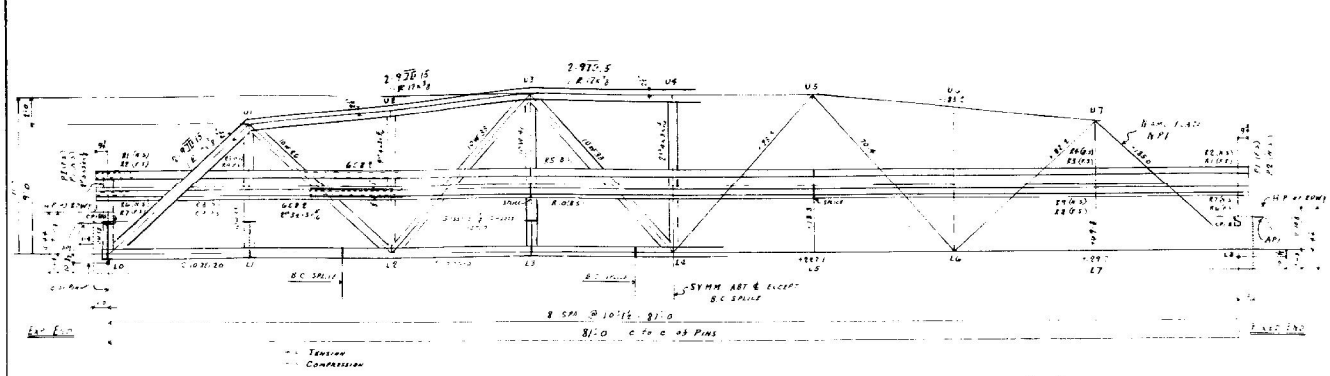
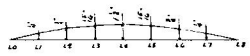
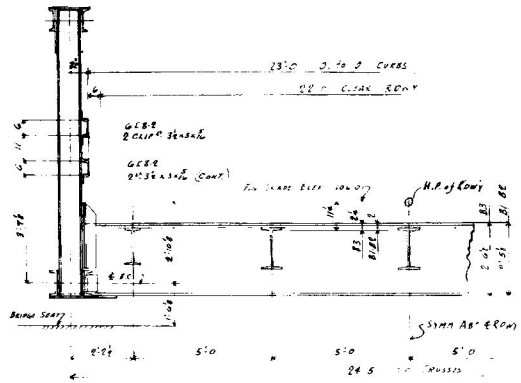


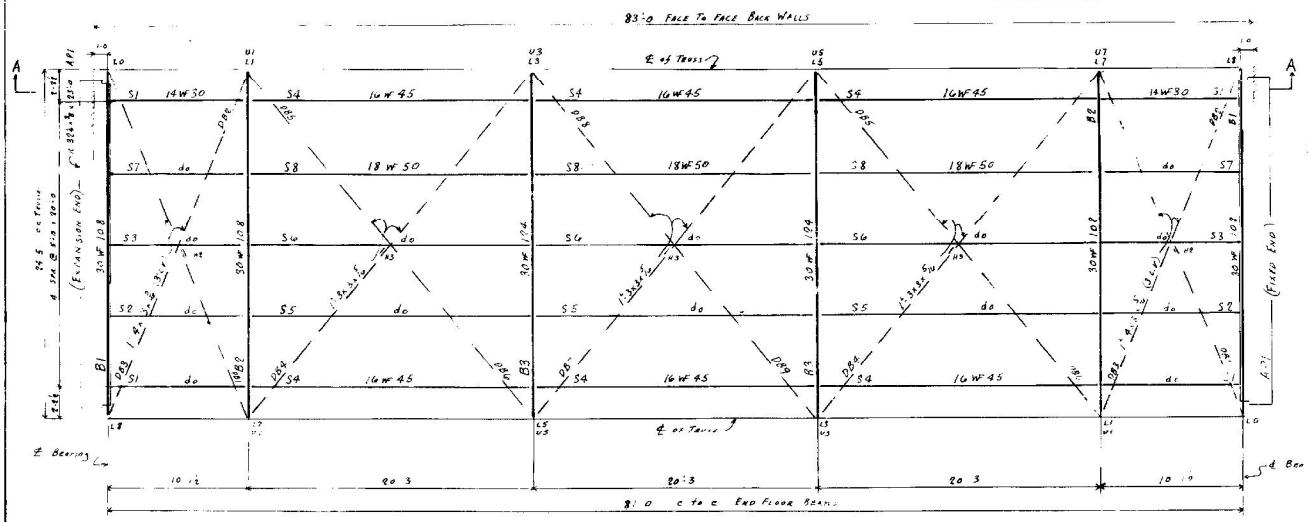
SECTIONAL ELEVATION "A-A"



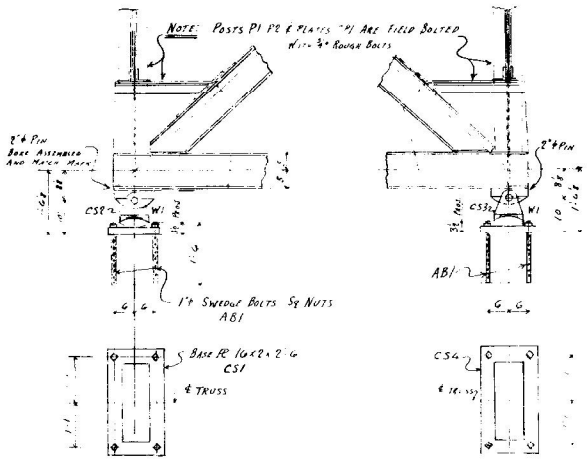
CAMBER DIAGRAM



HALF TRANSVERSE SECTION



FLOOR PLAN & BOTT. CHD. LATERALS



DETAIL of BEARING (EXP END)

DETAIL of BEARING (FIXED END)

ALL DIAGONAL BRACING FLUSH WITH BOTT FLG of 30"F TOED UP FOR COMPLETE DETAILS SEE MAINE DEPT of HIGHWAYS DR'WGS #4-5

NOTE FOR REAMING :- THE TRUSSES SHALL BE COMPLETELY ASSEMBLED AND FIRMLY BOLTED TOGETHER IN THE SHOP. ALL SUBPUNCHED HOLES (AS NOTED ON DETAIL SHTS) SHALL THEN BE REAMED TO 1⅛"ϕ AND EACH MEMBER MATCH MARKED WHILE THUS ASSEMBLED. THE TRUSSES SHALL THEN BE KNOCKED DOWN FOR SHIPMENT.

GEN. NOTES:-

RIVETS :- ¾"ϕ EXCEPT ⅝"ϕ IN FLANGES of RAIL ℄

HOLES IN RAIL MEMBER FOR FIELD CONN TO TRUSS TO BE SLOTTED

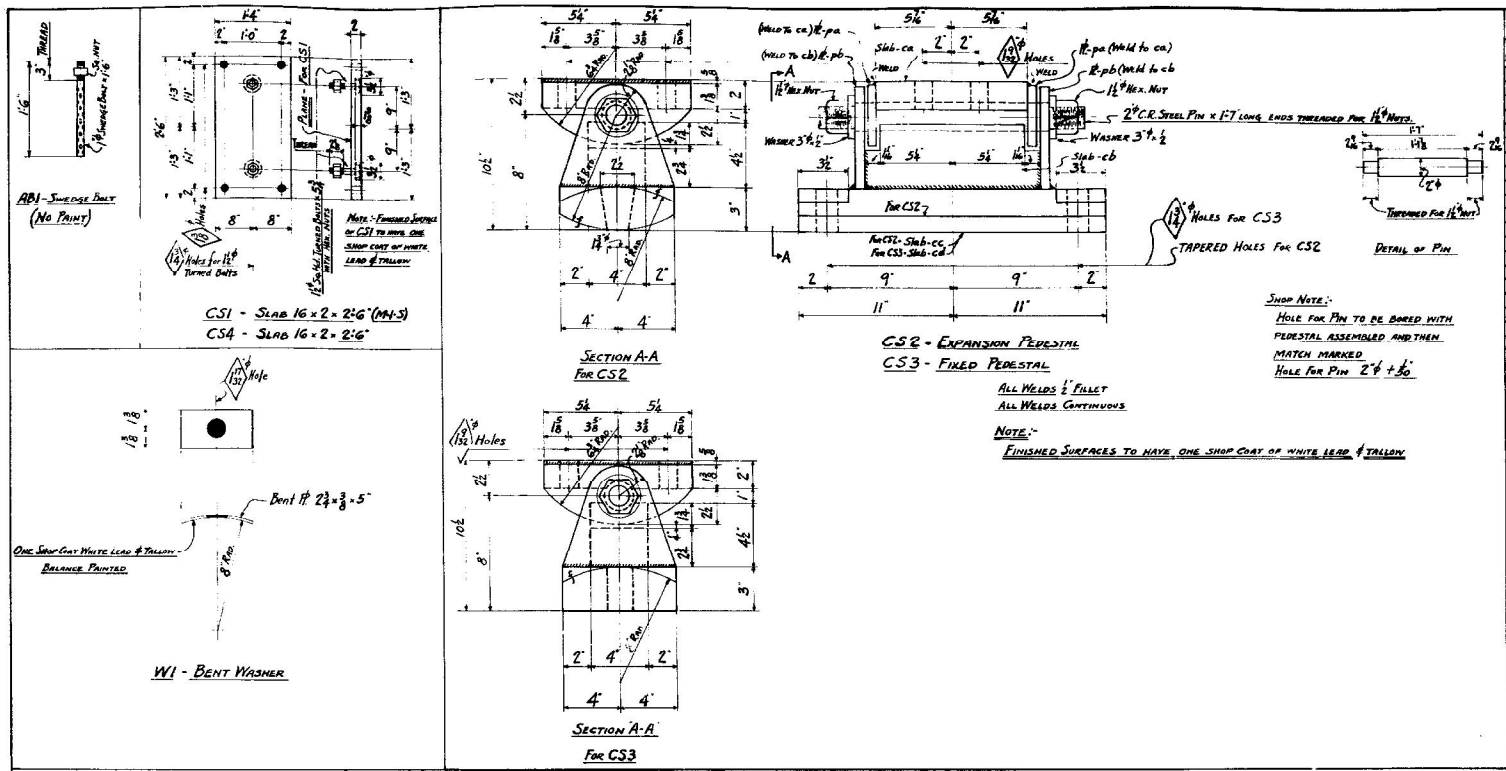
HOLES TO PERMIT HORIZONTAL EXPANSION.

