

GENERAL NOTES
 Field welds: The following plates and angles to beams, M. 6-C
 6-8" x 6-8" x 1/2" x 1/2" x 1/2"
 All other plates and angles to be shop welded to beams
 All field and shop welding shall conform to the details shown.
 Abbreviation B.S. means both sides.
 Steel fabricator may substitute shop riveting for shop
 welding if all outstanding legs of stiffener angles are
 ground and milled to give full bearing against
 flanges of beams.
 The length of all welds shown or called for is the
 effective length. Not less than 2 inches shall be added
 to the effective length at each end of welds for starting
 and stopping the arc.

CITY OF DETROIT
 DEPARTMENT OF PUBLIC WORKS
 OFFICE OF CITY ENGINEER
 EAST GRAND BOULEVARD VIADUCT
 BETWEEN RIOPELLE & ST. AUBIN
 DETAILS - STEEL DECK

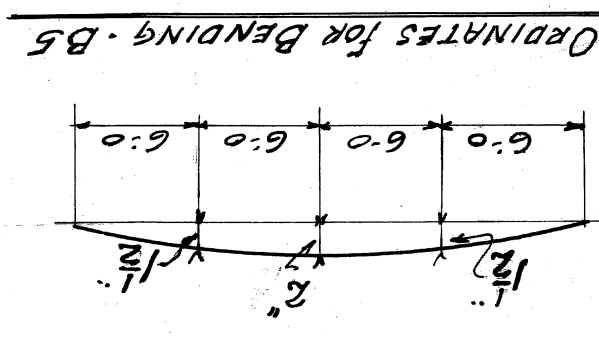
Scale 1/4" = 1'-0"
 Made by M.H. Heen. JUNE 25, 1934
 Checked by: R.S. REVISED July 31, 34

Approved: *[Signature]* City Engineer

EAST END APPROACH

WEST END APPROACH

T-Grating starts here



ORIPINATES for BENDING - BS

Provide

DETAIL OF FIELD SPLICE OF TOP FLANGE OF B1 & B1 incl

SECT. E.E.

DETAIL E

DETAIL D

SECT. D.D.

DETAIL A

SECT. A.A.

DETAIL B

SECT. B.B.

DETAIL C

SECT. C.C.

DETAIL H

SECT. H.H.

DETAIL F

SECT. F.F.

DETAIL G

SECT. G.G.

DETAIL W

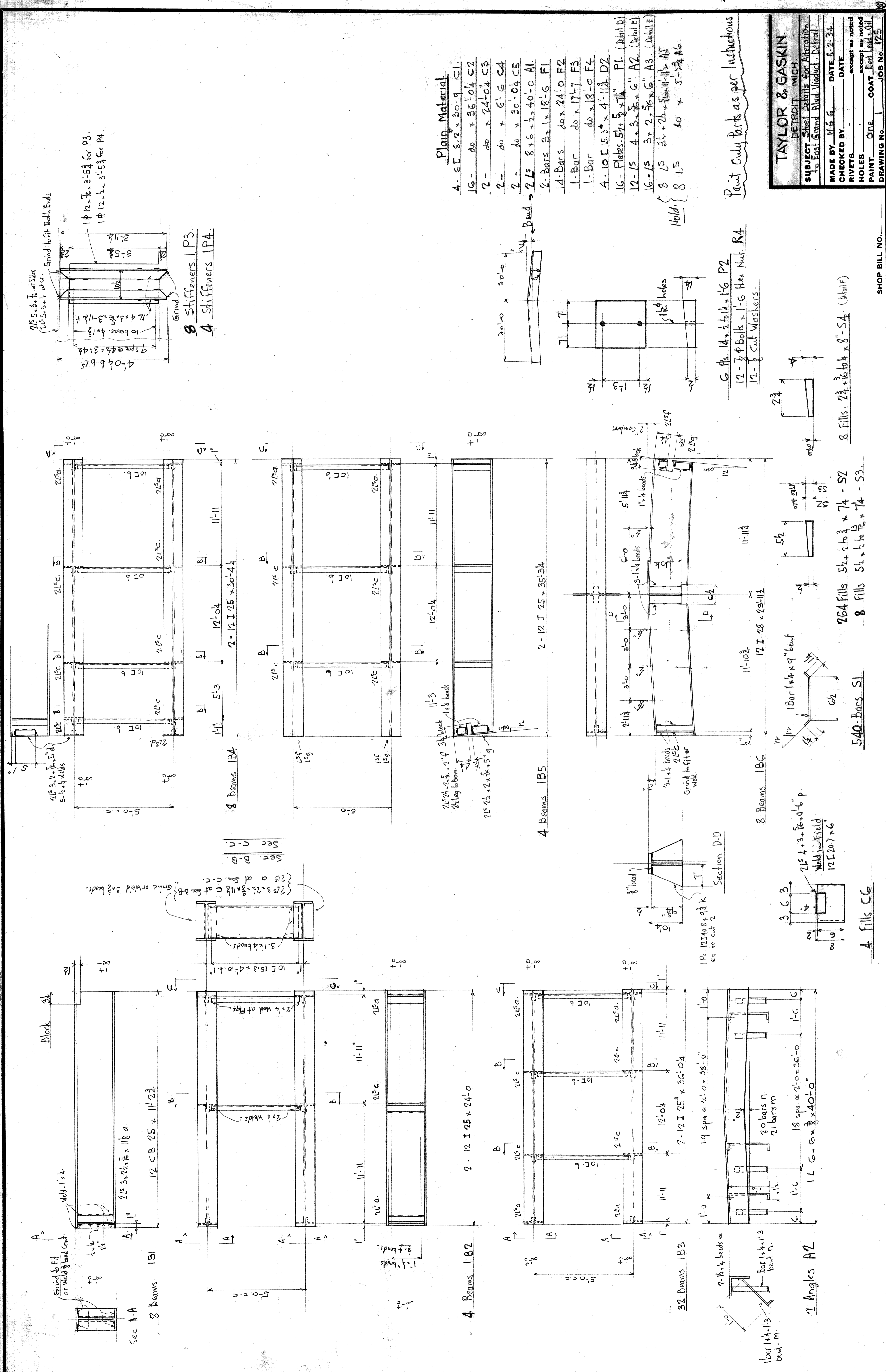
SECT. W.W.

DETAIL I

SECT. I.I.

DETAIL J

SECT. J.J.



Plain Material

A-6C	8-2 x 30-9	C1
16-	do	x 36-04 C2
2-	do	x 24-04 C3
2-	do	x 6-6 C4
2-	do	x 30-04 C5
2 Ls	8 x 6 x 1/2	40-0 A1
2 Bars	3 x 1 x 1/8	6 F1
14 Bars	do x 24-0	F2
1 Bar	do x 17-7	F3
1 Bar	do x 18-0	F4
4-10 I	15.3 x 4-11/2	D2
16- Plates	5/8 x 7/4	P1 (Detail D)
12- Ls	4 x 3 x 5/8	A2 (Detail E)
16- Ls	3 x 2 x 5/8	A3 (Detail F)
8 Ls	3/4 x 2 1/2 x 5/8	11-1/2 AS
8 Ls	do x 5-3/4	AG

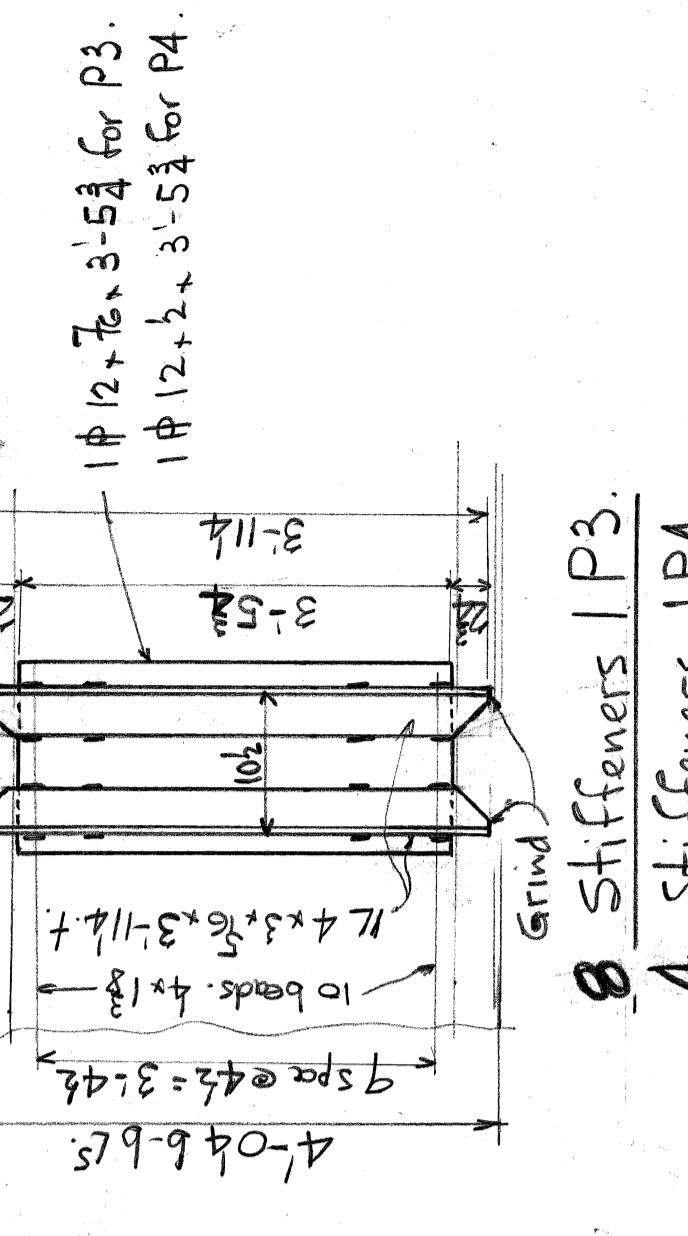
Paint Only parts as per instructions

TAYLOR & GASKIN
DETROIT MICH

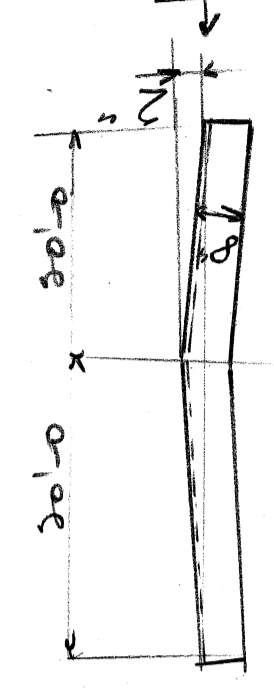
SUBJECT: Steel Details for Alteration
To East Grand Blvd Viaduct - Detroit

MADE BY: N.G.G. DATE: 8-2-34
CHECKED BY: DATE: _____
RIVETS: _____ except as noted
HOLES: _____ except as noted
PAINT: _____ COAT: _____
DRAWING NO. _____ JOB NO. 125

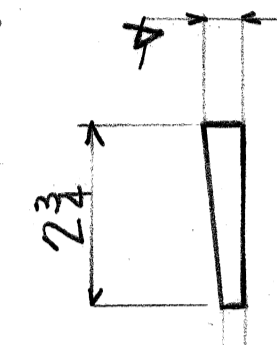
File X087-7



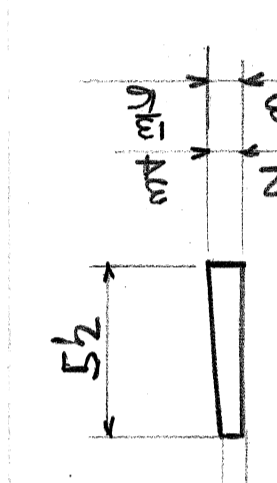
8 Stiffeners IP3.
4 Stiffeners IP4.



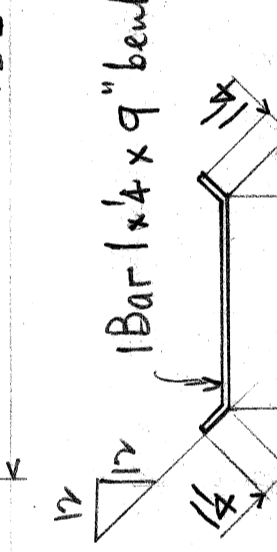
6 Pls. 1/4 x 2-1/2 x 1-6 P2
12- 3/8 Bolt x 1-6 Hex Nut R4
12- 8 Cut Washers.



8 Fills. 2-3/4 x 16-0 x 8-5/4 (Detail F)

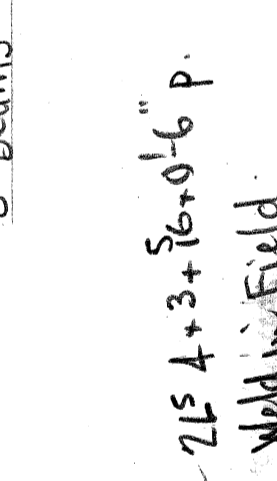


264 Fills 5-1/2 x 16-3/4 x 7-4 x 8-5/4



8 Fills 5-1/2 x 16-3/4 x 7-4 x 8-5/4

540 Bars S1



4 Fills C6

Section D-D

1 Pl. 12-140.8 x 9 1/4 k ea to cut 2

8 Beams 1B6

8 Beams 1B4

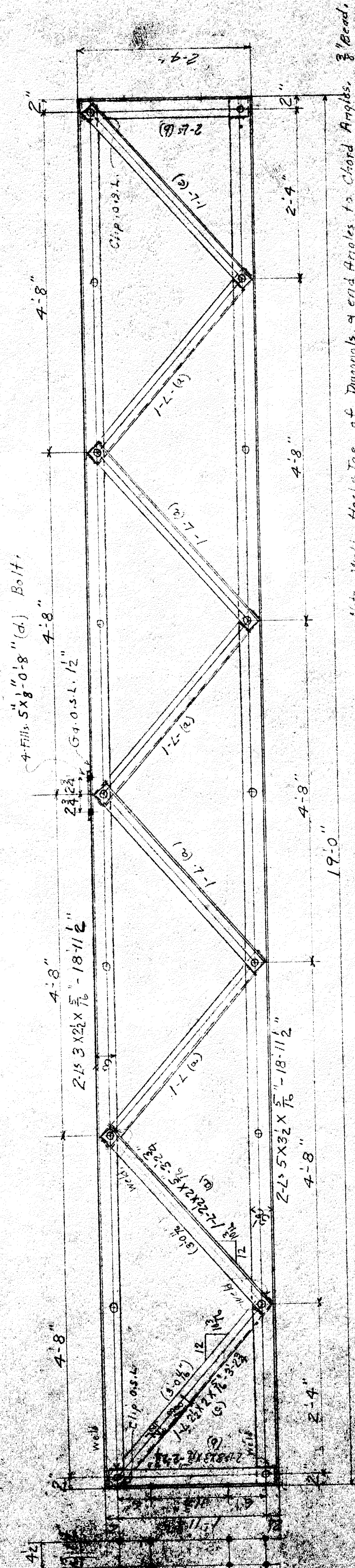
4 Beams 1B5

4 Beams 1B2

32 Beams 1B3

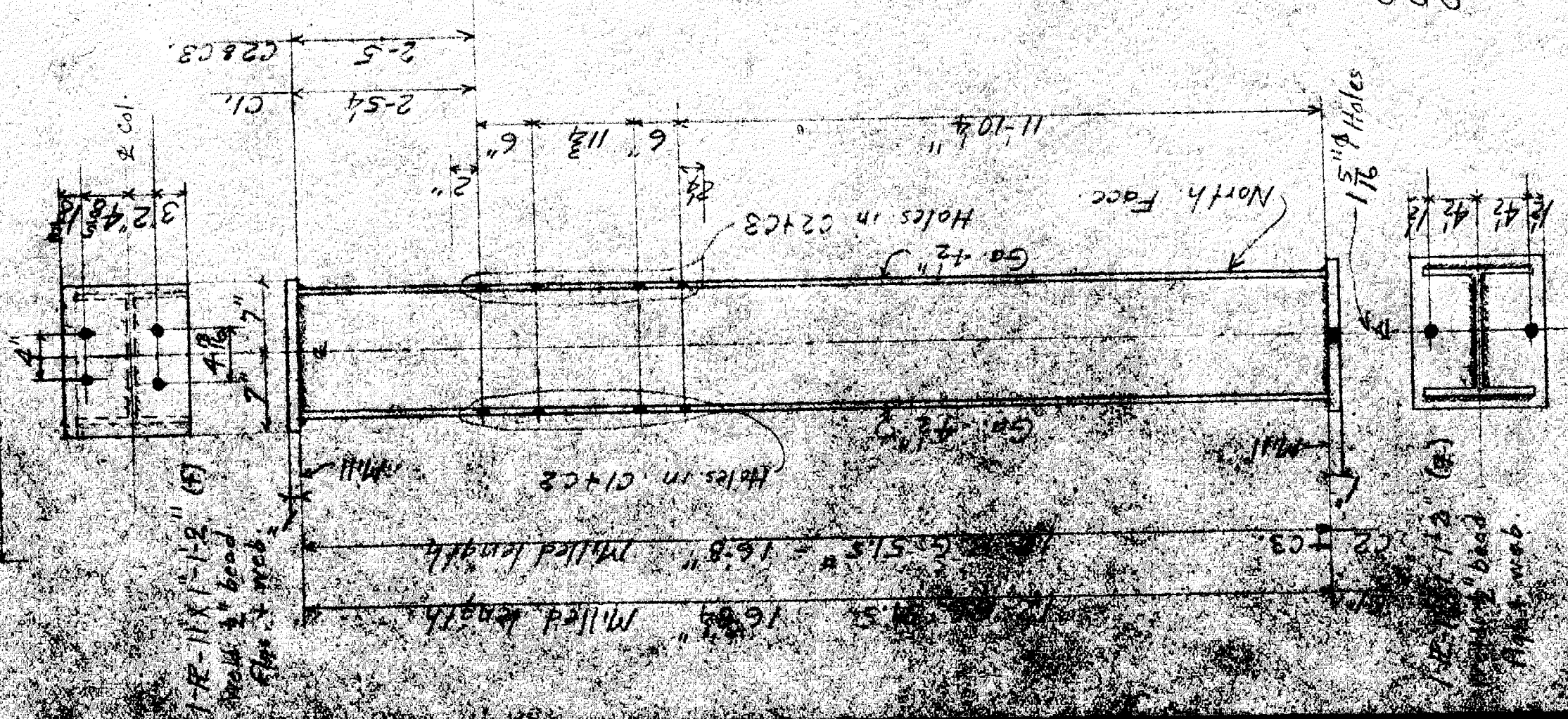
2 Angles A2

SHOP BILL NO.



Note: Welds, Heel & Toe of Diagonals, & end Angles to Chord Angles. 3/8" Bead.

2- Struts M.k. 151



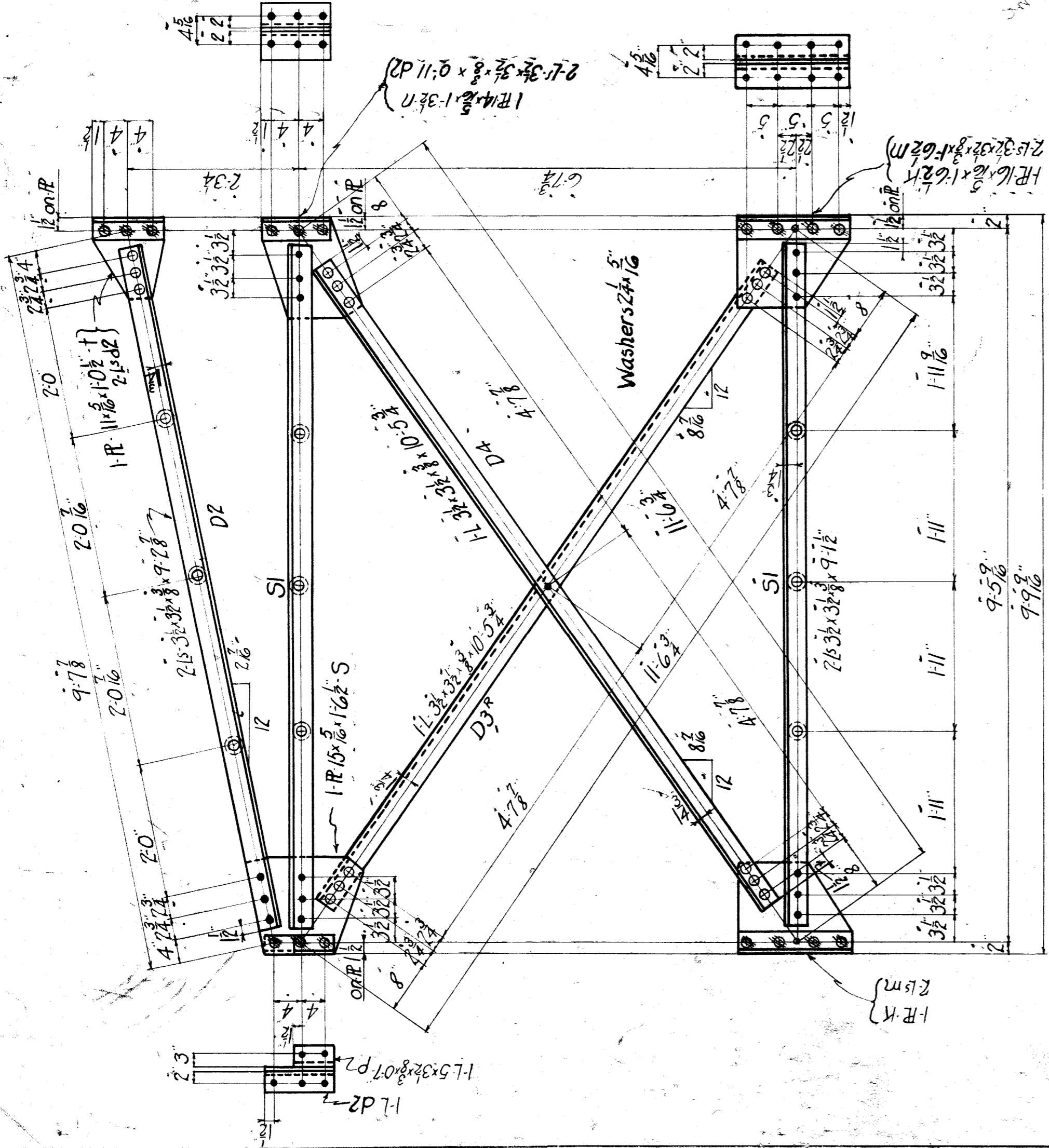
One Column. 1 C1.
One " " 1 C2.
One " " 1 C3.

Taylor & Co. Inc.
Engineers & Architects
100 No. 51st St.
New York, N.Y.

