F. R. A. DIV. NO	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	S-274(4)	1	14

STATE OF MAINE
STATE HIGHWAY COMMISSION

PENOBSCOT RIVER BRIDGE

BETWEEN THE TOWNS OF

ENFIELD & HOWLAND
PENOBSCOT COUNTY

MAINE FEDERAL AID SECONDARY
PROJECT NO. S-274 (4)

TOTAL LENGTH 0.270 MILES

SCALES
- PLAN 1 IN.= 30 FT.
- PROFILE
  - HOR. 1 IN.= 30 FT.
  - VER. 1 IN.= 10 FT.
- CROSS SECTIONS 1 IN.= 5 FT.

CONVENTIONAL SIGNS

State or National Line	Survey Line
County Line	Culvert
Town Line	Drop Inlet
Unfenced Property	Trolley Pole
Fence	Power Pole
Right of Way Line	Tel. Pole
Traveled Way	Marsh
Railroad	Trees
Retaining Wall	Stone Wall

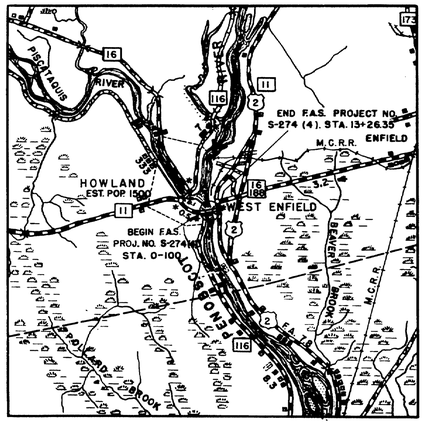
INDEX OF SHEETS

Sheet No. 1	Title Page
Sheet No. 2 & 3	Survey Plan
Sheet No. 4 & 5	Cross Sections
Sheet No. 6	Abutment No. 1
Sheet No. 7	Abutment No. 2
Sheet No. 8	Piers Nos. 1 & 2
Sheet No. 9	Piers Nos. 3 & 4
Sheet No. 10, 11 & 12	Truss Details
Sheet No. 13	Floor Beams & Expansion Details
Sheet No. 14	Roadway Slab & Reinforcing Steel

Concrete Classification

Class A – Floor & Approach Curbs

Class B – Abutments & Piers



LOCATION MAP
TRACED FROM S.W.H.P.S. MAP
SCALE- 1/62,500

Approved:
Maine State Highway Commission

Chairman

Chief Engineer

Recommended for approval date

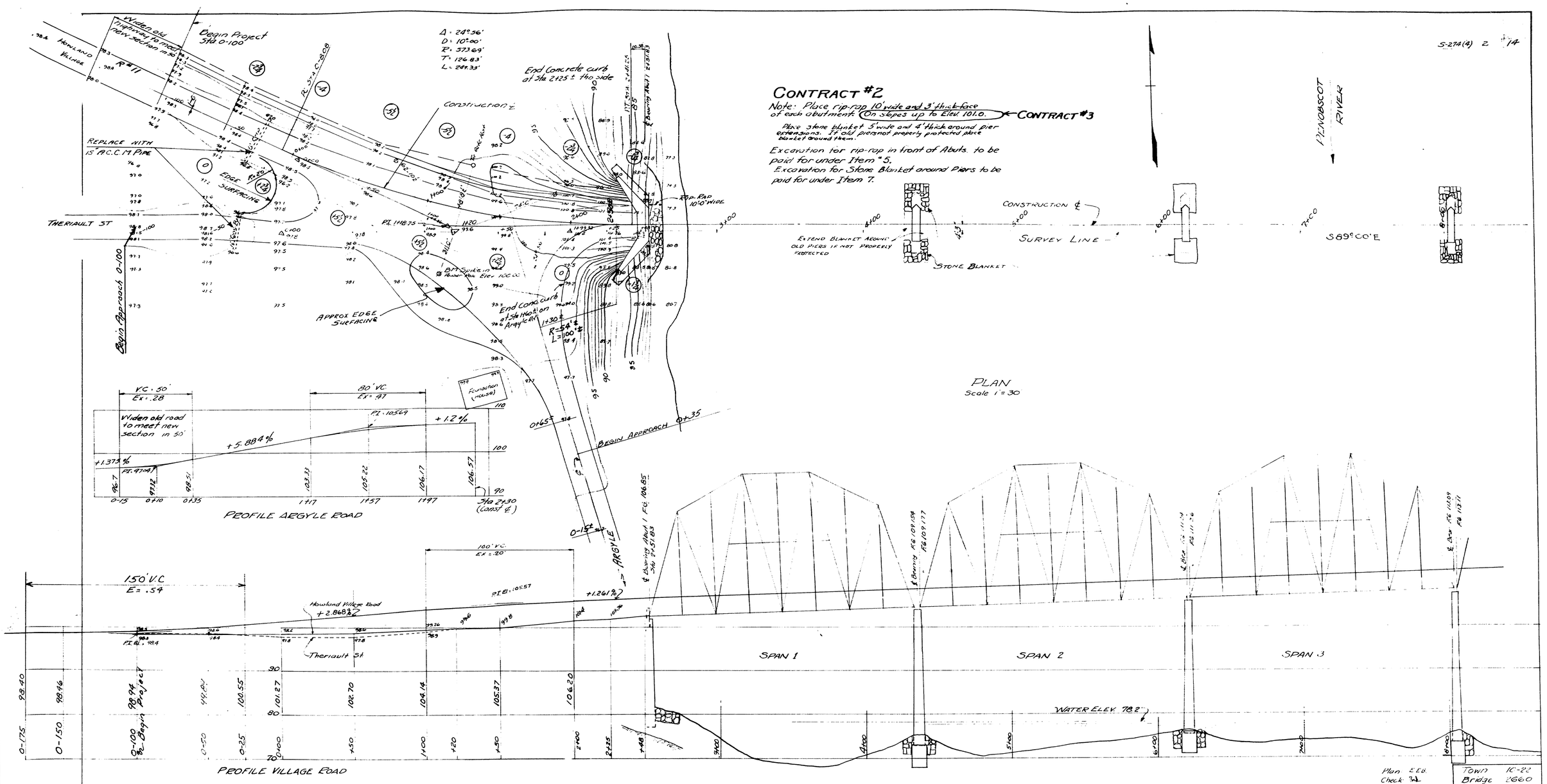
District Engineer
Public Roads Administration
Federal Works Agency

Approved date

Division Engineer
Public Roads Administration
Federal Works Agency

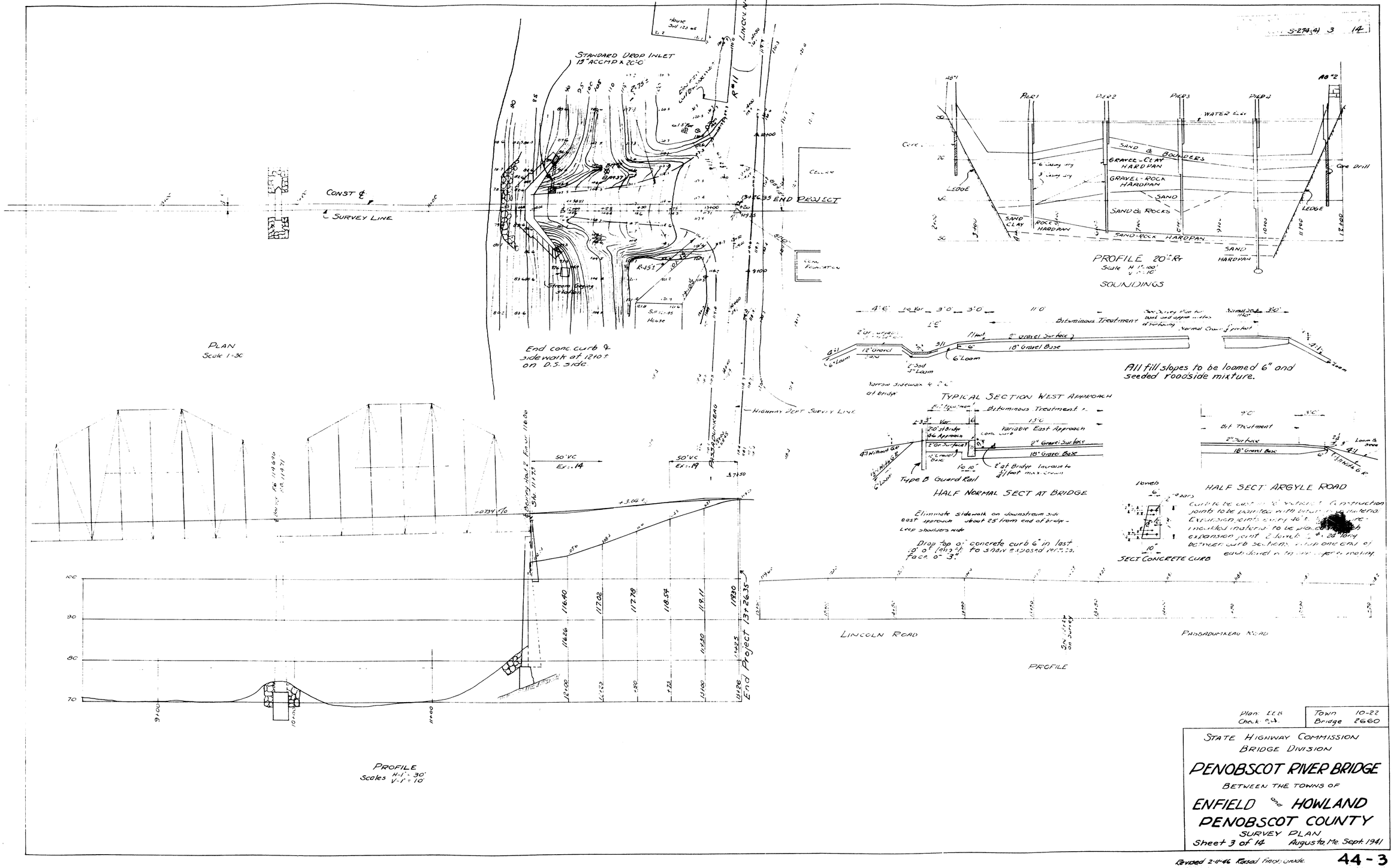
44-1

0 1 2 3 4 5 inches

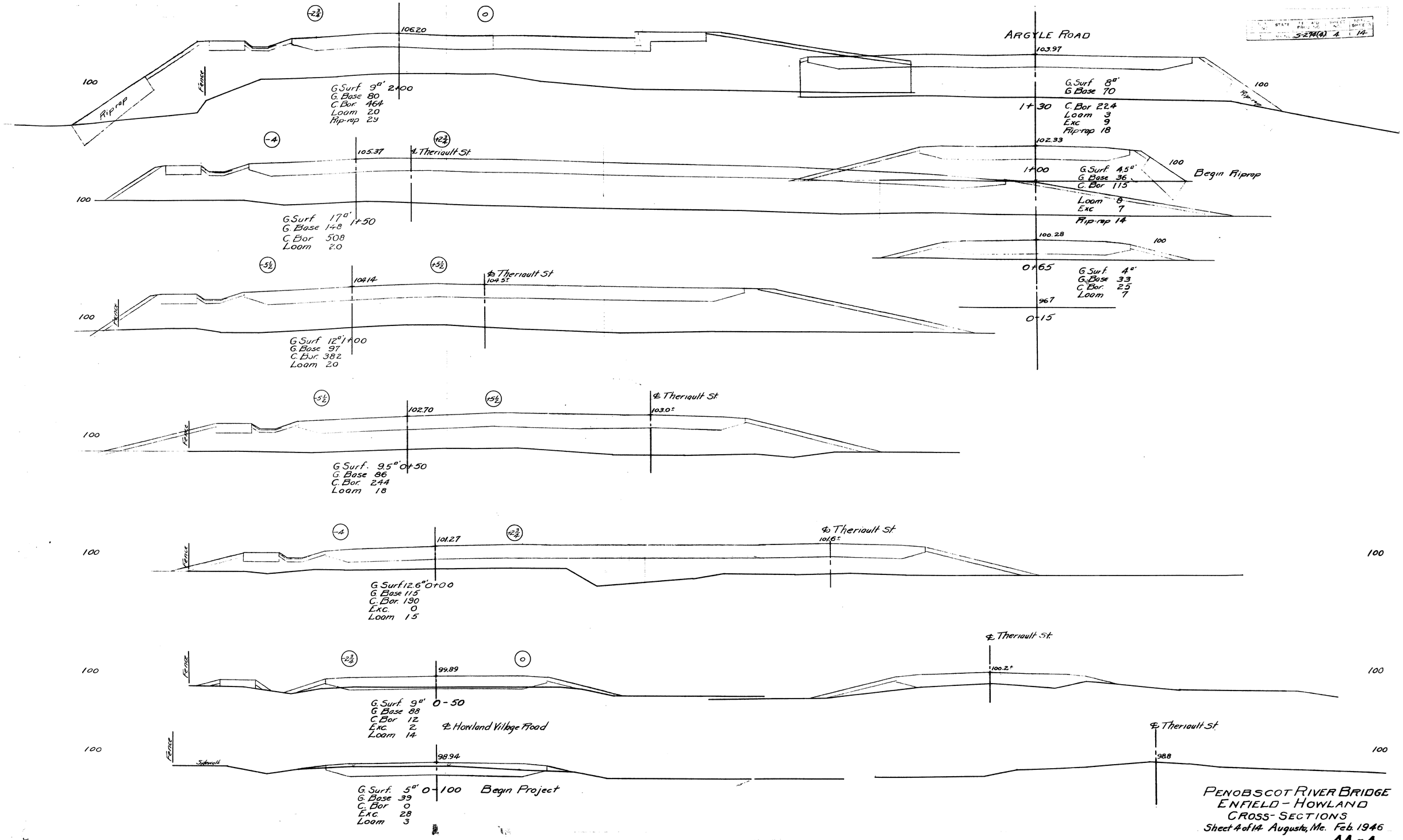


NOTES: Substructure ~ Abuts. and piers mortared masonry - good condition.
Superstructure ~ 5 thru truss spans wood floor
High water 1923 Elev. 99.0±

0 1 2 3 4 5 INCHES

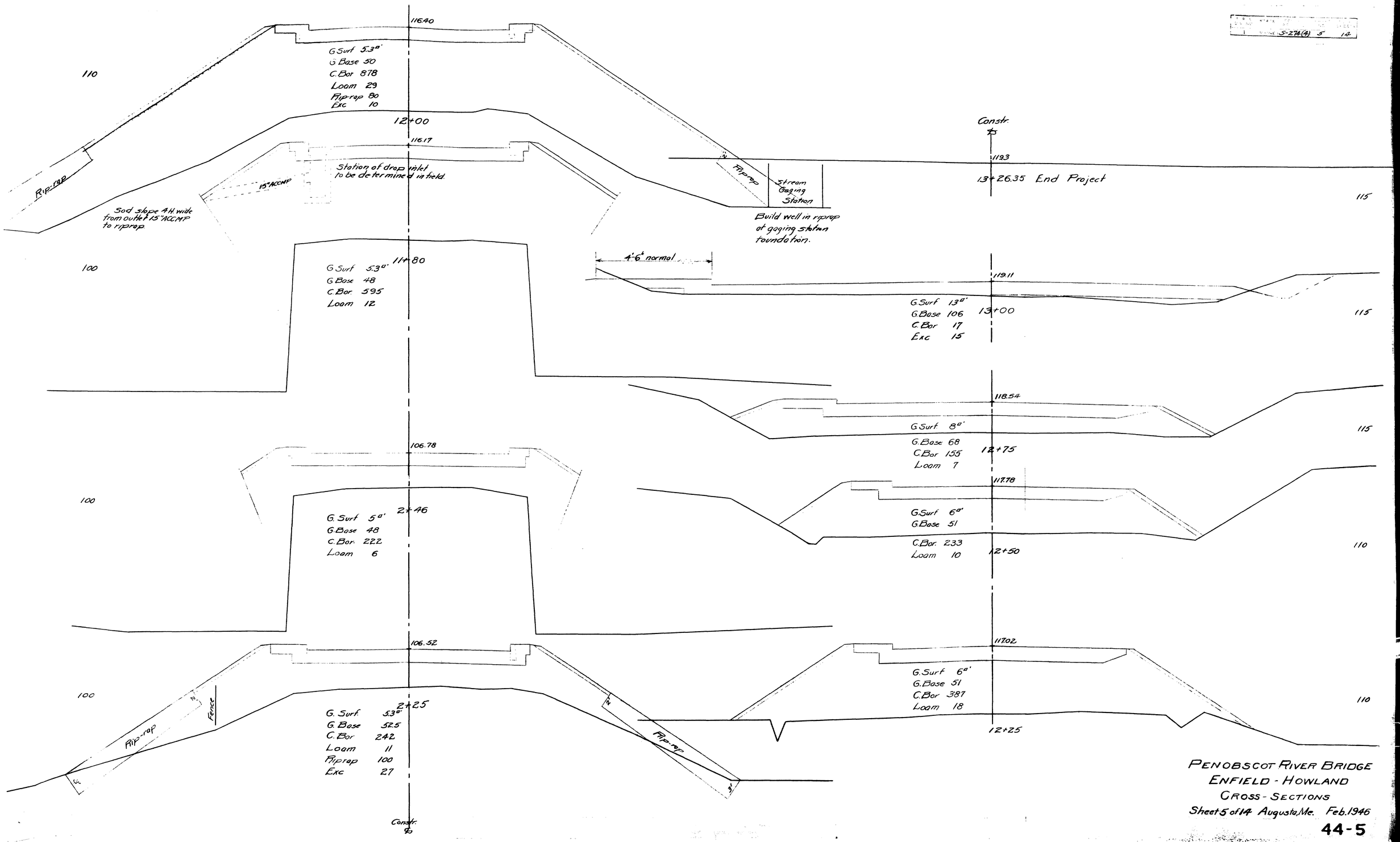


S-274(4) 3 14
STANDARD DROP INLET
13" ACCMP x 20'-0"
CONST ℄
℄ SURVEY LINE
END PROJECT
LINCOLN
PLAN
Scale 1"=30'
End conc. curb & sidewalk at 1210± on D.S. side
HIGHWAY DEPT SURVEY LINE
PASSADUMKEAG
50' VC
Ex. 14
50' VC
Ex. 19
PROFILE
Scales H-1"=30' V-1"=10'
End Project 13+26.35
LINCOLN ROAD
PASSADUMKEAG ROAD
PROFILE
PIER 1
PIER 2
PIER 3
PIER 4
WATER ELEV
SAND & BOULDERS
GRAVEL-CLAY HARDPAN
GRAVEL-ROCK HARDPAN
SAND
SAND & ROCKS
SAND CLAY
ROCK HARDPAN
SAND-ROCK HARDPAN
SAND HARDPAN
LEDGE
Core Drill
PROFILE 20'± Rt
SOUNDINGS
Bituminous Treatment
2" Gravel Surface
18" Gravel Base
6" Loam
All fill slopes to be loamed 6" and seeded roadside mixture.
TYPICAL SECTION WEST APPROACH
Variable East Approach
Type B Guard Rail
HALF NORMAL SECT AT BRIDGE
Eliminate sidewalk on downstream side east approach about 25' from end of bridge - Leep shoulders wide
Drop top of concrete curb 6" in last 10' of length to show exposed vertical face of 3"
HALF SECT ARGYLE ROAD
SECT CONCRETE CURB
Plan: EEB
Check: C.A.
Town 10-22
Bridge 2660
STATE HIGHWAY COMMISSION
BRIDGE DIVISION
PENOBSCOT RIVER BRIDGE
BETWEEN THE TOWNS OF
ENFIELD and HOWLAND
PENOBSCOT COUNTY
SURVEY PLAN
Sheet 3 of 14
Augusta, Me. Sept. 1941
Revised 2-11-46 Raised Finish Grade
44-3
0 1 2 3 4 5 INCHES



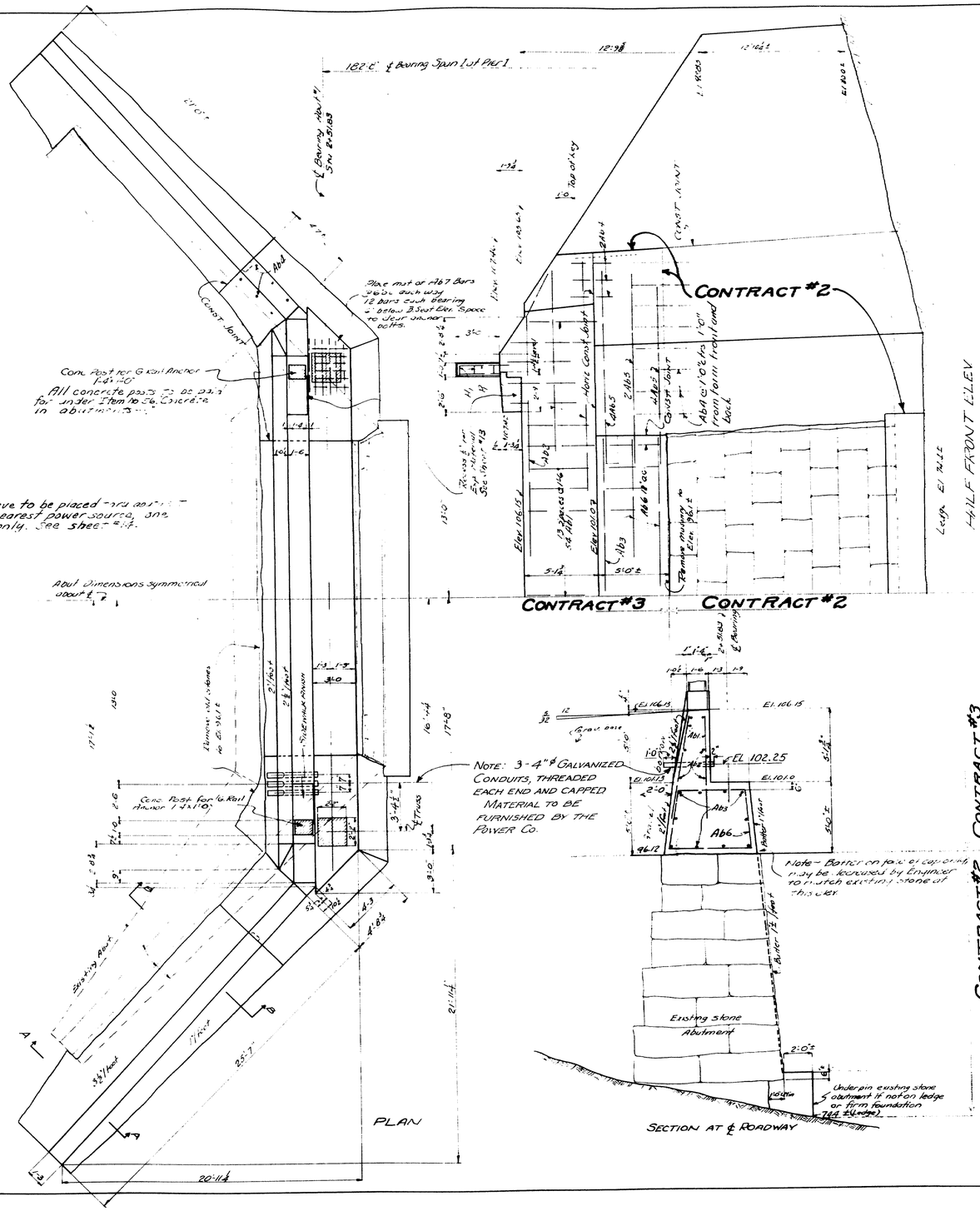
PENOBSCOT RIVER BRIDGE
ENFIELD - HOWLAND
CROSS-SECTIONS
Sheet 4 of 14 Augusta, Me. Feb. 1946
44-4

0 1 2 3 4 5 INCHES

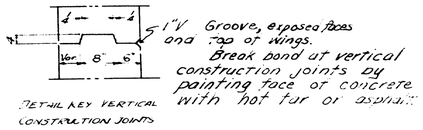


PENOBSCOT RIVER BRIDGE
ENFIELD - HOWLAND
CROSS - SECTIONS
Sheet 5 of 14 Augusta, Me. Feb. 1946

44-5



NOTE: 2½" Pipe sleeve to be placed [illegible] at corner nearest power source, one abutment only. See sheet [illegible].



Notes: Cost of construction joints to be included in cost of concrete. Concrete in backwall to be placed after struct. steel erection. Construction joints to be covered on the back side with two layers of heavy roofing. Cut concrete and back side of each layer of roofing is applied with hot tar or asphalt. Roofing to be 10" wide and are covered recessed ½".

Shaded areas on bridge seat to be finished to exact elevation.

STEEL SCHEDULE - CONTRACT #2

Mark	Size	No.	Length	Location
Ab4	⅞"ϕ	124	4'-0"	Abutments
Ab8	⅝"ϕ	40	24'-6"	"
Ab9	⅝"ϕ	22	32'-0"	"
Ab10	¾"ϕ	40	6'-0"	"
PP1	¾"ϕ	22	23'-0"	Piers
PP2	½"ϕ	86	6'-0"	"
PP3	¾"ϕ	88	6'-0"	"
PP7	½"ϕ	66	12'-6"	"
PP8	¾"ϕ	22	20'-0"	"
PP9	¾"ϕ	22	24'-0"	"
PP10	¾"ϕ	22	25'-0"	"

Revised May 2, 1947 - 3-4"ϕ Conduits for power cables. [illegible]

Plan: E.B.
Check: [illegible]

Town	10-22
Bridge	2660

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

PENOBSCOT RIVER BRIDGE

BETWEEN THE TOWNS OF

ENFIELD and HOWLAND

PENOBSCOT COUNTY

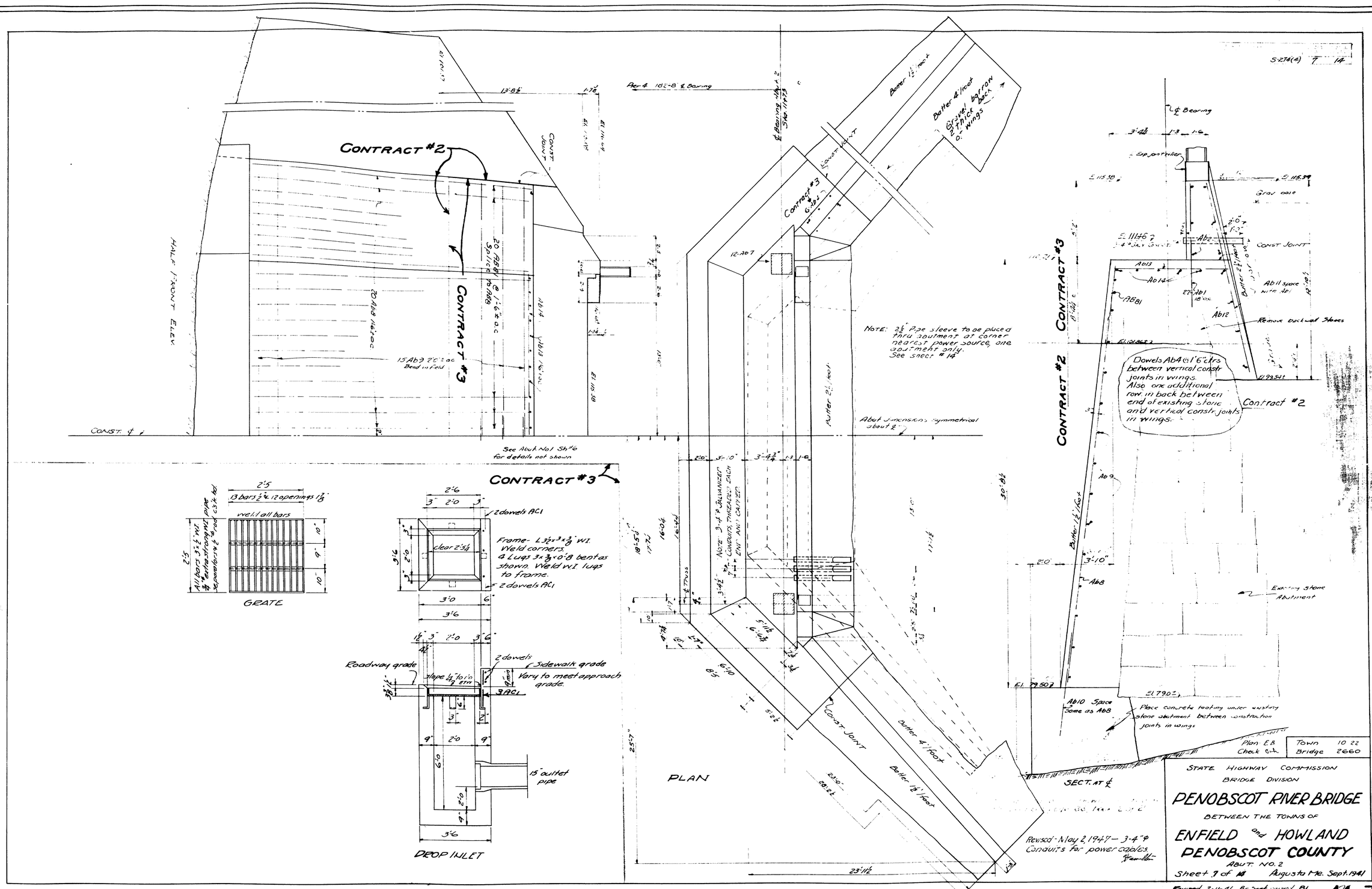
ABUT. NO. 1

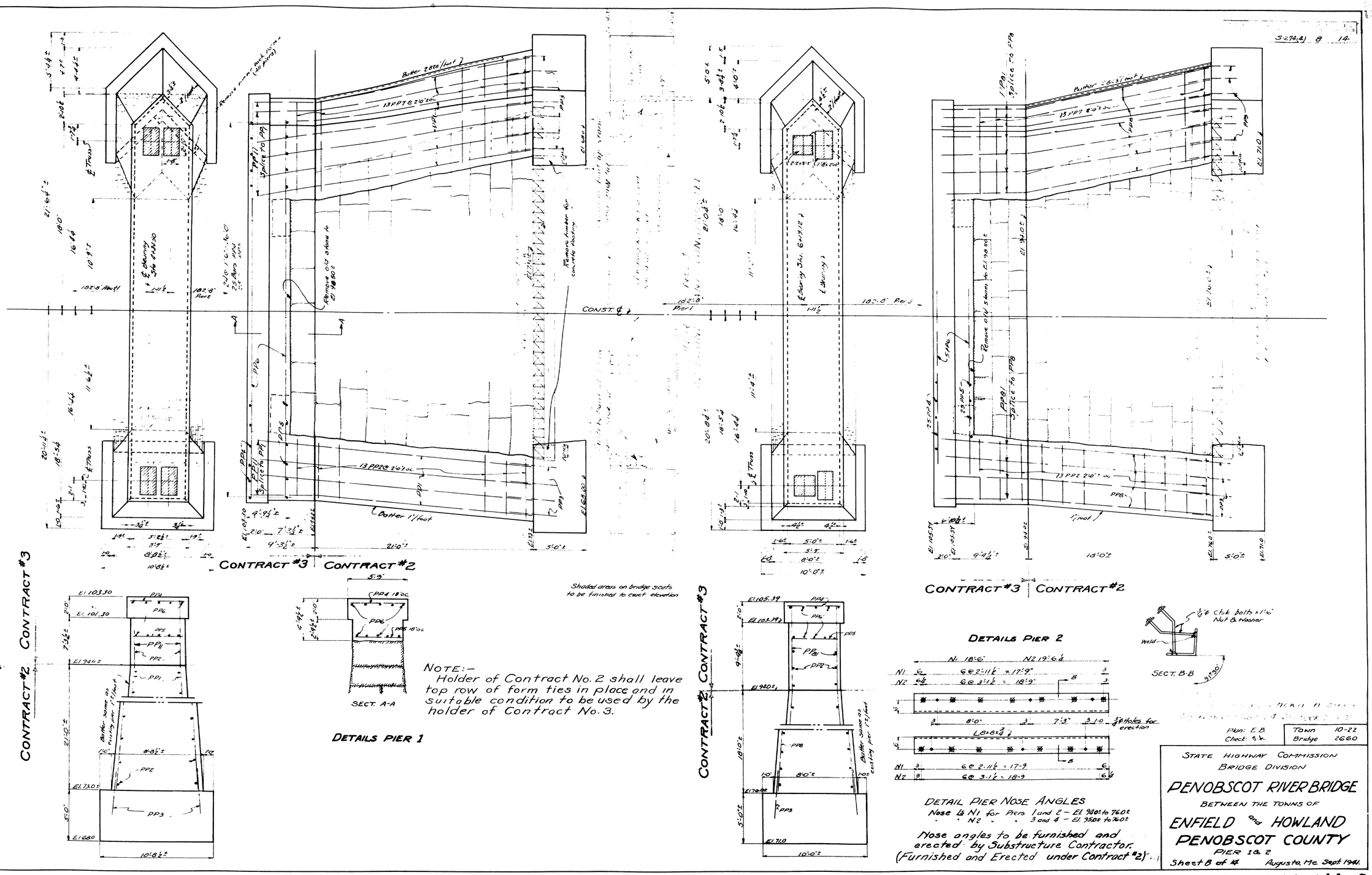
Sheet 6 of 14 Augusta Me Sept 1941

Revised 2/11/46 Elev. raised R.J.

