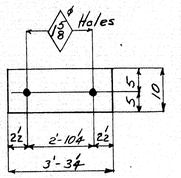
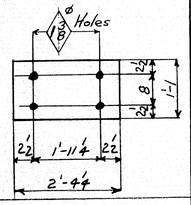
FORM D-39
SKETCH, SHOP AND SHIPPING BILL

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 MEMBER	ORDERED NO. PCS.	ORDERED LENGTH FT.	ORDERED LENGTH INS.	ORDERED ITEM	SHIPMENTS
	1											
	2											
	3											
	4			Duck 12oz - 14oz.								
	5	12	M17	10	3	3¢	No Charge					2-50002
	6											
	7											
	8											
	9											
	10											
	11											
	12											
	13											
	14											
	15			Duck 12oz - 14oz.								
	16	12	M18	13	2	4¢	No Charge					2-50002
	17											
	18											
	19											
	20											
	21											
	22											
	23											
	24	½	GAL.	RED LEAD PAINT			(10) No Charge					SK
	25											
	26											
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57-146

Advance Bill p.6
Duck
~~PAINT~~
~~CONTACT SURFACES~~

RIVETS: As Noted | HOLES

DRAWINGS	NAME	DATE
MADE BY	HTF	6-9-52
CHKD. BY	GDW	7/10/52

REVISIONS: ☐ ☐ ☐ ☐ ☒

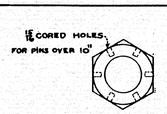
DRAWINGS FABRICATION: Elmira
IN CHARGE OF: E.E.T.
ORDER No.: Q2304
SHEET No.: C3

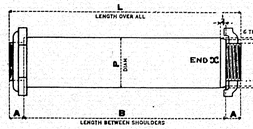
NAME OF STRUCTURE: STATE OF MAINE RED BRIDGE OVER SWIFT RIVER OXFORD COUNTY

D-57D490

PINS AND NUTS

AMERICAN BRIDGE COMPANY





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

PILOT NUT USED ON THIS END.

LINE NO.	MEMBER NO. PCS.	MEMBER MARK	PIN DIAM. P	PIN LENGTH L FT.	PIN LENGTH L INS.	PIN SCREW DIAM. S	PIN SCREW A	PIN LENGTH B FT.	PIN LENGTH B INS.	NUTS NO. PCS.	NUTS PATTERN NO.	CALCULATED WEIGHT FOR ONE MEMBER	ORDERED NO. PCS.	ORDERED LENGTH FT.	ORDERED LENGTH INS.	ORDERED ITEM	SHIPMENTS
1																	
2																	
3	8	P1	2ϕ	1	8½	1½ϕ	1	1	6½	16	PN21	(19)	POUNDS PN21	S 2-A4-209			
4																	
5																	
6																	
7																	
8																	
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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	1	2ϕ	2	1½ϕ	PS8	2-A4-208	(1) No Charge	
30								
31								
32								
33								
34								
35	ADVANCE BILL P.5							
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	1	2ϕ	4	1½ϕ	PD3	2-A4-208	3 No Charge	
30								
31								
32								
33								
34								
35								
36								

57-145

PIN AND NUTS

MATERIAL SPEC.
PAINT INSP.

DATE	NAME
HTF	5 23 52
GDW	7 10 52

DATE 19
DRAWINGS FABRICATION: ELMIRA ELMIRA
ORDER No.: Q2304
SHEET No.: C2

NAME OF STRUCTURE: STATE OF MAINE RED BRIDGE OVER SWIFT RIVER RUMFORD & MEXICO, OXFORD COUNTY, MAINE

FORM D-39
SKETCH, SHOP AND SHIPPING BILL

AMERICAN BRIDGE COMPANY

UNITED STATES STEEL CORPORATION

SKETCH	LINE NO.	NO. PCS.	MARK	MATERIAL SHAPE	MATERIAL LENGTH FT.	MATERIAL LENGTH INS.	CALCULATED WEIGHT FOR ONE MEMBER	ORDERED NO. PCS.	ORDERED LENGTH FT.	ORDERED LENGTH INS.	ORDERED ITEM	SHIPMENTS
	1											
Swedge Bolts 3" Thread	2	8	X1	1¼ϕ	1	4½	TOT (5)	45.33			S	
	3	8	Hex. Nuts 1¼ϕ Tap					4.33			S	
	4	8	Washers 2¢"×⅜" (1⅜ϕ Holes)				TOT (1)				S	
	5											
	6											
	7											
	8											
	9											
Swedge Bolts 3" Thread	10	16	X2	1ϕ	1	2½	TOT (5)	10.00			S	
	11	16	Hex. Nuts 1ϕ Tap					1.00			S	
	12	16	Washers 2¢"×⅜" (1⅛ϕ Holes)				TOT (1)				S	
	13											
	14											
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SHIP IN ADVANCE

57-144

Anchors Bolts
PAINT No
~~CONTACT SURFACES~~

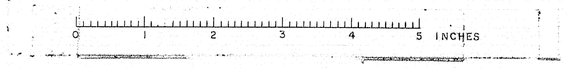
RIVETS | HOLES

DRAWINGS	NAME	DATE
MADE BY	E.T.J.	5-1-52
CHKD. BY	TJK	5-1-52

REVISIONS: ☐ ☐ ☐ ☐ ☒

DRAWINGS FABRICATION: ELMIRA ELMIRA
IN CHARGE OF: E.E.T.
ORDER No.: Q2304
SHEET No.: C1

NAME OF STRUCTURE: STATE OF MAINE, RED BRIDGE OVER SWIFT RIVER, RUMFORD & MEXICO, OXFORD COUNTY, MAINE



FORM D-73
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	BOLTS: HEAD	BOLTS: NUT	BOLTS: WASHER	BOLTS: TYPE OF BOLT	GRIP		CALCULATED WEIGHT TOTAL	SHIPMENTS
1													
2	480	520	7/8	24						11/16-3/4		3003	
3	2662	2710	"	2 3/4						13/16-7/8		171	
4	600	1660	"	2 5/8						1 1/16 1/8		422	
5	384	425	"	2 3/4						1 1/16 1/4		271	
6	246	270	"	3/4						1/2		194	
7	584	645	"	3/4						1/8		477	
8	10	13	"	3 1/2						1 1/4		10	
9	280	310	"	3 5/8						1 3/8		251	
10	12	17	"	3 3/4						2		14	
11	14	19	"	3/8						2 1/8		16	
12	12	17	"	44						2 7/16		15	
13	384	425	"	4 1/8						2 5/8		395	
14	280	310	"	4 1/2						2 3/4		298	
15	16	23	"	5						3 1/8		24	
16												2670	
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57-148

PAINT	RIVETS	HOLES	DRAWINGS	NAME	DATE
CONTACT SURFACES			MADE BY	H.L.S.	8-6-52
			CHKD. BY		

REVISIONS: E | D | C | B | X

DRAWINGS: ELMIRA — IN CHARGE OF E.E.T.
FABRICATION: ELMIRA — ORDER No. Q2304

SHEET No. C 5

NAME OF STRUCTURE

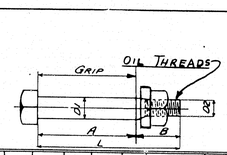
STATE OF MAINE, RED BRIDGE OVER SWIFT RIVER, RUMFORD & MEXICO, OXFORD CO. MAINE

FORM D-581
TURNED BOLTS

AMERICAN BRIDGE
DIVISION OF UNITED STATES STEEL COMPANY

SPECIFY UNDER DI

OF = { ORDINARY FIT (HOLE DIAMETER MINUS 1/32") }



STANDARD WASHERS — PLATE — TYPE X — DIMENSION "A" GRIP

NO. REQD.	TYPE OF HEAD	SIZE OF REAMED HOLE	D1	D2	A	B	L	GRIP	TYPE OF NUT	NO. OF NUTS EACH BOLT	TYPE WASHER	NO. AND SIZE OF WASHERS EACH BOLT	LOCATION and Mark	SHEET NO. MACH. CONT.	SHEET NO. STRUCT CONT.	CALCULATED WEIGHT TOTAL	SHIPMENTS
32	Hex	1 1/16	OF	1	3 1/4	1 1/2	4 3/4	3 1/4	Hex	1			7 x 3			65	
											X	1-2 9/32 x 3/16	hole Shoe Caps To Girders			13	

57-147

TURNED BOLTS	RIVETS	HOLES	DRAWINGS	NAME	DATE
			MADE BY	F.T.J.	8-6-52
			CHKD. BY	GDW	8-6-52

REVISIONS: E | D | C | B | X

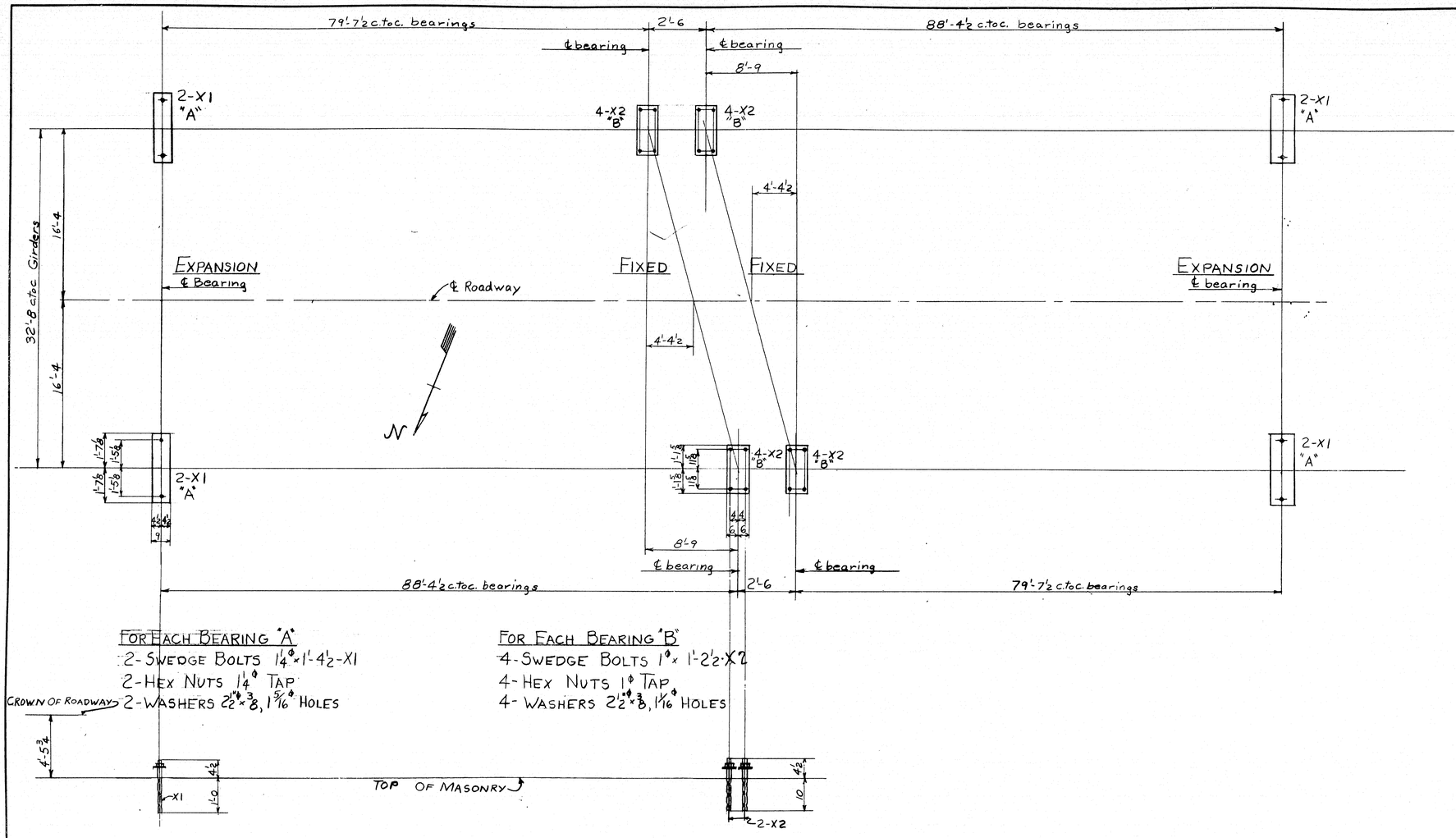
DRAWINGS: Elmira — IN CHARGE OF E.E.T.
FABRICATION: Elmira — ORDER No. Q2304

