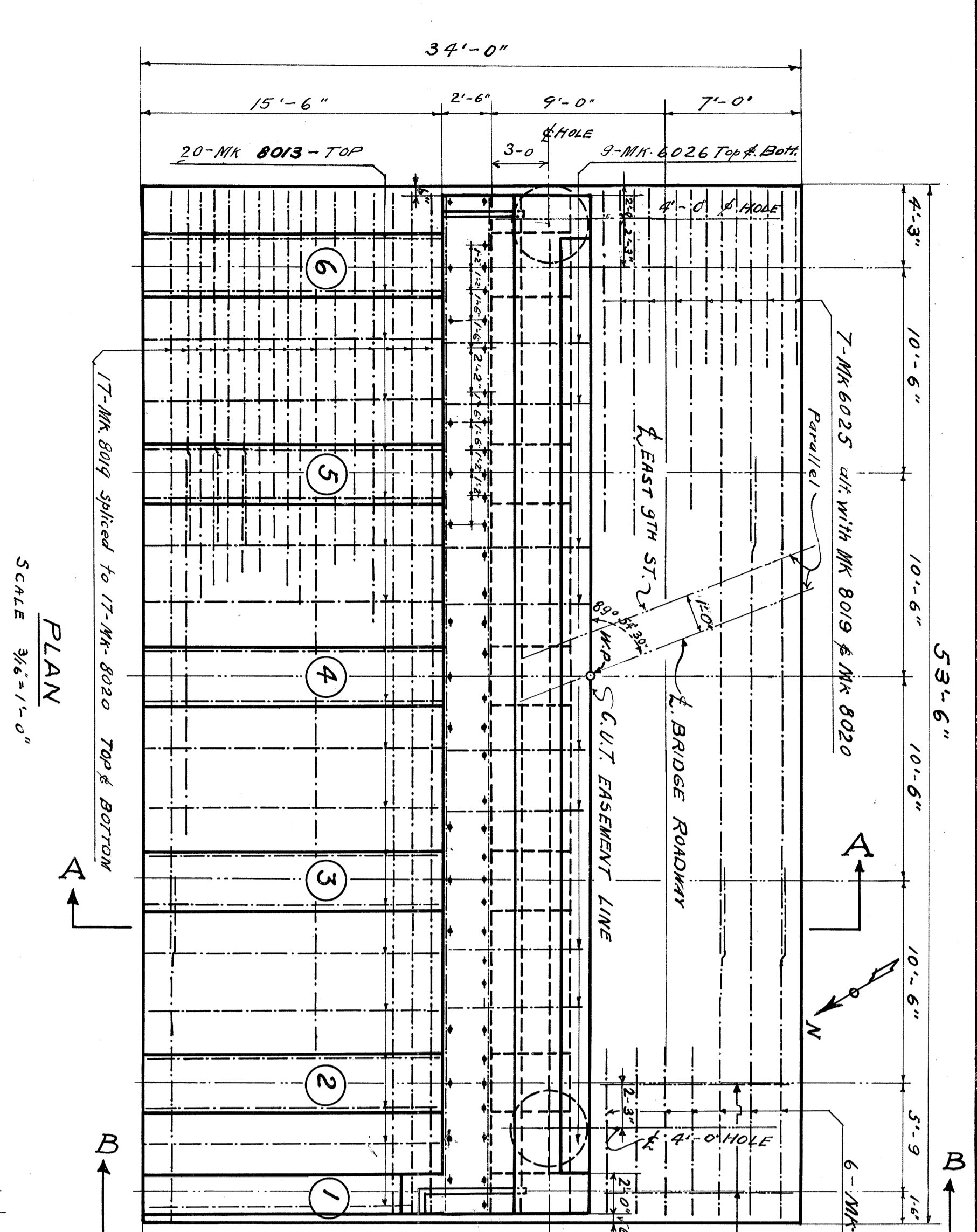
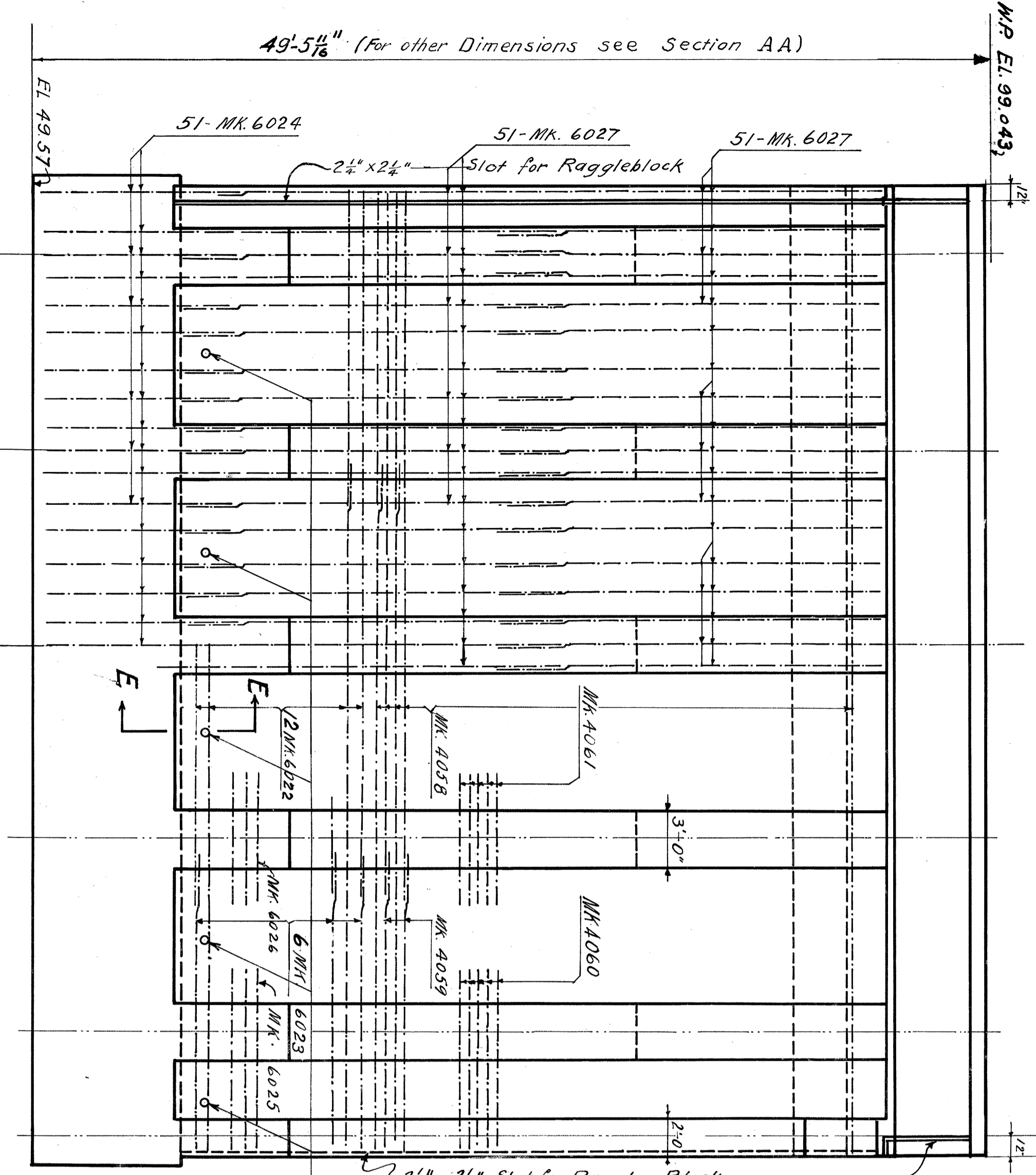
**CONSTRUCTION NOTES:** Concrete to be of 2500# Strength. 6 Gallons of Water per sack of cement. Use Water Cement Ratio Method, AREA Specifications, Vol. 28, Bulletin 295, March 1925. Approx Mix 1:5. Use 1" V Strips to chamfer all exposed concrete edges unless noted otherwise.

N. Y. C. & S. L. R. R.			
BRIDGE-NO-182.80-184.04			
CLEVELAND-OHIO. EAST 9TH ST.			
NORTH & SOUTH PIER & LOCATION PLAN.			
OFFICE OF CHIEF ENGINEER		CLEVELAND, O.	
SCALE	DRAWN	TRACED	CHECKED
As Shown	F.N. 8-24-28	M.C.H.	I.C. 9-5-28
DATE	REVISIONS	BY	DATE
8-24-28			

**NOTE: SPACING OF RODS IN NORTH PIER SAME AS IN THE SOUTH PIER EXCEPT AS NOTED.**

**COLLISION PIER SAME AS SOUTH PIER.**

**Note:** All exposed concrete surfaces to be finished with carborundum block to remove all traces of formwork.



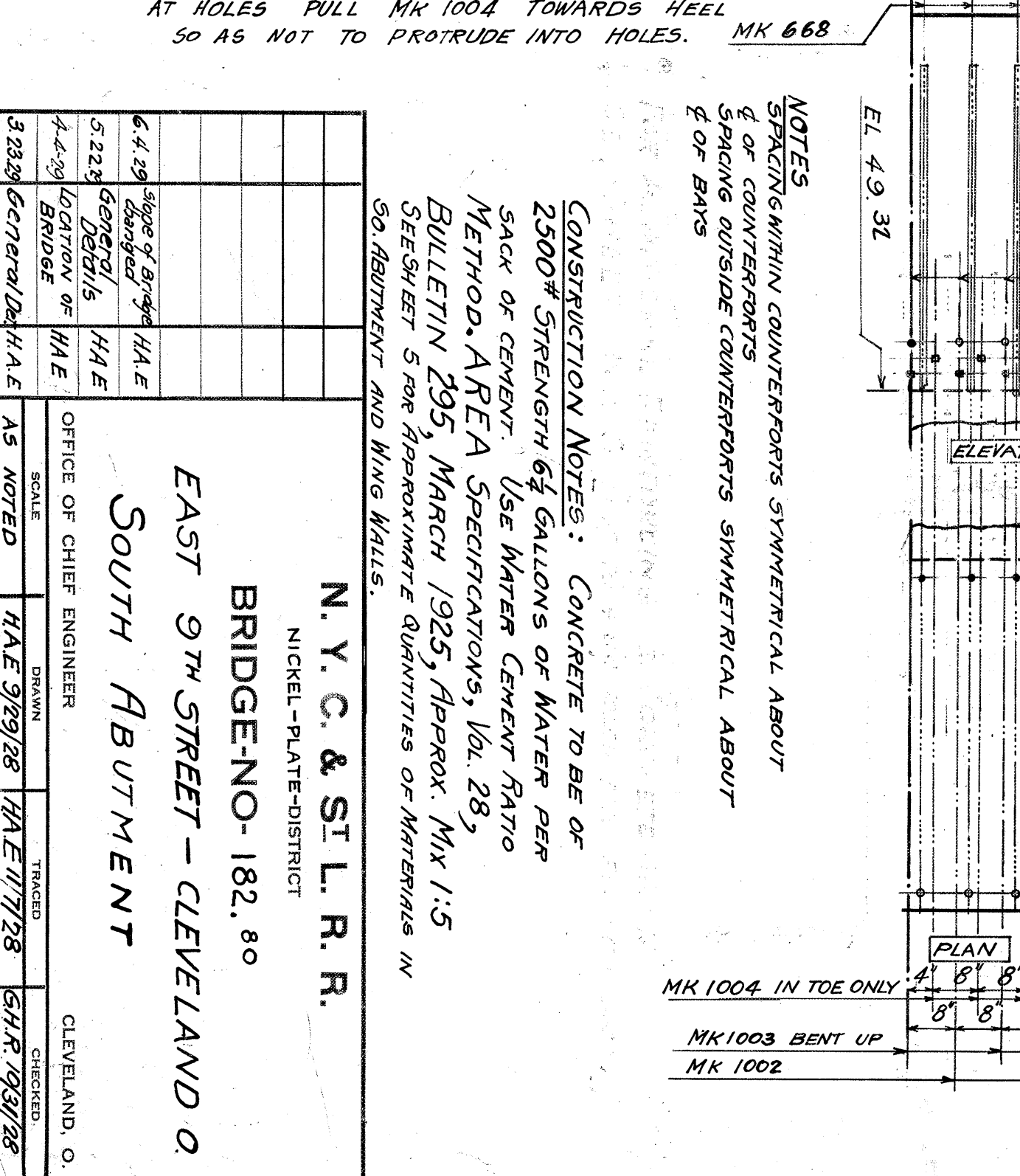
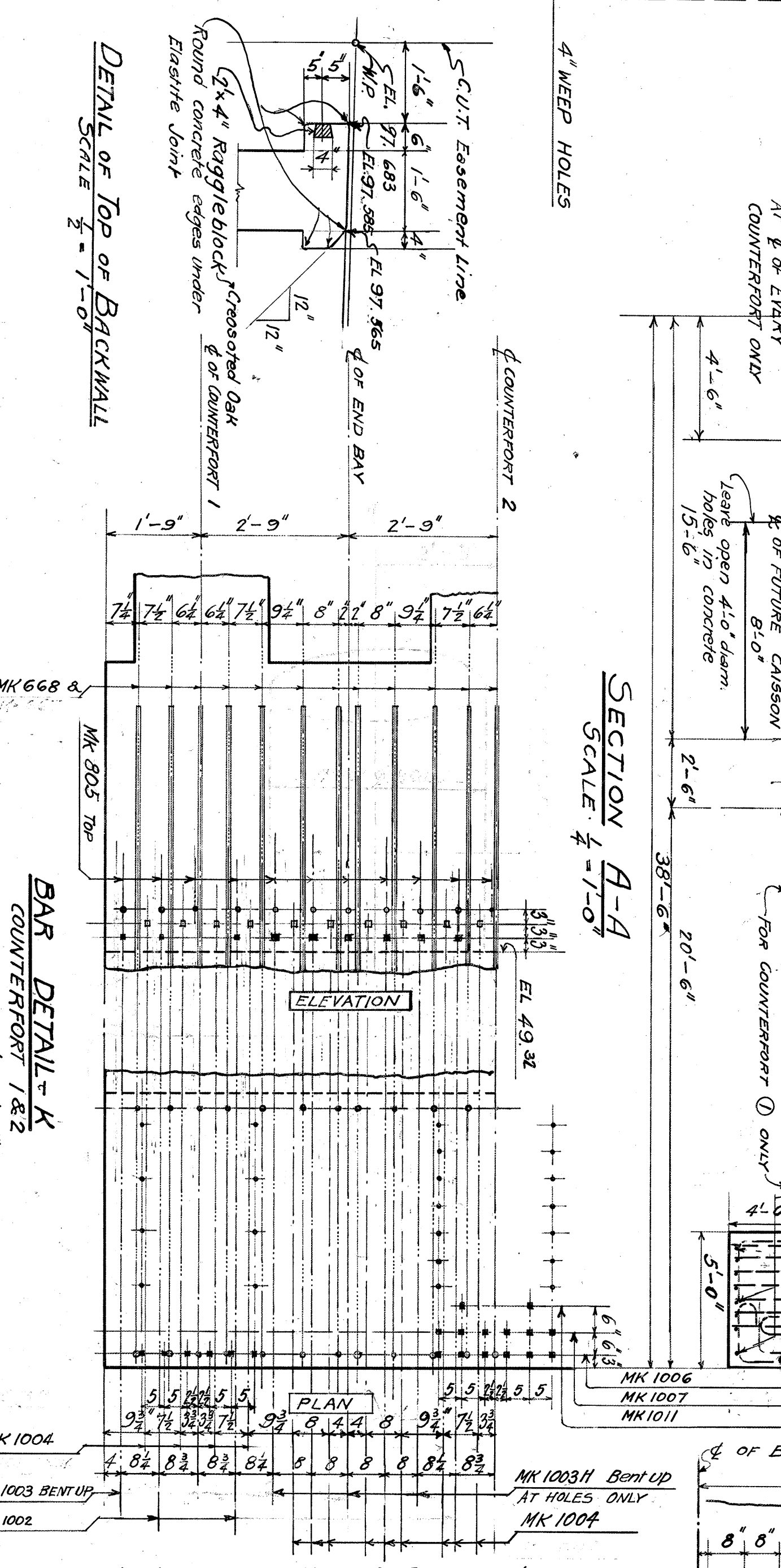
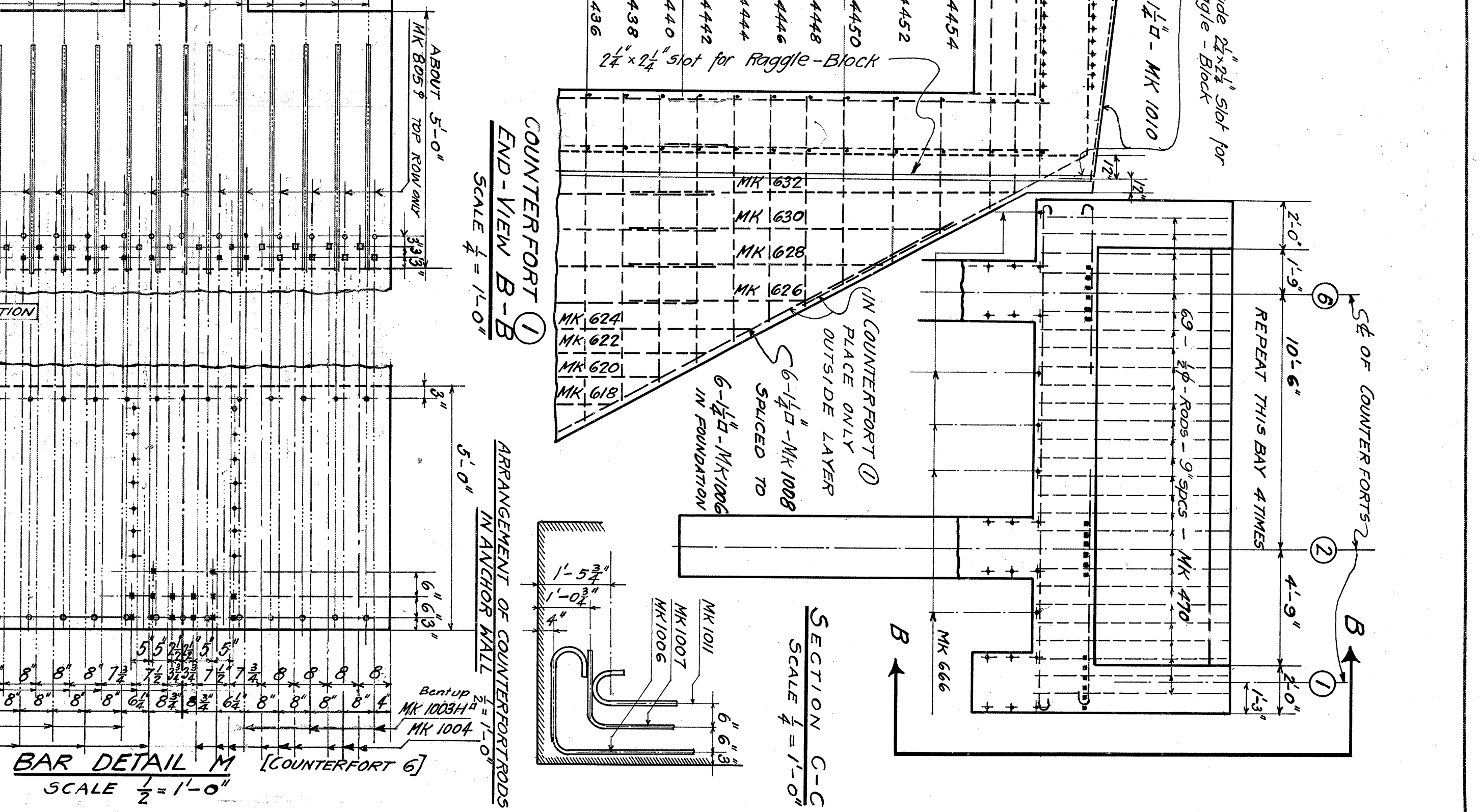
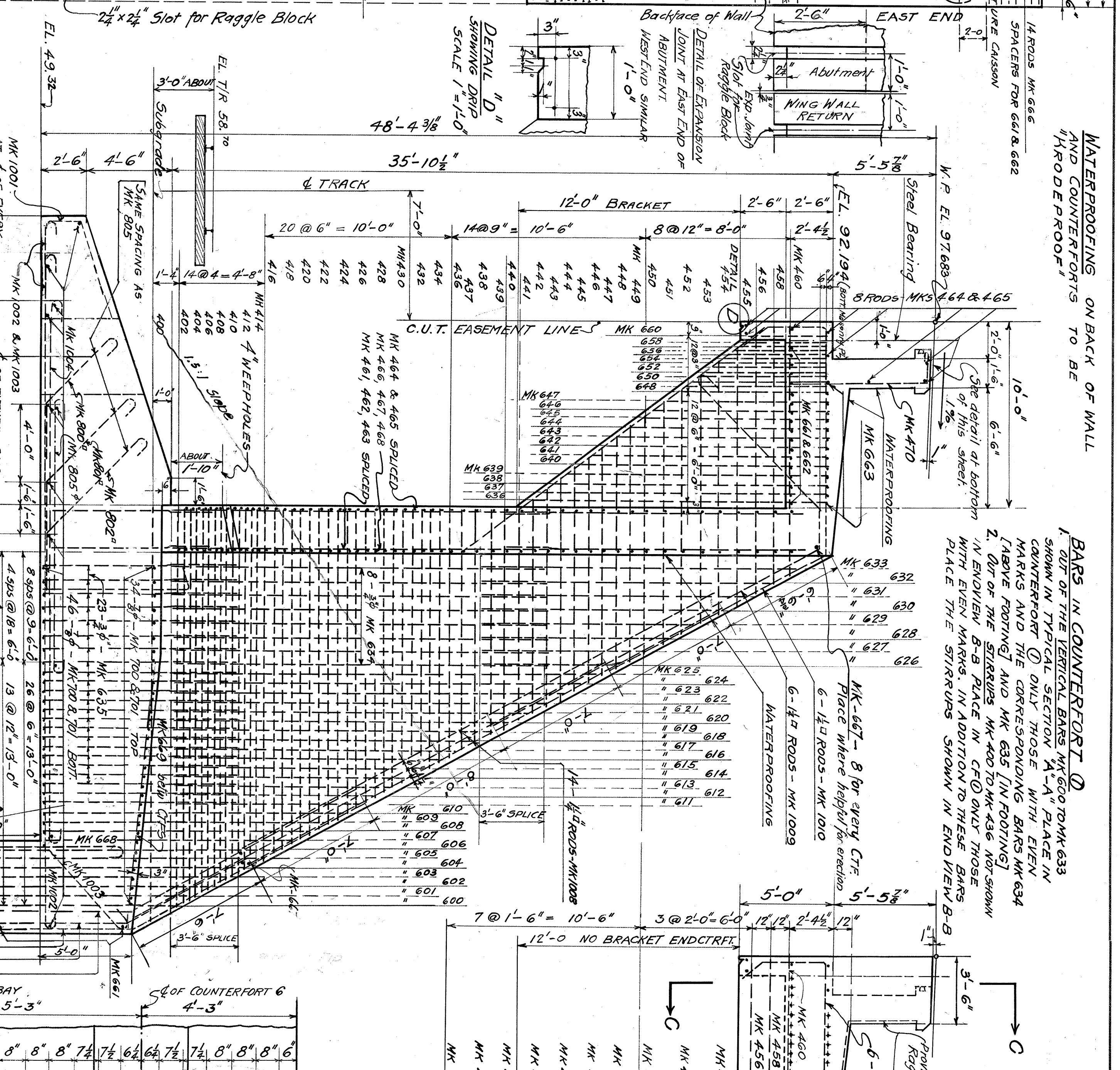
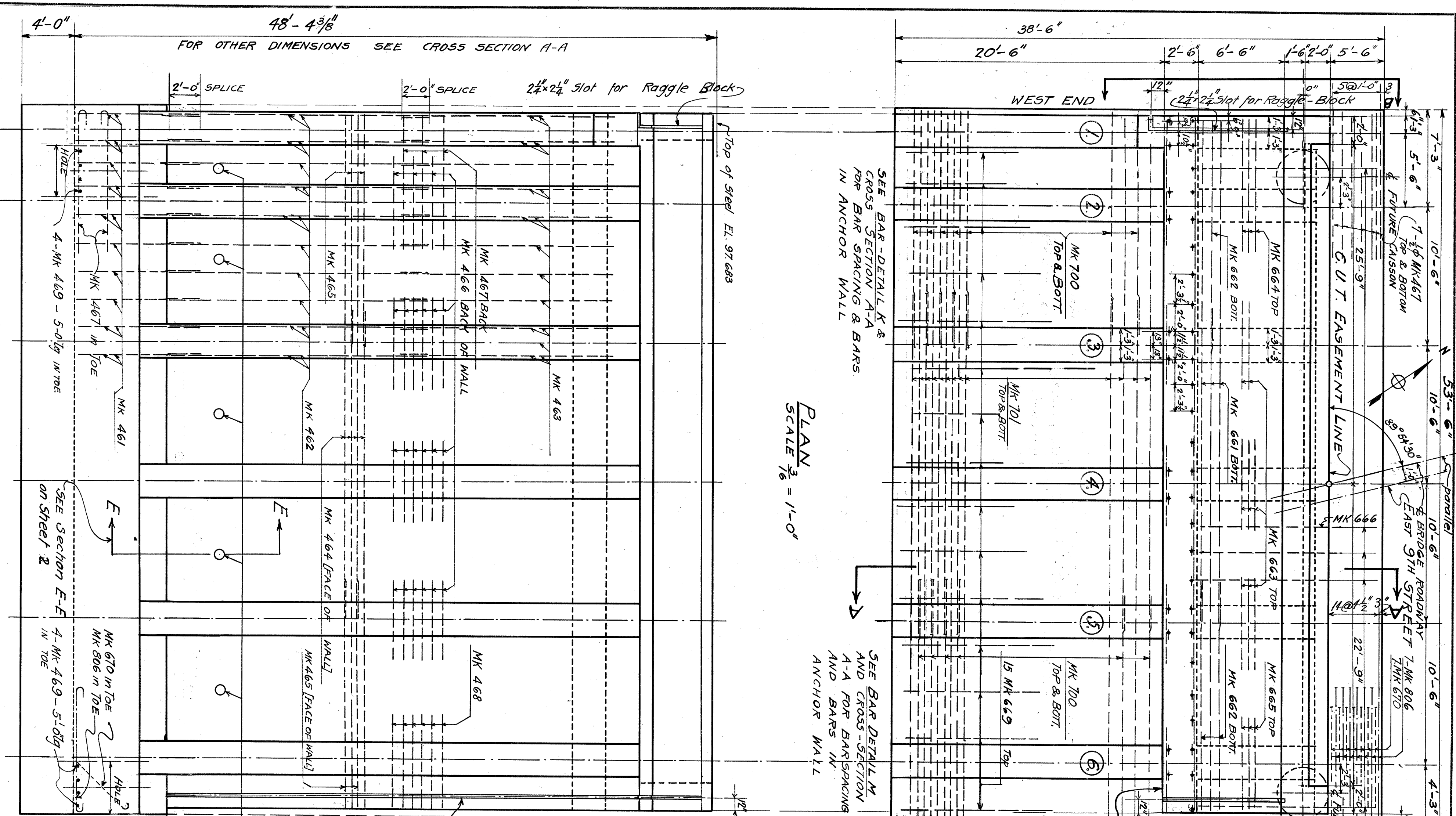
**APPROXIMATE QUANTITIES IN NORTH-ABUTMENT**

NO.	DESCRIPTION	QTY.	UNIT
1.	REINFORCING STEEL	126210	LB.
2.	CONCRETE 2500 LB/SY	911	CYD.
3.	MATERIALS FOR "KRODE PROOF"	6880	SQ.
4.	CONCRETE PILES 35'-0" LG.	178	NO.
5.	RAGGLE BLOCK 2X8	100	NO.
6.	EXCAVATION	50	CYD.

**N. Y. C. & ST. L. R. R.**  
BRIDGE NO. 182.80  
EAST 9TH STREET - CLEVELAND, O.  
NORTH - ABUTMENT

DATE 4. 6. 27  
SHEET 2 OF 9  
184-04-28





- NOTES**
- SPACING WITHIN COUNTERFORTS SYMMETRICAL ABOUT CENTERLINE
  - SPACING OUTSIDE COUNTERFORTS SYMMETRICAL ABOUT CENTERLINE

**CONSTRUCTION NOTES:** CONCRETE TO BE OF 2500' STRENGTH 6 1/2 GALLONS OF WATER PER SACK OF CEMENT. USE WATER CEMENT RATIO METHOD AREA SPECIFICATIONS, Vol. 28)

BULLETIN 295, MARCH 1925, APPROX. MIX 1-1-5

SEE SHEET 5 FOR APPROXIMATE QUANTITIES OF MATERIALS IN 50' ABUTMENT AND WING WALLS.