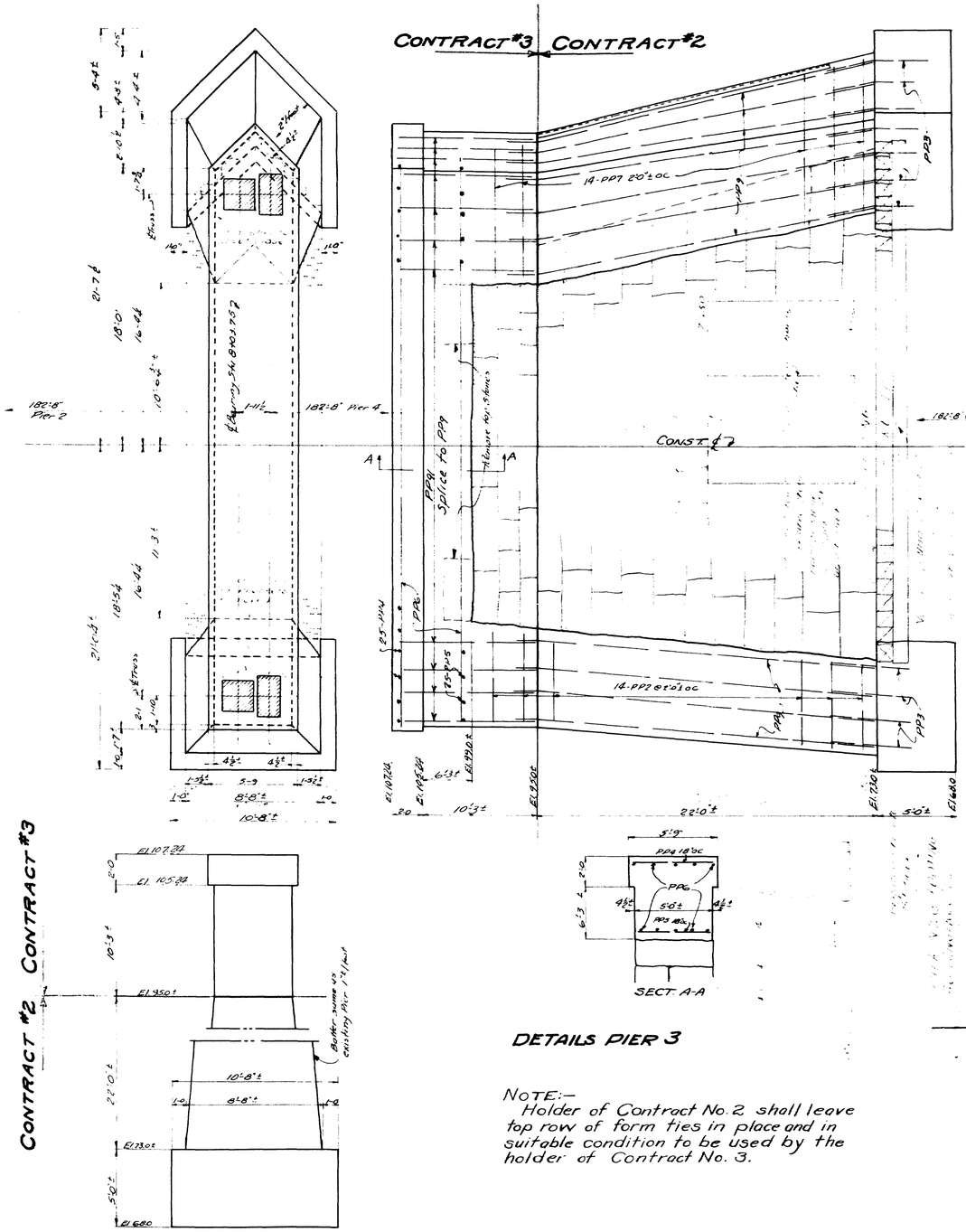
44-6

0 1 2 3 4 5 INCHES


S-274(A) T 14
CONTRACT #2
CONTRACT #3
HALF FRONT ELEV.
CONST. JOINT
20 Ab8 @ 1'6" o.c.
Sp. in CB to Ab8
20 Ab8 1'6" o.c.
15 Ab9 2'6" o.c. Bend in field
Ab14
Ab13 1'6" o.c.
CONST. ℄
See Abut. No. 1 Sh. #6 for details not shown
Batter 1½ foot
Batter 4 foot
Gravel backfill 2' thick back of wings
Contract #3 6'-0" x
12-Ab7
Batter 2½ foot
NOTE: 2½" Pipe sleeve to be placed thru abutment at corner nearest power source, one abutment only. See sheet #14
Abut. dimensions symmetrical about ℄
NOTE: 3-4" ϕ GALVANIZED CONDUITS THREADED EACH END AND CAPPED
CONST. JOINT
Batter 4 foot
Batter 1½ foot
PLAN
℄ Bearing
Sp. in filler
Grav. base
Ab2
CONST. JOINT
Ab13
Ab14
Ab1
Ab11 space like Ab1
Ab12
Remove backwall shoes
Dowels Ab4 @ 1'6" c/c's between vertical constr. joints in wings. Also one additional row in back between end of existing stone and vertical constr. joints in wings.
Contract #2
Existing stone Abutment
Ab9
Ab8
Ab10 Space same as Ab8
Place concrete footing under existing stone abutment between construction joints in wings
SECT. AT ℄
GRATE
DROP INLET
2 dowels AC1
Frame- L 3½x3x½" W.I. Weld corners. 4 Lugs 3x½x0'-8 bent as shown. Weld W.I. lugs to frame.
Roadway grade
Sidewalk grade
Vary to meet approach grade.
15" outlet pipe
Revised - May 2, 1947 - 3-4" ϕ Conduits for power cables.
Town 10 22
Bridge 2660
STATE HIGHWAY COMMISSION
BRIDGE DIVISION
PENOBSCOT RIVER BRIDGE
BETWEEN THE TOWNS OF
ENFIELD and HOWLAND
PENOBSCOT COUNTY
ABUT. NO. 2
Sheet 7 of 18 Augusta Me. Sept. 1941
Revised 2-11-46 Bridge revised RH
" 7/25-46 R.S. Steel Cont. #3 RH.
44-7

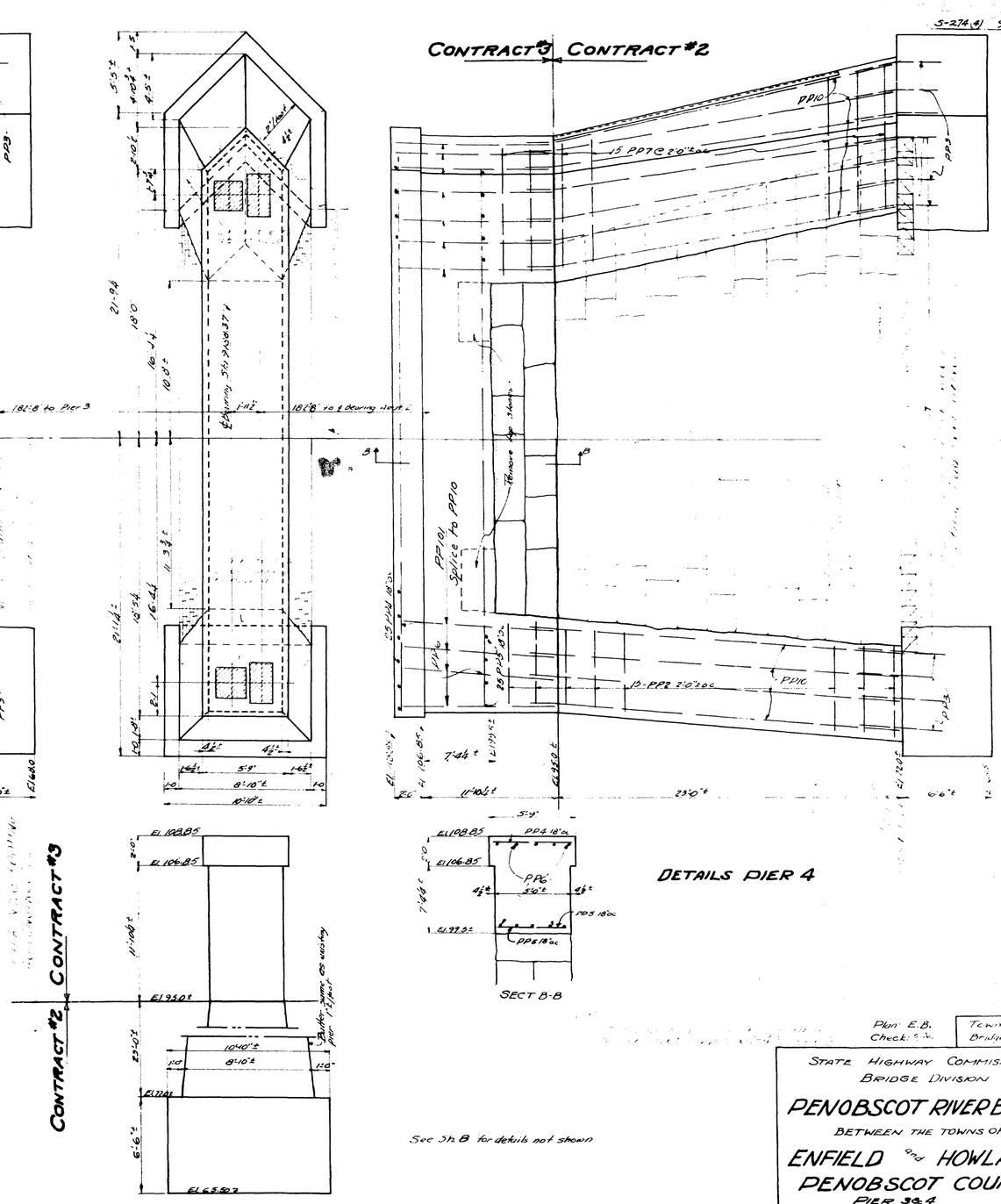


S-274(4) 8 14
CONTRACT #3
CONTRACT #2
CONTRACT #3
CONTRACT #2
CONST. ℄
Shaded areas on bridge seats to be finished to exact elevation
SECT. A-A
DETAILS PIER 1
NOTE:- Holder of Contract No. 2 shall leave top row of form ties in place and in suitable condition to be used by the holder of Contract No. 3.
DETAILS PIER 2
SECT. B-B
DETAIL PIER NOSE ANGLES
Nose Ls N1 for Piers 1 and 2 - El. 94.0± to 76.0±
" " N2 " " 3 and 4 - El. 95.0± to 76.0±
Nose angles to be furnished and erected by Substructure Contractor. (Furnished and Erected under Contract #2)
Plan: E.B.
Check: O.K.
Town 10-22
Bridge 2660
STATE HIGHWAY COMMISSION
BRIDGE DIVISION
PENOBSCOT RIVER BRIDGE
BETWEEN THE TOWNS OF
ENFIELD and HOWLAND
PENOBSCOT COUNTY
PIER 1 & 2
Sheet 8 of 14
Augusta, Me. Sept. 1941.
Revised 2-11-46 Br. Seat Raised.
" 7-25-46 R. Steel Cont. #3 P.J.
44-8
0 1 2 3 4 5 INCHES



DETAILS PIER 3

NOTE:—
Holder of Contract No. 2 shall leave top row of form ties in place and in suitable condition to be used by the holder of Contract No. 3.



DETAILS PIER 4

See Sh. 8 for details not shown

Plan: E.B.
Check:
Town 10-22
Bridge 2660

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

PENOBSCOT RIVER BRIDGE

BETWEEN THE TOWNS OF

ENFIELD and HOWLAND

PENOBSCOT COUNTY

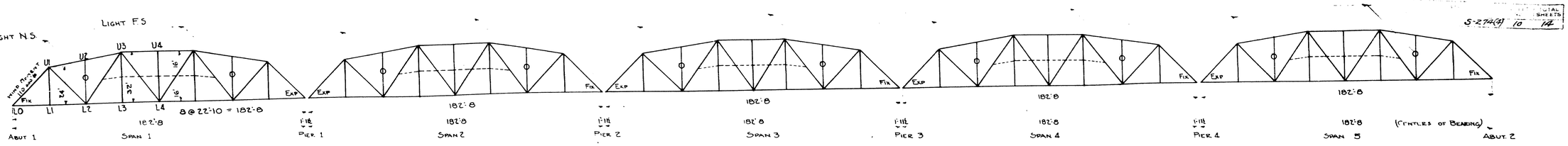
PIER 3 & 4

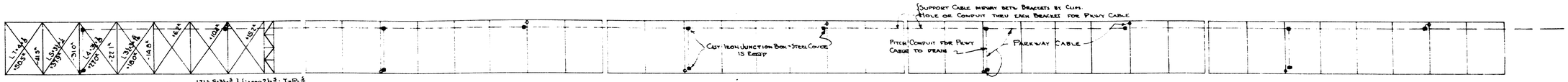
Sheet 9 of 14 Augusta, Me. Sept. 1941.

Revised 2-11-46 Br. Seat Lowered P.L.
" 7-25-46 R. Steel Contract #3 P.L.

44-9

0 1 2 3 4 5 INCHES





HALF PLAN - BOT LATERALS

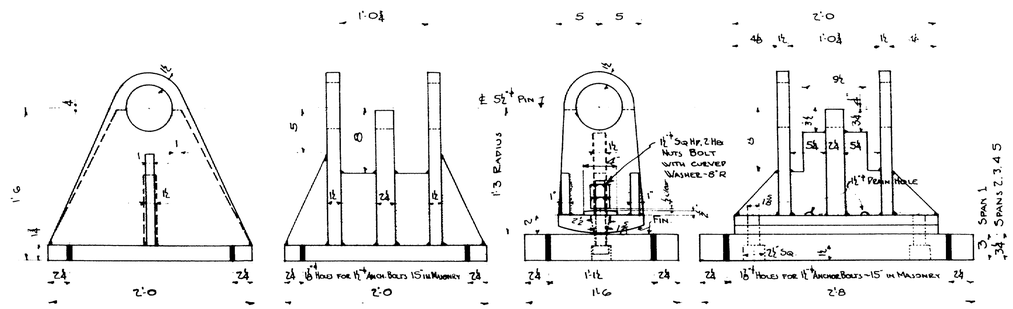
HALF PLAN - TOP LATERALS

MEMBER	STRESS IN KIPS DL	LL	I	TOTAL	DESIGN SECTION	CAMBER
L0U1	-298.3	-100.9	- 16.3	-415.5	2-15[50, 1-Pl 19"x½; 2-Pls 12"x⅜	0
U1U3	-306.9	- 94.6	- 15.3	-416.8	2-15[40; 1-Pl 19"x⅜	0
U3U4	-352.6	-108.8	- 17.6	-479.0	2-15[40; 1-Pl 19"x⅜	0
L0L2	+205.6	+ 63.4	+ 10.3	+279.3	2-15[33.9	0
L2L4	+330.4	+ 101.9	+ 16.5	+448.8	2-15[40; 2-Pl 12"x⅜	0
U1L2	+140.2	+ 36.4	+ 10.8	+207.4	10"WF 49	0
L2U3	- 48.7	+ 26.8 - 37.9	+ 7.9 - 7.9	+ 34.7 - 94.5	10"WF 39	0
U3L4	+ 37.9	- 25.0 + 38.0	- 6.3 + 8.8	- 31.5 + 84.7	9½"WF 33	0
U1L1	+ 61.8	+ 32.8	+ 10.4	+ 105.0	do	0
U2L2	0	0	0	0	do	0
U3L3	+ 61.8	+ 32.8	+ 10.4	+ 105.0	do	0
U4L4	0	0	0	0	do	0

DEAD LOAD 2700 #/FT OF TRUSS.

DESIGN OF STRINGERS & FL BEAMS ON SHEET No. 10

TRUSSES TO HAVE ½" PERMANENT CAMBER



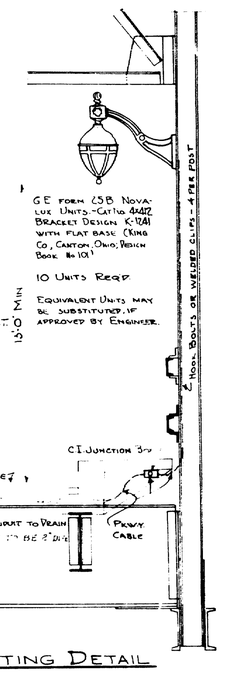
FIXED PEDESTALS ~ 10 REQD.

EXPANSION PEDESTAL & MASONRY PLATE 10 REQD

⅜" FILLET WELD

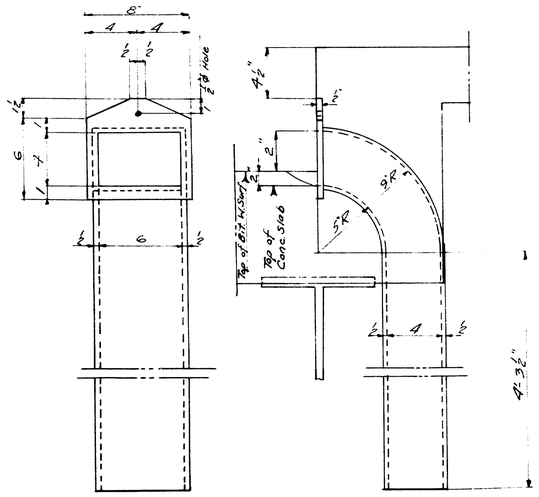
PEDESTALS MAY BE CAST STEEL - ¼" FILLETS

PEDESTAL DETAILS



NOTE: FURNISHING AND ERECTING C.I JUNCTION BOXES, PARKWAY CABLE AND CABLE SUPPORTS IS NOT A PART OF THIS CONTRACT.

LIGHTING DETAIL



CAST IRON DRAIN DETAIL

80 REQUIRED - PLACE NEAR ℄ OF PANEL - TO BE PART OF SUBSTRUCTURE CONTRACT

CONTRACT #3

Plan E.B.
Check

Town	10-22
Bridge	2680

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

PENOBSCOT RIVER BRIDGE

BETWEEN THE TOWNS OF

ENFIELD and HOWLAND

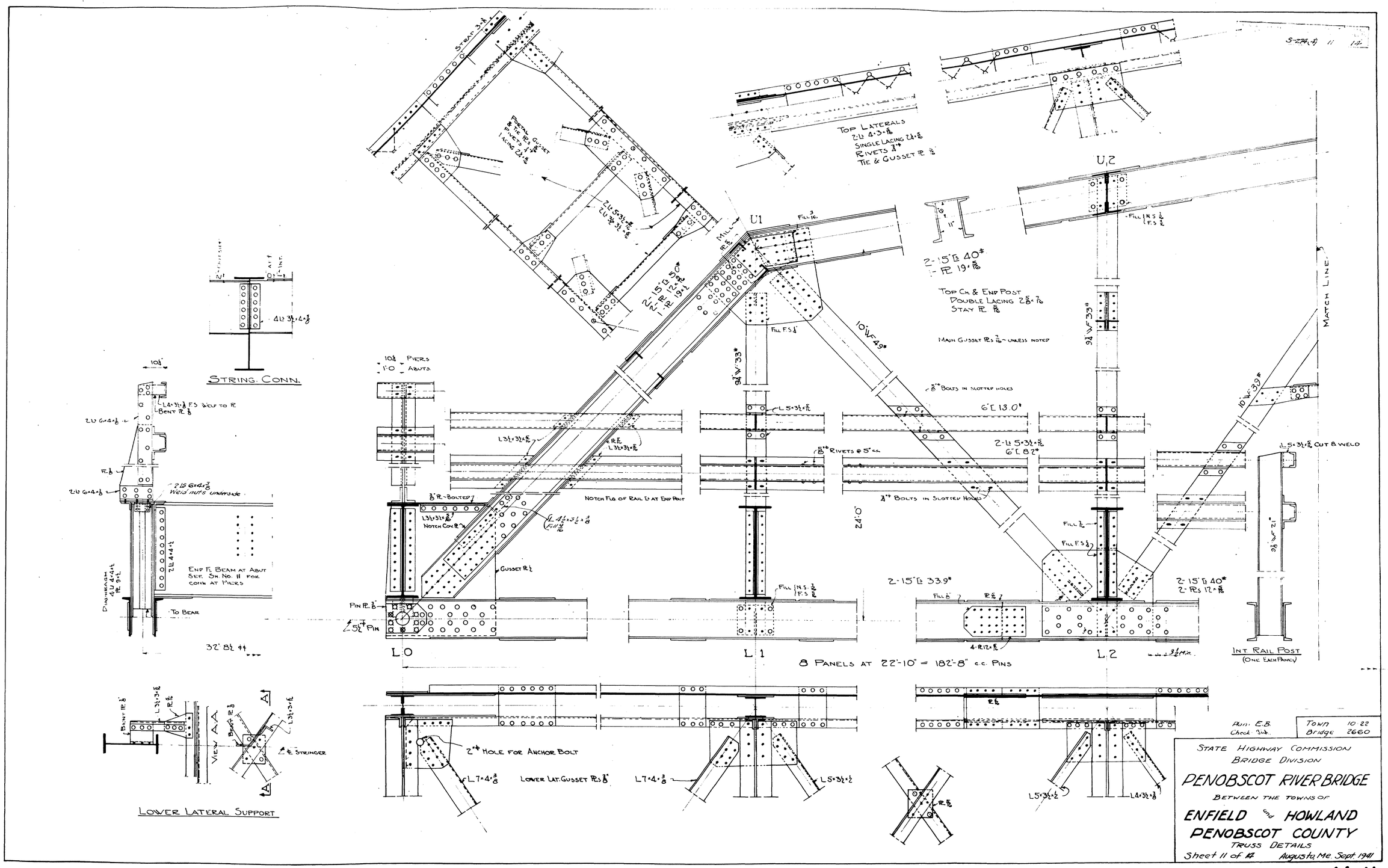
PENOBSCOT COUNTY

TRUSS DETAILS

Sheet 10 of 14 Augusta, Me. Sept 1941

44-10

0 1 2 3 4 5 INCHES



Plan: E.B.
Check: J.H.

Town	10-22
Bridge	2660

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

PENOBSCOT RIVER BRIDGE

BETWEEN THE TOWNS OF

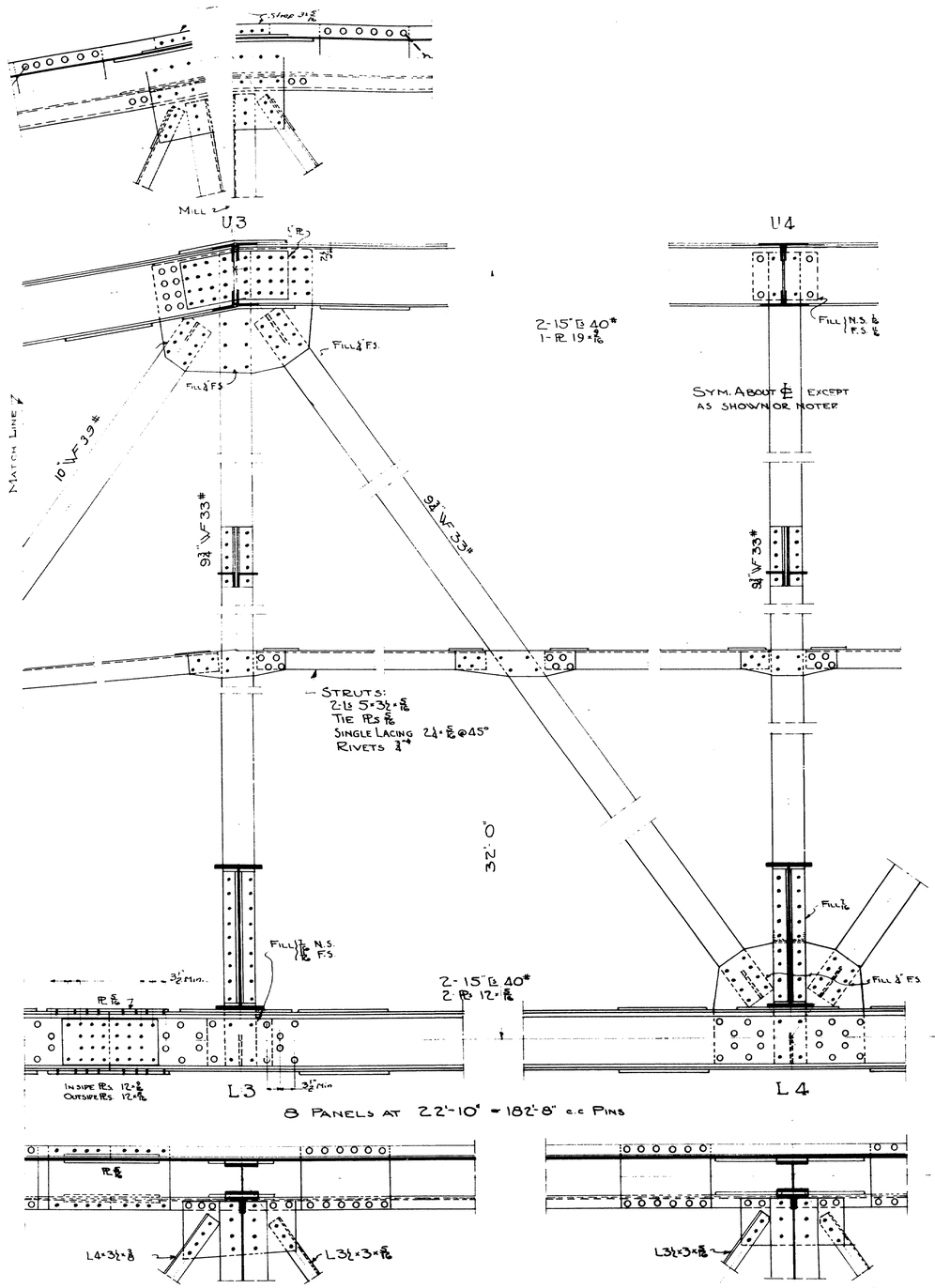
ENFIELD and HOWLAND
PENOBSCOT COUNTY

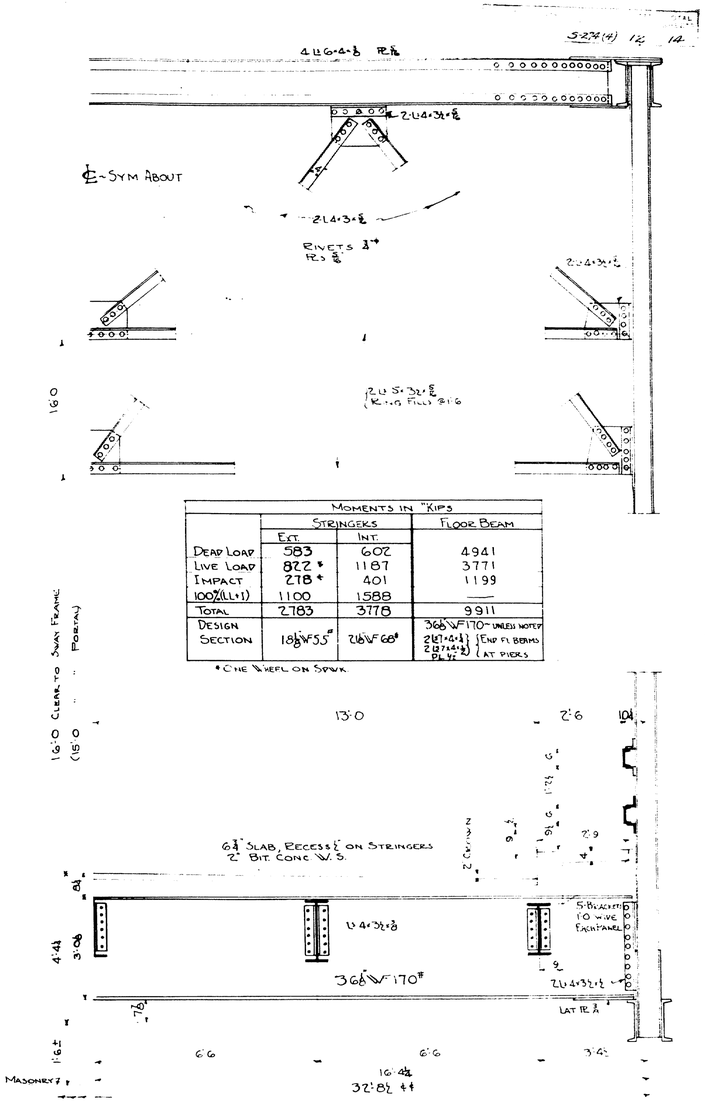
TRUSS DETAILS

Sheet 11 of 14 Augusta, Me. Sept. 1941

44-11

0 1 2 3 4 5 INCHES





Moments in "Kips			
	Stringers		Floor Beam
	Ext.	Int.	
Dead Load	583	602	4941
Live Load	822 *	1187	3771
Impact	278 *	401	1199
100%(LL+I)	1100	1588	—
Total	2783	3778	9911
Design Section	18 1/8" WF 55#	21 1/8" WF 68#	36 1/8" WF 170 - unless noted; 2 Ls 7×4×1/2, 2 Ls 7×4×1/2, Pl 1/2 } End Fl Beams at Piers

* One Wheel on Sdwk.