SHEET No. C4

NAME OF STRUCTURE

STATE OF MAINE, RED BRIDGE OVER SWIFT RIVER, RUMFORD & MEXICO, OXFORD COUNTY, MAINE

0 1 2 3 4 5 INCHES



FOR EACH BEARING "A"
2-SWEDGE BOLTS $1\frac{1}{4}\phi \times 1'-4\frac{1}{2}$-X1
2-HEX NUTS $1\frac{1}{4}\phi$ TAP
2-WASHERS $2\frac{1}{2}\phi \times \frac{3}{8}$, $1\frac{5}{16}\phi$ HOLES

FOR EACH BEARING "B"
4-SWEDGE BOLTS $1\phi \times 1'-2\frac{1}{2}$-X2
4-HEX NUTS 1ϕ TAP
4-WASHERS $2\frac{1}{2}\phi \times \frac{3}{8}$, $1\frac{1}{16}\phi$ HOLES

NOTE TO MASONRY CONTRACTORS:
Anchor Bolts furnished in advance by A.B. Div.; but set by others
Areas shown at bearing points are overall sizes of Masonry Plates;
All dimensions shown on this plan must be strictly adhered to
in all masonry construction or steelwork will not fit.
Report any errors or misunderstandings at once.
Back walls not to be built above bridge seats until steel
work is erected.

STATE OF MAINE
RED BRIDGE OVER SWIFT RIVER
RUMFORD & MEXICO, OXFORD COUNTY, MAINE
MASONRY PLAN

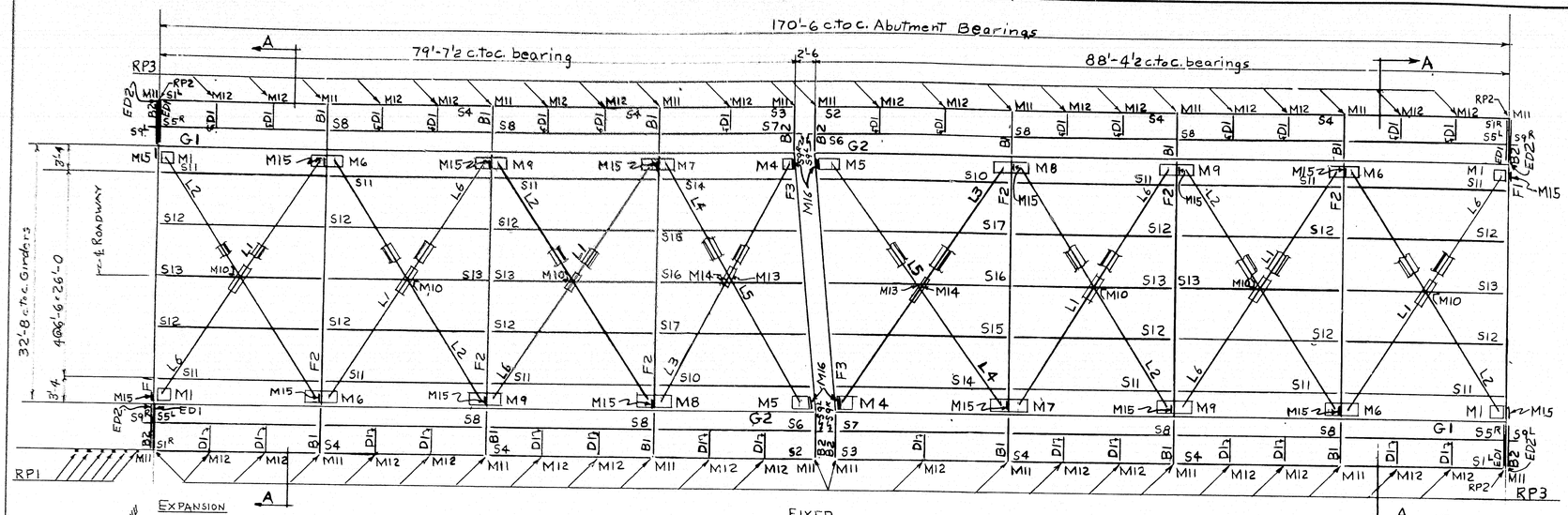
AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL COMPANY
DESIGN 800 B-50 PENCIL TEX

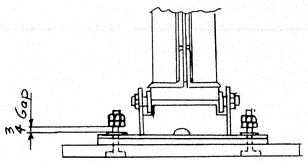
REVISIONS	
F	
E	
D	
C	
B	
X	

DRAWINGS MADE AT ELMIRA PLANT
WORK FABRICATED AT ELMIRA PLANT
IN CHARGE OF E.E. THOMPSON
DRAW. MADE BY F.T.J. DATE 5-1-52
DRAW. CHECKED BY TJK DATE 5-1-52
ORDER No. Q2304
SHEET No. E1

57-149

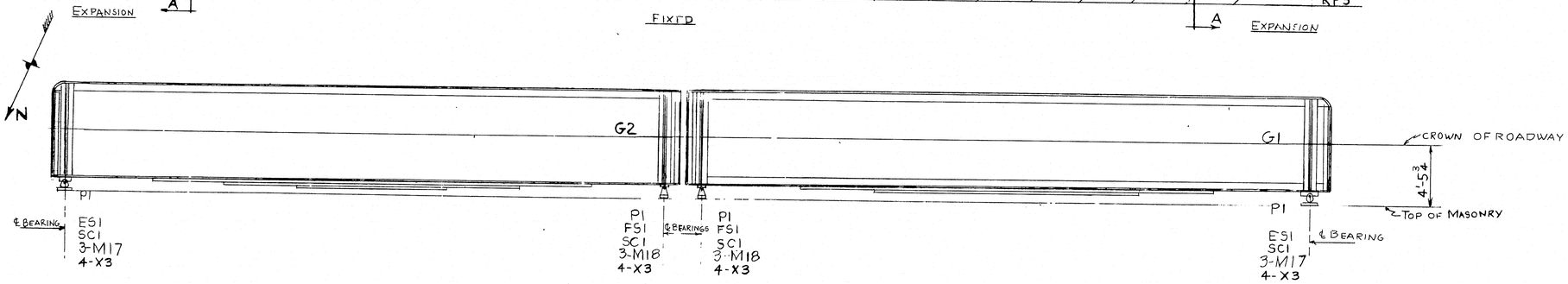
0 1 2 3 4 5 INCHES

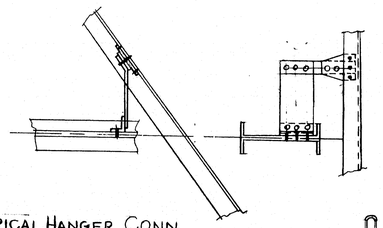




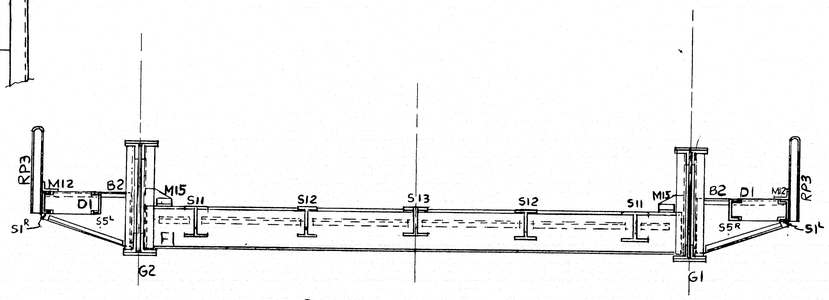
ES1

Sketch showing Anchor Bolt Gap after erection for Expansion shoes





TYPICAL HANGER CONN.
M10, M13, & M14



SECTION A-A

NOTE TO ERECTOR:
FIELD CONNECTIONS RIVETED EXCEPT SHOE CAPS SC1 BOLTED TO GIRDERS WITH TURNED BOLTS-X3
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 PLAN

NOT FURNISHED BY A.B. Co.
RAILING
BOLTS CONNECTING RAILING TO POST

STATE OF MAINE
RED BRIDGE OVER SWIFT RIVER
RUMFORD & MEXICO, OXFORD COUNTY, MAINE
ERECTION DIAGRAM

AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL COMPANY
DESIGN 500 8-50 PENCILTEX