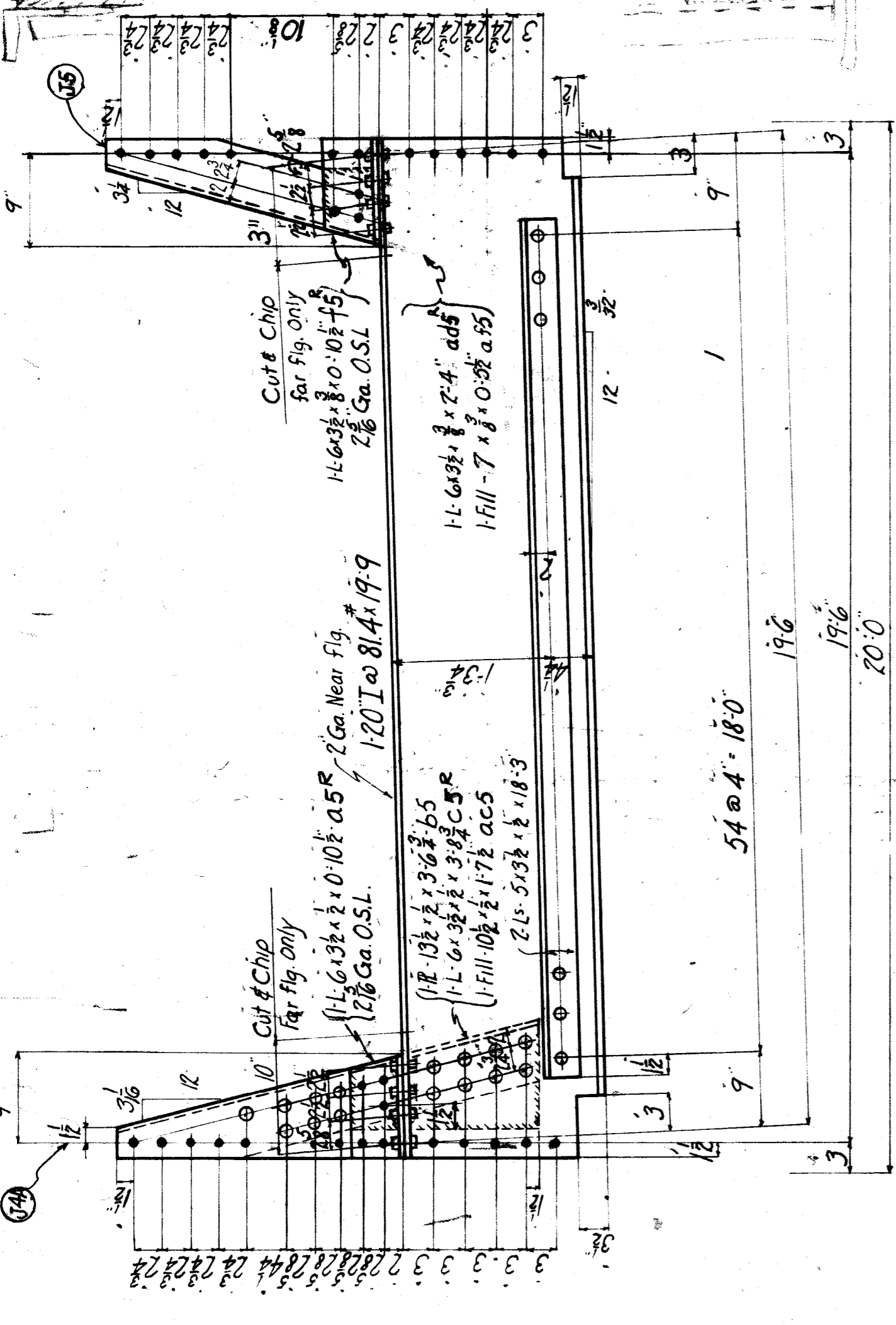
SUBJECT East Grand Blvd. Viaduct, N.Y.C. Subway
Details New Cols. & Struts, East Approach

MADE BY J.E.B. DATE 9-12-34
CHECKED BY DATE
RIVETS 3/4" except as noted
HOLES 5/16" except as noted
PAINT Oils. COAT R.L. TOLL
DRAWING NO. 1 JOB NO. 51616