Typical Cross Section

Provide hand holes in end fl beams for painting and bolting

Plan: E.B.
Check: B.L.

Town 10.22
Bridge 2660

Loading: H15
Design Specification: Maine State Highway Commission for Steel Highway Bridges 1937.
Detail and Fabrification Spec. Ditto 1945

All holes in field connections and field splices of main members to be sub-punched and reamed to a metal template, or reamed while assembled.

State Highway Commission
Bridge Division

Penobscot River Bridge

Between the Towns of

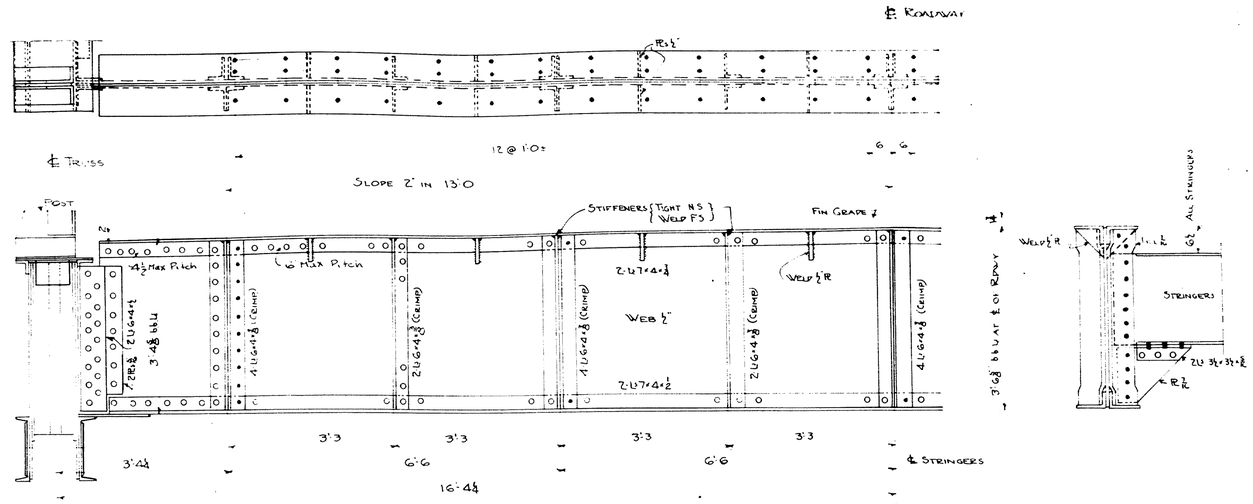
Enfield and Howland
Penobscot County

Truss Details

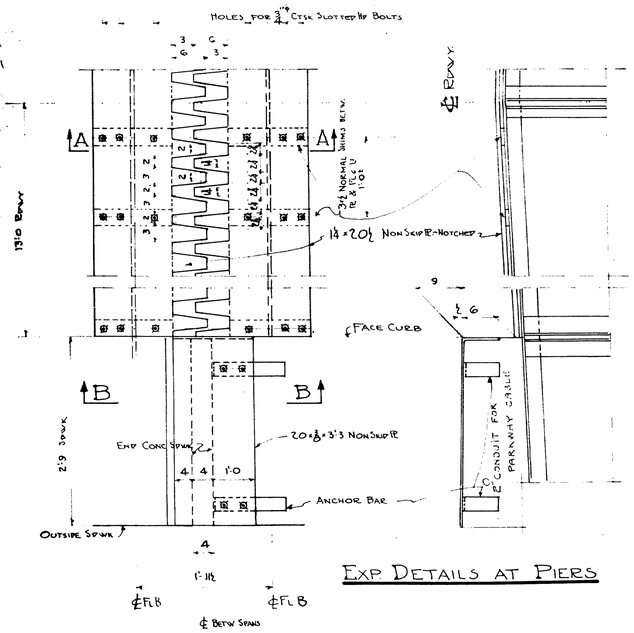
Sheet 12 of 14 Augusta, Me. Sept. 1941

44-12

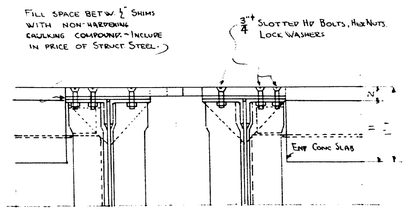
0 1 2 3 4 5 INCHES



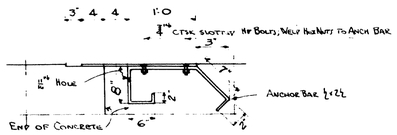
Detail End Floor Beam at Piers



Exp Details at Piers



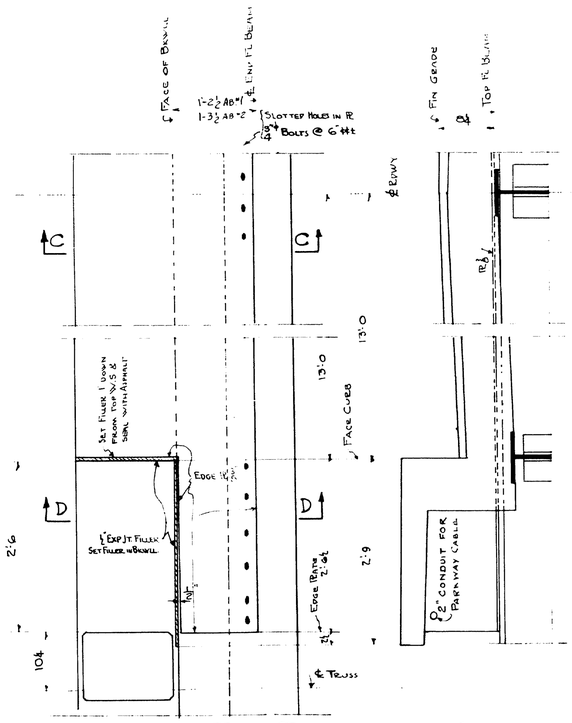
Sect. A-A



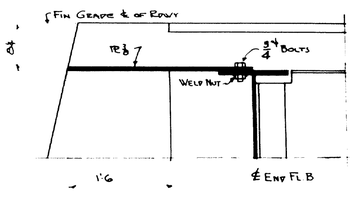
Sect. B-B

Note: Sidewalk expansion plates at piers, and apron plates at abutments to be furnished by steel contractor and erected by substructure contractor.

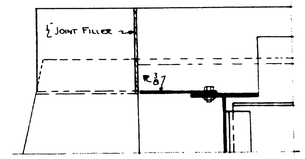
Erection - Contract #3



Exp Details at Abut.



Sect. C-C



Sect. D-D

Plan: EB	Town 10-22
Check: Bmk	Bridge 2660

State Highway Commission
Bridge Division

Penobscot River Bridge

Between the towns of

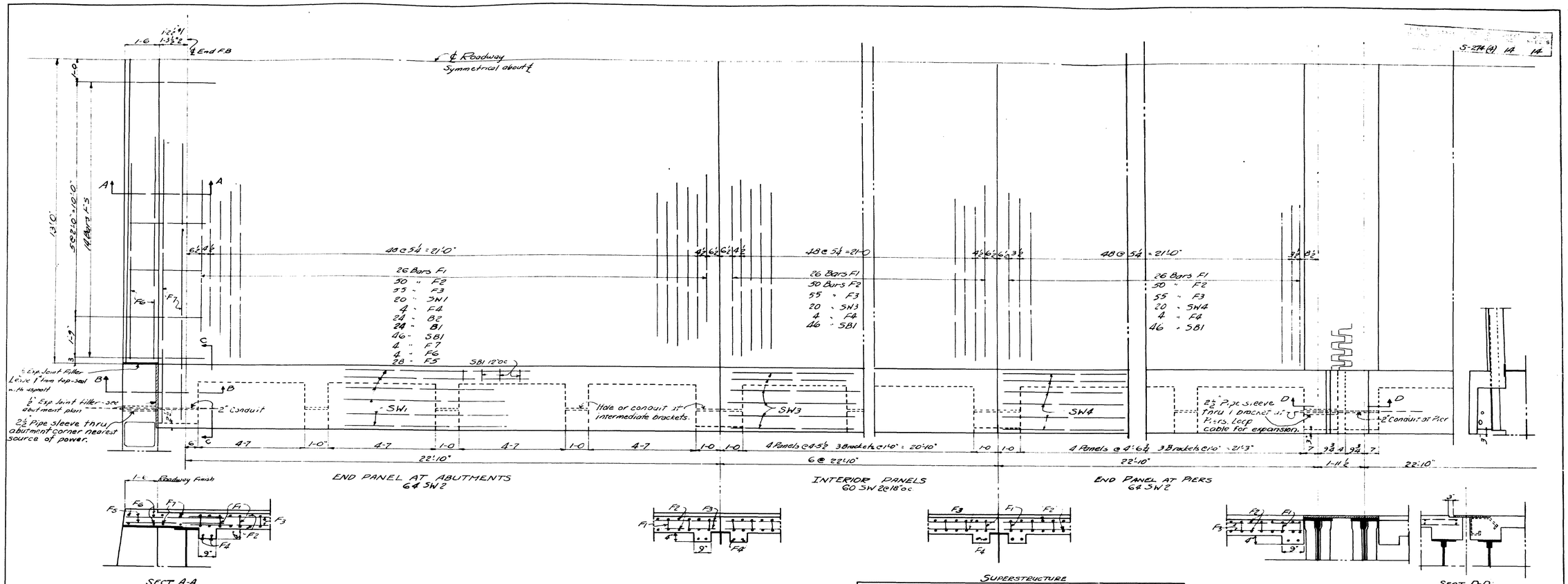
Enfield and Howland

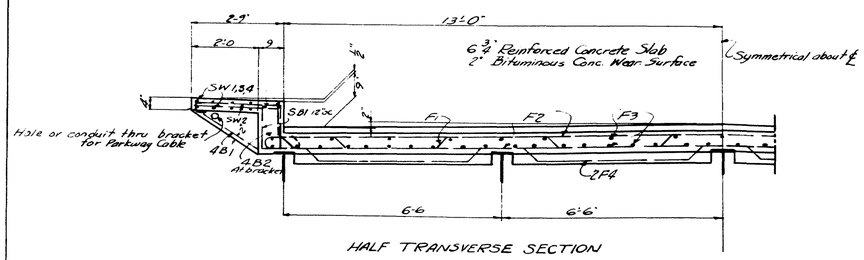
Penobscot County

End Floorbeam & Exp Details

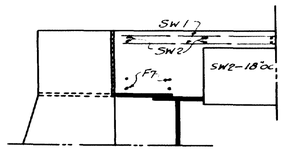
Sheet 13 of 14 Augusta Me. Sept. 1941

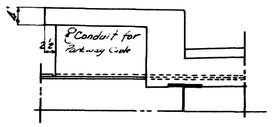
0 1 2 3 4 5 inches

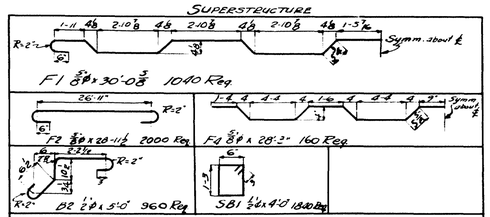




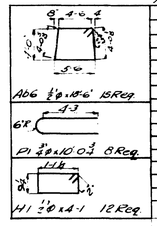
1" Min. cover for all reinforcing steel except as noted.







Mark	Size	No	Length	Remarks	Mark	Size	No	Length	Remarks
F3	⅝"ϕ	2200	22'-1"	All Panels	SW3	½"ϕ	600	22'-7"	Int. Panels
F5	½"ϕ	56	5'-0"	End - Abut.	SW4	"	160	23'-4"	End - Piers
F6	"	8	25'-0"	" "	B1	½"ϕ	960	4'-6	Brackets (bend in field)
F7	"	8	30'-6"	" "					
SW1	½"ϕ	40	23'-9"	" "					
SW2	½"ϕ	2440	21'-6"	All "					



ABUTMENTS

Mark	Size	No.	Length	Remarks
Ab1	½"ϕ	81	7'-0"	Abut 1 & 2
Ab2	⅝"ϕ	24	22'-6	" (Splice)
Ab3	⅝"ϕ	20	12'-6"	Abut 1 & 2
Ab4	"	24	40'-0"	" 1 & 2
Ab5	"	20	13'-0	" 1
Ab7	½"ϕ	48	4'-0	" 1 & 2
Ab8	⅝"ϕ	40	8'-0"	" 2
Ab9	"	8	32'-0	" 2 (Splice)
Ab10	⅝"ϕ	40	6'-0	" 2
Ab11	½"ϕ	27	15'-0	" 2
Ab12	"	10	22'-0	" 2 (Splice)
Ab13	⅝"ϕ	22	6'-8	" 2
Ab14	"	10	17'-0	" 2 (Splice)

APPROACH CURBS

AC1	¾"ϕ	29	2'-0	Dowels
AC2	½"ϕ	60	20'-0	Long Bars

PIERS

Mark	Size	No	Length	Remarks	Mark	Size	No	Length	Remarks
PP1	⅝"ϕ	22	29'-10	Pier 1	PP9	⅝"ϕ	22	33'-10	Pier 3
PP2	½"ϕ	29	6'-0	All Piers	PP10	"	44	21'-10"	" 4 (Splice)
PP3	⅝"ϕ	100	6'-0	"	PP11	⅝"ϕ	22	9'-0"	Pier 1
PP4	½"ϕ	100	5'-5	"	PP12	"	22	11'-9"	Pier 3
PP5	"	100	4'-8	"	PP13	"	22	13'-6"	Pier 4
PP6	⅝"ϕ	80	20'-0	" (Splice)					
PP7	½"ϕ	29	12'-6	"					
PP8	⅝"ϕ	22	11'-0"	Pier 2					

REINFORCING STEEL SCHEDULES - CONTRACT #3

Plan: E.B.
Check: [illegible]

Town	10-22
Bridge	2660

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

PENOBSCOT RIVER BRIDGE

BETWEEN THE TOWNS OF

ENFIELD and HOWLAND

PENOBSCOT COUNTY

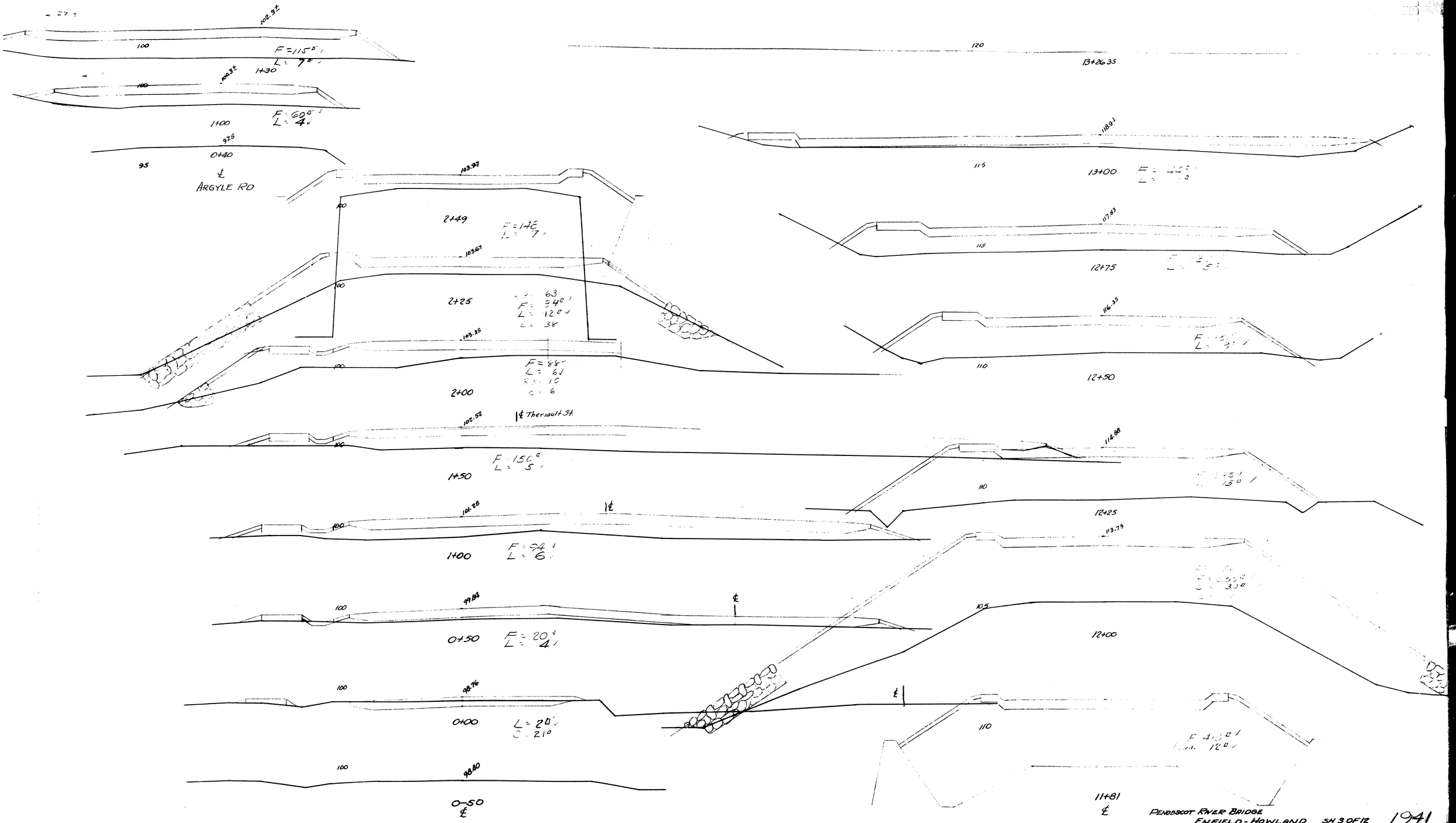
ROADWAY SLAB & REINFORCING STEEL

Sheet 14 of 14 Augusta Me Sept 1941

Steel schedule revised for Contract #3 Feb. 7-30-46

44-14

0 1 2 3 4 5 INCHES

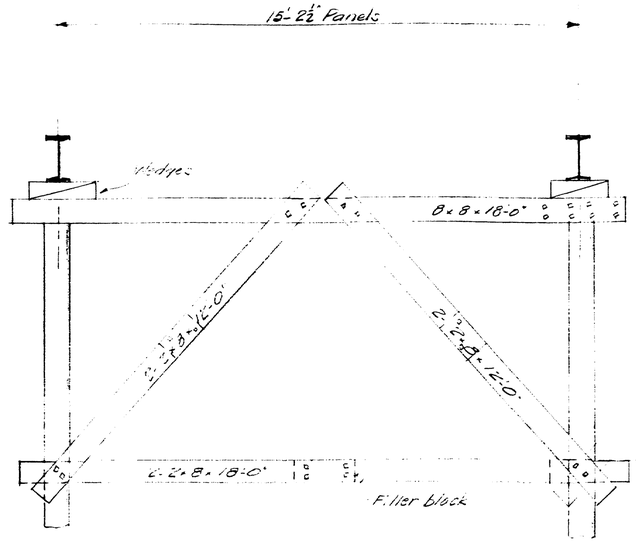


PENOBSCOT RIVER BRIDGE
ENFIELD - HOWLAND SH 3 OF 12 1941

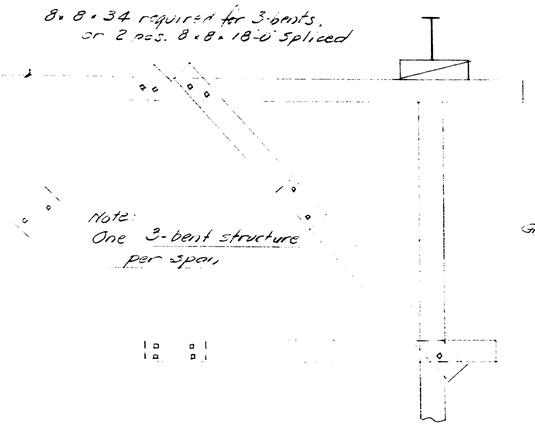
— ORIGINAL —

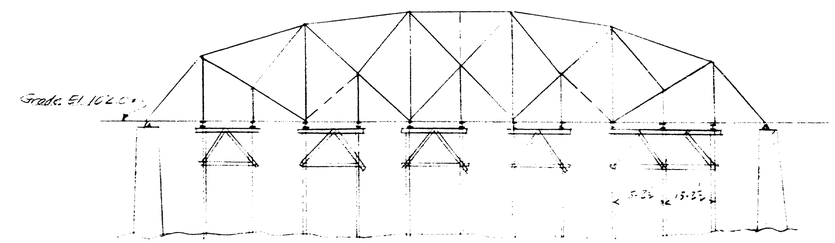
44-15

0 1 2 3 4 5 INCHES

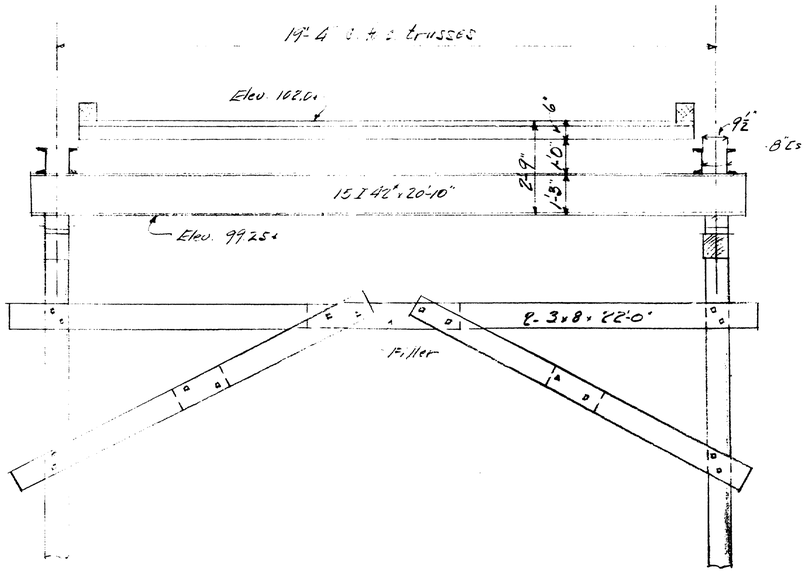


2-BENT STRUCTURE
SIDE ELEVATION





12 panels @ 15'-2½" = 182'-0"
5-Spans
SIDE ELEVATION FOR ONE SPAN



TRANSVERSE SECTION

Plan No.	Town 10-22
	Bridge 2660

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

PENOBSCOT RIVER BRIDGE
BETWEEN THE TOWNS OF
ENFIELD AND HOWLAND
PENOBSCOT COUNTY

TEMPORARY SUPPORTS

Sheet 1 of 1 Augusta, Maine, May, 1946

44-

0 1 2 3 4 5 INCHES

FIELD RIVETS AND BOLTS

AMERICAN BRIDGE COMPANY

UNITED STATES STEEL CORPORATION SUBSIDIARY

LINE NO.	ACTUAL NUMBER REQ'D.	NO. SHIPPED	DIAM.	RIVETS	BOLTS: LENGTH UNDER HEAD	HEAD	NUT	WASHER	TYPE OF BOLT	GRIP		CALCULATED WEIGHT TOTAL	SHIPMENTS
1													
2	50	60	7/8	2 1/8						5/8		53	
3	1460	1610	"	2 1/4						1/2 3/4		916	
4	1310	1445	"	2 3/8						13/16 7/8		865	
5	3866	4255	"	2 1/2						1		2438	
6	1906	2100	"	2 5/8						1 1/8		1344	
7	2744	3020	"	2 3/4						1 1/4		1972	
8	820	905	"	2 7/8						1 3/8		645	
9	1460	1610	"	3						1 1/2		1127	
10	2196	2415	"	3 1/8						1 5/8		1792	
11	240	265	"	3 1/4						1 11/16		206	
12	120	140	"	3 3/8						1 3/4		312	
13	360	400	"	3 1/2						1 7/8		1640	
14	1840	2025	"	3 5/8						2		1220	
15	1120	1235	"	3 3/4						2 1/8		1362	
16	144	160	"	3 7/8						2 1/4		383	
17	400	440	"	4									
18													
19													
20	1420	1565	3/4	2						5/8		577	
21	600	660	"	2 1/8						3/4		357	
22	300	330	"	2 1/4						7/8		132	
											TOT.	16030	
23													
24													
25	240	255	7/8		1 3/4	Hex	Hex			3/4		180	
26	120	130	"		2 1/4	"	"			1 1/8		105	
27	40	46	"		2 1/4	"	No NUT			1 1/8		29	
28	40	46	"		2 1/2	"	Hex			1 1/2		40	
29													
30	80	90	3/4		1 1/2	Hex	Hex			5/8		41	
31	320	340	"		1 3/4	"	"			7/8		167	
32	600	630	"		2	"	"			1-1/8		328	
33	126	140	"		2 3/4	"	No NUT			1 3/4		69	
34													
35													
36													
37	80	90	5/8		1 1/2	Hex	Hex			3/4		28	
38	160	170	"		1 3/4	"	"			7/8		58	
39	520	550	"		2	"	"			1 1/8		198	
40	80	90	"		2 1/4	"	"			1 3/8		34	
											TOT	1283	
41													
42	1096	1100			2 x 1/4 x 1 3/16			⊙				209	
43	760	800			2 x 1/4 x 11/16			⊙				160	
44													
45													
46													

FIELD RIVETS AND BOLTS

DATE NAME: HLS 4 5 47 — DATE 10

DRAWINGS: ELMIRA — FABRICATION: ELMIRA — ORDER No. J2777 — PAGE No. C 3

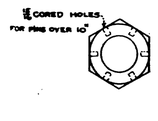
NAME OF STRUCTURE

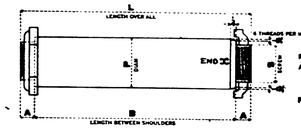
STATE OF MAINE. PENOBSCOT RIVER BRIDGE ENFIELD TO HOWLAND PENOBSCOT CY

44-19

PINS AND NUTS

AMERICAN BRIDGE COMPANY





FINISH ONE END OF ALL PINS AS PER SKETCH AND MARK END X

PILOT NUT USED ON THIS END.

LINE NO.	MEMBER: NO. PCS.	MEMBER: MARK	PIN: DIAM. P	PIN: LENGTH L FT.	PIN: LENGTH L INS.	SCREW: DIAM. S	SCREW: A	LENGTH B FT.	LENGTH B INS.	NUTS: NO. PCS.	NUTS: PATTERN NO.	CALCULATED WEIGHT FOR ONE NUT	ORDERED: NO. PCS.	ORDERED: LENGTH FT.	ORDERED: LENGTH INS.	ORDERED: ITEM	SHIPMENTS
1	20	M7	5 1/2	1	7 3/4	4 1/2	1 3/4	1	4 1/4								
2										40	PN27	(14)	2	5 3/4	17 2	107	
3															22	532	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	
25																	
26																	
27																	
28																	

PILOT NUTS

LINE NO.	NO. PCS.	DIAM. OF PIN P	LENGTH L	SCREW S	PATTERN NO.	ITEM	CALCULATED WEIGHT FOR ONE PIECE	SHIPMENTS
29	2	5 1/2	2 1/2	4 1/2	PS22	22 1582	(5)	
30								
31								
32								
33								
34								
35								
36								

DRIVING NUTS

LINE NO.	NO. PCS.	DIAM. OF PIN P	LENGTH L	SCREW S	PATTERN NO.	ITEM	CALCULATED WEIGHT FOR ONE PIECE	SHIPMENTS
29	2	5 1/2	6 3/4	4 1/2	PD9	22 1582	(31)	
30								
31								
32								
33								
34								
35								
36								

PIN AND NUTS

MATERIAL — SPEC.

