

BUILT BY
THE STATE OF PENNSYLVANIA
UNDER THE ACT OF 1895

1904

SAMUEL W. PENNYPACKER — GOVERNOR.

WILLIAM P. SNYDER — AUDITOR GENERAL.

W. L. MATHUES — STATE TREASURER.

JAMES M. SHUMAKER — SUPERINTENDENT.

JOHN E. STOTT — SECRETARY.

HERMANN LAUB — ENGINEER FOR THE BOARD.

OSCAR E. THOMSON — SUP'T. OF CONSTRUCTION.

REQUIRED LIST
2 Name Plates (cast iron) NP

Raised Letters 5/8" high

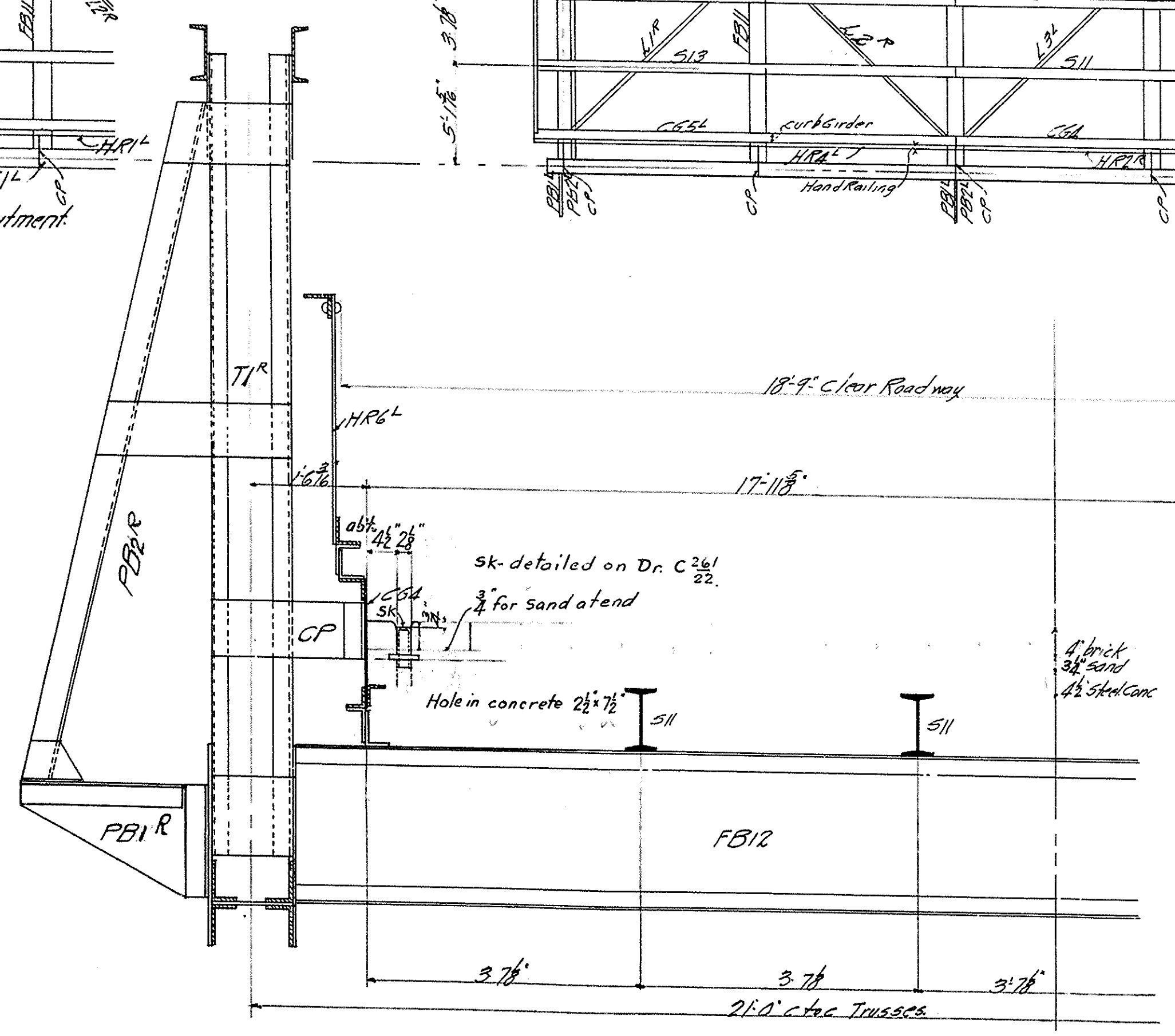
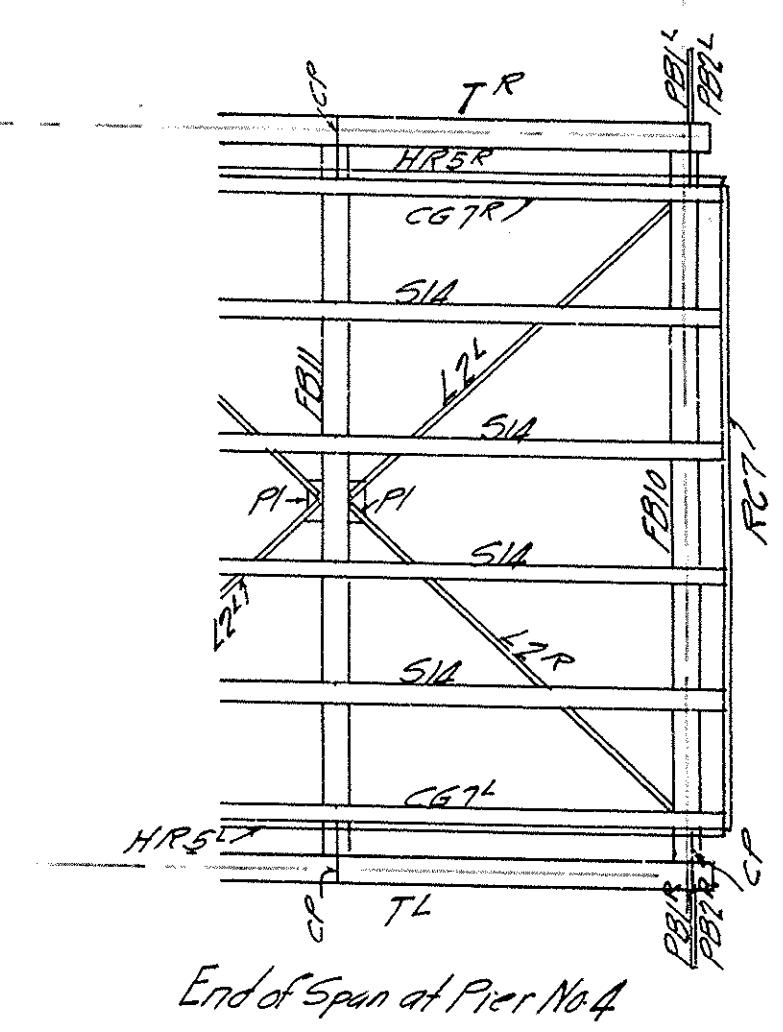
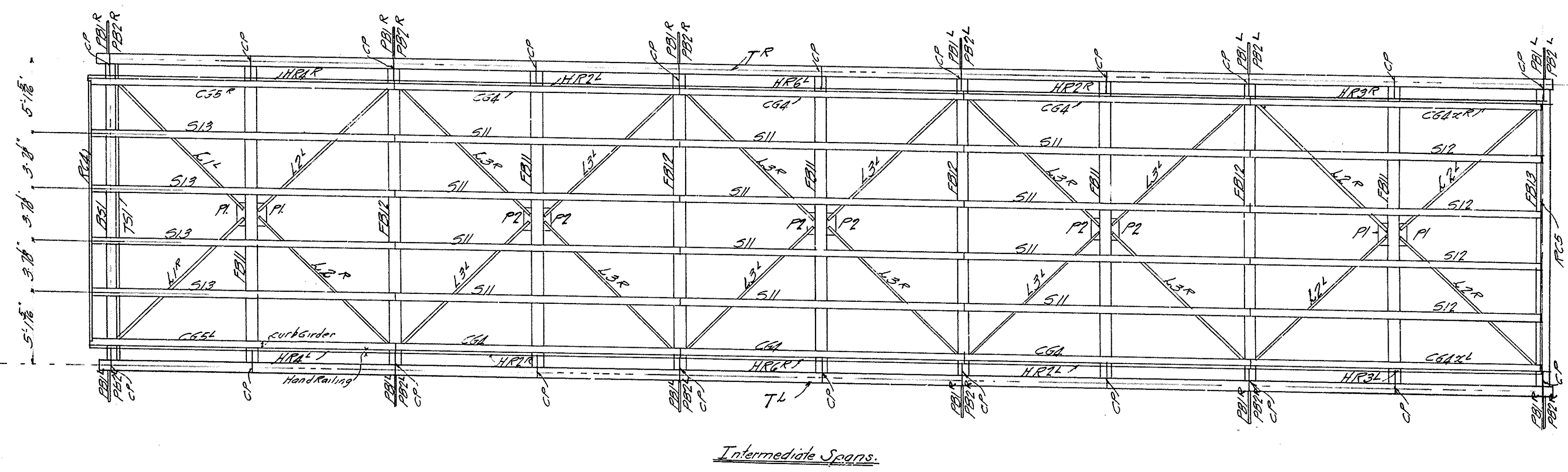
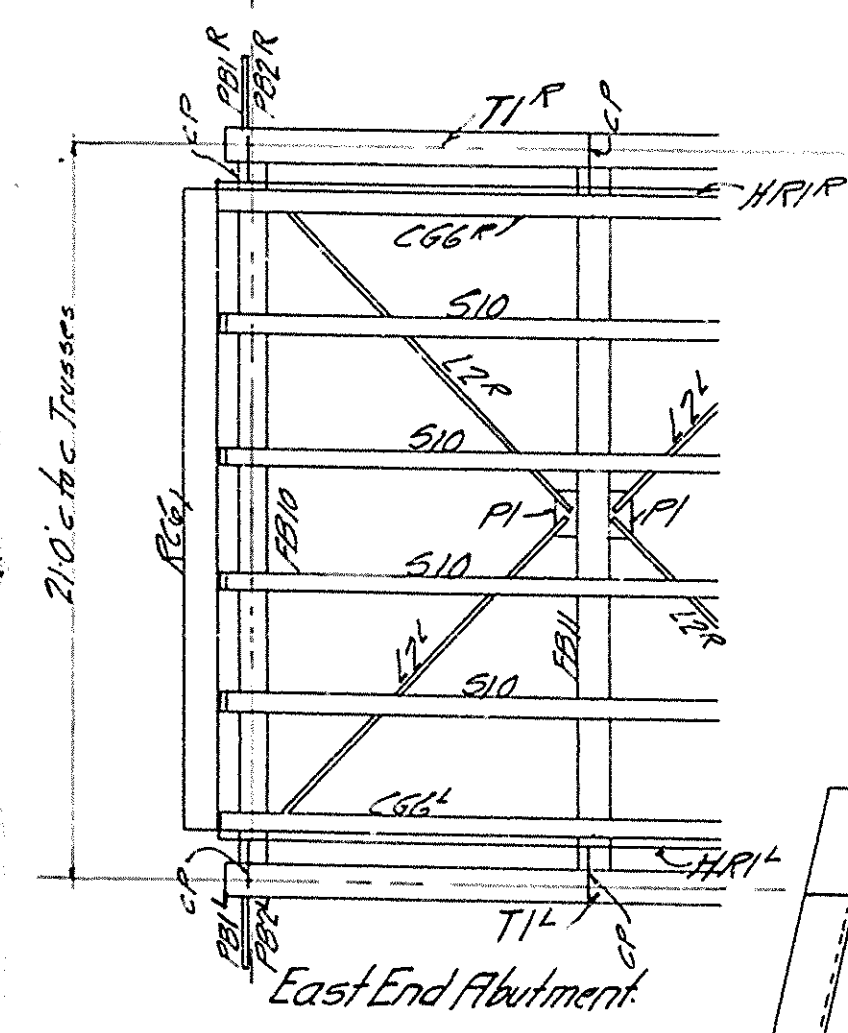
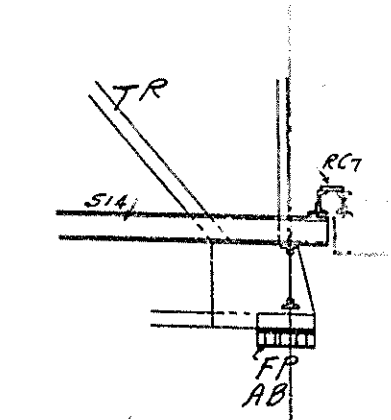
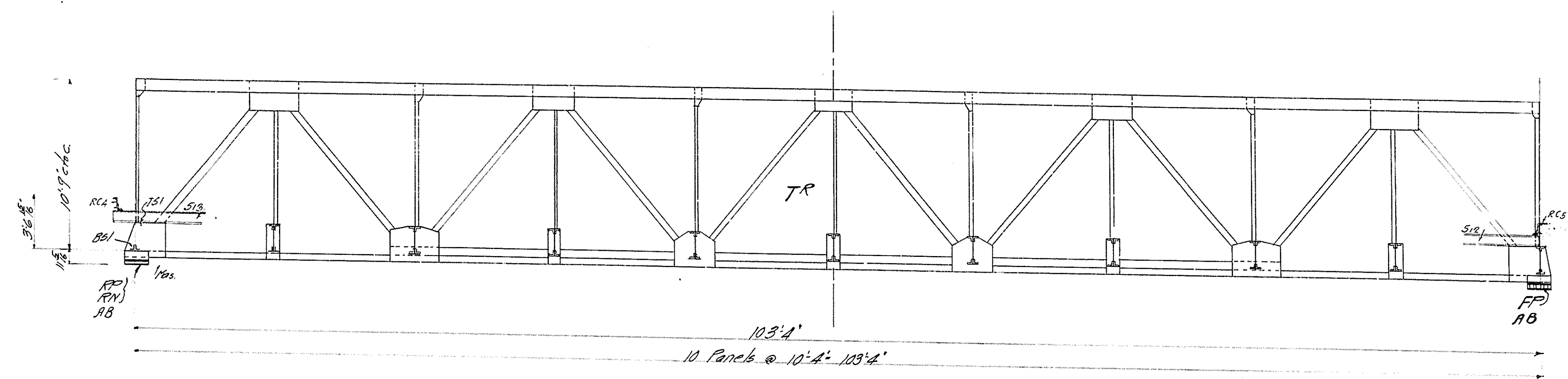
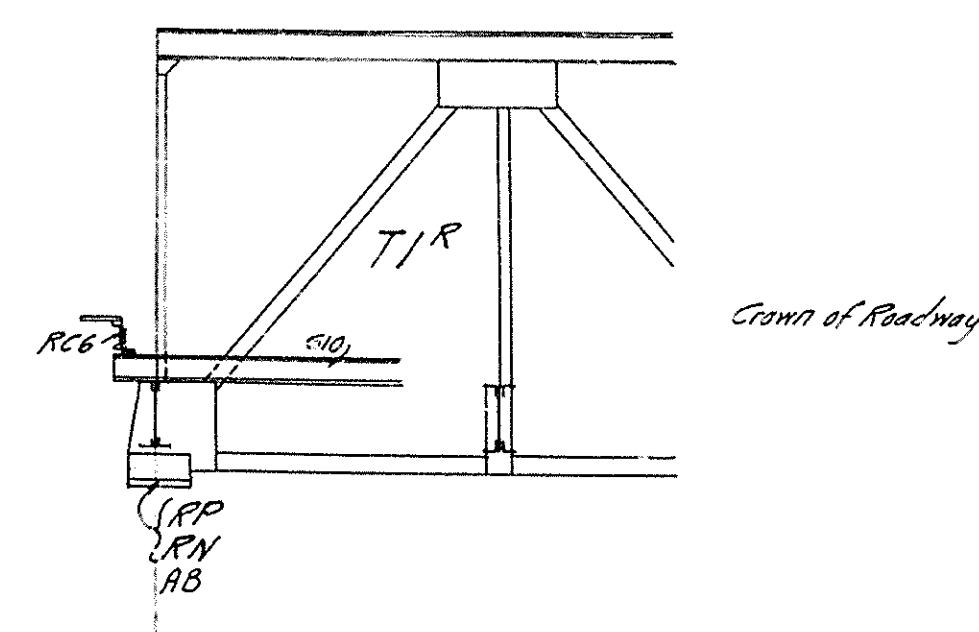
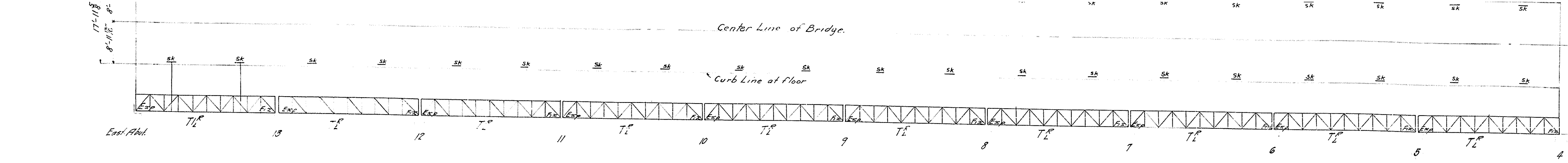
Name Plate.
Four 237 ft. 3 in. Spans, State Bridge
over Susquehanna River
Ulster, Bradford Co., Penna.

BUILT BY
THE PENNSYLVANIA STEEL CO.
Bridge & Construction Dep't.
Steelton, Pa.

Scale - Half Size
Made by J. H.
Traced by J. H.
Checked by J. H.
In charge: R. E. Specter.
Bill sheets 280.

March 8 1905

C 261
23



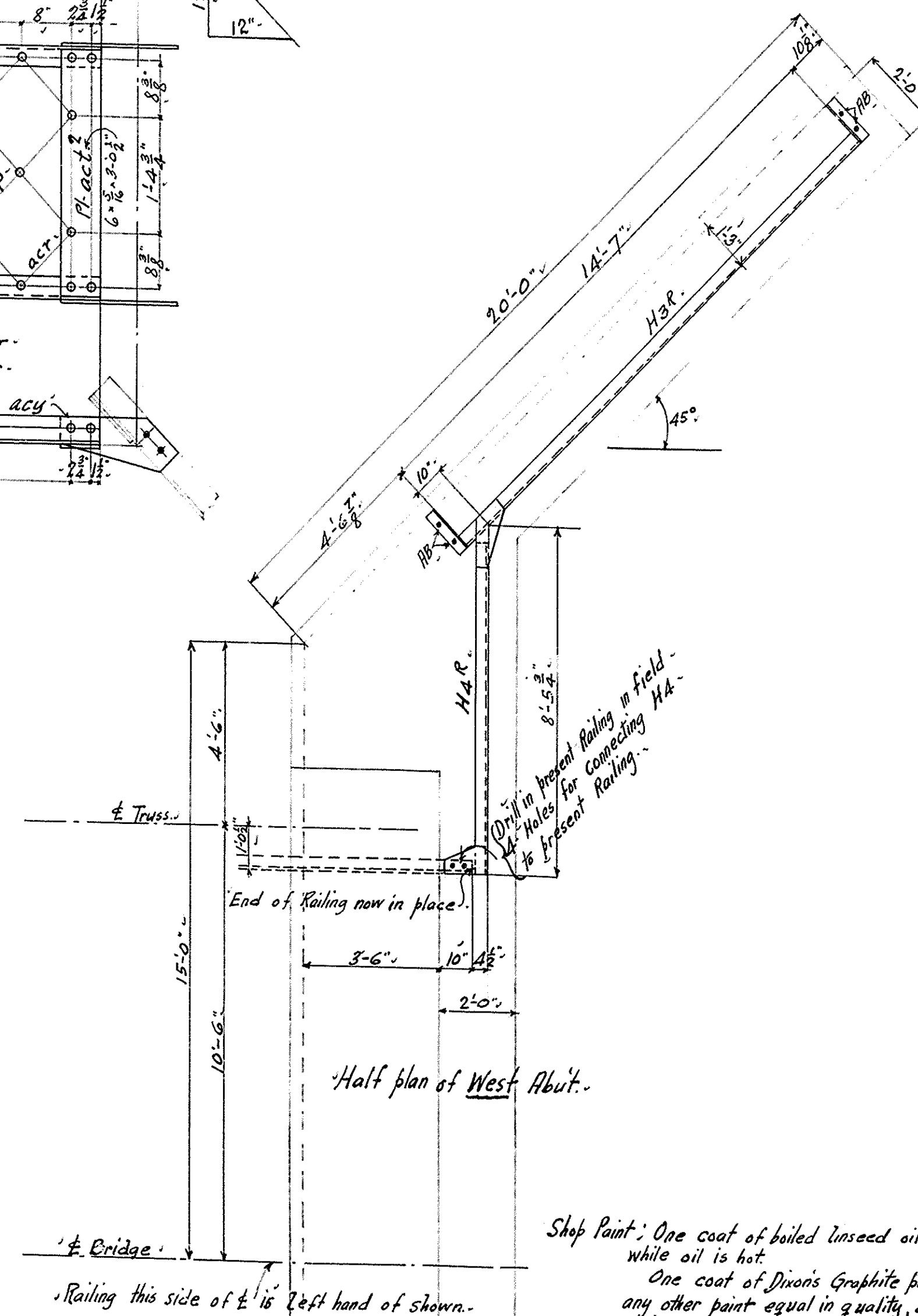
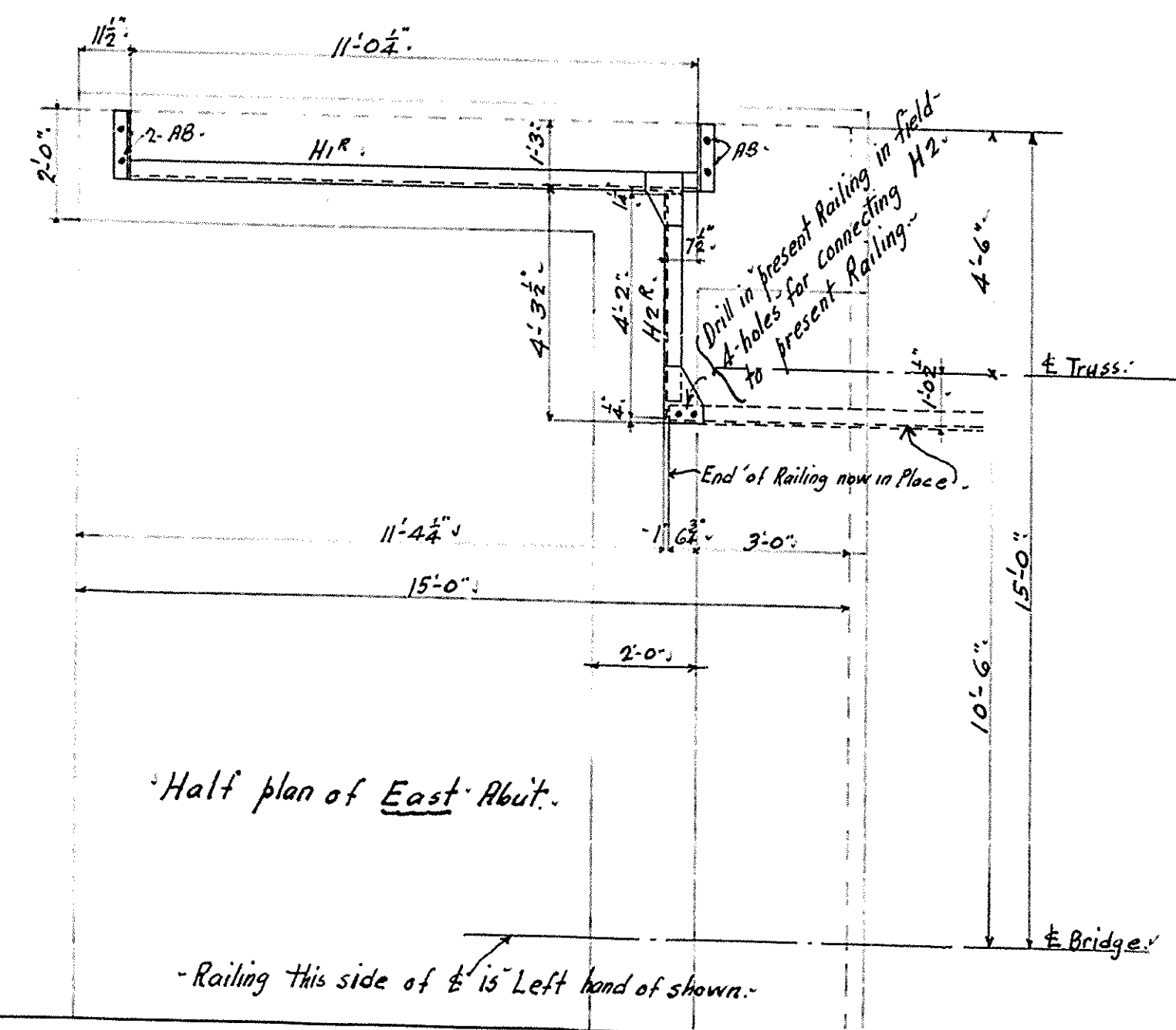
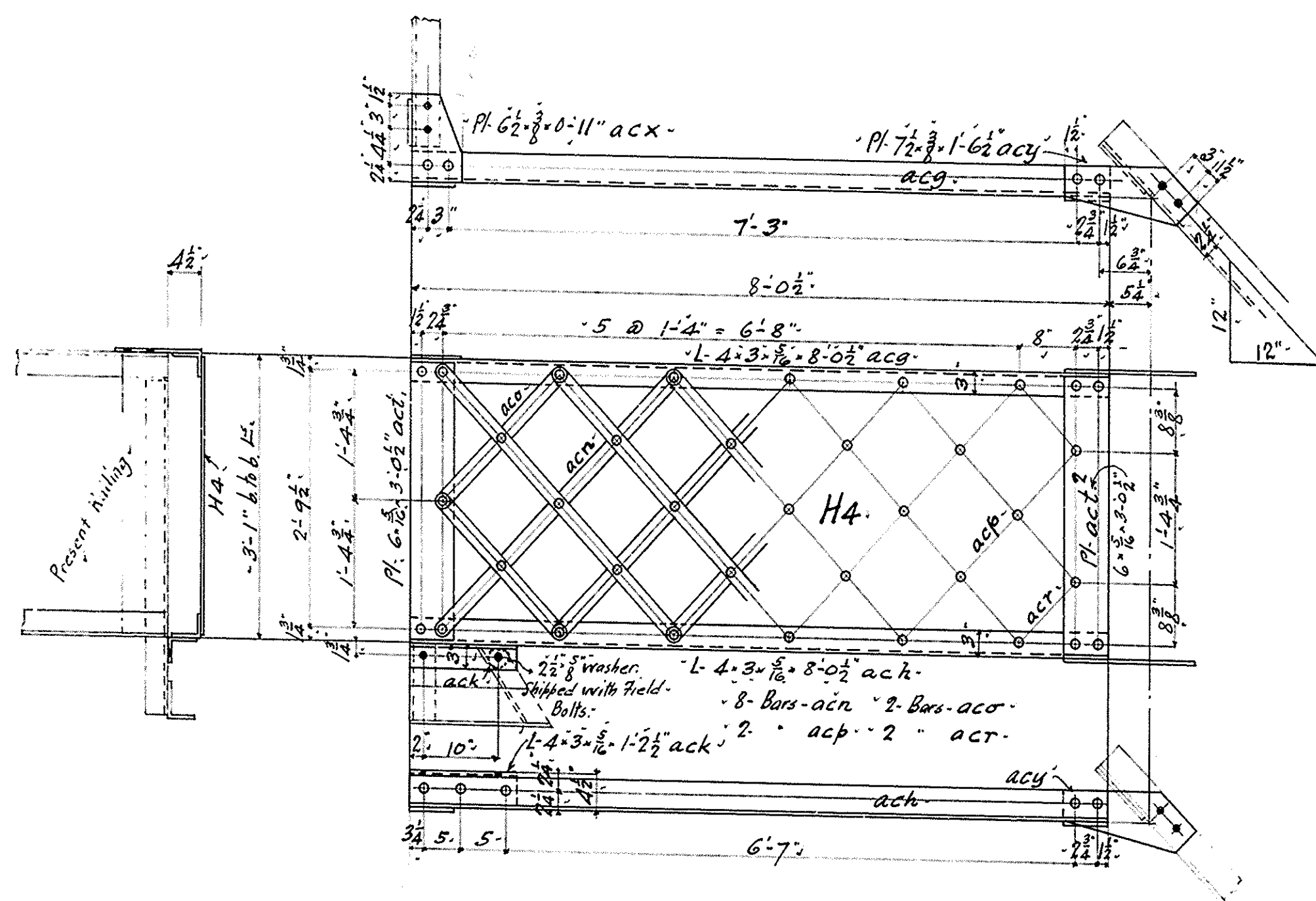
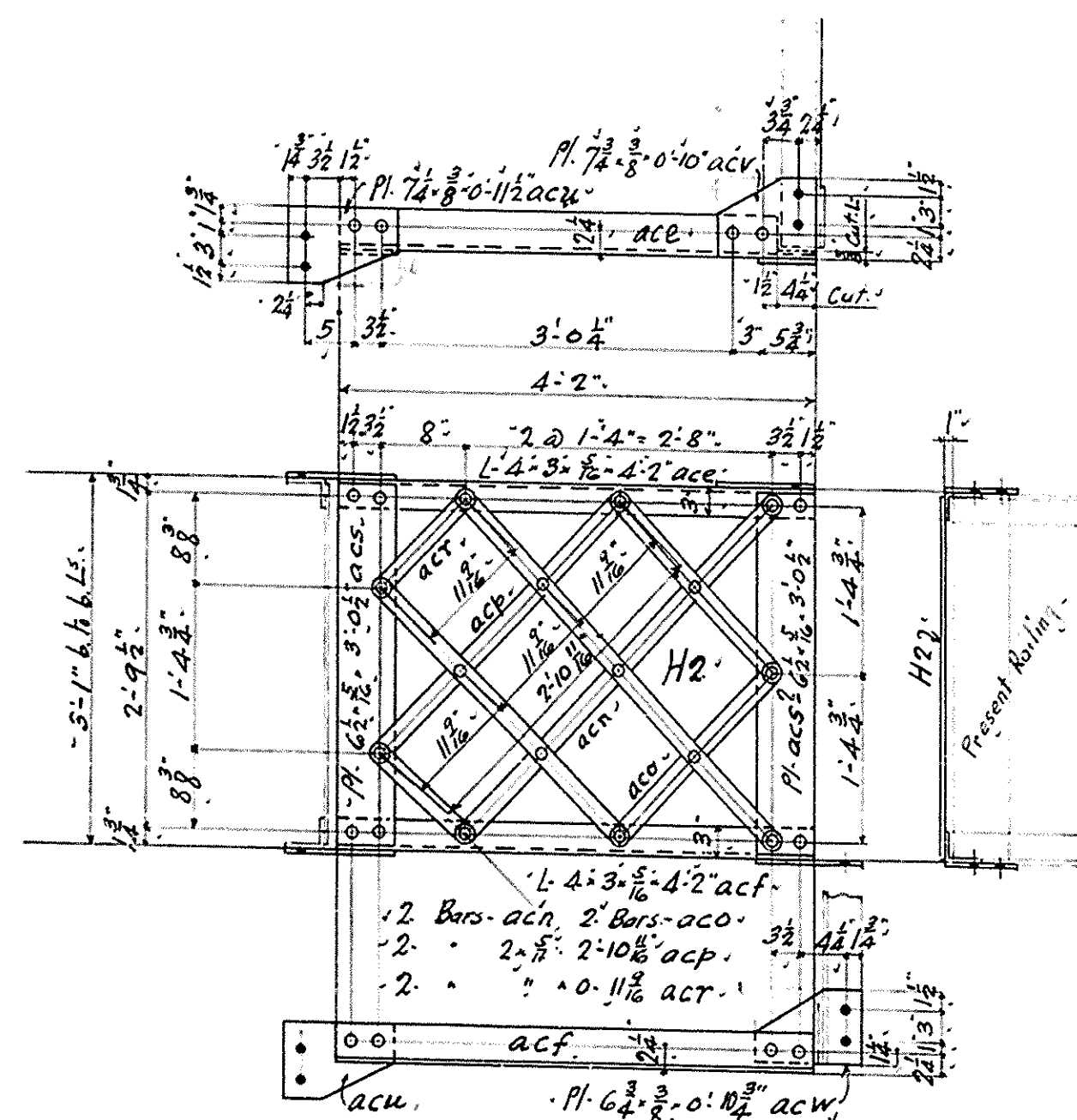
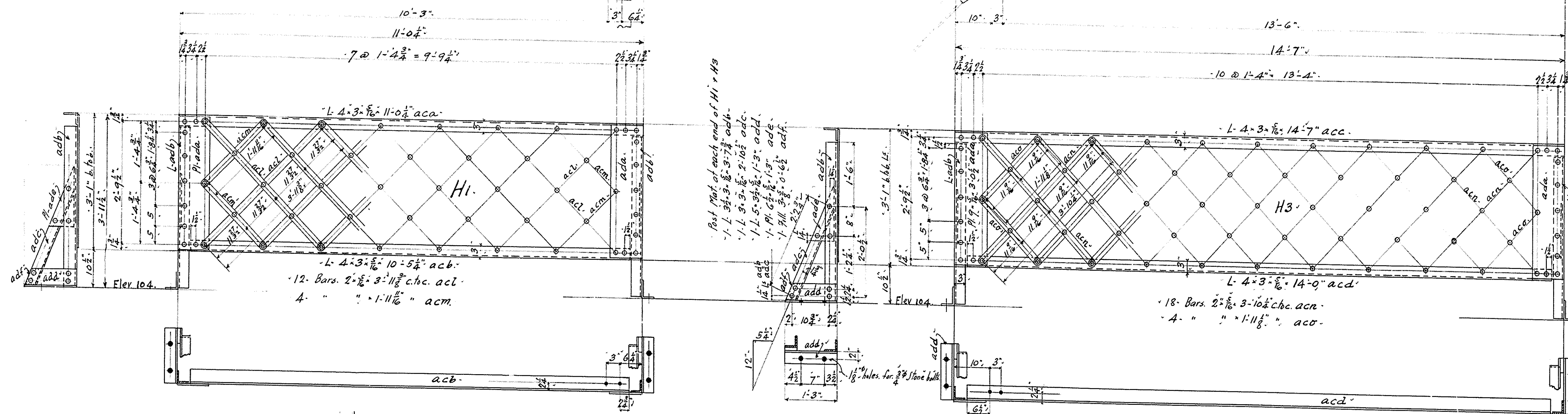
- LIST OF DRAWINGS.
- | No. | Title |
|--------|------------------------------|
| 1 | Erection Plan |
| 2 | Stringers |
| 3 | " |
| 4 | " |
| 5 | Exp. Channels |
| 6 | Bottom Laterals |
| 7 | Trusses |
| 8 | Floor Beams and Curb Girders |
| 9 | Shoes, Rollers & |
| 10 | Railing |
| RI-SRI | Field Rivets & Anchor Bolts |
| SI-S2 | Shipping List |

Erection Diagram
 Ten 103 ft. 4 in. Spans, State Bridge
 over Susquehanna River
 Ulster, Bradford Co., Penna.

THE PENNSYLVANIA STEEL CO.
 Bridge & Construction Dep't.
 Steelton, Pa.

Scale 3/4" = 1'-0" ft. Jan. 27 1915
 Made by CHS
 Checked by R.W. Elgerton
 In charge R.W. Elgerton

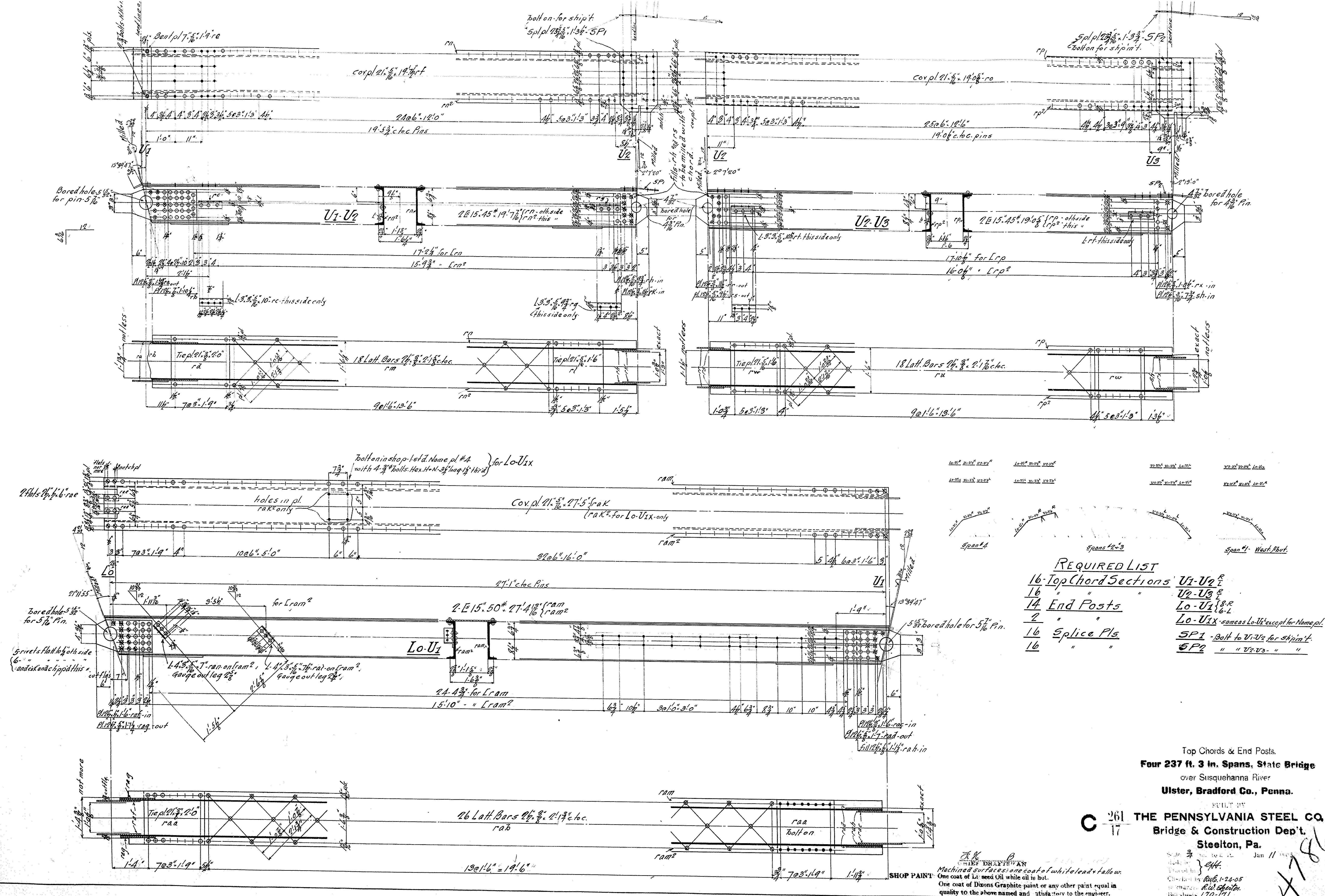
4790

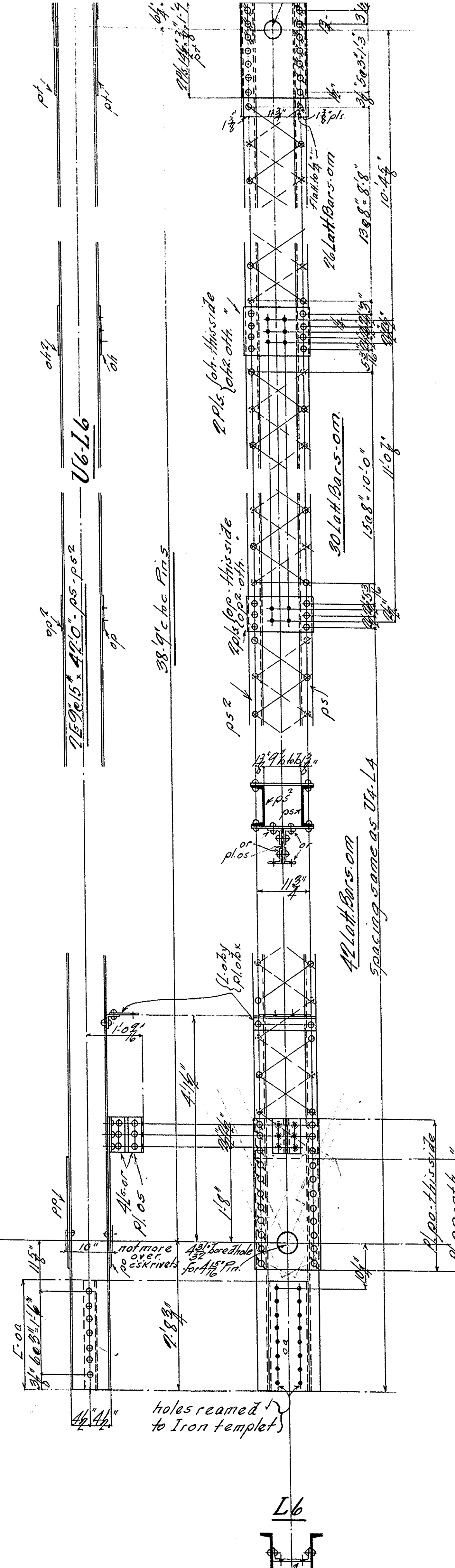
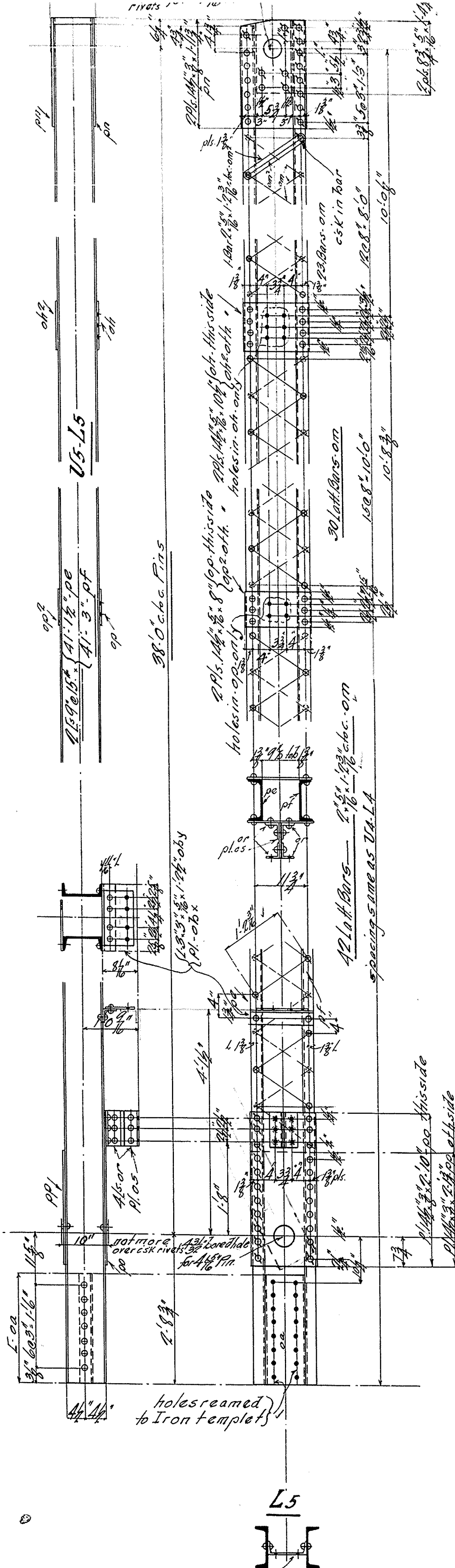


- Req'd. List
- 2- Railing Sections. H1 R.
 - 2- " " H2 R.
 - 2- " " H3 R.
 - 2- " " H4 R.

Railing at Abutments
STATE HIGHWAY BRIDGE
over Susquehanna River
Ulster, Bradford Co., Penna.

BUILT BY
C 261 THE PENNSYLVANIA STEEL CO.
25 Bridge & Construction Dept.
Steelton, Pa.
Scale $\frac{3}{8}'' = 1'-0''$
Dec. 14, 1905.
Made by -
Checked by - R.W. Eganter.
In Charge.
Bill Sheets 250-251.





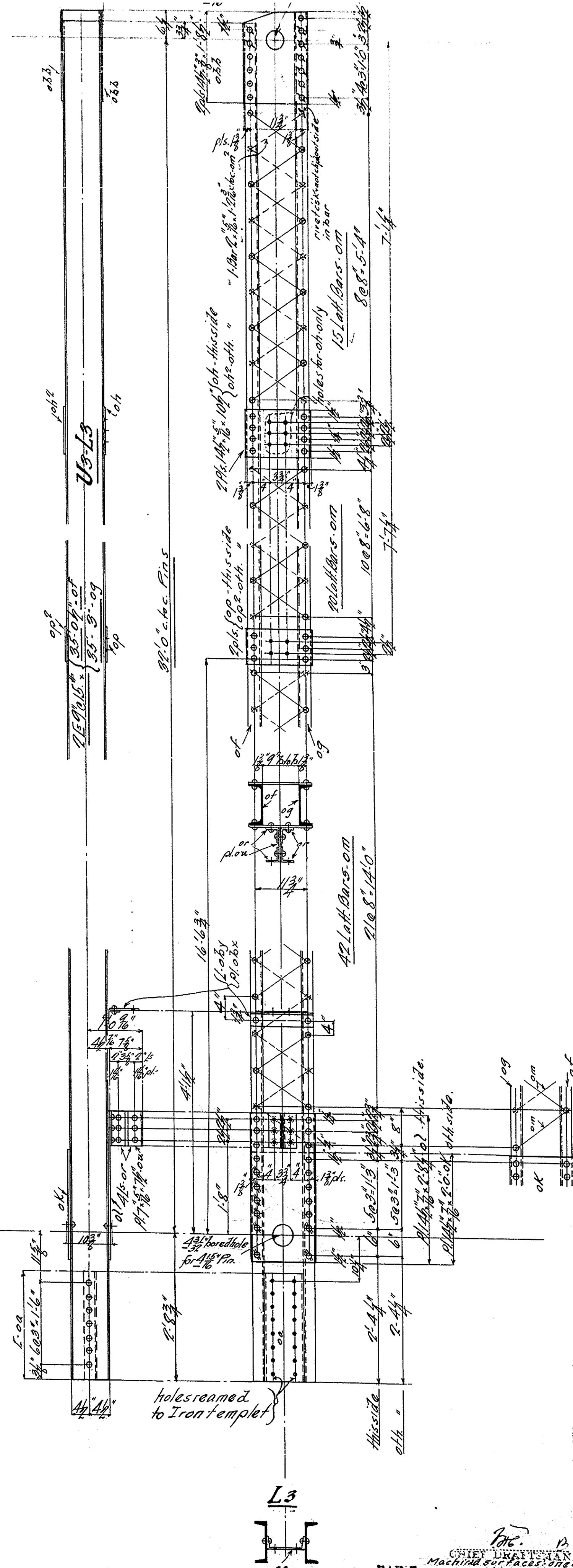
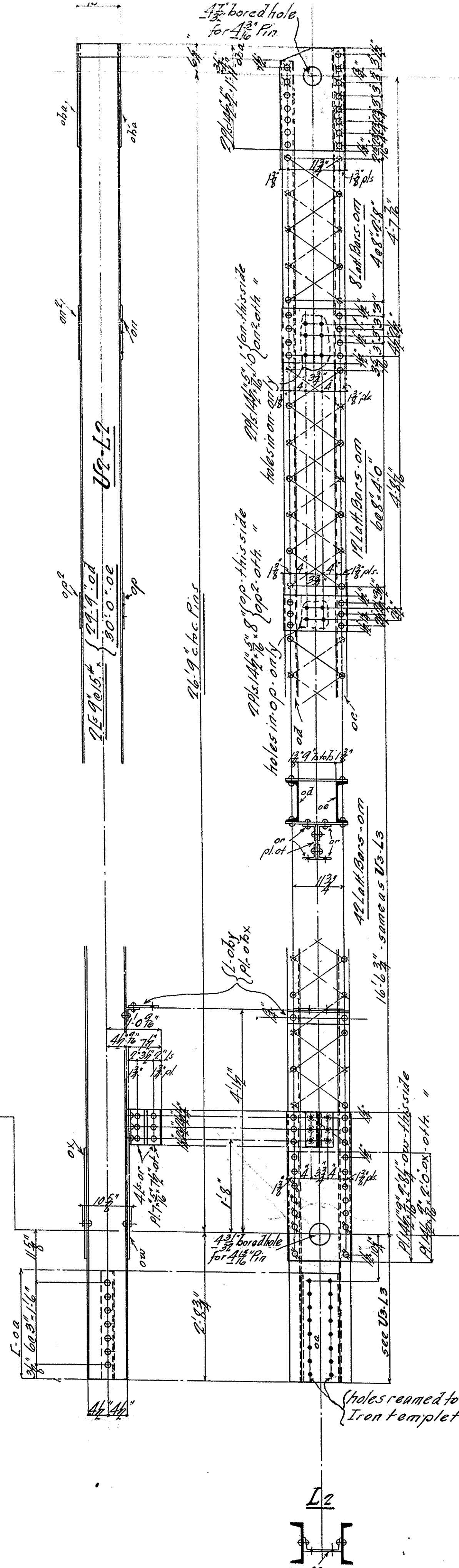
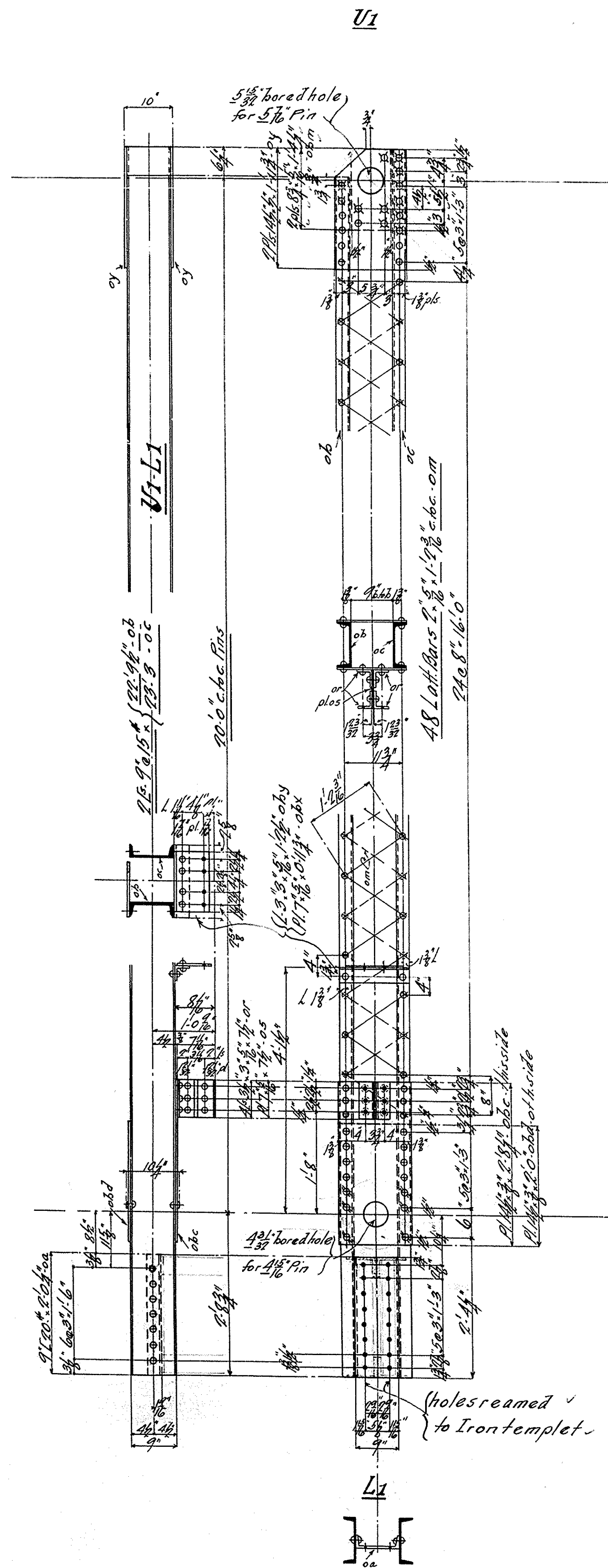
REQUIRED LIST

<u>16- Int. Posts</u>	<u>U4-L4^E</u>
<u>16- " "</u>	<u>U5-L5^E</u>
<u>16- " "</u>	<u>U6-L6^E</u>

RECEIVED BY
C 261 THE PENNSYLVANIA STEEL CO
16 Bridge & Construction Dept.
Steelton, Pa.