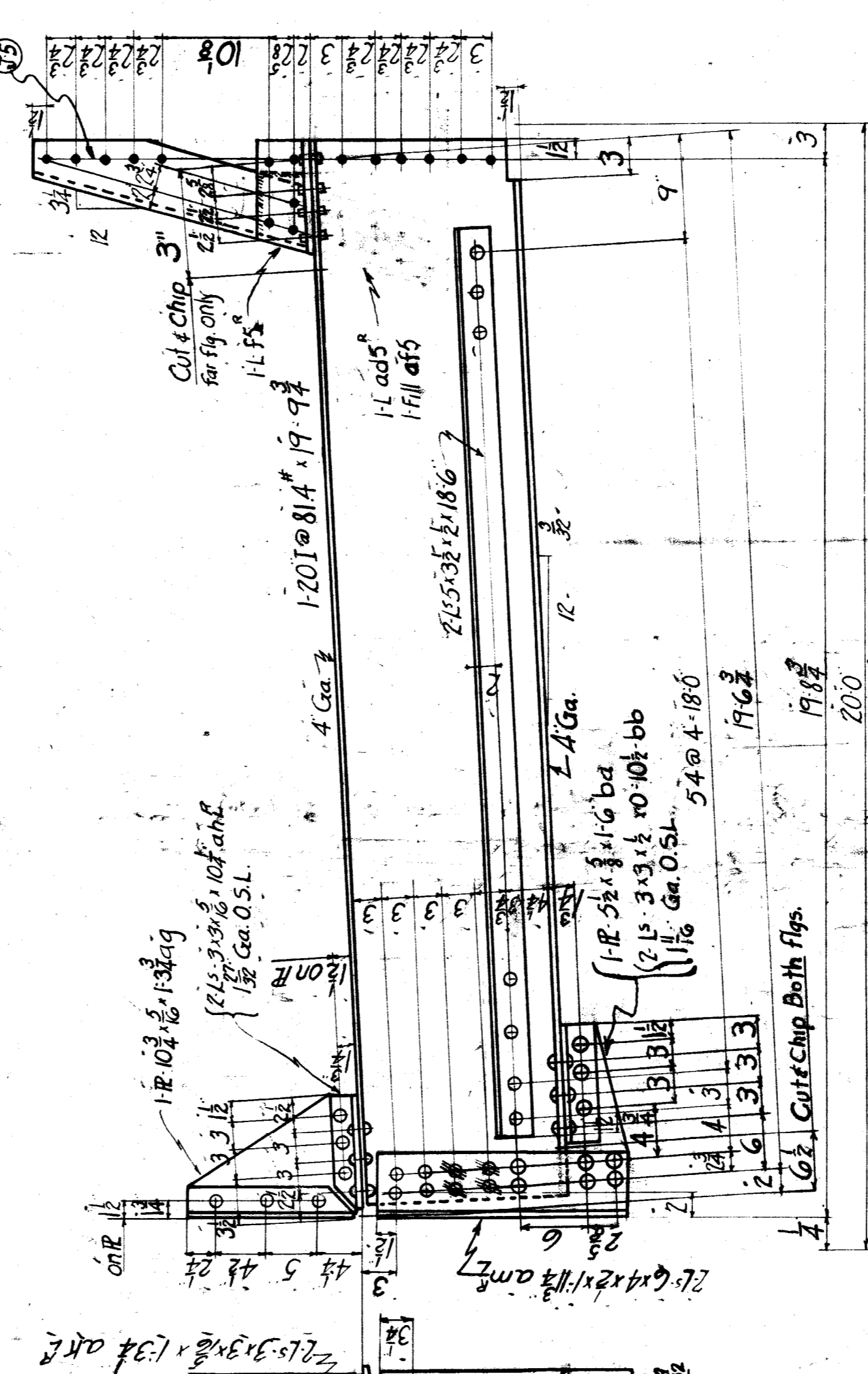
SHOP BILL NO. 8



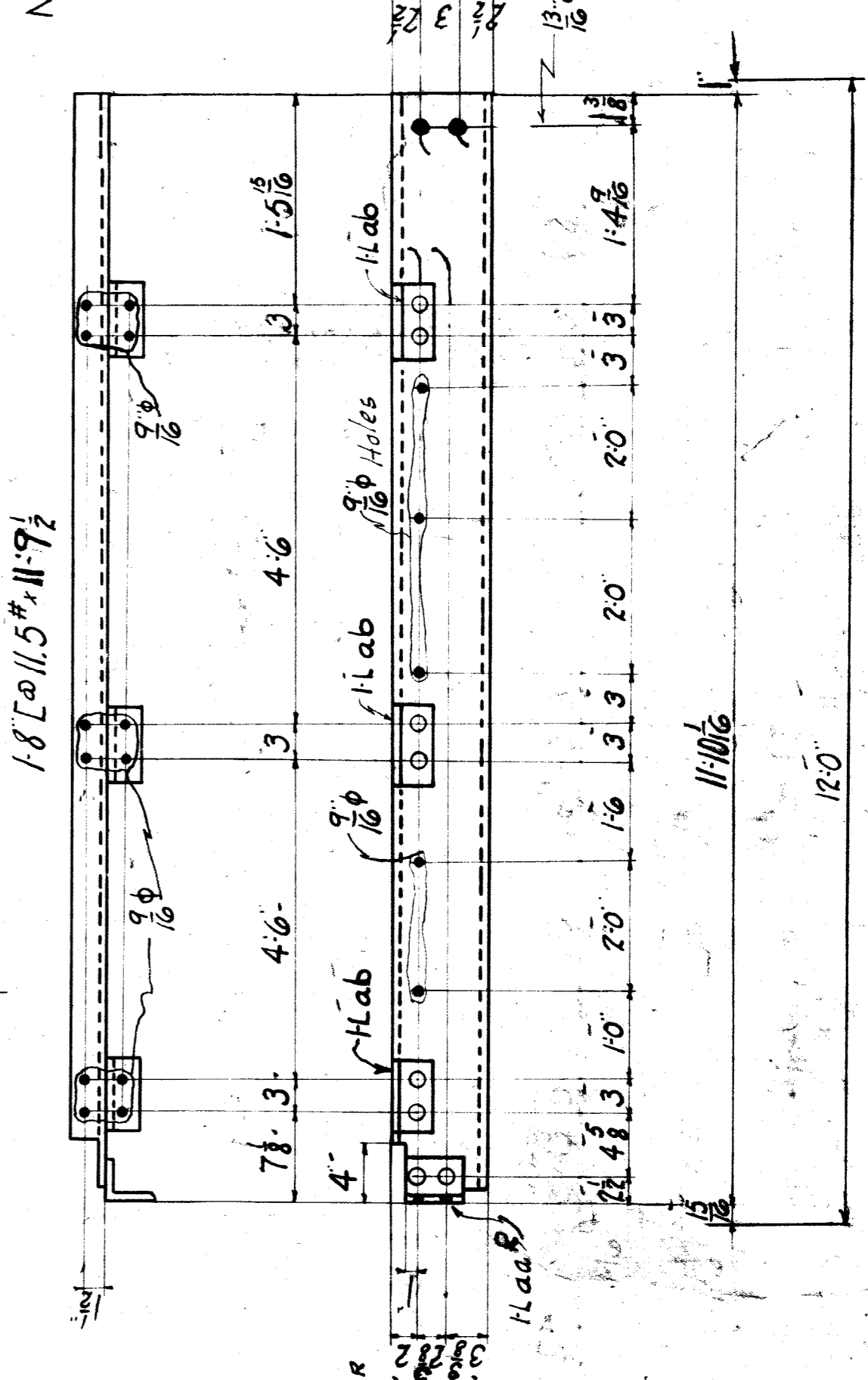
I Braces - D1 as shown
D1 Opp hand



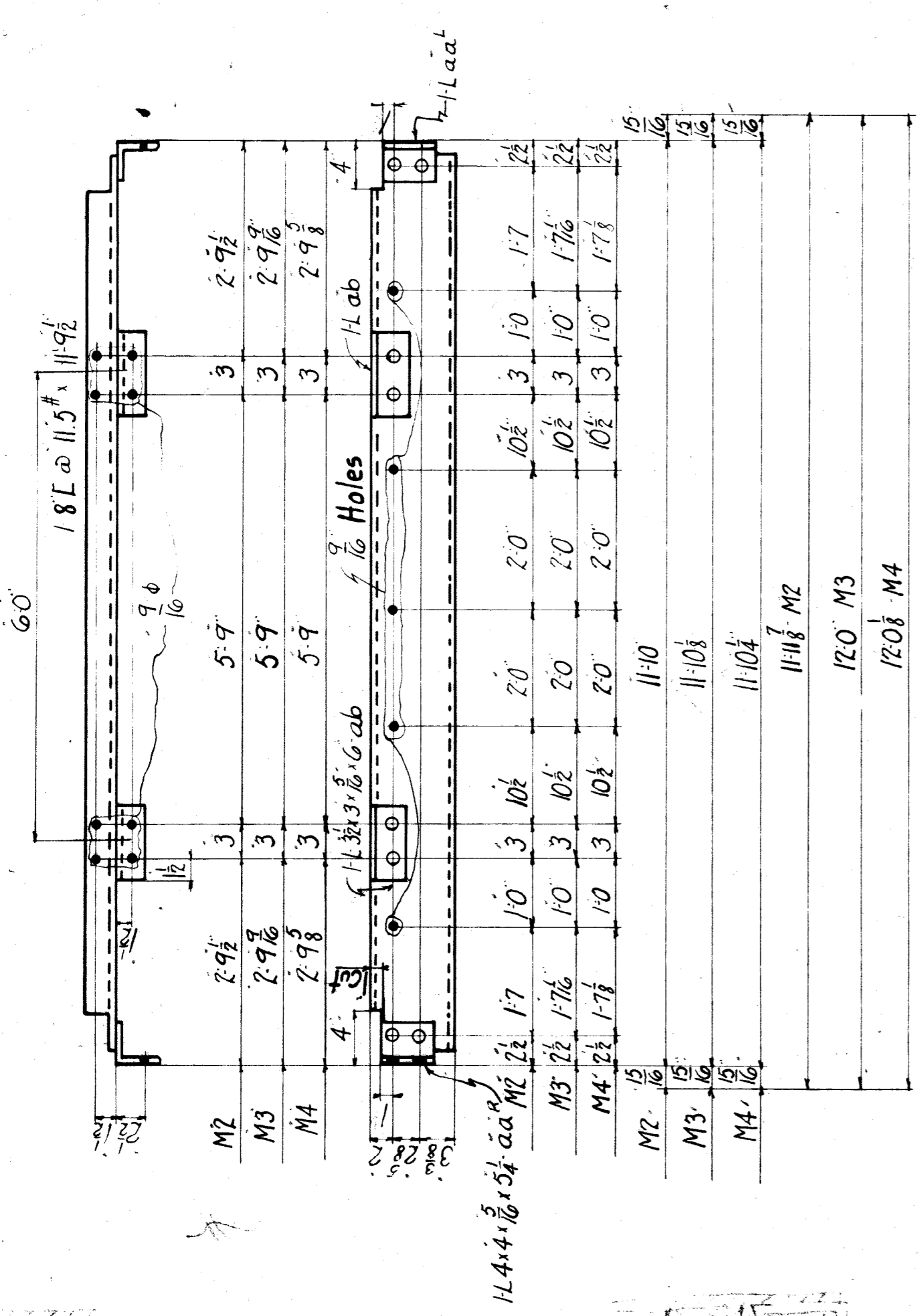
I2 Beams B1 as shown
I4 Opp hand



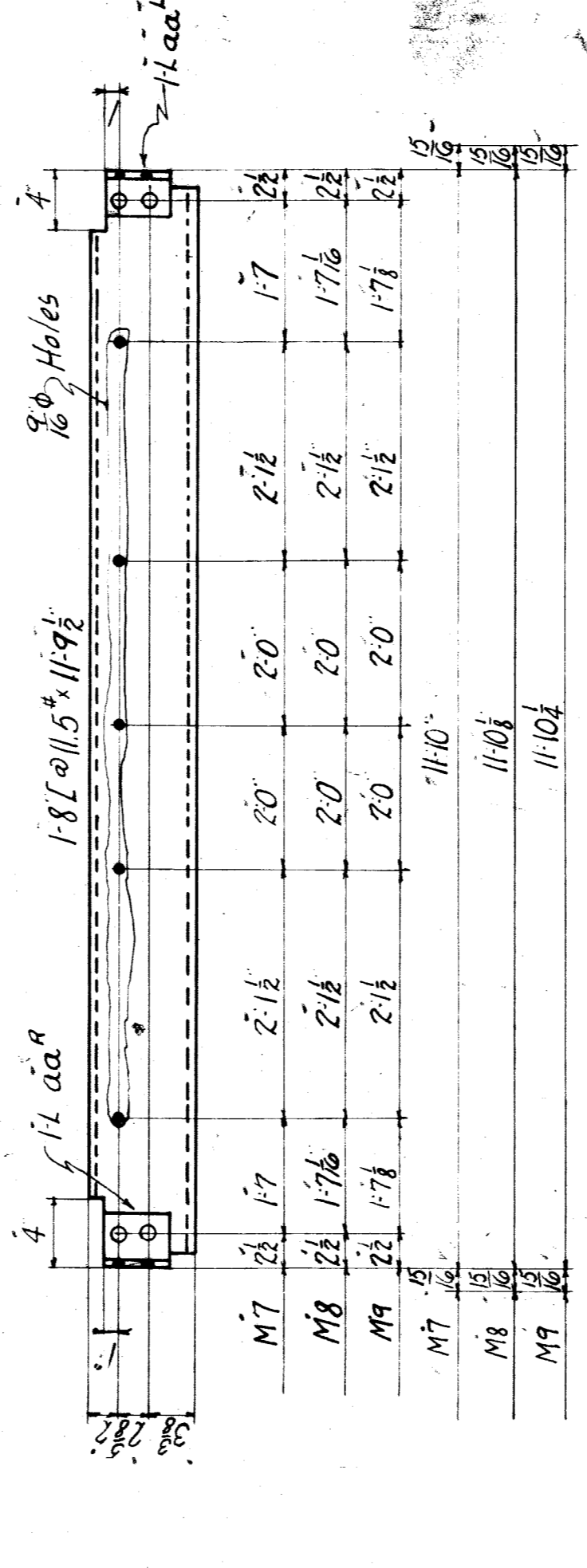
I Beam B2



I Sidewalk Stringers M6 as shown
M6 Opp hand



10 Sidewalk Stringers M2
M2
M3
M4

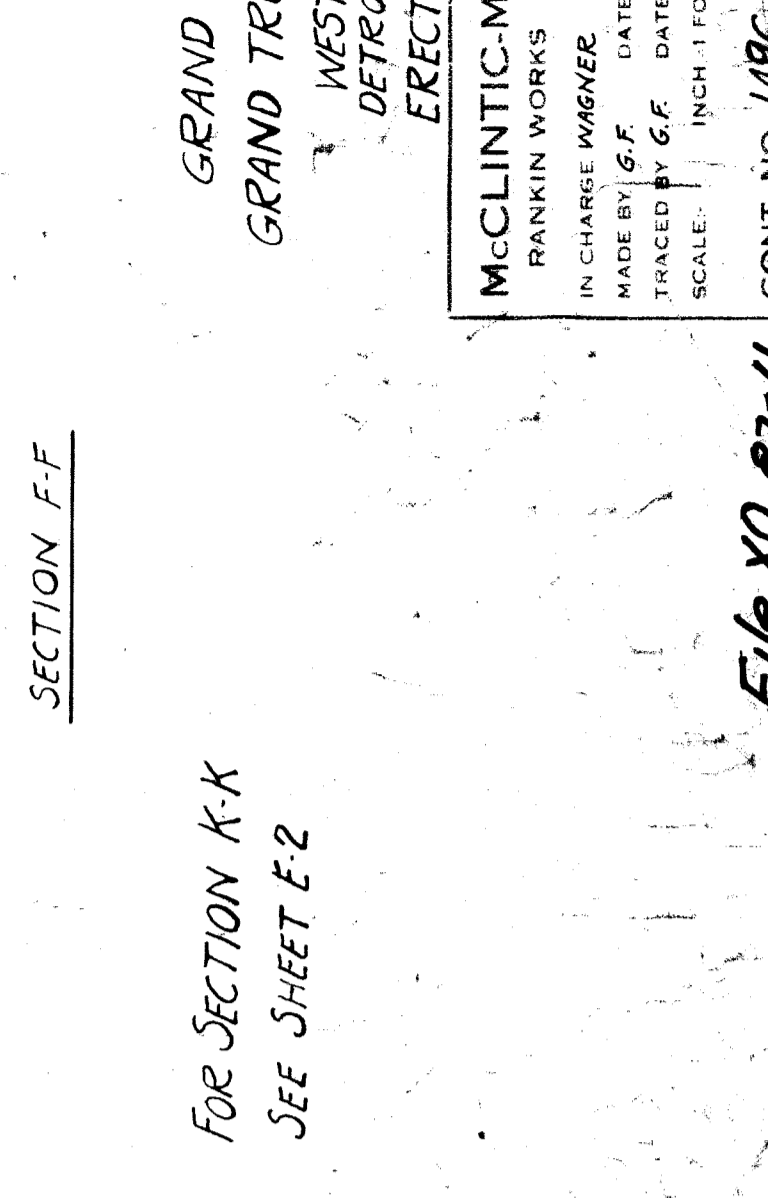
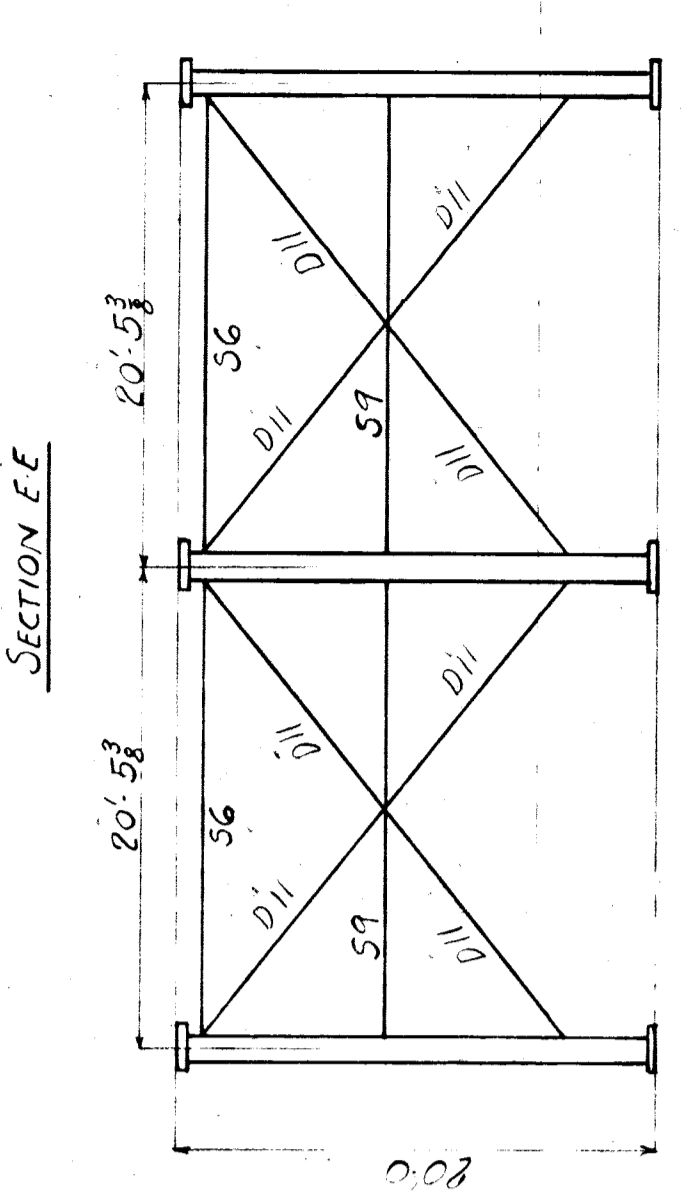
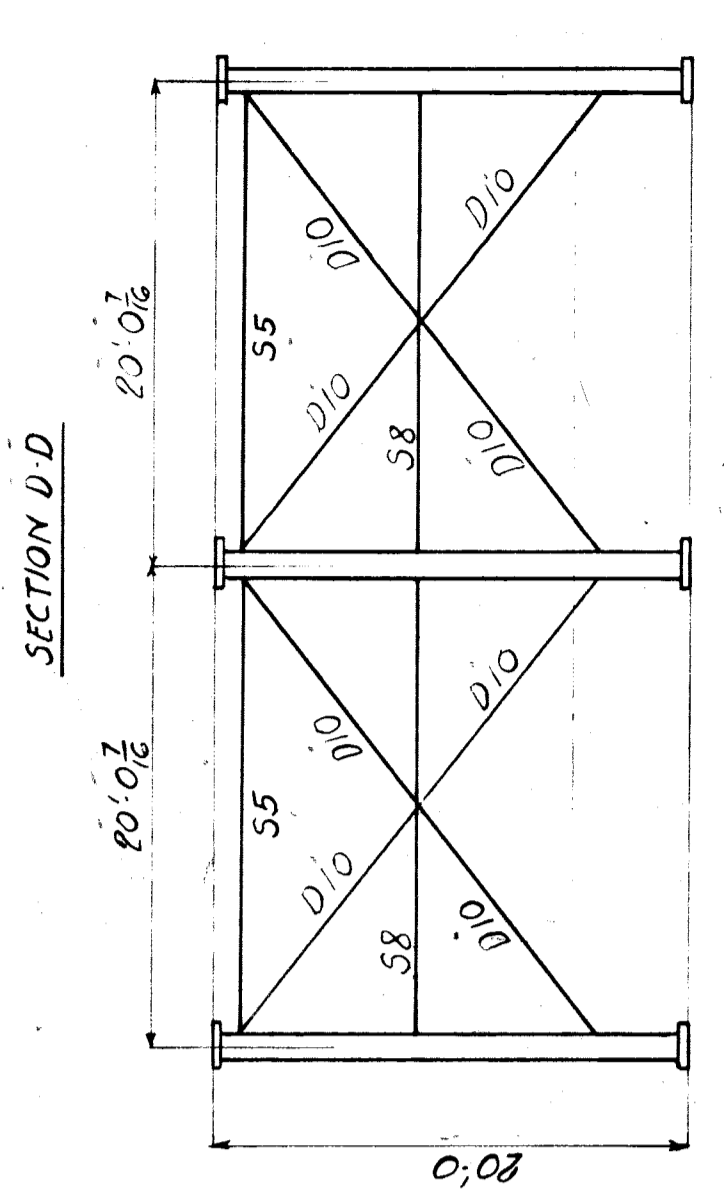
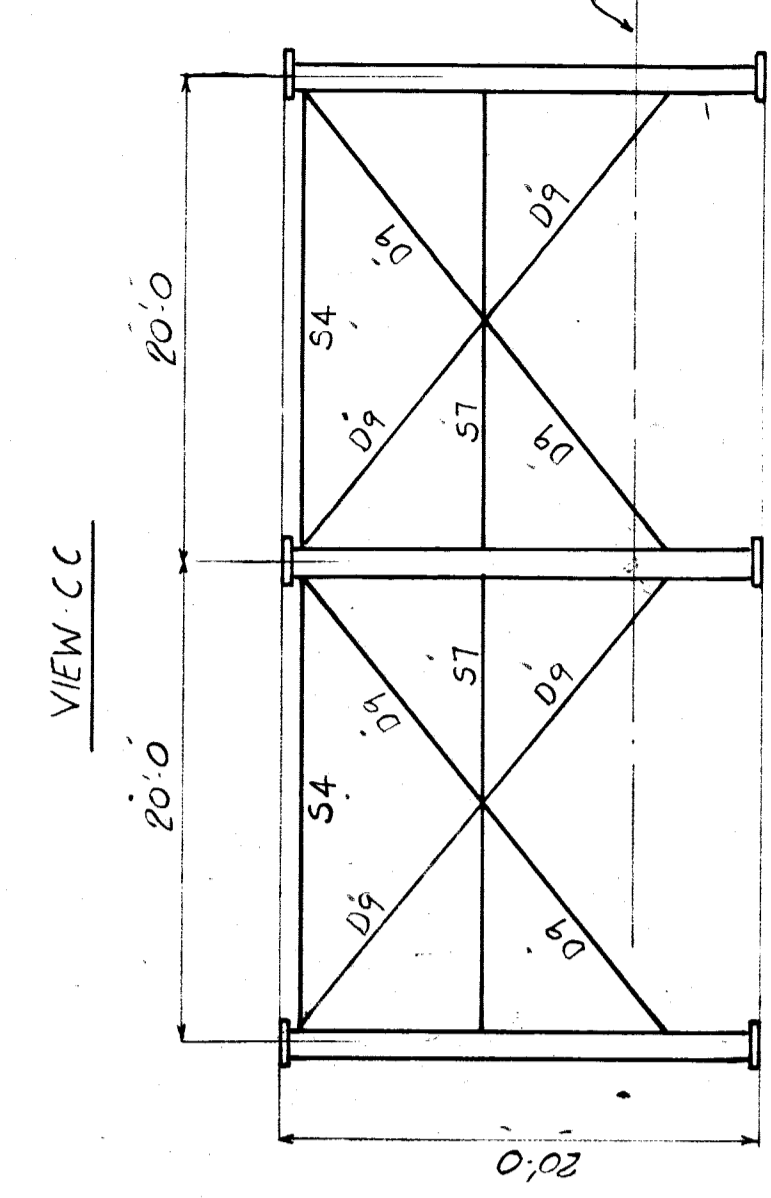
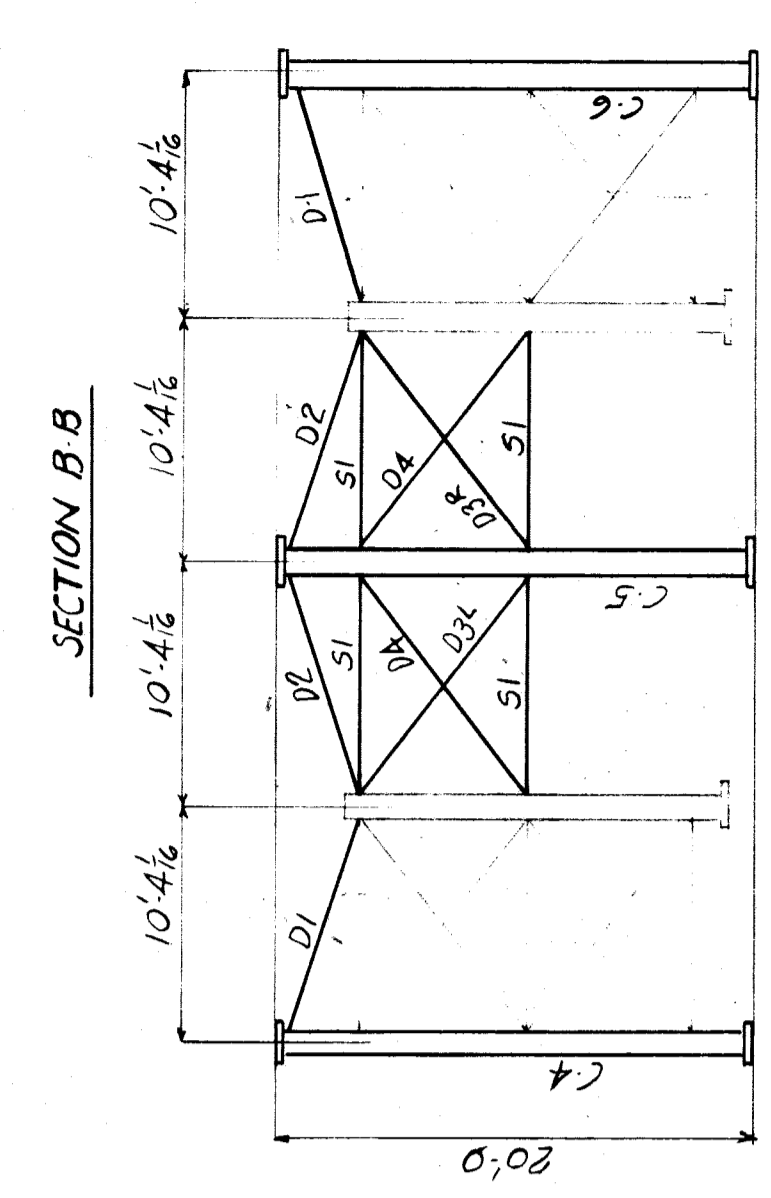
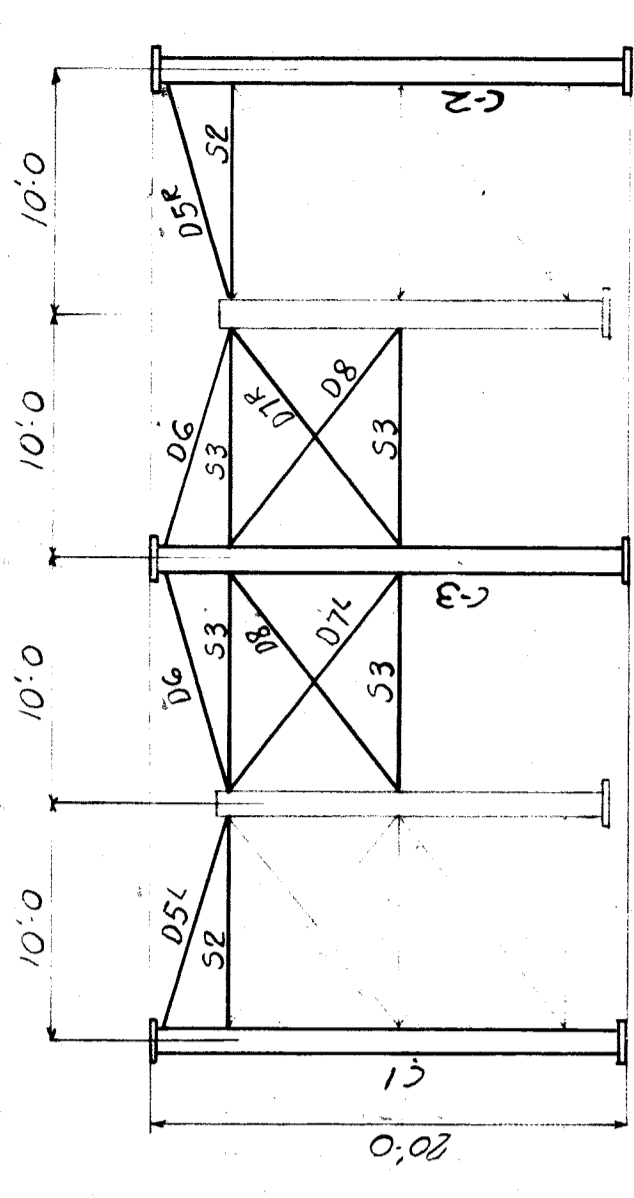
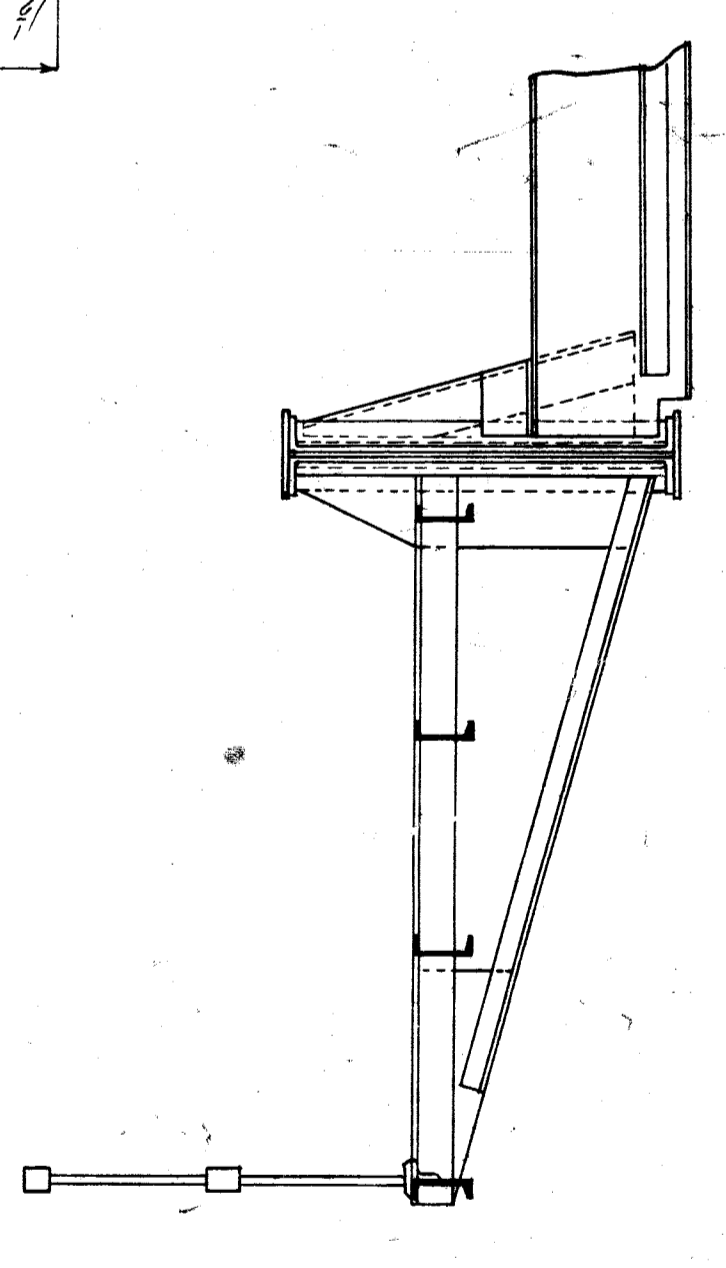
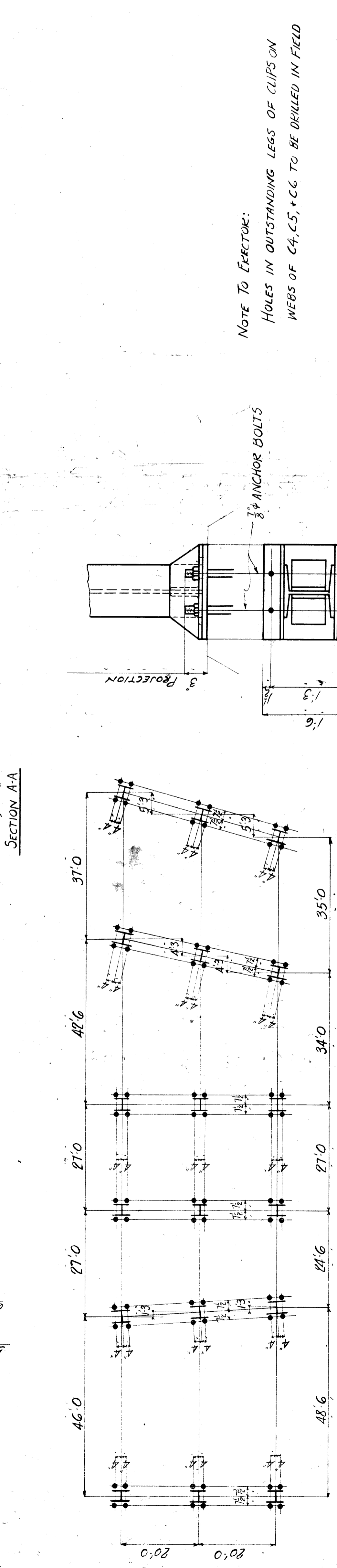
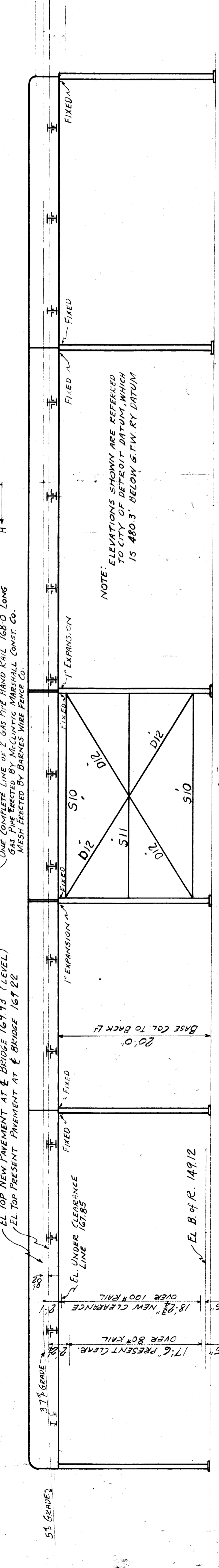
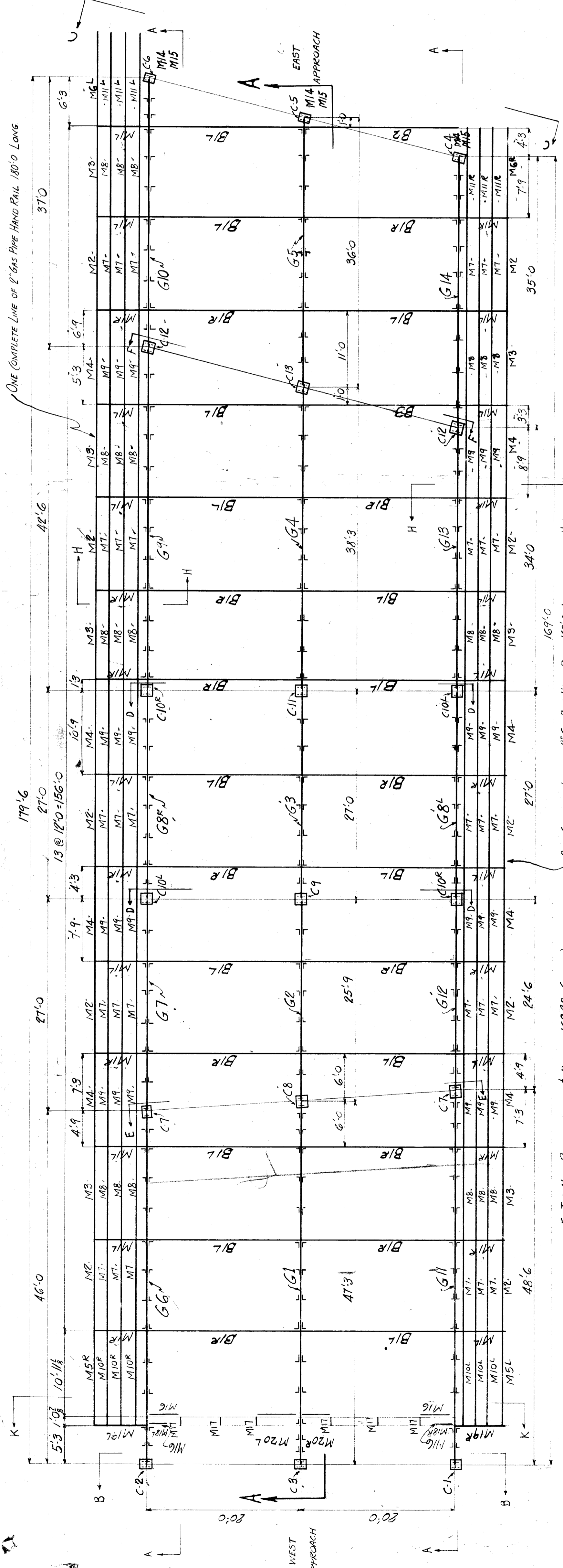


30 Sidewalk Stringers M7
M7
M8
M9

18 L x 11.5 x 11.9 1/2

Notes:
Rivets 7/8
Holes 1/8 unless noted
Paint One coat of Red Lead and oil
Surfaces inaccessible and in contact to be
given one coat each before assembling.

Grand Boulevard Viaduct
Grand Trunk Railway System
Western Lines
Detroit, Michigan.

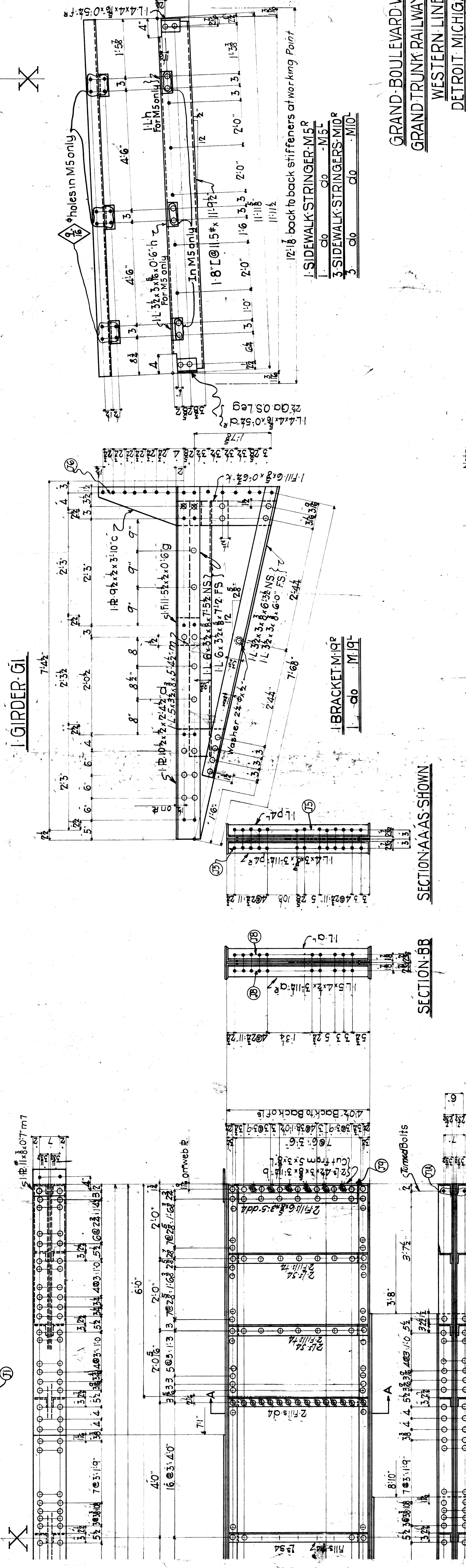
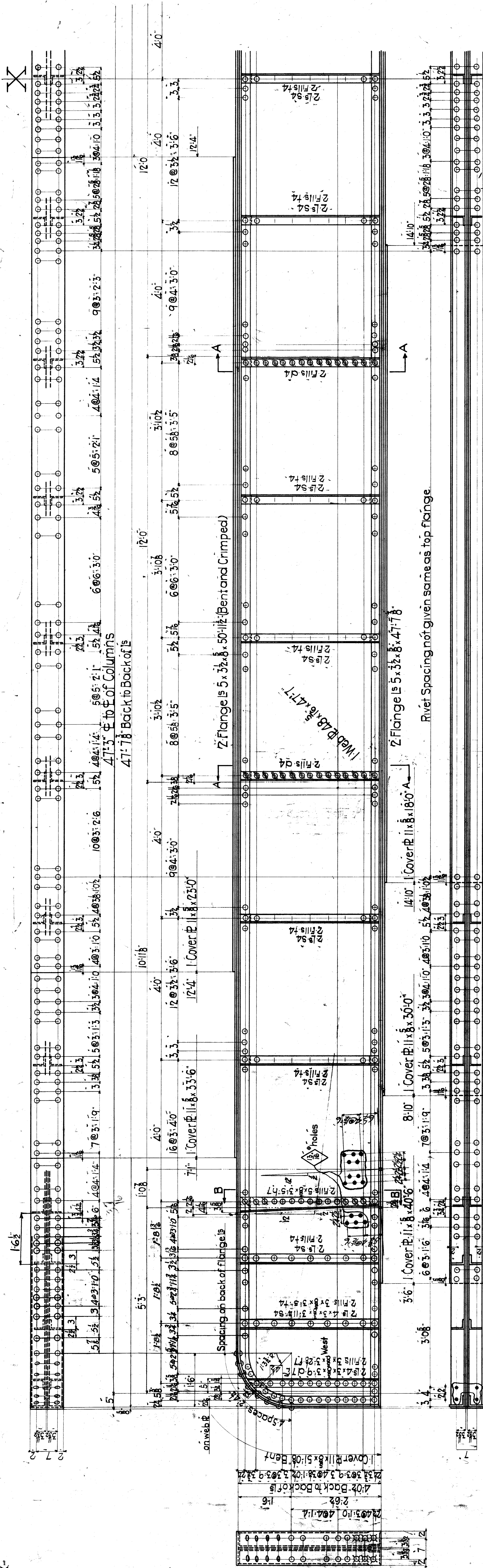


FOR SECTION K-K
SEE SHEET E-2

GRAND BOULEVARD VIADUCT
GRAND TRUNK RAILWAY SYSTEM
WESTERN LINES
DETROIT, MICHIGAN
ERECTION DIAGRAM

McCLINTIC-MARSHALL CONST. CO.
PITTSBURGH, PA.
RANKIN WORKS
IN CHARGE WAGNER
MADE BY G.F.
DATE 5/25/25
TRACED BY G.F.
DATE 5/25/25
SCALE: 1" = 1'-0"
LAST ASSEMBLING MARK

File XO 87-11 CONT. NO. 1496 SHEET NO. E1



GRAND BOULEVARD VIADUCT
 GRAND TRUNK RAILWAY SYSTEM
 WESTERN LINES
 DETROIT MICHIGAN
 GIRDER BRACKETS & STRINGERS

Note: -
 Rivets 3/4" unless noted
 Open holes 1/8" unless noted
 All holes marked thus: (1) to be subpunched 1/4" and reamed to 1/8" to an iron template.
 Paint - One coat of Red Lead and oil
 Surfaces inaccessible and in contact to be given one coat each before assembling.

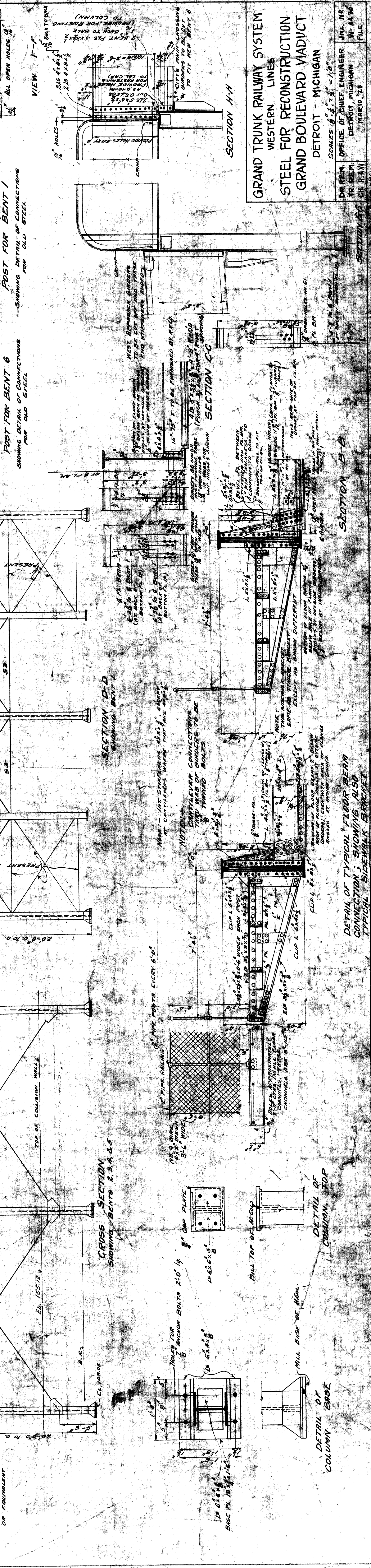
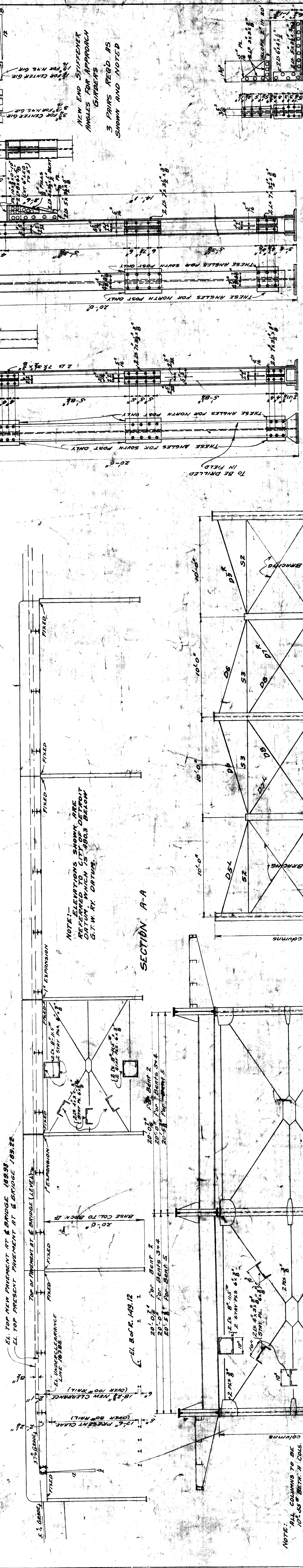
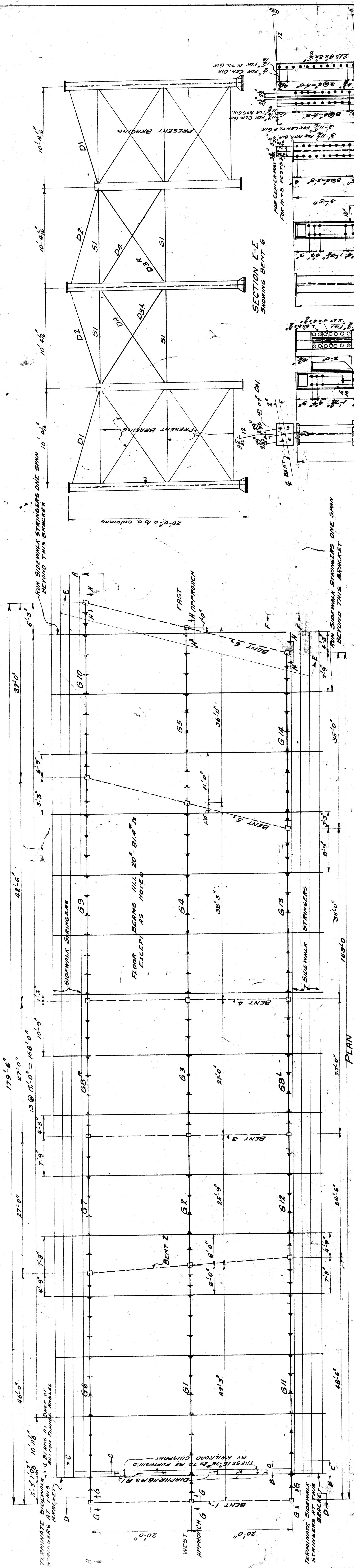
MCCONTIC-MARSHALL CONST. CO.
 PITTSBURGH, PA.
 WAGNER
 CHECKED BY G.F. DATE 5-20-24
 MADE BY H.W.C. DATE
 REVISION DATE
 SCALE: INCH = FOOT
 LAST ASSEMBLING MARK
 CONT. NO. 1496 SHEET NO. 8

File X007-12

**GRAND TRUNK RAILWAY SYSTEM
WESTERN LINES
STEEL FOR RECONSTRUCTION
GRAND BOULEVARD VIADUCT
DETROIT - MICHIGAN**

DR. REA, OFFICE OF CHIEF ENGINEER
TR. DE M., DETROIT, MICHIGAN
CH. RAY, CH. ENGR.
MARCH 28, 1918
J.M. NE, J.M. NE
M-4430
FILE

File No 87-78



NOTE: ELEVATIONS SHOWN ARE PRESENT WHICH SET 400.3 BELOW G.T.M. BY DATE.