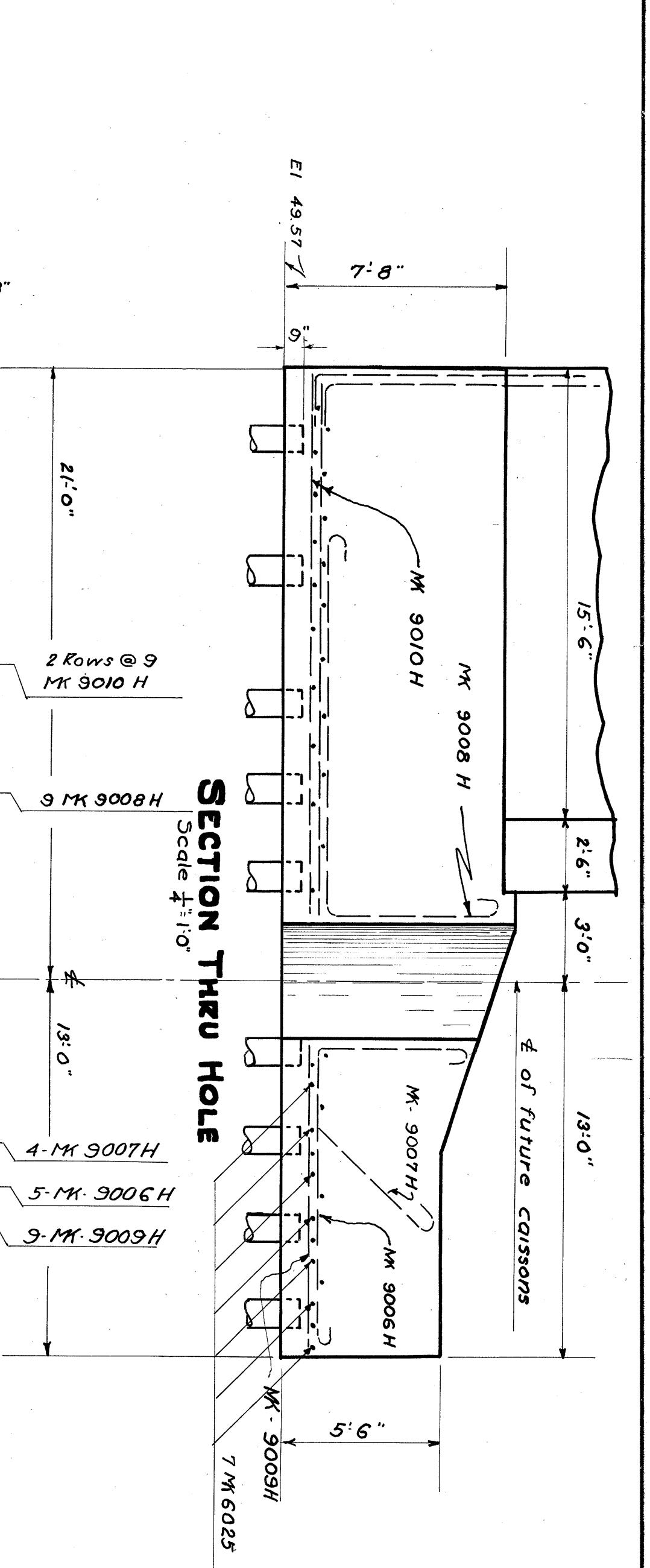
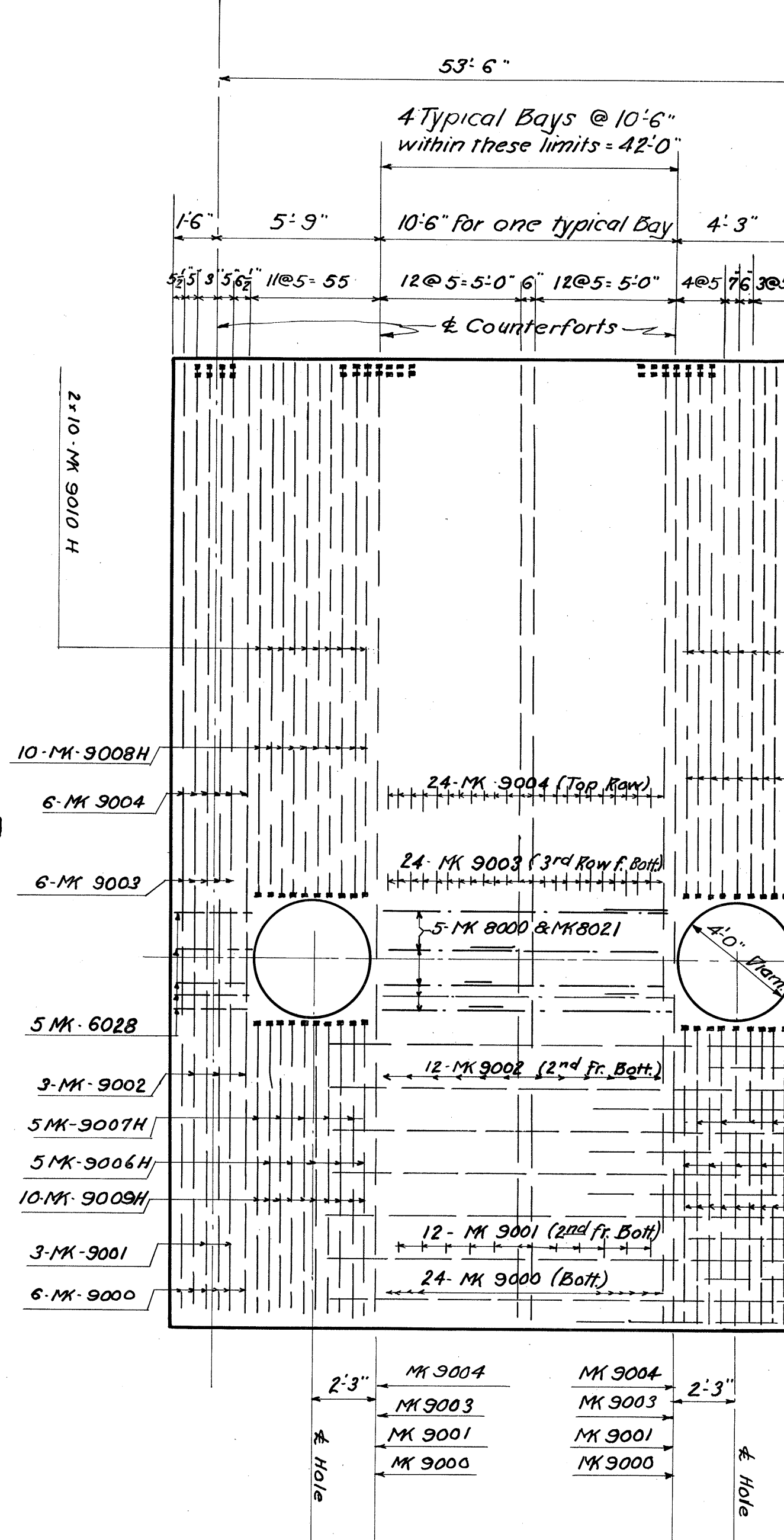
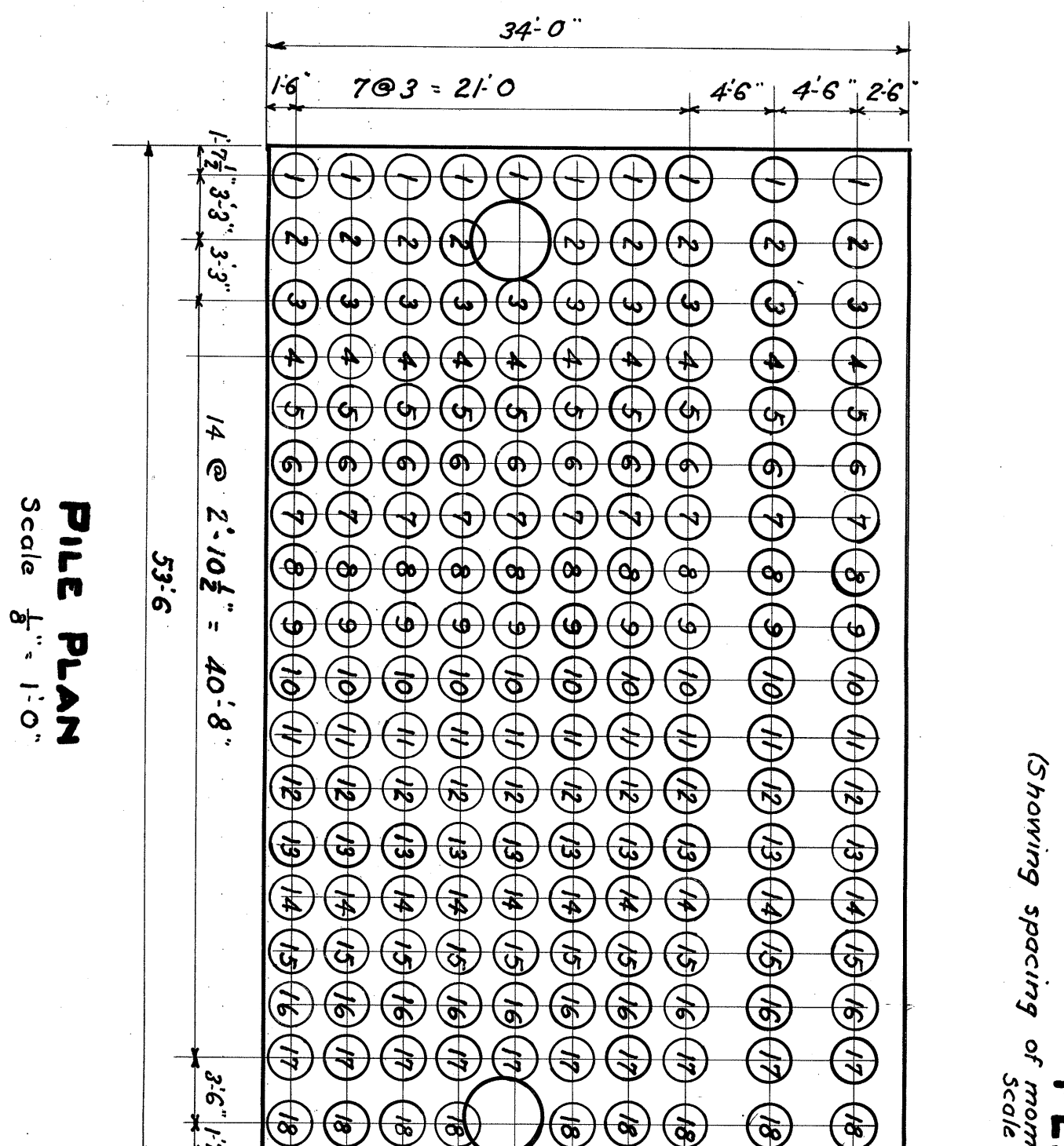
**N. Y. C. & S. I. L. R. R.**  
NICKEL-PLATE-DISTRICT  
BRIDGE-NO. 182, 80  
EAST 9TH STREET - CLEVELAND O  
SOUTH ABUTMENT

NO. 184-04-281  
DATE 9/29/28  
SHEET 4 OF 9



PILE NO.	LENGTH OF PILES IN FEET	NO. OF BLOWS LAST 10 BLOWS	SAFE LOAD PER EN FORMULA - TONS	DATE DRIVEN	DATE POUZED	DIAMETER OF BUTT AT CUT-OFF INCHES
1	16.5	21.5	22.1	22.23	22.5	22.5
2	16.5	21.5	22.1	22.23	22.5	22.5
3	16.5	21.5	22.1	22.23	22.5	22.5
4	16.5	21.5	22.1	22.23	22.5	22.5
5	16.5	21.5	22.1	22.23	22.5	22.5
6	16.5	21.5	22.1	22.23	22.5	22.5
7	16.5	21.5	22.1	22.23	22.5	22.5
8	16.5	21.5	22.1	22.23	22.5	22.5
9	16.5	21.5	22.1	22.23	22.5	22.5
10	16.5	21.5	22.1	22.23	22.5	22.5
11	16.5	21.5	22.1	22.23	22.5	22.5
12	16.5	21.5	22.1	22.23	22.5	22.5
13	16.5	21.5	22.1	22.23	22.5	22.5
14	16.5	21.5	22.1	22.23	22.5	22.5
15	16.5	21.5	22.1	22.23	22.5	22.5
16	16.5	21.5	22.1	22.23	22.5	22.5
17	16.5	21.5	22.1	22.23	22.5	22.5
18	16.5	21.5	22.1	22.23	22.5	22.5

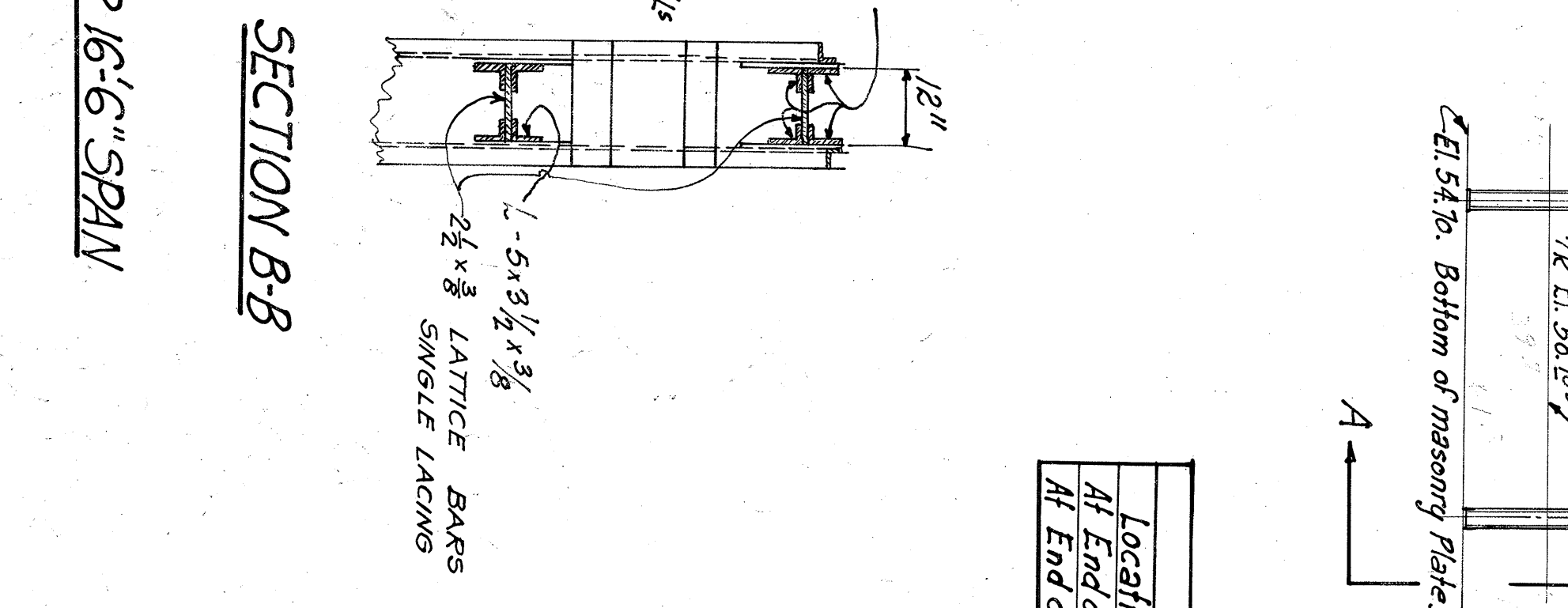
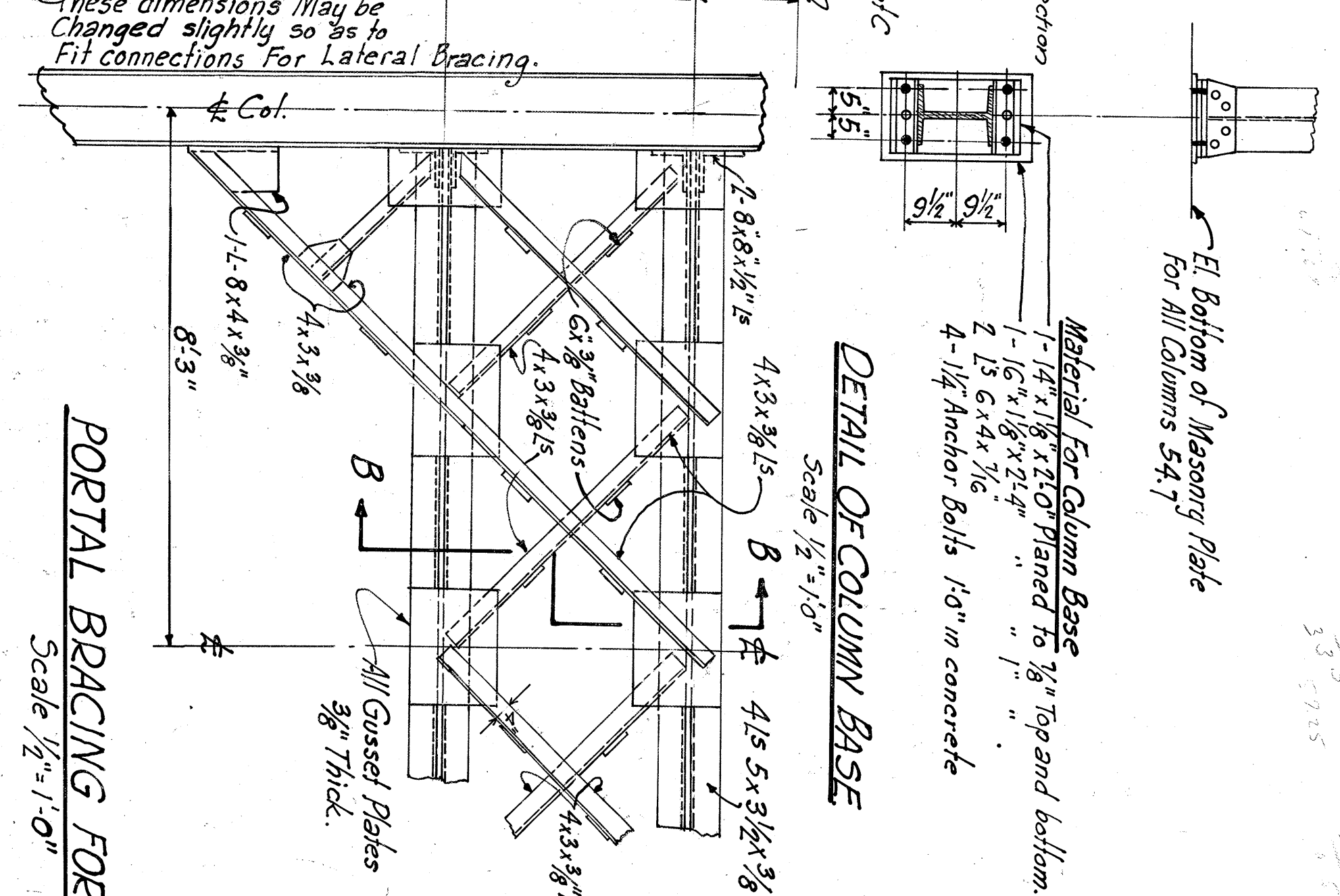
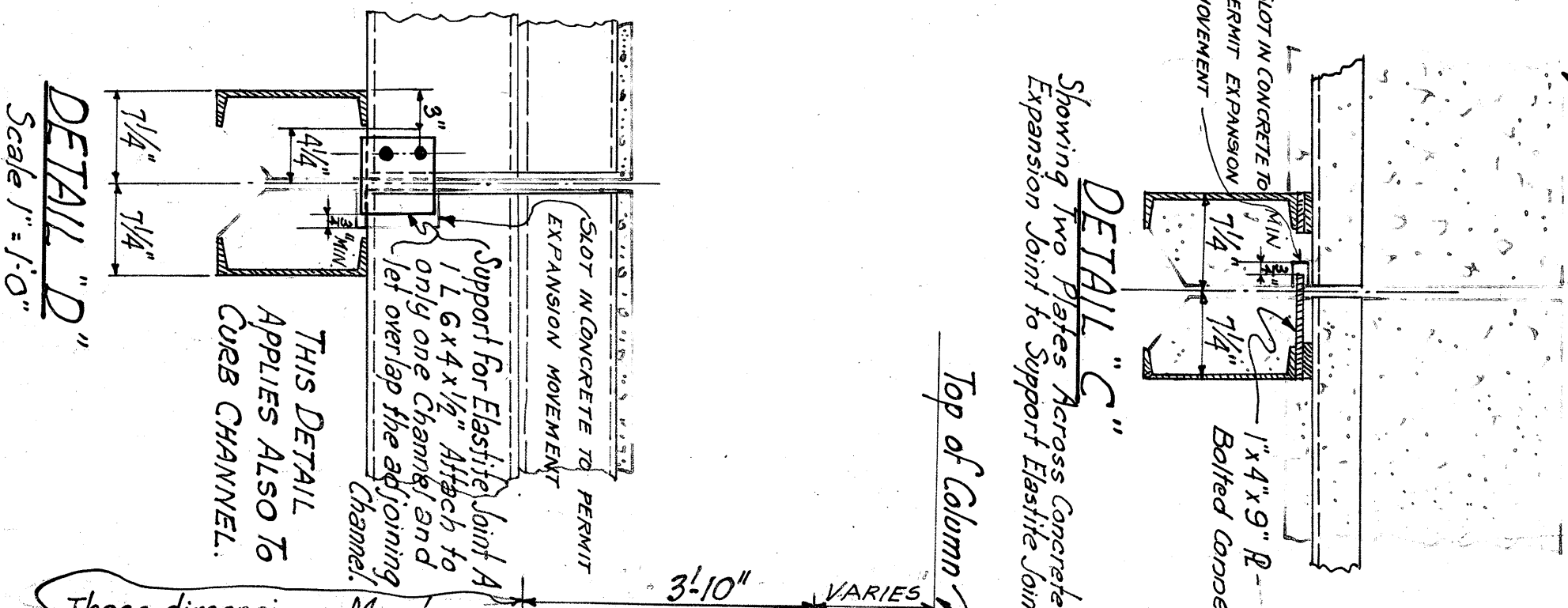
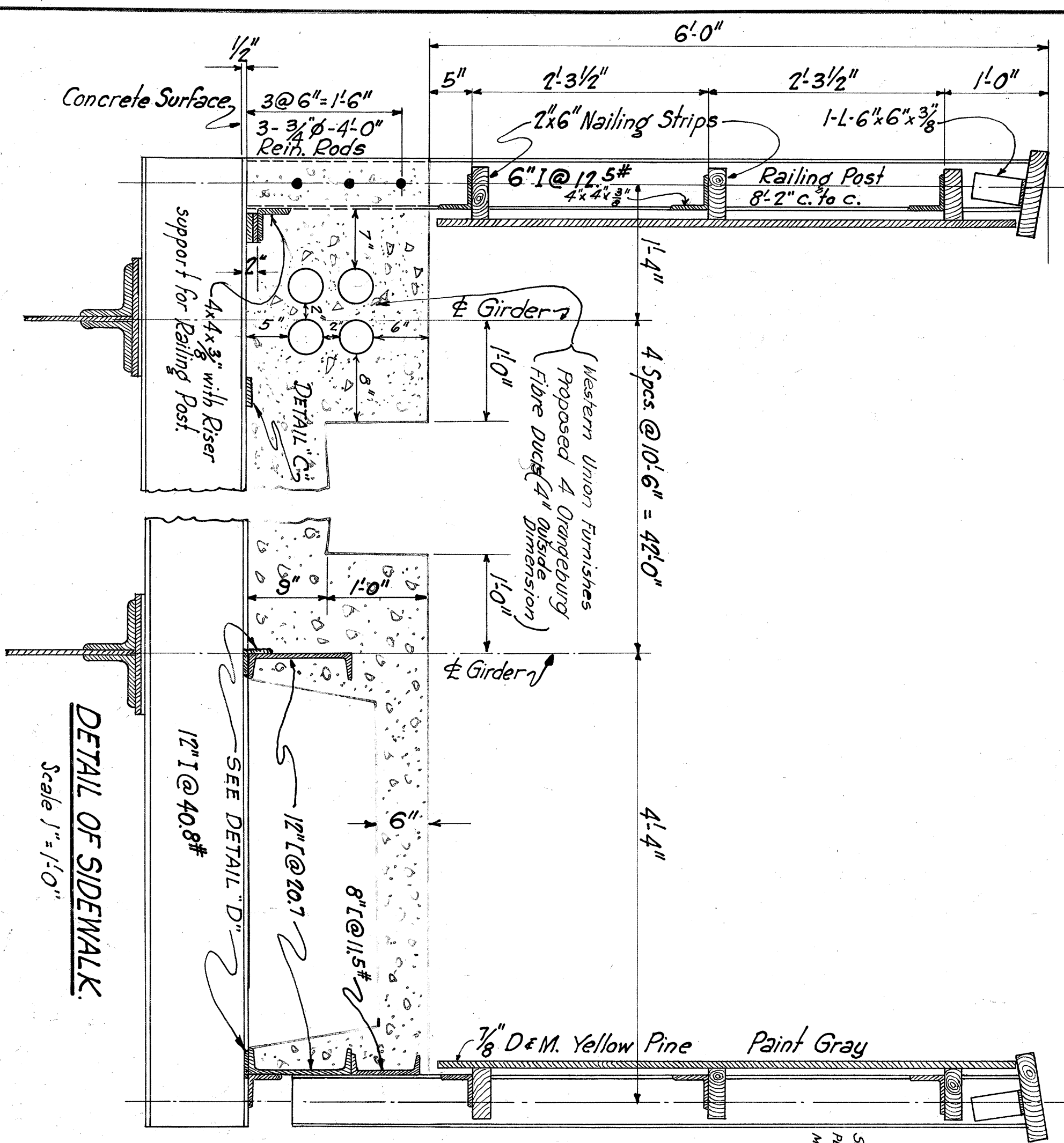
PILE NO.	LENGTH OF PILES IN FEET	NO. OF BLOWS LAST 10 BLOWS	SAFE LOAD PER EN FORMULA - TONS	DATE DRIVEN	DATE POUZED	DIAMETER OF BUTT AT CUT-OFF INCHES
1	16.5	21.5	22.1	22.23	22.5	22.5
2	16.5	21.5	22.1	22.23	22.5	22.5
3	16.5	21.5	22.1	22.23	22.5	22.5
4	16.5	21.5	22.1	22.23	22.5	22.5
5	16.5	21.5	22.1	22.23	22.5	22.5
6	16.5	21.5	22.1	22.23	22.5	22.5
7	16.5	21.5	22.1	22.23	22.5	22.5
8	16.5	21.5	22.1	22.23	22.5	22.5
9	16.5	21.5	22.1	22.23	22.5	22.5
10	16.5	21.5	22.1	22.23	22.5	22.5
11	16.5	21.5	22.1	22.23	22.5	22.5
12	16.5	21.5	22.1	22.23	22.5	22.5
13	16.5	21.5	22.1	22.23	22.5	22.5
14	16.5	21.5	22.1	22.23	22.5	22.5
15	16.5	21.5	22.1	22.23	22.5	22.5
16	16.5	21.5	22.1	22.23	22.5	22.5
17	16.5	21.5	22.1	22.23	22.5	22.5
18	16.5	21.5	22.1	22.23	22.5	22.5



Note:  
Concrete Piles are to be used. Piles are designed for 30 tons load and are to be 35 feet long unless tests in field indicate Piles 30 feet long to be satisfactory.