PAINT: One coat of Linseed Oil white oil is hot.
One coat of Dixons Graphite paint or any other paint equal in quality to the above named and satisfactory to the engineer

Scale $\frac{3}{4}$ in. to a ft. Jan. 25 1905
Made by } *E.H.H.*
Traced by }
Checked by *Rule 1-28-05*
in charge, *R.B. BERTM.*
Bill sheets. *160-161*



2 1/2"	5 1/2"	6 1/2"
7 1/2"	8 1/2"	9 1/2"
10 1/2"	11 1/2"	12 1/2"

4-5 pons

REQUIRED LIST			
16	Hanger Posts	U1-L1	
16	Int	U2-L2	
16	"	U3-L3	

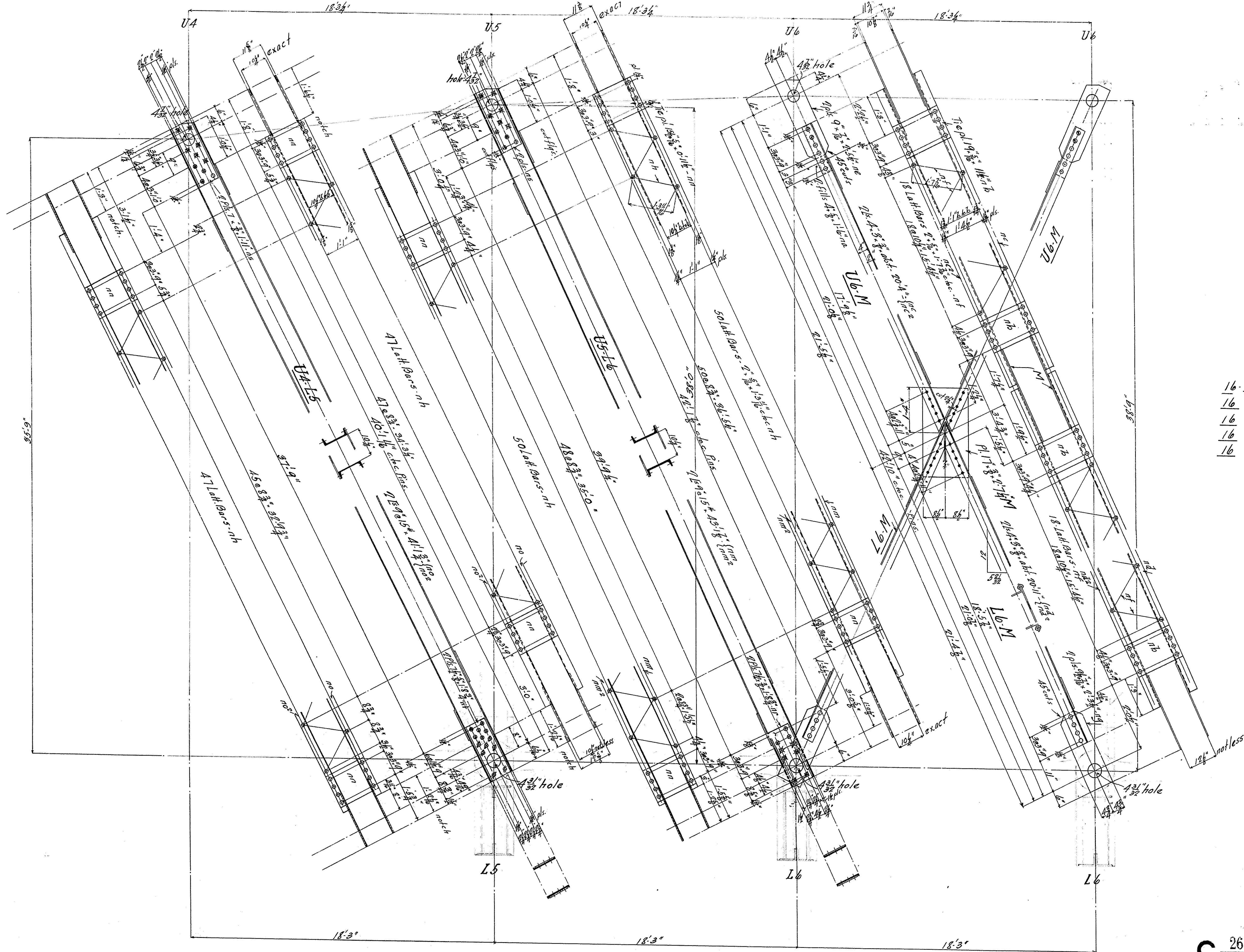
Posts.
Four 237 ft. 3 in. Spans, State Bridge
over Susquehanna River
Ulster, Bradford Co., Penna.

BUILT BY
C 261 THE PENNSYLVANIA STEEL CO.
15 Bridge & Construction Dep't.
Steelton, Pa.

PAINT: The coat of Linseed Oil white oil is hot.
One coat of Dixons Graphite paint or any other paint equal in
quality to the above named and satisfactory to the engineer

Scale 3/4" = 1 ft.
Made by J. H. H.
Traced by J. H. H.
Checked by RUG. 1-28-05
In charge: R. W. R. 1-28-05
Bill sheets 150-151

4784



REQUIRED LIST		
16	Diagonals	U6-M
16	"	L6-M
16	"	PL5-M
16	"	U5-L6
16	"	U4-L5

Main Truss Diagonals
 Four 237 ft. 3 in. Spans, State Bridge
 over Susquehanna River
 Ulster, Bradford Co., Penna.

BUILT BY

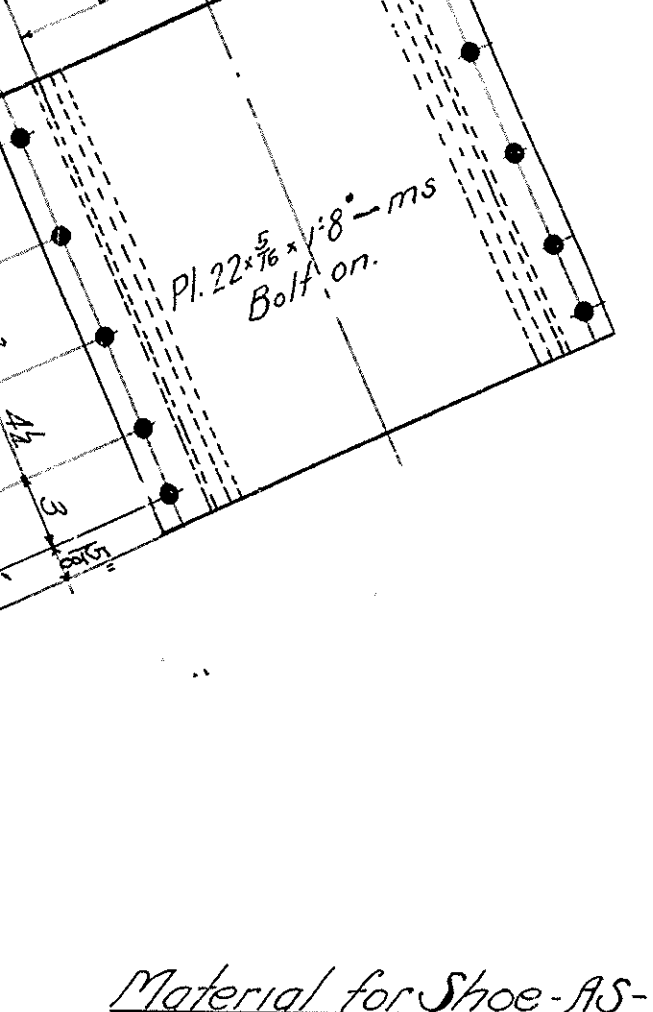
C 261 THE PENNSYLVANIA STEEL CO.
 14 Bridge & Construction Dep't.
 Steelton, Pa.

CHIEF DRAFTSMAN
 Machine surfaces on coat of white lead & fallow.
 One coat of line red while oil is hot.
 One coat of black iron paint or any other paint equal in
 quality to the above named and satisfactory to the engineer.

Revised Jan. 30th 1907

Scale 1/4" = 1 ft.
 Made by
 Traced by
 Checked by
 In charge
 Will show 140-141

783



Material for Shoe-Abs-

1 L. - $6 \times 4 \times \frac{1}{2}$ - $2'6''$ - mt

1 L. $6 \times 4 \times \frac{1}{2}$ - $2'6''$ - mt^2

2 Ls. - $6 \times 4 \times \frac{1}{2}$ - $2'6''$ - mt^3

2 Ls. - $3 \times 2 \frac{1}{2} \times \frac{5}{16}$ - $1'8\frac{1}{2}''$ - mu

4 Diaph L. $3 \times 3 \frac{1}{2} \times 0'7 \frac{1}{2}$ } $\left\{ \begin{matrix} mw \\ mw^2 \end{matrix} \right.$

1 " Pls. $7 \frac{1}{2} \times 1 \frac{1}{2} \times 1'2 \frac{1}{2}''$ - my

2 Tow Pls. - mb

4 Pls. $2 \frac{1}{2} \times \frac{9}{16} \times 2'6''$ } $\left\{ \begin{matrix} mw \\ mw^2 \\ mw^3 \\ mw^4 \end{matrix} \right.$

Sole Pl. $29 \times \frac{1}{2} \times 2'6''$ - ma

1 L. $6 \times 4 \times \frac{3}{8}$ - $1'6 \frac{1}{2}''$ - mob

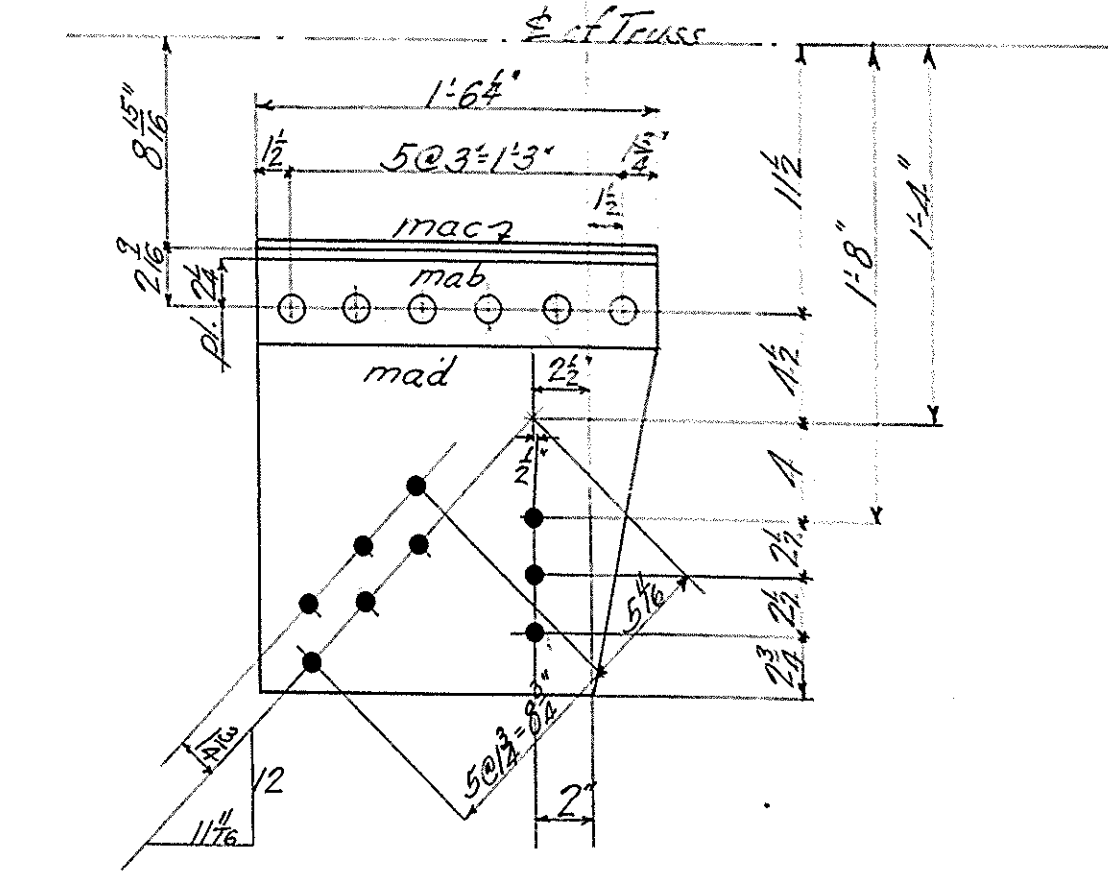
1 Fill - $4 \frac{1}{2} \times \frac{1}{2} \times 1'6 \frac{1}{2}''$ - mac

1 Pl. $18 \frac{1}{2} \times \frac{3}{8} \times 1'6 \frac{1}{2}''$ - mod

Required List.

8- Shoes	RS ^R
8- Roller Nests - RN	
8- Mas. Pls.	- MPI

8- Shoes	- ASL ^R
8- Mas. Pls.	- MP2



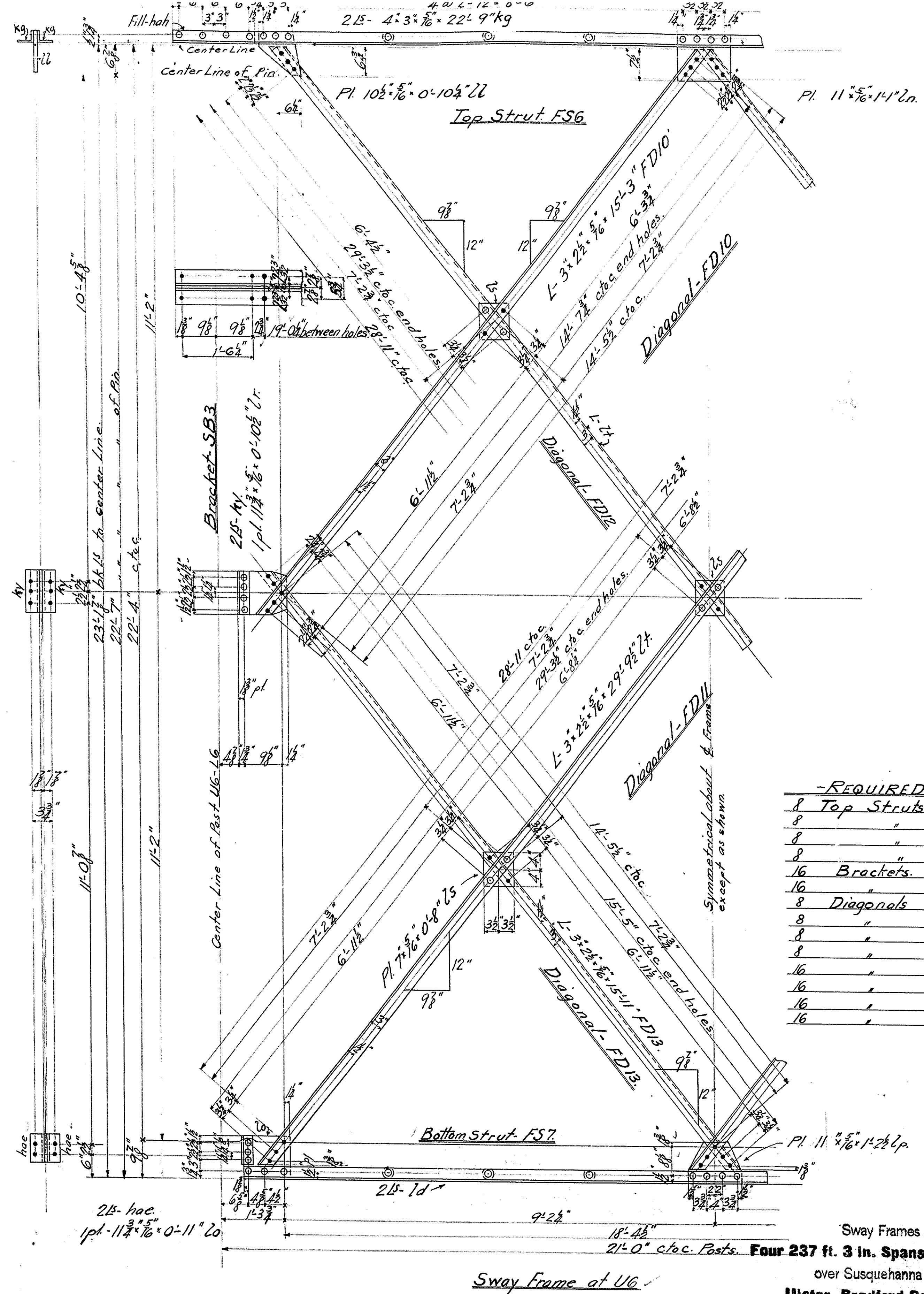
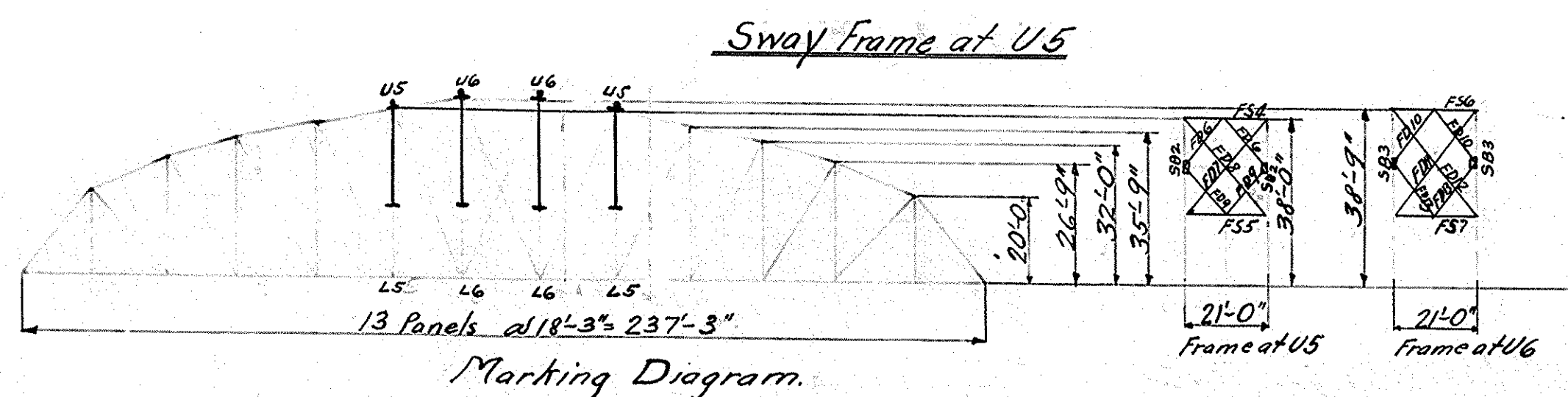
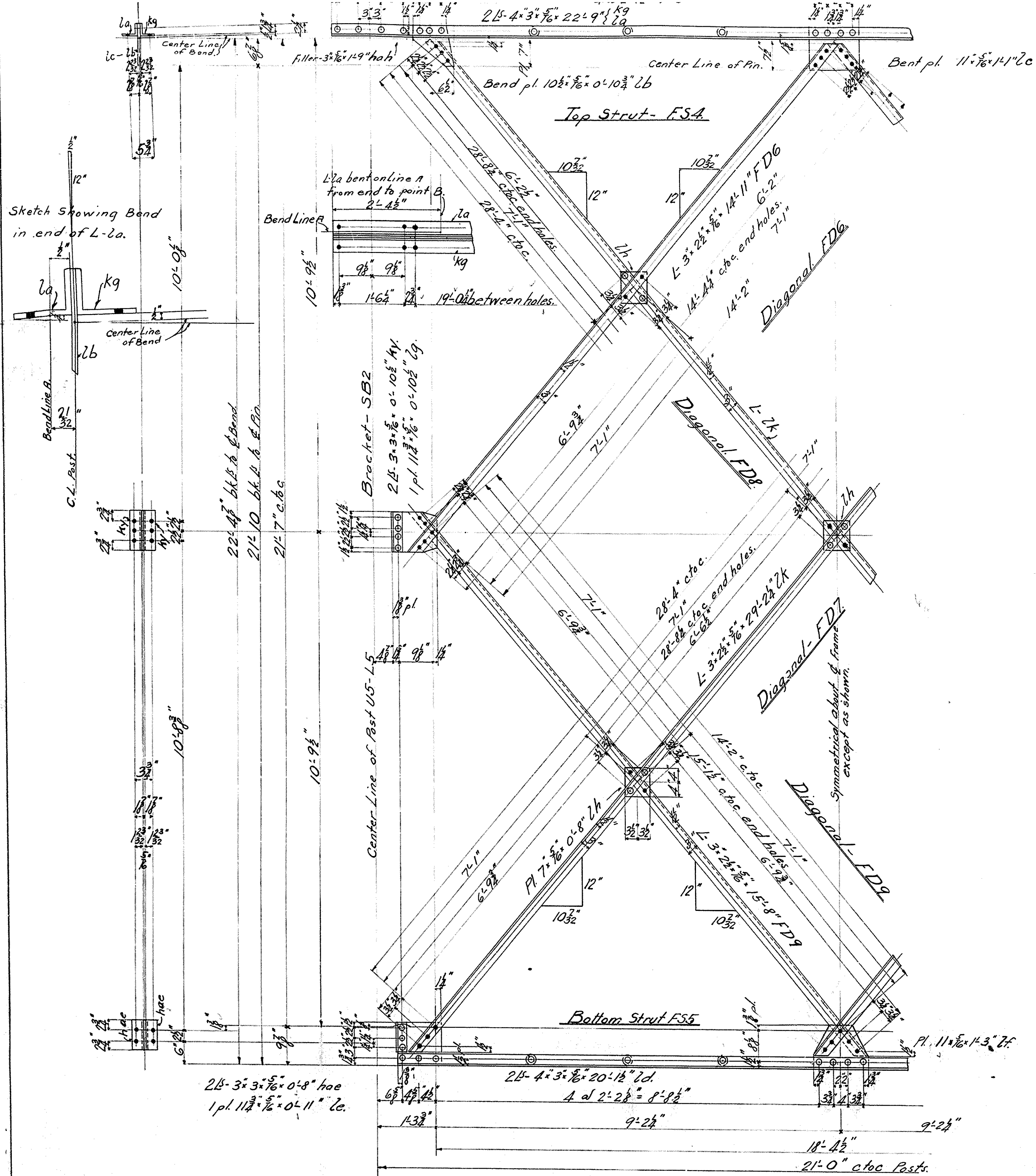
Shoes & Rollers
Four 237 ft. 3 in. Spans, State Bridge
 over Susquehanna River
Ulster, Bradford Co., Penna.

C 261 **THE PENNSYLVANIA STEEL CO.**
13 **Bridge & Construction Dep't.**
Steelton, Pa.

Inc. B
CHIEF DRAFTSMAN *2/2/20 (C)*

Machine surfaces one coat of white lead and tallow.
PAINT. One coat of Linseed Oil while oil is hot.
One coat of Dixons Graphite paint or any other paint equal in
quality to the above named and satisfactory to the engineer

Scale $\frac{1}{2}$ in. to it. Jan. 31, 1905
Made by *Emm*
Traced by: "
Checked by: *R.W.C. 1-31-05*
In charge: *R.W. Egerton.*
Bill sheets: *130-131*



-REQUIRED-

8	Top Struts	FS4
8	"	FS5
8	"	FS6
8	"	FS7
16	Brackets	SB2
16	"	SB3
8	Diagonals	FD7
8	"	FD8
8	"	FD11
8	"	FD12
16	"	FD6
16	"	FD9
16	"	FD10
16	"	FD13

Sway Frames
Four 237 ft. 3 in. Spans, State Bridge
over Susquehanna River
Ulster, Bradford Co., Penna.

BUILT BY
C 261 THE PENNSYLVANIA STEEL CO
Bridge & Construction Dep't
Steelton, Pa.

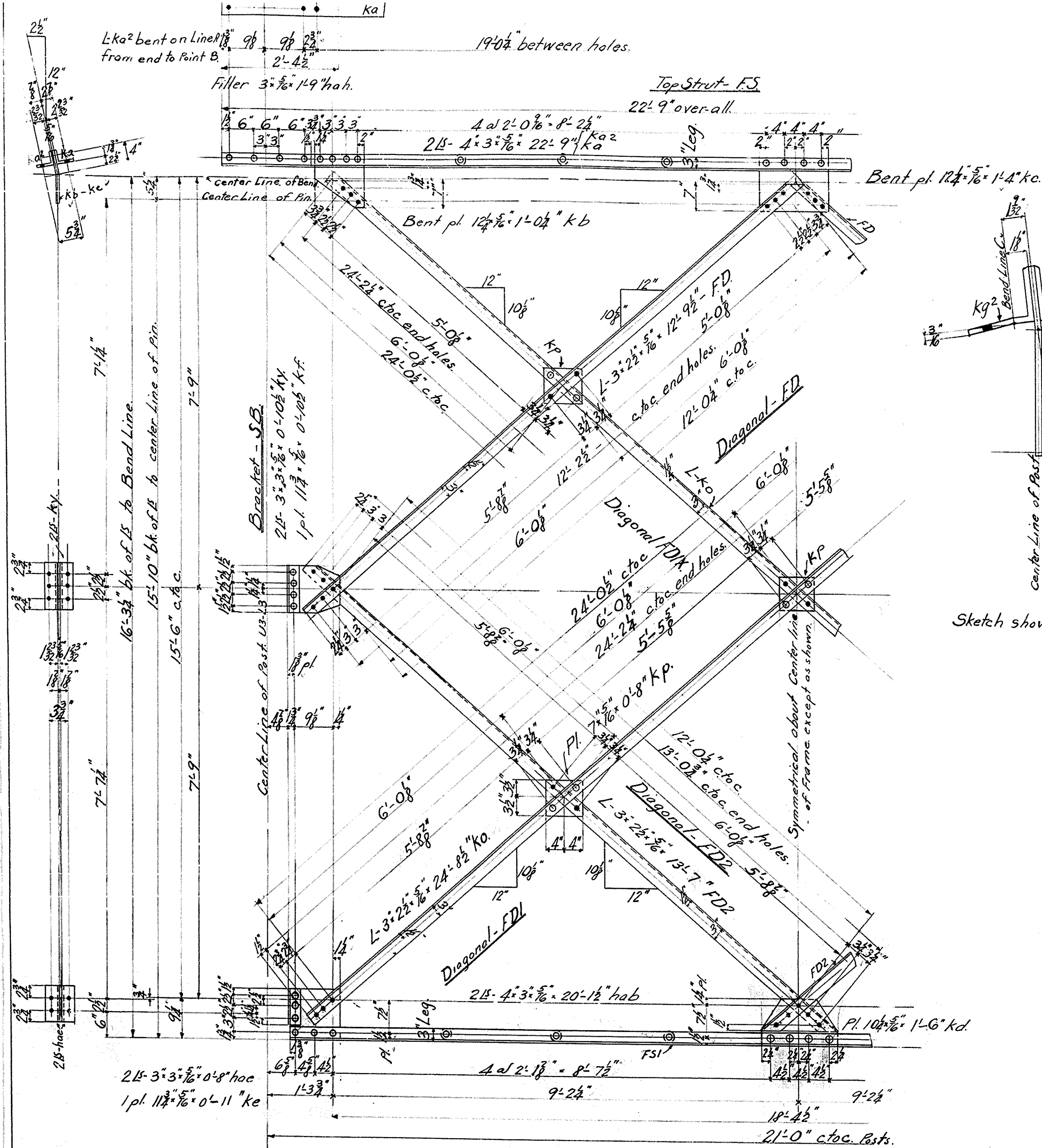
Scale 3/4" = 1' Jan. 14 1905

Made by J. J. Gaudin

Traced by R. B. 1-14-05

In charge: R. A. Elbert

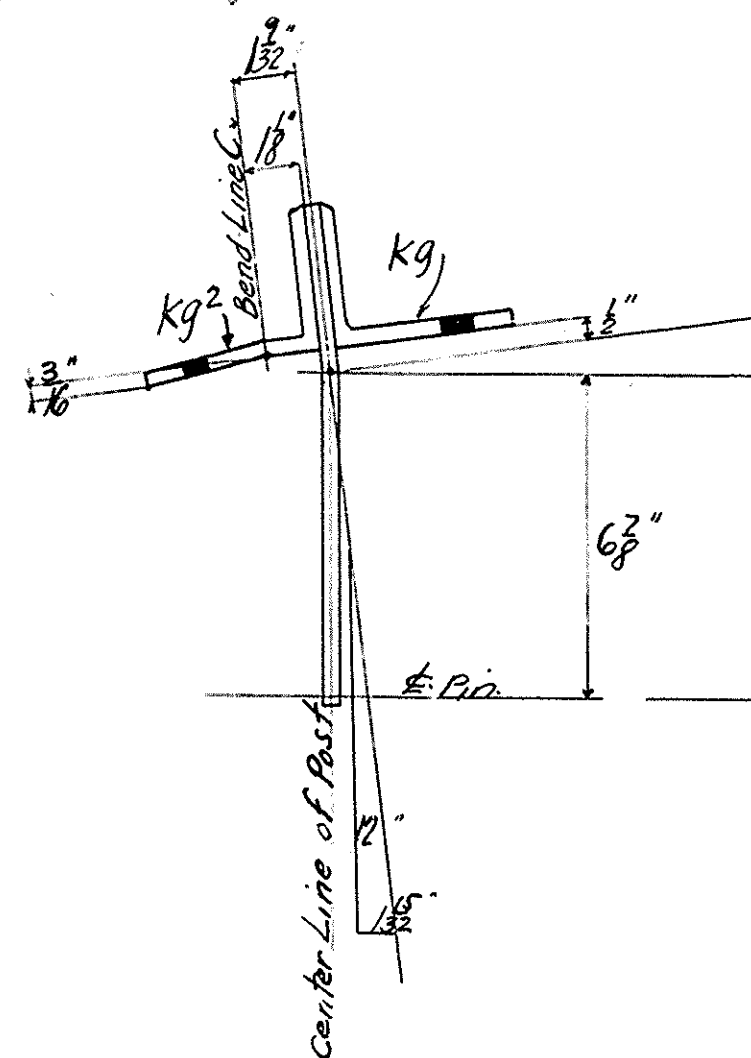
SHOP PAINT One coat of Li-seed Oil while oil is hot.
One coat of Dioxon Graphite paint or any other paint equal in quality to the above named and satisfactory to the engineer.



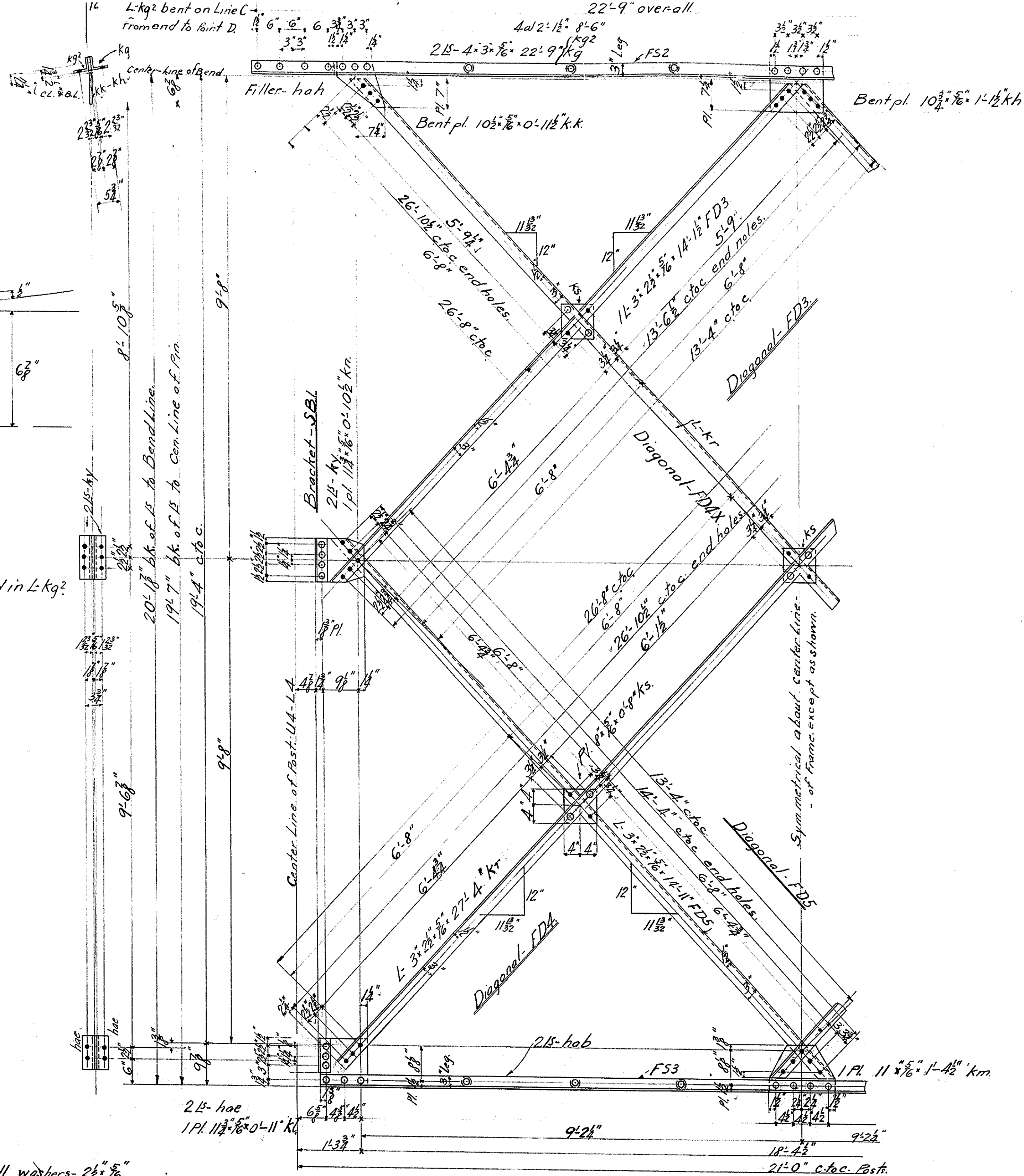
Bottom Strut - FS1

Sway Frame at U3

Sketch showing bend in L-kq?



All washers - 2 1/2 x 5/8"



Bottom Strut - FS3

Sway Frame at U4

REQUIRED	
8	Top Struts FS
8	Bottom " FS1
8	Top " FS2
8	Bottom " FS3
16	Brackets SB
16	" SBI
16	Diagonals FD
8	" FDI
16	" FD2
16	" FD3
8	" FDA
16	" FDS
8	" FDIX
8	" FDAX

Shop Paint: One coat of Linseed Oil while oil is hot.
One coat of Dixon's Graphite paint or any other paint
equal in quality to the above named and satisfactory
to the engineer.

Sway Frames
Four 237 ft. 3 in. Spans, State Bridge
over Susquehanna River
Ulster, Bradford Co., Penna.

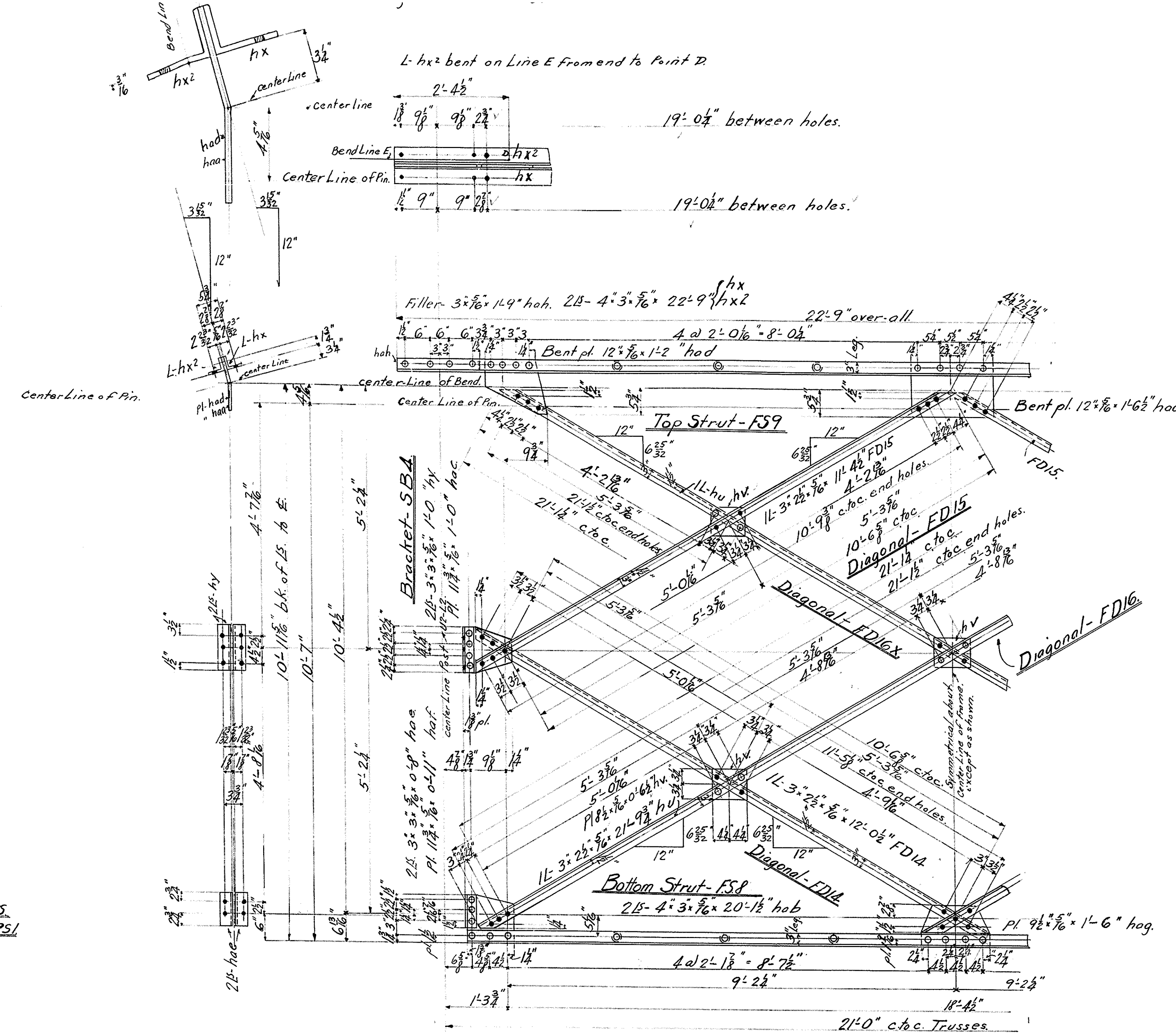
BUILT BY

C 261 THE PENNSYLVANIA STEEL CO
11 Bridge & Construction Dep't
Steelton, Pa.

Scale 3/4" = 1' Jan. 14 1905

Made by J.S. 12/29/04
Traced by J.S.
Checked by R.W. 1-14-05
In charge: R.W. Elgerton.

4780



Sway Bracing at U2.

All washers $2\frac{1}{2} \times \frac{5}{16}$.

<u>REQUIRED</u>	
2 Pectoral Struts	PS1
6 " "	PS
16 " Brackets	PB
8 Top Struts	FS9
8 Bottom Struts	FS8
16 Brackets	SB4
16 Diagonals	FD15
16 " "	FD14
8 " "	FD16
8 " "	FD16X.

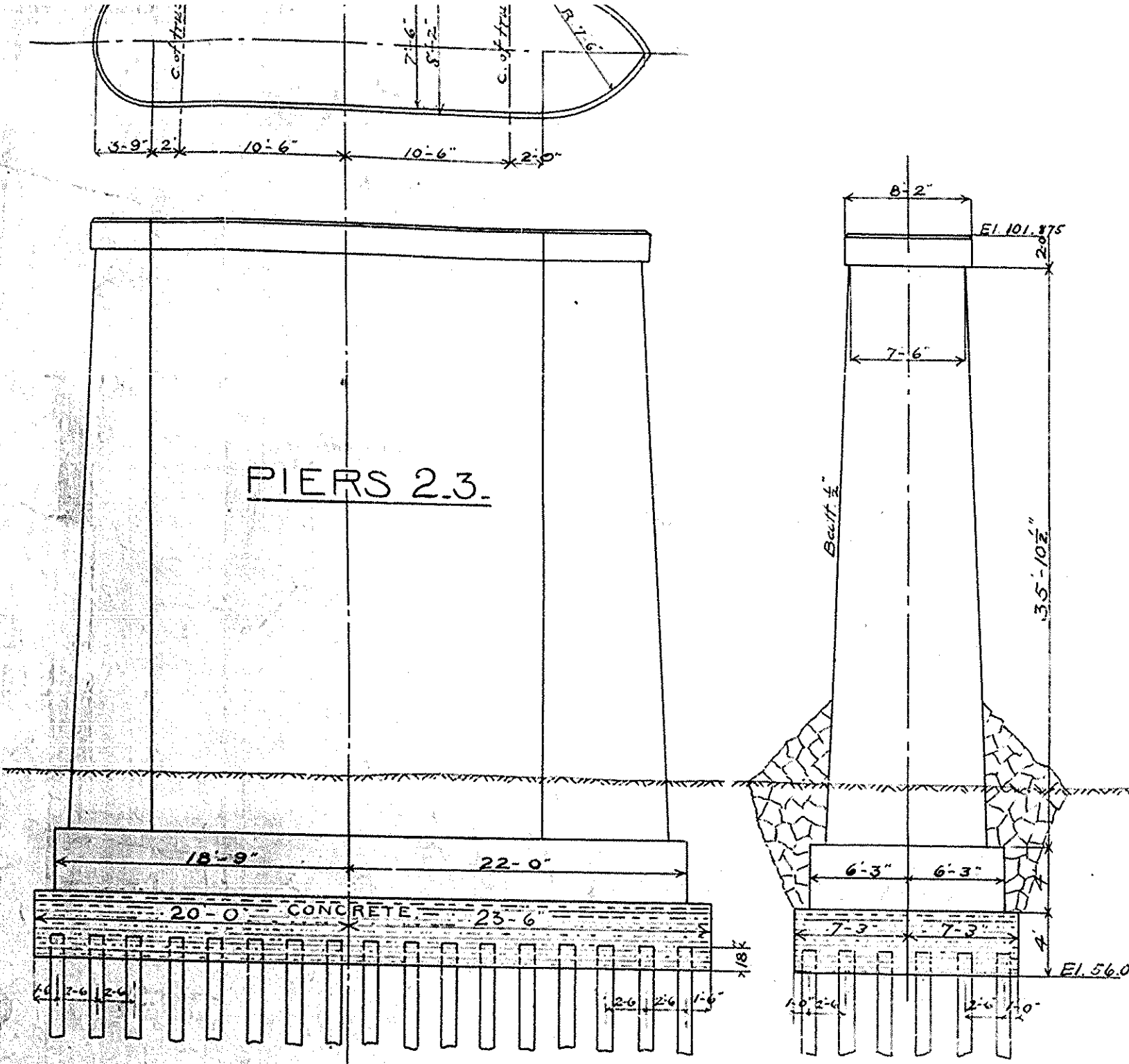
Portal & Sway Frames
Four 237 ft. 3 in. Spans, State Bridge
 over Susquehanna River
Ulster, Bradford Co., Penna.

BUILT BY
C 261 THE PENNSYLVANIA STEEL CO
10 Bridge & Construction Dep't.
Steelton, Pa.

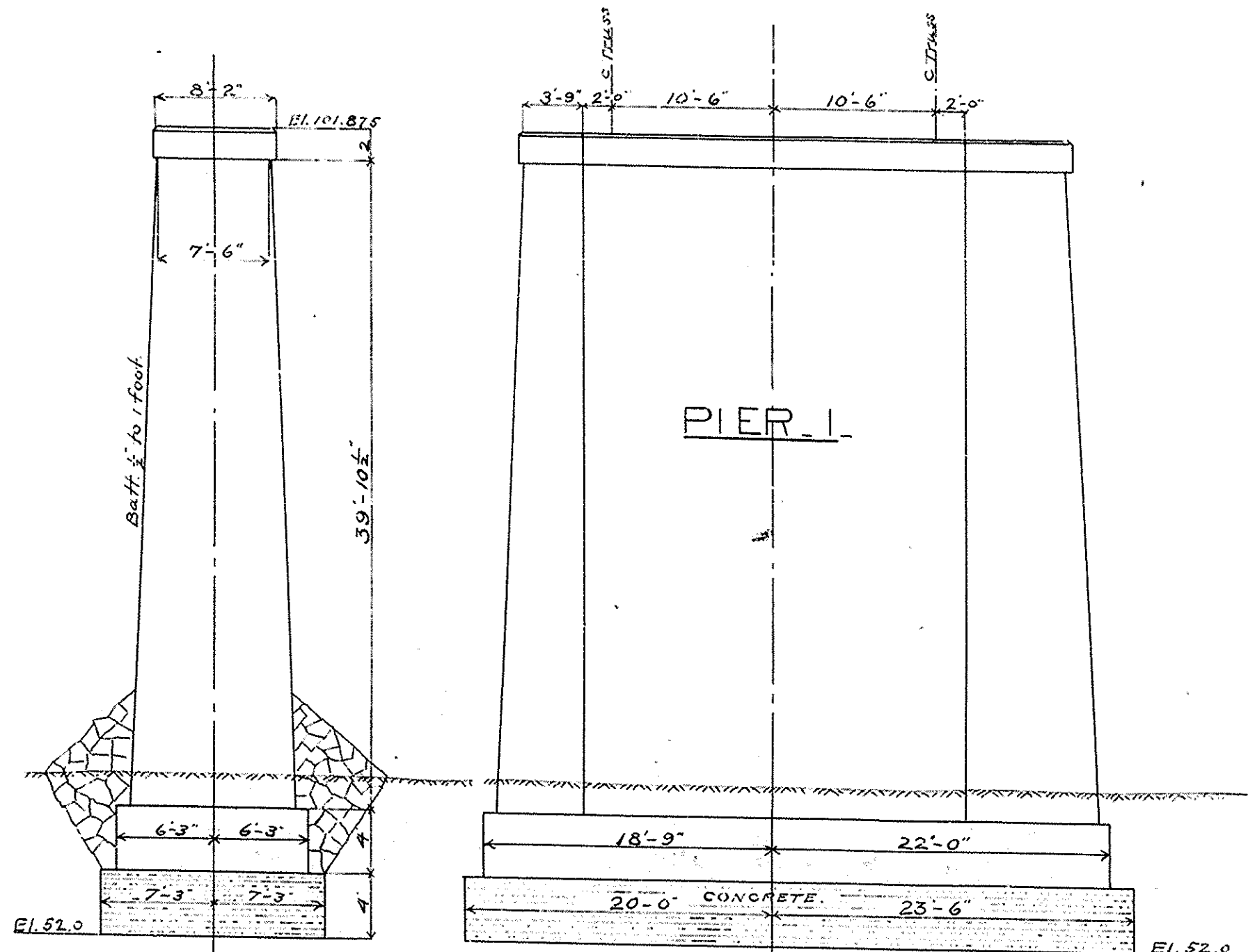
Scale $\frac{3}{4}$ " in. to a ft. Jan. 16 1905
Made by }
Traced by: } S. 12/27/04.
Checked by: *Ruf.* 1-16-05
in charge: *R. W. Edgerly*

CHIEF DRAFTSMAN *eng 2/2-2/2/2*

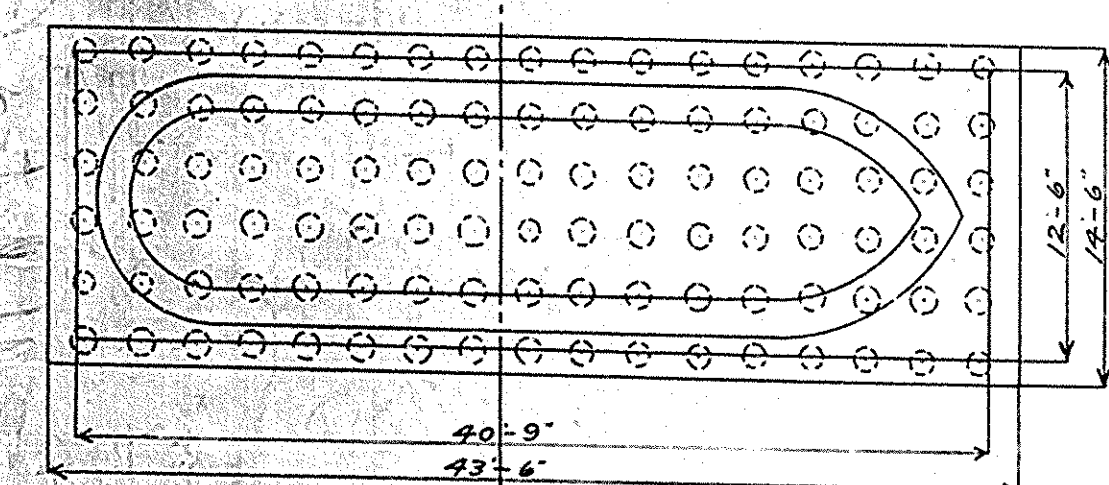
SEOP PAINT One coat of Linseed Oil while oil is hot.
One coat of Dixons Graphite paint or any other paint equal in quality to that used on the other side of the sheet.