FIELD CONNECTIONS :- RIVETED { EXCEPT FOR RAILING, POSTS P1 + P2, PLATES CP1 + PEDESTALS WHICH SHALL BE BOLTED

ALL STEEL PAINTED, EXCEPT MACHINED SURFACES (WHICH ARE TO BE COATED WITH WHITE LEAD & TALLOW) AND SHOP & FIELD CONTACT SURFACES (WHICH SHALL NOT BE PAINTED)

RIVETS	BETHLEHEM FABRICATORS, INC. BETHLEHEM, PA.
OPEN HOLES	IRVING BRIDGE OVER PUSHAW STREAM OLD TOWN - MAINE
PAINT	STEWART & WILLIAMS AUGUSTA MAINE
REVISIONS	Made by W M Checked by O Date Approved Scale
	S.O.- 7837 SHEET NO. E1

32-148



Bill of Material

No. Req'd.	Mark	Material	Lgth.		Remarks	Ord.	Weight
		16 - Swedge Bolts - AB1					
16		1φ Rods	1	6		S	64
16		1φ Sq. Nuts				S	6
		No Pt.					70
		2 - Slabs - CS1					
		2 - Slabs - CS4					
2		Pl 16" x 2"	2	6	CS1 (M-1-S)	(1-2 1/8) (5-0 1/4)	537
2		Pl 16" x 2"	2	6	CS4	(5-0 1/4)	537
8		1 1/2φ S.H. Turned Bts.		5 3/4	H.H.	4 H.H. 4 Hex.	46
		Paint .4					4
						281 Ea.	1124
		2 - Expansion Pedestal - CS2					
		2 - Fixed Pedestal - CS3					
4	ca	Slab 10 1/2" x 2"	0	10 1/8		3'-8 1/2	235
4	cb	Slab 4" x 4 1/2"	1	0 1/8			240
2	cc	Slab 8" x 3"	1	10	For CS2 (M-1-S)	(8'-3 1/2) (3'-8 1/2)	247
2	cd	Slab Do	1	10	For CS3	3'-8 1/2	277
8	pa	Pl 3 1/8 x 5/8	0	10 1/2		S	38
8	pb	Pl 7 1/8 x 5/8	0	8		S	57
4		2φ C.R. Steel	1	7		O	61
8		Washers 3φ x 1/2				S	7
8		1 1/2φ Hex. Nuts				O	8
		Paint .4					4
		Weld					5
						294 Ea.	1179
8	W1	Bent Pl 2 3/4 x 3/8	0	5		S	11

2384

Rivets
Open holes As Noted
Paint One Shop Coat unless noted

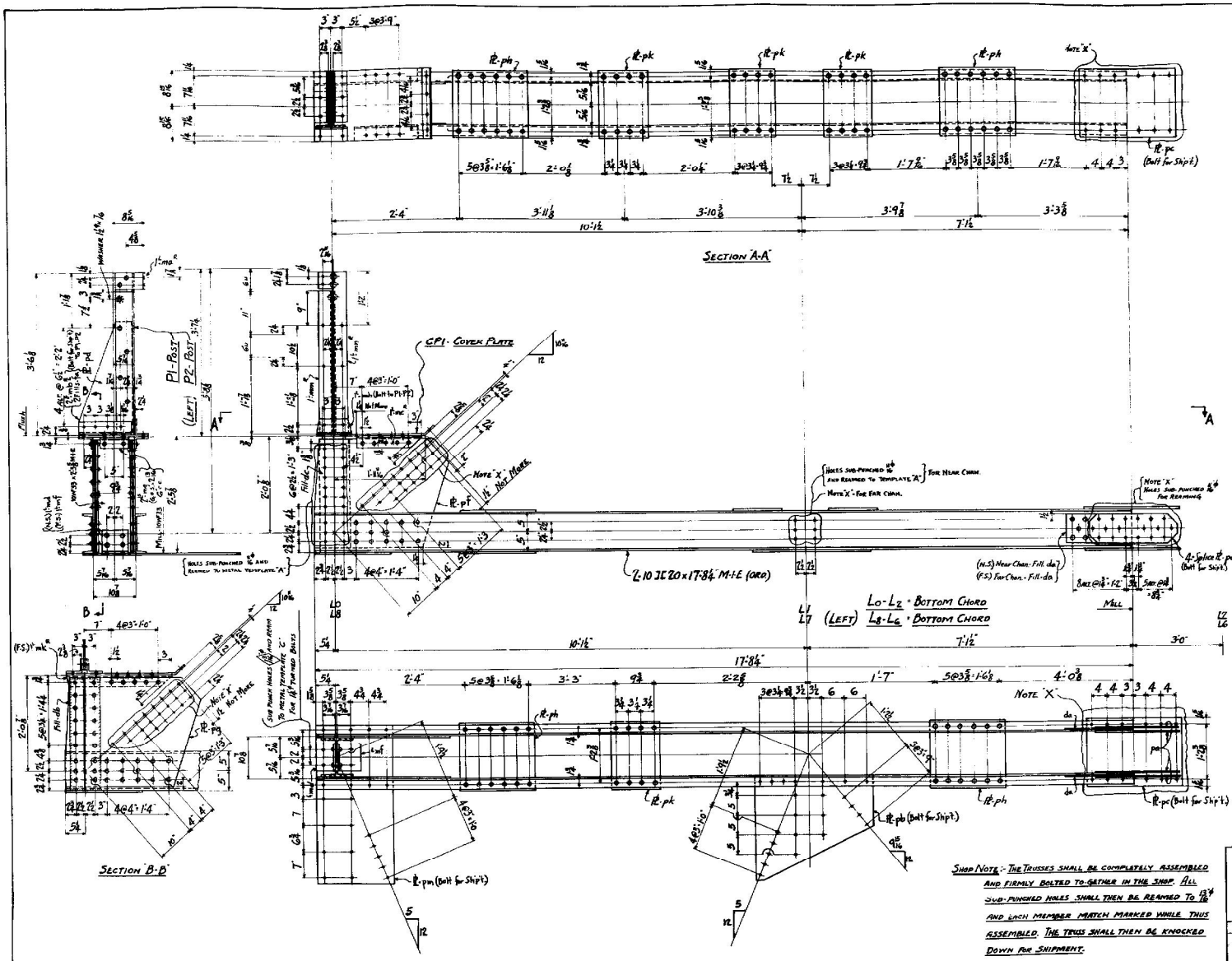
REVISIONS

BETHLEHEM FABRICATORS, INC.
BETHLEHEM, PA.

Irving Bridge over Pushaw Stream
Old Town Maine
Stewart & Williams Augusta Maine

Made by JHS Checked by W.M. Date
Approved Scale

S.O. 7837 SHEET NO. 1



SHOP NOTE:- THE TRUSSES SHALL BE COMPLETELY ASSEMBLED AND FIRMLY BOLTED TO-GETHER IN THE SHOP. ALL SUB-PUNCHED HOLES SHALL THEN BE REAMED TO 13/16" ϕ AND EACH MEMBER MATCH MARKED WHILE THUS ASSEMBLED. THE TRUSS SHALL THEN BE KNOCKED DOWN FOR SHIPMENT.

BILL OF MATERIAL

No. Req'd.	Mark	Material	Lgth.		Remarks	Ord.	Weight.
		4-Bottom Chords			2-L0-L2	2-L8-L6	
8		10 ⌶ 20	17	8¼	M-1-E	17-8¼	2826
16	pa	PL 8 x 3/8	2	0		S	299
8	da	PL 8 x 5/16	1	5¼	M-1-E	S	95
8	pc	PL 17 x 3/8	2	1		30-0	357
4	pb	PL 26¼ x 3/8	2	7¼		S	259
4	pm	PL 19¾ x 5/8	3	4¾		S	563
16	ph	PL 17 x 3/8	1	9		30-0	607
16	pk	PL Do	1	0½		30-0	361
4	pf	PL 28⅝ x 3/8	2	11		S	555
4	pg	PL Do	2	11		S	561
4	md	L 6 x 5 x 3/4	0	7		S	66
4	mf	L 6 x 6 x 3/4	0	7		S	66
4	mc	L 3½ x 3 x 5/16	1	4¼		S	35
4	mk	L Do	2	2½		S	70
4		10WF33	2	5⅝	M-1-E	S	326
8	mg	L 4 x 3 x 3/8	0	7½		S	42
652		Rivs. 3/4 ϕ				S	209
		Paint					30
40		Bolts				S	28
4	db	PL 8 x 3/16	2	5⅜		S	49
4	dc	PL Do	2	5⅜		S	49
							7453
		2-Posts-P1					
		2-Posts-P2					
4	mm	L 5 x 3½ x 3/8	3	1⅛		S	128
4	mn	L Do	3	6⅛		S	145
4	mh	L 4 x 3½ x 3/8	0	8½		S	25
4	ma	L 8 x 4 x 7/16	0	4½		S	26
4	pd	PL 13⅜ x 7/16	2	4½		S	134
8	mb	L 4 x 3½ x 3/8	1	1⅜		S	78
8	fa	PL 2½ x 3/8	0	8½		S	17
4		Washers 1¼ ϕ x 7/16				S	1
28		Rivs. 3/4 ϕ				S	9
		Paint					2
24		Bolts				S	17
							582
							145.5 ea.
4	CP1	PL 17⅞ x 3/8	2	7¾	Bent	S	238
							59.5 ea.

3273

Rivets 3/4 ϕ
Open holes 13/16 ϕ unless noted
Paint One Shop Coat, except for shop & field contact surfaces.

REVISIONS

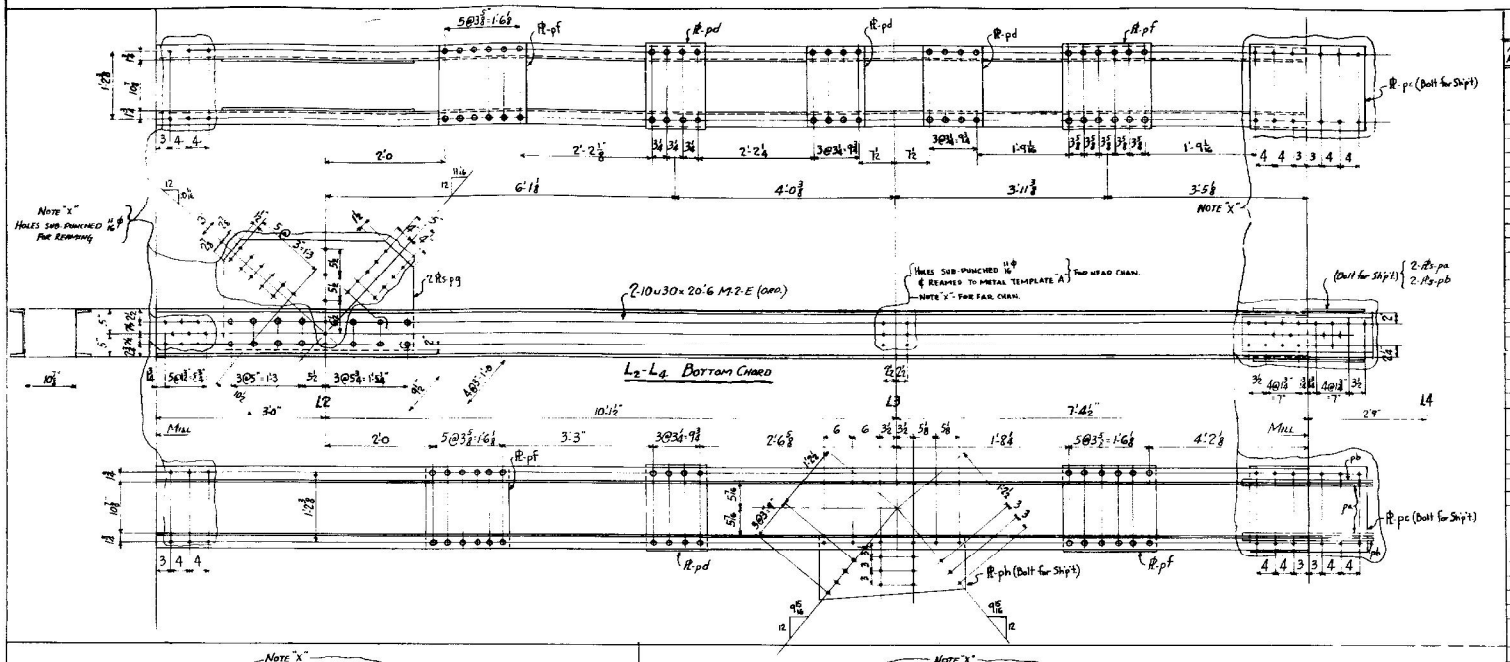
BETHLEHEM FABRICATORS, INC.
BETHLEHEM, PA.

Irving Bridge over Pushaw Stream
Old Town Maine
Stewart & Williams - Augusta, Maine

Made by JHS Checked by W.M. Date
Approved Scale

S.O. 7837 SHEET NO. 2

195-32-150



Shop Note '-' See sheet #2

Bill of Material

No. Req'd	Mark	Material	Lgth.	Remarks	Ord.	Weight
		2- Bottom Chords = L_2-L_4				
4		10 u 30	20	G M-2-E	20-6½	2449
4	pa	Pl 9 x 7/16	2	3½	5	119
4	pb	Pl 8 x 3/8	2	3½	5	89
4	pc	Pl 17 x 3/8	2	1	30-0	178
8	pd	Pl Do	1	0½	30-0	180
8	pf	Pl Do	1	9	30-0	304
4	pg	L 24 x 3/8	3	4½	5	399
2	ph	Pl 13½ x 3/8	2	3½	5	79
210		Rivs. 3/4ϕ			5	69
		Paint				15
16		Bolts			5	11
						3892
		2- Diagonal Members = U_1-L_2				
		2- Diagonal Members = L_6-L_7				
4		10WF26	12	0	0	1230
8		Bolts			5	6
16		Rivs. 3/4ϕ			5	5
		Paint				5
8	ma*	L 3½ x 3½ x 5/16	0	9½	5	57
4	df	Pl 5½ x 3/8	2	7½	5	50
						1355
						338.75 ea.
		2- Diagonal Members = L_2-U_3				
		2- Diagonal Members = L_6-U_5				
4		10WF33	13	4½	0	1749
8	dc	Pl 8 x ½	1	6	5	31
8	dd	Pl Do	1	6	5	31
8	mb*	L 3½ x 3½ x 5/16	1	2⅜	5	62
32		Rivs. 3/4ϕ			5	10
		Paint				8
4	dg	Pl 8 x 9/16	2	1	5	91
8		Bolts			5	6
						2000
						500 ea.

