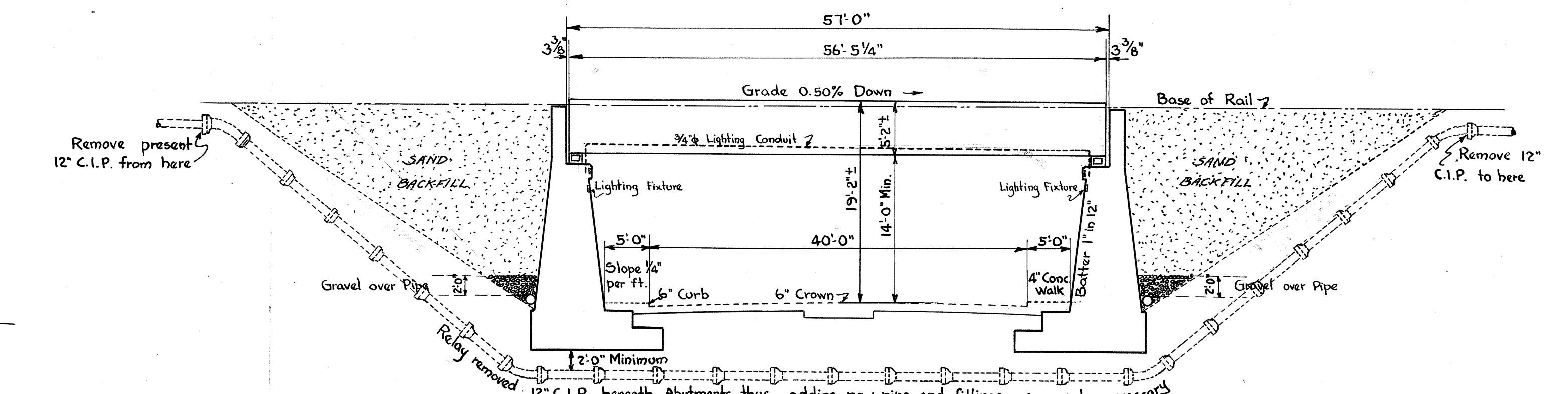


PLAN



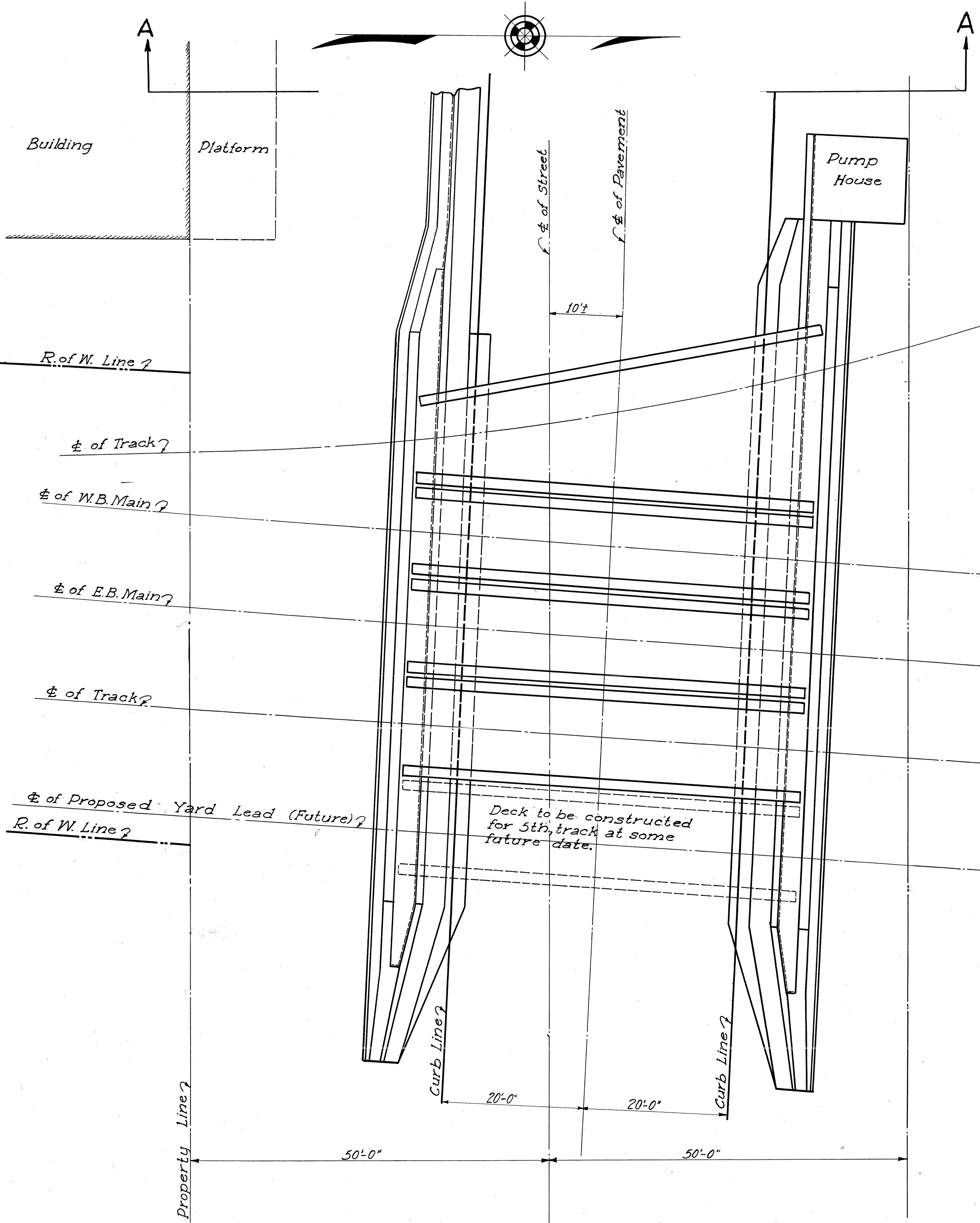
SECTION AT RIGHT ANGLES TO C OF PAVEMENT

- LIST OF DRAWINGS**
1. GENERAL PLAN
 2. STREET PLAN AND PROFILE
 3. TRACK PLAN AND PROFILE
 4. TEMPORARY TRACK WORK
 5. GENERAL STEEL PLAN
STEEL DESIGN GIRDERS G1, G2
 6. STEEL DESIGN GIRDERS G3, G4
 7. NORTH ABUTMENT
 8. SOUTH ABUTMENT
 9. DECK DETAILS
 10. PUMP HOUSE
 11. STANDARD HAND RAIL

BR. 179 1/2

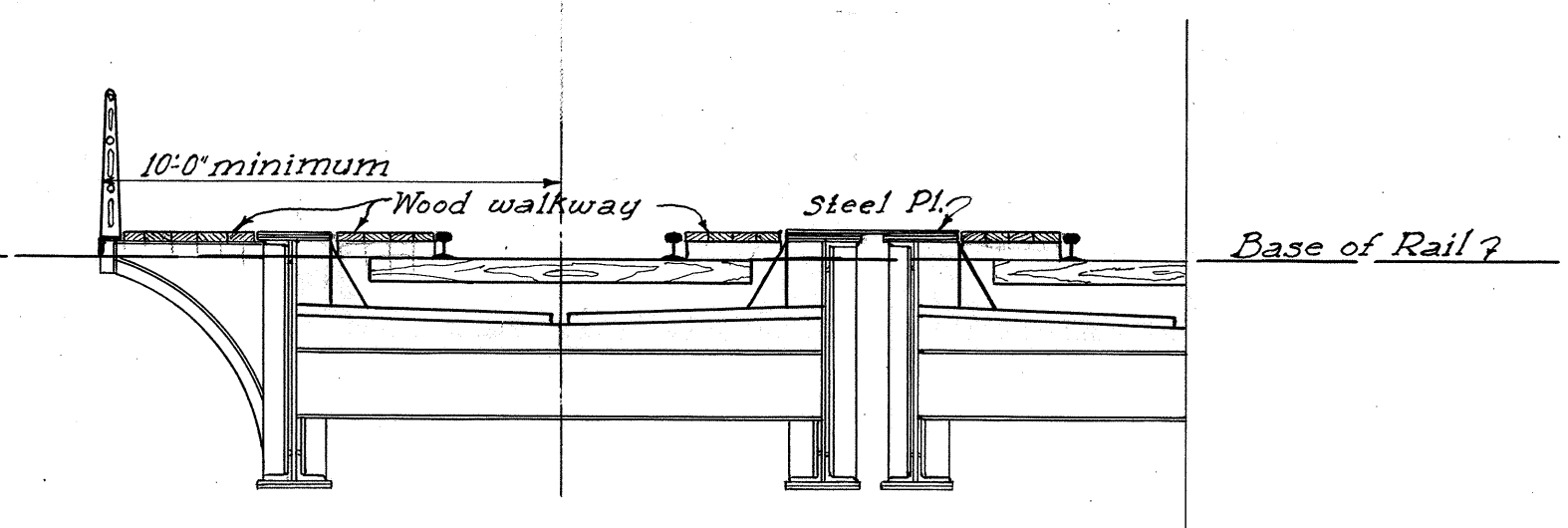
WABASH RAILWAY COMPANY			
OFFICE OF THE CHIEF ENGINEER			
STRUCTURE: SOUTH GRAND AVE. GRADE SEP'N.			
LOCATION: SPRINGFIELD, ILL.			
DIVISION: SPRINGFIELD			
SCALE: 1" = 10'-0"	GENERAL PLAN	SHEET NO.	NO. OF SHEETS
DATE: 5-15-31		1	11
DRAWN BY R.D.W.		PLAN:	
TRACED BY R.D.W.		CASE:	
CHECKED BY T.W.S.			

44-415.24-311



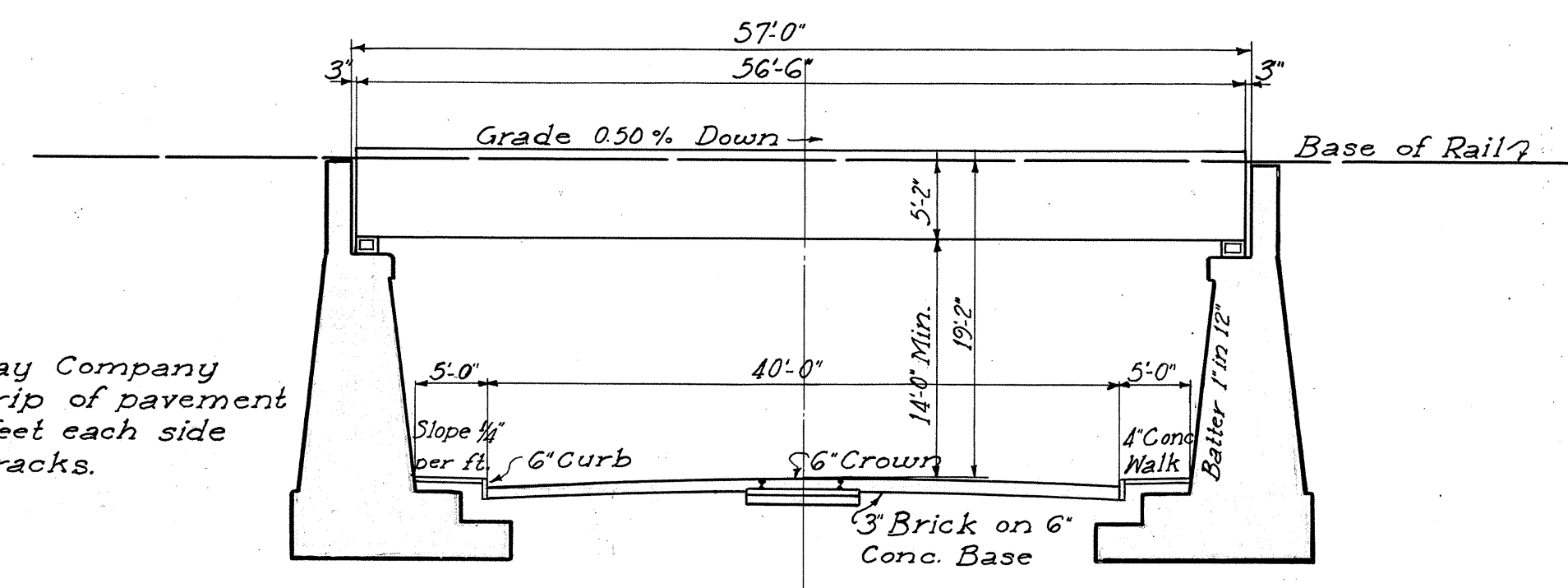
PLAN
Scale 1"=10'-0"

6" minimum ballast under tie,
3" concrete armor coat,
2 ply fabric waterproofing
6" concrete floor

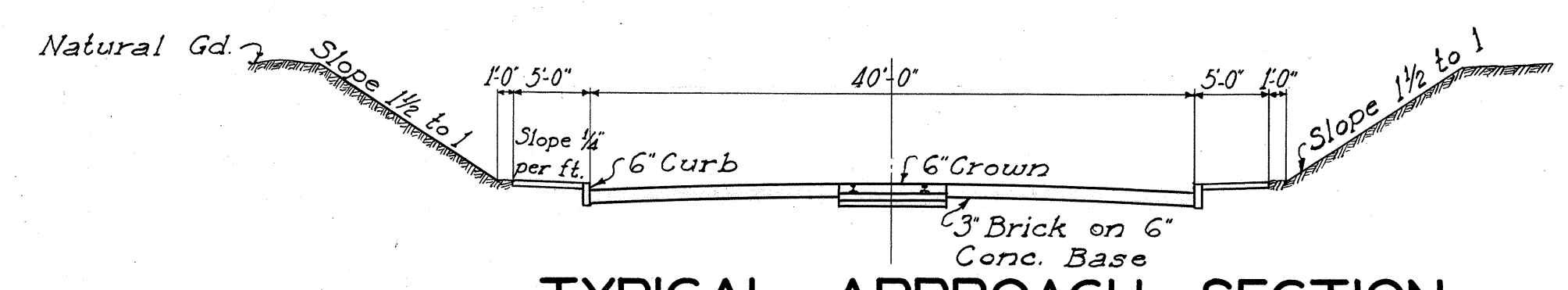


PARTIAL SECTION THRU DECK
Scale 1/4"=1'-0"

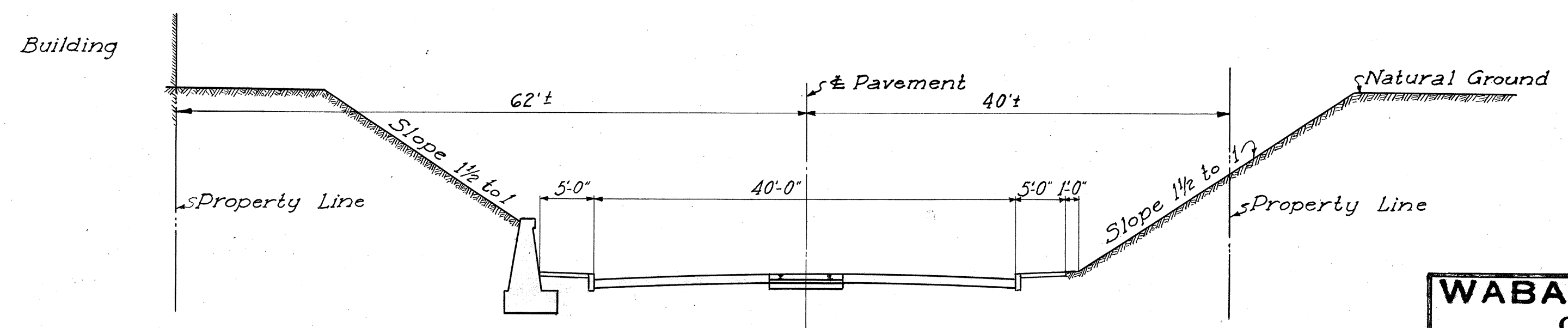
Note: Street Railway Company
pays for strip of pavement
7' wide; 3 1/2 feet each side
of center of car tracks.



SECTION AT RIGHT ANGLES TO CENTER OF STREET
Scale 1"=10'-0"



TYPICAL APPROACH SECTION
Scale 1"=10'-0"



SECTION A-A
Scale 1"=10'-0"

APPROVED: *John W. Kraft Mayor*
Attest *M. M. Smith, City Clerk.*
For City of Springfield, Ill.
W. W. Carter - Asst. City Engineer
For Wabash Railway Company.

EXHIBIT "A"

WABASH RAILWAY COMPANY			
OFFICE OF THE CHIEF ENGINEER			
STRUCTURE: SO. GRAND AVE. GRADE SEP'N.			
LOCATION: SPRINGFIELD ILL.			
DIVISION: SPRINGFIELD			
SCALE: <i>Shown</i>	GENERAL PLAN	SHEET NO.	NO. OF SHEETS
DATE: <i>Mar 26, 1931</i>		1	11
DRAWN BY: <i>J.M.E.L.</i>		PL. OR. CASE:	
TRACED BY: <i>J.M.E.L.</i>			
CHECKED BY:			

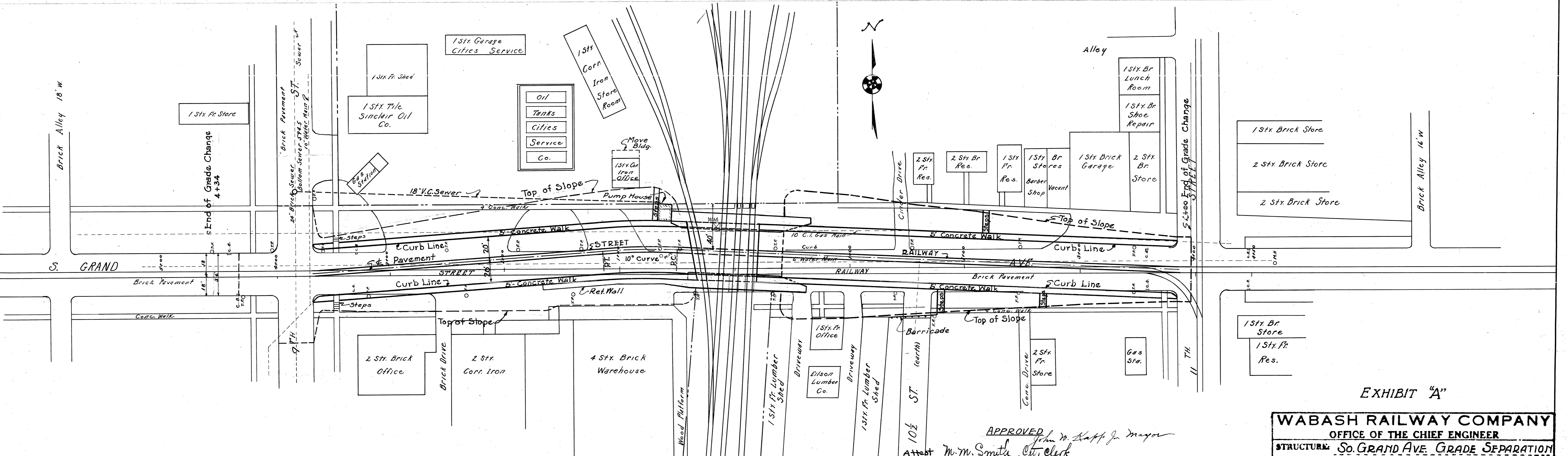
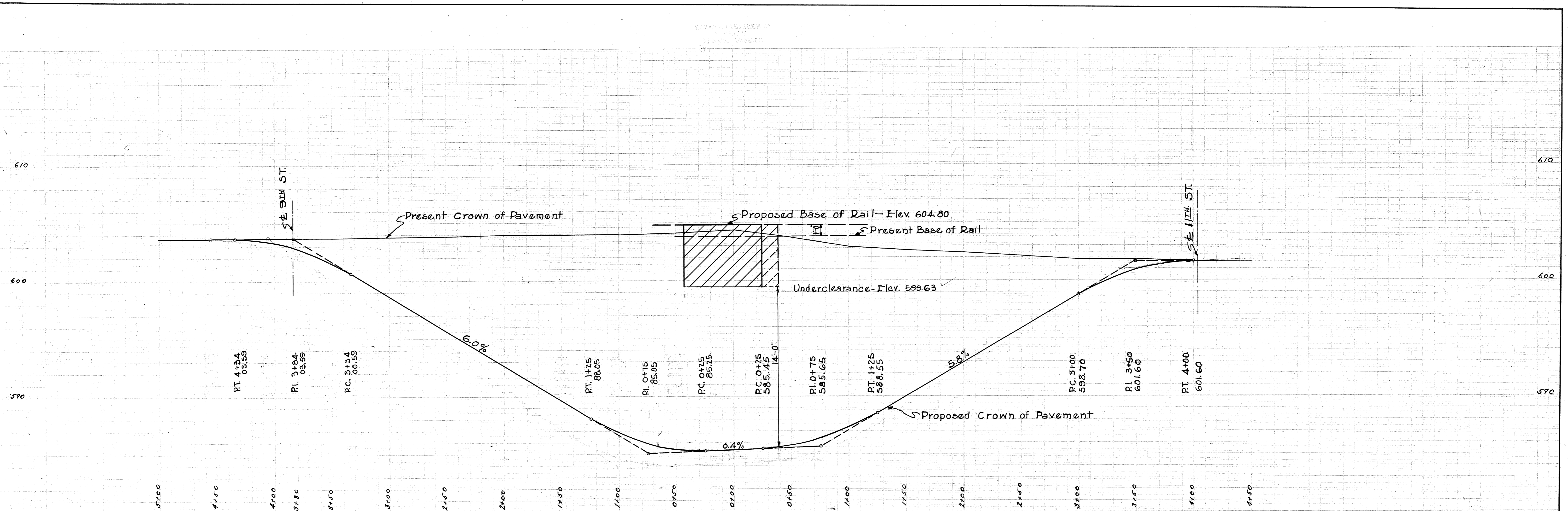
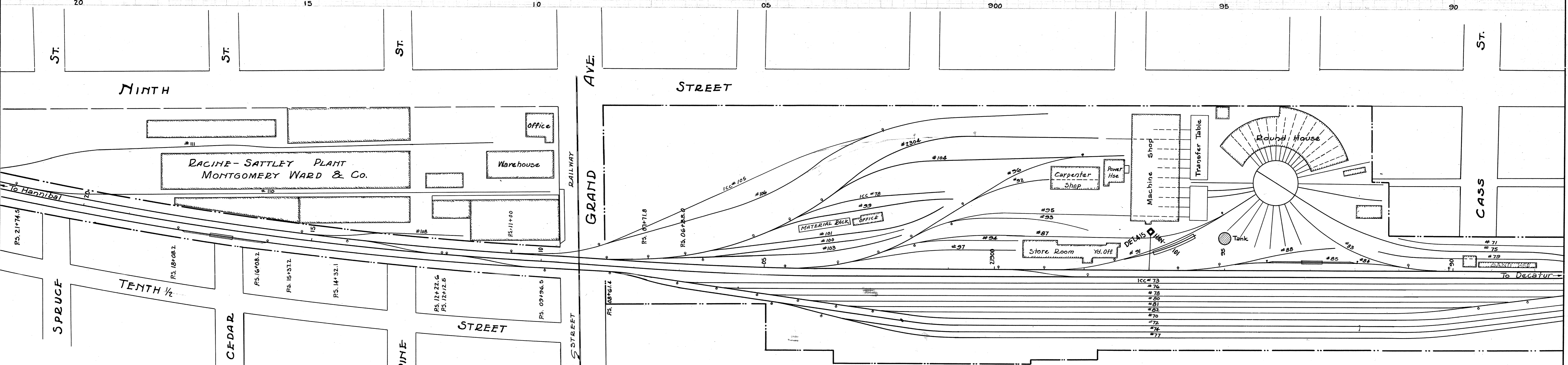
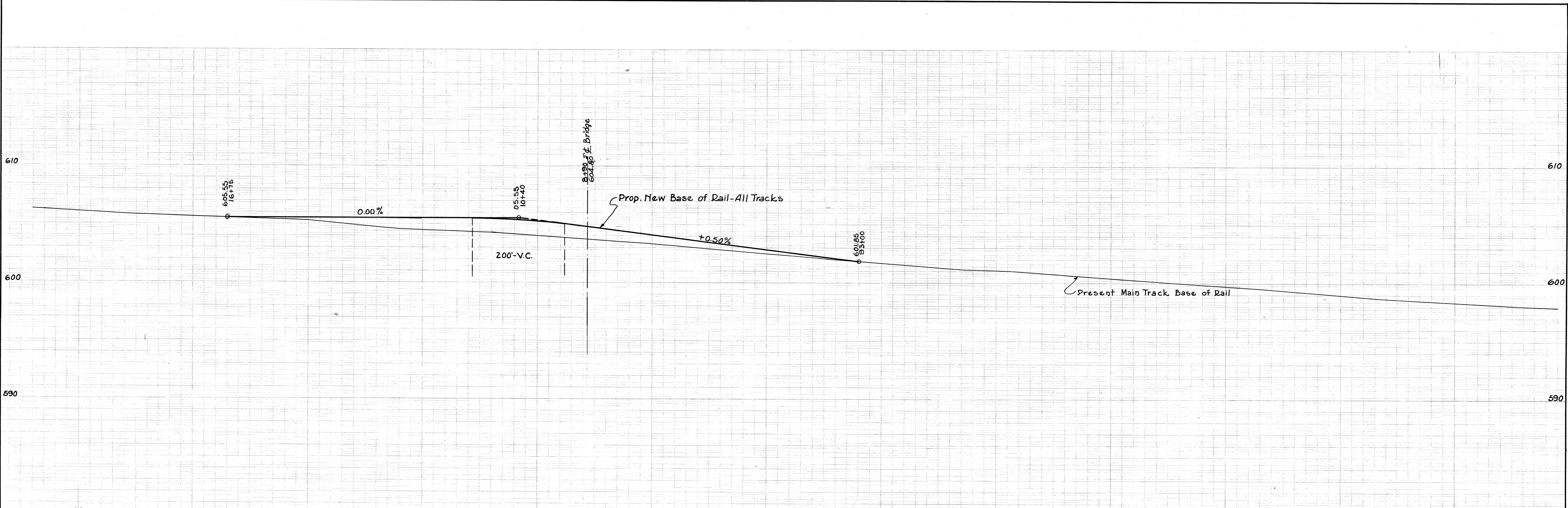