REVISIONS	
F	
E	
D	
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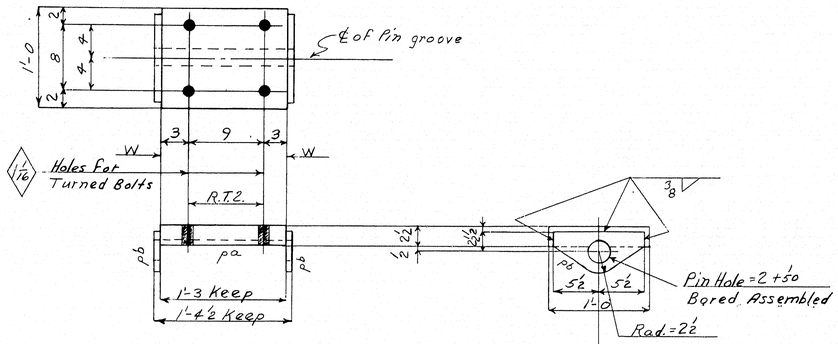
X	

DRAWINGS MADE AT ELMIRA PLANT
WORK FABRICATED AT ELMIRA PLANT
IN CHARGE OF E.E. THOMPSON
DRAW. MADE BY F.T.J. DATE 6-3-52
DRAW. CHECKED BY GLL-GDW DATE 7-9-52

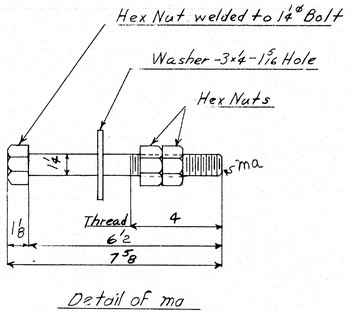
ORDER No. Q2304
SHEET No. E2

57-150

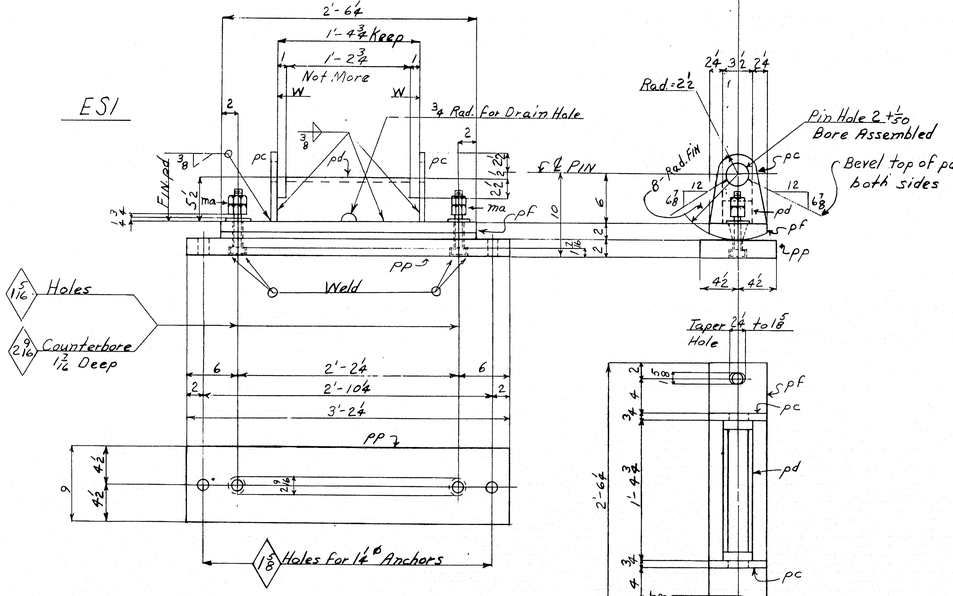
0 1 2 3 4 5 INCHES



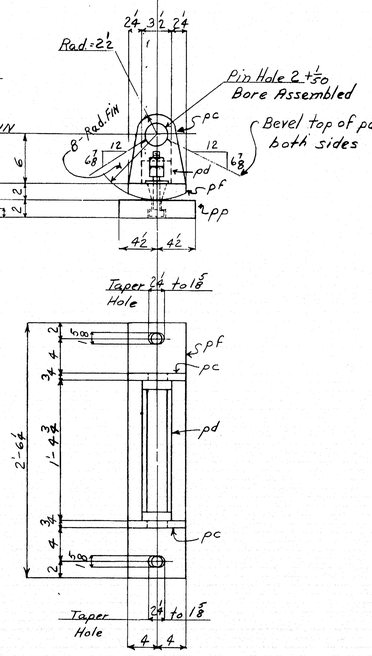
SC1

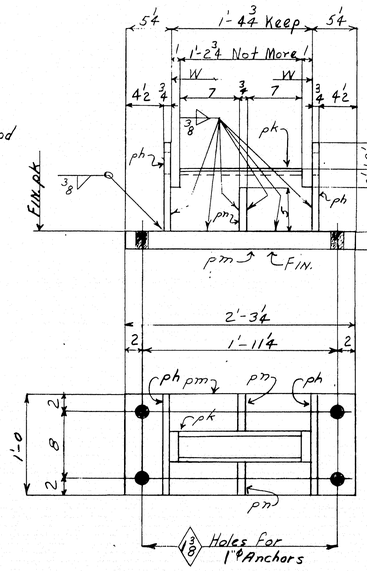


Detail of ma

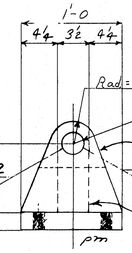


ES1





FS1



LINE	Mark Nos. of Front Pcs. in Lo Order	MATERIAL No. of Pcs. on Sheet	SHAPE	LENGTH Feet	LENGTH Inches	ASSEM-BLING MARK	REMARKS	ORDERED	ITEM	CALCULATED WEIGHT FOR ONE SHIP PIECE
1										
2		4	EXPANSION SHOES-ES1				WELD			(914)
3		4	PL 8 2		2 6¼	pf	FIN. SIDE		S	137 -20
4		8	PL 8 ¾		8½	pc		12 x ¾ 45-0	9	89 -10
5		4	PL 5½ ¾		1 4¾	pd	FIN. EDGE		S	91 -12
6		4	PL 9 2		7 2¼	pp	PRESS FLAT		S	196 -30
7		8	1¼"		7⅜	ma			S	7 -
8		8	WASH 3⅜ ¾		1 5/16 Hole				S	1 -
9		24	Hex Nuts 1¼ Tap.						S	3 - 3W 21.
10										
11										
12										
13										
14		8	SHOE CAP PLATES-SC1				WELD			(124)
15		8	PL 12 2½		1 3	pa			S	125 -21
16		16	PL 11 ¾		5	pb		12 x ¾ 45-0	9	23 -7 - 1W
17										
18										
19										
20										
21		4	FIXED SHOES - FS1							(338)
22		4	PL 12 2		2 3¼	pm	FIN. Side		S	185 -30
23		4	PL 7½ 3½		1 4¾	pk	FIN. edge		S	124 -15
24		8	PL 12 ¾		10½	pb		45-0	9	54 -20
25		8	PL 4½ ¾		5	pn			AS	7 - 2W 1P 5W
26										
27										
28										
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NOTES:
Holes as Noted
Edges Marked W must be cut square and true
Holes marked "R.T." to be drilled 1⅛ to a metal template
Paint: Yes, Pin grooves to have one coat of White Lead and tallow, applied while hot.

PAINT:
SHOP CONTACT SURFACES:

STATE OF MAINE
RED BRIDGE OVER SWIFT RIVER
RUMFORD & MEXICO
OXFORD COUNTY, MAINE

SHOES

AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL COMPANY
DATE 11-5-51 PENCILTEX

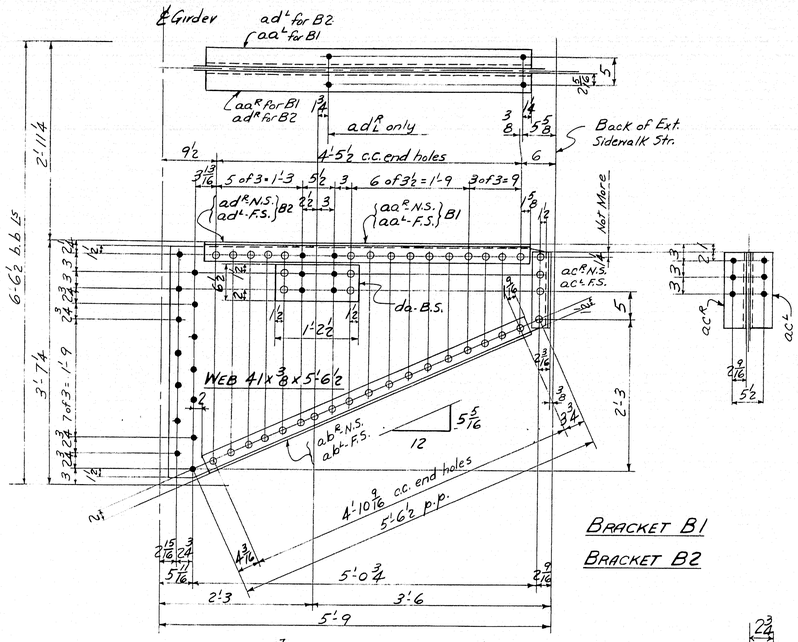
REVISIONS	
F	
E	
D	
C	
B	
X	

DRAWINGS MADE AT Elmira PLANT
WORK FABRICATED AT Elmira PLANT
IN CHARGE OF E.E.T.
DRAW. MADE BY H.T.E. DATE 5-23-52
DRAW. CHECKED BY G.D.W. DATE 7-10-52

ORDER No. Q2304
SHEET No. 1

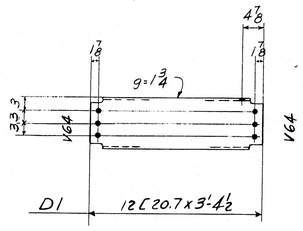
Am. Bld. 5.6
57-151 WELD

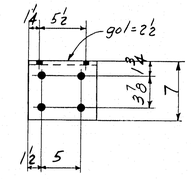
0 1 2 3 4 5 INCHES

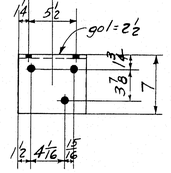


BRACKET B1

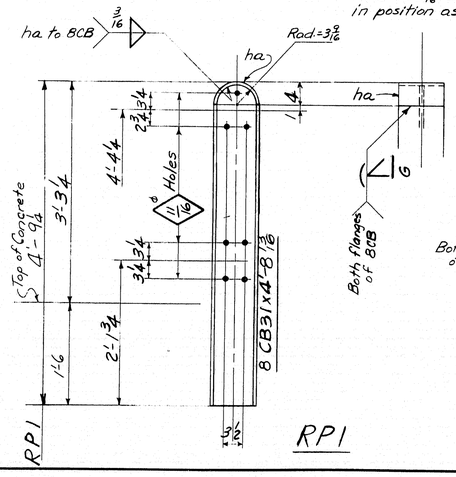
BRACKET B2



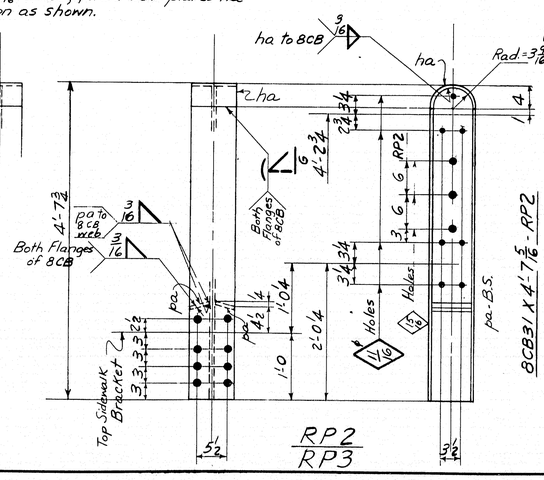




SHOP NOTE:
To obtain rounded top on railing posts RP1, RP2 & RP3, remove 8CB flanges, cut 8CB webs to 3⅞ radius, & weld bent plates ha in position as shown.