PAINT — FIN SURFACES 5-ONE COAT WHITE LEAD & TALLOW

DATE NAME: DHB 11 13 46 — TJK 1 16 47 — DATE 11/13 1946

DRAWINGS: ELMIRA — FABRICATION: ELMIRA — ORDER No. J2777 — SHEET No. C2

NAME OF STRUCTURE

STATE OF MAINE PENOBSCOT RIVER BRIDGE ENFIELD TO HOWLAND

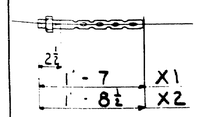
44-18

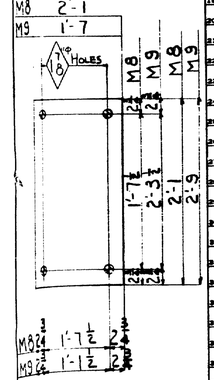
SKETCH, SHOP AND SHIPPING BILL

AMERICAN BRIDGE COMPANY

UNITED STATES STEEL CORPORATION SUBSIDIARY

SKETCH





LINE NO.	NO. PCS.	MARK	MATERIAL: SHAPE	MATERIAL: LENGTH FT.	MATERIAL: LENGTH INS.	CALCULATED WEIGHT FOR ONE NUMBER	ORDERED: NO. PCS.	ORDERED: LENGTH FT.	ORDERED: LENGTH INS.	ORDERED: ITEM	SHIPMENTS
1											
2		ANCHORS									
3											
4	40	X1	1 1/2 Φ		17	10 (492)				S	
5	40	HEX. NUTS	1 1/2 Tap							S	
6	40	WASHERS	2 1/2 x 3/16 x 3/8		9/16 HOLE	(13)				S	
7		80									
8											
9	40	X2	1 1/2 Φ		18 1/2	(450)				S	
10	40	HEX NUTS	1 1/2 Tap							S	
11	40	WASHERS	2 1/2 x 3/8 x 3/8		1 1/16 HOLE					S	
12											
13											
14											
15											
16											
17											
18											
19											
20		DUCK									
21											
22	30	M8	12 TO 14 OZ	25	2 1					C2 128	
23	30	M9	12 TO 14 OZ	19	2 9					C2 128	
24	2	GAL RED LEAD PASTE				TO (40)				SK	
25											
26											
27											
28											
29											
30											
31											
32		1000# NON-HARDENING COMPOUND								C2 129	
33											
34											
35											
36											
37											
38											
39											
40		BOLTS									
41						TOT					
42	650	X3	3/4 x 3/4	3 1/2		(416)	Eq 22	1581			
43			countersunk sloped head and Hex. Nut.								
44											
45	656	Verona lock washers for 3/4 bolt				(34)				S	
46											

Paint - No

DATE NAME: DHB 11 13 46 — TJK 1 16 47 — DATE 11/16 1946

DRAWINGS: ELMIRA — FABRICATION: ELMIRA — ORDER No. J2777 — SHEET No. C1

NAME OF STRUCTURE

STATE OF MAINE PENOBSCOT RIVER BRIDGE ENFIELD TO HOWLAND

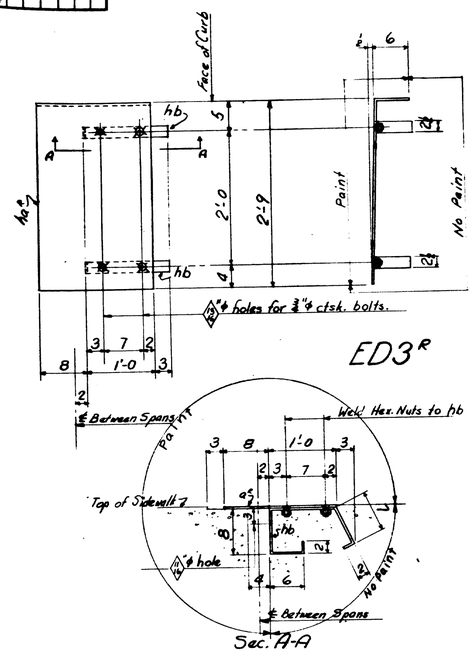
44-17

0 1 2 3 4 5 INCHES

SKETCH SHEET

AMERICAN BRIDGE COMPANY

RIVETS | BOLTS



ED3R

NO. PCS.	MATERIAL SHAPE	LENGTH FT.	LENGTH IN.	MARK	CALCULATED WEIGHT PER ONE BASP. PIECE	ORDERED	ITEM
4	End. Exp. Plates			ED3R			
4	" " "			ED3L			
4	Multiple plate	20	3/8	3 3			
4				haR			
4				haL			
16	pl	22 1/2	3 1	hb			
32	¾" ϕ bolts			ctsk. stamp head & hex. Nut			

PAINT Yes - as noted - (5)
STAGE CONTACT SURFACES - No

RIVETS | HOLES as noted

DATE BRAND BRP 11/14/46 TJK 1/18/47 | DATE 1/19 | DRAWINGS Elmira | FABRICATION Elmira | ORDER No. J2777 | SHEET No. F3

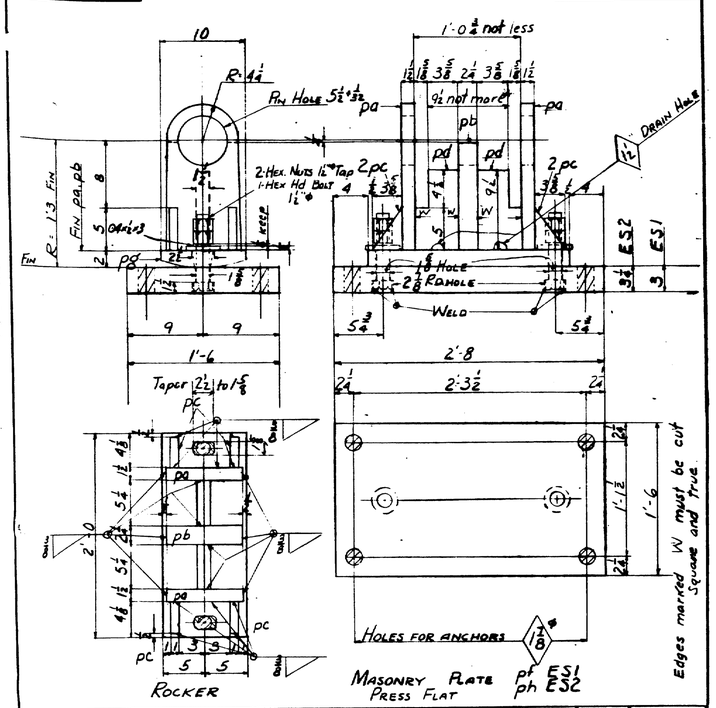
NAME OF STRUCTURE: State of Maine, Penobscot River Bridge, Enfield to Howland, Penobscot County

44-22

SKETCH SHEET

AMERICAN BRIDGE COMPANY

RIVETS | BOLTS



NO. PCS.	MATERIAL SPAN	LENGTH FT.	LENGTH IN.	MARK	CALCULATED WEIGHT PER ONE BASP. PIECE	ORDERED	ITEM
2	Expansion Shoes			ES1			
4	PL 17x1/2 (Fin.)	11 1/2		pa			
2	PL 10x1/2 (Fin.)	24		pb			
8	PL 5	1		pc			
4	PL 5x1/2	11 1/2		pd			
2	PL 18 3/4 (Fin.)	2	8	pf			
2	PL 10 1/2 (Fin.)	2	0	pg			
4	0 4 2		3				
4	PB 1⅛ ϕ Hex. Hd.		8	4" Thd.			
8	Hex. Nuts 1⅛ Tap						

NO. PCS.	MATERIAL SHAPE	LENGTH FT.	LENGTH IN.	MARK	CALCULATED WEIGHT PER ONE BASP. PIECE	ORDERED	ITEM
8	Expansion Shoes			ES2			
16	PL			pa			
8	PL			pb			
32	PL			pc			
16	PL			pd			
8	PL 18 3/4 (Fin.)	2	8	ph			
8				pg			
16	0 4 2		3	1⅛ ϕ Holes			
32	PB 1⅛ ϕ Hex. Hd.		8	4" Thd.			
32	Hex. Nuts 1⅛ Tap						

(5) Fin. Surfaces - one coat
PAINT Yes white lead & tallow
STAGE CONTACT SURFACES No except paint ph

RIVETS | HOLES as noted

DATE BRAND DHB 11/11/46 TJK 1/15/47 | DATE 11/14 1946 | DRAWINGS ELMIRA | FABRICATION ELMIRA | ORDER No. J2777 | SHEET No. F2

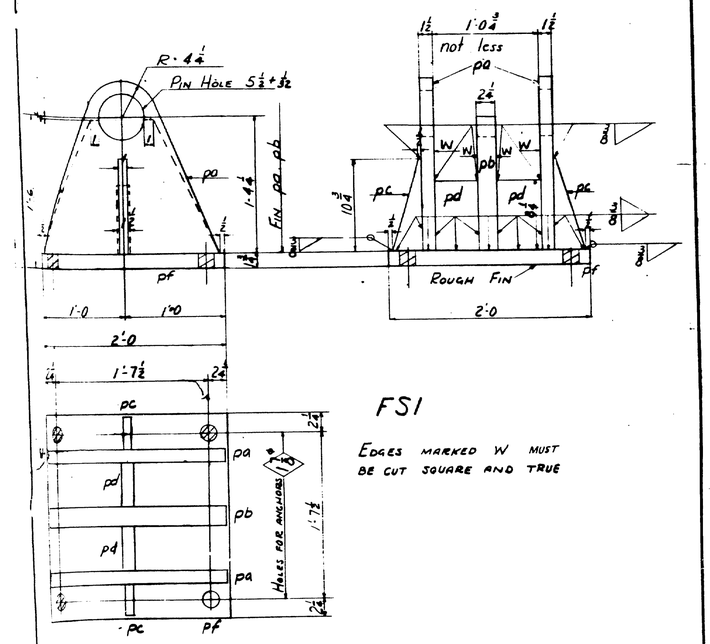
NAME OF STRUCTURE: State of Maine Penobscot River Bridge Enfield to Howland

44-21

SKETCH SHEET

AMERICAN BRIDGE COMPANY

RIVETS | BOLTS



NO. PCS.	MATERIAL SHAPE	LENGTH FT.	LENGTH IN.	MARK	CALCULATED WEIGHT PER ONE BASP. PIECE	ORDERED	ITEM
10	Fixed Shoes			FS1			
20	PL 17x1/2 (Fin.)	1	11	pa			
10	PL 16x1/2 (Fin.)	1	11	pb			
20	PL		3 5/8	pc			
20	PL 5x1/2		8 1/2	pd			
10	PL 16 3/4 (Fin.)	2	0	pf			

(5) Fin. Surfaces - one coat white lead & tallow
PAINT YES
STAGE CONTACT SURFACES No

RIVETS | HOLES as noted

DATE BRAND DHB 11/11/46 TJK 1/15/47 | DATE 11/1 1946 | DRAWINGS ELMIRA | FABRICATION ELMIRA | ORDER No. J2777 | SHEET No. F1

NAME OF STRUCTURE: State of Maine Penobscot River Bridge Enfield to Howland

44-20

0 1 2 3 4 5 INCHES

ERECTORS LIST
FIELD RIVETS AND BOLTS

AMERICAN BRIDGE COMPANY

LINE NO.	NO. PCS.	DIAM.	RIVETS	BOLTS: LENGTH UNDER HEAD	BOLTS: HEAD	BOLTS: NUT	BOLTS: WASHER	BOLTS: TYPE OF BOLT	GRIP	THICKNESS OF MATERIAL CONNECTED	LOCATION
								U3 & U5			
	220	7/8	3 1/8						1 1/2	5/16 9/16 5/8	Top Bent Pls to Chords
	140	7/8	2 1/2						15/16	5/16 3/8	Bot. " " " "
	240	3/4	2 1/8						11/16	3/8 5/16	Top Struts to Pls
	240	3/4	2						5/8	5/16 3/16	Top Lat. to Pls.
	960	7/8	3 1/8						1 1/2	5/16 7/16 7/16	Jaw Pls to Chords
	320	7/8	2 1/2						1	7/16 7/16	Gus. to "
	160	"	3 3/4						1 15/16	5/16 3/8 7/16 7/16 1/4 7/16	Vert. to "
	160	"	4						2 3/16	5/16 7/16 7/16 1/4 7/16	" " "
	120	"	2 3/4						7/8	7/16 7/16	" " Gus.
	120	"	2 5/8						1 1/8	7/16 1/4 7/16	" " "
	320	"	2 1/2						15/16	5/16 7/16	Diag. " "
	160	"	2 3/4						7/8	5/16 7/16	" " "
	160	"	2 5/8						1 1/8	7/16 1/4 7/16	" " "
								U4			
	120	3/4	2 1/8						11/16	3/8 5/16	Top Struts to Pls.
	120	3/4	2						5/8	5/16 5/16	" Lat. to Pls.
	40	7/8	3						11/16	7/16 7/16 7/16	Vert. to Chord
	40	7/8	3 3/8						1 1/16	7/16 7/16 7/16	" " "
								HOR. STRUT CONN.			
	160	7/8	2 3/4						13/16	5/16 1/2	LS4 & to Diag.
	160	7/8	2 1/4						3/4	5/16 7/16	LS2, LS1, to Diag.
	240	7/8	2 1/4						3/4	5/16 5/16	Struts to Verticals
	400	3/4	2						5/8	5/16 5/16	" " plates pc & pd
								TOP STRUTS TO VERTICALS			
	400	7/8	2 1/4						3/4	5/16 7/16	
								HUB-GUARD & POSTS			
	40	7/8	/	2 1/4	Hex.	—	—	Ordinary	1 1/8	3/8 3/8 3/8	End post to Diaph. at L0 & L8
	80	7/8	/	2 1/4	Hex.	Hex.	—	"	1 1/8	3/8 3/8 3/8	" " " " " "
	160	7/8	2 3/4						1 3/16	7/16 5/16 5/16	Int. " " Bot. Chord
	160	7/8	2 5/8						1 5/16	7/16 7/16 5/16	" " " " "
	160	7/8	3 1/4						1 5/8	5/16 7/16 7/16 3/16	" " " " "
	160	7/8	3 1/2						1 3/4	5/16 7/16 7/16 3/16	" " " " "
	80	5/8	/	2 1/4	Hex.	Hex.	2 3/4 x 1/2	Ordinary	1 3/8	11/16 7/16 1/4	Top Rail to End Rail. Post
	80	5/8	/	1 1/2	"	"	—	"	3/4	7/16 5/16	" " " Truss End Post
	80	5/8	/	1 3/4	"	"	2 3/4 x 1/2	"	7/8	5/16 5/16 1/4	" " " Int. Rail Posts
	160	5/8	/	2	"	"	"	"	1 1/8	5/16 5/16 7/16 1/4	" " " Vert. & Diag.
	520	5/8	/								

FIELD RIVETS AND BOLTS

DATE: CMN 3-31-47 | DRAWING: E | FABRICATION: E | ORDER No. J2777 | SHEET No. EF3

NAME OF STRUCTURE: Enfield - Howland Penobscot River Bridge

44-25

ERECTORS LIST
FIELD RIVETS AND BOLTS

AMERICAN BRIDGE COMPANY

LINE NO.	NO. PCS.	DIAM.	RIVETS	BOLTS: LENGTH UNDER HEAD	BOLTS: HEAD	BOLTS: NUT	BOLTS: WASHER	BOLTS: TYPE OF BOLT	GRIP	THICKNESS OF MATERIAL CONNECTED	LOCATION
								L3 & L5			
	40	7/8	3 1/8						2 1/8	1 1/8 5/8 5/8	Beam to Bot. Chord to pbg
	120		3 1/8						1 1/2	1 1/8 5/8	" " Lat. Pl.
	360		2 1/2						1 1/16	1/2 7/16	" " Vert.
	80		3 1/2						1 3/4	5/16 5/16 7/16 7/16	Bot. Chd. to "
	80		3 3/4						2	5/16 7/16 7/16 7/16	" " " "
	80		2 1/2						3/4	3/8 5/8	Laterals to Pl.
	60		2 1/4						11/16	5/8 5/8	" " "
								L4			
	20		3 1/8						2 1/8	1 1/8 5/8 5/8	Beam to Bot. Chd. to pbh
	40		3 1/8						1 1/2	1 1/8 5/8	" " Lat. Pl.
	180		2 7/8						1 3/8	1/2 7/16 7/16	" " Vert.
	80		2 5/8						1 1/8	7/16 1/4 7/16	Gus " "
	40		3 1/2						1 3/4	5/16 7/16 7/16 7/16	Bot. Chd. to "
	40		3 3/4						2	5/16 7/16 7/16 1/4 7/16	" " " "
	60		2 1/4						11/16	5/16 5/8	Laterals to Pl
	160		2 3/4						7/8	7/16 7/16	Diagonals to Gus
	160		2 5/8						1 1/8	7/16 1/4 7/16	" " "
								U1 & U7			
	100	7/8	3						1 7/16	5/16 1/2 5/8	Portal Top to End Post
	300	3/4	2						5/8	5/16 5/16	" to P6R, P7R, ph
	260	7/8	3						1 7/16	5/16 1/2 5/8	End post to bent plates (Top)
	880	"	3 5/8						1 13/16	5/16 3/4 7/16 5/16	Jaw Pls to Chds
	160	"	3 1/8						1 1/2	5/16 3/8 7/16	" " " "
	320	"	2 1/2						1	7/16 7/16	Gus to Chd
	160	"	2 3/4						7/8	7/16 7/16	" " Vert.
	160	"	2 5/8						1 1/8	7/16 1/4 7/16	" " "
	560	"	2 1/2						1	7/16 7/16	" " Diag.
	80	"	2 1/2						15/16	5/16 5/8	P7R to U1-3, U5-7
	80	"	2 1/2						1	7/8 5/8	P8 " " "
	120	3/4	2						5/8	5/16 5/16	Top Lat. to Pls.
								U2 & U6			
	240	3/4	2 1/8						11/16	3/8 5/16	Top Struts to Pls.
	240	3/4	2						5/8	5/16 5/16	Top Lat. to Pls.
	80	7/8	3						1 1/16	7/16 7/16 7/16	Vert. to Chord
	80	7/8	3 3/8						1 5/16	7/16 7/16 7/16	" " "
								INTERSECTION OF TOP LAT.			
	300	3/4	2 1/4						13/16	1/2 5/16	Laterals to Pl

FIELD RIVETS AND BOLTS

DATE: CMN 3-31-47 | DRAWING: E | FABRICATION: E | ORDER No. J2777 | SHEET No. EF2

NAME OF STRUCTURE: Enfie - Howland : Penobscot River Bridge

44-24

ERECTORS LIST
FIELD RIVETS AND BOLTS

AMERICAN BRIDGE COMPANY

LINE NO.	NO. PCS.	DIAM.	RIVETS	BOLTS: LENGTH UNDER HEAD	BOLTS: HEAD	BOLTS: NUT	BOLTS: WASHER	BOLTS: TYPE OF BOLT	GRIP	THICKNESS OF MATERIAL CONNECTED	LOCATION
								L0 & L8			
	640	7/8	3 3/4						1 1/4	3/4 1/2	End Post to Bot. Chord
	320		3 5/8						1 13/16	9/16 3/4 1/2	" " " " "
	240		4						2 3/16	9/16 3/4 1/2 3/8	" " " " "
	40		/	2 1/2	Hex.	Hex.		Ord.	1 1/2	1/2 1/2 3/8	" " " " "
	40		/	2 1/4	Hex.	Hex.		Ord.	1 1/4	1/2 1/2 3/8	" " " " "
	240		/	1 3/4	Hex.	Hex.		Ord.	11/16	5/16 3/8	Bot. Chord Assembly
	200		2 3/8						1 1/8	5/16 1/2	" " "
	40		2 1/8						15/16	1/2 1/2 5/16	" " "
	400		3 1/8						1 1/2	1/2 1/2 1/8	Floor beam to bot. chord
	4		3 1/8						2 1/8	1/2 5/8 3/8	Floor beam Fl to Bot. Chd. to P4
	16		3 1/8						1 1/2	1/8 3/8	" " Fl to P4
	64		2 1/8						1 1/8	3/8 3/8	" " F6 to P4 & P5
	140		2 1/4						3/4	3/8 3/8	Lateral to P4 & P5
	96		2 1/2						1	3/8 3/8	P4 & P5 to Bot. Chord
								L1 & L7			
	40		3 3/8						2 1/8	1 1/8 5/8 3/8	Beam to Bot. Chd. to pbd
	120		2 3/8						1 1/2	1 1/8 3/8	" " Lat. Pl.
	360		2 1/2						15/16	1/2 7/16	" " VERT.
	80		2 7/8						1 1/16	7/16 7/16	Bot. Chd. to "
	80		3 1/4						1 9/16	7/16 11/16 7/16	" " " "
	140		2 1/4						3/4	3/8 3/8	Laterals to Pl.
	100		2 3/4						7/8	1/2 3/8	" " "
								L2 & L6			
	40		3 3/8						2 1/8	1 1/8 5/8 3/8	Beam to Bot. Chd. to pbf
	120		3 3/8						1 1/2	1 1/8 5/8	" " Lat. Pl.
	360		2 7/8						1 3/8	1/2 7/16 7/16	" " Vertical
	200		2 5/8						1 1/8	7/16 1/4 7/16	Gus " "
	80		3 1/2						1 3/4	5/16 7/16 7/16 7/16	Bot. Chd. " "
	80		3 3/4						2	5/16 7/16 7/16 1/4 7/16	" " " "
	100		2 3/4						7/8	1/2 3/8	Laterals to Pl
	30		2 1/4						3/4	3/8 3/8	" " "
	560		2 1/2						1	7/16 7/16	Diagonals to gus.
	320		2 1/2						15/16	1/2 7/16	" " "
								BOT. CHD. SPLICE			
	720		3 1/2						2	7/16 5/16 7/16 7/16	Webs
	320		2 1/2						15/16	5/16 3/8	Flgs

FIELD RIVETS AND BOLTS

DATE: CMN 3-31-47 | DRAWING: Elmira | FABRICATION: Elmira | ORDER No. J2777 | SHEET No. EF1

NAME OF STRUCTURE: State of Maine, Penobscot River Bridge, Enfield to Howland, Penobscot County

44-23

0 1 2 3 4 5 INCHES

AMERICAN BRIDGE COMPANY

Description	Mark	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Bottom Laterals	L	1	1	1	1	1	1	1	1	1	1	1																													
Top Laterals	T	2	2	2	2	2	2																																		
Floor Beams	F	3	3	3	3	3	4																																		
Plates	PS	6																																							
Plates	P	3	3	11	9	9	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1
Miscellaneous	M	7	8	8	4	4	4	C1	C1	C1	5	5	5	5																											
Verticals	L-U	7	7	7	7																																				
Diagonals	L-U	8	8	8	8																																				
Longitudinal Struts	LS	8	8	8	8																																				
End Post	EP1	10																																							
End Expansion Plates	ED	15	15	F3																																					
Railing	R	12	12	12	12	12	12																																		
Expansion Shoes	ES	F2	F2																																						
Fixed Shoes	FS	F1																																							
Tie Struts	TS	13	14	14																																					
Stringers	S	5	5	5	5	5	5																																		
Anchors & bolts	X	C1	C1	C1																																					
Railing Posts	RP	T2	12																																						

Top Chords U1-3, U3-5, U5-7 detailed on Sh. 10

Verticals L1-U1, L3-U3, L4-U4, L5-U5, L6-U6, L7-U7 detailed on Sh. 7

Diagonals L2-U3, L3-U3, L4-U4, L5-U5, L6-U6, L7-U7 detailed on Sh. 8

Bottom Chords L0-3, L3-5, L5-8 detailed on Sh. 9

Description	Mark	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80

INDEX TO MARKS

DATE	NAME	DATE	DRAWINGS	FABRICATION	ORDER No.	SHEET No.
		1			J2777	K1

NAME OF STRUCTURE

TATE OF MAINE PENOBSCOT RIVER BRIDGE ENFIELD TO HOWLAND

44-27

ERECTORS LIST
FIELD RIVETS AND BOLTS

AMERICAN BRIDGE COMPANY

Line No.	No. Pcs.	Diam.	Rivets		Bolts: Length under head	Head	Nut	Washer	Type of bolt	Grip	Thickness of material connected			Location
1														
2					HUB-GUARD & POSTS (Cont'd)									
3	80	3/4		✓	2	Hex.	Hex.	2"×1/4"	Ordinary	15/16	5/16	3/8	1/4	Bot. Rail. to End Rail Post
4	320	"		✓	1 3/4	"	"	"	"	7/8	5/16	3/16	1/4	" " " Int. " "
5	280	"		✓	2	"	"	"	"	1	5/16	7/16	1/4	" " " Verticals
6	80	"		✓	2	"	"	"	"	1 1/8	5/16	7/16	1/4	" " " Diagonals
7	80	"		✓	2	"	"	"	"	1 1/16	5/16	1/2	1/4	" " " "
8	80	"		✓	2	"	"	"	"	1	5/16	7/16	1/4	" " " "
9	80	"		✓	1 1/2	"	"	—	"	5/8	5/16	3/16		" " " Truss End Posts
10														
11														
12					INTERSECTION OF BOT. LATERALS									
13	20	7/8	2 1/4	✓						3/4	3/8	3/8		L1, L2
14	20	"	2 1/2	✓						1	1/2	1/2		L3, L4
15	10	"	2 5/8	✓						1 1/16	5/16	3/8	3/8	L5, L6
16	20	"	2 1/4	✓						11/16	5/16	3/8		" "
17	10	"	2 1/2	✓						15/16	5/16	3/16	3/16	L7, L8
18	20	"	2 1/8	✓						5/8	5/16	3/16		" "
19	60	"	2 1/4	✓						11/16	5/16	3/8		Lat. Support to L1, L5
20	30	"	2 3/8	✓						13/16	5/16	1/2		" " " L3
21	30	"	2 1/8	✓						5/8	5/16	3/16		" " " L7
22	120	"	2 3/8	✓						13/16	3/8	7/16		" " " Stringers
23														
24					FLOOR SYSTEM									
25	126	3/4		✓	2 3/4	Hex.	—	2"×1/4"	Ordinary	1 3/4	1 1/8	3/8	1/4	P1 & P2 to Beam F1
26	56	7/8	2 5/8	✓						1 1/16	3/8	11/16		Stringer Conn. L to F1
27	980	7/8	3	✓						1 7/16	3/8	11/16	3/8	" " " " F2, F3, F4, F5
28	896	7/8	2 5/8	✓						1 1/8	3/8	3/8	3/8	Stringers to end conn. L5
29	1584	7/8	2 3/4	✓						1 3/16	3/8	7/16	3/8	" " " "
30	40	7/8	3 3/4	✓						2	3/4	1/2	3/4	Stiffeners to End Beams F6
31	360	7/8	2 3/4	✓						1 1/4	3/8	1/2	3/8	" " " " "
32	40	7/8	3 1/8	✓						1 1/2	1/2	1/2	1/2	" " " " "

FIELD RIVETS AND BOLTS

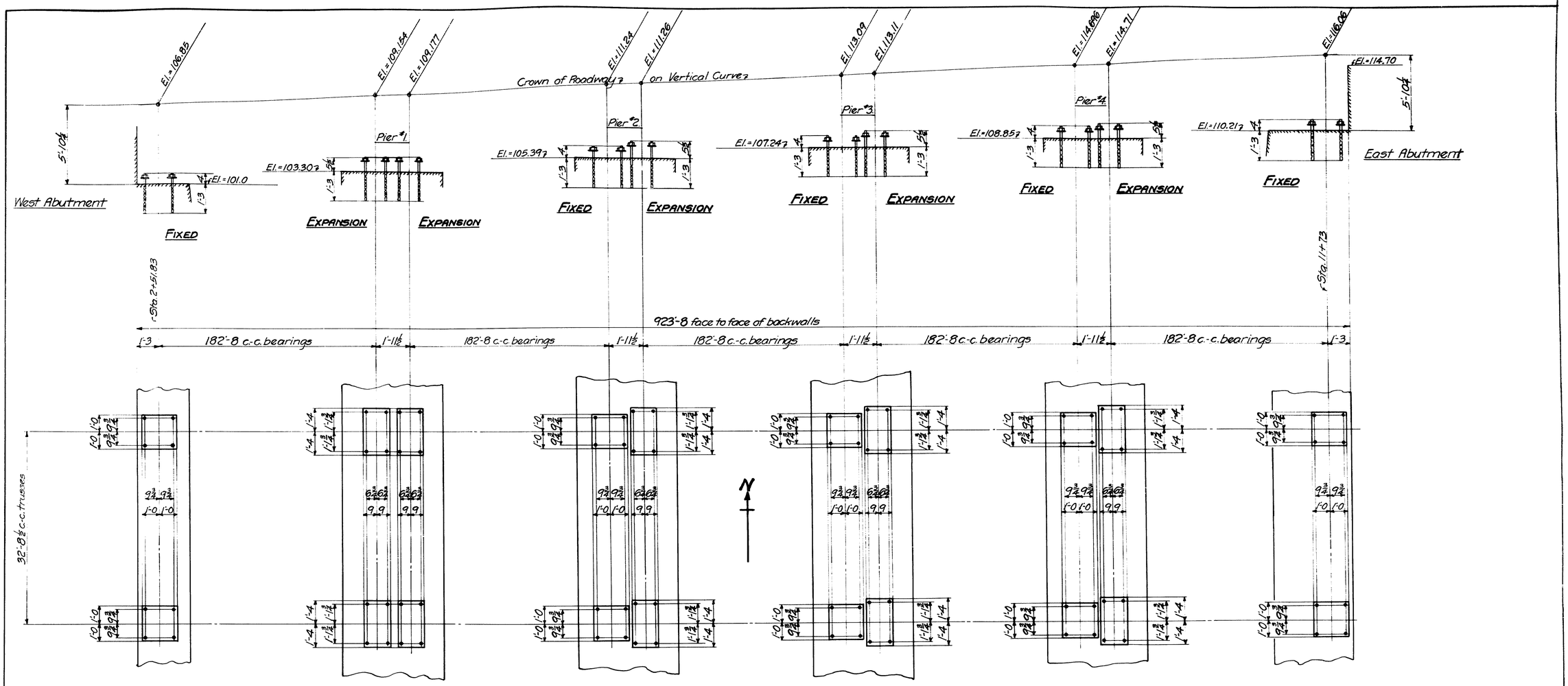
DATE	NAME	DATE	DRAWINGS	FABRICATION	ORDER No.	SHEET No.
	CMH 3-31-47	1	E	E	J2777	EF4

NAME OF STRUCTURE

Lafie Howland : Penobscot River Bridge

44-26

0 1 2 3 4 5 INCHES



For each Fixed Bearing:
4- Swedge Bolts $1\frac{1}{2}$" × 1'-7, X1
4- Hex Nuts $1\frac{1}{2}$" tap
4- Washers $2\frac{1}{2}$" × $\frac{3}{8}$", $1\frac{9}{16}$" holes.

For each Expansion Bearing:
4- Swedge Bolts $1\frac{1}{2}$" × 1'-$8\frac{1}{2}$, X2
4- Hex Nuts $1\frac{1}{2}$" tap
4- Washers $2\frac{1}{2}$" × $\frac{3}{8}$", $1\frac{9}{16}$" holes.

NOTES TO MASONRY CONTRACTOR:
Backwall at East Abutment is to be built to Elevation 114.70 only, before steelwork is erected.
Backwall at West Abutment not to be built above bridge seat until after steelwork is erected.
Anchor Bolts furnished by A.B.Co., and set by A.B.Co.
All elevations are given to the top of the Masonry at bearings.
Bridge seats must be located according to the dimensions shown on this plan or steelwork will not fit.
Areas shown at bearing points are overall sizes of Masonry Plates.