EXHIBIT "A"

APPROVED: *J. W. Kapp, Jr. Mayor*
 Attest: *M. M. Smith, City Clerk*
 For City of Springfield, Ill.
J. H. Conroy - Chief Engineer
 For Wabash Railway

WABASH RAILWAY COMPANY			
OFFICE OF THE CHIEF ENGINEER			
STRUCTURE: So. GRAND AVE. GRADE SEPARATION			
LOCATION: SPRINGFIELD, ILLINOIS			
DIVISION: SPRINGFIELD			
SCALE: Vert. 1"=4'	DATE: Mar. 26, 1931	DRAWN BY: W.J.H.	SHEET NO. 2
Hor. 1"=40'			
STREET PLAN & PROFILE		TRACED BY: E.L.L.	PLAN:
CHECKED BY: N.R.B.		CASE:	

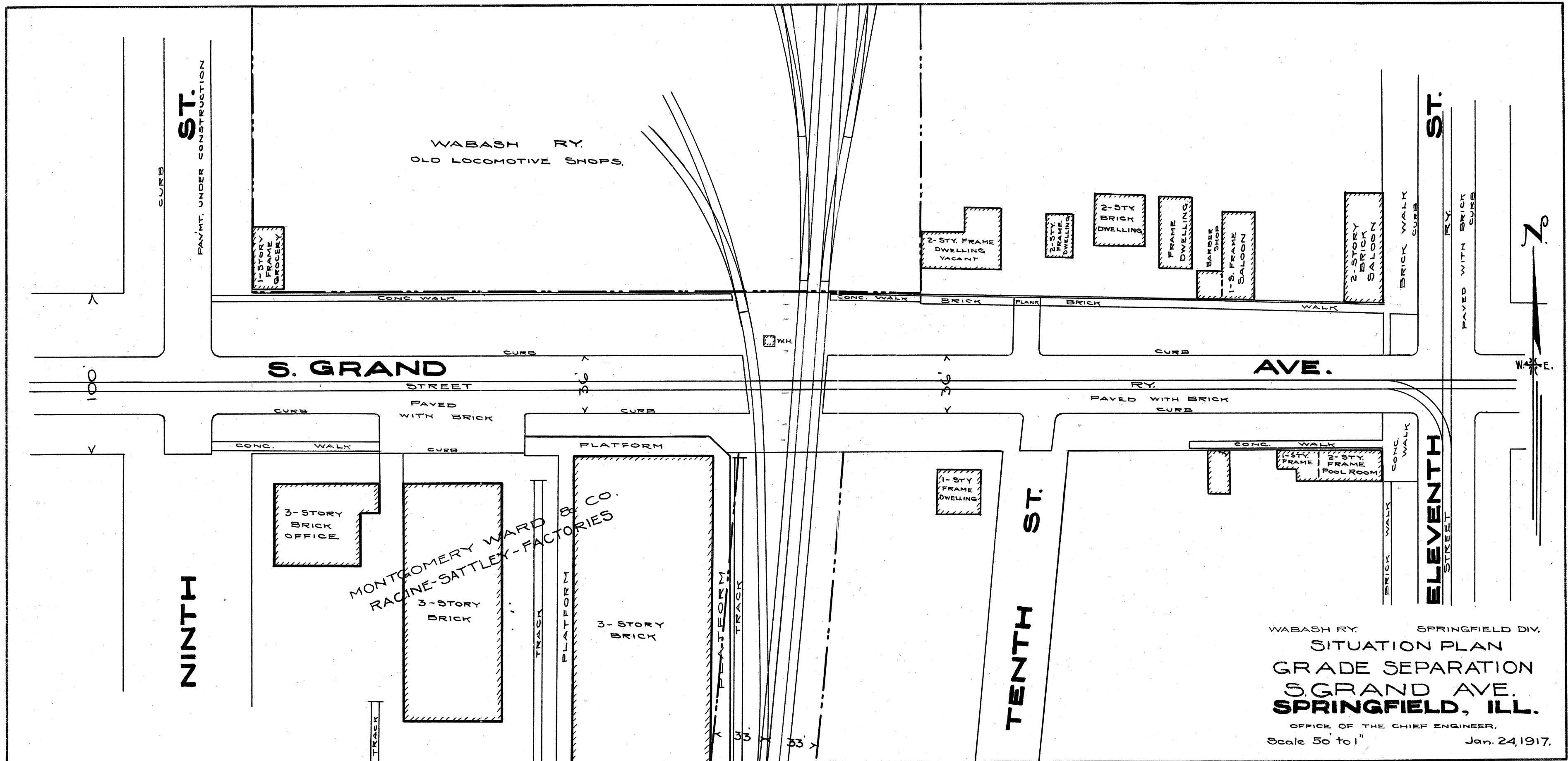


APPROVED
Wm. M. Smith Mayor
 City Clerk
 For City of Springfield
J. H. ...
 For Wabash Railway

EXHIBIT "A"

WABASH RAILWAY COMPANY			
OFFICE OF THE CHIEF ENGINEER			
STRUCTURE: <i>So. Grand Ave. Grade Separation</i>			
LOCATION: <i>Springfield - Illinois</i>			
DIVISION: <i>Springfield</i>			
SCALE: Vert. 1"=4'	DATE: May 26, 1931	DRAWN BY: F.L.M.	SHEET NO. 3
Hor. 1"=100'			
TRACED BY: F.L.M.	TRACK PLAN & PROFILE		NO. OF SHEETS 11
CHECKER BY:	PLAN:		CASE:

DH-415.24-311



WABASH RY. SPRINGFIELD DIV.
SITUATION PLAN
GRADE SEPARATION
S. GRAND AVE.
SPRINGFIELD, ILL.
 OFFICE OF THE CHIEF ENGINEER,
 Scale 50' to 1" Jan. 24, 1917.

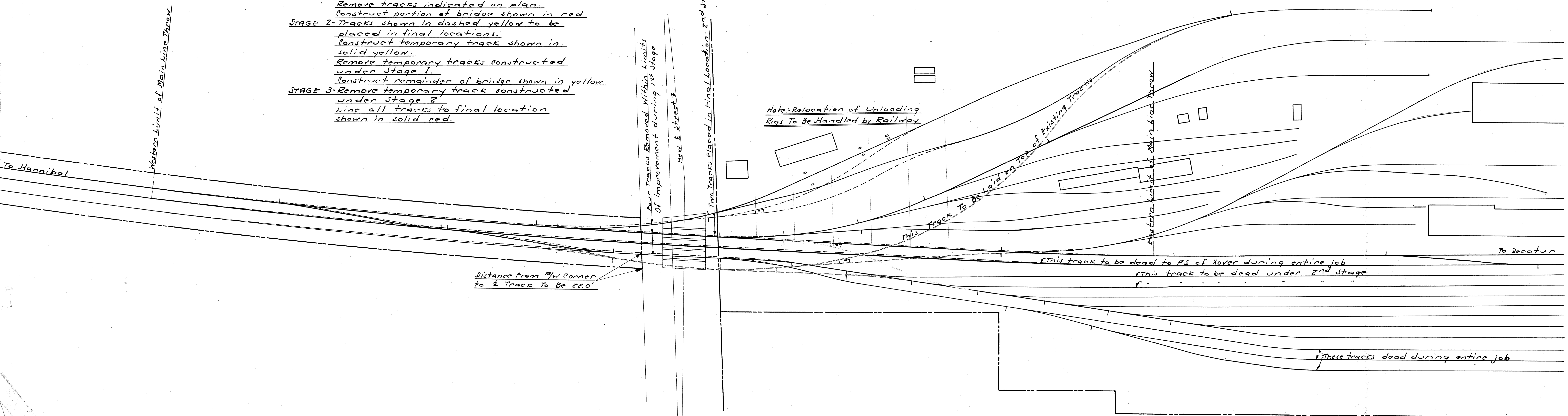
DH-415.24-171

STAGE 1 - Construct temporary tracks shown in dashed red.
 Remove tracks indicated on plan.
 Construct portion of bridge shown in red.

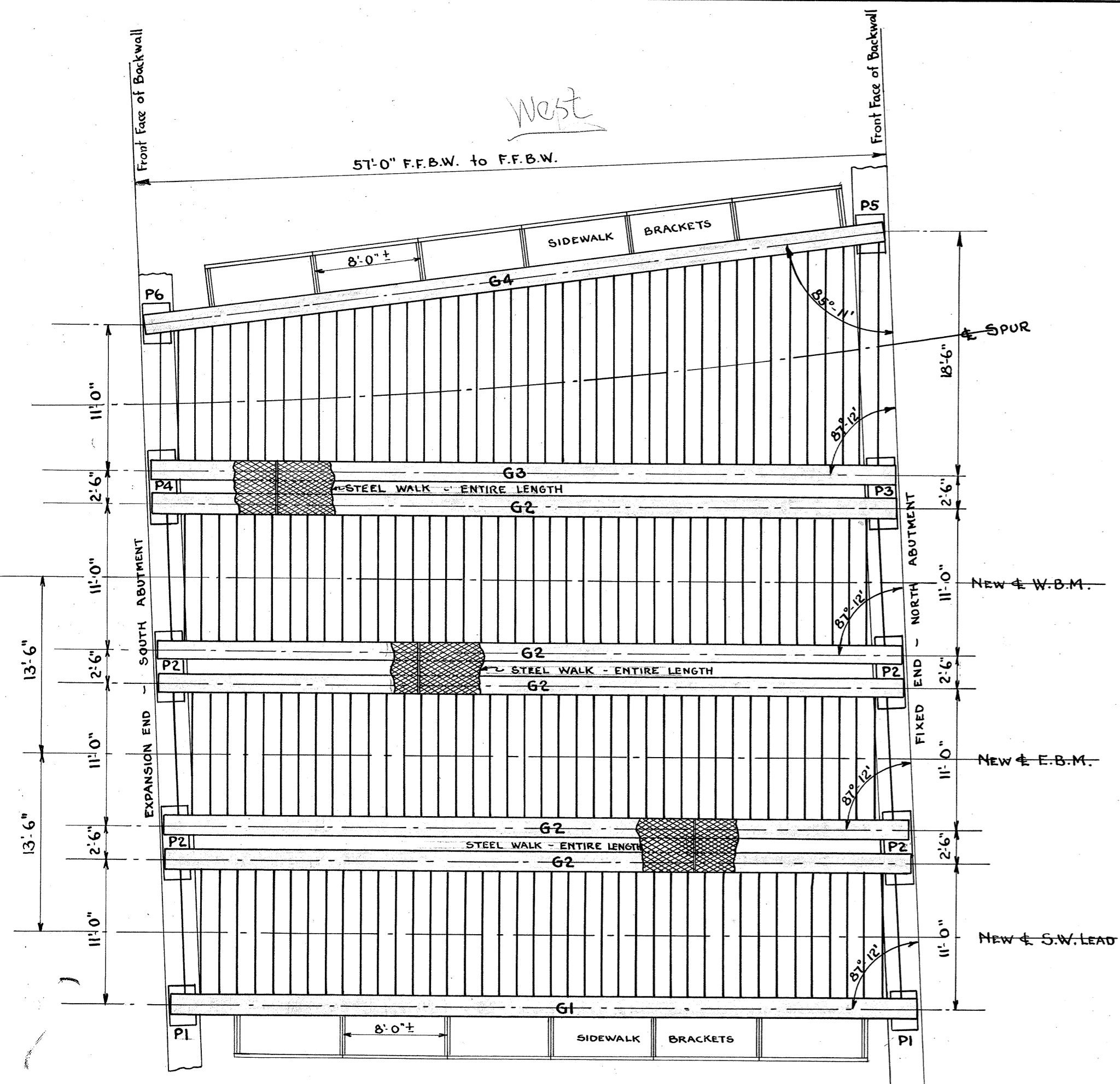
STAGE 2 - Tracks shown in dashed yellow to be placed in final locations.
 Construct temporary track shown in solid yellow.
 Remove temporary tracks constructed under stage 1.
 Construct remainder of bridge shown in yellow.

STAGE 3 - Remove temporary track constructed under stage 2.
 Line all tracks to final location shown in solid red.

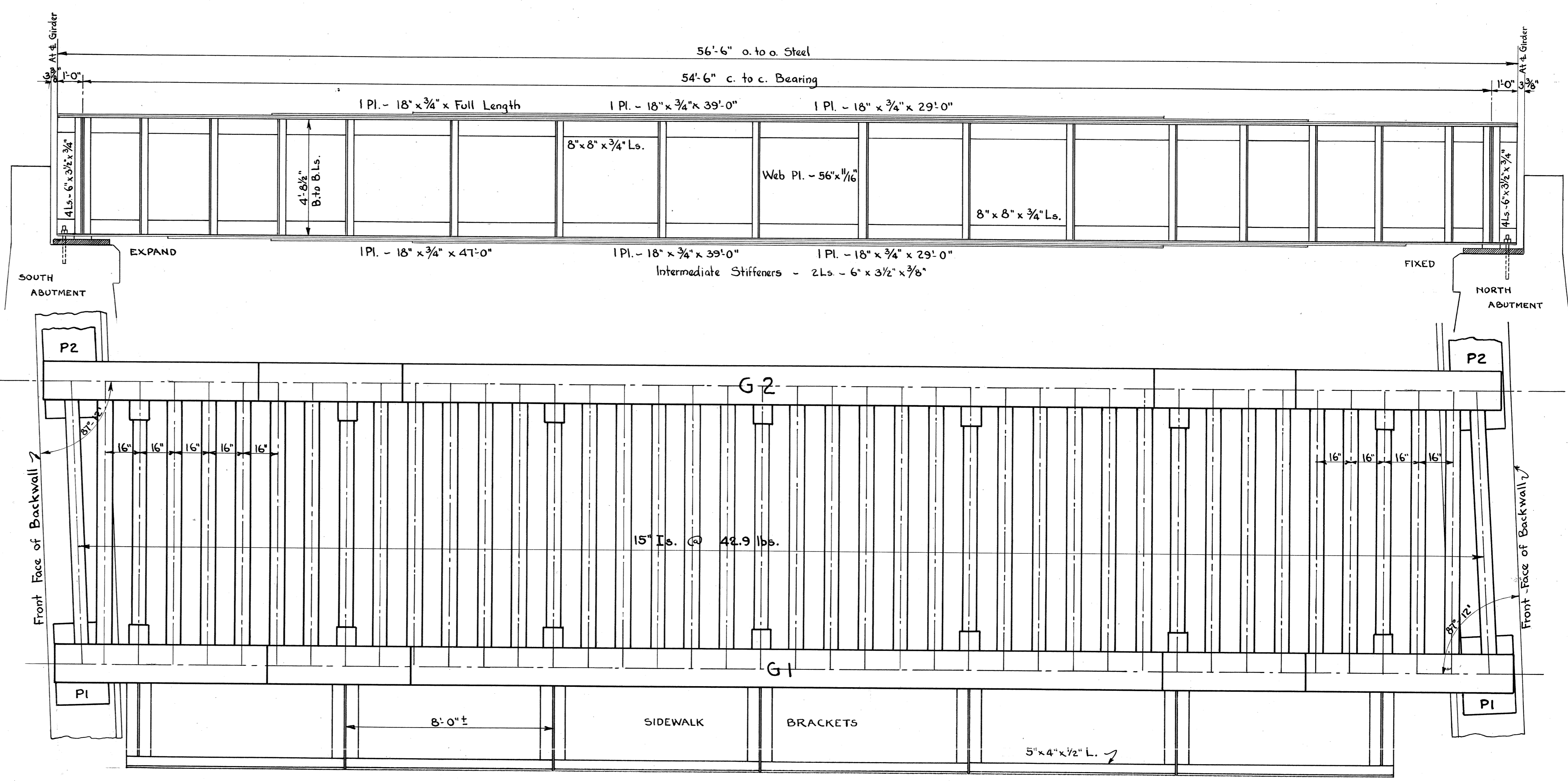
Note: Relocation of Unloading Rigs To Be Handled by Railway



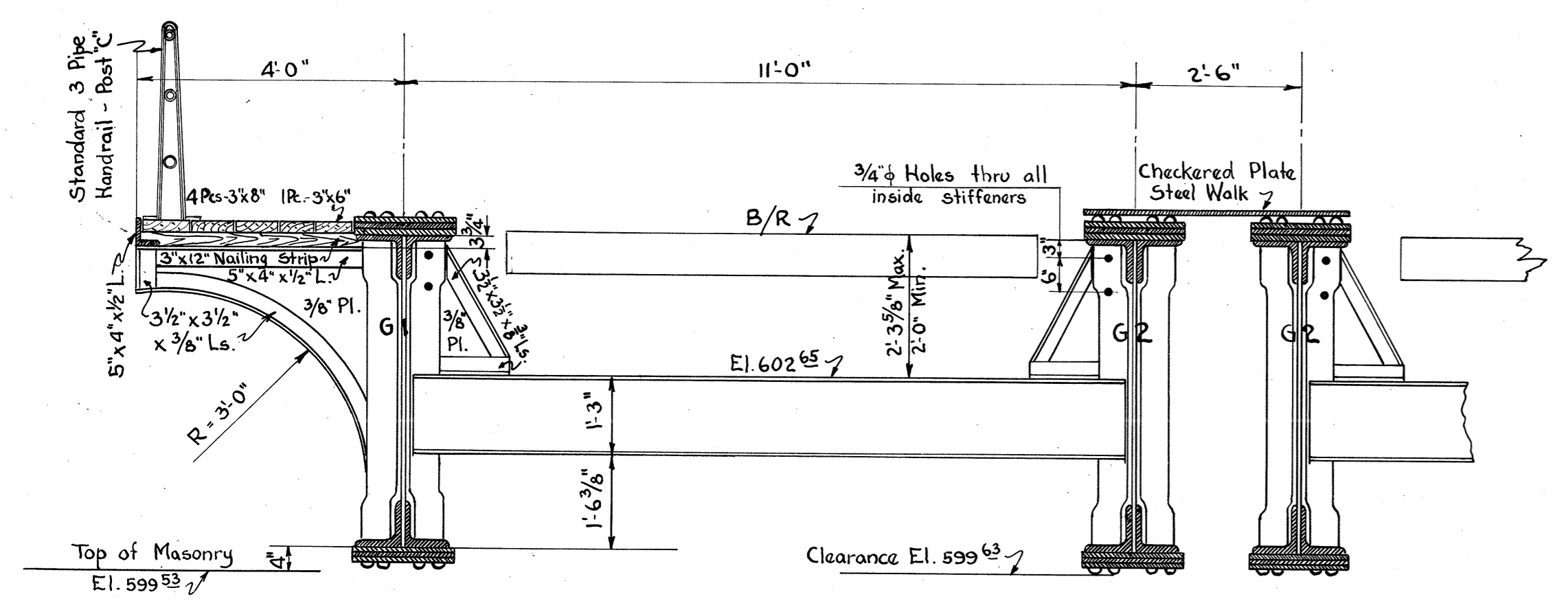
WABASH RAILWAY COMPANY			
OFFICE OF THE CHIEF ENGINEER			
STRUCTURE: SOUTH GRAND AVE. GRADE SEP'N.			
LOCATION: SPRINGFIELD, ILL.			
DIVISION: SPRINGFIELD			
SCALE: 1" = 50'	DATE: 5-20-31	DRAWN BY: T.E.O.	CHECKED BY: T.E.O.
TEMPORARY TRACK WORK		SHEET NO. 4	NO. OF SHEETS 11
TRACED BY: T.E.O.		PLANS	CASE:



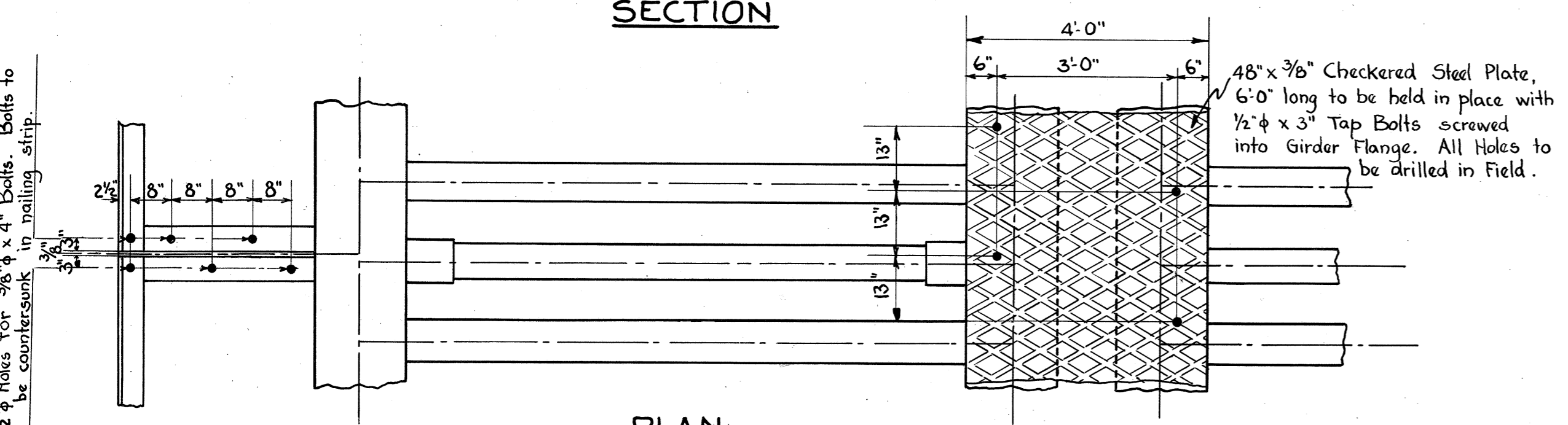
GENERAL STEEL PLAN
Scale 1/8" : 1'-0"



DETAILS OF GIRDERS G1, G2
Scale - 3/8" : 1'-0"



SECTION



PLAN
Scale 1/2" : 1'-0"

GIRDERS G1, G2
56'-6" o. to o. Steel 54'-6" c. to c. Bearing

Dead Load -
Track Ballast - 860
Slab - 690
Steel - 810
Total 2360 lbs./lin. ft. Girder

Moments -
D.L. - 2360 x 54.5² x 1/8 = 876,000
L.L. - 1,648,300 x 7/6 = 1,920,000
I. - 91% = 1,750,000
Total = 4,546,000 ft. lbs.

Shear -
D.L. - 2360 x 54.5 x 1/2 = 64,300
L.L. - 1,382,000 x 7/6 = 161,200
I. - 91% = 147,000
Total = 372,500 lbs.

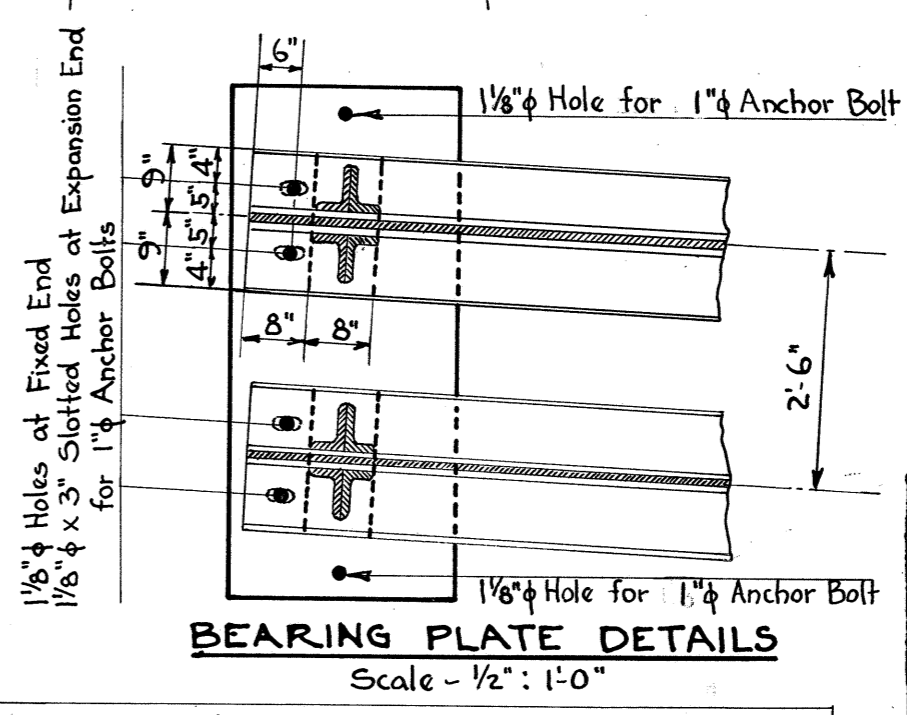
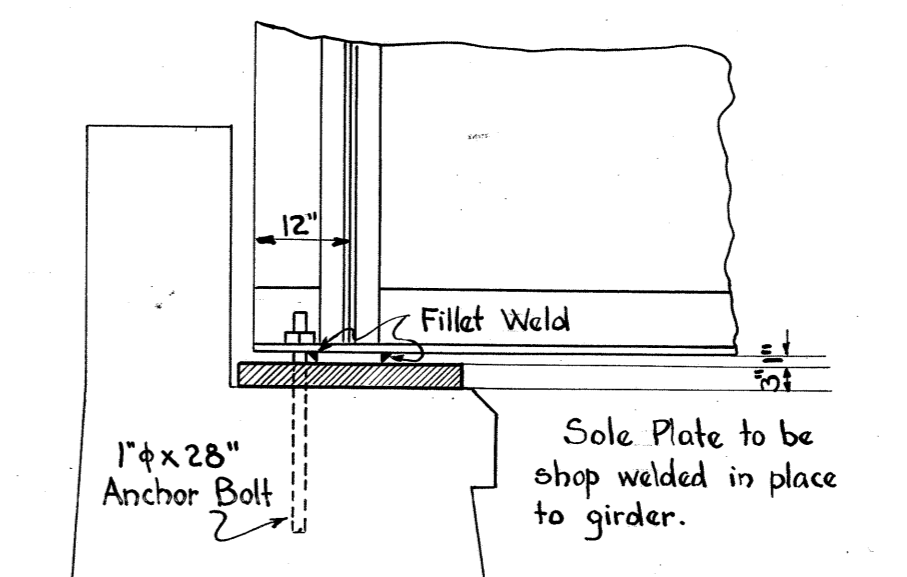
Web -
Area Required = 372,500 / 10,000 = 37.25 sq"
Use - 56" x 1/16" Pl. (A = 38.5 sq")

Flange -
Area Required = 4,546,000 x 12 x 1/56 x 1/16,000 = 60.9 sq"
Use - 2 Ls. - 8" x 8" x 3/4" (A = 9.94 x 2 = 19.88 sq" net)
3 Pls. - 18" x 3/4" (A = 12.00 x 3 = 36.00 " " "
1/8" Web (A = 38.5/8 = 4.81 " " "
Total = 60.69 sq" net

Cover Plates -
L₁ = 54.5 √(13.50 / 63.38) + 3.0 = 29'-0" L₂ = 54.5 √(21.00 / 63.38) + 3.0 = 39'-0"
L₃ = 54.5 √(40.50 / 63.38) + 3.0 = 47'-0"

End Stiffeners -
1 - 372,500 x 1/24,000 x 1/4 x 1/5.5 = .707
Use - 6" x 3/12 x 3/4" Ls.