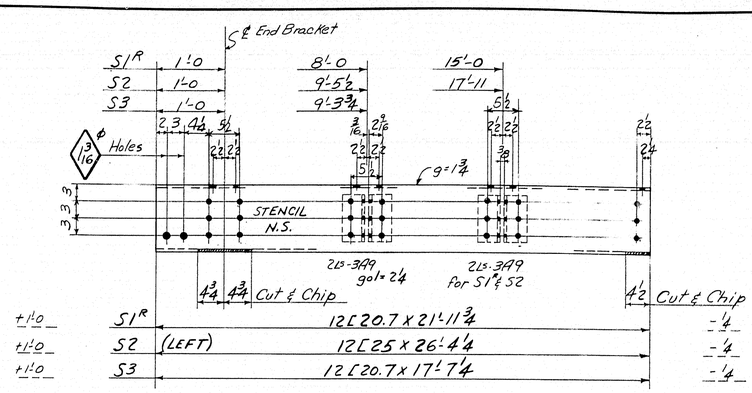


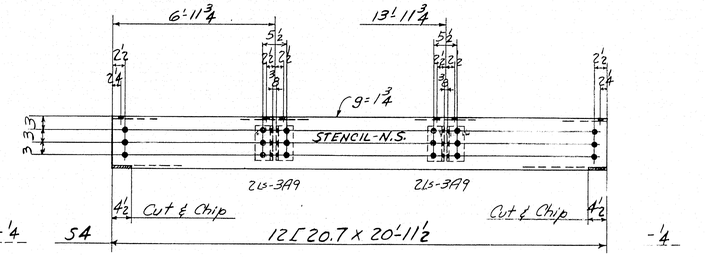
RP1

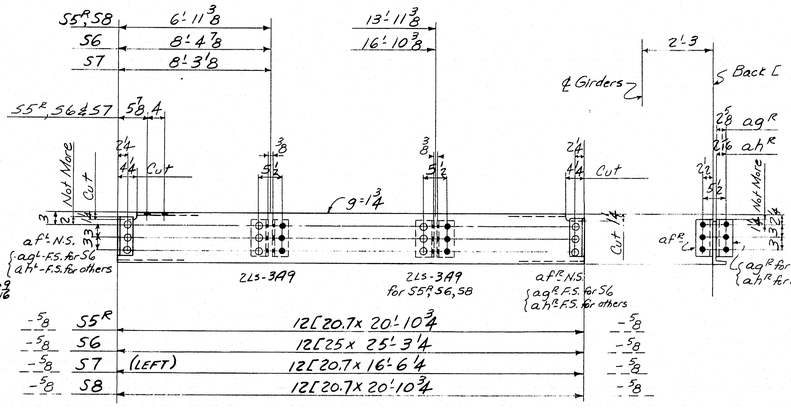


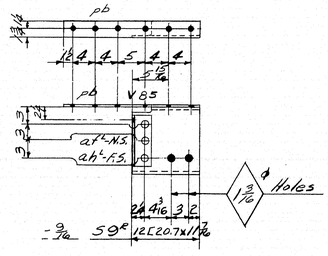
RP2
RP3

8CB31 x 4'-7 5/16 - RP2
8CB31 x 4'-7 5/16 - RP3









LINE	Total No. of Pieces in the Order	No. of Pieces in One Shipt	MATERIAL SHAPE	LENGTH Feet	LENGTH Inches	ASSEMBLING MARK	REMARKS	ORDERED	ITEM	CALCULATED WEIGHT FOR ONE SHIP PIECE
1										
2		12	- BRACKETS			B1				434
3		8	- BRACKETS			B2				
4		20	W66 41 3/8	5	6½			4-1¼ x ⅜ 4S-8	14	396
5		24	L 3½ 3½ ⅜	4	9	aa^R	B1			168
6		16	L 3½ 3½ ⅜	4	9	ad^R	B2	5⅝/60	49	
7		40	L 3½ 3½ ⅜	5	1⅜	ab^L				
8		40	L 4 3½ ⅜	1	¾	ac^R		5⅝/60	48	21
9		40	PL 6½ ⅜	1	2½	da			AS	20
10										
11										
12		30	12[20.7	3	4½	D1		3-⅞ c.c. x 60/60	29	694
13										
14		20	L 7 4 ⅜			B	M11		S	
15		30	L 7 4 ⅜			B	M12		S	
16										
17										
18		6	RAILING POSTS			RP1	WELD			151
19		6	8CB31	4	8½			4-⅞ c.c. x 16'-0	28	147
20	56	6	PL 8 5/16		11¾ (Ext.)	ha	BENT		S	12
21										
22										
23		3	- RAILING POSTS			RP2	WELD			150
24		47	- RAILING POSTS			RP3	WELD			
25		50	8CB31	4	7 5/16			2-⅞ c.c. x 5'-0	28	143
26		50	PL			ha	BENT		S	12
27		100	PL 7/8 5/16		3¾	pa			S	5
28										
29										
30		2	- STRINGERS			S1^R	STENCIL			478
31		2	- STRINGERS			S1^L	STENCIL			
32		2	- STRINGERS			S2	STENCIL			66
33		2	- STRINGERS			S3	STENCIL			371
34		4	12[20.7	21	11¾		S1^R	21'-11¾	30	455
35		2	12[20.7	17	7¼		S3	17'-7¼	33	364
36		2	12[25	26	4¼		S2	26'-4¼	35	650
37	120	28	L 4 3½ ⅜		8½	3A9	4 ea. S1^R, S2 2 ea. S3 4 ea. S1^L, S2 2 ea. S3	5⅝/60	48	26
38		28	S.B. ⅜						AS	
39										
40		8	- STRINGERS			S4	STENCIL			459
41		8	12[20.7	20	11½			20'-11½	31	434
42		32	L			3A9				26
43		32	S.B. ⅜						AS	
44										
45										
46		2	- STRINGERS			S5^R				478
47		2	- STRINGERS			S5^L				
48		2	- STRINGERS			S6				687
49		2	- STRINGERS			S7				328
50		8	- STRINGERS			S8				410
51		12	12[20.7	20	10¾		S5^R, S8	20'-10	34	431
52		2	12[20.7	16	6¼		S7	16'-5½	34	341
53		2	12[25	25	3¼		S6	25'-2½	36	630
54	40	32	L 4 3½ ⅜		9¼	af^R				
55	36	28	L 4 3½ ⅜		9¼	ah^R	2 ea. S5^R, S7, S8	5⅝/60	48	228
56		4	L 4 3½ ⅜		9¼	ag^R	4 ea. S5^R, S6, S8 2 ea. S7			273
57		60	L			3A9				
58		60	S.B. ⅜						AS	
59										
60		4	STRINGERS			S9^R				411
61		8	STRINGERS 12 C 20.7		11¾	S9^L		11"c.c. x 60/60	29	200
62		4				af^R, af^L				14
63		4				ag^R, ag^L				
64		8	PL ⅜	2	0	pb			S	8
65		16	S.B. ⅜						AS	

STATE OF MAINE
RED BRIDGE OVER SWIFT RIVER
RUMFORD & MEXICO, OXFORD COUNTY
SIDEWALK STEEL

AMERICAN BRIDGE
DIVISION
OF UNITED STATES STEEL COMPANY
ORIG 6005-50 WHITEX

NOTES:
Rivets - ⅞
Holes 15/16 U.N.
PAINT: YES
SHOP CONTACT SURFACES: No

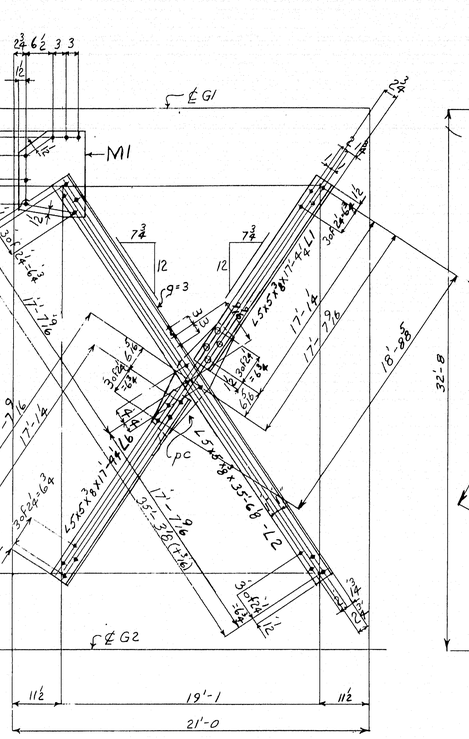
REVISIONS	
F	
E	
D	
C	
B	
X	

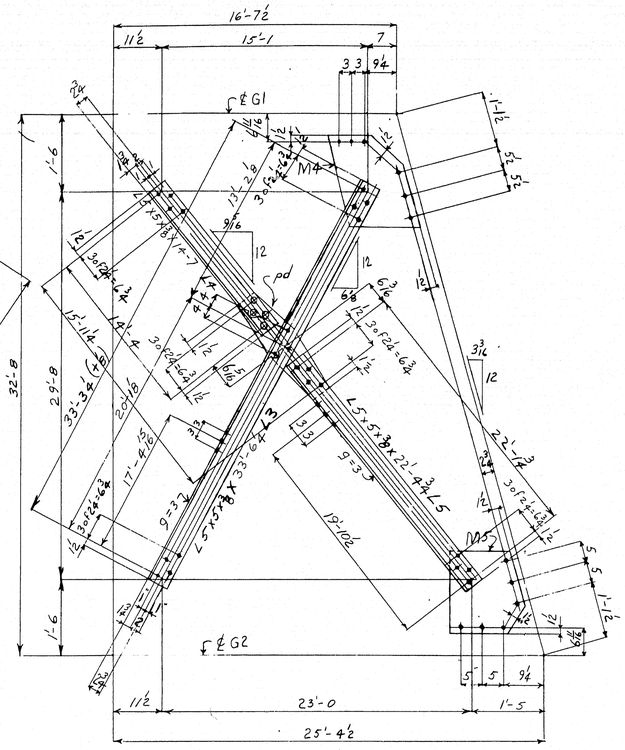
DRAWINGS MADE AT ELMIRA PLANT
WORK FABRICATED AT ELMIRA PLANT
IN CHARGE OF E.E. THOMPSON
DRAW. MADE BY E.H.H. DATE 5-28-52
DRAW. CHECKED BY CLC DATE 7-9-52
ORDER No. Q 2304
SHEET NO. 2

