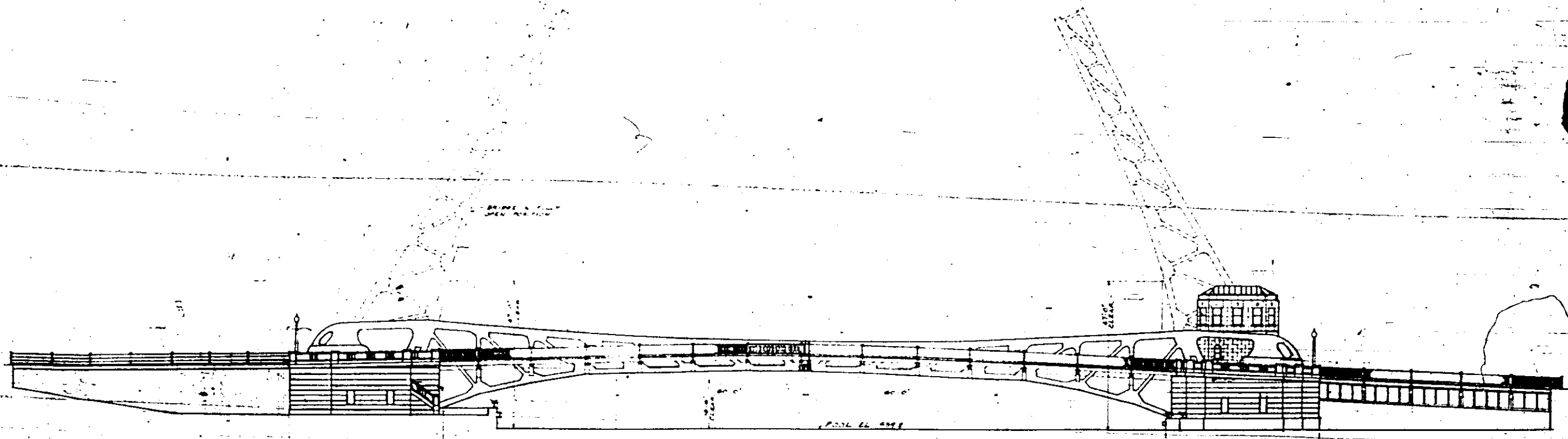


FLAN



ELEVATION

- LIST OF DRAWINGS**
- 1 GENERAL PLAN
  - 2 LOCATING PLAN
  - 3 EAST PIER
  - 4 EAST PIERS
  - 5 EAST PIER
  - 6 EAST PIERS
  - 7 BRIDGE & TRUNNION FOR DETAILS
  - 8 BRIDGE & TRUNNION FOR DETAILS
  - 9 BRIDGE & TRUNNION FOR DETAILS
  - 10 BRIDGE & TRUNNION FOR DETAILS
  - 11 BRIDGE & TRUNNION FOR DETAILS
  - 12 BRIDGE & TRUNNION FOR DETAILS
  - 13 BRIDGE & TRUNNION FOR DETAILS
  - 14 BRIDGE & TRUNNION FOR DETAILS
  - 15 BRIDGE & TRUNNION FOR DETAILS
  - 16 BRIDGE & TRUNNION FOR DETAILS
  - 17 BRIDGE & TRUNNION FOR DETAILS
  - 18 BRIDGE & TRUNNION FOR DETAILS
  - 19 BRIDGE & TRUNNION FOR DETAILS
  - 20 BRIDGE & TRUNNION FOR DETAILS
  - 21 BRIDGE & TRUNNION FOR DETAILS
  - 22 BRIDGE & TRUNNION FOR DETAILS
  - 23 BRIDGE & TRUNNION FOR DETAILS
  - 24 BRIDGE & TRUNNION FOR DETAILS
  - 25 BRIDGE & TRUNNION FOR DETAILS
  - 26 BRIDGE & TRUNNION FOR DETAILS
  - 27 FLOOR DETAILS AND TRUSS CASTINGS
  - 28 FLOOR BEAMS 12 TO 15
  - 29 FLOOR BEAMS 16 AND 17
  - 30 HORIZONTAL BRACES AND BRACING
  - 31 HORIZONTAL BRACING
  - 32 EDGEE LOCK AND SUPPORTS
  - 33 EDGEE LOCK CASTINGS
  - 34 CENTERING - EAST LEAF
  - 35 CENTERING - WEST LEAF
  - 36 OPERATING MECHANISM
  - 37 MECHANICAL DETAILS
  - 38 TRUNNIONS AND BEARINGS
  - 39 TRUNNION SUPPORTS
  - 40 TRUNNION SUPPORTS
  - 41 CENTRAL ENGINE AND ROPEWAY LIFTS
  - 42 MECHANICAL INDICATOR ETC.
  - 43 WATER PARTS AND CONNECTIONS
  - 44 ALTERATIONS TO PREVIOUS DRAWING

GENERAL PLAN  
DOUBLE LEAF TRUNNION BASCULE BRIDGE  
OVER  
THE ILLINOIS WATERWAY  
AT  
RUBY ST. JOLEY ILL.

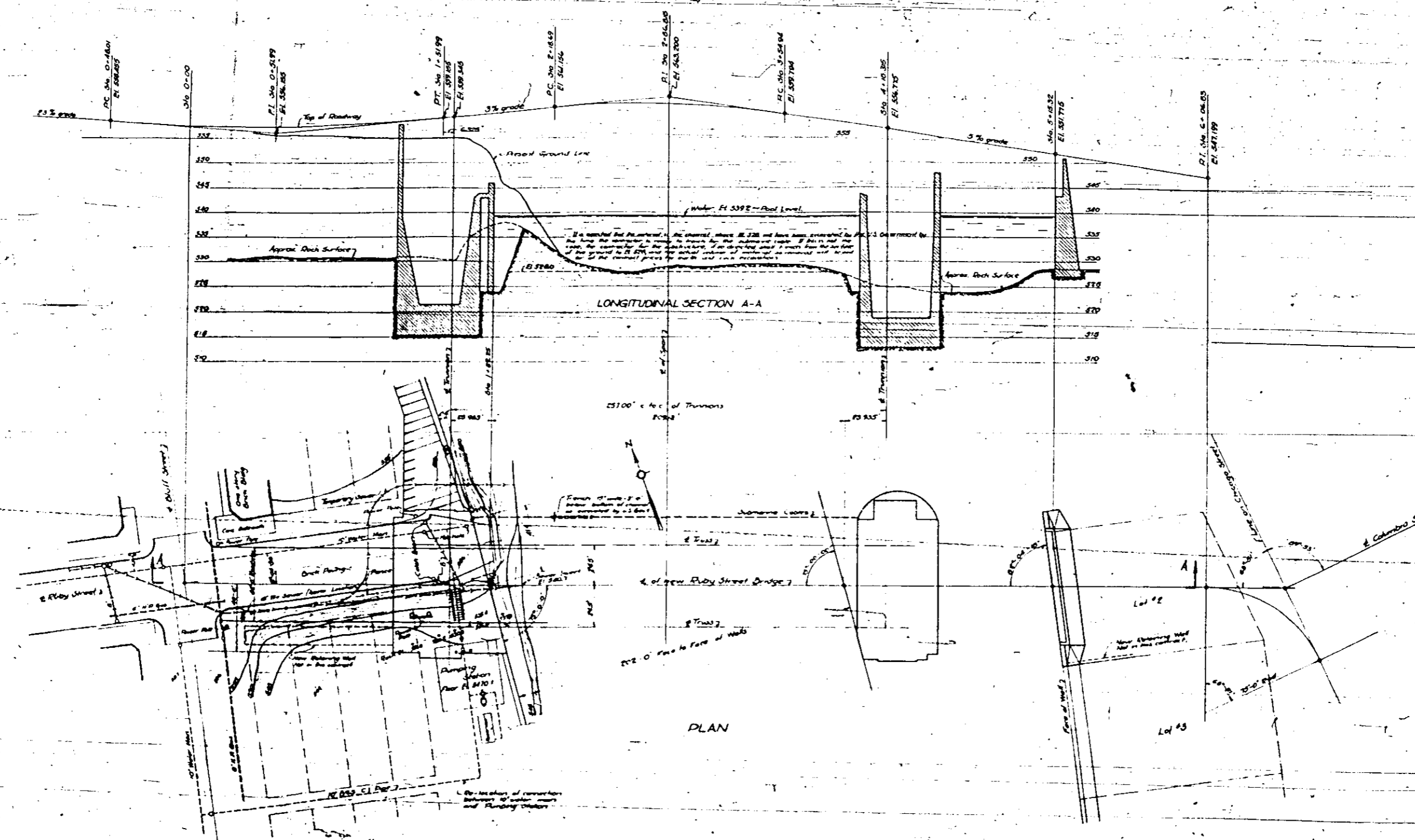
STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS  
DIVISION OF WATERWAYS

DESIGNED BY  
THE SCHERZER ROLLING LIFT BRIDGE CO.  
CHICAGO, ILL.

Approved: *[Signature]*  
Approved: *[Signature]*

179

999-9901



LOCATION PLAN  
 DOUBLE LEAF TRUNNION BASCULE BRIDGE  
 OVER  
 THE ILLINOIS WATERWAY  
 AT  
 RUBY ST. JOUET, ILL.

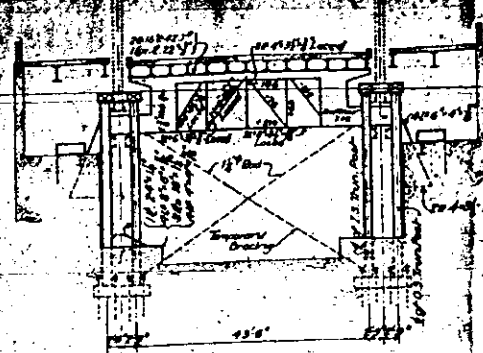
THE SCHERZER ROLLING LIFT BRIDGE CO.  
 Approved: *[Signature]* April 13, 1922  
 Chief Engineer

STATE OF ILLINOIS  
 DEPARTMENT OF PUBLIC WORKS AND BUILDINGS  
 DIVISION OF WATERWAYS  
 Approved: \_\_\_\_\_  
 Bridge Engineer

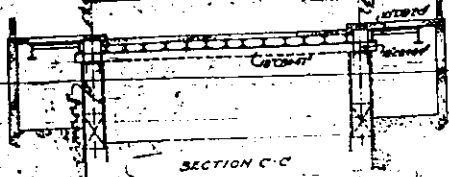
DESIGNED BY  
 THE SCHERZER ROLLING LIFT BRIDGE CO.  
 MONADNOCK BLOCK - CHICAGO, ILL.

Scale: 1" = 20'  
 Date: Feb. 25, 1922  
 SHEET NO. 1343-2

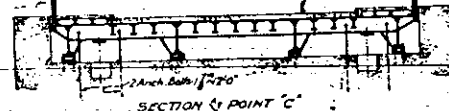




SECTION A-A



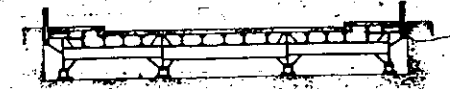
SECTION C-C



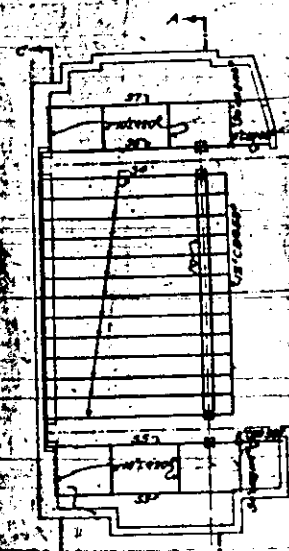
SECTION AT POINT C



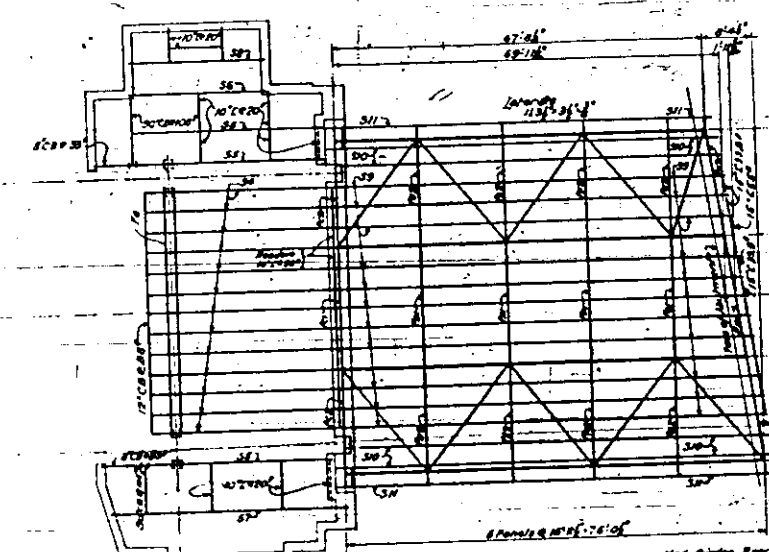
SECTION AT POINTS D, E, F, G, H



SECTION AT POINT I



PLAN OF FIXED PARTS

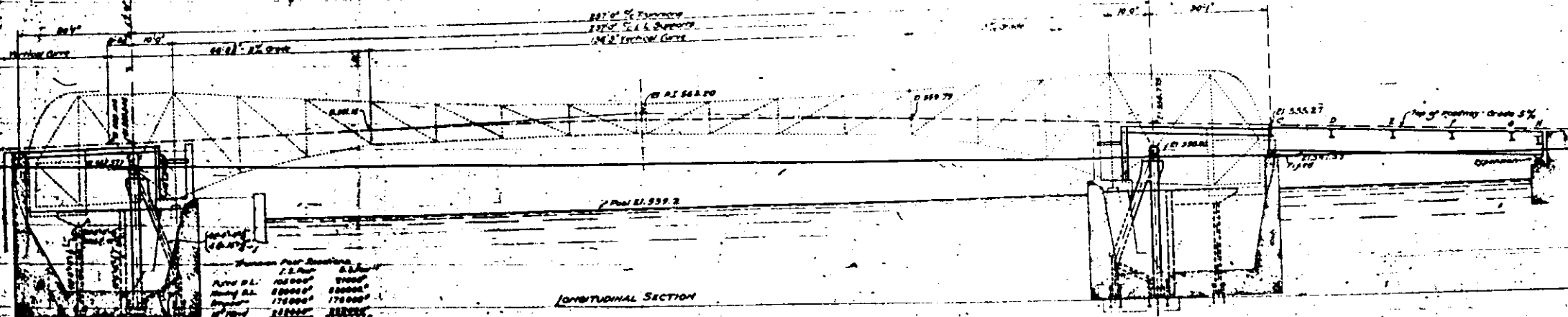


MEMBER	SHEARS IN 1000 <sup>0</sup>				MOMENTS IN 1000 <sup>0</sup> FT. LBS.				SECTION
	D.L.	L.L.	IMP.	TOTAL	D.L.	L.L.	IMP.	TOTAL	
54	7.0	21.4	8.4	36.8	52.	88.	28	168	24" CB 85" X 4"
55	12.0	10.0	-	22.0	100.	88	-	188	30" CB 108" X 4"
56	44.4	6.8	-	51.2	288.	40	-	328	30" CB 108" X 4"
57	18.4	16.0	-	34.4	184.	160	-	344	33" CB 141" X 4"
58	6.1	7.9	-	14.0	36	48	-	84	24" CB 85" X 4"
59	3.3	12.3	5.8	21.4	18	44	13	75	16" CB 46" X 4"
510	1.7	2.8	-	4.5	6.6	9.8	-	16.4	16" CB 46" X 4"
511	-1.3	-1.3	-	-2.6	-4.7	-4.7	-	-9.4	16" CB 46" X 4"
701	27.2	42.8	12.9	82.9	174.	285	71	430	36" CB 141" X 4"
702	20.2	31.8	8.9	60.9	110.	159	37	306	36" CB 141" X 4"
703	17.8	28.8	11.4	58.0	114.	212	64	390	30" CB 108" X 4"
704	12.8	27.5	7.5	47.8	75	158	38	271	30" CB 108" X 4"
705	10.7	24.8	24.7	60.2	62	248	146	356	30" CB 108" X 4"
706	7.0	21.2	16.1	44.3	32	182	40	254	24" CB 85" X 4"
707	27.1	28.4	18.4	73.9	144.	168	37	349	36" CB 141" X 4"
708	27.1	28.7	24.8	76.6	147.	171	47	365	36" CB 141" X 4"

Additional section provided for handling machinery.  
 Section is increased to reduce stresses.

Max. Girder Reactions  
 Girder 01 & 04  
 D.L. 71000<sup>0</sup>  
 L.L. 40000<sup>0</sup>  
 Imp. 4300<sup>0</sup>  
 Tot. 115300<sup>0</sup>

Max. Girder Reactions  
 Girder 02 & 03  
 D.L. 712000<sup>0</sup>  
 L.L. 91000<sup>0</sup>  
 Imp. 81500<sup>0</sup>  
 Tot. 150800<sup>0</sup>



LONGITUDINAL SECTION

Max. Girder Reactions  
 Girder 01 & 04  
 D.L. 71000<sup>0</sup>  
 L.L. 40000<sup>0</sup>  
 Imp. 4300<sup>0</sup>  
 Tot. 115300<sup>0</sup>

STRESS SHEET - FIXED PARTS  
 DOUBLE LEAF TRUNNION BASCULE BRIDGE  
 OVER  
 THE ILLINOIS WATERWAY  
 AT  
 RUBY ST. JOLIET ILL.