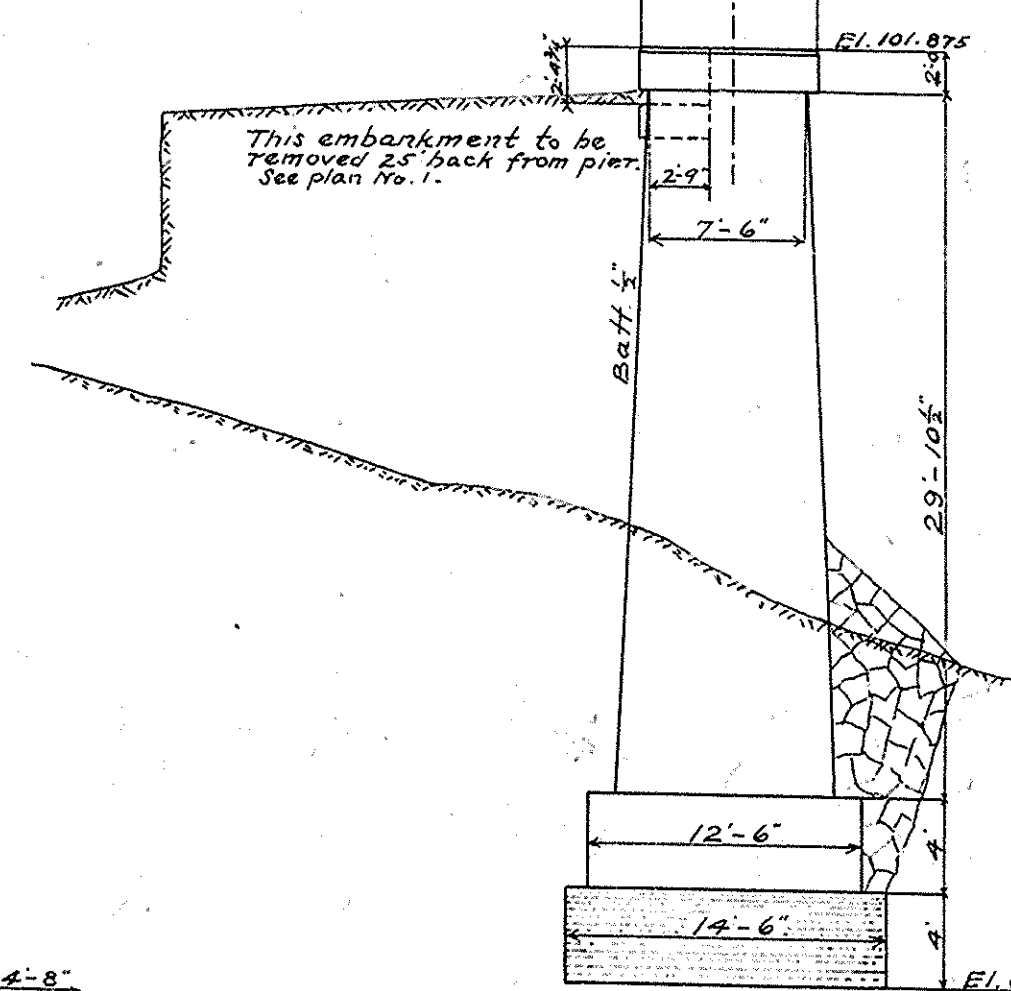
SIDE ELEVATION - PIERS 2-3. END ELEV. PIERS 2-3.



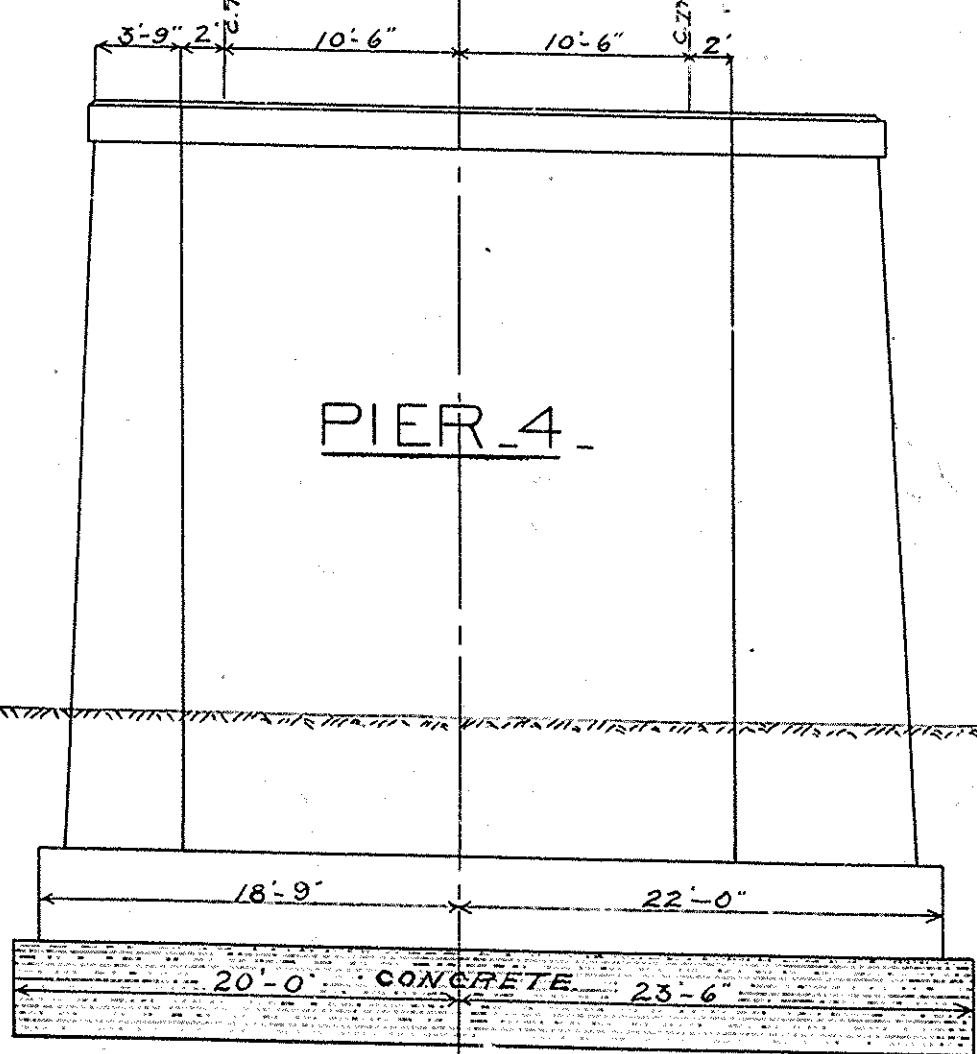
END ELEV. PIER 1. SIDE ELEVATION PIER 1.



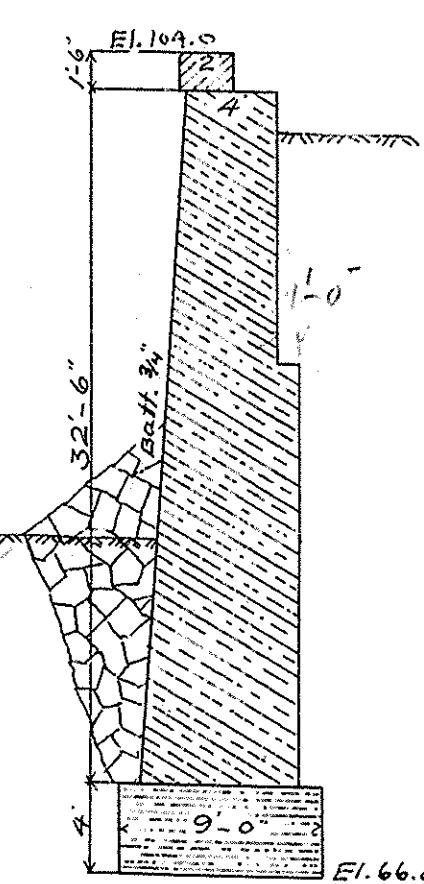
FOUNDATION FOR PIERS 1-2-3.



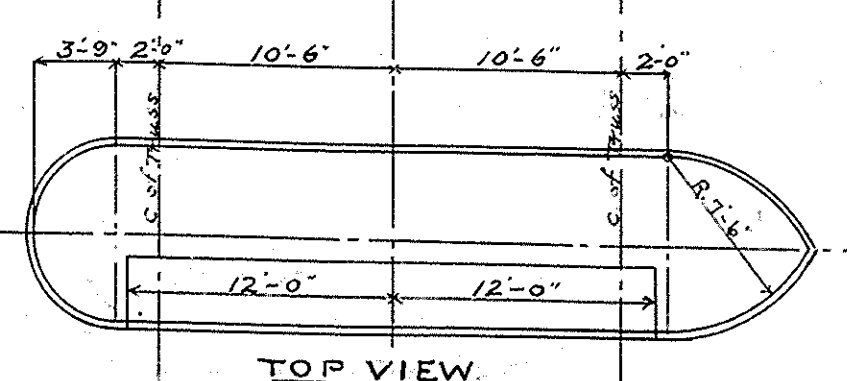
END ELEV. PIER 4.



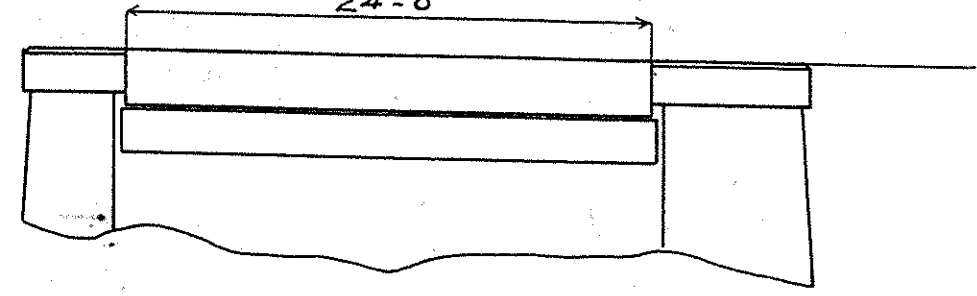
SIDE ELEVATION PIER 4.



SECTION THRO. WING WALL.



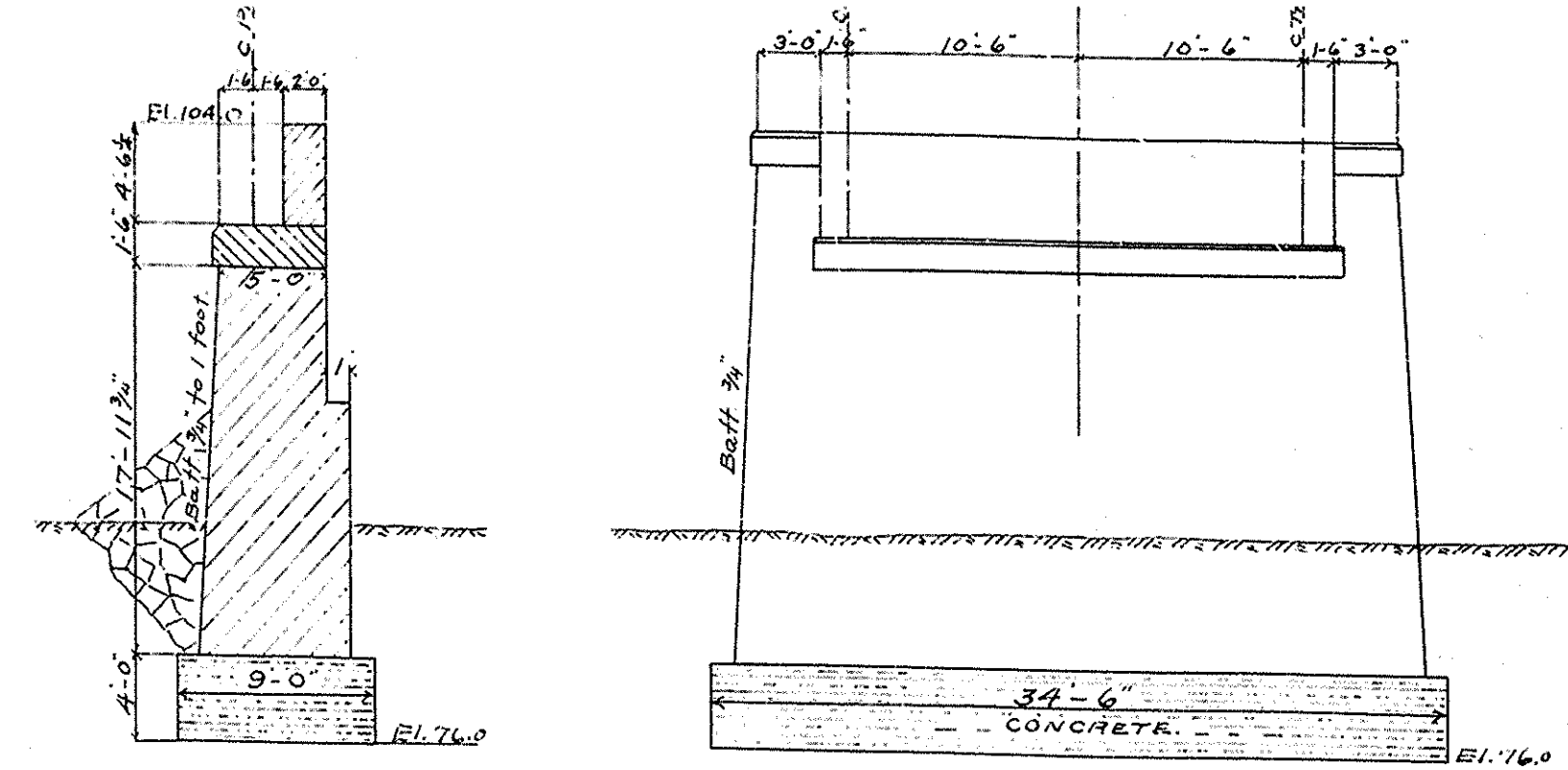
TOP VIEW.



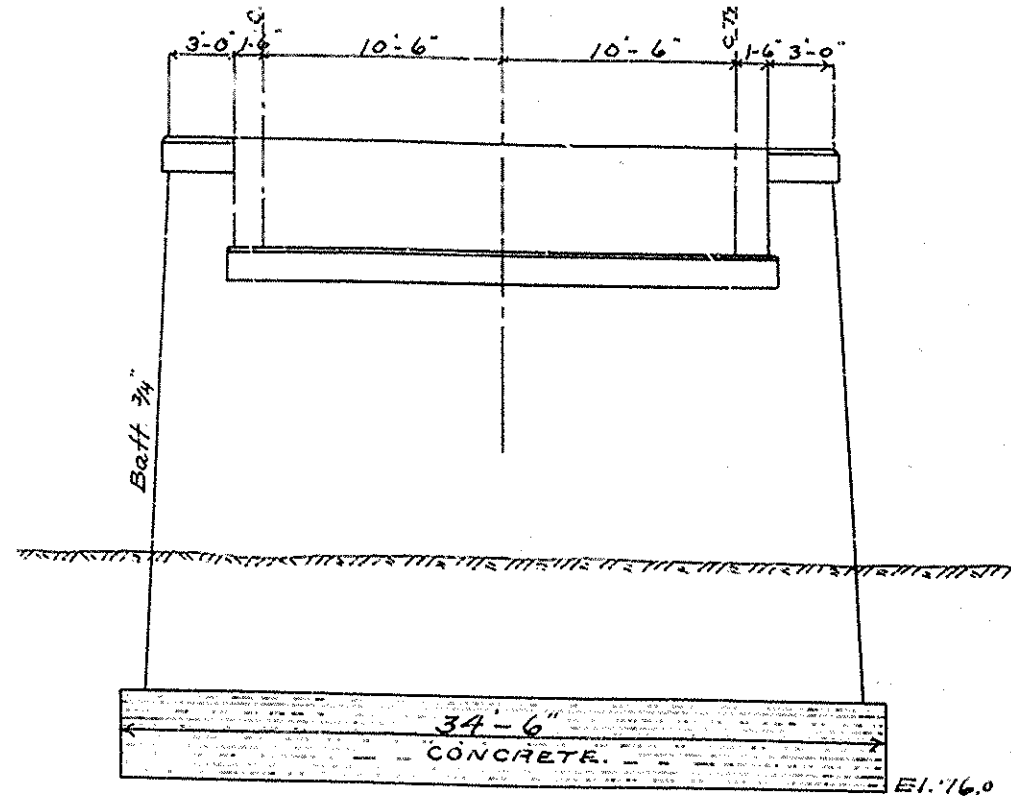
ELEVATION.

STATE BRIDGE
OVER
SUSQUEHANNA RIVER
AT
ULSTER
PA.
MASONRY PLAN

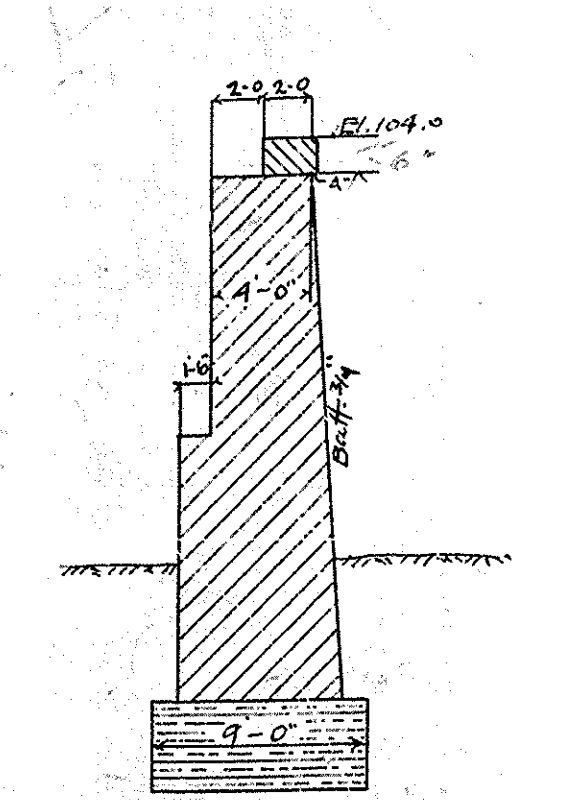
SCALE - 1/4" = 1'-0"



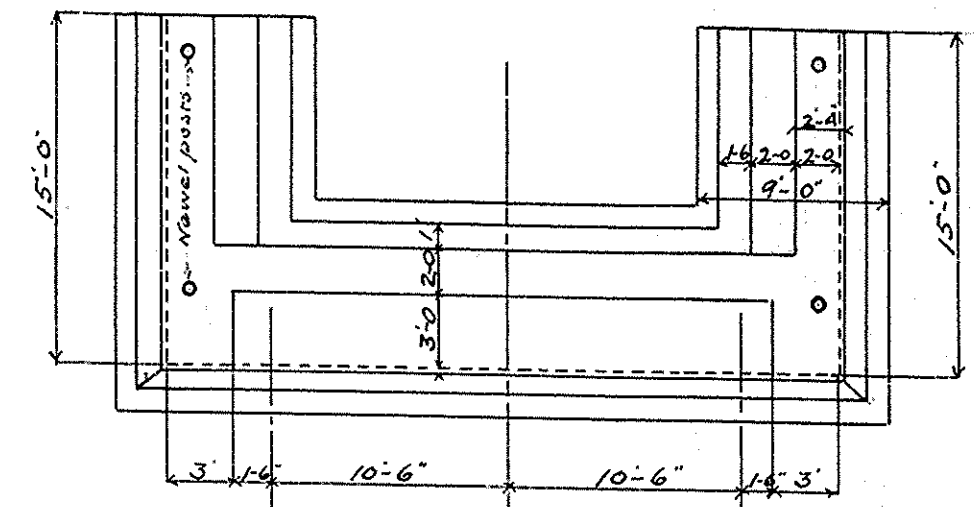
SECTION THRO. FRONT WALL.



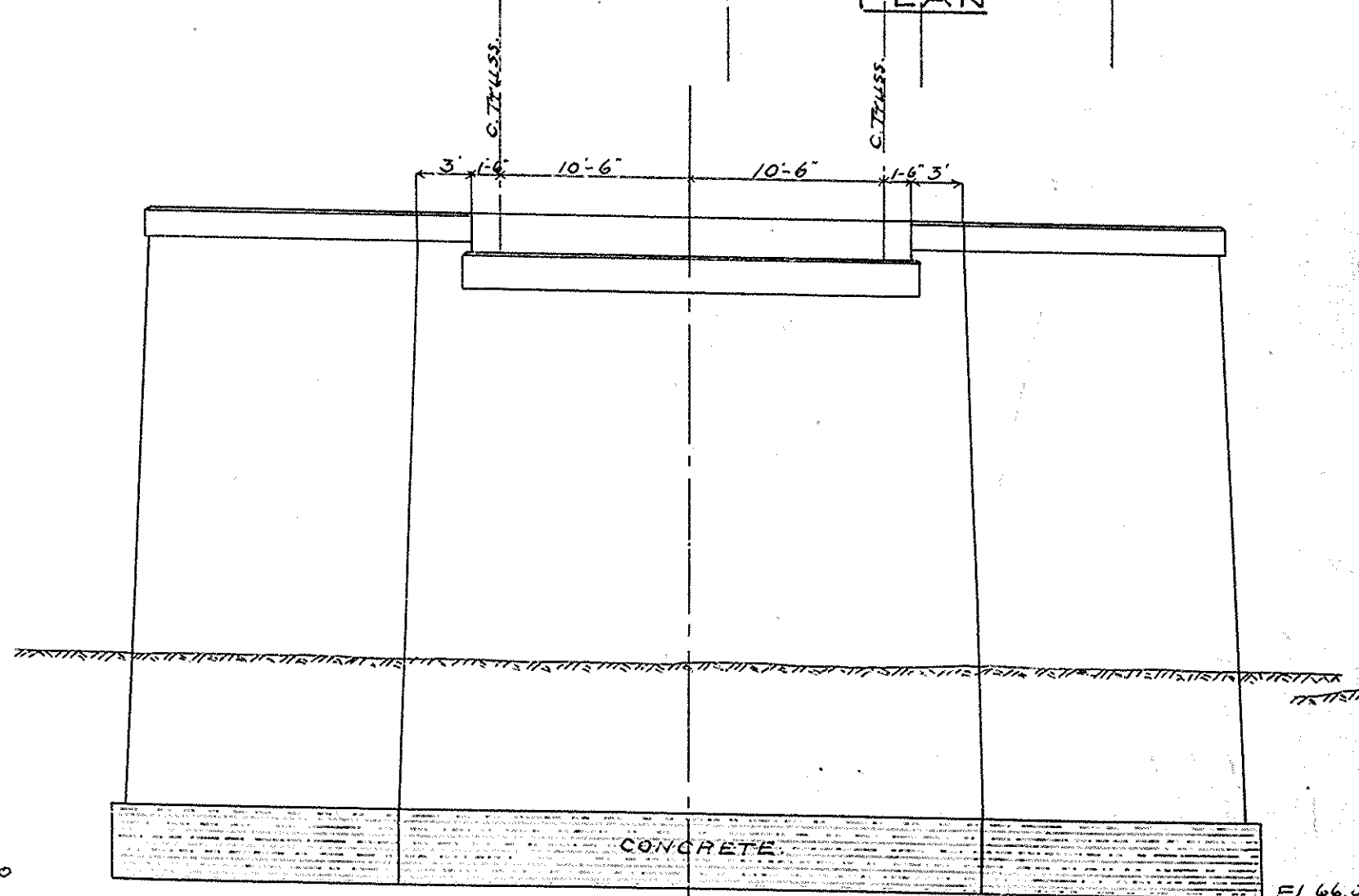
FRONT ELEVATION
EAST ABUTMENT



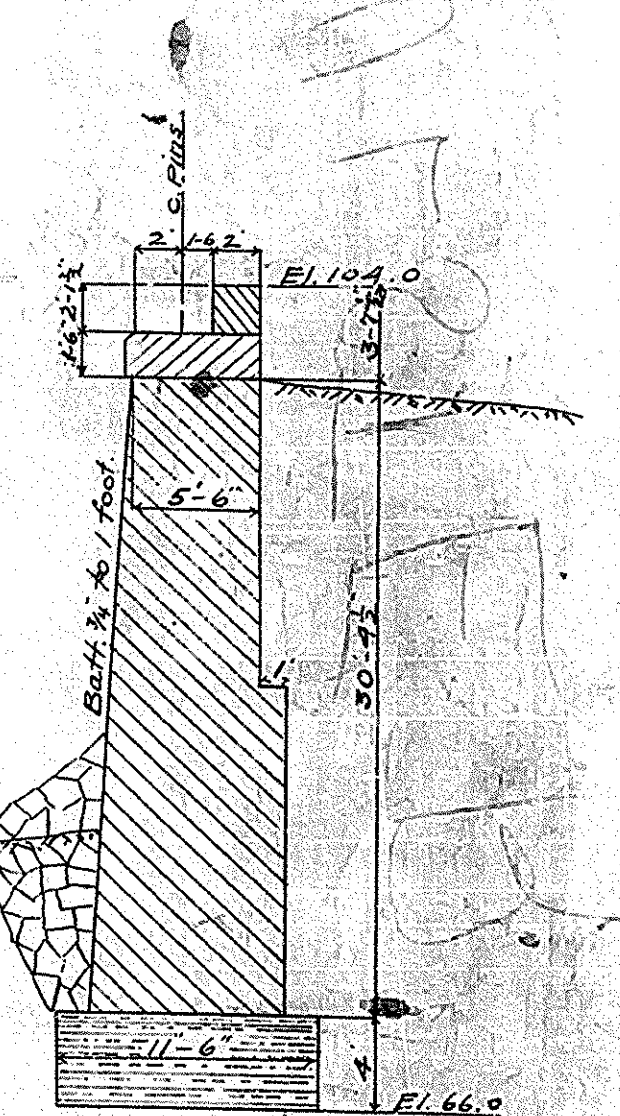
SECTION THROUGH
WING WALL.



PLAN.

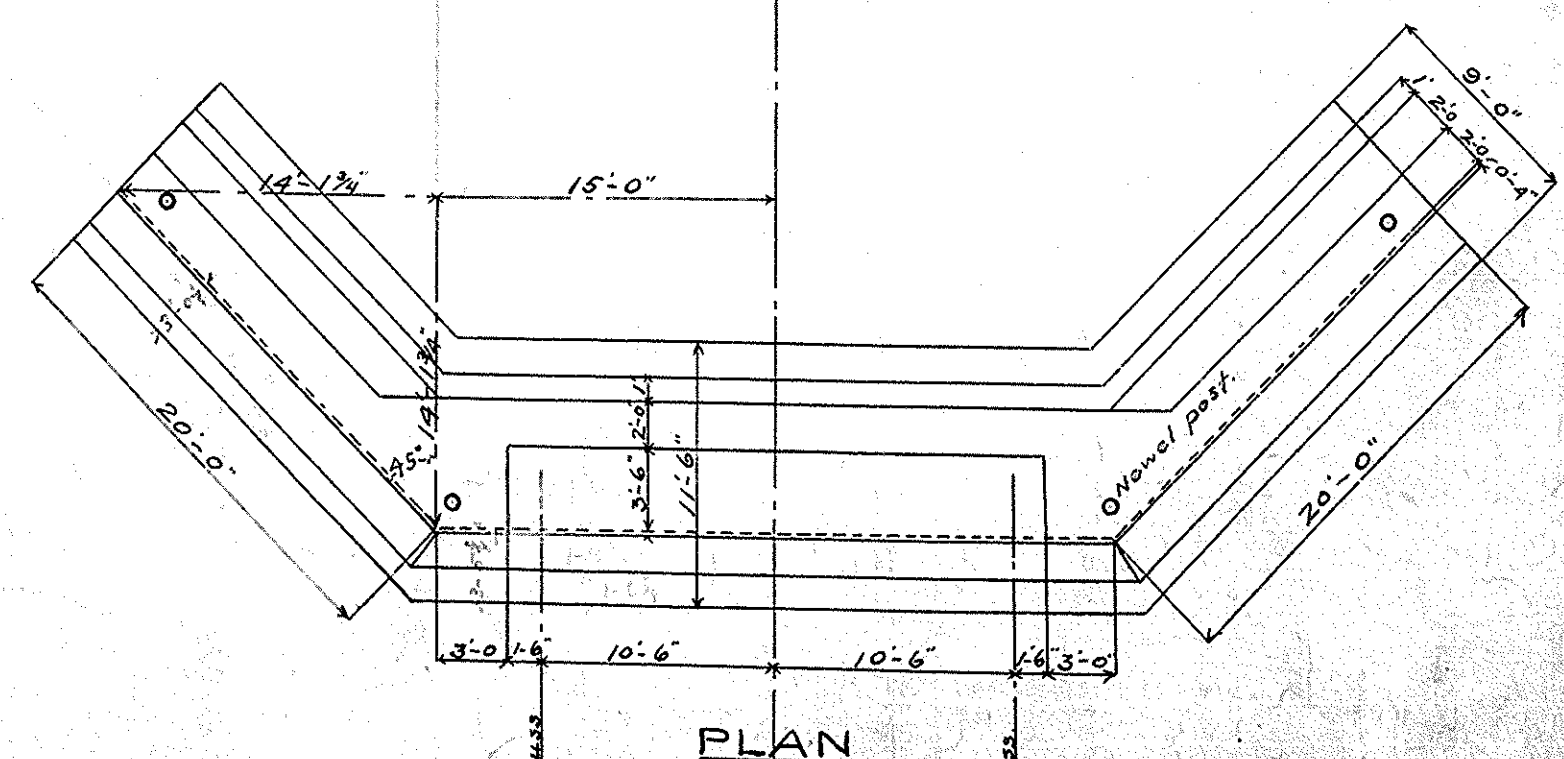


FRONT ELEVATION



SECTION THRO. FRONT WALL.

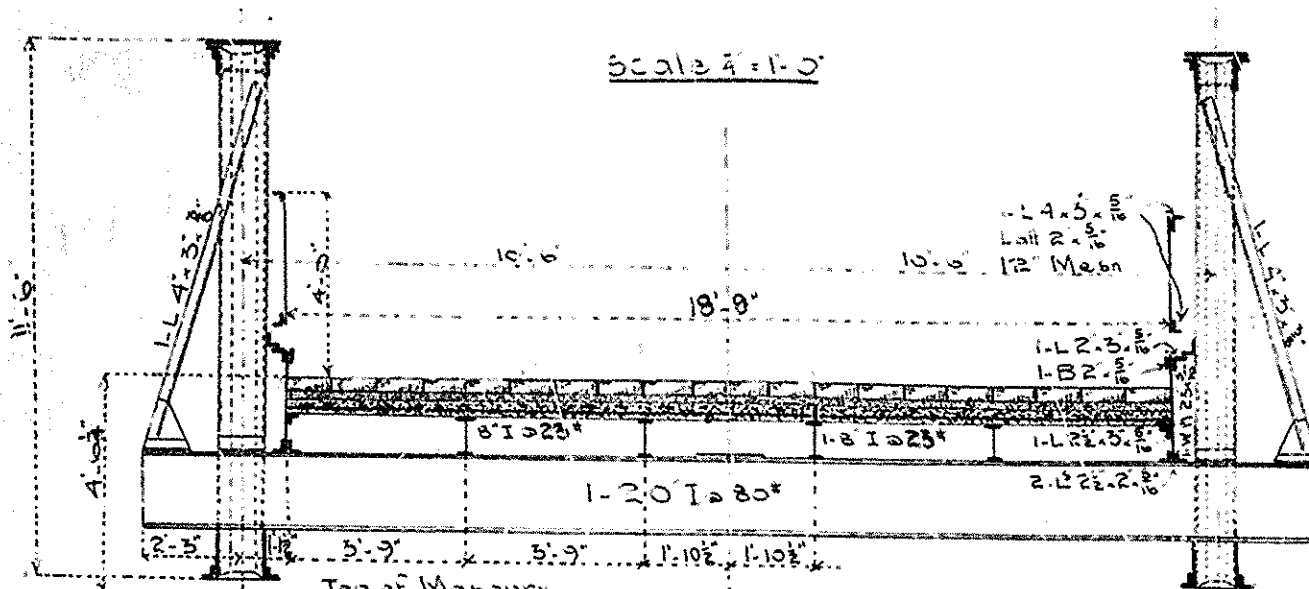
WEST ABUTMENT



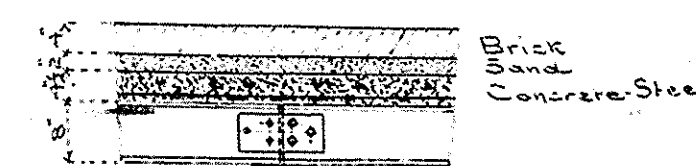
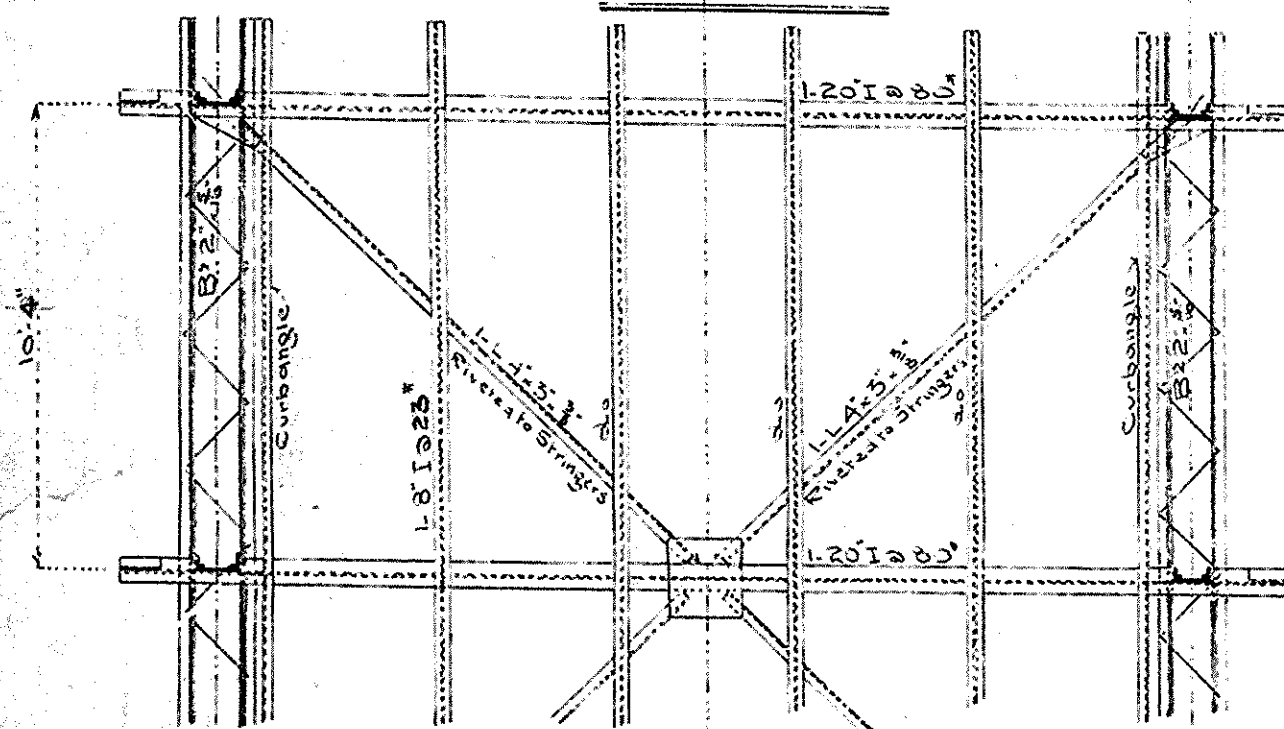
PLAN.

APPROVED JUNE 7TH 1904
Wm E. Stott
Jesse B. Public
Harrisburg, Pa.

HERMANN LAUB C.E.
LEWIS BLOCK, PITTSBURGH, PA.
MAY 19, 1904.

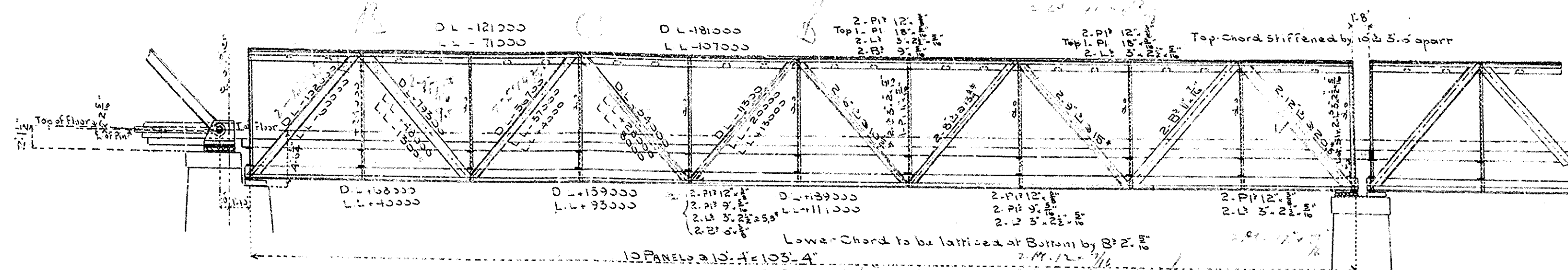


PLAN



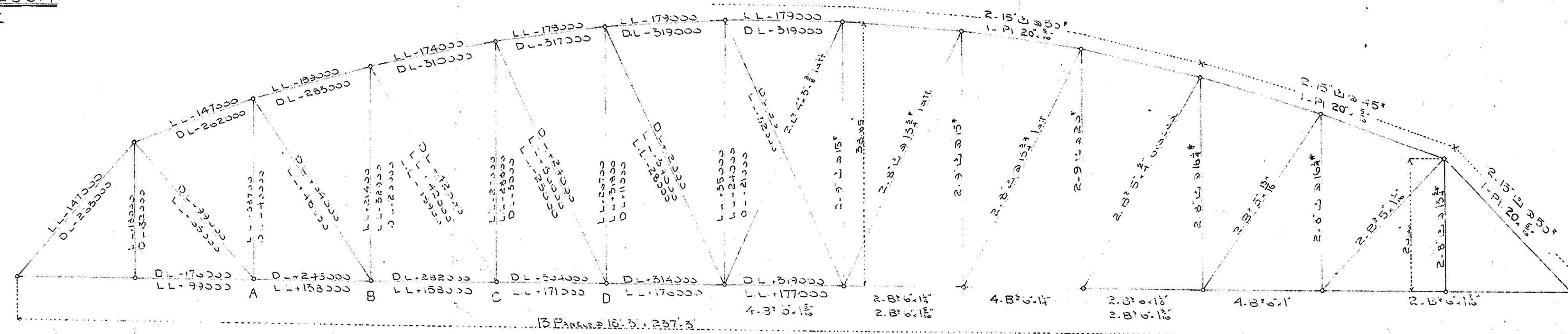
DETAIL OF FLOOR

Scale 1/8" = 1'-0"



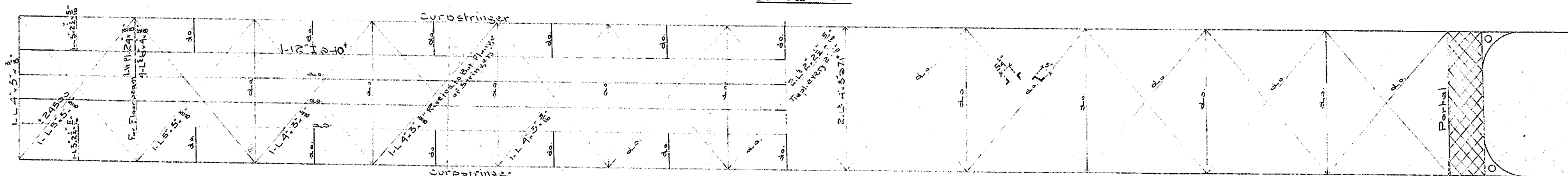
STRAIN AND SECTION-DIAGRAM FOR 103'-4\"/>

Scale 1/8" = 1'-0"



STRAIN AND SECTION-DIAGRAM FOR 237'-5\"/>

Scale 1/8" = 1'-0"

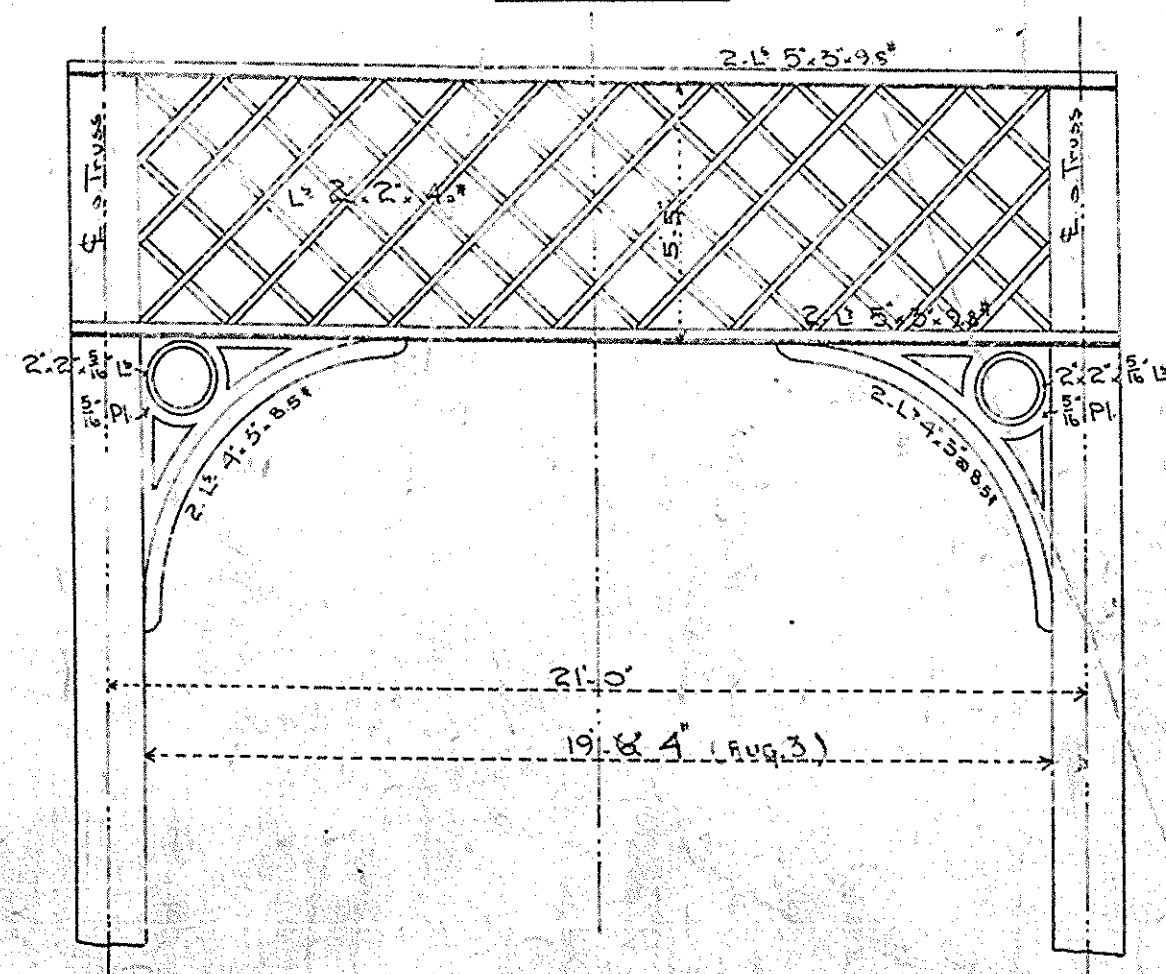


PLAN SHOWING BOTTOM AND TOP LATERAL BRACING

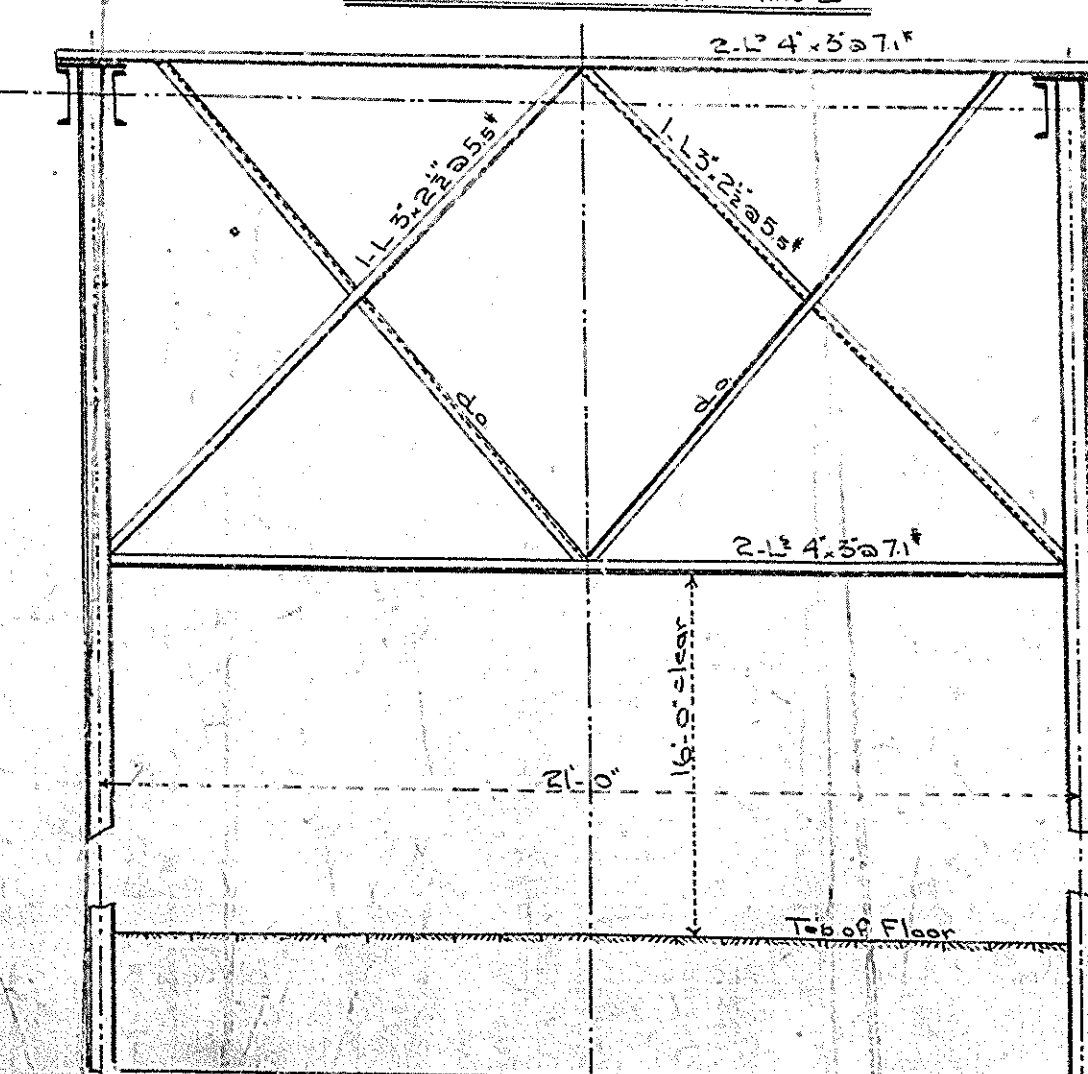
Scale 1/8" = 1'-0"

PORTAL FOR THROUGH-SPANS

Scale 1/4" = 1'-0"



CROSS-SECTION AT A AND B



Scale 1/4" = 1'-0"

CROSS SECTION OF THROUGH-SPANS AT CENTER AND AT C AND D

Scale 1/4" = 1'-0"

APPROVED JUNE 7TH 1904

John E. Stett
Lucy B. Pullie
James E. Kuntze
Hermann
Pa

STATE BRIDGE

OVER

SUSQUEHANNA RIVER AT ULSTER

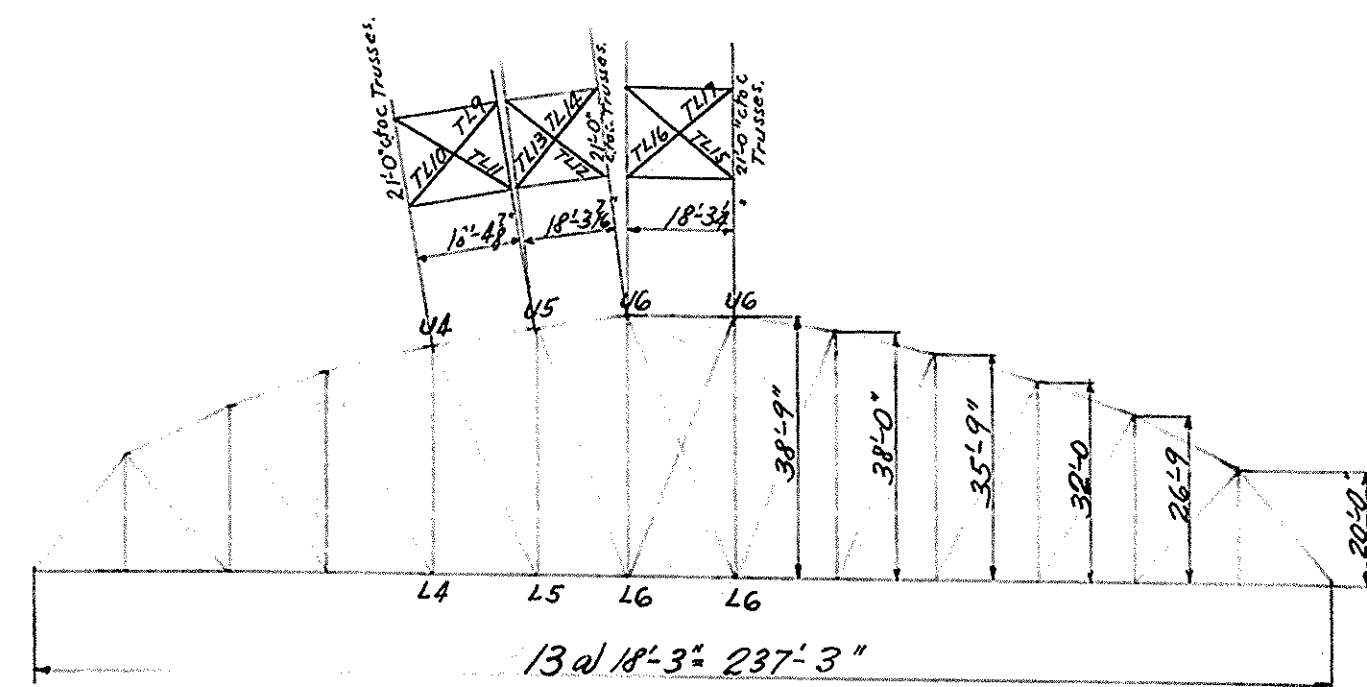
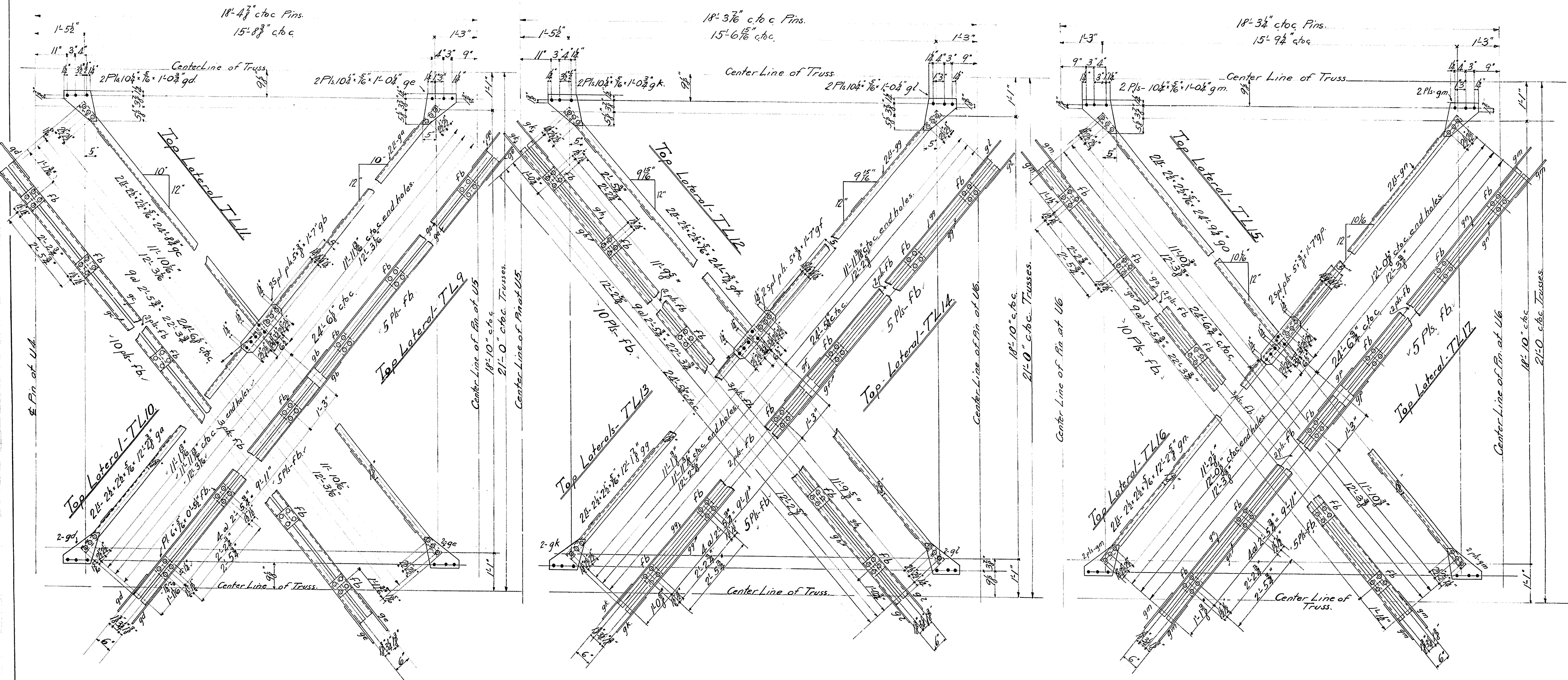
BRADFORD CO. PA

STRAIN AND SECTION-DIAGRAMS

Scales as marked on Drawing

Hermann Laub C.E.