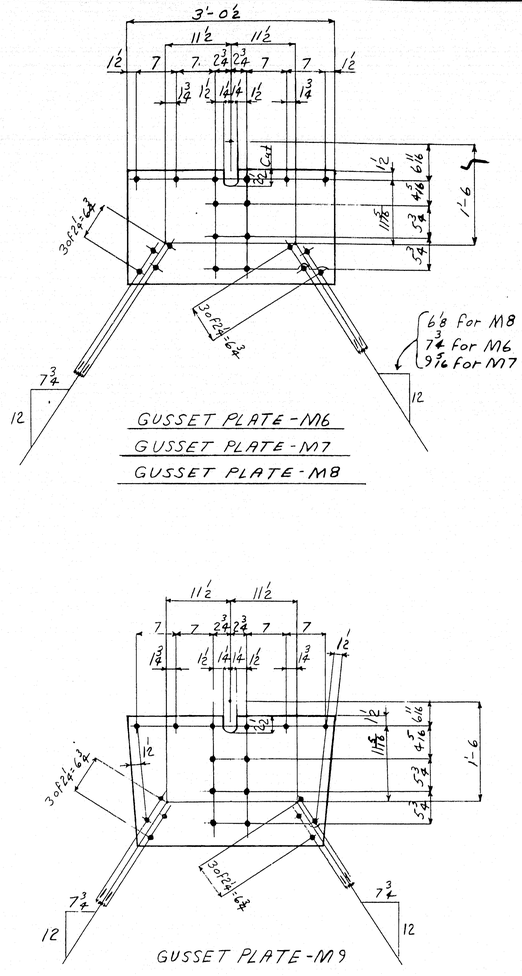
Adv. Bill 3,4,5

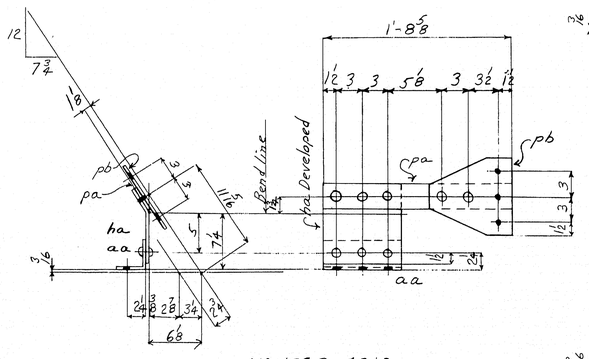
57-152 Weld

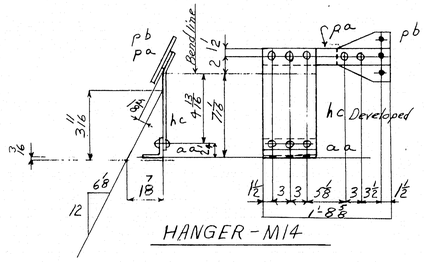
0 1 2 3 4 5 INCHES

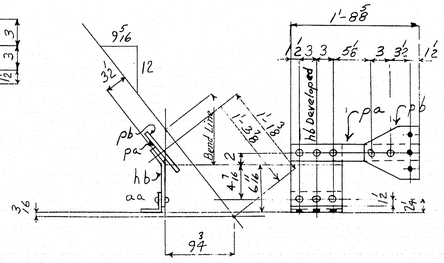












NOTES:
Holes - 15/16
Rivets - 7/8

LINE	Total No. of Pieces in this Order	No. of Pieces on this Sheet	MATERIAL SHAPE				LENGTH Feet	LENGTH Inches	SLING MARK	REMARKS	ORDERED	ITEM	CALCULATED WEIGHT FOR ONE SHIP PIECE
1													
2			6 - LATERALS - L2										(438)
3			6	L	5	5	3/8	35 6/8			35-7	42	437
4													
5			6	LATERALS - L1									(291)
6			6	L	5	5	3/8	17 4/4			17-9	45	213
7			6	PL	12	3/8		2 4 1/2	pc			S	66
8				2 - LATERAL - L3									(213)
9			2	L	5	5	3/8	33 6 4			33-7	43	412
10													
11				2 - LATERALS - L4									(200)
12			2	L	5	5	3/8	14 7			15-0	46	179
13			2	PL	12	3/8		2 4	pd			S	36
14				2 - LATERALS - L5									(215)
15			2	L	5	5	3/8	22 4 1/2			23-6	44	273
16													
17			4	PL	15/8	x 3/8		1 8 1/2	M1			S	(30) 34
18													
19			6 - LATERALS - L6										(213)
20			6	L	5	5	3/8	17 4/4			17-9	45	212
21													
22													
23			2	PL	16 3/4	3/8		2 2	M4				(37) 46
24													
25			2	PL	18	3/8		1 8 1/2	M5				(34) 39
26													
27			4	PL	19 1/2	3/8		3 0 1/2	M6		42x3/8 45-0	14	(70) 76
28													
29			2	PL	19	3/8		3 0 1/2	M7				(72) 74
30													
31			2	PL	20	3/8		3 0 1/2	M8				(76) 78
32													
33			4	PL	21	3/8		3 1/4	M9				(77) 83
34													
35			6	HANGERS - M10									(33)
36			6	PL	9	3/8		9 3/4	ha	Bent		S	9
37	10	6	L	3 1/2	3 1/2	3/8		9	aa		55/60	49	6
38	10	6	PL	3	3/8		1	8 5/8	pa				7 4R
39	10	6	PL	9	3/8			9 1/2	pb			S	9 2C
40													
41			2 - HANGER - M13										(33)
42		2	PL	9	3/8			9 6	hb	Bent		S	9
43		2	L						aa				6
44		2	PL						pa				9
45		2	PL						pb				9 2C 4R
46													
47			2 - HANGER - M14										(33)
48		2	PL	9	3/8			9 3/8	hc	Bent		S	9
49		2	L						aa				6
50		2	PL						pa				9
51		2	PL						pb				9 2C 4R
52													
53													
54													
55													
56													
57													
58													
59													
60													
61													
62													
63													
64													

STATE OF MAINE
RED BRIDGE OVER SWIFT RIVER
RUMFORD & MEXICO, OXFORD COUNTY
LATERALS

AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL COMPANY
DES. 11-53-11 PENDLETEX

PAINT: Yes
SHOP CONTACT SURFACES: No

REVISIONS	
F	
E	
D	
C	
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X	

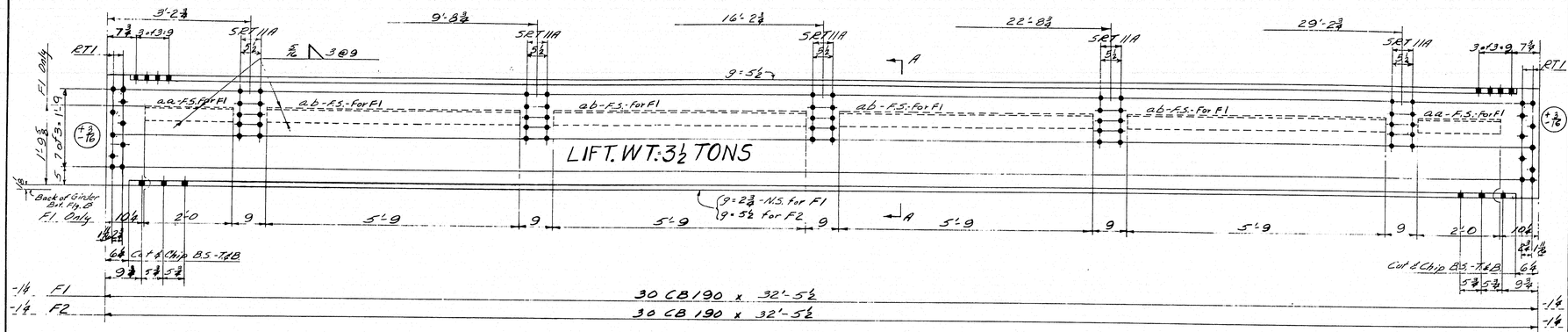
DRAWINGS MADE AT Elmira PLANT
WORK FABRICATED AT Elmira PLANT
IN CHARGE OF E.E.T.
DRAW. MADE BY H.T.E DATE 6-2-52
DRAW. CHECKED BY G.D.W DATE 7-10-52