7241

Rivets 3/4ϕ — 12 & unless 16 noted

Open holes

Paint One Shop Coat, Except for Shop & Field Contact Surfaces

REVISIONS

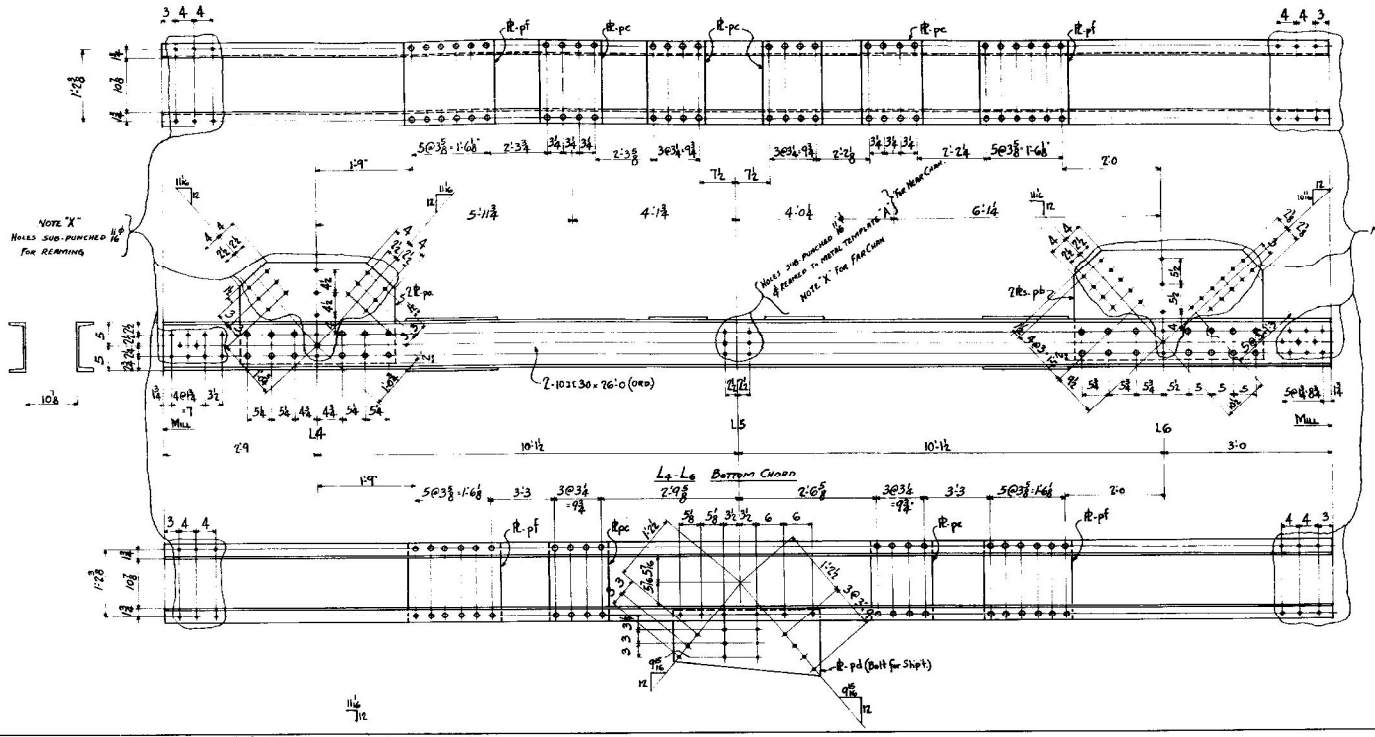
BETHLEHEM FABRICATORS, INC.
BETHLEHEM, PA

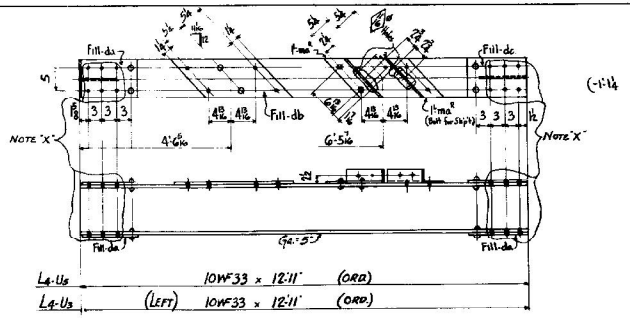
Irving Bridge over Pushaw Stream
Old Town, Maine
Stewart & Williams Augusta, Maine

Made by JHS Checked by WM Date
Approved Scale

S.O. 7837 SHEET NO. 3

32-154





SHOP NOTE : SEE SHEET #2

BILL OF MATERIAL

No Req'd	Mark	Material	Length	Remarks	Ord	Weight
		2- Bottom Chord L4-L6				
4		10" 30#	26 0	MLE	26-0½	3113
4	pa	Pt 22 x ⅜	2 9½		5	298
4	pb	Pt 24 x ⅜	3 4½		5	400
8	pf	Pt 17 x ⅜	1 9		5	304
12	pc	Pt Do	1 0½		5	271
244		Rivs ⅞ ø			5	78
		Paint + 4 Bolts			5	21
2	pd	Pt 13½ x ⅜	2 8½		5	82
						+307
		2- Diagonal Member = L4-U5				
		2- Diagonal Members = L4-U4				
4		10WF33	12 11		0	1679
16	da	Pt 8 x ⅜	1 0		5	53
8	ma*	L 3½ x 3½ x 5/16	1 7⅛		5	53
48		Rivs ⅞ ø			5	15
		Paint + 8 Bolts			5	14
4	db	Pt 9 x 5/16	2 1		5	18
						1931
						483 ea.

64 28

Rivets ⅞ ø	BETHLEHEM FABRICATORS, INC. BETHLEHEM, PA.
Open Holes 13/16 unless 16 noted	Irving Bridge over Pushaw Stream Old Town Maine
Paint One Shop Coat Except for Shop & Field Contact Surfaces.	Stewart & Williams - Augusta Maine
REVISIONS	Made by JHS Checked by W.M. Date
	Approved Scale
	S.O. 7837 SHEET NO. 4

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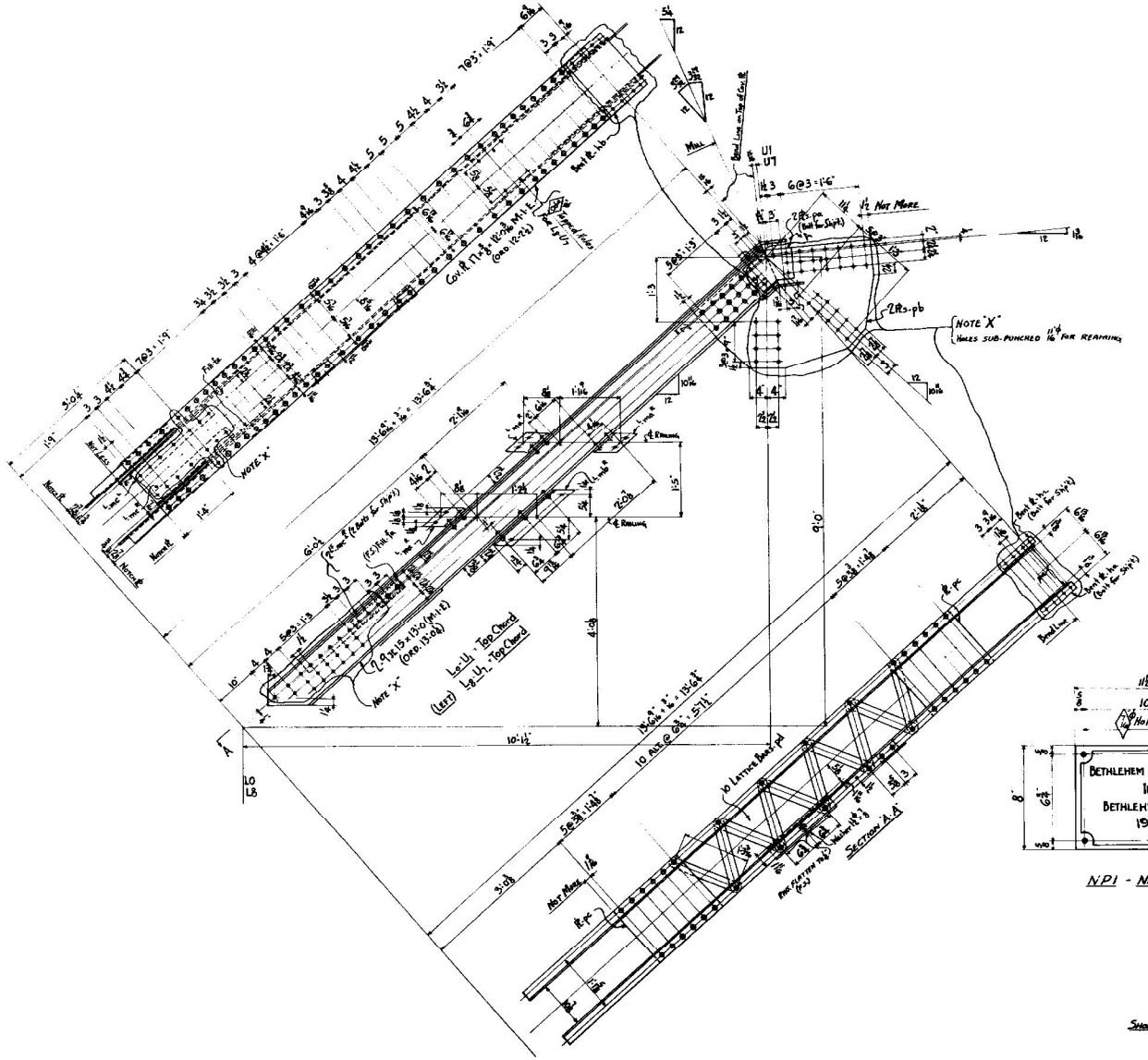

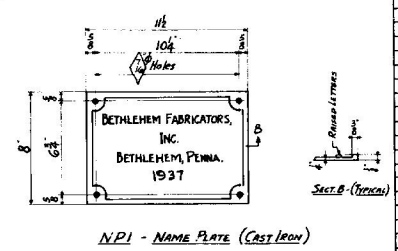

NP1 - NAME PLATE (CAST IRON)

SHOP NOTE :- SEE SHEET #2

BILL OF MATERIAL

No. Reqd.	Mark	Material	Length		Remarks	Ord.	Weight
		2-Top Chords = L_0-U_1					
		2-Top Chords = L_8-U_7					
8		9 u 15	13	0	M-1-E	13-0½	1505
4		PL 17×⅜	12	0¾	M-1-E	12-2½	1039
8	pb	PL 30×⅜	3	6½		S	843
8	ha	PL 2¼×5/16	1	0	Bent	S	18
4	hb	PL 12×5/16	1	5	Bent	S	71
8	pc	PL 16×⅜	1	8		S	273
40	pd	PL 2¼×7/16	1	5⅞		20-0	194
8	pa	PL 9¼×⅜	1	0½		S	65
12	ma	L 4×3×5/16	0	10½		S	42
4	mb	L 3½×3×5/16	1	10¼		S	41
8	mc	L 3½×3½×⅜	2	0½		S	132
8	fa	PL 2½×7/16	1	3		S	36
4		Washers 1½ φ ⅞				S	1
560		Rivs. ¾ φ				S	179
64		Bolts ¾ φ				S	45
		PAINT A					18
							4502
							1125.5 sq.
		2-NAME PLS - NP1					20

4522

RIVET: ¾ φ
OPEN HOLES 13/16 φ UNLESS NOTED
PAINT ONE SHOP COAT EXCEPT FOR SHOP & FIELD CONTACT SURFACES

REVISIONS

BETHLEHEM FABRICATORS, INC.
BETHLEHEM, PA.