Bearing -
372,500 / 450 = 828 sq" for one girder on concrete



Mark	No. Req'd	Load	Masonry Plates	Sole Plates
P1	2	372,500	1 Pl. - 24" x 3" x 3'-0"	1 Pl. - 8' x 1' x 1'-6"
P2	4	745,000	1 Pl. - 24" x 3" x 5'-8"	2 Pls. - 8' x 1' x 1'-6"
P3	1	852,500	1 Pl. - 28" x 3" x 5'-8"	2 Pls. - 8' x 1' x 1'-6"
P4	1	798,500	1 Pl. - 28" x 3" x 5'-4"	2 Pls. - 8' x 1' x 1'-6"
P5	1	424,300	1 Pl. - 24" x 3" x 3'-2"	1 Pl. - 8' x 1' x 1'-6"
P6	1	375,900	1 Pl. - 24" x 3" x 3'-0"	1 Pl. - 8' x 1' x 1'-6"

GENERAL NOTES

Live Load - Coopers E 70

Specifications - "A.R.E.A Specifications for Steel Railway Bridges," Latest Revision; and "Wabash Supplementary Specifications"

Reamed Work - General Reaming required thruout

Rivets - 7/8" φ

Holes - 15/16" φ for 7/8" φ Rivets

Paint - One shop coat, paint approved by Chief Engineer. No paint on tops of Floor Beams. No paint on inside of Girders above floor beams.

QUANTITIES

Total Weight of Steel -
Weight of one Girder, G1, G2 -
G3 -
G4 -

WABASH RAILWAY COMPANY
OFFICE OF THE CHIEF ENGINEER

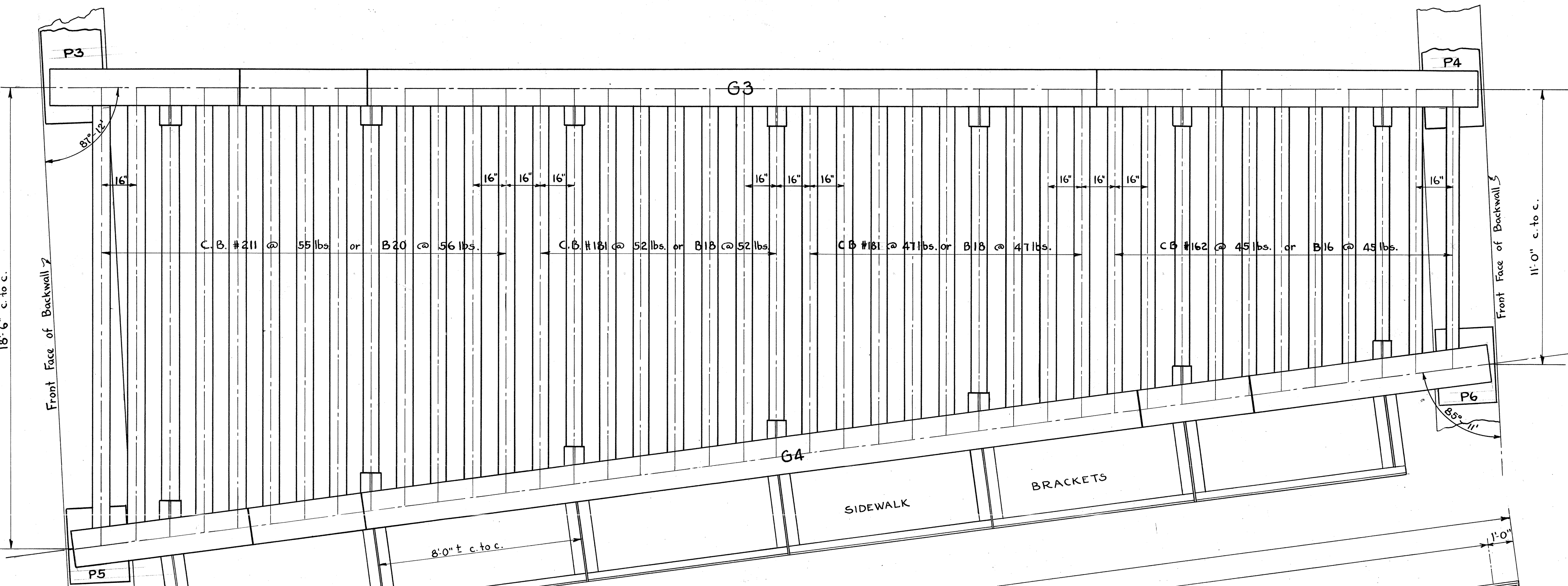
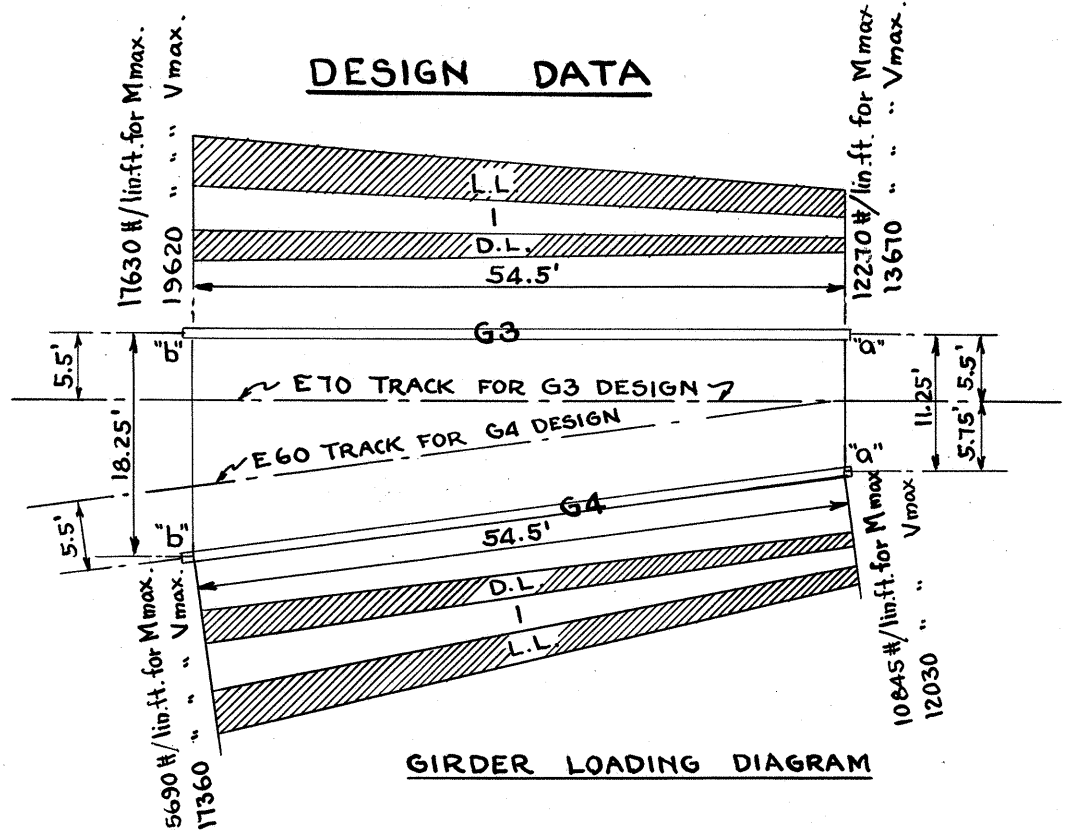
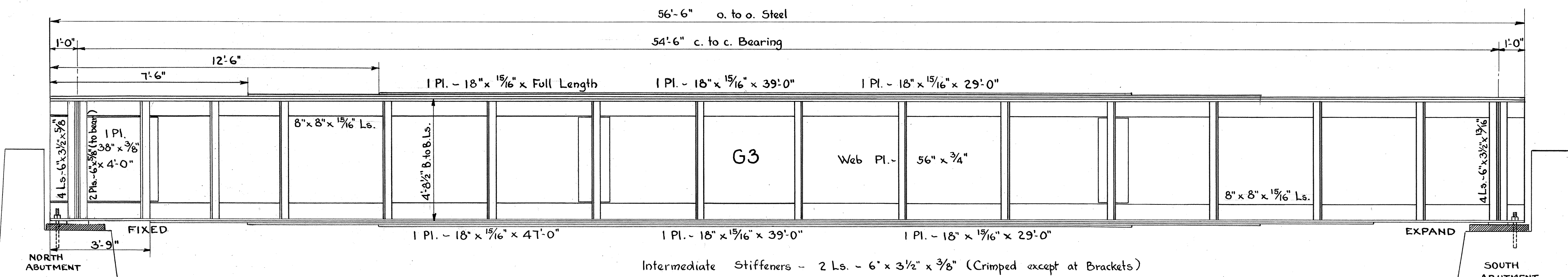
STRUCTURE: SOUTH GRAND AVE. GRADE SEP'N.
LOCATION: SPRINGFIELD, ILL.
DIVISION: SPRINGFIELD

SCALE: As shown
DATE: 5-15-31
DRAWN BY: R.D.W.
TRACED BY: R.D.W.
CHECKED BY: A.H.S.

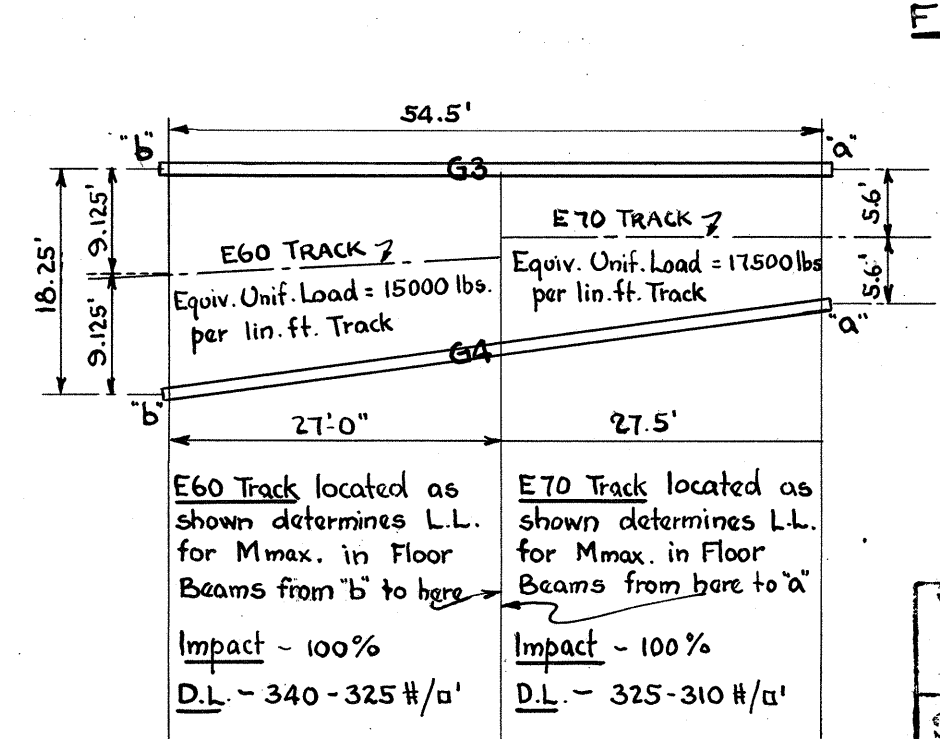
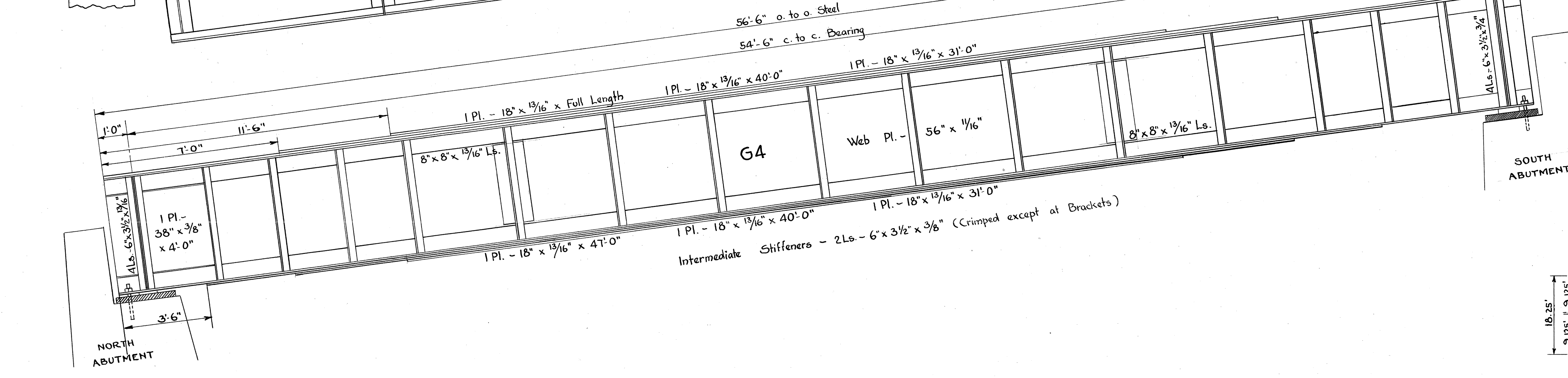
GENERAL STEEL PLAN
STEEL DESIGN
GIRDERS G1, G2

SHEET NO.	NO. OF SHEETS
5	11

QUAN. BY -
CKD BY -



GIRDER G3		GIRDER G4	
56'-6" o.t.o. Steel	54'-6" c.t.o. Bearing	56'-6" o.t.o. Steel	54'-6" c.t.o. Bearing
Loading -		Loading -	
Girder Steel - 600 lbs./lin.ft.		Girder Steel - 600 lbs./lin.ft.	
D.L. - Track and Ballast - 150 lbs./sq.ft.		D.L. - Track and Ballast - 150 lbs./sq.ft.	
Concrete Slab - 120 lbs./sq.ft.		Concrete Slab - 120 lbs./sq.ft.	
Floorbeams - 40 " " at 'a'		Floorbeams - 40 " " at 'a'	
		Floorbeams - 70 " " at 'b'	
Total D.L. at 'a' = 2300 lbs./lin. ft. Girder		Total D.L. at 'a' = 2300 lbs./lin. ft. Girder	
" " at 'b' = 3720 " " " " Girder		" " at 'b' = 3720 " " " " Girder	
L.L. -		L.L. -	
(E70 - Track 5.5' out from # Girder)		(E60 - Track 5.5' out from # Girder)	
Equiv. L.L. - Mmax. = 10440	Vmax. = 11900 #/lin. ft. Track	Equiv. L.L. - Mmax. = 10200 #/lin. ft. Track	Vmax. = 12030 #/lin. ft. Track
Girder L.L. at 'a' = 5220	at 'a' = 5950 #/lin. ft. Girder	Girder L.L. at 'a' = 4475	at 'a' = 5100 #/lin. ft. Girder
" " at 'b' = 7280	at 'b' = 8325 #/lin. ft. Girder	" " at 'b' = 6270	at 'b' = 7130 #/lin. ft. Girder
Impact - 91%		Impact - 91%	
Moment Equation -		Moment Equation -	
$M = w_1x(27.3 - \frac{x}{2}) + w_2(18.2 - x + \frac{x^2}{321})$		$M = w_1x(27.3 - \frac{x}{2}) + w_2(18.2 - x + \frac{x^2}{321})$	
(x = distance from 'b')		(x = distance from 'b')	
Shear Equation -		Shear Equation -	
$V = w_1(27.3 - x) + w_2(18.2 - x + \frac{x}{169})$		$V = w_1(27.3 - x) + w_2(18.2 - x + \frac{x}{169})$	
(x = distance from 'b')		(x = distance from 'b')	
Max. Moment -		Max. Moment -	
Using x = 26.0 w ₁ = 12270 w ₁ +w ₂ = 17630		Using x = 26.0 w ₁ = 10845 w ₁ +w ₂ = 15690	
Mmax. = 5,640,000 ft. lbs.		Mmax. = 4,920,000 ft. lbs.	
Max. Shear -		Max. Shear -	
Using x = 54.5' for 'a', x = 0 for 'b'		Using x = 54.5' for 'a', x = 0 for 'b'	
w ₁ = 13670 w ₁ +w ₂ = 19620		w ₁ = 12030 w ₁ +w ₂ = 17360	
Vmax. at 'a' = 426,000 lbs., at 'b' = 480,000 lbs.		Vmax. at 'a' = 375,900 lbs. at 'b' = 424,300 lbs.	
Web Plate -		Web Plate -	
Area required = $\frac{426000}{10000} = 42.6 \text{ in}^2$		Area required = $\frac{375900}{10000} = 37.59 \text{ in}^2$	
Use 56" x 3/4" Pl. (A = 42.0 in ²)		Use 56" x 1/16" Pl. (A = 38.5 in ²)	
Add 38" x 3/8" x 4'-0" Pl. at 'b' end		Add 38" x 3/8" x 4'-0" Pl. at 'b' end	
Flange -		Flange -	
Area required = $\frac{5640000 \times 12}{56 \times 16000} = 75.4 \text{ in}^2$		Area required = $\frac{4920000 \times 12}{56 \times 16000} = 65.8 \text{ in}^2$	
Use -		Use -	
2 Ls. - 8" x 8" x 1/16" (A = 24.48 in ² net)		2 Ls. - 8" x 8" x 1/16" (A = 21.44 in ² net)	
3 Pls. - 18" x 1/16" 45.00		3 Pls. - 18" x 1/16" 39.03	
1/8 Web 5.25		1/8 Web 4.81	
Total A = 74.73 in ² net		Total A = 65.28 in ² net	
End Stiffeners -		End Stiffeners -	
at 'a' - t = $\frac{426000}{24000 \times 4 \times 5.5} = .807$		at 'a' - t = $\frac{375900}{24000 \times 4 \times 5.5} = .713$	
Use 4 Ls. - 6" x 3 1/2" x 1/16"		Use 4 Ls. - 6" x 3 1/2" x 1/16"	
at 'b' - t = $\frac{480000}{24000 \times 6 \times 5.5} = .606$		at 'b' - t = $\frac{424300}{24000 \times 4 \times 5.5} = .804$	
Use 4 Ls. - 6" x 3 1/2" x 5/8"		Use 4 Ls. - 6" x 3 1/2" x 1/16"	
2 Pls. - 6" x 3/8"			
Cover Plates -		Cover Plates -	
From Moment Diagram -		From Moment Diagram -	
L ₁ = 29'-0" L ₂ = 39'-0" L ₃ = 47'-0"		L ₁ = 31'-0" L ₂ = 40'-0" L ₃ = 47'-0"	
Bearing -		Bearing -	
at 'a' - $\frac{426000}{450} = 946 \text{ in}^2$ at 'b' - $\frac{480000}{450} = 1067 \text{ in}^2$		at 'a' - $\frac{375900}{450} = 835 \text{ in}^2$ at 'b' - $\frac{424300}{450} = 943 \text{ in}^2$	



FLOOR BEAM DESIGN

NOTE

Girders and Floorbeams are designed for maximum L.L. condition to be obtained from either of the following loadings -

- E70 Track located 5.5' from # of track to # of G3.
- E60 Track located anywhere but not closer than 5.5' from # of track to # of either girder.

WABASH RAILWAY COMPANY
OFFICE OF THE CHIEF ENGINEER

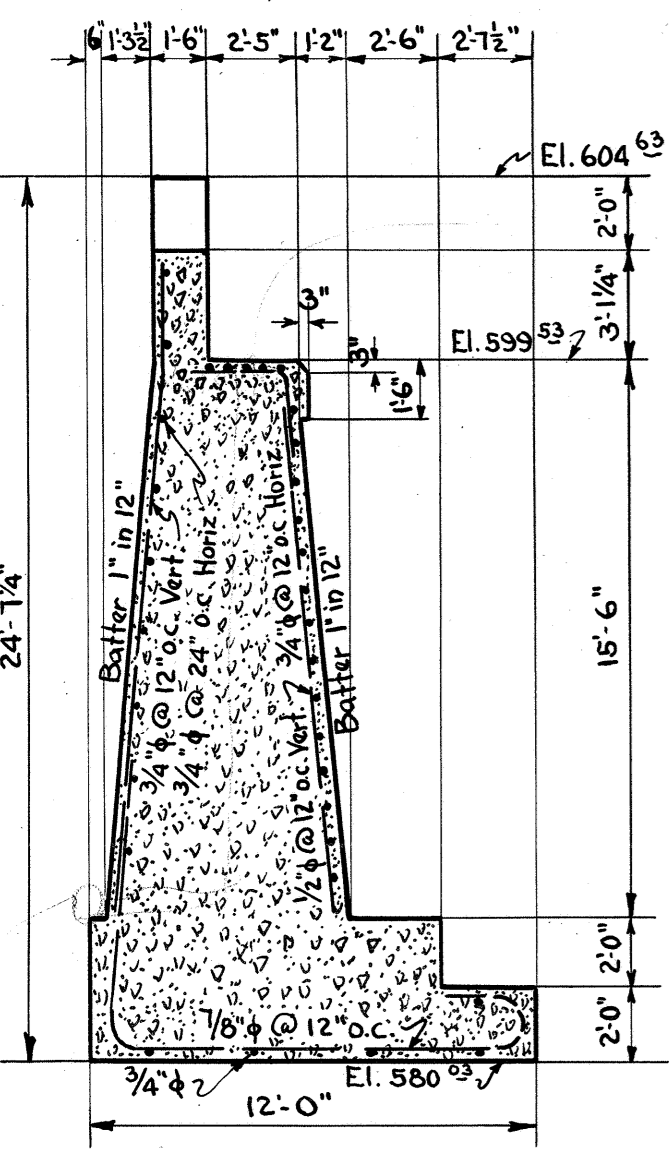
STRUCTURE: SOUTH GRAND AVE. GRADE SEP'N.
LOCATION: SPRINGFIELD, ILL.
DIVISION: SPRINGFIELD

SCALE: 3/8" = 1'-0"
DATE: 5-15-31
DRAWN BY R.D.W.
TRACED BY R.D.W.
CHECKED BY A.H.S.

STEEL DESIGN
GIRDERS G3, G4

SHEET NO. 6
NO. OF SHEETS 11

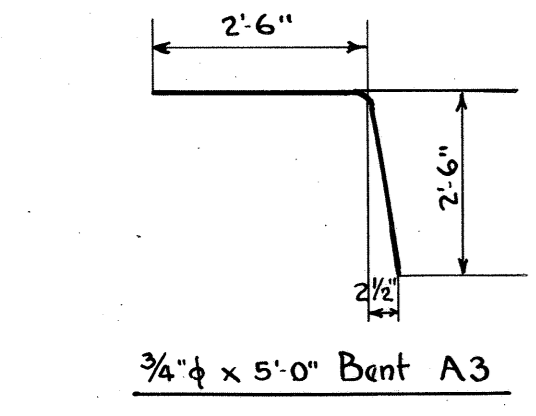
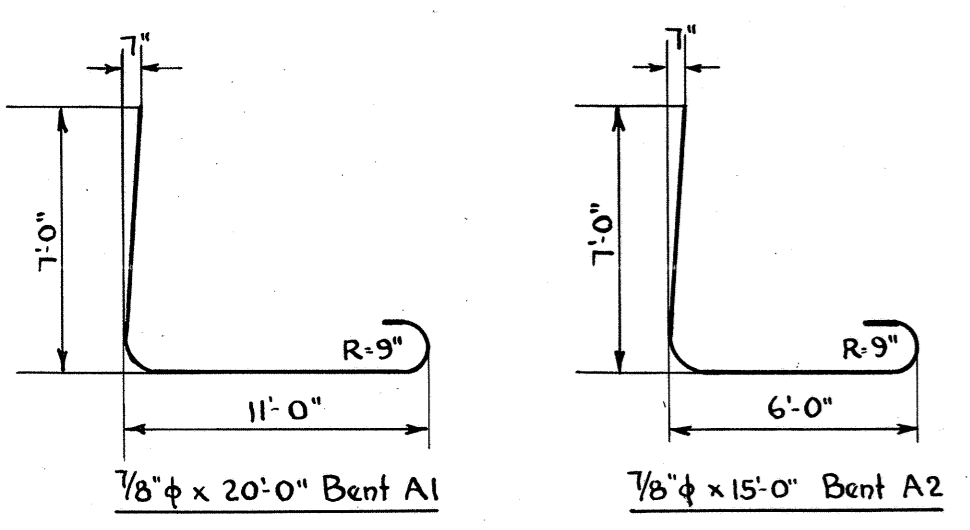
QUAN. BY -
CKD BY -



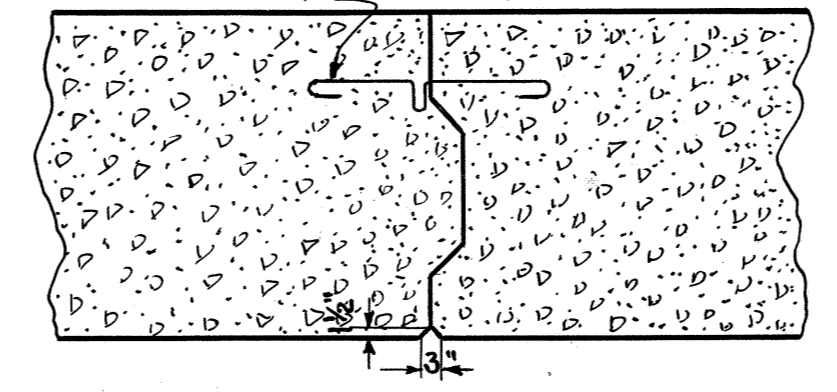
SECTION

P max. at Heel = 6000 lbs./sq.ft.
 P max. at Toe = 3600 lbs./sq.ft.
 P average = 4500 lbs./sq.ft.