STATE OF MAINE
PENOBSCOT RIVER BRIDGE
ENFIELD TO HOWLAND
PENOBSCOT COUNTY

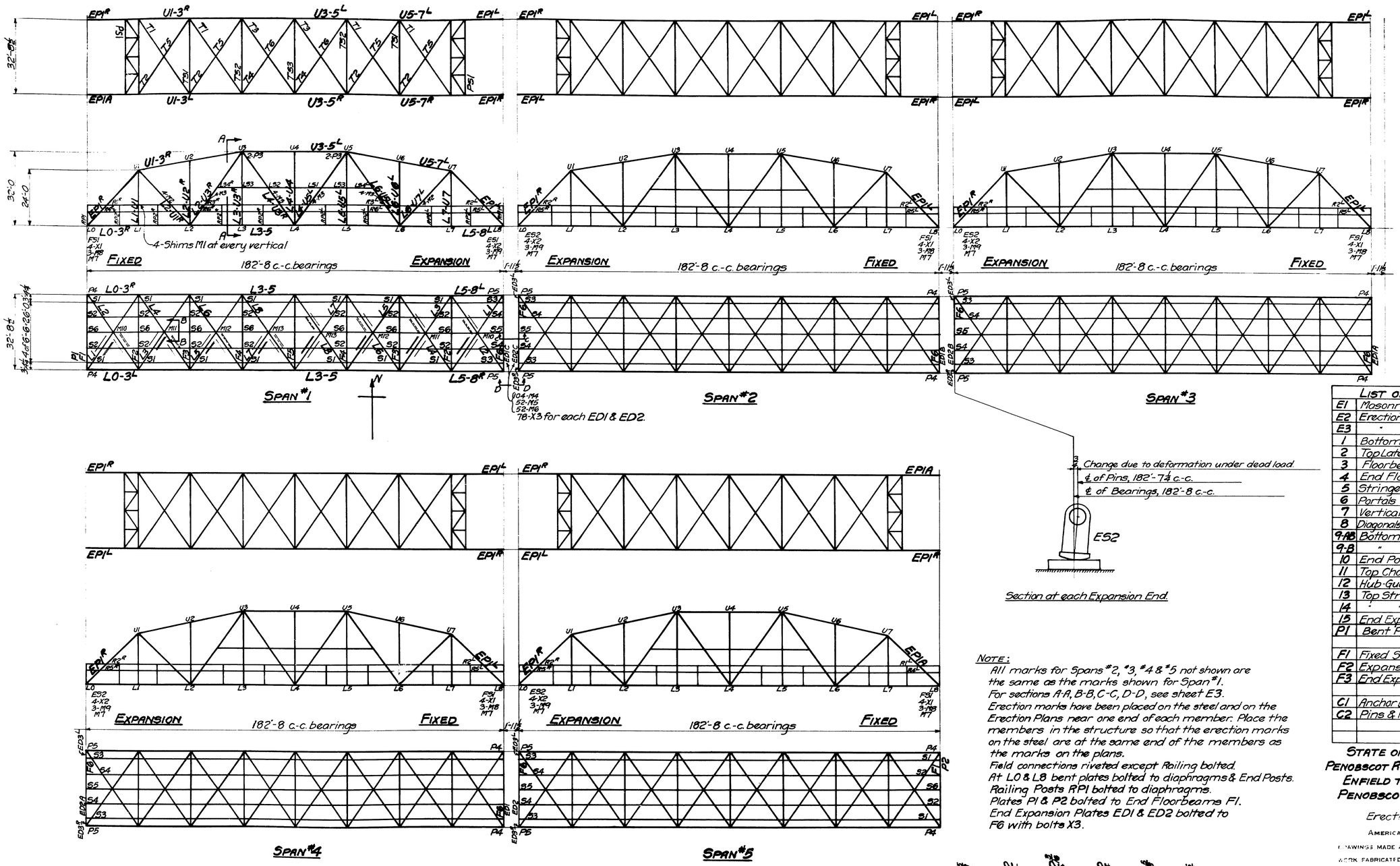
Masonry Plan

AMERICAN BRIDGE COMPANY
DRAWINGS MADE AT Elmira PLANT
WORK FABRICATED AT Elmira PLANT
IN CHARGE OF E.E. Thompson
DRAW. MADE BY H.A.H. DATE 11-13-46
DRAW. CHECKED BY T.K. DATE 1-8-47

ORDER No. J2777
SHEET No. E1

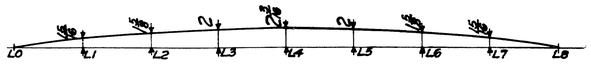
44-28

0 1 2 3 4 5 INCHES



Section at each Expansion End.

NOTE:
All marks for Spans #2, #3, #4 & #5 not shown are the same as the marks shown for Span #1.
For sections A-A, B-B, C-C, D-D, see sheet E3.
Erection marks have been placed on the steel and on the Erection Plans near one end of each member. Place the members in the structure so that the erection marks on the steel are at the same end of the members as the marks on the plans.
Field connections riveted except Railing bolted.
At L0 & L8 bent plates bolted to diaphragms & End Posts.
Railing Posts RP1 bolted to diaphragms.
Plates P1 & P2 bolted to End Floorbeams F1.
End Expansion Plates ED1 & ED2 bolted to F6 with bolts X3.



Camber Diagram.

LIST OF SHEETS	
E1	Masonry Plan
E2	Erection Diagram
E3	"
1	Bottom Laterals
2	Top Laterals
3	Floorbeams
4	End Floorbeams
5	Stringers
6	Portals
7	Verticals
8	Diagonals & Longitudinal Struts
9-AB	Bottom Chords
9-B	" "
10	End Posts
11	Top Chords
12	Hub-Guards & Posts
13	Top Struts
14	" "
15	End Expansion Plates
P1	Bent Plates
F1	Fixed Shoes
F2	Expansion Shoes
F3	End Expansion Plates
C1	Anchor Bolts & Duck
C2	Pins & Nuts

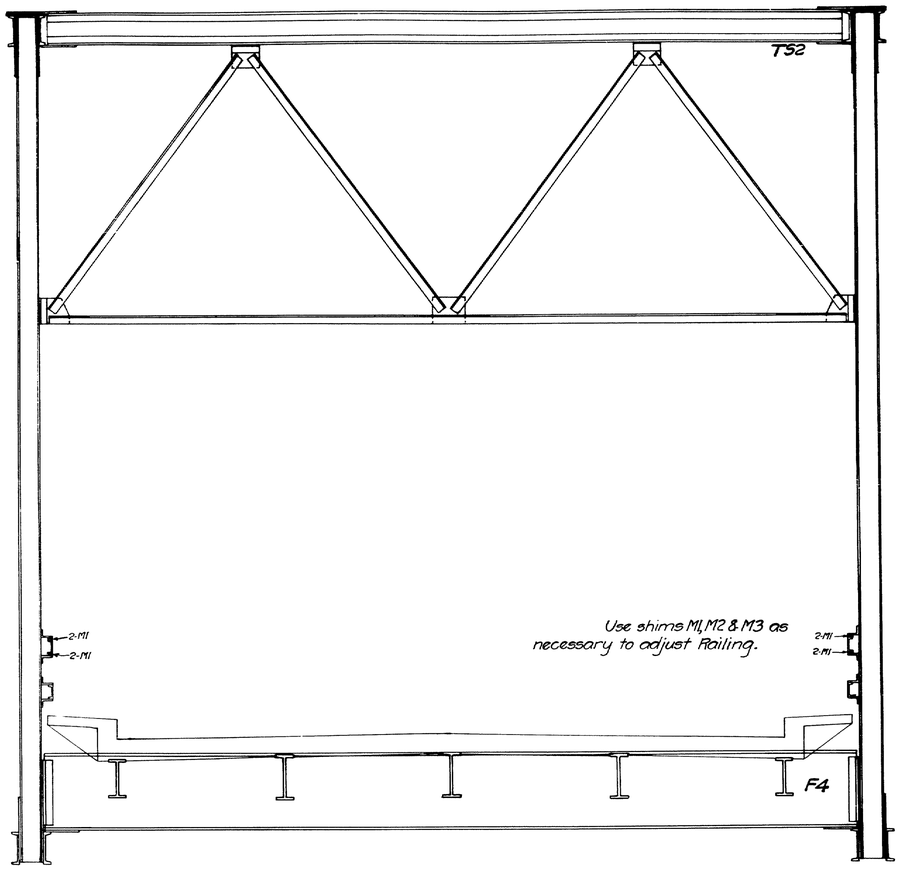
STATE OF MAINE
PENOBSCOT RIVER BRIDGE
ENFIELD TO HOWLAND
PENOBSCOT COUNTY

Erection Diagram

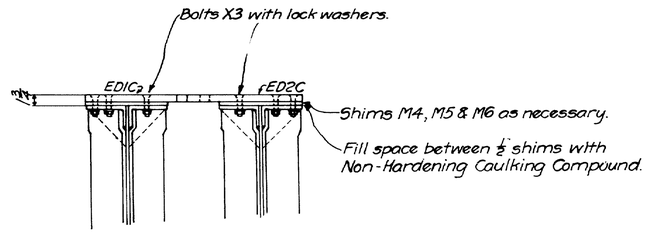
AMERICAN BRIDGE COMPANY
DRAWINGS MADE AT Elmira
WORK FABRICATED AT Elmira PLANT
IN CHARGE OF E.E. Thompson
DRAW. MADE BY H.A.H. DATE
DRAW. CHECKED BY TJK DATE 1/13/4

ORDER No J2777 | SHEET No. E2

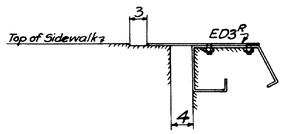
44-29



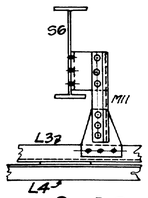
Sec. A-A.



Sec. C-C.



Sec. D-D.



Sec. B-B

STATE OF MAINE
PENOBSCOT RIVER BRIDGE
ENFIELD TO HOWLAND
PENOBSCOT COUNTY

Erection Diagram

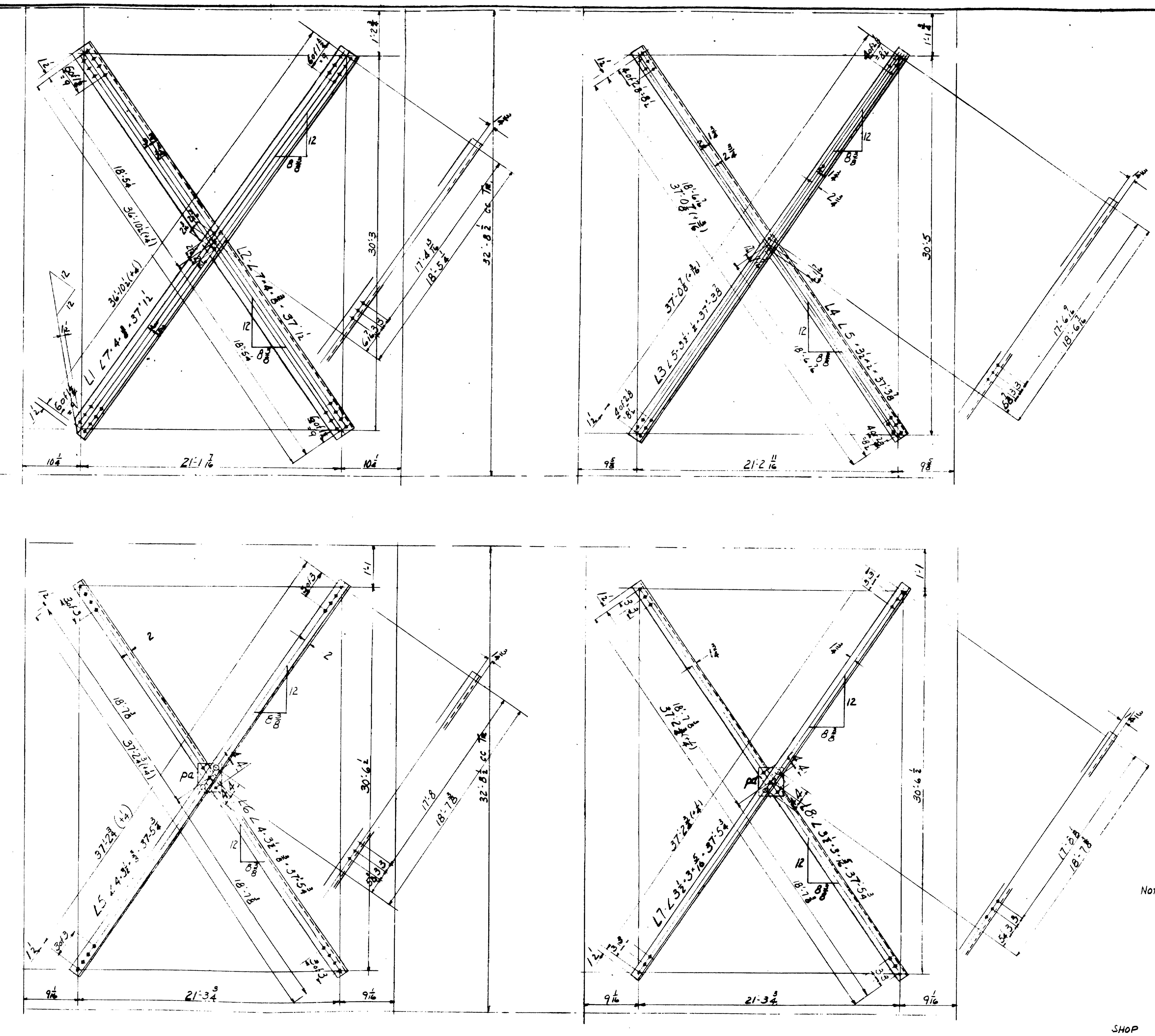
AMERICAN BRIDGE COMPANY

DRAWINGS MADE AT Elmira PLANT
WORK FABRICATED Elmira PLANT
IN CHARGE OF E.E. Thompson
DRAW. MADE BY H.A.H. DATE
DRAW. CHECKED BY DATE

ORDER NO. J2777 | SHEET No. E3

44-30

0 1 2 3 4 5 INCHES



NO. PIECES FOR ONE SPAN										
	11	Bottom Laterals								
2	12	10	∠	7	4	3/8	37	1½	L1	
2	13	10	∠	7	4	3/8	37	1½	L2	
2	14	10	∠	5	3½	½	37	3⅞	L3	
2	15	10	∠	5	3½	½	37	3⅞	L4	
2	16	10	∠	4	3½	3/8	37	5¾	L6	
2	17	10	∠	3½	3	5/16	37	5¾	L8	
2	20	10 Bottom Laterals L5								
	21	10	∠	4	3½	3/8	37	5¾		
20	22	10	PL		8	5/16		9½	pa	
2	24	10 Bottom Laterals L7								
	25	10	∠	3½	3	5/16	37	5¾		
	26	10	PL						pa	

Notes
Rivets 7/8"ϕ
Holes 15/16"ϕ

SHOP PAINT: YES (S)
CONTACT SURFACES: NO

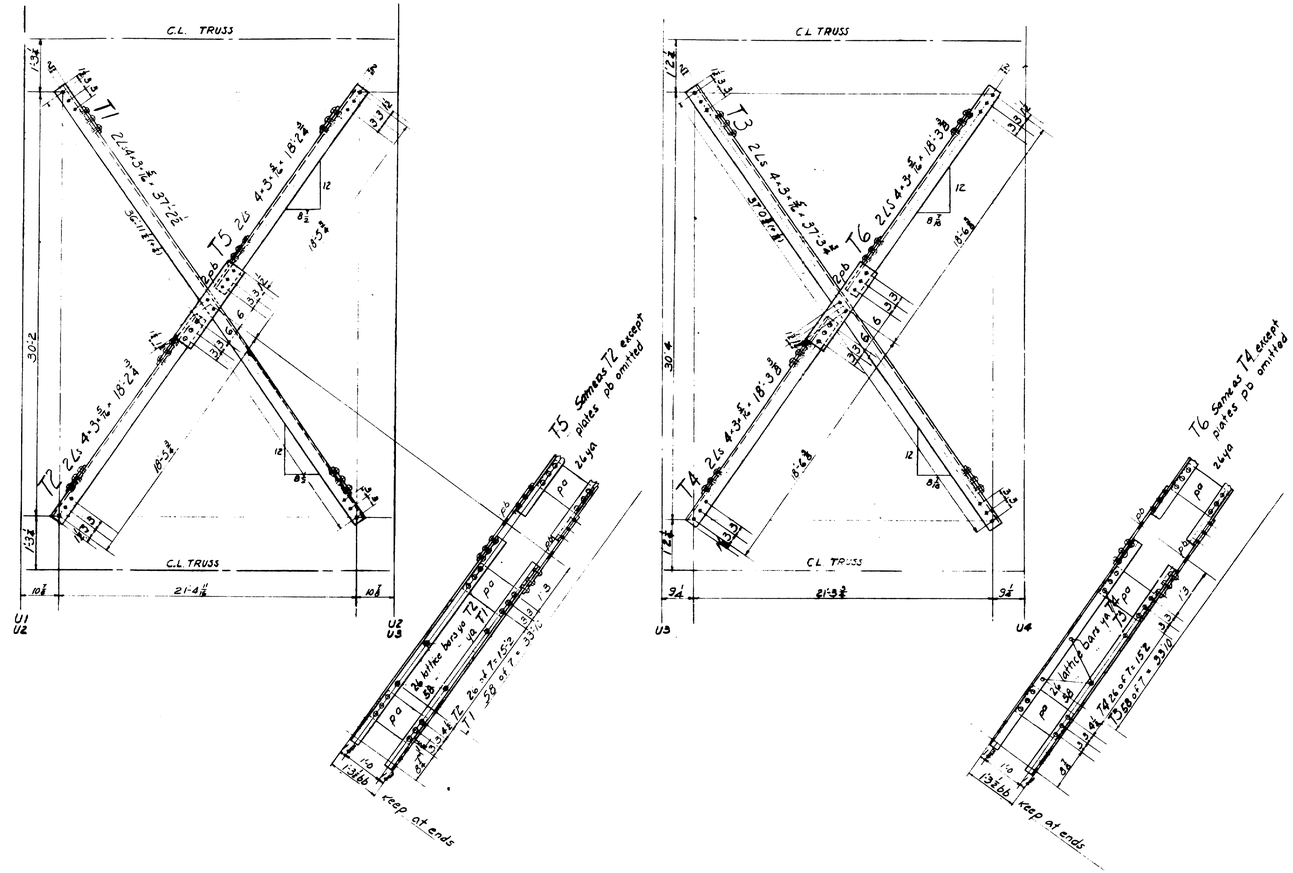
STAT…
PENOBSC…
ENFIELD …
PENOB…
BOTTO…

AMERI…

DRAWINGS MAD…
WORK FABRICAT…
IN CHARGE OF …
DRAW. MADE BY…
DRAW. CHECKED…

ORDER …
J277…

0 1 2 3 4 5 INCHES



NO. PIECES FOR ONE SPAN													
4	10	20	TOP LATERALS				T1		37-3			(767)	
	11	40	L 4 3 5/16	37	2 1/2				37-3 1/4	92		536	
	12	180 40	pl	9	3/16	1	3	pa	45-0	50		24	
	13	320 160	lattice bars	2 1/4	5/16	1	1 1/8 cc	ya	25/30	106		186	
4	14	20	TOP LATERALS				T2				(362)		
4	15	20	TOP LATERALS				T5				(430)		
	16	80	L 4 3 5/16	18	2 3/4				18-4 1/2	94		263	
	17	80	pl					pa				24	
	18	1040	lattice bars					ya				84	
	19	60 40	pl.	6	1/2	2	3	pb	T2		5	46	
2	21	10	TOP LATERALS				T3		37-4			(768)	
	22	20	L 4 3 5/16	37	3 3/4				37-4 1/2	91		537	
	23	20	pl.					pa				24	
	24	580	lattice bars					ya				186	
2	25	10	TOP LATERALS				T4				(382)		
2	26	10	TOP LATERALS				T6				(430)		
	27	40	L 4 3 5/16	18	3 3/8				18-6 3/4	93		263	
	28	40	pl.					pa				24	
	29	520	lattice bars					ya				84	
	30	20	pl.					pb.	T4			46	

STATE OF MAINE
PENOBSCOT RIVER BRIDGE
ENFIELD TO HOWLAND
PENOBSCOT COUNTY
TOP LATERALS

Notes:
Rivets 3/4"φ
Holes 13/16"φ

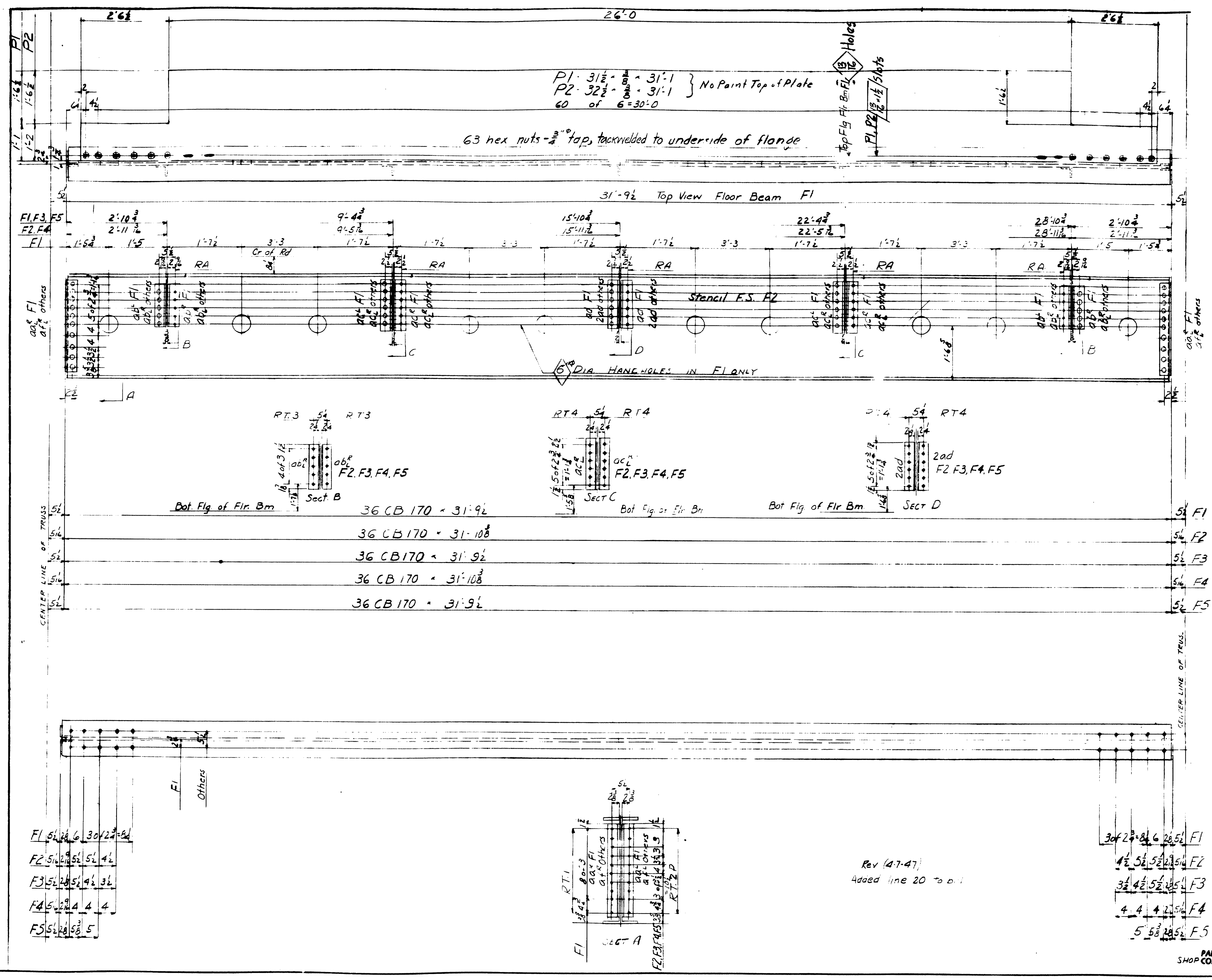
SHOP PAINT, 1983 (S) CONTACT SURFACES, NO

AMERICAN BRIDGE COMPANY
DRAWINGS MADE AT ELMIRA PLANT
WORK FABRICATED AT ELMIRA PLANT
IN CHARGE OF EET
DRAW. MADE BY DB DATE 9-25-46
DRAW. CHECKED BY TJK DATE 1-19-49

ORDER No. J2777 | SHEET No. 2

44-32

0 1 2 3 4 5 INCHES



Line	No. Pieces for One Span (West / Int. / East)		Description		Mark	Length		Weight
10	1 / 0 / 1		2 Floor Beams F1			31-10		5622
11			2 36CB170 31 9½			31'-9	56	5398 6G
12			4 ∠ 4 4 ½ 2 7¾		aa^R	550	86	135
13			4 ∠		aa^L		86	
14		1A	4 ∠ 4 3½ 3/8 1 3¾		ab^R	550	87	
15		1A	4 ∠		ab^L	"	87	126
16		1A	4 ∠ 4 3½ 3/8 1 5¾		ac^R	"	87	
17		1A	4 ∠		ac^L	"	87	
18		1A	4 ∠ 4 3½ 3/8 1 4¾		ad	"	87	
19			20 SB 7/8"φ				A	9 28P
20			126 Hex Nuts 3/4"φ tap	Weld to flg.				8 17B
21	2 / 2 / 2		10 Floor Beams F2	Stencil		31-10		5850
22			10 36CB170 31 10⅜			31'-9⅜	55	5408
23		70	20 ∠ 4 4 ½ 2 7¾		af^R	550	86	135
24		70	20 ∠		af^L	"	86	
25			40 ∠		ab^R			
26			40 ∠		ab^L			
27			40 ∠		ac^R			252
28			40 ∠		ac^L			
29			40 ∠		ad			
30			100 SB 7/8"φ				A	9 17B 29P
32	2 / 2 / 2		10 Floor Beams F3			31-10		5840
33			10 36CB170 31 9½			31'-9	56	5398
34			20 ∠		af^R			135
35			20 ∠		af^L			
36			40 ∠		ab^R			
37			40 ∠		ab^L			
38			40 ∠		ac^R			252
39			40 ∠		ac^L			
40			40 ∠		ad			
41			100 SB 7/8"φ				A	9 17B 29P
43	2 / 2 / 2		10 Floor Beams F4			31-10		5850
44			10 36CB170 31 10⅜			31'-9⅜	55	5408
45			20 ∠		af^R			135
46			20 ∠		af^L			
47			40 ∠		ab^R			
48			40 ∠		ab^L			
49			40 ∠		ac^R			252
50			40 ∠		ac^L			
51			40 ∠		ad			
52			100 SB 7/8"φ				A	9 17B 29P
54	1 / 1 / 1		5 Floor Beams F5			31-10		5840
55			5 36CB170 31 9½			31'-9	56	5398
56			10 ∠		af^R			135
57			10 ∠		af^L			
58			20 ∠		ab^R			
59			20 ∠		ab_L			
60			20 ∠		ac^R			252
61			20 ∠		ac_L			
62			20 ∠		ad			
63			50 SB 7/8"φ				A	9 17B 29P
65	1 / 0 / 0		1 pl 31½ 3/8 31 1		P1	31-1	31-1¾ 12	1110 1248
66	0 / 0 / 1		1 pl 32½ 3/8 31 1		P2	"	31-1¾ 11	1150 1288 6P

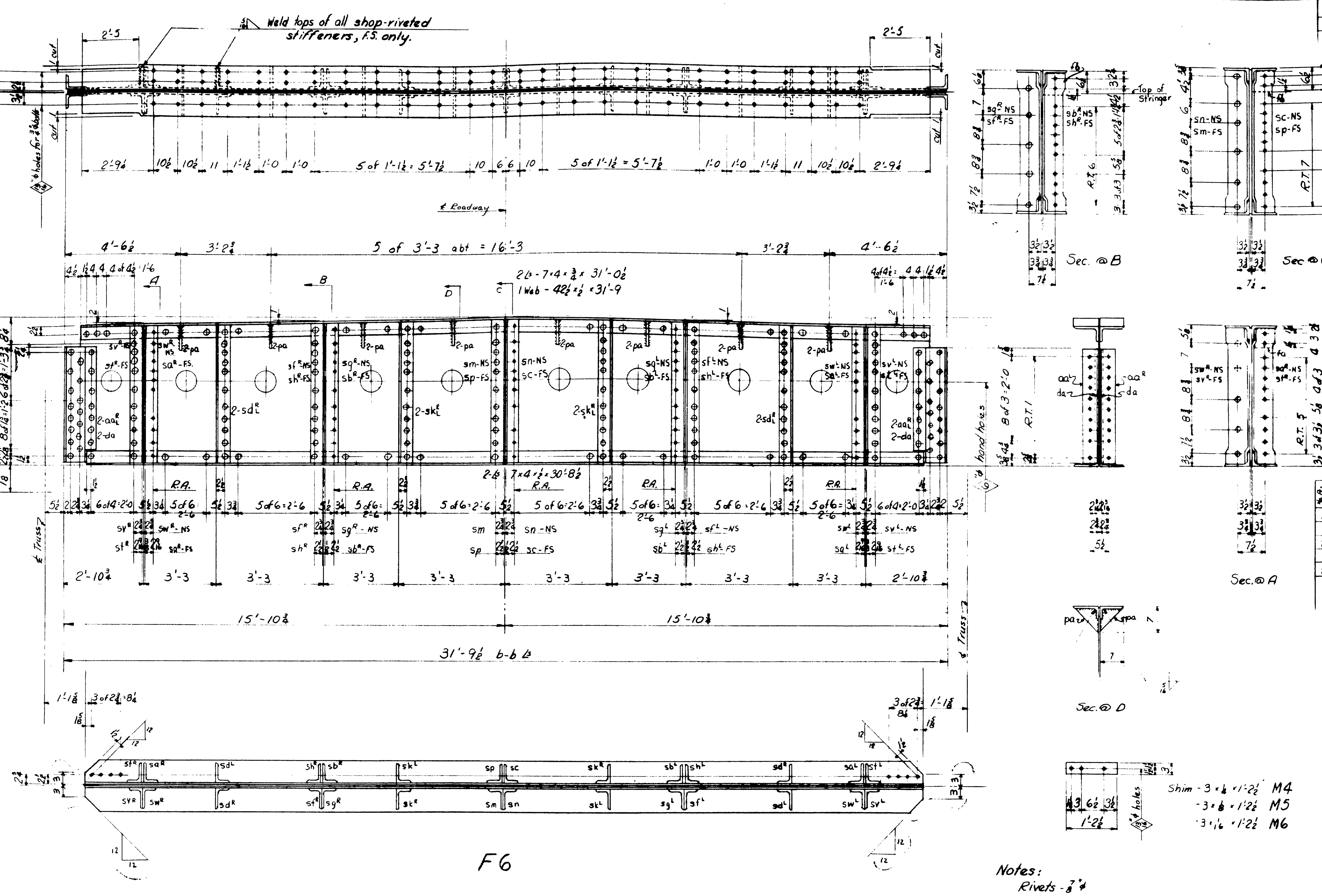
End angles must be set square and true and to correct length
Rivets 7/8"φ
Holes 15/16"φ unless noted
Holes marked R.T. to be punched 11/16"φ and reamed 15/16"φ to a metal templet
Holes marked R.A. to be reamed with parts assembled.
Holes in main material over 3/4" thick shall be subdrilled 11/16"φ and reamed 15/16"φ or drilled to 15/16"φ from the solid

PAINT, YES (S) except as noted
SHOP CONTACT SURFACES: NO

STATE OF MAINE
PENOBSCOT RIVER BRIDGE
ENFIELD TO HOWLAND
PENOBSCOT COUNTY
FLOOR BEAMS

AMERICAN BRIDGE COMPANY
DRAWINGS MADE AT ELMIRA PLANT
WORK FABRICATED AT ELMIRA PLANT
IN CHARGE OF C.E.T.
DRAW. MADE BY DB DATE 9-30-46
DRAW. CHECKED BY TJK DATE 1-18-47
ORDER No. 52777
SHEET No. 3

44-33



No. Pcs West Span	No. Pcs one Int. Span	No. Pcs East Span	Line	No.	Piece				Length		Mark			Wt.	
1	2	1	6	8	FLOOR BEAMS						F6		31-10		(6486)
			7	8	Web	42½	½		31	9			31-10	8	
			8	16	L	7	4	¾	31	0½			31-1½	72	1626
			9	16	L	7	4	½	30	8½			30-9½	73	1099
			10	16	L	6	4	½	2	9	aaR		44-1	75	
			11	16	L						aaL		"	75	178
			12	32	fill		9	5/16	2	9	da		450	50	105
			13	8	L	6	4	⅜	3	3⅜	svR	+2½	600	76	
			14	8	L						svL	"		76	
			15	8	L	6	4	⅜	3	3⅜	swR	"		76	
			16	8	L						swL	"		76	
			17	8	L	6	4	⅜	3	3⅜	stR	"		76	
			18	8	L						stL	"		76	
			19	8	L	6	4	⅜	3	3⅜	saR	"		76	
			20	8	L						saL	"		76	
			21	16	L	6	4	⅜	3	3⅜	sdR	"		76	
			22	16	L						sdL	"		76	
			23	8	L	6	4	⅜	3	4⅜	sfR	"		76	
			24	8	L						sfL	"		76	
			25	8	L	6	4	⅜	3	4⅜	sgR	"		76	1219
			26	8	L						sgL	"		76	
			27	8	L	6	4	⅜	3	4⅜	shR	"		76	
			28	8	L						shL	"		76	
			29	8	L	6	4	⅜	3	4⅜	sbR	"		76	
			30	8	L						sbL	"		76	
			31	16	L	6	4	⅜	3	4⅞	skR	"		76	
			32	16	L						skL	"		76	
			33	8	L	6	4	⅜	3	5⅜	sm	"		76	
			34	8	L	6	4	⅜	3	5⅜	sn	"		76	
			35	8	L	6	4	⅜	3	5⅜	sp	"		76	
			36	8	L	6	4	⅜	3	5⅜	sc	"		76	
			37	128	pl		7	½		7	pa			5	56
			38	16	fill		5¼	⅜		5½	fa			8	7
			39	24	fill		6	1/16		5½	fb			5	12
52	104	52	42	416	shims		3	¼	1	2½	M4			5	Tot (320) (640) (320)
26	52	26	44	208	shims		3	⅛	1	2½	M5			5	(80) (160) (80)
26	52	26	46	208	shims		3	1/16	1	2½	M6			5	(40) (80) (40)

Crimped 3/4" Top & Bottom

Notes:
Rivets - ⅞"φ
Holes - 15/16"φ unless noted.
Holes marked R.T. to be sub-punched 11/16"φ and reamed 15/16"φ to a metal templet.
Holes marked RA to be reamed with parts assembled.