DATE	REVISIONS	BY	DATE
6/4/23	3/28/23	M/E	

**N. Y. C. & ST. L. R. R.**  
BRIDGE NO. 18280  
**E. 9TH STREET BR.**  
NORTH ABUTMENT  
PILE PLAN & PILE CHART  
CLEVELAND, O.  
DATE 5-23-27 SHEET 6 OF 9



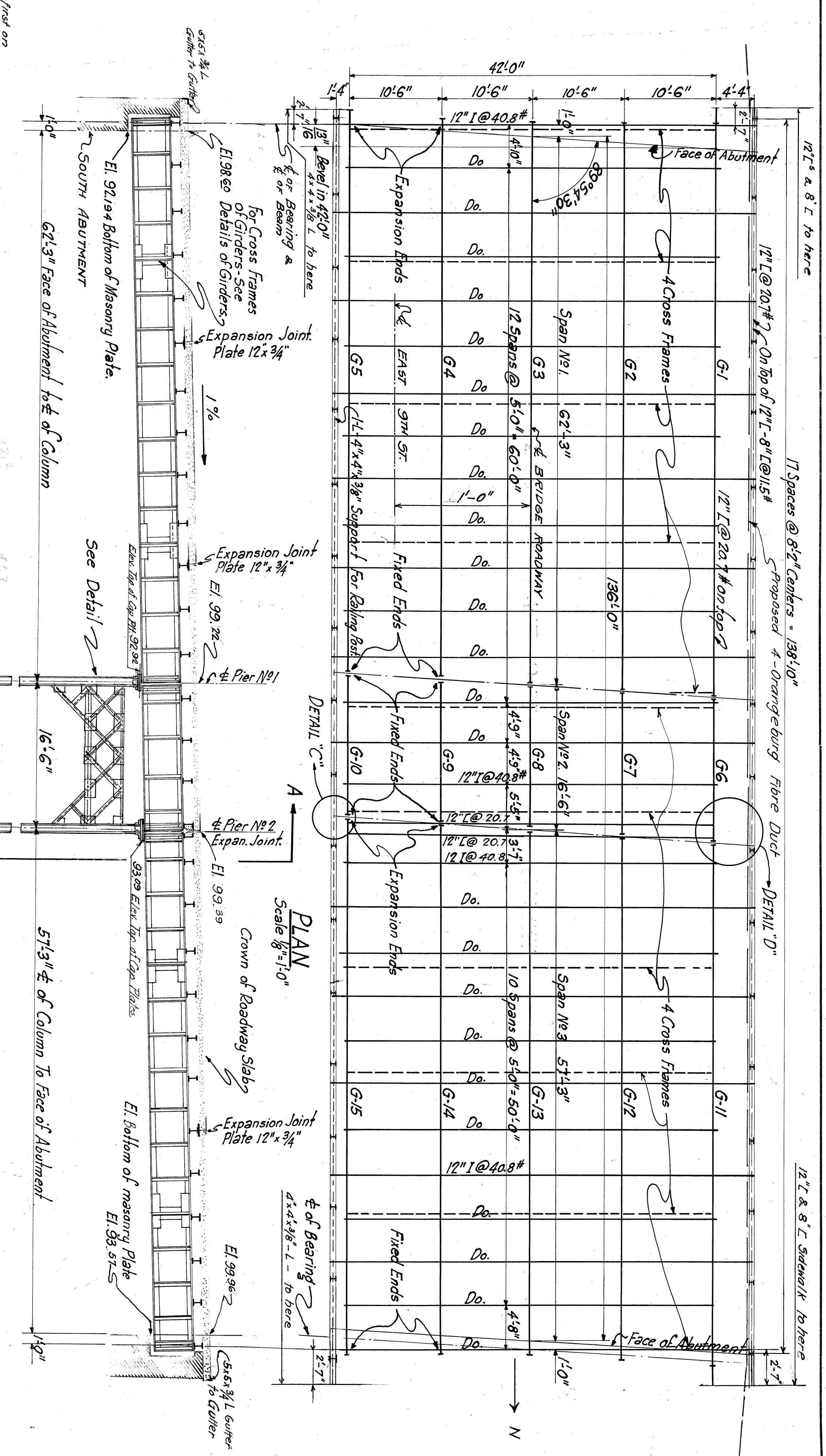
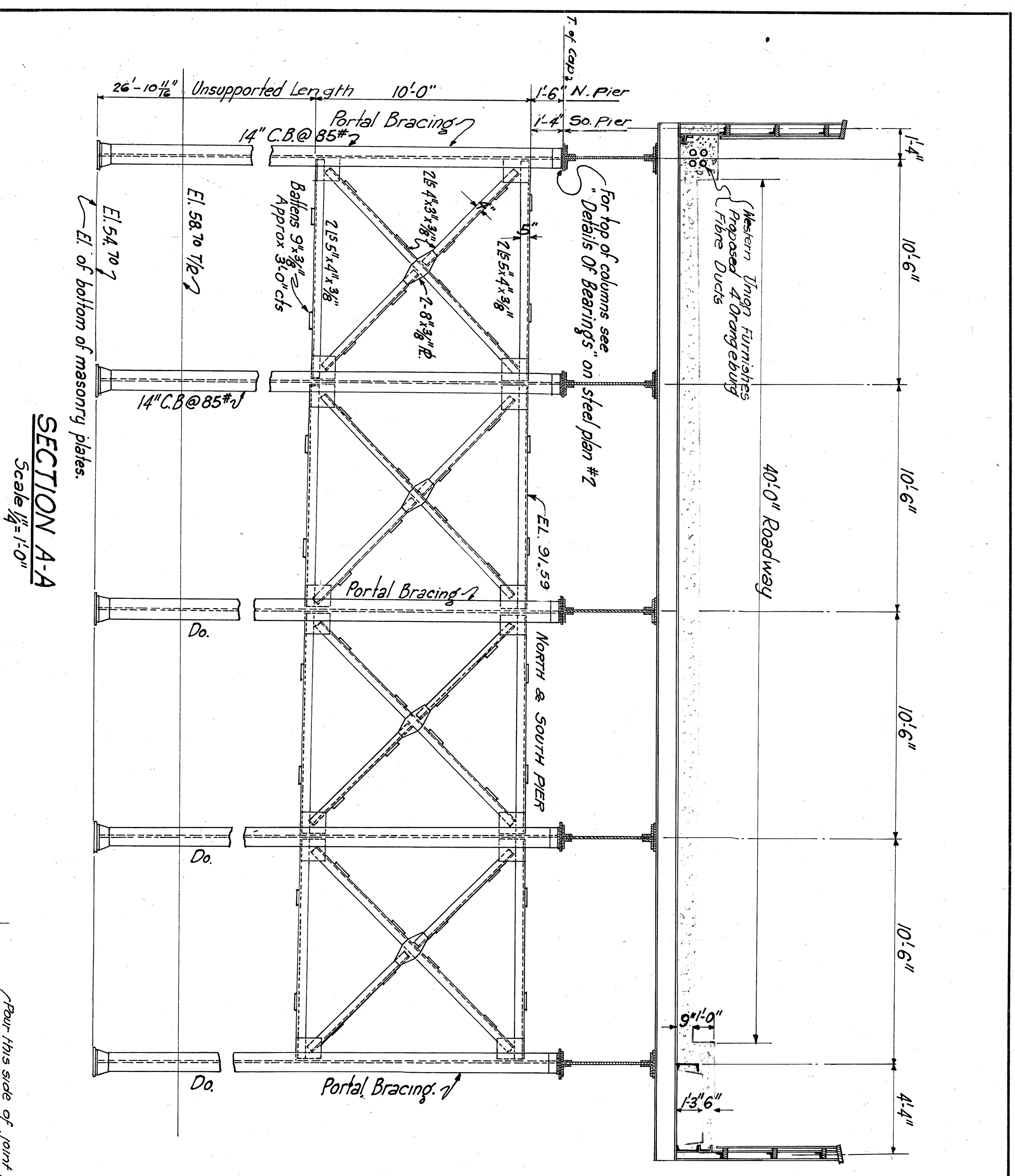
**COLUMN SCHEDULE**

Location	Lags in lbs. of Base of Col.	U/Curb Under Center Girders	W/Col.
At End of 34.9' Span	168	220	220
At End of 38.3' Span	158.5	211	211

**HEIGHT OF STRUCTURAL STEEL 324 000 #**

**N. Y. C. & ST. L. R. R.**  
 BRIDGE NO. 182-80  
 HIGHWAY BRIDGE AT E 9TH ST  
 CLEVELAND, OHIO  
 PLANS & SECTIONS

DATE: 1-25-28  
 SHEET: 7 OF 9  
 NO. 182-80-281  
 184-04-281



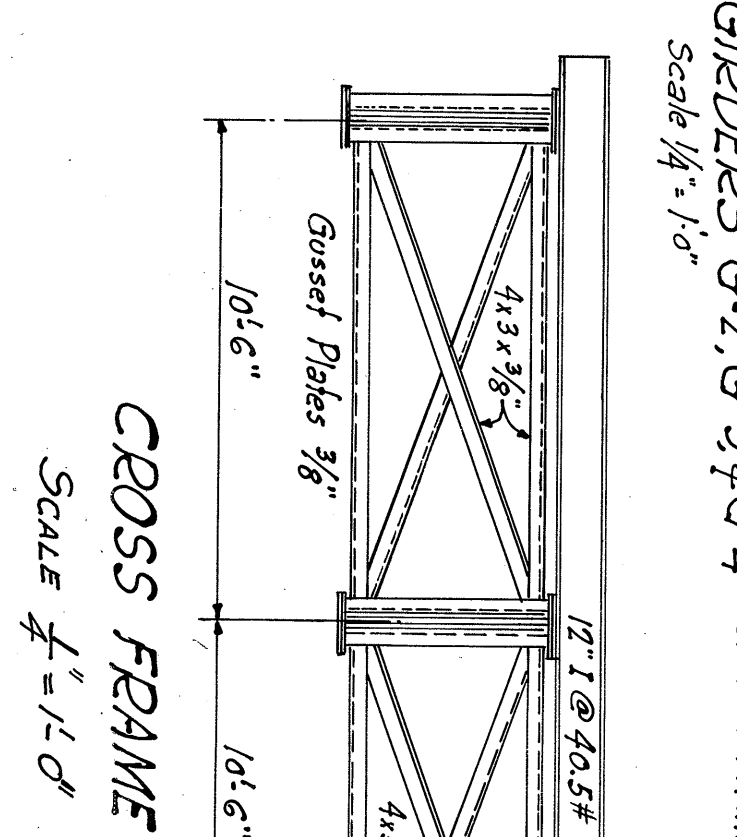
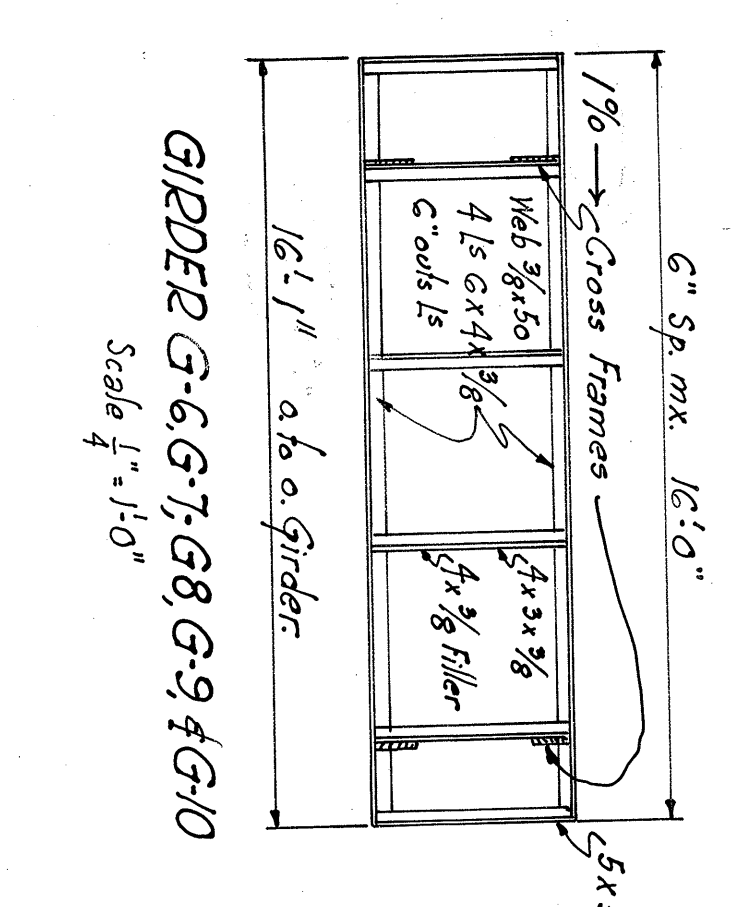
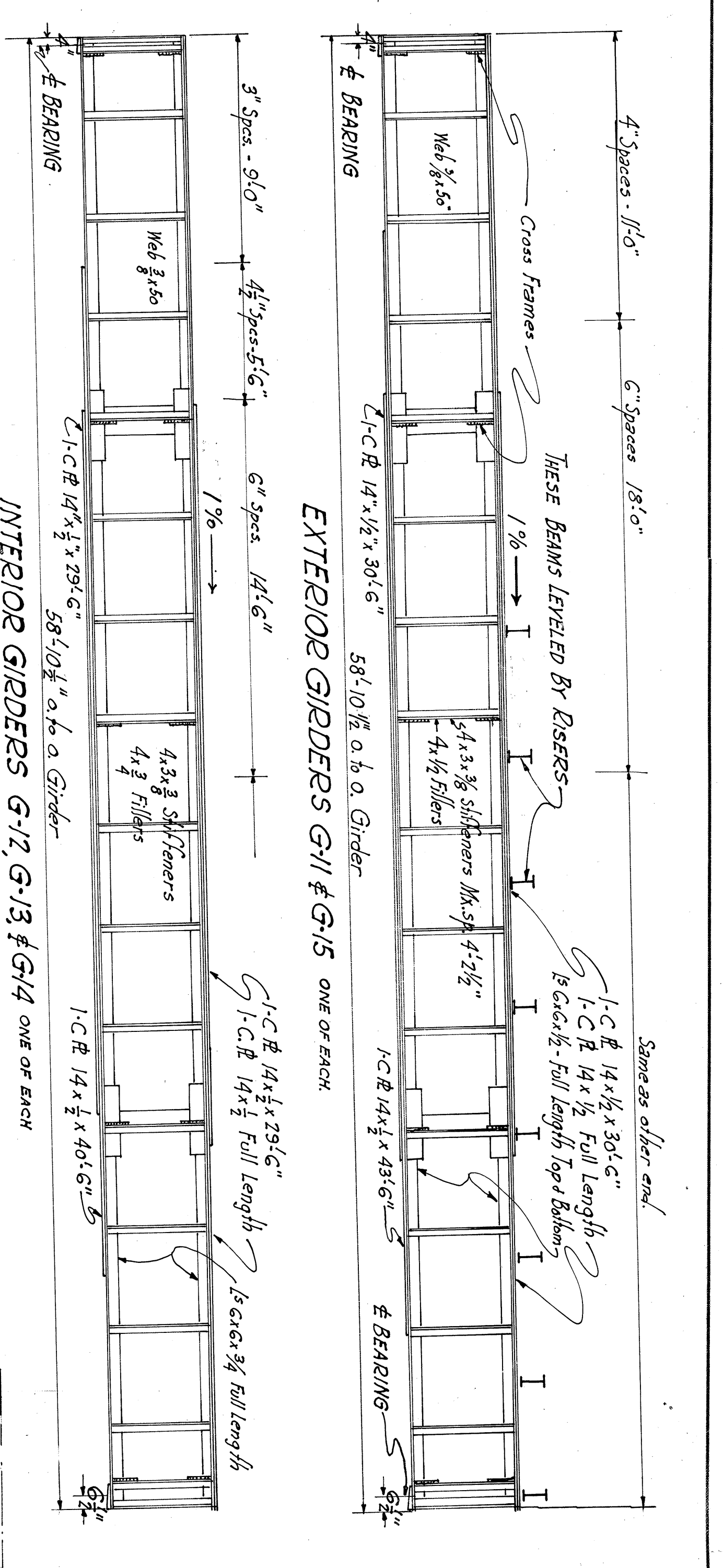
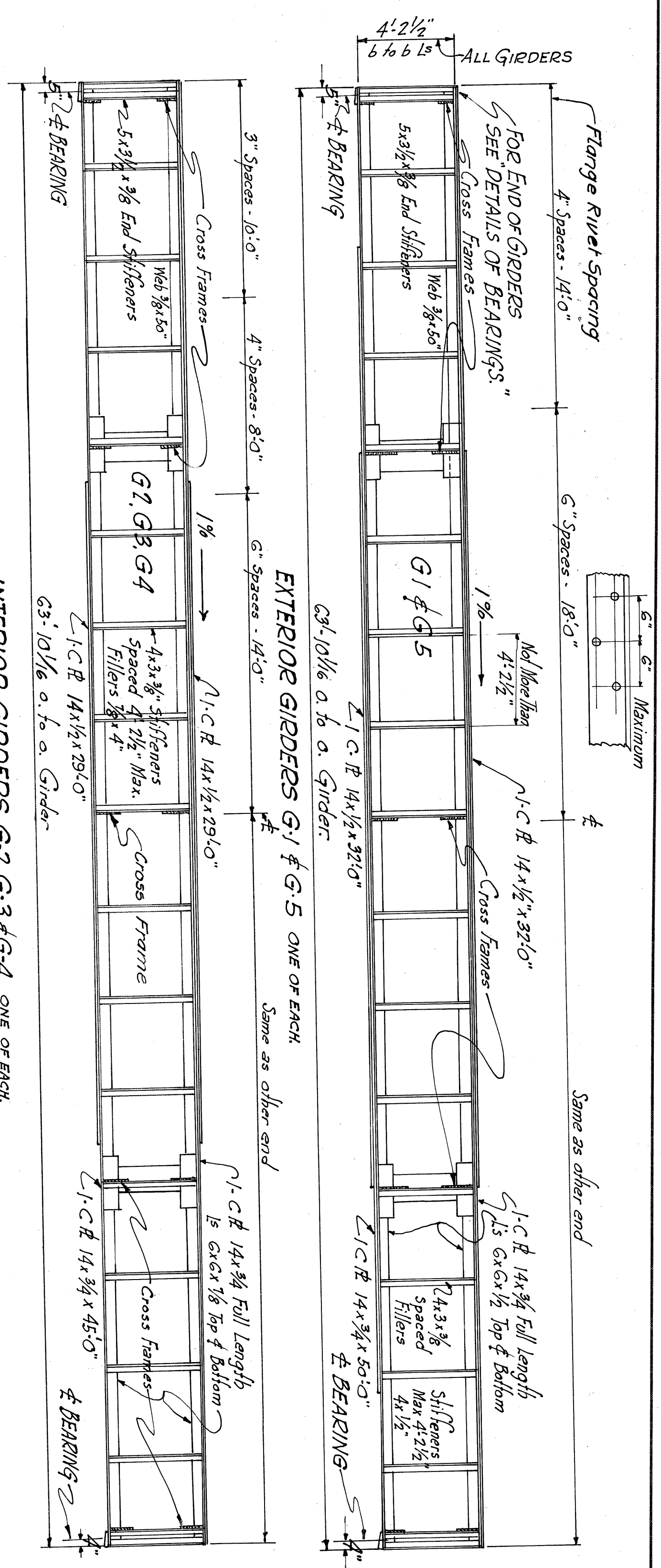
**COLUMN SCHEDULE**

Location	Lags in lbs. of Base of Col.	U/Curb Under Center Girders	W/Col.
At End of 34.9' Span	168	220	220
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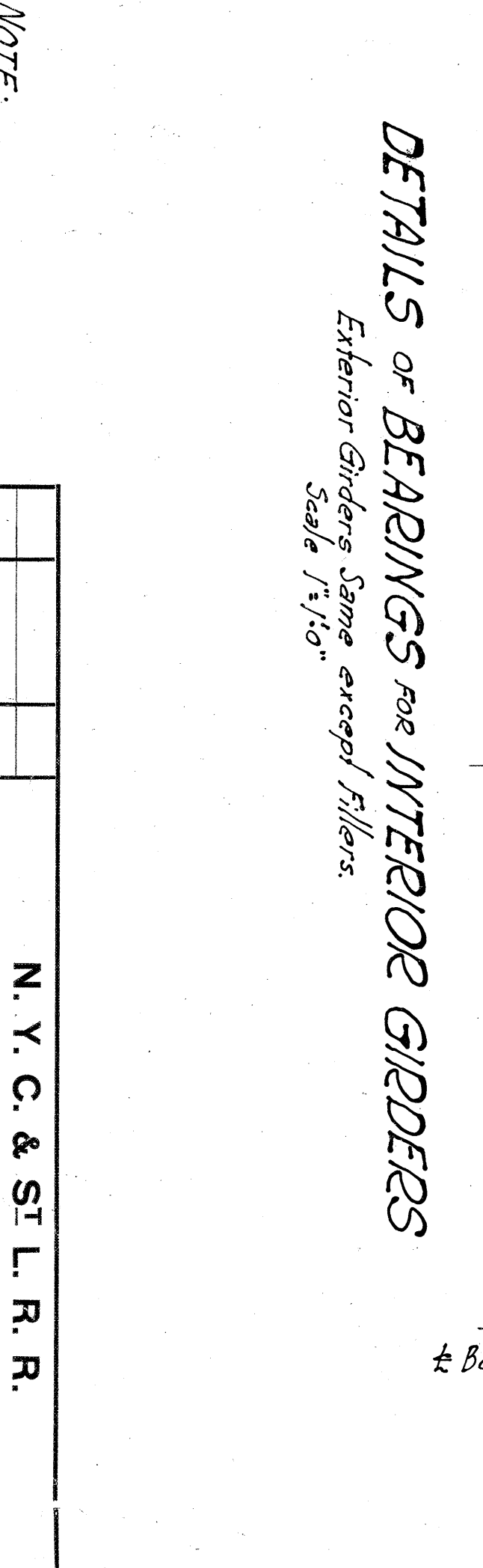
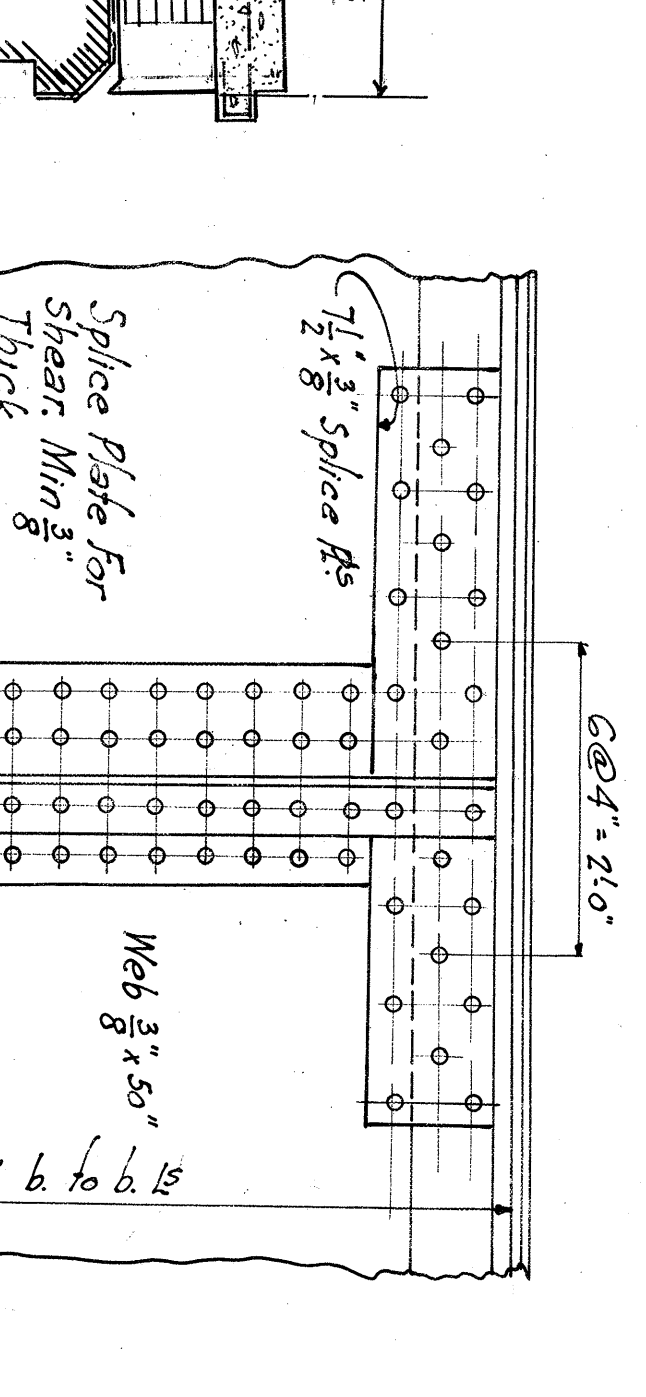
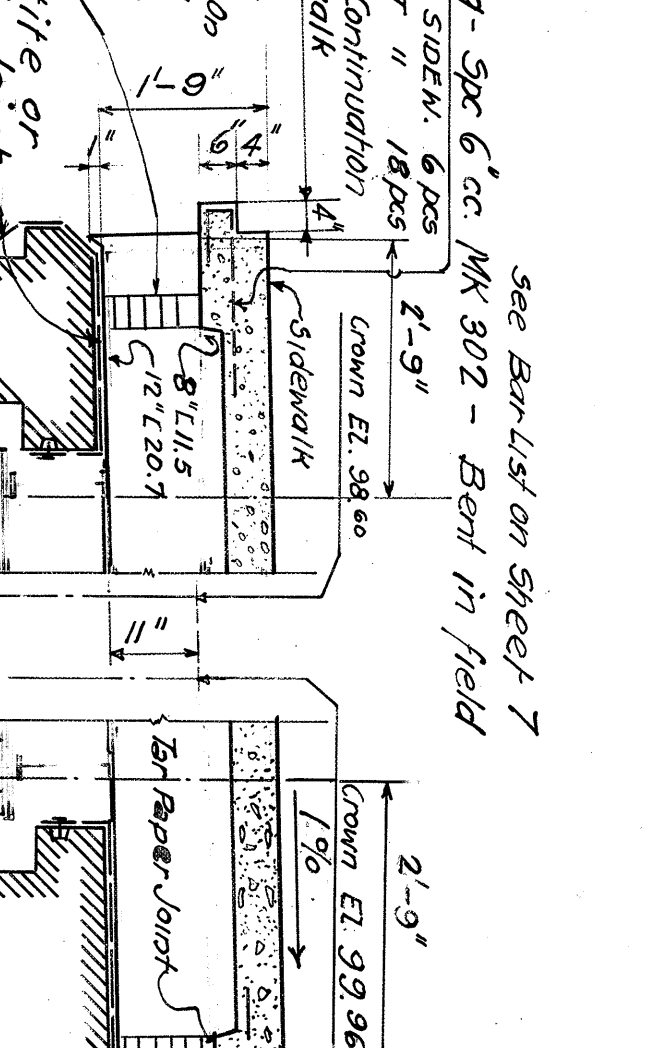
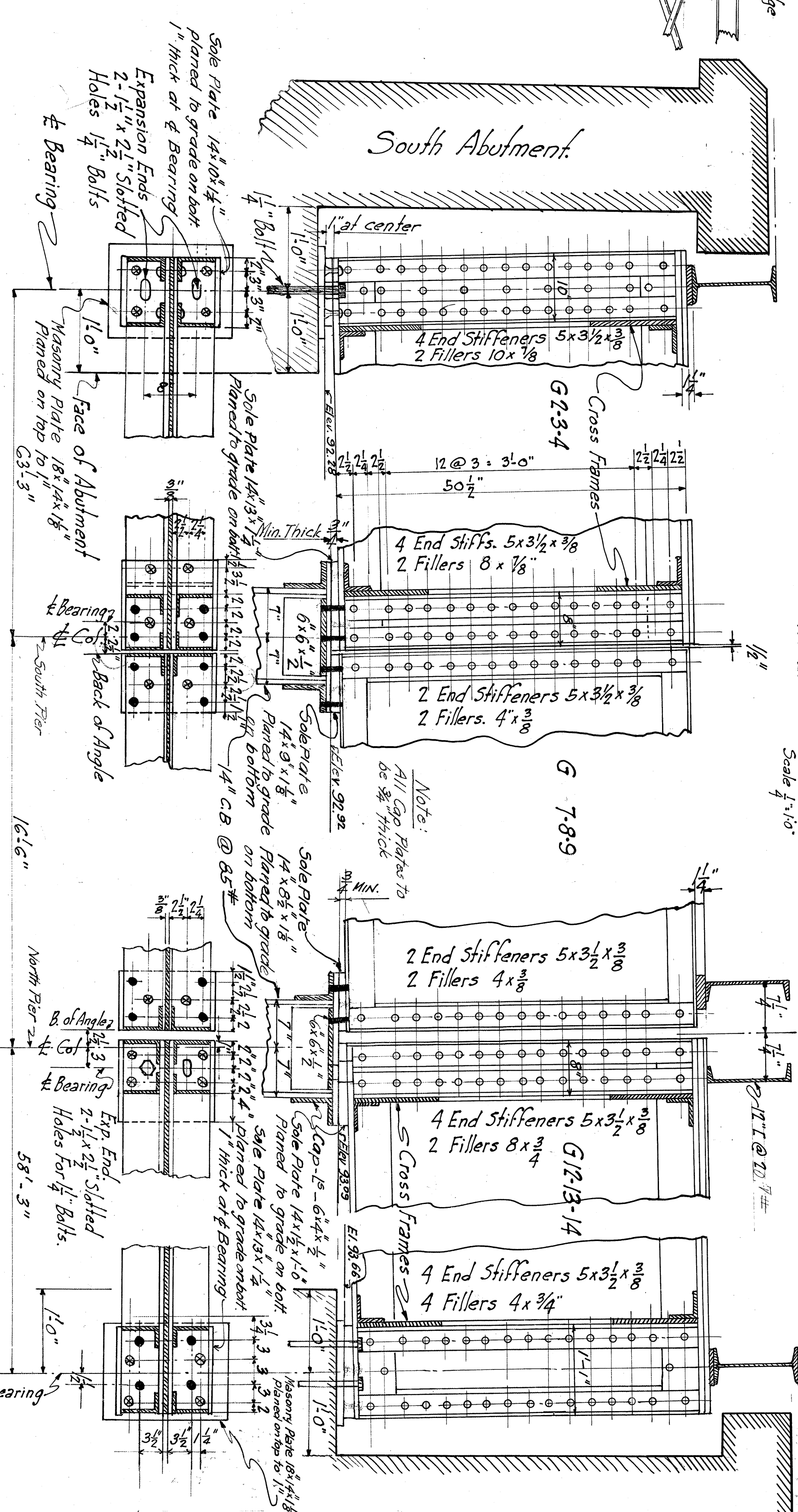
HEIGHT OF STRUCTURAL STEEL 324 000 #

**N. Y. C. & ST. L. R. R.**  
 BRIDGE NO. 182-80  
 HIGHWAY BRIDGE AT E 9TH ST  
 CLEVELAND, OHIO  
 PLANS & SECTIONS

DATE: 1-25-28  
 SHEET: 7 OF 9  
 NO. 182-80-281  
 184-04-281



Item	Quantity	Unit	Weight
G-2-G-4	3	ft	146,230#
G-1-G-5	3	ft	138,300#
G-12-13-14	3	ft	107,498#
G-7-G-9	3	ft	69,750#
G-6-G-10	3	ft	44,600#
Ratio Depth to Length	1:15		
D.L. Floor	1,530#		
D.L. Girder	325		
D.L. Total	1,855		
D.L. Bending Moment	940,000#		
L.L. "	805,000		
L.L. "	213,000		
L.L. Sidewalk	267,000		
Total	1,649,000#		
D.L. End Shear	60,430		
L.L. "	67,900		
L.L. " "	17,900		
L.L. Sidewalk	16,900		
Total Shear	146,230#		
Gross Area Web Req'd	14.6 in <sup>2</sup>		
Use 3/8 x 50	Net 12.38		
Max. Shear St. Web Met	11,800#/in <sup>2</sup>		
End Stiffeners	4 1/2 x 3 1/2 x 3/8		
Gross Area	17.2 in <sup>2</sup>		
Net Bearing Area	6.08 in <sup>2</sup>		
Rivets Bearing	18.6		
" Add for 1/4" Fil	6.2		
Total	24.8		



Work this concrete detail with sheet 1

LONGITUDINAL SECTION THRU ENDS OF WEST SIDEWALK SHOWING EXPANSION BEARING ON ABUTMENTS

SCALE 1/2" = 1'-0"

NOTE: Rivets 3/4" for details & workmanship see A.R.E.A. Specifications for Iron & Steel Structures 1923. One shop coat of approved paint.