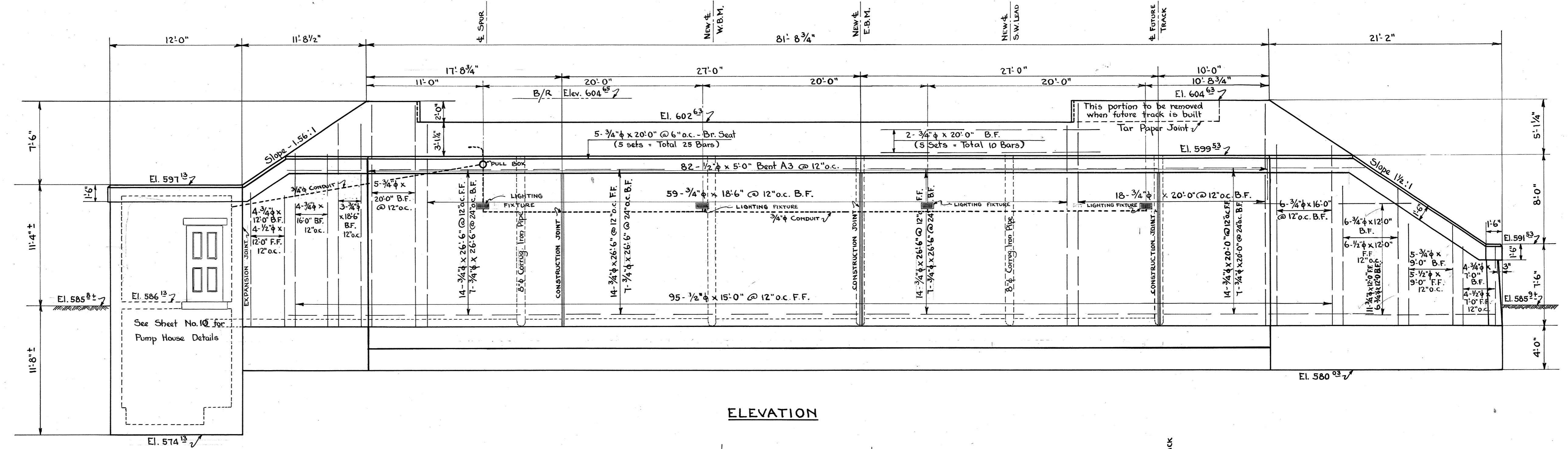
No.	Size	Length	Remarks
82	7/8" φ	20'-0"	Bent A1, Footing
23	"	15'-0"	Bent A2 "
63	3/4" φ	26'-6"	Back and Front Face, Horiz.
22	"	21'-0"	Footing
79	"	20'-0"	Bk. and F. Face, Hor., Vert., Br. Seat
62	"	18'-6"	Back Face, Vert.
10	"	16'-0"	" " "
2	"	14'-0"	Footing
27	"	12'-0"	Back Face, Front Face, Horiz. Vert.
5	"	9'-0"	" " "
4	"	7'-0"	" " "
95	1/2" φ	15'-0"	Front Face, Vert.
10	"	12'-0"	" " "
5	"	9'-0"	" " "
4	"	7'-0"	" " "
82	"	5'-0"	Bent A3, Br. Seat



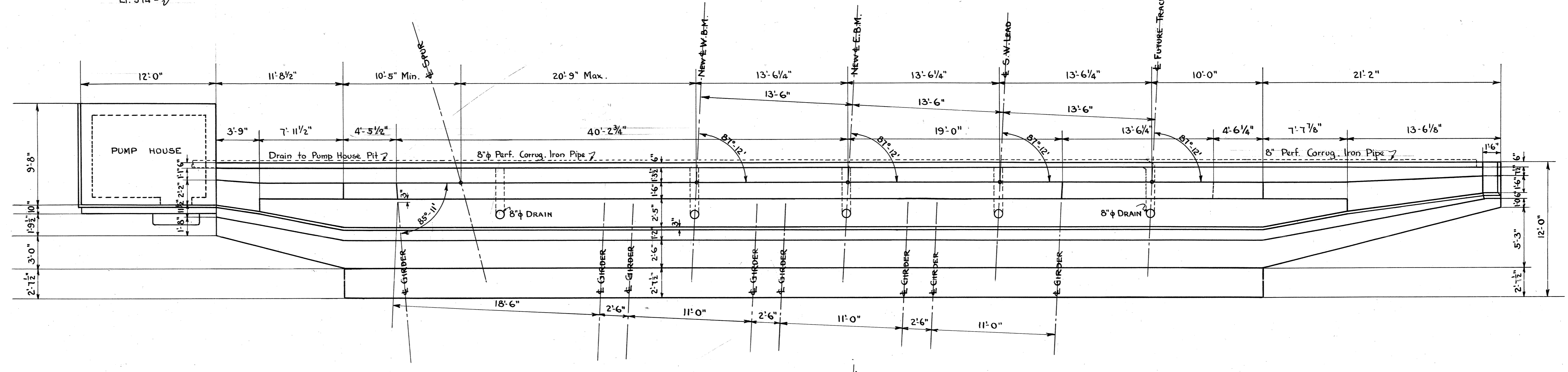
15" x 3/32" Sheet Lead to extend from top of Footing to Br. Seat



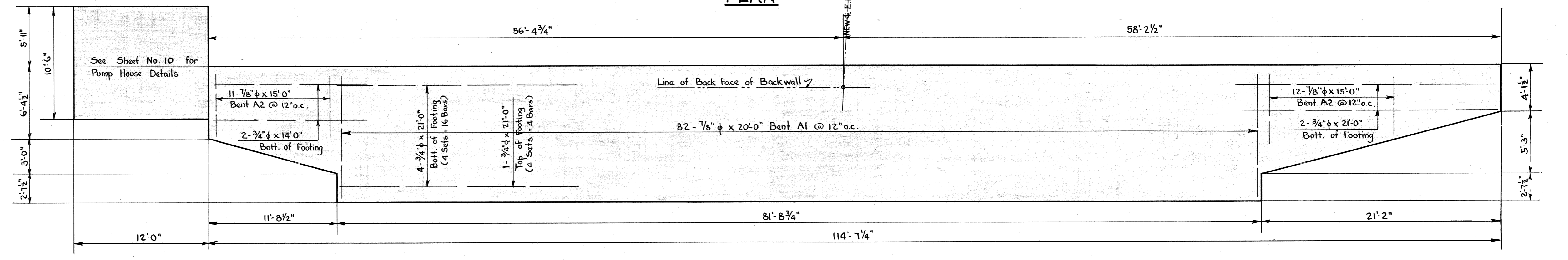
DETAILS OF VERTICAL CONSTRUCTION JOINT



ELEVATION



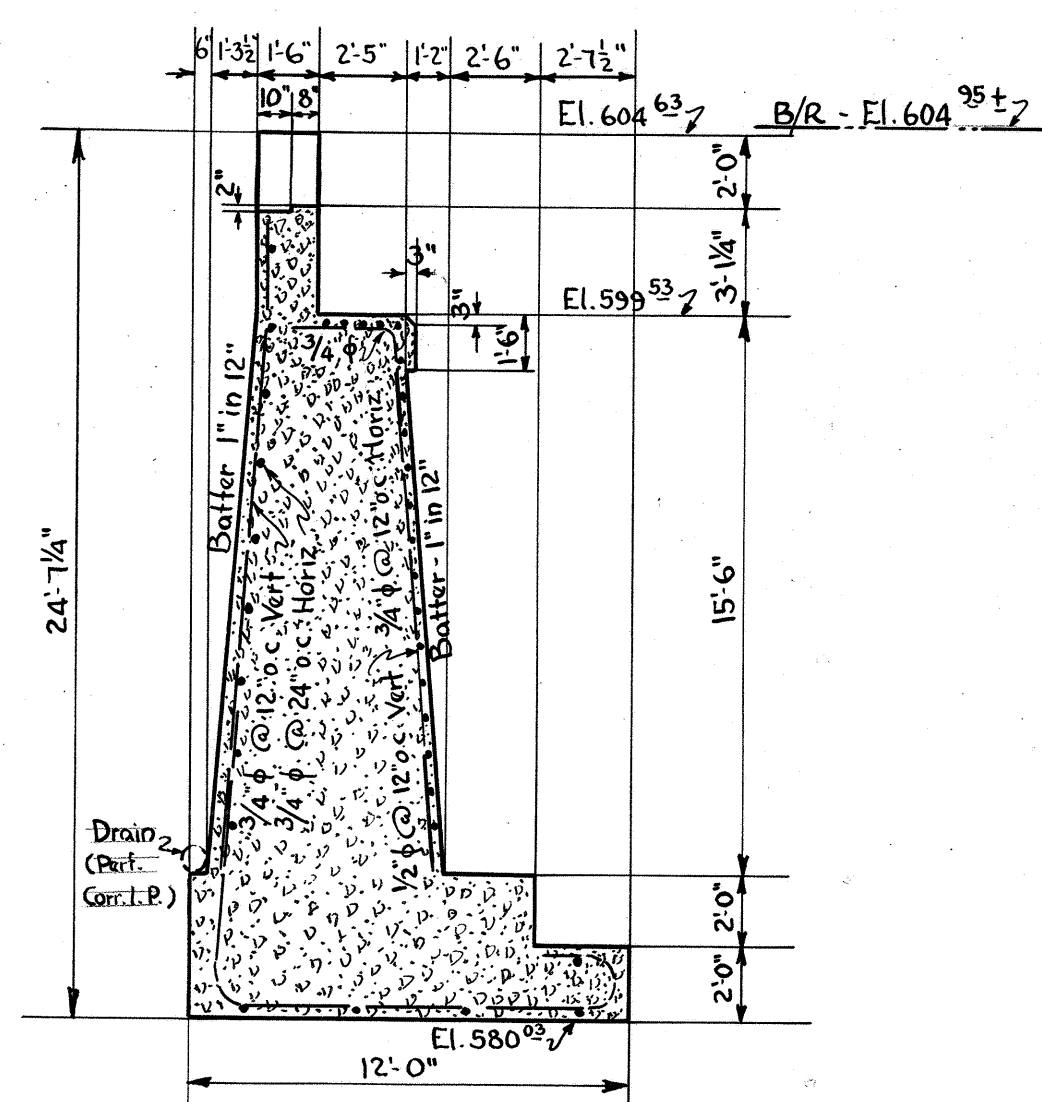
PLAN



FOOTING PLAN

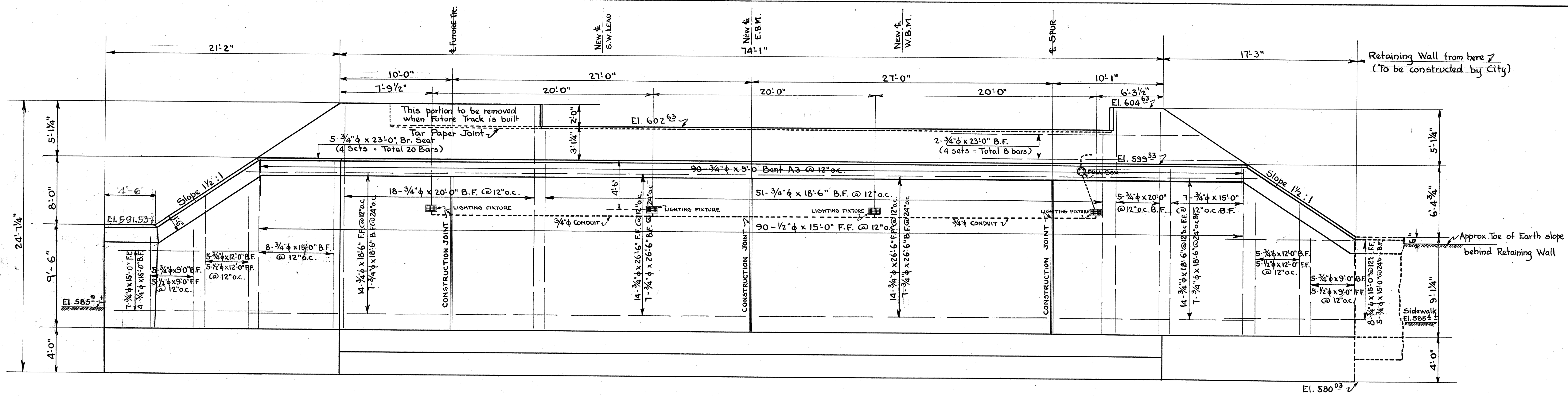
WABASH RAILWAY COMPANY
 OFFICE OF THE CHIEF ENGINEER
 STRUCTURE: SOUTH GRAND AVE. GRADE SEP'N.
 LOCATION: SPRINGFIELD, ILL.
 DIVISION: SPRINGFIELD
 SCALE: 3/16" = 1'-0"
 DATE: 5-15-31
 DRAWN BY R.D.W.
 TRACED BY R.D.W.
 CHECKED BY A.H.S.

NORTH ABUTMENT		SHEET NO. 7	NO. OF SHEETS 11
		QUAN. BY-	CKD BY-

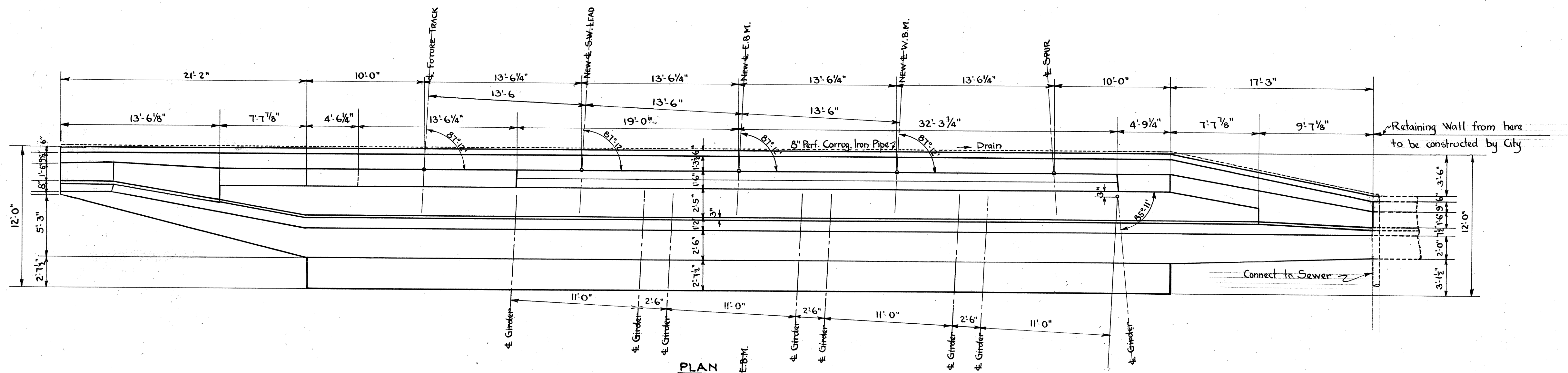


SECTION

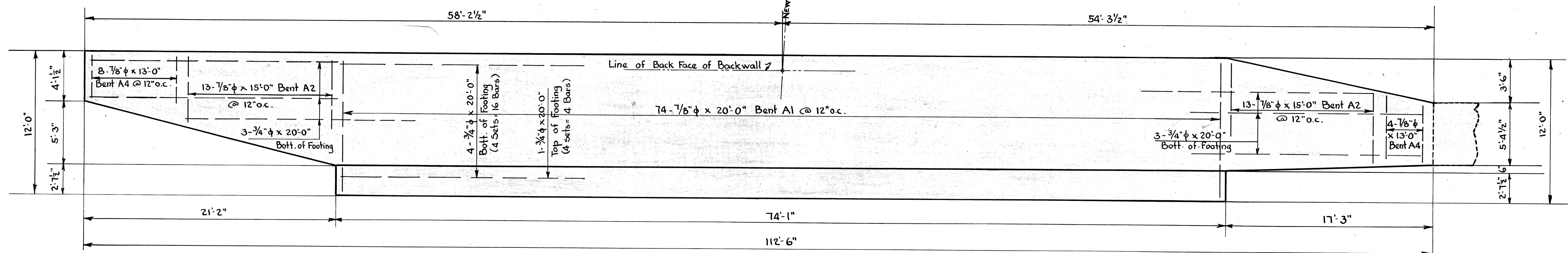
P max. at Heel = 6000 lbs./sq.ft.
 P max. at Toe = 3600 lbs./sq.ft.
 P average = 4500 lbs./sq.ft.



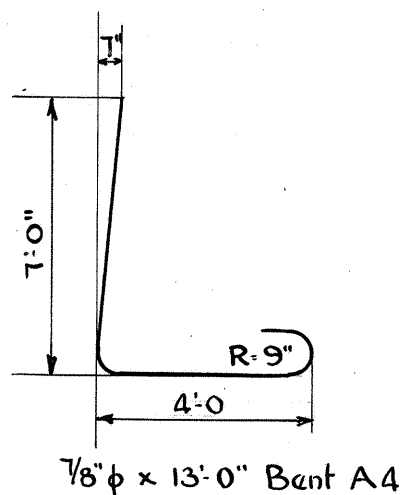
ELEVATION



PLAN



FOOTING PLAN



Red is as built
 Yellow abandoned

No.	Size	Length	Remarks
74	1/8" φ	20'-0"	Bent A1, Footing
26	"	15'-0"	Bent A2, "
12	"	13'-0"	Bent A4, "
42	3/4" φ	26'-6"	B.F., F.F. Horiz.
28	"	23'-0"	Br. Seat, B.F. Horiz.
49	"	20'-0"	B.F. Vert., Footing
93	"	18'-6"	B.F., F.F. Horiz., Vert.
39	"	15'-0"	" " "
10	"	12'-0"	B.F., Vert.
10	"	10'-0"	" " "
90	"	5'-0"	Bent A3, Br. Seat
90	1/2" φ	15'-0"	F.F. Vert.
10	"	12'-0"	" " "
10	"	9'-0"	" " "
10	3/4" φ	9'-0"	B.F., Vert.

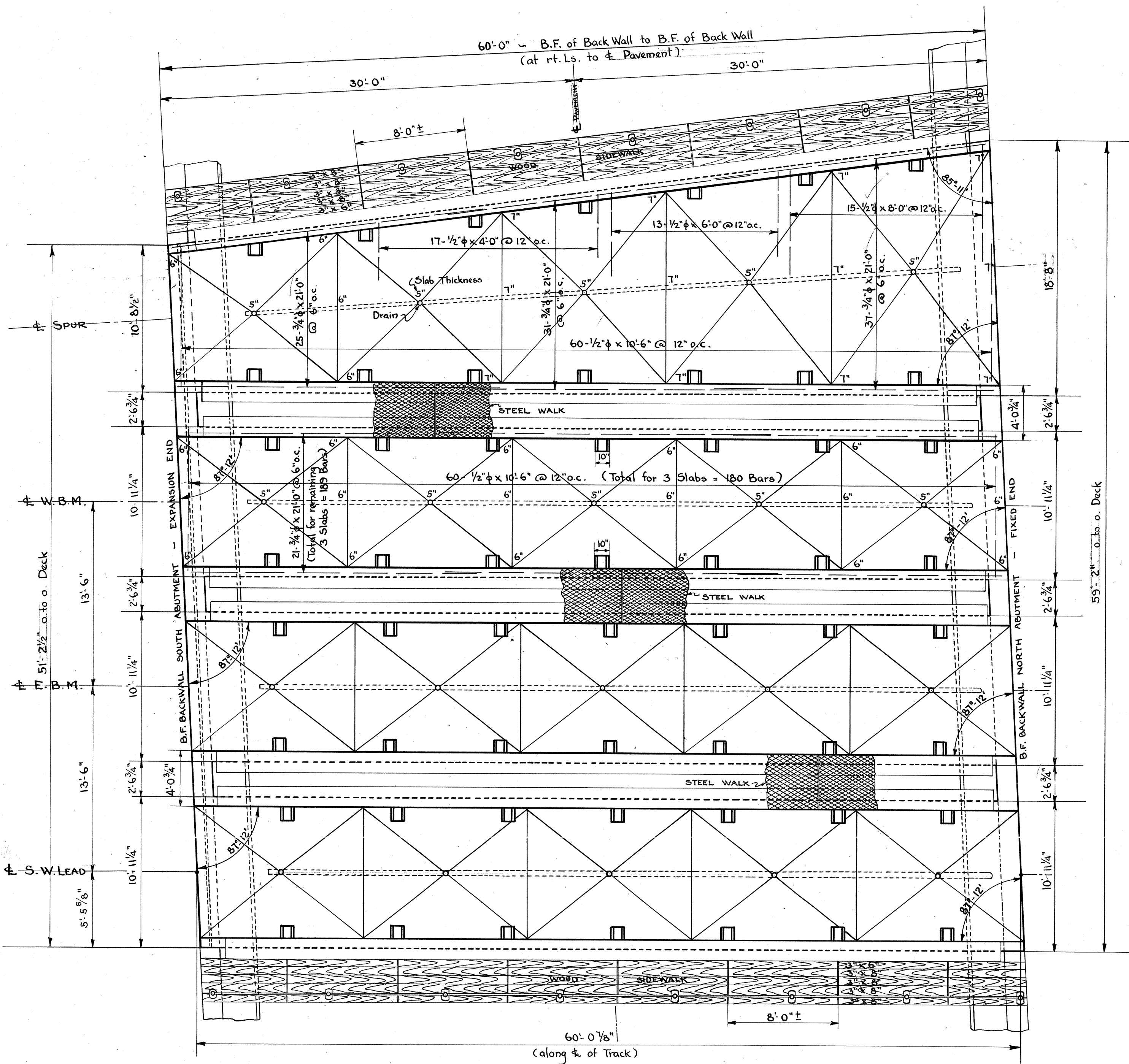
WABASH RAILWAY COMPANY
 OFFICE OF THE CHIEF ENGINEER

STRUCTURE: SOUTH GRAND AVE. GRADE SEP'N.
 LOCATION: SPRINGFIELD, ILL.
 DIVISION: SPRINGFIELD

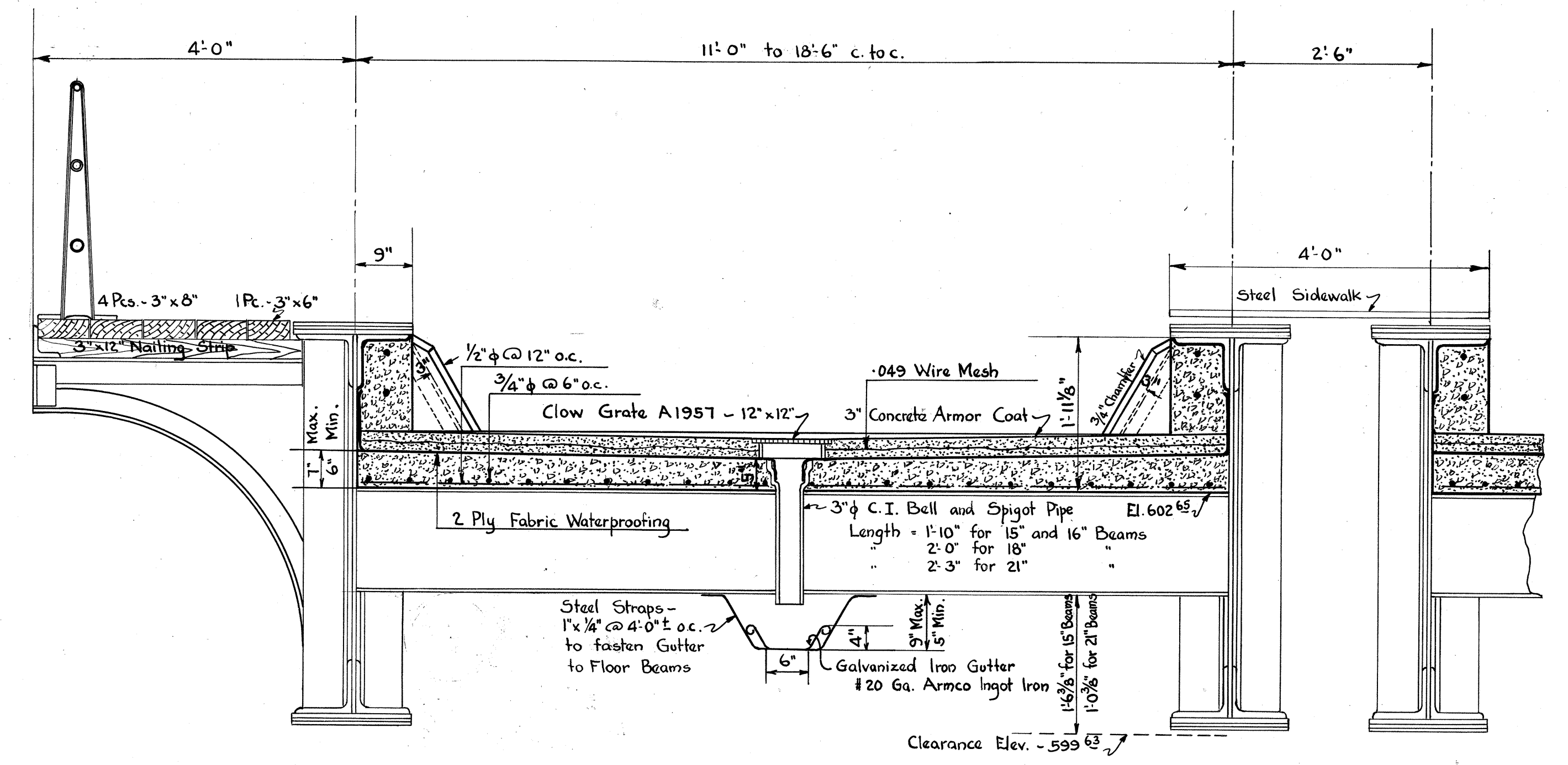
SCALE: 3/16" = 1'-0"
 DATE: 5-15-31
 DRAWN BY R.D.W.
 TRACED BY R.D.W.
 CHECKED BY A.H.S.