IRVING BRIDGE OVER PUSHAW STREAM
OLD TOWN MAINE
STEWART & WILLIAMS - AUGUSTA, MAINE.

Made by JHS Checked by W.M. Date
Approved Scale

S.O.- 7837 SHEET NO. 5

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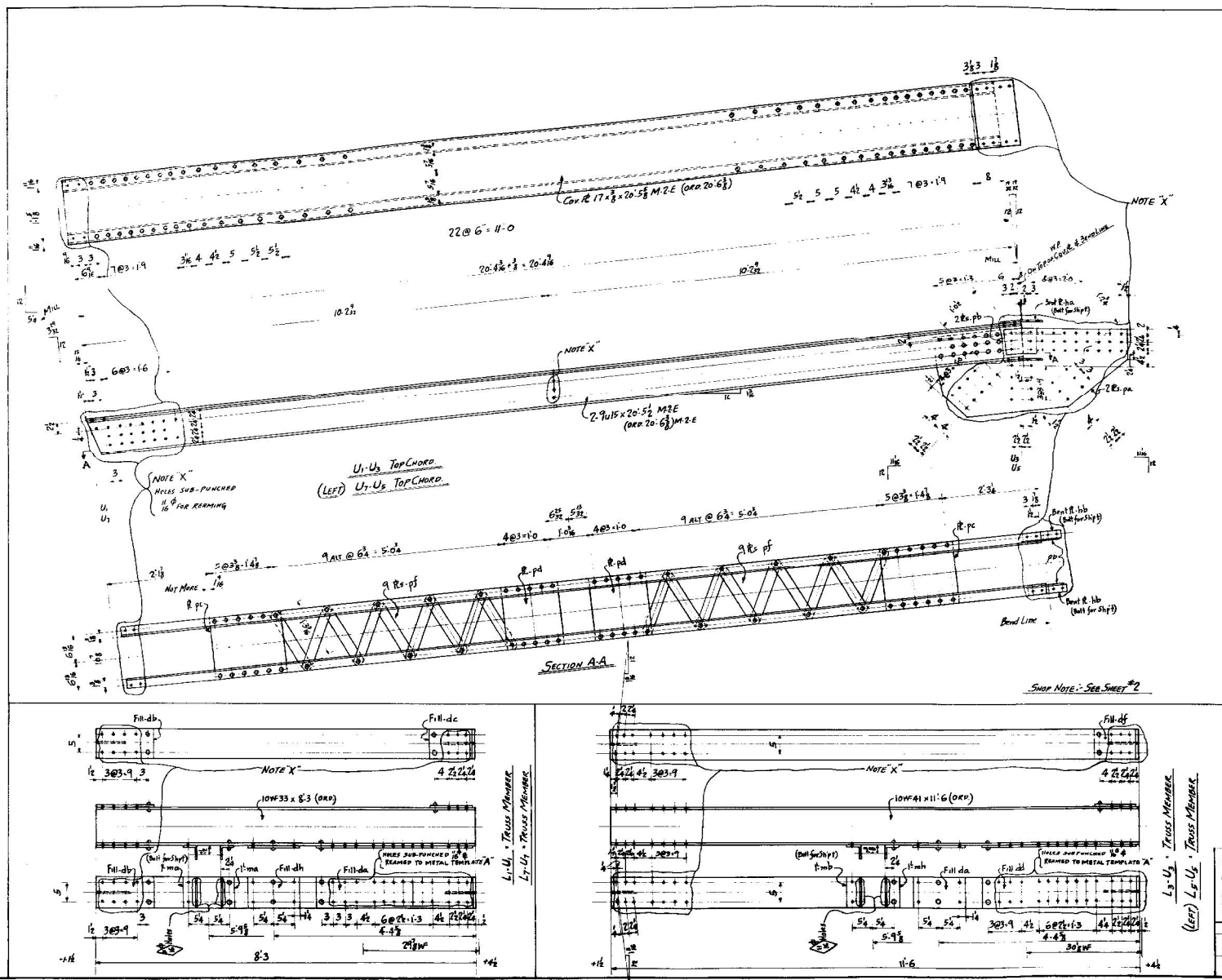

BILL OF MATERIAL

No. Req'd	Mark	Material	Length	Remarks	Ord	Weight
		2-Top Chords = U1-U3				
		2-Top Chords = U7-U5				
8		9u15	20 5 1/2	M.2.E	20'-6 3/8	2446
4		PL 17 x 3/8	20 5 5/8	M.2.E	20'-6 3/8	1777
8	pa	PL 24 x 3/8	4 3		5	881
8	pb	PL 7 1/2 x 3/8	0 3 1/2		5	52
4	ha	PL 13 x 5/16	1 5		5	75
8	hb	PL 2 1/4 x 5/16	1 0		5	18
8	pc	PL 16 x 3/8	1 8		5	273
8	pd	PL Do	1 3		5	204
72	pf	PL 2 1/4 x 7/16	1 5 7/16		20-0	350
768		Rivs. 3/4 φ			5	246
32		Bolts 3/4 φ			5	22
		Paint .4				25
						6369
						1592.2 ea.
		2-Truss Members = L1-U1				
		2-Truss Members = L7-U7				
4		10WF33	8 3		0	1081
4	da	PL 8 x 1/2	3 4 1/2		5	177
8	db	PL 8 x 1/8	1 3		5	33
4	dc	PL 8 x 1/2	0 11 3/4		5	51
8	ma	L 3 1/2 x 3 1/2 x 5/16	0 8		5	38
48		Rivs. 3/4 φ			5	15
		Paint .4				5
4	dh	PL 8 x 9/16	1 1		5	65
8		Bolts 3/4 φ			5	6
						1472
		2-Truss Members = L3-U3				368# ea.
		2-Truss Members = L5-U5				
4		10WF41	11 6		0	1867
4	dd	PL 8 x 3/8	3 4 1/2		5	133
4	df	PL Do	0 11 3/4		5	39
4	dg	PL 8 x 7/16	1 1		5	50
8	mb	L 3 1/2 x 3 1/2 x 5/16	0 8		5	38
32		Rivs 3/4 φ			5	10
8		Bolts 3/4 φ			5	6
		Paint				8
						2151

9992

Rivets 3/4 φ
Open holes 13/16 φ unless noted
Paint: One Shop Coat, except for shop & field contact surfaces.

REVISIONS

BETHLEHEM FABRICATORS, INC.
BETHLEHEM, PA.

Irving Bridge over Pushaw Stream
Old Town, Maine.
Stewart & Williams Augusta, Maine.

Made by JHS Checked by W.M. Date
Approved Scale

S.O. 7837 SHEET NO. 6

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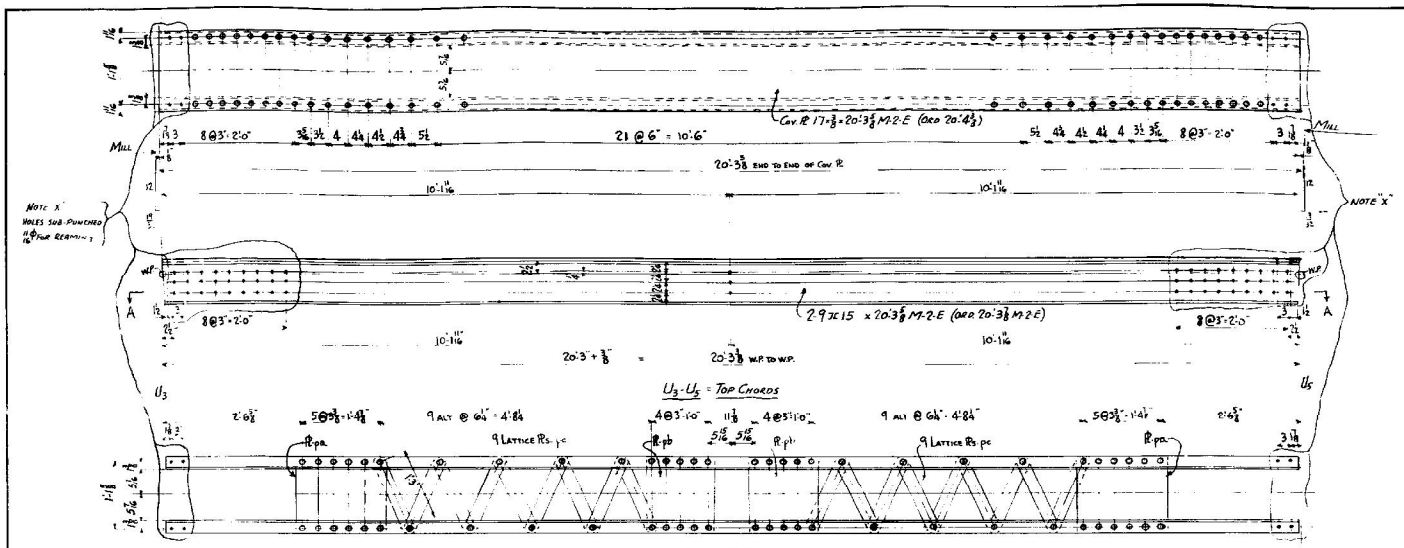
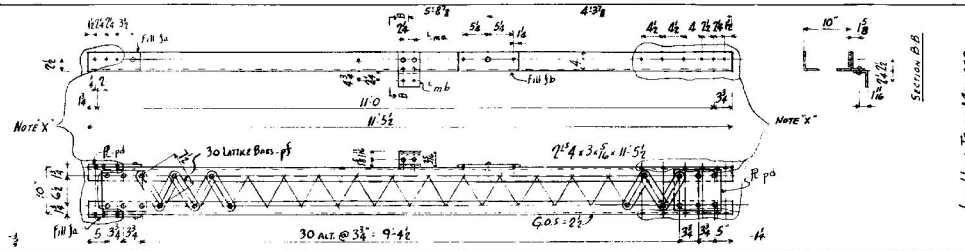
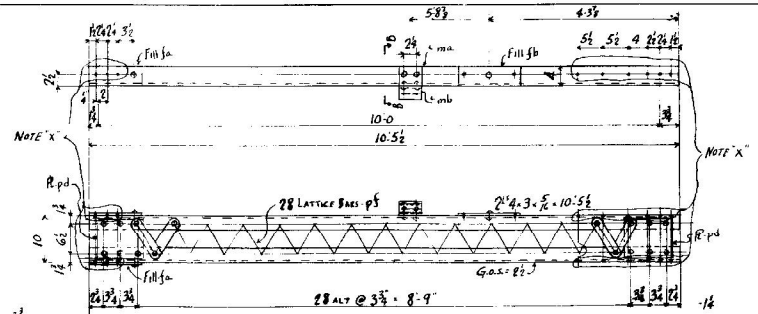






SHOP NOTE :- SEE SHEET #2

BILL OF MATERIAL

No. Reqd	Mark	Material	Length	Remarks	Ord.	Weight
		2 - Top Chords U3-U5				
4		9 x 15	20'-3 3/8"	M-2-E	20'-4 3/8"	1209
2		Pl 17 x 3/8	20'-3 3/8"	M-2-E	20'-4 3/8"	881
4	pa	Pl 16 x 3/8	1'-3"		3'	136
4	pb	Pl 20	1'-3"		3'	102
36	pc	Pl 2 1/4 x 5/16	1'-5 1/2"		20-0	114
320		Rivs. 3/4ϕ			3'	102
		1 Paint - 4				10
						2614
		2 - Truss Members - L4 - U4				
4		L 4 x 3 x 5/16	11'-3 1/2"		5'	323
4	fa	Pl 4 x 3/8	0'-11"		5'	8
2	fb	Pl 4 x 7/16	1'-0"		5'	4
4	pd	Pl 4 1/2 x 7/16	0'-10 1/2"		5'	16
60	pf	Pl 2 1/4 x 5/16	0'-5 1/2"		5'	129
2	ma	Pl 3 x 5/16	0'-7 1/2"		5'	5
2	mb	L 3 1/2 x 3 x 5/16	0'-8 1/2"		5'	5
48		Rivs. 3/4ϕ			5'	31
		Paint - 4				2
						558
		2 - Truss Members - L2 - U4				
		2 Truss Members - L6 - U6				
8		L 4 x 3 x 5/16	10'-5 1/2"		5'	599
8	fa				5'	37
4	fb				5'	26
8	pd				5'	71
112	pf				5'	225
4	ma				5'	11
4	mb				5'	10
184		Rivs. 3/4ϕ			5'	59
		Paint - 4				4
						1042
						2605 lbs.