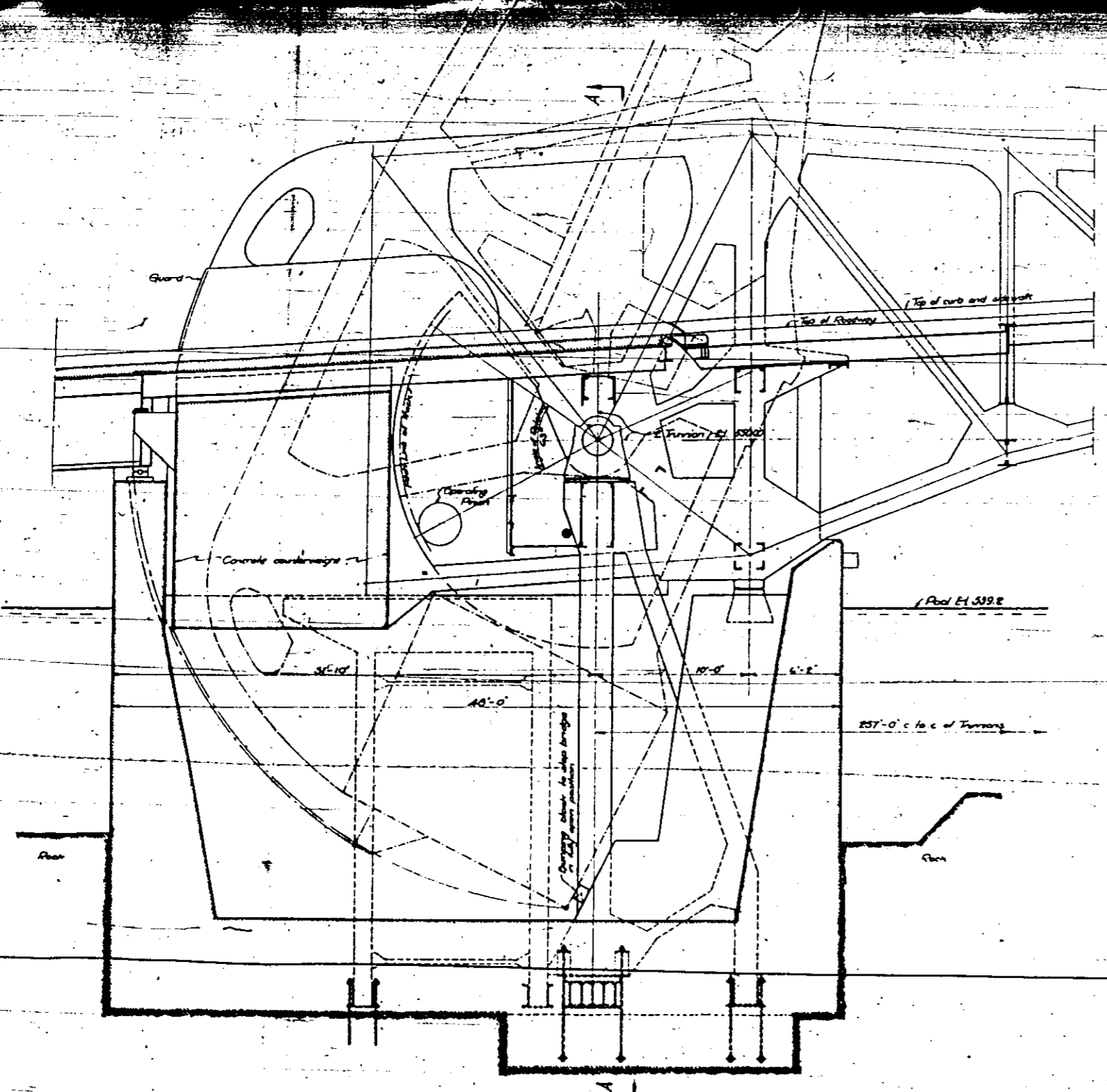
STATE OF ILLINOIS  
 DEPARTMENT OF PUBLIC WORKS AND BUILDINGS  
 DIVISION OF WATERWAYS

THE SCHERZER ROLLING LIFT BRIDGE CO.  
 Approved: 1/16/13, 1923  
 [Signature]  
 Consulting Engineer

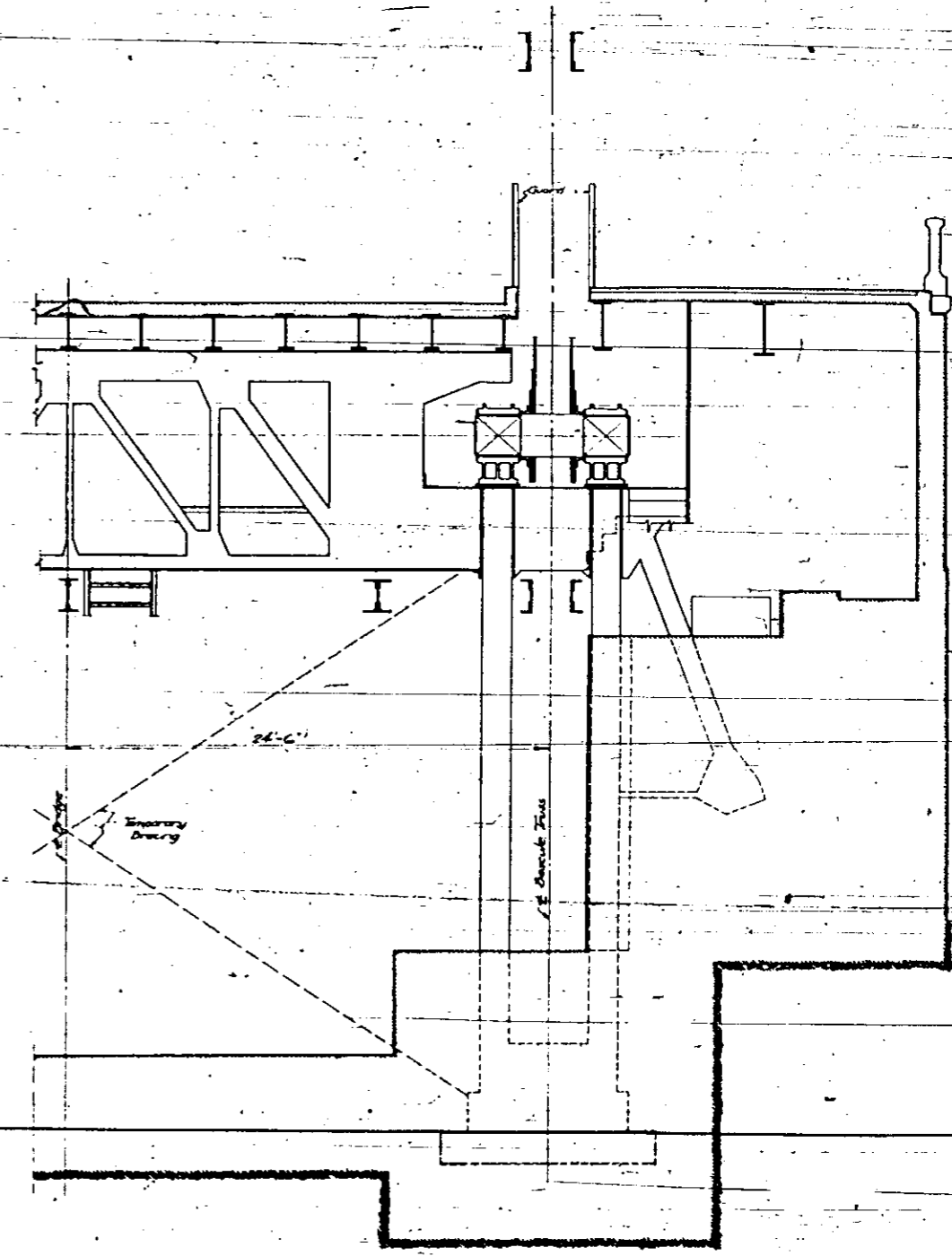
Approval recommended:  
 [Signature]  
 Bridge Engineer

Approved: 1/16/13, 1923  
 [Signature]  
 Chief Engineer

DESIGNED BY  
 THE SCHERZER ROLLING LIFT BRIDGE CO.  
 MONROCK BLOCK, CHICAGO, ILL.



CLEARANCE DIAGRAM FOR EAST LEAF  
Diagram for West Leaf similar.



SECTION A-A

CLEARANCE DIAGRAM  
DOUBLE LEAF TRUNNION BASCULE BRIDGE  
OVER  
THE ILLINOIS WATERWAY  
AT  
RUBY ST. JOUET, ILL.

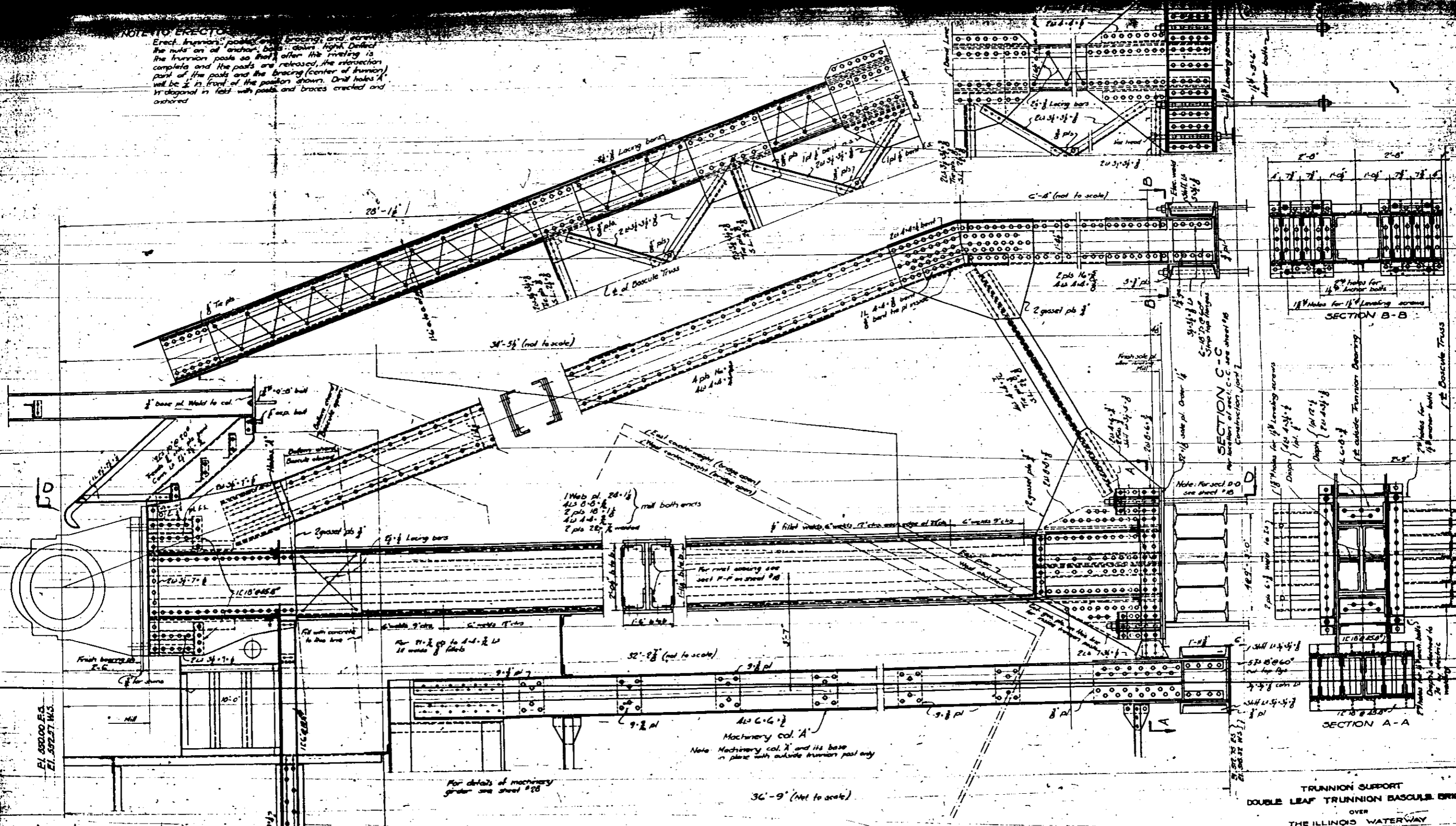
THE SCHERZER ROLLING LIFT BRIDGE CO.  
Approved: *Sept. 13, 1933*  
*Ingolf Erdel*  
Managing Engineer  
Approved: *Sept. 13, 1933*  
*Chas. J. ...*

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS AND BUILDING  
DIVISION OF WATERWAYS  
Approval recommended:  
Approved: \_\_\_\_\_  
Bridge Engineer

DESIGNED BY  
THE SCHERZER ROLLING LIFT BRIDGE CO.  
MONADNOCK BLOCK, CHICAGO, ILL.  
DRAWN BY ALAS.  
SCALE 1/4" = 1'-0"  
DATE, FEB. 28, 1933

**NOTE TO ERECTOR**

Erect trunnion posts and bracing and draw the nuts on all anchor bolts down tight. Deflect the trunnion posts so that after the riveting is complete and the posts are released, the elevation part of the posts and the bracing (center of trunnion) will be 2" in front of the position shown. Drill holes in diagonal in field with posts and braces erected and anchored.



**GENERAL NOTES**  
 1. Trunnion posts, bracing, girders and anchor bolts are substructure steel.  
 2. Open holes.  
 3. Rounding see spec.

THE SCHERZER ROLLING LIFT BRIDGE CO.  
 Approved *Sept 13, 1933*  
*Engelhardt*  
 Consulting Engineer  
 Approved *Sept 12, 1933*  
*Carl [unclear]*

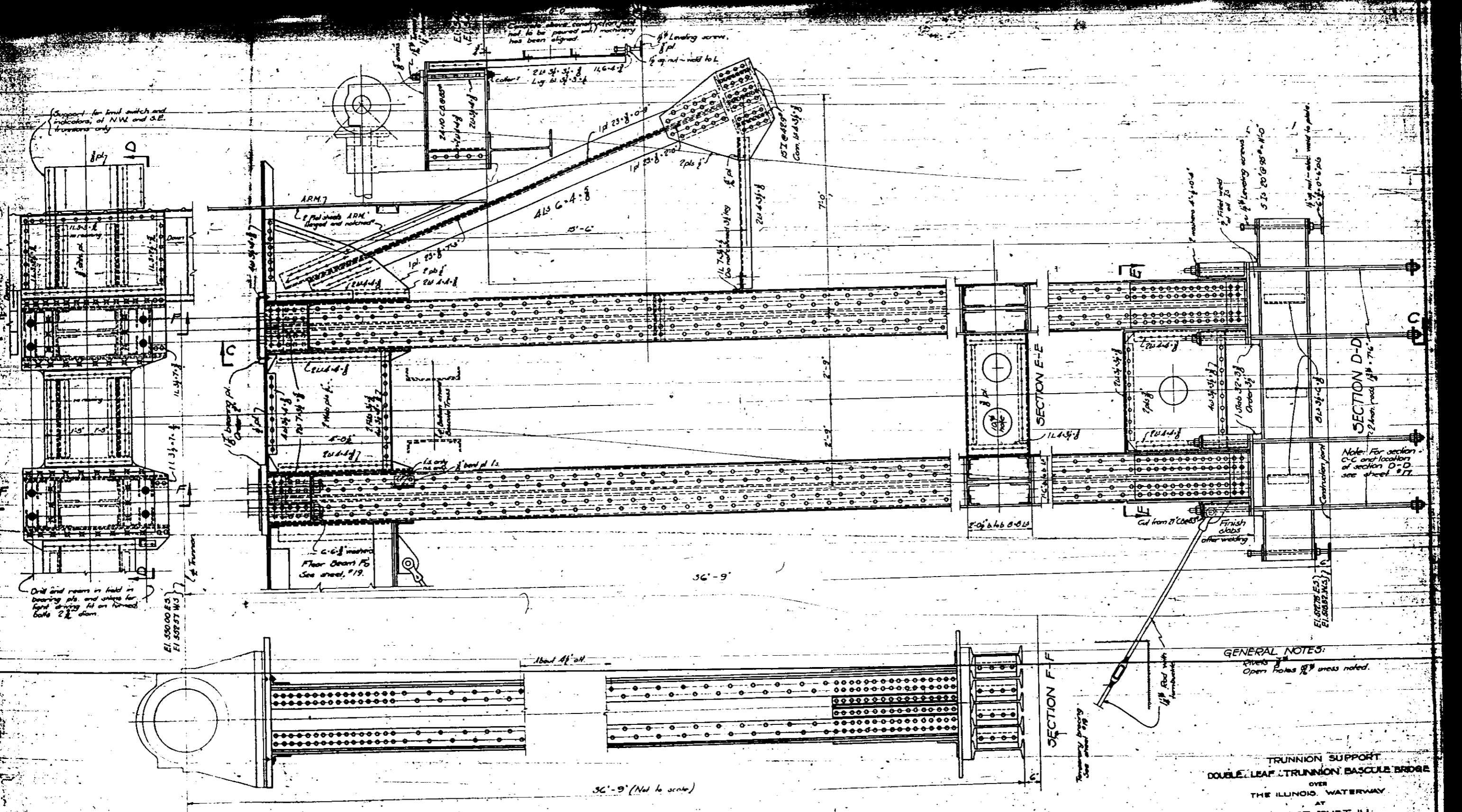
STATE OF ILLINOIS  
 DEPARTMENT OF PUBLIC WORKS AND BUILDINGS  
 DIVISION OF WATERWAYS  
 Approved recommended  
 Bridge Engineer

DESIGNED BY  
 THE SCHERZER ROLLING LIFT BRIDGE CO.  
 MONADNOCK BLOCK, CHICAGO, ILL.

SCALE: 1" = 1'-0"  
 DATE: FEB. 21, 1933

**TRUNNION SUPPORT  
 DOUBLE LEAF TRUNNION BASCULE BRIDGE  
 OVER  
 THE ILLINOIS WATERWAY  
 AT  
 RUBY ST. JOUET, ILL.**

EL. 532.00 F.S.  
 EL. 532.27 W.S.



Support for limit switch and indicators, of N.W. and S.E. trunnions only

Drill and ream in field in bearing plate and shaft for limit driving fit on turned cable 2 1/2" diam.

E1 550 00 E-3  
E1 502 57 W-3

Concrete above construction joint not to be poured until machinery has been aligned.

1/4" Landing screw, 8" pl  
1/2" up nut - weld to L

ARM 7

1/2" Flat steel ARM Flanged and notched

Landing

C-C 8" meters Floor Beam F5 See sheet #19.

36'-9"

36'-9" (Not to scale)

SECTION F-F

Temporarily bracing. See sheet #19.

GENERAL NOTES:  
Girders  
Open holes 1/2" unless noted.

TRUNNION SUPPORT  
DOUBLE LEAF TRUNNION BASCULE BRIDGE  
OVER  
THE ILLINOIS WATERWAY  
AT  
RUBY ST. JOUET, ILL.

THE SCHERZER ROLLING LIFT BRIDGE CO.  
Approved: *[Signature]*  
Sept. 13, 1932  
Chief Engineer

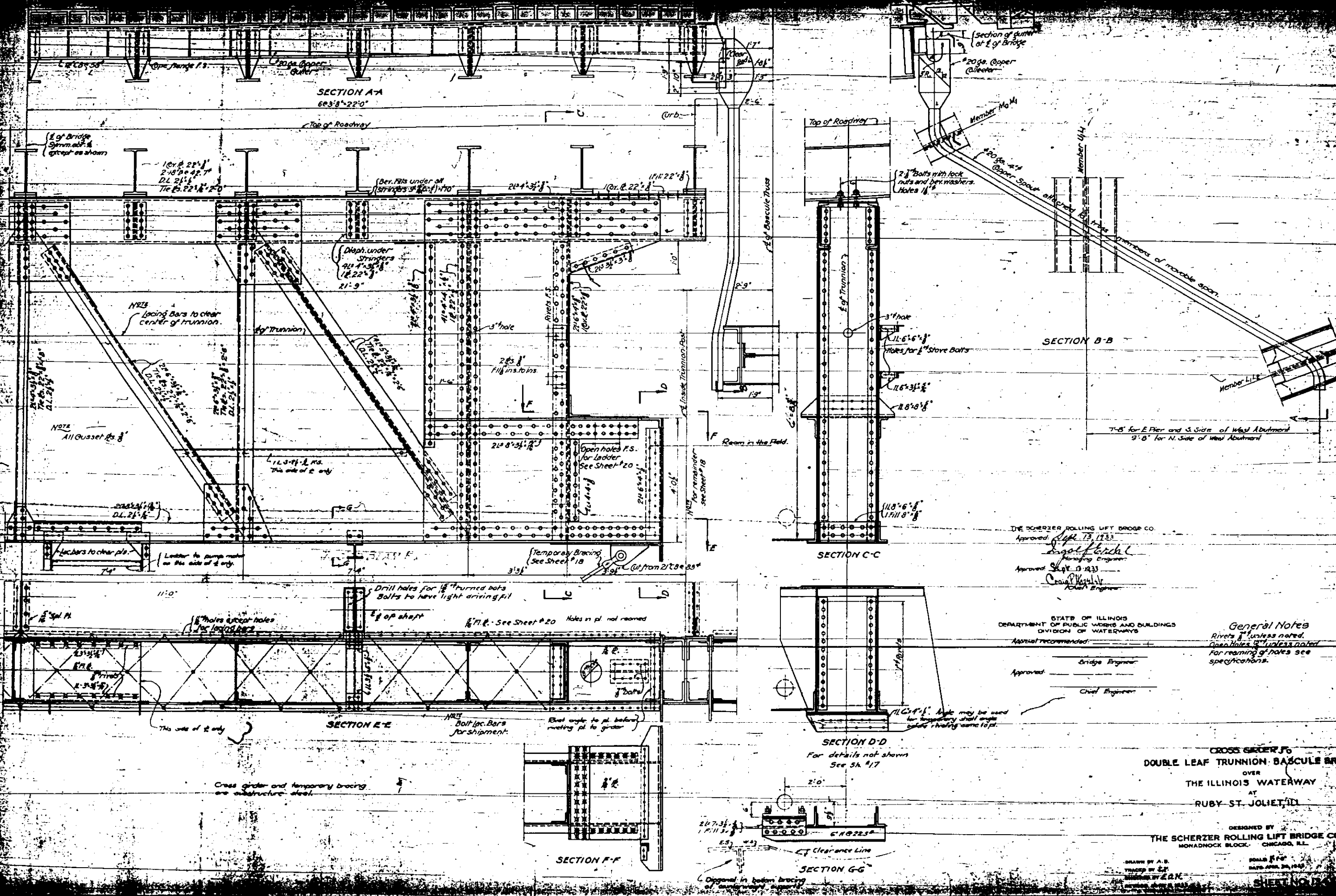
STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS  
DIVISION OF WATERWAYS  
Approval recommended:  
Approved: *[Signature]*  
Bridge Engineer

DESIGNED BY  
THE SCHERZER ROLLING LIFT BRIDGE CO.  
MONADNOCK BLOCK, CHICAGO, ILL.

SCALE: 1/4" = 1'-0"  
DATE: FEB 21, 1932

Note: For section C-C and location of section D-D see sheet #17.