SOUTH
 ABUTMENT

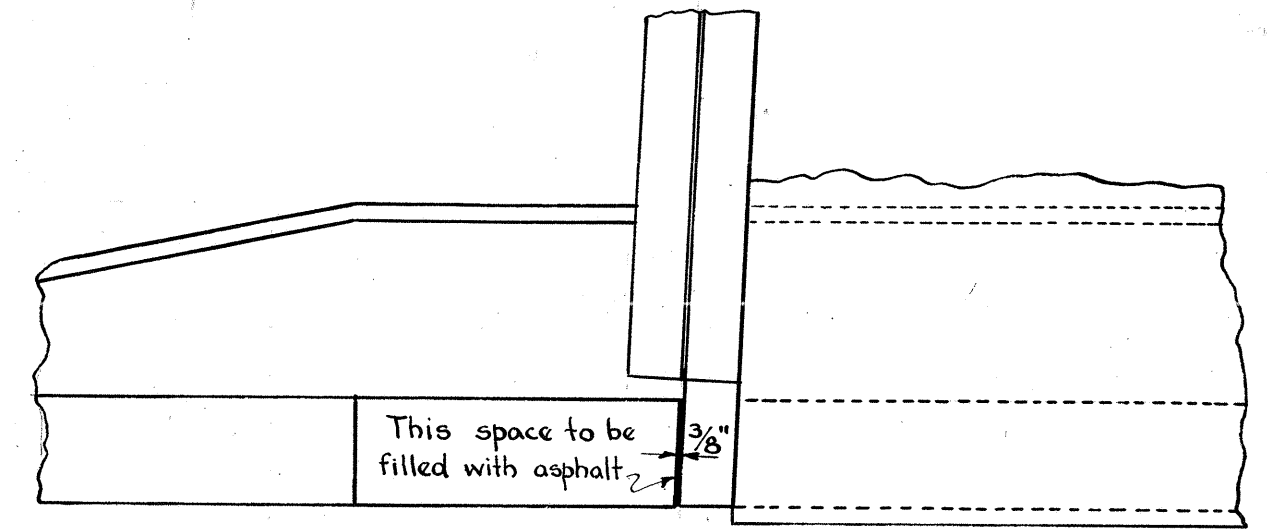
SHEET NO.	NO. OF SHEETS
8	11
QUAN. BY -	CKD BY -



DECK PLAN
Scale - 3/16" : 1'-0"

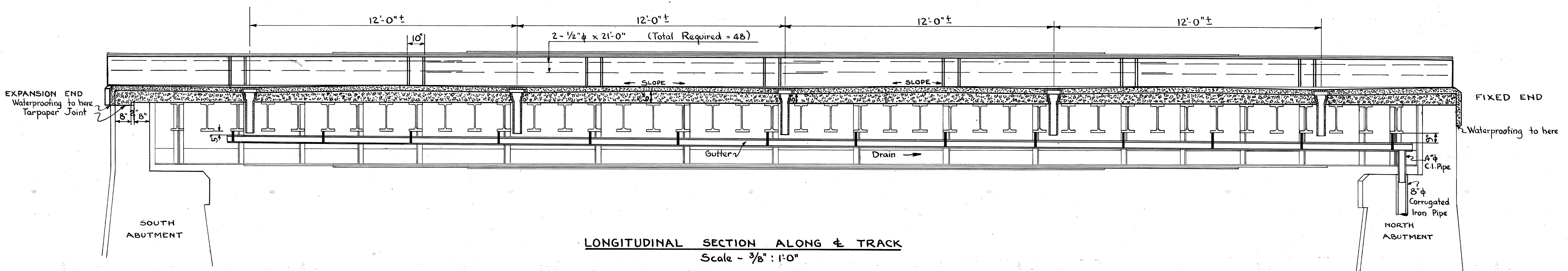


SECTION
Scale 3/4" : 1'-0"



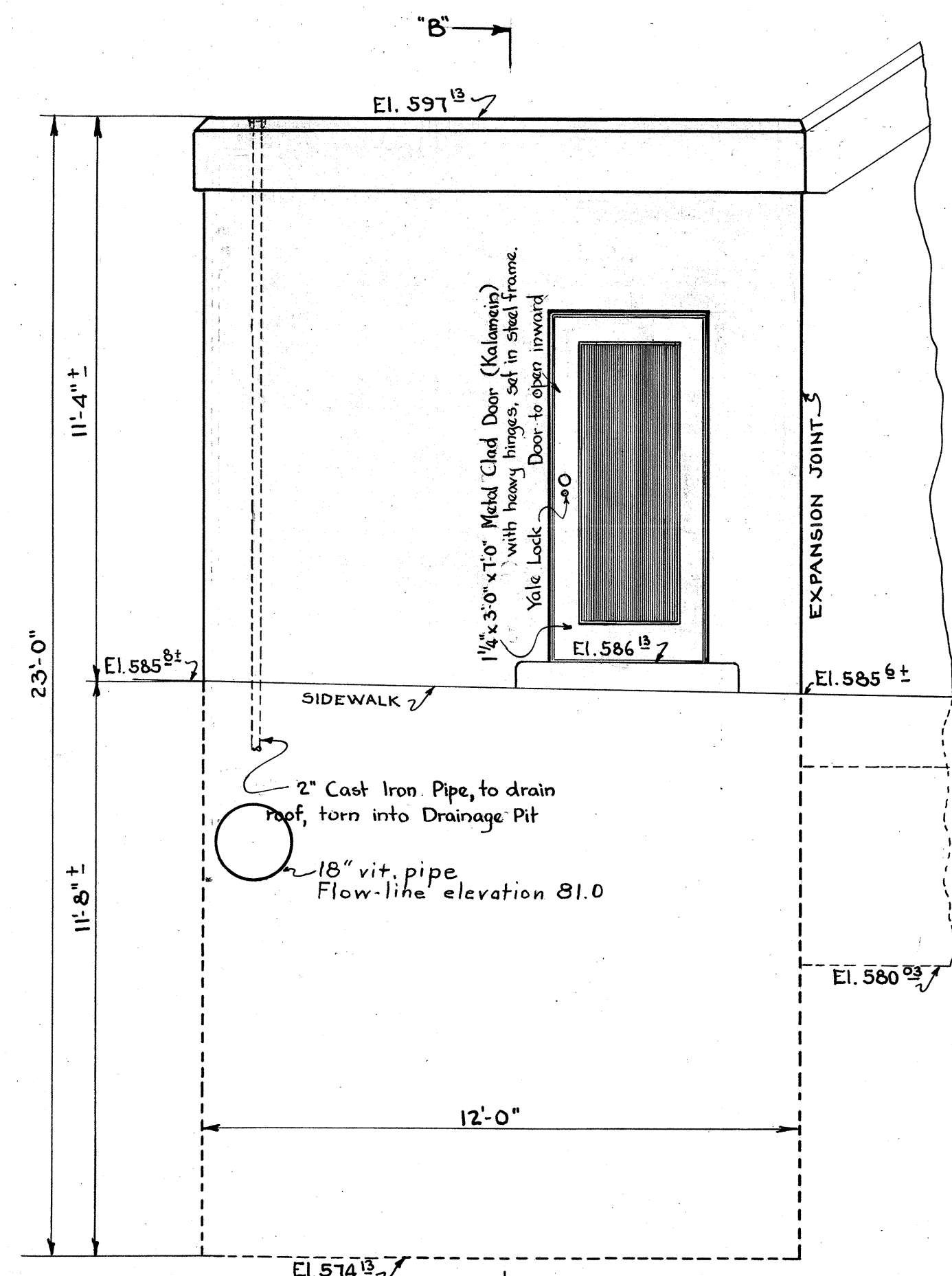
DETAIL OF END OF SLAB AT ABUTMENT

TOTAL DECK REINFORCING			
No.	Size	Length	Remarks
282	3/4" φ	21'-0"	Bottom of Slab
48	1/2" φ	21'-0"	Curb Walls
240	"	10'-6"	Bottom of Slab
15	"	8'-0"	" " "
13	"	6'-0"	" " "
17	"	4'-0"	" " "

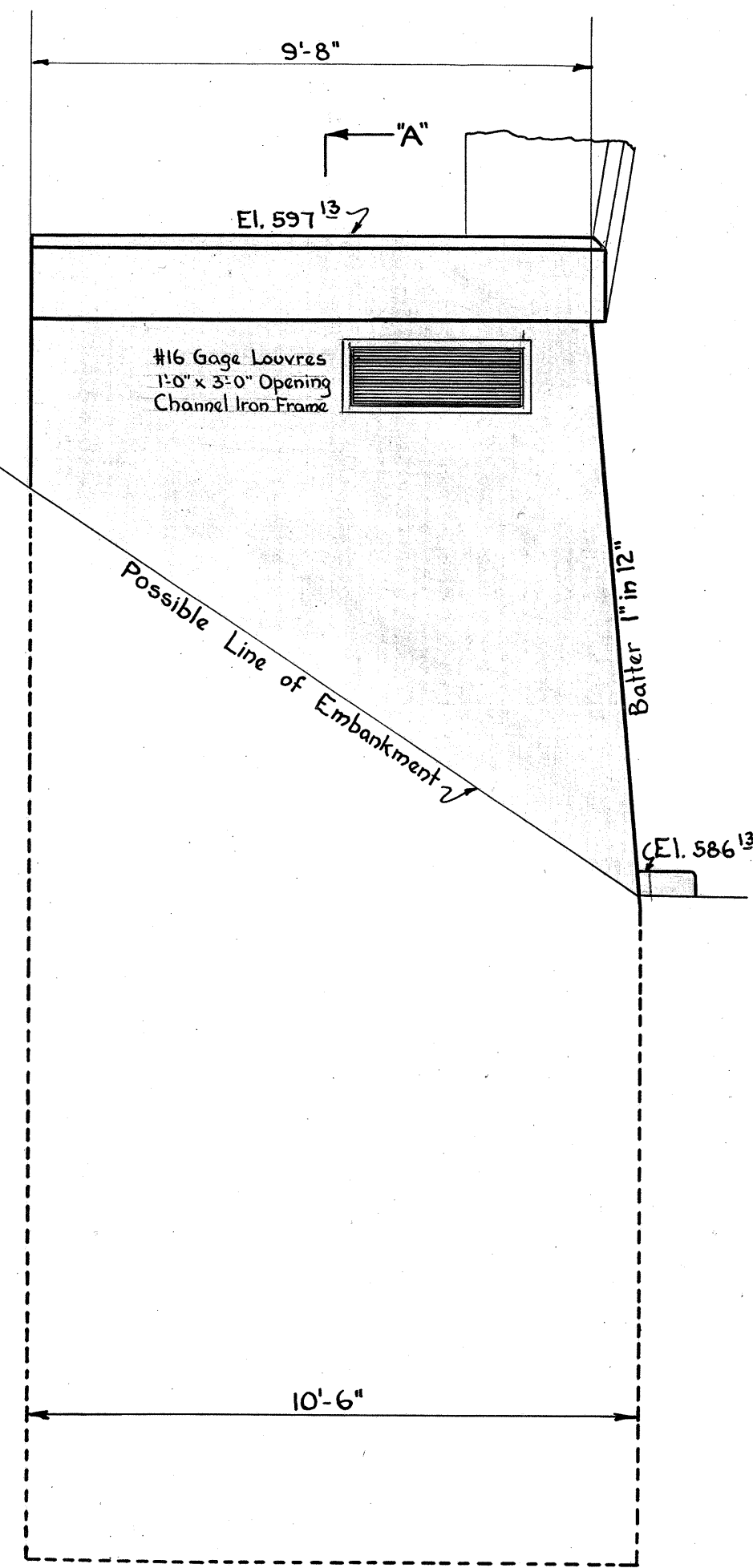


LONGITUDINAL SECTION ALONG TRACK
Scale - 3/8" : 1'-0"

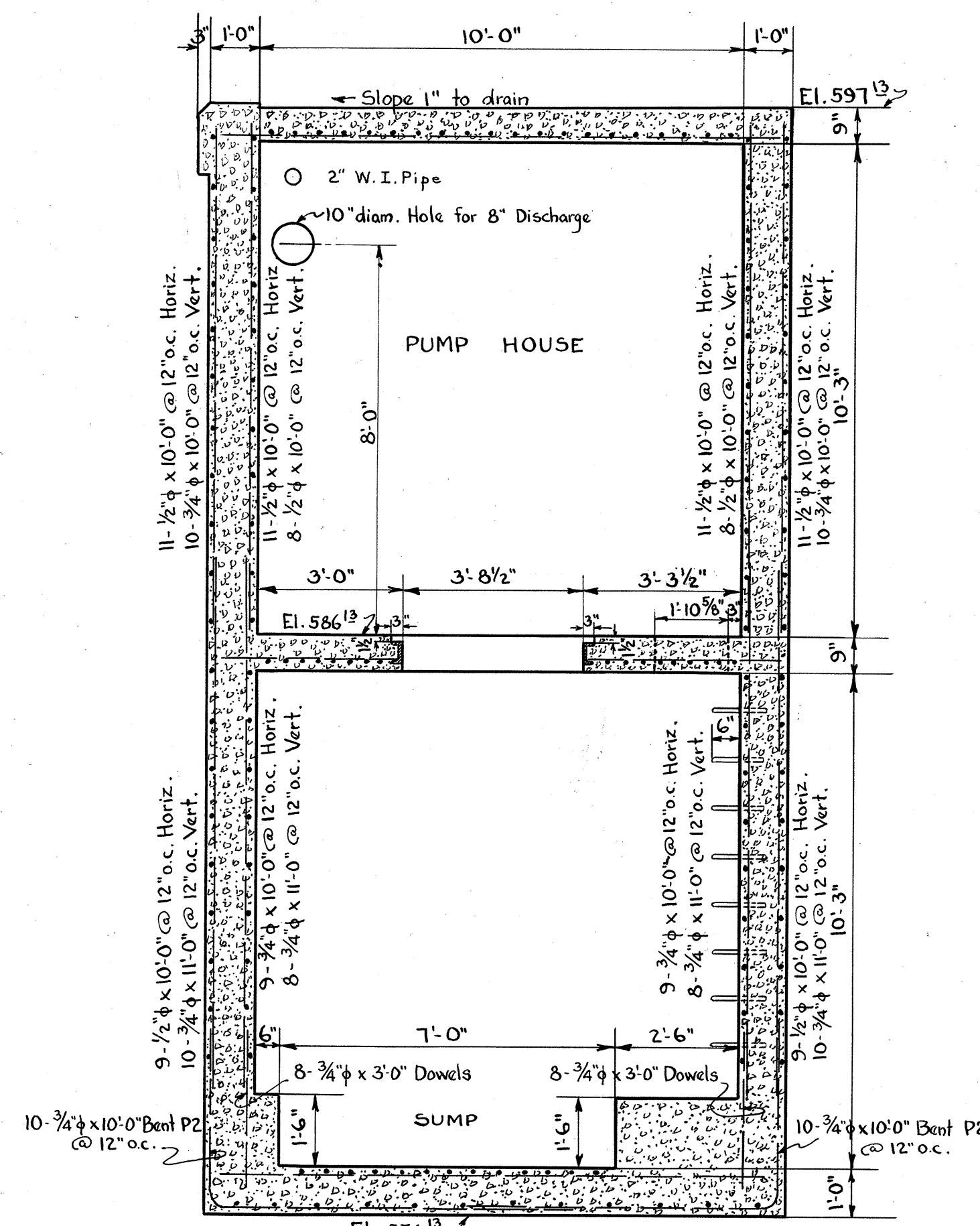
WABASH RAILWAY COMPANY			
OFFICE OF THE CHIEF ENGINEER			
STRUCTURE: SOUTH GRAND AVE. GRADE SEP'M			
LOCATION: SPRINGFIELD, ILL.			
DIVISION: SPRINGFIELD			
SCALE: As shown	DECK DETAILS	SHEET NO.	NO. OF SHEETS
DATE: 5-15-31		9	11
DRAWN BY R.D.W.		QUAN. BY -	CK'D. BY -
TRACED BY R.D.W.			
CHECKED BY A.H.S.			



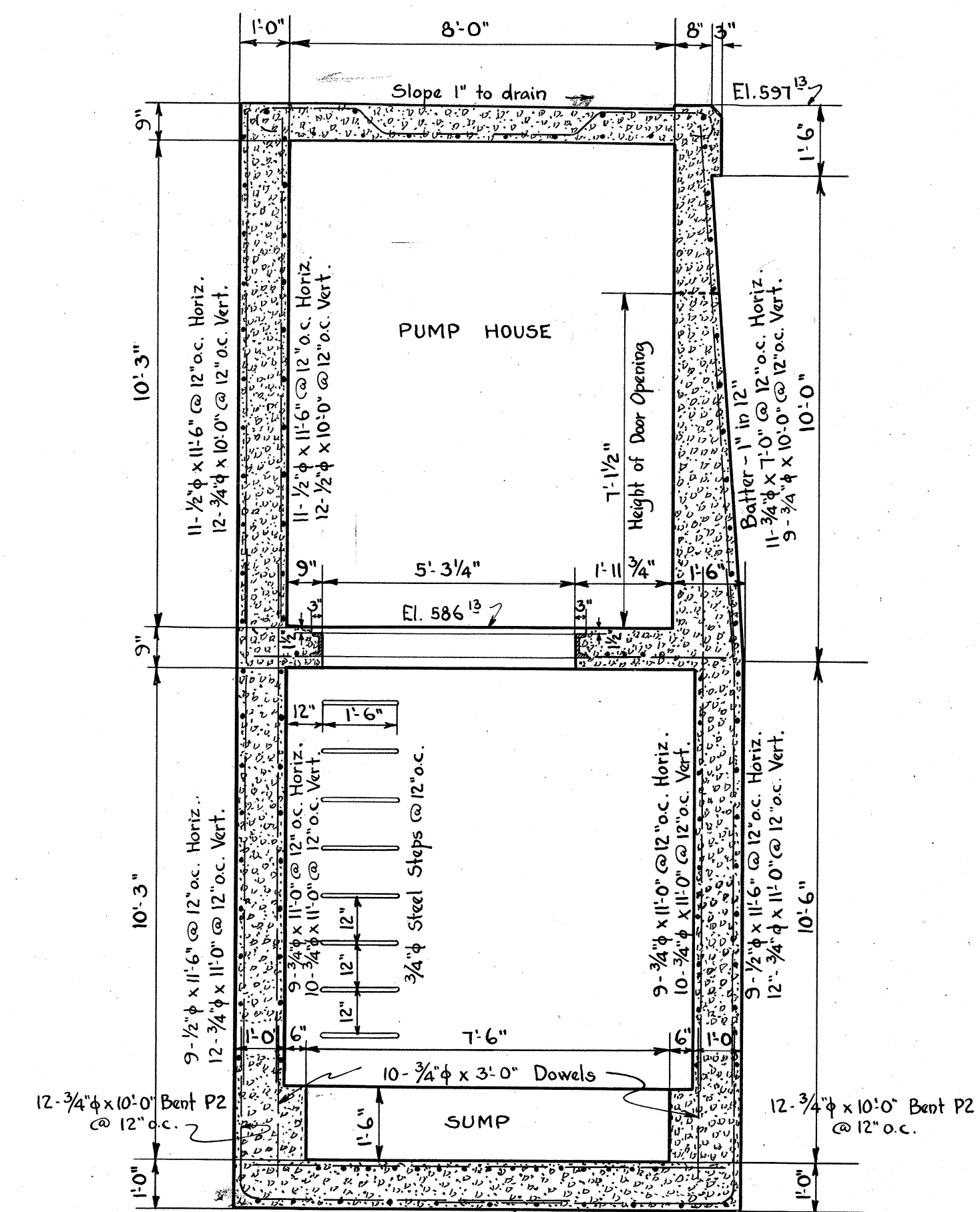
FRONT ELEVATION



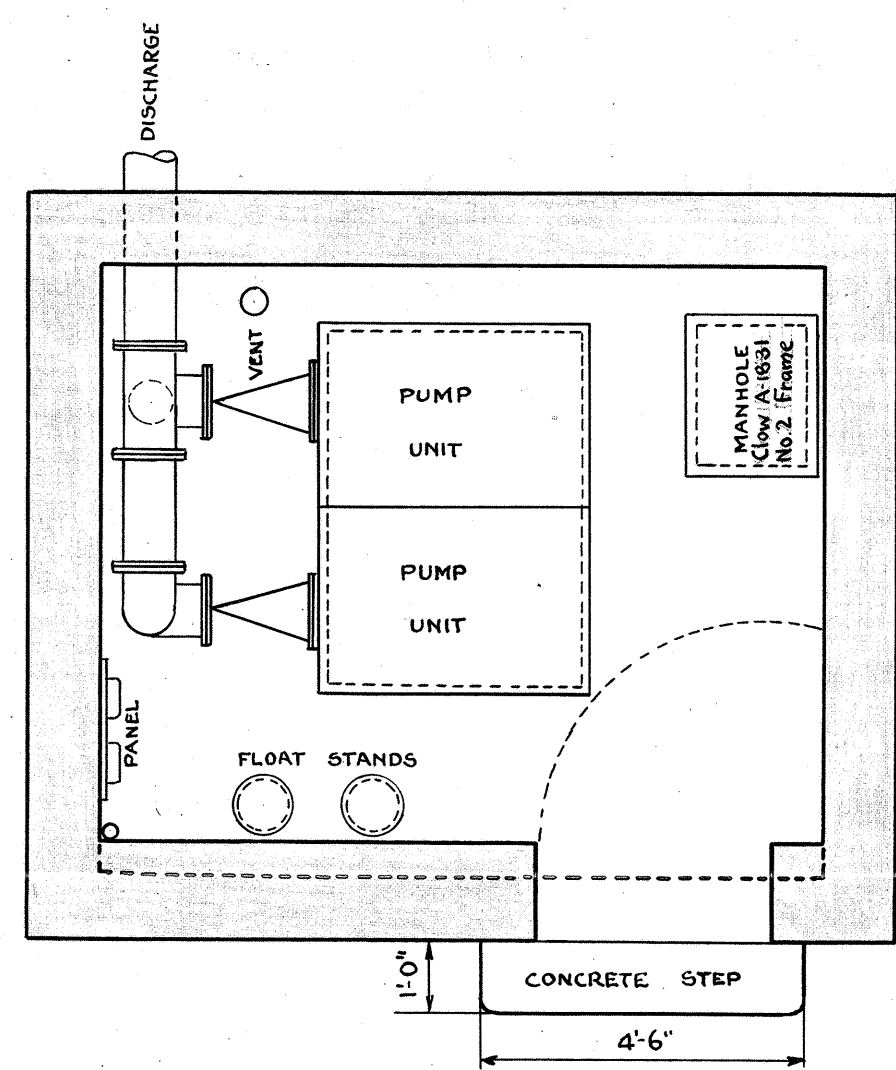
END ELEVATION



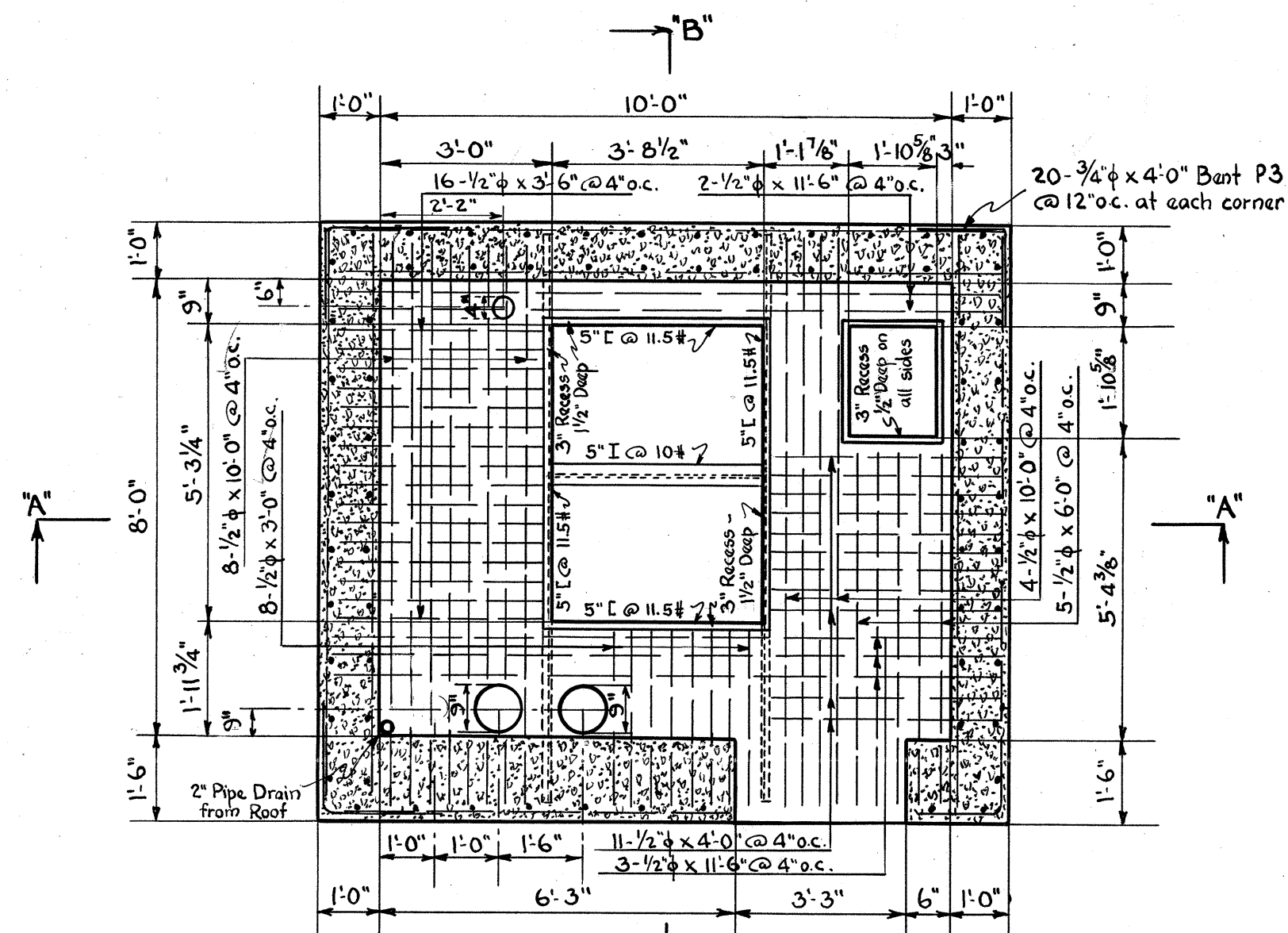
SECTION "A-A"