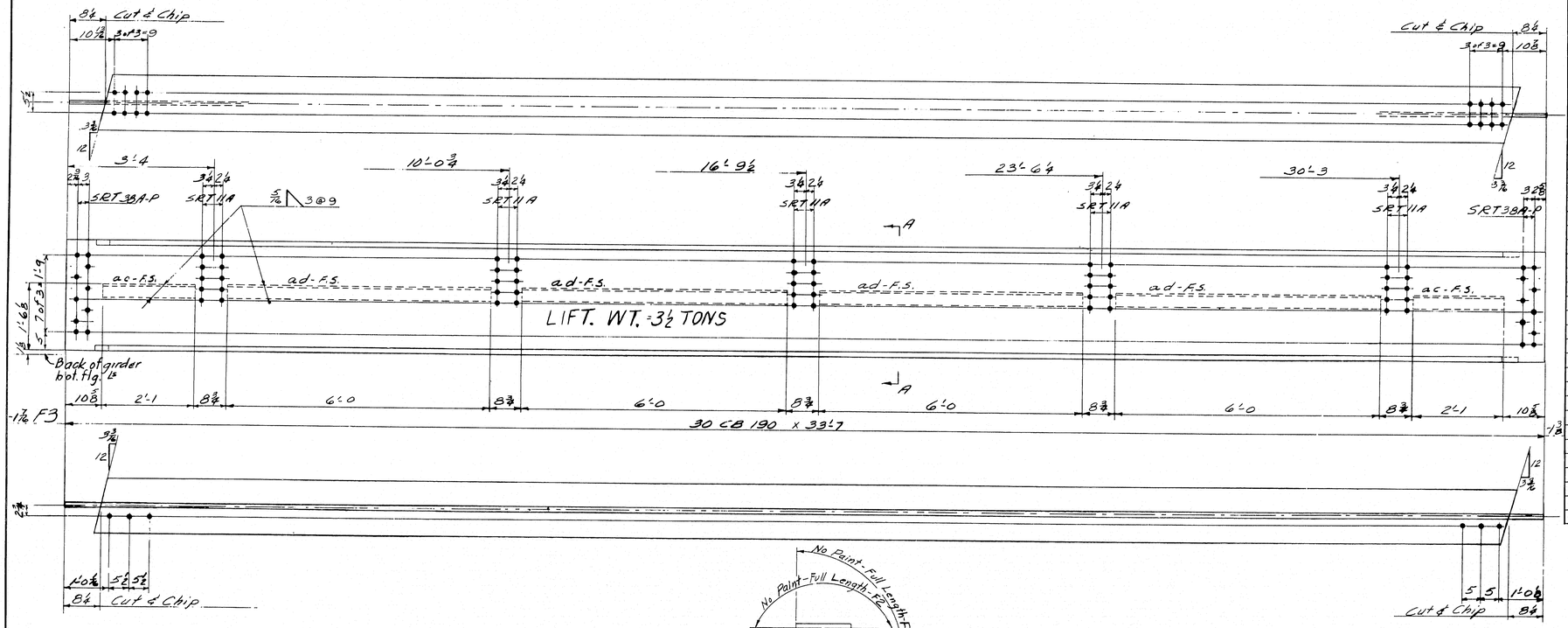
ORDER No. Q2304
SHEET No. 3

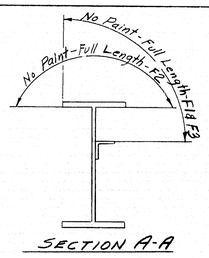
Adv. Bill 4

57 = 153

0 1 2 3 4 5 INCHES







LINE	Total No. of Pieces in the Order	MATERIAL No. of Pcs. on Sheet	SHAPE	LENGTH Feet	LENGTH Inches	ASSEMBLING MARK	REMARKS	ORDERED ITEMS	ORDERED	CALCULATED WEIGHT FOR ONE SHIP PIECE
1	2	Floor Beams				F1	Weld			(6486)
2	6	Floor Beams				F2		32'-6		(6013)
3										
4	8	30 CB 190		32	5½			32'-5½	21	6167
5	4	L 4 4 ⅜		20		aa	F1		S	265
6	8	L 4 4 ⅜		5	9	ab	F1		S	
7										
8										
9										
10										
11										
12	2	Floor Beams				F3	Weld	33'-7		(6505)
13										
14	2	30 CB 190		33	7			33'-7	20	6388
15	4	L 4 4 ⅜		21		ac			S	276
16	8	L 4 4 ⅜		6	0	ad			S	
17										
18										
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64										

FI-7 W2
F2-3A

STATE OF MAINE
RED BRIDGE OVER SWIFT RIVER
RUMFORD & MEXICO
OXFORD COUNTY
FLOOR BEAMS
AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL COMPANY
DEC 800-5-50 WHITEX

NOTES: Lift. wt. to be marked plainly on ea. beam.
Holes marked 'RT' or 'SRT' to be sub-punched & reamed to size with a metal templet or drilled to size from the solid to a metal templet. Holes in material thicker than ¾ to be sub-punched & reamed to size, or drilled to size from the solid.

Holes - 15/16

PAINT: Yes - Except as Noted
SHOP CONTACT SURFACES: No

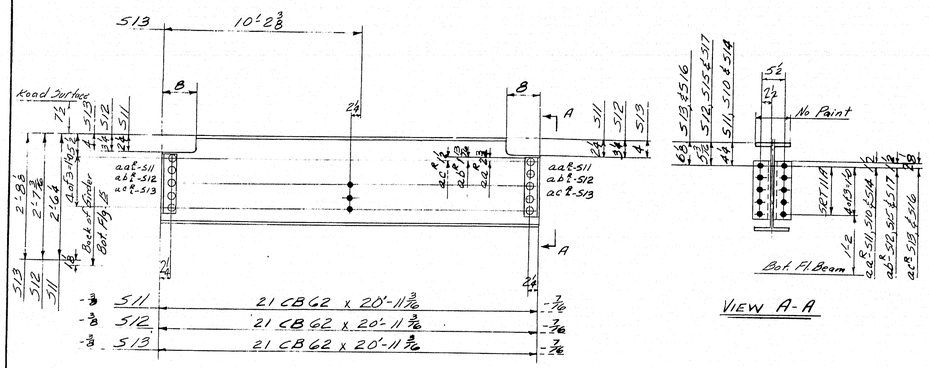
REVISIONS	
F	
E	
D	
C	
B	
X	

DRAWINGS MADE AT Elmira
WORK FABRICATED AT Elmira
IN CHARGE OF EET
DRAW. MADE BY CEJ DATE 5/28/52
DRAW. CHECKED BY CLL DATE 7-9-52
ORDER No. Q2304
SHEET No. 4

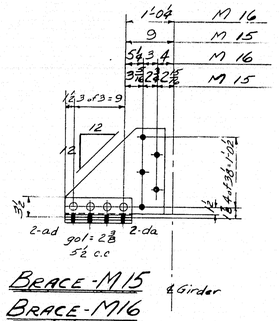
Adv. Bill 3

57-154 Weld

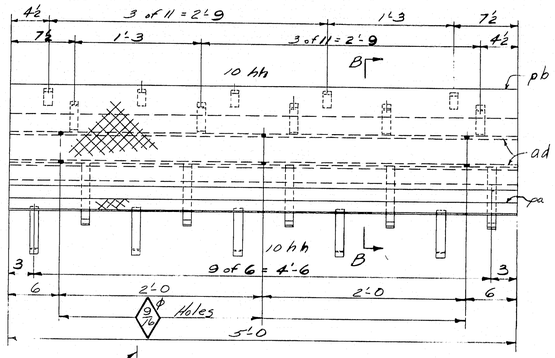
0 1 2 3 4 5 INCHES



VIEW A-A

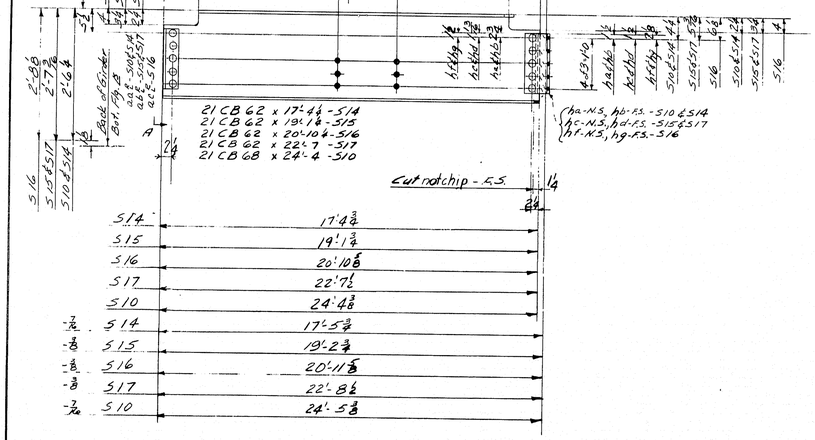


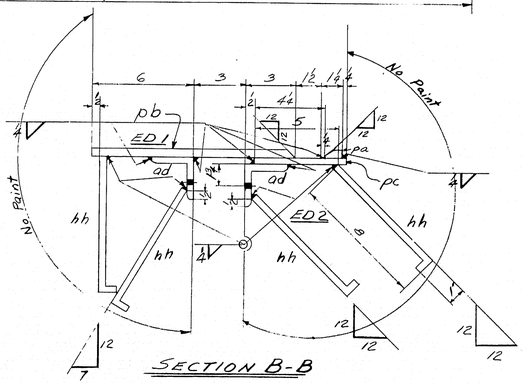
BRACE-M15
BRACE-M16



END DAM-ED1

END DAM-ED2





SECTION B-B

LINE	Total No. of Pcs. on the Order	No. of Pcs. on Sheet	MATERIAL SHAPE				LENGTH Feet	LENGTH Inches	ASSEM-BLING MARK	REMARKS	ORDERED		ITEM	CALCULATED WEIGHT FOR ONE SHIP. PIECE
1		12	STRINGERS						S11					(3880)
2		12	STRINGERS						S12					(3897)
3		6	STRINGERS						S13					(1944)
4														
5		30	21	CB	62		20	11 3/16						1496
6	28	24	L 5	4	3 1/2	7/16	1	4 4	aa^R	S11	20'-10 7/8	24		57
7	28	24	L 5						aa^L	S11				
8	28	24	L 5	4	3 1/2	7/16	1	3 3/8	ab^R	S12				54
9	28	24	L 5						ab^L	S12	(55/60	47		
10	14	12	L 5	4	3 1/2	7/16	1	3 3/8	ac^R	S13				55
11	14	12	L 5						ac^L	S13				
12														
13		2	STRINGERS						S14					(1120)
14		2	STRINGERS						S15					(1223)
15		2	STRINGERS						S16					(1334)
16		2	STRINGERS						S17					(1440)
17		2	STRINGERS						S10					(1701)
18		2	21	CB	62		17	5 3/4		S14	17'-4 4	27		1476
19		2	21	CB	62		19	2 3/4		S15	19'-1 4	26		1584
20		2	21	CB	62		20	11 5/8		S16	20'-10 4	25		1293
21		2	21	CB	62		22	8 1/2		S17	22'-7	23		1404
22		2	21	CB	GB		24	5 3/8		S10	24'-4	22		1692
23		4	L 8						aa^R	S10 & S14				29
24		4	L 5						aa^L	S10 & S14				
25		4	L 5						ab^R	S15 & S17				27
26		4	L 5						ab^L	S15 & S17				
27		2	L 5						ac^R	S16				28
28		2	L 5						ac^L	S16				
29		4	PL.		16 4	1/16			Bobt.	h a	Bent-S10 & S14		S	16
30		4	PL.		16 4	1/16			Bobt.	h b	Bent-S10 & S14		S	12
31		4	PL.		15 3	7/16			Bobt.	h c	Bent-S15 & S17		S	15
32		4	PL.		15 3	7/16			Bobt.	h d	Bent-S15 & S17		S	16
33		2	PL.		15 3	7/16			Bobt.	h f	Bent-S16		S	16
34		2	PL.		15 3	7/16			Bobt.	h g	Bent-S16		S	17
35														
36														
37		16	BRACES						M15					(73)
38		4	BRACES						M16					(78)
39		16	PL.		18	3/8	1	3 2		M15	(18 4 3/4	8		59
40		4	PL.		15 3	3/8	1	8 4		M16	(45-0			67
41		40	L 5	4	3 1/2	7/16	1	0	ad		55/60	47		21
42		40	F.H.		12	8		8 2	da				AS	17
43		40	SB	3 7									AS	17
44														
45														
46		4	END DAMS						ED1	Weld				(53)
47		3	END DAMS						ED2	Weld				(89)
48		4	PL.		12	2	5	0	pb	ED1-S300	4 8 1/2 x 15-0	1		107
49		3	PL.		5 1/2	3/8	5	0	pc	ED2			S	35
50		7	L 5	2	2 2	3/8	5	0	ad	4 ED1 & 3 ED2			S	30
51		3	PL.		1	2	5	0	pa	ED2-S300	4 8 1/2 x 15-0	S		9
52		70	Straps	1	3 8				Bobt.	hh	Bent		S	10
53														
54														
55														
56														
57														
58														
59														
60														
61														
62														
63														
64														

see note "A"