E1 502 57 W-3  
E1 502 57 W-3



THE SCHERZER ROLLING LIFT BRIDGE CO.  
 Approved Sept. 13, 1933  
 [Signature]  
 Managing Engineer  
 Approved Sept. 10, 1933  
 [Signature]  
 Chief Engineer

STATE OF ILLINOIS  
 DEPARTMENT OF PUBLIC WORKS AND BUILDINGS  
 DIVISION OF WATERWAYS  
 Approval recommended: \_\_\_\_\_  
 Approved: \_\_\_\_\_  
 Bridge Engineer  
 Chief Engineer

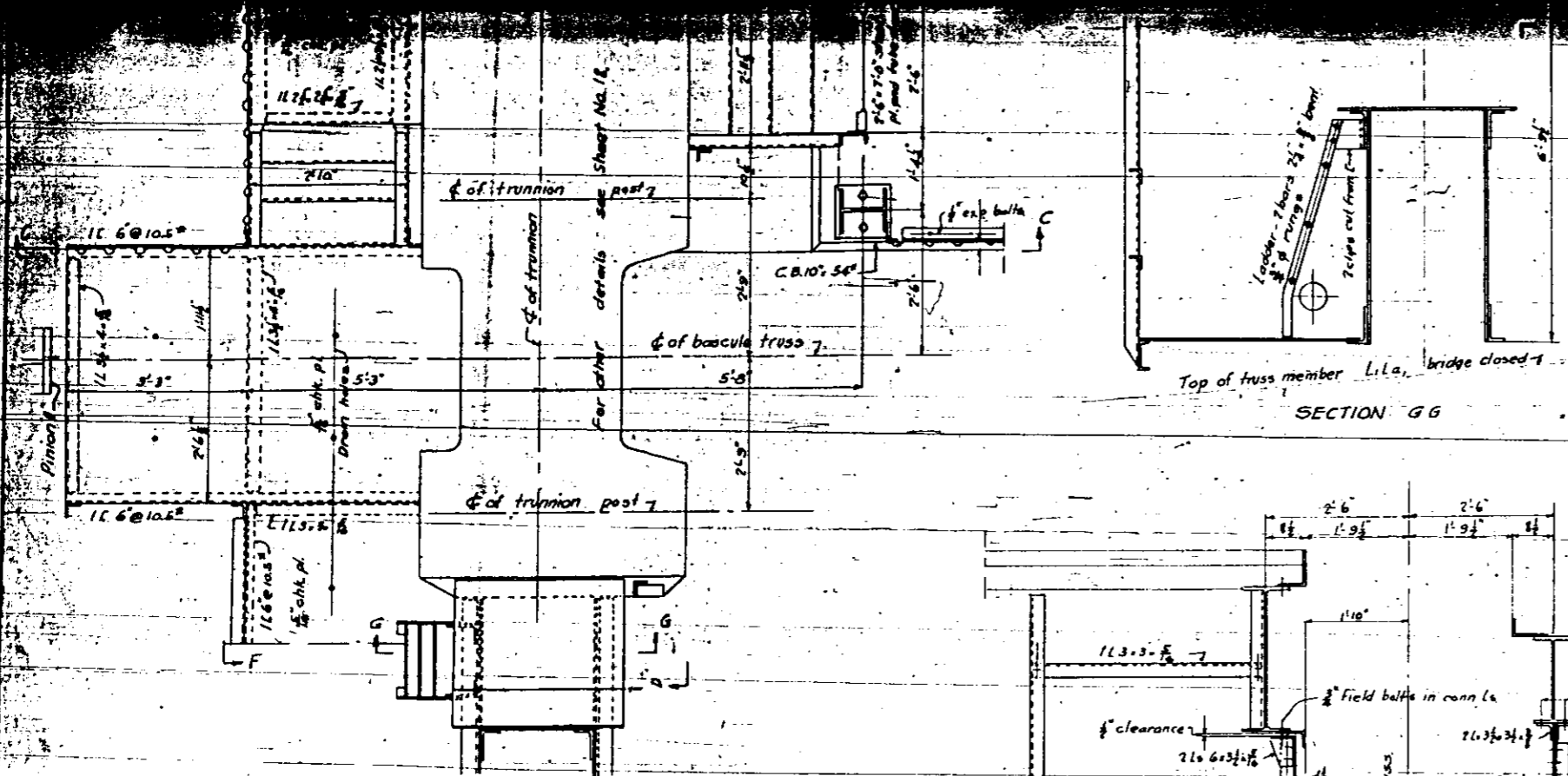
**General Notes**  
 Rivets unless noted.  
 Open holes unless noted.  
 For reaming of holes see specifications.

**CROSS GIRDER F-F**  
**DOUBLE LEAF TRUNNION BASCULE BRIDGE**  
 OVER  
**THE ILLINOIS WATERWAY**  
 AT  
**RUBY-ST. JOUETT, ILL.**

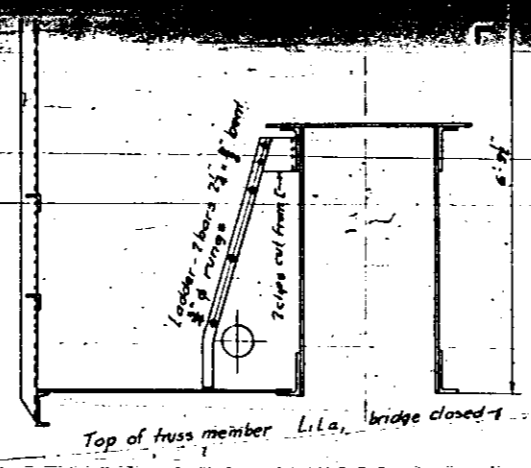
DESIGNED BY  
**THE SCHERZER ROLLING LIFT BRIDGE CO.**  
 MONADNOCK BLOCK - CHICAGO, ILL.

DRAWN BY A.B.  
 TRACED BY E.P.  
 CHECKED BY E.C.N.  
 SCALE 1/4" = 1'-0"  
 DATE APR. 20, 1933  
**SHEET NO. 1**

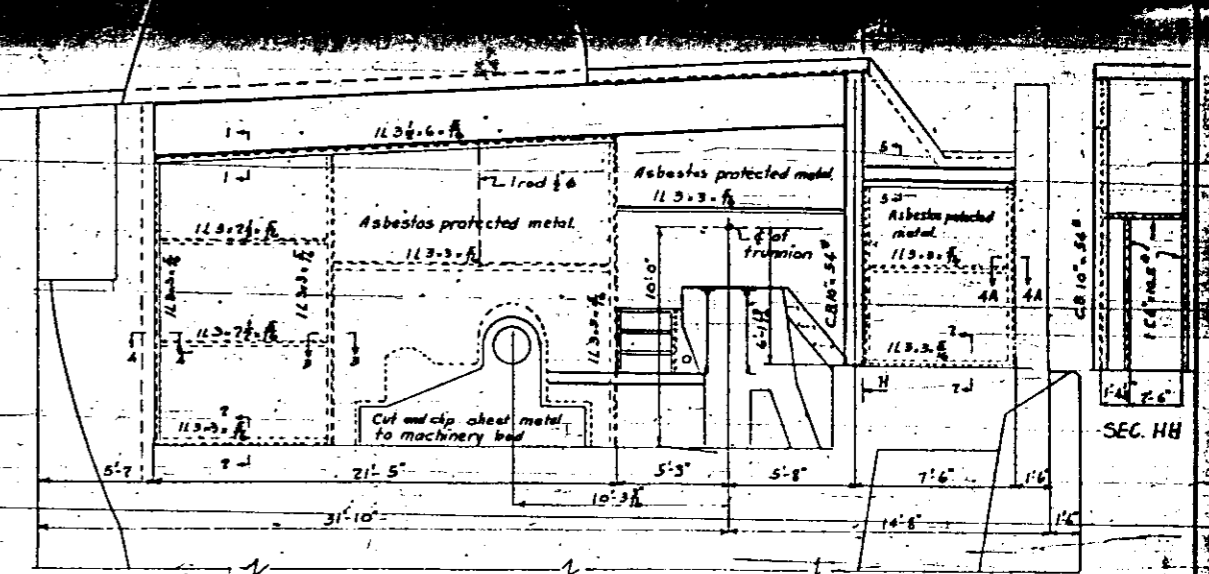




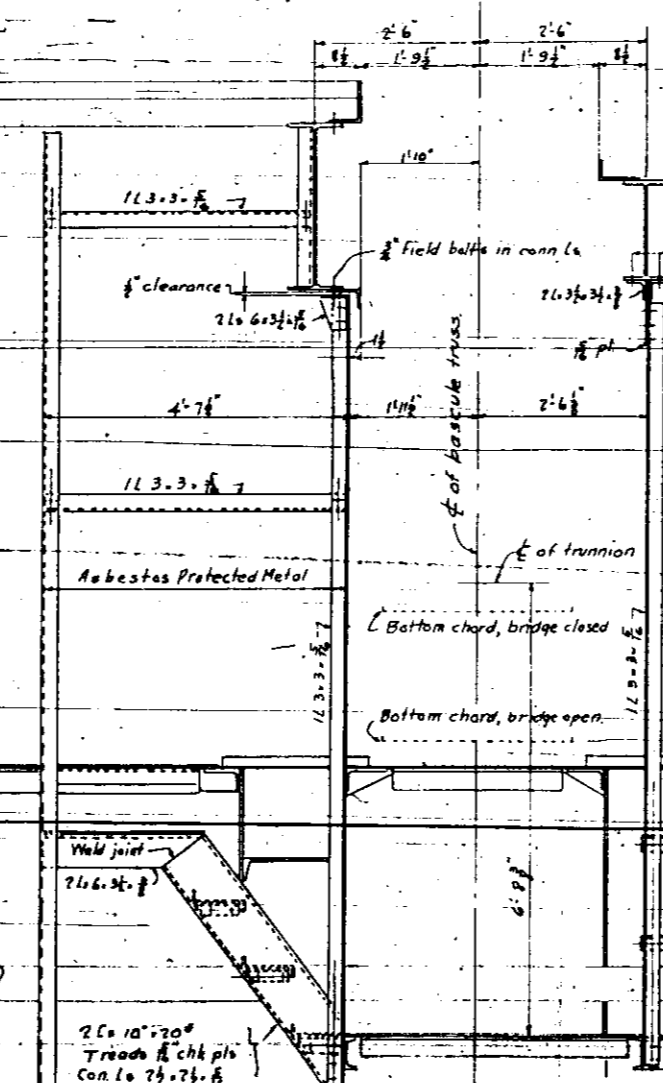
PLAN OF PLATFORMS AND STAIRS AT SOUTHEAST TRUNNION  
OTHERS SIMILAR.



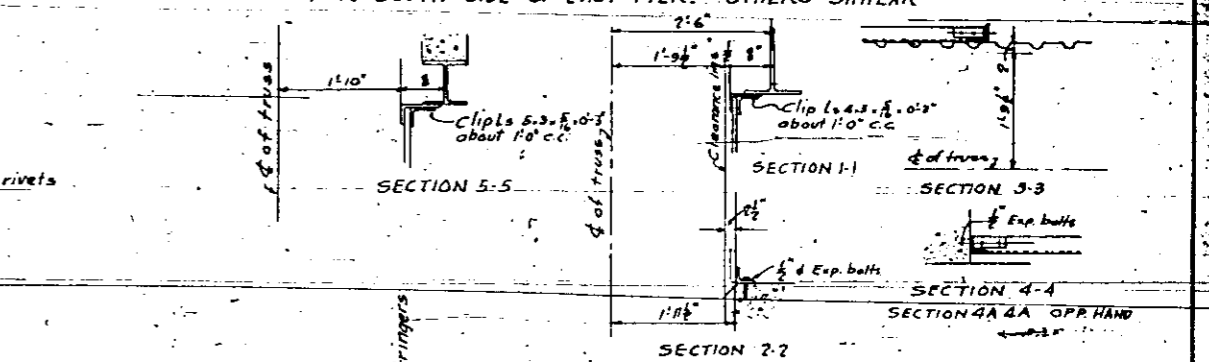
SECTION GG



ELEVATION OF MACHINERY ENCLOSURE  
FOR SOUTH SIDE OF EAST PIER. OTHERS SIMILAR

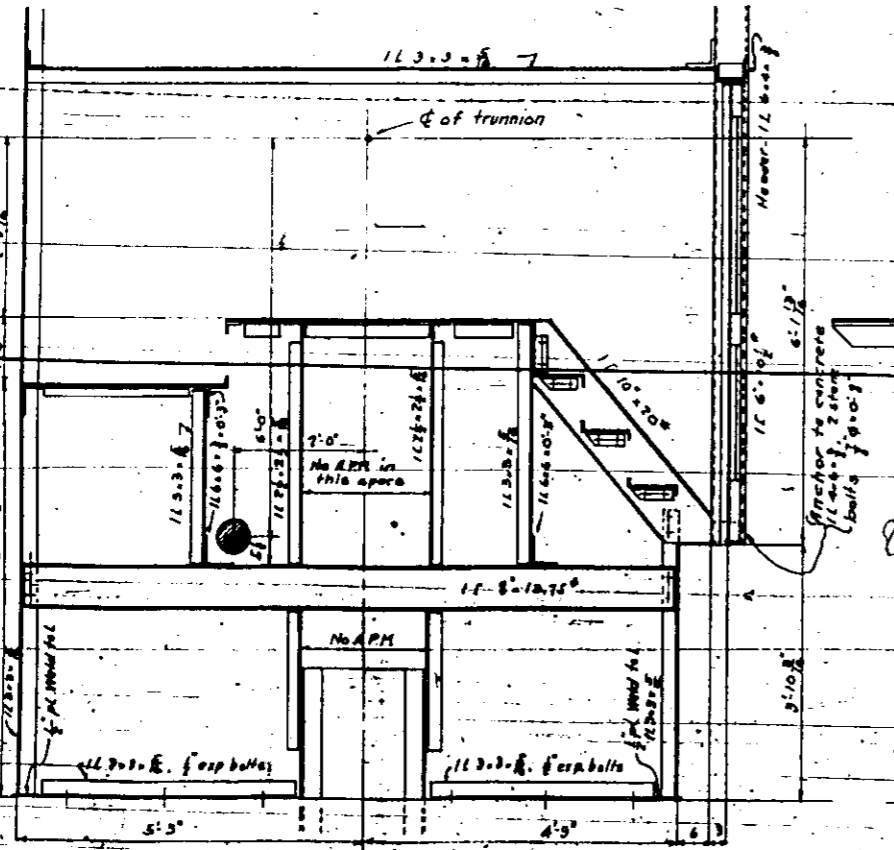


SECTION FF



Note: Asbestos protected metal shall be H.R. Robertson Co. or equal, 418 gage mansard type sheets, aluminum finish. Adjacent to the movable parts of the bridge where the outside of the sheets is inaccessible, they shall be attached to the structural steel work and be the machinery beds in such manner that they may be taken down and replaced from the inside of the enclosures.

For Section CC, see Sheet No. 17  
For Section DD, see Sheet No. 18.



SECTION EE

MACHINERY ENCLOSURES  
PLATFORMS AND STAIRS  
DOUBLE LEAF TRUNNION BASCULE BRIDGE  
OVER  
THE ILLINOIS WATERWAY  
AT  
RUBY ST. JOLIET, ILL.

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS  
DIVISION OF WATERWAYS

THE SCHERZER ROLLING LIFT BRIDGE CO.  
Approved Sept. 13, 1933  
S. J. ...  
Managing Engineer

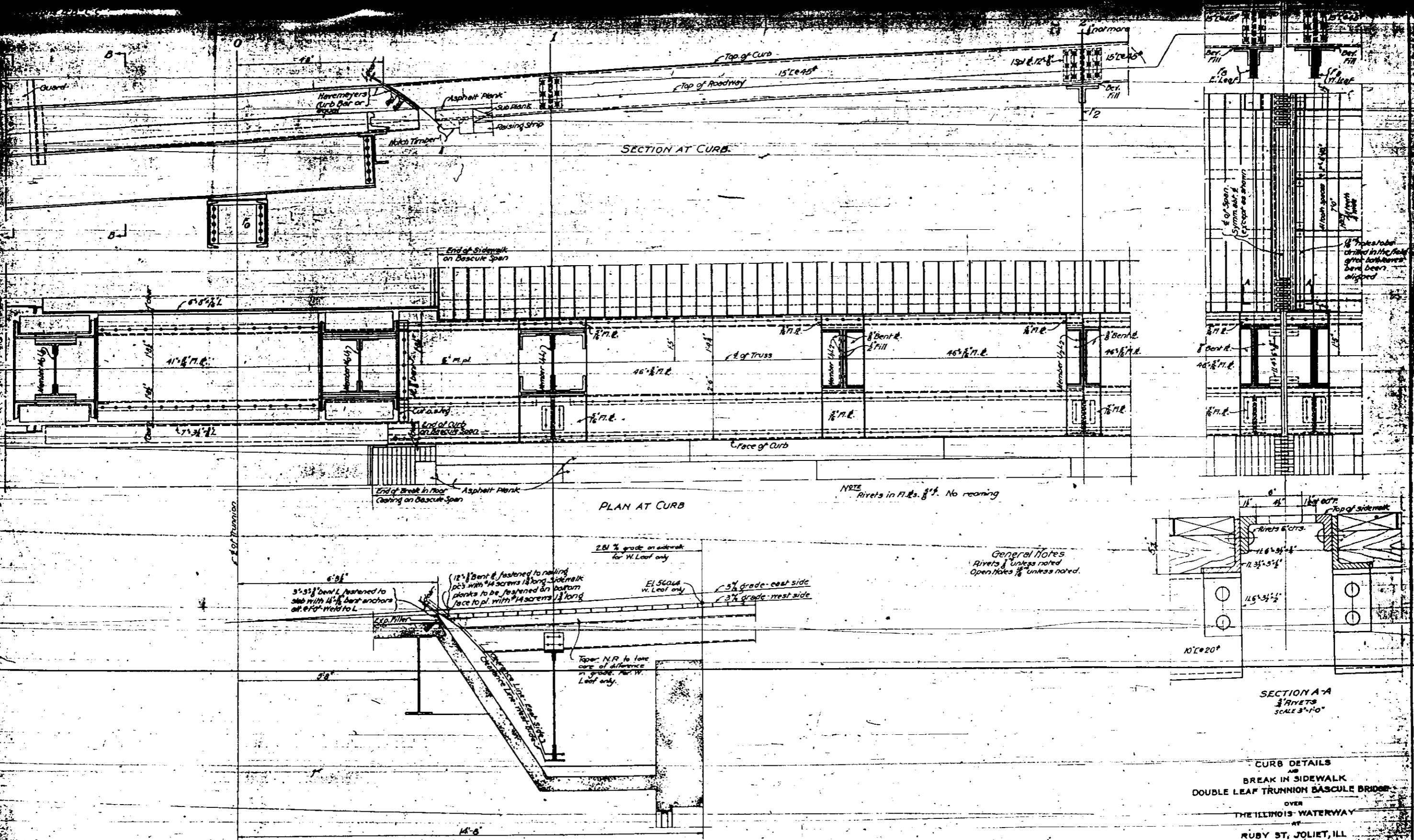
Approval recommended:  
...  
Bridge Engineer

Approved:  
...  
Chief Engineer

DESIGNED BY  
THE SCHERZER ROLLING LIFT BRIDGE CO.  
MONADNOCK BLOCK, CHICAGO, ILL.

DRAWN BY ALICE  
CHECKED BY CAR  
DATE: SEPT. 6, 1933

SHEET NO. 11A-520



DETAILS AT REAR BREAK IN SIDEWALK FLOOR - NORTH SIDE OF WEST ABUTMENT  
 DETAILS AT OTHER POINTS SIMILAR

STATE OF ILLINOIS  
 DEPARTMENT OF PUBLIC WORKS AND BUILDINGS  
 DIVISION OF WATERWAYS

DESIGNED BY  
 THE SCHERZER ROLLING LIFT BRIDGE CO.  
 MONADNOCK BLOCK, CHICAGO, ILL.