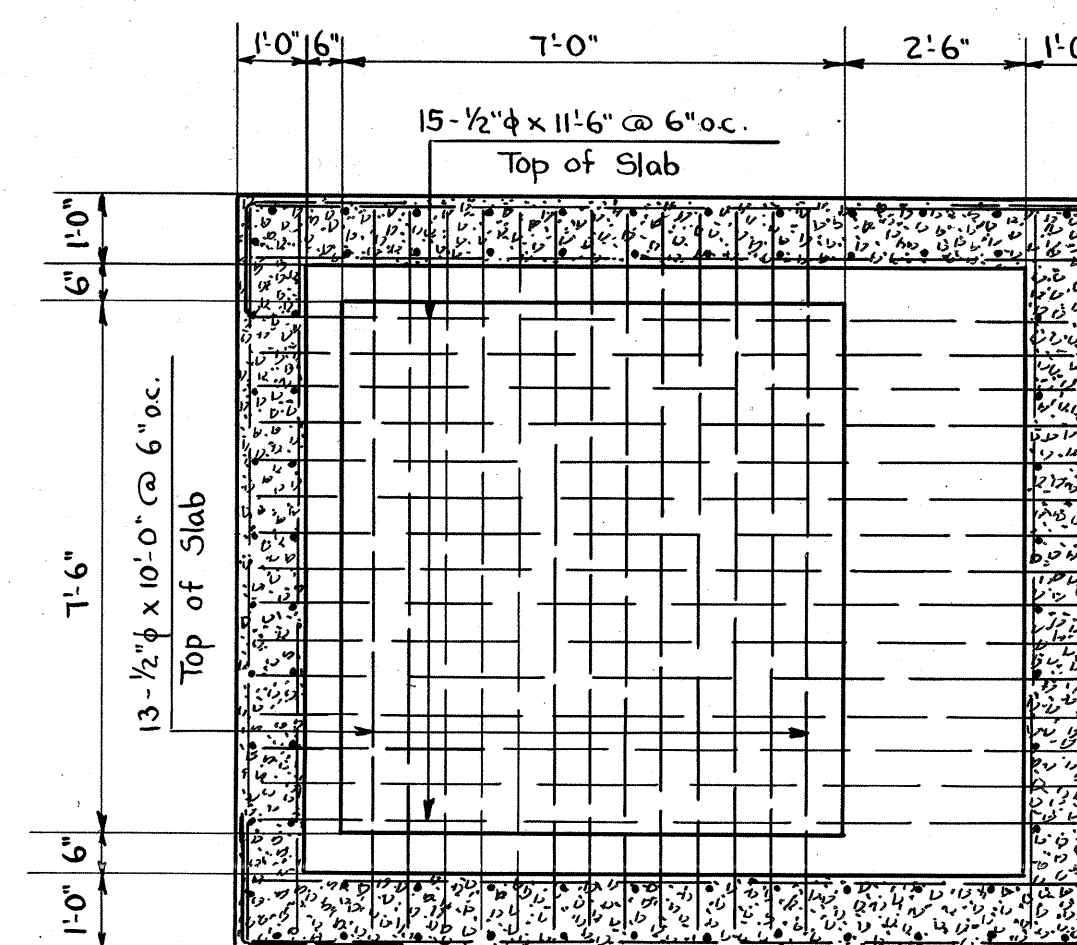
SECTION "B-B"



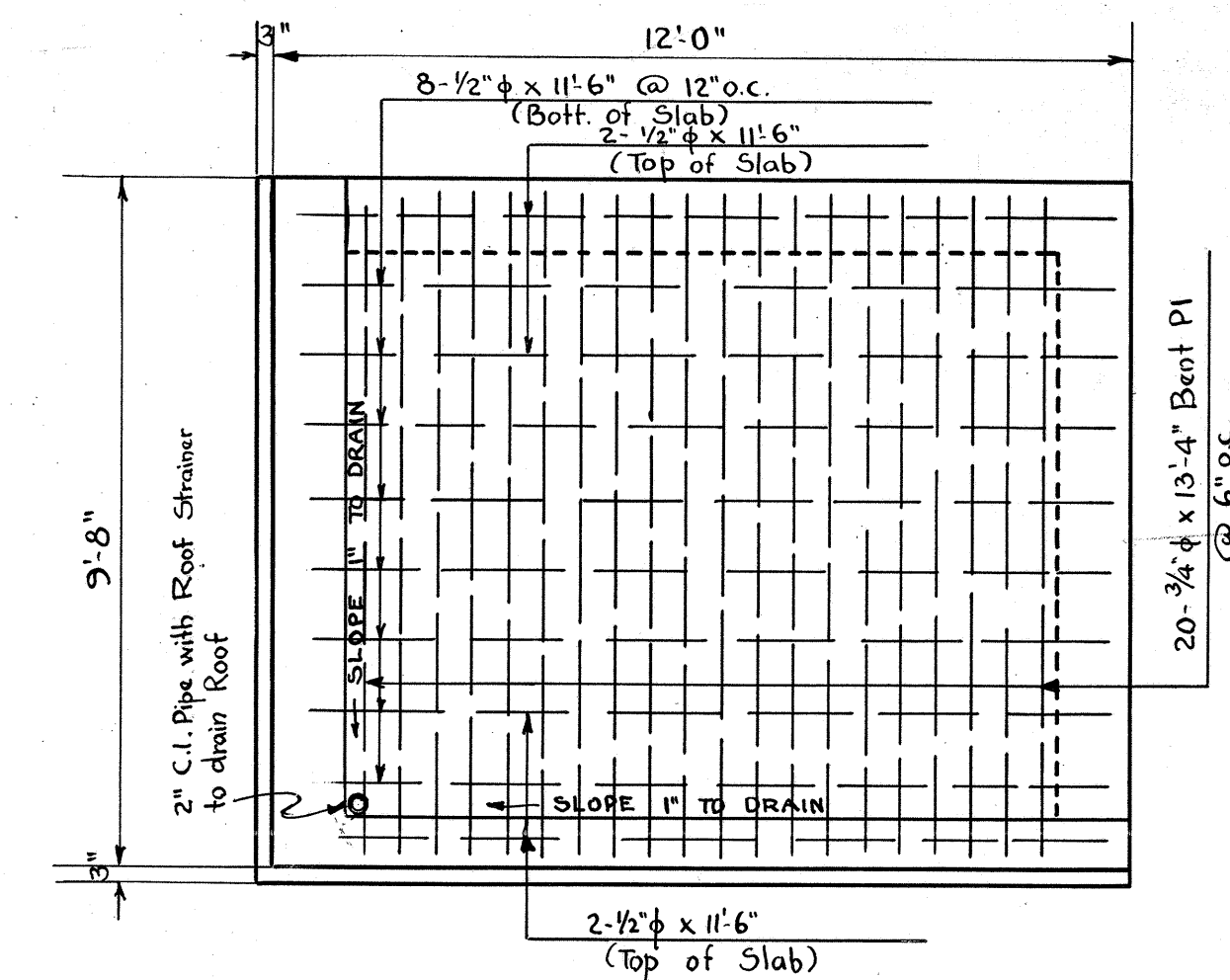
PUMP FLOOR LAYOUT



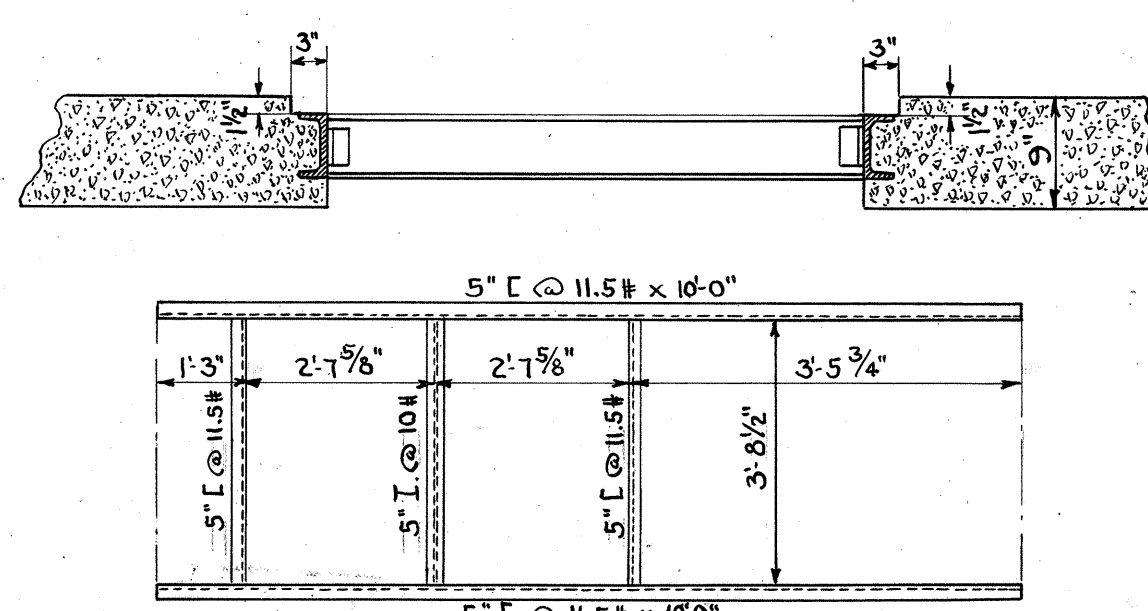
PUMP FLOOR PLAN



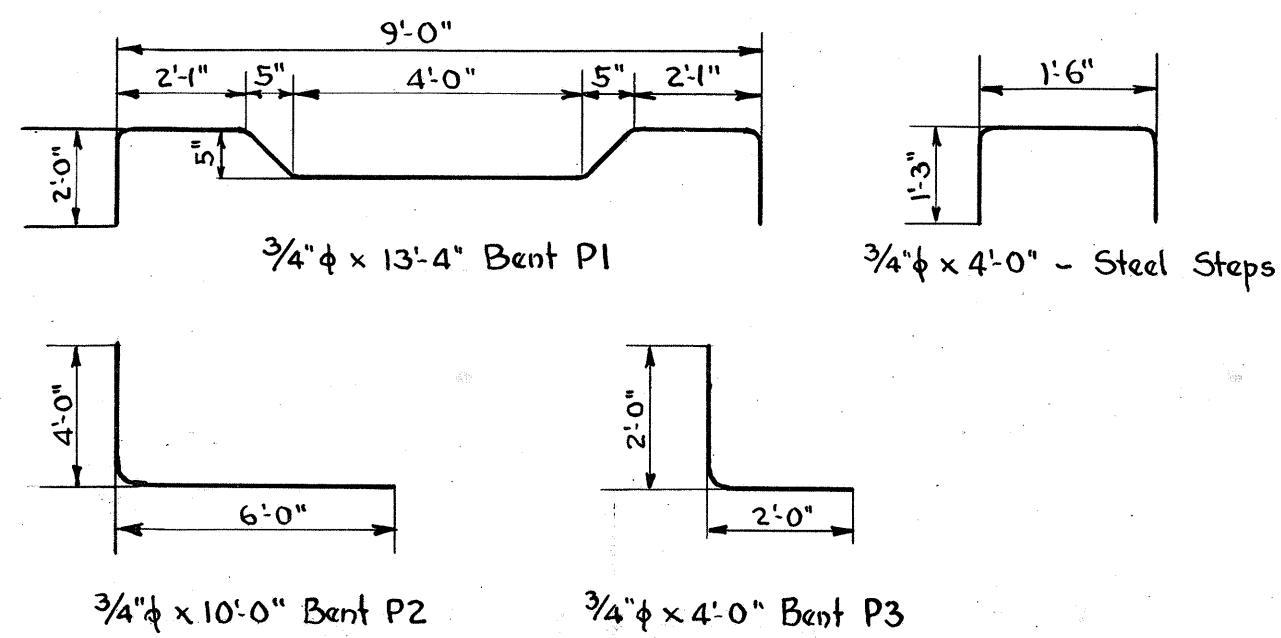
SUMP FLOOR PLAN



ROOF PLAN



DETAILS OF PUMP MOUNTING FRAME



BENDING DETAILS

REINFORCING STEEL			
No.	Size	Length	Remarks
20	3/4" φ	13'-4"	Bent P1, Roof
98	"	11'-0"	Wall, Vert. and Horiz.
44	"	10'-0"	Bent P2, Wall Footing
59	"	10'-0"	Wall, Vert. and Horiz.
11	"	7'-0"	Wall, Horiz.
80	"	4'-0"	Bent P3, Wall Corners
36	"	3'-0"	Dowels
72	1/2" φ	11'-6"	Floor, Roof, Walls
115	"	10'-0"	"
5	"	6'-0"	Pump Floor
11	"	4'-0"	"
16	"	3'-6"	"
8	"	3'-0"	"
8	3/4" φ	4'-0"	Bent for Steel Steps

QUANTITIES		
ITEM	UNIT	AMOUNT
Excavation	cu. yds.	
Sheeting and Shoring	Sq. ft.	
Concrete	cu. yds.	
Reinforcing Steel	lbs.	
Expansion Joint	Sq. ft.	
Structural Steel	lbs.	
2" C.I. or G.I. Pipe	lin. ft.	
Manhole Cover	Each	
Millwork, Door, 3'x7'	Each	

WABASH RAILWAY COMPANY
OFFICE OF THE CHIEF ENGINEER

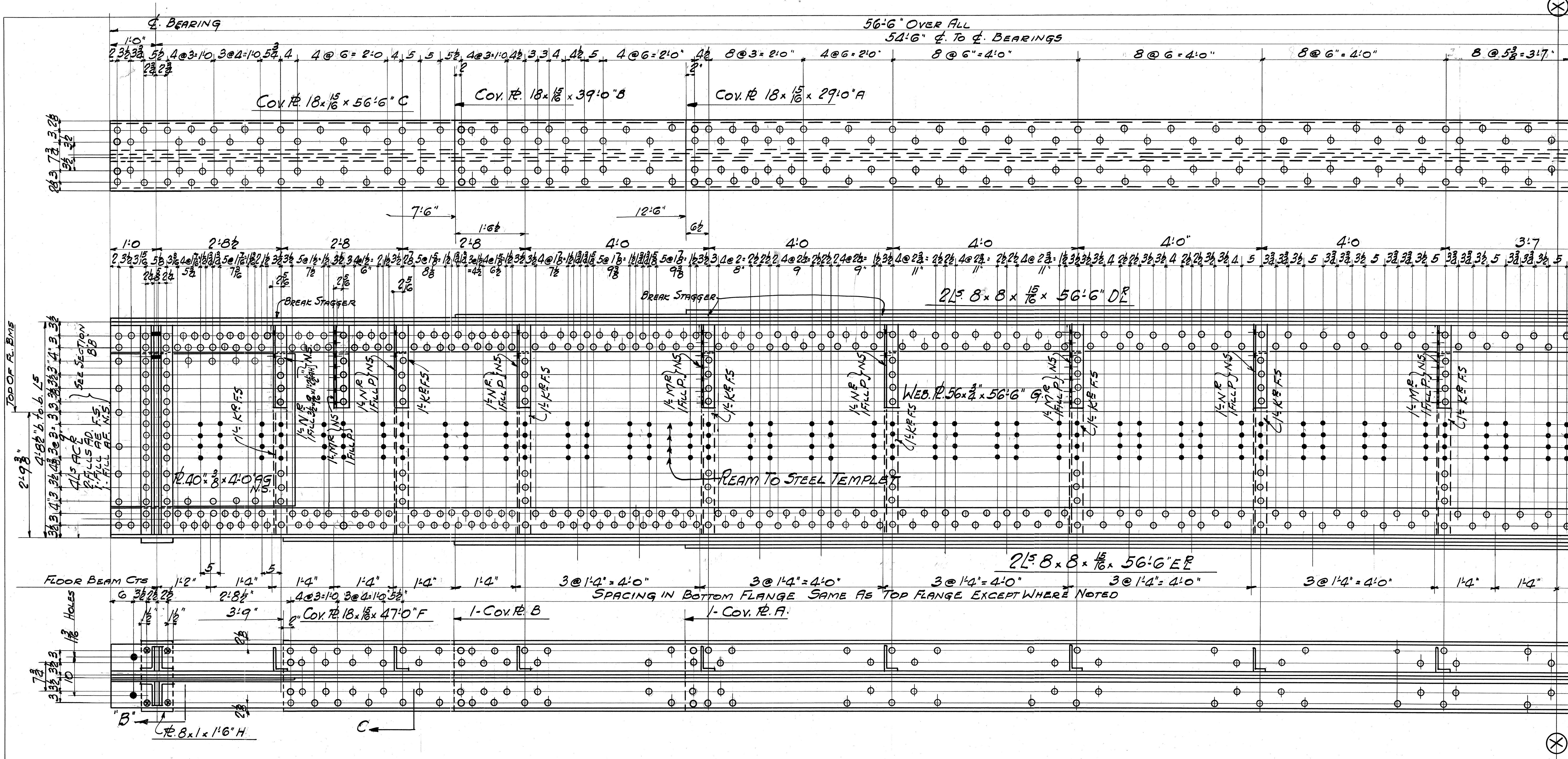
STRUCTURE: **SOUTH GRAND AVE. GRADE SEP'M.**
LOCATION: **SPRINGFIELD, ILL.**
DIVISION: **SPRINGFIELD**

SCALE: **3/8" = 1'-0"**
DATE: **5-15-31**
DRAWN BY: **R.D.W.**
TRACED BY: **R.D.W.**
CHECKED BY: **A.H.S.**

PUMP HOUSE
DETAILS

SHEET NO.	NO. OF SHEETS
10	11

QUAN. BY -
CKD BY -

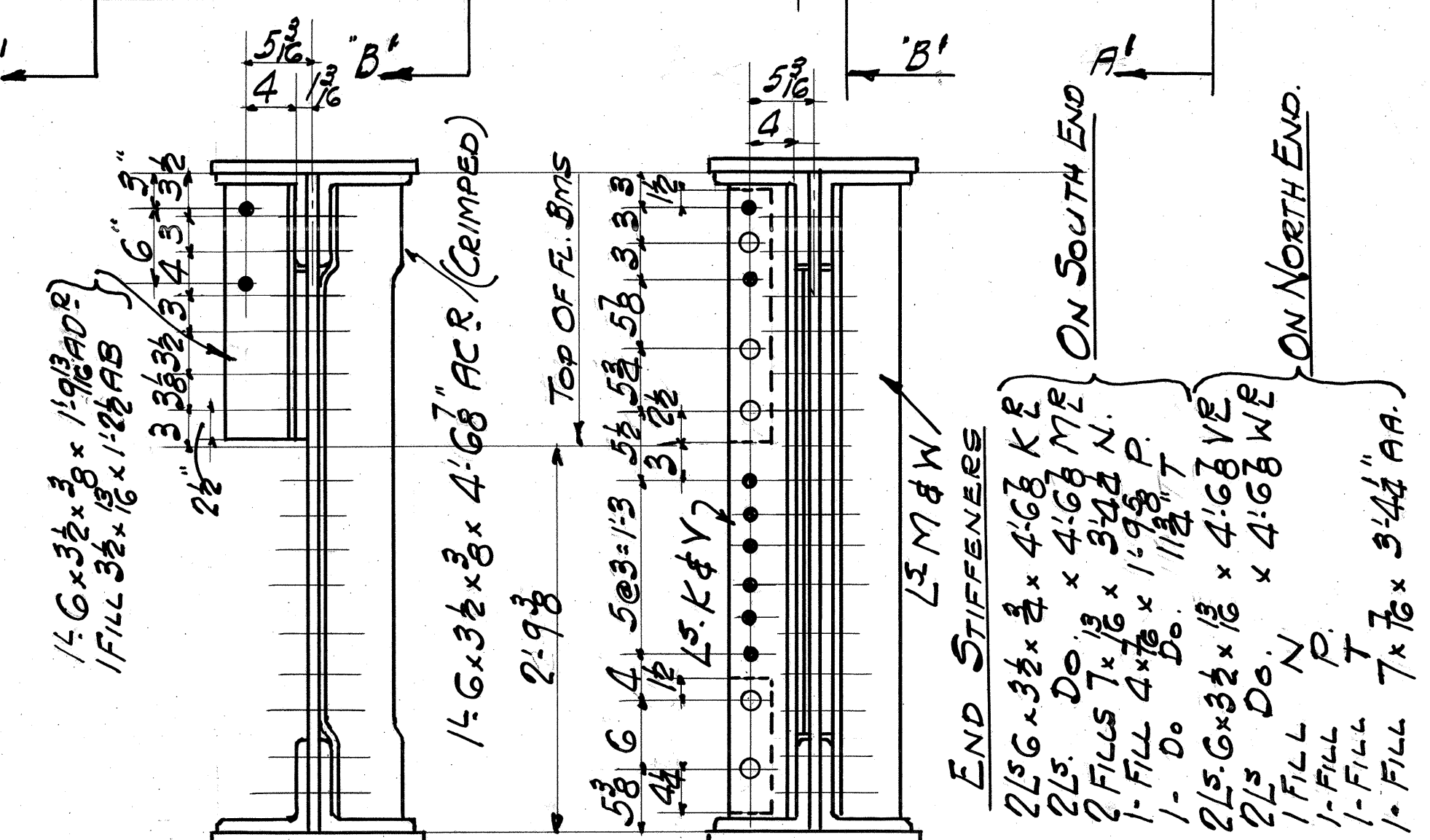
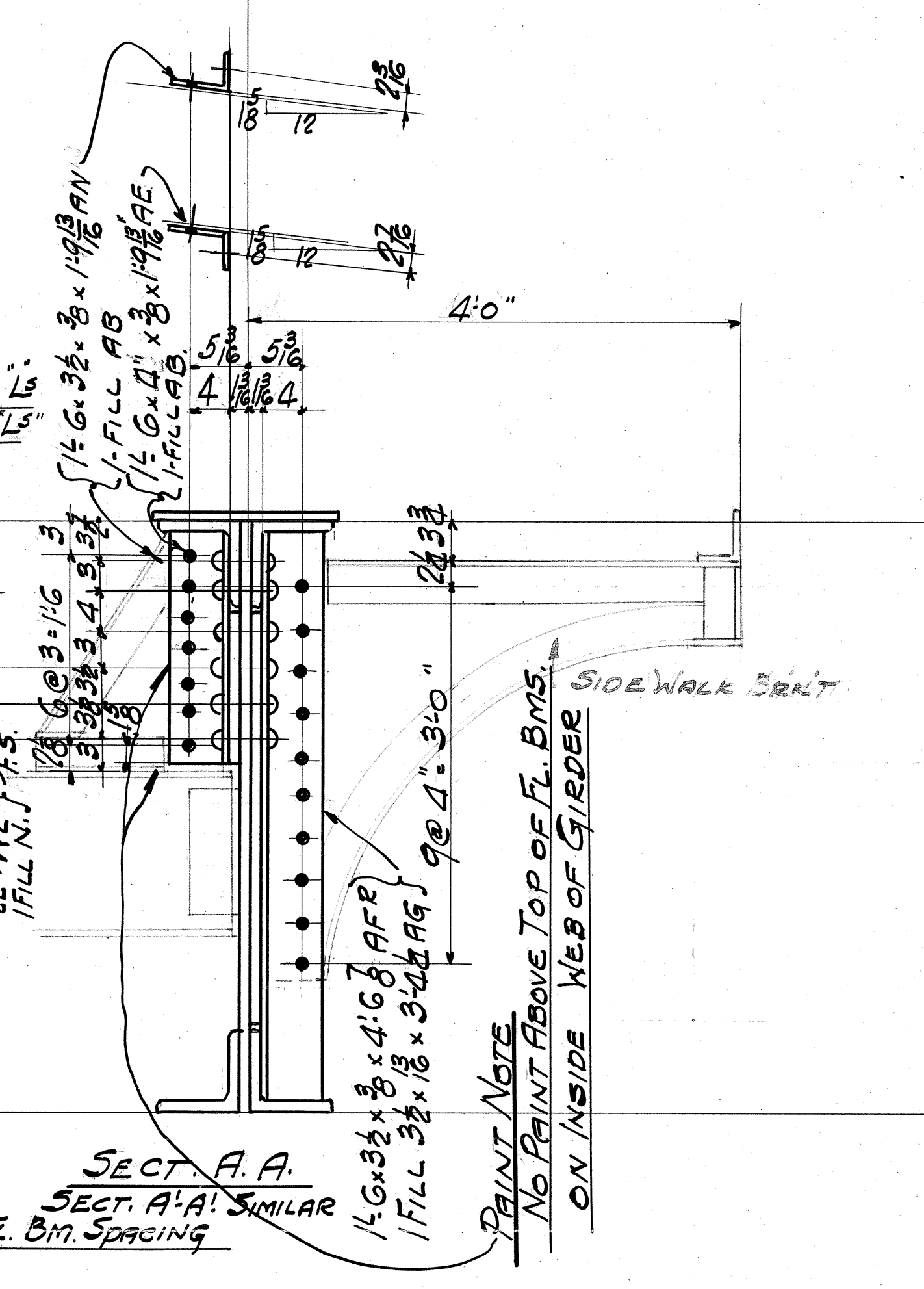
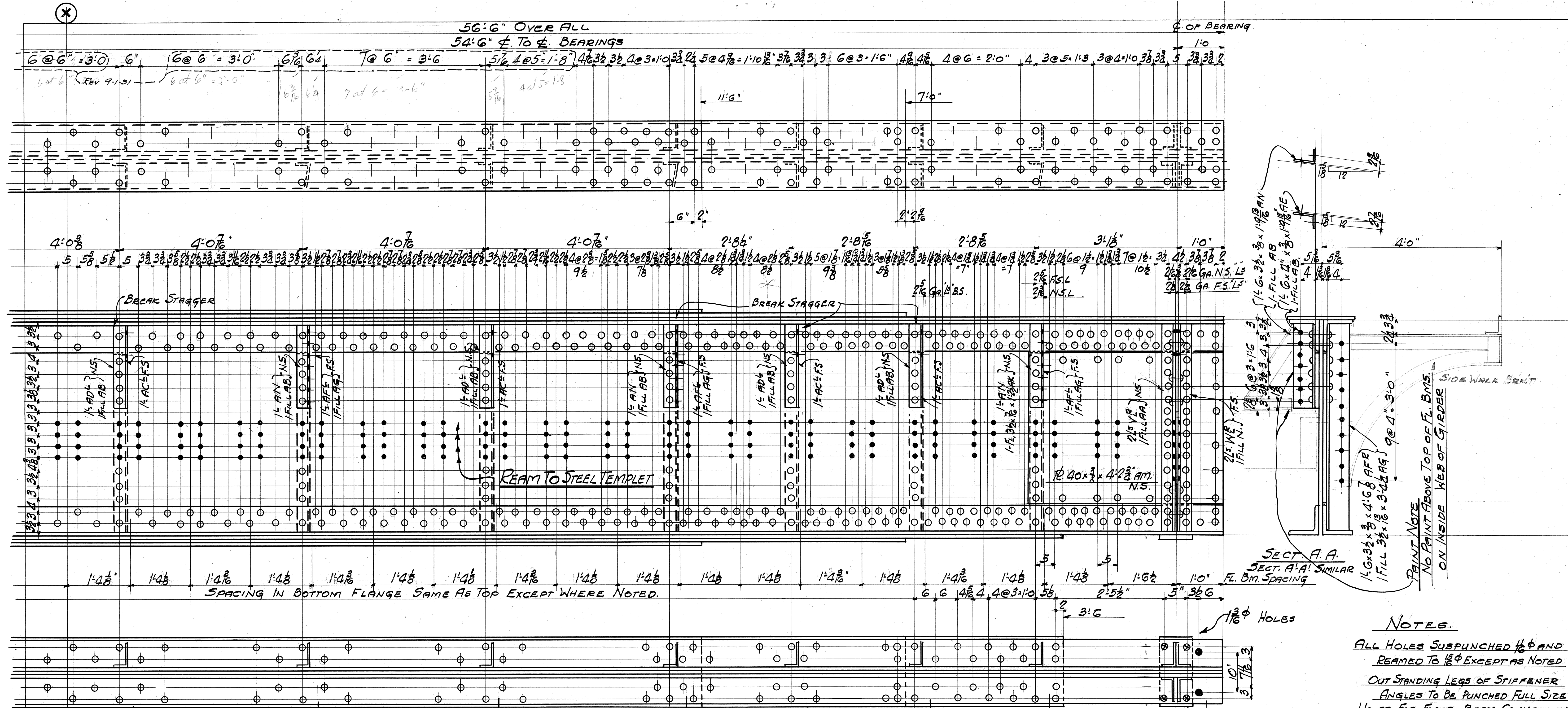