NOTE: ALL COLUMNS TO BE 10'-0" DIA. WITH 4 COSS OR EQUIVALENT

DETAIL OF COLUMN BASE

DETAIL OF TYPICAL FLOOR BEAM CONNECTION, SHOWING ALSO TYPICAL SIDEWALK BRACKET

SECTION B-B

SECTION C-C

SECTION D-D

SECTION E-E

SECTION F-F

SECTION G-G

SECTION H-H

SECTION I-I

SECTION J-J

SECTION K-K

SECTION L-L

SECTION M-M

SECTION N-N

SECTION O-O

SECTION P-P

SECTION Q-Q

SECTION R-R

SECTION S-S

SECTION T-T

SECTION U-U

SECTION V-V

SECTION W-W

SECTION X-X

SECTION Y-Y

SECTION Z-Z

MAXIMUM MOMENT

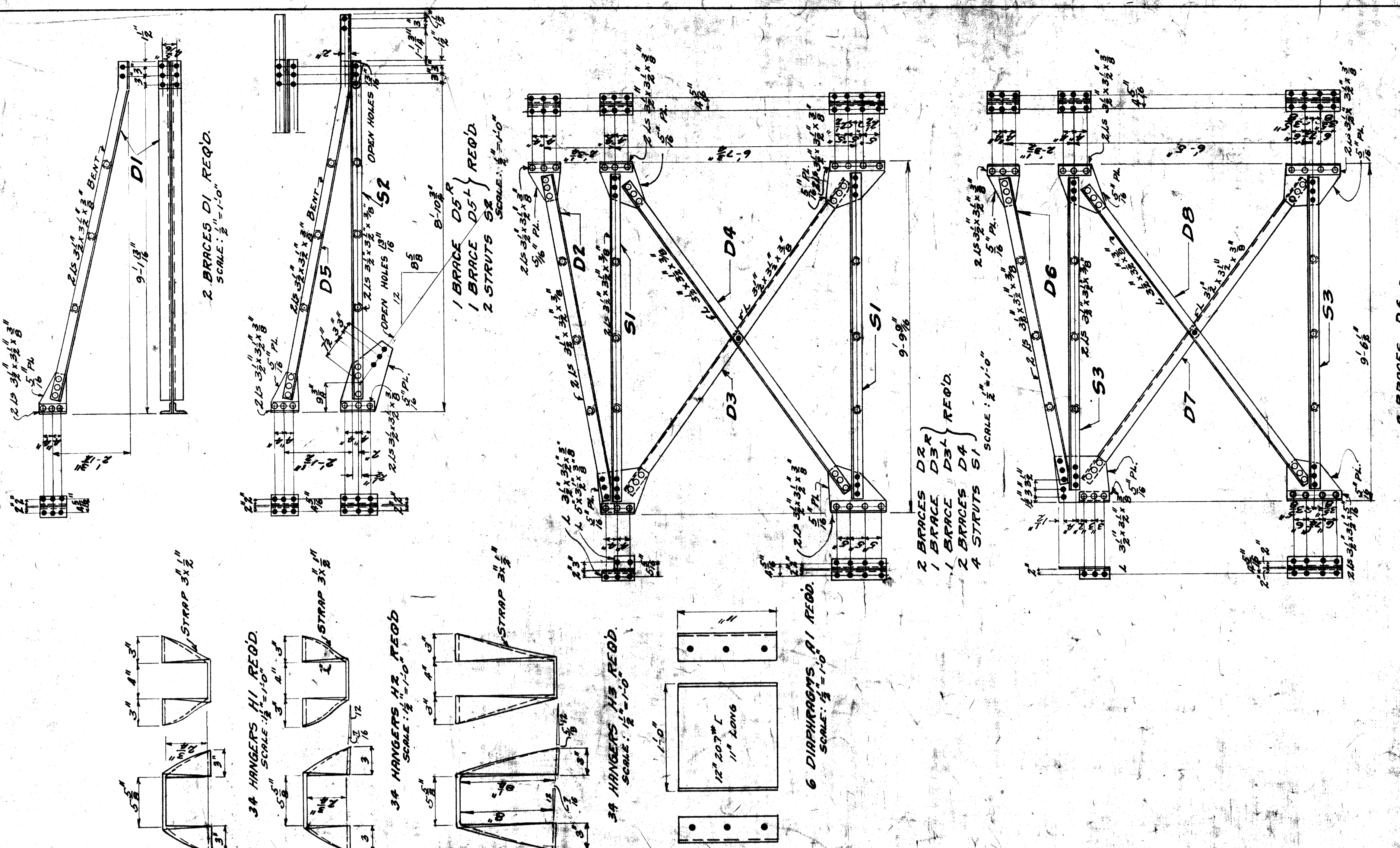
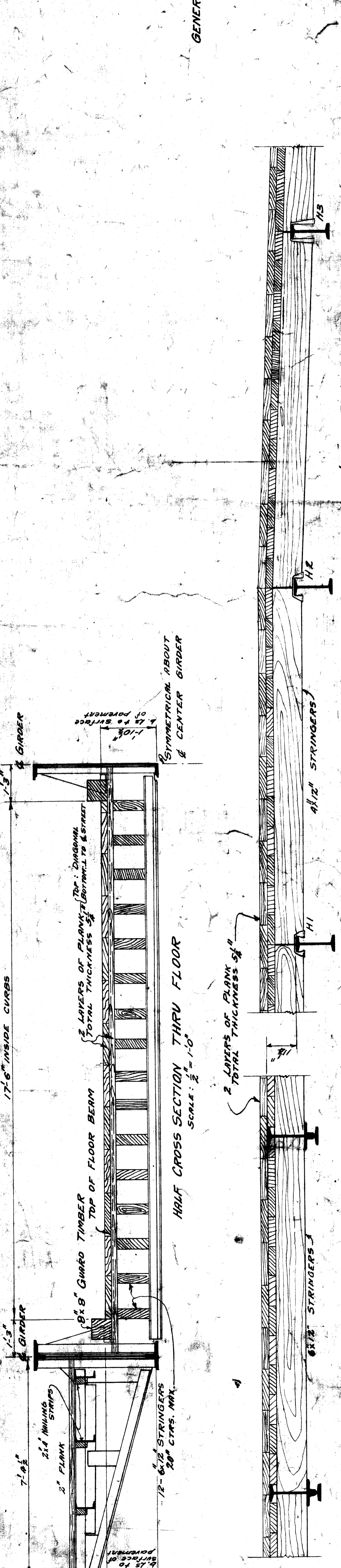
MAXIMUM SHEAR

MEMBER	D.L. LBS.	I LBS.	TOTAL LBS.	WEBS SECT. REQ'D. PER 1000 FT. SPAN.	WEBS SECT. USED	END STITCHERS	D.L. IN. LBS.	I IN. LBS.	TOTAL IN. LBS.	SECT. REQ'D. PER 50 IN.	SECT. USED	LENGTH OF CORNER PLATES	TENSION SECTION USED	FLANGE SECTION USED	LENGTH OF CORNER PLATES	LENGTH OF CORNER PLATES	
G1	36400	17500	122900	12.29	48 1/2" x 10"	20 1/2" x 3/4"	4825000	9700000	2425000	31	6 WBS 48 1/2" x 10" / 3 COR. PL. 1/2" x 3"	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236
G2	18600	64700	6.47	40"	20 1/2" x 3/4"	1456300	2995000	750000	96	6 WBS 40" x 10" / 1 COR. PL. 1/2" x 3"	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	
G3	21300	42900	74900	7.49	40"	20 1/2" x 3/4"	1677100	3370000	842500	104	6 WBS 40" x 10" / 1 COR. PL. 1/2" x 3"	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236
G4	33900	69500	120800	12.08	40"	20 1/2" x 3/4"	2967500	5930000	1482500	190	6 WBS 40" x 10" / 2 COR. PL. 1/2" x 3"	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236
G5	32180	66100	114800	11.48	40"	20 1/2" x 3/4"	2698000	5380000	1340000	172	6 WBS 40" x 10" / 1 COR. PL. 1/2" x 3"	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236
G6	28250	56200	97750	9.78	40"	20 1/2" x 3/4"	3770000	7260000	1810000	226	6 WBS 40" x 10" / 2 COR. PL. 1/2" x 3"	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236
G7	14950	27800	49700	4.97	40"	20 1/2" x 3/4"	1267500	2490000	628500	81	6 WBS 40" x 10" / 1 COR. PL. 1/2" x 3"	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236
G8	17500	33900	59900	5.99	40"	20 1/2" x 3/4"	1573600	2670000	670000	82	6 WBS 40" x 10" / 1 COR. PL. 1/2" x 3"	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236
G9	30280	59700	104900	10.49	40"	20 1/2" x 3/4"	3679000	6810000	1577500	225	6 WBS 40" x 10" / 2 COR. PL. 1/2" x 3"	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236
G10	22000	42500	73500	7.35	40"	20 1/2" x 3/4"	2456000	5140000	1280000	168	6 WBS 40" x 10" / 1 COR. PL. 1/2" x 3"	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236
G11	30000	58000	101000	10.10	40"	20 1/2" x 3/4"	4253800	8140000	2032000	245	6 WBS 40" x 10" / 3 COR. PL. 1/2" x 3"	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236
G12	18850	30600	54100	5.41	40"	20 1/2" x 3/4"	1127400	2280000	558000	78	6 WBS 40" x 10" / 1 COR. PL. 1/2" x 3"	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236
G13	25200	49900	87600	8.76	40"	20 1/2" x 3/4"	2096800	4010000	1002500	132	6 WBS 40" x 10" / 1 COR. PL. 1/2" x 3"	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236
G14	23800	46100	81400	8.14	40"	20 1/2" x 3/4"	2383000	4525000	1132000	148	6 WBS 40" x 10" / 1 COR. PL. 1/2" x 3"	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236	188 / 984 / 2022 / 3236
FL. BMS			32000						2280000		SECT. REQ'D. PER 1000 FT. SPAN = 20" x 8 1/2" x 1/2"						

* STRESS USED BASED ON 18000-200 1/2

MEMBER	SECT. REQ'D. PER 1000 FT. SPAN	SECT. USED	ALLOWABLE LOAD = 1574(18000-50 250) = 1946000
COLUMNS			

DESIGN ALL COLUMNS TO TAKE MAX. LOAD = 1988000 - USE 10" x 25" x 1/2" BETH. H. COL. OF EQUIVALENT 17" x 6" WIDE CURBS



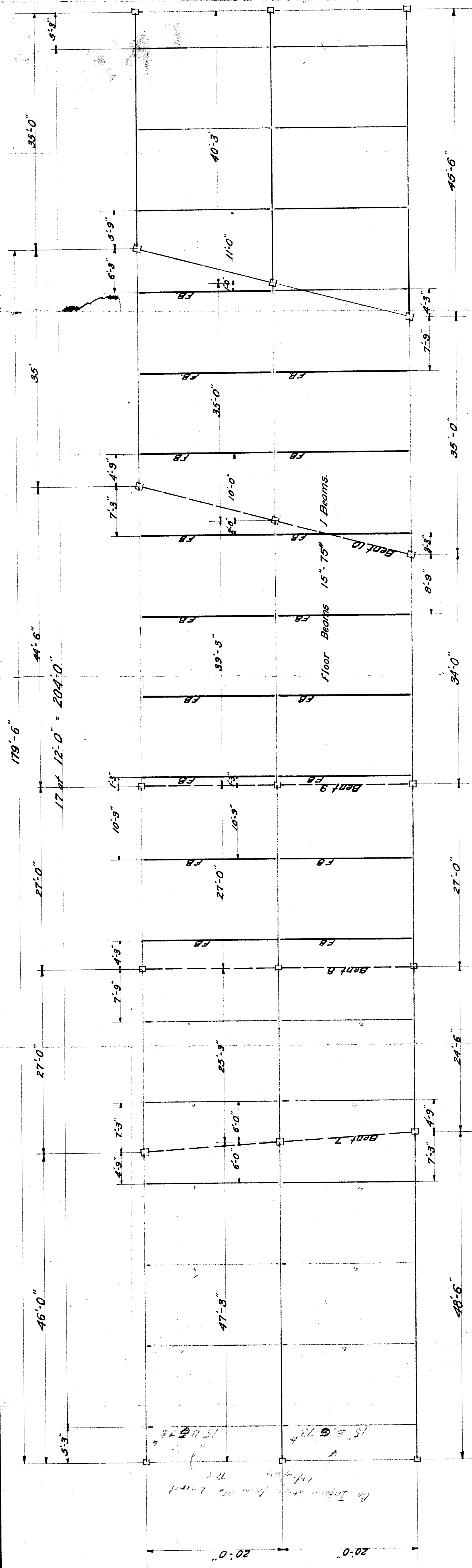
GENERAL NOTES:-
 AREA SPECIFICATIONS 1930 REARMED WORK
 REIN. 1" AND OPEN HOLES 1/2" EXCEPT AS SHOWN
 ASSEMBLE ALL FIELD CONNECTIONS IN SHOP
 REIN. HOLES TO FIT AND MATCH-MAKING
 STEEL TO BE GIVEN ONE SHORT COAT OF RED LEAD-LINSEED OIL
 COMPLETE DETAILS TO BE FURNISHED BY CO. FOR APPROVAL
 COMPLETE TRACINGS OF ALL STEEL WORK TO BE FURNISHED BY CO.
 BRIDGE TO BE ERRECTED BY BRIDGE COMPANY (SEE
 CONNECTIONS BETWEEN BRIDGES AND GANTRY ALSO BETWEEN
 GANTRY AND GANTRY AT EXPOSURES TO BE DETAIL ALL OTHERS REFERRED TO
 DR. REAM OFFICE OF CHIEF ENGINEER JNL:NG
 TR. REAM DETROIT, MICHIGAN W. L. A. 31
 CH. REAM WARS. I. G. '23 FILE X 087-19

GRAND TRUNK RAILWAY SYSTEM
 WESTERN LINES
 STEEL FOR RECONSTRUCTION
 GRAND BOULEVARD VIADUCT
 DETROIT - MICHIGAN
 SCALE AS SHOWN

SHIPPING WEIGHT OF STRUCTURAL STEEL 23985
 SHIPPING WEIGHT OF HAND RAIL & WARE 3445
 DATE OF LAST SHIPMENT JUNE 18, 1925.

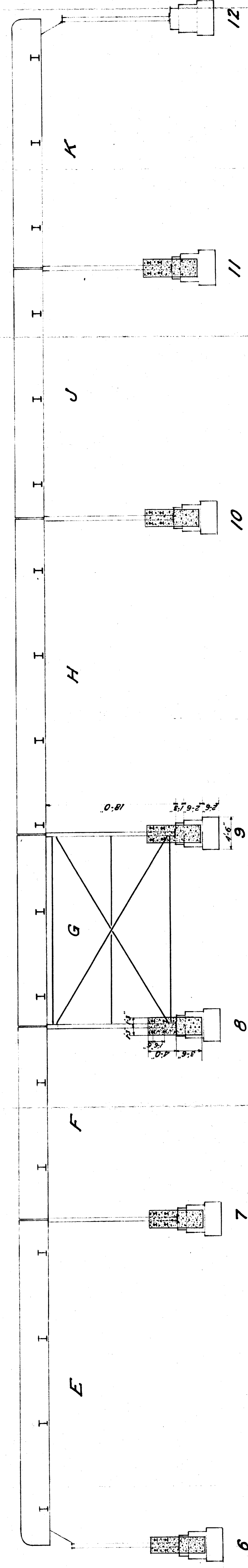
WEST APPROACH

EAST APPROACH

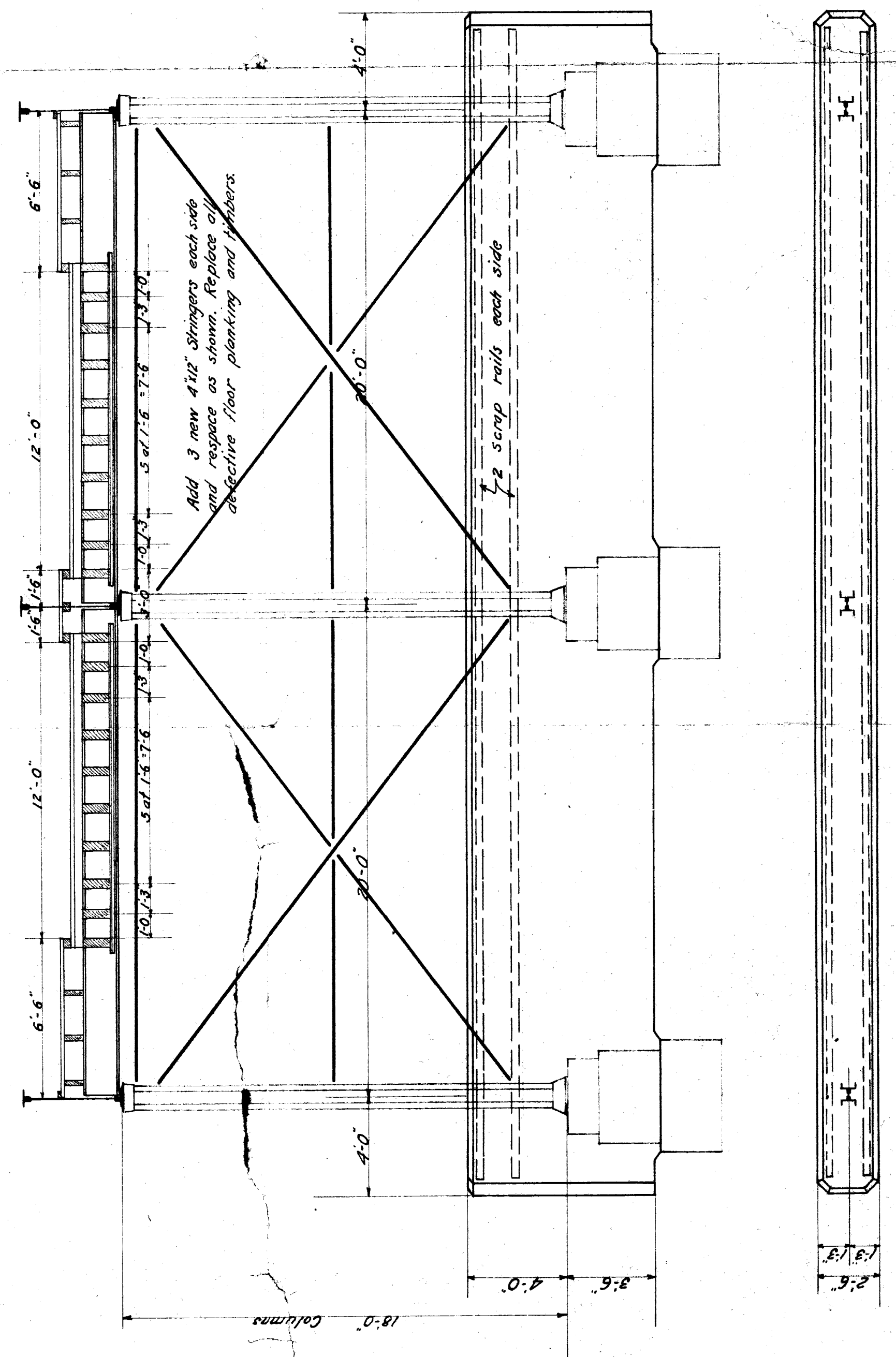


Note:
 Present girders to remain unchanged.
 New floor beams are present connections
 to girders except for new connection angles. (See detail)
 Columns to remain as at present except for
 cross bracing and diagonal bracing to be
 renewed as detailed.
 Floor system and stringers to be repaired
 and strengthened. (See note on cross section)

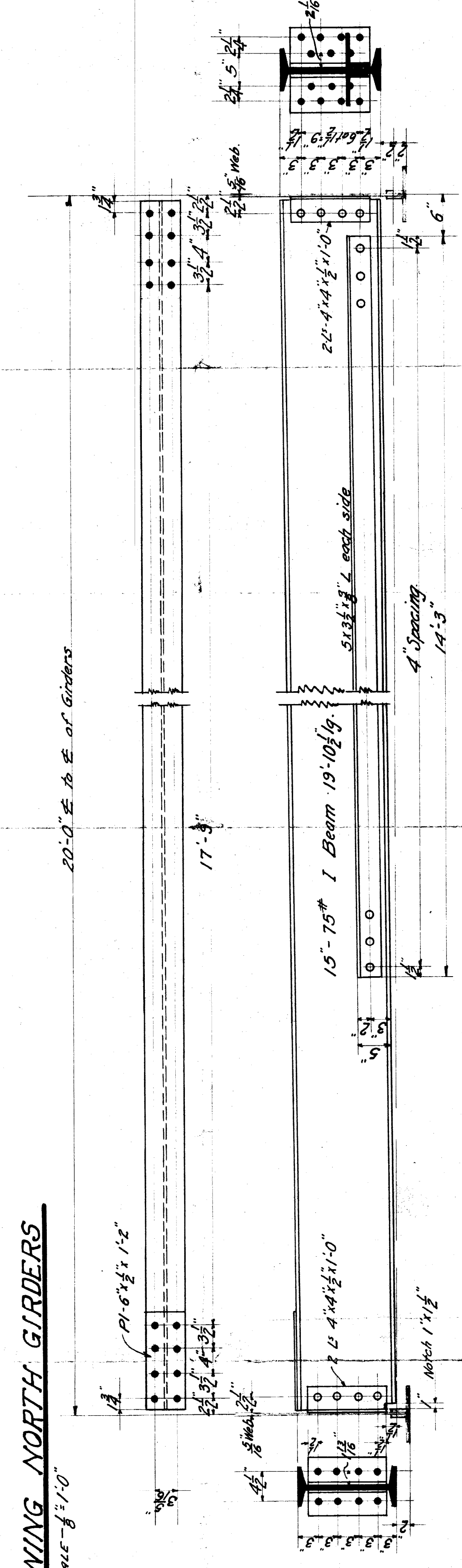
PLAN
 SCALE - 1/4" = 1'-0"



SECTION SHOWING NORTH GIRDERS
 SCALE - 1/2" = 1'-0"



SECTION SHOWING BENT 8 & 9
 TYPICAL FOR 6, 7, 10 & 11
 SCALE - 1/2" = 1'-0"

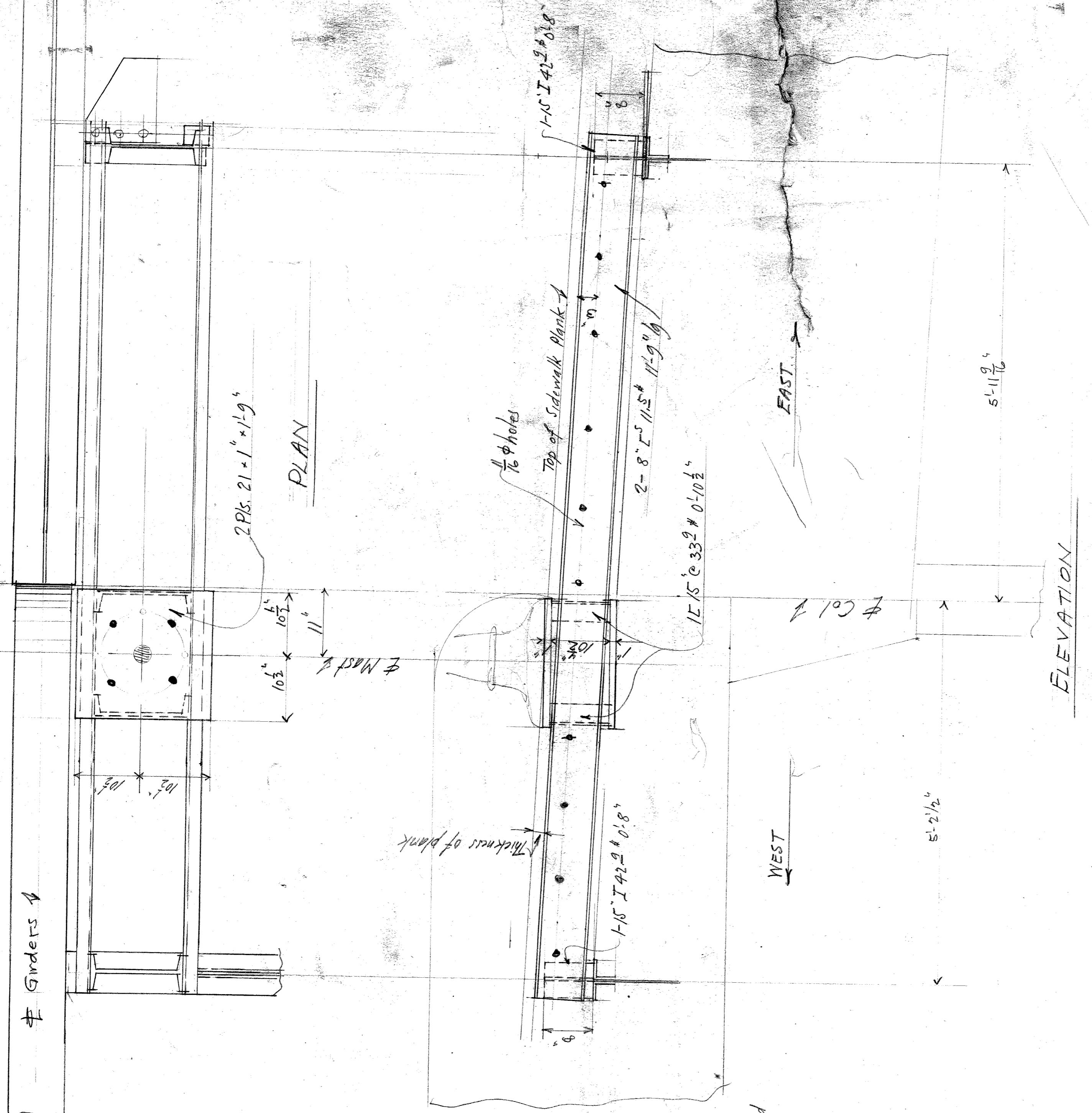


DETAIL OF FLOOR BEAM 17 REQD. FB.
 SCALE - 1" = 1'-0"

GENERAL NOTES
 All steel Class B Specifications.
 Bridge strengthened to accommodate one line
 of motor trucks in each direction. Weight
 of loaded plus 20,000 lbs, 14,000 on rear
 and 6,000 on front axle, using 50% impact
 100' SRT. Equivalent uniform load used for
 the dead load.
 All rivets to be 7/8" dia.
 All open holes for rivets to be 1/8" dia.
 Steel to be given one shop coat of red lead and lined with
 All base connecting plates to be built for shipment
 Steel to be erected by Steel Co.
 See field rivet list.