**N. Y. C. & ST. L. R. R.**  
N. Y. C. DISTRICT

**BRIDGE NO. 182.80**  
CLEVELAND-OHIO, EAST 9TH ST.

**STEEL PLAN 2**  
GIRDERS.

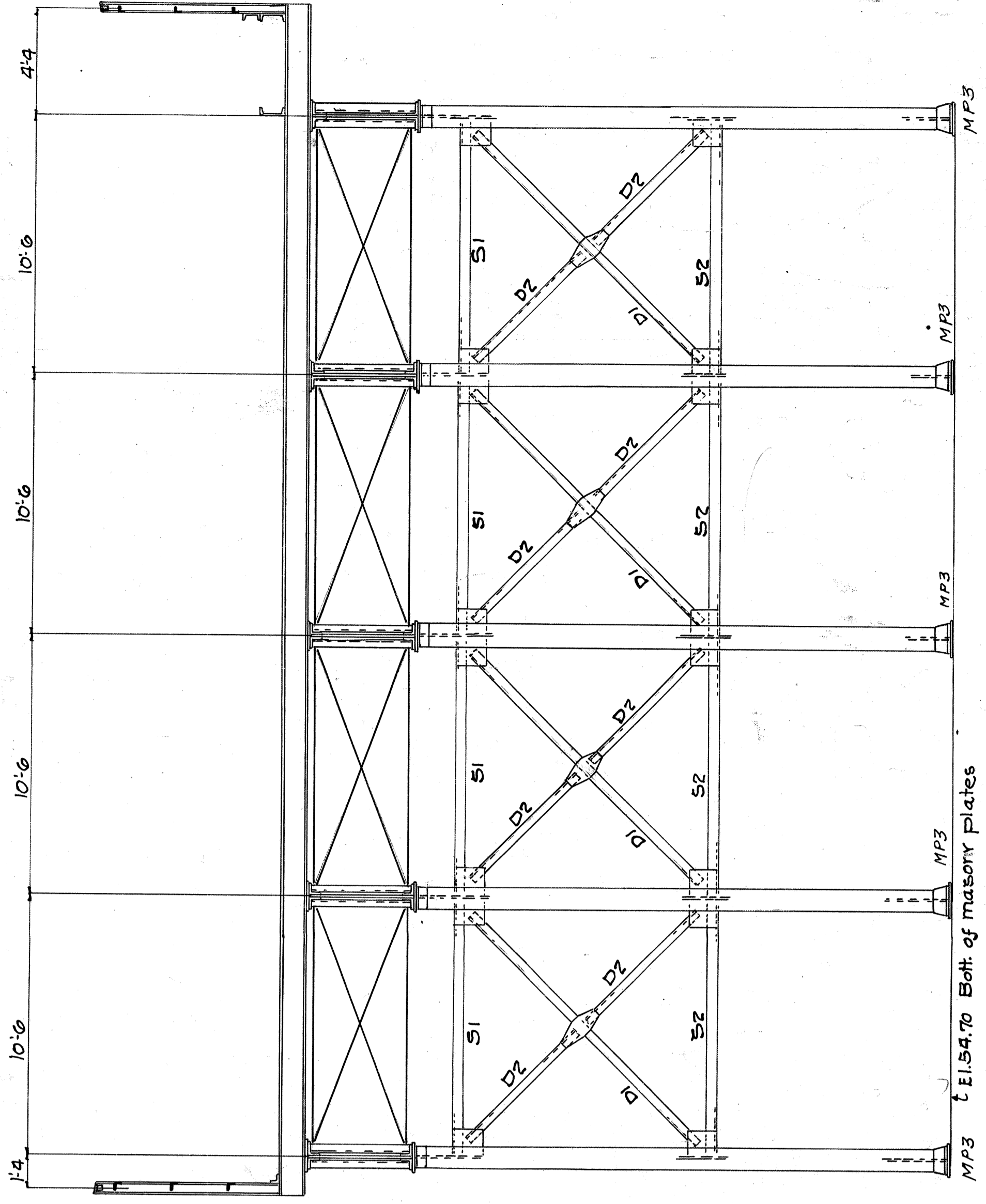
OFFICE OF CHIEF ENGINEER  
SCALE: DRAWN: H.A.E. 7.25.28  
DATE: 7.25.28

CLEVELAND, O.  
CHECKED: I.C. 8.27.28

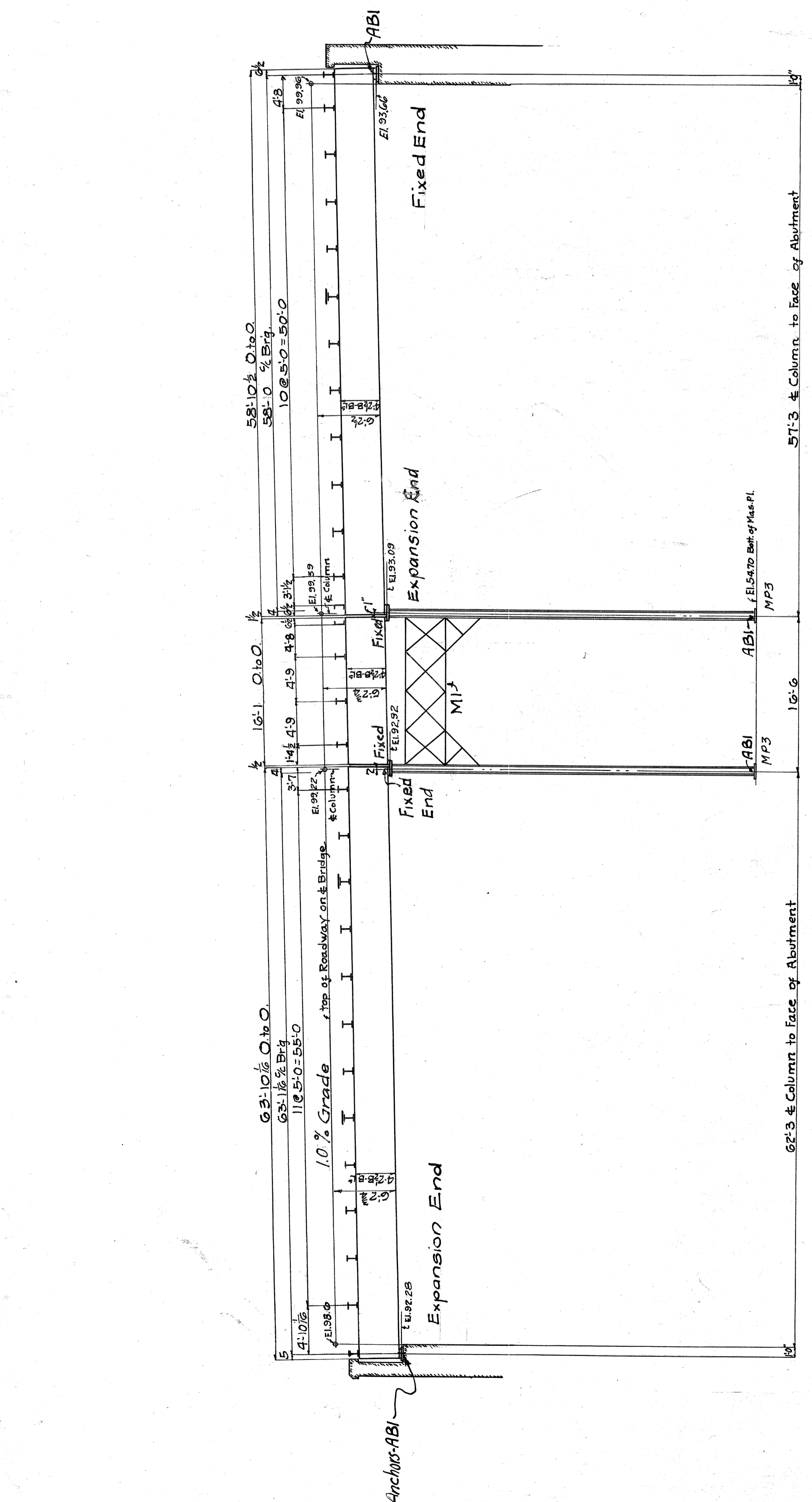
REVISIONS: NO. 184-04-281



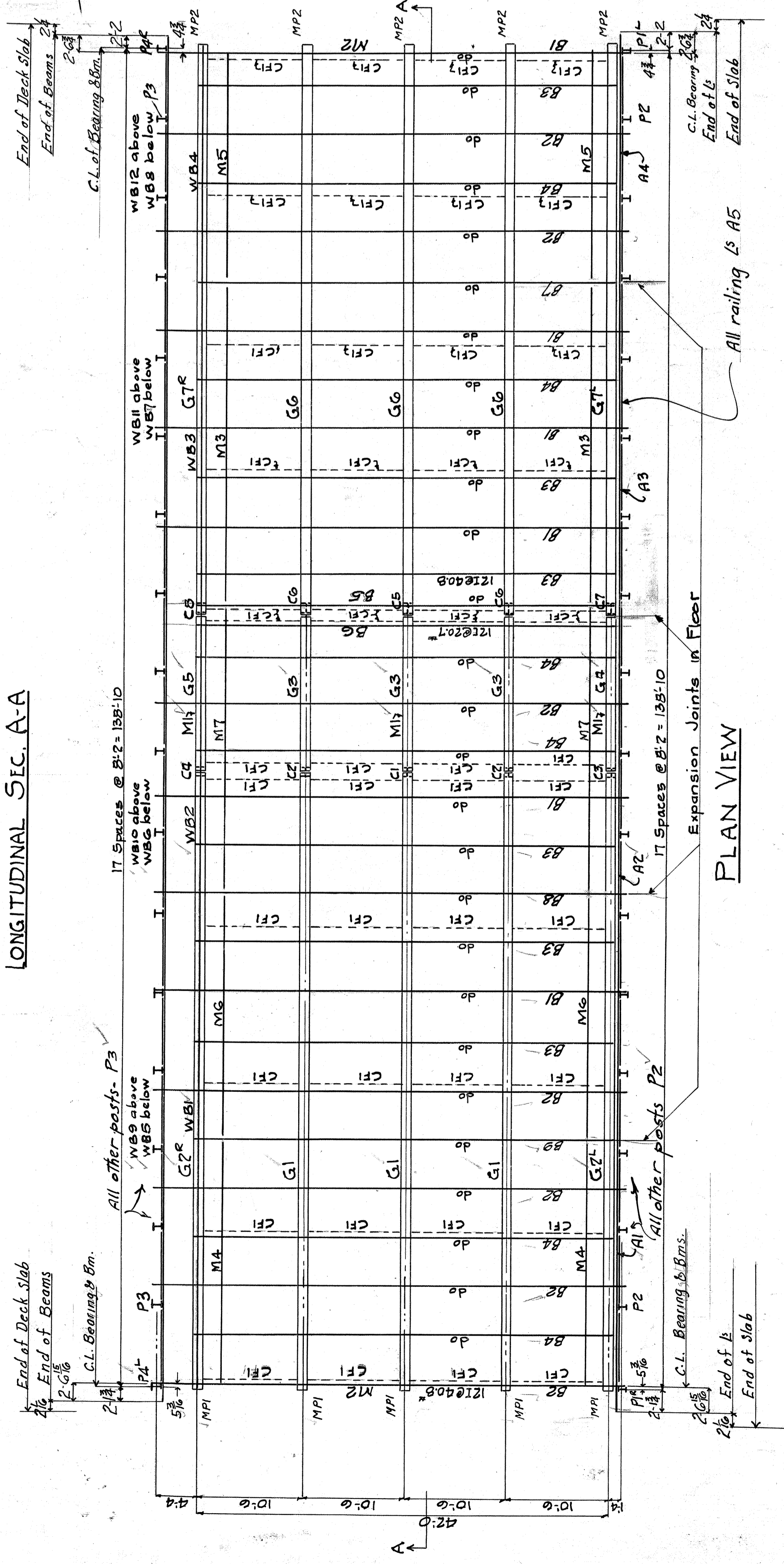




TRANSVERSE SECTION  
LOOKING SOUTH



LONGITUDINAL SEC. A-A



PLAN VIEW

LIST OF DRAWING

E1	Erection Diagram
1	Column
2	Girder
3	do
4	do
5	do
6	do
7	Bracing & Portal
F1 to F7	Floor Beams
F8 to F10	Railing & Posts
F11	Masonry Plates
F12	Anchors
F13 to F15	Curbs
FIG	Field Rivets

6-28-29  
Ref-6-12-29

N. Y. C. & St. L. R. R. Co.  
Bridge No. 182.80  
East 9th. St.  
Cleveland, Ohio.

AMERICAN BRIDGE COMPANY  
DRAWINGS MADE AT Toledo  
WORK EXECUTED AT Amb.  
IN CHARGE OF Cocarbour  
DRAWN BY H.W.B. 5/27/29  
CHECKED BY E.G.B. 5-31-29

ORDER NO. F5947  
SHEET NO. E1

NS 184-04-191

AMERICAN BRIDGE COMPANY

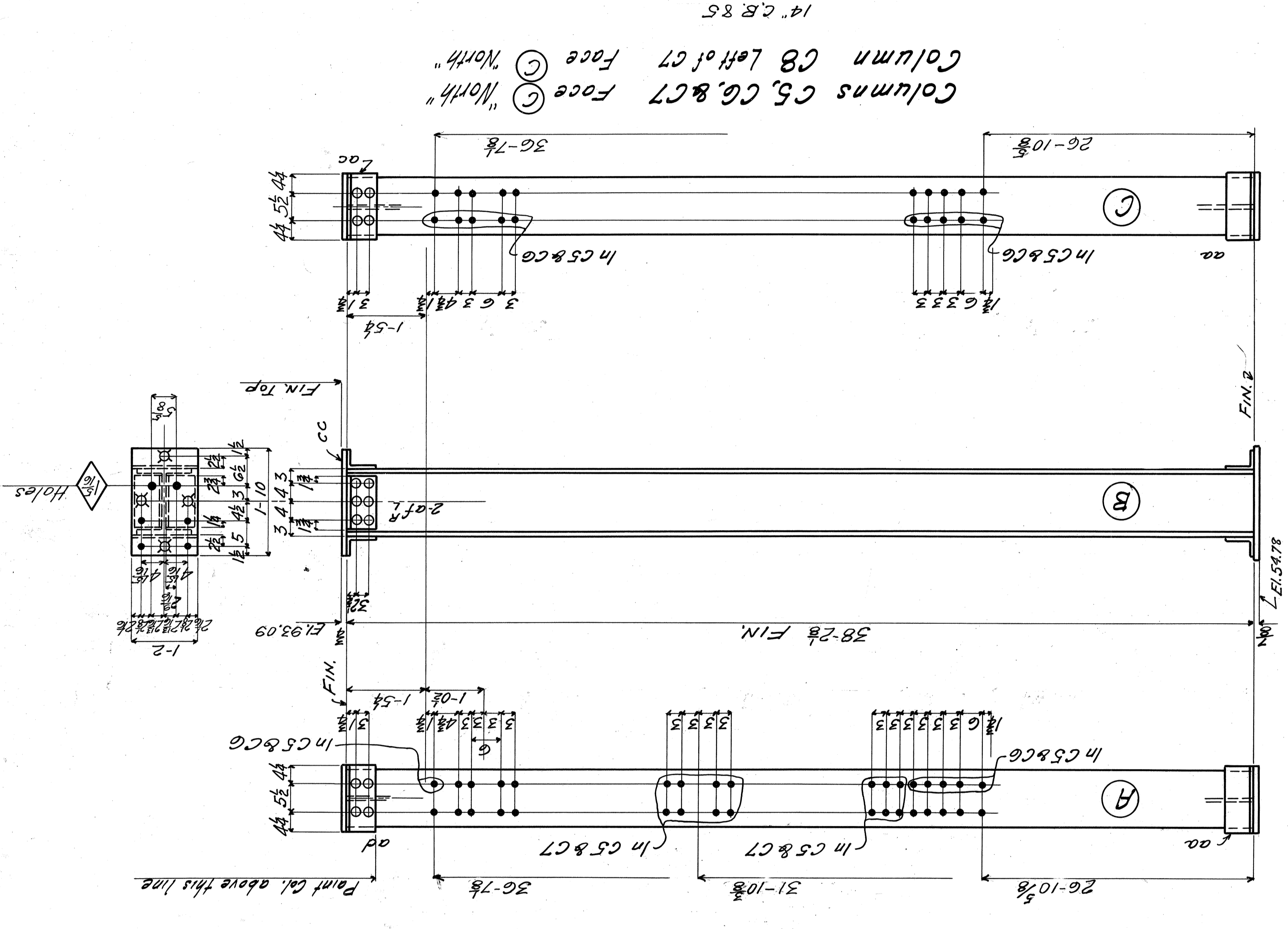
ITEM	QTY	DESCRIPTION	REMARKS	ORDERED	ASSEMBLY MARK	CALCULATOR
1	5	Columns	1-C1			
2	2		2-C2			
3	1		1-C3			
4	5	C.B. 14 85 38 0 1/2	Fin. 2-Ends 38-118 7			
5	5	Base Pl.	Fin. 2-Sides 14x18 08			
6	10	2 1/2" x 4 1/2" x 1/2"	ca			
7	20	10 1/2" x 4 1/2" x 1/2"	cb			
8	5	Cap Pl.	14-3 18 5			
9	10	2 1/2" x 4 1/2" x 1/2"	cc			
10	10	2 1/2" x 4 1/2" x 1/2"	cd			
11	10	2 1/2" x 4 1/2" x 1/2"	ce			
12	10	2 1/2" x 4 1/2" x 1/2"	cf			
13	10	2 1/2" x 4 1/2" x 1/2"	cg			
14	10	2 1/2" x 4 1/2" x 1/2"	ch			
15	10	2 1/2" x 4 1/2" x 1/2"	ci			
16	10	2 1/2" x 4 1/2" x 1/2"	cj			
17	10	2 1/2" x 4 1/2" x 1/2"	ck			
18	10	2 1/2" x 4 1/2" x 1/2"	cl			
19	10	2 1/2" x 4 1/2" x 1/2"	cm			
20	10	2 1/2" x 4 1/2" x 1/2"	cn			
21	10	2 1/2" x 4 1/2" x 1/2"	co			
22	10	2 1/2" x 4 1/2" x 1/2"	cp			
23	10	2 1/2" x 4 1/2" x 1/2"	cq			
24	10	2 1/2" x 4 1/2" x 1/2"	cr			
25	10	2 1/2" x 4 1/2" x 1/2"	cs			
26	10	2 1/2" x 4 1/2" x 1/2"	ct			
27	10	2 1/2" x 4 1/2" x 1/2"	cu			
28	10	2 1/2" x 4 1/2" x 1/2"	cv			
29	10	2 1/2" x 4 1/2" x 1/2"	cw			
30	10	2 1/2" x 4 1/2" x 1/2"	cx			
31	10	2 1/2" x 4 1/2" x 1/2"	cy			
32	10	2 1/2" x 4 1/2" x 1/2"	cz			
33	10	2 1/2" x 4 1/2" x 1/2"	ca			
34	10	2 1/2" x 4 1/2" x 1/2"	cb			
35	10	2 1/2" x 4 1/2" x 1/2"	cc			
36	10	2 1/2" x 4 1/2" x 1/2"	cd			
37	10	2 1/2" x 4 1/2" x 1/2"	ce			
38	10	2 1/2" x 4 1/2" x 1/2"	cf			
39	10	2 1/2" x 4 1/2" x 1/2"	cg			
40	10	2 1/2" x 4 1/2" x 1/2"	ch			
41	10	2 1/2" x 4 1/2" x 1/2"	ci			
42	10	2 1/2" x 4 1/2" x 1/2"	cj			
43	10	2 1/2" x 4 1/2" x 1/2"	ck			
44	10	2 1/2" x 4 1/2" x 1/2"	cl			
45	10	2 1/2" x 4 1/2" x 1/2"	cm			
46	10	2 1/2" x 4 1/2" x 1/2"	cn			
47	10	2 1/2" x 4 1/2" x 1/2"	co			
48	10	2 1/2" x 4 1/2" x 1/2"	cp			
49	10	2 1/2" x 4 1/2" x 1/2"	cq			
50	10	2 1/2" x 4 1/2" x 1/2"	cr			
51	10	2 1/2" x 4 1/2" x 1/2"	cs			
52	10	2 1/2" x 4 1/2" x 1/2"	ct			
53	10	2 1/2" x 4 1/2" x 1/2"	cu			
54	10	2 1/2" x 4 1/2" x 1/2"	cv			
55	10	2 1/2" x 4 1/2" x 1/2"	cw			
56	10	2 1/2" x 4 1/2" x 1/2"	cx			
57	10	2 1/2" x 4 1/2" x 1/2"	cy			
58	10	2 1/2" x 4 1/2" x 1/2"	cz			
59	10	2 1/2" x 4 1/2" x 1/2"	ca			
60	10	2 1/2" x 4 1/2" x 1/2"	cb			
61	10	2 1/2" x 4 1/2" x 1/2"	cc			
62	10	2 1/2" x 4 1/2" x 1/2"	cd			
63	10	2 1/2" x 4 1/2" x 1/2"	ce			
64	10	2 1/2" x 4 1/2" x 1/2"	cf			
65	10	2 1/2" x 4 1/2" x 1/2"	cg			
66	10	2 1/2" x 4 1/2" x 1/2"	ch			
67	10	2 1/2" x 4 1/2" x 1/2"	ci			
68	10	2 1/2" x 4 1/2" x 1/2"	cj			
69	10	2 1/2" x 4 1/2" x 1/2"	ck			
70	10	2 1/2" x 4 1/2" x 1/2"	cl			
71	10	2 1/2" x 4 1/2" x 1/2"	cm			
72	10	2 1/2" x 4 1/2" x 1/2"	cn			
73	10	2 1/2" x 4 1/2" x 1/2"	co			
74	10	2 1/2" x 4 1/2" x 1/2"	cp			
75	10	2 1/2" x 4 1/2" x 1/2"	cq			
76	10	2 1/2" x 4 1/2" x 1/2"	cr			
77	10	2 1/2" x 4 1/2" x 1/2"	cs			
78	10	2 1/2" x 4 1/2" x 1/2"	ct			
79	10	2 1/2" x 4 1/2" x 1/2"	cu			
80	10	2 1/2" x 4 1/2" x 1/2"	cv			
81	10	2 1/2" x 4 1/2" x 1/2"	cw			
82	10	2 1/2" x 4 1/2" x 1/2"	cx			
83	10	2 1/2" x 4 1/2" x 1/2"	cy			
84	10	2 1/2" x 4 1/2" x 1/2"	cz			
85	10	2 1/2" x 4 1/2" x 1/2"	ca			
86	10	2 1/2" x 4 1/2" x 1/2"	cb			
87	10	2 1/2" x 4 1/2" x 1/2"	cc			

REV-6-72-29

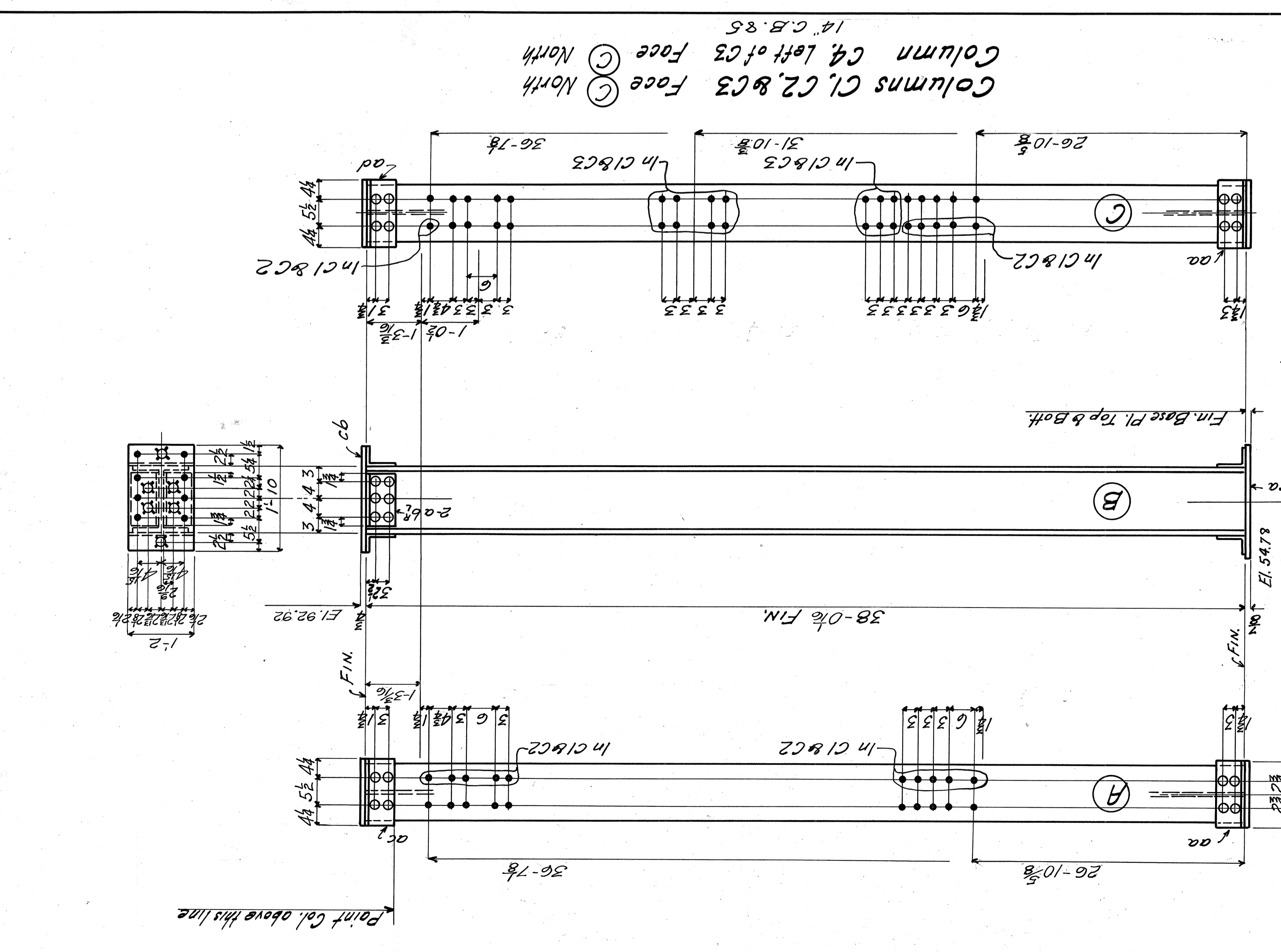
N. Y. C. & St. L. R. R. Co.  
 Bridge No. 18280  
 East 9th St.  
 Cleveland, Ohio.  
 AMERICAN BRIDGE COMPANY  
 WORKS MADE AT TOLEDO PLANT  
 IN CHARGE OF CONSTRUCTION  
 DRAWN BY F.J.S. DATE 5-16-27  
 CHECKED BY E.C.E. DATE 5-22-27  
 ORDER NO F5947 SHEET NO. /

NS184-04-191

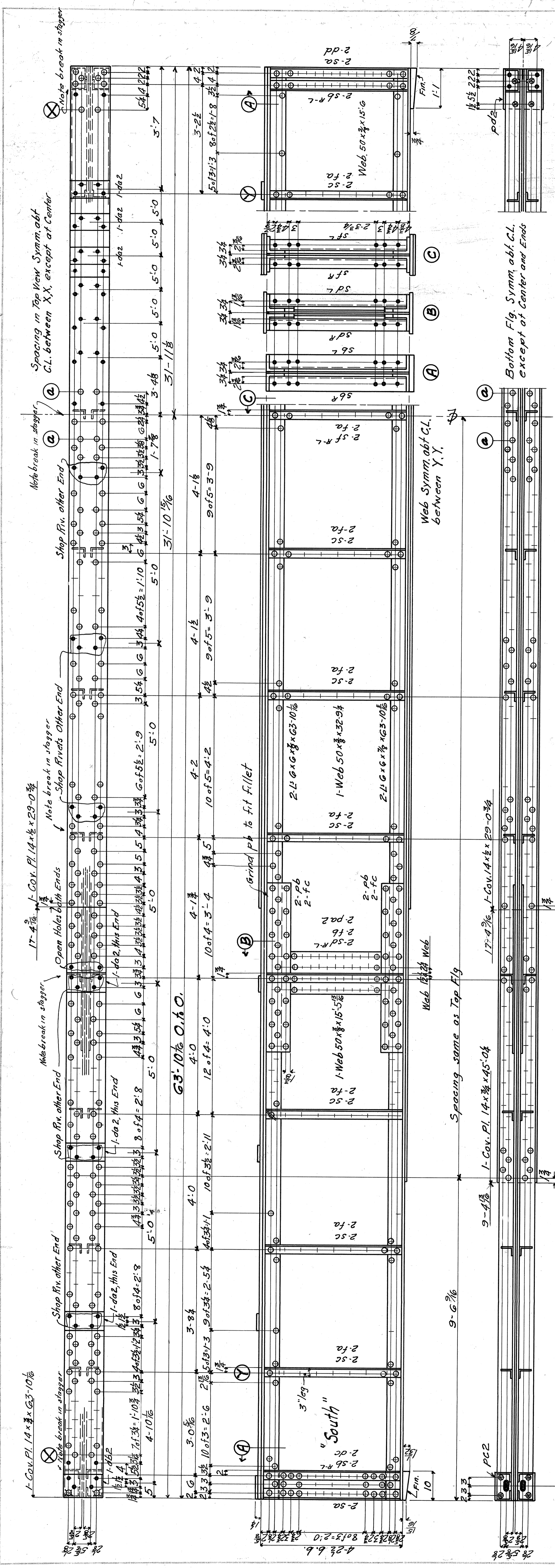
NOTES:  
 MATERIAL- O. H. Steel Abs. Card 864.  
 SPECIFICATIONS- A. R. E. A. For St. Hy. Bridges.  
 INSPECTION- Geo. H. Tinker, Engr.  
 SHOP PAINT- Others.  
 FIELD PAINT- Paint as noted  
 RIVETS- 5/8" Dia.  
 OPEN HOLES- 1/8" Dia. Except noted  
 Reaming- All holes to be reamed to size after parts  
 are assembled or drilled from the solid.