Lewis Black - Pittsburg Pa.



Marking Diagram

REQUIRED	
8	Top Laterals TL9
8	" " TL10
8	" " TL11
8	" " TL12
8	" " TL13
8	" " TL14
4	" " TL15
4	" " TL16
4	" " TL17

CHIEF DRAFTSMAN

SHOP PAINT One coat of Linseed Oil while oil is hot.
One coat of Dixons Graphite paint or any other paint equal in quality to the above named and satisfactory to the engineer.

Top Laterals
Four 237 ft. 3 in. Spans, State Bridge
over Susquehanna River
Ulster, Bradford Co., Penna.

THE PENNSYLVANIA STEEL CO.
Bridge & Construction Dep't.
Steelton, Pa.

Scale 3/4" in. to 1 ft. Jan 13 1905

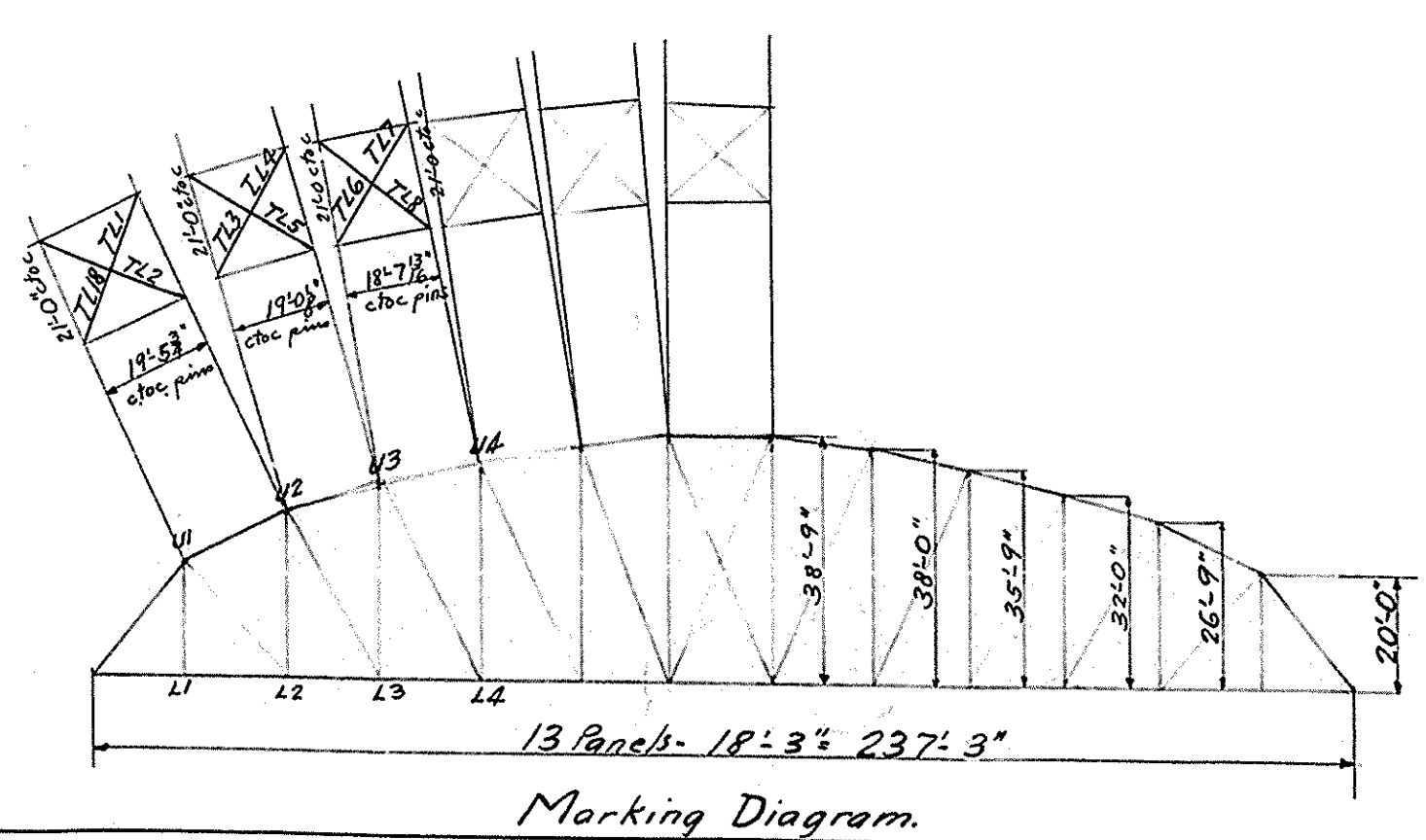
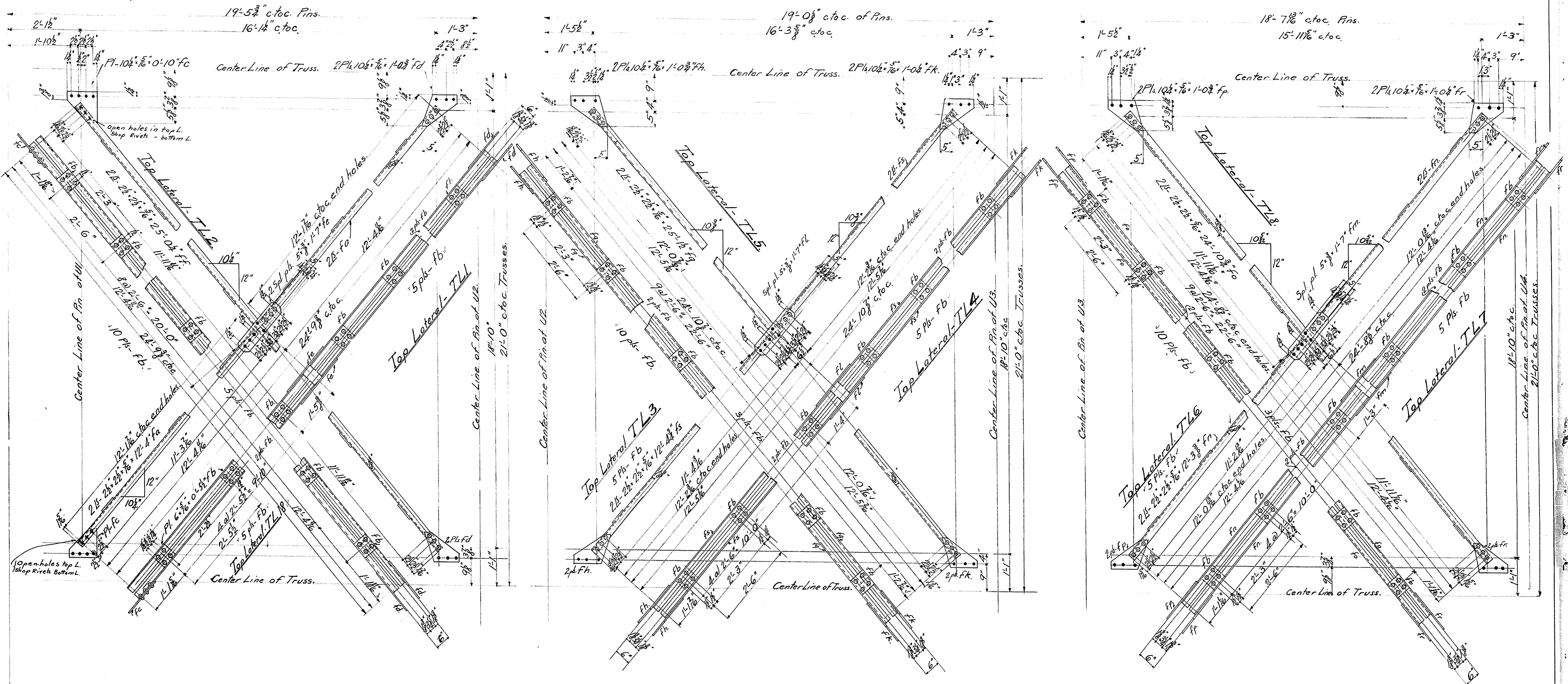
Made by: B. Jan 11-05

Drawn by: R. W. 1-13-05

In charge: R. W. Ebert

Full sheet on 21

4774



REQUIRED

8 Top Laterals	TL 18
8 " "	TL 1
8 " "	TL 2
8 " "	TL 3
8 " "	TL 4
8 " "	TL 5
8 " "	TL 6
8 " "	TL 7
8 " "	TL 8

CHIEF DRAFTSMAN

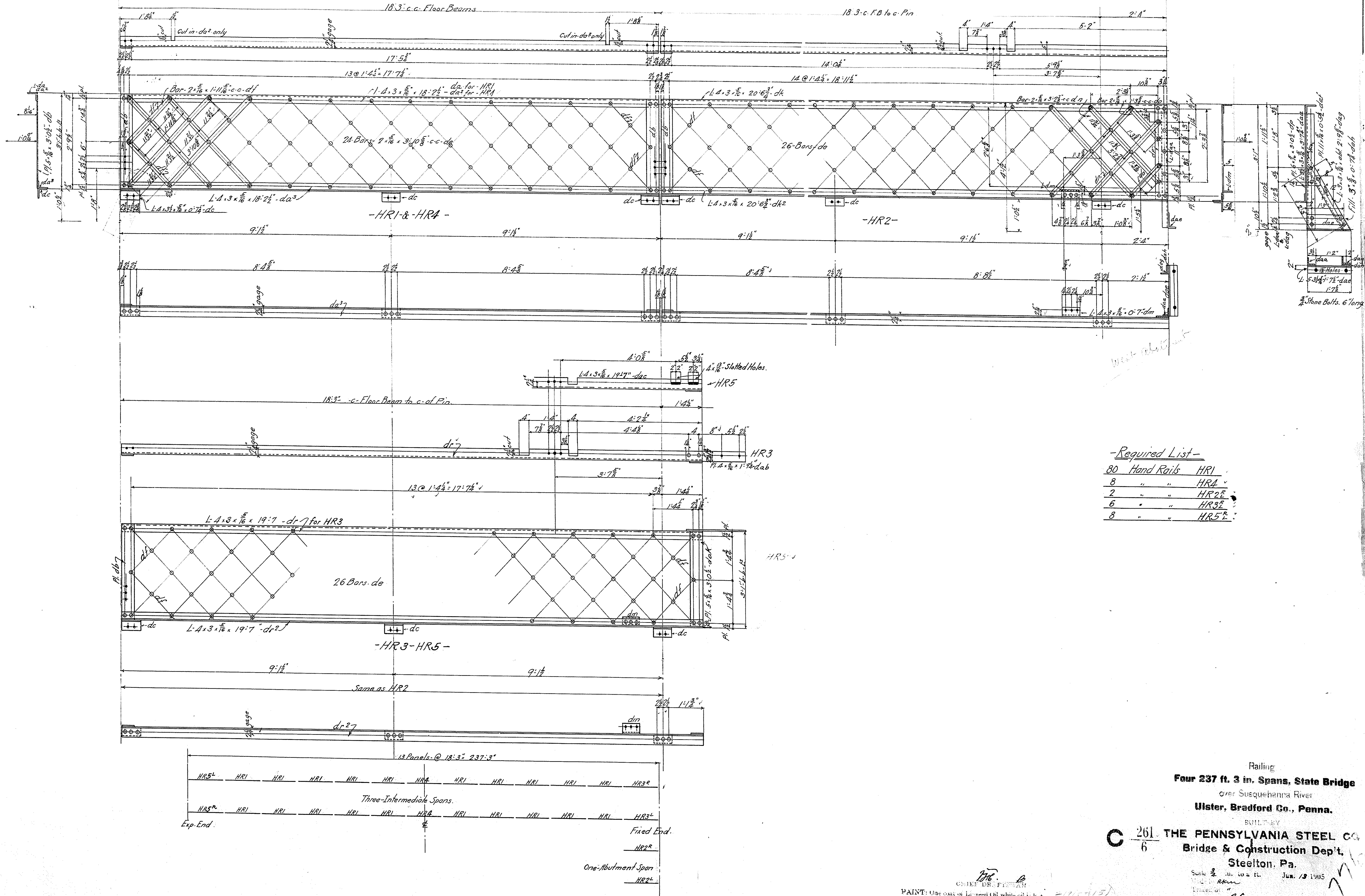
SHOP PAINT One coat of Linseed Oil white oil is hot.
One coat of Dixons Graphite paint or any other paint equal in quality to the above named and satisfactory to the engineer.

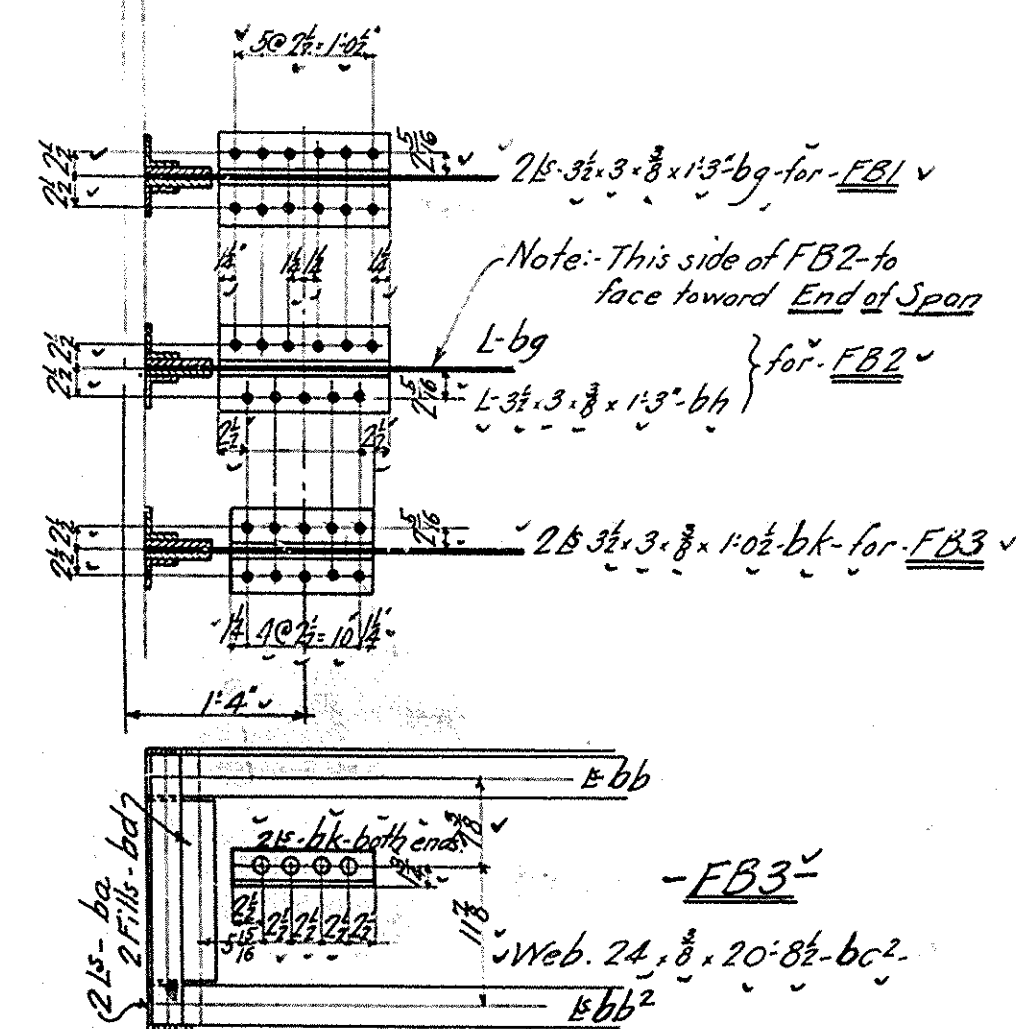
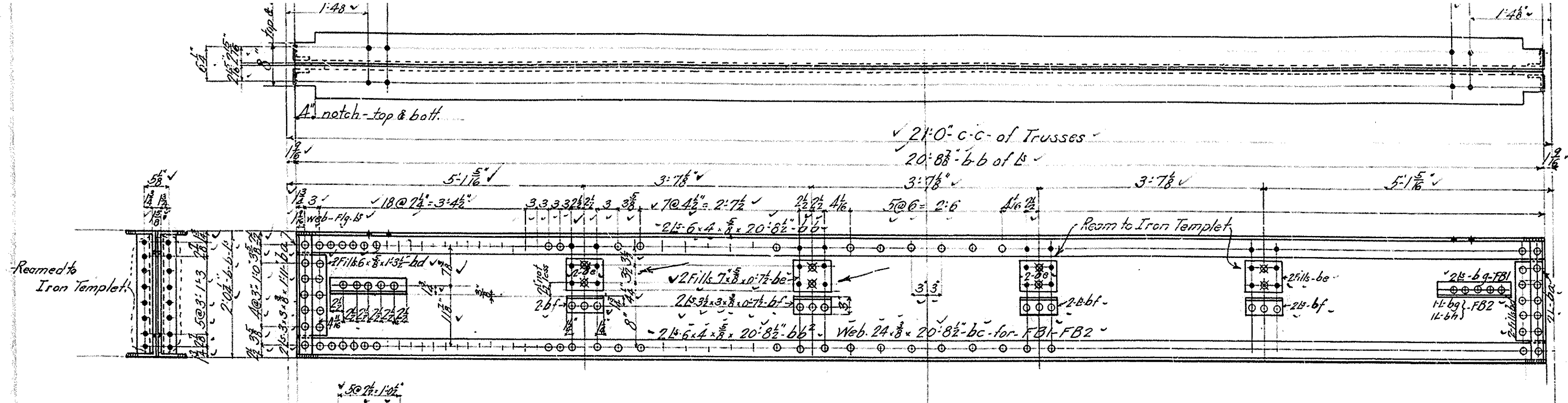
Top Laterals
Four 237 ft. 3 in. Spans, State Bridge
over Susquehanna River
Ulster, Bradford Co., Penna.

BUILT BY
C 261 THE PENNSYLVANIA STEEL CO.
8 Bridge & Construction Dep't.
Steelton, Pa.

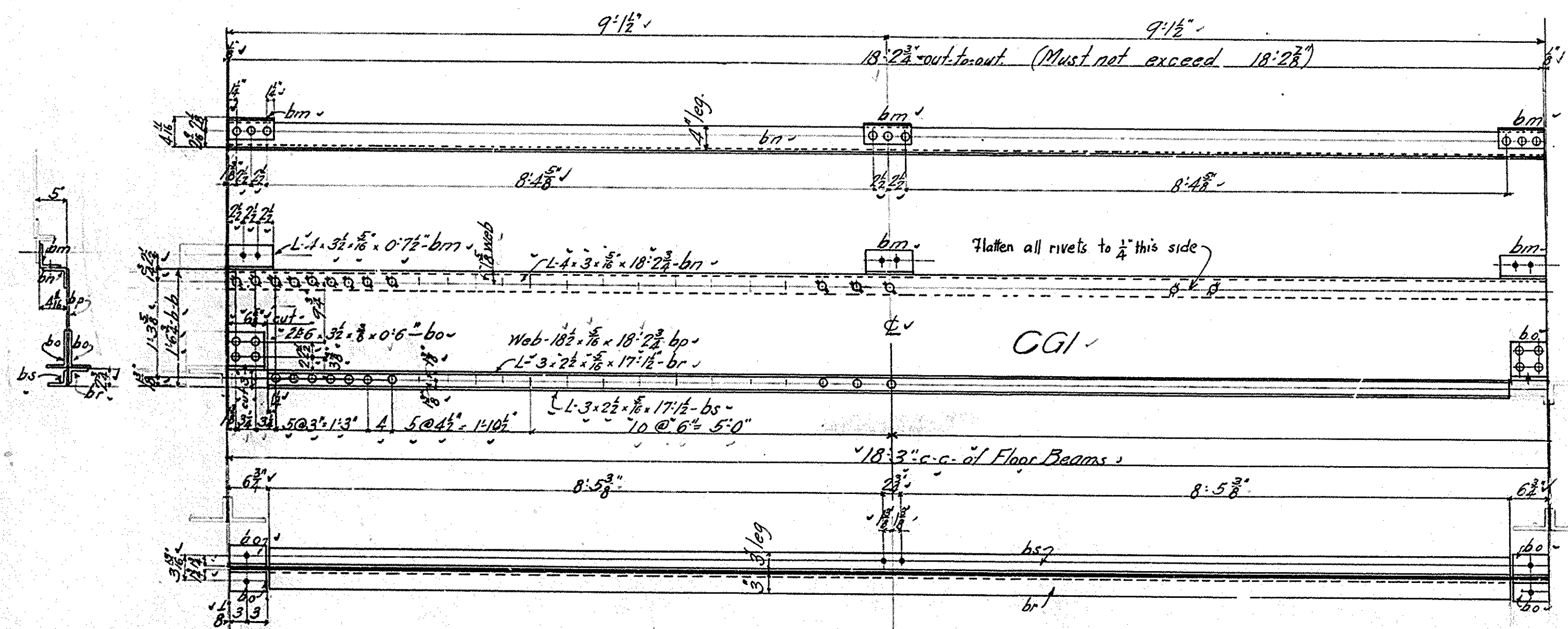
Scale 3/4" in. to a ft. Jan 13-1905
Made by: {B. Jan 9-05
Traced by: {B. Jan 9-05
Checked by: R.W. 1-13-05
In charge: R.W. 1-13-05
Bill sheets 80-81

4777

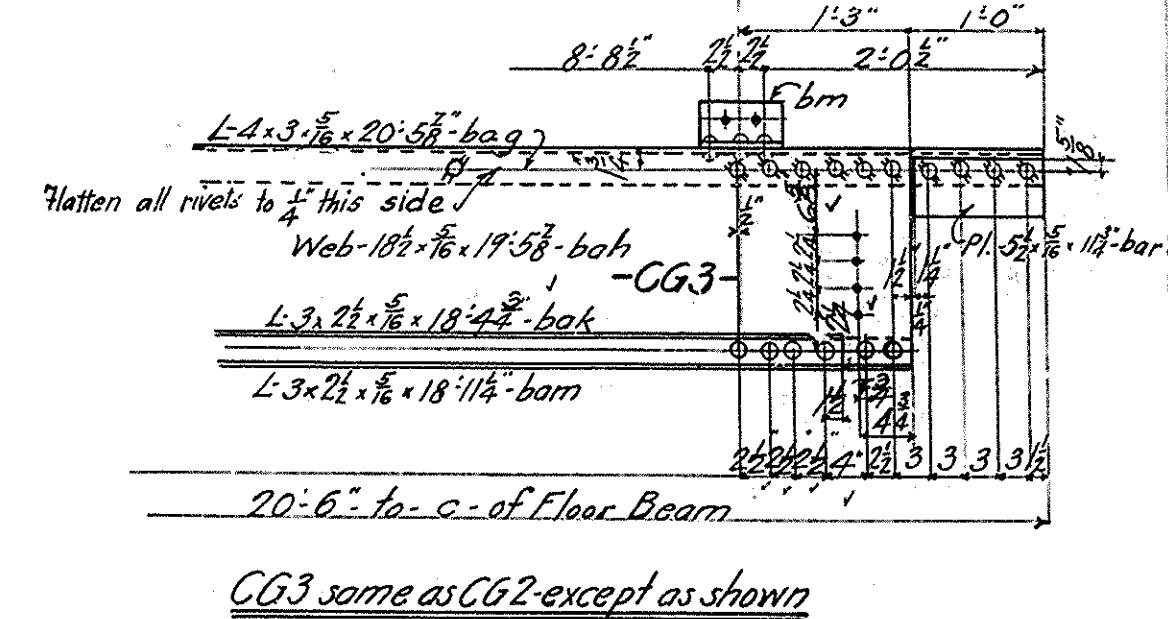
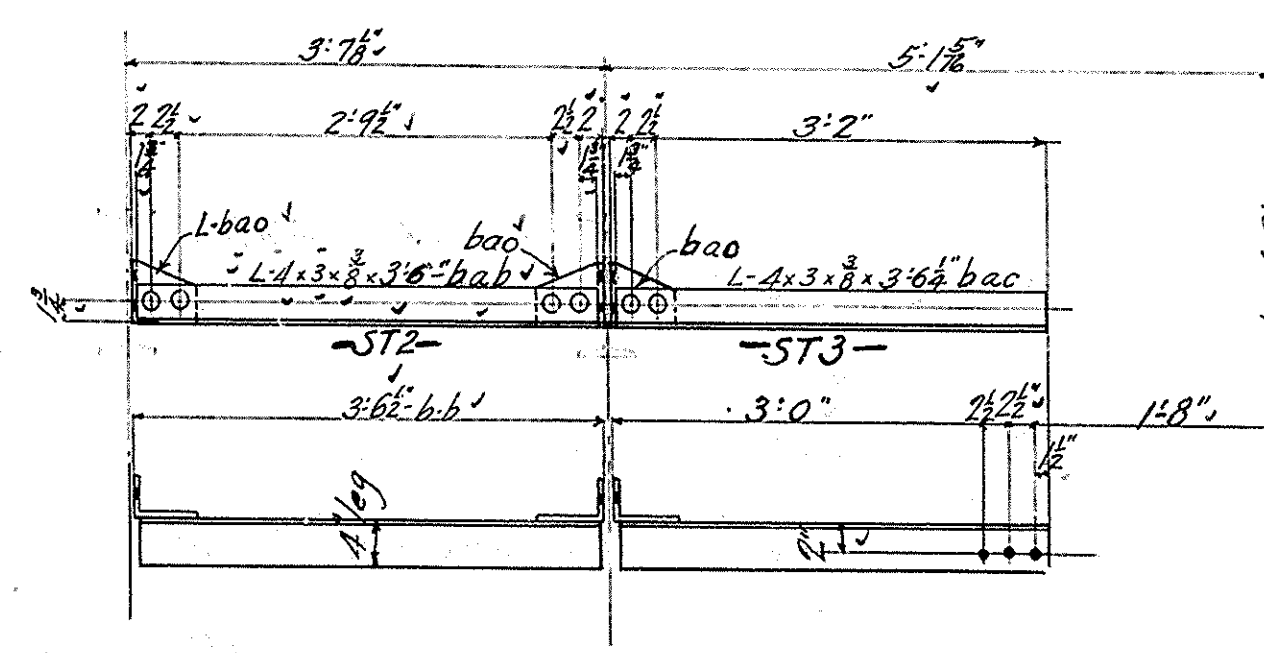
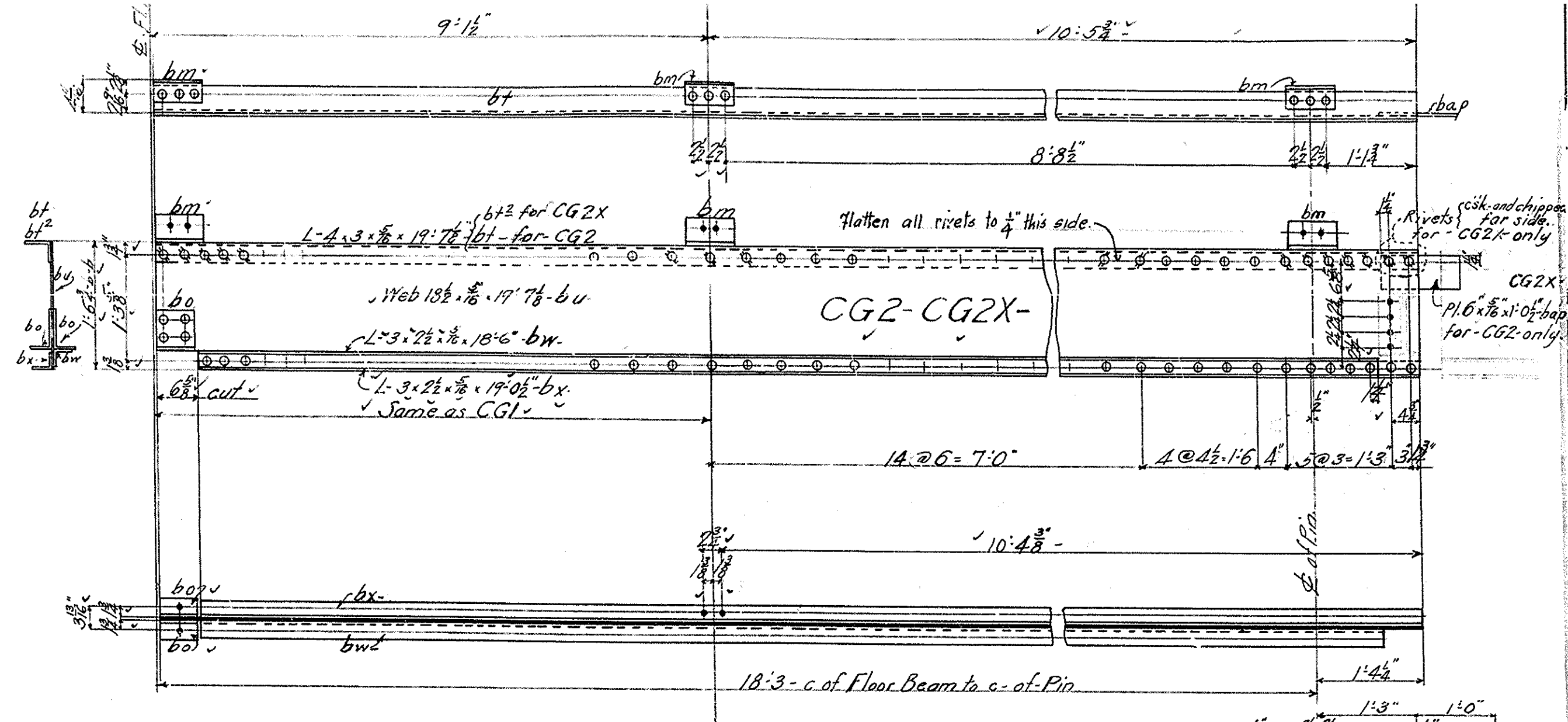
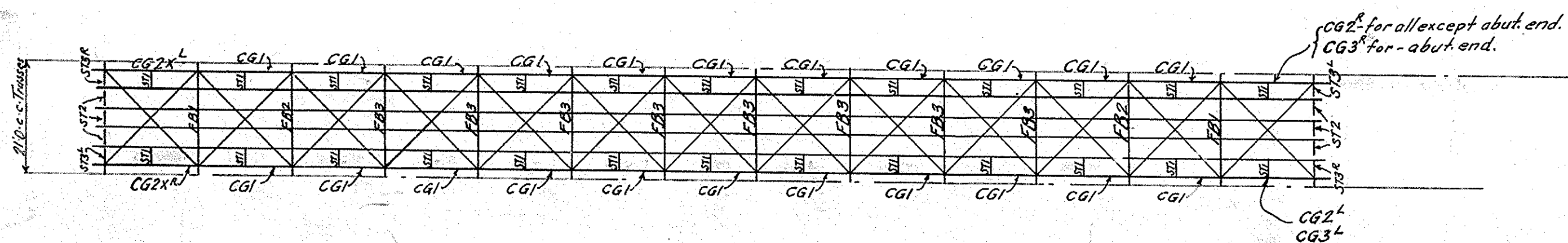




Floor Beam - FB1
FB2 & FB3 } Symm. about C



Symm. about C



Required List

8	Floor Beams	FB1
8	"	FB2
32	"	FB3
88	Curb Girders	CG1
6	"	CG2
2	"	CG3 For Abutment End.
104	Struts	ST1
24	"	ST2
16	"	ST3
8	Curb Girders	CG2X

Revised Feb. 16, 05. = (17)

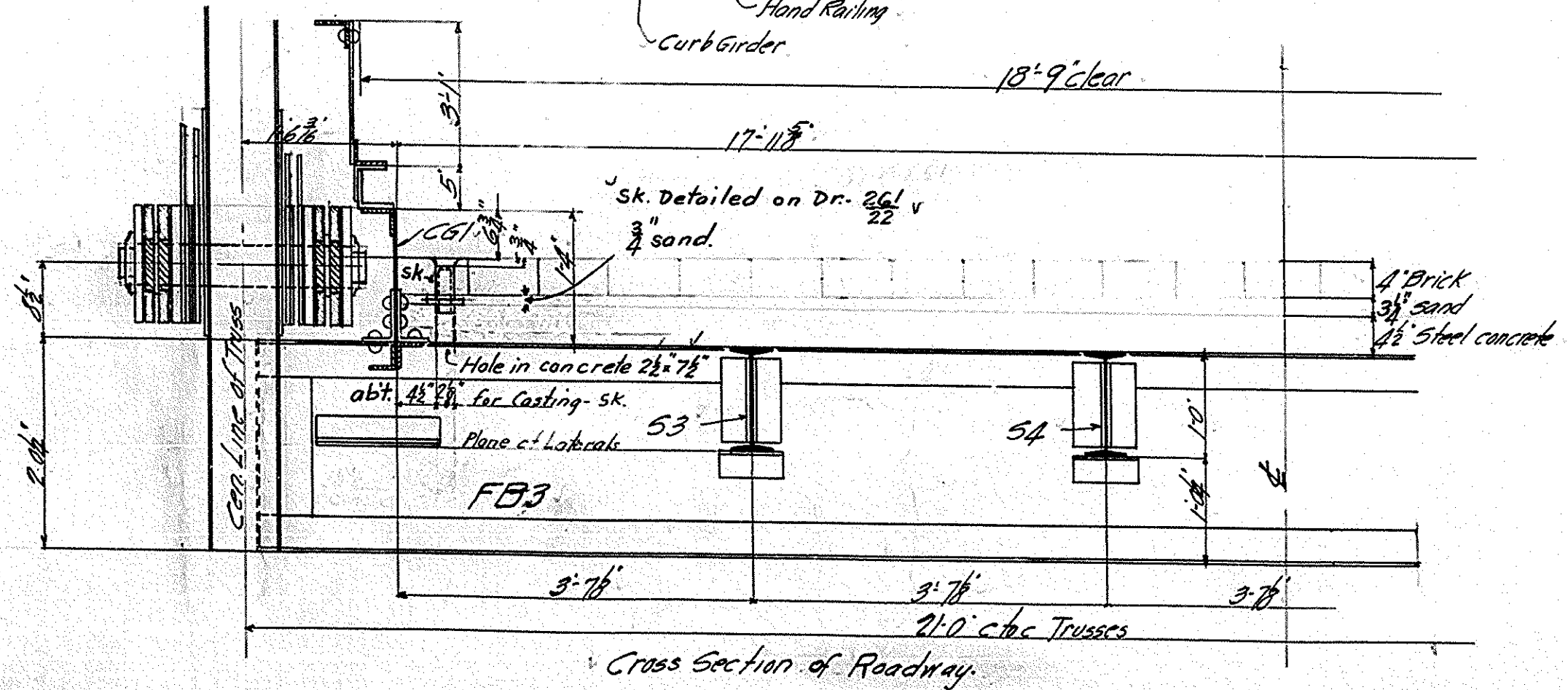
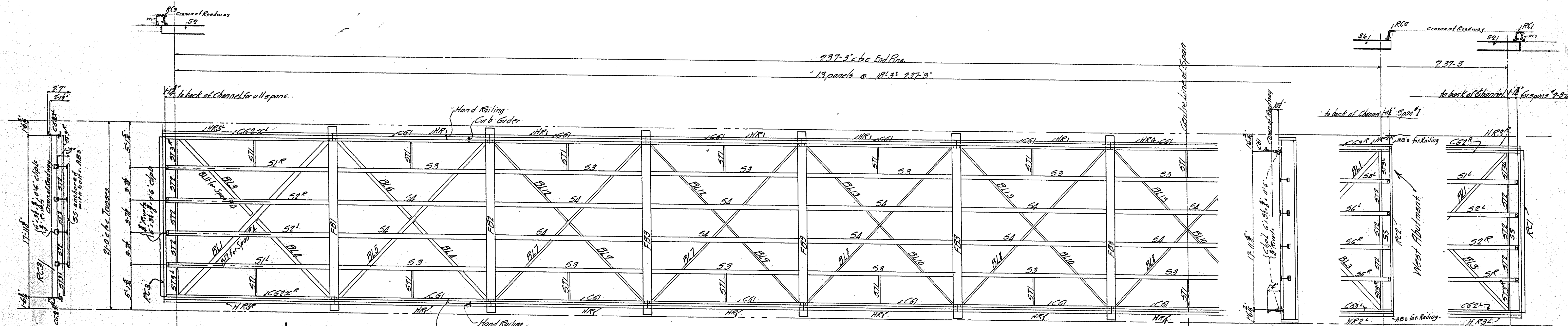
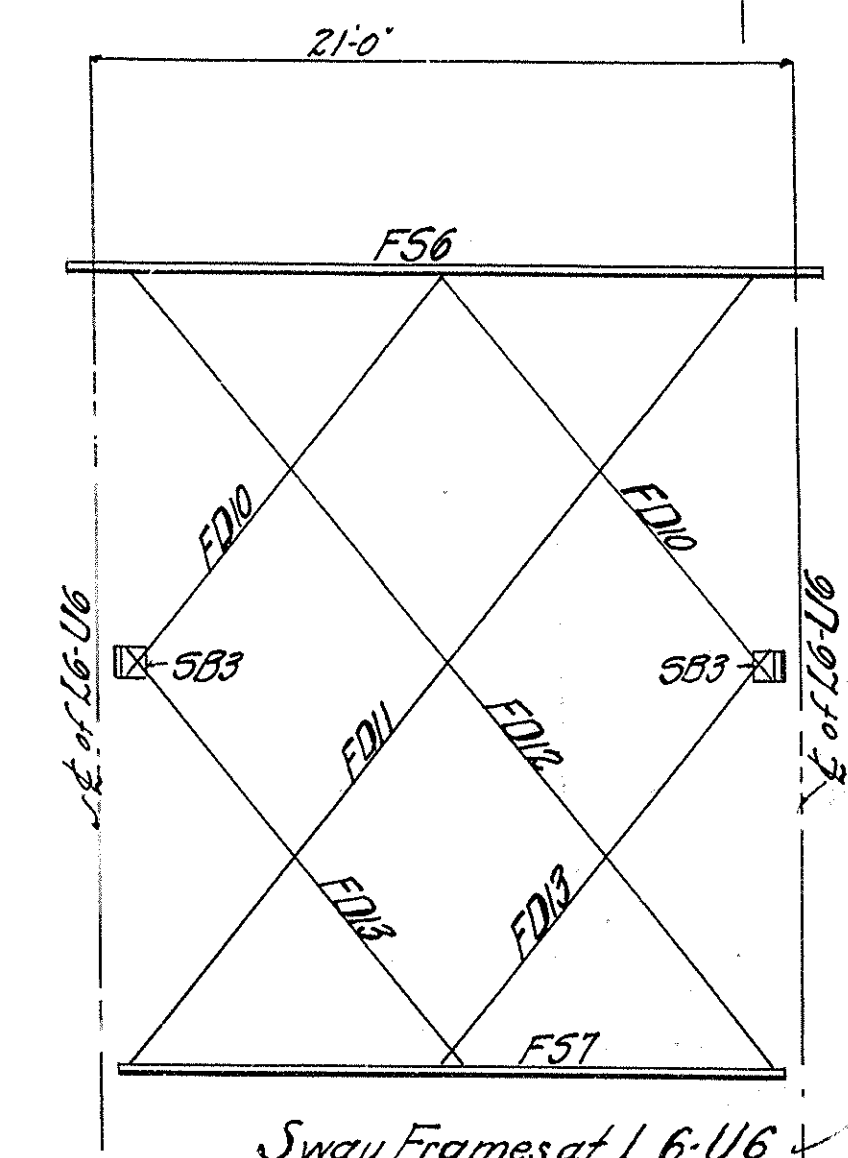
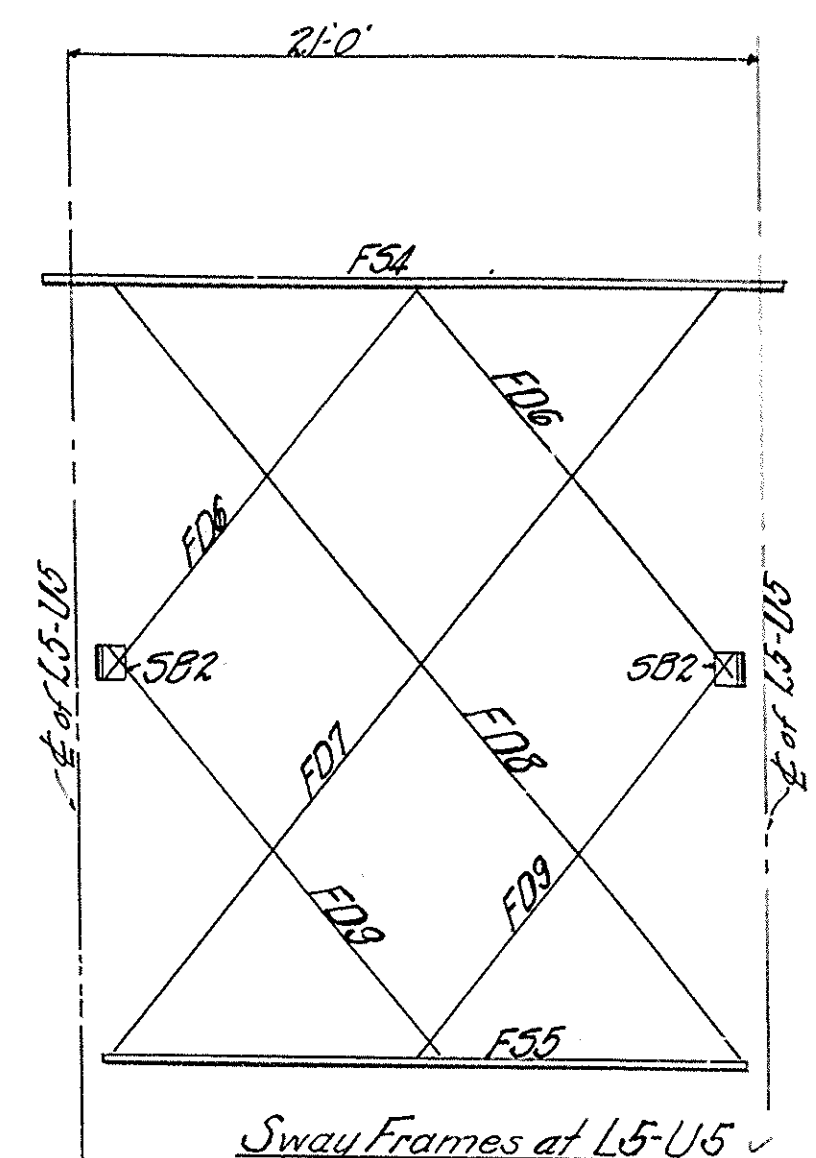
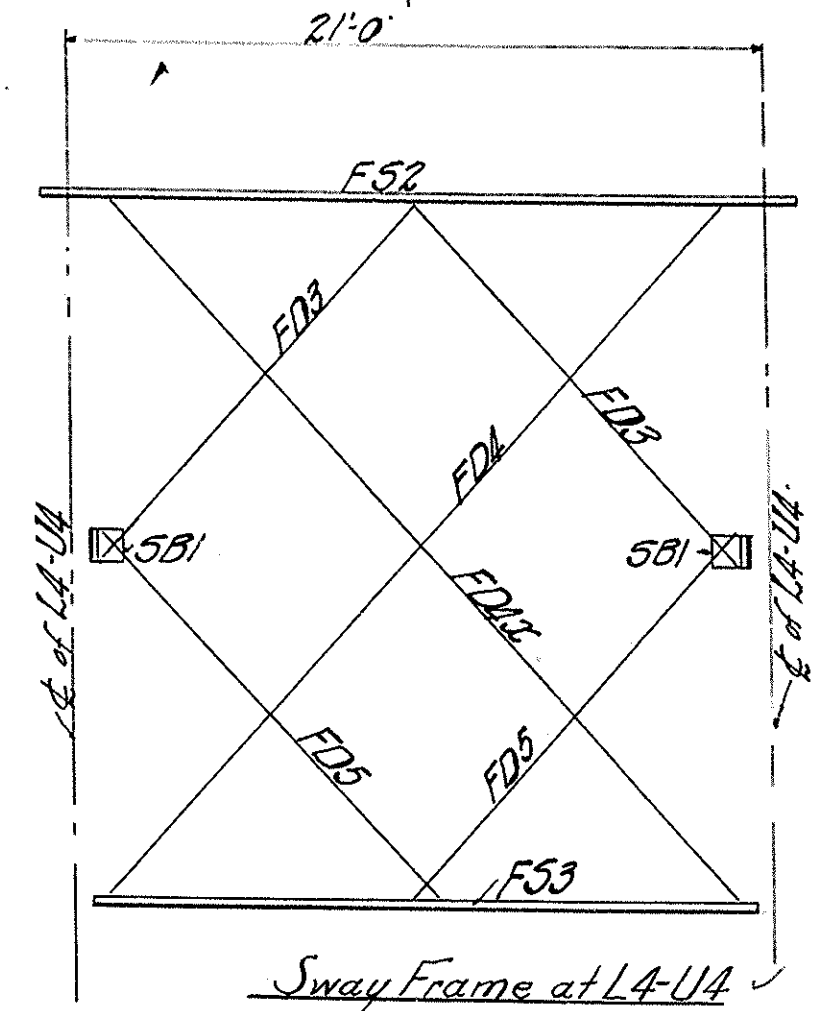
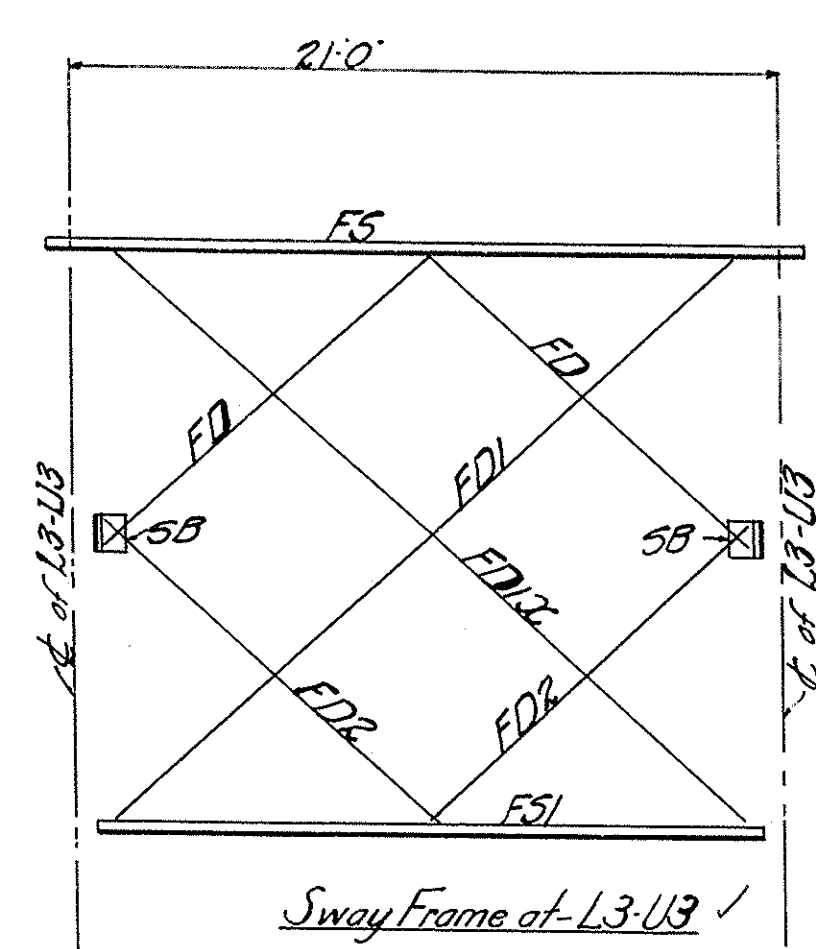
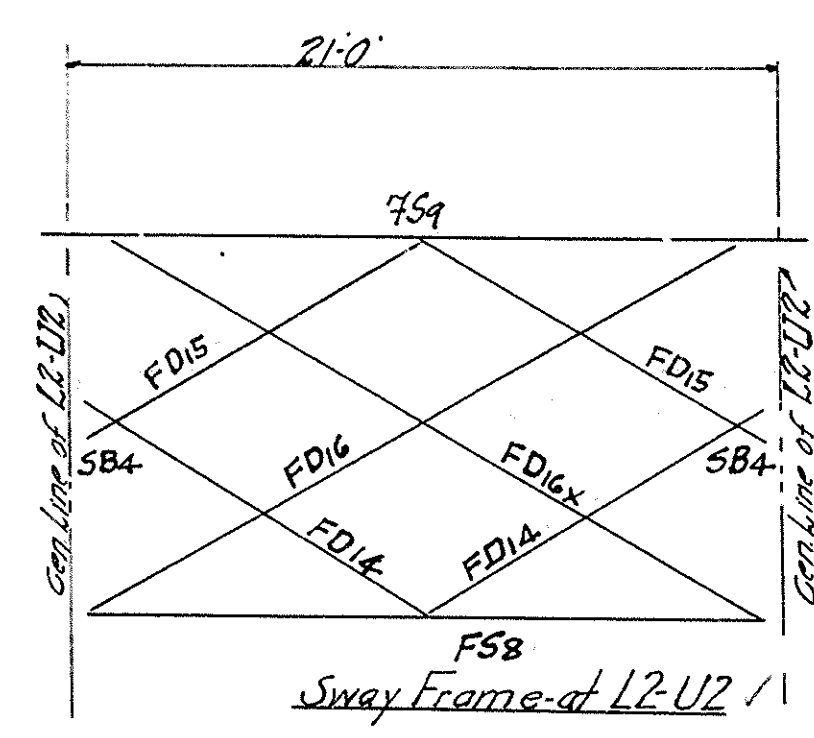
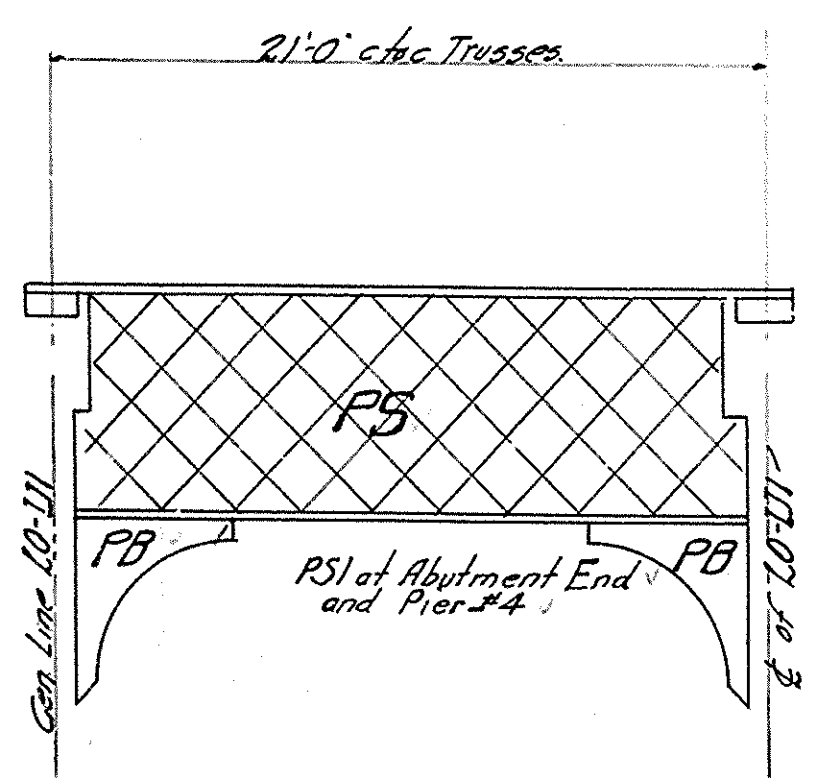
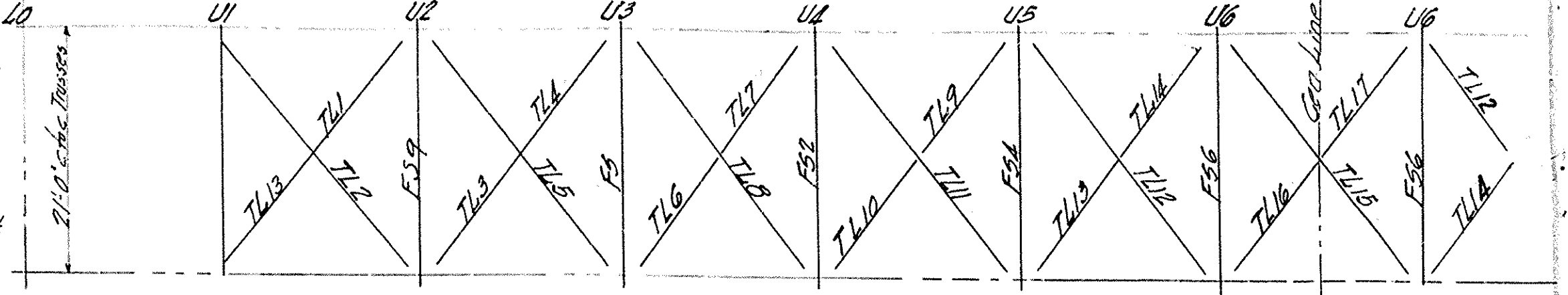
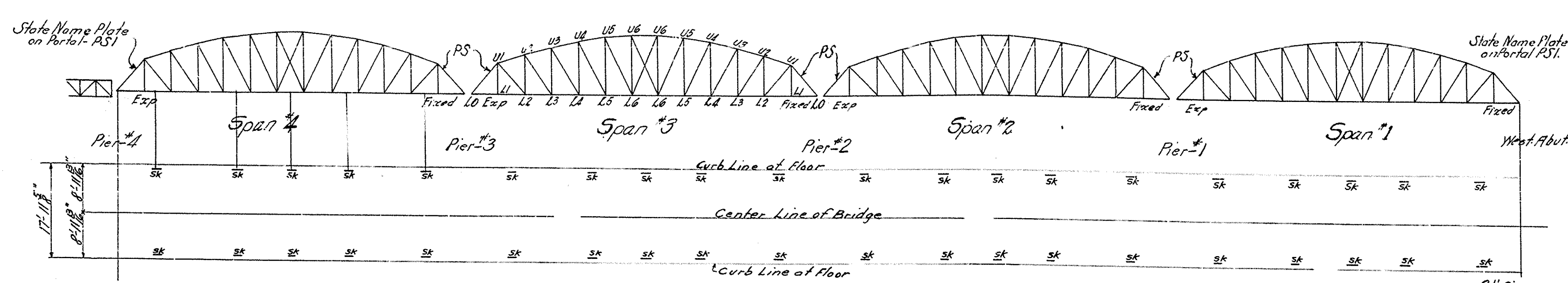
Floor Beams, Curb Girders Etc.
Four 237 ft. 3 in. Spans, State Bridge
over Susquehanna River
Ulster, Bradford Co., Penna.