STATE OF MAINE
RED BRIDGE OVER SWIFT RIVER
RUMFORD & MEXICO
OXFORD COUNTY
STRINGERS, BRACES, & END DAMS

AMERICAN BRIDGE
DIV. UNITED STATES STEEL CORPORATION

NOTES:
Holes marked "SRT" to be sub-punched & reamed to size with a metal templet.
Rivets - 7/8 ϕ
Holes - 15/16 ϕ Unless Noted.

Note "A"
No of end dams ED2 reduced from 4 to 3 as Customer has obtained one elsewhere. Balance of dams (3ED2) to be shipped in advance. See Shiporder dated 8-27-52

Marked per Shop 8-27-52

PAINT: Yes except as Noted
SHOP CONTACT SURFACES: No

F	
E	
D	
C	
B	
X	8-27-52
REVISIONS	

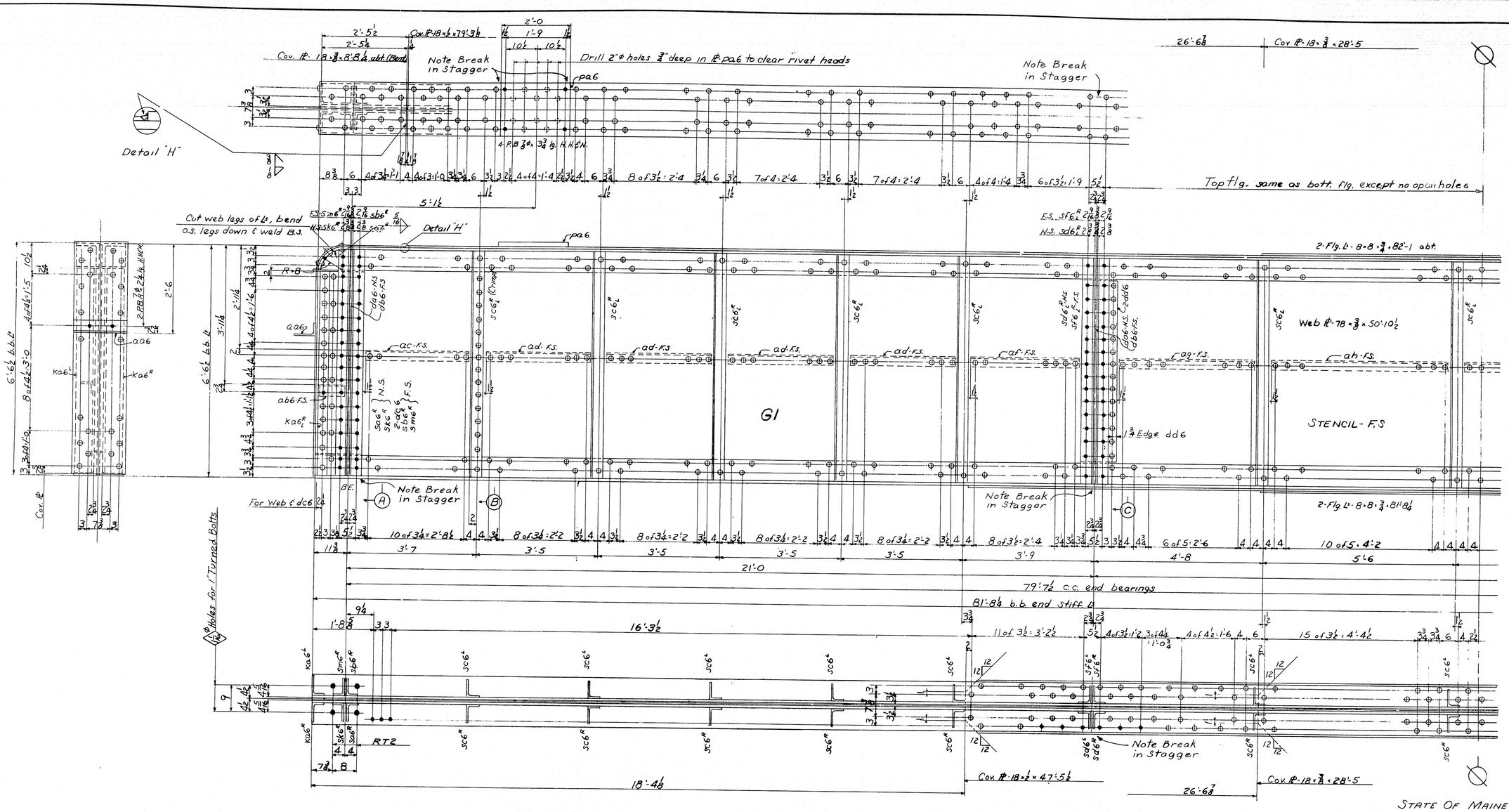
DRAWINGS MADE AT Elmira PLANT
WORK FABRICATED AT Elmira PLANT
IN CHARGE OF EET
DRAW. MADE BY CEJ DATE 6/12/52
DRAW. CHECKED BY CLL DATE 7-9-52

ORDER No. Q2304
SHEET No. 5

Adv. Bill 385

57-155 Weld

0 1 2 3 4 5 INCHES



STATE OF MAINE
RED BRIDGE OVER SWIFT RIVER
RUMFORD & MEXICO OXFORD COUNTY
GIRDER- G1

AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL COMPANY
DESIGN 500 B-50 FENDALITE

PAINT:
SHOP CONTACT SURFACES:

REVISIONS	
X	
B	
C	
D	
E	
F	

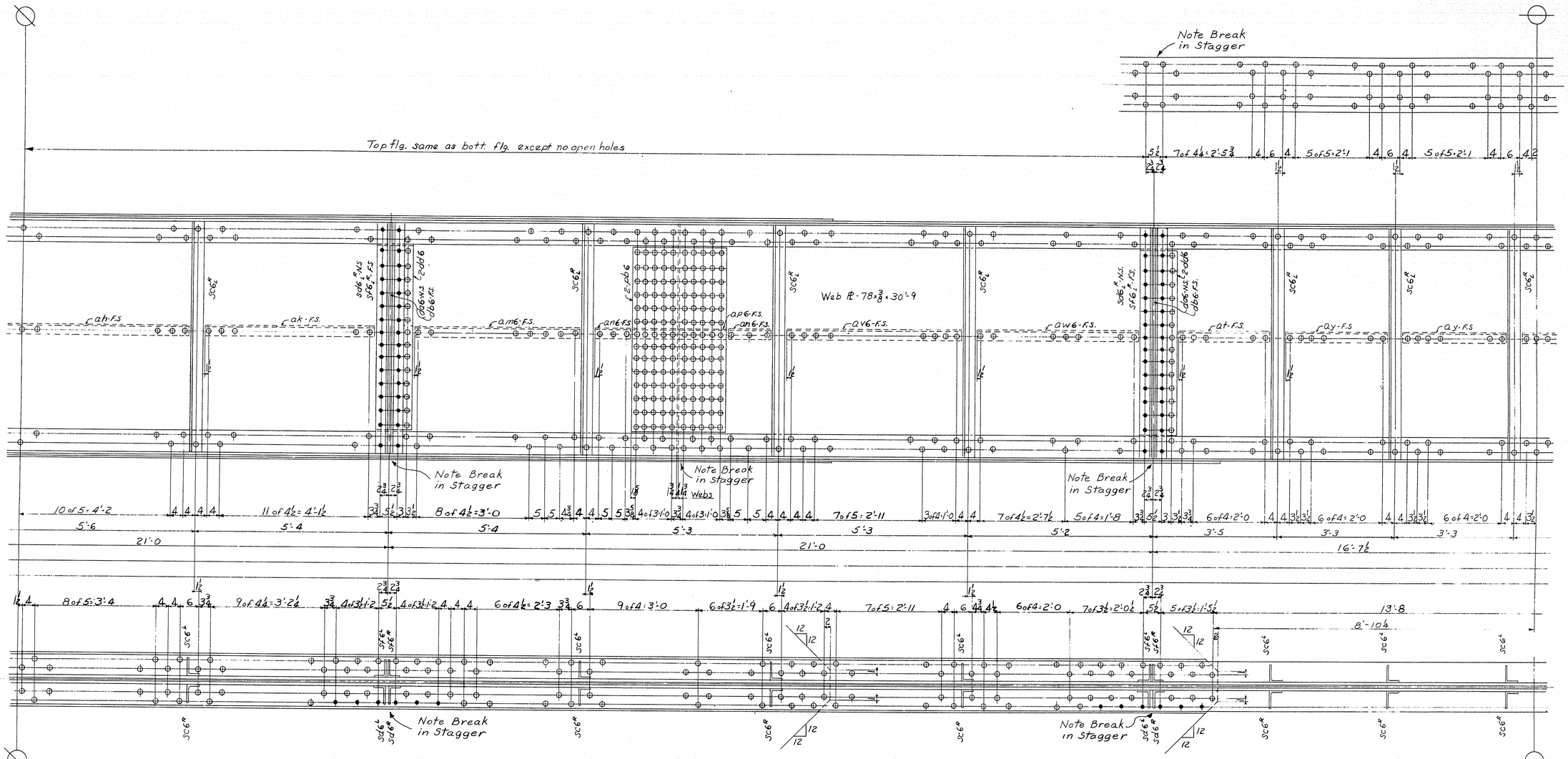
DRAWINGS MADE AT ELMIRA PLANT
WORK FABRICATED AT ELMIRA PLANT
IN CHARGE OF E.E.T.
DRAW. MADE BY A.R.B. DATE 6-3-52
DRAW. CHECKED BY G.D.W DATE 7-11-52