Rev. 4-9-47
Bott. Section of F6 - remaining corners clipped at 45° angle as shown
Left end of elevation of F6 - 1'-2¾ chg'd to 1'-3¾

PAINT: Yes - (S)
SHOP CONTACT SURFACES: No

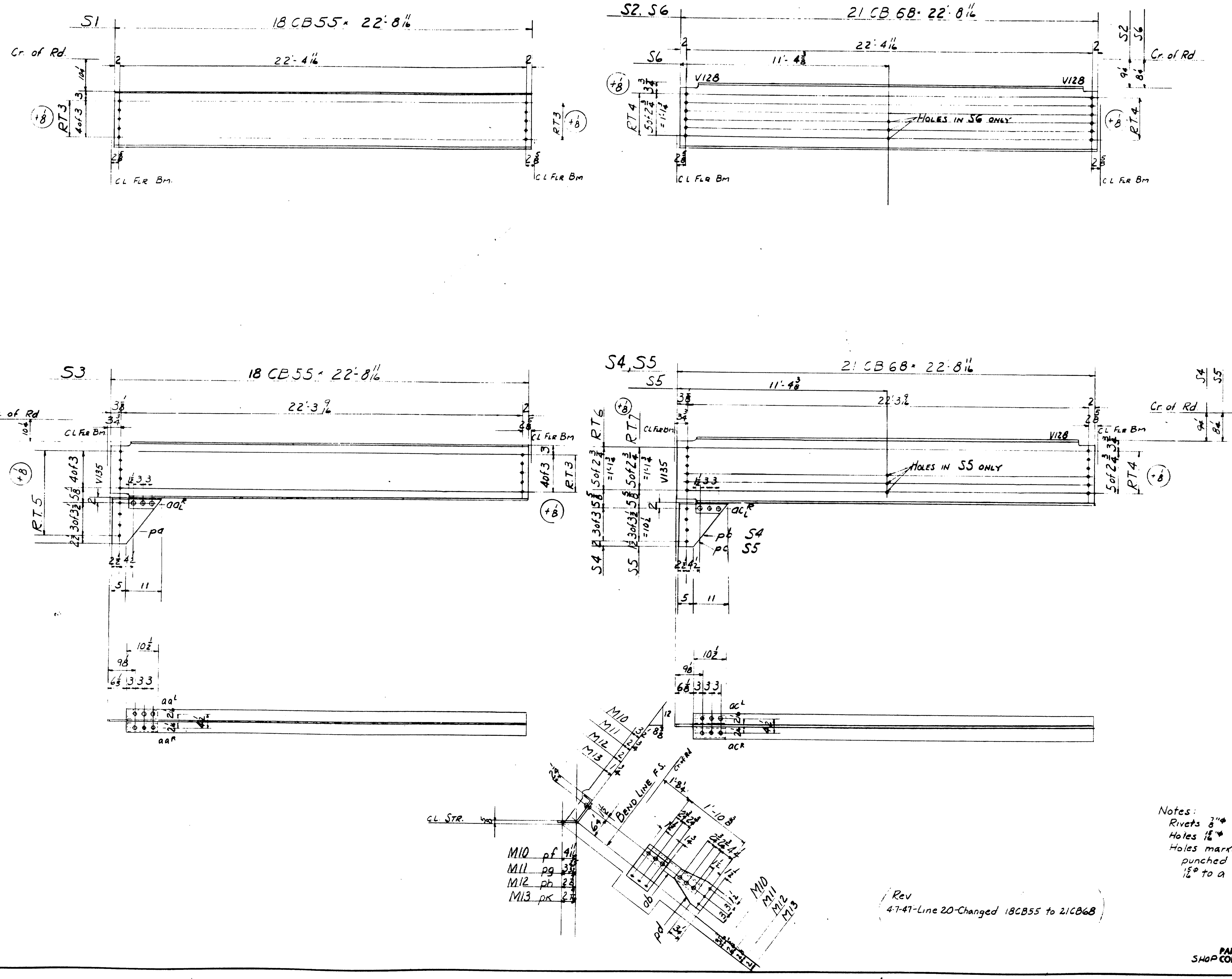
STATE OF MAINE
PENOBSCOT RIVER BRIDGE
ENFIELD TO HOWLAND
PENOBSCOT COUNTY
End Floor Beams
AMERICAN BRIDGE COMPANY

DRAWINGS MADE AT ELMIRA PLANT
WORK FABRICATED AT ELMIRA PLANT
IN CHARGE OF EET
DRAW. MADE BY RP DATE 11-8-46
DRAW. CHECKED BY TJK DATE 1-13-47

ORDER No. J2777 | SHEET No. 4

Weld 44-34

0 1 2 3 4 5 INCHES



West	Int.	East	Line	No.	Piece	Size			Length		Mark	Remarks					
14	12	14	11	64	18CB55				22	8 1/16	S1	Exterior Int.	22-8 3/4	58	(150)	1250	6P
14	12	14	12	64	21CB68				22	8 1/16	S2		22-8 3/4	57	(150)	1546	22c
7	6	7	13	32	21CB68				22	8 1/16	S6	¢ Int	22-8 3/4	57	(150)	1546	22c 8P
2	4	2	14	16	Stringers						S3	Exterior End			(127)		
			15	16	18CB55				22	8 1/16			22-8 3/4	58		1250	9c
			16	16	pl	16	3/8		1	2 1/2	pa			A		25	8c
			17	16	L	3 1/2	3 1/2	5/16		10 1/2	aa^R		55-0	9L		13	3R
			18	16	L						aa^L		"	9L			6P
2	4	2	19	16	Stringers						S4				(150)		
			20	16	21CB68				22	8 1/16			22-8 3/4	57		1546	32c
			21	16	pl	16	7/16		1	0 1/2	pb			5		26	
			22	2A 16	L	3 1/2	3 1/2	5/16		10 1/2	ac^R		55-0	9L		13	3R
			23	2A 16	L						ac^L		"	9L			
1	2	1	24	8	Stringers						S5	¢ End			(155)		8P
			25	8	21CB68				22	8 1/16			22-8 3/4	57		1546	32c
			26	8	pl	16	7/16		1	1 1/2	pc			5		27	
			27	8	L						ac^R						
			28	8	L						ac^L					13	3R 8P
2	2	2	36	10	Stringer Hangers						M10				(34)		
			37	10	PL	9	3/8		1	2 abt	pf	Bent		S		13	
			38	4D 10	PL	9	5/16		1	0 3/4	pd		45-0	50		10	3R
			39	4D 10	L	3 1/2	3	5/16	1	9 8	ab		35-1	98		12	cut LR
2	2	2	41	10	Stringer Hangers						M11				(33)		
			42	10	PL	9	3/8		1	1 abt	pg	Bent		S		12	
			43	10	PL						pd					10	3R
			44	10	L						ab					12	2R
2	2	2	46	10	Stringer Hangers						M12				(33)		
			47	10	PL	9	3/8		1	0 abt	ph	Bent		S		12	
			48	10	PL						pd					10	3R
			49	10	L						ab					12	2R
2	2	2	51	10	Stringer Hangers						M13				(32)		
			52	10	PL	9	3/8			11 1/4 abt	pk	Bent		S		11	
			53	10	PL						pd					10	3R
			54	10	L						ab					12	2R

Notes:
Rivets 7/8"φ
Holes 15/16"φ
Holes marked R.T. to be punched 11/16"φ and reamed 15/16φ to a metal templet

Rev
4-7-47-Line 20-Changed 18CB55 to 21CB68

PAINT, YES (S)
SHOP CONTACT SURFACES, NO

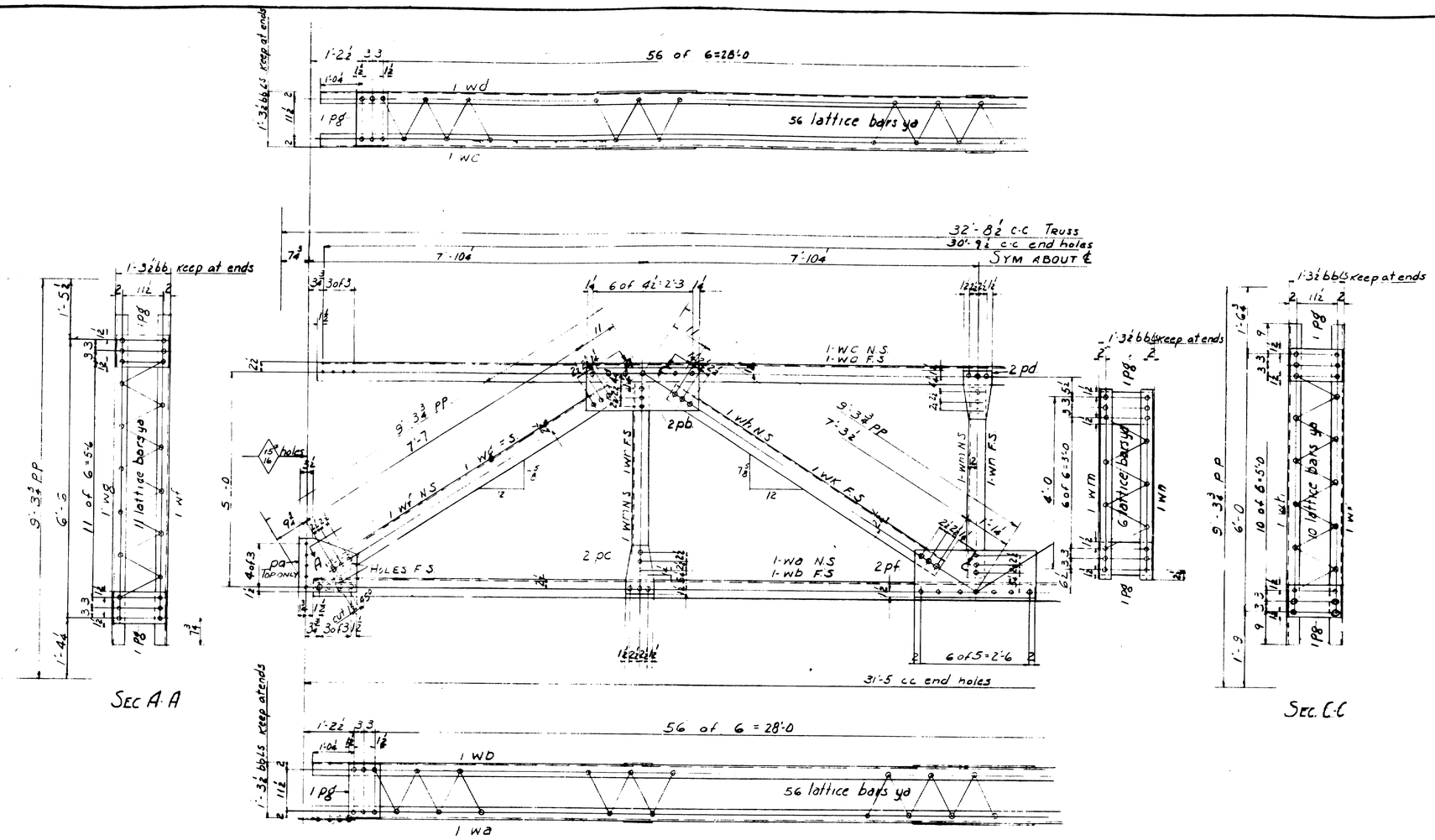
STATE OF MAINE
PENOBSCOT RIVER BRIDGE
ENFIELD TO HOWLAND
PENOBSCOT COUNTY
STRINGERS

AMERICAN BRIDGE COMPANY
DRAWINGS MADE AT ELMIRA PLANT
WORK FABRICATED AT ELMIRA PLANT
IN CHARGE OF E.E.T.
DRAW. MADE BY D.B DATE 10-1-46
DRAW. CHECKED BY TJK DATE 1-18-47

ORDER No. J2777 | SHEET No. 5

44-35

0 1 2 3 4 5 INCHES



NO PIECES FOR ONE SPAN												
2	10 Portals PS 1								65x16 31-9			
	10	∠	5	3½	5/16	31	0½	wa		31-1¼	85	
	10	∠	5	3½	5/16	31	0½	wb		"	85	
	10	∠	5	3½	5/16	31	0½	wc		"	85	
	10	∠	5	3½	5/16	31	0½	wd		"	85	
	20	∠	5	3½	5/16	7	9½	wf		60-0	80	
	20	∠	5	3½	5/16	7	9½	wg		"	80	
	20	∠	5	3½	5/16	7	6	wh		"	80	
	20	∠	5	3½	5/16	7	6	wk		"	80	
	30	∠	3½	3½	5/16	4	5	wm		55-0	96	
	30	∠	3½	3½	5/16	4	5	wn		"	96	
	20	pl.	16	5/16		1	3	pa		40-0	27	
	40	pl.	12	5/16		2	5½	pb		45-0	44	
	40	pl.	8	5/16		1	1	pc				
	20	pl.	8	5/16		1	0	pd	36x5/16	40/45-0	14	
	20	pl	13	5/16		2	10	pf			-	
	180	pl.	9	5/16		1	2	pg		45-0	50	
	120	lat bars		2¼	5/16	1	1	ya	c-c	25/30	106	

STATE OF MAINE
PENOBSCOT RIVER BRIDGE
ENFIELD TO HOWLAND
PENOBSCOT COUNTY
PORTALS

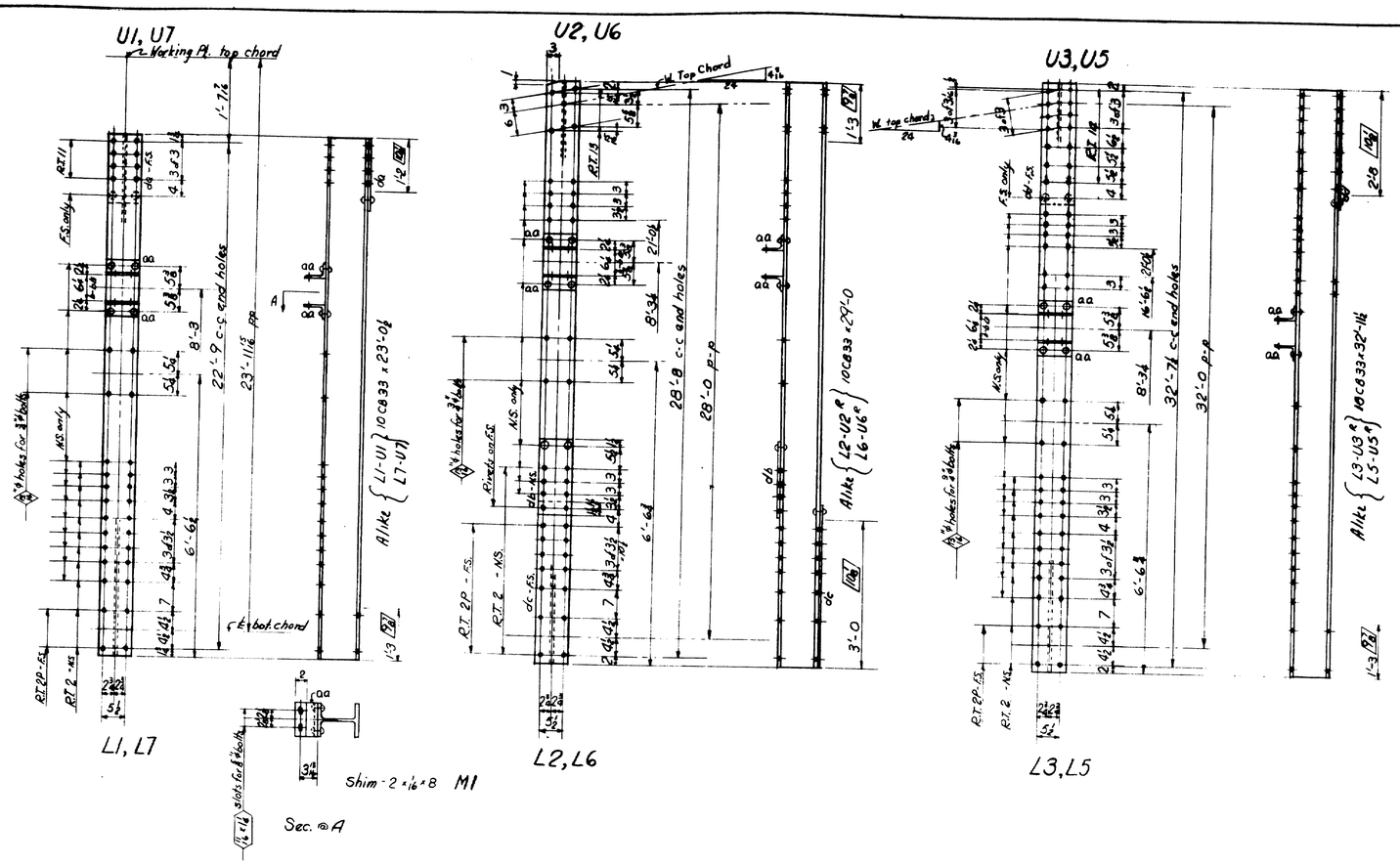
Notes
Rivets ¾"φ
Holes 13/16"φ unless noted

AMERICAN BRIDGE COMPANY
DRAWINGS MADE AT ELMIRA PLANT
WORK FABRICATED AT ELMIRA PLANT
IN CHARGE OF EET
DRAW. MADE BY DB DATE 10-5-46
DRAW. CHECKED BY TJK DATE 1-18-47

PAINT: YES
SHOP CONTACT SURFACES: NO

ORDER No. J2777 | SHEET No. 6

44-36



	7		10	VERTICALS							L1-U1					
	8		10	VERTICALS							L7-U7					
	9	20		10CB33			23	0½				23'-0½	C4		700	
	10	20	fill		8	4/16	1	4½			da		S		9	
	11	40	L	5	3½	5/16			8		aa		100	80	12	
1	12		5	VERTICALS							L2-U2R					
1	13		5	"							L2-U2L					
1	14		5	"							L6-U6R					
1	15		5	"							L6U6L					
	16	20		10CB33			29	0				29'-0	C3		907	
	17	20	fill		8	4/16	1	6			db		S		18	
	18	20	fill		8	4/16	3	2⅜			dc		S		20	
	19	40	L	5	3½	5/16			8		aa				12	
1	20		5	VERTICALS							L3-U3R					
1	21		5								L3-U3L					
1	22		5								L5-U5R	33'-0				
1	23		5	"							L5-U5L					
	24	20		10CB33			32	11½				32'-11½	C2		1088	
	25	20	fill		8	4/16	2	10			dd		S		19	
	26	40	L	5	3½	5/16			8		aa				12	
	27															
	28															
	29															
2	30		10	VERTICALS							L4-U4	33'-0				
	31	10		10CB33			32	11½				32'-11½	C2		1088	
	32	10	fill		8	7/16	1	10			df		S		22	
	33	10	fill		8	4/16	2	10½			dg		S		20	
	34	20	L	5	3½	5/16			8		aa				12	
	35															
	36															
56	37	280	shims		2	1/16			8		M1		S			
	38															
	39															
	40															
	41															
	42															
	43															
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	64															
	65															
	66															
	67															

Notes:

Rivets - ⅞" ϕ
Holes - 15/16" ϕ unless noted.
Holes marked RT to be subpunched 1 1/16" ϕ and reamed 15/16" ϕ to a metal templet.
The overall depth of CB, or CB including filler, must not exceed the figure given in the parallelogram thus [10½] for the distances indicated to permit proper entrance of members between gusset plates.

STATE OF MAINE
PENOBSCOT RIVER BRIDGE
ENFIELD TO HOWLAND
PENOBSCOT COUNTY
Verticals

AMERICAN BRIDGE COMPANY

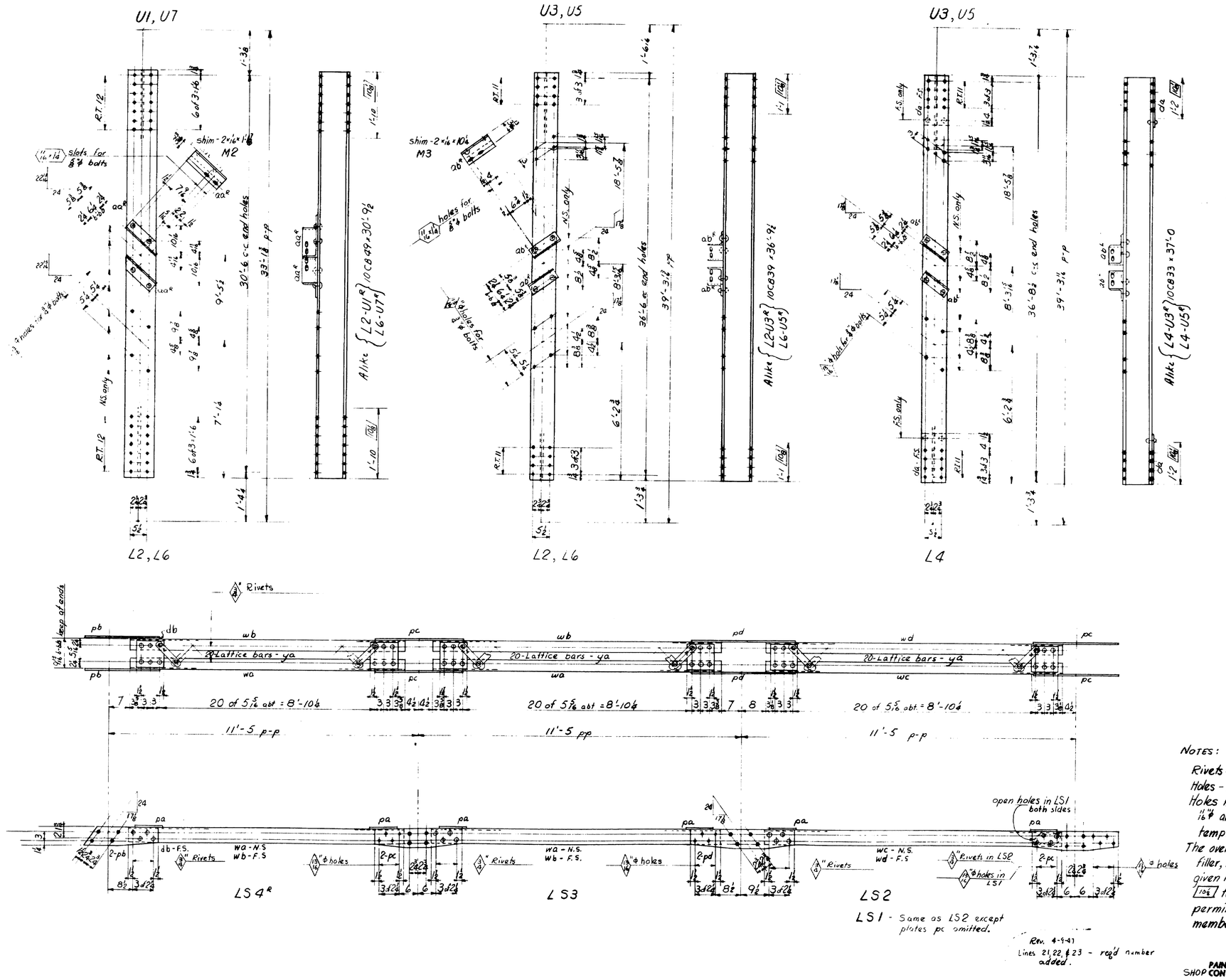
DRAWINGS MADE AT Elmira PLANT
WORK FABRICATED AT Elmira PLANT
IN CHARGE OF E.E.T.
DRAW. MADE BY R.P. DATE 10-29-46
DRAW. CHECKED BY TJK DATE 1-18-47

PAINT. Yes (S)
SHOP CONTACT SURFACES: No

ORDER No. J2777
SHEET No. 7

44-37

0 1 2 3 4 5 INCHES



	1																		
	2																		
	3																		
	4																		
	5																		
1	6			5	DIAGONALS							L2-U1R							
1	7			5	"							L2-U1L							
1	8			5	"							L6-U7R	30'-10						
1	9			5	"							L6-U7L							
	10		20		10	CB	49	30	9½					30'-9½	59			1569	
	11		20	L	5	3½	5/16	1	16			aaR		6'-0	80				
	12		20	L								aaL		"	80				
1	13			5	DIAGONALS							L2-U3R							
1	14			5	"							L2-U3L							
1	15			5	"							L6-U5R	36'-10						
1	16			5	"							L6-U5L							
	17		20		10	CB	39	36	9½					36'-9½	60			1435	
	18	40	20	L	5	3½	5/16		10½			abR		6'-0	80				
	19	40	20	L								abL		"	80				
1	20			5	DIAGONALS							L4-U3R							
1	21			5	"							L4-U3L							
1	22			5	"							L4-U5R							
1	23			5	"							L4-U5L							
	24		20		10	CB	33	37	0					37'-0	61			1221	
	25		40	fill		8	¼	1	4¼			da			5			18	
	26		20	L								abR							
	27		20	L								abL							
	28																		
	29																		
16	30		80	shims	2	1/16	1	1½	M2						5			8	
	31																		
32	32		160	shims	2	1/16		10¼	M3						5			12	
	33																		
	34																		
2	35		10	LONGITUDINAL STRUTS								LS1						277	
	36	20	10	L	5	3½	5/16	10	4½			wc		6'-0	80				
	37	20	10	L	5	3½	5/16	10	4½			wd		"	80			181	
	38	20	20	pl.		9	5/16		8			pa		4'-50	50			13	
	39	200	200	Lat. bars		2¼	5/16		7½ c-c			ya		25'/80	106			39	9R
	40	20	20	pl.		6	5/16	2	10½			pd			5			37	2C 1P
2	41			10	LONGITUDINAL STRUTS							LS2						309	
	42		10	L	5	3½	5/16	10	4½			wc						181	
	43		10	L	5	3½	5/16	10	4½			wd							
	44		20	pl.		9	5/16		8			pa						13	
	45		200	lat. bars		2¼	5/16		7½ c-c			ya						39	11R
	46	60	20	pl.		6	5/16	2	4½			pc			5			30	2C
	47		20	pl.		6	5/16	2	10½			pd						37	2C 1P
	48																		
4	49			20	LONGIT. STRUTS							LS3						272	
	50	40	20	L	5	3½	5/16	10	5½			wa		6'-0	80				
	51	40	20	L	5	3½	5/16	10	5½			wb		"	80			182	
	52		40	pl.		9	5/16		8			pa						13	
	53		400	lat. bars		2¼	5/16		7½ c-c			ya						39	8R
	54		40	pl.		6	5/16	2	4½			pc						30	2C 1P
	55																		
2	56			10	LONGIT. STRUTS							LS4R						272	
2	57			10	"							LS4L							
	58		20	L	5	3½	5/16	10	5½			wa						182	
	59		20	L	5	3½	5/16	10	5½			wb							
	60		40	pl		9	5/16		8			pa						13	
	61		400	lat. bars		2¼	5/16		7½ c-c			ya						39	
	62		40	pl		6	5/16	2	1			pb			5			27	2C 1P
	63		20	fill		5	¼		9¾			db			A			2	
	64																		
	65																		
	66																		
	67																		

NOTES:

Rivets - 7/8" ø unless noted
Holes - 15/16" ø unless noted
Holes marked R.T. to be sub-punched 11/16" ø and reamed 15/16" ø to a metal templet.
The overall depth of CB, or CB including filler, must not exceed the figure given in the parallelogram thus 10¾ for distances indicated to permit proper entrance of members between gusset plates.