BRIDGE ENGINEER

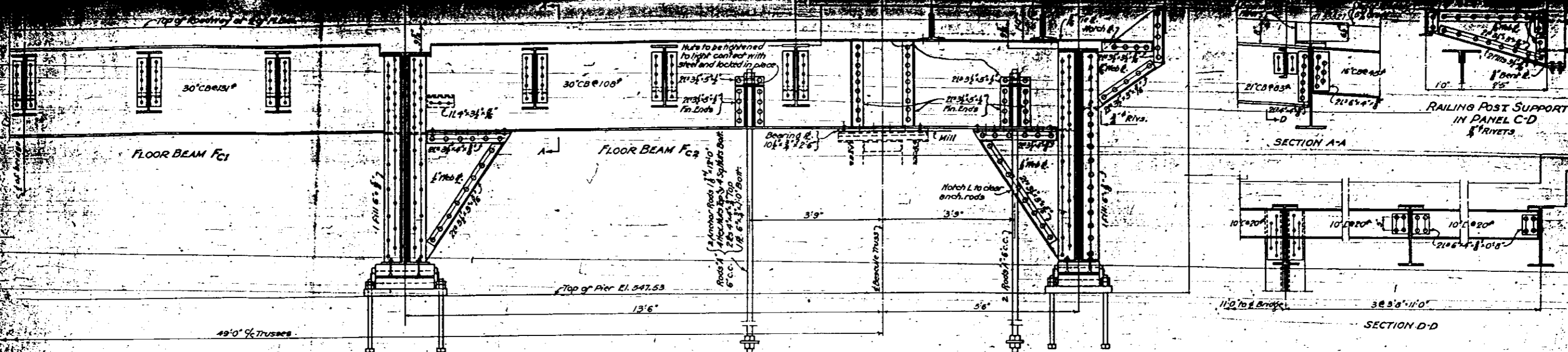
APPROVED: [Signature]   
 [Signature]   
 [Signature]

APPROVAL RECOMMENDED: [Signature]

DESIGNED BY [Signature]

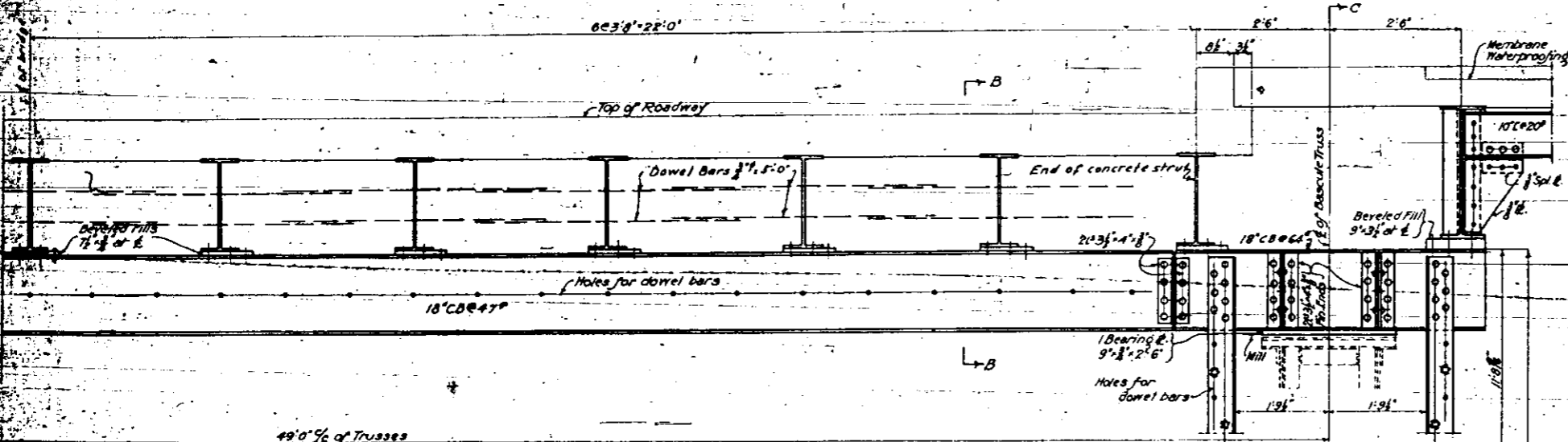
CHIEF ENGINEER





FLOOR BEAMS & ANCHORAGE AT POINT C EAST LEAF

Anchor rods and anchor bolts are substructure steel.



ANCHORAGE GIRDER & COLUMNS (Substructure steel) WEST LEAF

General Notes  
Rivets unless noted  
Open Holes unless noted  
For reaming of holes see specifications.

THE SCHERZER ROLLING LIFT BRIDGE CO.  
Approved: *Sept. 12, 1933*  
*Engelhardt*  
Managing Engineer  
Approved: *Sept. 19, 1933*  
*Chief Engineer*

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS  
DIVISION OF WATERWAYS

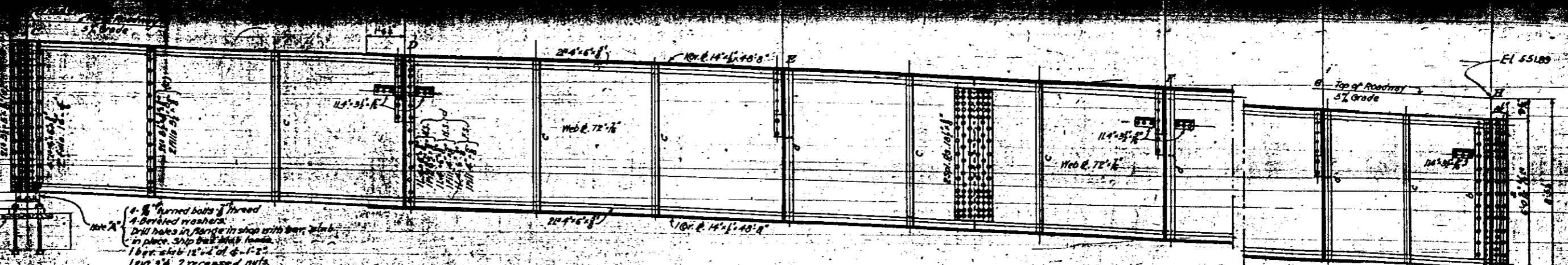
ANCHORAGE GIRDERS & COLUMNS  
DOUBLE LEAF TRUNNION BASCULE BRIDGE  
OVER  
THE ILLINOIS WATERWAY  
AT  
RUBY ST., JOLIET, ILL.

DESIGNED BY  
THE SCHERZER ROLLING LIFT BRIDGE CO.  
MONADNOCK BLOCK, CHICAGO, ILL.

2 Leveling Screws  
Construction Joint  
El. 537.57

Approval recommended:  
\_\_\_\_\_  
Bridge Engineer

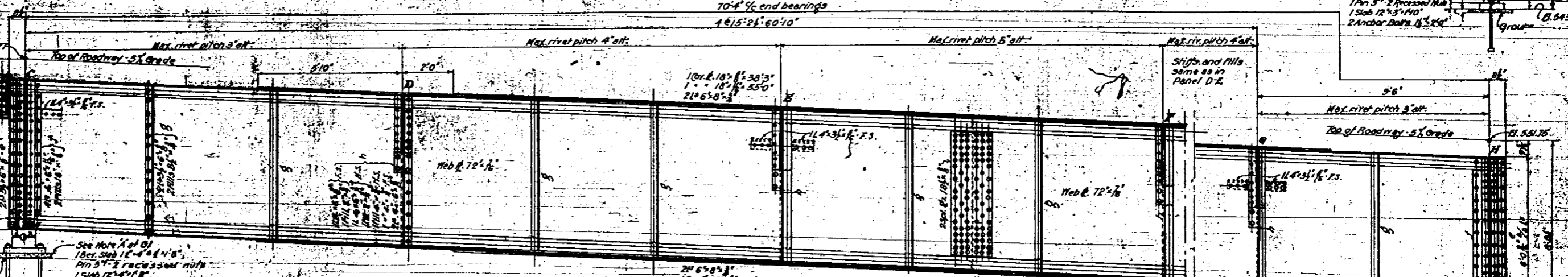
DRAWN BY: S.L.P.  
CHECKED BY: C.L.B.  
DATE: APR. 1933



4-#4 turned bolts 3/4 thread  
 4-Beveled washers  
 Drill holes in flange in shop with 2" dia. bit  
 in place. Shop bolts 1/2" dia.  
 1-8" x 12" x 1/2" of 4-1/2"  
 1-1" x 3" x 2 recessed nuts  
 1-slab 12" x 3" x 1/2"  
 1-slab 12" x 2" x 1/2" 4 anchor bolts 1/2" diam. x 2'-0"

See Note A at other end of  
 1 Slab 12" x 4" x 1/2"  
 1 Cast Steel Rocker  
 1 Pin 3" x 2 Recessed Nut  
 1 Slab 12" x 3" x 1/2"  
 2 Anchor Bolts 1/2" x 2'-0"

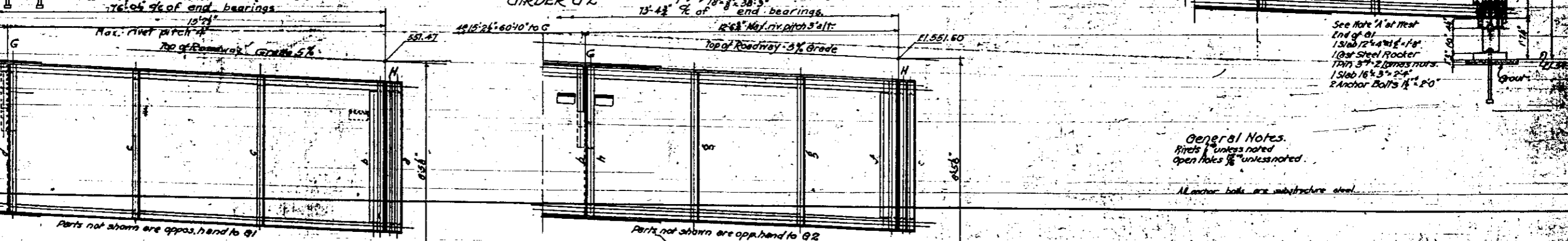
GIRDER G1



See Note A at G1  
 1-8" x 12" x 1/2" of 4-1/2"  
 1-1" x 3" x 2 recessed nuts  
 1-slab 12" x 4" x 1/2"  
 1-slab 20" x 2 1/2" x 1/2" 4 anchor bolts 1/2" diam. x 2'-0"  
 76' 0 1/4' % of end bearings

See Note A at West End of G1  
 1 Slab 12" x 4" x 1/2"  
 1 Cast Steel Rocker  
 1 Pin 3" x 2 Recessed nuts  
 1 Slab 12" x 3" x 1/2"  
 2 Anchor Bolts 1/2" x 2'-0"

GIRDER G2

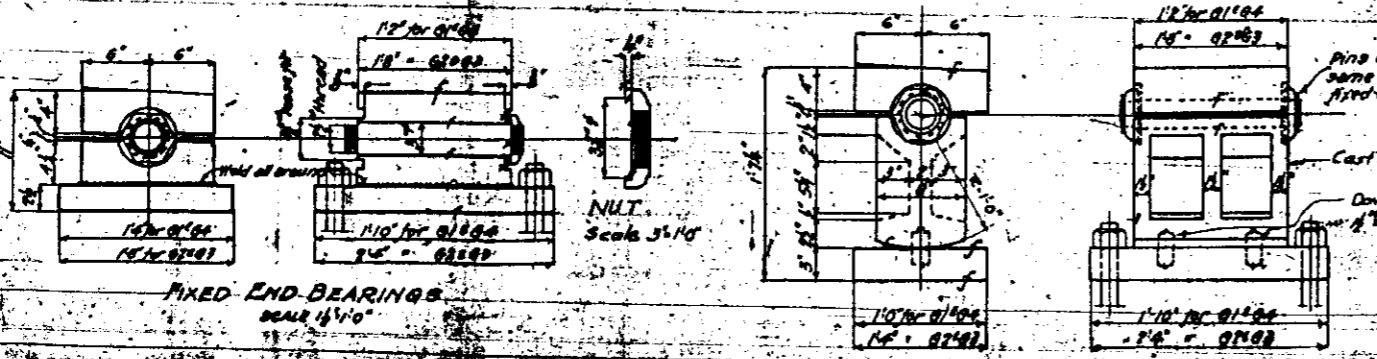


GIRDER G4

GIRDER G3

General Notes  
 Rivets unless noted  
 open holes 1/2" unless noted.

All anchor bolts are substructure steel.



FIXED END BEARINGS  
 Scale 1 1/2" = 1'-0"

EXPANSION END BEARINGS  
 Scale 1 1/2" = 1'-0"

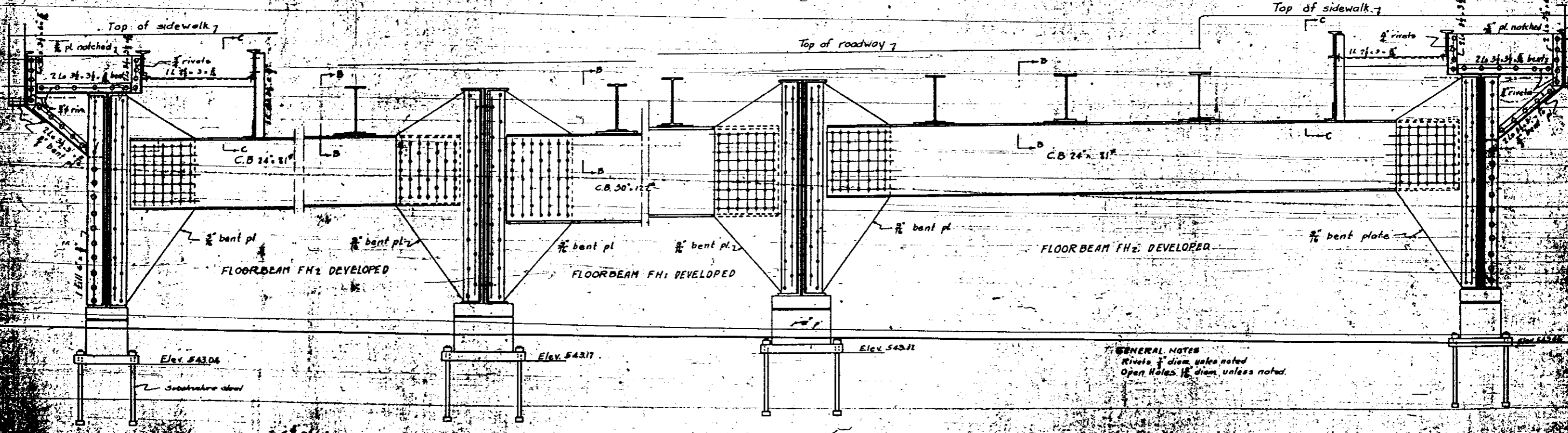
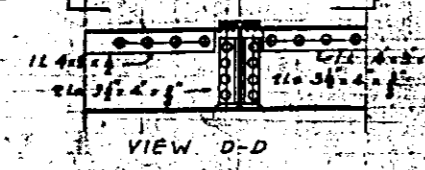
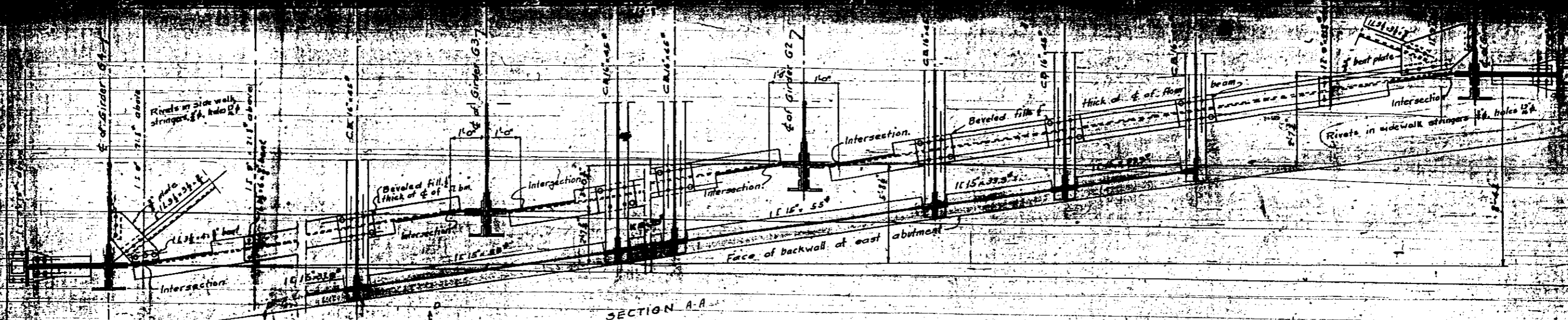
THE SCHERZER ROLLING LIFT BRIDGE CO.  
 Approved: Sept. 12, 1933  
 Joseph F. Hodel  
 Managing Engineer  
 Approved: Sept. 21, 1933  
 Curtis P. Kessler  
 Chief Engineer

STATE OF ILLINOIS  
 DEPARTMENT OF PUBLIC WORKS AND BUILDINGS  
 DIVISION OF WATERWAYS  
 Approved: \_\_\_\_\_  
 Bridge Engineer  
 Approved: \_\_\_\_\_  
 Chief Engineer

APPROACH GIRDERS  
 DOUBLE LEAF TRUSS BAScule BRIDGE  
 OVER  
 THE ILLINOIS WATERWAY  
 AT  
 RUBY ST., JOUET, ILL.

DESIGNED BY  
 THE SCHERZER ROLLING LIFT BRIDGE CO.  
 MONADNOCK BLOCK CHICAGO, ILL.

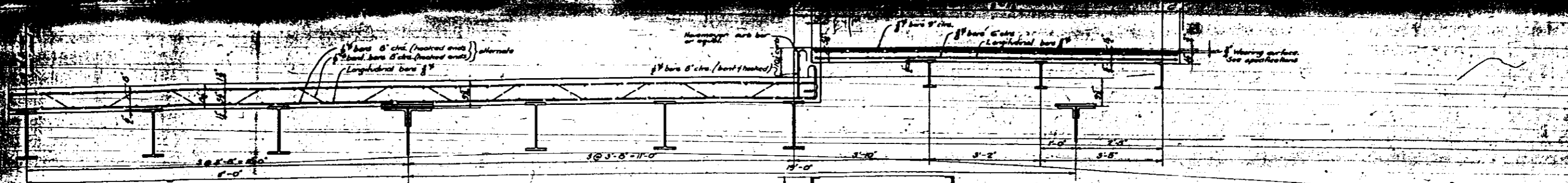
DOYAL, Finish all over  
 Scale 3/4" = 1'-0"



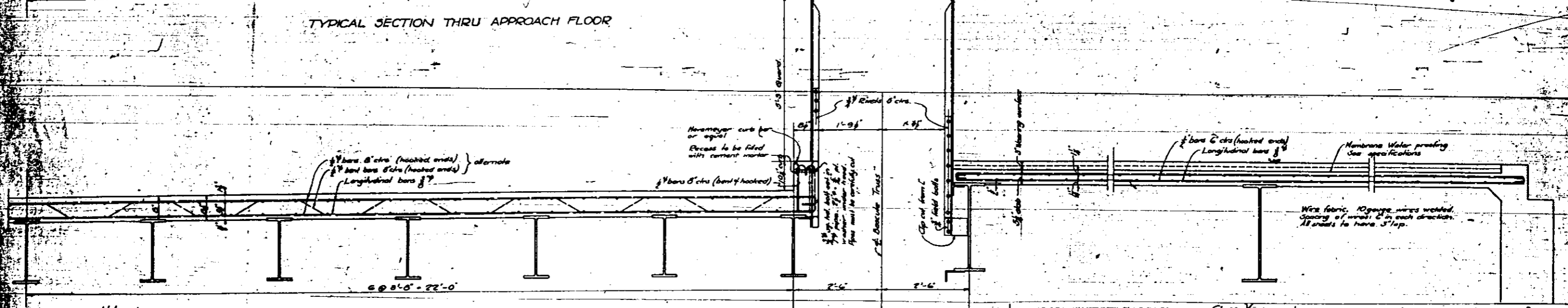
GENERAL NOTES  
 Rivets 3" diam unless noted  
 Open Holes 1 1/2" diam unless noted



APPROACH FLOORBEAM SET  
 DOUBLE LEAF TRUSSION BASCOTE BRIDGE  
 OVER  
 THE ILLINOIS WATERWAY  
 AT  
 RUBY ST. JOLIET, ILL.  
 DESIGNED BY  
 THE SCHERZER ROLLING LIFT BRIDGE CO.  
 MONROE BLDG. CHICAGO, ILL.  
 APPROVED: [Signature] ENGINEER  
 APPROVED: [Signature] SUPERVISOR  
 APPROVED: [Signature] ARCHT.  
 STATE OF ILLINOIS  
 DEPARTMENT OF PUBLIC WORKS AND BUILDINGS  
 DIVISION OF WATERWAYS  
 APPROVED: [Signature]



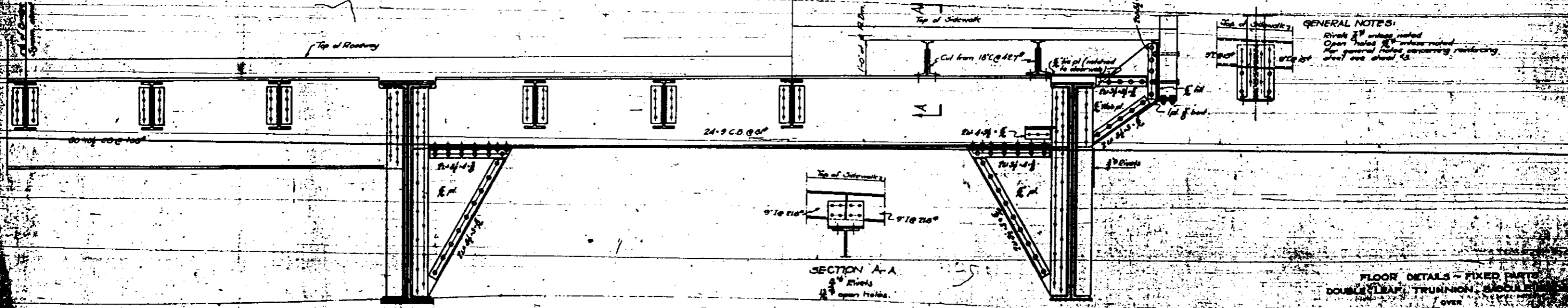
TYPICAL SECTION THRU APPROACH FLOOR



SECTION C-C THRU FLOOR OVER COUNTERWEIGHT PIT

Note:  
The marked curves above West Abutment to be taken care of by increased depth of roadway slab.