4214

RIVETS 3/4ϕ
OPEN HOLES 13/16ϕ UNLESS NOTED
PAINT ONE SHOP COAT EXCEPT FOR SHOP & FIELD CONTACT SURFACES.

REVISIONS

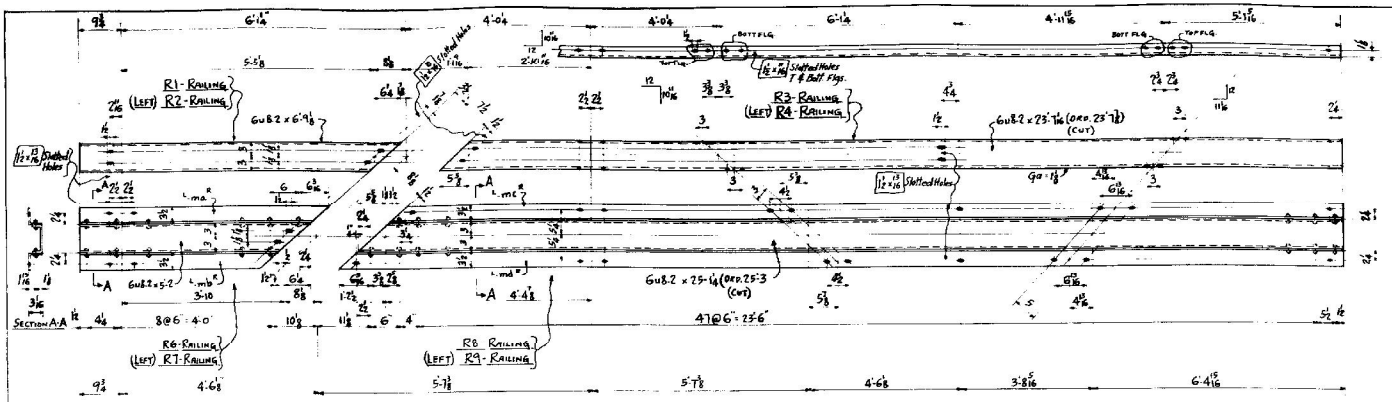
BETHLEHEM FABRICATORS, INC.
BETHLEHEM, PA.

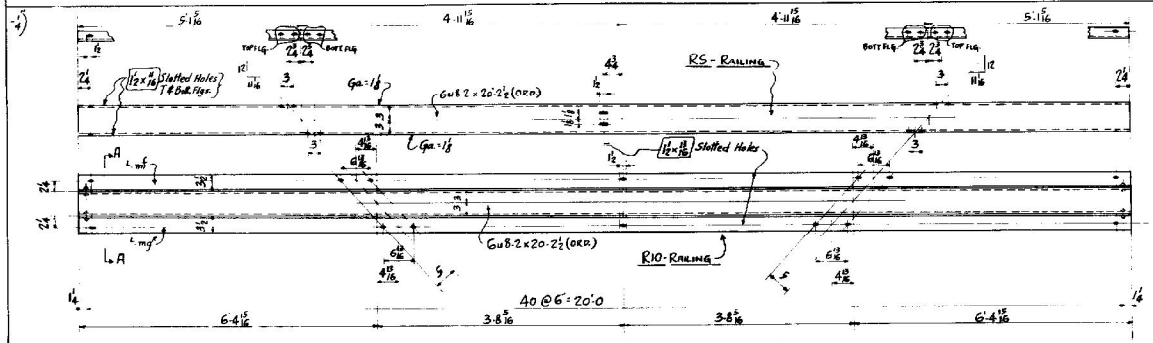
IRVING BRIDGE OVER PUSHAW STREAM
OLD TOWN, MAINE
STEWART & WILLIAMS - AUGUSTA, MAINE.

Made by JHS Checked by W.M. Date
Approved Scale

S.O. 7837 SHEET NO. 7

32-155





Bill of Material

No. Reqd.	Mark	Material	Length	Remarks	Ord.	Weight
2	R1	6u8.2	6' 9⅛		5	110
2	R2	Do	6' 9⅛		5	110
2	R3	Do	23' 7 1/16		23'7⅞	382
2	R4	Do	23' 7 1/16		23'7⅞	382
2	R5	Do	20' 2½		0	331
		Paint				
		2-Railings-R6				
		2-Railings-R7				
4		6u8.2	5' 2		6'3¼	161
4	ma^R	L 3½x3x5/16	5' 5 3/16		5	144
4	mb^R	L Do	4' 7½		5	129
84		Rivs. ⅝φ			5	16
		Paint .4				2
						443
						110-Tea
		2-Railings-R8				
		2-Railings-R9				
4		6u8.2	25' 1¼		25'3	814
4	mc^R	L 3½x3x5/16	24' 6½		5	645
4	md^R	L Do	25' 5 3/16		5	668
404		Rivs ⅝φ			5	78
		Paint .4				9
						2214
						553-Sq.
		2-Railings-R10				
2		6u8.2	20' 2½		0	331
2	mf	L 3½x3x5/16	20' 2½		5	266
2	mg	L Do	20' 2½		5	266
164		Rivs ⅝φ			5	32
		Paint .4				3
						898

4870

Shop Note:-

All Slotted Holes to have 1½φ Dimen. Horizontal

Rivets ⅝φ
Open holes As Noted
Paint One Shop Coat

BETHLEHEM FABRICATORS, INC.
BETHLEHEM, PA.

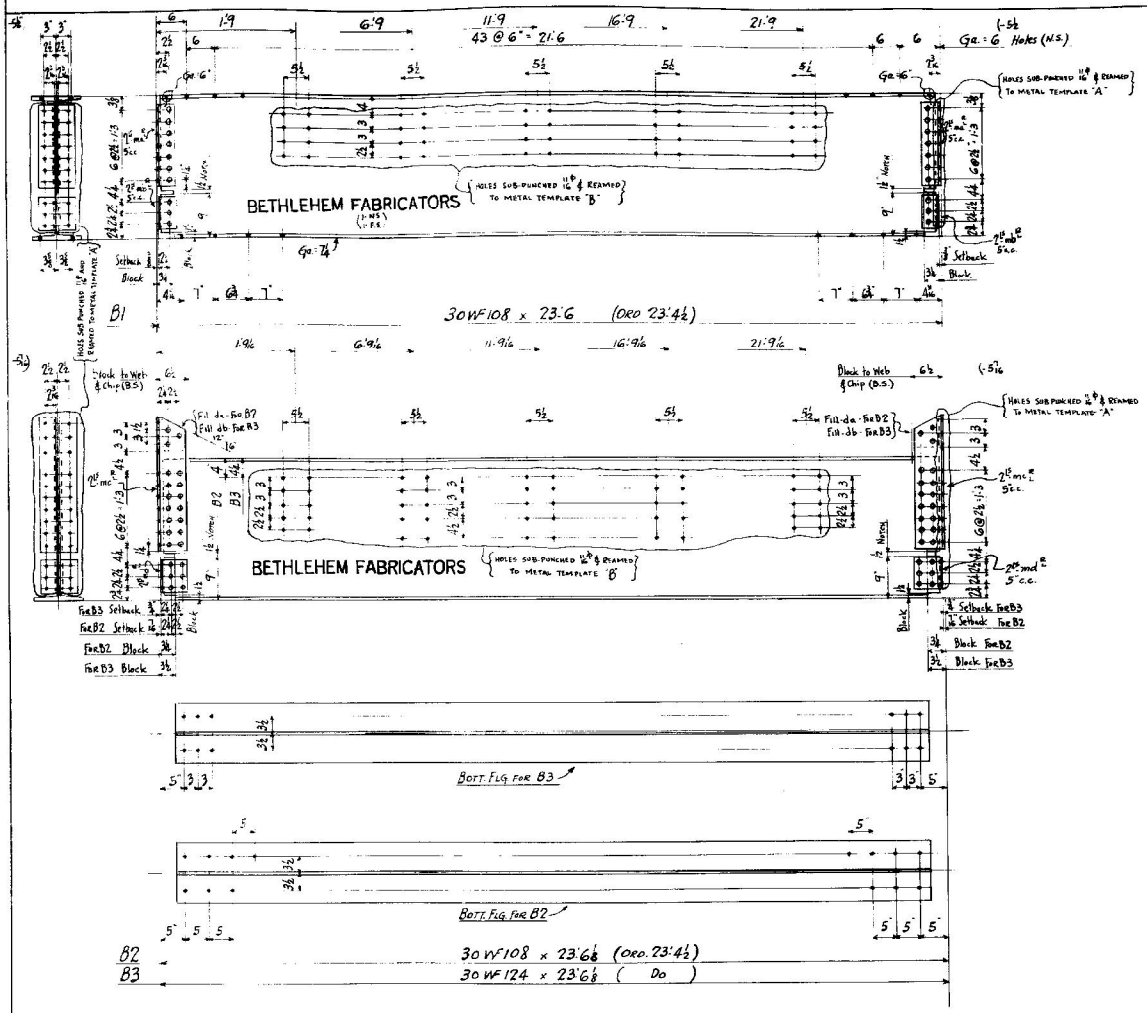
Irving Bridge over Pushaw Stream
Old Town, Maine
Stewart & Williams - Augusta, Maine

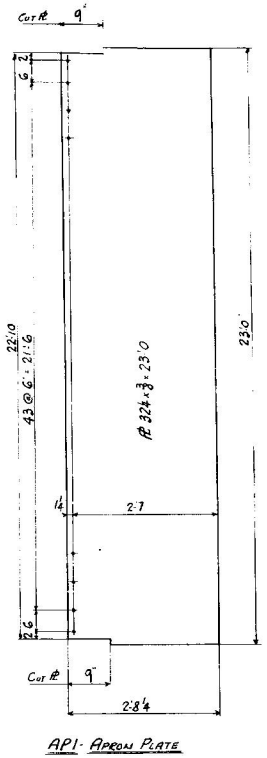
REVISIONS

Made by JHS Checked by W.M. Date
Approved Scale

S.O.- 7837 SHEET NO. 8

32-156





AP1 - APRON PLATE

BILL OF MATERIAL

No. REQD	MARK	MATERIAL	LENGTH	REMARKS	ORD.	WEIGHT
		2-BEAMS - B1				
2		30 WF 108	23 4½		0	5040
8	ma^R	L 4 x 3½ x 7/16	1 5¾		S	123
8	mb^R	L Do	0 7¼		S	50
40		RIVS. ¾ϕ			S	13
		PAINT 4				21
						5247
		2-BEAMS - B2				
		2-BEAMS - B3				
2		30 WF 108	23 4½		0	4955
2		30 WF 124	23 4½		0	5693
16	mc^R	L 6 x 3½ x 7/16	2 4		S	493
16	md^R	L Do	0 7¼		S	127
4	da	PL 5 x 9/16	0 6	FOR B2	S	19
4	db	PL 5 x 5/8	0 6	FOR B3	S	20
184		RIVS. ¾ϕ			S	59
		PAINT 4				45
						11411
						2853 ea.
2	AP1	PL 32¼ x ⅜	23 0		S	1895