PAINT. Yes (5)
SHOP CONTACT SURFACES. No

STATE OF MAINE
PENOBSCOT RIVER BRIDGE
ENFIELD TO HOWLAND
PENOBSCOT COUNTY
Diagonals & Longitudinal Struts

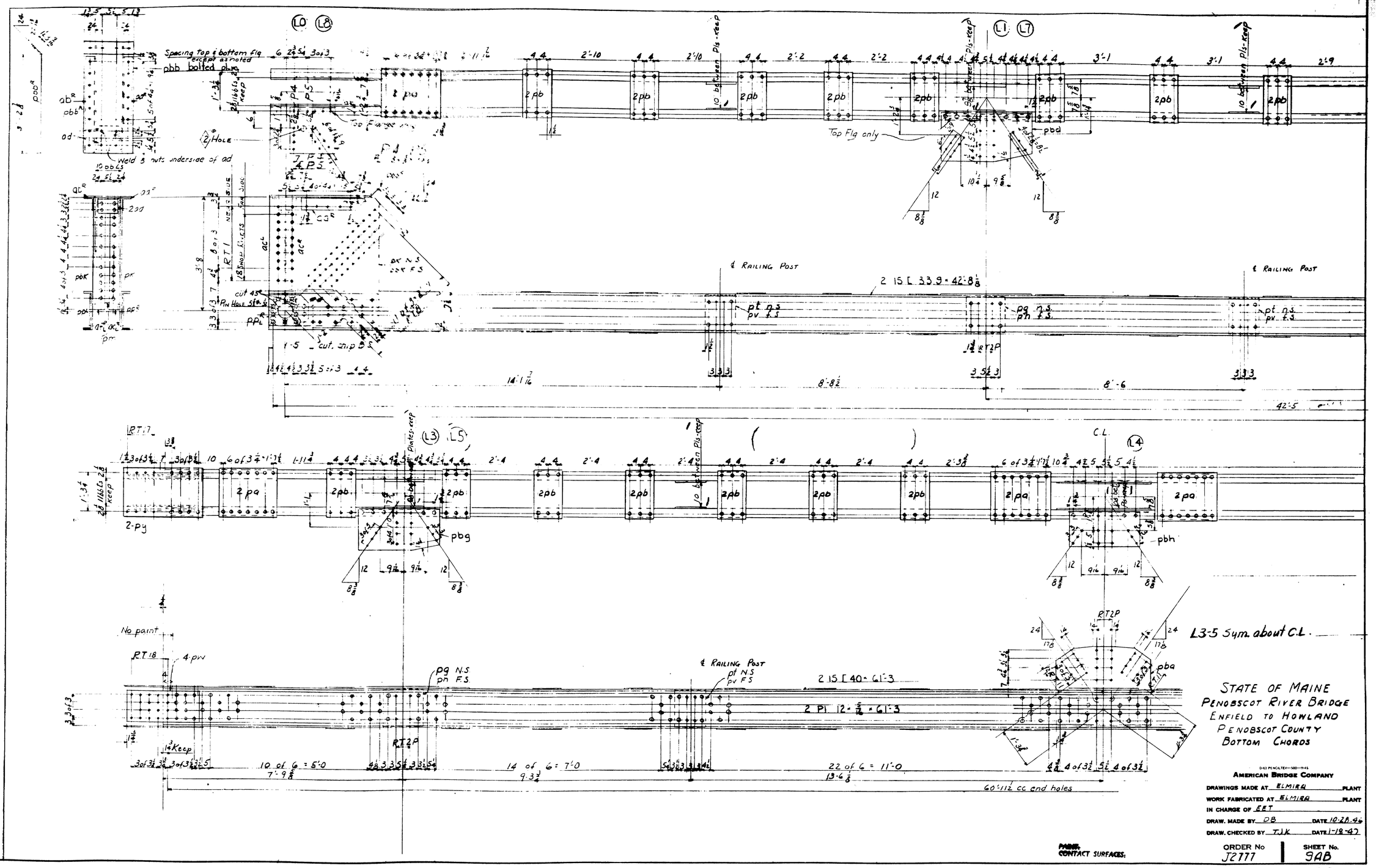
AMERICAN BRIDGE COMPANY

DRAWINGS MADE AT ELMIRA PLANT
WORK FABRICATED AT ELMIRA PLANT
IN CHARGE OF E.E.T.
DRAW. MADE BY R.P. DATE 12-31-46
DRAW. CHECKED T.J.K. DATE 1-18-47

ORDER No. J2777
SHEET No. 8

44-38

0 1 2 3 4 5 INCHES



STATE OF MAINE
PENOBSCOT RIVER BRIDGE
ENFIELD TO HOWLAND
PENOBSCOT COUNTY
BOTTOM CHORDS

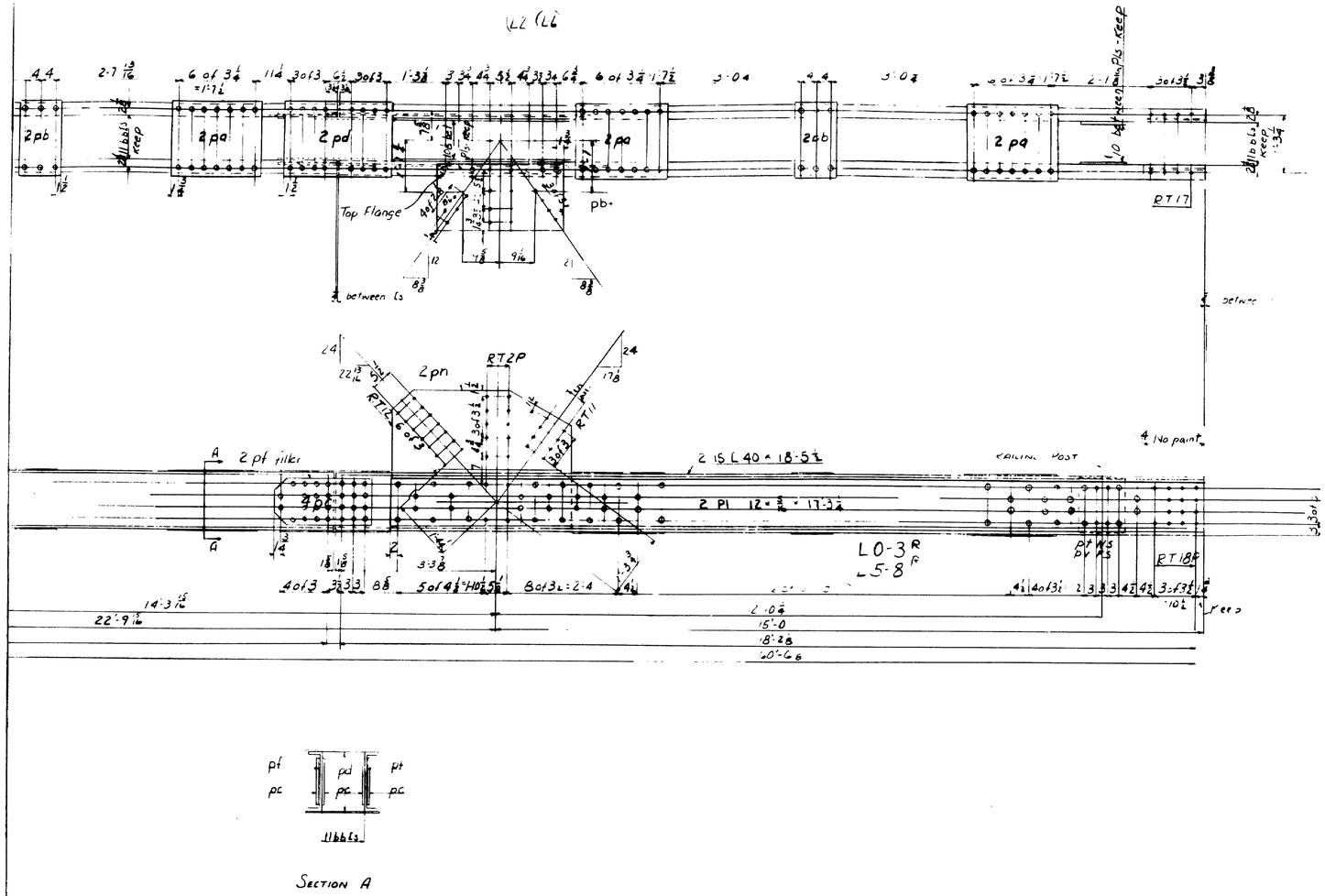
AMERICAN BRIDGE COMPANY

DRAWINGS MADE AT ELMIRA PLANT
WORK FABRICATED AT ELMIRA PLANT
IN CHARGE OF EET
DRAW. MADE BY DB DATE 10-28-46
DRAW. CHECKED BY TJK DATE 1-18-47

PAINT CONTACT SURFACES:

ORDER No J2777 | SHEET No. 9AB

44-39



NO. PIECES FOR ONE SPAN															
	8	5	Bottom Chords L0-3R												
1	9	5	Bottom Chords L0-3L							61-2½					
1	10	5	Bottom Chords L5-8R												
1	11	5	Bottom Chords L5-8L												
	12	40	15	US	33.9		42	8⅜			42-8¼	71		2993	
	13	40	15	US	40		18	5½			18-5½	70		2590	
	14	40	Pl	12	⅞		17	3¼			17-3¼	45		2295	
16 40	15	160	Pl	19	7/16		1	11	pa		45-0	21		1890	
16 40	16	160	Pl	19	7/16			11	pb		"	21			
	17	80	Pl	12	7/16		2	1	pc		45-0	44		1056	
	18	40	Pl	19	7/16		2	3½	pd		45-0	21		792	
	19	40	Pl	12	⅜		1	3¼	pf			5		78	
20 40		20	Pl	14	7/16		1	3	pg			5		126	
21 40		20	Pl	14	7/16		1	3	ph			5		141	
	22	40	Pl	50	½		3	6	25 per 3-0 BBK		35-6	7		530	
	23	20	Pl	9	½		3	5½	pm	FIN1		5		153	
	24	40	Pl	35	7/16		3	9¾	pn		38-5	10		297	
	25	20	Pl	12	⅜		1	3	pp R	36x⅜	40/45-0	25		38	
	26	20	Pl						pp L						
27 80		60	Pl	14	7/16		1	0	pt			5		60	
28 80		60	Pl	14	7/16		1	0	pv			5		80	
	29	20	Pl	19	⅜		3	Bent	10-0 BBK	Bent	45-0	19		89	
	30	10	L	5	3½	⅜	2	0½	aq R		60-0	80			
	31	10	L						aq L		"	80			
	32	10	L	5	3½	⅜	3	1.4	ab R		"	80		45	
	33	10	L						ab L		"	80			
	34	40	L	4	4	½	3	6¼	30-0 ac R 30-0 ac L		55-0	86		1830	
	35	40	L	4	4	½	3	6¼	30-0 af R 30-0 af L		"	86			
	36	40	L	6	4	⅜		8	ad		60-0	76		16	
	37	40	Hex Nuts & Tap							weld to ea ad		8		1	
	38	160	Sk	2	4							8		8	
	39	20	Pl	9	½		2	11	pdd		45-0	19		71	
	40	20	Pl	17	½		2	8	pdt	36x⅜	40/45-0	25	72	158	
2	41	10	Pl	18	⅜		1	5½	P4	Fixed Ends	19x⅜	19		103	
2	42	10	Pl	18	⅜		1	5½	P5	Expansion Ends	40/45-0			103	
	43														
	44														
	45														
2	46	10	Bottom Chords L3-5							63-8				8916	
	47														
	48	20	15	US	40		61	3			61-3	67		4100	
	49	20	Pl	12	7/16		61	3			61-3	45		1562	
	50	5	Pl						pi					838	
	51	20	P						pr						
	52	20	Pl						ps					52	
	53	20	Pl						pr					82	
	54	20	Pl						pt					42	
	55	20	Pl						pv					54	
	56	80	Pl	12	9/16		2	3½	pw		44-4	39		421	
	57														
	58	40	Pl	19	7/16		2	7	py		45-0	21		309	
	59														
	60	20	Pl	31	7/16		3	1	pbq		45-0	13		284	
	61	20	Pl	16	⅜		2	6	pbq	36x⅜	40/45-0	25		100	
	62	10	Pl	13½	⅜		2	4	pbh					40	
	63													35/16	
	64													327 R	
	65													34 F	13/16
	66														
	67														

Notes:
Rivets ⅞"
Holes 15/16" unless noted
Holes marked RT to be punched 15/16" and reamed 15/16" to a metal template

Key
3-7-4 added keep distances between plates

SHOP PAINT, (5) YES, except at splices CONTACT SURFACES.

STATE OF MAINE
PENOBSCOT RIVER BRIDGE
ENFIELD TO HOWLAND
PENOBSCOT COUNTY
BOTTOM CHORDS

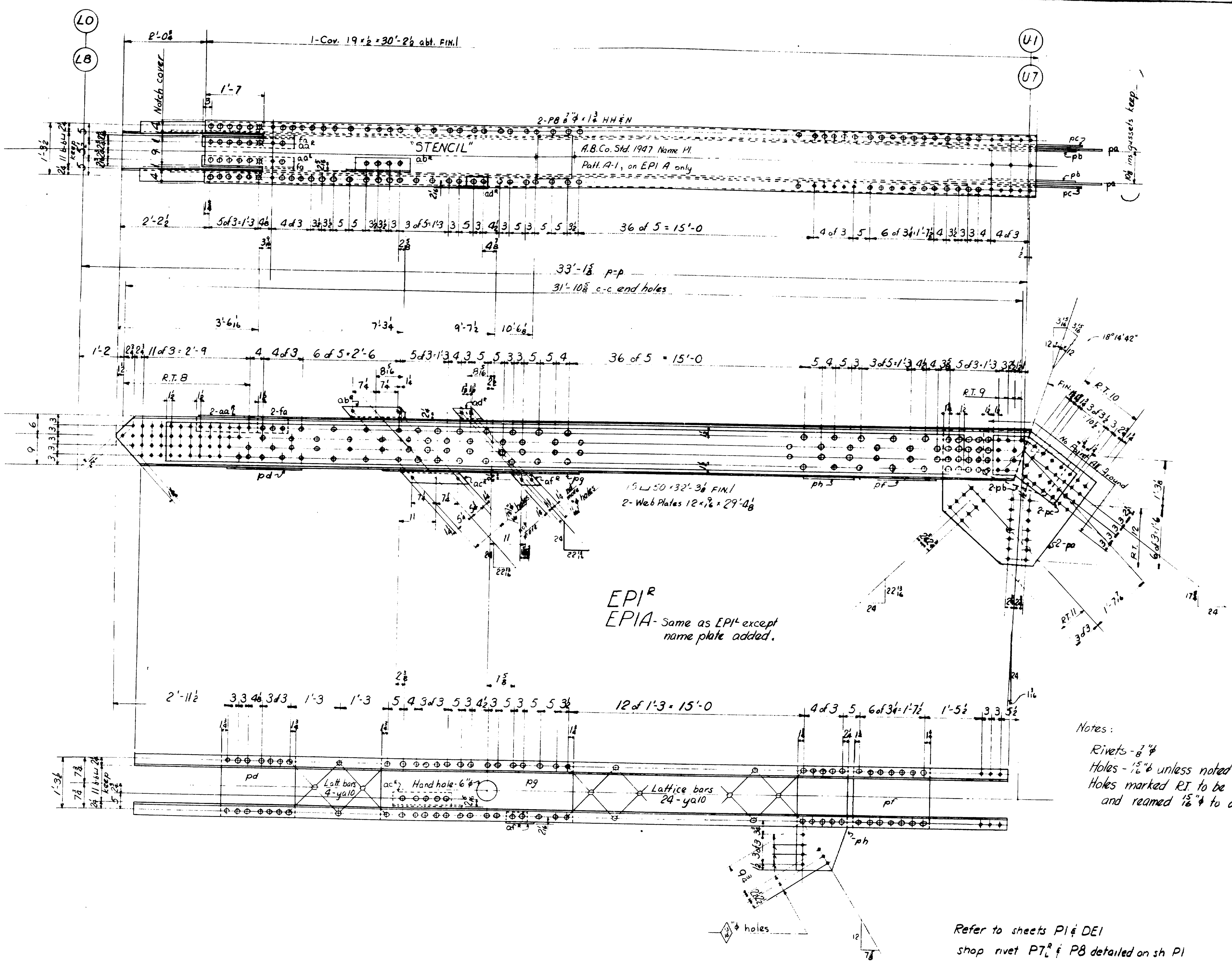
AMERICAN BRIDGE COMPANY

DRAWINGS MADE AT ELMIRA PLANT
WORK FABRICATED AT ELMIRA PLANT
IN CHARGE OF EET
DRAW. MADE BY DB DATE 10-31-46
DRAW. CHECKED BY TJK DATE 1-13-47

ORDER No. J2777
SHEET No. 9B

WELD 44-40

0 1 2 3 4 5 INCHES



Notes:

Rivets - 7/8"⌀
Holes - 15/16"⌀ unless noted
Holes marked RT to be subpunched 11/16"⌀ and reamed 15/16"⌀ to a metal templet.

Refer to sheets P1 & DE1
shop rivet P7R/L & P8 detailed on sh P1

Rev. 4-9-47
Top View, - dimension Inside gusset plates = 10⅛" added

8	2	End Posts					EP1A	"STENCIL"	34-0		(6769)
9	8	"					EP1L	"			
10	10	"					EP1R	"			(6158)
11	40		15 ⊔ 50		32	3⅛ Fin. abt			32'-6	66	3226 21c 31c
12	20	cov. pl.	19	½	30	2½ Fin. abt			30-9	18	976
13	40	web pl.	12	9/16	29	4⅛			29-10	40	1347
14	20	L 5	3½	⅜	2	4	aaR		48-5	79	49
15	20	L					aaL		"	79	
16	10	L 4	3½	5/16	1	7 abt	abR	mill clips	55-0	89	
17	10	L					abL	"	"	89	26 2c
18	10	L 4	3½	5/16	1	9 abt	acR	"	"	89	
19	10	L					acL	"	"	89	
20	10	L 3½	3½	5/16		9⅞ abt	adR	"	55-0	96	
21	10	L					adL	"	"	96	11 2c
22	10	L 3½	3½	5/16		9⅞ abt	afR	"	"	96	
23	10	L					afL	"	"	96	
24	40	fill.	4½	9/16		9	fa			5	13
25	40	R	36½	7/16	3	10½	pa	Gus. U1	38-7c / 39-8	9	421 100c
26	40	R	16	5/16	2	4 abt	pb	Rein. "	40-0	27	79 19c
27	40	R	15½	5/16	2	4 abt	pc	Jaw "	10-3/16 "	27	77 23c
28	20	R	19	5/16	1	10⅝	pd	Tie @ L0	45-0	21	
29	20	R	19	5/16	1	11	pf	Tie @ U1	"	21	175
30	20	R	19	5/16	4	10½	pg		"	21	3c
31	20	R	16	5/16	2	7½	ph	Lat. Pl.	45-0	27	45 2c
32	shop 560	Latt. bar	2⅝	5/16	1	9⅝	ya10		30-1	105	221
33	2	Std. A.B. Co. Name pls. 1947					Patt. A1	on EP1A		a2 130	10
34	4	PB		7/8"⌀		1¾		HH&N EP1A		A	1
35	10	R					P7R	EP1R			
36	10	R					P7L	EP1L EP1A detailed Sh P1			30
37	20	R					P8				7
39	80	S8		7/8"⌀						A	4

6707 221R
205
33P

STATE OF MAINE
PENOBSCOT RIVER BRIDGE
ENFIELD TO HOWLAND
PENOBSCOT COUNTY
End Post
AMERICAN BRIDGE COMPANY

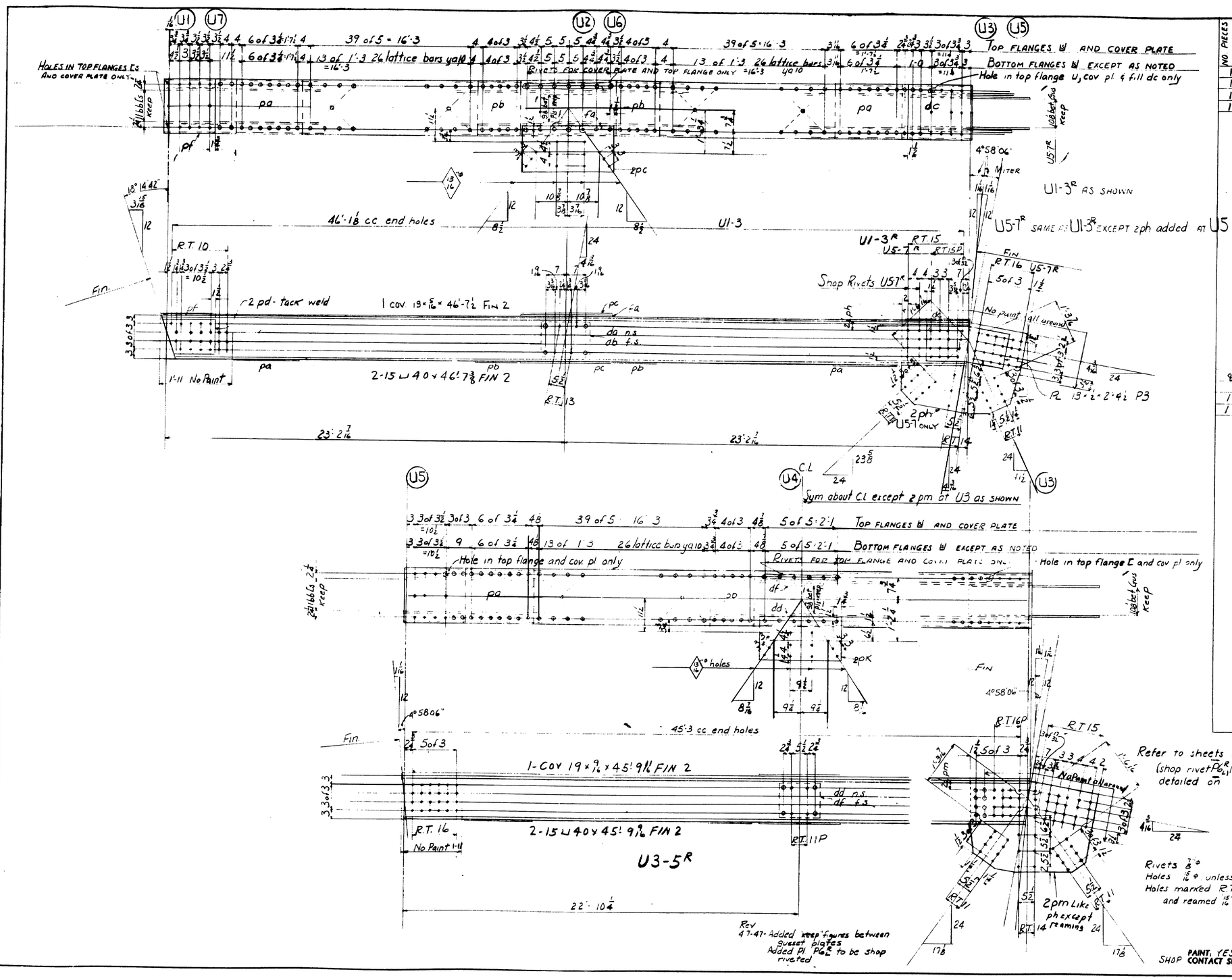
DRAWINGS MADE AT ELMIRA PLANT
WORK FABRICATED AT ELMIRA PLANT
IN CHARGE OF E.E.T.
DRAW. MADE BY R.P. DATE 11-6-46
DRAW. CHECKED BY TJK DATE 1-13-47

PAINT: Yes Ⓢ except as noted at splice.
SHOP CONTACT SURFACES: No

ORDER No J2777 | SHEET No. 10

44-41

0 1 2 3 4 5 INCHES



NO. PIECES FOR ONE SPAN																	
	3																
	4																
	5																
	6																
	7																
	8																
1	9	5	Top Chords U1-3R							46-8							5768
1	10	5	Top Chords U1-3L														
1	11	5	Top Chords U5-7R							46-4							6010
1	12	5	Top Chords U5-7L														
	13	40	15	⊔	40		46	7⅞			Fin 2	46-8¼	68			3727	
	14	20	Pl		19	9/16	46	7⅞			Fin 2	46-8¼	20				
	15	60	40	Pl	19	9/16	1	11	pa			45-0	21			1069	
	16	60	40	Pl	19	9/16	1	3	pb			"	21				
	17		40	Pl	16	9/16	2	8	pc			40-0	27			97	
	18		40	Fill	12	9/16	1	6½	pd				S			29	
	19		20	Fill	19	9/16	1	5	pf				S			17	
	20		20	Fill	2¾	1/4	2	8	fa				S			6	
	21		20	Pl	31	1/16	3	7	ph	U5-7R		45-0	13			351	
	22		20	Fill	12	9/16	1	5	da				S			25	
	23		20	Fill	12	9/16	1	5	db				S			40	
	24		20	Fill	19	1/4	1	10¾	dc				S			37	
	25		1040	lat bars	2¾	7/16	1	9 9/16 cc	4a10							713	
	26															1338	
	27																
	28		10	Pl					P6R	U1-3R U5-7R U1-3L U5-7L							
	29		10	Pl					P6L							90	
	30		5	Pl					P9R	U1-3R							
	31		5	Pl					P9L	U1-3L	U1-3					89	
	32		5	Pl					P10R	U5-7R							
	33		5	Pl					P10L	U5-7L	U5-7					41	
	34		10	Pl					P11	U5-7R U5-7L	U5-7					6	
	35																
8	36		40	Pl	13	½	2	4½	P3			34-0	36			52	
	37																
1	38		5	Top Chords U3-5R						47-10							6593
1	39		5	Top Chords U3-5L													
	40																
	41		20	15	⊔	40		45	9 9/16		Fin 2	45-10½	69			3664	
	42		10	Pl		19	5/16	45	9 9/16		Fin 2	45-10½	17			1065	
	43		20	Pl						pa						178	
	44		20	Pl						pb							
	45		20	Pl		15	5/16	2	4½	pK	36 × 5/16	40/45-6	14			76	
	46		10	Fill		12	9/16	1	2	dd			S			21	
	47		10	Fill		12	9/16	1	2	df			S			30	
	48		520	lat bars						4a10						418	
	49		20	Pl		31	1/16	3	7	pm		45-0	13			331	
	50															140	
	51		5	Pl					P9R	Detailed on Sh Pl						89	
	52		5	Pl					P9L								
	53		5	Pl					P10R							41	
	54		5	Pl					P10L								
	55		10	Pl					P11							6	
	56																
	57															6	
	58																
	59															38	
	60																
	61																
	62																
	63																
	64																
	65																
	66																
	67																

STATE OF MAINE
PENOBSCOT RIVER BRIDGE
ENFIELD TO HOWLAND
PENOBSCOT COUNTY
TOP CHORDS

AMERICAN BRIDGE COMPANY
DRAWINGS MADE AT ELMIRA PLANT
WORK FABRICATED AT ELMIRA PLANT
IN CHARGE OF EET
DRAW. MADE BY DB DATE 11-4-46
DRAW. CHECKED BY TJK DATE 1-18-47

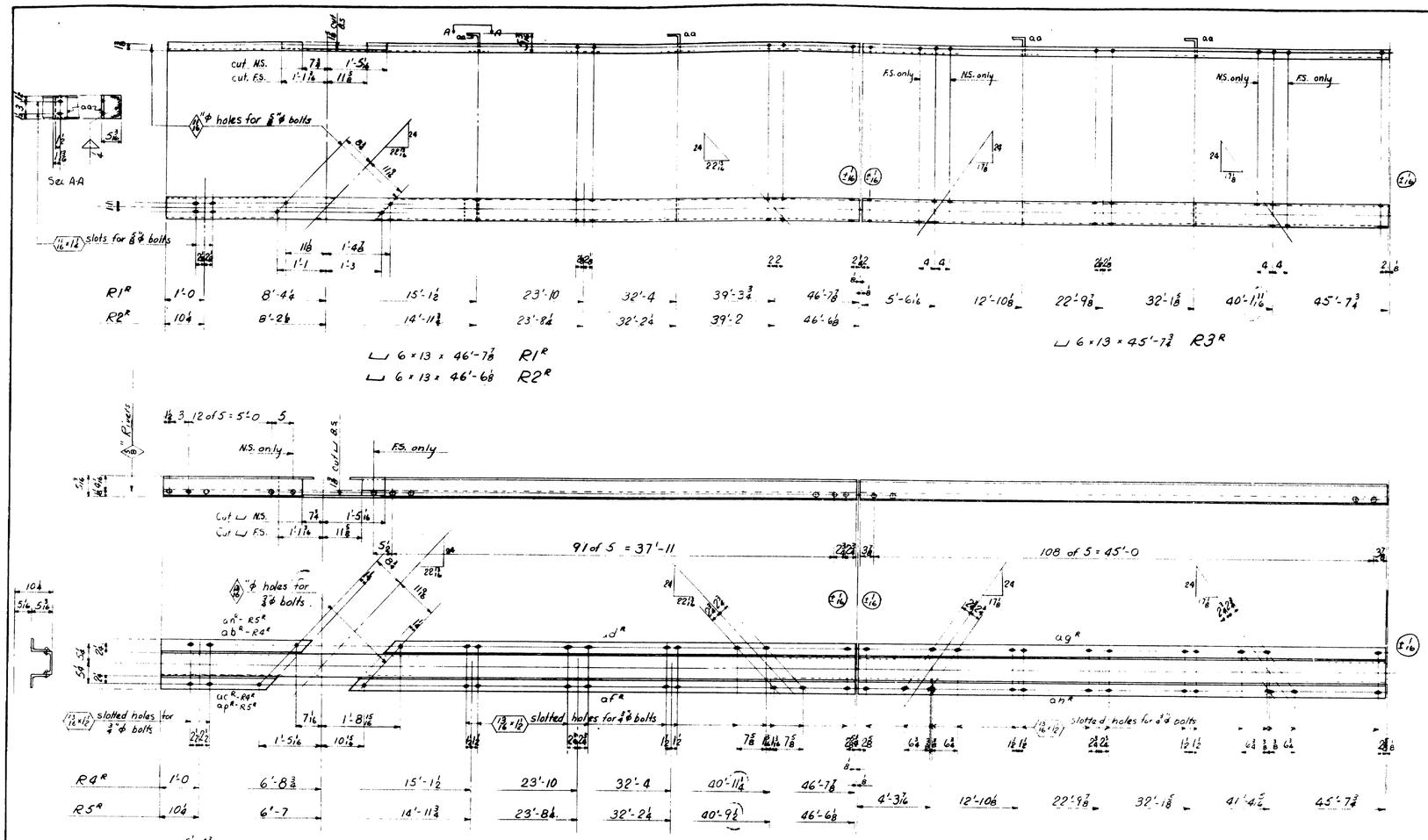
PAINT, YES ⊗, except at chord splices
SHOP CONTACT SURFACES, No