SECTION D-D THRU FLOOR OVER COUNTERWEIGHT PIT



FLOOR BEAM DETAILS AT POINT D

GENERAL NOTES:  
Rivets 3\"/>

FLOOR DETAILS - FIXED PARTS  
DOUBLE LEAF TRUNNION, SADDLE  
OVER  
THE ILLINOIS WATERWAY  
AT  
RUBY ST. JOLETT, ILL.

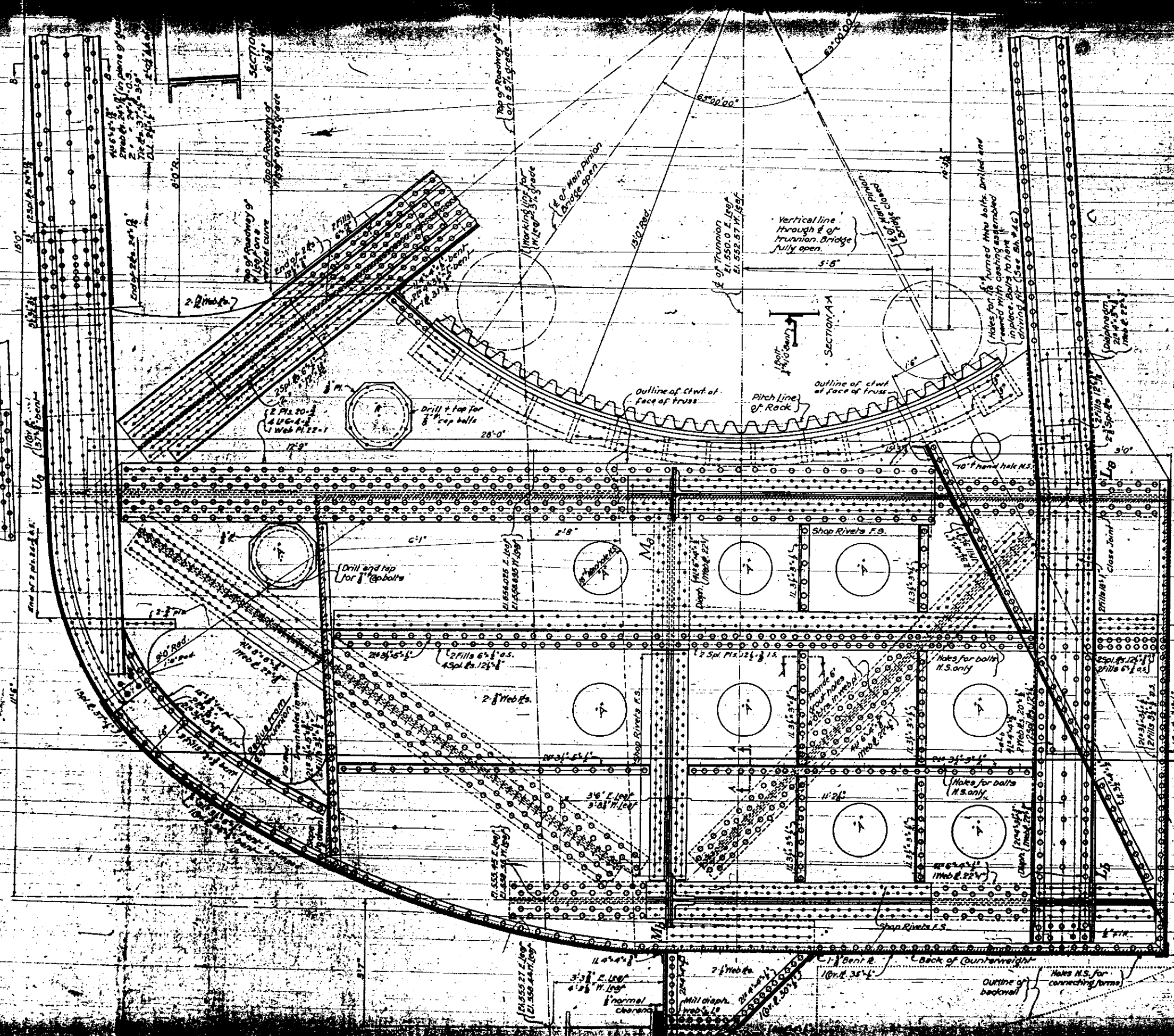
STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS  
DIVISION OF WATERWAYS

DESIGNED BY  
THE SCHERZER ROLLING LIFT BRIDGE CO.  
MONMOUTH, ILL.

APPROVED: [Signature]  
[Signature]  
[Signature]







**General Notes.**  
 Rivers &  
 Open Holes 18" unless noted.  
 Poles are to be vertical.  
 Details are drawn for L Leaf  
 W Leaf is similar.  
 Shaded area to be filled between webs etc.  
 with counterweight material. See SHP 44  
 Surfaces inaccessible after assembly  
 including surfaces in contact with concrete  
 shall have two coats of shop paint.

THE SCHERZER ROLLING LIFT BRIDGE CO.  
 Approved: *Sept 15 1932*  
*Joseph J. Breda*  
 Highway Engineer  
 Approved: *Sept 15 1932*  
*Clay P. Smith*  
 Chief Engineer

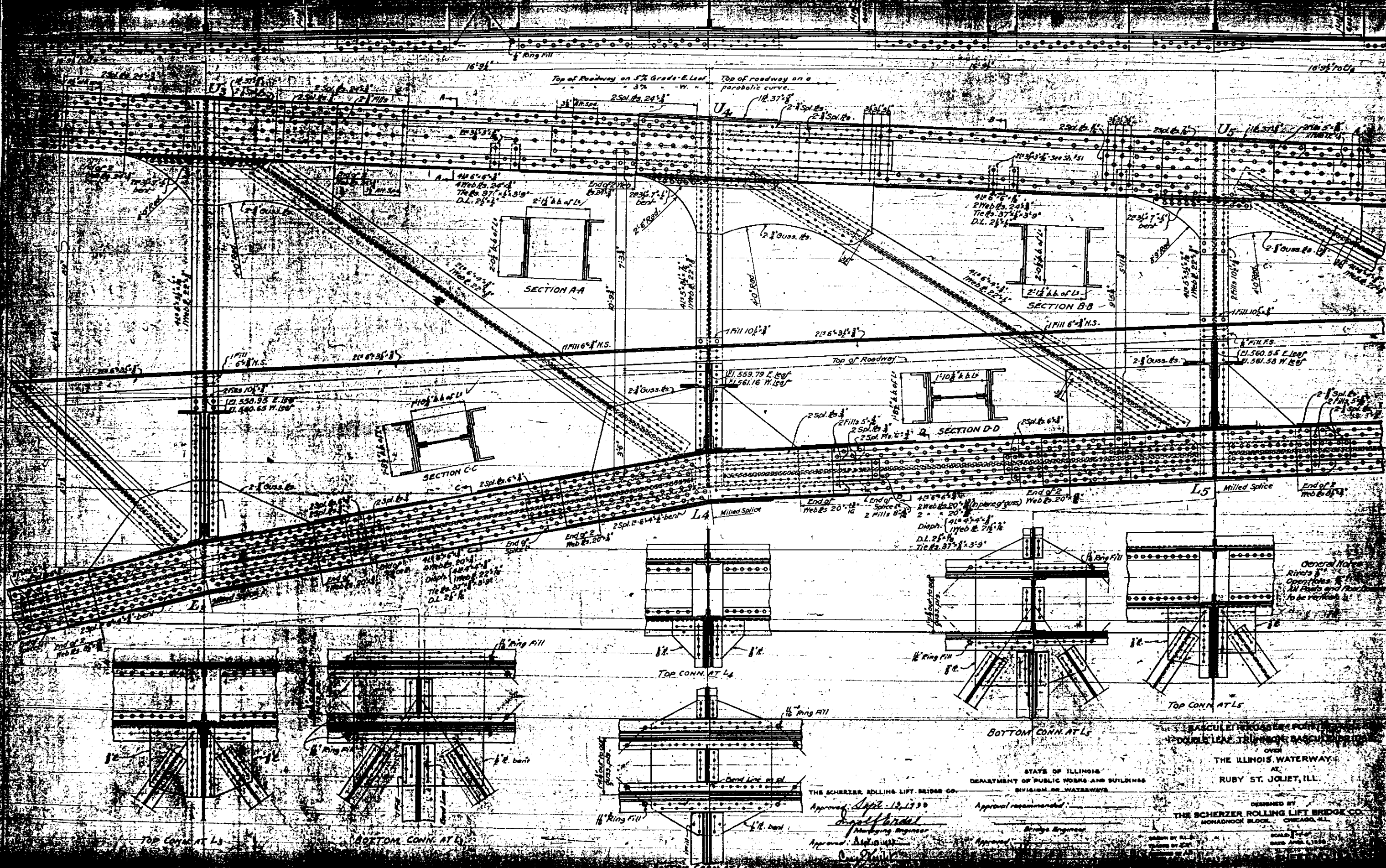
STATE OF ILLINOIS  
 DEPARTMENT OF PUBLIC WORKS AND BUILDINGS  
 DIVISION OF WATERWAYS  
 Approval recommended: \_\_\_\_\_  
 Bridge Engineer  
 Approved: \_\_\_\_\_  
 Chief Engineer

BASCULE TRUSSES - POINTS 5' x 5'  
 DOUBLE-LEAF TRUNNION BASCULE BRIDGE  
 OVER  
 THE ILLINOIS WATERWAY  
 AT  
 RUBY ST. LOUIE, ILL.

DESIGNED BY  
 THE SCHERZER ROLLING LIFT BRIDGE CO.  
 MONROEVILLE, PA.  
 DRAWN BY R.L.E.  
 SCALE 1/4" = 1'-0"







THE SCHERZER ROLLING LIFT BRIDGE CO.  
 Approved: *Sept. 13, 1900*  
*Engelhardt*  
 Managing Engineer  
 Approved: *Sept. 13, 1900*  
*Conrad*  
 Chief Engineer

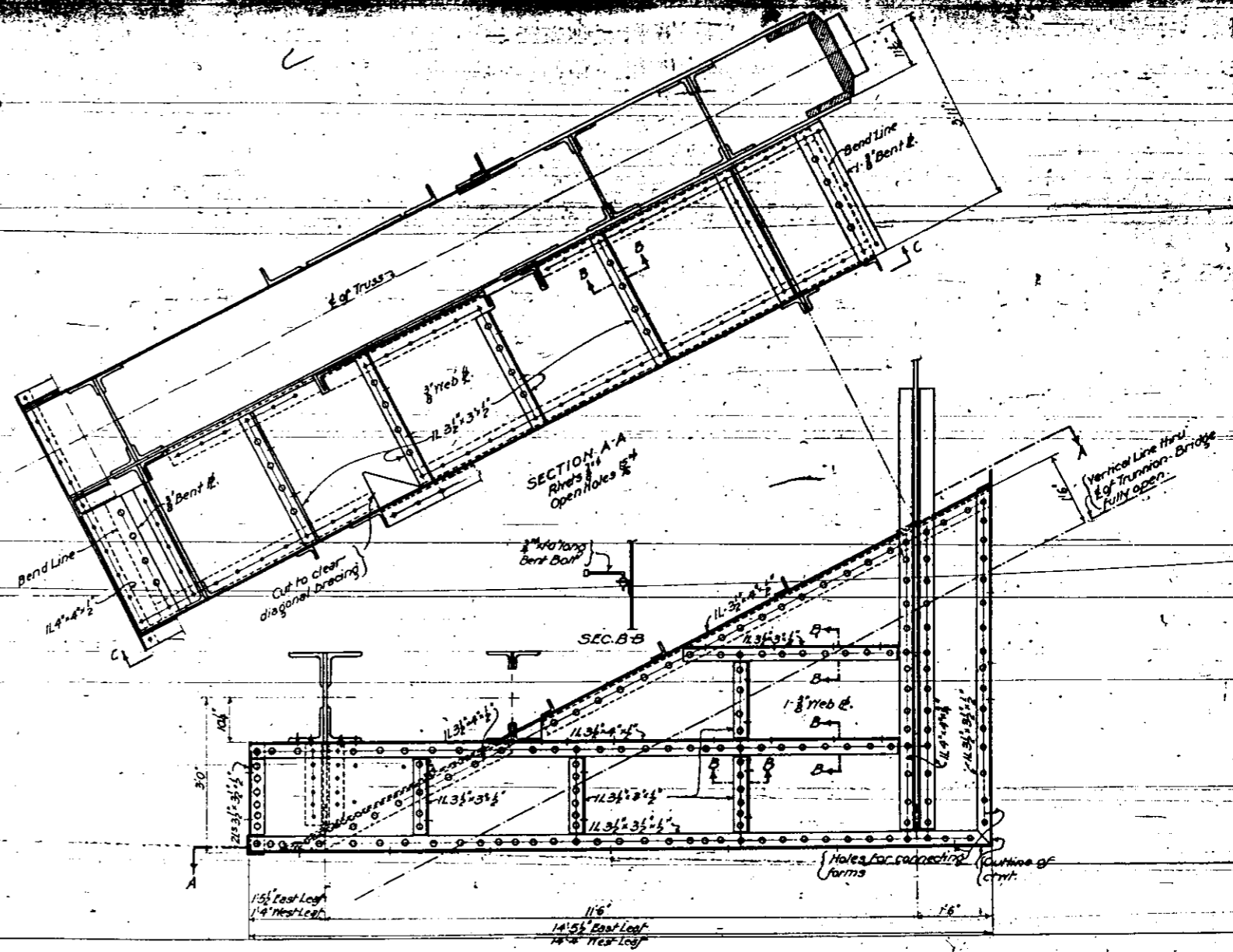
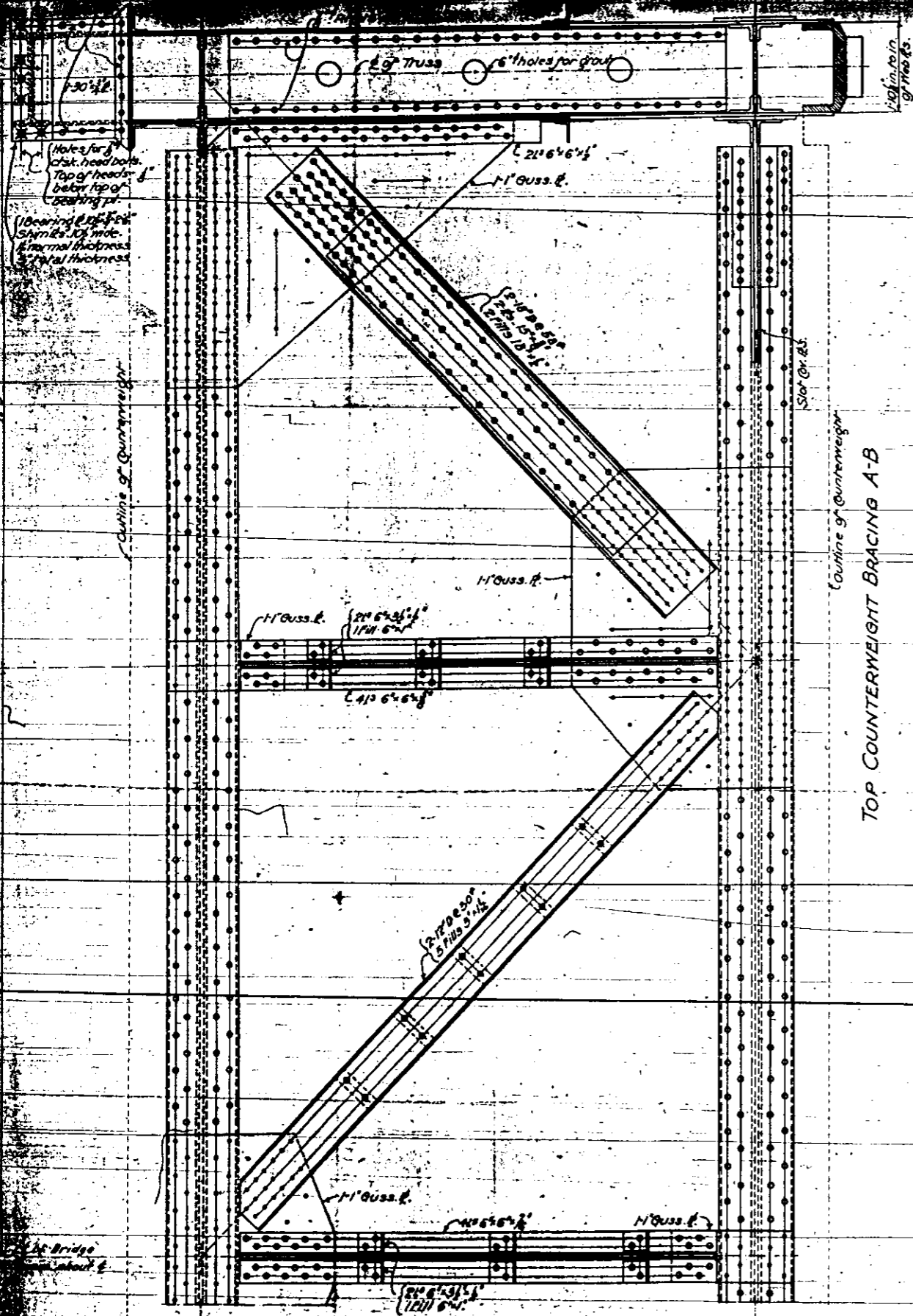
STATE OF ILLINOIS  
 DEPARTMENT OF PUBLIC WORKS AND BUILDINGS  
 DIVISION OF WATERWAYS  
 Approval recommended: \_\_\_\_\_  
 Bridge Engineer

THE ILLINOIS WATERWAY  
 AT  
 RUBY ST. JOUET, ILL.  
 DESIGNED BY  
 THE SCHERZER ROLLING LIFT BRIDGE CO.  
 MONADNOCK BLOCK, CHICAGO, ILL.

ORDER BY R.L. ...  
 DRAWN BY ...  
 CHECKED BY ...  
 SCALE: 1" = 10'-0"  
 DATE: APRIL 1, 1900







TOP COUNTERWEIGHT BRACING A-B

SECTION C-C  
Rivets 3/4"  
Open Holes 1/4"  
FOR LOCATION SEE SHEET 36

**General Notes.**  
Rivets 1" unless noted.  
Open Holes 1/4" unless noted.  
Steel encased in concrete is not to be painted or oiled.  
Holes in gussers are for development. See Sheet 36.  
For reaming of holes see specifications.  
Field connections to be reamed assembled.