BUILT BY
C 261 THE PENNSYLVANIA STEEL CO.
4 Bridge & Construction Dept.
Steelton, Pa.

SHOP PAINT: One coat of boiled linseed oil white oil is hot.
One coat of Dixon's Graphite paint or any other paint equal in
quality to the above named and satisfactory to the engineer.

Scale 1/4" = 1' in. to a ft.
Made by R.M.
Traced by: "
Checked by: R.M. 1-4-05
In charge: R.M. Elbertson.
Full sheets: 20-41

4772



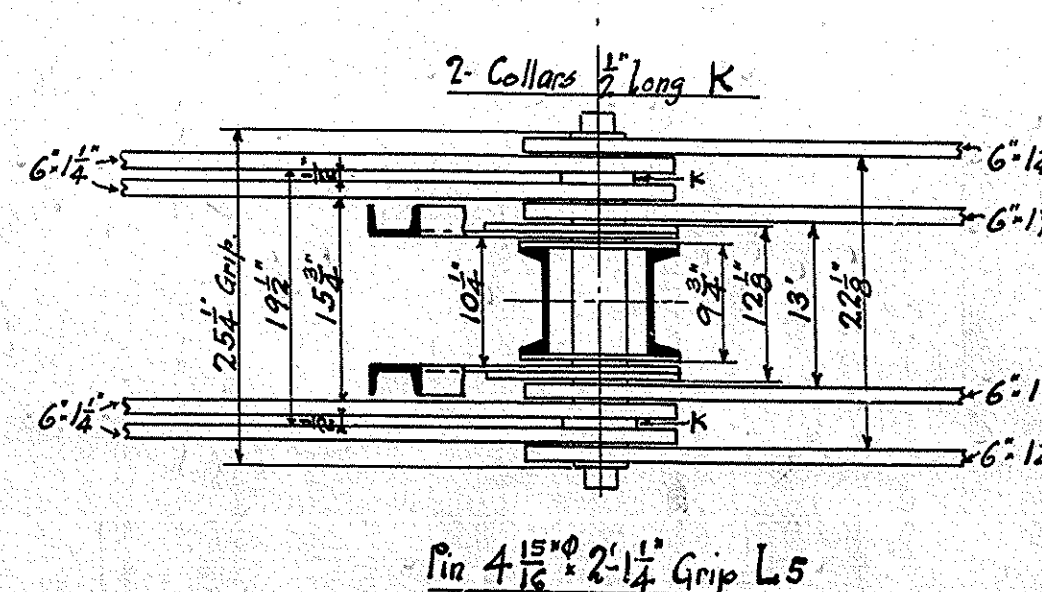
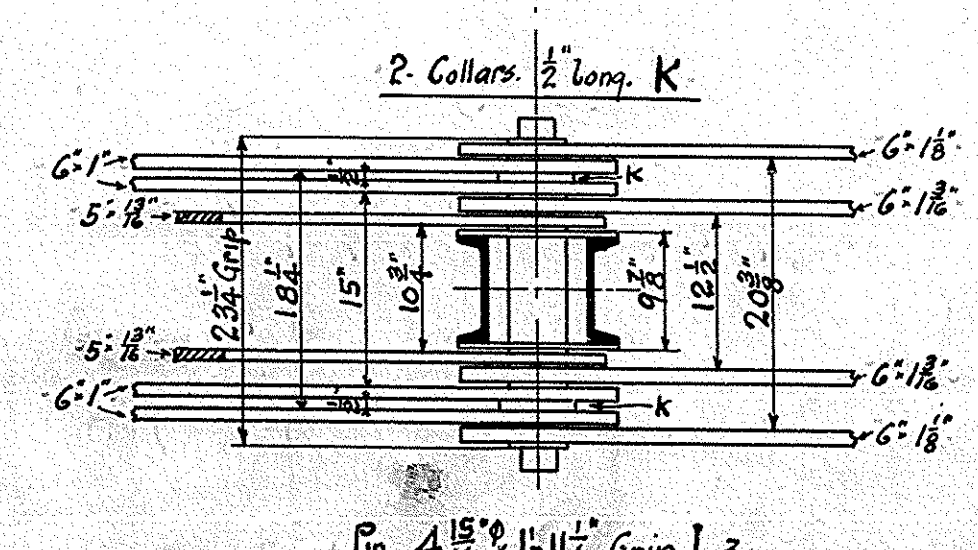
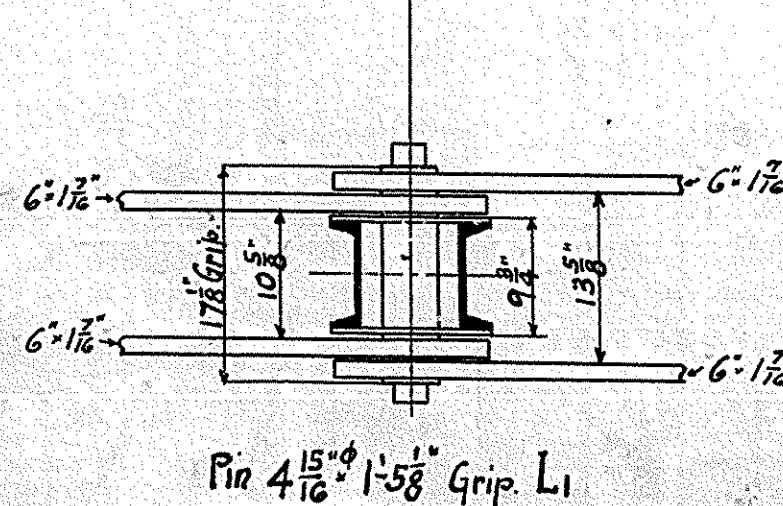
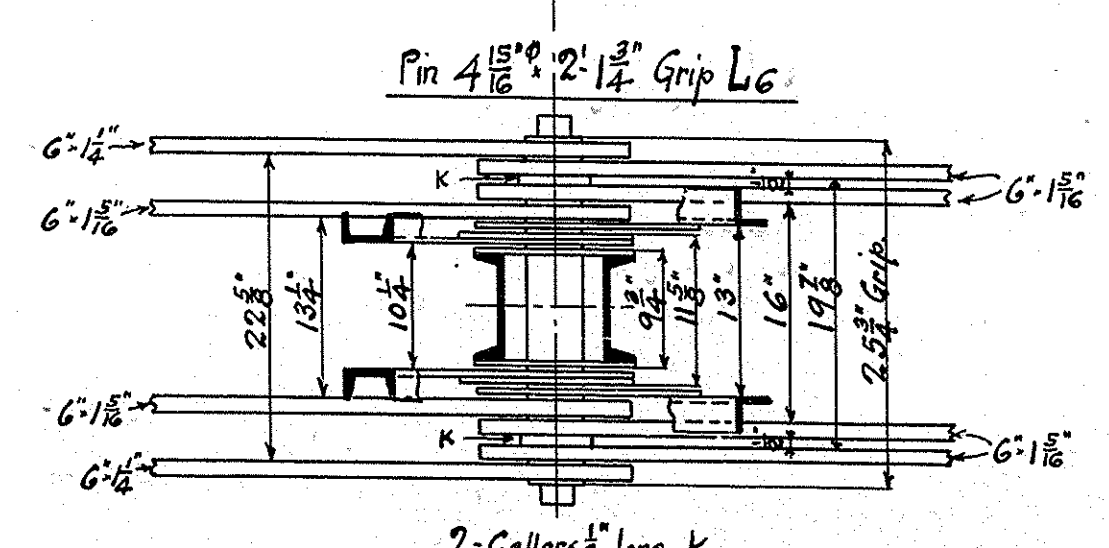
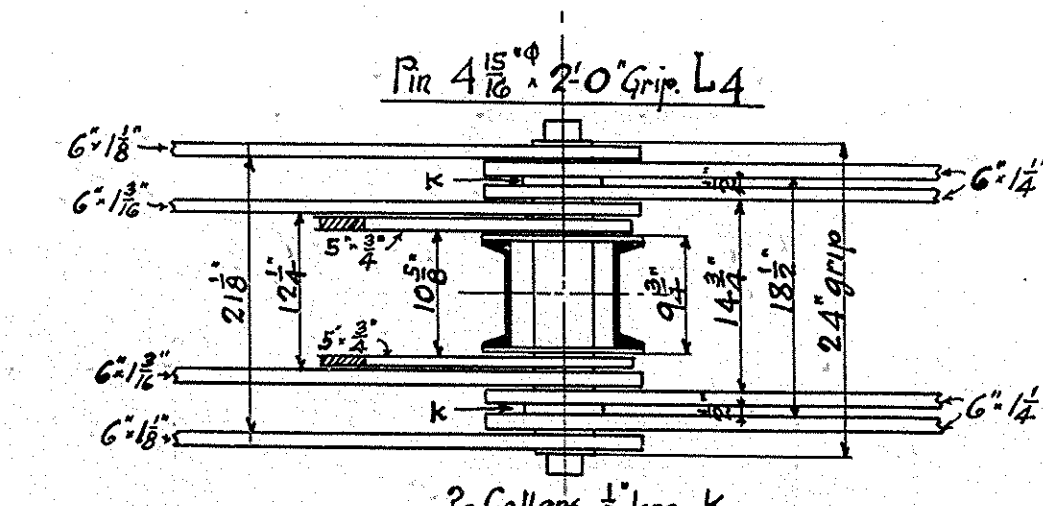
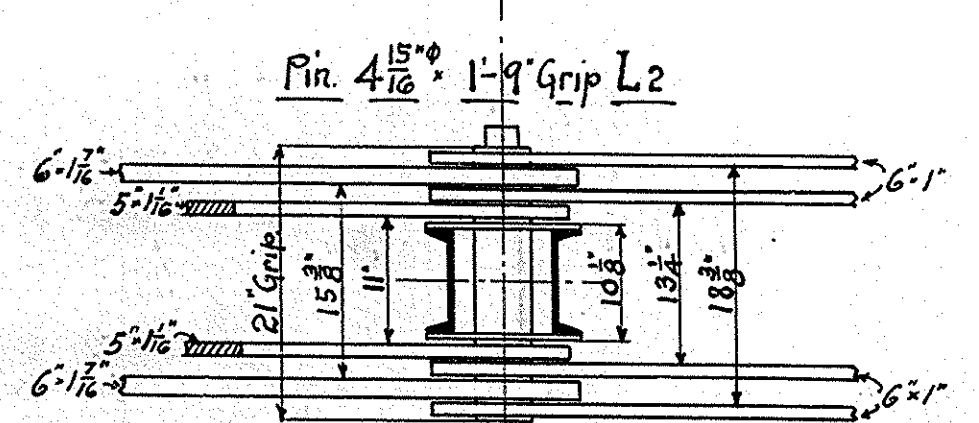
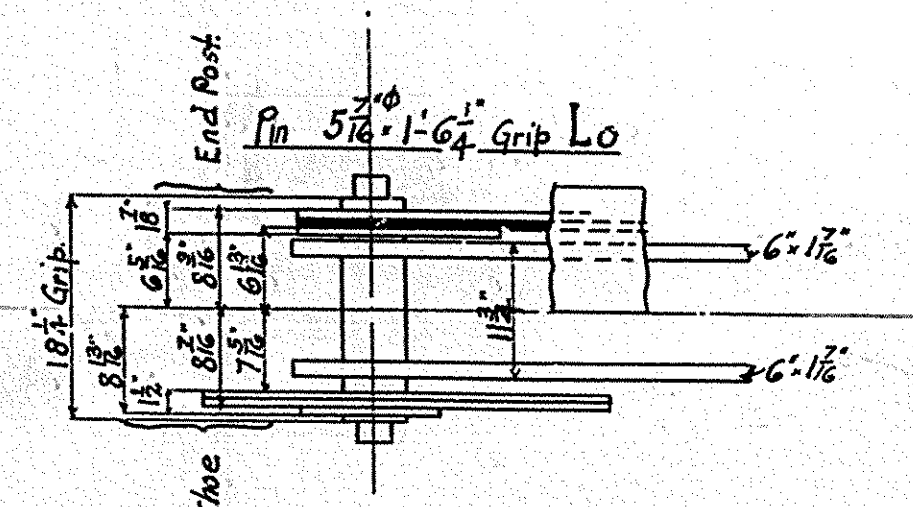
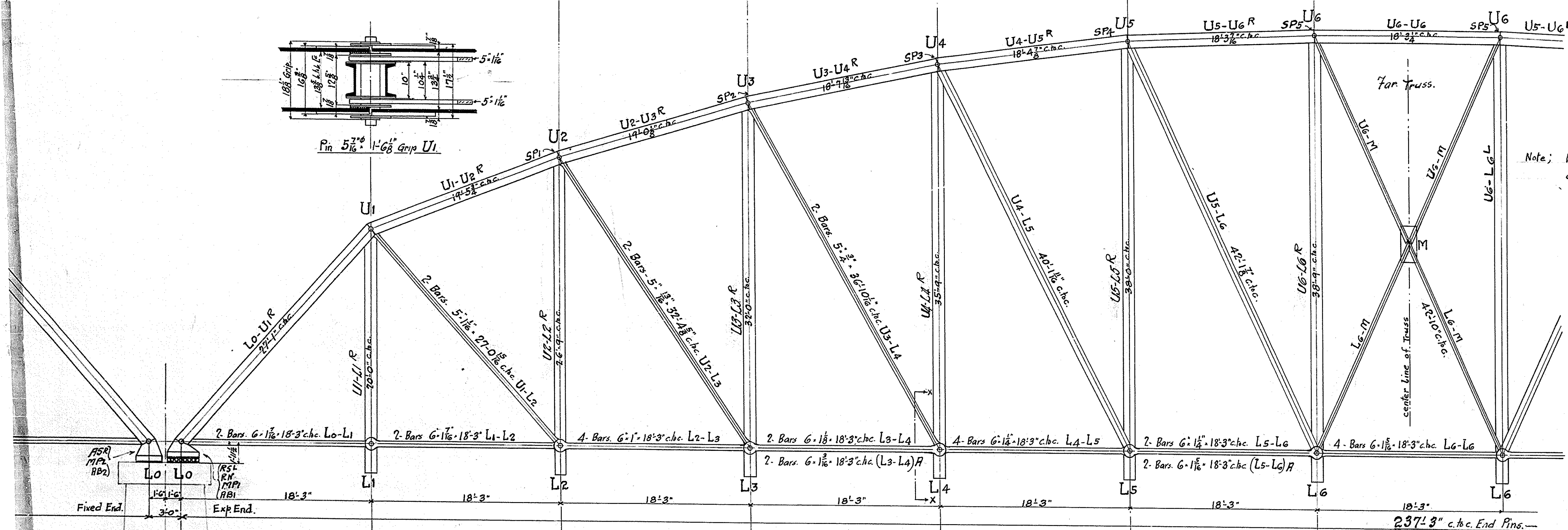
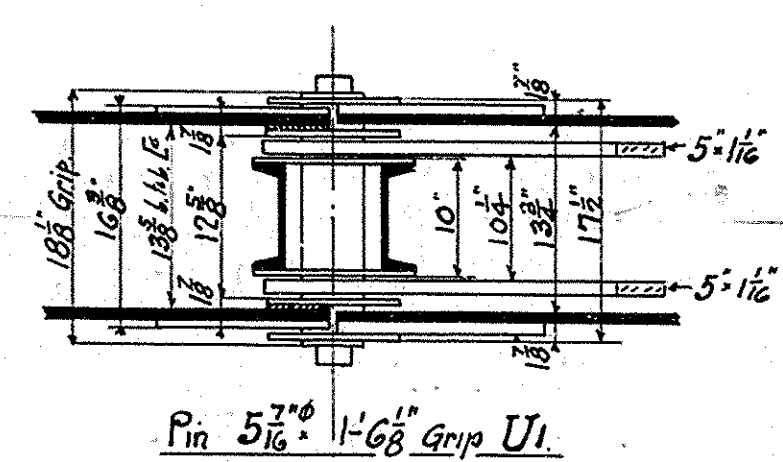
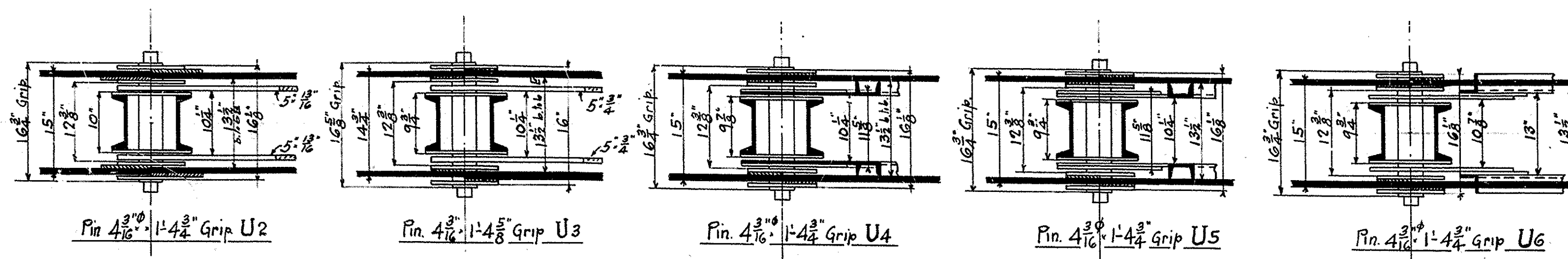
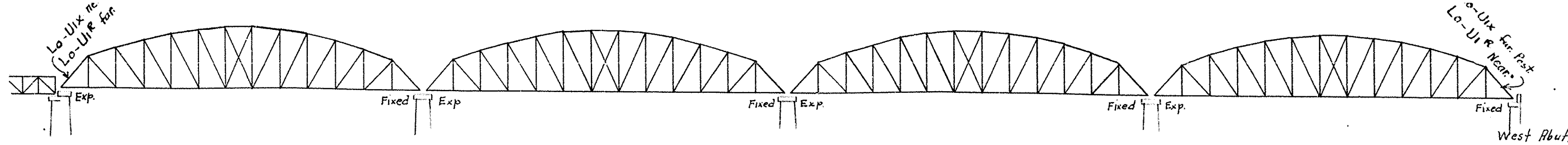
For Erection Diagram of Trusses See Div. C 261
For List of Drawings " " " "

Erection Diagram
Four 237 ft. 3 in. Spans, State Bridge
over Susquehanna River
Ulster, Bradford Co., Penna.

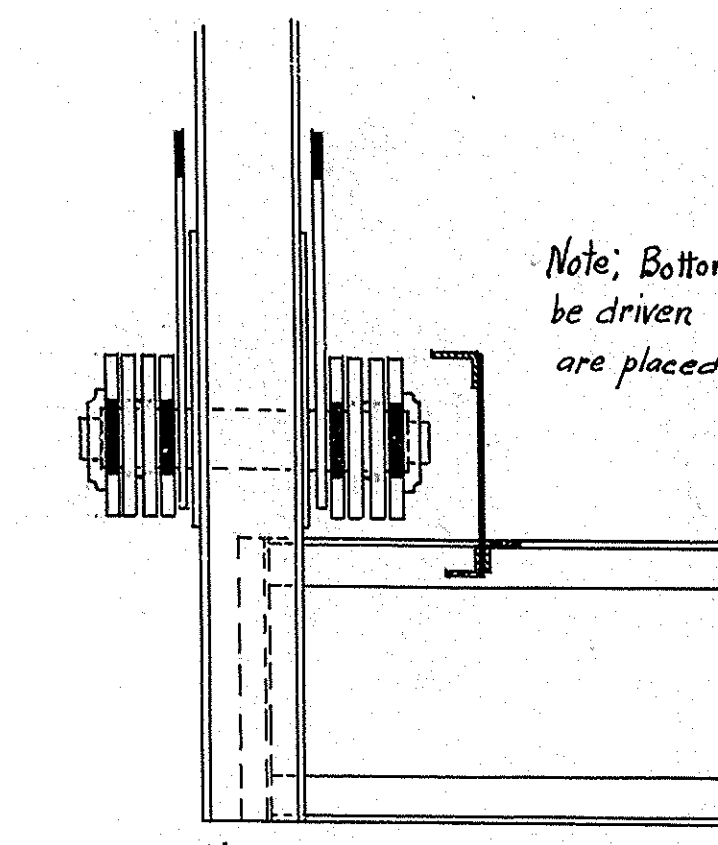
BUILT BY
THE PENNSYLVANIA STEEL CO.
Bridge & Construction Dep't.
Steelton, Pa.

Scale: 1/4" = 1 ft.
Made by: G.H.S.
Traced by: G.H.S.
Checked by: Rub. 2-4-05
In charge: R.W. Egan

4773



- LIST OF DRAWINGS
- | Drawings | Title |
|--------------|--------------------------------|
| 2-Erection | Diagram of Trusses |
| 2A- | " " " Floor and Trans. Bracing |
| 3-T | Beam Stringers |
| 4-Floor | Beams and Curb Girders |
| 5-Bottom | Laterals |
| 6-Railing | |
| 7-Channels | |
| 8-Top | Laterals |
| 9- | " " |
| 10-Portal | and Sway Frame |
| 11-Sway | Frames |
| 12- | " " |
| 13-Shoes | and Rollers |
| 14-Diag. | Truss Members |
| 15-Posts | and Hangers |
| 16- | " " |
| 17-Top | Chord Sections |
| 18- | " " |
| 19-Eye | Bars |
| 20-Pins | and Lomas Nuts |
| 21-Channel | Supports |
| R1-R2-SR1- | Field Rivets & Anchor Bolts |
| SR2-3-4-5-6- | Shipping List |
| 22- | Cast Iron Scuppers |
- Note; Pieces which are marked R for Far Truss. are marked L for Near Truss.
- 23- State Name Plates
- 24- Conn's for " "

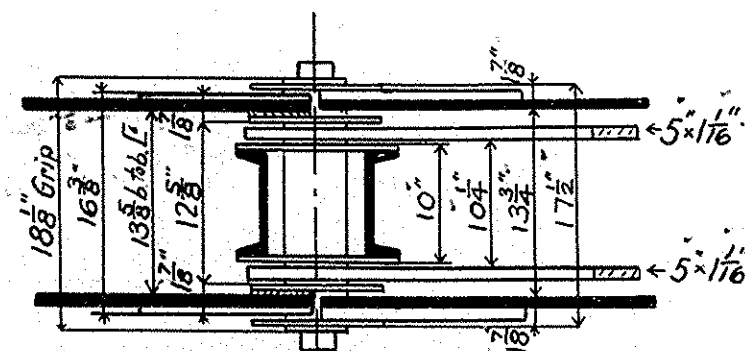


Note; Bottom chord pins must be driven before Curb Girders are placed in position

For Erection Diagram of Floor System See Dwg. C-261

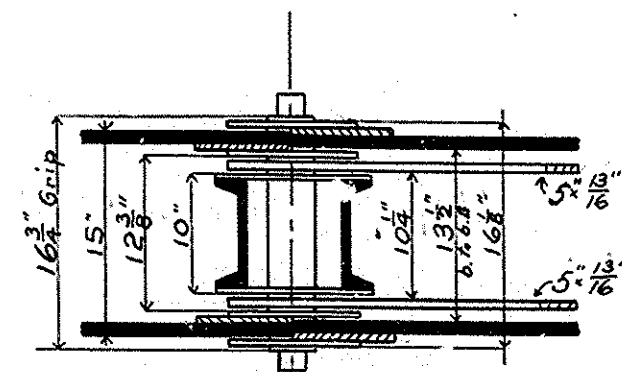
Erection Diagram
Four 237 ft. 3 in. Spans, State Bridge
 over Susquehanna River
Ulster, Bradford Co., Penna.
 BUILT BY
THE PENNSYLVANIA STEEL CO.
 Bridge & Construction Dep't
 Steelton, Pa.
 Scale $\frac{3}{4}$ in. to a ft. Jan. 2 1905
 Made by *Rub.*
 Traced by *Rub.*
 Checked by *Rub.*
 In charge; *Rub.*
 B. J. 2000

CHIEF DRAFTSMAN



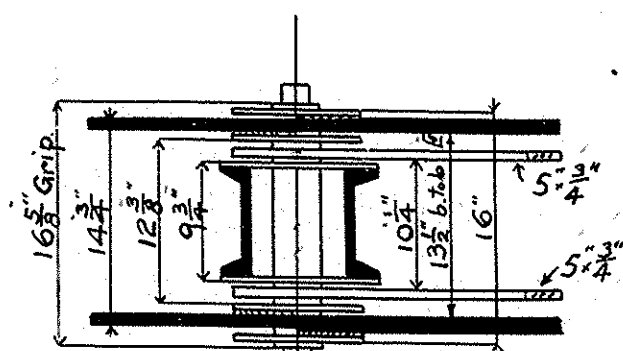
Pin $5\frac{7}{8} \times 1'-6\frac{1}{8}$ Grip U1

U1



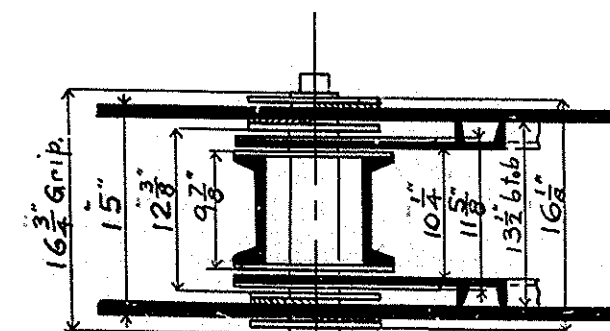
Pin $4\frac{3}{8} \times 1'-4\frac{3}{4}$ Grip U2

U2



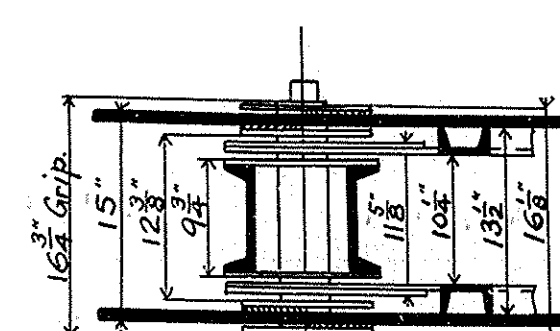
Pin $4\frac{3}{8} \times 1'-4\frac{5}{8}$ Grip U3

U3



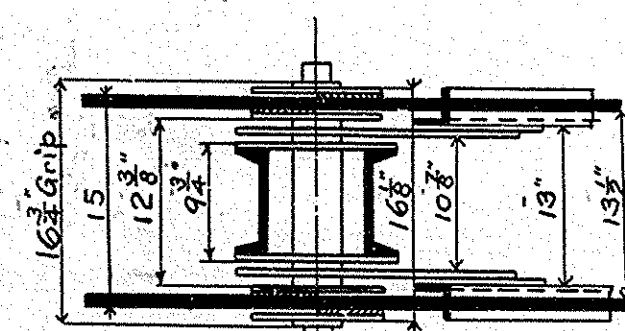
Pin $4\frac{3}{8} \times 1'-4\frac{3}{4}$ Grip U4

U4



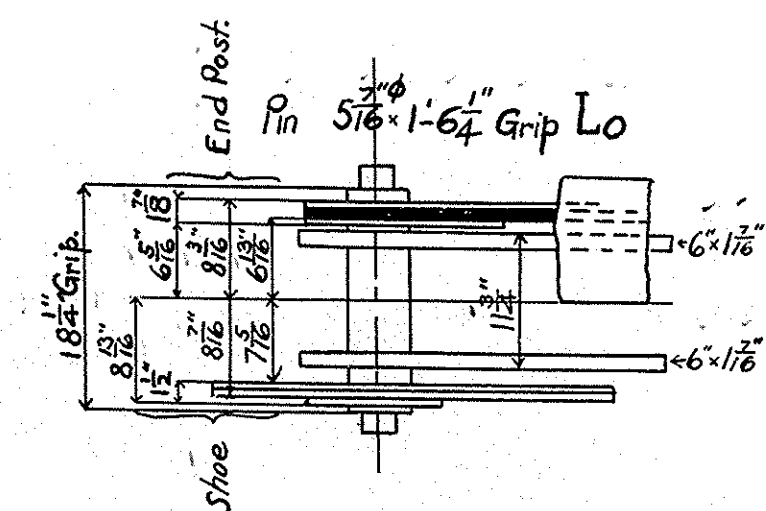
Pin $4\frac{3}{8} \times 1'-4\frac{3}{4}$ Grip U5

U5

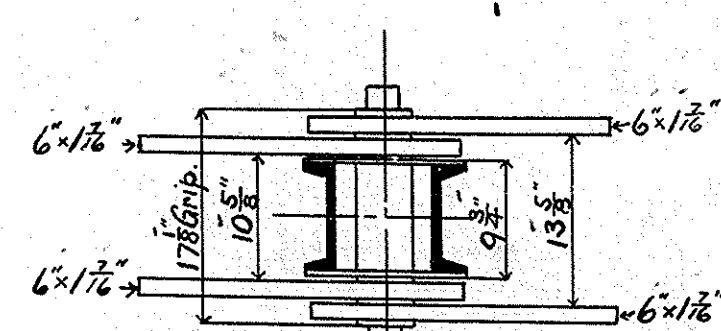


Pin $4\frac{3}{8} \times 1'-4\frac{3}{4}$ Grip U6

U6

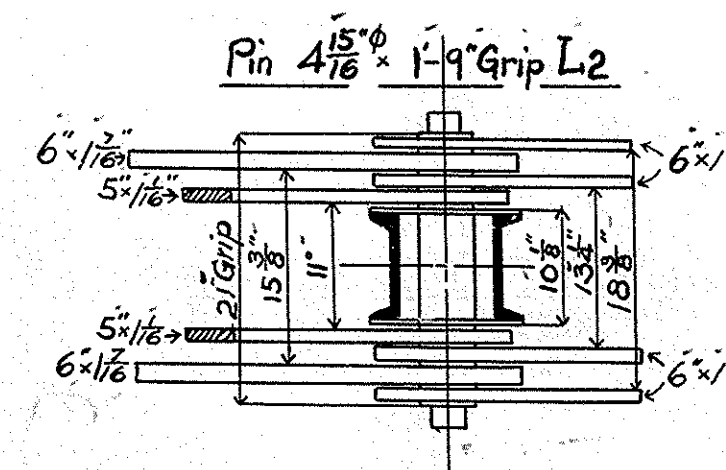


L0



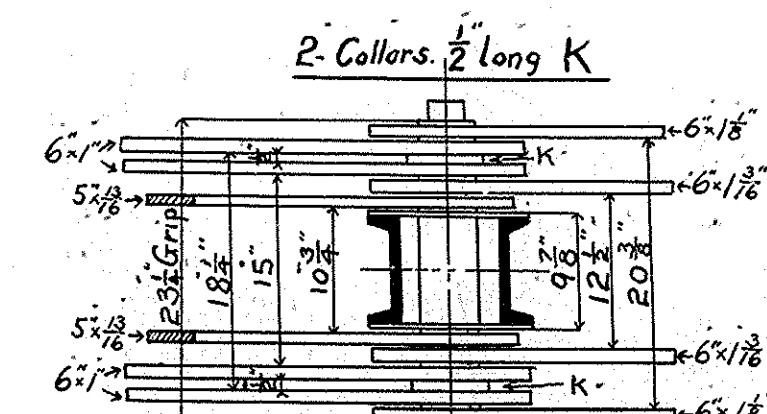
Pin $4\frac{5}{8} \times 1'-5\frac{1}{8}$ Grip L1

L1



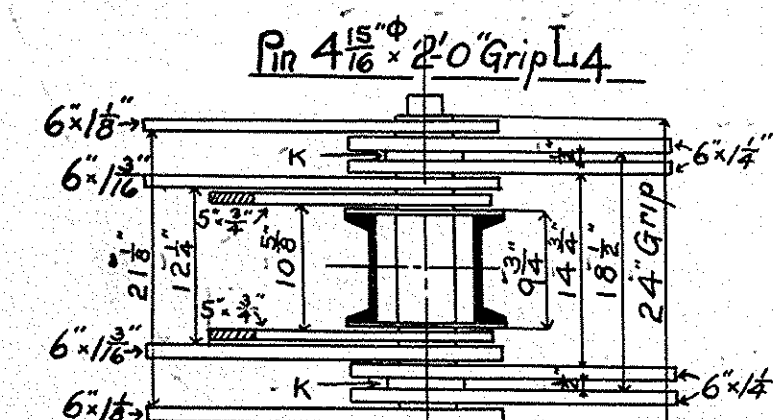
Pin $4\frac{5}{8} \times 1'-9$ Grip L2

L2



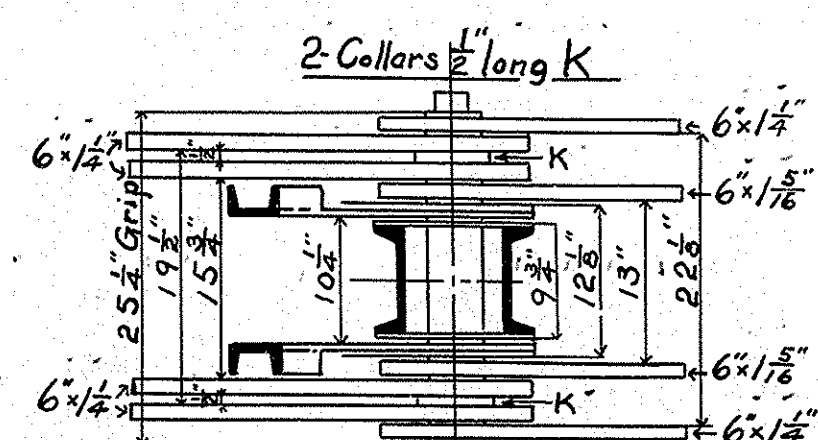
Pin $4\frac{5}{8} \times 1'-11\frac{1}{4}$ Grip L3

L3



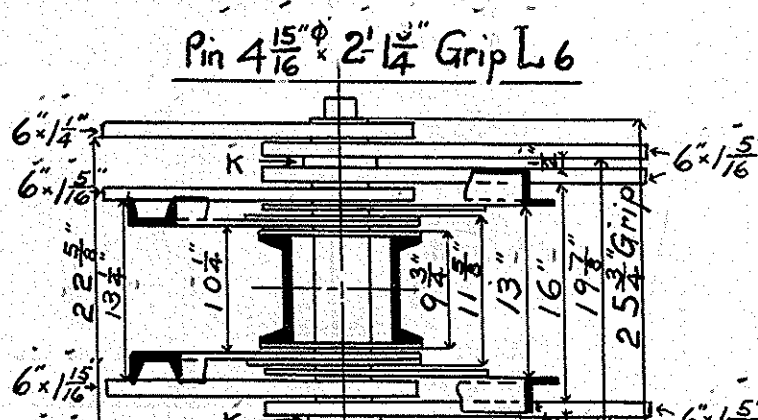
Pin $4\frac{5}{8} \times 2'-0$ Grip L4

L4



Pin $4\frac{5}{8} \times 2'-1\frac{1}{4}$ Grip L5

L5

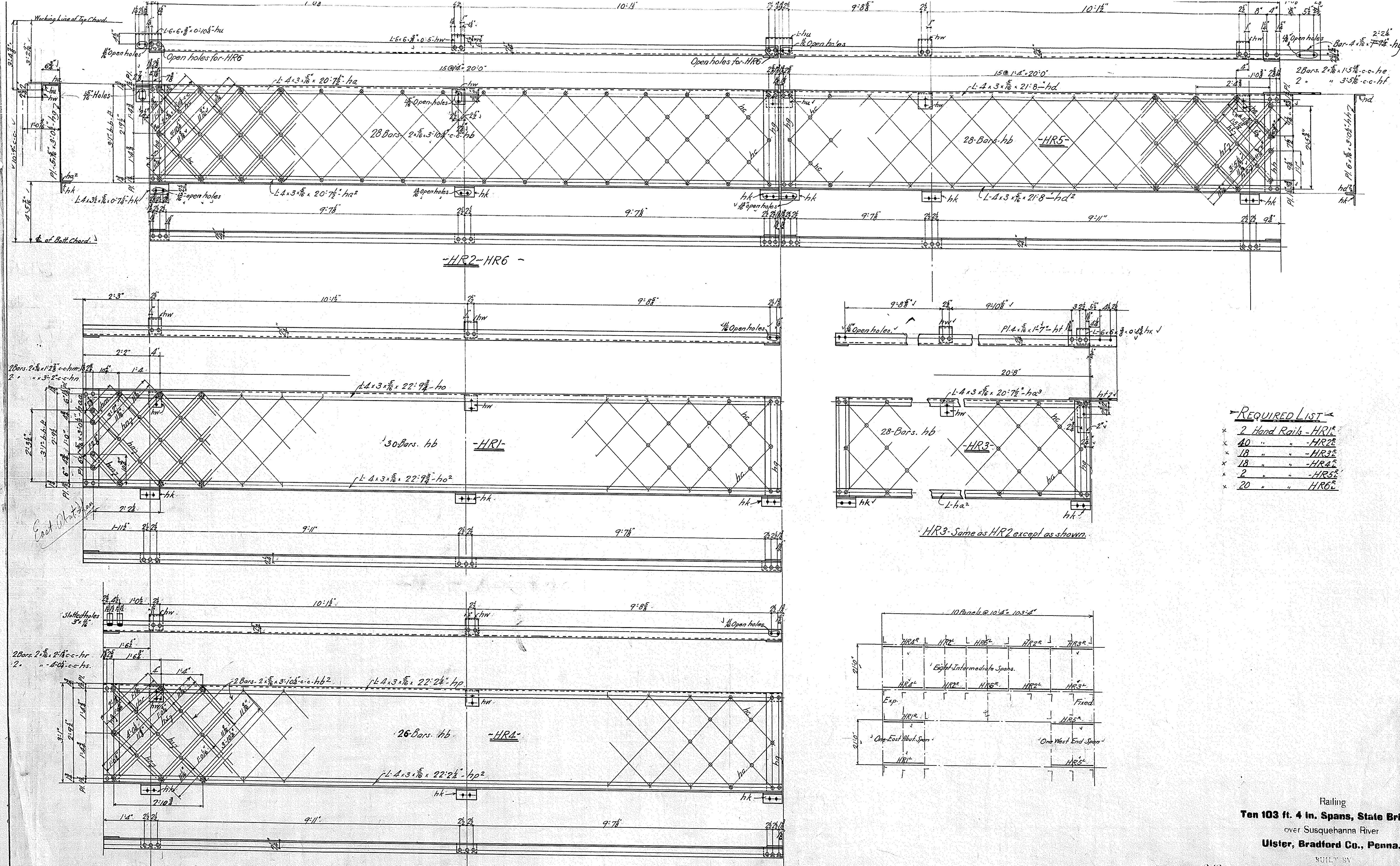


Pin $4\frac{5}{8} \times 2'-1\frac{1}{4}$ Grip L6

L6

Sketches Showing Packing of Panel Points.
Four 237 ft. 3 in. Spans, State Bridge
over Susquehanna River
Ulster, Bradford Co, Penna.

Refers to C 261

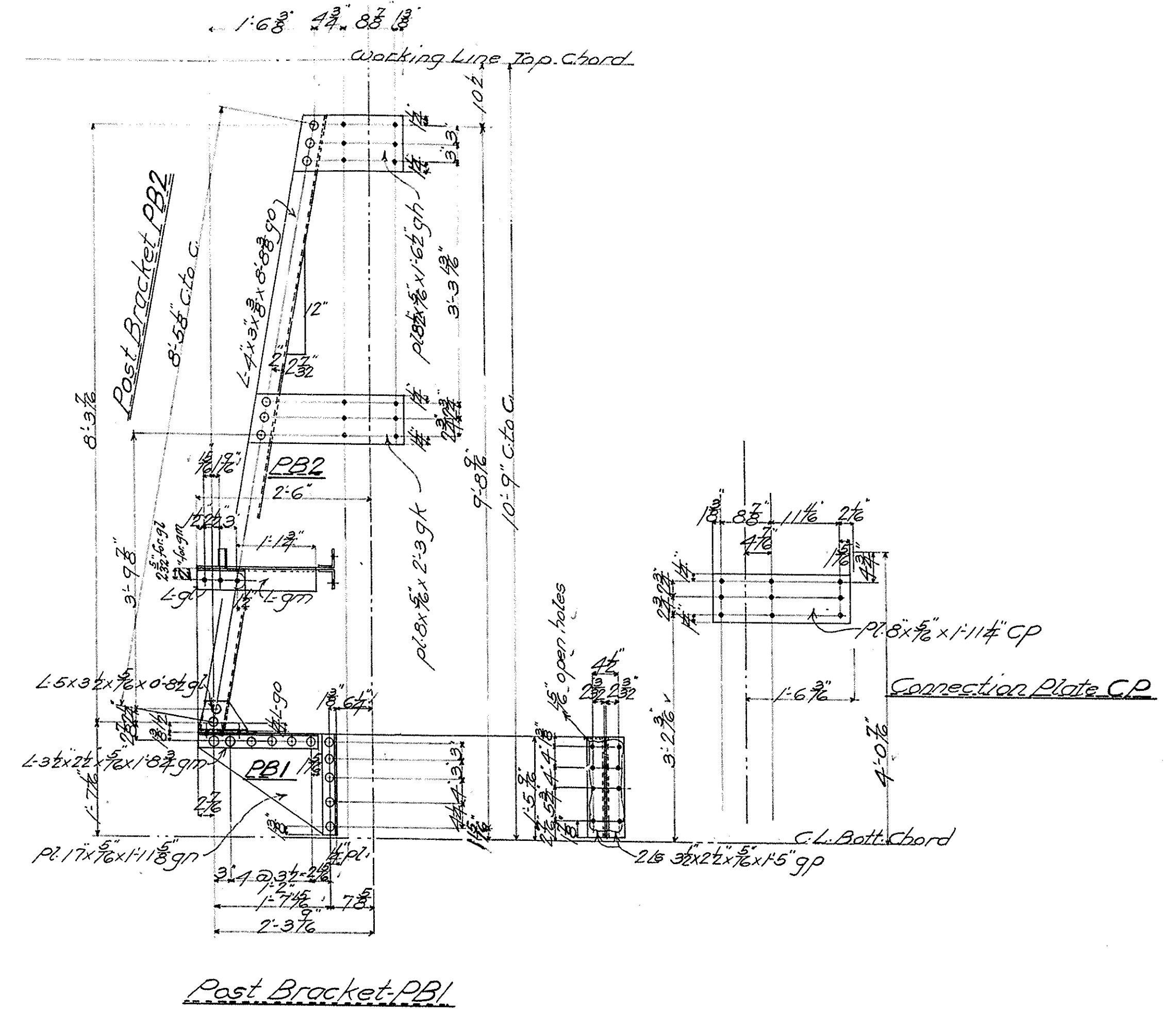
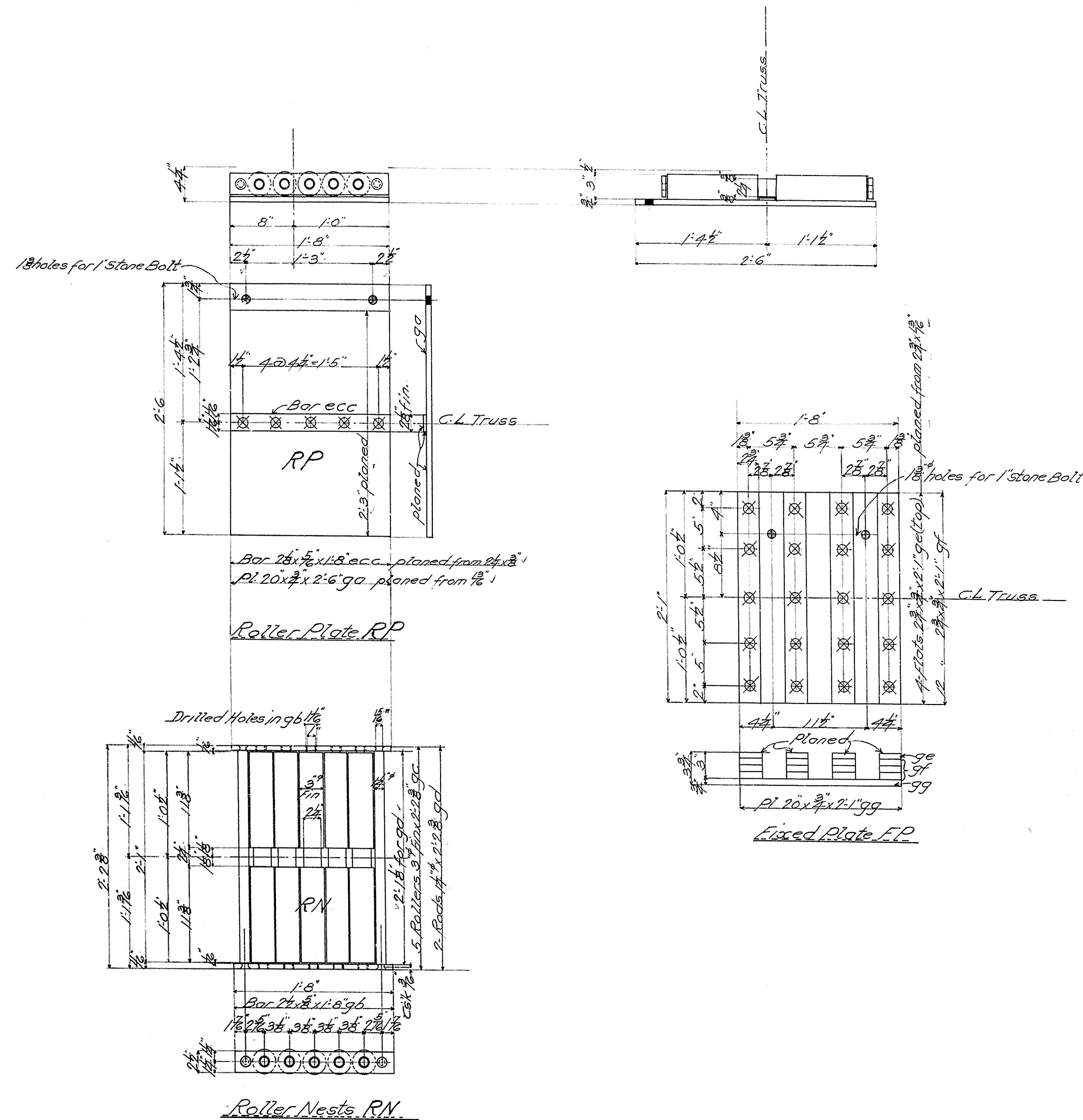


Railing
Ten 103 ft. 4 in. Spans, State Bridge
over Susquehanna River
Ulster, Bradford Co., Penna.

BUILT BY
THE PENNSYLVANIA STEEL CO.
Bridge & Construction Dept.
Steelton, Pa.