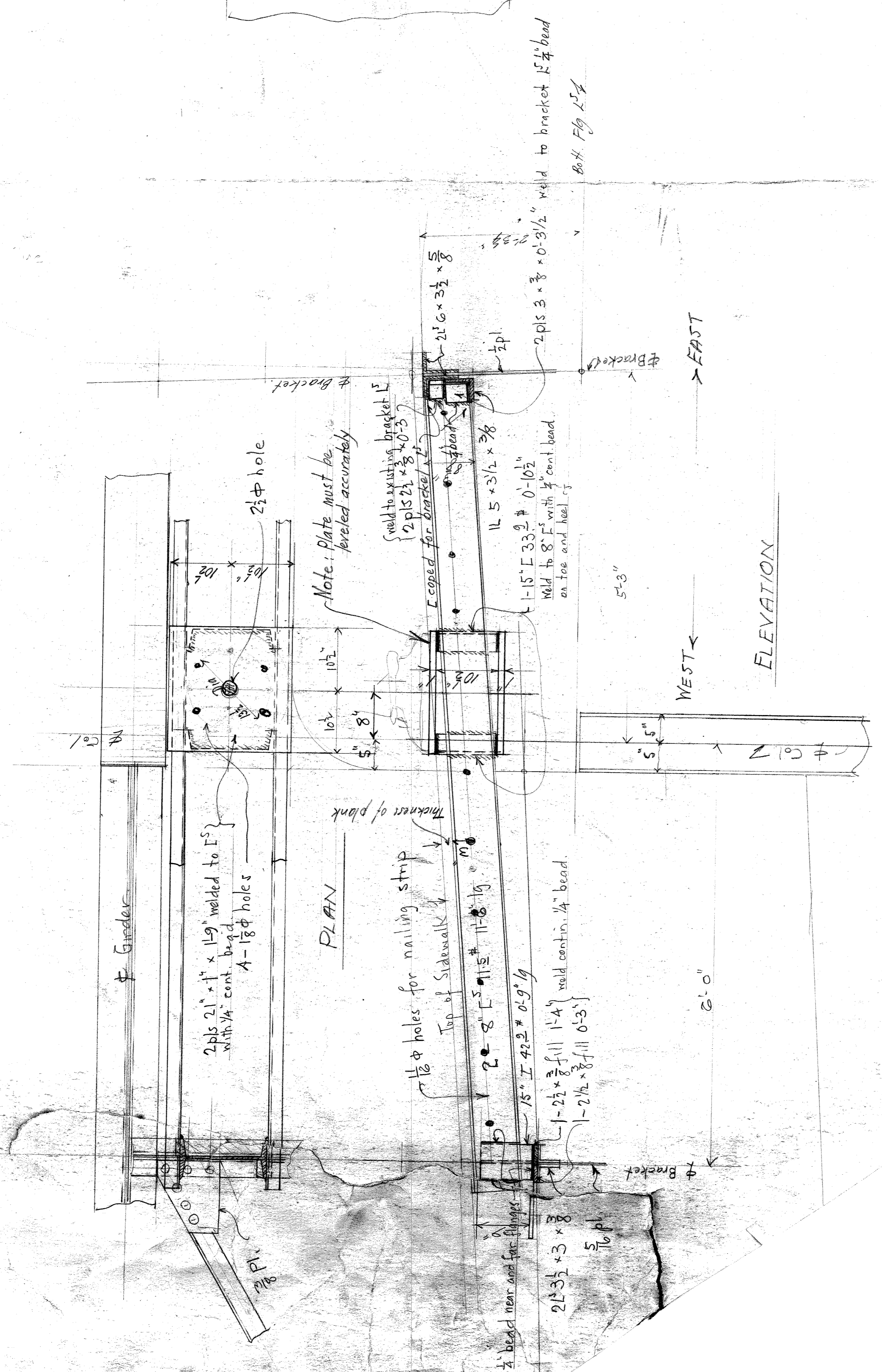
GRAND TRUNK RAILWAY SYSTEM
 WESTERN LINES
 PROPOSED REPAIRS
 GRAND BOULEVARD VIADUCT
 DETROIT - MICHIGAN
 SCALE AS SHOWN
 DR. - RAW OFFICE OF CHIEF ENGINEER
 TR. - RAW DETROIT, MICHIGAN.
 CH. - AUG. 23, 1923
 JOURNAL NO. W-4196
 FILE

3/21/34



SUPPORTS FOR LIGHTING MASTS - WEST APPROACH

2-Wanted
 Note: Furnish all material and assemble same in field.
 Scale 1" = 1'-0"

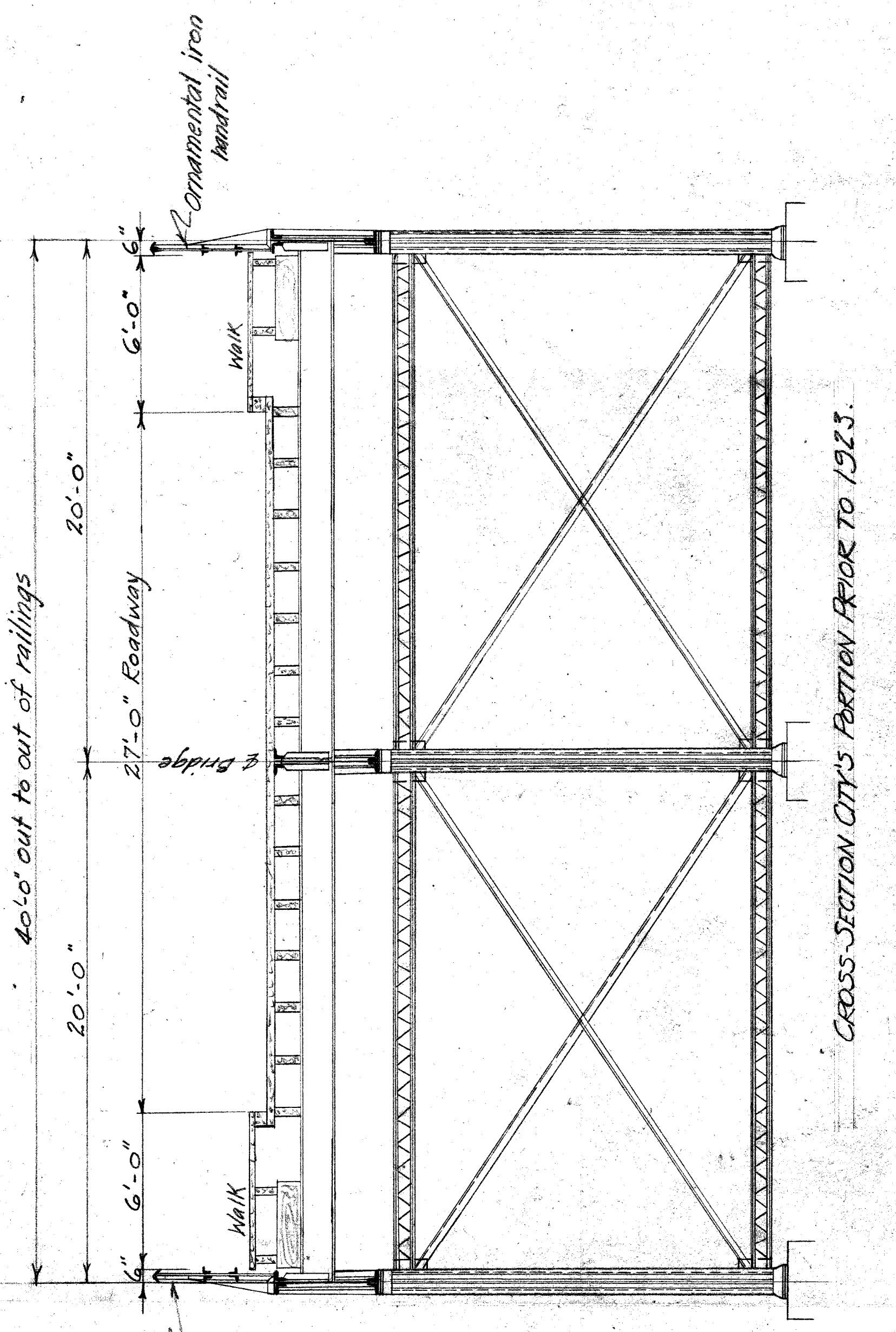


SUPPORTS FOR LIGHTING MASTS - EAST APPROACH

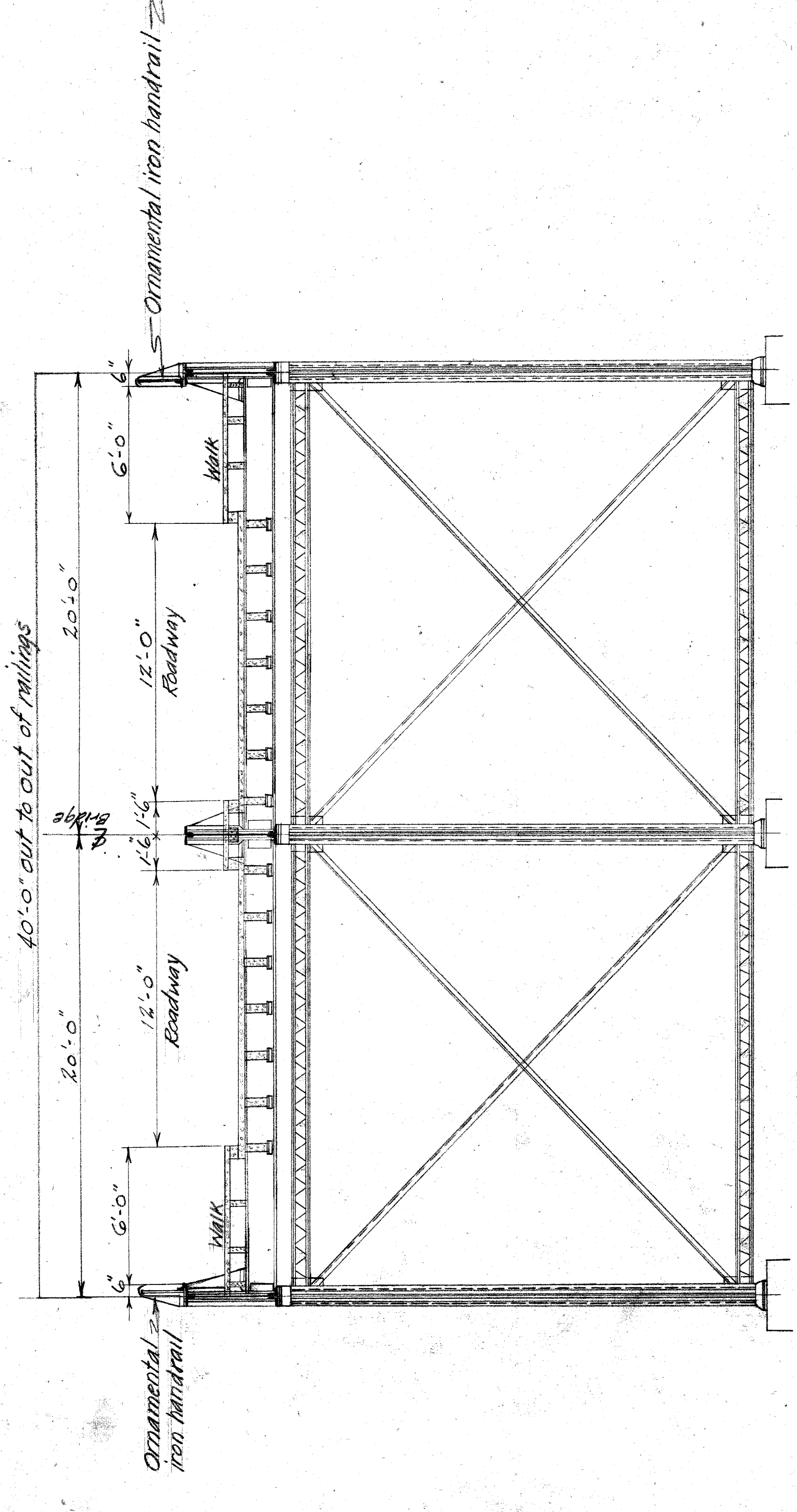
2-Wanted
 Note: EVERYTHING SAME AS FOR WEST APPROACH UNLESS SHOWN OR CALLED FOR OTHERWISE

CITY OF DETROIT
 OFFICE OF CITY ENGINEER
 EAST GRAND BOULEVARD VIADUCT,
 BETWEEN ROPELLE & ST. AUBIN.

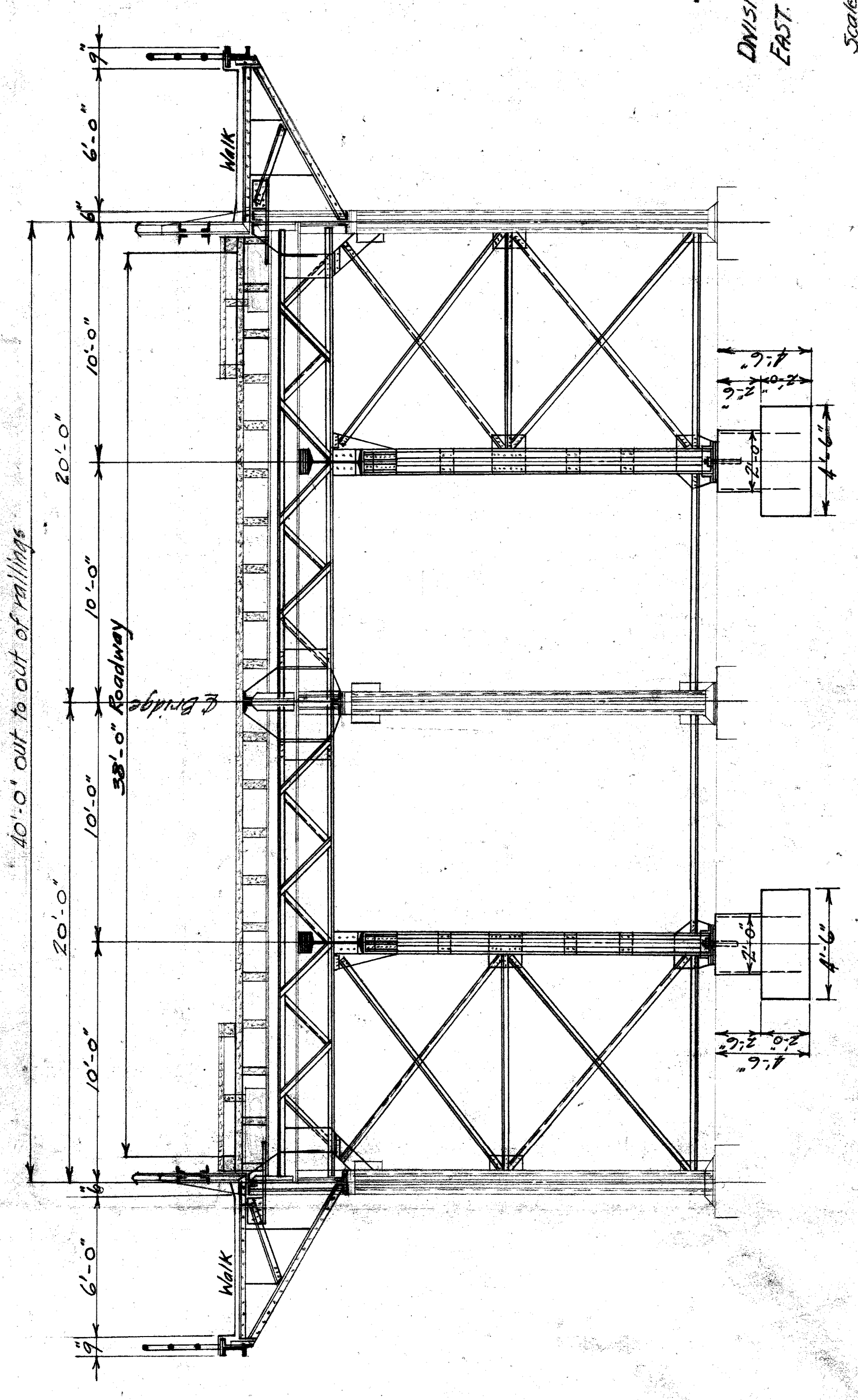
Made by: R.S.
 Sept. 20th 1934



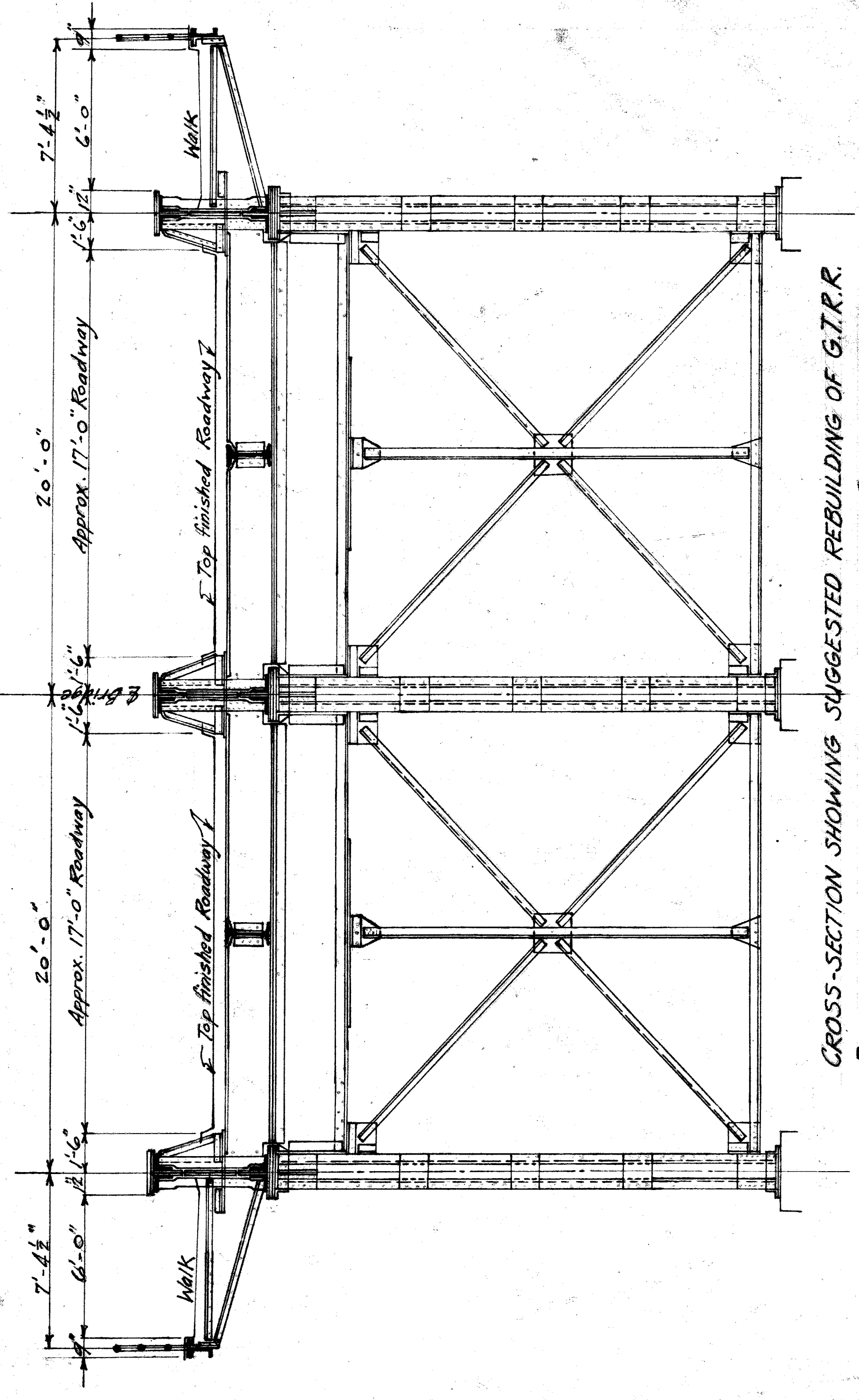
CROSS-SECTION CITY'S PORTION PRIOR TO 1923.



CROSS-SECTION G.T.R. PORTION PRIOR TO 1923.
(Unchanged to-day except new floor beams added during repair work 1923)

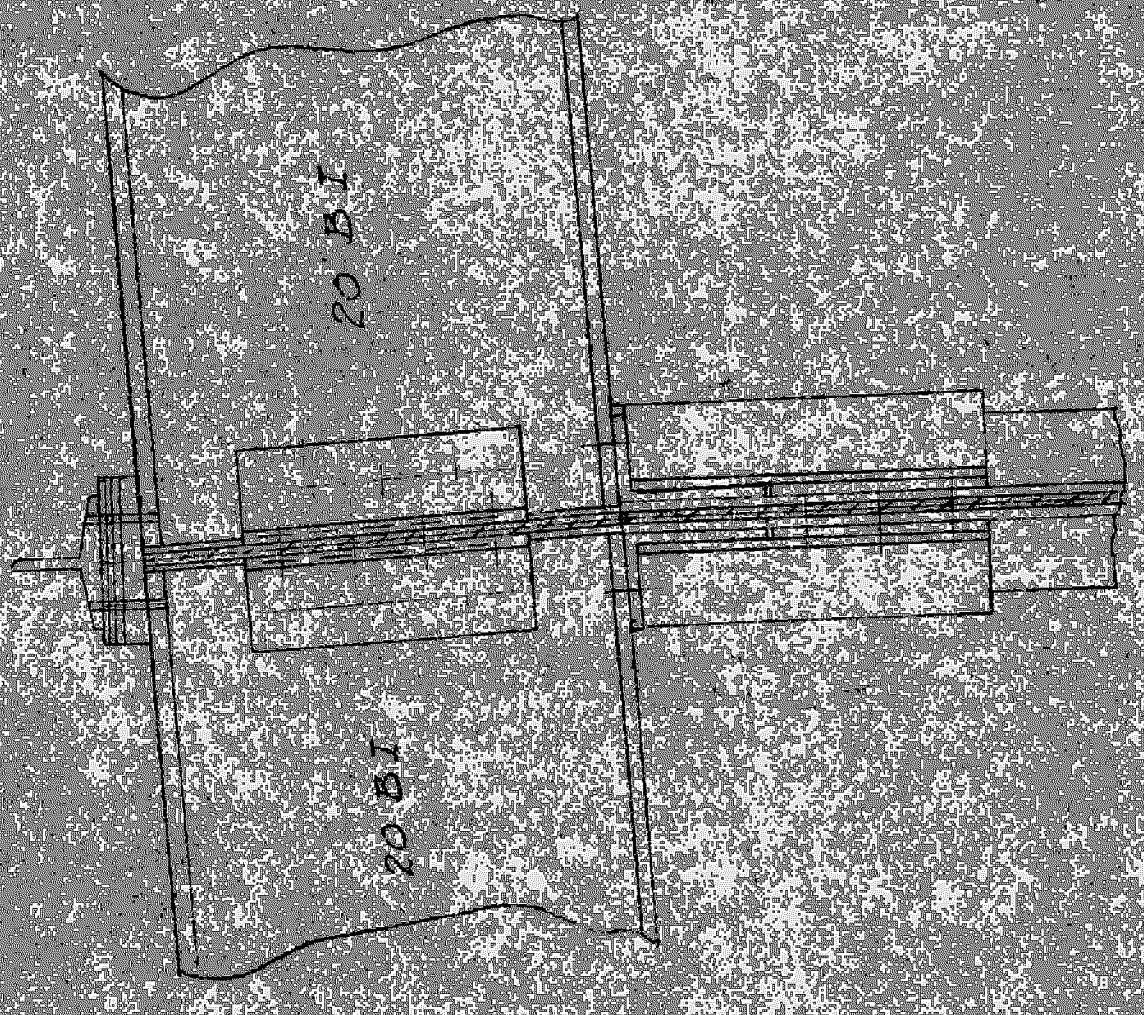
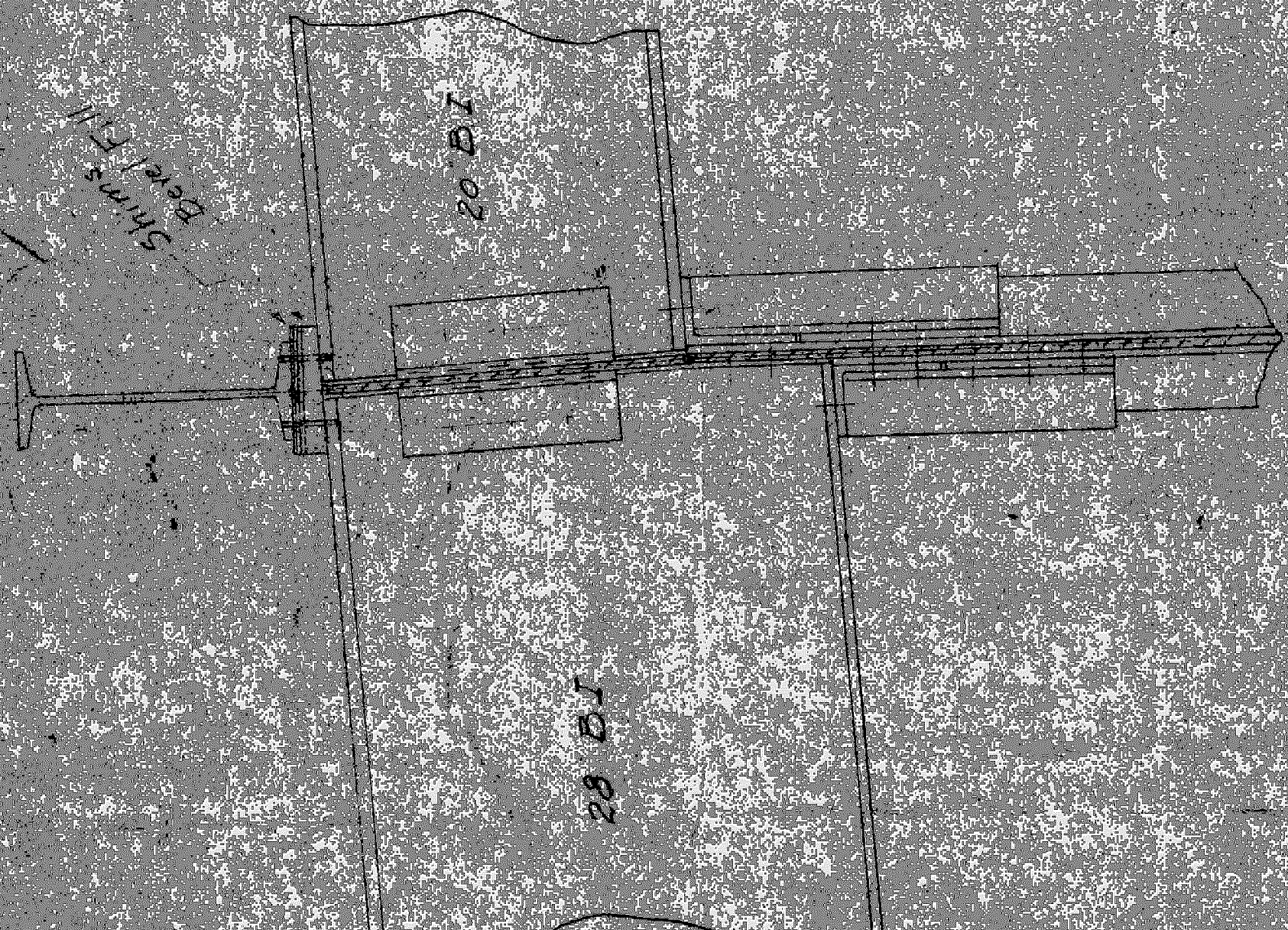


CROSS-SECTION OF PRESENT CITY'S PORTION SHOWING IN BLACK STRENGTHENING WORK DONE IN 1923 AND IN RED PROPOSED CANTILEVER SIDEWALKS TO ALLOW WIDER ROADWAY.