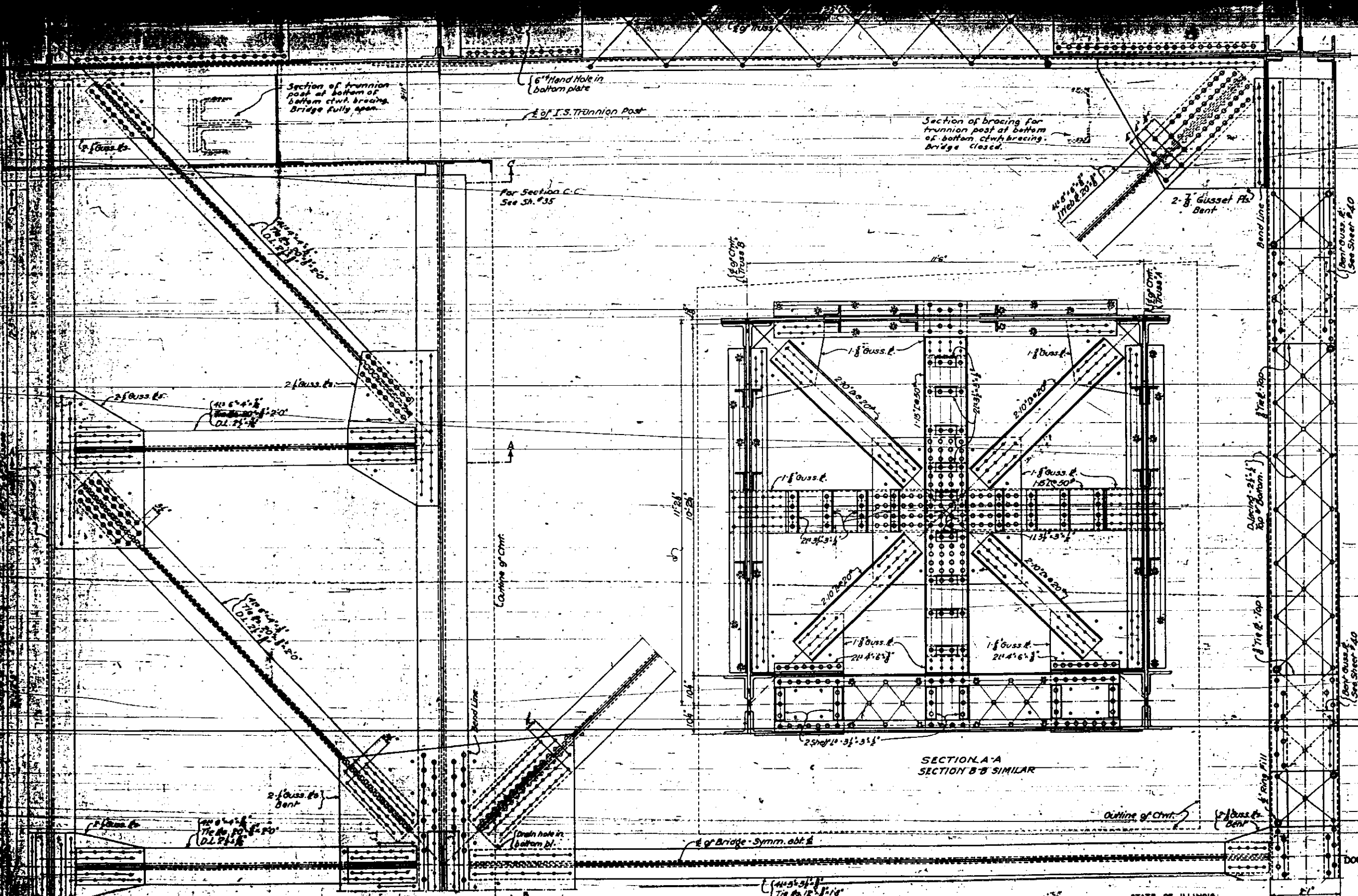
COUNTERWEIGHT SUPPORTS  
DOUBLE LEAF TRUNION BASCULI BRIDGE  
over  
THE ILLINOIS WATERWAY  
AT  
RUBY ST., JOLIET, ILL.

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS  
DIVISION OF WATERWAYS

THE SCHERZER ROLLING LIFT BRIDGE CO.  
Approved: Sept. 12, 1923  
Managing Engineer

Approval recommended:  
Bridge Engineer

DESIGNED BY  
THE SCHERZER ROLLING LIFT BRIDGE CO.  
MONROE BLOCK, CHICAGO, ILL.



**General Notes**  
 Rivets 3/4"  
 Open Holes 1/8"  
 Steel encased in concrete is not to be painted or alled.  
 Plates in Gusset Pls. are to have bare. See Sheet 44  
 For reaming of holes see specifications.  
 Field connections to be reamed assembled.

**BOTTOM COUNTERWEIGHT BRACING**

**COUNTERWEIGHT SUPPORTS**  
**DOUBLE LEAF TRUNNION BASCULE BRIDGE**  
 OVER  
**THE ILLINOIS WATERWAY**  
 AT  
**RUBY ST. JOUET, ILL.**

STATE OF ILLINOIS  
 DEPARTMENT OF PUBLIC WORKS AND BUILDINGS  
 DIVISION OF WATERWAYS

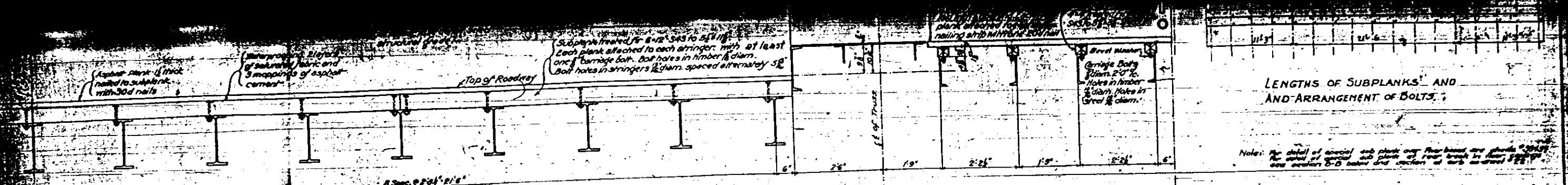
THE SCHERZER ROLLING LIFT BRIDGE CO.  
 Approved: Sept. 13, 1923  
*Joseph J. ...*  
 Manufacturing Engineer

Approval recommended:  
 \_\_\_\_\_  
 Bridge Engineer

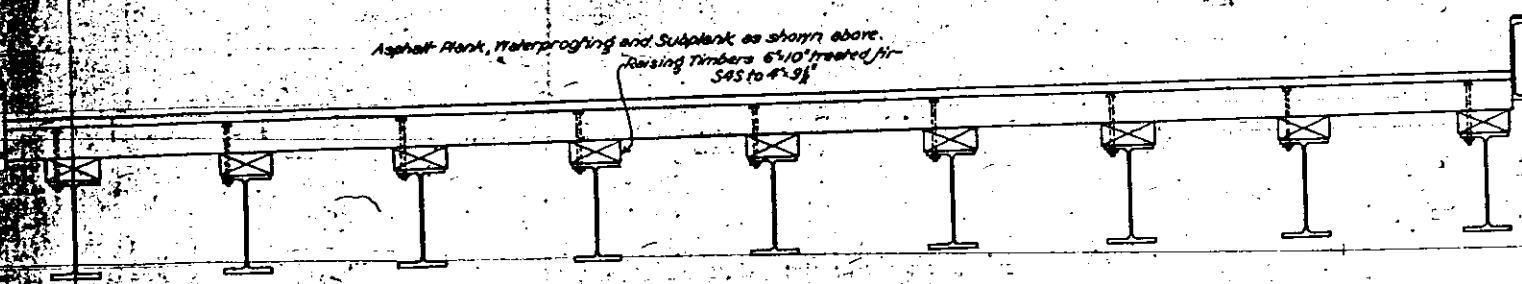
DESIGNED BY  
 THE SCHERZER ROLLING LIFT BRIDGE CO.  
 100 MADISON BLDG. CHICAGO, ILL.

DRAWN BY R.L.S.  
 CHECKED BY P.P.  
 SCALE 1/4" = 1'-0"  
 DATE APR. 16, 1923

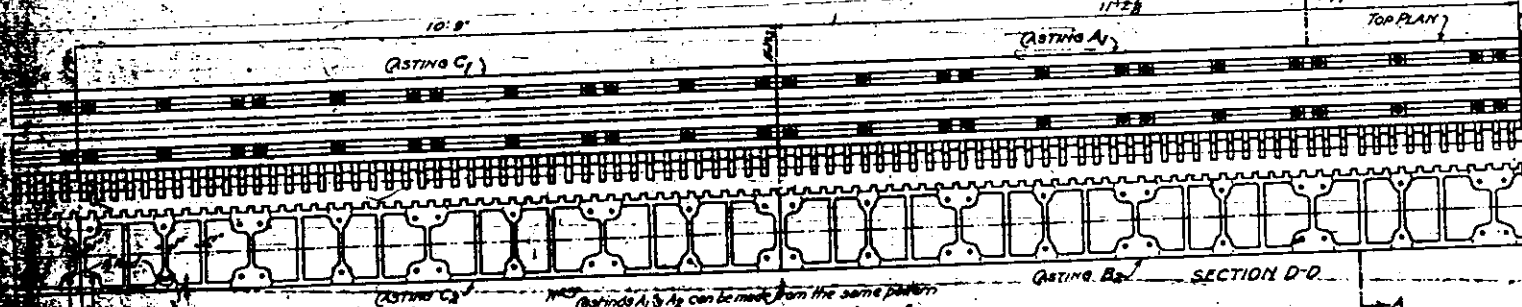




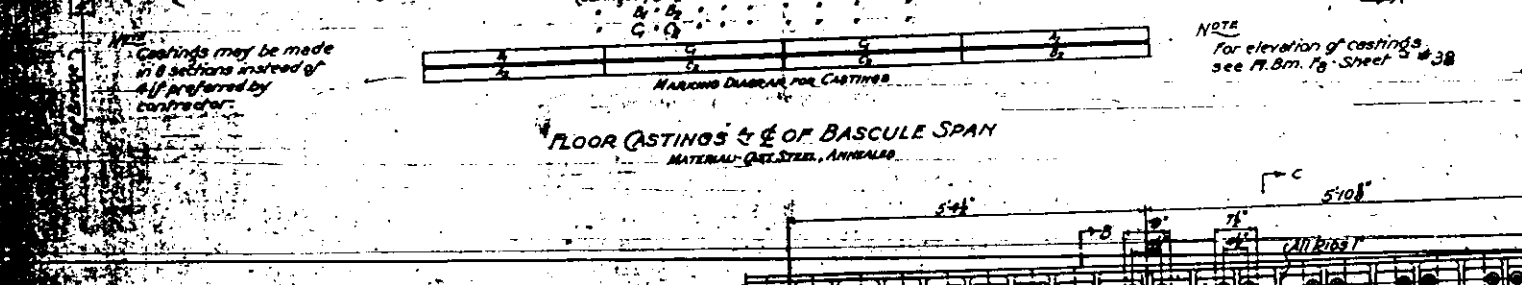
TYPICAL SECTION THRU BASCULE FLOOR BETWEEN FLOORBEAM F<sub>2</sub> TO E OF SPAN.



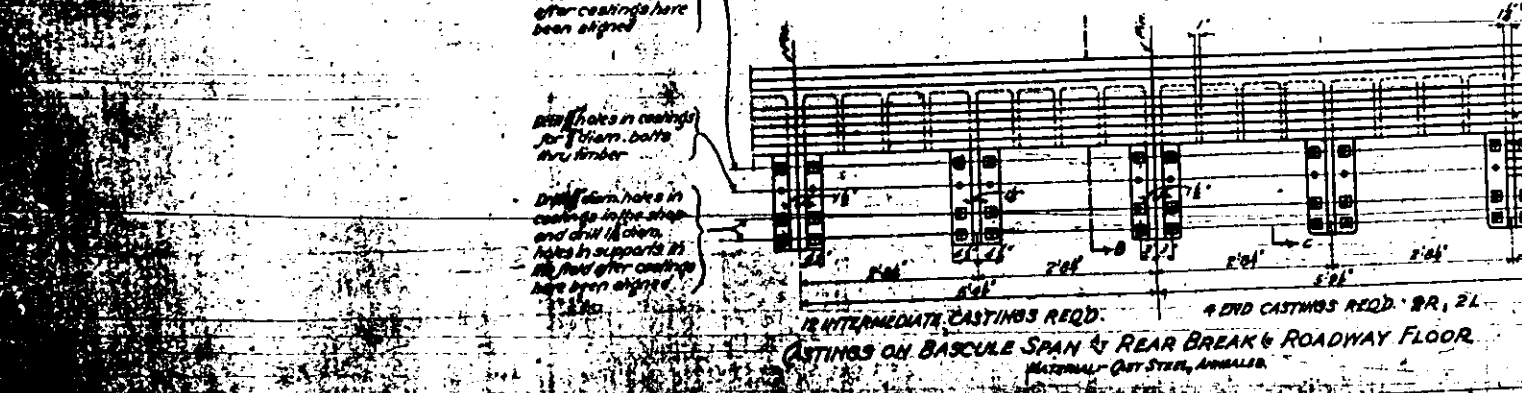
SECTION THRU BASCULE FLOOR BETWEEN REAR BREAK IN FLOOR & FLOORBEAM F<sub>2</sub>



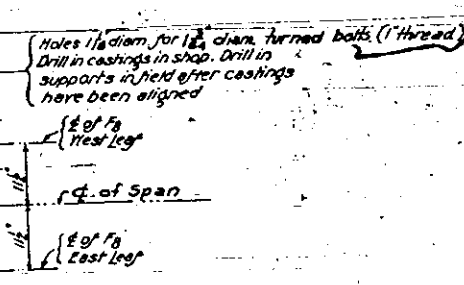
FLOOR CASTINGS & E OF BASCULE SPAN  
MATERIAL - Q&T STEEL, ANNAPOLIS



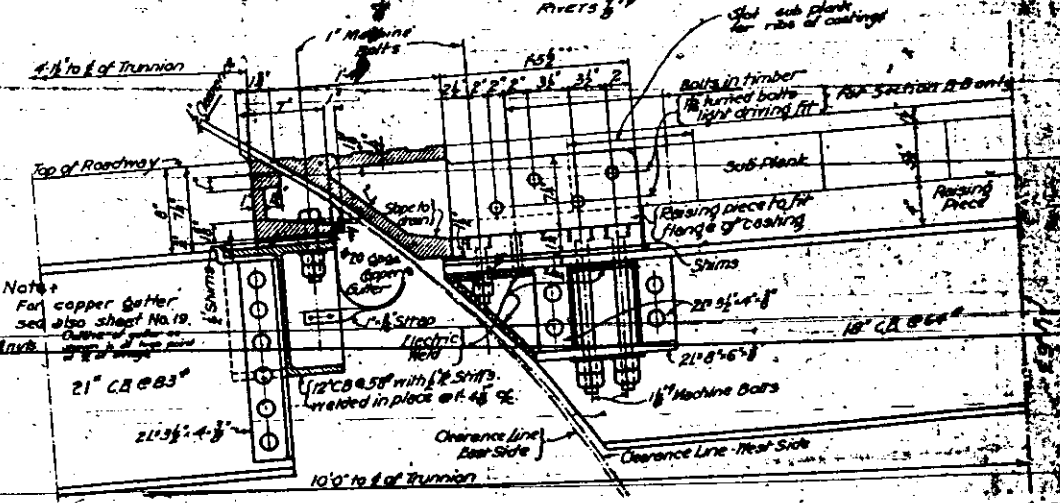
12 INTERMEDIATE CASTINGS REQD. 4 END CASTINGS REQD. - 2R, 2L.  
PLAN OF FIXED CASTINGS & REAR BREAK & ROADWAY FLOOR



12 INTERMEDIATE CASTINGS REQD. 4 END CASTINGS REQD. - 2R, 2L.  
CASTINGS ON BASCULE SPAN & REAR BREAK & ROADWAY FLOOR  
MATERIAL - Q&T STEEL, ANNAPOLIS



SECTION A-A  
SCALE 1/4\"/>



SECTION B-B  
SCALE 1/4\"/>

FLOOR DETAILS AND FLOOR CASTINGS  
DOUBLE LEAF TRUNNION BASCULE BRIDGE  
OVER  
THE ILLINOIS WATERWAY  
AT  
RUBY ST. JOLIET, ILL.

General Notes:  
Spot level castings for all bottom beams.  
Rivets - 3/4\"/>

THE SCHERZER ROLLING LIFT BRIDGE CO.  
Approved: [Signature] 12/23  
[Signature]  
Approved: [Signature]

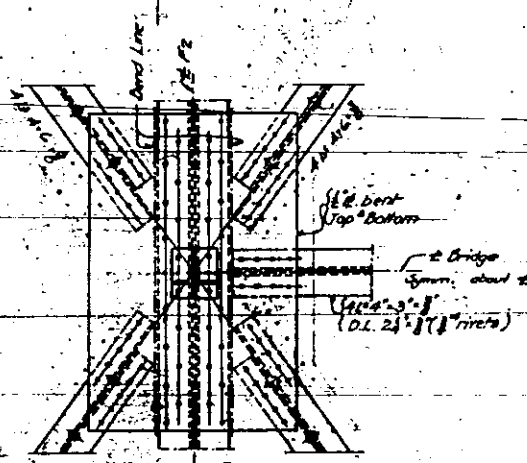
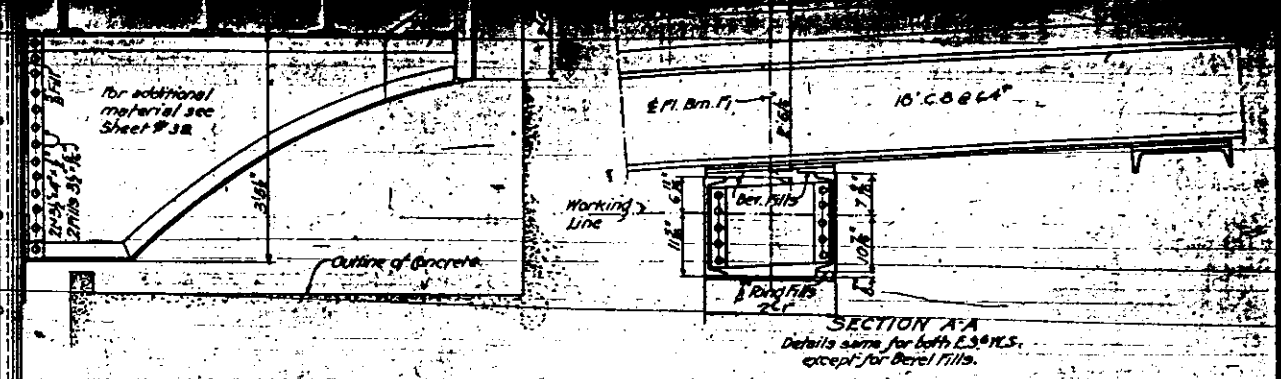
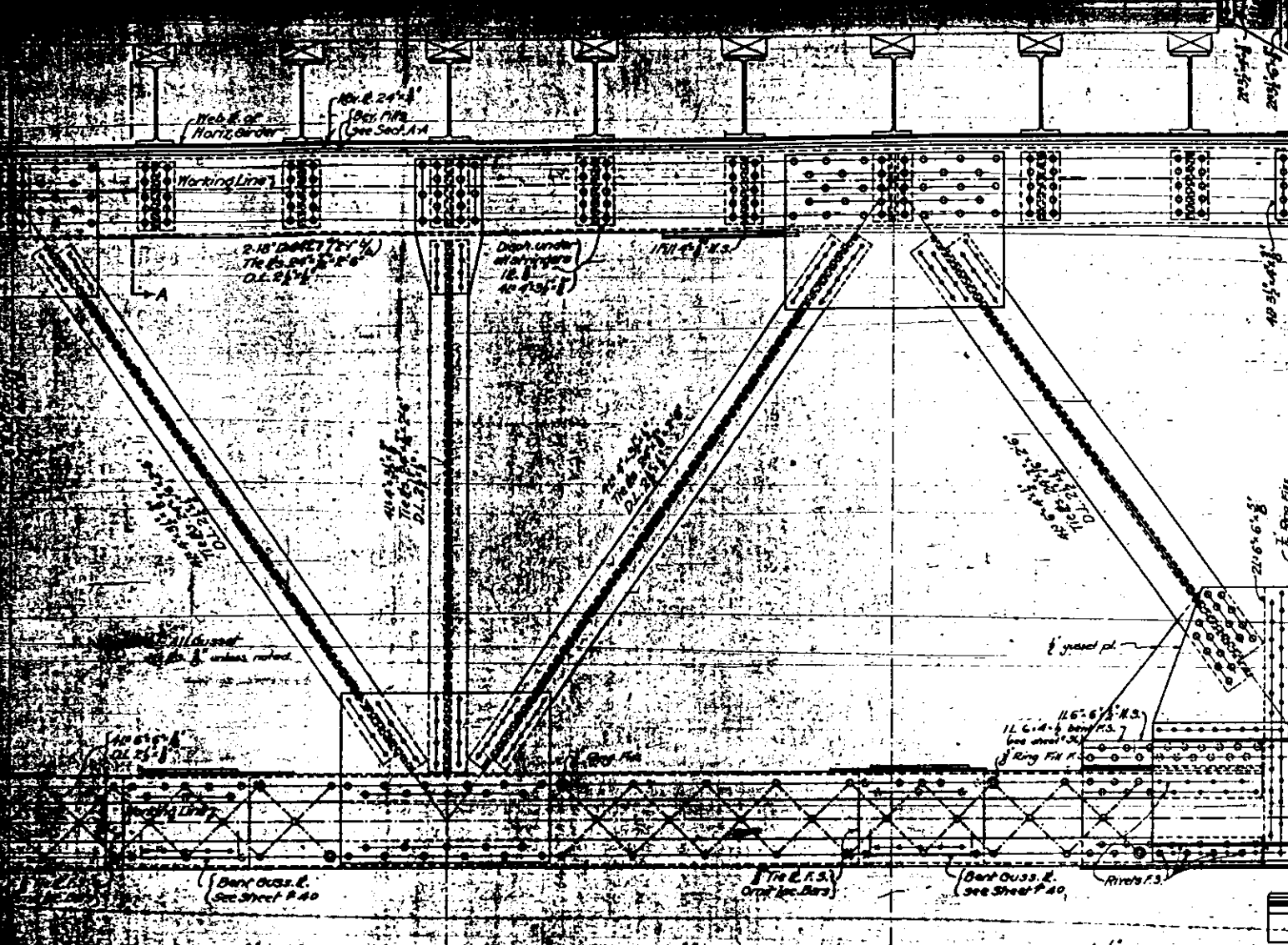
STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS  
DIVISION OF WATERWAYS  
Approval recommended: [Signature]  
Approved: [Signature]

DESIGNED BY  
THE SCHERZER ROLLING LIFT BRIDGE CO.  
MONROE BLOCK, CHICAGO, ILL.