Scale: 3/4" = 1'-0"
Made by: [Signature]
Checked by: [Signature]
In charge: [Signature]
Revised: 4-6-05

PAINT: One coat of Linseed Oil white oil is hot.
One coat of Duxons Graphite paint or any other paint equal in
quality to the above named and at station to the engineer



Post Bracket PB1

Dimensions PB1 verified at construction
and at 1/4" in. as shown in drawing
in connection with the 1/2" x 1/4" x 1/4" gusset
plates in PB2 and verified to run.
Bob 11/10/05

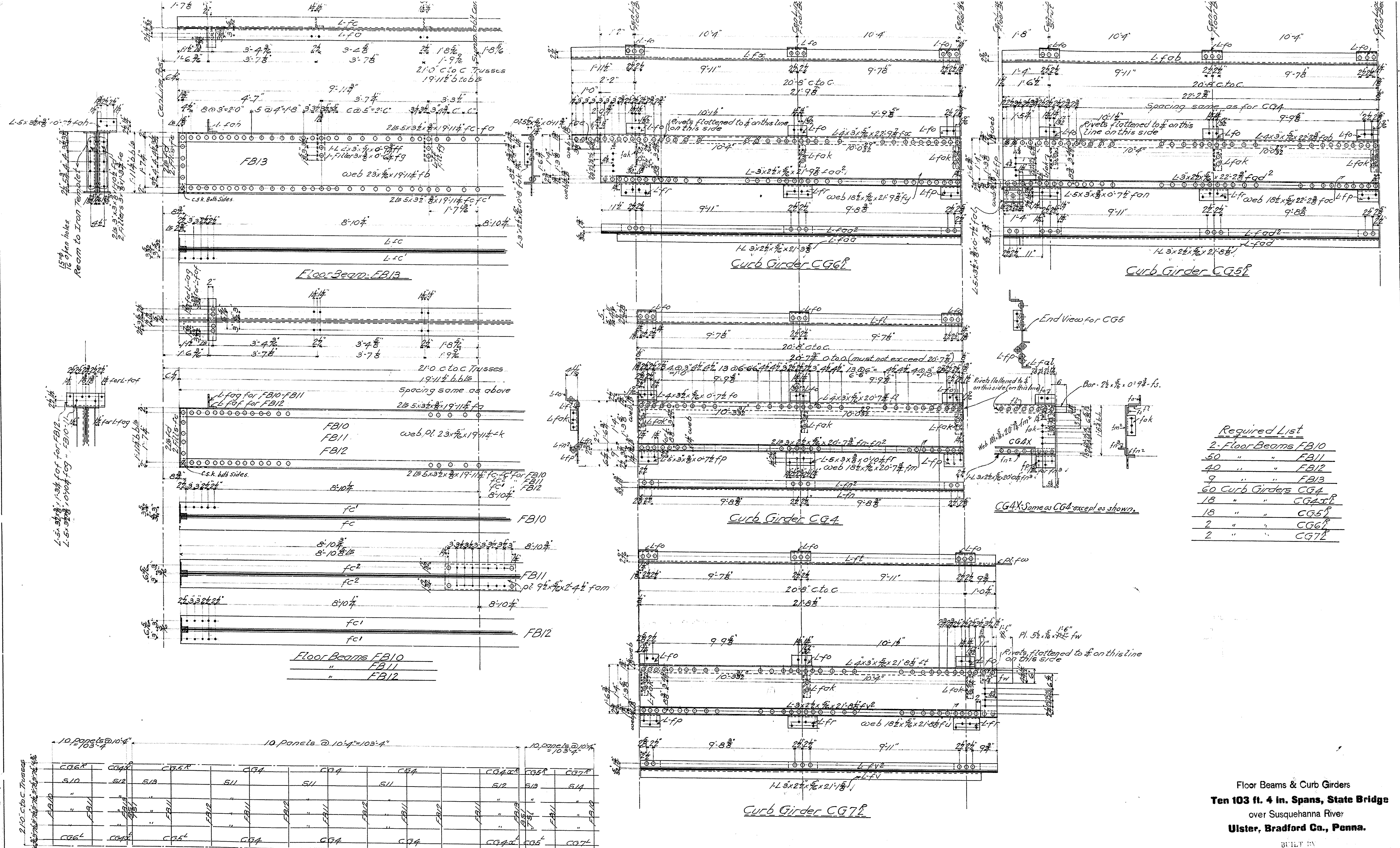
- Required List
- 20-Roller Plate RP
 - 20-Fixed " FP
 - 20-Roller Nests RN
 - 120-Post Bracket PB1
 - 220-Connection Plate CP
 - 120-Post Brackets PB2

Shoes & Out riggers
Ten 103 ft. 4 in. Spans, State Bridge
over Susquehanna River
Ulster, Bradford Co., Penna.

BUILT BY
THE PENNSYLVANIA STEEL CO.
Bridge & Construction Dep't.
Steelton, Pa.

CHIEF DRAFTSMAN
Machined Surfaces One coat of White Lead and Tallow.
PAINT: One coat of Linseed Oil while oil is hot.
One coat of Dioxon Graphite paint or any other paint equal in
quality to the above named and satisfactory to the engineer

Scale 3/8" = 1'-0"
Made in 24 JAN 1-21-04
Checked by R.W. 1-31-05
In charge R.W. 1-31-05
Jail 31-05



Floor Beams & Curb Girders
 Ten 103 ft. 4 in. Spans, State Bridge
 over Susquehanna River
 Ulster, Bradford Co., Penna.

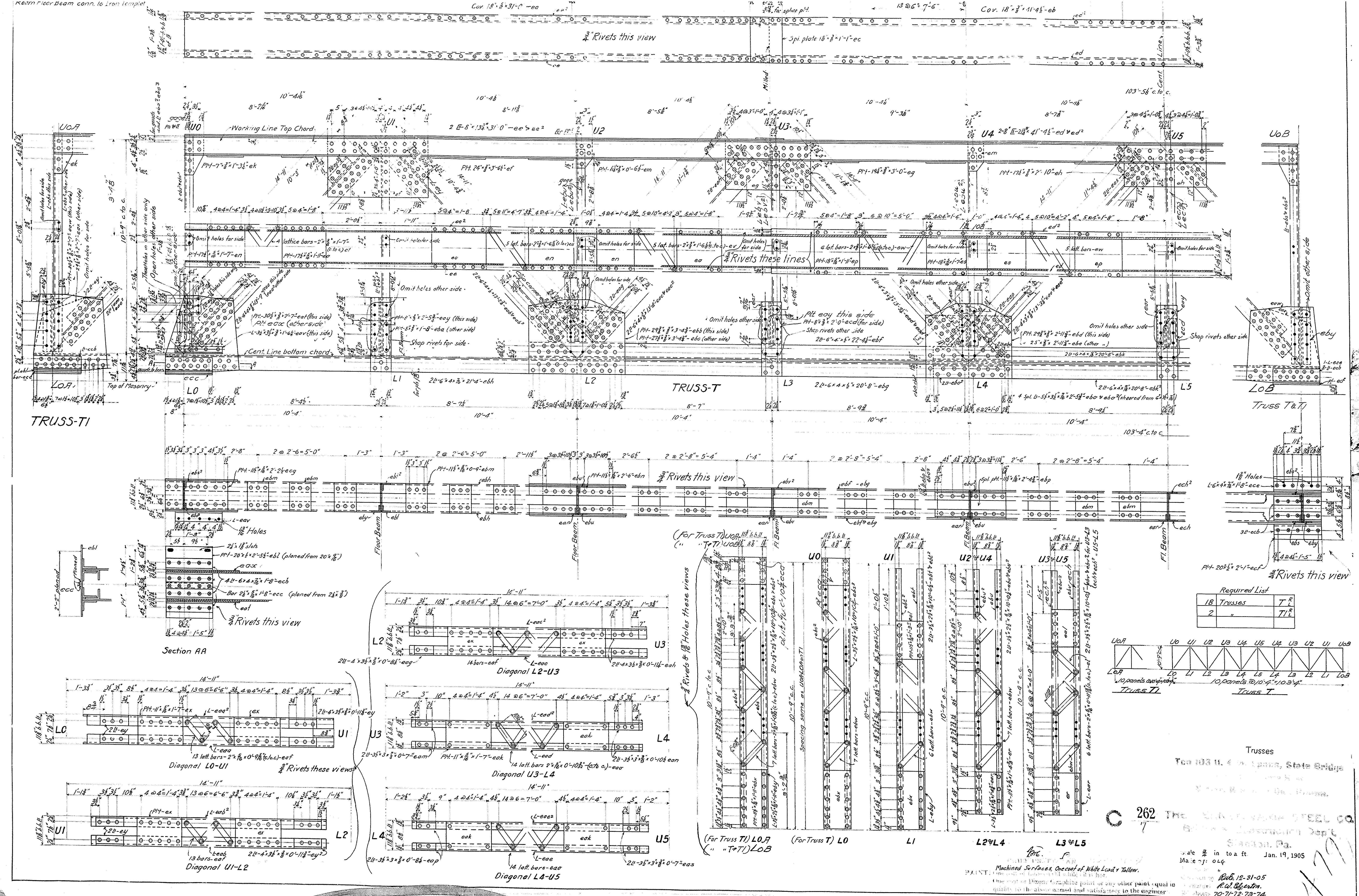
BUILT BY
THE PENNSYLVANIA STEEL CO
 Bridge & Construction Dep't
 Steelton, Pa.

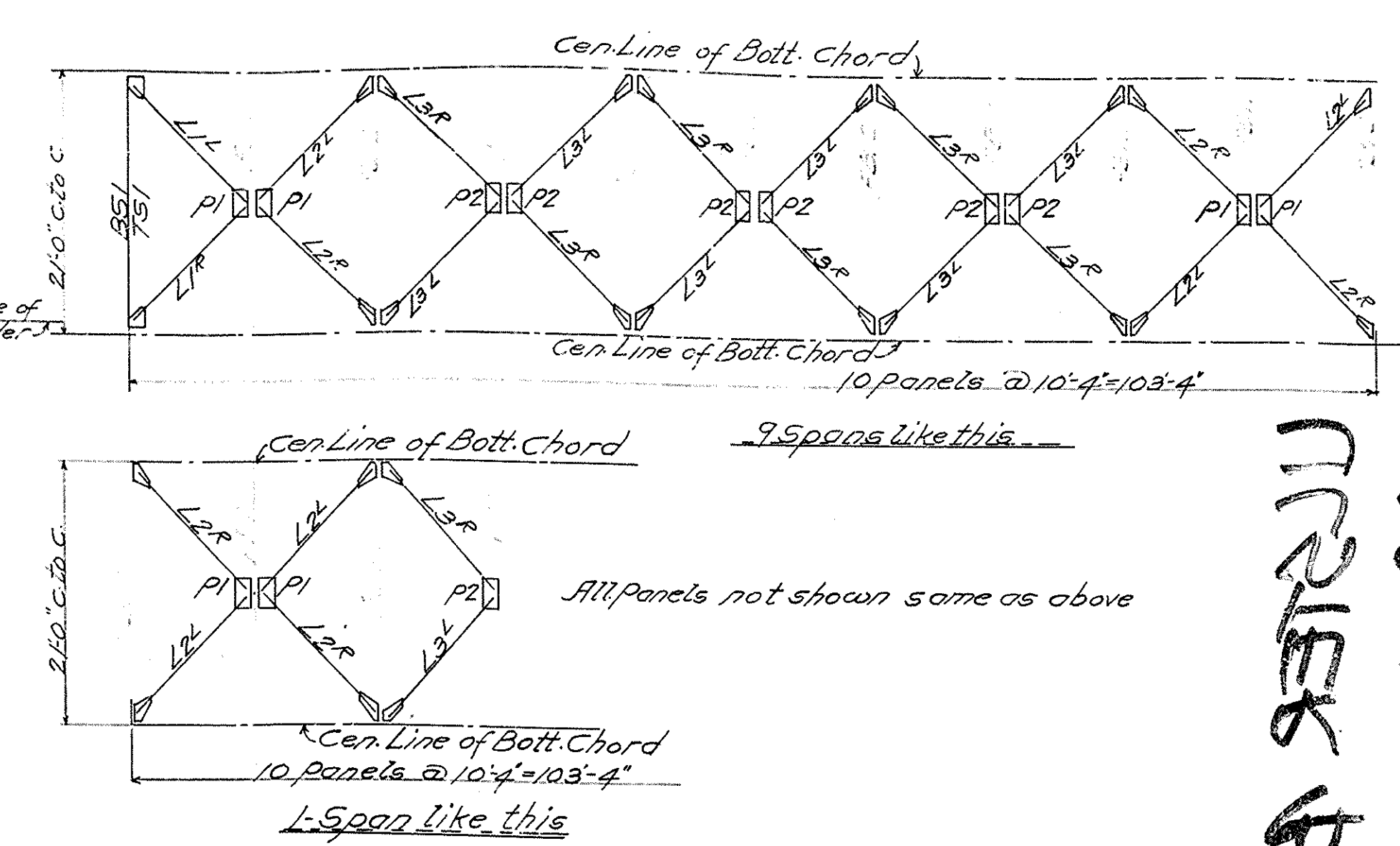
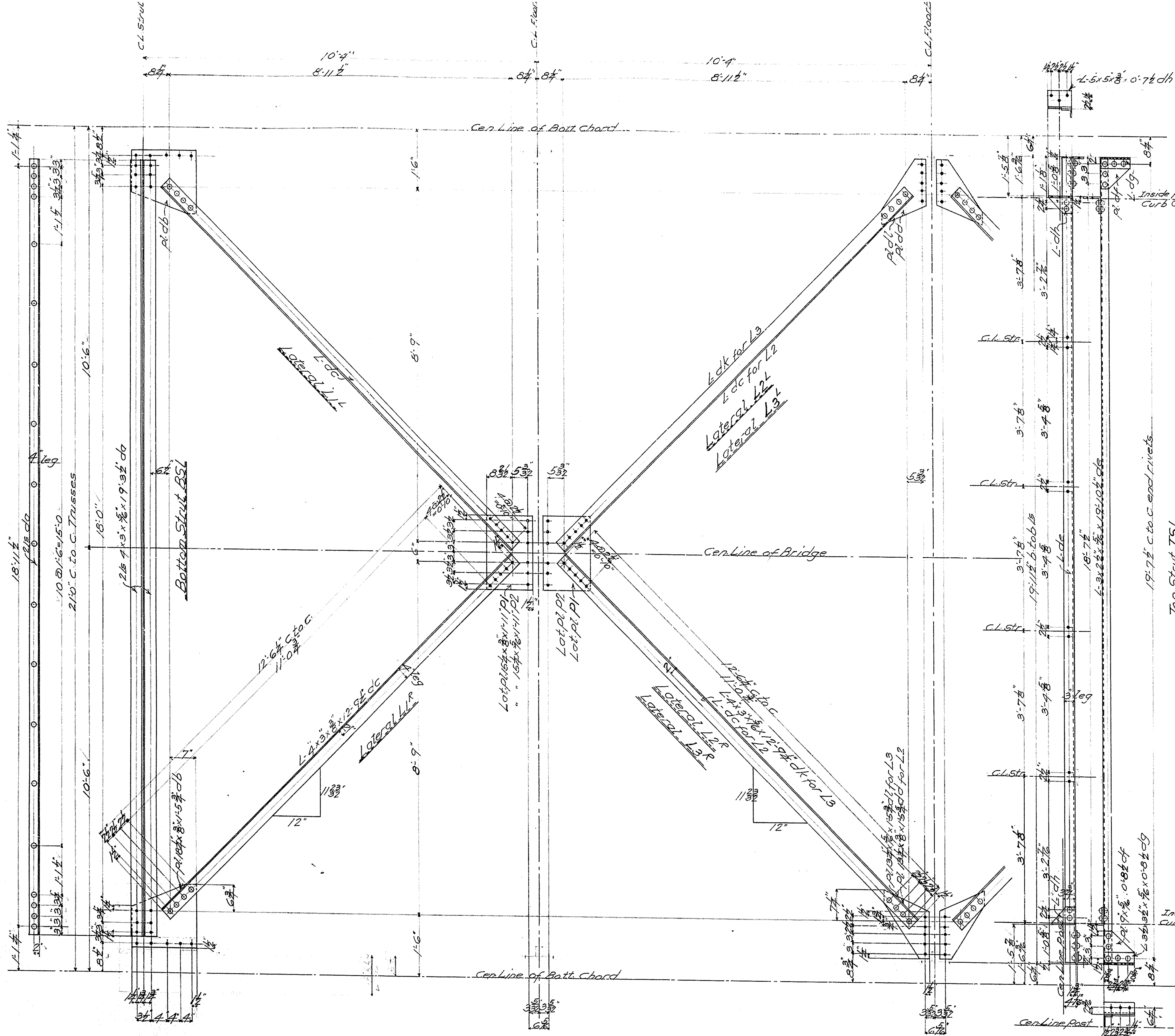
Scale $\frac{3}{8}$ in. to 1 ft. Jan. 19, 1905
 Made by J.H.
 Traced by
 Checked by R.W. 1-20-05.
 In charge: R. St. John.
 Bill sheets: 20-21

SEED PAINT One coat of Linseed Oil white, if it is not.
 Use coat of Duxon Graphite paint or any other paint equal in
 quality to the above named and satisfactory to the engineer.

Revised 4-6-05

4793





- Required List
- 9-Laterals L1R
 - 9 " L1L
 - 31 " L2R
 - 31 " L2L
 - 9-Top Struts T5L
 - 9-Bottom " B5L
 - 40 Lat. Plates P1
 - 60 " " P2
 - 60 Laterals L3R
 - 60 " L3L

Bottom Lateral Bracing
Ten 103 ft. 4 in. Spans, State Bridge
over Susquehanna River
Ulster, Bradford Co., Penna.

BUILT BY
C 262 THE PENNSYLVANIA STEEL CO
6 Bridge & Construction Dep't
Steelton, Pa.

Scale 3/8" in. to a ft. Jan. 14th 1905

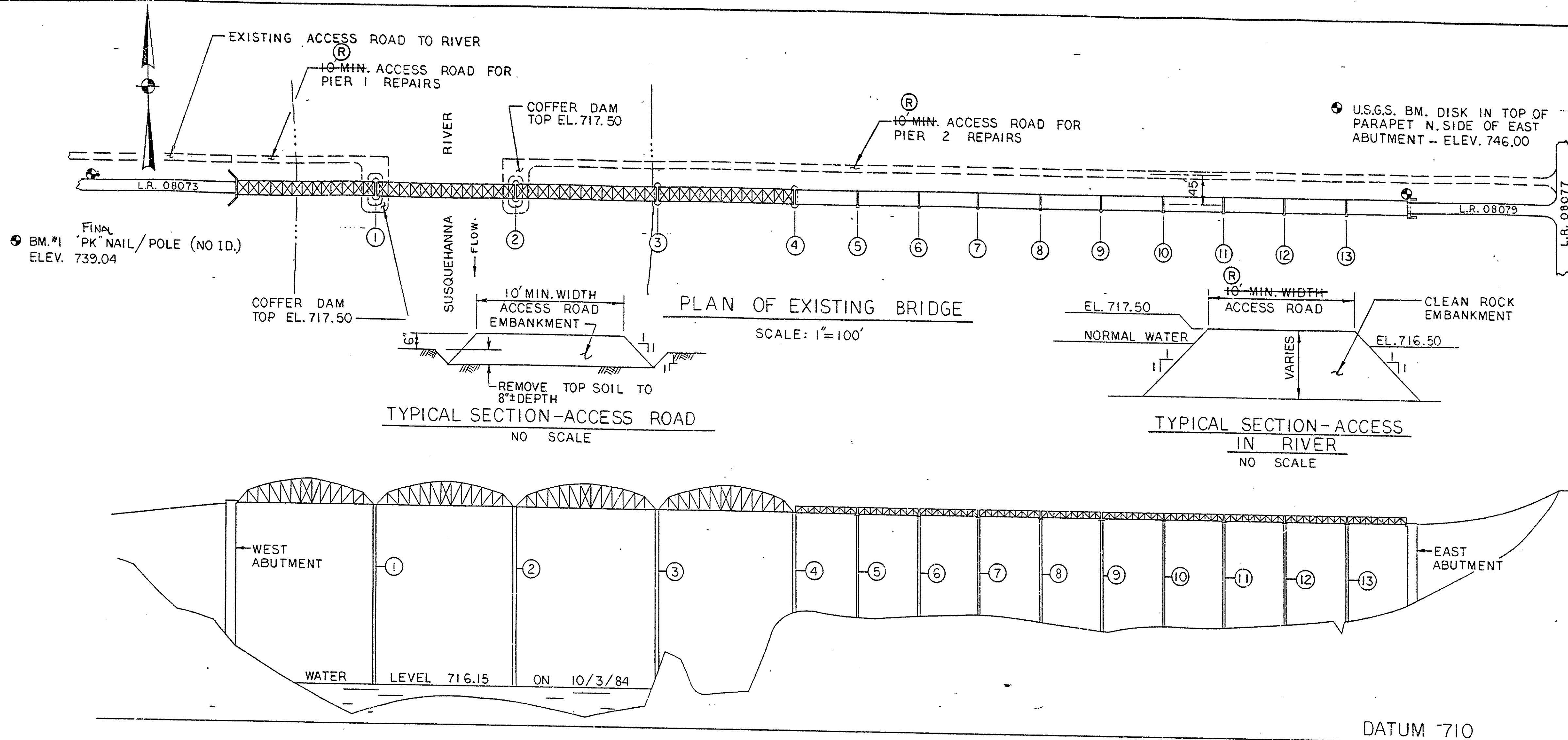
Made by
Drawn by
Checked by R.W.C. 1-16-05
in charge, R. W. Repton.
Bill sheets 60

SHOP PAINT One coat of Linseed Oil while oil is hot.
One coat of Dioxon Graphite paint or any other paint equal in
quality to be approved and satisfactory to the engineer.

CHIEF DRAFTSMAN

TRUSS BRIDGE

4791



SOUTH ELEVATION OF EXISTING BRIDGE

SCALE: HORIZ. 1"=100' - VERT. 1"=10'

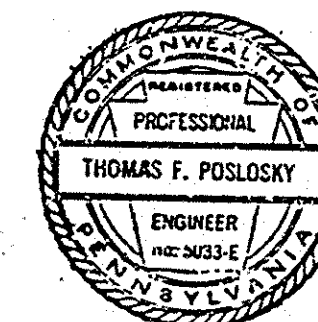
SUMMARY OF ESTIMATED BRIDGE QUANTITIES

ITEM NUMBER	ITEM	UNIT	PIER 1	PIER 2	TOTAL
2203-0002	CLASS 1 EXCAVATION, SPECIAL	C.Y.	120	120	240
2204-0101	CLASS 3 EXCAVATION, SPECIAL	C.Y.	105	105	210
2001-0010	CLASS A CEMENT CONCRETE, SPECIAL	C.Y.	145	145	290
1002-0001	REINFORCEMENT BARS	LBS.	4550	4550	9100
2205-0302	SELECTED BORROW EXCAVATION	TON	170	170	340
0664-0003	MASONRY REPOINTING, TYPE C	L.F.	2000	2000	4000
2000-0003	ADHESIVE ANCHORS	EA.	156	156	312

GENERAL NOTES:

- MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION 408, DATED 1983, AND THE CONTRACT SPECIAL PROVISIONS.
- DESIGN SPECIFICATIONS: DESIGN DIVISION OF 1977 "AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" (INCLUDING INTERIMS THRU 1982) AND AS SUPPLEMENTED BY THE PENNSYLVANIA DEPT. OF TRANSPORTATION DESIGN MANUAL PART 4, STRUCTURES (INCLUDING JULY 1982 REVISION).
- CONCRETE COVER ON REINFORCEMENT BARS SHALL BE AS NOTED.
- CLASS A CEMENT CONCRETE SHALL BE USED FOR THE FOOTING REPAIRS.
- EXPOSED CONCRETE EDGES SHALL BE CHAMFERED 1"X1" EXCEPT AS NOTED.
- ALL REINFORCEMENT STEEL SHALL MEET THE REQUIREMENTS OF ASTM DESIGNATION A615, G10 OR G17, GRADE 60, AS SET FORTH IN PUBLICATION 408.
- LAP SPICE LENGTHS AND EMBEDMENT LENGTHS SHALL CONFORM TO AASHTO ART. 1.5.22.
- ALL DIMENSIONS ARE HORIZONTAL.
- THE CONTRACTOR SHALL NOTIFY ALL INVOLVED UTILITY COMPANIES PRIOR TO STARTING WORK. UTILITIES WILL NOT BE DISTURBED OR ENDANGERED DURING CONSTRUCTION OPERATIONS.
- CONSTRUCTION DETAILS OTHER THAN THOSE SHOWN ON THESE DRAWINGS SHALL CONFORM TO THE STANDARD DRAWINGS.
- ALL DIMENSIONS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR BEFORE THE START OF CONSTRUCTION.
- ANY PORTION OF THE EXISTING STRUCTURE NOT SPECIFIED FOR REMOVAL, WHICH IS DAMAGED BY THE CONTRACTOR SHALL BE REPLACED IN KIND AT NO EXPENSE TO THE DEPARTMENT.
- THE ENGINEER RESERVES THE RIGHT TO CHANGE THE NATURE AND LIMITS OF THE WORK TO ASSURE A SATISFACTORY REPAIR.
- ALL EXISTING CONCRETE WHICH IS TO COME IN CONTACT WITH THE NEW CONCRETE SHALL BE COATED WITH EPOXY BONDING COMPOUND JUST PRIOR TO PLACING THE NEW CONCRETE. THE EXISTING CONCRETE SHALL BE THOROUGHLY BLAST CLEANED PRIOR TO THE APPLICATION OF THE EPOXY. THE COST OF CLEANING AND EPOXY APPLICATION SHALL BE INCIDENTAL TO THE CLASS OF CONCRETE FOR WHICH IT IS APPLIED. THE EPOXY RESIN BONDING COMPOUND SHALL BE TYPE 2, GRADE 2 AS DESCRIBED IN ASTM C 881-78.

(R)	Checked Drawg. per Final Survey And As Built Plan.	G.L.F.			4/1/88
(R)	Alternate Construction Details	Pa DOT 3-0	LR	KAD	2/7/85
Mark	Description	By	Chk'd	App'd	Date
REVISIONS					



Thomas F. Poslosky, P.E.
12/5/84

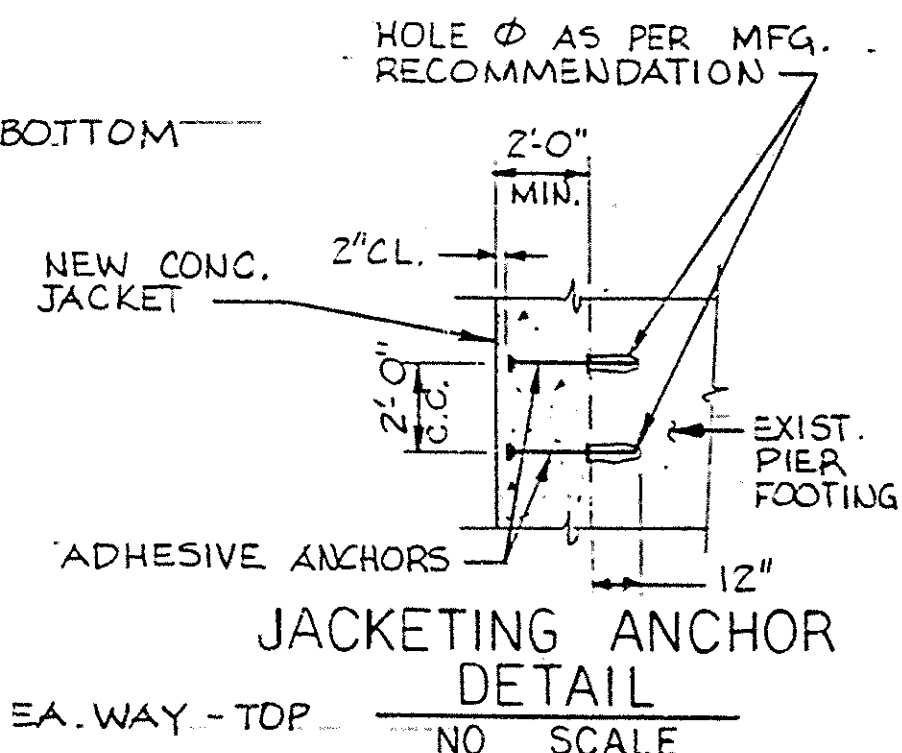
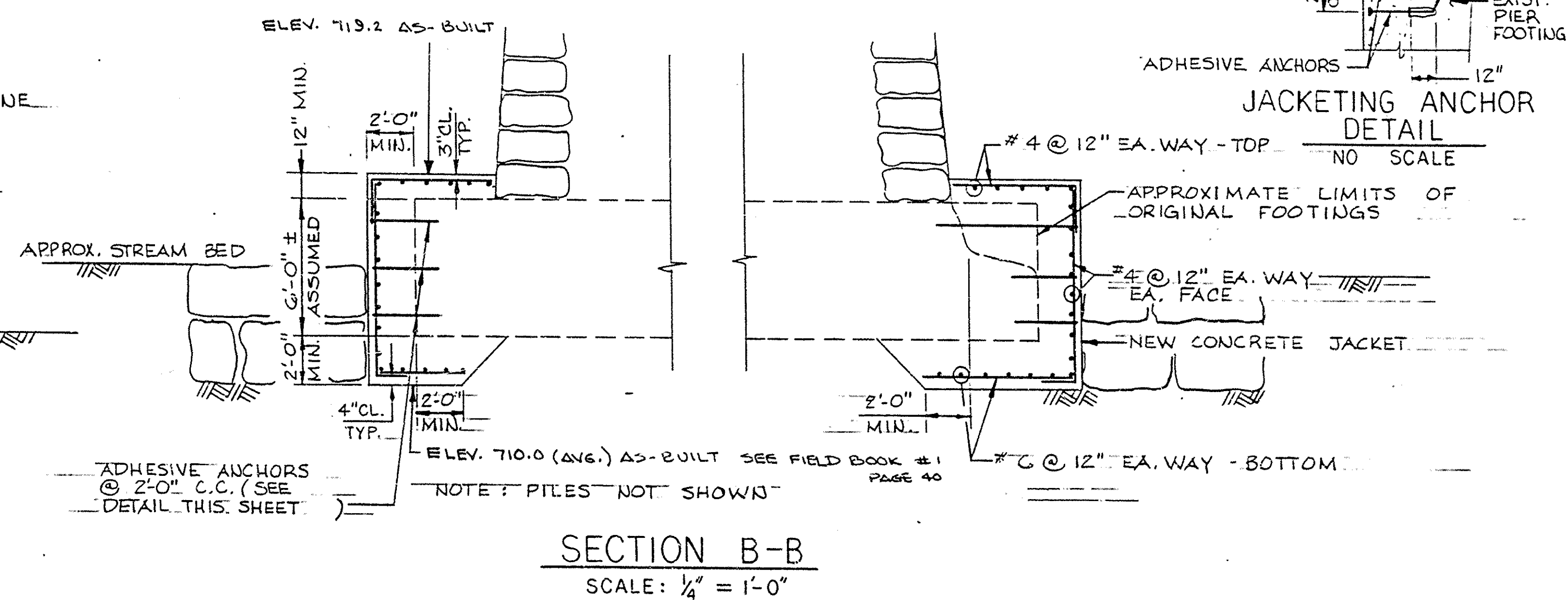
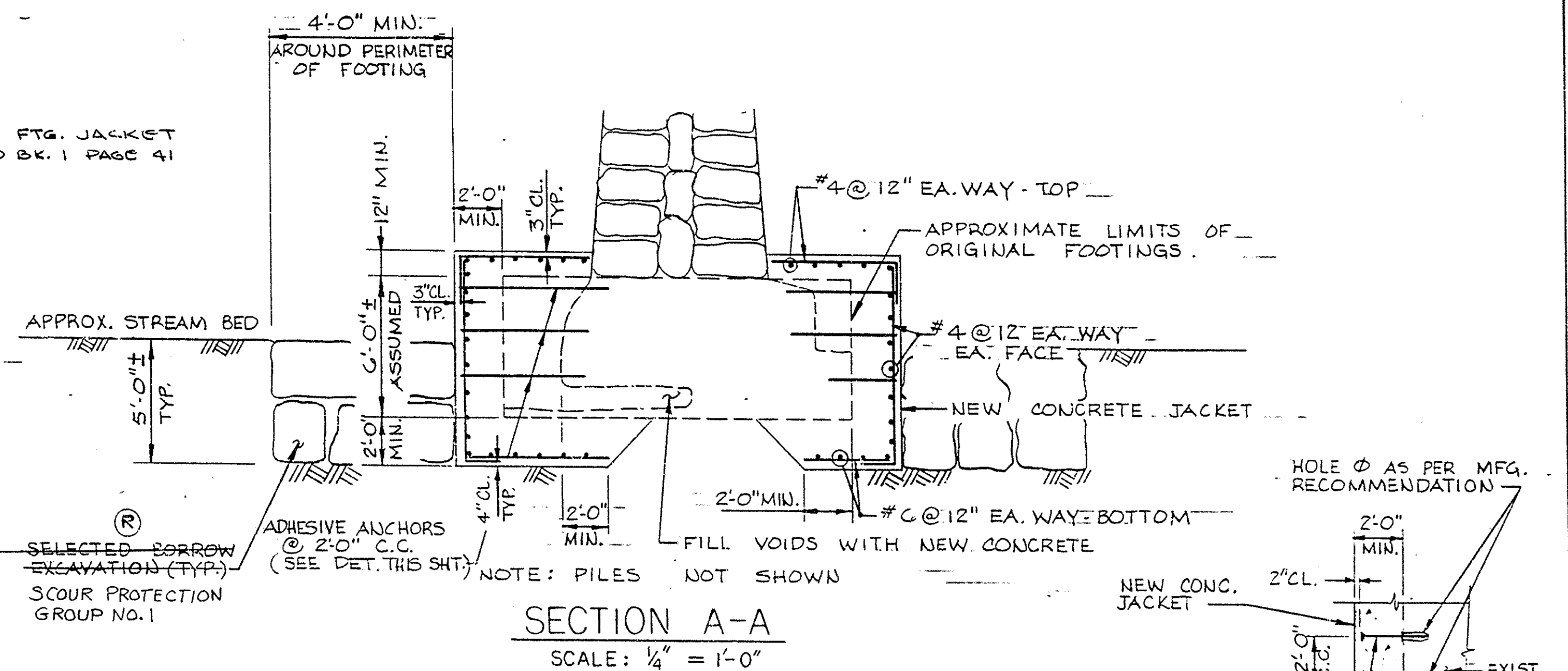
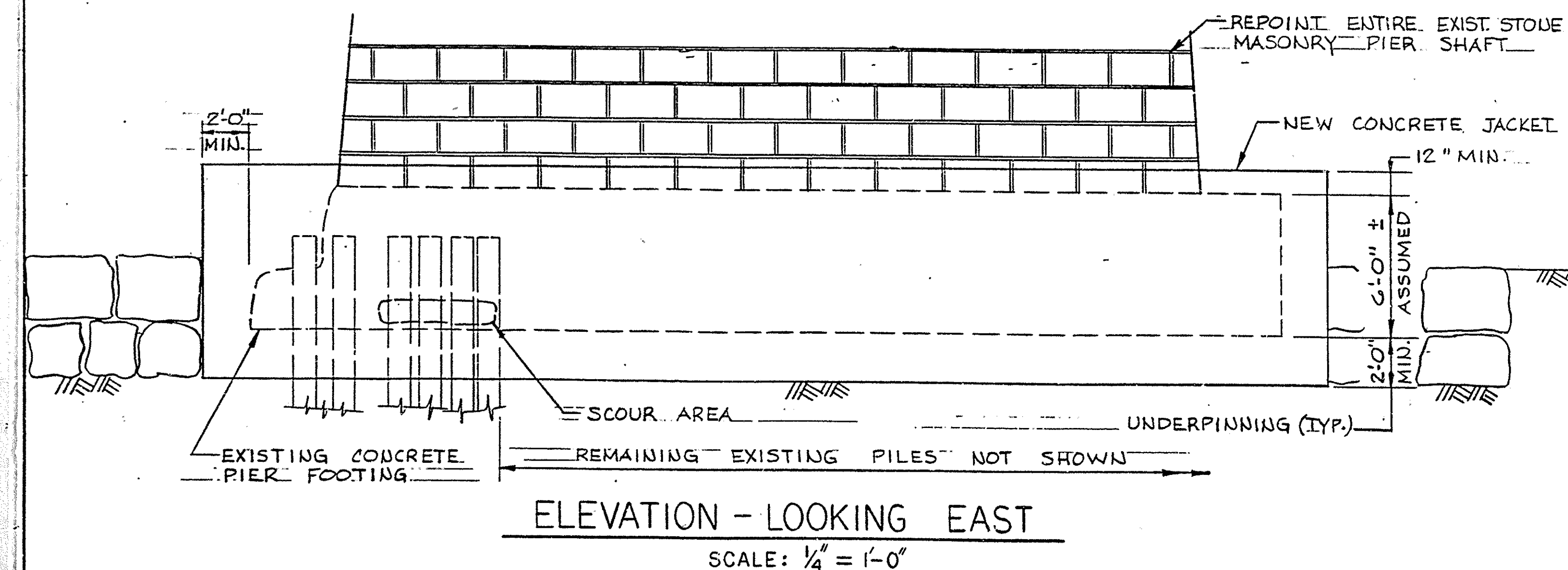
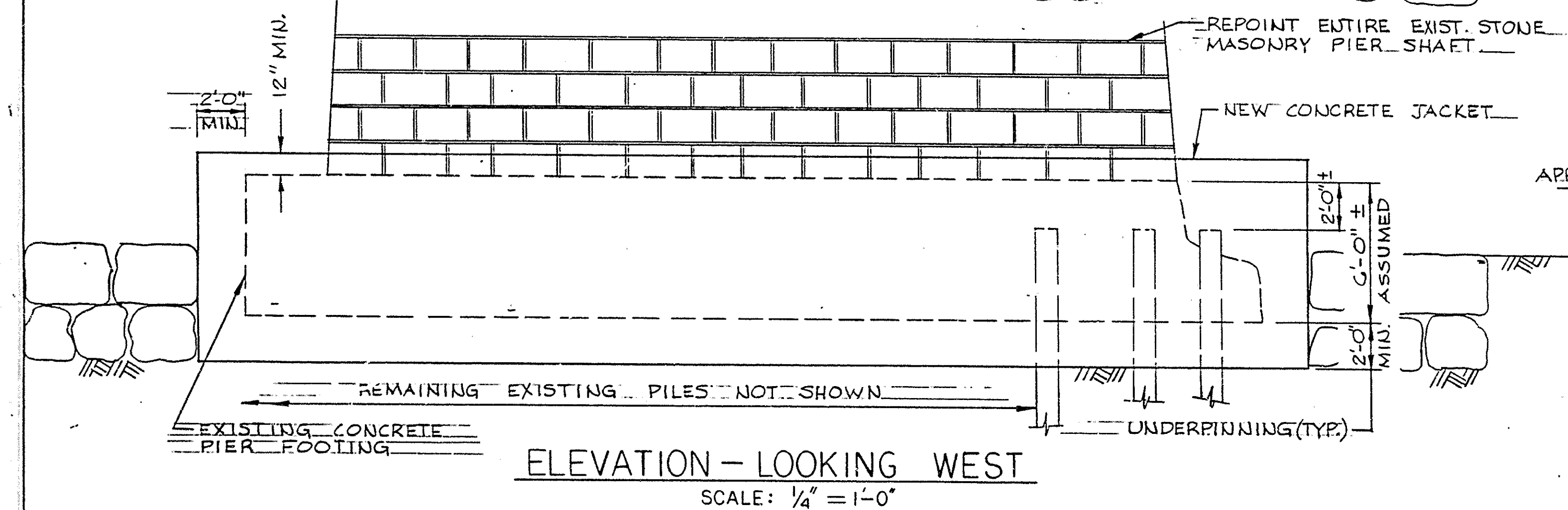
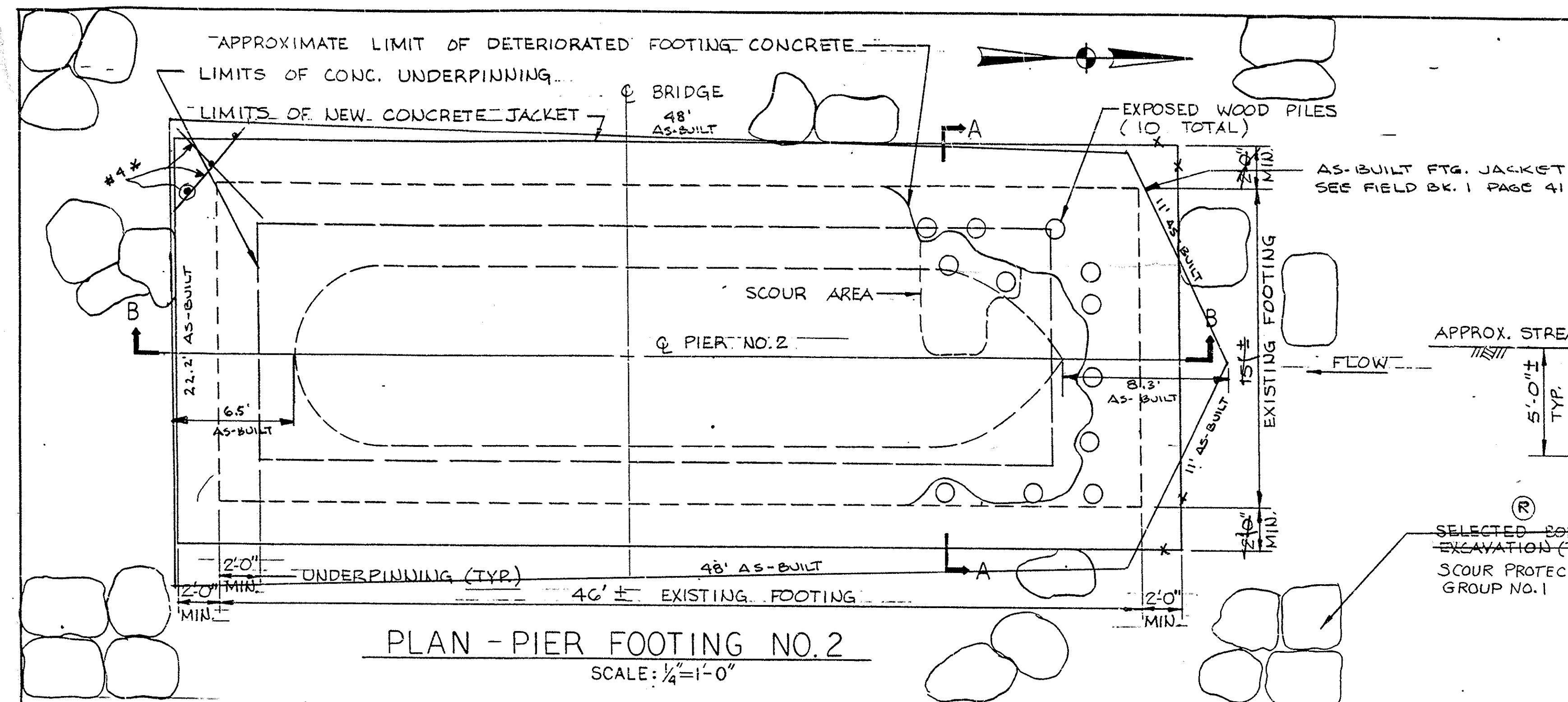
BRADFORD COUNTY
ULSTER/SHESEQUIN TOWNSHIPS
COUNTY BRIDGE NO. 36
OVER SUSQUEHANNA RIVER
GENERAL PLAN AND ELEVATION

REINF. BAR FABRICATION DETAILS	BC-336A	11/4/81
BACKFILL AT STRUCTURES	RC-12	5/2/83
DESCRIPTION	DWG. NO.	APP. DATE
SUPPLEMENTAL DRAWINGS		

PENNEAST CORPORATION
CONSULTING ENGINEERS
541 WEST BACON STREET - PAID ALTO
POTTSVILLE PENNSYLVANIA

RECOMMENDED 12-17-84
R.C. Quinn
BRIDGE ENGINEER

SHEET 1 OF 3
SUPPLEMENTAL
DRAWINGS
S-15952



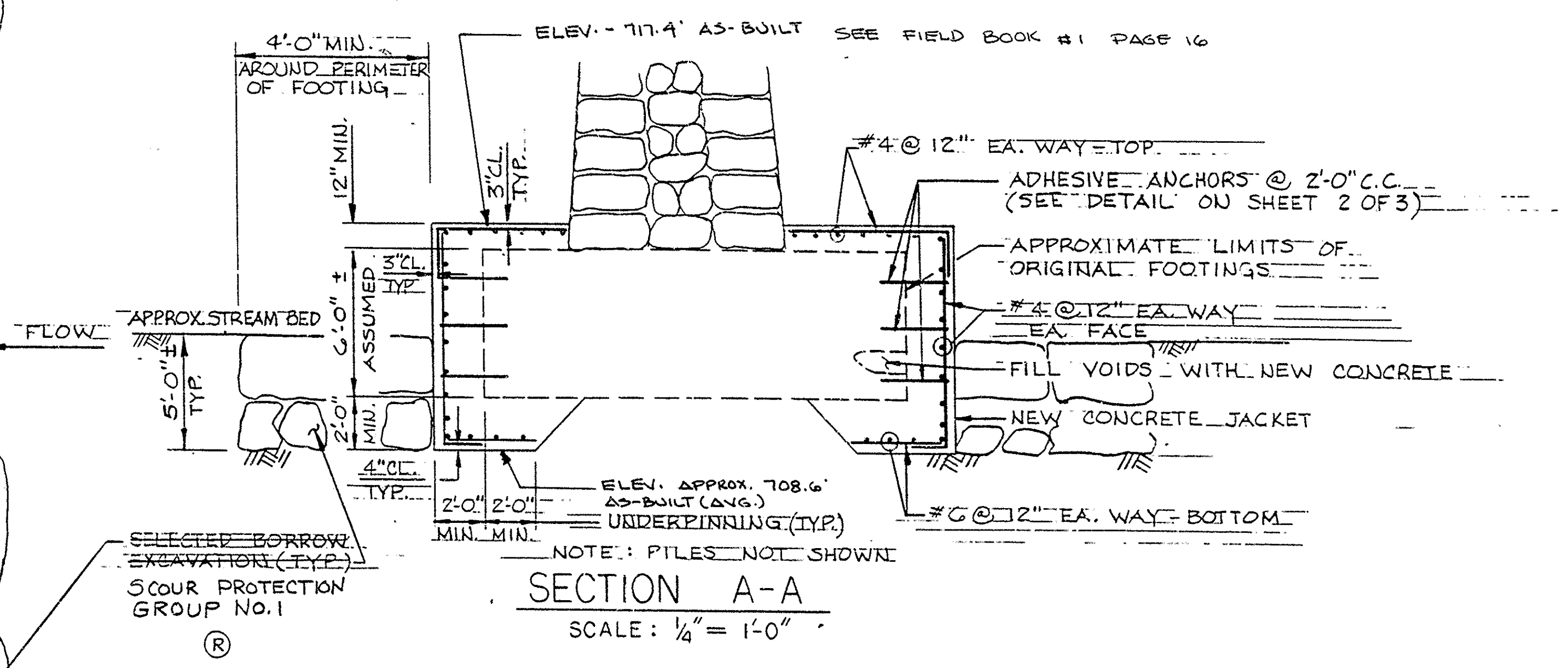
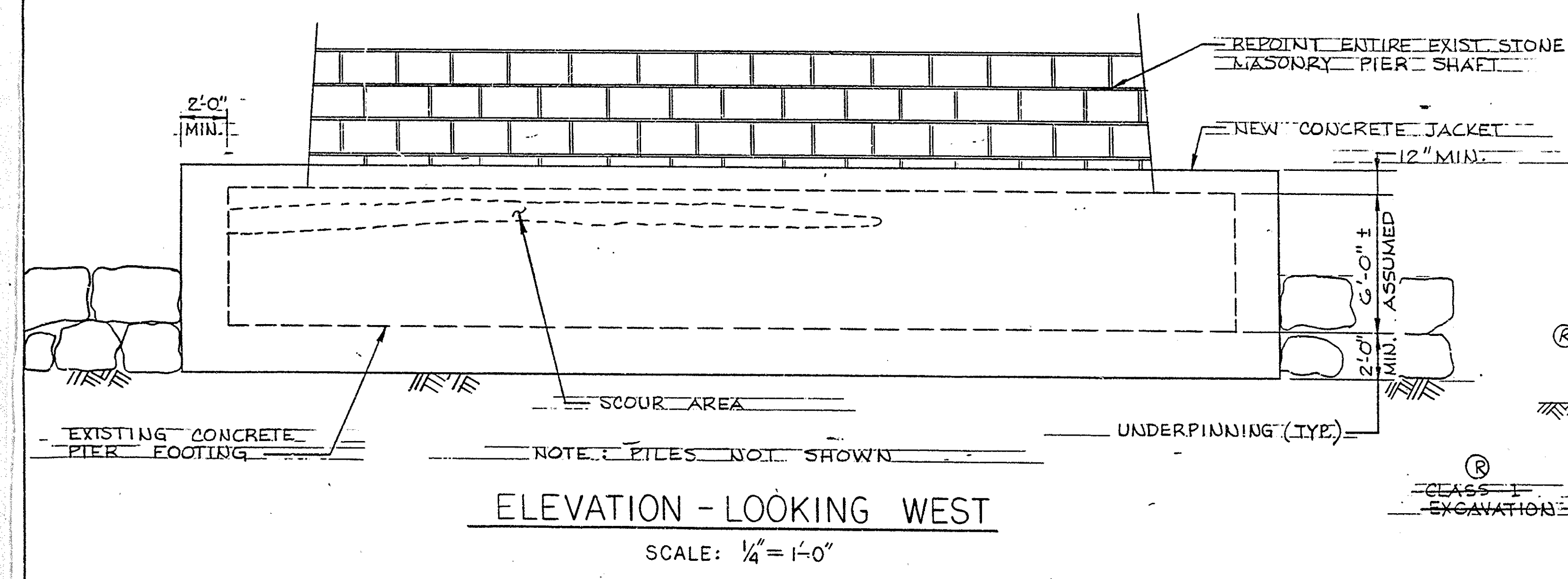
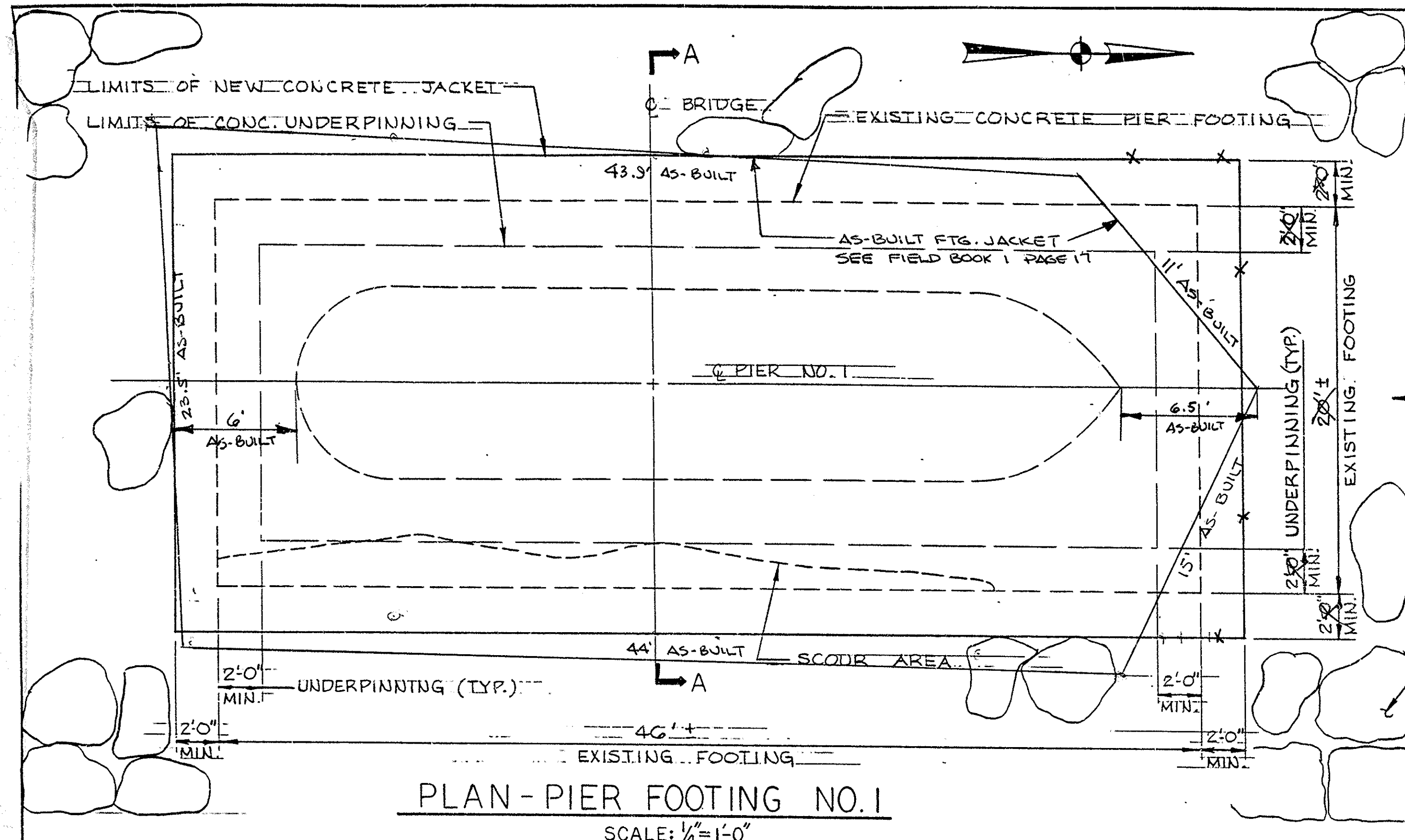
- NOTES :

- REPAIRS TO PIER NO. 2 FOOTING MUST BE COMPLETED PRIOR TO THE START OF ANY WORK FOR THE REPAIR OF PIER NO. 1 FOOTING.
- REMOVE ALL LOOSE, DETERIORATED CONCRETE FROM EXISTING FOOTING PRIOR TO PLACING REINFORCEMENT BARS AND FORMS.
- DETERIORATED PORTIONS OF THE EXPOSED TIMBER PILING TO BE REMOVED. INCREASE EXTENT OF NEW CONCRETE WORK AS REQUIRED TO ENCASE AT LEAST 12 INCHES OF THE TIMBER PILES.
- BLAST CLEAN EXISTING CONC. SURFACES, USE ADHESIVE ANCHORS AND EPOXY RESIN BONDING COMPOUND TO BOND NEW AND OLD CONCRETE.