CROSS-SECTION SHOWING SUGGESTED REBUILDING OF G.T.R. PORTION TO ALLOW WIDER ROADWAYS AND CANTILEVER WALKS.

CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
CITY ENGINEERS OFFICE
DIVISION OF GRADE SEPARATION & BRIDGES
EAST GRAND BOULEVARD VIADUCT OVER
D. G. H. & M. R. R.
Aug. 27, 1924
Scale 1" = 1'-0"



PROPOSED METHOD OF CONNECTING
NEW STRINGERS TO OLD FL. BMS AT
COLUMN JOINTS

EAST GRD BOULEYD YARDST
OVER

D. G. H. & M. R.

DETROIT MICH

9/17 23

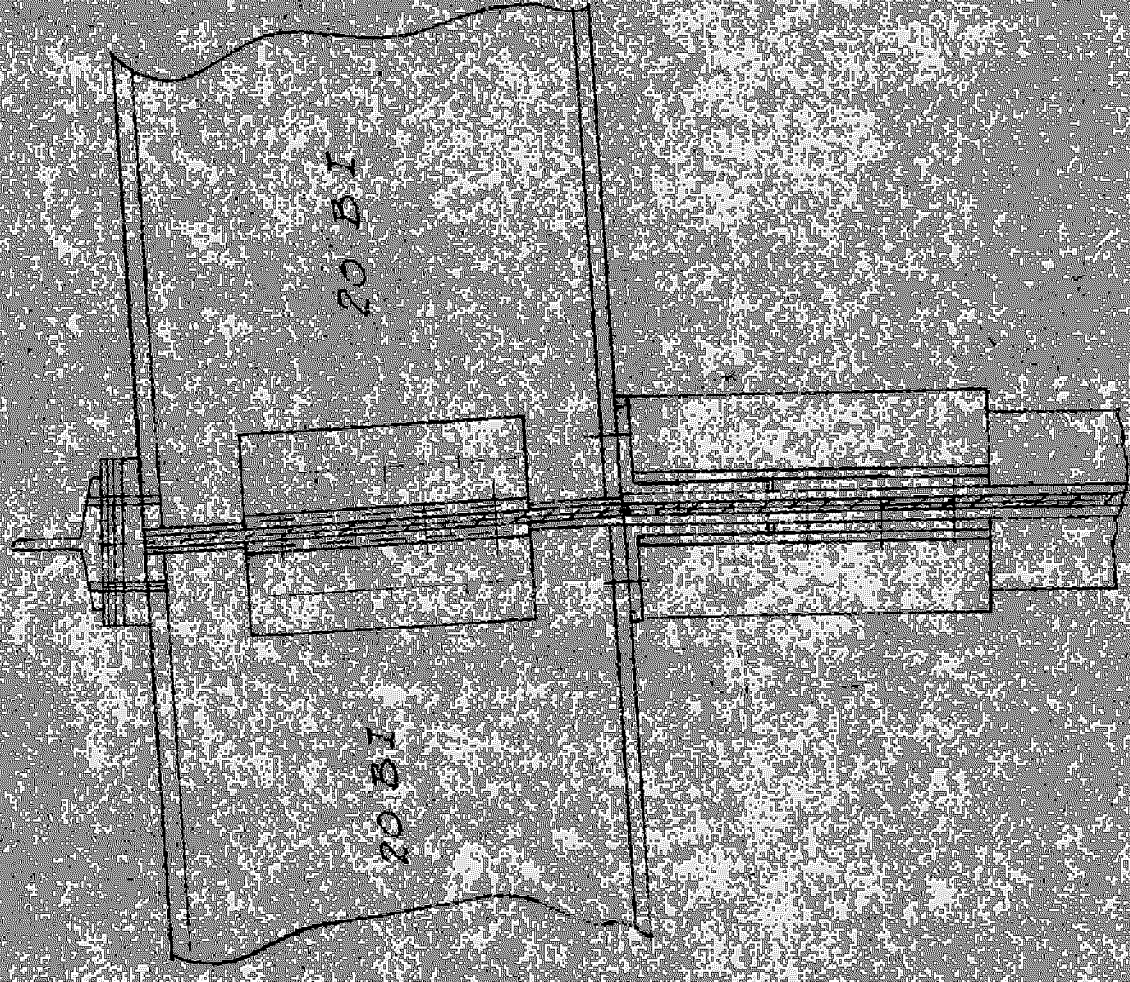
R.S.

SHT 701

#2611



Shims
Barell Fill



PROPOSED METHOD OF CONNECTING
NEW STRINGERS TO OLD FL. BMS AT
COLUMN JOINTS

EAST GRD BOULEVARD VIADUCT
OVER

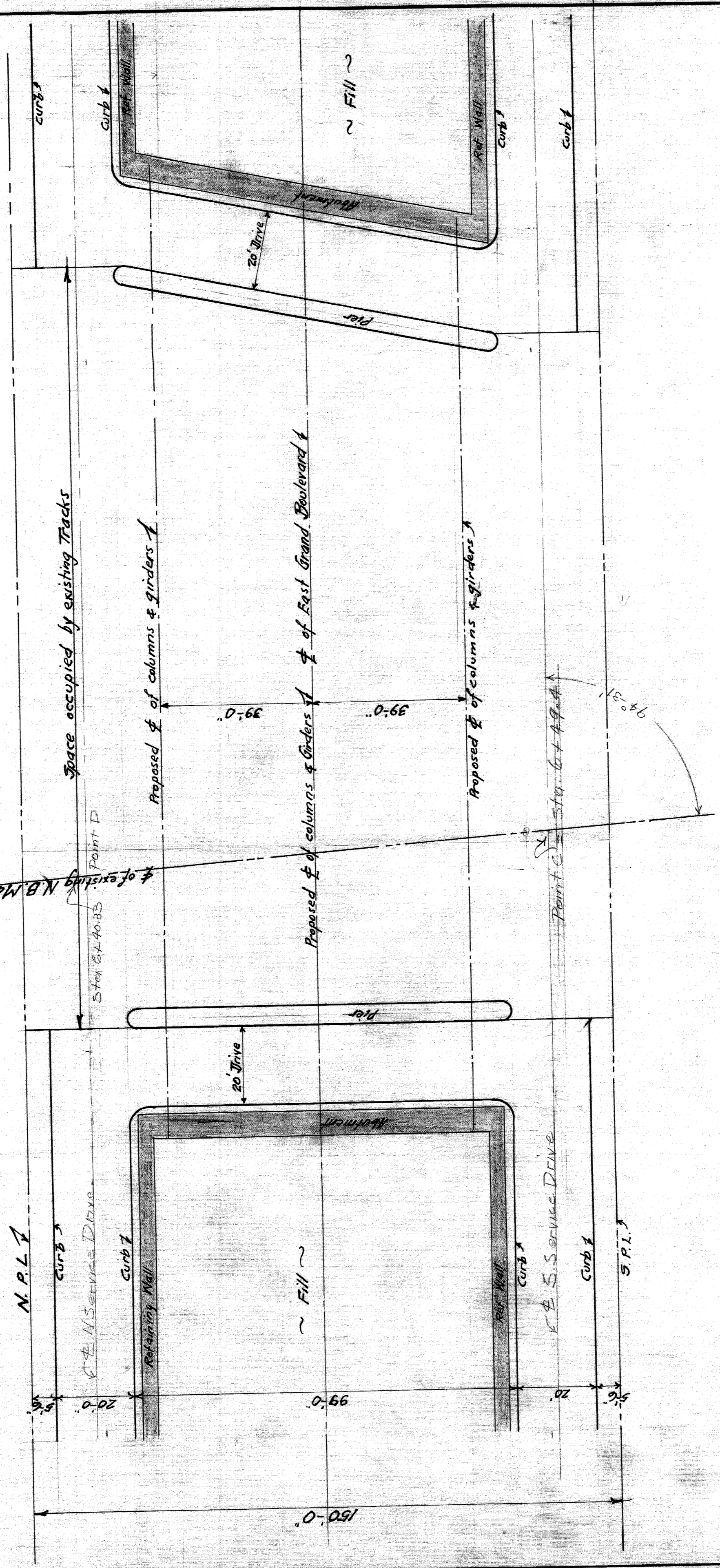
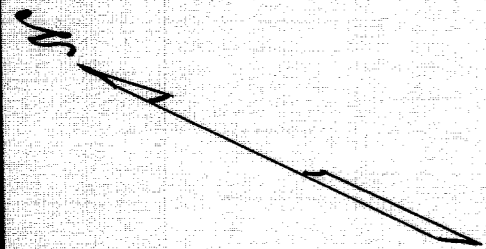
D. G. H. & M. RY

DETROIT MICH

9/17 23

R.S.

SHT 701
2611

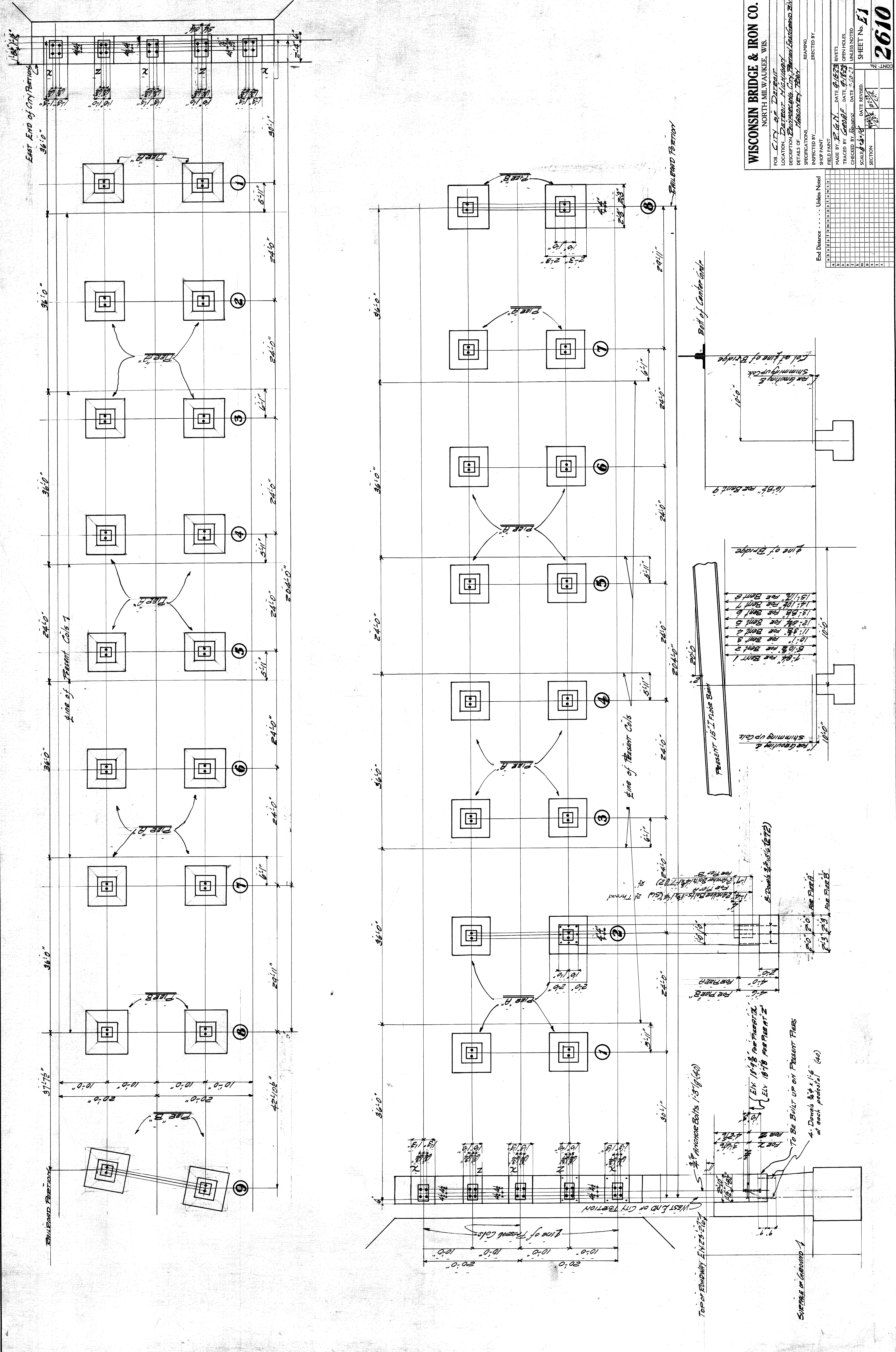


CITY OF DETROIT
 DEPARTMENT OF PUBLIC WORKS
 Office of City Engineer

EAST GRAND BLVD VIADUCT
OVER

G.T.R.R. - DEQUINDRE ST.
 Scale 1" = 20 ft. ✓
 January 15th 1934.

2195
 2/3, 1/2

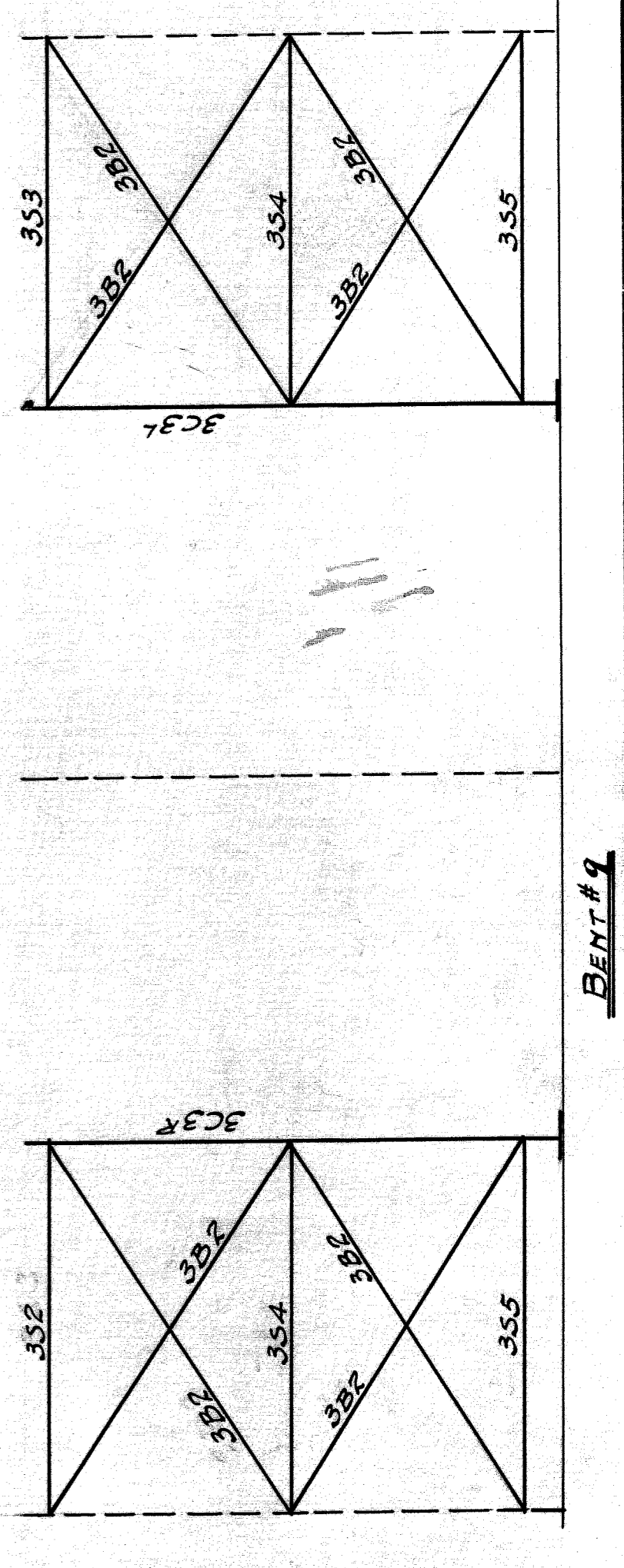
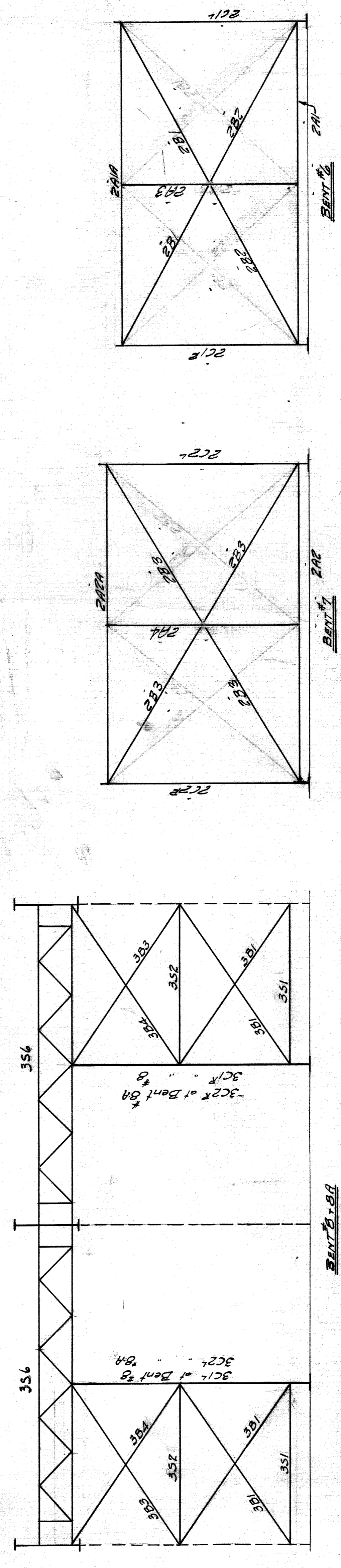
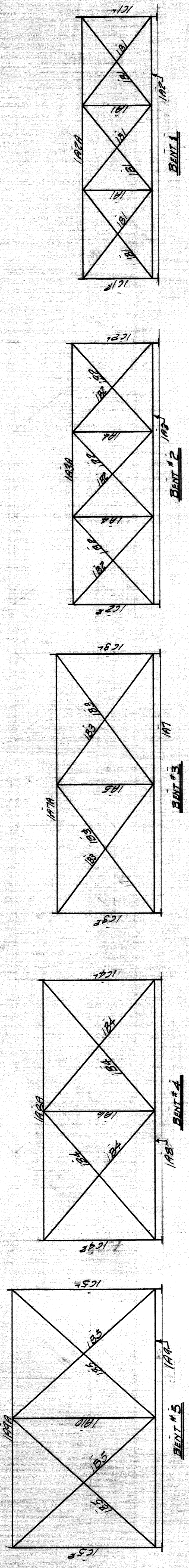
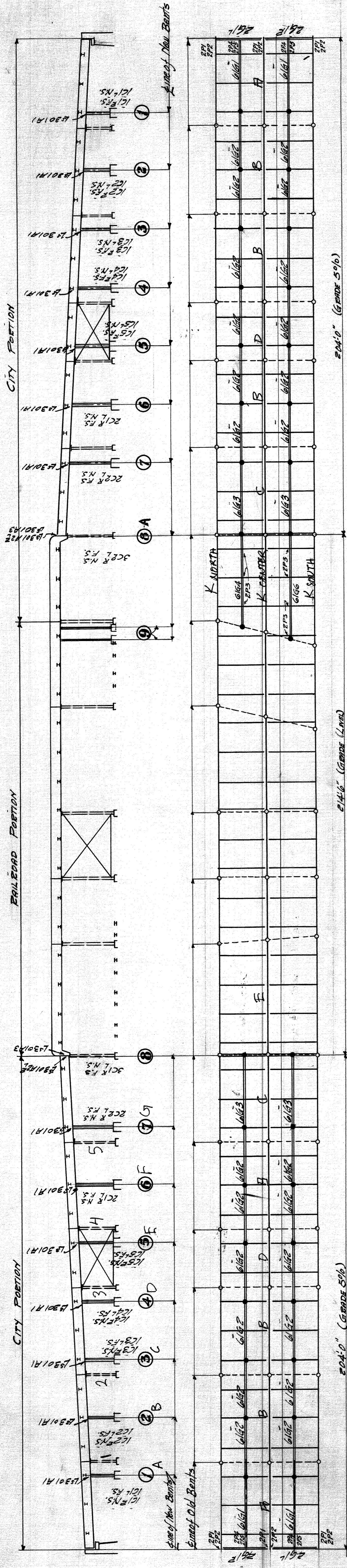


WISCONSIN BRIDGE & IRON CO.
 NORTH MILWAUKEE, WIS.
 FOR CITY OF DETROIT
 LOCATION: DETROIT HIGHWAY
 DESCRIPTION: BRIDGE OVER RIVER
 DETAILS OF: MASONRY TOWER

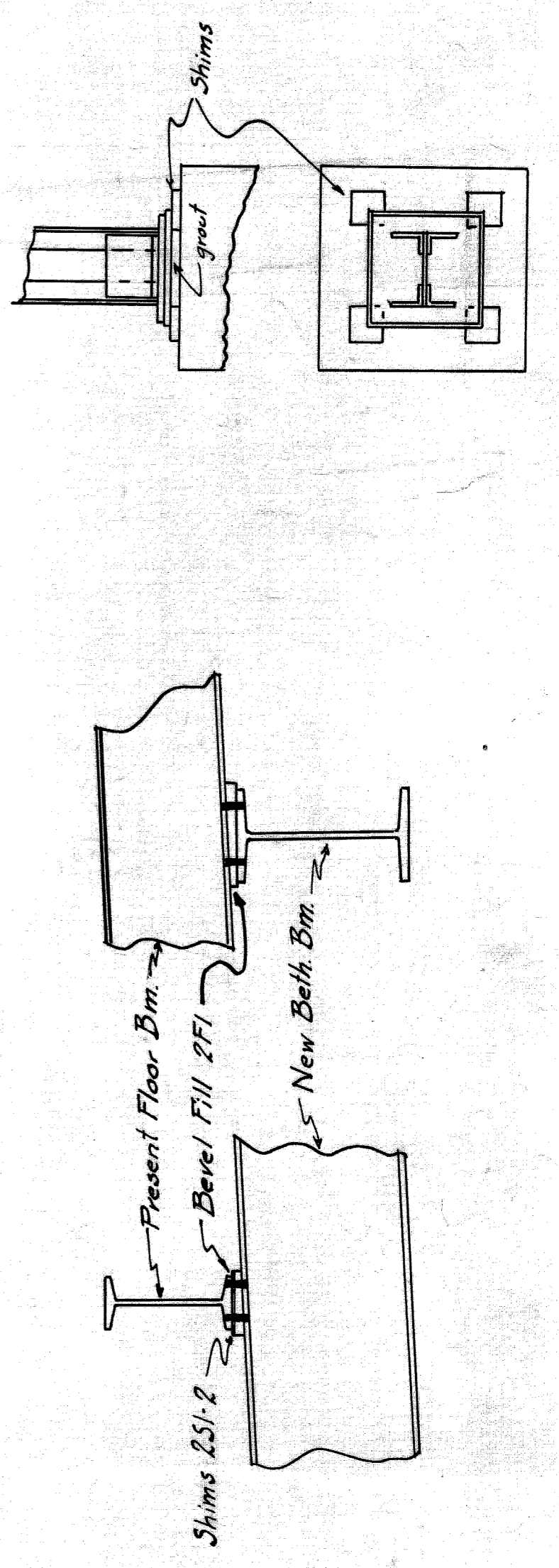
INSPECTED BY: _____
 SPECIFICATIONS: _____
 SHOP PAINT: _____
 FIELD PAINT: _____

MADE BY: E. G. N. DATE: 9/15/22
 TRACED BY: G. H. F. DATE: 9/15/22
 CHECKED BY: G. H. F. DATE: 9/15/22
 SCALE: AS SHOWN
 SHEET NO. 11
 SECTION

End Distance: Unless Noted



Note: The Columns are to be set so that the tops of the new beams with the beveled fillers in place will just touch the existing floor-beams. The floorbeams shall then be jacked up and an additional shim plate inserted below the floor-beam so that each floor-beam will have an upward deflection of not less than 3/8" nor more than 1/2". After this is accomplished, holes will be drilled in the old floor-beams at points of support and riveted up.