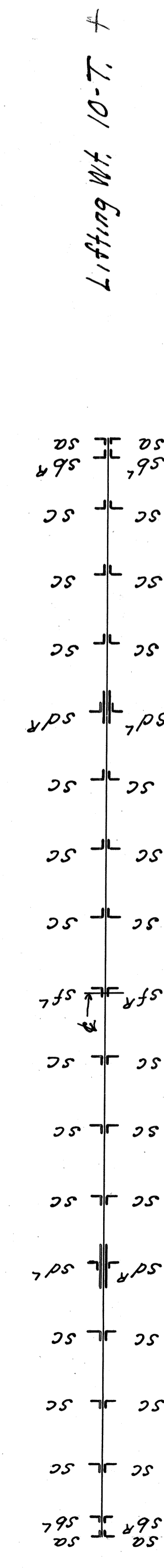
Columns C5, C6 & C7  
 Face (C) North  
 Column C8 Left of C7  
 Face (C) North  
 14" C.B. 85



Columns C1, C2 & C3  
 Face (C) North  
 Column C4 Left of C3  
 Face (C) North  
 14" C.B. 85



**GIRDER-G1** Work Sheets 2 & 3 together



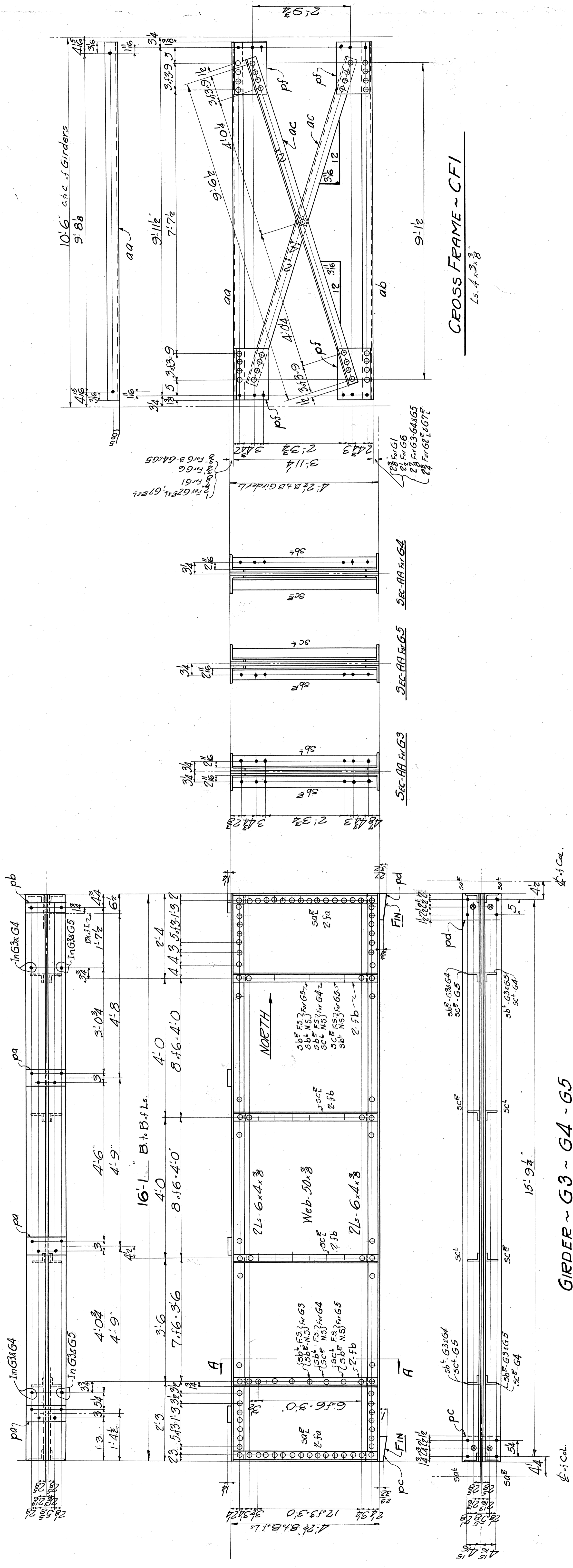
6-28-29  
Rev. 6-12-29  
N. Y. C. & St. L. R. R. Co.  
Bridge No. 182.80  
East 9th. St.  
Cleveland, Ohio.

AMERICAN BRIDGE COMPANY  
DRAWINGS MADE AT TOLEDO PLANT  
WORK FABRICATED AT AMHADGE PLANT  
IN CHARGE OF Cocanour  
DRAW. MADE BY R.T.B.  
DATE 5-23-29  
DRAW. CHECKED BY E.G.B.  
ORDER NO F 5947 SHEET NO. 2  
Copyright American Bridge Company 1929

ITEM	QUANTITY	UNIT	DESCRIPTION	REMARKS	ORDERED	REMARKS	MATERIAL	SHAPE	SIZE	WEIGHT	LENGTH	VOLUME	AREA	PERCENT
1	3	Welds	50 x 3/8 x 15 5/8											
2	12	1/2	6 x 3/8 x 10 1/2											
3	5	Welds	50 x 3/8 x 15 5/8											
4	3	1/2	6 x 3/8 x 10 1/2											
5	3	1/2	6 x 3/8 x 10 1/2											
6	3	1/2	6 x 3/8 x 10 1/2											
7	3	1/2	6 x 3/8 x 10 1/2											
8	3	1/2	6 x 3/8 x 10 1/2											
9	3	1/2	6 x 3/8 x 10 1/2											
10	3	1/2	6 x 3/8 x 10 1/2											
11	3	1/2	6 x 3/8 x 10 1/2											
12	3	1/2	6 x 3/8 x 10 1/2											
13	3	1/2	6 x 3/8 x 10 1/2											
14	3	1/2	6 x 3/8 x 10 1/2											
15	3	1/2	6 x 3/8 x 10 1/2											

NS 184-04-191





CROSS FRAME ~ CFI

15.4 x 3.8

GIRDER ~ G3 ~ G4 ~ G5

4'-5' ca.

4'-5' ca.

LINE NO.	QTY	DESCRIPTION	ORDERED	REMARKS	ASSEMBLY	LENGTH	MATERIAL	WEIGHT	PRICE	ITEM
1	3	GIRDERS	16-7-23		G3	16	40 T.B. 8x4			5
2	1	ONE GIRDER	16-14-60		G4	17				
3	1	ONE GIRDER	21-0-26		G5	18				
4	20	Ls	25-3-39			19				
5	20	Ls	25-3-39			20				
6	20	Ls	25-3-39			21				
7	20	Ls	25-3-39			22				
8	20	Ls	25-3-39			23				
9	20	Ls	25-3-39			24				
10	20	Ls	25-3-39			25				
11	20	Ls	25-3-39			26				
12	20	Ls	25-3-39			27				
13	20	Ls	25-3-39			28				
14	20	Ls	25-3-39			29				
15	20	Ls	25-3-39			30				

Rev-6-12-29

N. Y. C. & St. L. R. R. Co.  
 Bridge No. 182.80  
 East 9th. St.  
 Cleveland, Ohio.

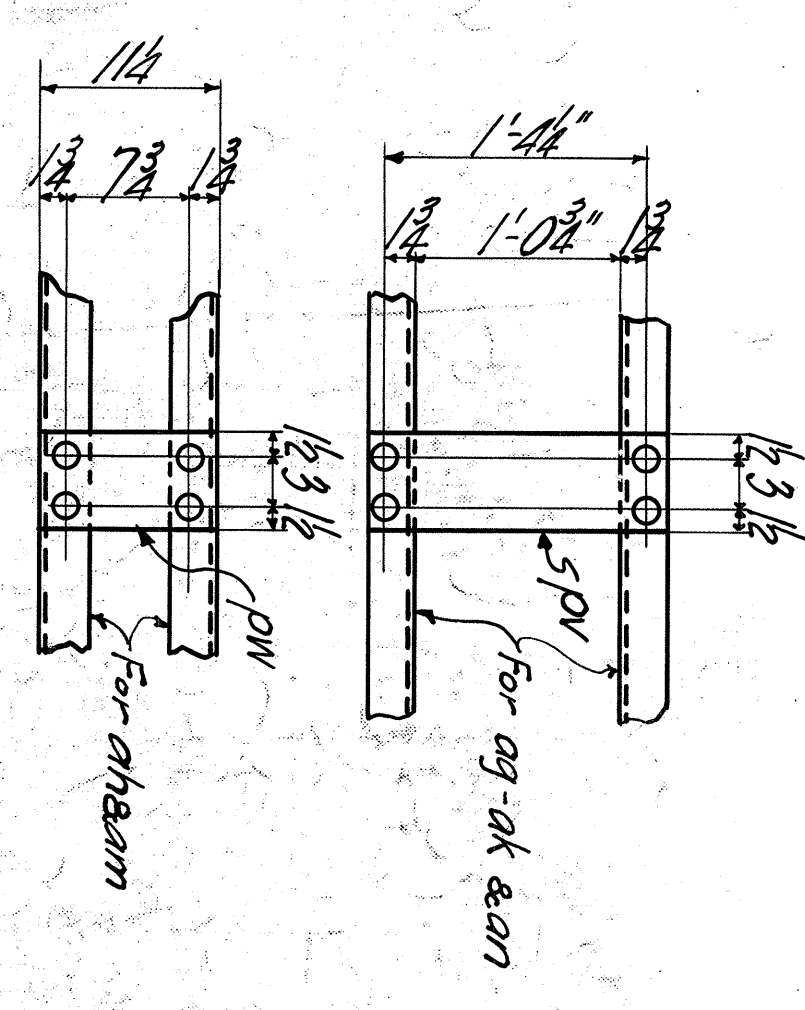
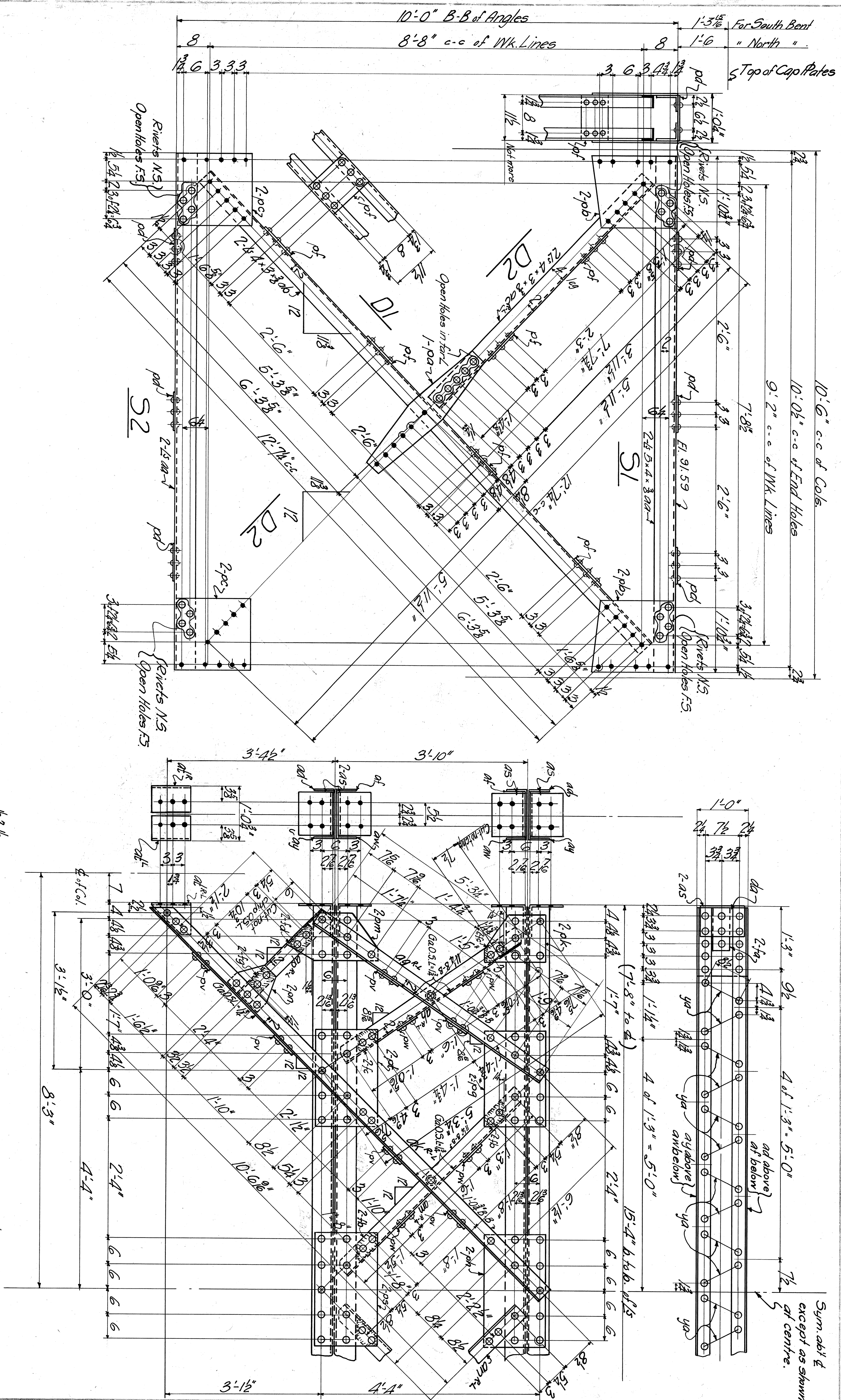
AMERICAN BRIDGE COMPANY  
 WORKS MADE AT TOLEDO PLANT  
 IN CHARGE OF C. O. CANOUE  
 DRAWN BY J. F. H. DATE 5-18-29  
 CHECKED BY E. E. H. DATE 5-24-29  
 ORDER NO F 5947 SHEET NO. 4  
 Copyright American Bridge Company 1929

NS184-04-291









PORTAL - M1

Sym. abt. & except as shown at centre.

LINE NO.	DESCRIPTION	MATERIAL	QUANTITY	WEIGHT	MARK
1	STRUTS	SA	8	25.5	
2	STRUTS	PA	10	29.5	
3	STRUTS	PA	17	51	
4	STRUTS	PA	17 1/2	51	
5	STRUTS	PA	17 1/2	51	
6	STRUTS	PA	17 1/2	51	
7	STRUTS	PA	17 1/2	51	
8	STRUTS	PA	17 1/2	51	
9	STRUTS	PA	17 1/2	51	
10	STRUTS	PA	17 1/2	51	
11	STRUTS	PA	17 1/2	51	
12	STRUTS	PA	17 1/2	51	
13	STRUTS	PA	17 1/2	51	
14	STRUTS	PA	17 1/2	51	
15	STRUTS	PA	17 1/2	51	
16	STRUTS	PA	17 1/2	51	
17	STRUTS	PA	17 1/2	51	
18	STRUTS	PA	17 1/2	51	
19	STRUTS	PA	17 1/2	51	
20	STRUTS	PA	17 1/2	51	
21	STRUTS	PA	17 1/2	51	
22	STRUTS	PA	17 1/2	51	
23	STRUTS	PA	17 1/2	51	
24	STRUTS	PA	17 1/2	51	
25	STRUTS	PA	17 1/2	51	
26	STRUTS	PA	17 1/2	51	
27	STRUTS	PA	17 1/2	51	
28	STRUTS	PA	17 1/2	51	
29	STRUTS	PA	17 1/2	51	
30	STRUTS	PA	17 1/2	51	
31	STRUTS	PA	17 1/2	51	
32	STRUTS	PA	17 1/2	51	
33	STRUTS	PA	17 1/2	51	
34	STRUTS	PA	17 1/2	51	
35	STRUTS	PA	17 1/2	51	
36	STRUTS	PA	17 1/2	51	
37	STRUTS	PA	17 1/2	51	
38	STRUTS	PA	17 1/2	51	
39	STRUTS	PA	17 1/2	51	
40	STRUTS	PA	17 1/2	51	
41	STRUTS	PA	17 1/2	51	
42	STRUTS	PA	17 1/2	51	
43	STRUTS	PA	17 1/2	51	
44	STRUTS	PA	17 1/2	51	
45	STRUTS	PA	17 1/2	51	
46	STRUTS	PA	17 1/2	51	
47	STRUTS	PA	17 1/2	51	
48	STRUTS	PA	17 1/2	51	
49	STRUTS	PA	17 1/2	51	
50	STRUTS	PA	17 1/2	51	
51	STRUTS	PA	17 1/2	51	
52	STRUTS	PA	17 1/2	51	
53	STRUTS	PA	17 1/2	51	
54	STRUTS	PA	17 1/2	51	
55	STRUTS	PA	17 1/2	51	
56	STRUTS	PA	17 1/2	51	
57	STRUTS	PA	17 1/2	51	
58	STRUTS	PA	17 1/2	51	
59	STRUTS	PA	17 1/2	51	
60	STRUTS	PA	17 1/2	51	
61	STRUTS	PA	17 1/2	51	
62	STRUTS	PA	17 1/2	51	
63	STRUTS	PA	17 1/2	51	
64	STRUTS	PA	17 1/2	51	
65	STRUTS	PA	17 1/2	51	
66	STRUTS	PA	17 1/2	51	
67	STRUTS	PA	17 1/2	51	
68	STRUTS	PA	17 1/2	51	
69	STRUTS	PA	17 1/2	51	
70	STRUTS	PA	17 1/2	51	
71	STRUTS	PA	17 1/2	51	
72	STRUTS	PA	17 1/2	51	
73	STRUTS	PA	17 1/2	51	
74	STRUTS	PA	17 1/2	51	
75	STRUTS	PA	17 1/2	51	
76	STRUTS	PA	17 1/2	51	
77	STRUTS	PA	17 1/2	51	
78	STRUTS	PA	17 1/2	51	
79	STRUTS	PA	17 1/2	51	
80	STRUTS	PA	17 1/2	51	
81	STRUTS	PA	17 1/2	51	
82	STRUTS	PA	17 1/2	51	
83	STRUTS	PA	17 1/2	51	
84	STRUTS	PA	17 1/2	51	
85	STRUTS	PA	17 1/2	51	
86	STRUTS	PA	17 1/2	51	
87	STRUTS	PA	17 1/2	51	
88	STRUTS	PA	17 1/2	51	
89	STRUTS	PA	17 1/2	51	
90	STRUTS	PA	17 1/2	51	
91	STRUTS	PA	17 1/2	51	
92	STRUTS	PA	17 1/2	51	
93	STRUTS	PA	17 1/2	51	
94	STRUTS	PA	17 1/2	51	
95	STRUTS	PA	17 1/2	51	
96	STRUTS	PA	17 1/2	51	
97	STRUTS	PA	17 1/2	51	
98	STRUTS	PA	17 1/2	51	
99	STRUTS	PA	17 1/2	51	
100	STRUTS	PA	17 1/2	51	

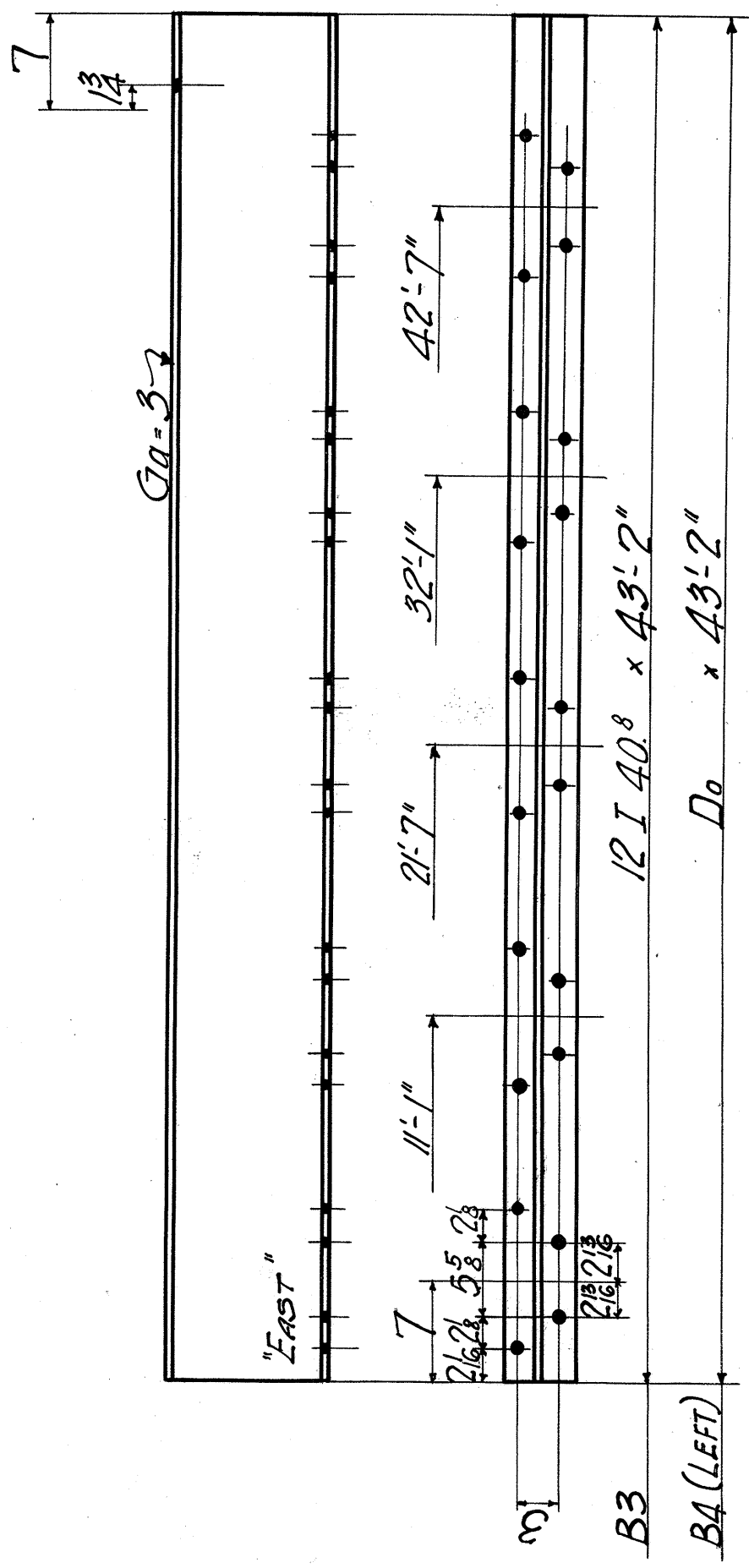
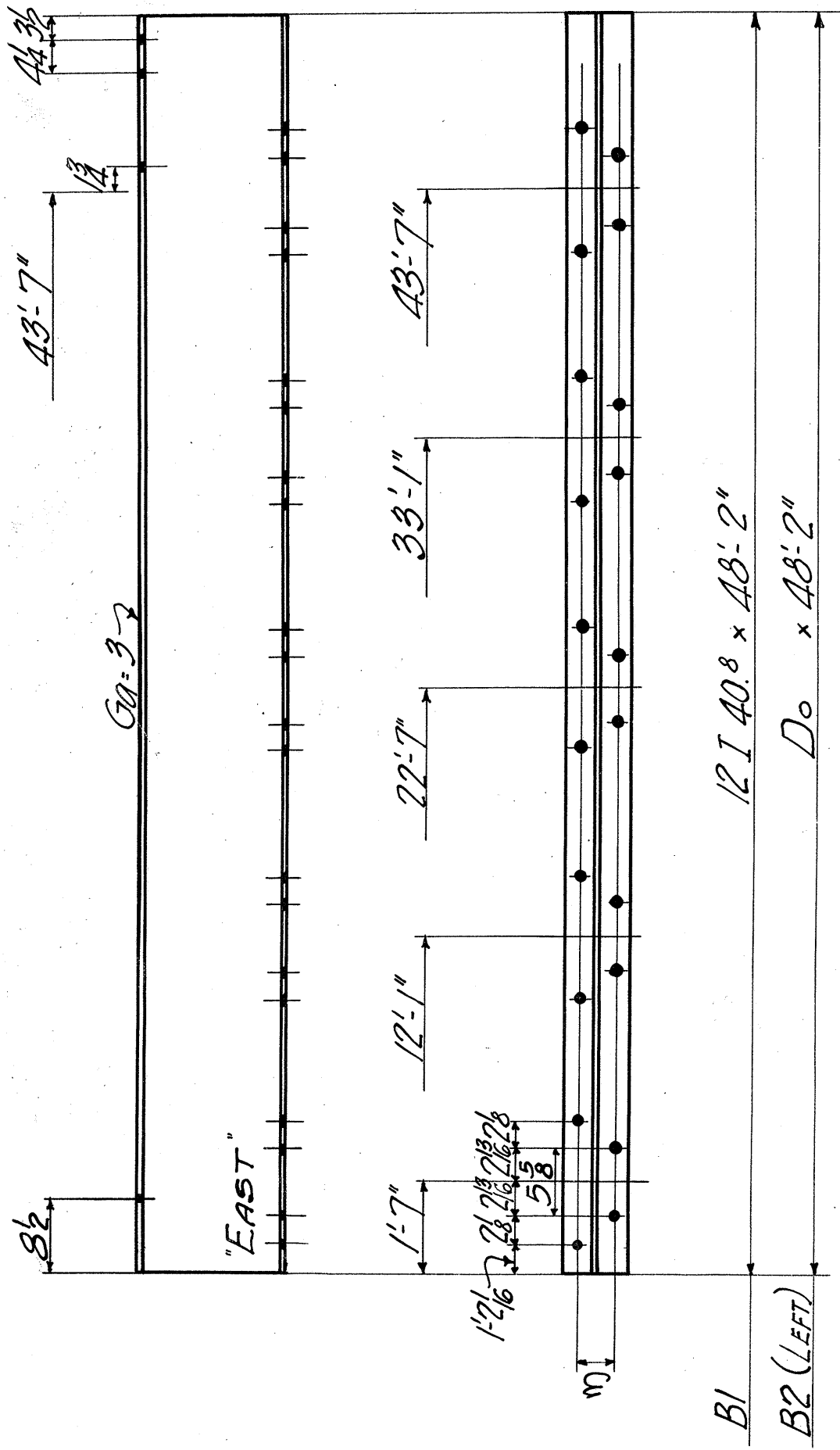
NOTES:  
MATERIAL - O. H. Steel, AISC, Grade 50.  
SPECIFICATIONS - A. R. E. & F. for St. Hy. Bridges.  
ERECTOR - Geo. H. Tinker, Engr.  
SUPPLY - None.  
RIVETS - 3/8" dia.  
OPEN HOLES - 1/8" dia.  
KIDNEY - None.

N. Y. C. & St. L. R. R. Co.  
Bridge No. 18280  
East 9th St.  
Cleveland, Ohio.

AMERICAN BRIDGE COMPANY  
DRAWINGS MADE AT TORONTO PLANT  
WORK FABRICATED AT AMBRIDGE PLANT  
IN CHARGE OF COOPER  
DRAWN MADE BY J.B.P.  
DATE 5-22-29  
CHECKED BY  
ORDER NO F 5947 SHEET NO. 7  
Copyright American Bridge Company 1929

Rev. 6-12-19

NS 184-04-19



NO.	SHAPE	LENGTH	MARK.	GROUP	NO.	DATE	BY	CHKD.	DATE	BY	CHKD.
6	BEAMS	B1									
7	Do	B2									
13	12 I 40.8	48 2		3							
6	BEAMS	B3									
6	Do	B4									
12	12 I 40.8	43 2		4							
Paint										5 23	5
Reaming - None										29	AMB. F5947

NS 184-04-291

N. Y. C. & St. L. R. R. Co. - Bridge No. 182.80 - East 9th. St. Cleveland, O.

AMERICAN BRIDGE COMPANY

6

LINE NO.	NO. PCS.	DIAM.	RIVETS		BOLTS					GRIP	THICKNESS OF MATERIAL CONNECTED				LOCATION
					LENGTH UNDER HEAD	HEAD	NUT	WASH-ER	TYPE OF BOLT						
1			Rivets												
2	64	7/8	3/4							19/16	3/8	3/8	13/16		S1&S2 to Cols.
3	224	"	2 3/4							13/16	3/8	13/16			
4	32	"	3/4							19/16	3/8	13/16	3/8		M1 " "
5	100	"	2 3/4							13/16	3/8	13/16			
6															
7	416	"	2 1/4							3/4	3/8	3/8			D1&D2 to S1&S2
8															
9	12	"	5/8							3/4	7/8	7/8	3/4	3/4	G1 to Cols.
10	8	"	4 5/8							2 7/8	1/2	7/8	3/4	3/4	G2 " "
11	10	"	4 7/8							2 13/16	3/8	15/16	3/4	3/4	
12	10	"	4 3/8							2 5/8	3/8	1	3/4	1/2	
13	10	"	4 1/8							2 3/8	3/8	3/4	3/4	1/2	G3, G4, G5 to Cols.
14	10	"	4 1/2							2 1/6	3/8	13/16	3/4	3/4	
15															
16			Bolts												
17	6	1 1/4			5 1/2	Hex	Hex	2 1/4 x 4		3 3/4	3/4	1 1/4	3/4	3/4	
18	4	"			5 1/4	"	"	"		3 1/2	1/2	1 1/4	3/4	3/4	
19			Rivets												
20	192	7/8	2 7/8							1 1/8	3/8	3/8	3/8		CF1 to Girders thru Stiffs.
21	384	"	2 1/4							3/4	3/8	3/8			
22	6	"	4 1/4							2 1/2	3/8	7/8	3/4	1/2	
23	24	"	3 3/4							2	3/8	7/8	3/4		CF1 to G1&G2 " flge
24	2	"	3 1/4							1 5/8	3/8	1	3/4		
25	8	"	3 7/8							2 1/8	3/8	1/2	3/4	1/2	
26	16	"	2 1/4							3/4	3/8	3/8			" " G3-G4-G5 " "
27	12	"	3 7/8							2 1/8	3/8	3/4	1/2	1/2	
28	6	"	4 5/8							2 7/8	3/4	3/4	1/2	1/2	
29	12	"	3 1/4							1 5/8	3/8	3/4	1/2		" " G6 & G7 " "
30	2	"	3 7/8							1 7/8	3/8	1/2	1/2	1/2	
31	4	"	4 3/8							2 5/8	3/8	1	1	1	
32	4	"	2 7/8							1 3/8	3/8	1/2	1/2		
33															
34															
35	156	7/8	4 7/8							2 7/8	7/8	3/4	1/2	3/4	Beams to G1
36	104	"	4 1/4							2 1/2	1/2	3/4	1/2	3/4	" " G2
37	60	"	4 1/8							2 3/8	3/8	1 1/4	3/4		" " G3-G4-G5
38	10	"	3 7/8							2 1/8	3/8	1 1/4	1/2		" " "
39	6	"	4							2 1/4	3/4	1/2	1/2	1/2	" " G6
40	144	"	4 1/4							2 1/2	3/4	1/2	1/2	3/4	" " "
41	4	"	3 3/4							2	1/2	1/2	1/2	1/2	" " G7
42	96	"	4							2 1/4	1/2	1/2	1/2	3/4	" " "
43															
44															
45															
46															

NS 184-04-291

FIELD RIVETS AND BOLTS

DATE	7/1
NAME	A.L.C.