ONE GIRDER - 1A1 (G3)

WORK WITH SHEET 1B

MISSISSIPPI VALLEY STRUCTURAL STEEL CO. Plant at MELROSE PARK			
Rivets 3ϕ	Structure SOUTH GRAND AVE BRIDGE	Contract 6640	
Holes $1 \frac{1}{8} \phi$ - SEE NOTES	Location SPRINGFIELD ILL	Customer WABASH RAILWAY CO	Sheet 1AB
Paint 2400 DET. GRAPH	Contents G3	Made by A.S.	Work Order 1
SEE NOTES	Traced by	Checked by JBL 8-8-31	Revised

SHOP INSPECTION BY R.W. HUNT & CO.



NOTES.

ALL HOLES SUBPUNCHED $\frac{1}{16}$ " AND REAMED TO $\frac{1}{8}$ " EXCEPT AS NOTED

OUT STANDING LEGS OF STIFFENER ANGLES TO BE PUNCHED FULL SIZE HOLES FOR FLOOR BEAM CONNECTIONS TO BE REAMED TO STEEL TEMPLAT

STIFFENER ANGLES TO BEAR TOP AND BOTTOM AND TO BE CHAMFERED TO FIT FILLET OF FLANGE ANGLES

THE MILL OVER RUN AT ENDS OF GIRDERS MAY BE FLAME CUT & THEN PLANED $\frac{1}{4}$ "

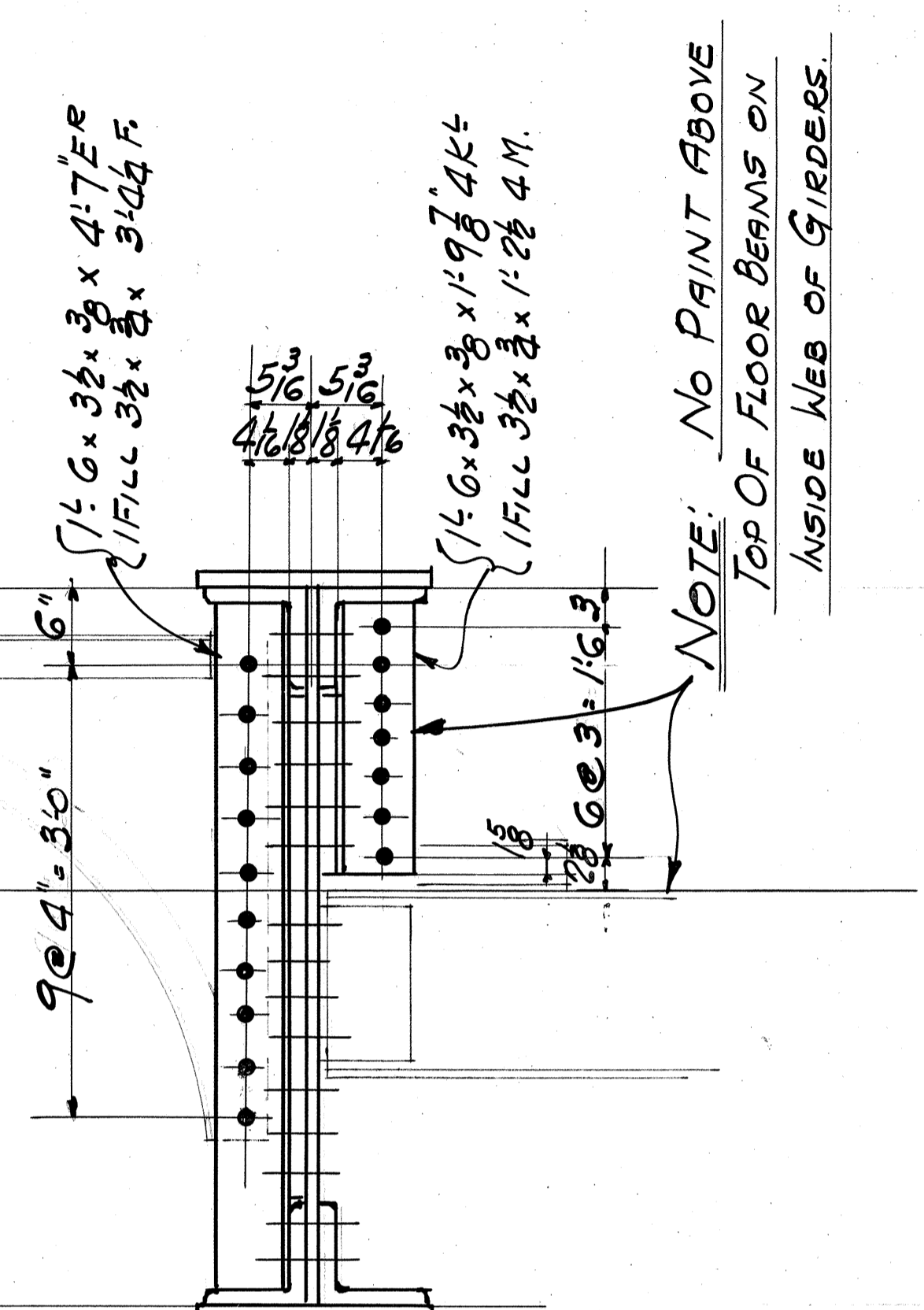
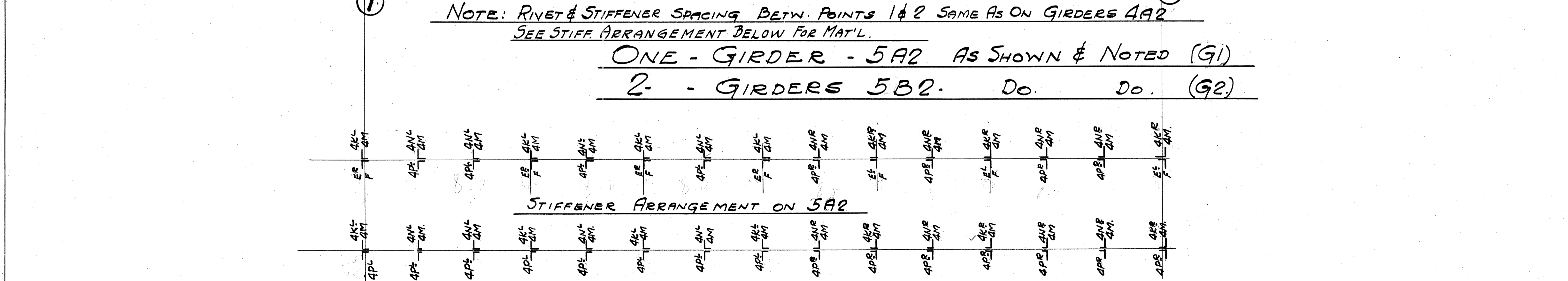
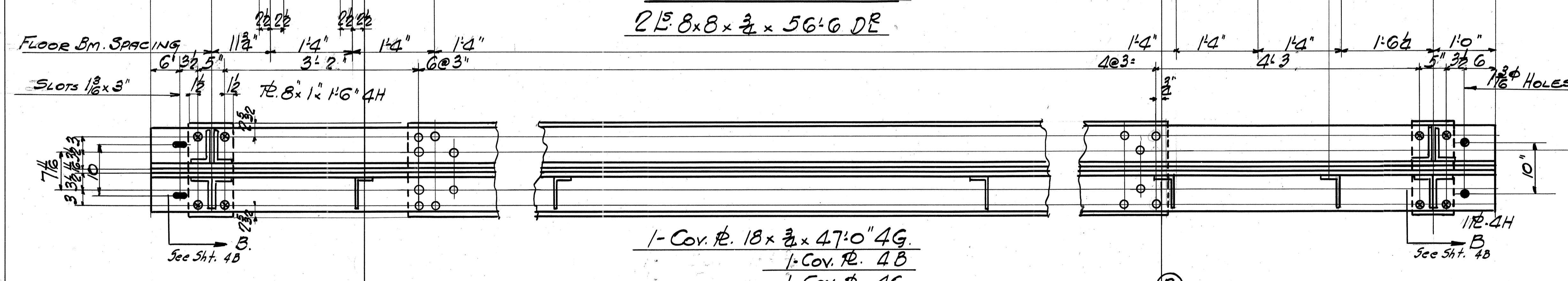
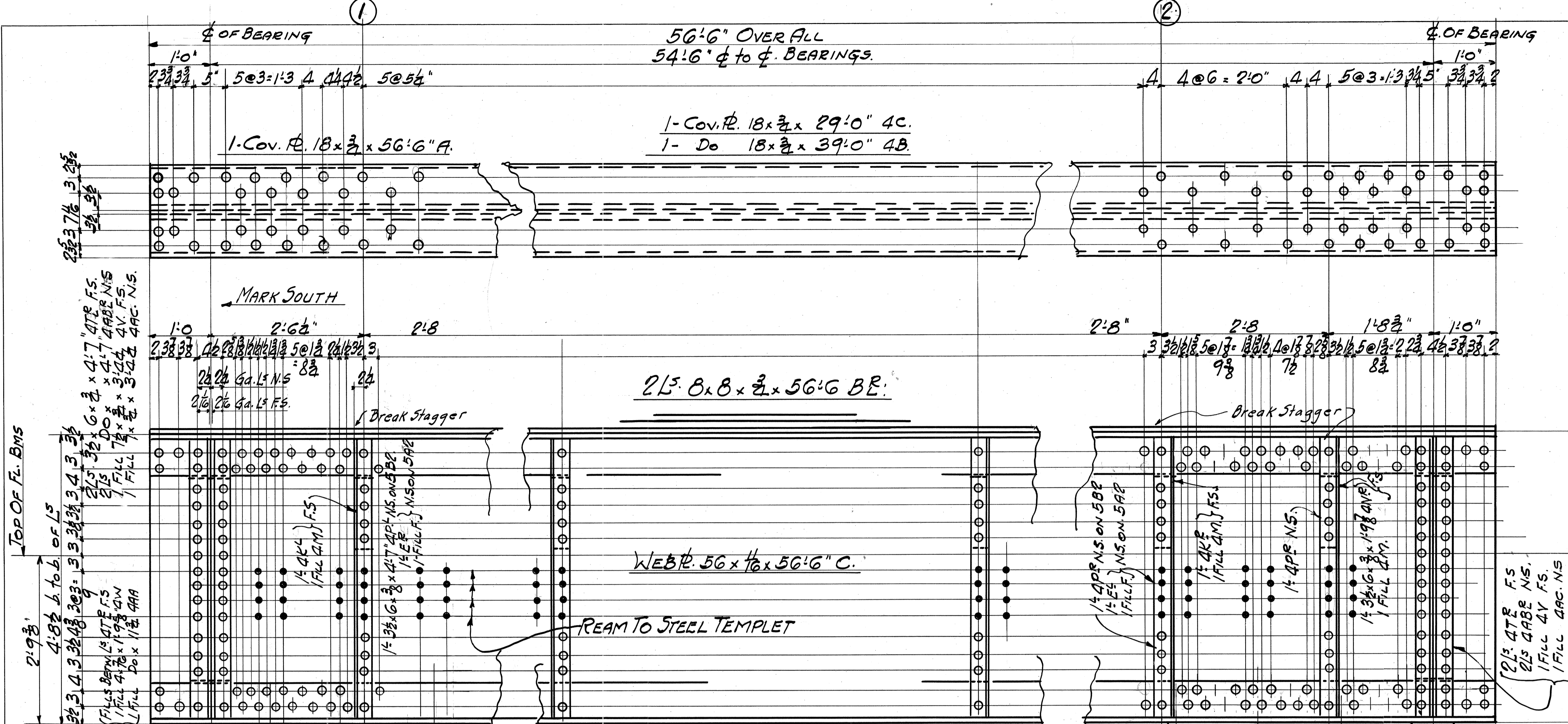
NO MATERIAL EXCEPT AS NOTED ABOVE & BASE BS. SHALL BE FLAME CUT. PLATES TO BE HOT-STRAIGHTENED OR PLANED.

PAINT: CONTACT SURFACES
SHOP PAINT #2400 DETROIT GRAPHITE
SEE DRWG FOR SURFACES NOT PAINTED

WORK WITH SHEET 2AB

MISSISSIPPI VALLEY STRUCTURAL STEEL CO. Plant at MELROSE PARK		
Rivets $\frac{7}{8}$ " ϕ	Structure SOUTH GRAND AVE BRIDGE	Contract 6640
Holes $\frac{1}{8}$ " - SEE NOTES	Location SPRINGFIELD ILL	Sheet 2B
Paint 2400 DET. GRAPH SEE NOTES	Customer WABASH RAILWAY CO.	Work Order
	Contents GA	
Made by A.S.	Checked by J.W.B.-3/	
Traced by	Revised 9-1-31 E.J.S.	

SHOP INSPECTION BY R.W. HUNT & CO.



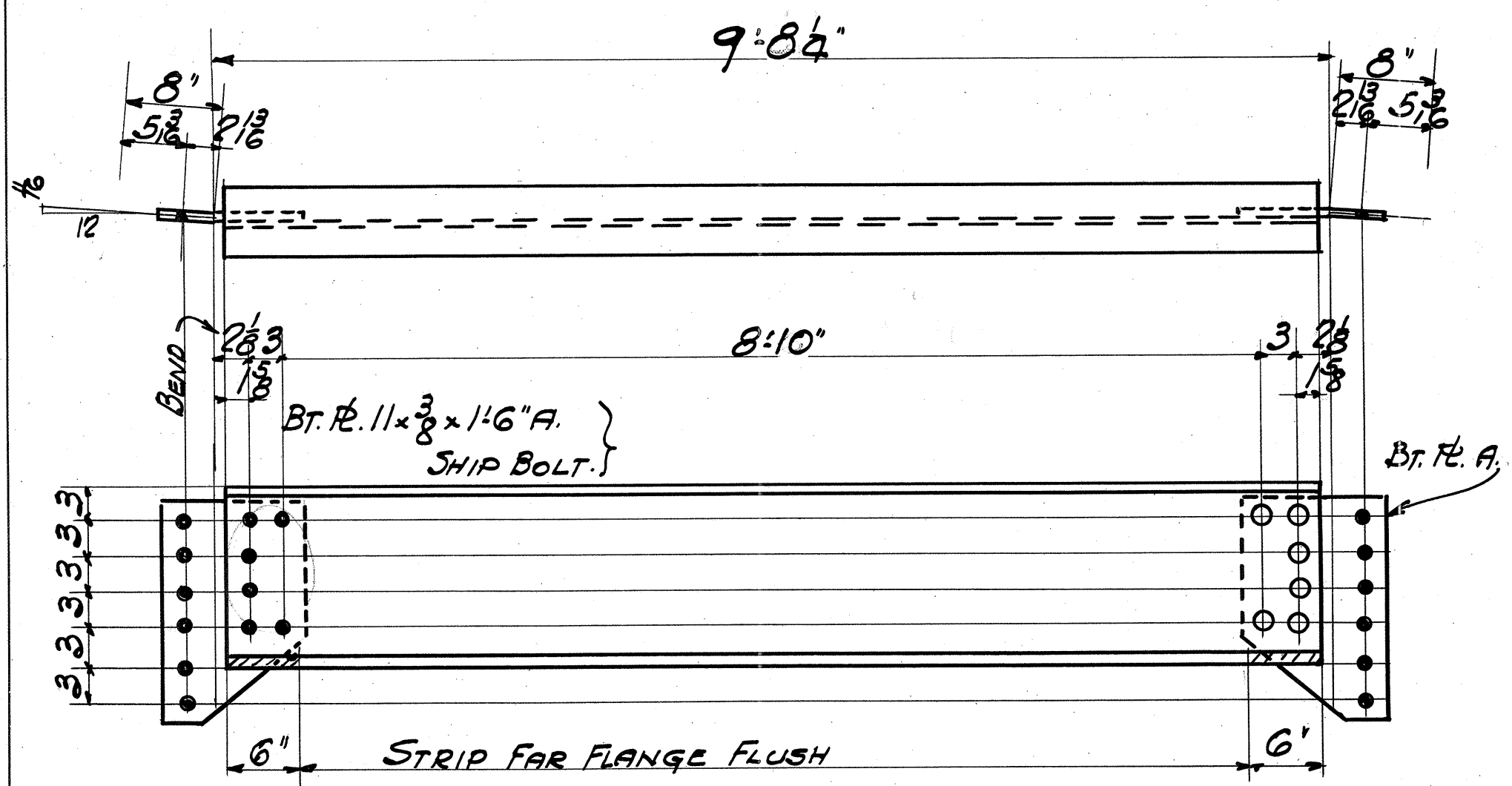
NOTES.
 ALL HOLES SUBPUNCHED 1/8" AND REAMED TO 1/8" EXCEPT AS NOTED
 OUT STANDING LEGS OF STIFFENER ANGLES TO BE PUNCHED FULL SIZE HOLES FOR FLOOR BEAM CONNECTIONS TO BE REAMED TO STEEL TEMPLAT
 STIFFENER ANGLES TO BEAR TOP AND BOTTOM AND TO BE CHAMFERED TO FIT FILLET OF FLANGE ANGLES
 THE MILL OVER RUN AT ENDS OF GIRDERS MAY BE FLAME CUT & THEN PLANED &
 NO MATERIAL EXCEPT AS NOTED ABOVE & BASE RS. SHALL BE FLAME CUT

PLATES TO BE HOT STRAIGHTENED OR PLAN
 PAINT CONTACT SURFACES
 SHOP PAINT #2400 DETROIT GRAPHITE
 SEE DRWG FOR SURFACES NOT PAINTED.

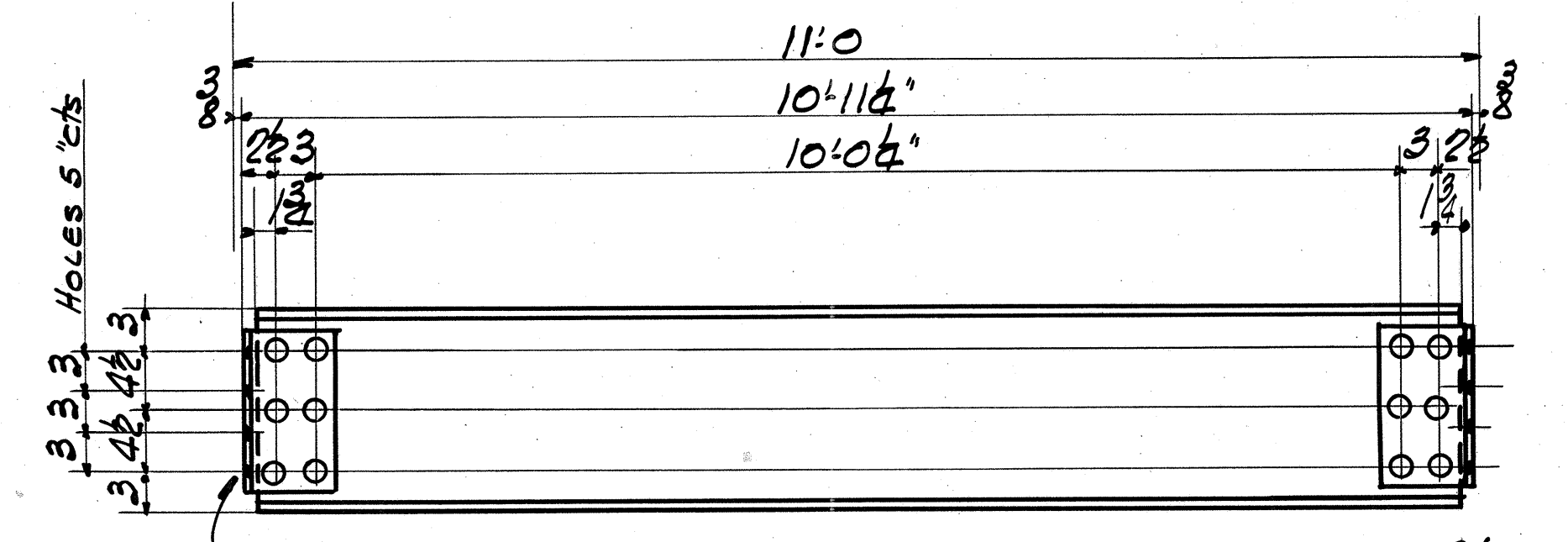
WORK WITH SHEETS 4B & 4AB

MISSISSIPPI VALLEY STRUCTURAL STEEL CO. Plant at MELROSE PARK		
Rivets 6φ	Structure SOUTH GRAND AVE BRIDGE	Contract 6640
Holes 1/8" SEE NOTES	Location SPRINGFIELD ILL	Sheet 5
Paint #2400 DET. GRAPH. SEE NOTES	Customer WABASH RAILWAY CO.	Work Order
	Contents G1 & G2	2
Made by A.S.	Checked by J.M. B. 11-31	
Traced by	Revised	

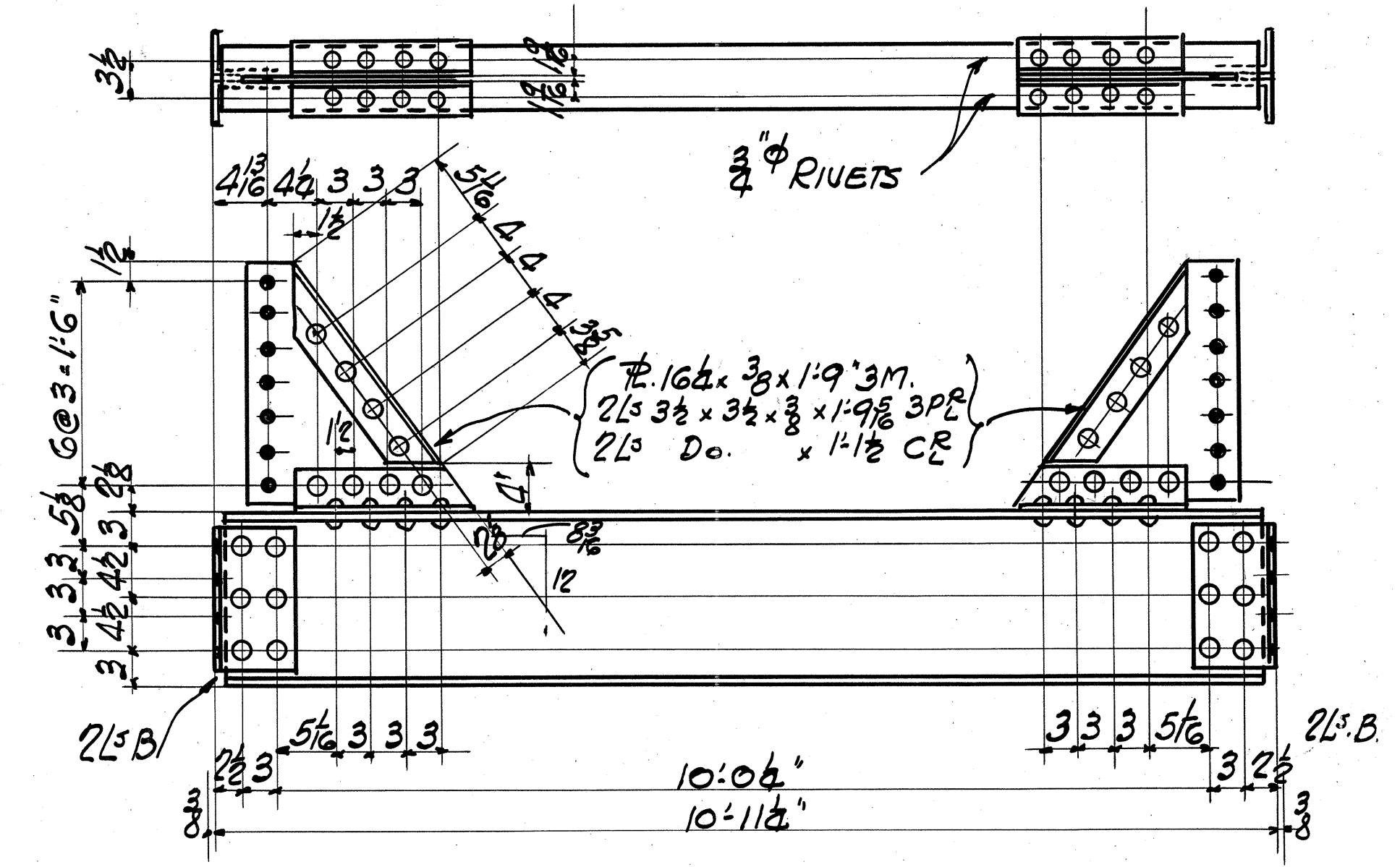
SHOP INSPECTION BY: R.W. HUNT & CO.