18553

RIVETS ¾ϕ
OPEN HOLES 13 ϕ UNLESS 16 NOTED
PAINT ONE SHOP COAT EXCEPT FOR SHOP & FIELD CONTACT SURFACES

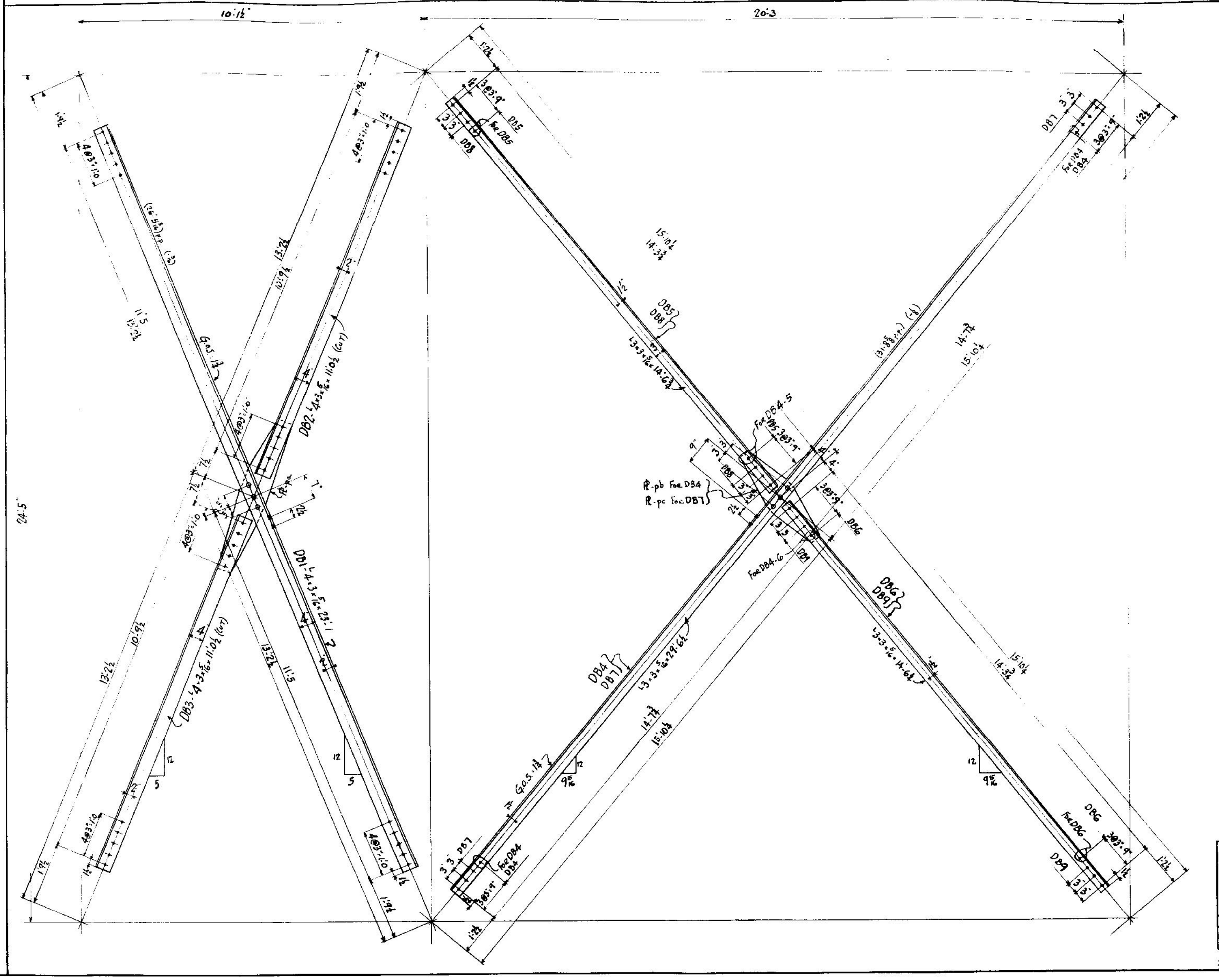
REVISIONS

BETHLEHEM FABRICATORS, INC.
BETHLEHEM, PA.

IRVING BRIDGE OVER PUSHAW STREAM
OLD TOWN, MAINE
STEWART & WILLIAMS - AUGUSTA, MAINE

Made by JHS Checked by W.M. Date
Approved Scale

S.O.- 7837 SHEET NO. 9



Bill of Material

No. Reqd.	Mark	Material	Length	Remarks	Ord.	Weight.
		2-Diagonals-DB1				
2		L 4×3×5/16	23 1		5	331
2	pa	℞ 7½×⅜	3 6		5	37
6		Rivs. ¾ϕ			5	2
		Paint +				1
						371
		2 Diagonals-DB4				
		One-Do-DB7				
2		L 3×3×5/16	29 6½	DB4	5	358
One		Do	29 6½	DB7	5	179
2	pb	℞ 8½×⅜	1 5	For DB4	5	30
One	pc	℞ Do		For DB7	5	16
9		Rivs. ¾ϕ			5	3
		Paint +				2
						588
2	DB3	L 4×3×5/16	11 0½		5	160
2	DB2	L Do	11 0½		5	160
2	DB5	L 3×3×5/16	14 6½		5	179
2	DB6	L Do	14 6½		5	179
One	DB8	L Do	14 6½		5	88
One	DB9	L Do	14 6½		5	88
		Pf				

1813

Rivets ¾ϕ
Open holes 13/16 ϕ
Paint One Shop Coat, Except for Shop & Field Contact Surfaces

REVISIONS

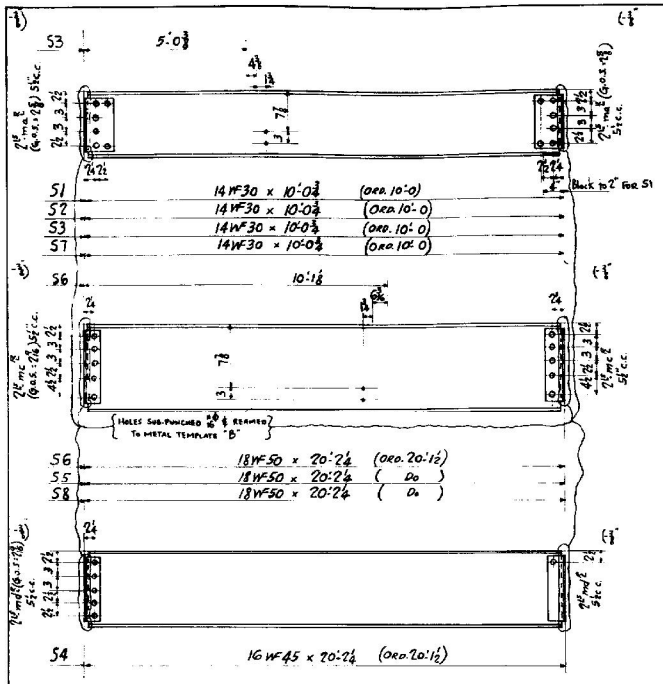
BETHLEHEM FABRICATORS, INC.
BETHLEHEM, PA.

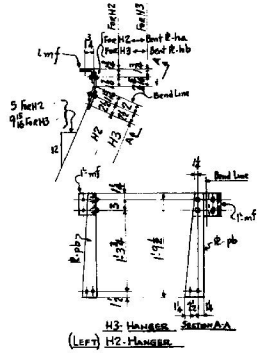
Irving Bridge over Pushaw Stream
Old Town, Maine
Stewart & Williams - Augusta, Maine

Made by JHS Checked by W.M Date
Approved Scale

S.O. 7837 SHEET NO. 10

32-15





BILL OF MATERIAL

No. Each	Mark	Material	Length	Remarks	Ord.	Weight
		4 - BEAMS - 51				
		2 - BEAMS - 53				
		2 - BEAMS - 52				
		2 - BEAMS - 57				
10		14 WF 30	10 0		0	2996
40	mk	L 6 x 4 x ⅜	0 11½		5	465
120		Rivs. ¾ ϕ			5	36
		Paint - 4				14
						3513
						351.3 cw
		3 - BEAMS - 56				
		3 - BEAMS - 55				
		3 - BEAMS - 58				
9		18 WF 50	20 1½		0	7056
36	mk	L 4 x 3½ x ⅜	1 3½		5	415
90		Rivs. ¾ ϕ			5	29
		Paint - 4				38
						7538
						753.8 cw
		6 - BEAMS - 54				
6		16 WF 45	20 1½		0	5435
24	mk	L 4 x 3½ x ⅜	1 1½		5	241
60		Rivs ¾ ϕ			5	19
		Paint - 4				23
						5718
		2 - HANGER - H2				
		3 - HANGER - H3				
5	pb	PL 5 x ⅝	1 9½		5	38
2	ha	PL 5½ x ⅝	0 6⅞	Bent - H2	5	6
3	hb	PL Do	0 6⅞	Bent - H3	5	10
5	mk	L 3 x 3 x ⅝	0 5½		5	13
20		Rivs. ¾ ϕ			5	6
		Paint - 4				0
						73

18842

Rivets ¾ ϕ
Open Holes 13/16 ϕ unless noted
Paint One Shop Coat, except for Shop & Field Contact Surfaces.

REVISIONS
No. 1 H2 & H3
No. 2 H3

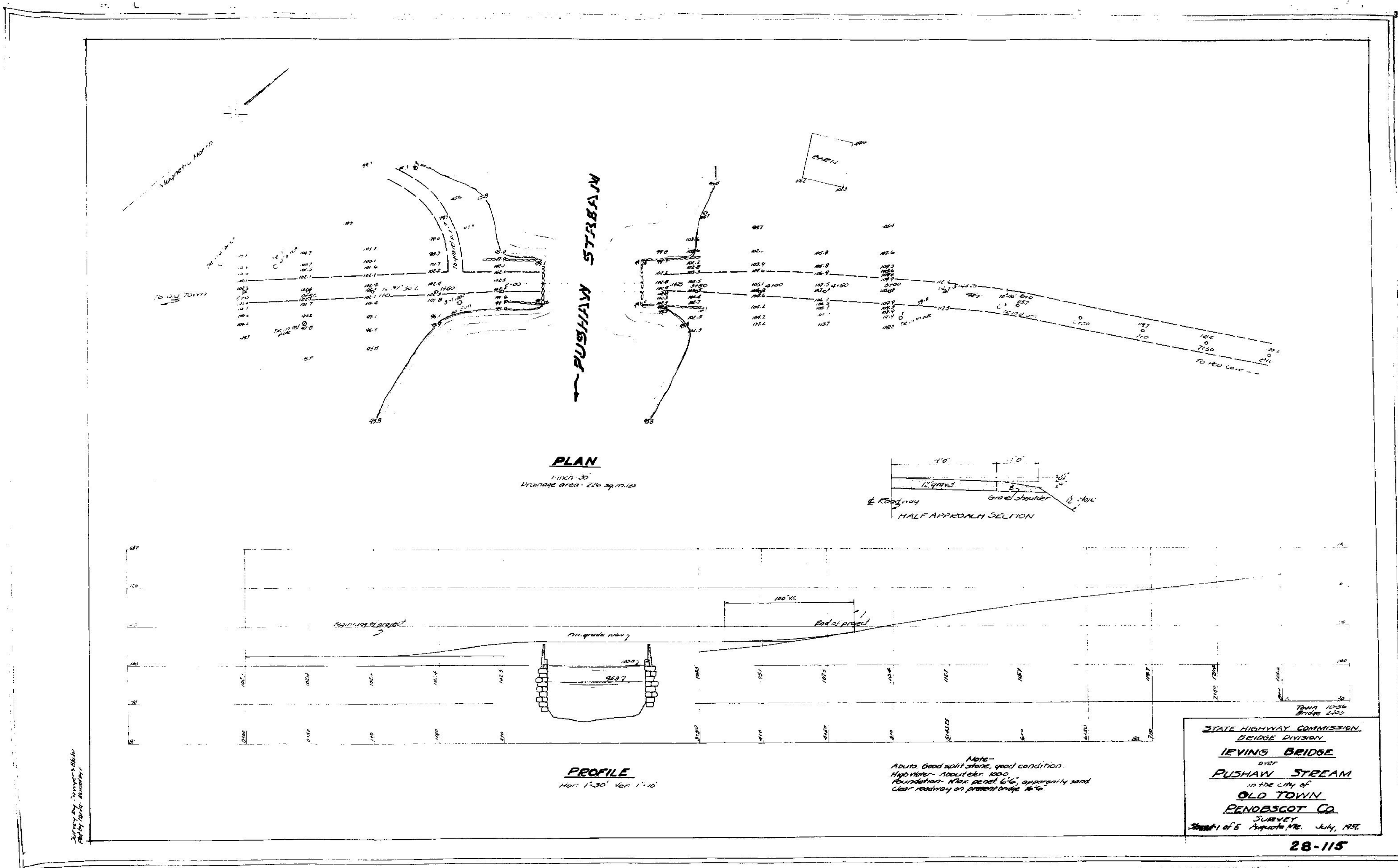
BETHLEHEM FABRICATORS, INC.
BETHLEHEM, PA