End Distance Unless Noted

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
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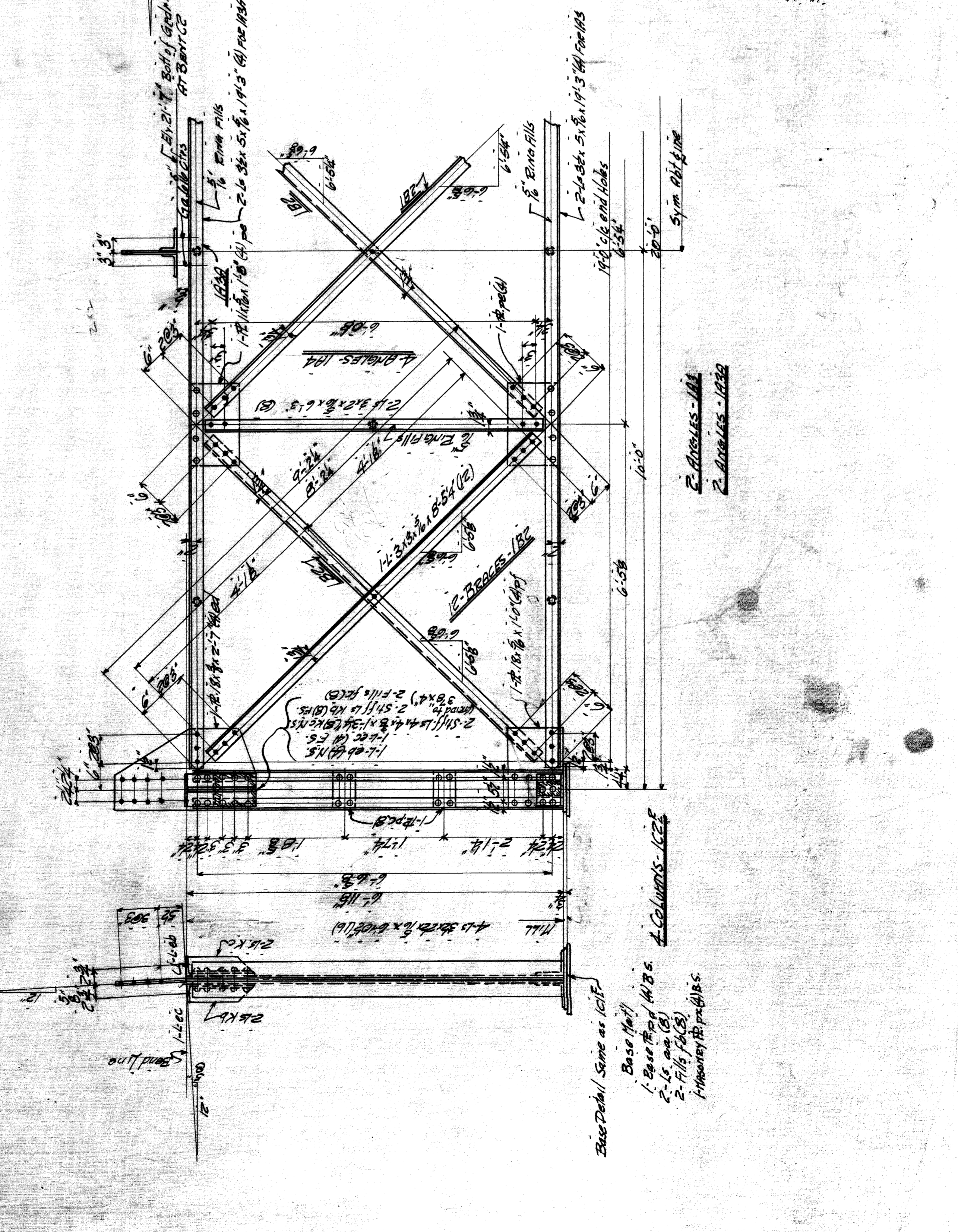
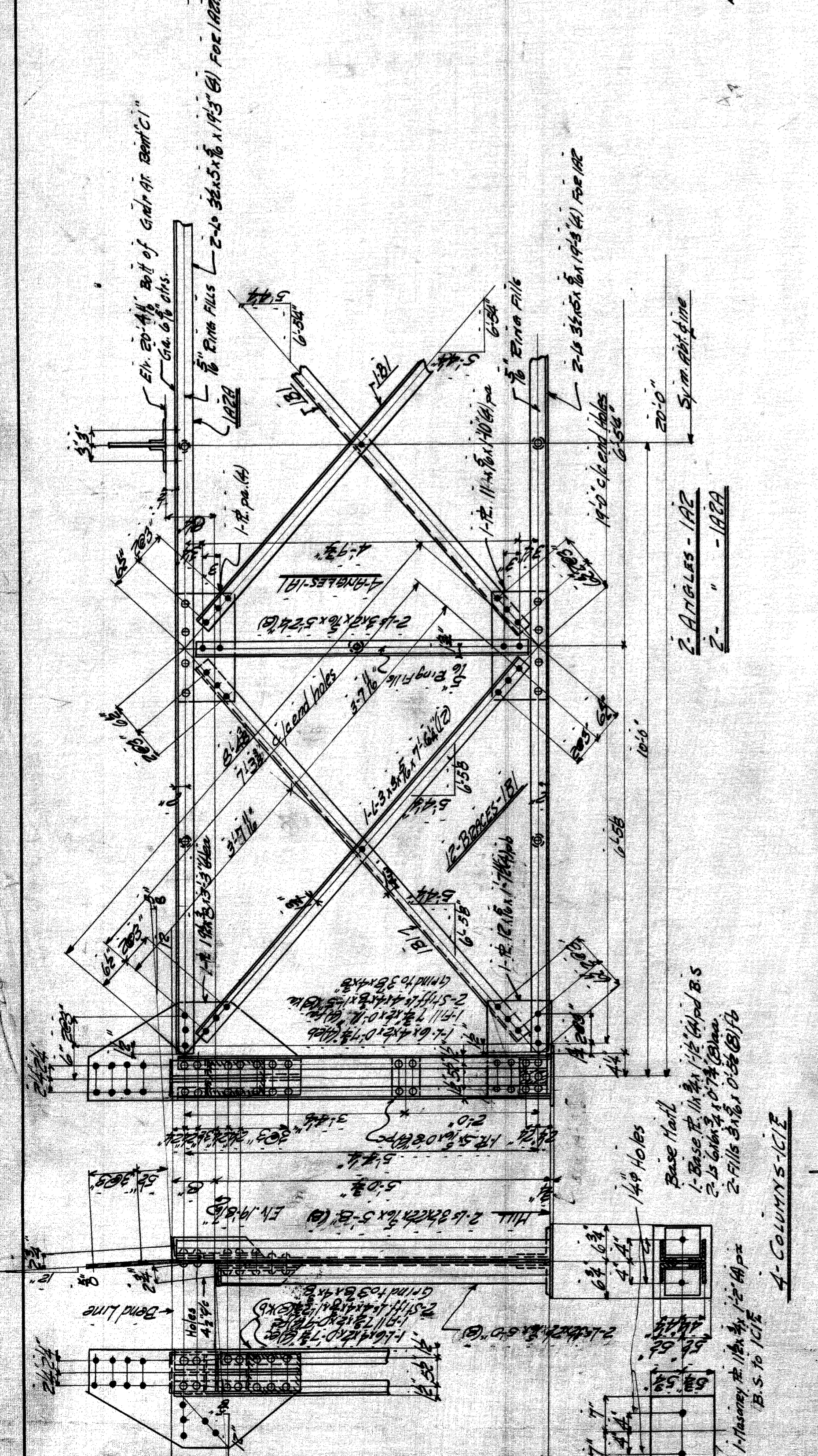
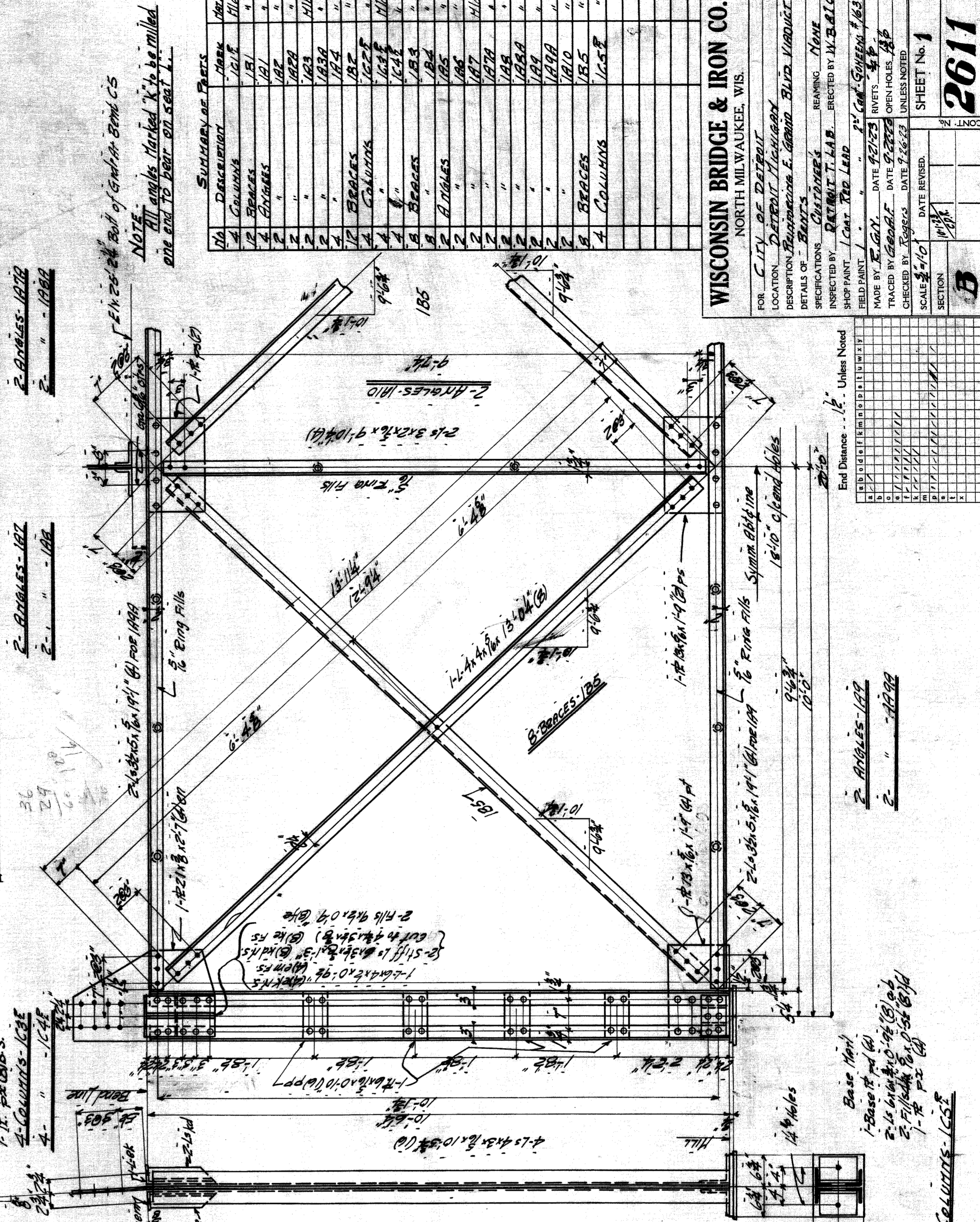
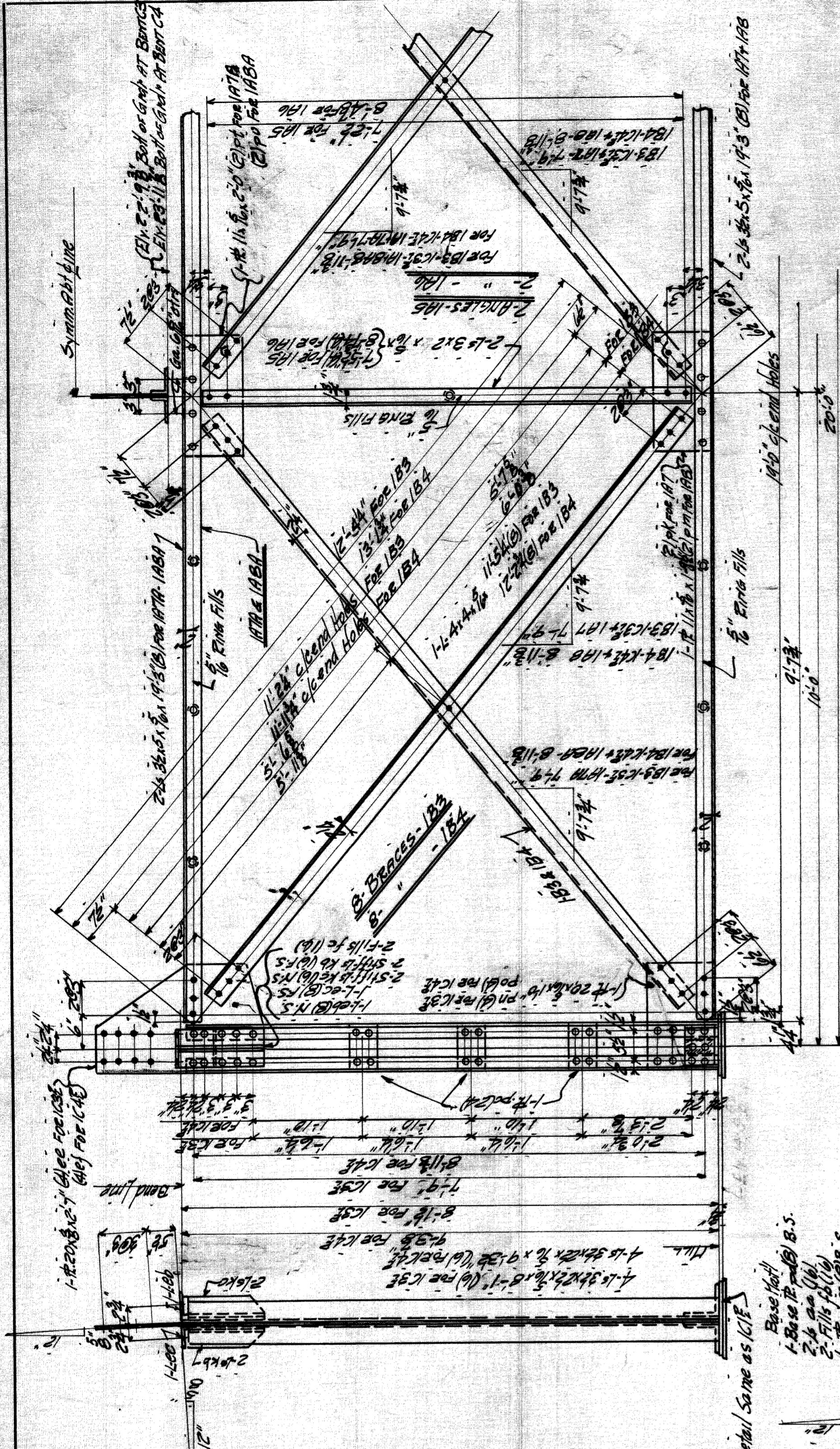
WISCONSIN BRIDGE & IRON CO.
NORTH MILWAUKEE, WIS.

FOR: CITY of DEPOIT
LOCATION: DEPOIT MILWAUKEE
DESCRIPTION: THROUGH TRUSS BRIDGE OVER R.R. VIADUCT
DETAILS OF: ERECTION PLAN

SPECIFICATIONS: DRAWING NO. _____
REVISIONS: _____
ERECTED BY: _____
SUPERVISOR: _____
FIELD PAINT: _____

MADE BY: GAOPE DATE: 9-23-23 INVENTS: _____
TRACED BY: GAOPE DATE: 9-23-23 OPEN HOLES: _____
CHECKED BY: GAOPE DATE: 10-23-23 UNLESS NOTED: _____
SCALE: 1/4" = 1'-0" DATE REVISED: _____
SECTION: _____ SHEET NO. **E1**

2611



NO.	DESCRIPTION	QUANTITY	UNIT
1	4 Columns	4	"
2	2 Beams	2	"
3	2 Braces	2	"
4	2 Braces	2	"
5	2 Braces	2	"
6	2 Braces	2	"
7	2 Braces	2	"
8	2 Braces	2	"
9	2 Braces	2	"
10	2 Braces	2	"
11	2 Braces	2	"
12	2 Braces	2	"
13	2 Braces	2	"
14	2 Braces	2	"
15	2 Braces	2	"
16	2 Braces	2	"
17	2 Braces	2	"
18	2 Braces	2	"
19	2 Braces	2	"
20	2 Braces	2	"
21	2 Braces	2	"
22	2 Braces	2	"
23	2 Braces	2	"
24	2 Braces	2	"
25	2 Braces	2	"
26	2 Braces	2	"
27	2 Braces	2	"
28	2 Braces	2	"
29	2 Braces	2	"
30	2 Braces	2	"
31	2 Braces	2	"
32	2 Braces	2	"
33	2 Braces	2	"
34	2 Braces	2	"
35	2 Braces	2	"
36	2 Braces	2	"
37	2 Braces	2	"
38	2 Braces	2	"
39	2 Braces	2	"
40	2 Braces	2	"
41	2 Braces	2	"
42	2 Braces	2	"
43	2 Braces	2	"
44	2 Braces	2	"
45	2 Braces	2	"
46	2 Braces	2	"
47	2 Braces	2	"
48	2 Braces	2	"
49	2 Braces	2	"
50	2 Braces	2	"

WISCONSIN BRIDGE & IRON CO.
 NORTH MILWAUKEE, WIS.
 FOR: City of Detroit
 LOCATION: Detroit Highway
 DESCRIPTION: Replacement of Grand Blvd Viaduct
 DETAILS OF: BRIDGES
 SPECIFICATIONS: CHRYSLER'S
 INSPECTED BY: CHARLES T. LAB
 SHOP PAINT: CAT. T-20 LEAD
 FIELD PAINT: F.V. CO. GREEN #163
 MADE BY: F. GAY
 DATE: 9/2/23
 TRACED BY: GEORGE F. HUBBARD
 DATE: 9/2/23
 CHECKED BY: GEORGE F. HUBBARD
 DATE: 9/2/23
 SCALE: 3/4" = 1'-0"
 SHEET NO. 1

SECTION: B
 SHEET NO. 1
 2611
 File X087-24

Unless Noted

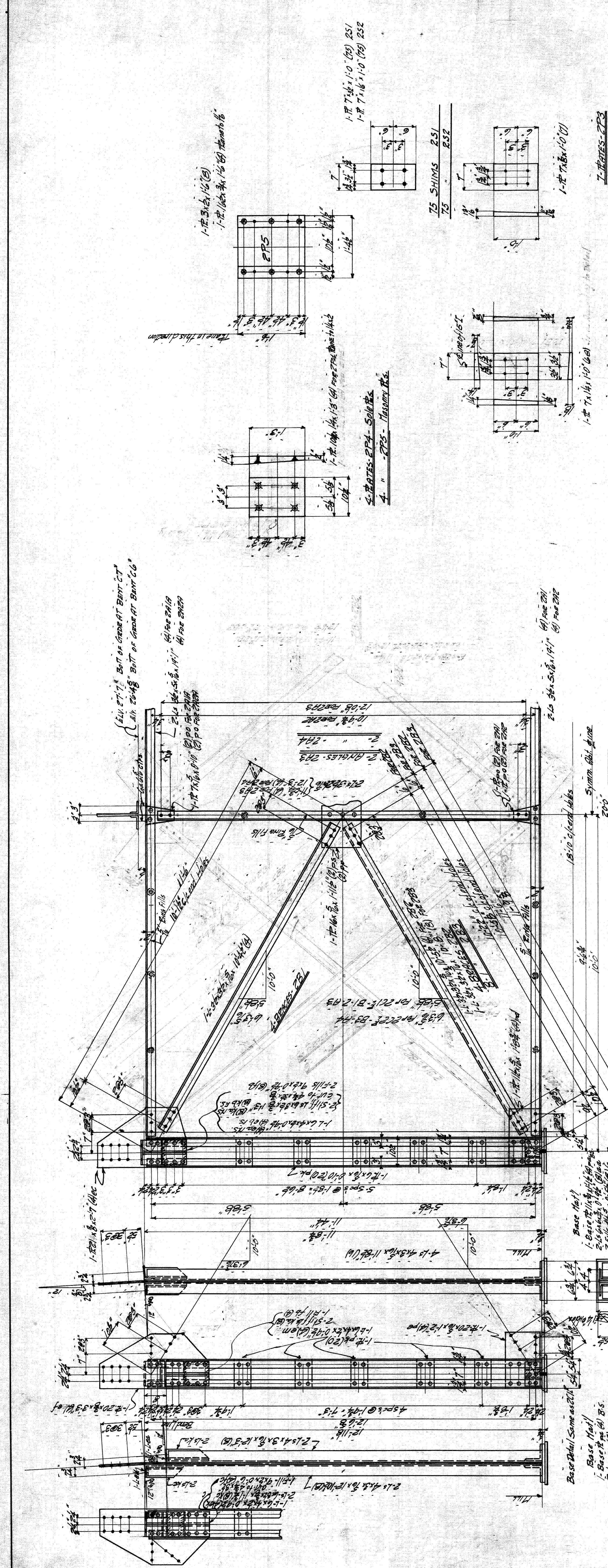
1	1/2" dia. rivets	1/2"
2	3/4" dia. rivets	3/4"
3	1" dia. rivets	1"
4	1 1/4" dia. rivets	1 1/4"
5	1 1/2" dia. rivets	1 1/2"
6	1 3/4" dia. rivets	1 3/4"
7	2" dia. rivets	2"
8	2 1/4" dia. rivets	2 1/4"
9	2 1/2" dia. rivets	2 1/2"
10	2 3/4" dia. rivets	2 3/4"
11	3" dia. rivets	3"
12	3 1/4" dia. rivets	3 1/4"
13	3 1/2" dia. rivets	3 1/2"
14	3 3/4" dia. rivets	3 3/4"
15	4" dia. rivets	4"

2-Angles-1212
 2- " -1212

2-Angles-1212
 2- " -1212

2-Angles-1212
 2-Angles-1212

2-Columns-1212
 2-Columns-1212



7-TRUSS-ETCS

Part No.	Description	Material
1	CHAINS	STEEL
2	BRACES	STEEL
3	AXLES	STEEL
4	RAILS	STEEL
5	RAILS	STEEL
6	RAILS	STEEL
7	RAILS	STEEL
8	RAILS	STEEL
9	RAILS	STEEL
10	RAILS	STEEL
11	RAILS	STEEL
12	RAILS	STEEL
13	RAILS	STEEL
14	RAILS	STEEL
15	RAILS	STEEL
16	RAILS	STEEL
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91	RAILS	STEEL
92	RAILS	STEEL
93	RAILS	STEEL
94	RAILS	STEEL
95	RAILS	STEEL
96	RAILS	STEEL
97	RAILS	STEEL
98	RAILS	STEEL
99	RAILS	STEEL
100	RAILS	STEEL

WISCONSIN BRIDGE & IRON CO.
NORTH MILWAUKEE, WIS.