DATE	7/1
19	29
DRAWINGS	
FABRICATION	Amb.

ORDER No. F5947

SHEET No. EF1

NAME OF STRUCTURE  
Bridge #182.80 - E. 9th St. Cleveland, O.

N.Y.C. & S.T.L. R.R. CO.

# AMERICAN BRIDGE COMPANY

LINE NO.	NO. PCS.	DIAM.	RIVETS		BOLTS					GRIP	THICKNESS OF MATERIAL CONNECTED	LOCATION
					LENGTH UNDER HEAD	HEAD	NUT	WASH-ER	TYPE OF BOLT			
1												
2	2	7/8	3/8	✓						1 1/2	2 1/2	4x1 Bars to B5
3	90	"	2 3/4	✓						1 1/4	3 1/2	12" L Beams,
4	4	"	2 1/2	✓						1	2 1/2	" " "
5	30	"	2 5/8	✓						1 1/8	3 3/8	" " "
6	56	"	2 5/8	✓						1 1/8	3 3/8	SA15A4 " "
7	2	"	3 3/8	✓						1 3/8	3 1/2	" "
8												
9												
10	140	3/4	2 1/4	✓						7/8	1 1/2	8" L to 12" L,
11												
12	144	5/8	1 7/8	✓						9/8	3 1/4	P3 & 4 to 8 & 12" L,
13	36	"	2	✓						3/4	3 3/8	" " L
14	10	"	1 7/8	✓						5/8	3 1/4	12" L at joints.
15												
16	410	3/4	2 1/8	✓						3/4	3 3/8	A5 to Posts,
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
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29												
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46												

NS 184-04-291

FIELD RIVETS

DATE	7/1
NAME	A.L.C.

DATE	7/1
19	29
DRAWINGS	Φ
FABRICATION	Amb.

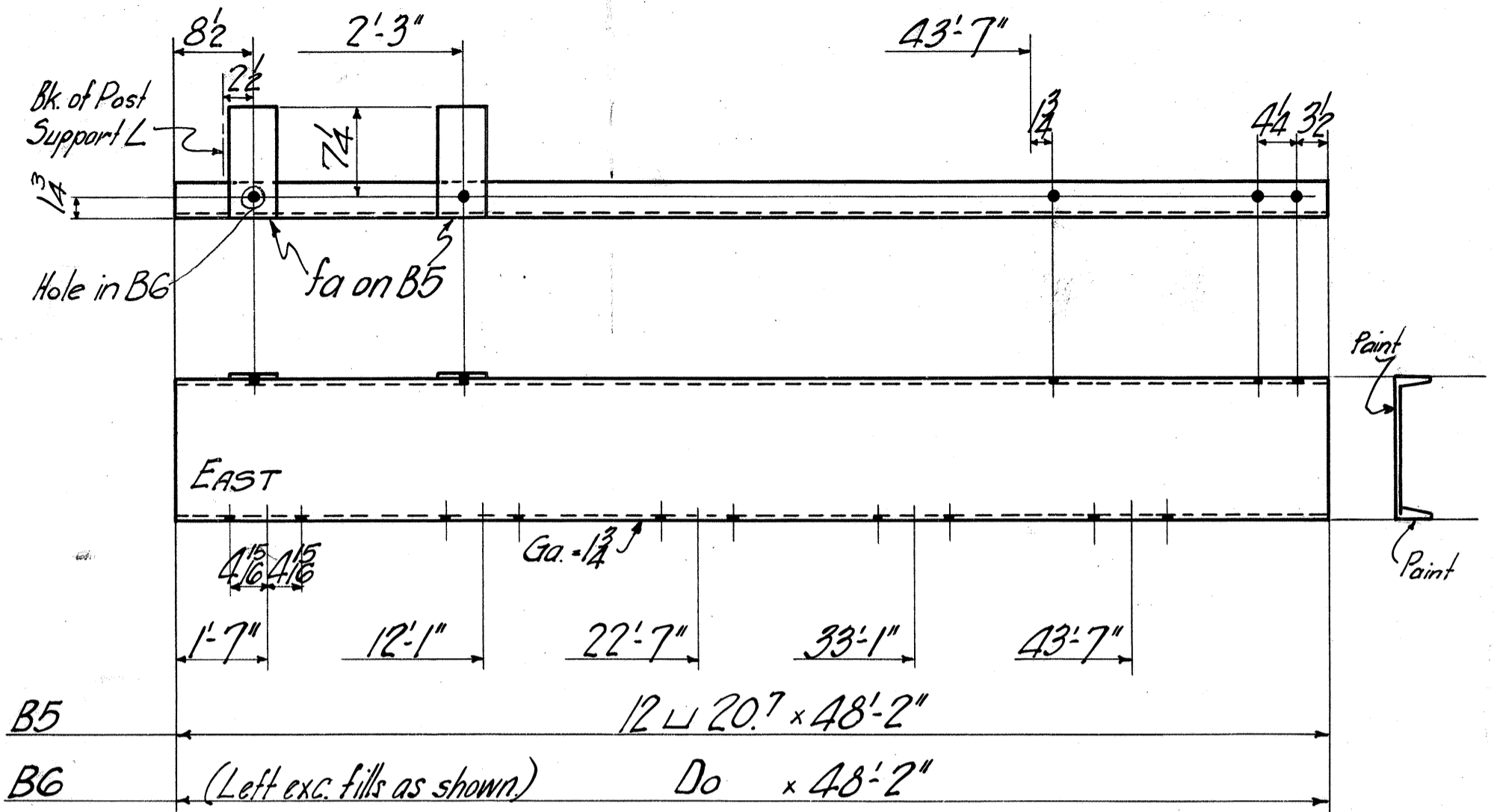
ORDER No. F5947

SHEET No. EF2

NAME OF STRUCTURE  
Bridge #182.80, E. 9th St., Cleveland, O

N.Y.C. & St. L. R.R.  
2-6-2

SKETCH SHEET  
**AMERICAN BRIDGE COMPANY**



*Rev. 6-28-29*

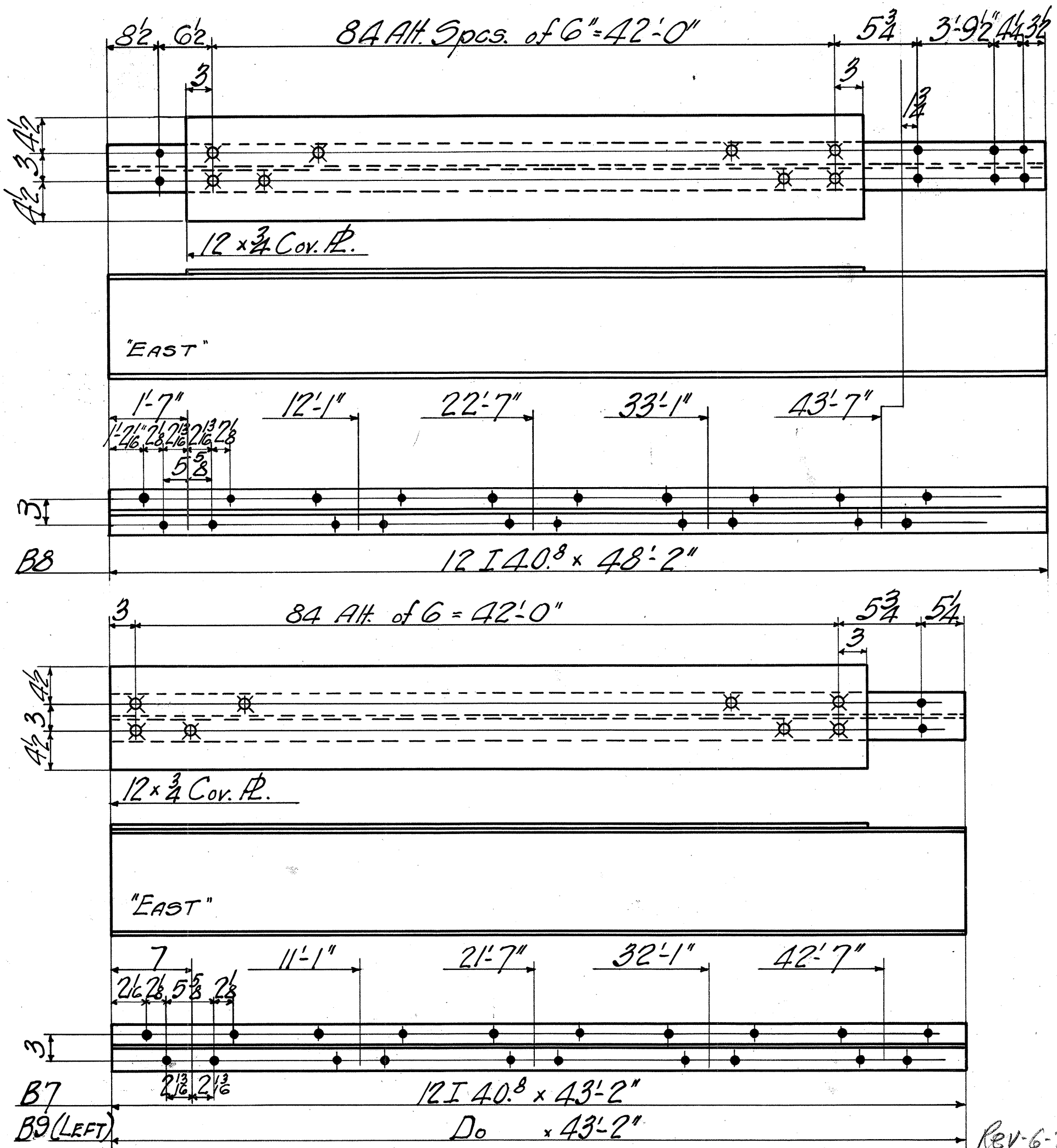
NO. POS.	MATERIAL			CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED		NO. POS.	MATERIAL			CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED		
	SHAPE	LENGTH	MARK		ITEM	ITEM		SHAPE	LENGTH	MARK		ITEM		
	<i>ONE BEAM B5</i>													
	<i>ONE D0 B6</i>													
<i>2</i>	<i>12 L 20.7</i>	<i>48</i>	<i>2</i>				<i>8</i>							
<i>2</i>	<i>Fills</i>	<i>4</i>	<i>1</i>	<i>9</i>	<i>fa Bolt on B5</i>		<i>16-6</i>	<i>45</i>						

**NS 184-04-291**

*Paint - as noted*  
*Reaming - none*

DATE	DRAWING	ORDER NO.	SHEET NO.
<i>5/23</i>	<i>Φ</i>	<i>F5947</i>	<i>F 2</i>
<i>29</i>	<i>AMB</i>		

SKETCH SHEET  
**AMERICAN BRIDGE COMPANY**



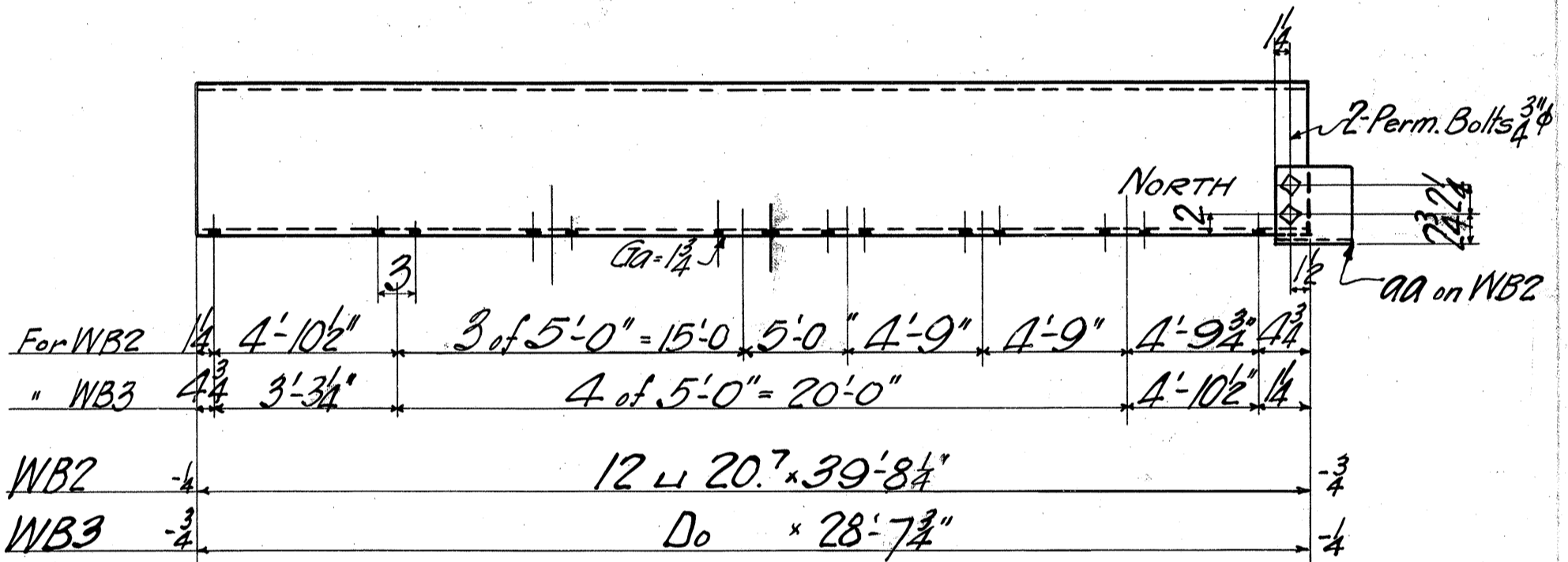
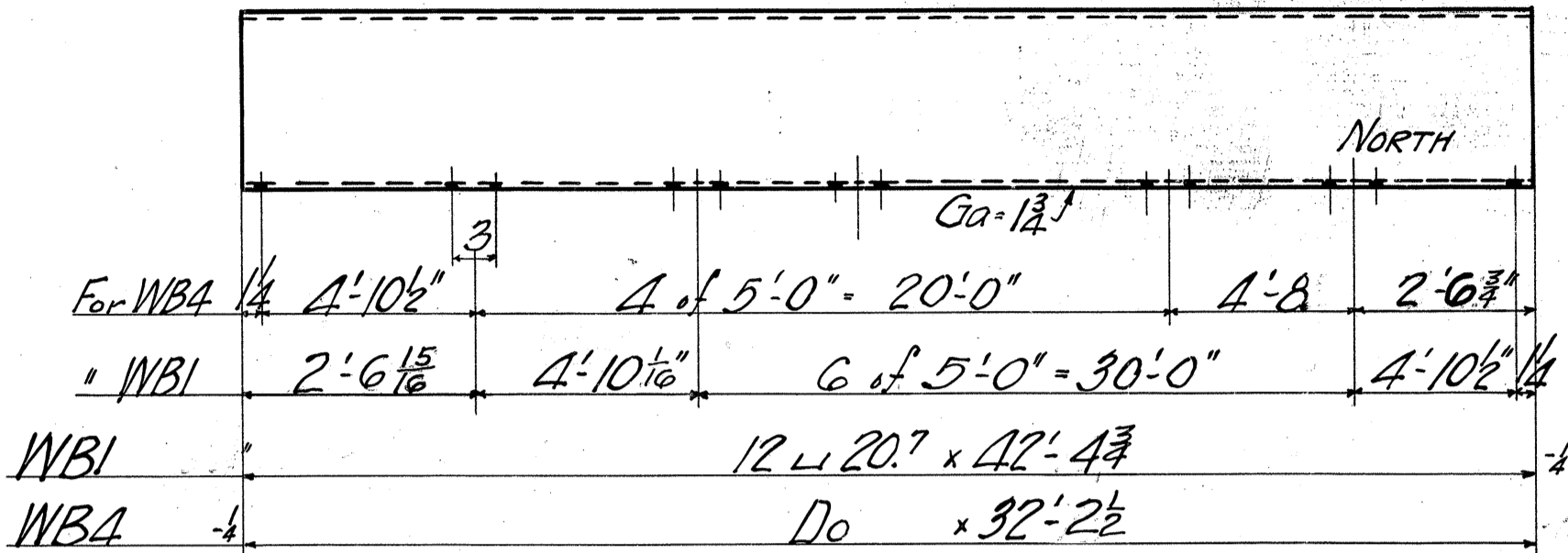
Rev-6-78-29

NO. PCS.	MATERIAL			CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED		NO. PCS.	MATERIAL			CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	
	SHAPE	LENGTH FT. INCH.	MARK		ITEM	NO.		SHAPE	LENGTH FT. INCH.	MARK		ITEM	
<b>ONE BEAM B8</b>													
1	12 I 40.8	48 2					3						
1	Pl	12 3/4	42 6				79						
<b>ONE BEAM B7</b>													
<b>ONE Do B9</b>													
2	12 I 40.8	43 2					4						
2	Pl	12 3/4	42 6				79						

**NS 184-04-291**

Paint	7 15	EG3 5 29 29	DATE	5-24	DRAWING'S	Φ	ORDER No.	F5947	SHEET No.	F 3
Reaming - None	8 16			29	AMB.					

SKETCH SHEET  
AMERICAN BRIDGE COMPANY



6-28-29  
Rev. - 6-12-29

NO. PCS.	MATERIAL		MARK	CALCULATED WEIGHT PER ONE SHIP. PIECE	ORDERED		NO. PCS.	MATERIAL		MARK	CALCULATED WEIGHT PER ONE SHIP. PIECE	ORDERED		
	SHAPE	LENGTH			ITEM	SHAPE		LENGTH	ITEM					
<u>ONE WALKWAY BEAM WB1</u>													<u>ONE WALKWAY BEAM WB2</u>	
1	12 L 20.7	42 (4 3/4)			42-10	87	1	12 L 20.7	39 8 1/4			39-10	10	
							1	L 6	4 1/2	6	aa		5	
							2	Perm. Bolts	3/4 phi	1 3/4			3	
<u>ONE WALKWAY BEAM WB4</u>													<u>ONE WALKWAY BEAM WB3</u>	
1	12 L 20.7	32 (2 1/2)			(32-8)	9	1	12 L 20.7	28 7 3/4				85	

**NS 184-04-291**

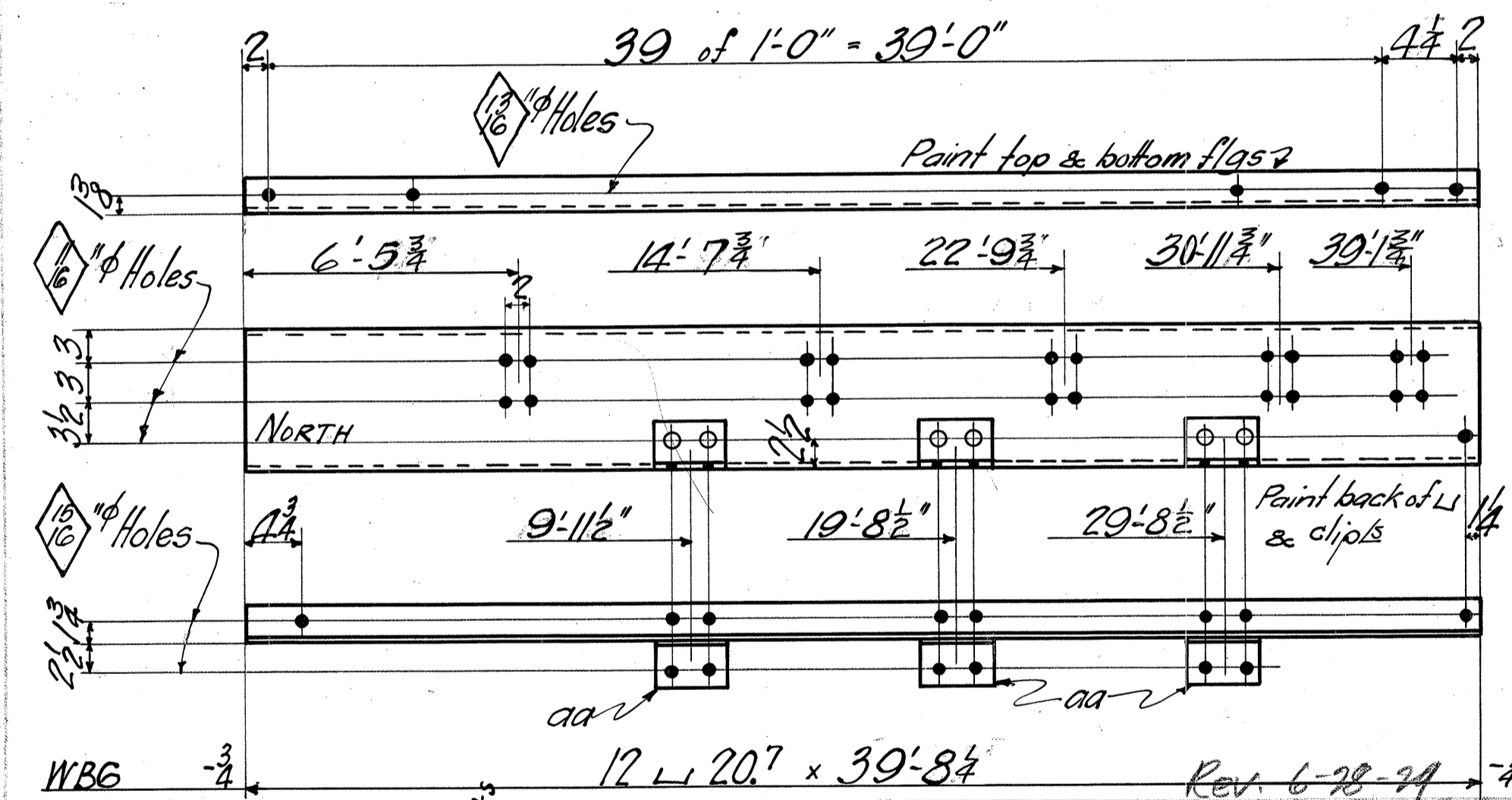
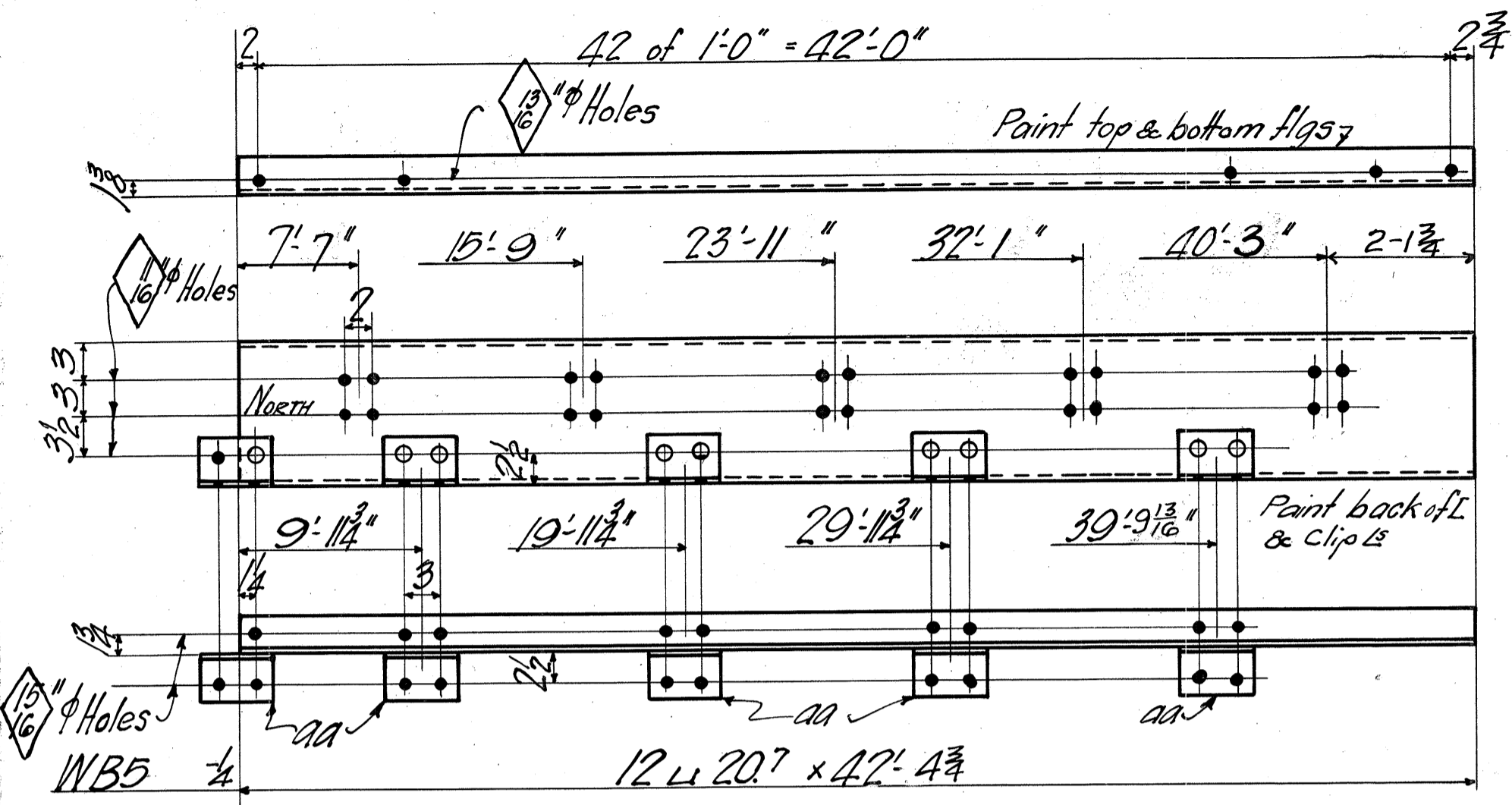
No Paint  
Reaming - None

15  
16  
JBP  
EGB 5 29 29

DATE  
5 25  
TO  
29  
DRAWINGS  
Φ  
FABRICATION  
AMB.