IRVING BRIDGE over PUSHAW STREAM
OLD TOWN, MAINE
STEWART & WILLIAMS - AUGUSTA, MAINE

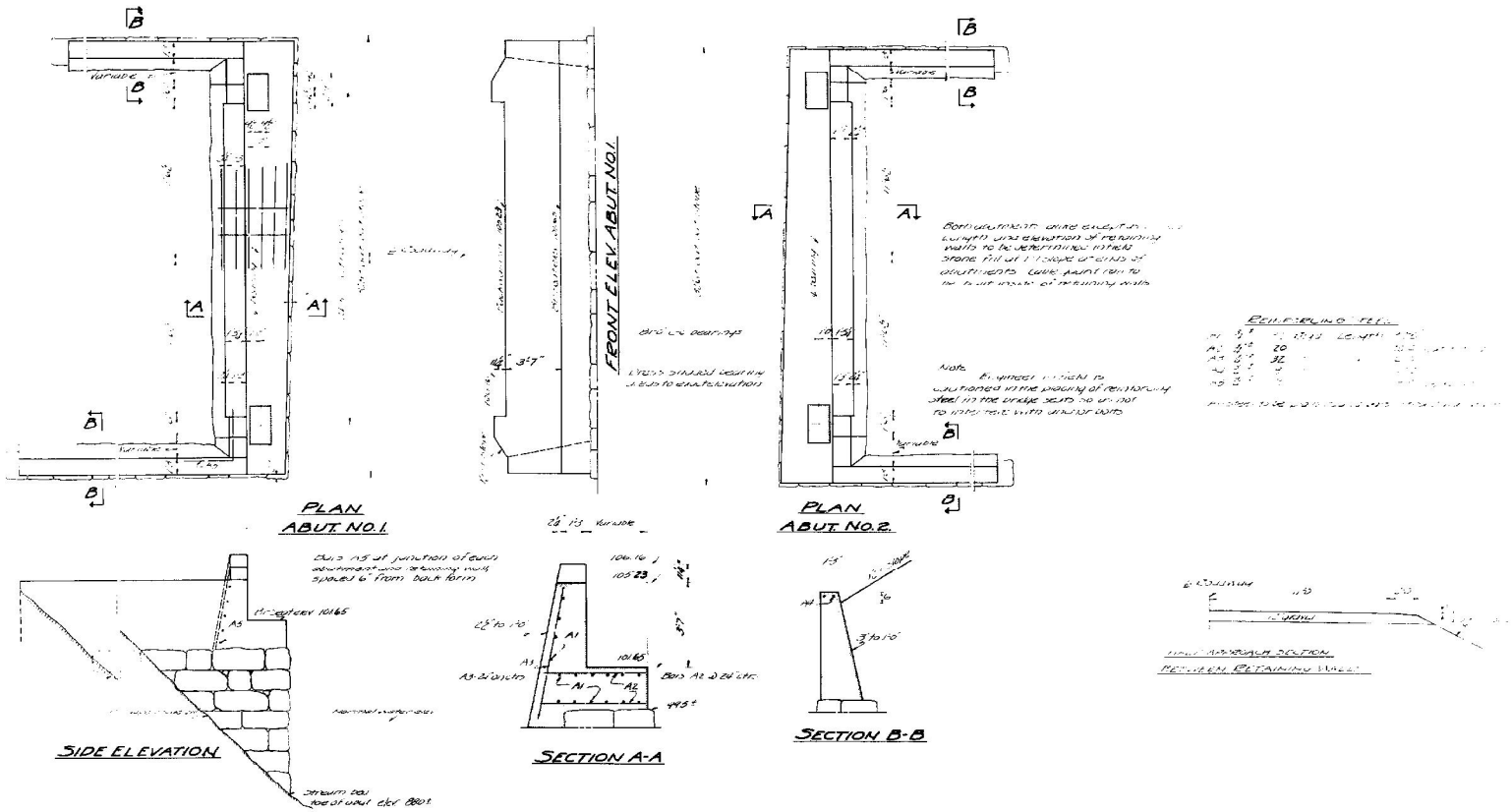
Made by JHS Checked by W.H. Date
Approved Scale

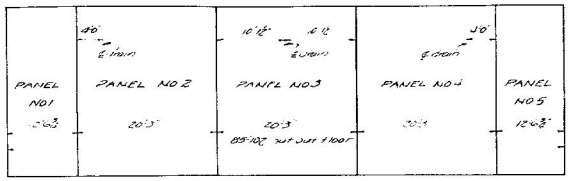
S.O. 7837 SHEET NO. 11

OCT 9 1937 32

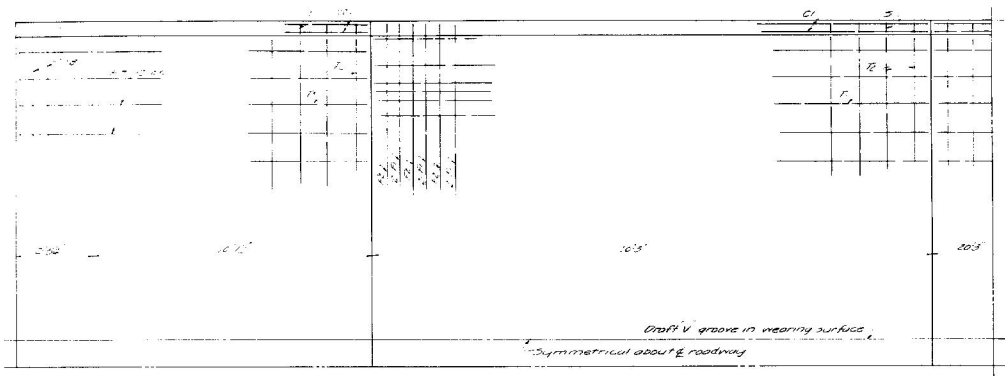


Magnetic North
To Old Town
PUSHAW STREAM
BARN
PLAN
1 inch = 30'
Drainage area - 22.6 sq. miles
HALF APPROACH SECTION
℄ Roadway
12' gravel
Gravel Shoulder
Beginning of project
End of project
100' V.C.
Fin. grade 106.0
PROFILE
Hor: 1"=30' Ver: 1"=10'
Note-
Abuts. Good split stone, good condition.
High Water - About elev. 100.0
Foundation - Max. penet. 6'6", apparently sand.
Clear roadway on present bridge 16'6".
Town 10.56
Bridge 2.205
STATE HIGHWAY COMMISSION
BRIDGE DIVISION
IRVING BRIDGE
over
PUSHAW STREAM
in the City of
OLD TOWN
PENOBSCOT CO.
SURVEY
Sheet 1 of 5 Augusta, Me. July, 1951
28-115
0 1 2 3 4 5 INCHES


PLAN
ABUT. NO. 1.
FRONT ELEV. ABUT. NO. 1.
PLAN
ABUT. NO. 2.
SIDE ELEVATION
SECTION A-A
SECTION B-B
REINFORCING STEEL
Note
Engineer intends to cautioned in the placing of reinforcing steel in the bridge seats so as not to interfere with anchor bolts
Bars A5 at junction of each abutment and retaining wall spaced 6" from back form
Bridge elev. 101.65
Normal water elev.
Stream bed toe of wall elev. 880±
Bars A2 @ 24" ctrs.
Variable
Bridge bearings
Cross shaded bearing leads to exact elevation
Both abutments alike except in length and elevation of retaining walls to be determined in field
Stone fill at 1:1 slope at ends of abutments. Cable guard rail to be built inside of retaining walls
Reinforcing steel
Footing to be placed in dry
Section through retaining wall
STATE HIGHWAY COMMISSION
BRIDGE DIVISION
IRVING BRIDGE
over
PUSHAW STREAM
in the city of
OLD TOWN
PENOBSCOT COUNTY
SUBSTRUCTURE
Sheet 2 of 5 Augusta Me June 1937
28-116

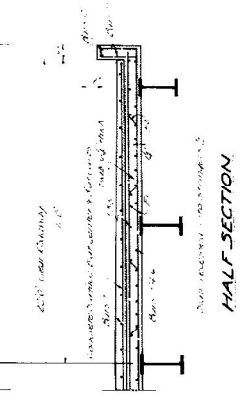


Panels 2-3-4 alike
Panels 1-5 alike

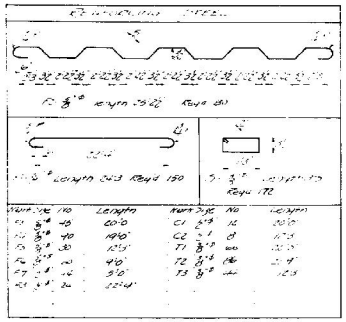


HALF PLAN PANELS 1-5

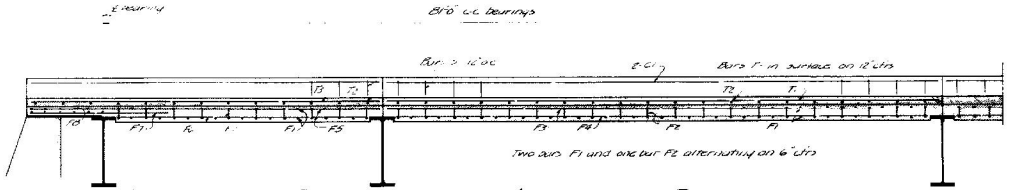
HALF PLAN PANELS 2-3-4



HALF SECTION

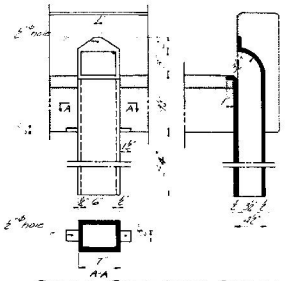


All reinforcing steel to be plain round bars, structural steel, dimensions are to ℄ of bars



LONGITUDINAL SECTION
PANELS 1-5

LONGITUDINAL SECTION
PANELS 2-3-4



DETAIL CAST IRON DRAIN
6 Required
3 drains in each curb. For location see elsewhere on this sheet.

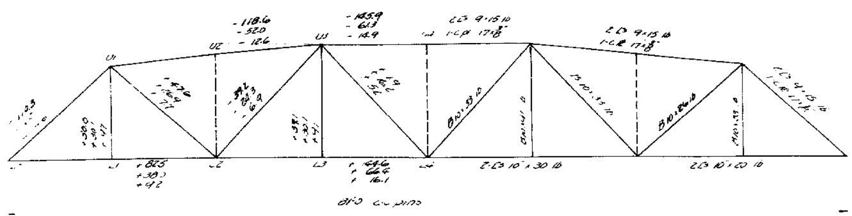
Plan by
Checked by

Town
Bridge

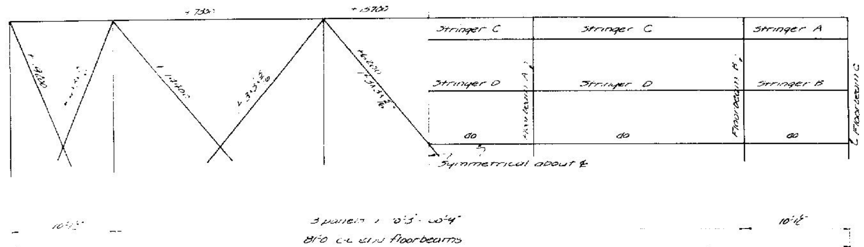
STATE HIGHWAY COMMISSION
BRIDGE DIVISION
IRVING BRIDGE
over
PUSHAW STREAM
in the City of
OLD TOWN
PENOBSCOT COUNTY
FLOOR DETAILS
Sheet 3 of 5 Augusta, Me. June 1937

28-117

0 1 2 3 4 5 INCHES

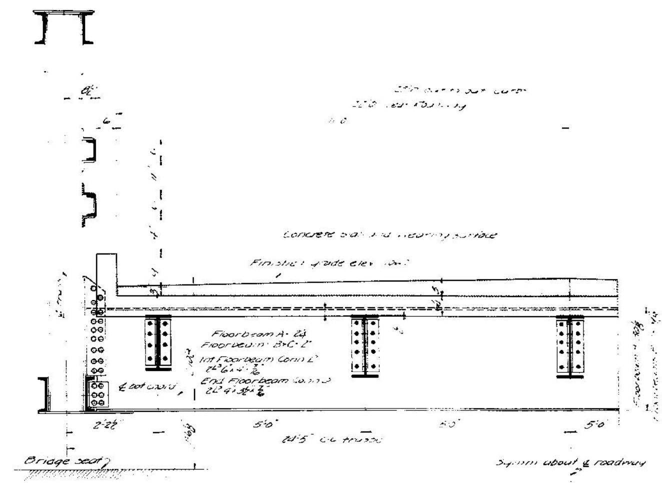


ELEVATION TRUSS



HALF PLAN LOWER LATERALS

HALF FLOOR PLAN



HALF TRANSVERSE SECTION

NOTES

SPECIFICATIONS - Maine State Highway Commission Specifications for Steel Highway Bridges

LIVE LOAD - H15

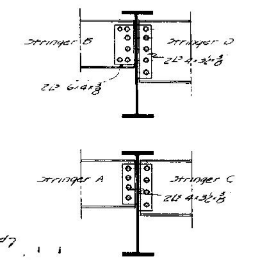
IMPACT $\frac{50}{L+125}$

WIND LOAD - 50#/□' on 1½ times area of structure as seen in elevation

SHIMS - Use shims between stringer connections and Floorbeam web

RIVETS - ¾" except ⅝" in ...