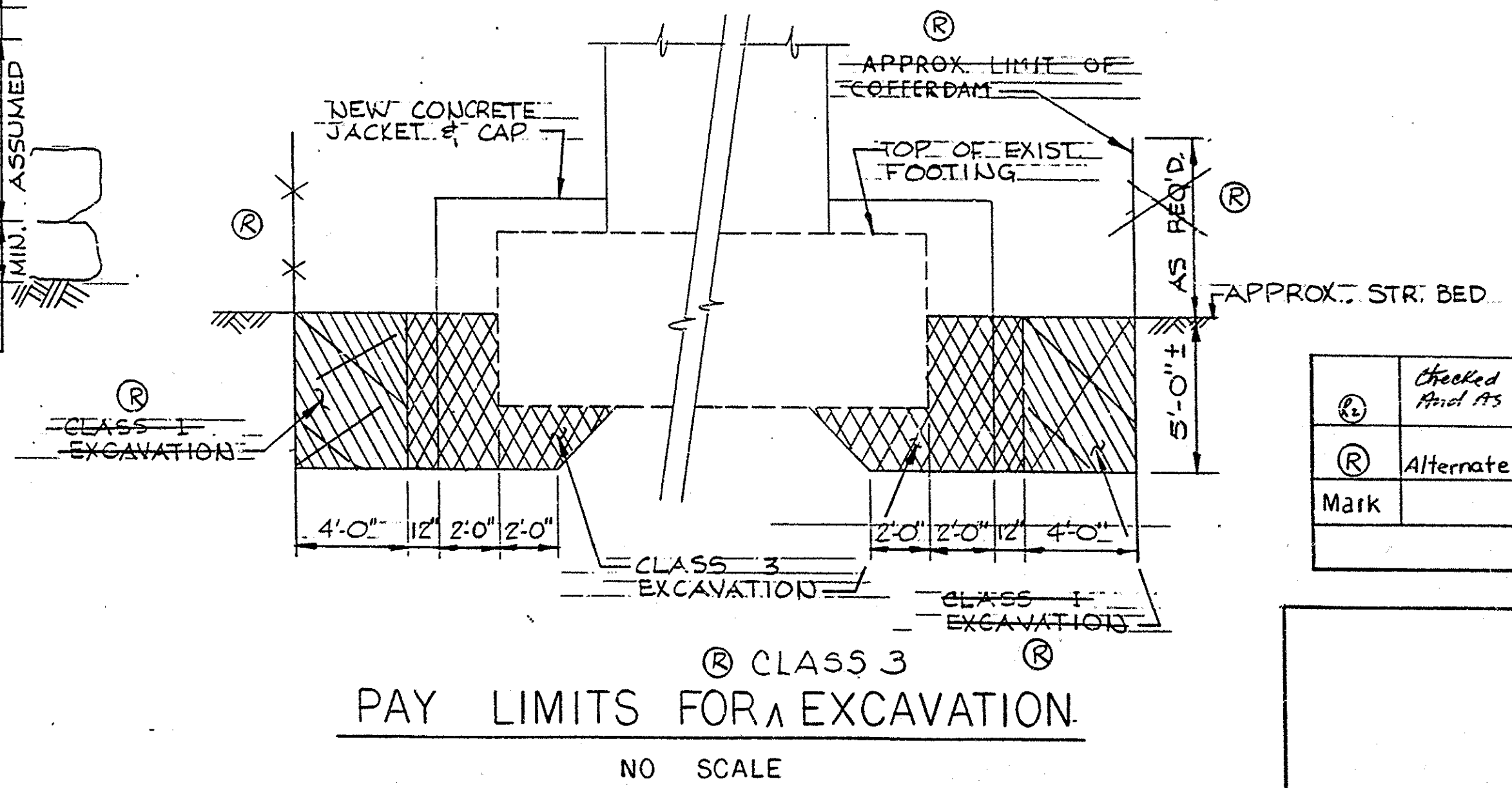
* ADDITIONAL #4 BARS ADDED @ ALL 4 CORNERS
BY ORDER OF ENGINEER DUE TO EXCESSIVE VOIDS
CAUSED BY DETERIORATED CONC.

(R2)	Checked Drwg. per Final Survey And As Built Plan.	G.L.F.			2/11/88
(R)	Alternate Construction Details	PaDOT 3-0	1 R	KAD	2/7/85
Mark	Description	By	Chk'd.	App'd.	Date
REVISIONS					

BRADFORD COUNTY
ULSTER / SHESHEQUIN TOWNSHIPS
COUNTY BRIDGE NO. 36
OVER SUSQUEHANNA RIVER
FOOTING REPAIRS PIER NO. 2



- NOTES:**
- REPAIR FOOTING FOR PIER NO. 1 AFTER REPAIRS TO PIER NO. 2 HAVE BEEN COMPLETED. INCLUDING PLACEMENT OF SELECTED BORROW EXCAVATION AND THE ACCESS ROAD AND COFFER DAM HAVE BEEN REMOVED.
 - REMOVE ALL LOOSE, DETERIORATED CONCRETE FROM EXISTING FOOTING PRIOR TO PLACING REINFORCEMENT BARS AND FORMS.
 - BLAST CLEAN EXISTING CONCRETE SURFACES. USE ADHESIVE ANCHORS AND EPOXY RESIN BONDING COMPOUND TO BOND NEW AND OLD CONCRETE.



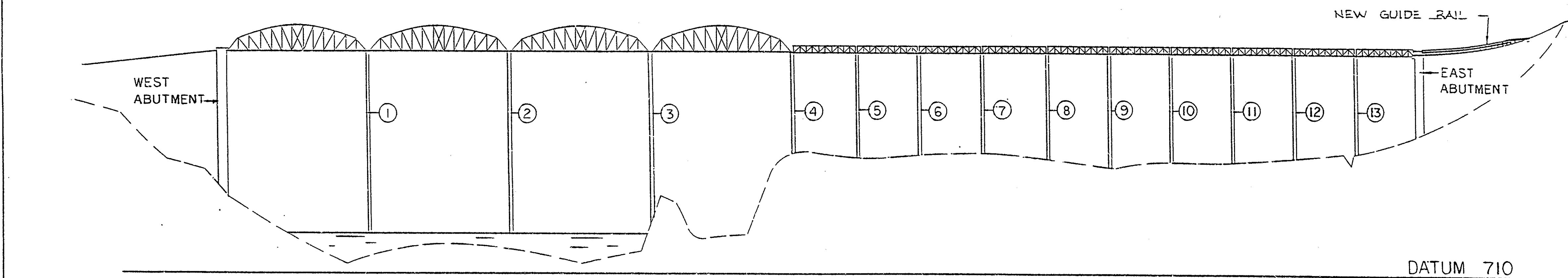
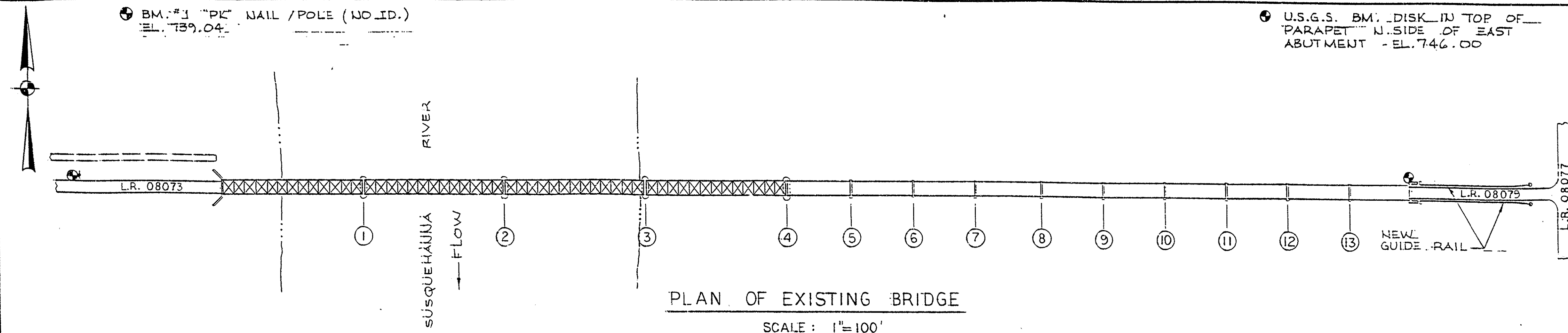
Mark	Description	By	Chk'd.	App'd.	Date
(S)	Checked Draw per Final Survey And As Built Plan.	G.L.F.			4/1/88
(R)	Alternate Construction Details	R.D.T.	LR	KAD	2/7/85

BRADFORD COUNTY
ULSTER / SHESHEQUIN TOWNSHIPS
COUNTY BRIDGE NO. 36
OVER SUSQUEHANNA RIVER
FOOTING REPAIRS PIER NO.1

RECOMMENDED _____
BRIDGE ENGINEER

SHEET 3 OF 3
S-15952

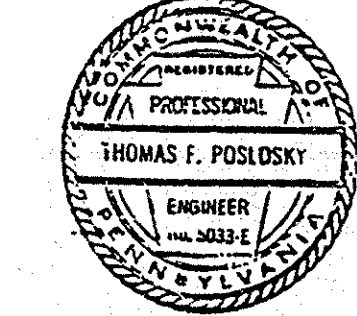
PE PENNEAST CORPORATION
CONSULTING ENGINEERS
541 WEST BACON STREET - PALO ALTO
POTTSVILLE PENNSYLVANIA



- GENERAL NOTES:**
- MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION 408, DATED 1933 AND THE CONTRACT SPECIAL PROVISIONS.
 - DESIGN SPECIFICATIONS: DESIGN DIVISION OF 1933 AASHTO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" (INCLUDING INTERIMS THROUGH 1933) AND AS SUPPLEMENTED BY THE PENNSYLVANIA DEPT. OF TRANSPORTATION DESIGN MANUAL, PART 4, STRUCTURES (INCLUDING JULY 1982 REVISION.)
 - THE CONTRACTOR SHALL NOTIFY ALL INVOLVED UTILITY COMPANIES PRIOR TO STARTING WORK. UTILITIES WILL NOT BE DISTURBED OR ENDANGERED DURING CONSTRUCTION OPERATIONS.
 - CONSTRUCTION DETAILS OTHER THAN THOSE SHOWN ON THESE DRAWINGS SHALL CONFORM TO THE STANDARD DRAWINGS.
 - ALL DIMENSIONS ARE HORIZONTAL.
 - ALL DIMENSIONS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR BEFORE THE START OF CONSTRUCTION.
 - ANY PORTION OF THE EXISTING STRUCTURE NOT SPECIFIED FOR REMOVAL WHICH IS DAMAGED BY THE CONTRACTOR SHALL BE REPLACED IN KIND AT NO EXPENSE TO THE DEPARTMENT.
 - THE ENGINEER RESERVES THE RIGHT TO CHANGE THE NATURE AND LIMITS OF THE WORK TO ASSURE A SATISFACTORY REPAIR.
 - WHEN ADDING THE NEW DECK STRINGERS, THE CONTRACTOR SHALL NOT REMOVE MORE THAN ONE (1) CROSS BRACE AT A TIME (BELOW THE BRIDGE DECK ON THE WATERWAY SPANS.) REPLACE CROSS BRACING USING $\frac{3}{4}$ " Ø A-325 BOLTS.
 - THE CONTRACTOR SHALL REPLACE ALL RIVETS AT THE UPPER CHORD LATERAL BRACING CONNECTIONS WHICH SHOW VISIBLE SIGNS OF RIVET HEAD DISPLACEMENT (APPROX. 30). THESE RIVETS ARE TO BE REPLACED ONE AT A TIME WITH $\frac{3}{4}$ " Ø A-325 BOLTS.
 - THE CONTRACTOR SHALL REPLACE ALL BENT BRIDGE RAILING CONNECTION PLATES ENLARGE SLOTTED HOLES IN ENDS OF BRIDGE RAILING TO PROVIDE FOR THERMAL MOVEMENT.
 - TIGHTEN "PIN" NUTS AT UPPER TRUSS JOINTS U₁ AND U₂ OF THE DOWNSTREAM TRUSS FOR SPAN 4. CHECK PIN NUTS AT ALL OTHER JOINTS AND TIGHTEN WHERE NECESSARY.
 - REPLACE MISSING RIVETS WITH $\frac{3}{4}$ " Ø A-325 BOLTS TRUSS JOINT L₁₁ OF THE DOWNSTREAM TRUSS OF SPAN 4 AND AT OTHER JOINTS AS REQUIRED.
 - DESIGN LOADING FOR REPAIRS IS HS-20 / ML-80.

SUMMARY OF ESTIMATED BRIDGE QUANTITIES							
ITEM NUMBER	ITEM	UNIT	PIER 4	PIERS 5-13	E. ABUT.	SUPER.	TOTAL
0664-0003	MASONRY REPOINTING TYPE C	L.F.	750	—	750	—	1,500
1011-0001	OPEN STEEL BEAM BRIDGE FLOORING	S.F.	—	—	—	504	504
1017-0002	PRESSURE MORTAR SURFACING	S.Y.	—	20	—	—	20
1019-0002	PROTECTIVE COATING FOR REINF. CONCR. SURFACE	S.Y.	—	1000	—	—	1000
1056-0100	FABRICATED STRUCTURAL STEEL (RETROFIT)	LB.	—	—	—	296,609	296,609
1070-0001	PAINT EXIST. STRUCTURAL STEEL (APPROX. 2,323,765 LBS.)	L.S.	—	—	—	—	—
1090-0025	REPAIR EXPANSION BEARINGS	EA.	—	—	—	8	8
2014-0002	REPAIRS TO EXISTING BRIDGE RAILING	L.S.	—	—	—	L.S.	L.S.
2050-0100	ULTRASONIC TESTING OF EYEBARS	L.S.	—	—	—	L.S.	L.S.
1071-0001	PAINT EXIST. STEEL USING ALUMINUM	L.S.	—	—	—	—	—
2070-0001	POLLUTION CONTROL	L.S.	—	—	—	—	—
2056-0001	3/4" DIAMETER HIGH STRENGTH BOLTS	EA.	—	—	—	8751	8751

TYPE 2-S	TYPE 2-SC	GUIDE RAIL	RC-52 JAN. 2, 1986
DESCRIPTION		DWG. NO. / APP. DATE	
SUPPLEMENTAL DRAWINGS			

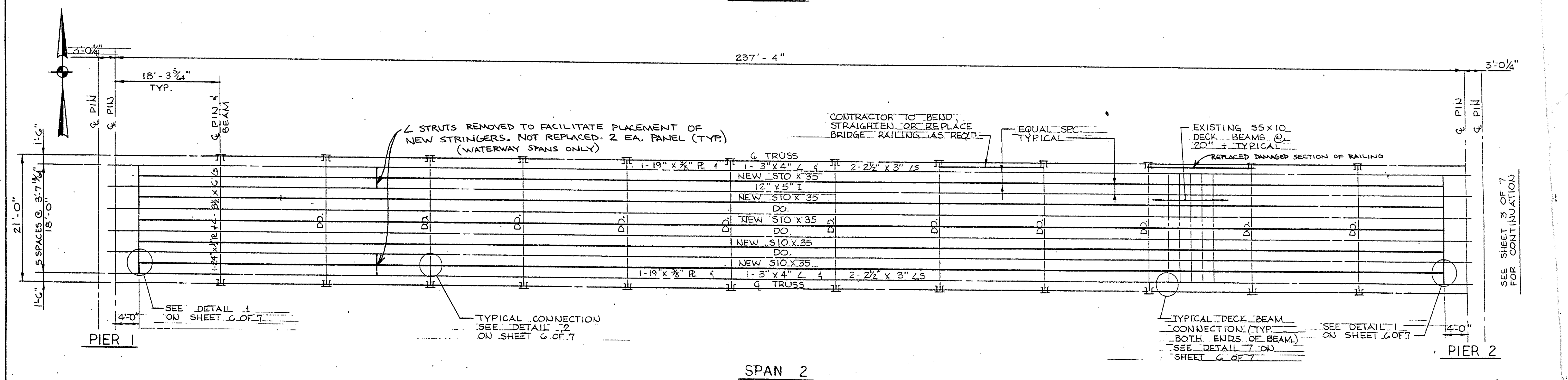
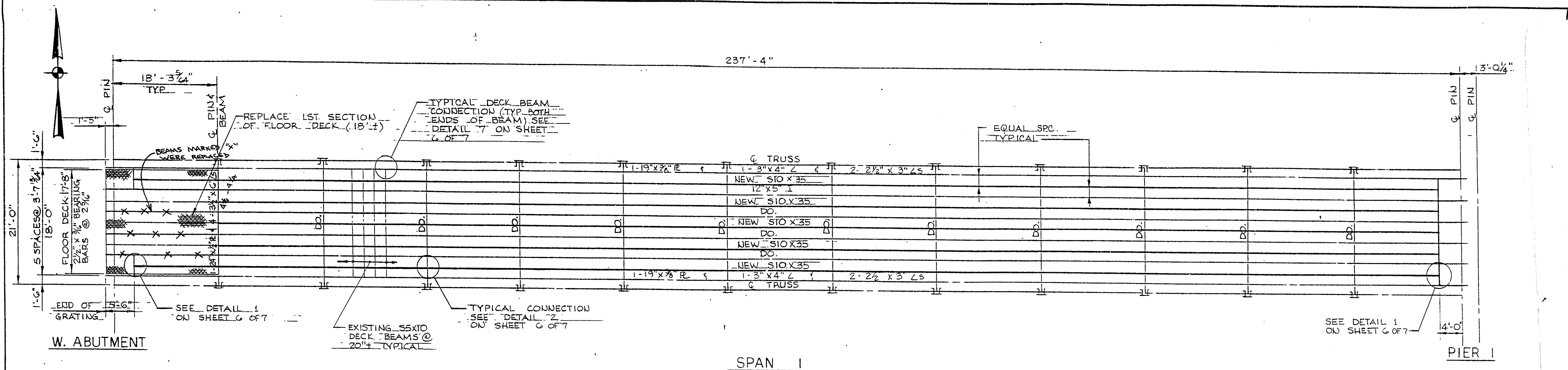


Thomas F. Poslosky, P.E.
6/26/86

R-2	Checked Drawg. per Final Survey And As Built Plan	G.L.F.			2/11/88
R-1	DELETE ITEM NO. 1070-0001 DELETE ITEM NO. 1071-0001 DELETE ITEM NO. 2070-0001	N.J.P.	H.D.H.	C.P.B.	1-26-87
Mark	Description	By	Chk'd.	App'd.	Date
REVISIONS					

BRADFORD COUNTY
ULSTER / SHESHEQUIN TOWNSHIPS
COUNTY BRIDGE NO. 36
OVER SUSQUEHANNA RIVER
GENERAL PLAN AND ELEVATION

RECOMMENDED	Oct 14, 1986	SHEET 1 OF 7
BRIDGE ENGINEER		+ SUPPLEMENTAL DRAWINGS
		S-16741A



EXISTING FLOOR PLAN
WATERWAY TRUSS SPANS

SCALE: 1/8" = 1'-0"

Mark	Description	By	Chk'd.	App'd.	Date
(R)	Revised Drawg. per Final Survey And As Built Plan.	G.L.F.			2/1/88
REVISIONS					

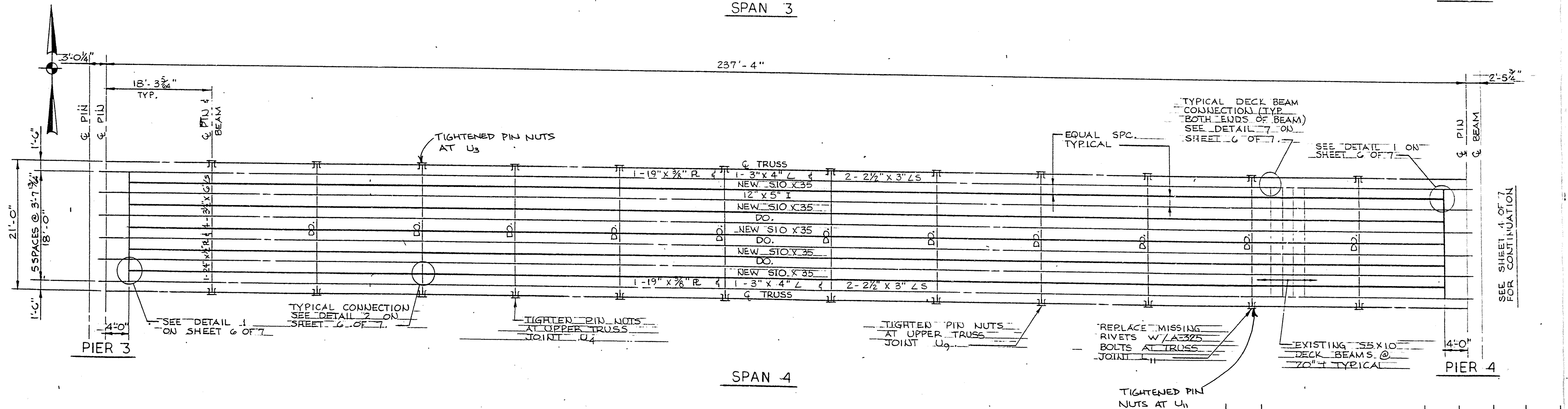
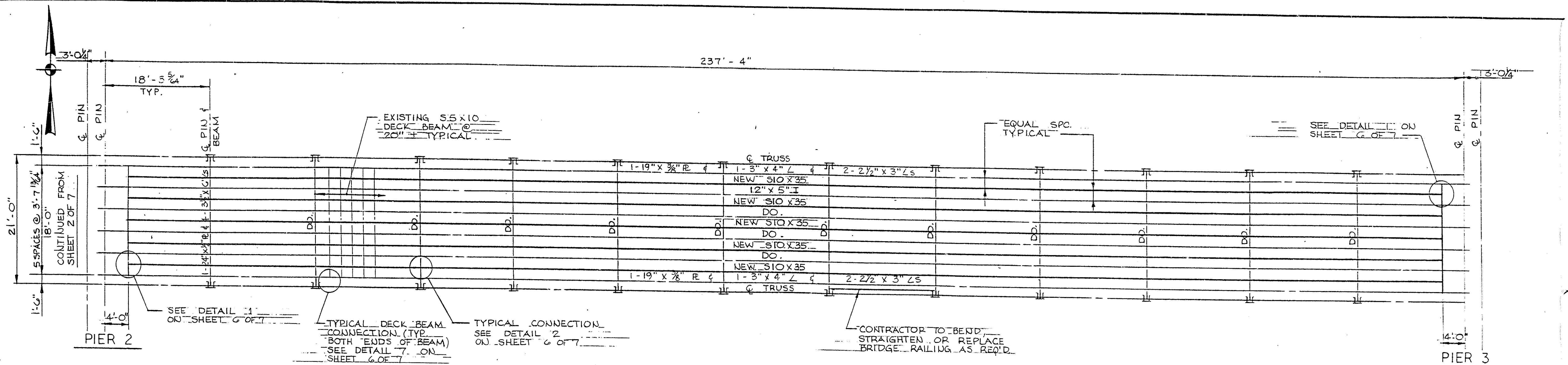
BRADFORD COUNTY
ULSTER/SHEPHEQUIN TOWNSHIPS
COUNTY BRIDGE NO. 36
OVER SUSQUEHANNA RIVER
STRINGER PLACEMENT PLAN

RECOMMENDED

BRIDGE ENGINEER

SHEET 2 OF 7

S-16741 A

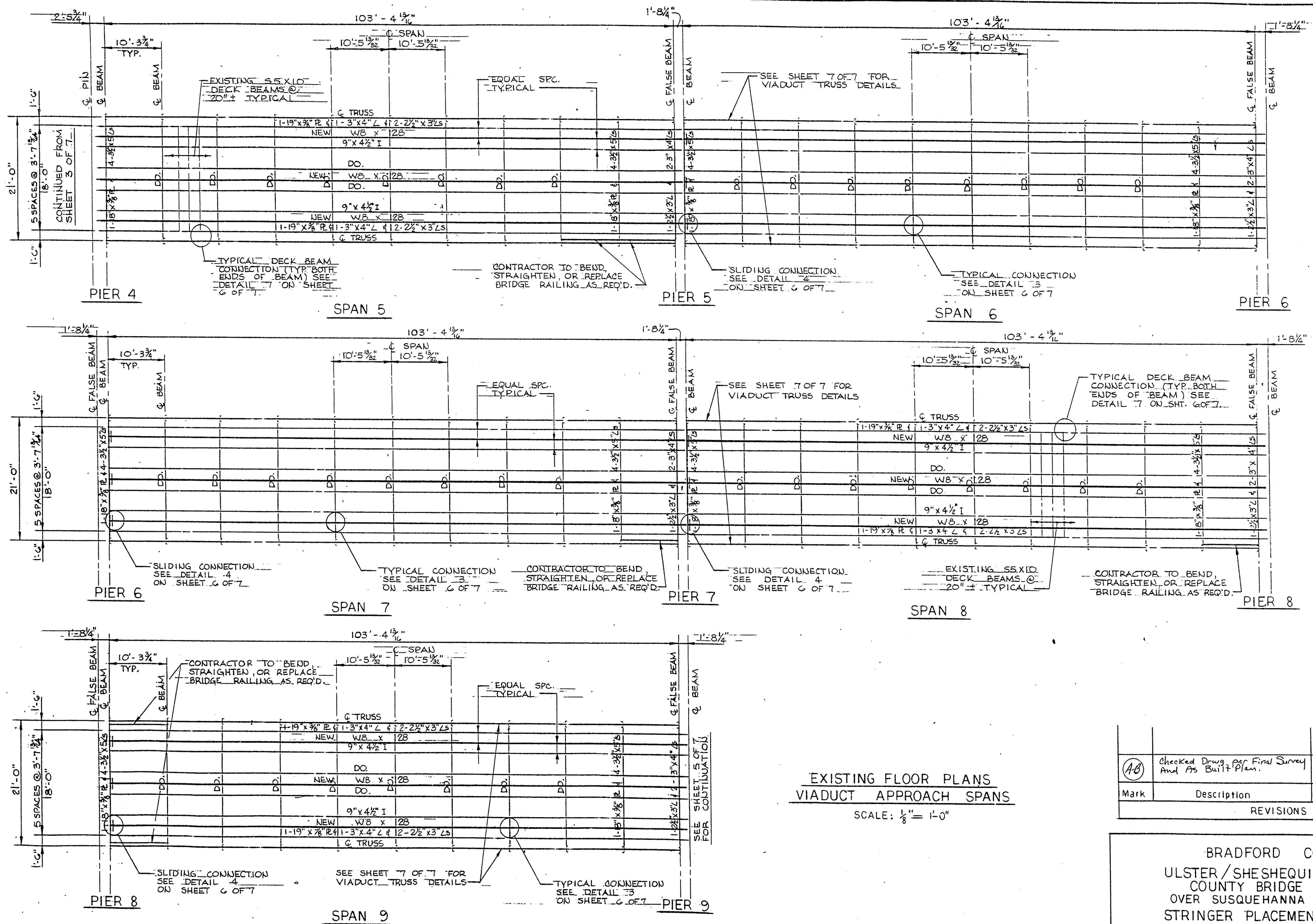


EXISTING FLOOR PLAN
WATERWAY TRUSS SPANS
SCALE: $\frac{1}{8}" = 1'-0"$

(R)	Revised Drwg. per Final Survey And As Built Plan.	GLF			2/1/88
Mark	Description	By	Chk'd.	App'd.	Date
REVISIONS					

BRADFORD COUNTY
ULSTER / SHESHEQUIN TOWNSHIPS
COUNTY BRIDGE NO. 36
OVER SUSQUEHANNA RIVER
STRINGER PLACEMENT PLAN

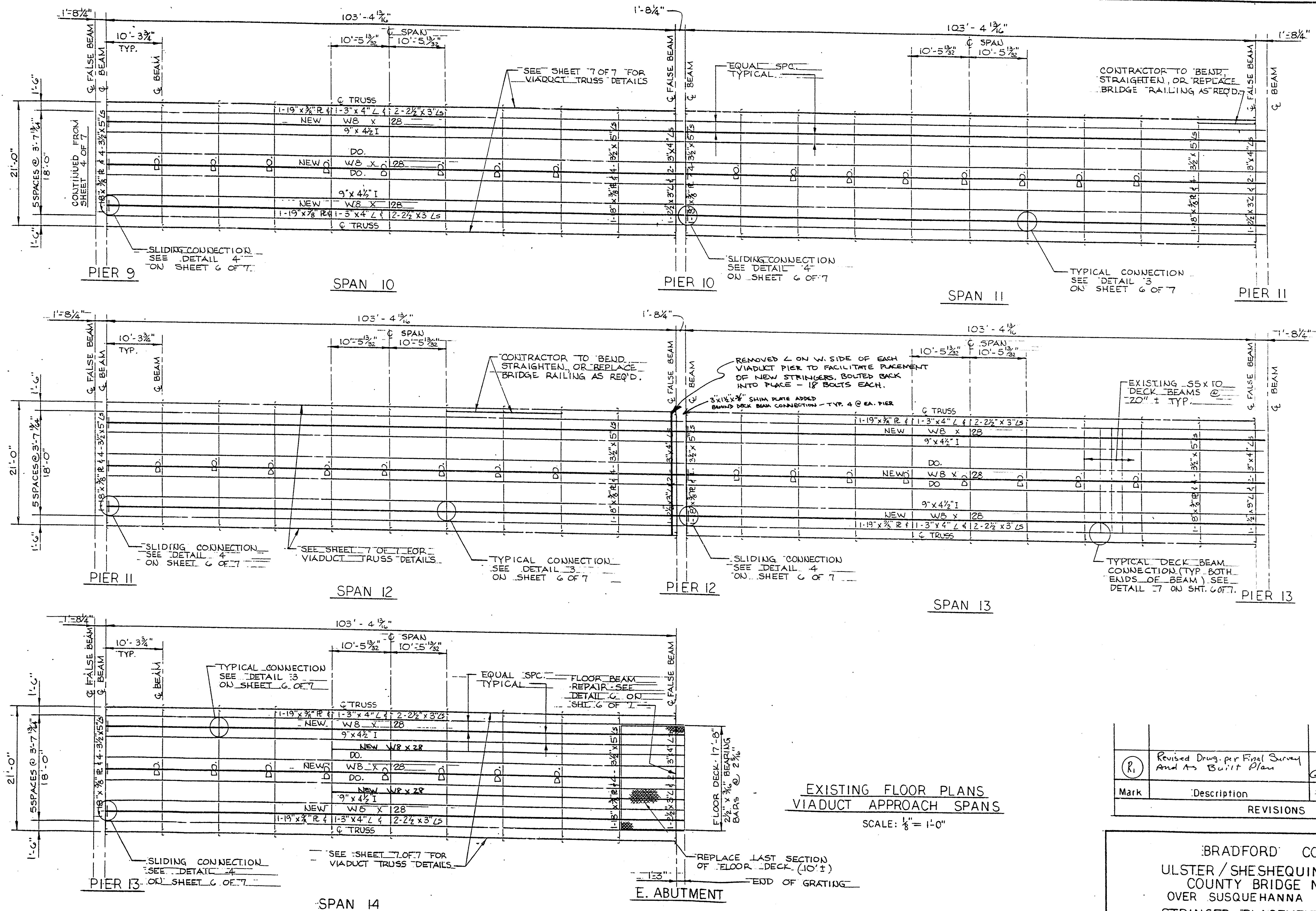
RECOMMENDED	SHEET 3 OF 7
BRIDGE ENGINEER	S-16741-A



EXISTING FLOOR PLANS
VIADUCT APPROACH SPANS
SCALE: $\frac{1}{8}'' = 1'-0''$

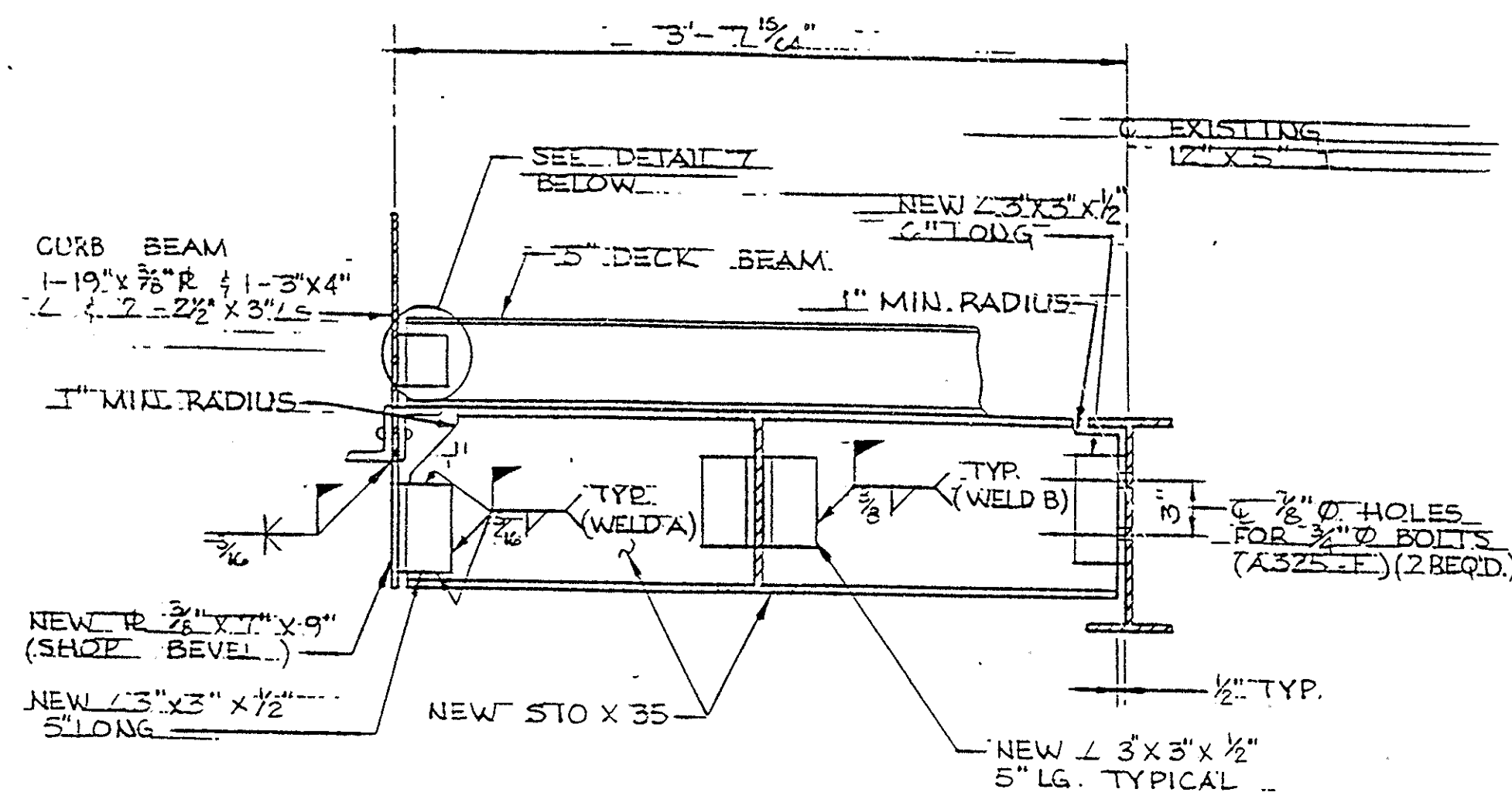
(AB)	Checked Drawg. per Final Survey And As Built Plan.	G.L.F.			2/11/88
Mark	Description	By	Chk'd.	App'd.	Date
REVISIONS					

BRADFORD COUNTY.	
ULSTER/SHESEQUIN TOWNSHIPS	
COUNTY BRIDGE NO. 36	
OVER SUSQUEHANNA RIVER	
STRINGER PLACEMENT PLAN	
RECOMMENDED _____	SHEET 4 OF 7
BRIDGE ENGINEER _____	S-16741 A

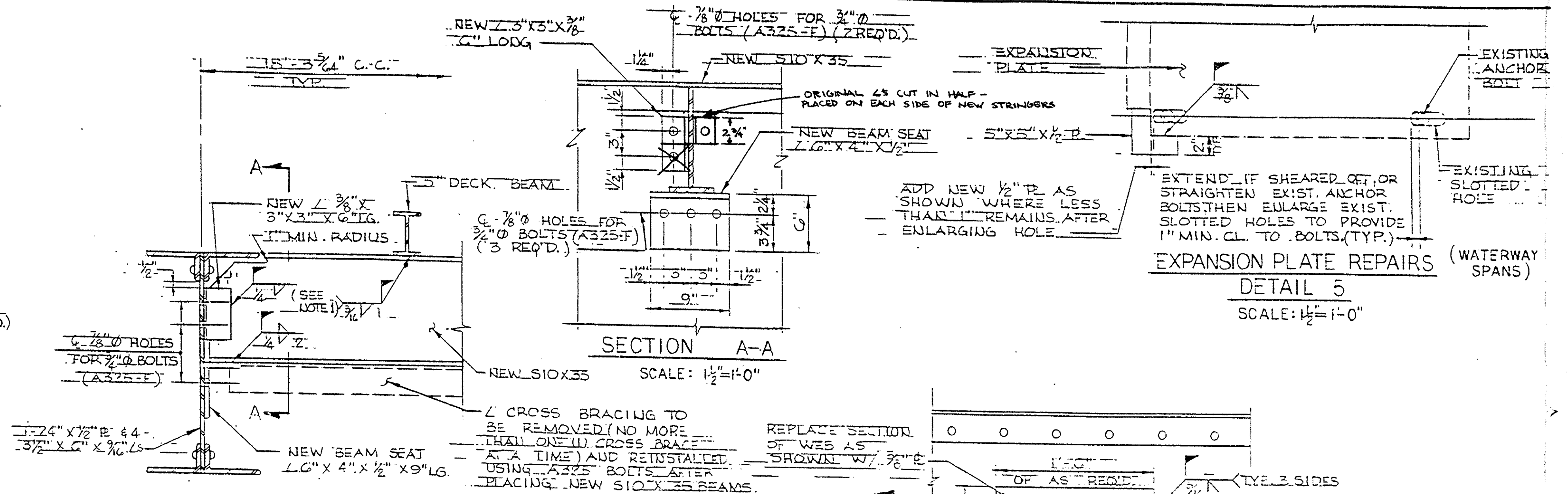


(R ₁)	Revised Drawg. per Final Survey And As Built Plan	GLF			2/1/68
Mark	Description	By	Chk'd.	App'd.	Date
REVISIONS					

BRADFORD COUNTY					
ULSTER / SHESHEQUIN TOWNSHIPS					
COUNTY BRIDGE NO. 36					
OVER SUSQUEHANNA RIVER					
STRINGER PLACEMENT PLAN					
RECOMMENDED					SHEET 5 OF 7
BRIDGE ENGINEER					S-16741-A

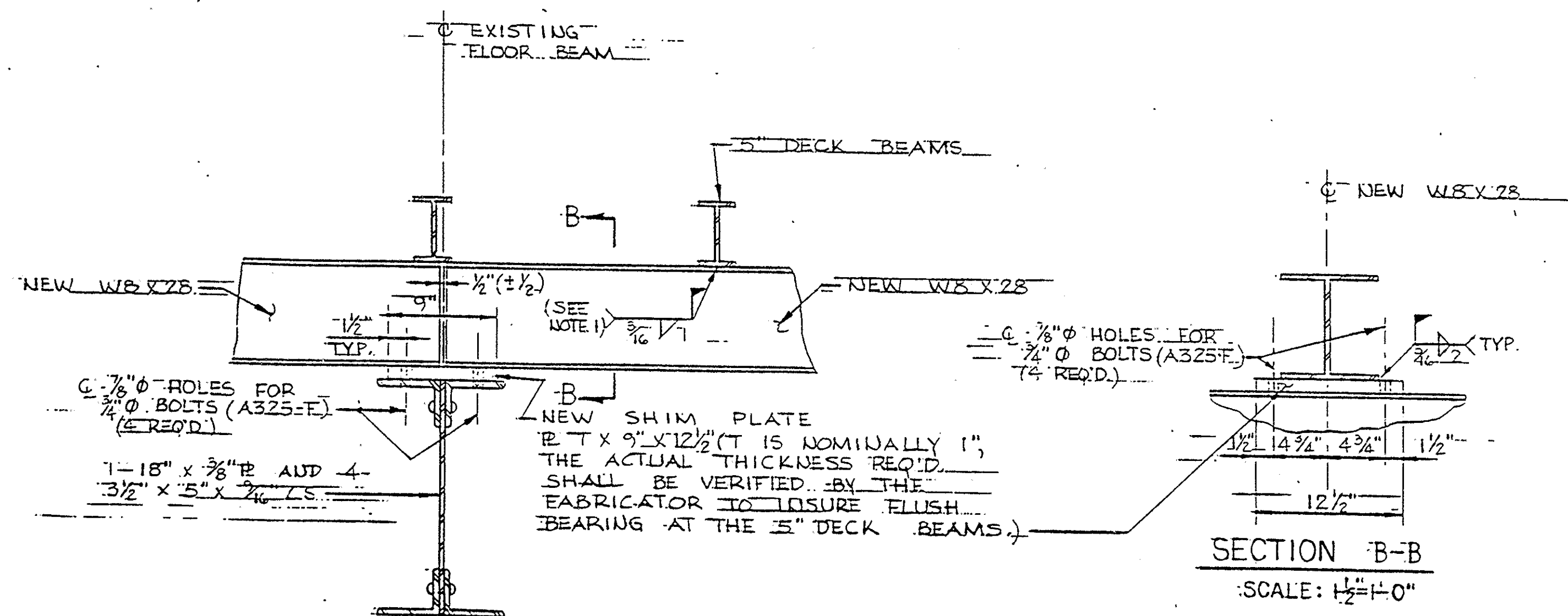


SIOX35 BEAM CONNECTION - DETAIL 1
SCALE: 1 1/2" = 1'-0"

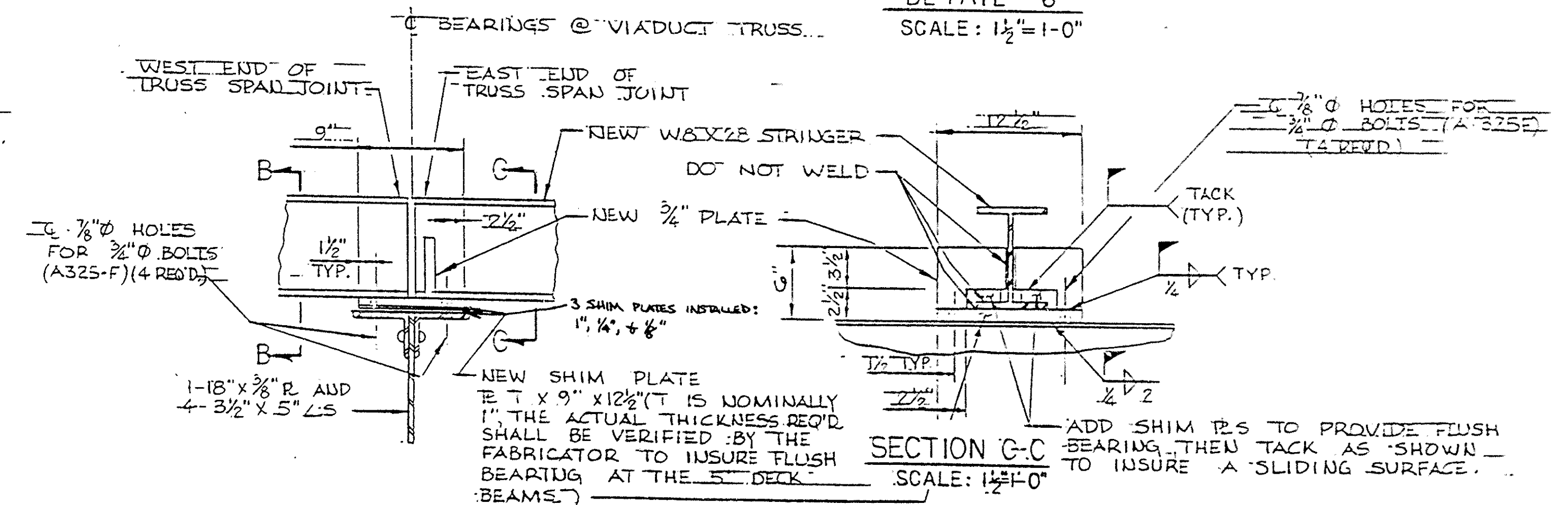
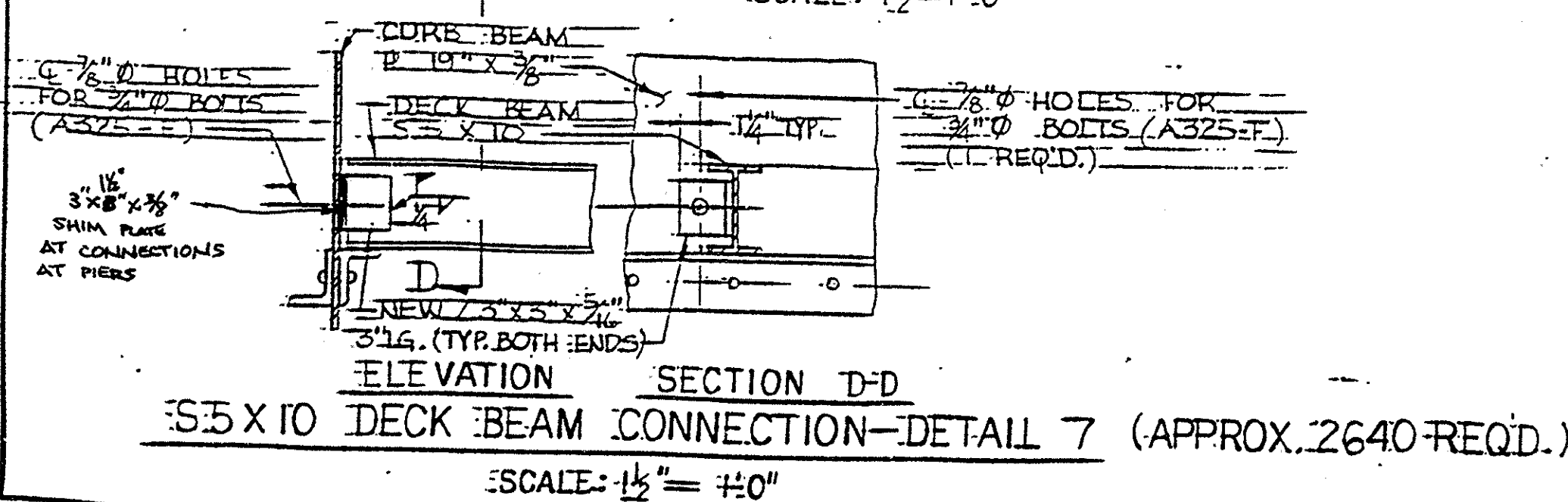


NEW STRINGER (SIO X 35) CONNECTION
DETAIL 2
SCALE: 1 1/2" = 1'-0"

WATERWAY TRUSS SPANS

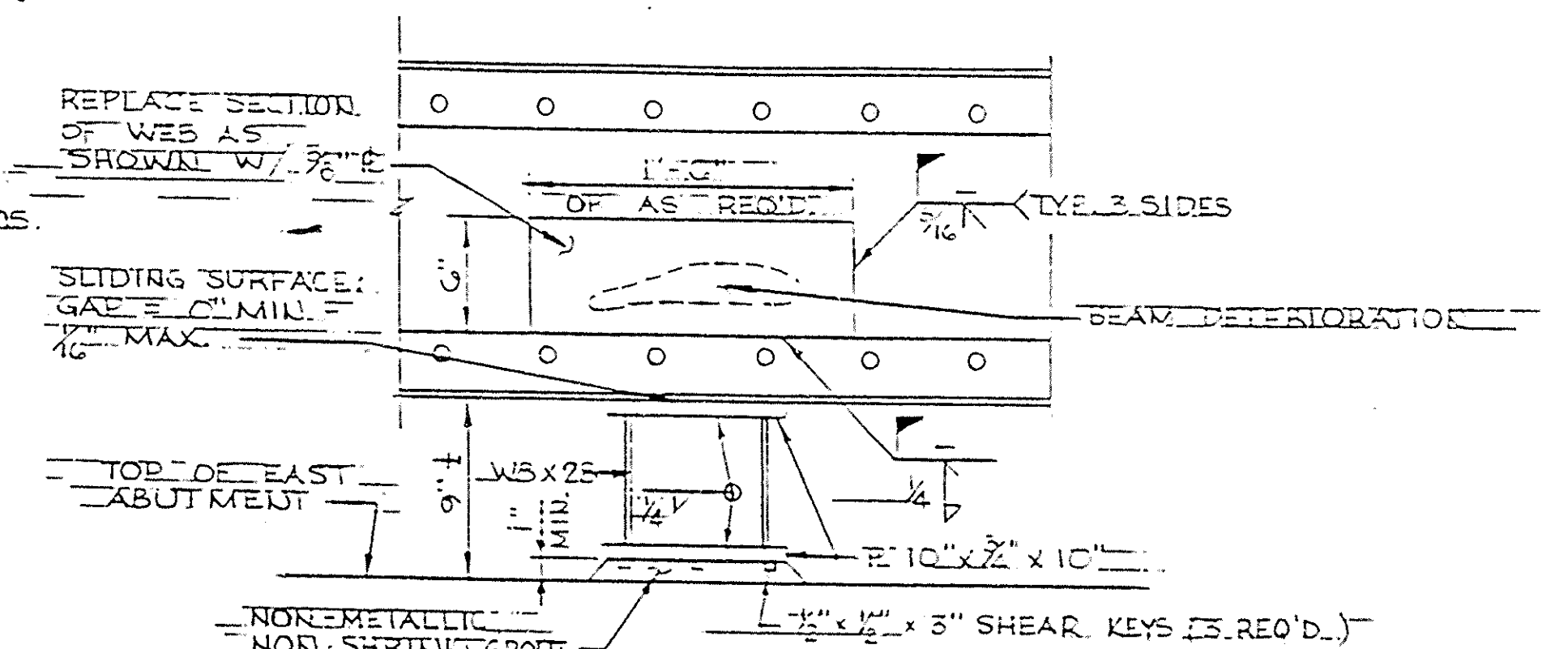


NEW STRINGER (W 8 X 28) CONNECTION - DETAIL 3
SCALE: 1 1/2" = 1'-0"