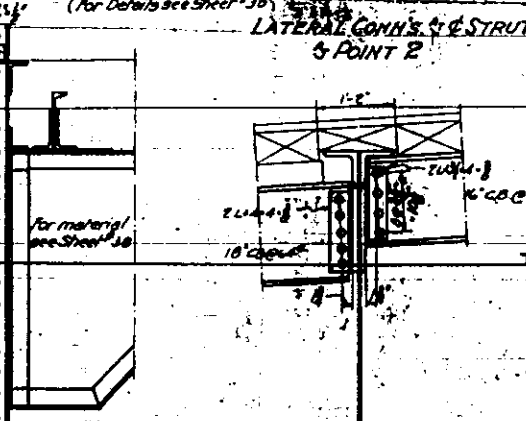
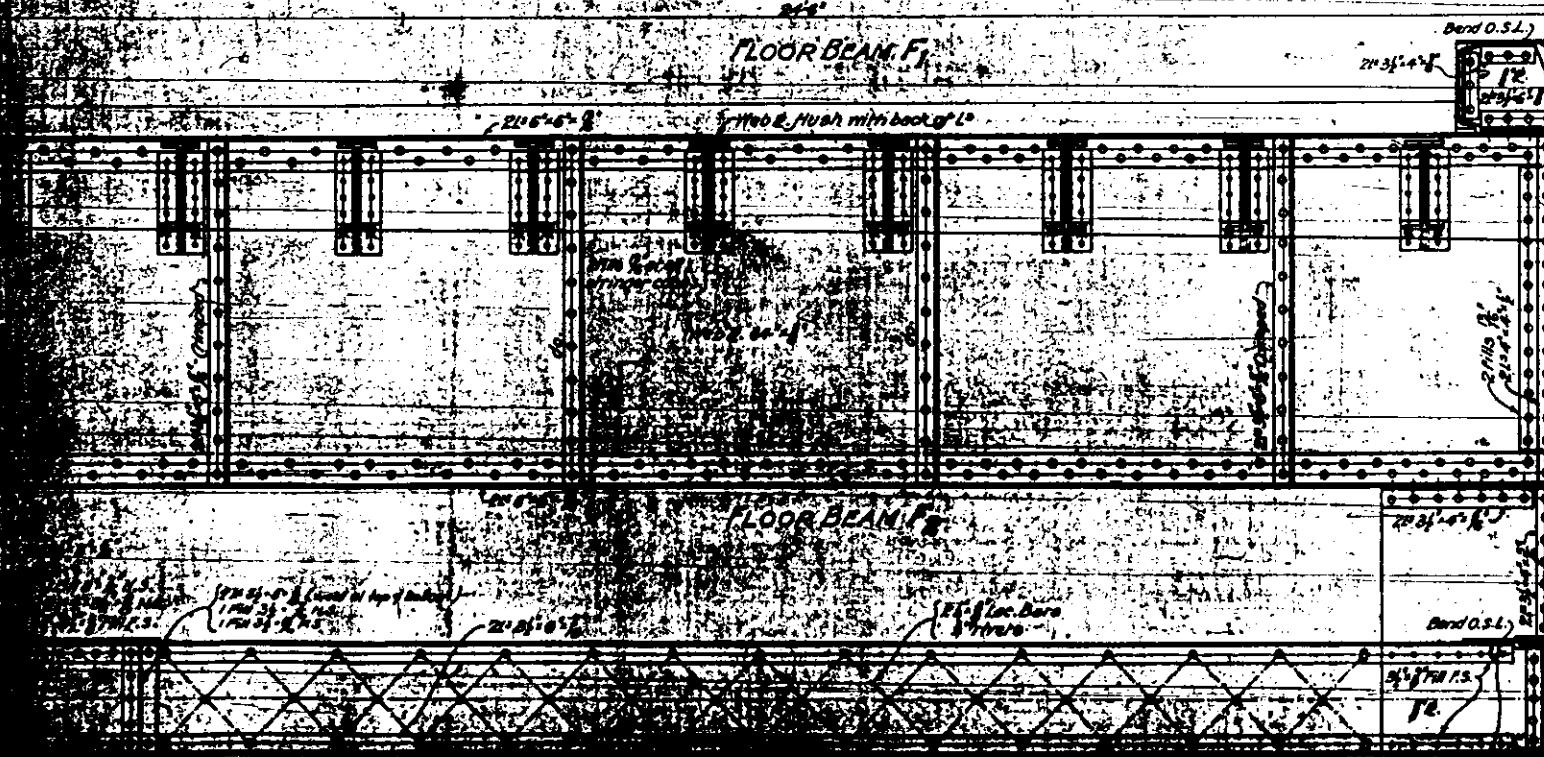
DRIVER OF ALLSHELL  
MADE IN U.S.A.  
MADE IN U.S.A.

SCALE 1/4\"/>





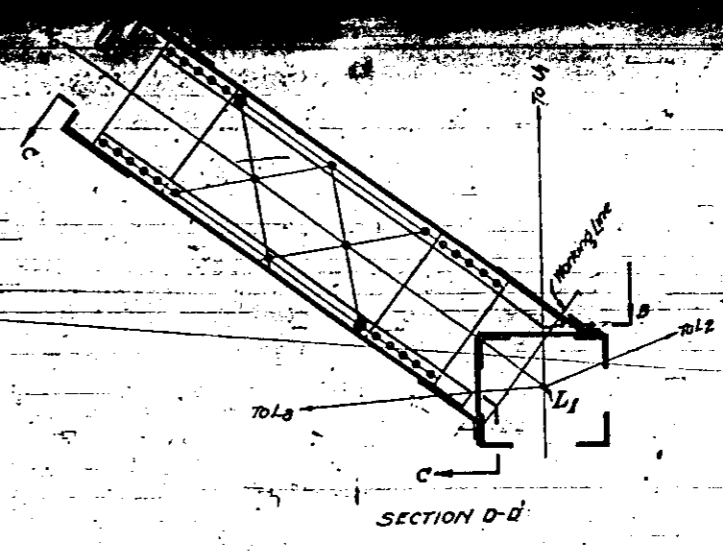
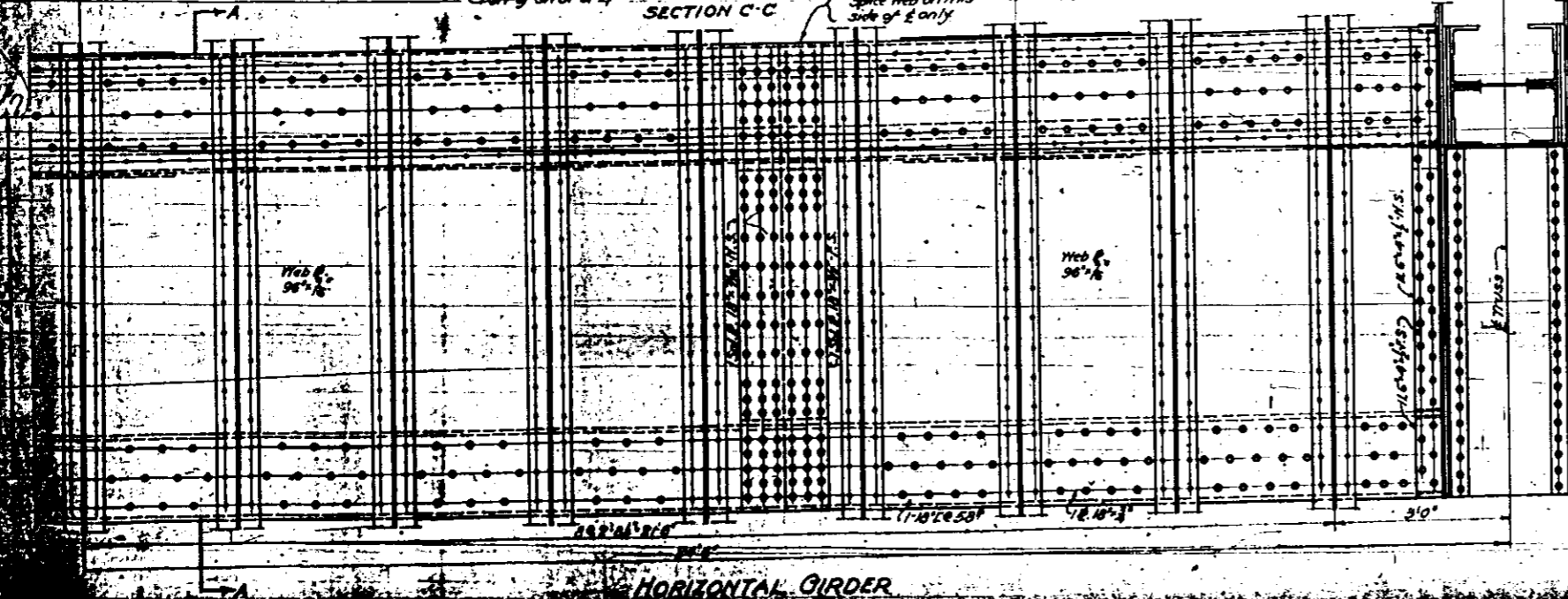
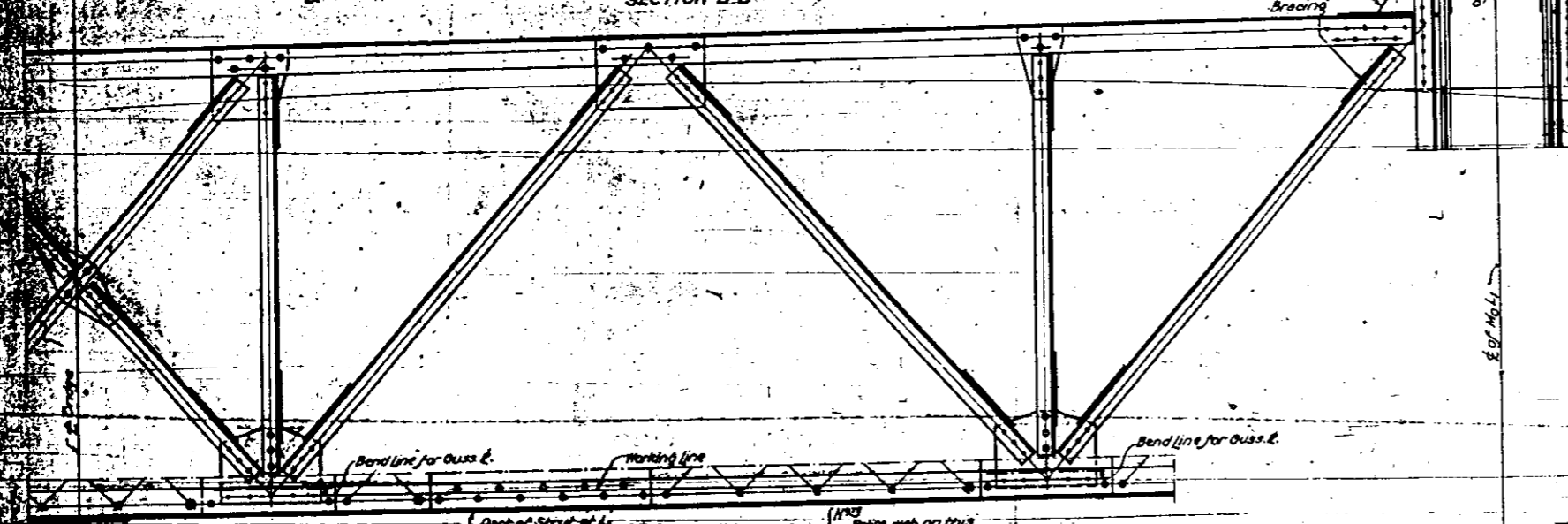
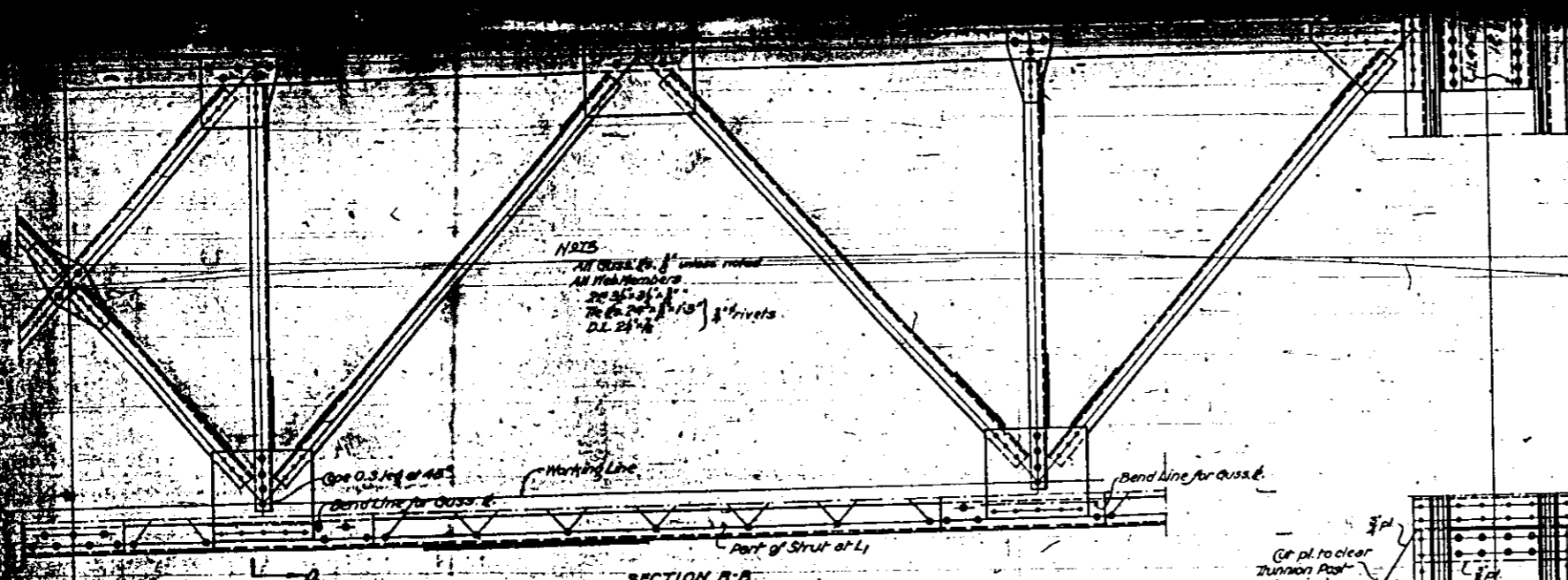
General Notes:  
 Rivets 7/8\"/>



STATE OF ILLINOIS  
 DEPARTMENT OF PUBLIC WORKS AND BUILDINGS  
 DIVISION OF WATERWAYS  
 THE SCHERZER ROLLING LIFT BRIDGE CO.  
 Approved: Sept. 12, 1923  
*Joseph Kardel*  
 Consulting Engineer  
 Approved: Sept. 12, 1923  
*Clayton W. Haskett*  
 Chief Engineer

FLOOR BEAMS F1 & F2 - BASCULE SPAN  
 DOUBLE LEAF TRUNNION BASCULE BRIDGE  
 OVER  
 THE ILLINOIS WATERWAY  
 AT  
 RUBY ST. JOLIET, ILL.

DESIGNED BY  
 THE SCHERZER ROLLING LIFT BRIDGE CO.  
 MONROCK BLOCK CHICAGO, ILL.



NOTES  
 All Ouss. 1/2" unless noted  
 All Web Members  
 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 125 130 135 140 145 150 155 160 165 170 175 180 185 190 195 200 205 210 215 220 225 230 235 240 245 250 255 260 265 270 275 280 285 290 295 300 305 310 315 320 325 330 335 340 345 350 355 360 365 370 375 380 385 390 395 400 405 410 415 420 425 430 435 440 445 450 455 460 465 470 475 480 485 490 495 500 505 510 515 520 525 530 535 540 545 550 555 560 565 570 575 580 585 590 595 600 605 610 615 620 625 630 635 640 645 650 655 660 665 670 675 680 685 690 695 700 705 710 715 720 725 730 735 740 745 750 755 760 765 770 775 780 785 790 795 800 805 810 815 820 825 830 835 840 845 850 855 860 865 870 875 880 885 890 895 900 905 910 915 920 925 930 935 940 945 950 955 960 965 970 975 980 985 990 995 1000

General Notes  
 Rivets 1/2" unless noted  
 Open holes 1/2" unless noted  
 For reaming of holes see specifications.

STATE OF ILLINOIS  
 DEPARTMENT OF PUBLIC WORKS AND BUILDINGS  
 DIVISION OF WATERWAYS

THE SCHERZER ROLLING LIFT BRIDGE CO.  
 Approved: *[Signature]*  
 Chief Engineer

Approved: *[Signature]*  
 Chief Engineer

HORIZONTAL GIRDER  
 AND  
 BRACING M-5 L-1  
 DOUBLE LEAF TRUNNION BASCULE BRIDGE  
 OVER  
 THE ILLINOIS WATERWAY  
 AT  
 RUBY ST. JOLIET, ILL.

DESIGNED BY  
 THE SCHERZER ROLLING LIFT BRIDGE CO.  
 MONADNOCK BLOCK CHICAGO, ILL.