ORDER No.  
F5947

SHEET No.  
FA

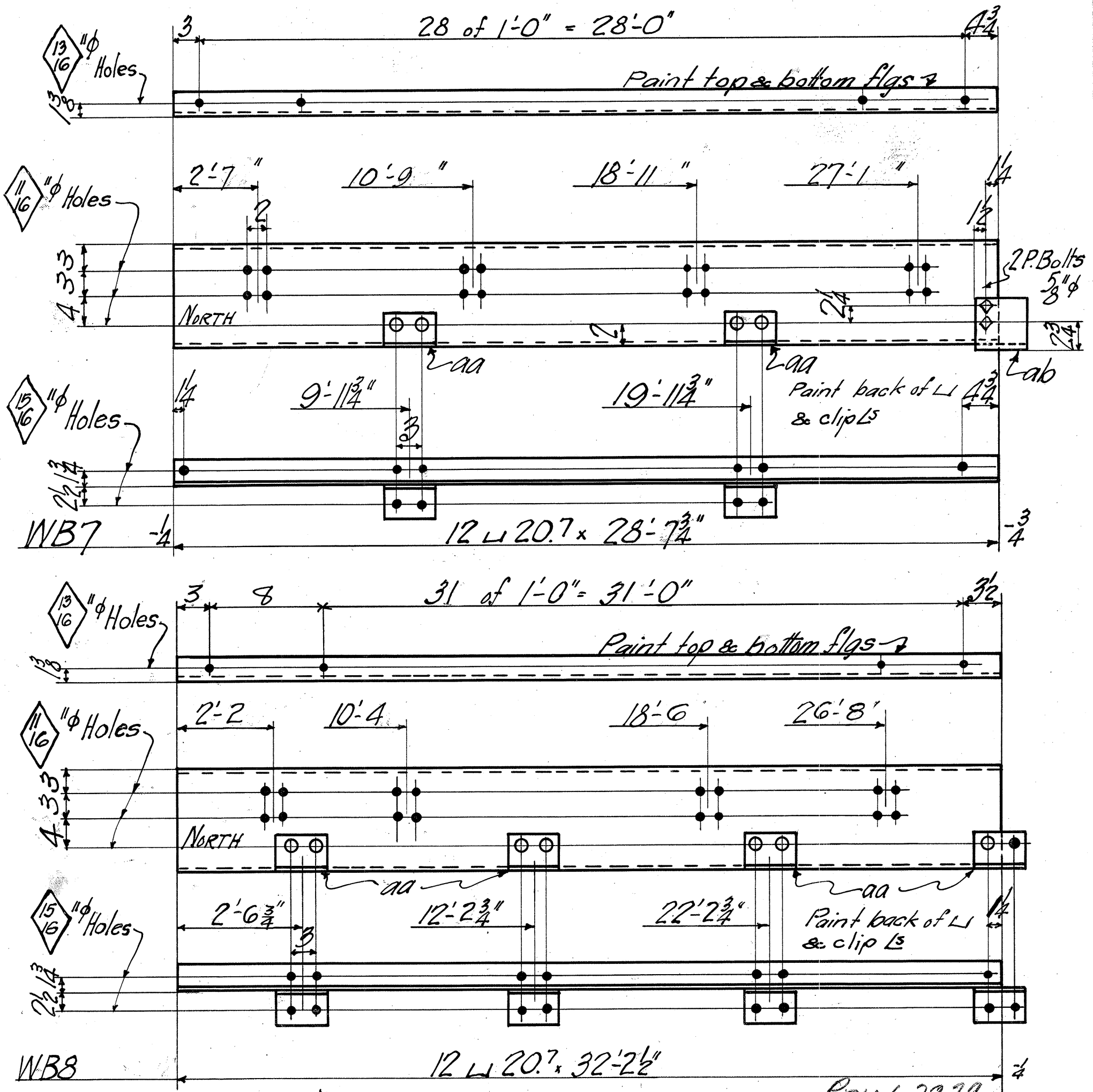


NO.	MATERIAL			Total Pcs	CALCULATED WEIGHT PER ONE SHIP. PIECE	ORDERED		NO. PCS.	MATERIAL			CALCULATED WEIGHT PER ONE SHIP. PIECE	ORDERED	
	SHAPE	LENGTH	MARK			ITEM	SHAPE		LENGTH	MARK	ITEM			
Rev. 6-12-29														
ONE WALKWAY BEAM WB5														
1	12 L 20.7	42'-4 3/4"		42	10	87								
5	L 4	4 3/8"	aa	8		5								
ONE WALKWAY BEAM WBG														
1	12 L 20.7	39'-8 1/4"		39	10	10								
3	L 4		aa											

NS 184-04-291

Paint - as noted      5 as noted      5 27  $\Phi$   
 Reaming - None      8 noted      29 AMB.      F5947      F5





MATERIAL				Total Pcs	ORDERED		MATERIAL				ORDERED
SHAPE	LENGTH	MARK	ITEM		NO. POS.	SHAPE	LENGTH	MARK	ITEM		
<b>ONE WALKWAY BEAM WB7</b>											
1	12 L 20.7	28 7/4		85							
1	L 6 4 1/2	6	ab	5							
2	L 4 4 3/8	6	aa	6							
2	P. Bolts	5/8" x 1 1/4"		5							
<b>ONE WALKWAY BEAM WB8</b>											
1	12 L 20.7	32 2 1/2		9							
4	L 5		aa								

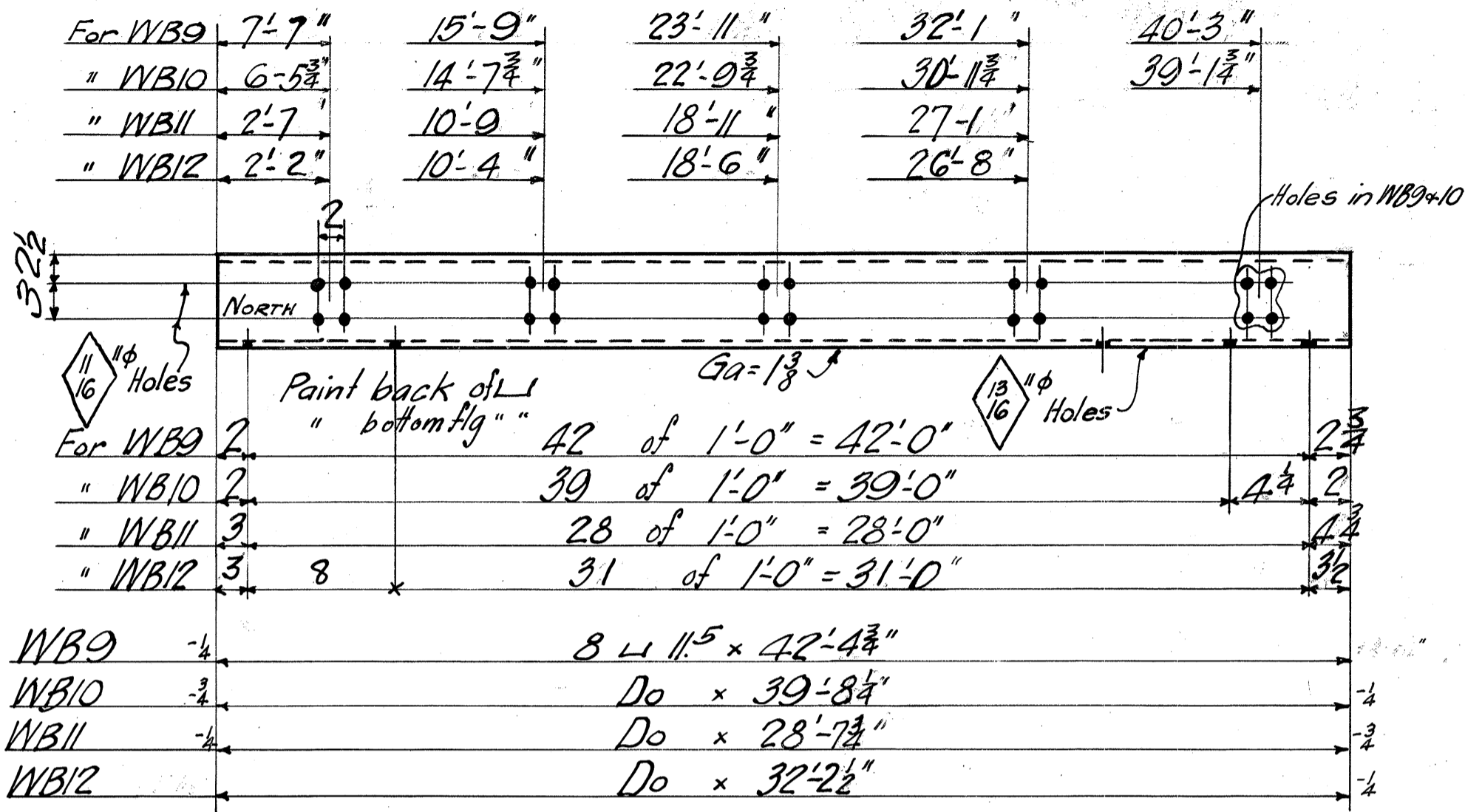
Rev. 6-28-29

Rev. 6-12-29

NS 184-04-291

Paint - as noted	5	as	JBP	5	28	Φ	ORDER No.	SHEET No.
Reaming - None	8	noted	EG 3	5	29	AMB.	F5947	F 6

AMERICAN BRIDGE COMPANY



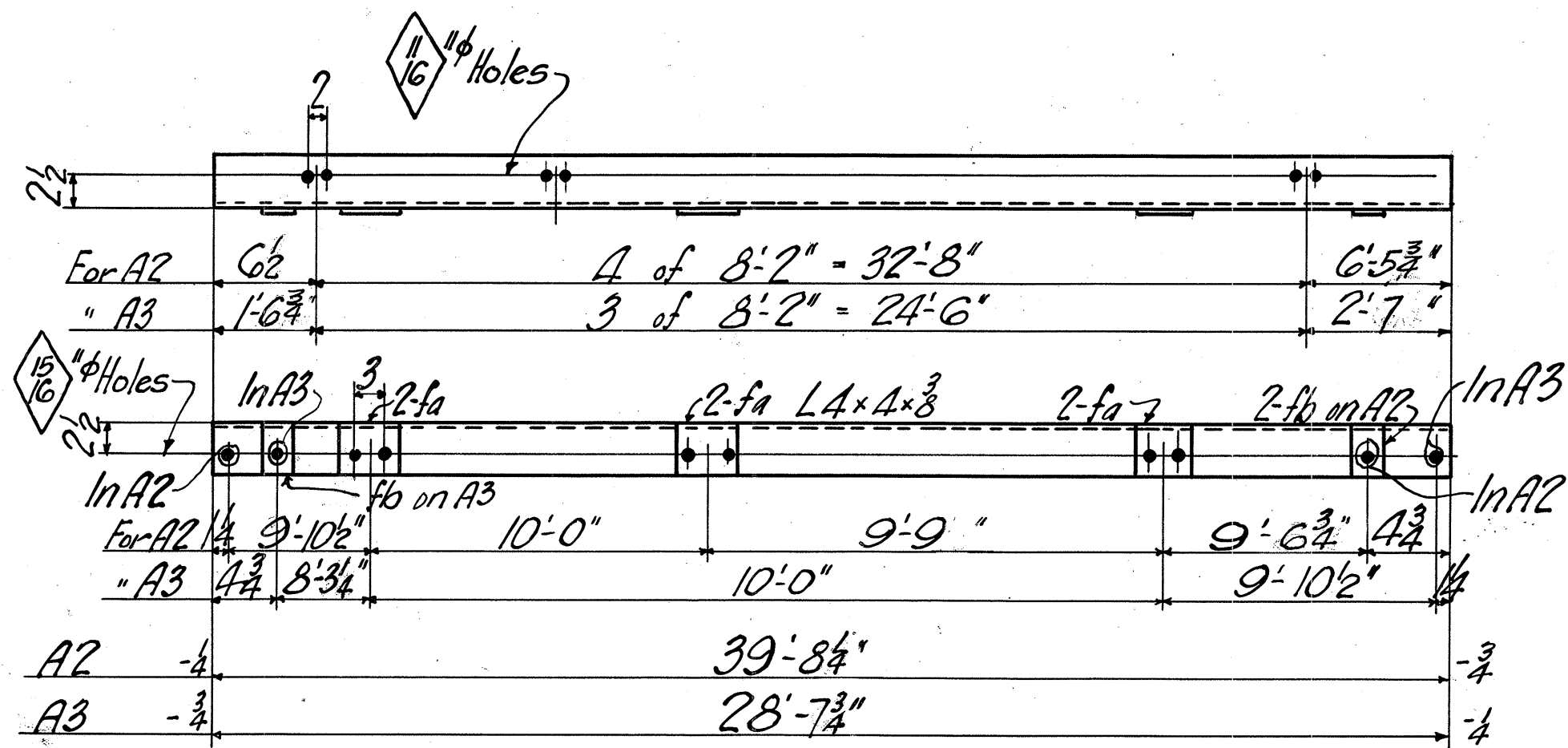
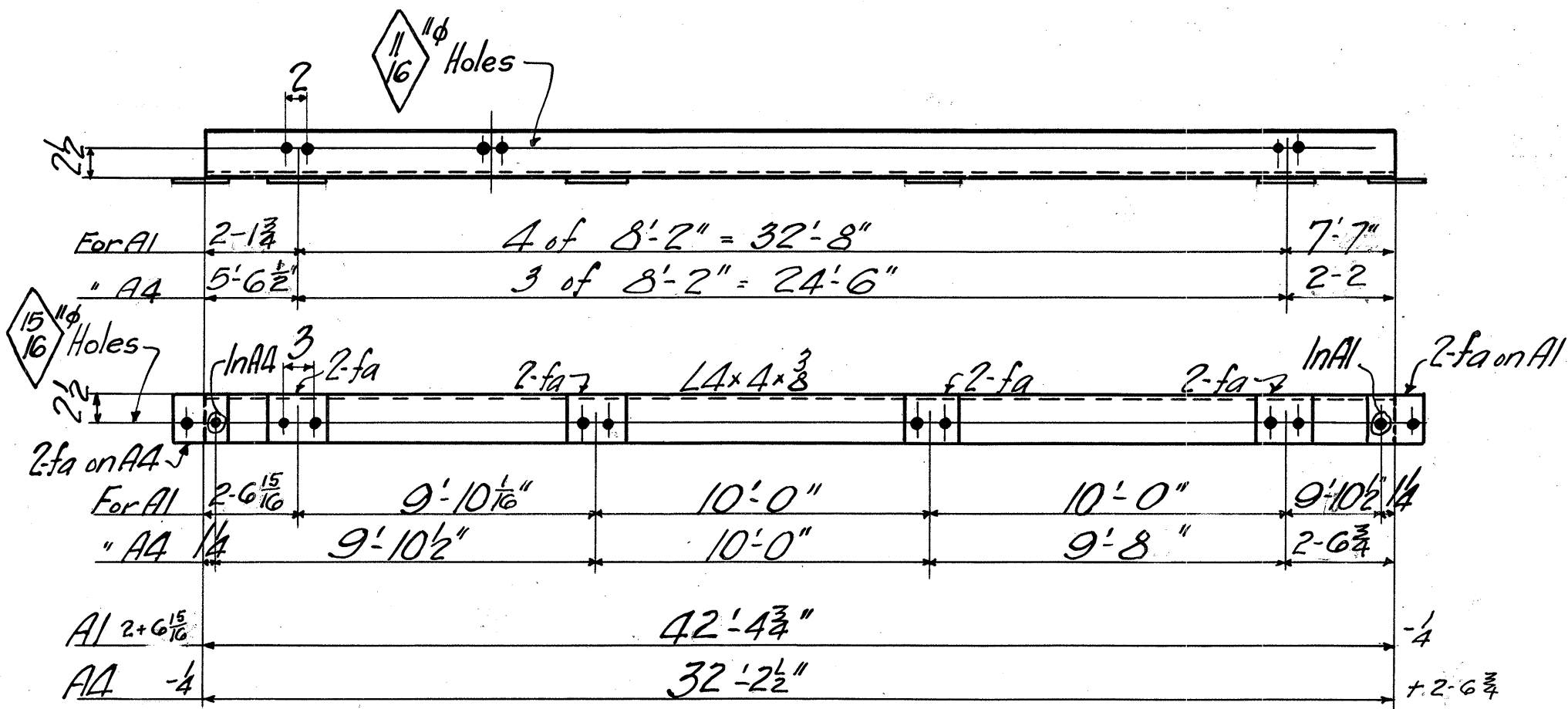
6-28-29  
Rev-6-12-29

NO. QTY.	MATERIAL SHAPE	LENGTH FT. INCH.	MARK	ORDERED NO. PCS.	ITEM
<b>ONE WALKWAY BEAM WB9</b>					
1	8 L 11.5	42 (4 3/4)		84	
<b>ONE WALKWAY BEAM WB12</b>					
1	8 L 11.5	32 (2 1/2)		13	
<b>ONE WALKWAY BEAM WB10</b>					
1	8 L 11.5	39 (8 1/4)		14	
<b>ONE WALKWAY BEAM WB11</b>					
1	8 L 11.5	28 (7 3/4)		86	

Paint-as noted	as noted	JBP	5 28	Φ	ORDER No.	SHEET No.
Reaming-None	noted	EGG 5 31 29	29	AMB.	F5947	F7

NS 184-04-291



6-28-29  
 Rev. 6-12-29

NO. SHIP.	MATERIAL			Total Pcs	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	NO. Pcs.	MATERIAL			Total Pcs	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM
	SHAPE	LENGTH	MARK					SHAPE	LENGTH	MARK				
<u>ONE POST SUPPORT A1</u>														
1	L 4 4 3/8	42 4 3/4		1	28	1	L 4 4 3/8	39 8 1/4		1	29			
10	Fills	4 1 6	fa(Bolt)	10	28	6	Fills		fa(Bolt)	6	45			
<u>ONE POST SUPPORT A2</u>														
1	L 4 4 3/8	32 2 1/2		1	30	1	L 4 4 3/8	28 7 3/4		1	29			
8	Fills		fa(Bolt)	8		4	Fills		fa(Bolt)	4	45			
<u>ONE POST SUPPORT A3</u>														
1	L 4 4 3/8	28 7 3/4		1	29	1	L 4 4 3/8	28 7 3/4		1	29			AS
Exchange Order #6 4 Fills fa(Bolt)														
1 Fill fb(") 3														

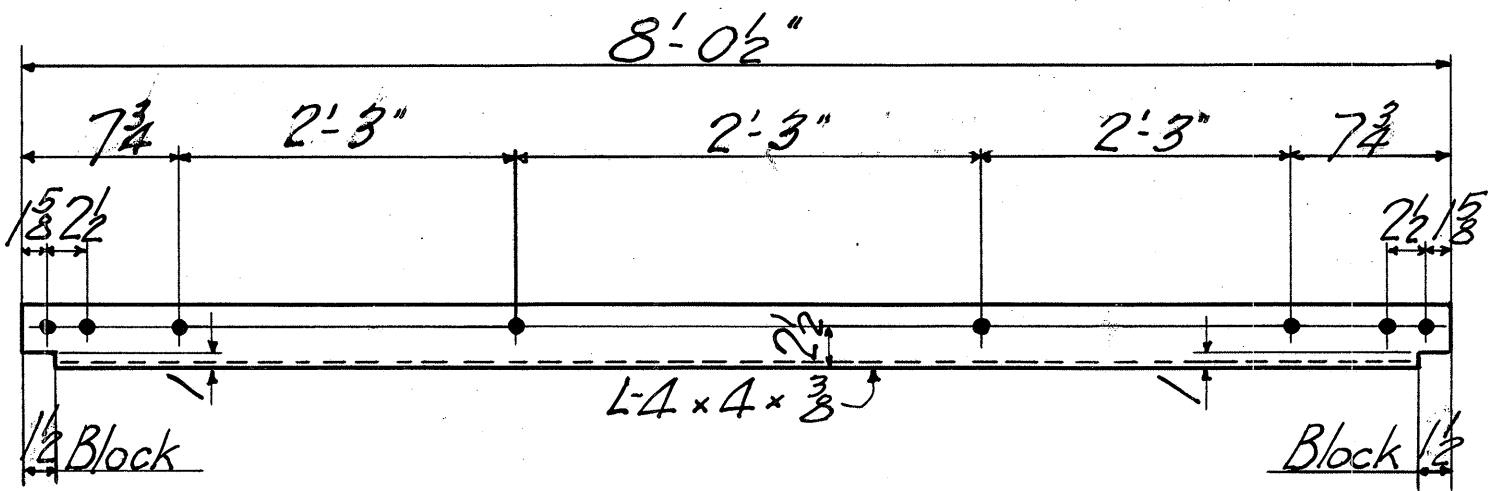
Paint - none  
 Reaming - none

as noted J.B.P. EGB 5 31 29

5 23  
 29 AMB.

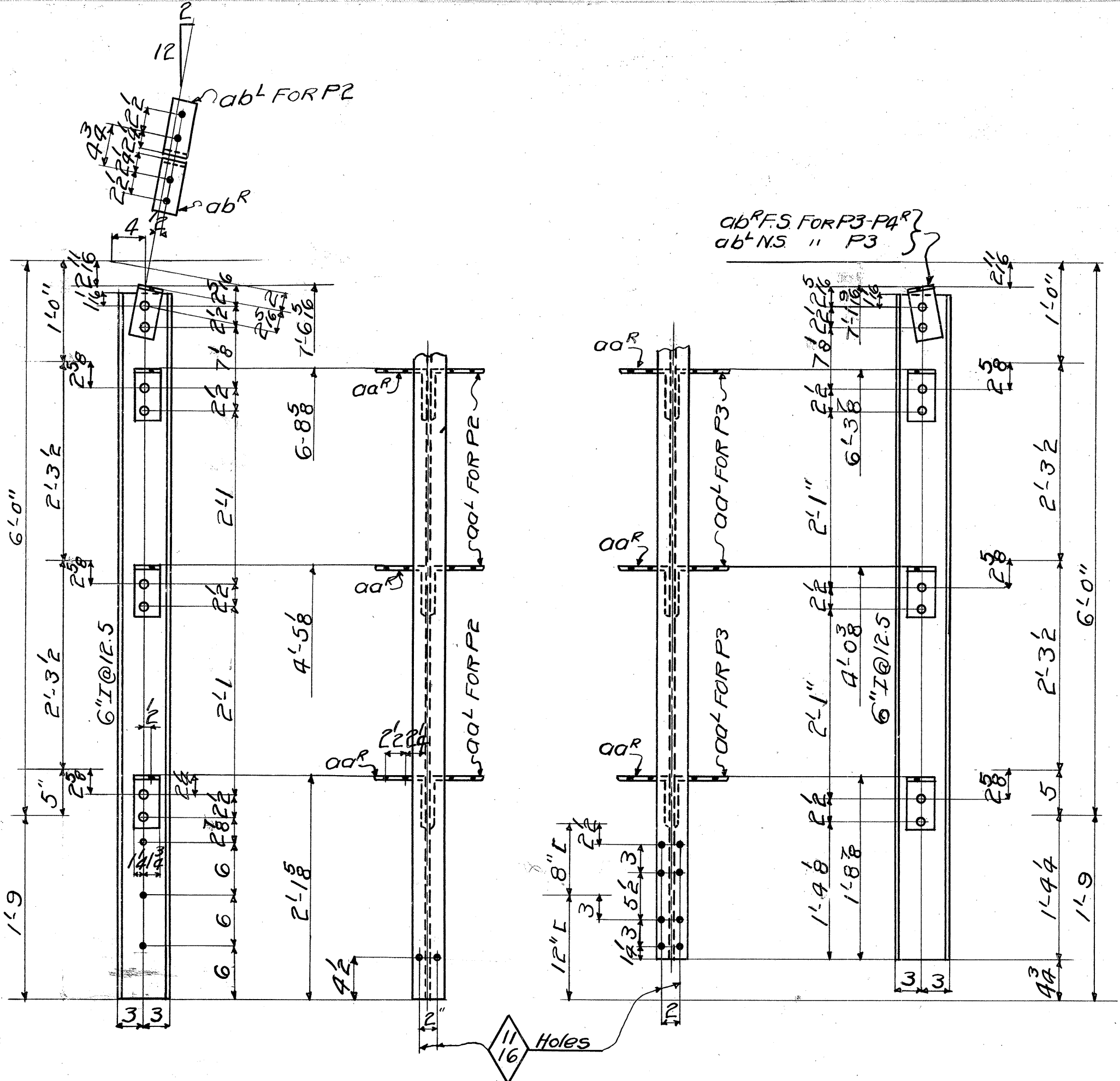
NS 184-04-291  
 ORDER No. F5947 SHEET No. 8

11  
 SKETCH SHEET  
**AMERICAN BRIDGE COMPANY**



RAILING ANGLE A5

MATERIAL				ORDERED		MATERIAL				ORDERED				
NO. FOR.	SHAPE	LENGTH		MARK	CALCULATED WEIGHT FOR ONE SHIP. PIECE	NO. FOR.	ITEM	SHAPE	LENGTH		MARK	CALCULATED WEIGHT FOR ONE SHIP. PIECE	NO. FOR.	ITEM
		FT.	INS.						FT.	INS.				
<b>102 RAILING ANGLES A5</b>														
102	L 4 4 3/8	8	0 1/2				24-332							
<b>NS 184-04-291</b>														
Paint					REMOVED	NO. OF	DATE	DRAWINGS		ORDER NO.		SHEET NO.		
Reaming - None					13	JBP	5 24	Ø		F5947		9		
					16	EG 3 5 31 29	29	AMB.						



POST P2  
 POST P1<sup>R</sup>

POST P3  
 POST P4<sup>R</sup>

NO. POSTS	MATERIAL		CLASS	Total/Pcs.	CALCULATED WEIGHT FOR ONE END, POUND	ORDERED		NO. POSTS	MATERIAL		MARK	CALCULATED WEIGHT FOR ONE END, POUND	ORDERED	
	SHAPE	LENGTH				ITEM	ITEM		SHAPE	LENGTH			ITEM	ITEM
16	POSTS		P2					16	POSTS		P3			
ONE	do		P1 <sup>R</sup>					ONE	POST		P4 <sup>R</sup>			
ONE	do		P1 <sup>L</sup>					ONE	do		P4 <sup>L</sup>			
18	6" I 12.5	7 5/4					6	18	6" I 12.5	7 0 1/2				7 1/2 7
102	15 6 6 3/8	3	aa <sup>R</sup>	102 <sup>R</sup>			5	102	15		aa <sup>L</sup>			
34	15 do	3	ab <sup>L</sup>	34 <sup>R</sup>			5	34	15		ab <sup>L</sup>			

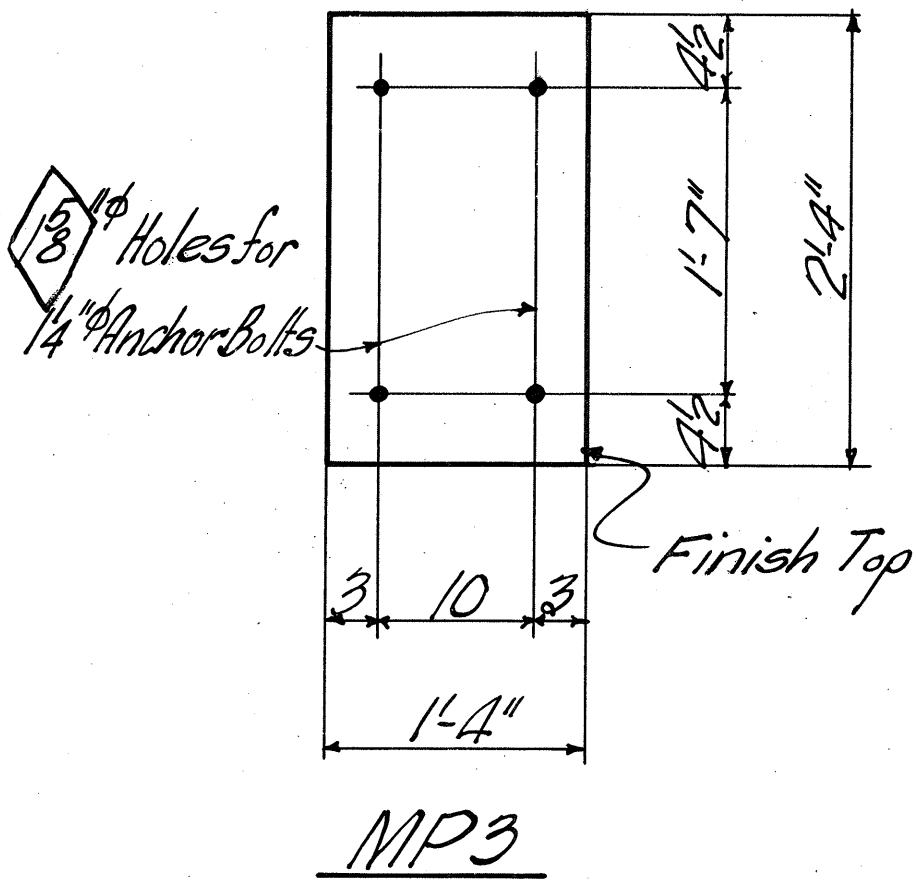
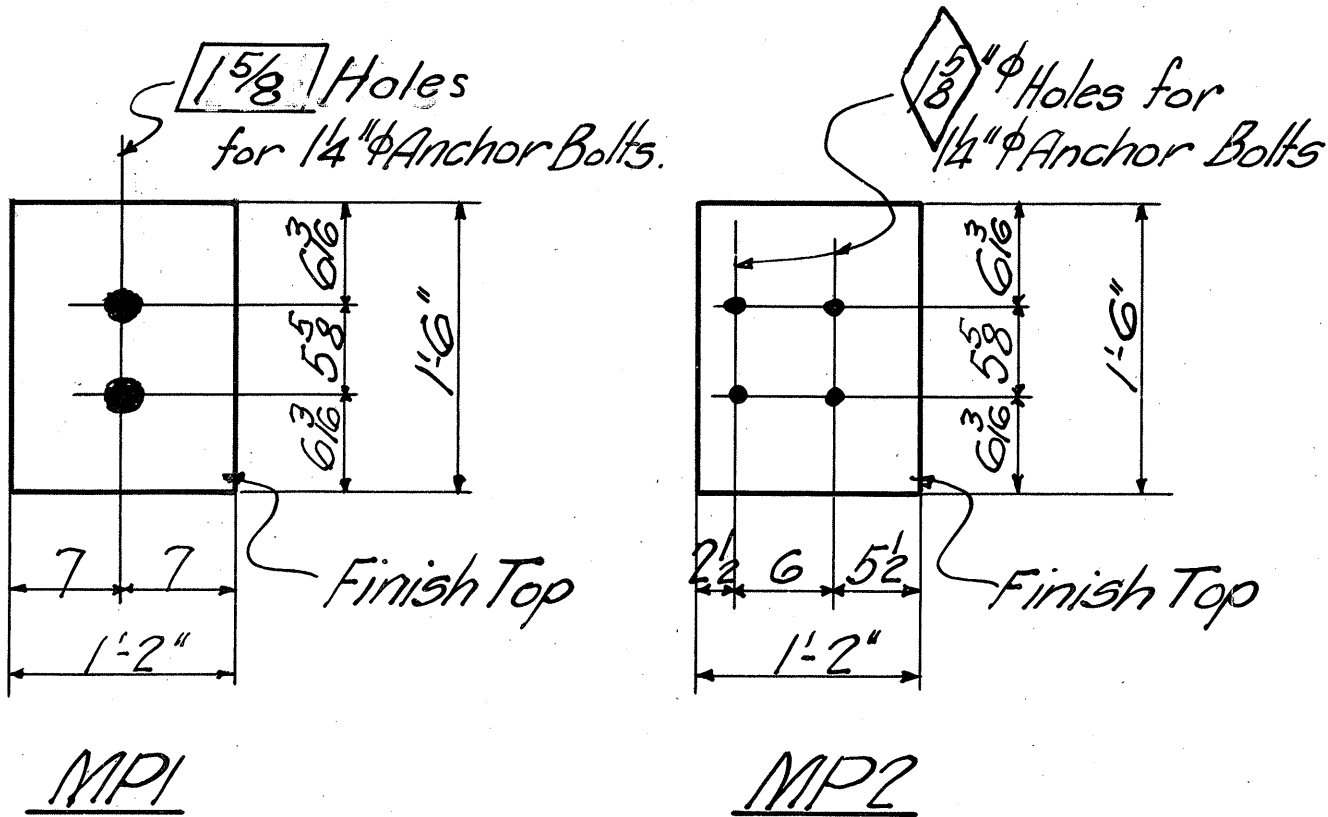
NS 184-04-291

Paint  
 Reaming - None.