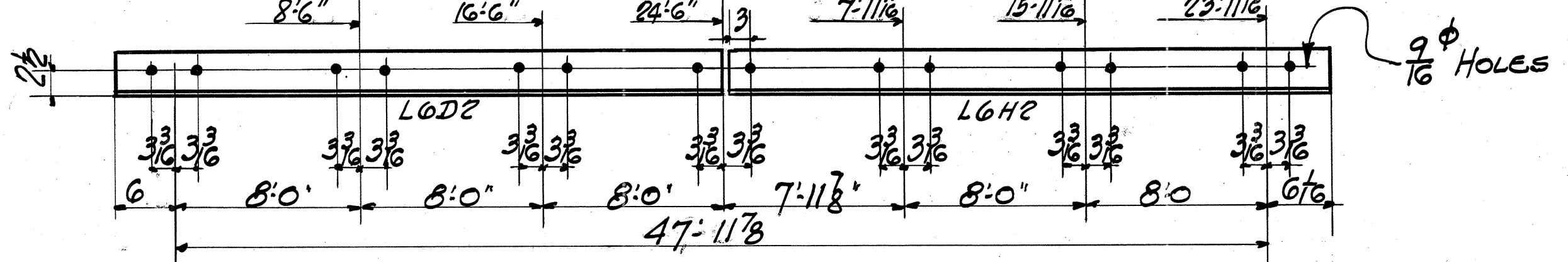
6- FLOOR BEAMS 15" I-42.9# x 9'-7 1/2" GA2



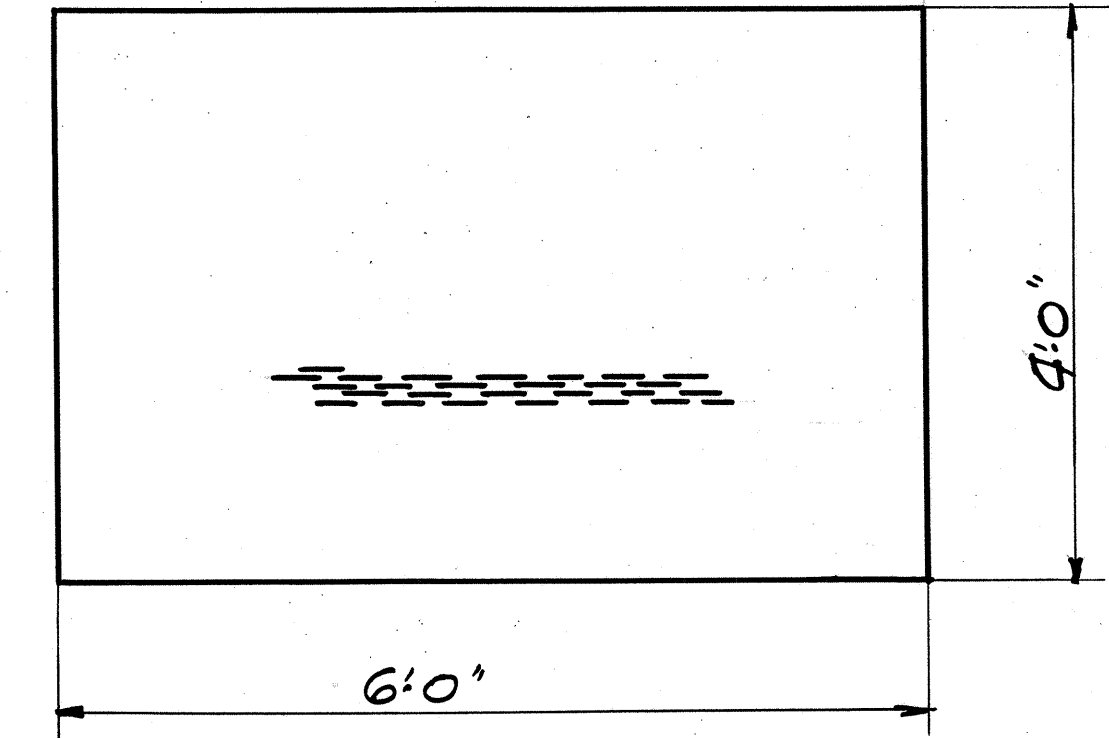
99- FLOOR BEAMS 15" I-42.9# x 10'-9 3/4" GB2



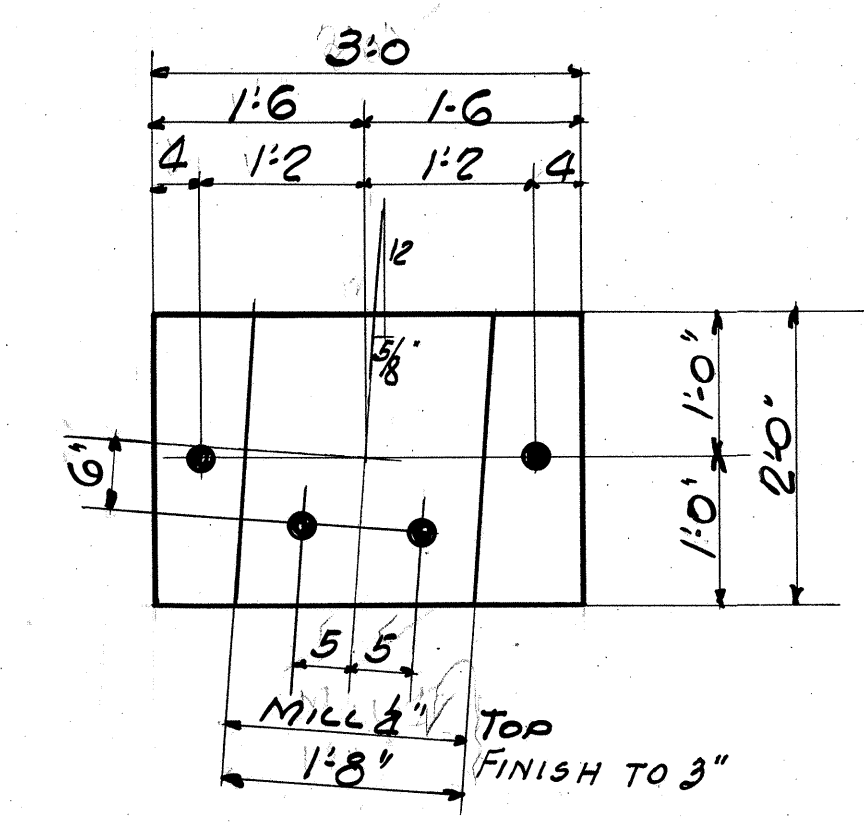
21 FLOOR BEAMS 15" I-42.9# x 10'-9 3/4" GC2



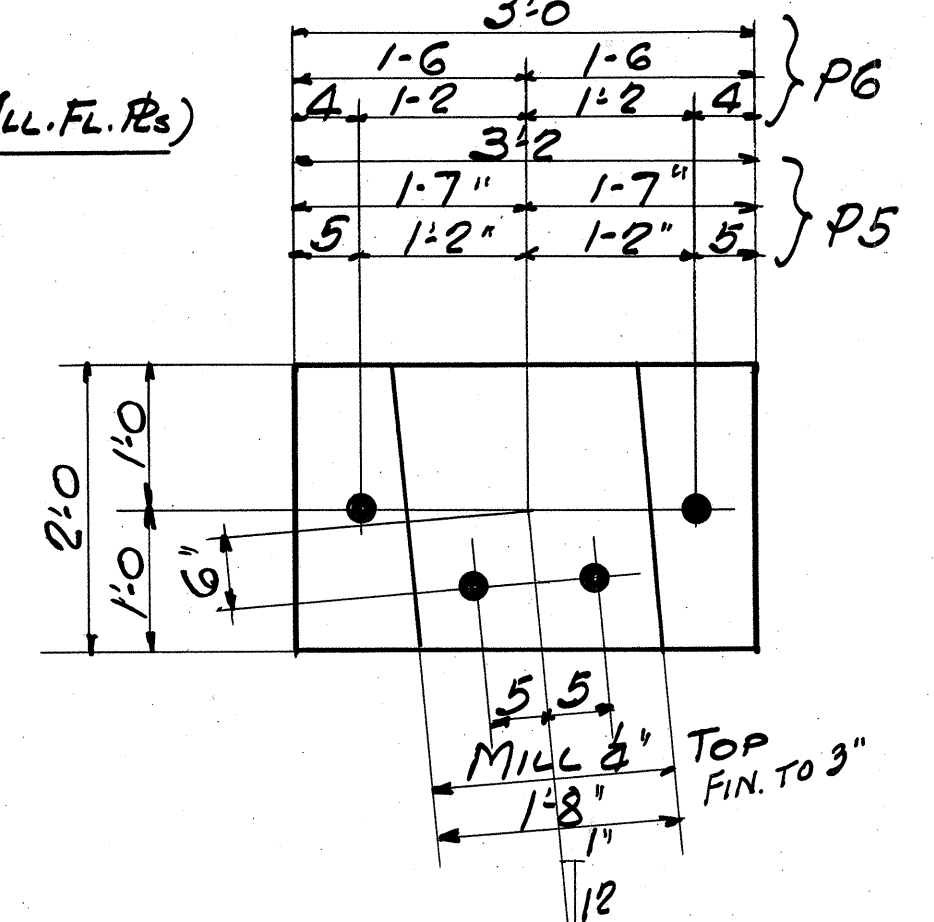
ONE ANGLE - 4" x 5" x 1/2" x 24'-6" GD2
ONE Do 4" x 5" x 1/2" x 24'-5 3/4" GH2



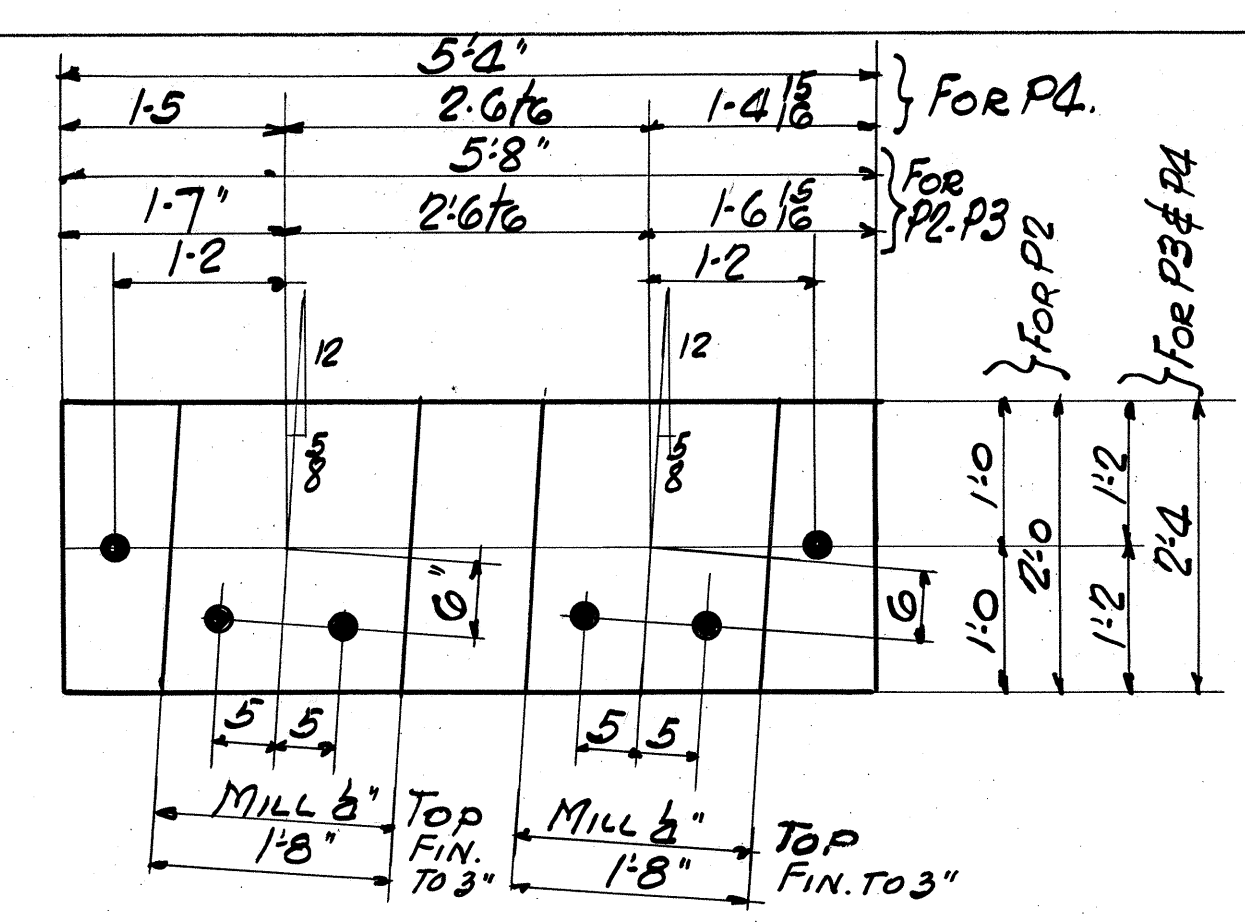
30- WALKWAY PLATES 48 x 3/4 x 6'-0" GE2 (ILL. FL. PL.)



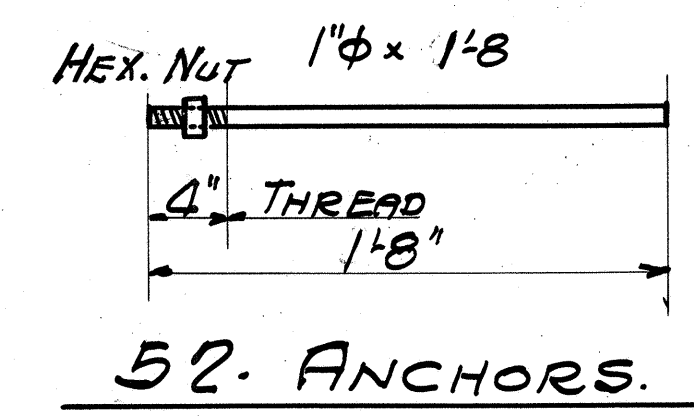
2- SLABS 24 x 3/4 x 3'-0" P1



ONE SLAB 24 x 3/4 x 3'-2" P5
ONE SLAB 24 x 3/4 x 3'-0" P6



4- SLABS 24 x 3/4 x 5'-8" P2
ONE SLAB 28 x 3/4 x 5'-8" P3
ONE Do. 28 x 3/4 x 5'-4" P4



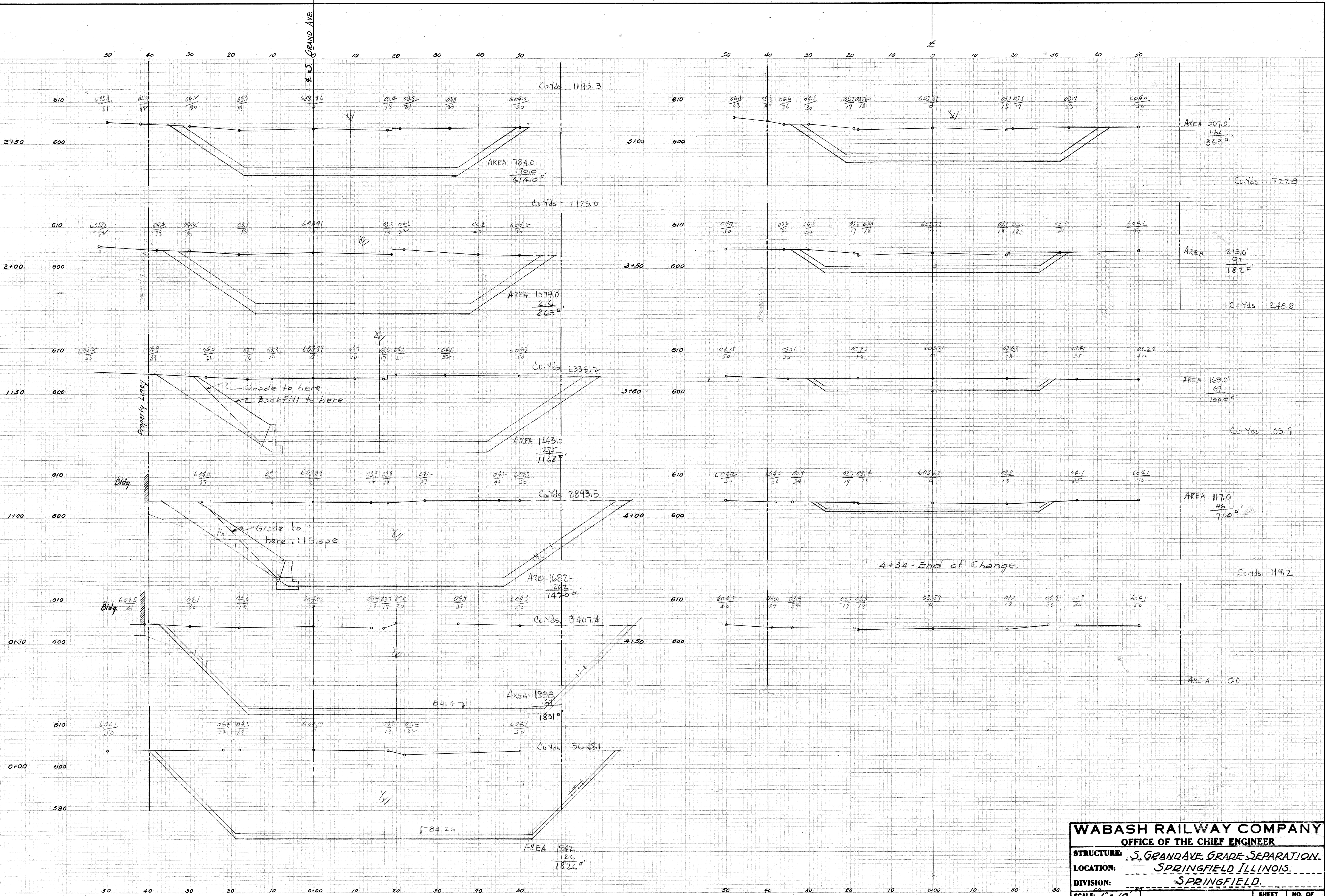
52- ANCHORS.

NOTES.

- RIVETS 7/8" EXCEPT TOP EDGE OF 15" I'S
- FIELD HOLES: HOLES IN CONN. L'S ON FL. BEAMS SUBPUNCHED 1/16" AND REAM TO STEEL TEMPLATE.
- HOLES IN WEB OF BMS (15" I'S) SUBPUNCHED 1/16" AND REAMED TO 1/16" ALL OTHER HOLES PUNCHED FULL SIZE UNLESS NOTED OTHERWISE
- NO MATERIAL EXCEPT SLABS SHALL BE FLAME CUT.
- PAINTING - ONE COAT #2400 DETROIT GRAPHITE. PAINT CONTACT SURFACES.
- NO PAINT ON TOP OF FLOOR BEAMS OR BRACKET CONNECTING TO FL. BEAMS
- DRILL SLABS 1/16"

MISSISSIPPI VALLEY STRUCTURAL STEEL CO. Plant at MELROSE PARK			
Rivets	SEE NOTES	Structure	SOUTH GRAND AVE BRIDGE
Holes		Location	SPRINGFIELD ILL
Paint		Customer	WABASH RAILWAY CO
		Contents	FLOOR BMS. SLABS. WALKWAY.
		Contract	6640
		Sheet	6
		Work Order	2
		Checked by	JW 8-11-31
		Revised	

SHOP INSPECTION BY R.W. HUNT & CO.



WABASH RAILWAY COMPANY
OFFICE OF THE CHIEF ENGINEER

STRUCTURE: S. GRAND AVE. GRADE SEPARATION.
 LOCATION: SPRINGFIELD ILLINOIS.
 DIVISION: SPRINGFIELD.

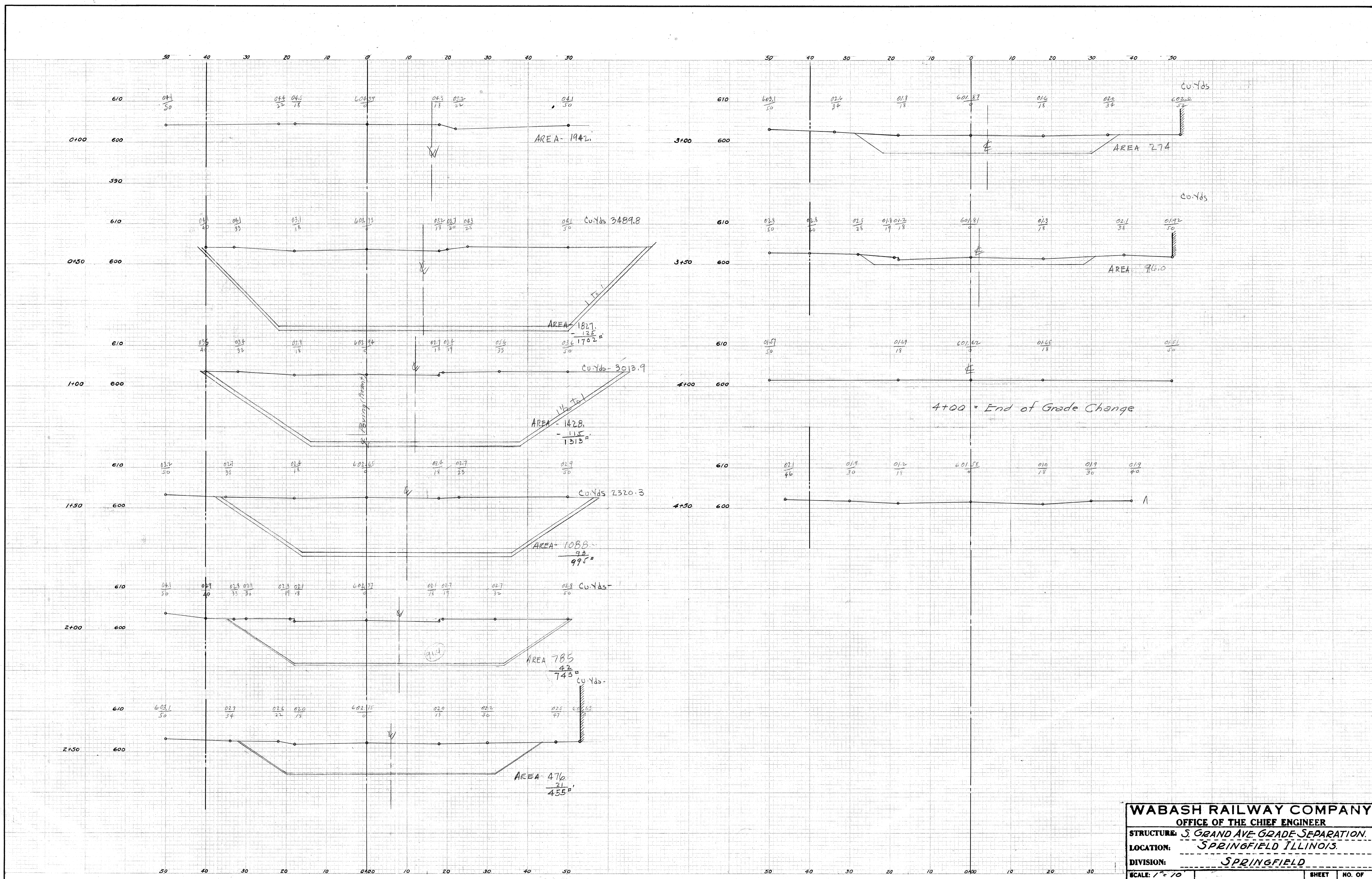
SCALE: 1" = 10'
 DATE: Jan. 31, 1930
 DRAWN BY: C.M.L.
 TRACED BY: C.M.L.
 CHECKED BY:

CROSS-SECTIONS
 ON
 WEST SIDE OF TRACK

SHEET NO.	NO. OF SHEETS

PLAN:
 CASE:

Field Book 143
 DH-415.24-301



WABASH RAILWAY COMPANY			
OFFICE OF THE CHIEF ENGINEER			
STRUCTURE: S. GRAND AVE. GRADE SEPARATION.			
LOCATION: SPRINGFIELD ILLINOIS.			
DIVISION: SPRINGFIELD			
SCALE: 1" = 10'	CROSS-SECTIONS ON FAST SIDE OF TRACK.	SHEET NO.	NO. OF SHEETS
DATE: Jan. 31, 1930			
DRAWN BY: G.M.L.	PLAN: CABE:		
TRACED BY: G.M.L.			
CHECKED BY:			