SCALE: 1/4" = 1'-0"  
 DRAWN BY: *[Signature]*  
 CHECKED BY: *[Signature]*

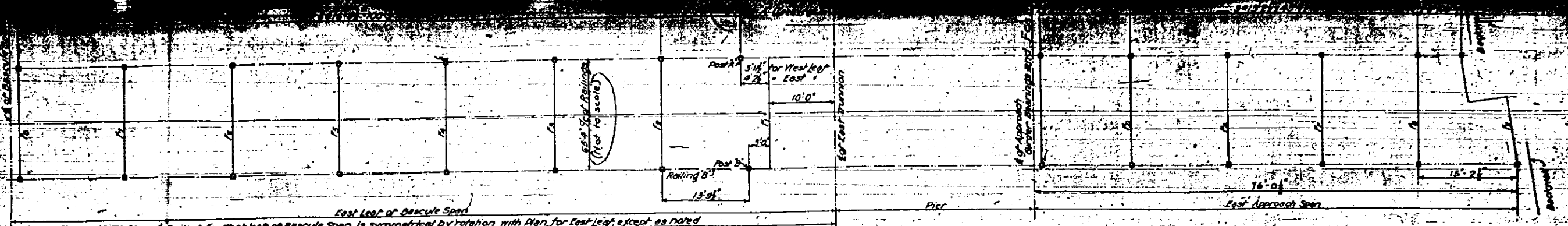
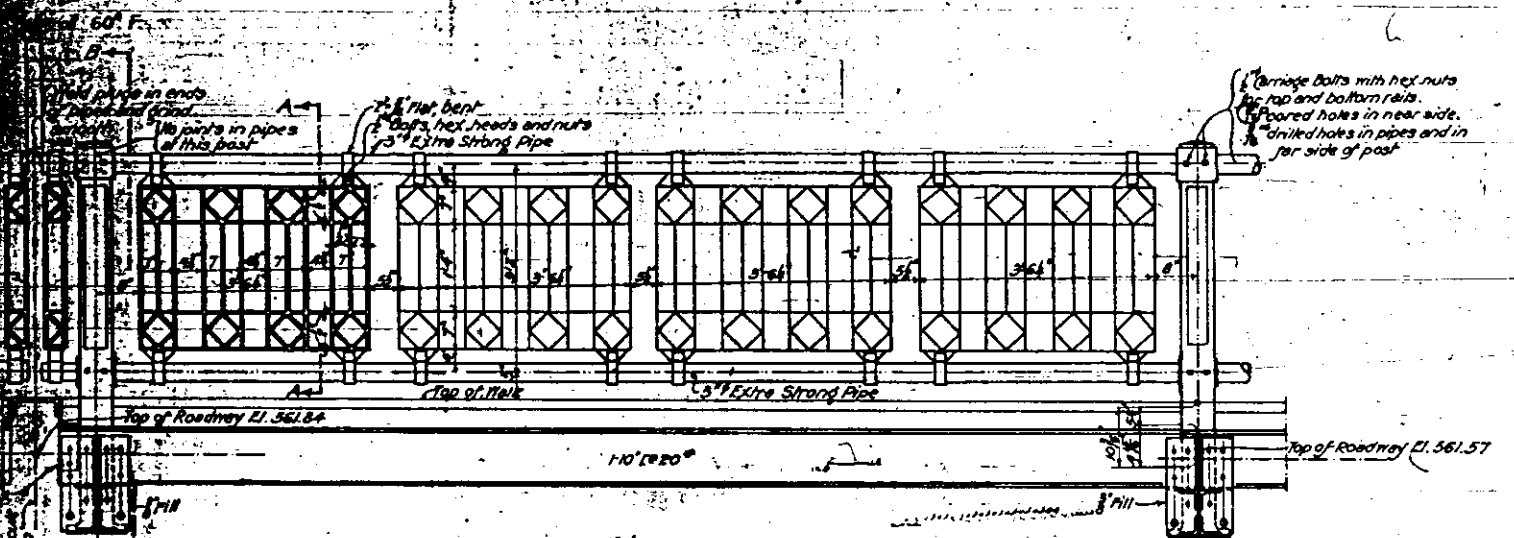
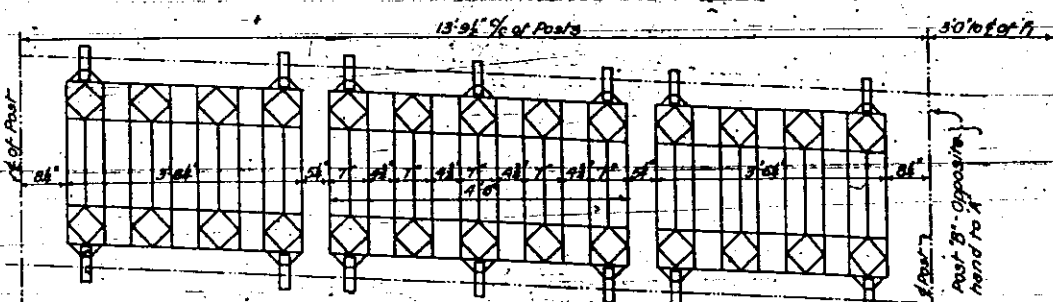


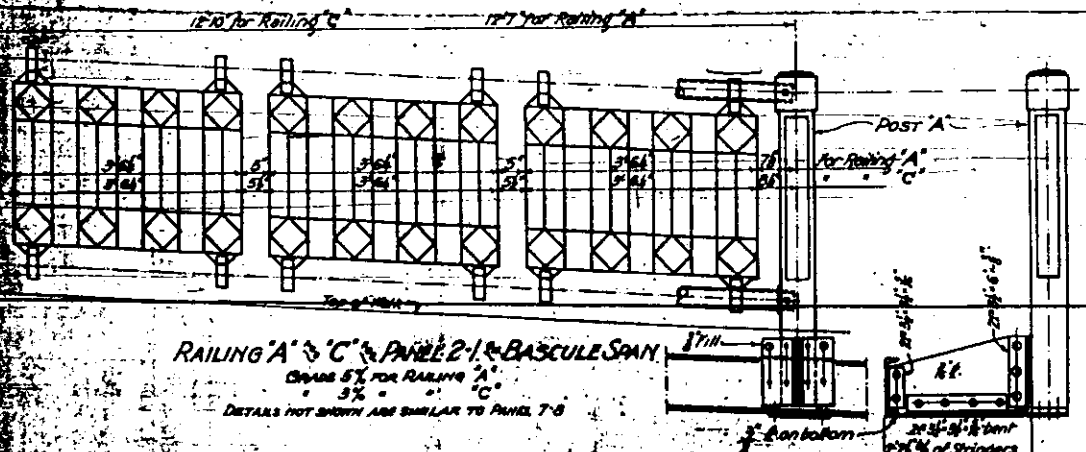
DIAGRAM OF BRIDGE RAILING  
SCALE 1/4" = 1'-0"



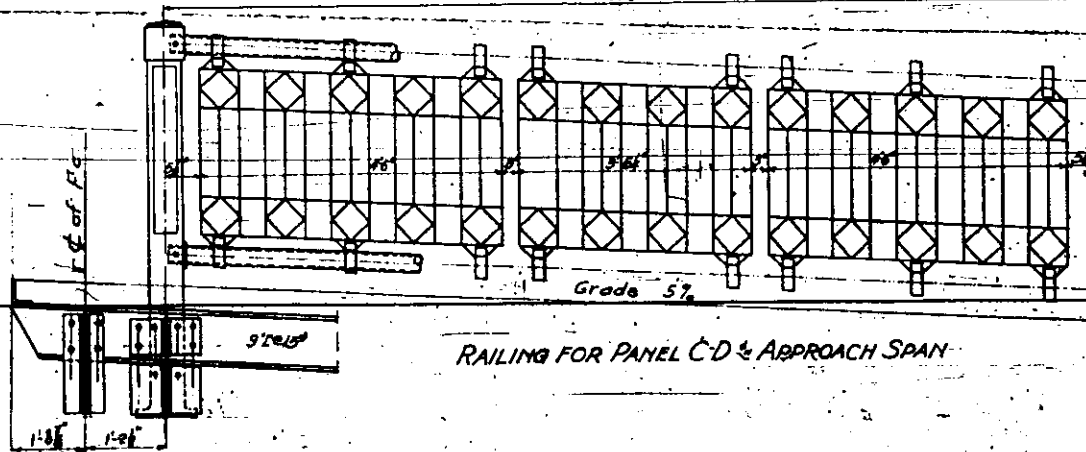
RAILING FOR PANEL 7-8 & EAST LEAF OF BASCULE SPAN  
DETAILS FOR PANELS 7 TO 8 ARE SIMILAR. NOTE DIFFERENCES IN GRADE



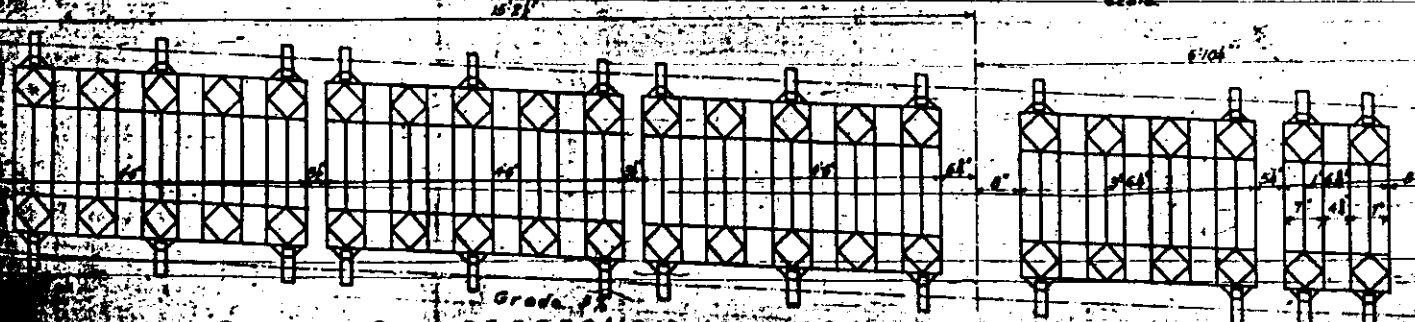
RAILING B FOR PANEL 2-1 OF BASCULE SPAN  
GRADE 5% FOR EAST LEAF  
5% WEST  
DETAILS NOT SHOWN SIMILAR TO PANEL 7-8



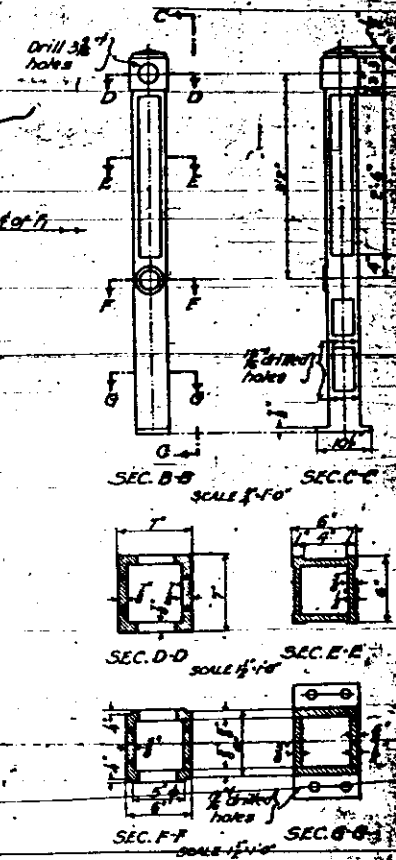
RAILING A & C FOR PANEL 2-1 OF BASCULE SPAN  
GRADE 5% FOR RAILING A  
5% C  
DETAILS NOT SHOWN ARE SIMILAR TO PANEL 7-8



RAILING FOR PANEL C-D OF APPROACH SPAN  
Grade 5%



RAILING FOR PANELS D-E, E-F, F-G OF APPROACH SPAN  
Grade 5%



General Notes  
All posts shall be vertical.  
All posts shall be made of cast iron.  
Ornamentation shall be made of malleable iron.  
Each pattern shall have a distinctive mark that will show on the casting.  
All pipe shall be genuine wrought iron.  
Rivets 3/4 inch.  
Open holes 3/4 inch unless noted.

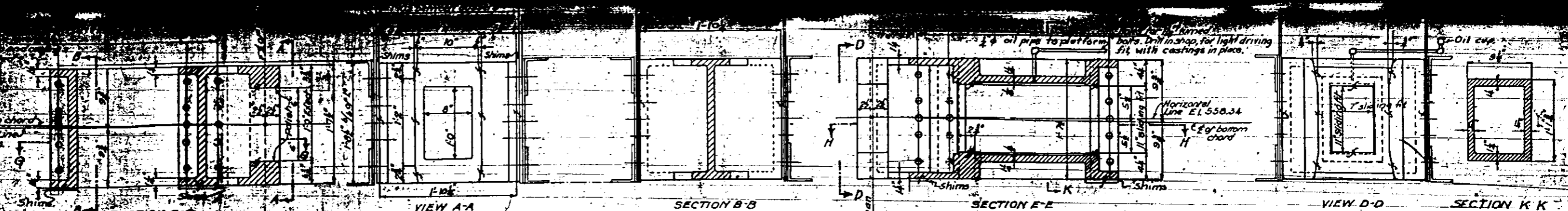
ORNAMENTAL RAILING  
DOUBLE LEAF TRUSSON BASCULE BRIDGE  
OVER  
THE ILLINOIS WATERWAY  
AT  
RUBY ST. JOUET, ILL.

THE SCHERZER ROLLING LIFT BRIDGE CO.  
Approved: Sept. 13, 1925  
[Signature]  
Managing Engineer  
Approval recommended:  
[Signature]  
Bridge Engineer

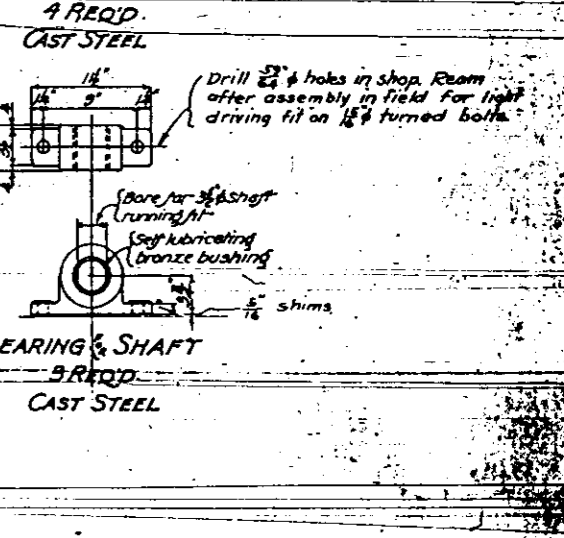
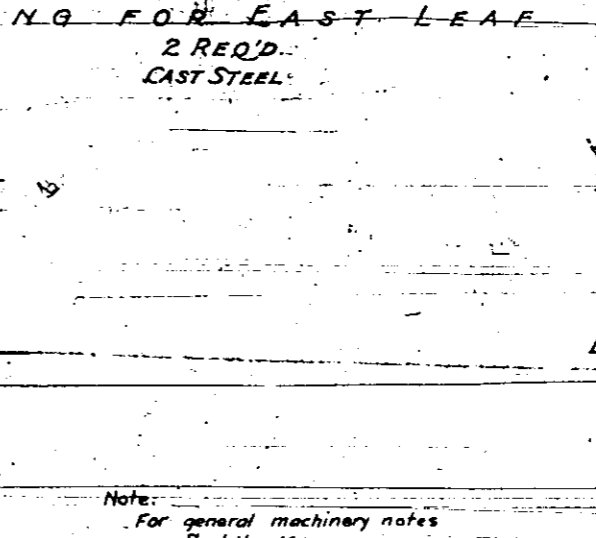
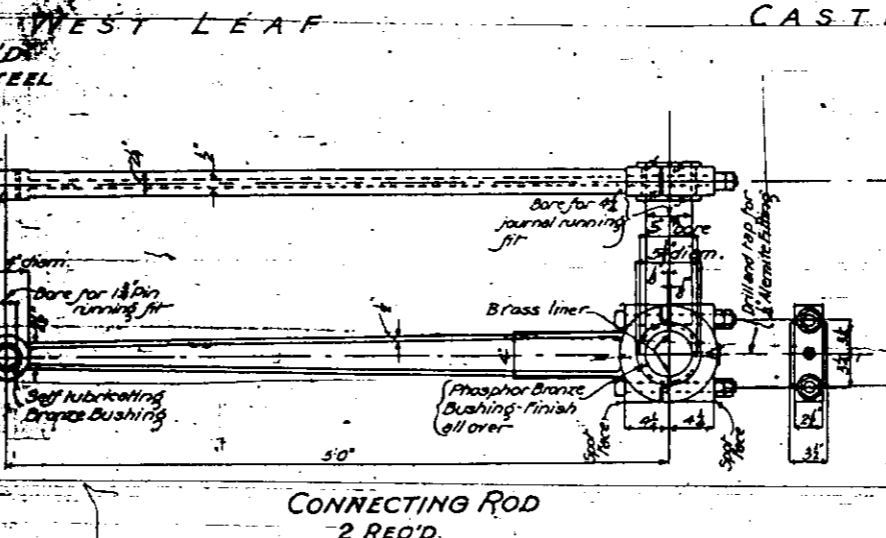
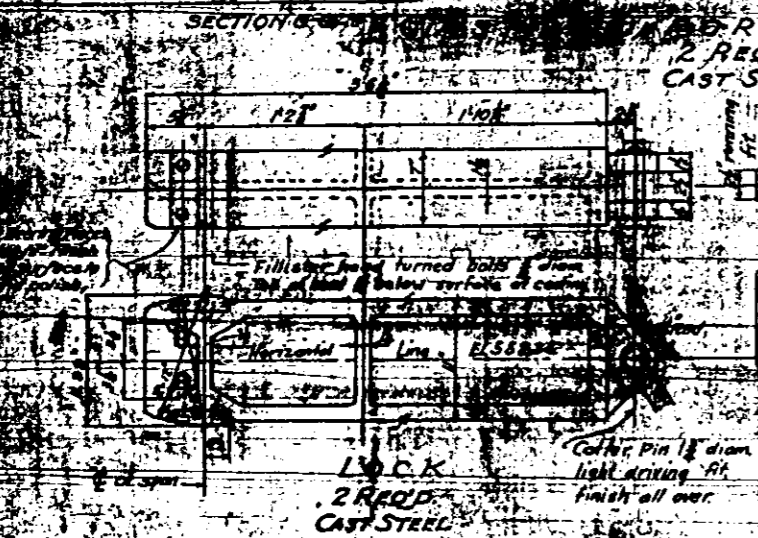
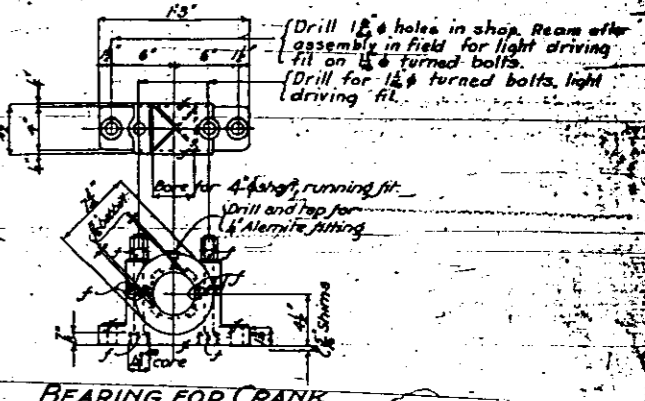
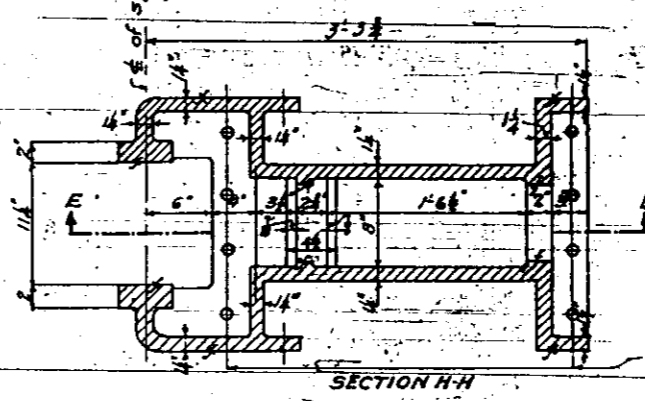
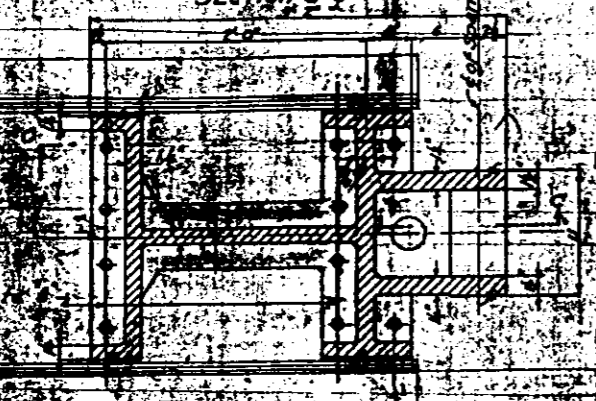
DESIGNED BY  
THE SCHERZER ROLLING LIFT BRIDGE CO.  
MONMOUTH BLOCK, CHICAGO, ILL.

MADE BY S.A.R.  
MADE BY S.A.R.  
MADE BY S.A.R.





Note  
Dimensions locating lock castings are given for a temperature of 60° F and should be varied according to the temperature at the time the castings are adjusted.



Note:  
For general machinery notes see Sheet No. 46.

Take special note for starting fit on shaft of lock rollers so that hand wheel may be removed and stored when not in use.

**CENTER LOCK CASTINGS**  
**DOUBLE LEAF TRUNNION BASKET**

OVER  
THE ILLINOIS WATERWAY  
AT  
RUBY ST, JOLIET, ILL.

DESIGNED BY  
**THE SCHERZER ROLLING LIFT BRIDGE CO.**  
MONADNOCK BLOCK, CHICAGO, ILL.

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS  
DIVISION OF WATERWAYS

THE SCHERZER ROLLING LIFT BRIDGE CO.  
Approved: Sept. 12, 1913  
Managing Engineer

Approval recommended: \_\_\_\_\_  
Bridge Engineer

Approved: \_\_\_\_\_