Field connections of main members to be subpunched and reamed to ...

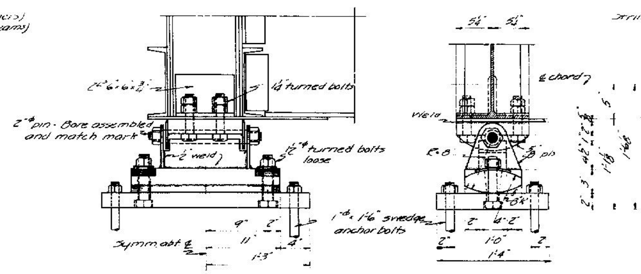


STRINGER DETAILS

Floor System	D.L Moment	LL+I Moment	Total Moment	Section
Stringer A	87.4	449.1	536.5	B 14·30#
" B	12.9	554.4	667.3	B 14·30#
" C	359.2	882.1	1241.3	B 16·45#
" D	464.4	1089.0	1553.4	B 18·50 #

Floor System	D.L Moment	L.L. Moment	Impact Moment	Total Moment	Section
Floorbeam A	238.6	200.5	60.5	499.6	B30×124#
" B	174.8	200.5	64.8	445.1	B30×108#
" C	64.4	186.1	68.9	319.4	B30×108#

Moments in thousands of inch pounds (Stringers)
Moments in thousands of foot pounds (Floorbeams)



EXPANSION PEDESTAL DETAIL

Fixed pedestal same, except use flat base without curve.

Req'd 2 - Fixed
2 - Expansion

Town 10-56
Bridge 3405

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

IRVING BRIDGE

over

PUSHAW STREAM

in the city of

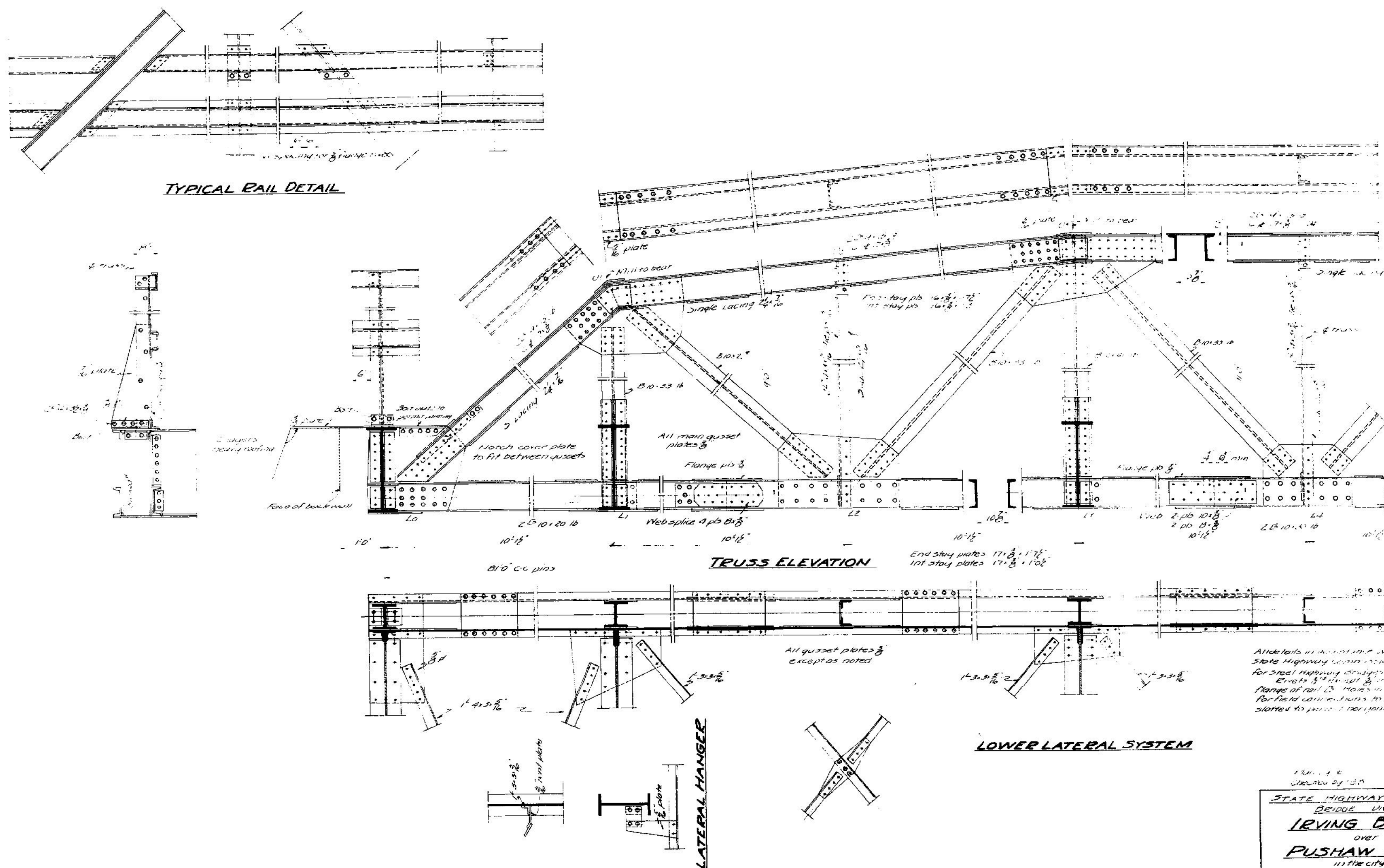
OLD TOWN

PENOBSCOT COUNTY

STEEL DETAILS

Sheet 4 of 5 Augusta Me, June, 1937

28-118



All details in [illegible] with Maine State Highway Commission Specifications for Steel Highway Bridges 1936
Rivets 3/4" except [illegible]
Flange of rail [illegible] Holes in [illegible] members for field connections to truss to be slotted to [illegible] horizontal expansion

Checked by [illegible]

Town	10-56
Bridge	2405

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

IRVING BRIDGE
over
PUSHAW STREAM
in the city of
OLD TOWN
PENOBSCOT COUNTY

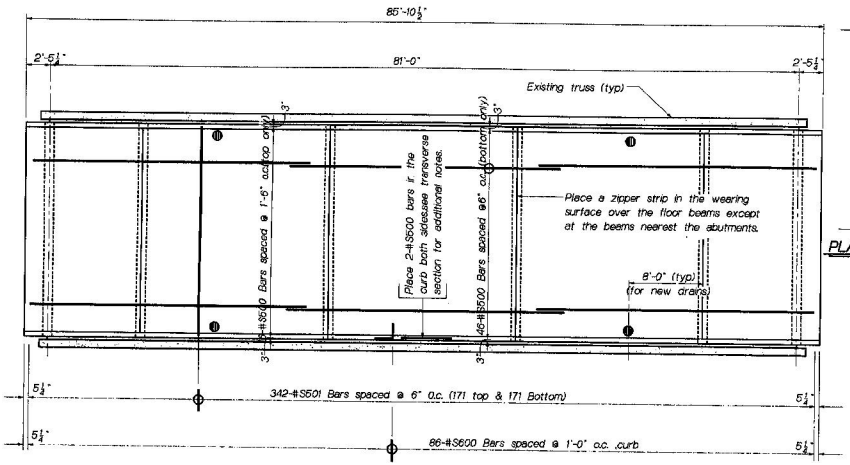
STEEL DETAILS

Sheet 5 of 5 Augusta, Me. June, 1937.

28-119

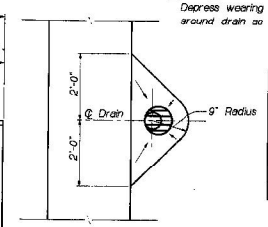
0 1 2 3 4 5 INCHES

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	#2405	1	2



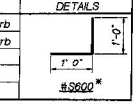
PLAN VIEW

NOTE:
Depress wearing surface ½" around drain as shown by arrows.

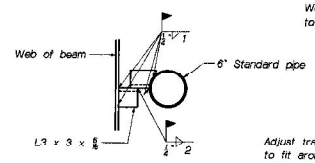


PLAN VIEW OF NEW WEARING SURFACE AT DRAIN

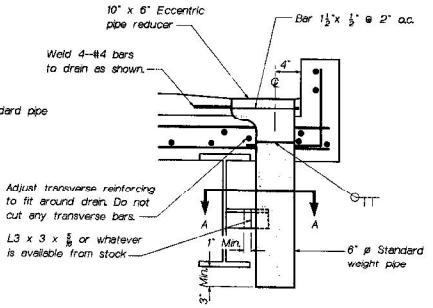
REINFORCING STEEL SCHEDULE					
MARK	BAR SIZE	NO.	LENGTH	LOCATION	DETAILS
#S500	#5 Bar	210	30'-0"	Longit. slab/curb	
#S501	#5 Bar	350	22'-8"	Transv. slab/curb	
#S600	#6 Bar	175	2'-0"*	Curb	



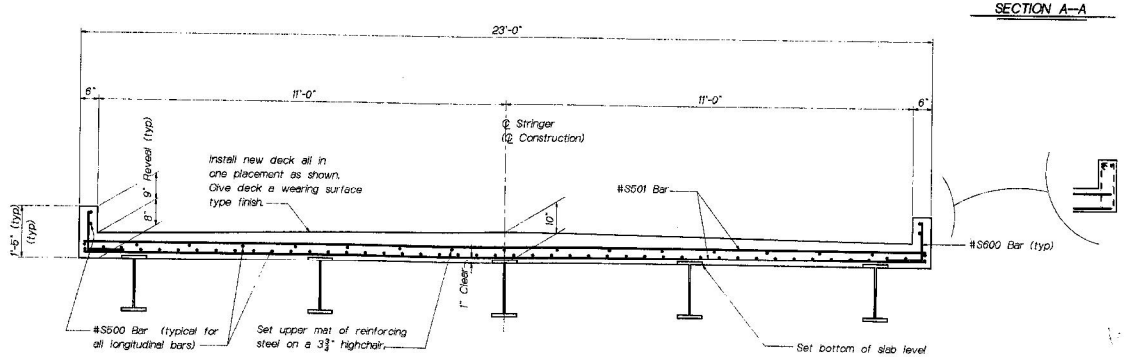
All bars shall be A615 grade 40 or 60
*Bend in field



SECTION A—A



PIPE DRAIN DETAIL



TYPICAL TRANSVERSE SECTION

NOTE:
If the existing curb reinforcing bars are in good condition they may be reused. For spacing and location refer to the plan view. Also install the #S500 Bars at the top as shown.

GENERAL NOTES

1. All reinforcing steel to have 2" of cover unless noted.
2. Refer to sheet no. 2 for details of the new wearing surface.

PROJECT BOTH ENGINEER		BY	DATE
PLANS	DESIGN-DETAILED	L.S.BENNER	9/91
	CHECKED		
	REVISIONS		
	FIELD CHANGES		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IRVING BRIDGE
OVER
PUSHAW STREAM
IN
OLD TOWN
PENOBSCOT COUNTY

DECK REPLACEMENT

SHEET 1 OF 2 AUGUSTA, MAINE SEPT 1991

111-244