SLIDING STRINGER CONNECTION
DETAIL 4
(EAST ENDS OF TRUSS SPANS ONLY)
SCALE: 1 1/2" = 1'-0"

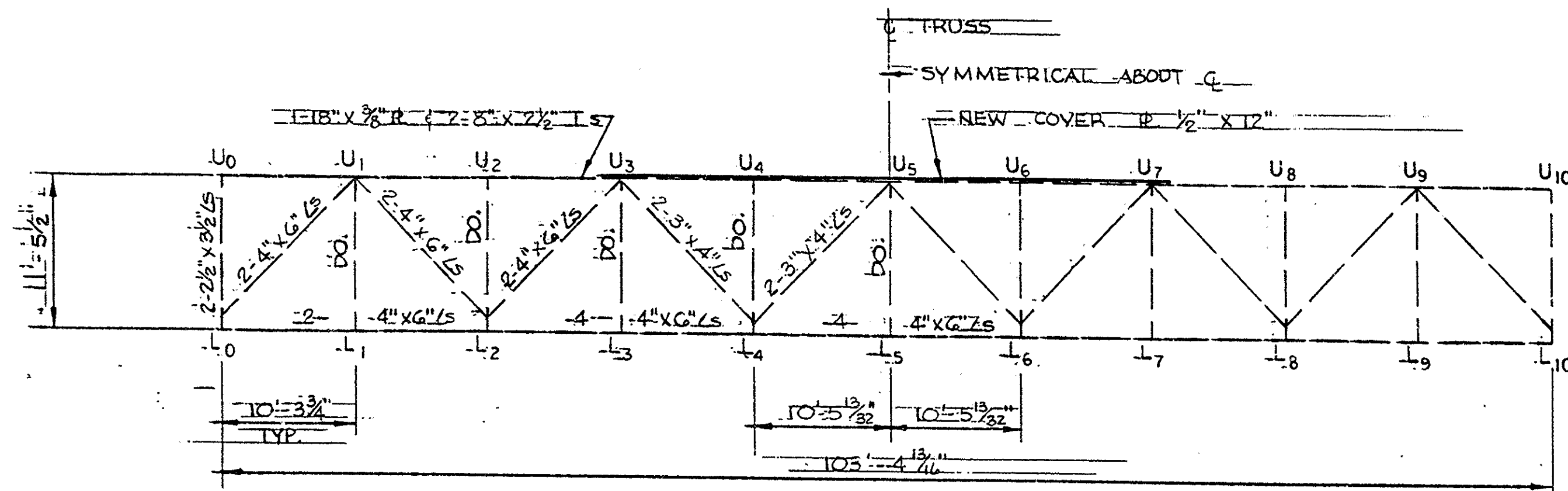
VIADUCT TRUSS SPANS



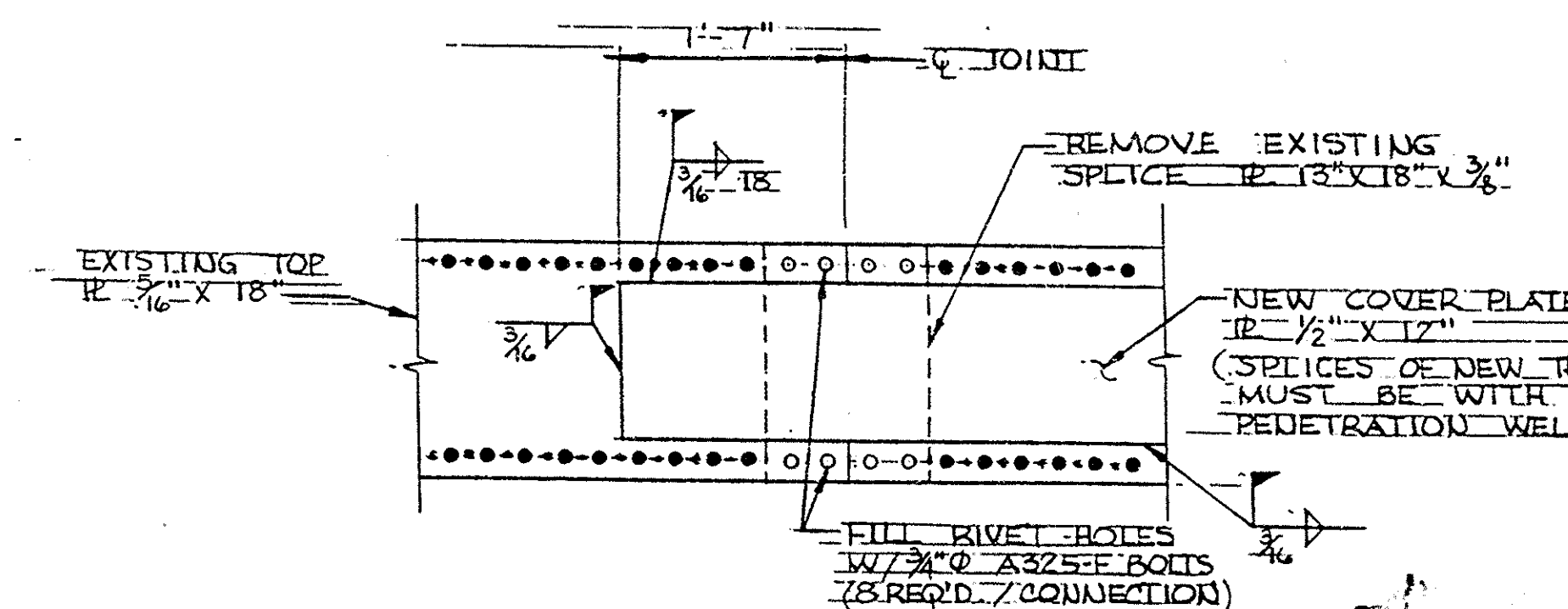
FLOOR BEAM REPAIR
AT EAST ABUTMENT
DETAIL 6
SCALE: 1 1/2" = 1'-0"

Mark	Description	By	Chk'd	App'd	Date
(R)	Revised Drawg. per Final Survey and As Built Plan.	G.L.F.			2/1/00
REVISIONS					

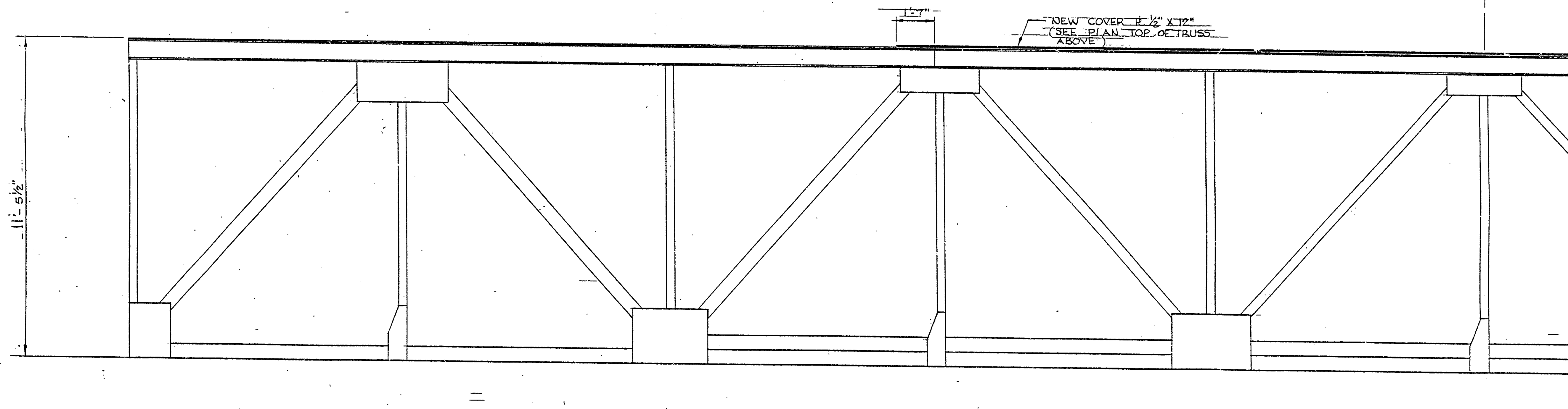
BRADFORD COUNTY
ULSTER/SHESEQUIN TOWNSHIPS
COUNTY BRIDGE NO. 36
OVER SUSQUEHANNA RIVER
NEW STRINGER DETAILS



ELEVATION
TYPICAL VIADUCT TRUSS APPROACH SPAN
SCALE: $\frac{1}{8}'' = 1'-0''$



PLAN TOP OF TRUSS
@ PANEL POINTS
U3 AND U7
SCALE: $1'' = 1'-0''$



ELEVATION HALF-SPAN
TYPICAL VIADUCT TRUSS
SCALE: $\frac{1}{2}'' = 1'-0''$

(A-B)	Checked Drawg. per Final Survey And Its Built Plans.	G.L.F.			2/11/88
Mark	Description	By	Chk'd.	App'd.	Date
REVISIONS					

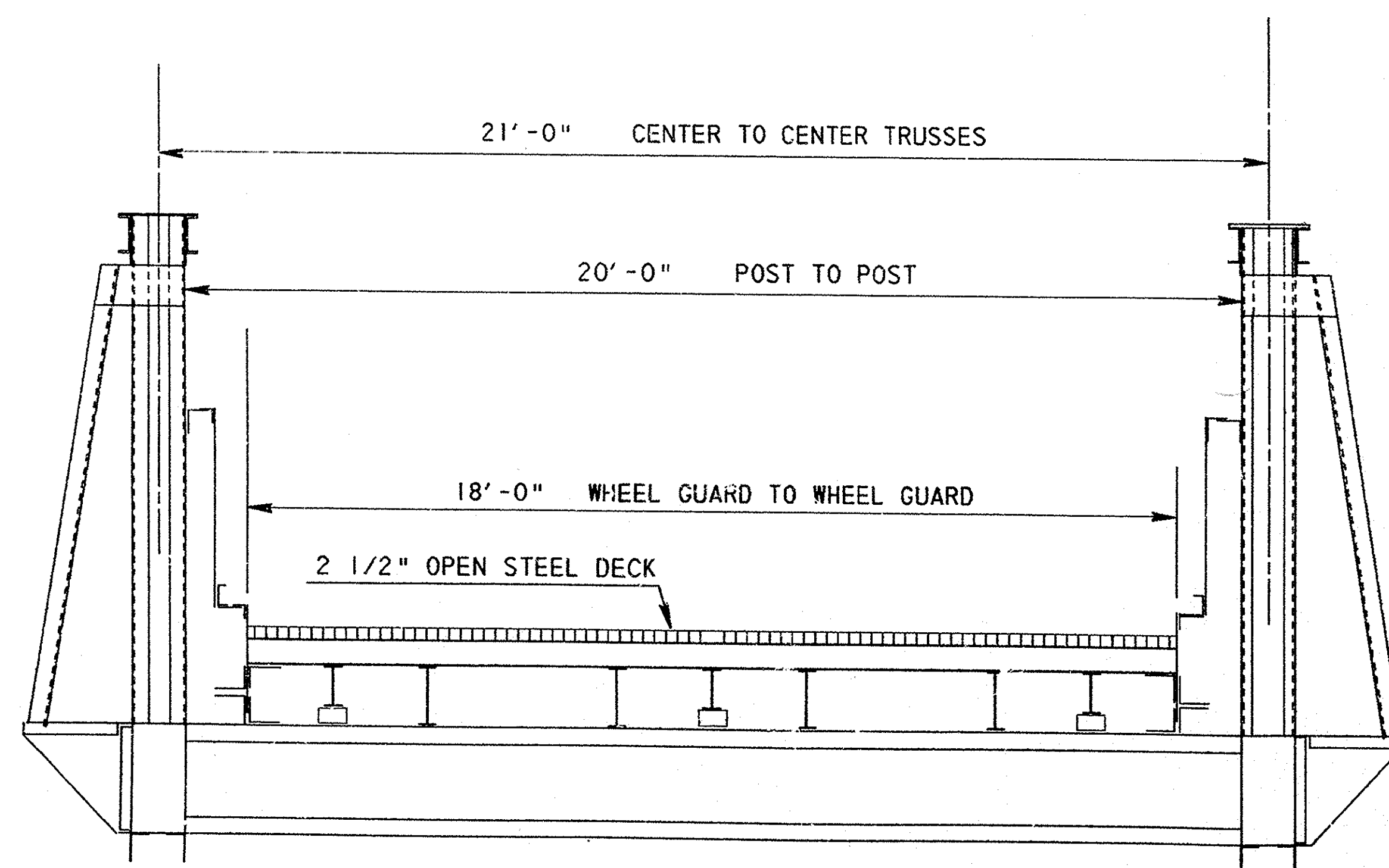
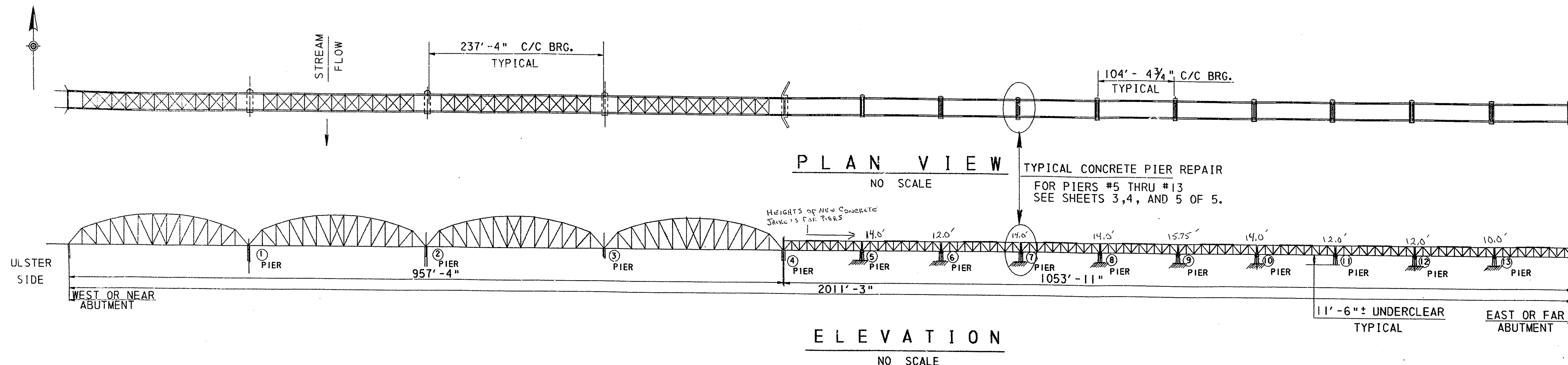
BRADFORD COUNTY
ULSTER/SHESEQUIN TOWNSHIPS
COUNTY BRIDGE NO. 36
OVER SUSQUEHANNA RIVER
VIADUCT TRUSS DETAILS

RECOMMENDED

BRIDGE ENGINEER

SHEET 7 OF 7

S-16741-A



PLANS FOR THE EXISTING BRIDGE ARE AVAILABLE AT THE DISTRICT OFFICE, DISTRICT 3-0, AT A NOMINAL REPRODUCTION COST. CONTACT DISTRICT BRIDGE ENGINEER FOR ORDERING A SET. DO NOT CONSIDER ANY OF THE DATA ON THE EXISTING STRUCTURE SUPPLIED IN THE ORIGINAL DESIGN DRAWINGS OR MADE AVAILABLE TO YOU BY THE DEPARTMENT OR ITS AUTHORIZED AGENTS AS POSITIVE REPRESENTATIONS OF ANY OF THE CONDITIONS THAT YOU WILL ENCOUNTER IN THE FIELD.

THIS INFORMATION IS NOT PART OF THE PLANS, PROPOSAL, OR CONTRACT AND IS NOT TO BE CONSIDERED A BASIS FOR COMPUTATION OF THE UNIT PRICES USED FOR BIDDING PURPOSES. THERE IS NO EXPRESSED OR IMPLIED AGREEMENT THAT INFORMATION IS CORRECTLY SHOWN. THE BIDDER IS NOT TO RELY ON THIS INFORMATION, BUT IS TO ASSUME THE POSSIBILITY THAT CONDITIONS AFFECTING THE COST AND/OR QUANTITIES OF WORK TO BE PERFORMED MAY DIFFER FROM THOSE INDICATED.

EXISTING PLANS:
S-16741A, SHEETS 1 THRU 7 OF 7, DATED OCTOBER 14, 1986 (BRIDGE REHABILITATION)
S- , SHEETS 1 THRU 5 OF 5, DATED MARCH 10, 1960 (OPEN STEEL DECKING AND BEARINGS)
S-4768, SHEET #2 ONLY, DATED JUNE 7, 1904 (SUBSTRUCTURE PLANS) *

* TOP OF FOOTER FOR PIERS #5 THRU #13
ARE INDICATED AS BEING APPROXIMATELY
9'-0" BELOW THE GROUND LINE.

** TOP OF FOOTER ON Pier #9 WAS ENCOUNTERED WHILE EXCAVATING
AND IS 14.75' BELOW TOP OF PIER AND APPROXIMATELY 5.0' BELOW
EXISTING GROUND - THIS IS THE ONLY FOOTER ENCOUNTERED

REINF. BAR FABRICATION DETAILS	BC-736	03-01-89
WALL CONSTRUCTION AND EXPANSION JOINTS DETAILS	BC-735	01-20-89
CLASSIFICATION OF EARTHWORK FOR STRUCTURES	RC-11	01-29-88
BACKFILL AT STRUCTURES	RC-12	05-20-88
DESCRIPTIONS	DWG. NO.	APP. DATE

**SUPPLEMENTAL
DRAWINGS**

Mark	Description	By	Chk'd	App'd	Date
REVISIONS					

S.R. 1022 PREVIOUSLY KNOWN AS L.R. 08079

**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION**

BRADFORD COUNTY
S.R. 1022 SEC. 001
SEGMENT 0006 OFFSET 0000
S.R. 1022 STA. 2+66
OVER N. BR. SUSQUEHANNA RIVER AND FLOOD PLAIN
**PIER REHABILITATION
GENERAL PLAN**

RECOMMENDED 8, Aug 1989

J.P. [Signature]
BRIDGE ENGINEER

SHEET 1 OF 5

S - 17997

SCALE AS NOTED

DES: J.J.F. DWG: A.C.E. CKD: J.J.F.

FILE NAME: BRU: [40, 2]JULST1022.DGN: 1

DESIGNED BY DISTRICT 3-0 BRIDGE UNIT

"0000 ADD 64 87,

4

- PROVIDE MATERIALS AND WORKMANSHIP IN ACCORDANCE WITH THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS PUBLICATION 408/87 AND CONTRACT SPECIAL PROVISIONS.
- DESIGN SPECIFICATIONS: DESIGN DIVISION 1 OF 1983 AASHTO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" (INCLUDING 1985 INTERIM SPECIFICATIONS), AND AS SUPPLEMENTED BY THE DESIGN MANUAL, PART 4, STRUCTURES (INCLUDING 04- 88 REVISIONS).
- LIVE LOADS: HS25 LOADING OR 125% OF THE ALTERNATE MILITARY LOADING, OR P-82 (204K PERMIT LOAD) WITH THE AASHTO GROUP I B LOADING (AT OPERATING LEVEL).
- DESIGN IS IN ACCORDANCE WITH THE STRENGTH DESIGN METHOD (LOAD FACTOR DESIGN).
- THE ENGINEER RESERVES THE RIGHT TO CHANGE THE NATURE AND LIMITS OF THE WORK TO ASSURE A SATISFACTORY REPAIR.
- COAT ALL EXISTING CONCRETE THAT IS TO COME IN CONTACT WITH NEW CEMENT CONCRETE WITH EPOXY BONDING COMPOUND JUST PRIOR TO PLACING THE NEW CONCRETE. BLAST CLEAN THE EXISTING CONCRETE THOROUGHLY PRIOR TO THE APPLICATION OF THE EPOXY. THE COST OF CLEANING AND EPOXY APPLICATION IS INCIDENTAL TO THE CLASS OF CONCRETE FOR WHICH IT IS APPLIED. THE EPOXY BONDING COMPOUND IS TYPE 2, GRADE 2 AS DESCRIBED IN ASTM-C881-78.
- VERIFY ALL DIMENSIONS AND GEOMETRY OF THE EXISTING STRUCTURE IN THE FIELD AS NECESSARY FOR PROPER FIT OF THE PROPOSED CONSTRUCTION.
- PROVIDE MINIMUM LAP AND EMBEDMENT LENGTH OF REINFORCEMENT IN ACCORDANCE WITH 1983 AASHTO OR 30 DIAMETERS WHICHEVER IS GREATER.
- PROVIDE GRADE 60 REINFORCING STEEL BARS THAT MEET THE REQUIREMENTS OF ASTM FOR DEFORMED BILLET STEEL BARS FOR CONCRETE REINFORCEMENT (A615), RAIL STEEL (A616), OR AXLE STEEL (A617). DO NOT WELD GRADE 60 REINFORCING STEEL BARS UNLESS SPECIFIED. GRADE 40 REINFORCING STEEL BARS MAY BE SUBSTITUTED WITH A PROPORTIONAL INCREASE IN CROSS SECTIONAL AREA.
- PROVIDE 2" CONCRETE COVER ON REINFORCEMENT BARS EXCEPT AS NOTED.
- CHAMFER EXPOSED CONCRETE EDGES 1" X 1" EXCEPT AS NOTED.
- USE CLASS A CEMENT CONCRETE FOR ALL PROPOSED WORK.
- APPLY PROTECTIVE COATING FOR REINFORCED CONCRETE SUBSTRUCTURE SURFACES TO ALL EXPOSED FACES OF THE PIERS. THIS INCLUDES THE ENTIRE TOP OF THE PIERS.
- CONSTRUCTION DETAILS OTHER THAN THOSE SHOWN CONFORM TO THE STANDARD DRAWINGS.
- RAKE FINISH ALL HORIZONTAL CONSTRUCTION JOINTS EXCEPT AS INDICATED.
- THE CONTRACTOR TO EXERCISE CARE SO AS NOT TO DAMAGE EXISTING WIRE MESH OR THE CONCRETE THAT IS TO REMAIN IN PLACE. DURING THE REMOVAL OPERATION, ANY DAMAGE TO THE STRUCTURE BEYOND THE REMOVAL AREA CAUSED BY THE CONTRACTORS OPERATION TO BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER AT NO COST TO THE DEPARTMENT.
- REINFORCE EXISTING WIRE MESH WITH MORE THAN 20% SECTION LOSS AFTER CLEANING WITH ADDITIONAL SAME SIZE REINFORCEMENT EMBEDDED INTO EXISTING CONCRETE AS DIRECTED BY THE ENGINEER.
- DISPOSE OF ALL REMOVED MATERIALS SATISFACTORILY.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSURE STRUCTURAL STABILITY OF THE BRIDGE. IF DURING UNSOUND CONCRETE REMOVAL OPERATIONS STABILITY IS QUESTIONED, THE CONTRACTOR WILL BE REQUIRED TO TEMPORARILY SUPPORT THE BRIDGE AS DIRECTED BY THE ENGINEER. THIS WORK IS INCIDENTAL TO THE ITEM FOR CLASS A CEMENT CONCRETE, SPECIAL.

S.R. 1022 PREVIOUSLY KNOWN AS L.R. 08079

BRADFORD COUNTY

SEGMENT 0006 OFFSET 0000

RECOMMENDED August 8, 1989

SHEET 2 OF 5

S - 17997

T I E S T U D S

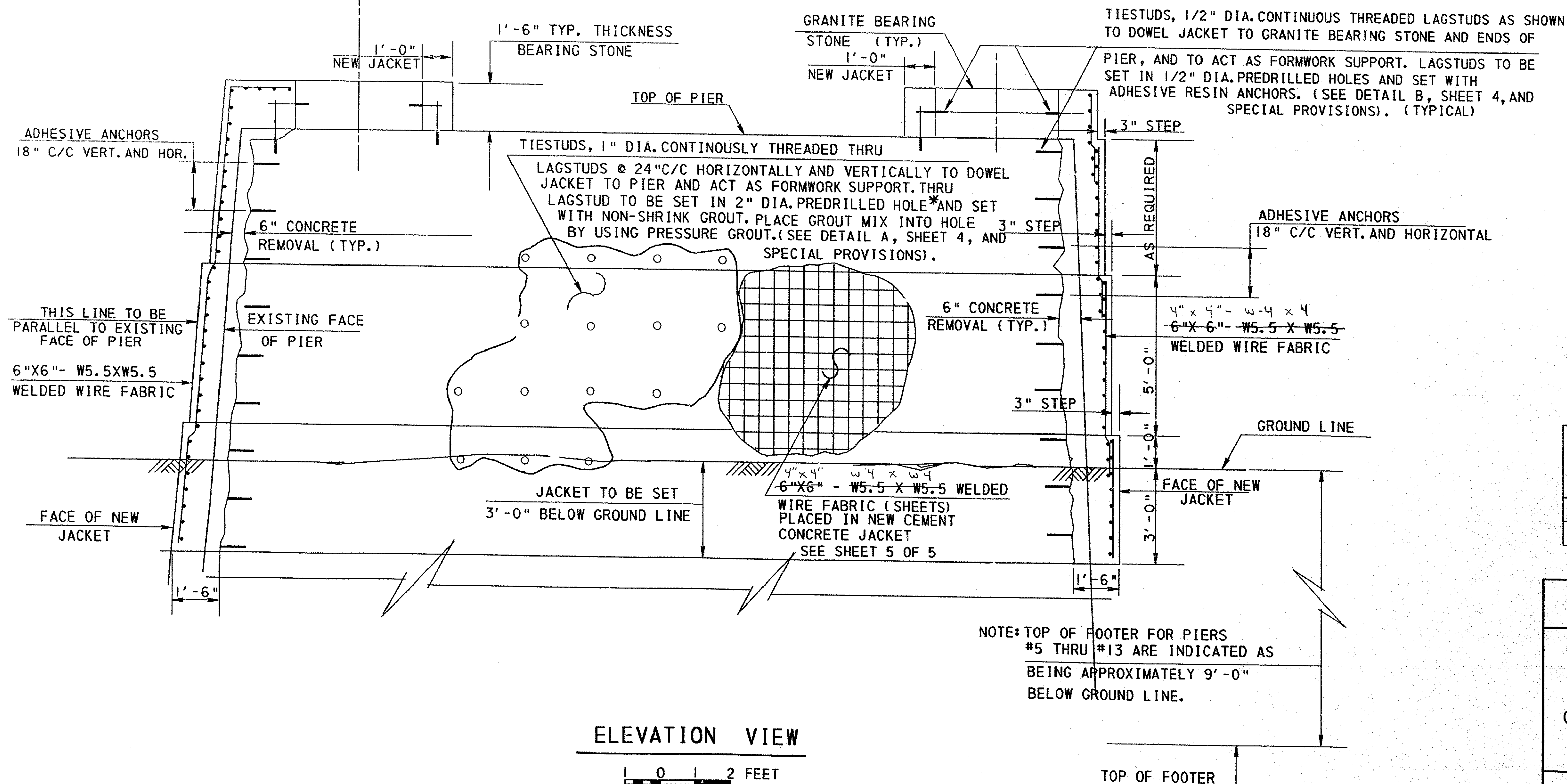
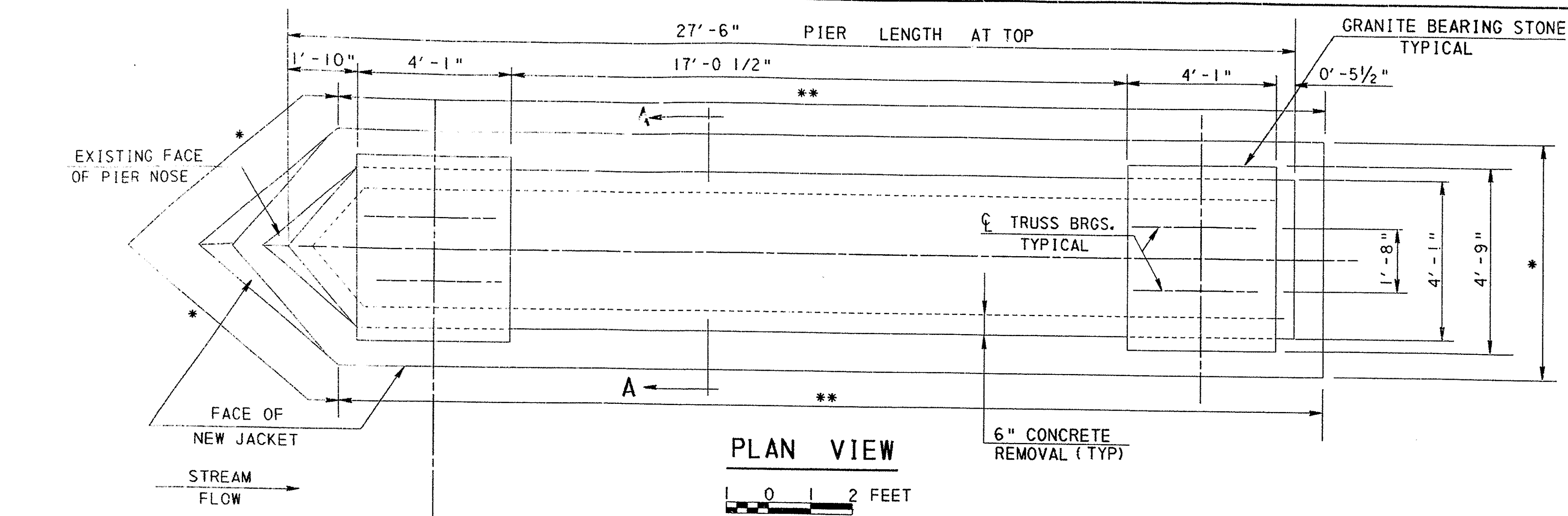
- * - LIMITS OF 1/2" DIA. CONTINUOUS THREADED LAGSTUD @ 18" C/C HORIZONTAL AND VERTICAL
- ** - LIMITS OF 1" DIA. CONTINUOUS THREADED THRU LAGSTUD @ 24" C/C HORIZONTAL AND VERTICAL

SEE SECTION A - A, SHEET 4 OF 5, FOR TIE STUD PLACEMENT

SEE SECTION A - A, SHEET 5 OF 5, FOR WELDED WIRE FABRIC PLACEMENT

PLACE WELDED WIRE FABRIC WHEREVER NEW CEMENT CONCRETE IS CONSTRUCTED.

* = A SMALLER DIAMETER PREDRILLED PILOT HOLE MAY BE REQUIRED TO PREVENT SPALLING OF THE HOLE.



Mark	Description	By	Chk'd	App'd	Date
REVISIONS					

S.R. 1022 PREVIOUSLY KNOWN AS L.R. 08079

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

BRADFORD COUNTY
S.R. 1022 SEC. 001
SEGMENT 0006 OFFSET 0000
S.R. 1022 STA. 2+66
OVER N.B.R. SUSQUEHANNA RIVER AND FLOOD PLAIN
PIER REHABILITATION
PLAN AND ELEVATION

RECOMMENDED August 8, 1989 SHEET 3 OF 5

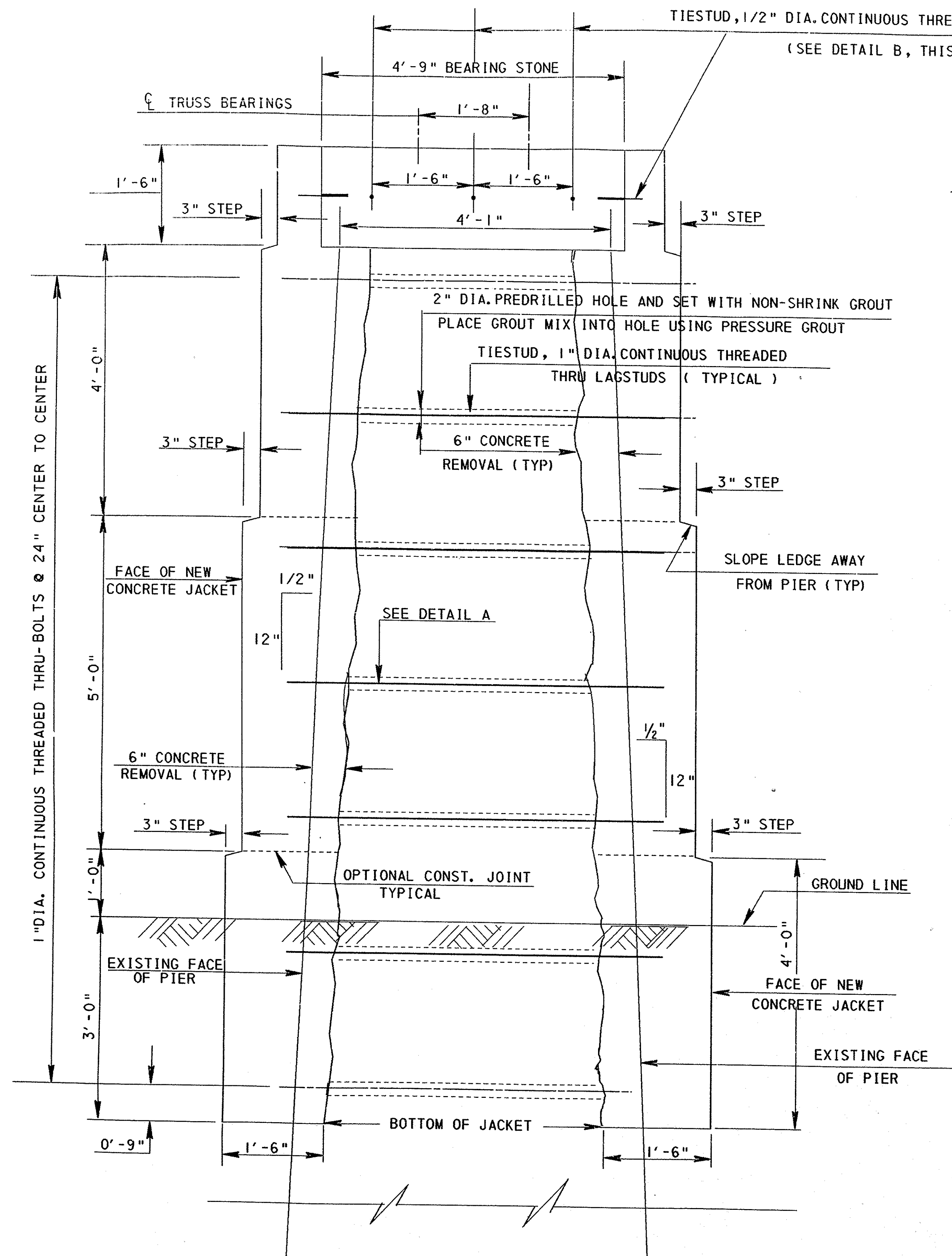
BRIDGE ENGINEER

S - 17997

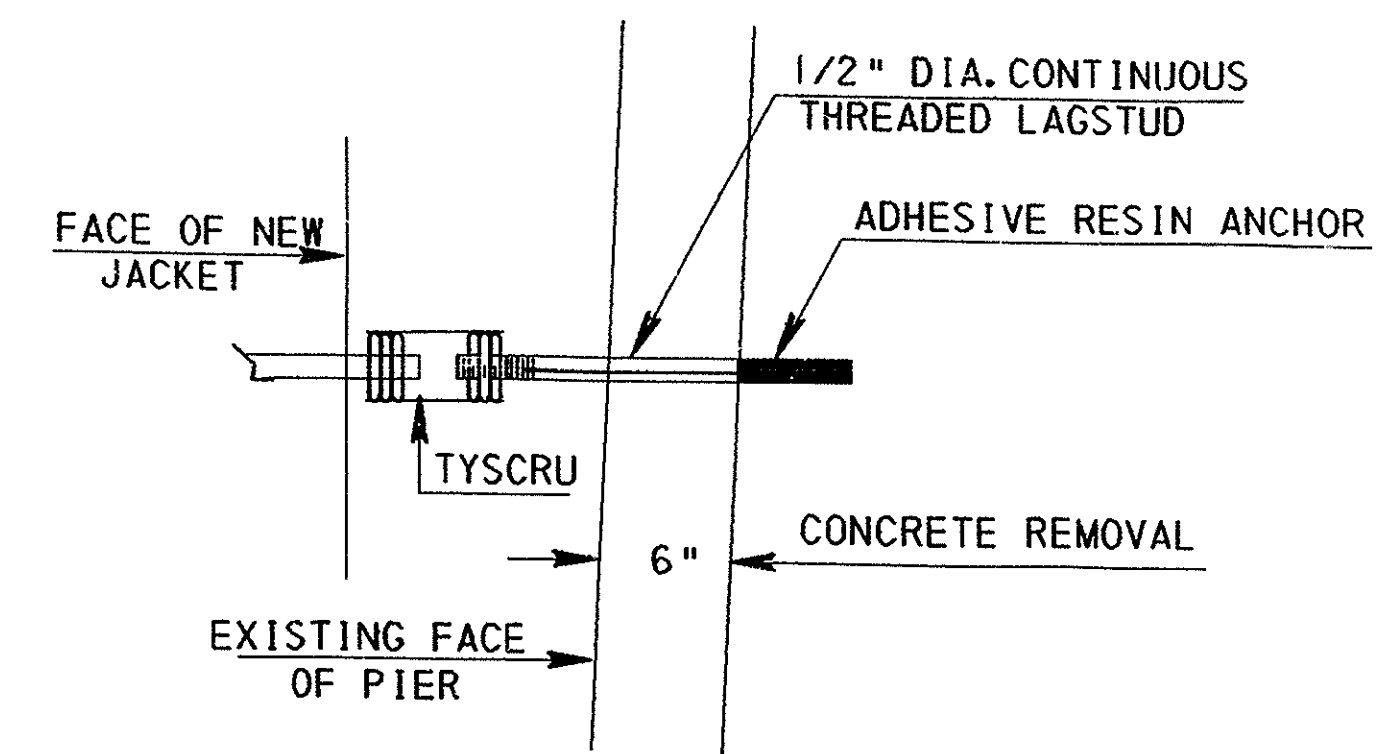
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FILE NAME: BRU:140.2JULST1022.DGN:1

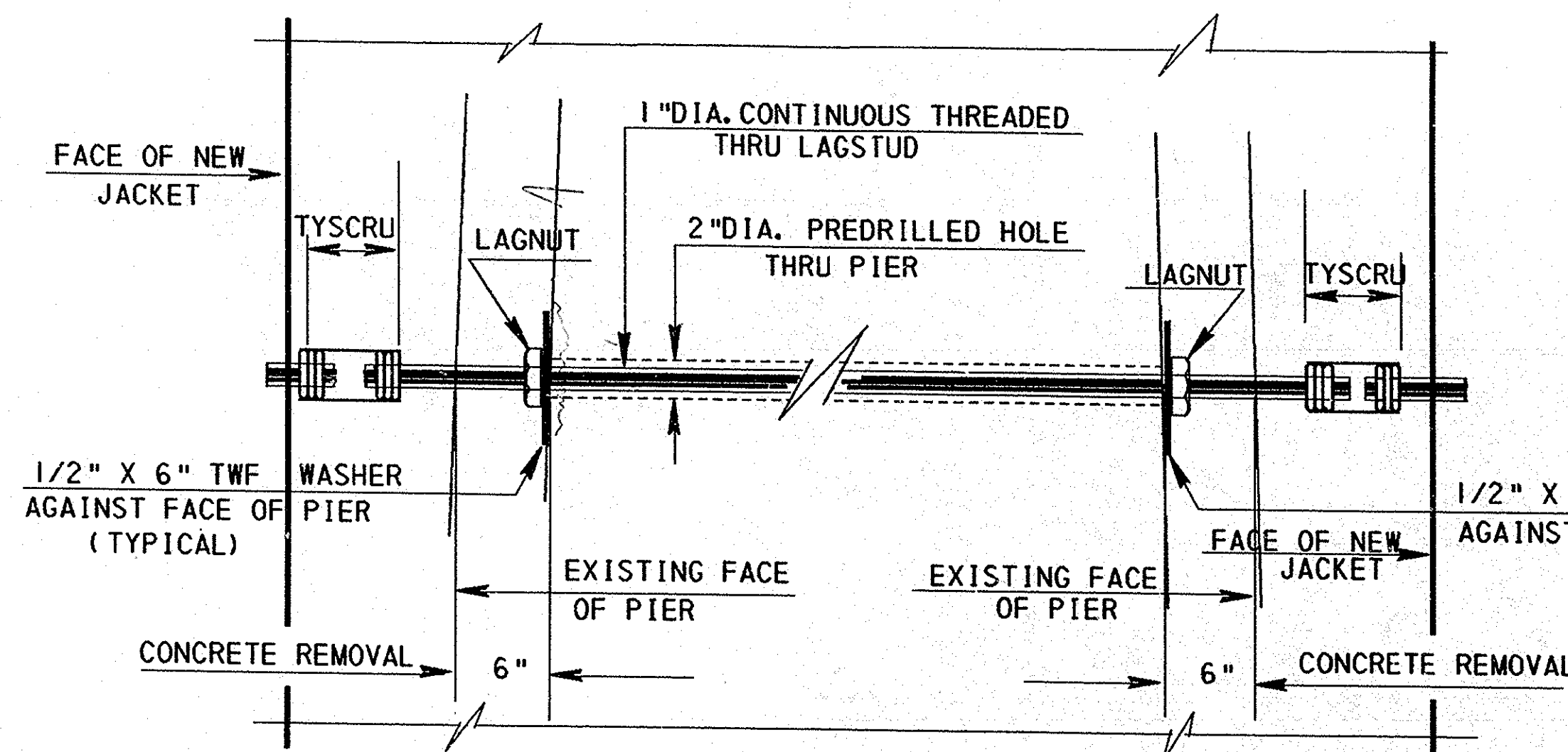
SCALE AS NOTED



SECTION A-A
(SHOWING CONT. THREADED LAGSTUDS)
NO SCALE



DETAIL B (TIESTUDS)
6 0 6 INCHES



DETAIL A (TIESTUDS)
6 0 6 INCHES

* IF FULL BEARING IS NOT ACHIEVED AS DIRECTED BY THE ENGINEER BATTER WASHERS WILL BE REQUIRED.

Mark	Description	By	Chk'd	App'd	Date
REVISIONS					

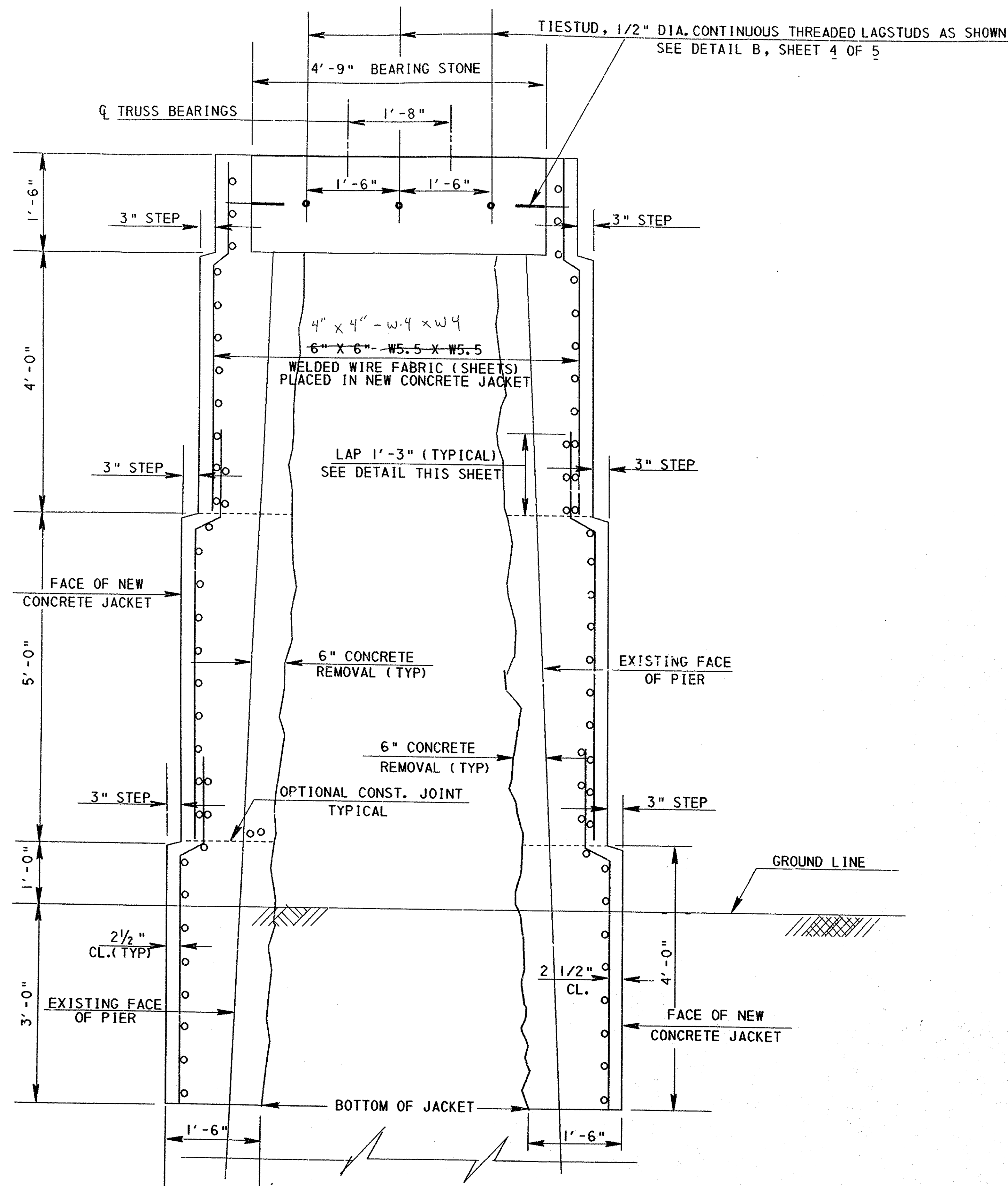
S.R. 1022 PREVIOUSLY KNOWN AS L.R. 08079

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION	
BRADFORD COUNTY S.R. 1022 SEGMENT 0006 S.R. 1022	COUNTY SEC. 001 OFFSET 0000 STA. 2+66
OVER N. BR. SUSQUEHANNA RIVER AND FLOOD PLAIN PIER REHABILITATION THRU LAGSTUD DETAILS	
RECOMMENDED _____	SHEET 4 OF 5
BRIDGE ENGINEER _____	S - 17997

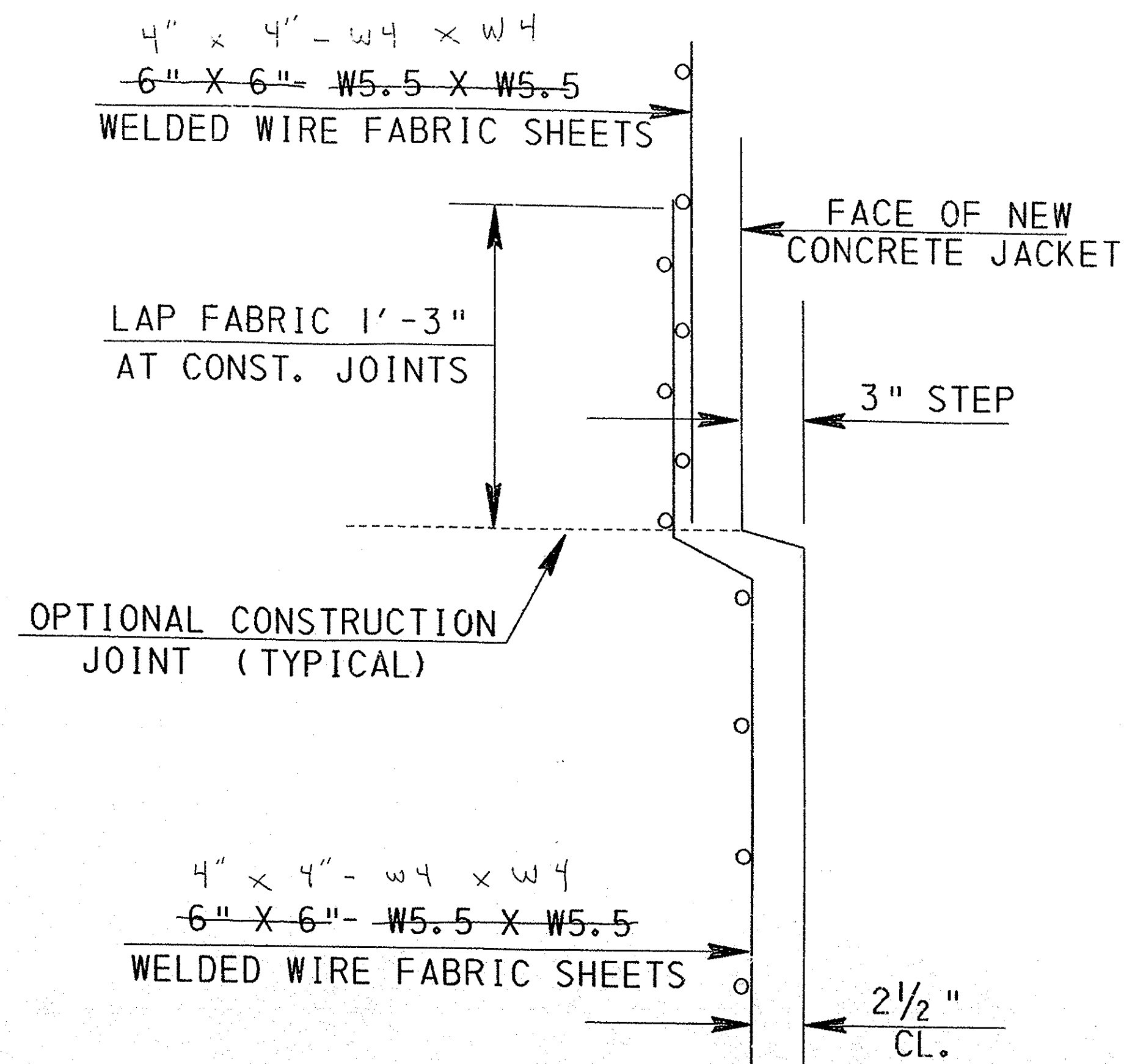
SCALE AS NOTED

DES: J. J. F. DWG: A. C. E. CKD: J. J. F.

FILE NAME: BRU: I40, 2JULST1022.DGN: 1



SECTION A-A
(SHOWING WELDED WIRE FABRIC)
NO SCALE



DETAIL C
NO SCALE

Mark	Description	By	Chk'd	App'd	Date
REVISIONS					

S.R. 1022 PREVIOUSLY KNOWN AS L.R. 08079

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION	
BRADFORD COUNTY S.R. 1022 SEGMENT 0006 S.R. 1022	COUNTY SEC. 001 OFFSET 0000 STA. 2+66
OVER SUSQUEHANNA RIVER AND FLOOD PLAIN PIER REHABILITATION JACKET REINFORCEMENT	
RECOMMENDED _____	SHEET 5 OF 5
BRIDGE ENGINEER	S - 17997

SCALE AS NOTED

DES: J. J. F. DWG: A. C. E. CKD: J. J. F.

FILE NAME: BRU: [40, 2]JULST1022.DGN: 1