3 13  
 4 16  
 Exc. R.K.D. E.G.B. 5 29 29  
 Noted

5 23  
 29

Amb. F5947 10



QUANTITY	DESCRIPTION	UNIT	PRICE	TOTAL
5	MASONRY PLATES MPI			
5	14 1 1 6 14x1 1/8		5-11 62	
5	MASONRY PLATES MP2			
5	14 1 1 6		5	
10	MASONRY PLATES MP3			
10	16 1 2 4 16x1 1/8		23-5 64	

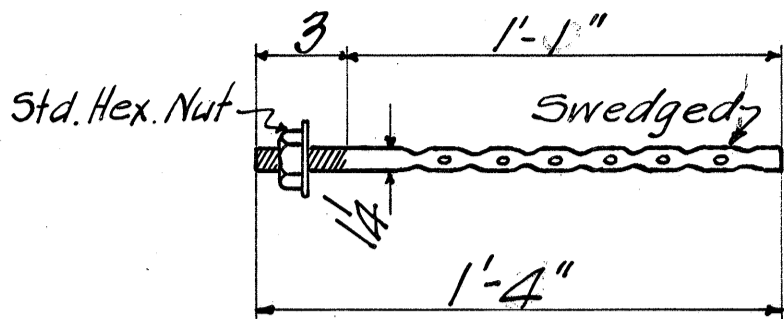
NS 184-04-291

MASONRY PLATES.  
Paint-

AS noted JBP.  
EGG 5 29 29

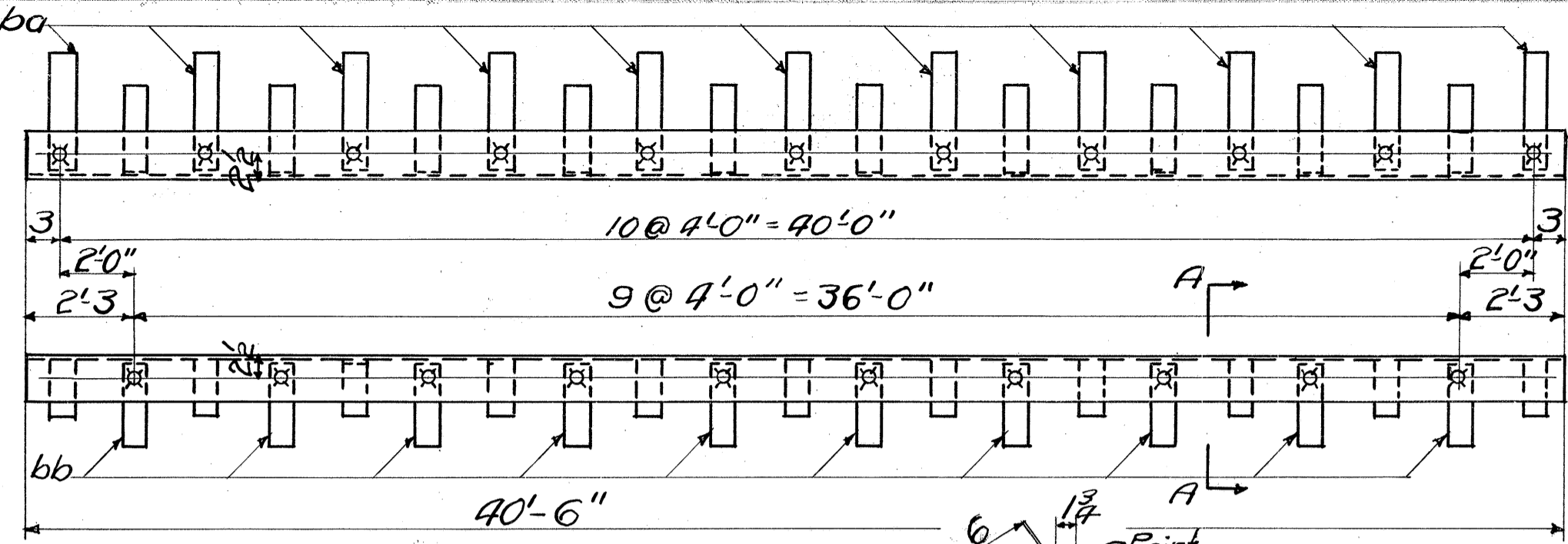
528  $\phi$   
29 AMB. F5947 11

SKETCH SHEET  
**AMERICAN BRIDGE COMPANY**



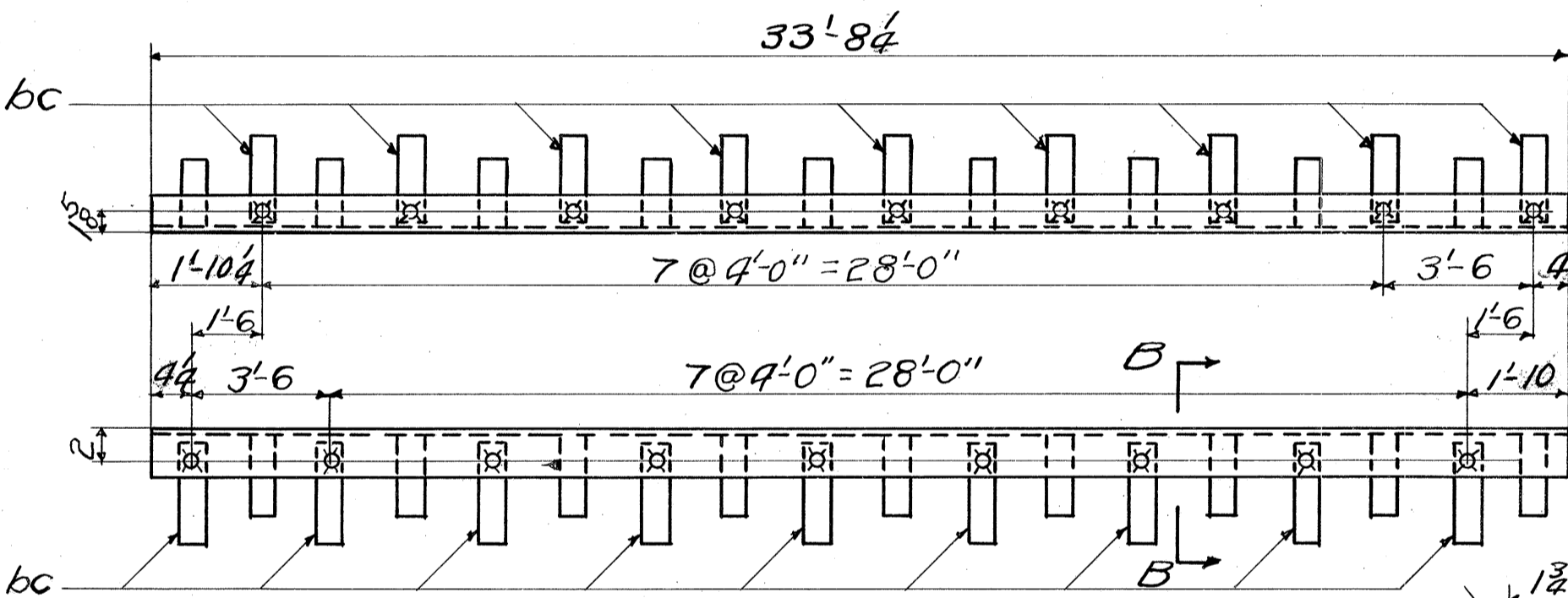
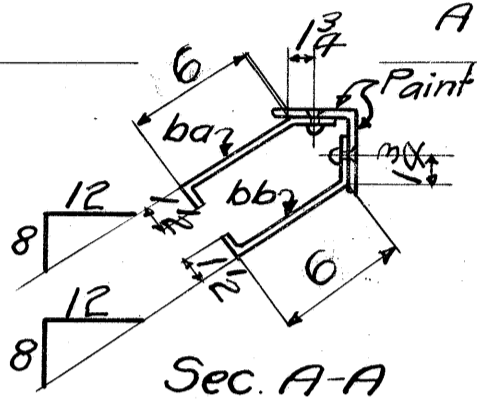
ANCHOR BOLT ABI

NO. Pcs.	MATERIAL		MARK	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED		NO. Pcs.	MATERIAL		MARK	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	
	SHAPE	LENGTH			ITEM	SHAPE		LENGTH	ITEM				
	<b>70 ANCHOR BOLTS ABI</b>												
70	Bolts	1/4" $\phi$ 4	Swaged			S							
70	Std Hex Nuts	1/4" $\phi$				S							
70	Washers	3" $\phi$ - 1/4 Thick				S							
<b>NS 184-04-291</b>													
Anchor Bolts													
Paint - none													
				JBP EGB 5 29 29		5/29 $\Phi$		29 AMB.		ORDER No. F5947		SHEET No. F 12	



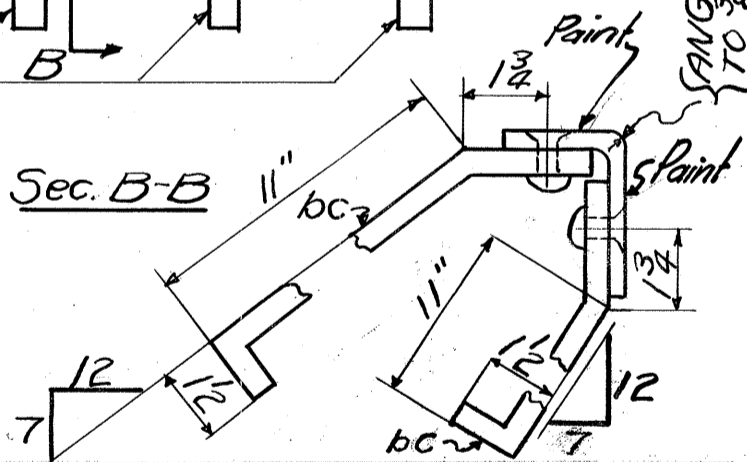
GUARD ANGLE M2

L-5x5x<sup>3</sup>/<sub>4</sub>



CURB ANGLE M3

L-3 1/2 x 2 1/2 x 3/8



ANGLE ROUNDED TO 3" RADIUS

Rev-6-28-29-7

NO.	MATERIAL		MARK	CALCULATED WEIGHT PER ONE SHIP. PIECE	ORDERED		NO. PCS.	MATERIAL		MARK	CALCULATED WEIGHT PER ONE SHIP. PIECE	ORDERED	
	SHAPE	LENGTH			ITEM	ITEM		SHAPE	LENGTH			ITEM	ITEM
2 GUARD ANGLES M2					2 CURB ANGLES M3								
2	L 5 5 3/4	40 6			24	2	L 3 1/2 2 1/2 3/8	33 8 1/4					AS
22	bars 2 1/2	10 1/2	ba		22-7	83	36	bars 2 1/2	1 3/4	bc			22-7 83
20	do	10 1/2	bb		22-7	83							

N 184-04-291

Paint 3 1/2 x 2 1/2 L as noted 1  
No Paint For 2 1/2 x 1/2 Anchor 2  
Reaming - None

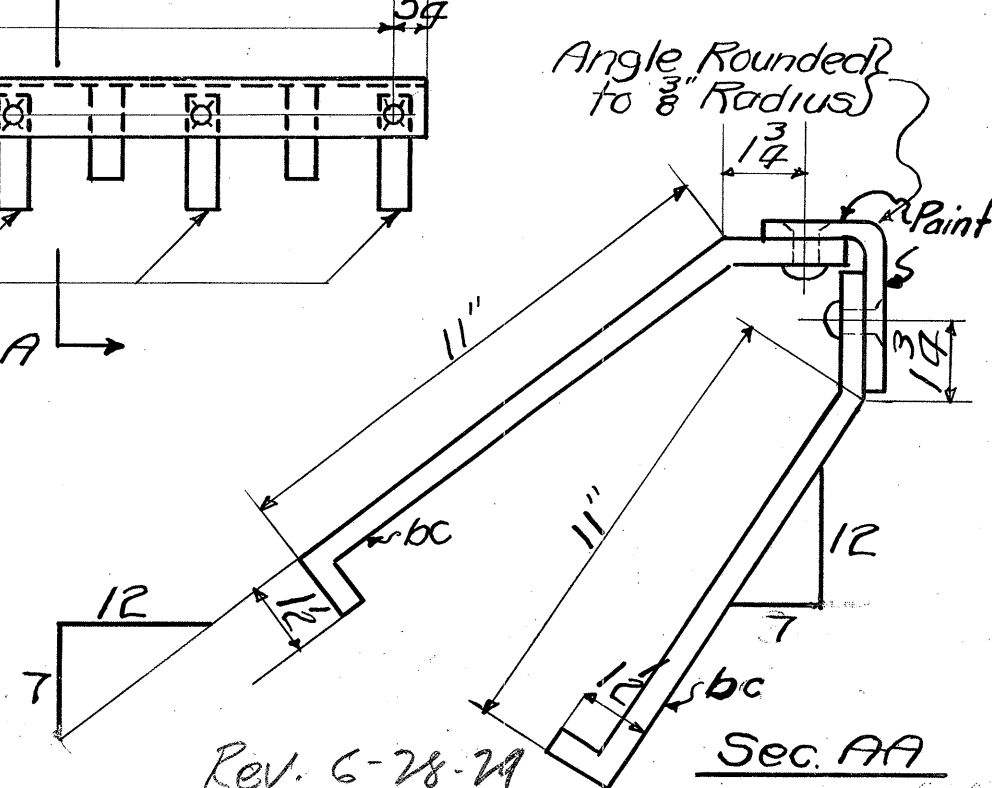
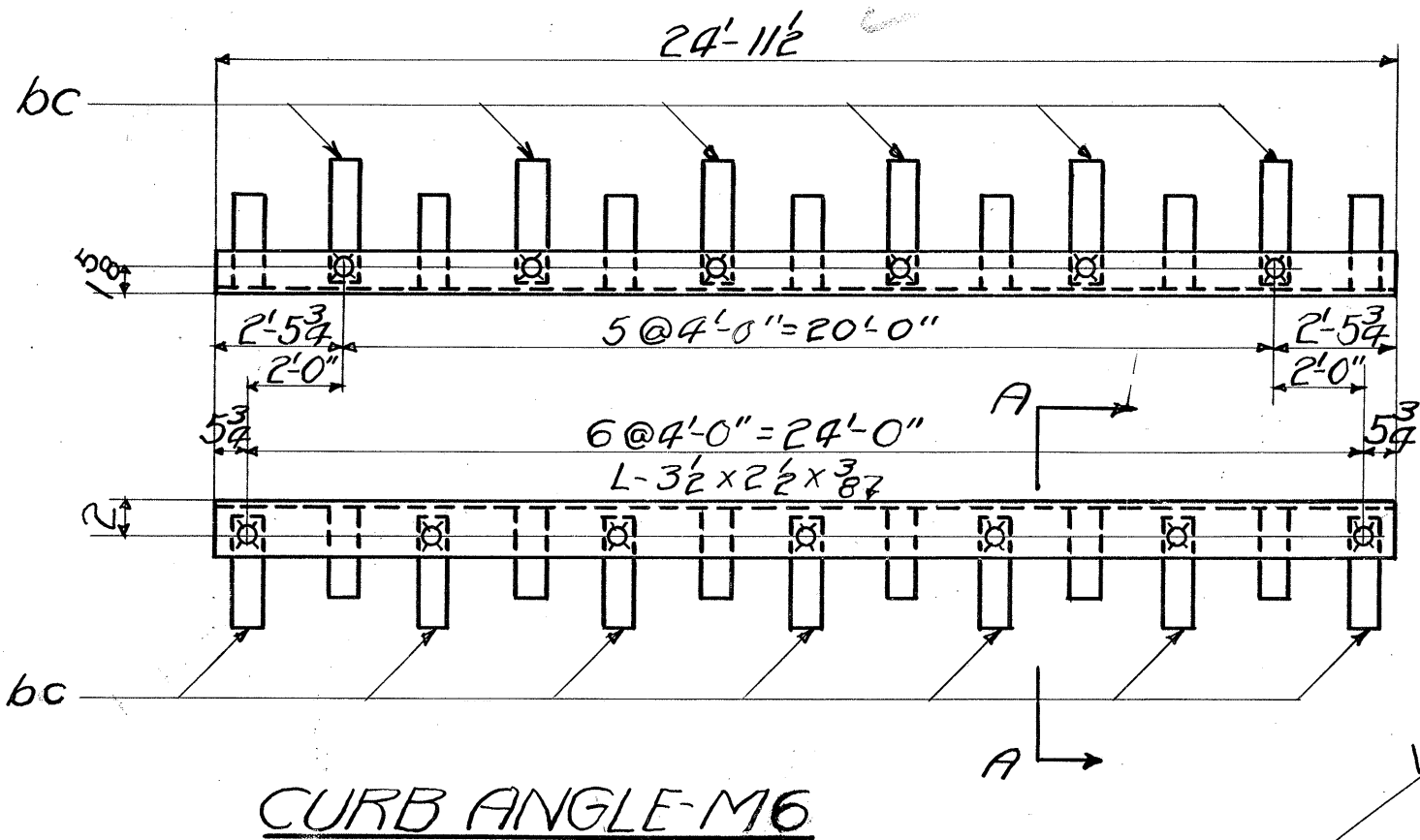
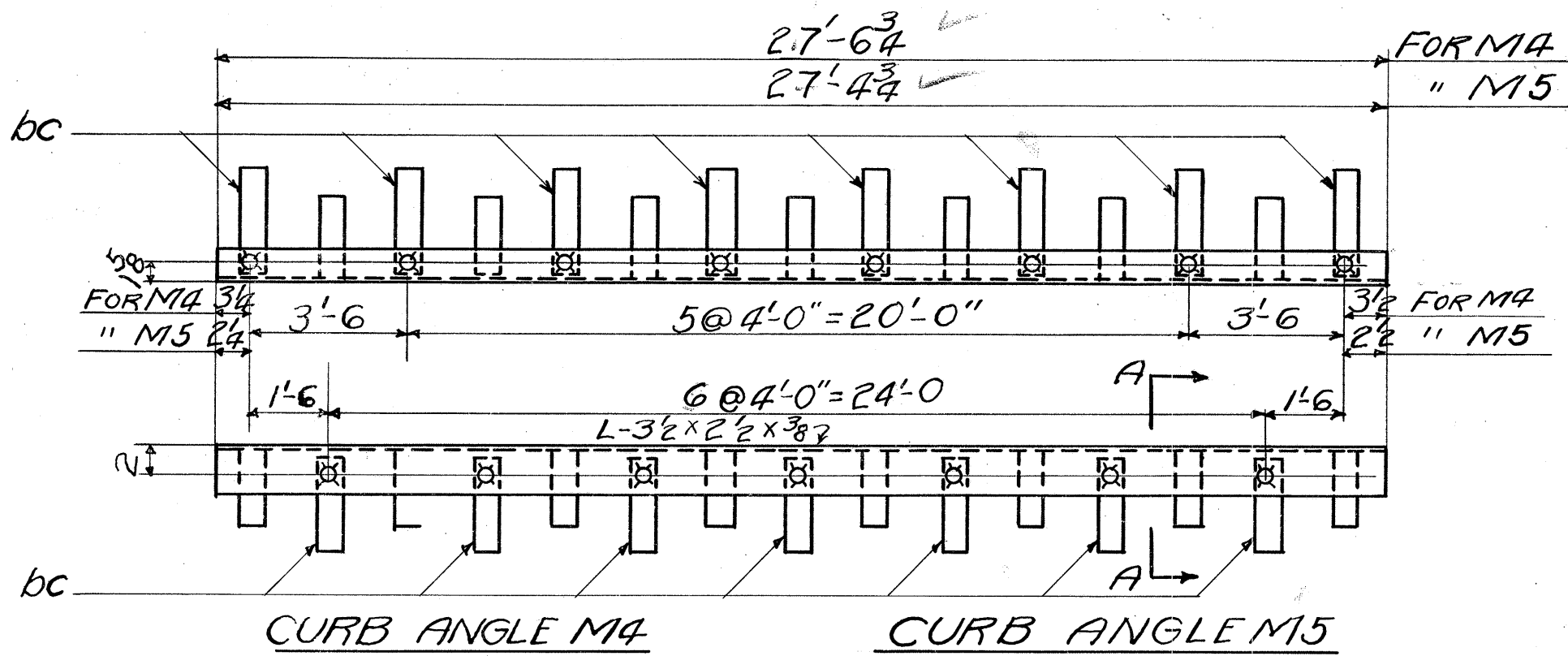
RKD  
E.G.B. 5 29 29

DATE 5 28 29  
DRAWINGS

Amb F5947

F 13





Rev. 6-28-29

MATERIAL				Total/Pcs.	ORDERED		MATERIAL				ORDERED	
NO. Pcs.	SHAPE	LENGTH FT. INCH.	MARK		NO. Pcs.	ITEM	NO. Pcs.	SHAPE	LENGTH FT. INCH.	MARK	NO. Pcs.	ITEM
2	CURB ANGLES	M4					2	CURB ANGLES	M6			
2	do	M5					2	L 3 1/2 x 2 1/2 x 3/8	24 11 1/2		30-0	81
2	L 3 1/2 x 2 1/2 x 3/8	27 6 3/4	FORM M4		30-0	81	26	bars	bc			
2	L do	27 4 3/4	" M5		30-0	81						
60	bars	24 1/2	1 3/4	bc	22-7	83						

**NS 184-04-291**

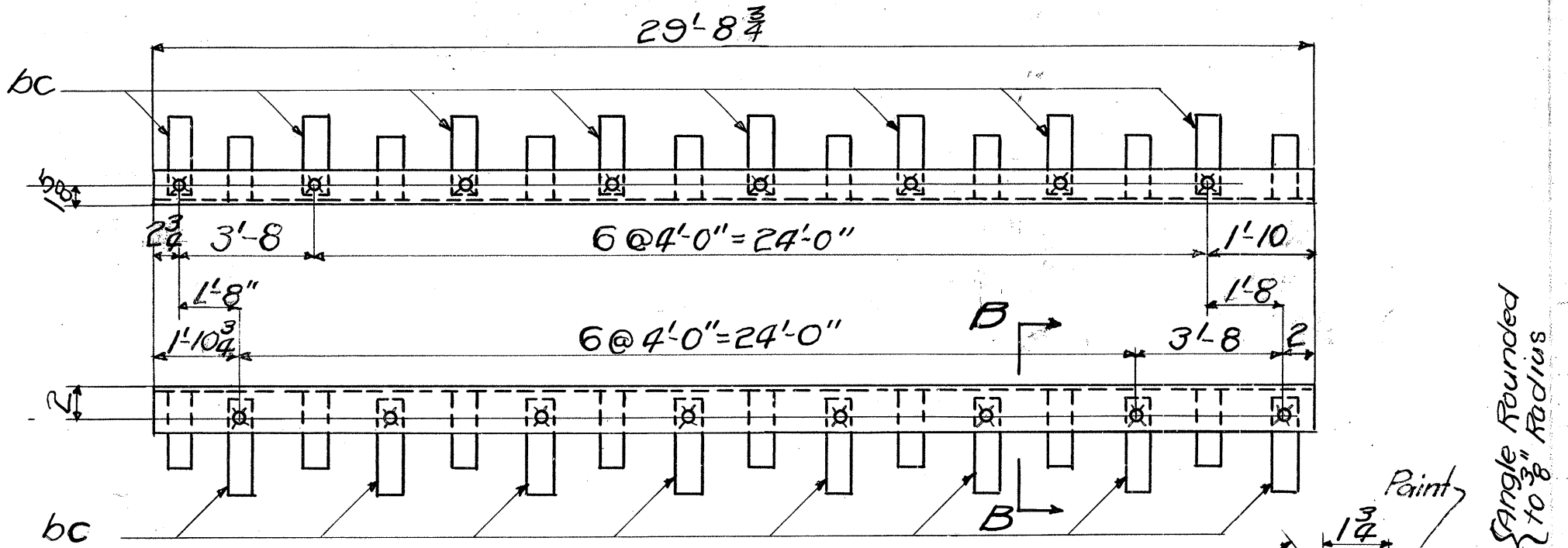
Paint 3 1/2 x 2 1/2 L-as noted 1  
 No Paint For 2 1/2 x 1/2 Anchors 2  
 Reaming-None

RKD  
 E.G.B. 5 29 29

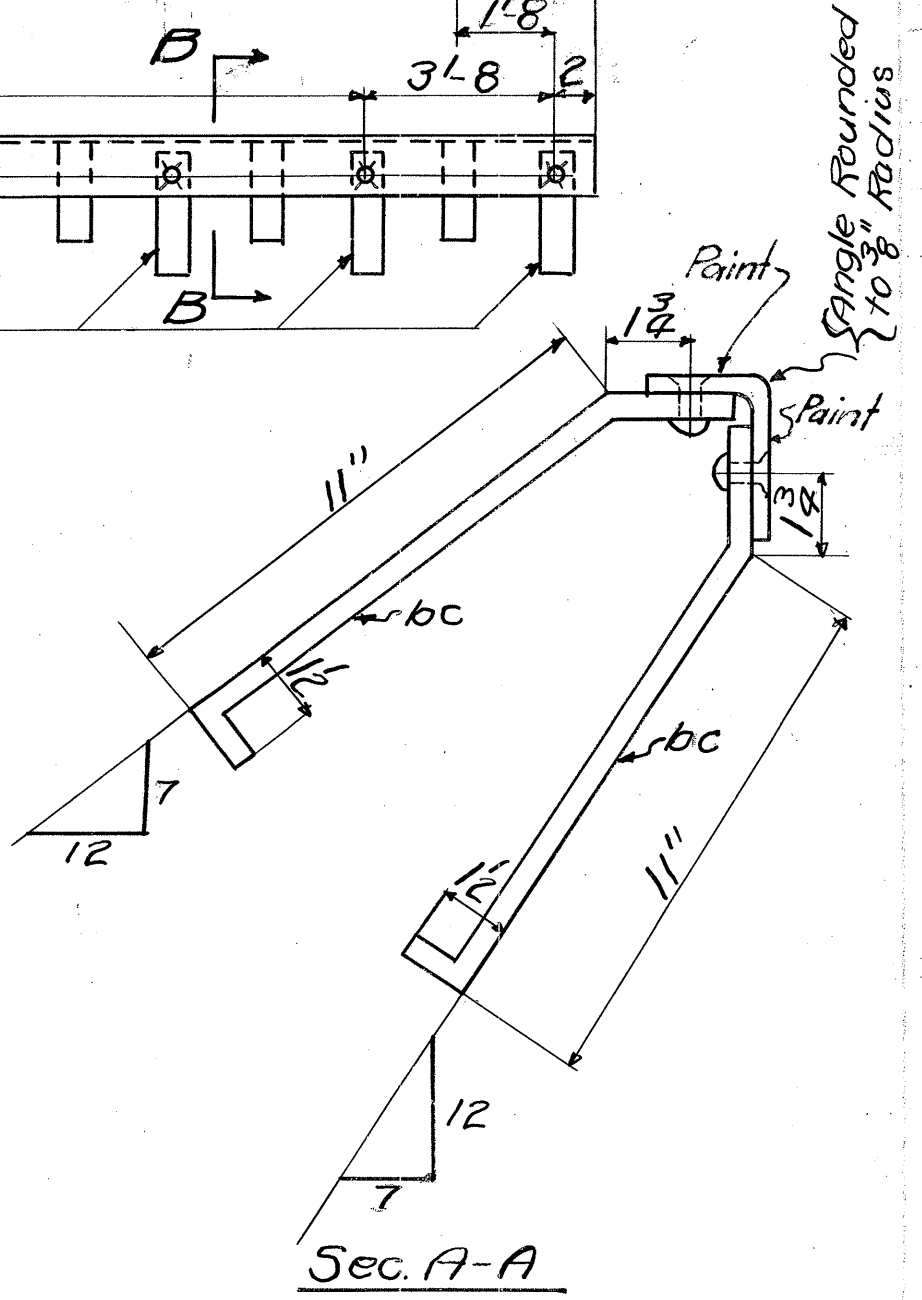
5 29  
 29

Amb.

ORDER No. F5947  
 SHEET No. F14



**CURB ANGLE M7**  
 $L - 3\frac{1}{2} \times 2\frac{1}{2} \times \frac{3}{8}$



6-28-29  
 Rev. - 6-12-29

NO. Pcs.	SHAPE	LENGTH	MARK	ORDERED	NO. Pcs.	SHAPE	LENGTH	MARK	ORDERED
2	L-3 1/2 x 2 1/2 x 3/8	29 8 3/4		30-0 81					
32	bars	24 1/2	bc	22-7 83					

Paint  $3\frac{1}{2} \times 2\frac{1}{2}$  L-as noted 1  
 NoPaint For  $24 \times \frac{1}{2}$  Anchors 2  
 Reaming-None

RKD  
 EGB 5 29 29

DATE  
 5/29  
 1929

DRAWING'S  
 Amb.

ORDER No.  
 F5947

SHEET No.  
 F15

**NS 184-04-291**

# AMERICAN BRIDGE COMPANY

LINE NO.	NO. PCS.	DIAM.	RIVETS		BOLTS					GRIP	REMARKS	CALCULATED WEIGHT TOTAL	SHIPMENTS
					LENGTH UNDER HEAD	HEAD	NUT	WASH-ER	TYPE OF BOLT				
1													
2	910	7/8	2 1/4										
3	15	"	2 1/2										
4	315	"	2 5/8										
5	465	"	2 3/4										
6	15	"	2 7/8										
7	15	"	3 1/8										
8	130	"	3 1/4										
9	15	"	3 5/8										
10	40	"	3 3/4										
11	45	"	3 7/8										
12	125	"	4										
13	85	"	4 1/8										
14	290	"	4 1/4										
15	25	"	4 3/8										
16	20	"	4 1/2										
17	210	"	4 5/8										
18	25	"	5 1/8										
19													
20													
21													
22	460	3/4 φ	2 1/8										
23	165	"	2 1/4										
24													
25													
26	180	5/8 φ	1 7/8										
27	50	"	2										
28													
29													
30													
31	10	1 1/4 φ	<del>2 1/8</del>	<del>Hex</del>	5 1/4	Hex	Hex	2 1/4 x 1/4					
32	12	1 1/4 φ	<del>2 1/4</del>	<del>"</del>	5 1/2	"	"	2 1/4 x 1/4					
33													
34													
35													
36													
37													
38													
39													
40													
41													
42													
43													
44													
45													
46													

**NS 184-04-291**

FIELD RIVETS AND BOLTS

DATE NAME	DATE	DRAWINGS
HEW	July 1st 1929	5
		FABRICATION
		Ambridge

ORDER No. **F5947**

PAGE No. **F16**

NAME OF STRUCTURE

Br# 182.80 - E 9th St. Cleveland. Ohio. N.Y.C. & St. L. R.R. Co.