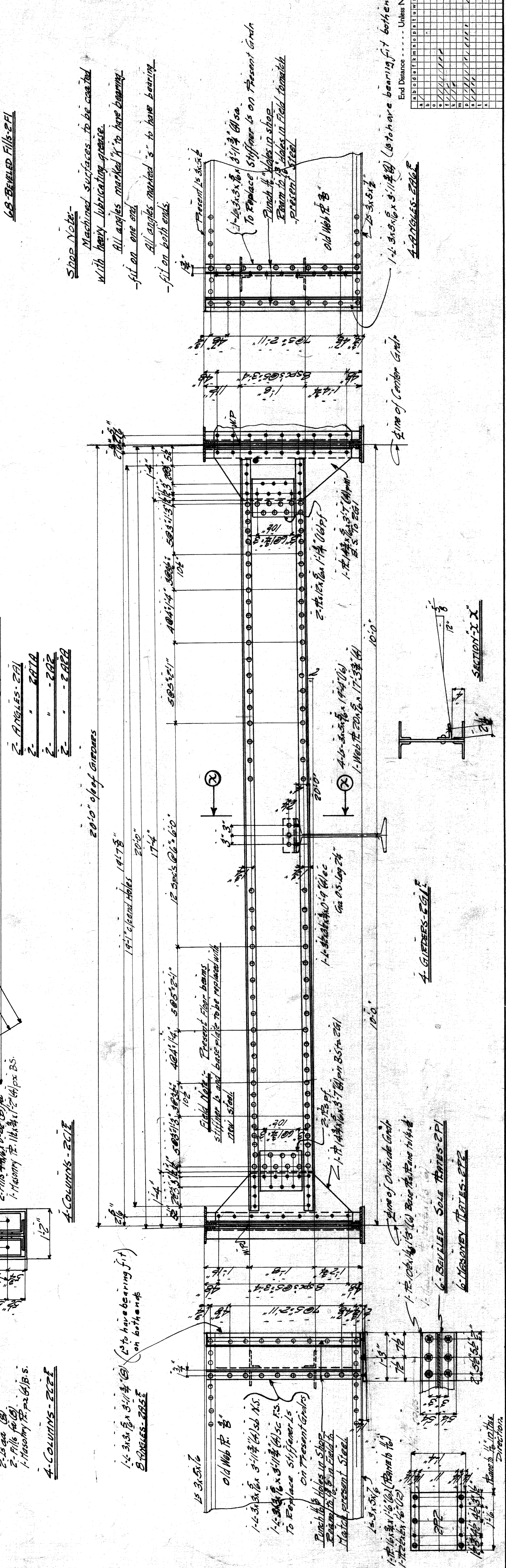
FOR: CITY OF DETROIT
LOCATION: DETROIT MICHIGAN
DESCRIPTION: REPAIRING & BRACING E. GRAND RIVER VIADUCT

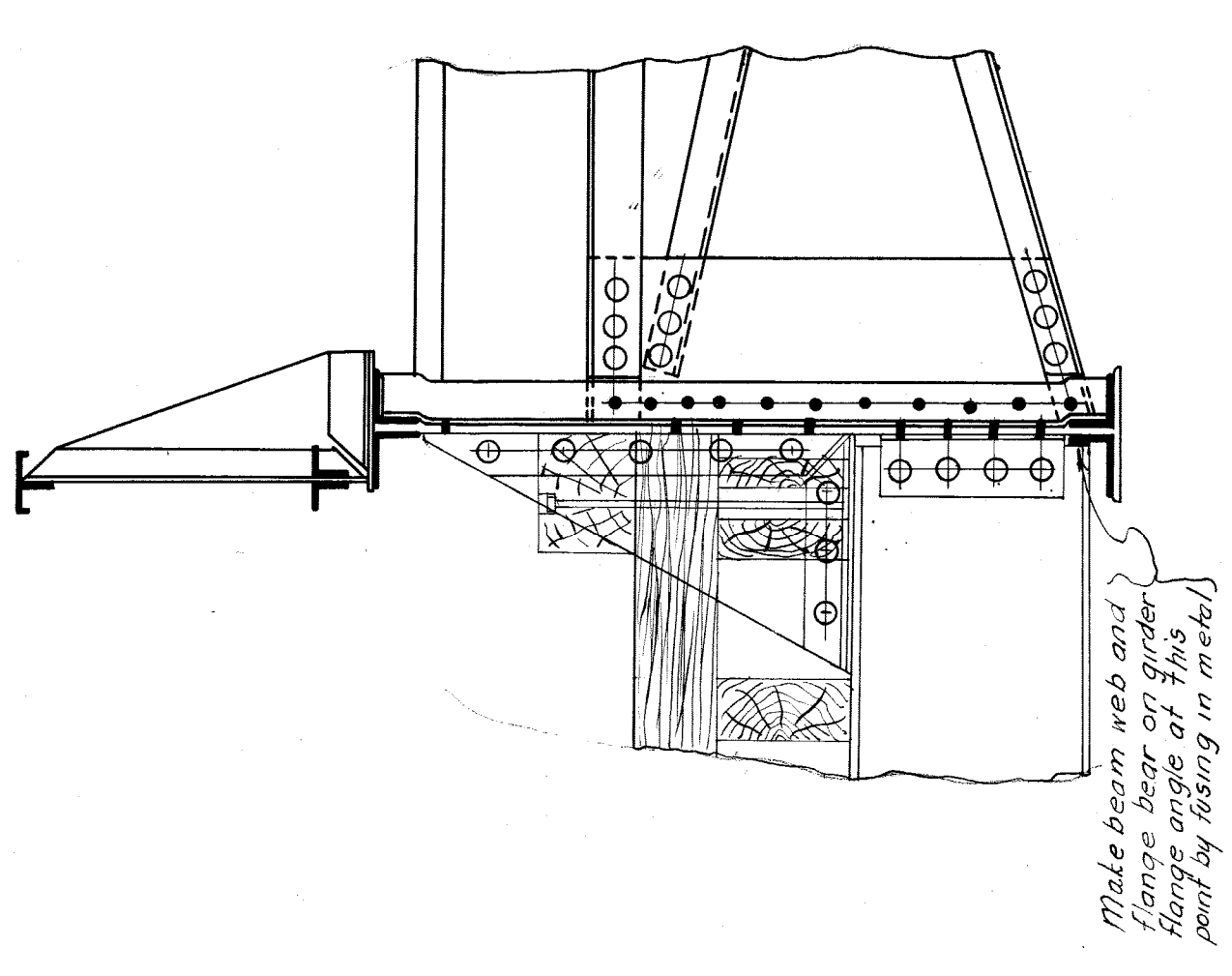
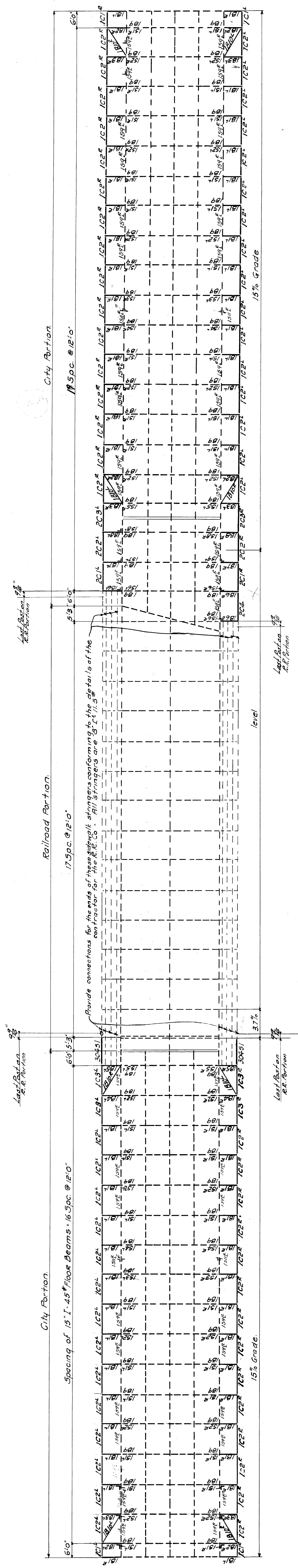
INSPECTED BY: [Signature]
SPECIFICATIONS: CUSTOMER
DETAILS OF: BRIDGE
SHOP PAINT: [Signature]
REMARKS: [Signature]

MADE BY: [Signature]
TRACED BY: [Signature]
CHECKED BY: [Signature]
SCALE: 1/4" = 1'-0"

DATE: [Signature]
DATE: [Signature]
DATE: [Signature]
DATE: [Signature]

SHEET NO. **2**
SECTION **B & C**
FILE NO. **2611**





WISCONSIN BRIDGE & IRON CO.
NORTH MILWAUKEE, WIS.

FOR **CITY OF DETROIT**,
LOCATION **DETROIT, MICH.**
DESCRIPTION **WIDENING GRAND AVE VIADUCT.**
DETAILS OF **ERECTION DIAGRAM.**

INSPECTED BY _____
REWORKING _____
ERECTED BY _____

MADE BY **W. H. B. S. T.** DATE **5/27/25**
TRACED BY _____ DATE _____
CHECKED BY **C. E. P.** DATE **5-28-25**
SCALE _____
SECTION _____ SHEET No. **E1.**

2955

Unless Noted

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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File X0 87-28

WISCONSIN BRIDGE & IRON CO.
NORTH MILWAUKEE, WIS.

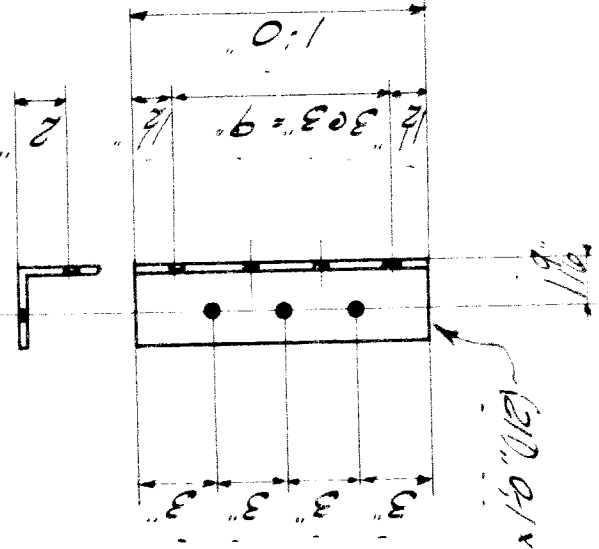
FOR CITY OF DETROIT
LOCATION DETROIT, MICH.
DESCRIPTION REINFORCING E. GRAND. BVD. Y. WAREHOUSING
ERECTED BY W.B. & I. Co.
SPECIFICATIONS CUSTOMER

CONT. NO. 2611-A
BILL NO. 301

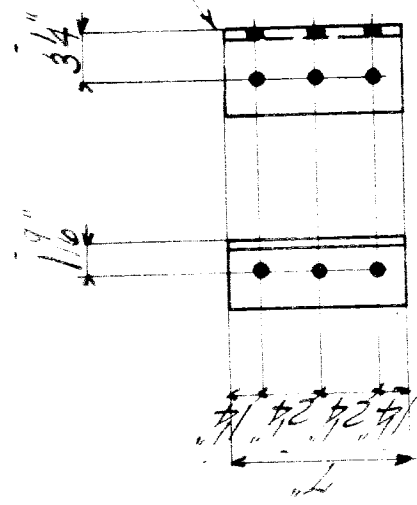
INSPECTION BY W.B. & I. Co.
MADE BY GEO. A. F. DATE 9-26-23
TRACED BY GEO. A. F. DATE 9-26-23
CHECKED BY ROYERS DATE 9-26-23

RIVETS 13/16" UNLESS NOTED
OPEN HOLES 1/8" UNLESS NOTED
SHOP PAINT 1st. Red Lead
FIELD PAINT 2nd. Red Lead

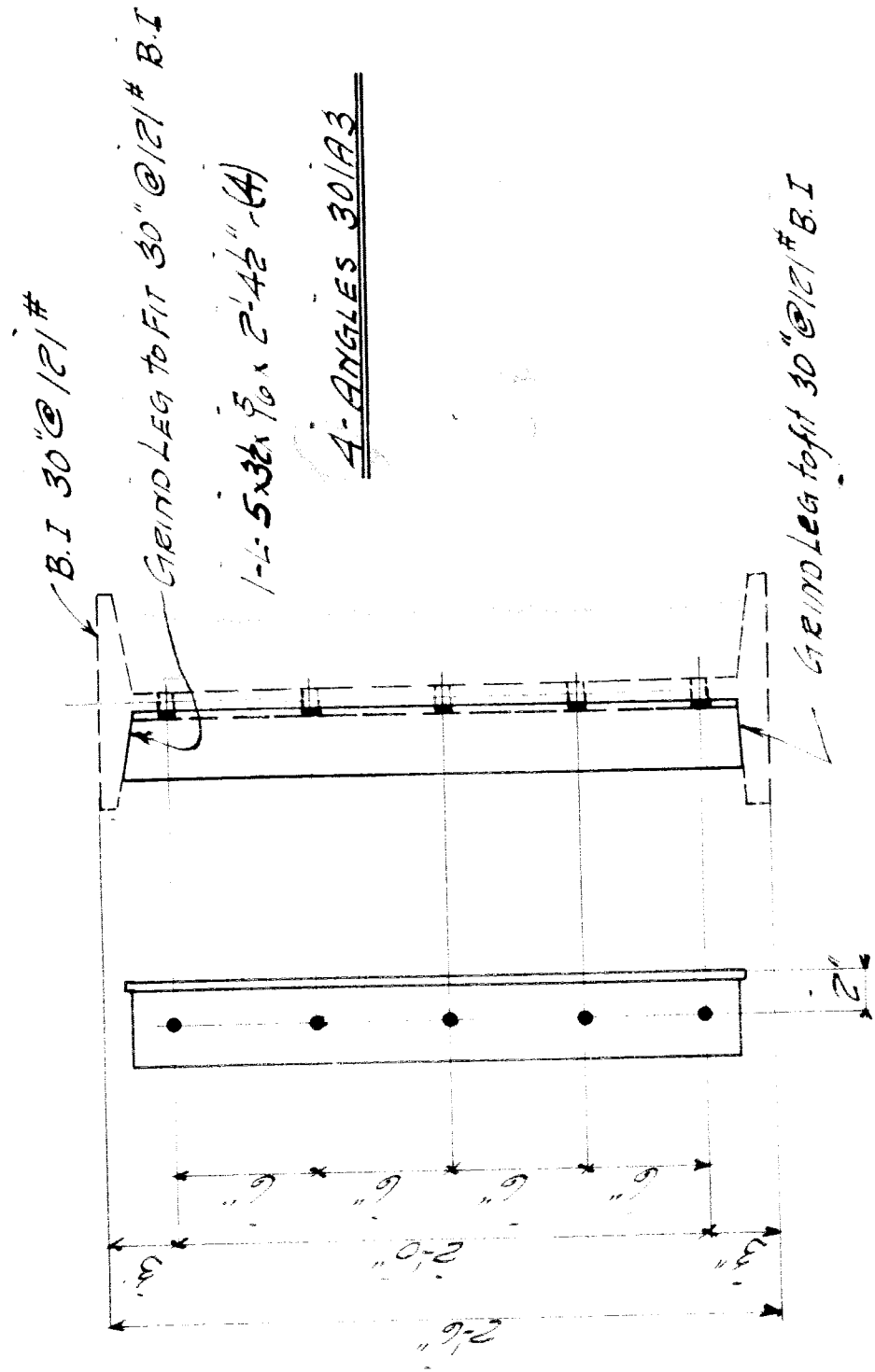
Delight Trucking
Inc.

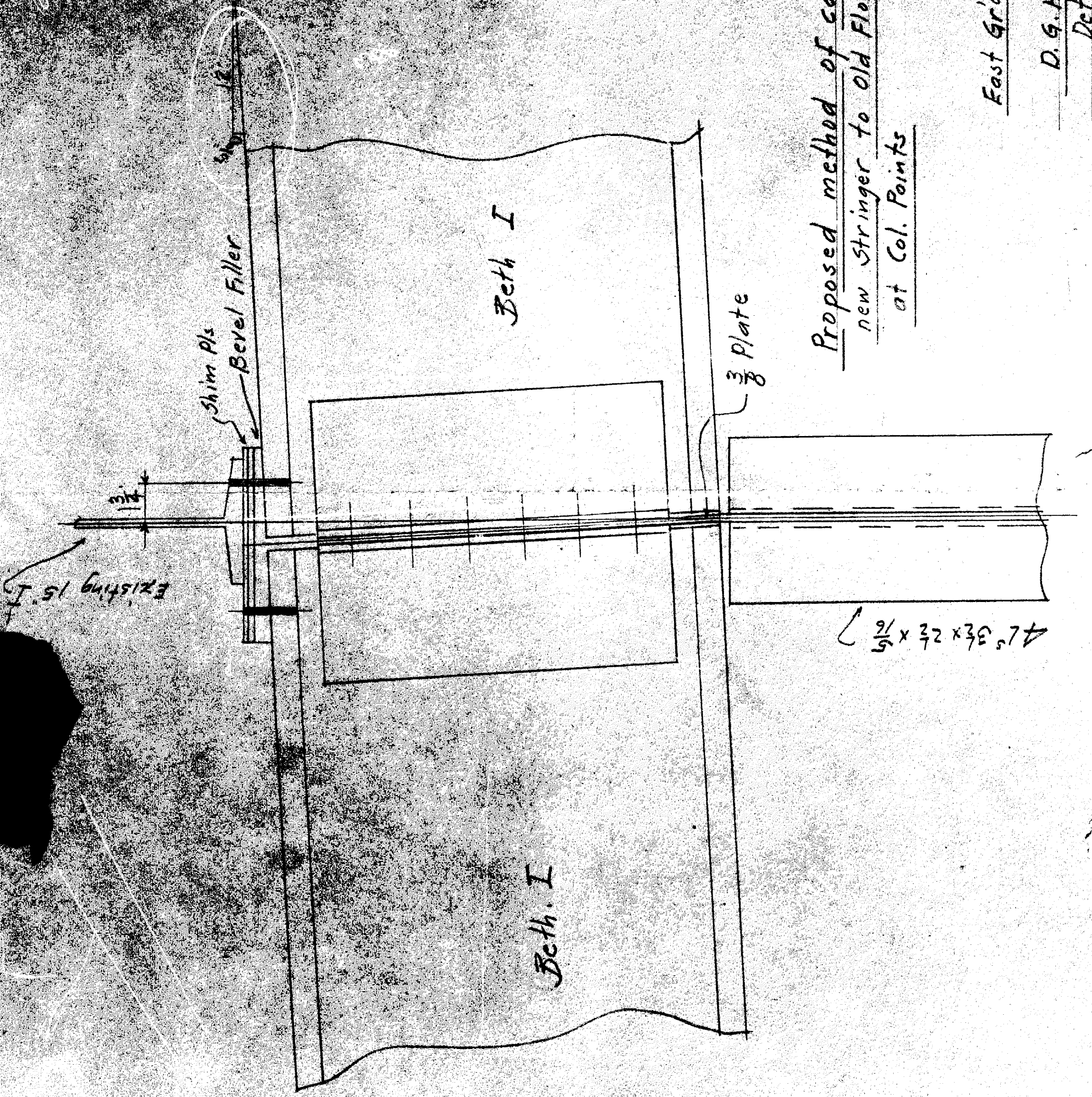


112 ANGLES-301A1



8-ANGLES-301A2E





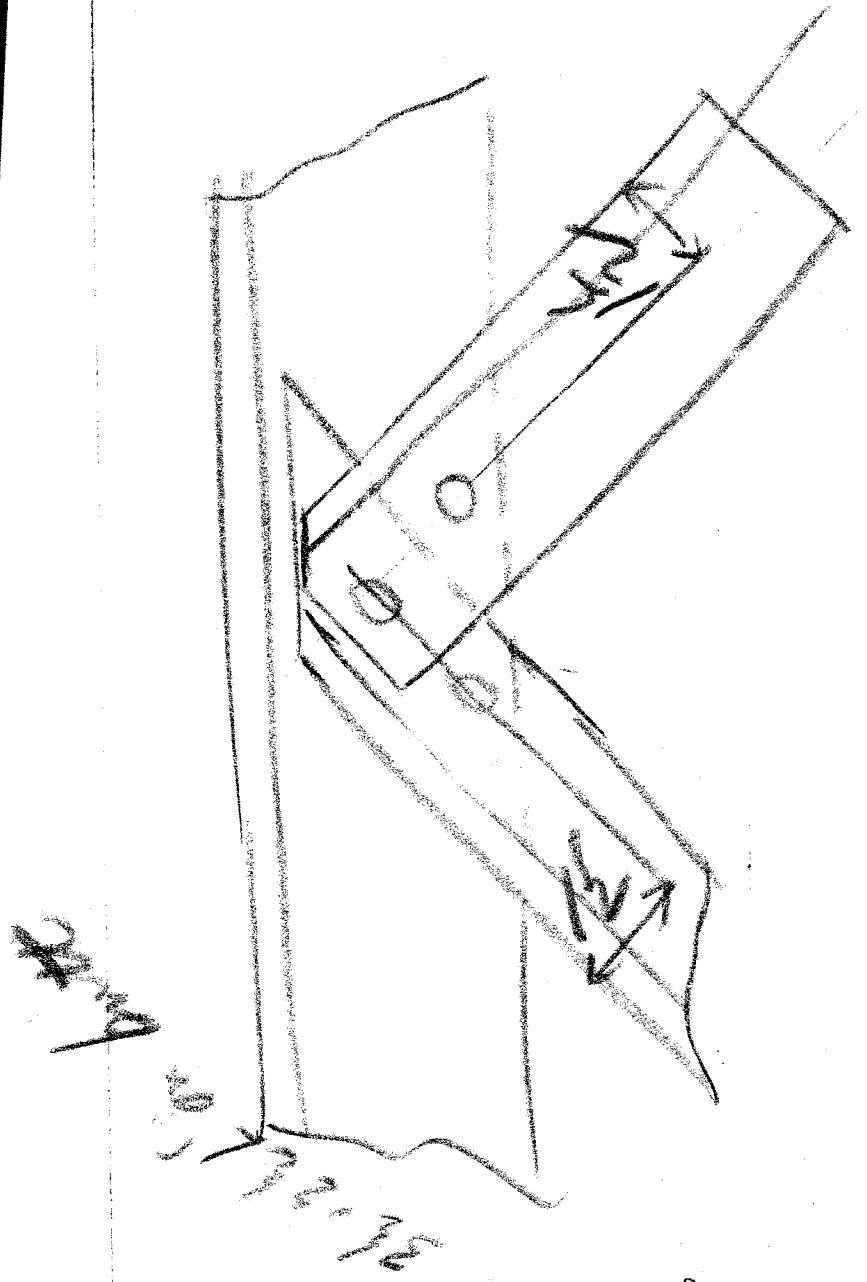
Proposed method of connecting
new Stringer to old Floor Beams
at Col. Points

East Gr'd Boulevard Viaduct

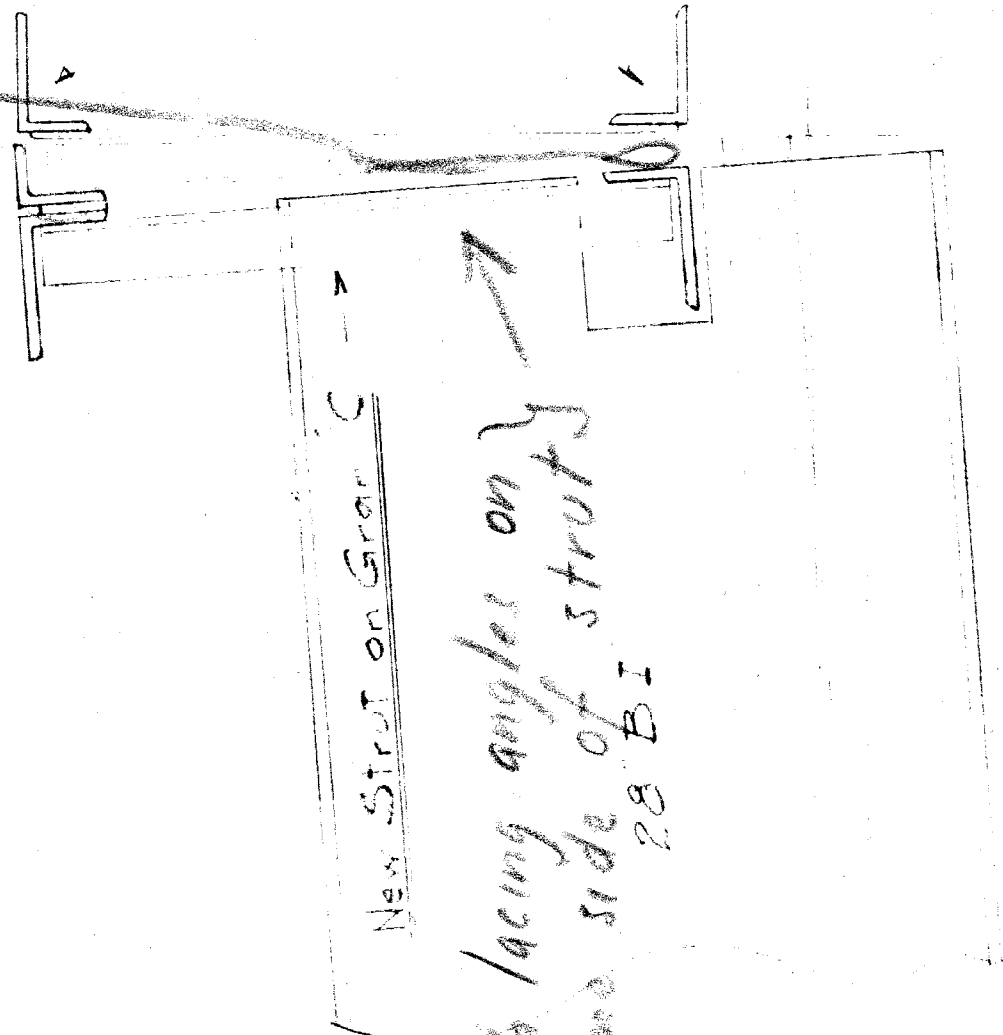
D. G. H. + M. Ry.
Detroit - Mich.

Est #469/23

Bill #701



Present Strut on Ground



New Strut on Gravel
 both facing angles on y
 same side of struts
 28 BI

A-B
 A-B

BENT @ OF C.D WORK

RELATIVE POSITION OF STRUTS ON 4 OF NEW ERECT

SAT # 703

Scale 1/20

2611