ORDER No. J2777

SHEET No. 11

44-42

0 1 2 3 4 5 INCHES



			7			2	Hub Guard Rails		R1R										
1		1	8			2	" " "		R1L	46-8									
			9		4	⊔	6 x 13	46 7⅞			46'-8	99			606	8c			
			10	80	8	L	4⅝ 3½ 5/16	6	aa	5-3½	60 0	80			9	3P			
			11																
			12																
1	2	1	13			8	Hub Guard Rails		R2R										
1	2	1	14			8	" " "		R2L	46-6									
			15		16	⊔	6 x 13	46 6⅛			46'-6⅛	100			605	8c			
			16		32	L			aa						9	3P			
			17																
			18																
2	2	2	19			10	Hub Guard Rails		R3R										
2	2	2	20			10	" " "		R3L	45-8									
			21		20	⊔	6 x 13	45 7¾			45'-7¾	101			592				
			22		40	L			aa						9	3P			
			23																
			24																
1		1	25			2	Hub Guard Rails		R4R										
1		1	26			2	" " "		R4L	46-8									
			27		4	⊔	6 x 8.2	46 7⅞			46'-8	102			383	8c			
			28		2	L	5 3½ 5/16 6	4 0	ab R		60 0	80			55	1			
			29		2	L			ab L		"	80							
			30		2	L	5 3½ 5/16 5	7 0	ac R		"	80			49	1			
			31		2	L			ac L		"	80							
			32	10	2	L	5 3½ 5/16	38 6	ad R		38-8	83			395	1			
			33	10	2	L			ad L		"	83							
			34	10	2	L	5 3½ 5/16	39 3	af R		39-5	82			341	1			
			35	10	2	L			af L		"	82							
			36																
			37																
1	2	1	38			8	Hub Guard Rails		R5R										
1	2	1	39			8	" " "		R5L	46-6									
			40		16	⊔	6 x 8.2	46 6⅛			46'-6⅛	103			381	8c			
			41		8	L	5 3½ 5/16 6	2 0	an R		60 0	80			54	1			
			42		8	L			an L		"	80							
			43		8	L	5 3½ 5/16 5	5 0	ap R		"	80			48				
			44		8	L			ap L		"	80							
			45		8	L			ad R						395	1			
			46		8	L			ad L										
			47		8	L			af R						341	1			
			48		8	L			af L										
			49																
			50																
4	4	4	51			20	Railing Posts		RP1	Pers & Abut.									
			52		20	L	6 4 3/8 3	9⅛	ak R		60 0	76			92	1			
			53		20	L			ak L		"	76							
			54		20	L	6 4 3/8 1	3	am R	base	"	76			34				
			55		20	L			am L		"	76							
			56		20	pl	15 3/8 2	10	pa	19 x 3/8	40/45-0	19			54	1			
			57		20	pcs	24-6 7/16	4¼	ma		1 out 2	5			13	1			
			58		40	washers	2¼ x 3/8 x 15/16 ϕ hole					9			1	1			
			59																
			60																
8	8	8	61			40	Railing Posts		RP2R	Inter.									
8	8	8	62			40	" "		RP2L	"									
			63		80	CB	10 x 21	8 6¾			4-3-3	65			180	1P			
			64																
2	2	2	65			10	Hub Guard Rails		R6R										
2	2	2	66			10	" " "		R6L	45-8									
			67		20	⊔	6 x 8.2	45 7¾			45'-7¾	104			378				
			68		10	L	5 3½ 5/16	45 7¾	ag R		"	81			397				
			69		10	L			ag L		"	81							
			70		10	L	5 3½ 5/16	45 7¾	ah R		"	81			397				
			71		10	L			ah L		"	81							

Notes:

Rivets as noted
Holes as noted

Rev. 4-9-47
on RP1 - arrows on ϕ holes changed
on R3R - 40'-1⅛ chg'd to 40'-1 11/16
on R4R - 40'-11⅛ chg'd to 40'-11¼
on R5R - 40'-9⅞ chg'd to 40'-9½

STATE OF MAINE
PENOBSCOT RIVER BRIDGE
ENFIELD TO HOWLAND
PENOBSCOT COUNTY
Hub-Guard Railing & Posts

DRAWN IN INK—PENCILLED

AMERICAN BRIDGE COMPANY
UNITED STATES STEEL CORPORATION SUBSIDIARY

DRAWINGS MADE AT Elmira PLANT
WORK FABRICATED AT Elmira PLANT
IN CHARGE OF E.E.T.
DRAW. MADE BY R.P. DATE 11-19-46
DRAW. CHECKED BY _____ DATE _____

REVISIONS	
F	
E	
D	
C	
B	
X	

ORDER No. J2777
SHEET No. 12

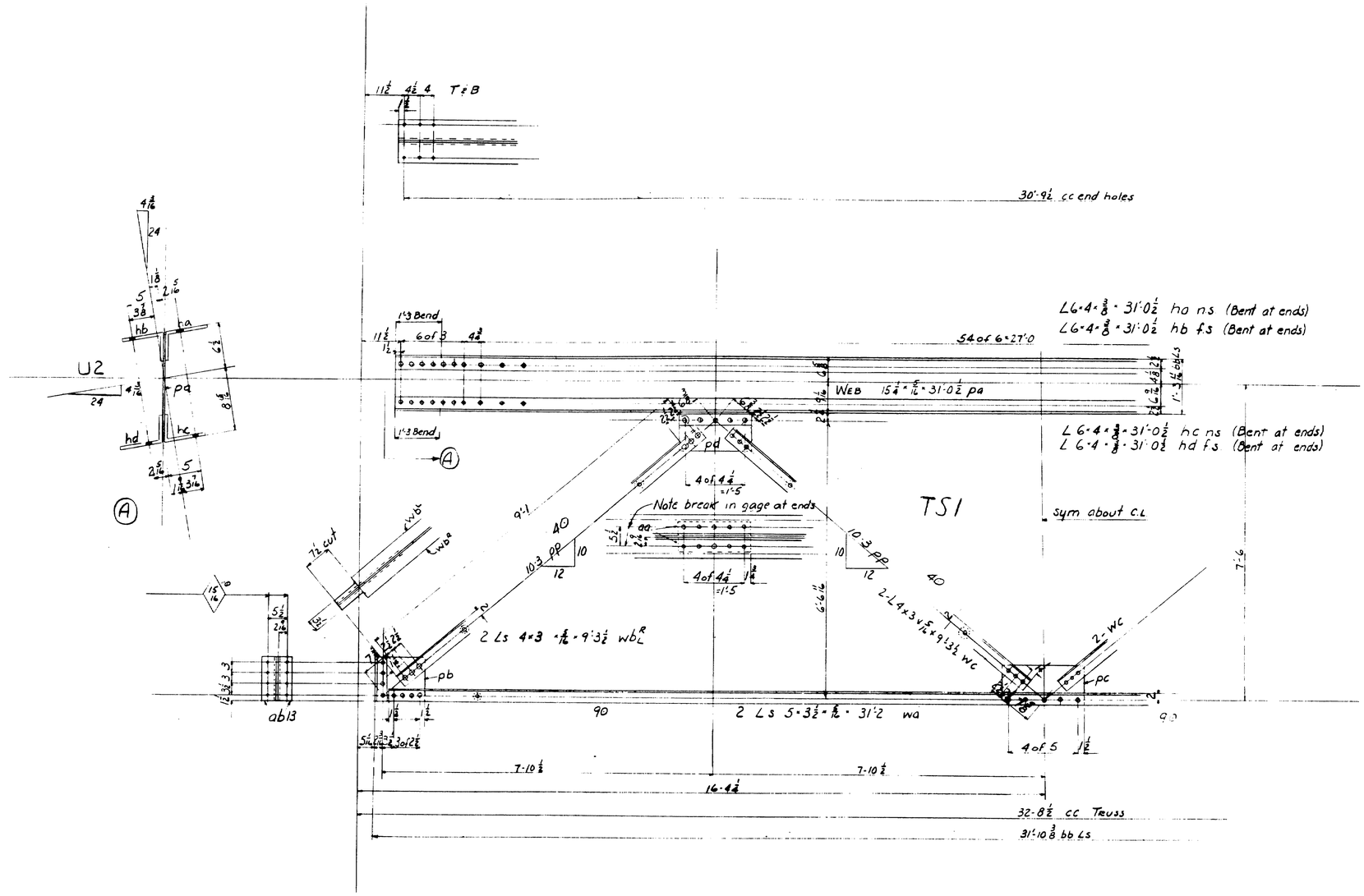
PAINT: Yes
SHOP CONTACT SURFACES: No

Welding-Gross Wt. of Electrodes

Adv. 8/48

Weld 44-43

0 1 2 3 4 5 INCHES



NO. PIECES FOR ONE SPAN												
2	10	Top	Struts			TS1			98×12×31-10			3346
	10	L	6	4	3/8	31	0½	ha	Bent at ends	31-1¼	77	
	10	L	6	4	3/8	31	0½	hb	Bent at ends	"	77	1527
	10	L	6	4	3/8	31	0½	hc	Bent at ends	"	77	
	10	L	6	4	3/8	31	0½	hd	Bent at ends	"	77	
	10	Pl		15¼	5/16	31	0½	pa		31-1¼	28	503
	40	L	4	3½	5/16	1	8½	aa		55-0	89	53
	20	Pl		10	5/16	1	8½	pd	36×5/16	40/45-0	14	36
	40	L	4	3	5/16	9	3½	20-WL 20-WL		47-7	90	268
	340	20×5/16		13/16 Hole							A	8
	40	L	4	3	5/16	9	3½	wc		47-7	90	268
	20	L	5	3½	5/16	31	2	wa		31-3	84	542
	40	L	4	3½	5/16	1	0½	ab13		55-0	89	32
	20	Pl		14	5/16	1	0½	pb	36×5/16	40/45-0	14	31
	10	Pl		11	5/16	1	11	pc	36×5/16	40/45-0	14	22
												59

Notes:
Rivets ¾"φ
Holes 13/16"φ unless noted
Washers 2"φ × 5/16 × 13/16"φ holes

STATE OF MAINE
PENOBSCOT RIVER BRIDGE
ENFIELD TO HOWLAND
PENOBSCOT COUNTY
TOP STRUTS

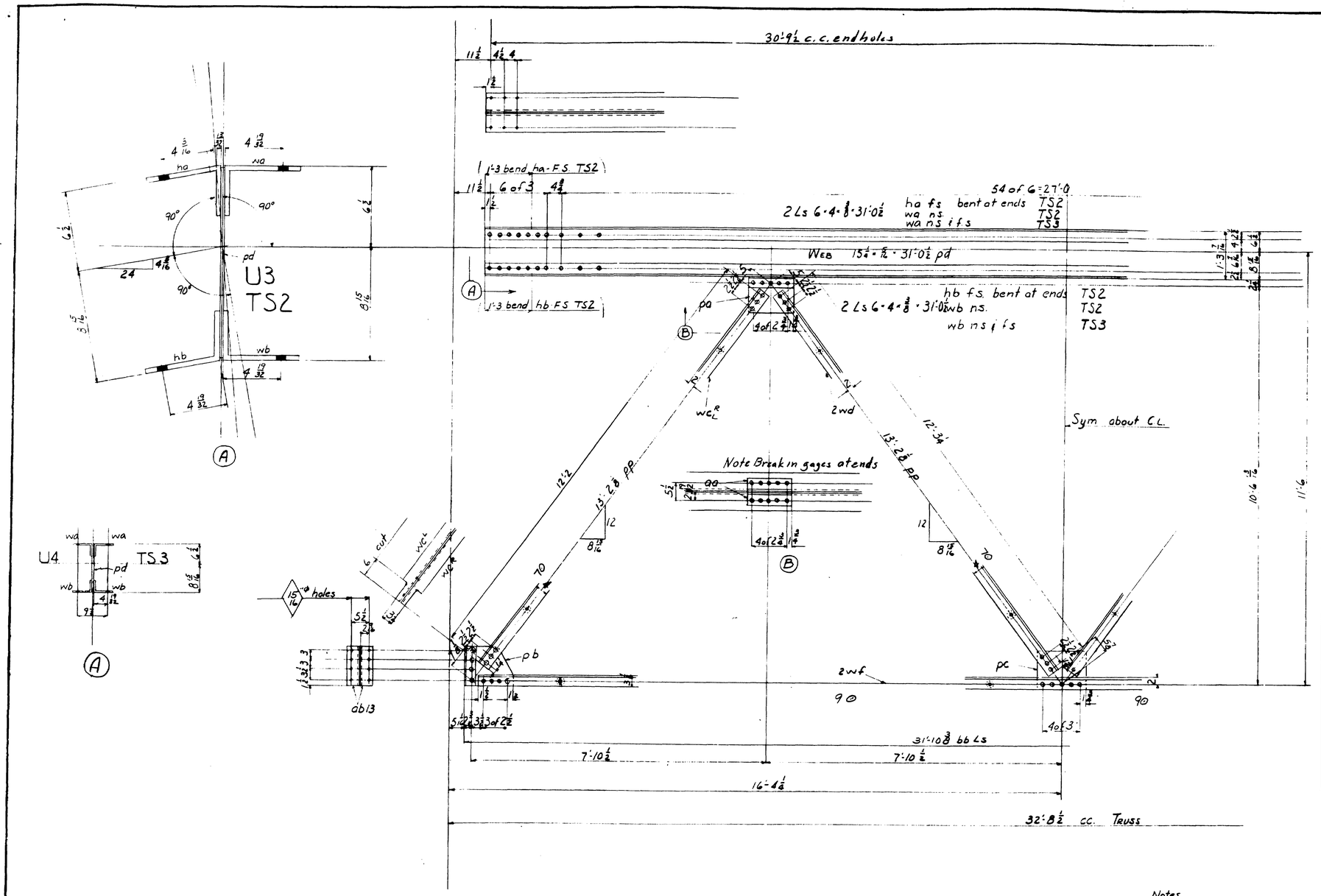
AMERICAN BRIDGE COMPANY
DRAWINGS MADE AT ELMIRA PLANT
WORK FABRICATED AT ELMIRA PLANT
IN CHARGE OF EET
DRAW. MADE BY DB DATE 11-9-46
DRAW. CHECKED BY TJK DATE 1-13-47

SHOP PAINT, YES ⊗ CONTACT SURFACES, NO

ORDER No. J2777 | SHEET No. 13

44-44

0 1 2 3 4 5 INCHES



NO PIECES FOR ONE SPAN

2	13	10	Top Struts TS2									14641 2X 31'-11				(35.18)	
	14		10	L	6	4	3/8	31	0¼	ha	Bent at ends	31-1½	77			152.7	
	15		10	L	6	4	3/8	31	0¼	hb	Bent at ends	"	77				
	16	60	10	L	6	4	3/8	31	0¼	wa		"	77				
	17	60	10	L	6	4	3/8	31	0¼	wb		"	77				
	18	15	10	Pl		15¼	5/16	31	0¼	pd		31-1½	28			50.3	
	19																
	20	60	40	L	4	3¼	5/16	1	2¼	aa		55-0	89			317	
	21	30	20	Pl		11	5/16	1	2¼	pa	36 × 5/16	4045-0	14			28.8	
	22																
	23	60	40	L	4	3	5/16	12	4¼	18-wc		12-6	95			356	
	24		460	20	×	5/16	13/16	hole					A			11	
	25																
	26																
	27	60	40	L	4	3	5/16	2	5¾	wd		12-6	95			359	
	28																
	29																
	30	30	20	L	5	3½	5/16	31	2	wf		31-3	84			542	
	31																
	32		40	L	4	3½	5/16	1	0¼	ab13						32.1	
	33	30	20	Pl		14	5/16	1	0¼	pb	36 × 5/16	4045-0	14			31.1	4c
	34																
	35	15	10	Pl		12	5/16	1	3¼	pc		45-0	44			16	
	36															6.8	18P
	37																
1	38		5	Top Struts TS3								14641 2X 31'-11				(35.18)	
	39		10	L						wa						152.7	
	40		10	L						wb							
	41		5	Pl						pd						50.3	4cm
	42																
	43		20	L						aa						37.7	
	44		10	Pl						pa						28.8	
	45																
	46		20	L						10, wc R 10-wc						356	
	47		230	20	×	5/16	13/16	hole					A			11	
	48																
	49																
	50		20	L						wd						359	
	51																
	52																
	53		10	L						wf						542	
	54																
	55																
	56		20	L						ab13						32.1	
	57		10	Pl						pb						31.1	4c
	58																
	59		5	Pl						pc						16	
	60																
	61															6.8	18P
	62																
	63																
	64																
	65																
	66																
	67																

Notes
Rivets ¾" ⌀
Holes 13/16" ⌀ unless noted
Washers 2" ⌀ × 5/16 13/16" ⌀ hole

Rev
4-7-47 Added bend distances for angles in TS2

PAINT: YES ⑤
SHOP CONTACT SURFACES: NO

REVISIONS	
F	
E	
D	
C	
B	
X	

STATE OF MAINE
PENOBSCOT RIVER BRIDGE
ENFIELD TO HOWLAND
PENOBSCOT COUNTY
TOP STRUTS

AMERICAN BRIDGE COMPANY
UNITED STATES STEEL CORPORATION SUBSIDIARY

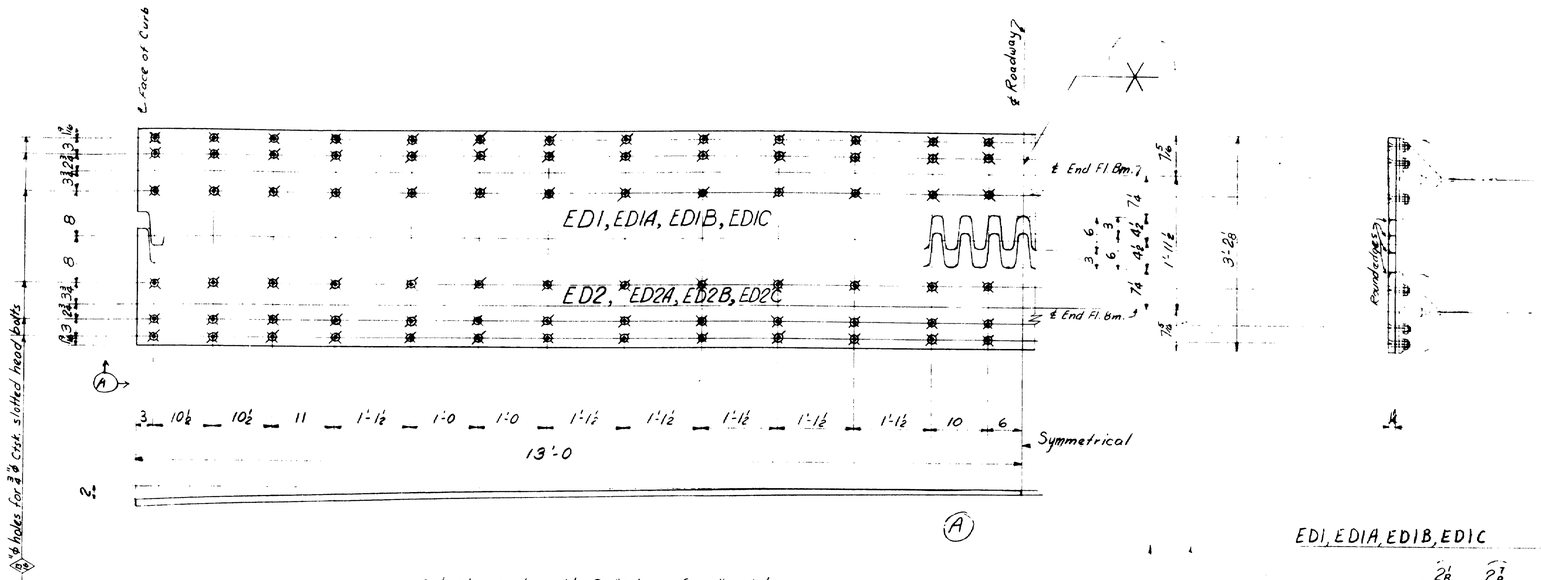
DRAWINGS MADE AT ELMIRA PLANT
WORK FABRICATED AT ELMIRA PLANT
IN CHARGE OF EET
DRAW. MADE BY DB DATE 11-11-46
DRAW. CHECKED BY TJK DATE 1-15-47

ORDER No. T2777
SHEET No. 14

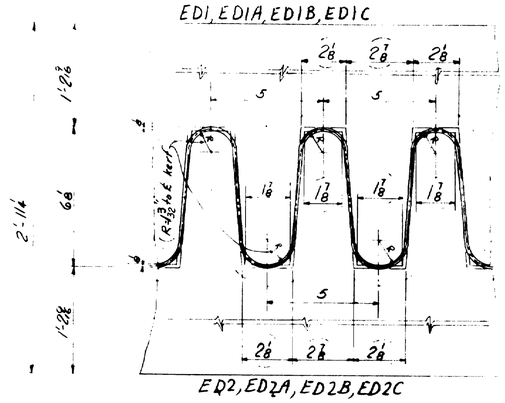
44-45

Welding-Gross Wt. of Electrodes
Art. 848

0 1 2 3 4 5 INCHES



Ambridge is to weld 8 - "All-way Grip" plates
35¼ × 1¼ × 13'-0 together to make 4 - plates
35¼ × 1¼ × 26'-0 which are to be cut and pieces
from 1st plate are to be marked ED1 & ED2.
2nd " " " ED1A & ED2A.
3rd " " " ED1B & ED2B.
4th " " " ED1C & ED2C.
Plates are to be bent.
All other work is to be done at Elmira.



	No. Req'd										
Span #4	1		1	End Exp. Plate				ED1			
" #3	1		1	"	"	"		ED1A			
" #2	1		1	"	"	"		ED1B			
" #1	1		1	"	"	"		ED1C			
		4	Pls	20¼	1¼	26	0		"All-way Grip"	Req. 22-1570	1976
Span #5	1		1	End Exp. Plate				ED2			
" #4	1		1	"	"	"		ED2A			
" #3	1		1	"	"	"		ED2B			
" #2	1		1	"	"	"		ED2C			
		4	Pls	20¼	1¼	26	0		"All way Grip"	Req. 22-1570	1976

Notes:

Holes - 13/16"ϕ
All holes sub-drilled 9/16"ϕ and reamed to 13/16"ϕ
or drilled 13/16"ϕ from the solid.

Rev. 3-12-47
Teeth made equal widths & with continuous single radius at ends.
Butt weld at ℄ of Plates changed to double-V type.

PAINT: Yes

STATE OF MAINE
PENOBSCOT RIVER BRIDGE
ENFIELD TO HOWLAND
PENOBSCOT COUNTY
End Expansion Plates

AMERICAN BRIDGE COMPANY
UNITED STATES STEEL CORPORATION SUBSIDIARY

DRAWINGS MADE AT Elmira PLANT
WORK FABRICATED AT Elmira PLANT
IN CHARGE OF E.E.T.
DRAW. MADE BY R.P. DATE 11-12-46
DRAW. CHECKED BY T.J.K. DATE 1-18-47

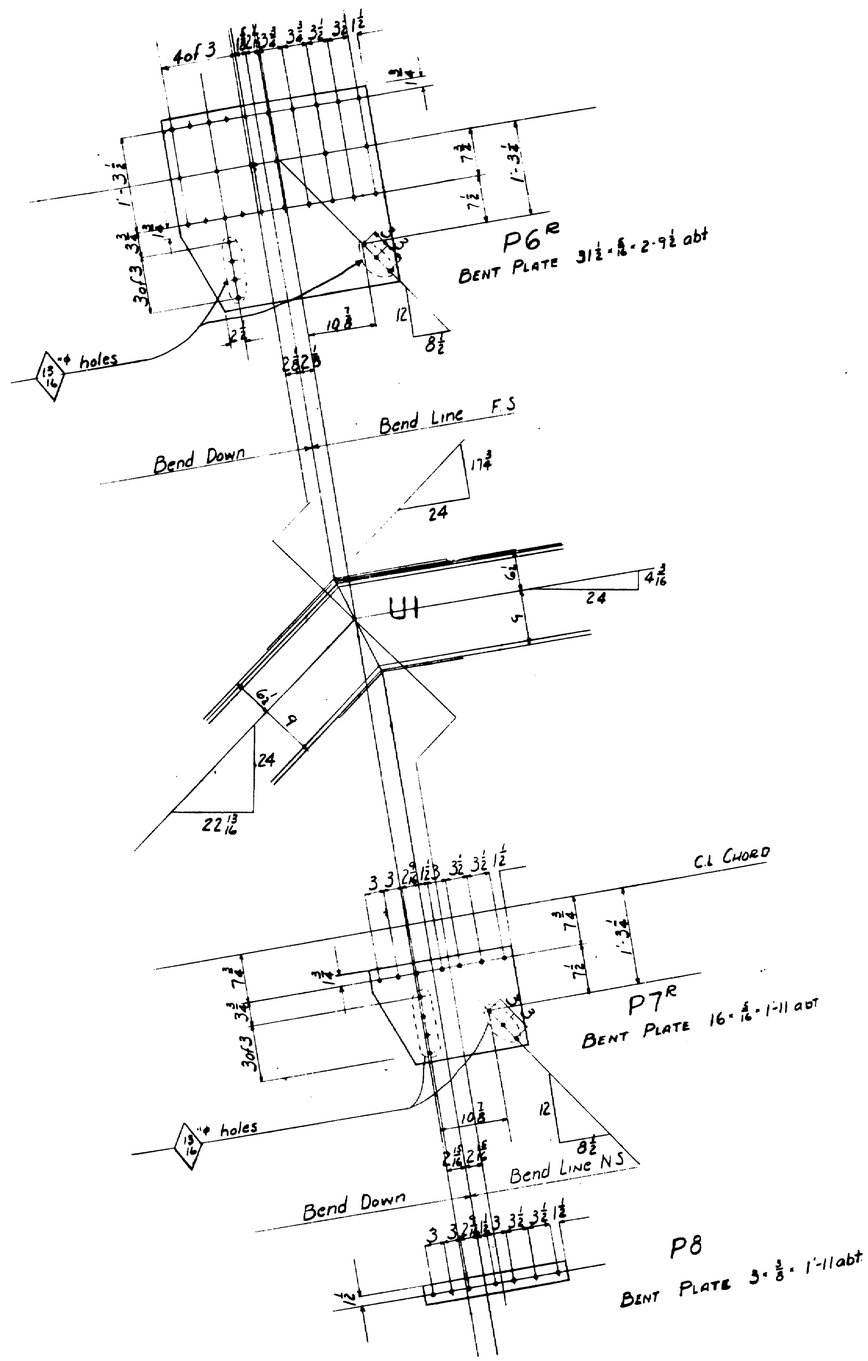
REVISIONS	
F	
E	
D	
C	
B	
X	

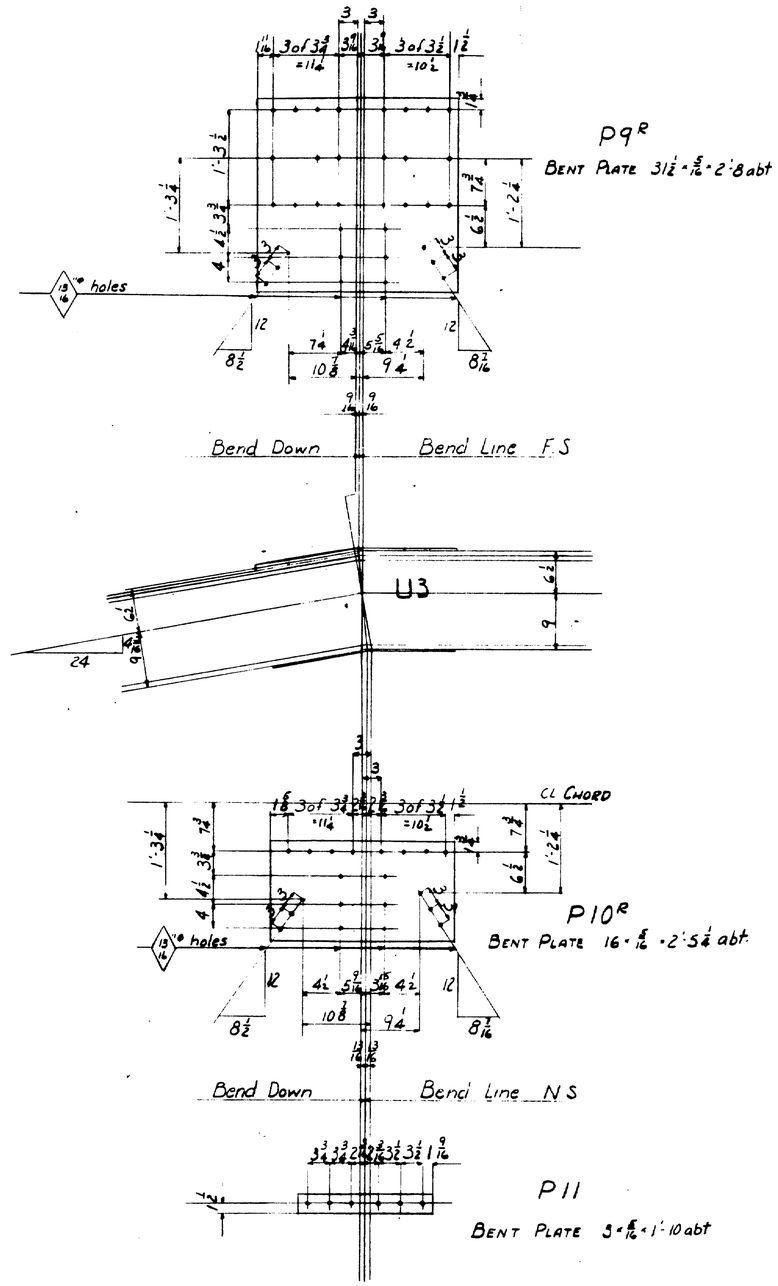
ORDER No. J2777
SHEET No. 15

Weld 44-46

Welding-Gross Wt. of Electrodes
Adv. Bill

0 1 2 3 4 5 INCHES





NO. PIECES FOR ONE SPAN		
2	10 BENT PLATES	P6R
2	10 BENT PLATES	P6L
	20 PL 31½ 5/16 2 9½	
2	10 BENT PLATES	P7R
2	10 BENT PLATES	P7L
	20 PL 16 5/16 1 11 abt	
4	20 BENT PLATES	P8
	20 PL 3 ⅜ 1 11 abt	
2	10 BENT PLATES	P9R
2	10 BENT PLATES	P9L
	20 PL 31½ 5/16 2 8 abt	
2	10 BENT PLATES	P10R
2	10 BENT PLATES	P10L
	20 PL 16 5/16 2 5¼ abt	
4	20 BENT PLATES	P11
	20 PL 3 5/16 1 10 abt	

Refer to Sheets 10, 11, DE1

- Shop rivet P6L R to U1-3L R & U5-7L R detailed on sh 11
- " " P9L R to U1-3L R & U3-5L R (U5 end) " "
- " " P7L R & P8 to EP1L R & EP1A " " 10
- " " P10L R & P11 to U5-7L R & U3-5L R (U3 end) " 11

Holes 15/16" ϕ unless noted

PAINT. See Sheets 10 & 11
CONTACT SURFACES.

STATE
PENOBSCO
ENFIELD
PENOB
BENT

AMER
DRAWINGS MAD
WORK FABRICAT
IN CHARGE OF
DRAW. MADE BY
DRAW. CHECKED

ORDER
J2777

0 1 2 3 4 5 INCHES