ORDER No. Q2304
SHEET No. 6AC

Adv. Bill 1

57-156

0 1 2 3 4 5 INCHES



STATE OF MAINE
RED BRIDGE OVER SWIFT RIVER
RUMFORD & MEXICO OXFORD COUNTY
GIRDER G1

AMERICAN BRIDGE

D61X 500 R-50 PENCILTEX

AMERICAN BRIDGE COMPANY

DRAWINGS MADE AT ELMIRA PLANT
WORK FABRICATED AT ELMIRA PLANT
IN CHARGE OF E.E.T.
DRAW. MADE BY A.R.B. DATE 6-4-52
DRAW. CHECKED BY GDW DATE 7-11-52

REVISIONS
F
E
D
C
B
X

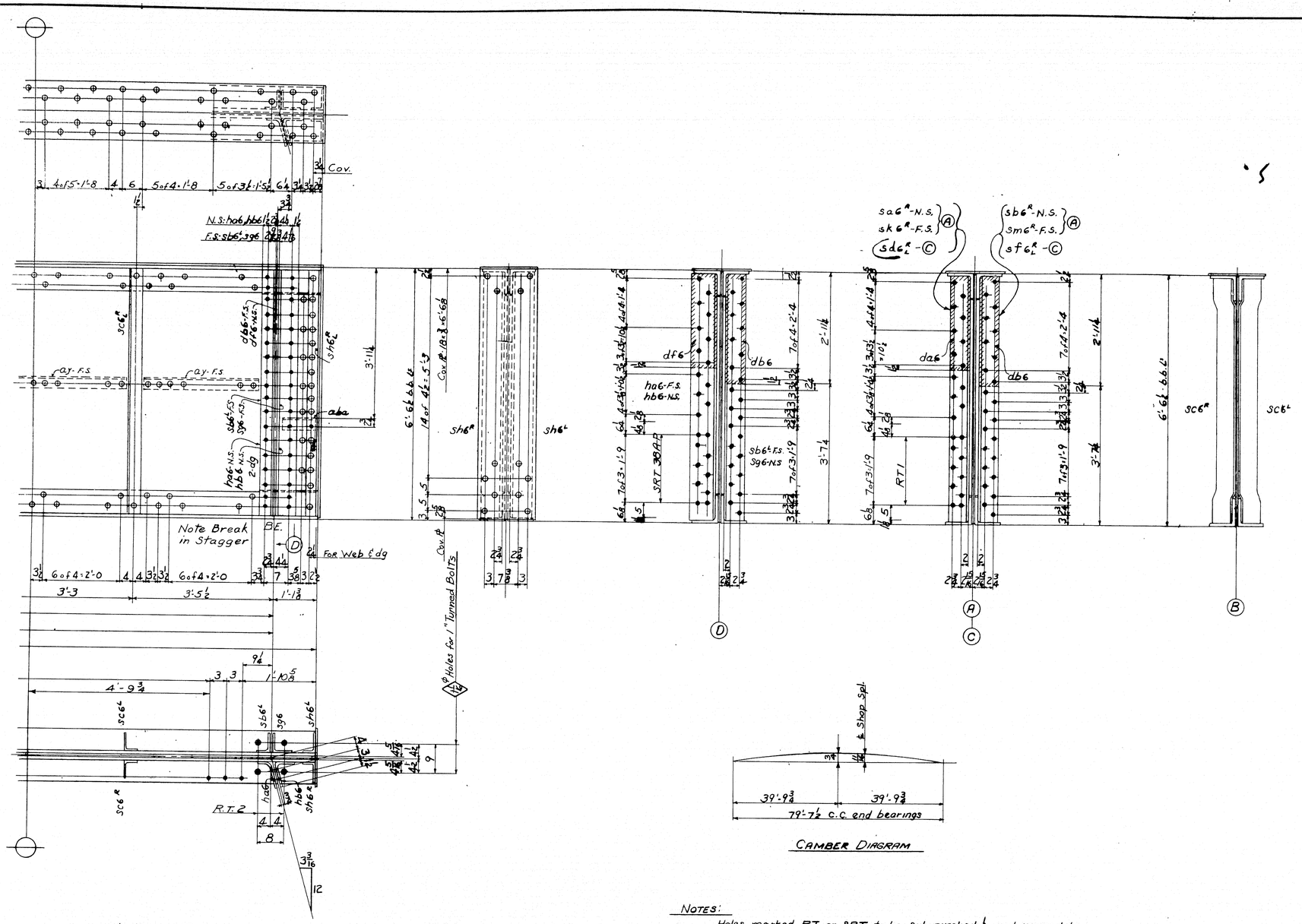
ORDER No. Q2304
SHEET No. 6B0

PAINT:
SHOP CONTACT SURFACES:

Adv. Bill

57 - 157

0 1 2 3 4 5 INCHES



CAMBER DIAGRAM

L. WT. = 18 TON

LINE	Erec. Pc. or Pc. mk. on Erec. Sheet	Qty. or Pcs. per Mem.	MATERIAL SHAPE	LENGTH Feet	LENGTH Inches	ASSEMBLING MARK	REMARKS	ORDERED ITEM	ORDERED	CALCULATED WEIGHT FOR ONE SHOP PIECE
1							80X19X81-9			
2			2 GIRDERS - G1				STENCIL			35593
3		2	Web PL 78 x 3/8	50	10½			50-11½	3	8399 16C
4		2	Web PL 78 x 3/8	30	9			30-10½	6	
5		4	Flg. PL 8 x 3/4	82	11½	abt.	Cut, Bent	82-2	39	12761 13C
6		4	Flg. PL 8 x 3/4	81	8½			81-9	40	
7		2	Cov. PL 18 x 1/2	79	9½			79-4½	12	9838 7C
8		2	Cov. PL 18 x 1/2	47	5½			48-6½	13	
9		4	Cov. PL 18 x 3/8	28	5			29-0	17	1653
10		2	Cov. PL 18 x 3/8	8	8½	abt.	BENT	40-0	16	
11		2	Cov. PL 18 x 3/8	6	6½					
12	2@ 2½	2	L 6 x 4 x 7/16	6	5	sa6R	FIN 1		S	
13	2@ 2½	2	L 6 x 4 x 7/16	6	5	sk6R	FIN 1		S	326
14	2@ 2½	2	L 6 x 4 x 7/16	6	5	sb6R	FIN 1		S	
15		2	L			sb6L				
16	4	30	L 6 x 4 x 3/8	6	5	sc6R	CRIMPS			
17	4	30	L			sc6L				2332 C
18	12	6	L 6 x 4 x 3/8	6	5	sd6R		55/60	41	
19	12	6	L			sd6L				
20	12	6	L 6 x 4 x 3/8	6	5	sf6R				
21	12	6	L			sf6L				
22	4	2	L 6 x 6 x 7/16	6	5	sg6	FIN 1		S	112
23	4	2	PL 77 x 7/16		11 abt.	ha6	FIN 1 end		S	218
24	4	2	PL 77 x 7/16		11 abt.	hb6	FIN 1 end		S	
25	4	2	L 7 x 4 x 7/16	6	5	sh6R			S	
26	4	2	L			sh6L			S	386
27	4	2	L 7 x 4 x 7/16	5	9½	ka6R			S	
28	4	2	L			ka6L			S	
29	16	8	Fills 6 x 3/4	2	5⅝	da6			S	151 5C
30	20	10	Fills 6 x 3/4	2	10⅜	db6			S	1101 9C
31	4	2	Fills 7½ x 3/8	2	5⅝	df6		12½ 22-6	9	47 3C
32	8	4	Fills 15½ x 3/8	2	5	dc6		18½	8	408 4C
33		4	Fills 17½ x 3/8	2	5	dg		45-0		441 4C
34	2A 12	12	Fills 12 x 3/8	2	5	dd6		45-0	9	999 25C
35	8 4	4	PB 31 x 3/8	2	5	pb6		22x38 42-0	14	408
36	4 4	4	PB 7 x 3/8	2	5	pa6	H.H.&N.		NS	120
37	4	2	L 4 x 4 x 3/8		9½	ab6			S	17
38		2	L 3½ x 3½ x 3/8	2	11½	ac				
39		8	L 3½ x 3½ x 3/8	3	0	ad				
40		2	L 3½ x 3½ x 3/8	3	1½	af				
41		2	L 3½ x 3½ x 3/8	3	9⅜	ag		55/60	49	291
42		4	L 3½ x 3½ x 3/8	5	1	ah				
43		2	L 3½ x 3½ x 3/8	4	8½	ak				
44	6	2	L 3½ x 3½ x 3/8	4	5⅜	am6				
45	8 4	4	L 3½ x 3½ x 3/8	1	1	an6				
46	4	2	L 3½ x 3½ x 3/8	2	7	ap6				
47	2@ 2½	2	L 6 x 4 x 7/16	6	5	sm6R	FIN 1		S	92 62C
48	8	2	L 3½ x 3½ x 3/8	4	10	av6				
49	10	2	L 3½ x 3½ x 3/8	4	6½	aw6		55/60	49	198
50		2	L 3½ x 3½ x 3/8	2	6⅝	at				
51		8	L 3½ x 3½ x 3/8	2	10	ay				
52		2	L 4 x 4 x 3/8		11	aba			S	9
53		104	SB 7/8 ø						AS	1
54	4	2	PB 18 x 1/2	2	0	pa6		18x1½ 12'-10	7	184 8C
55		8	PB 7/8 ø x 3 3/4				H.H.&N.		AS	4
56										908R
57										1421F
58										
59										
60										
61										
62										
63										
64										

NOTES:

Holes marked RT or SRT to be sub-punched ¼, and reamed to size with a metal template.
B.E. indicates bearing end of stiffeners.
Lifting weight to be plainly marked on girders.
Rivets - 7/8 ø
Holes - 45/16 ø unless noted.

STATE OF MAINE
RED BRIDGE OVER SWIFT RIVER
RUMFORD & MEXICO OXFORD COUNTY
GIRDER G1

AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL COMPANY

DRAWINGS MADE AT ELMIRA PLANT
WORK FABRICATED AT ELMIRA PLANT
IN CHARGE OF E.E.T.
DRAW. MADE BY A.R.B. DATE 6-6-52
DRAW. CHECKED BY G.D.W DATE 7-11-52

F	
E	
D	
C	
B	
X	8-6-52
REVISIONS	

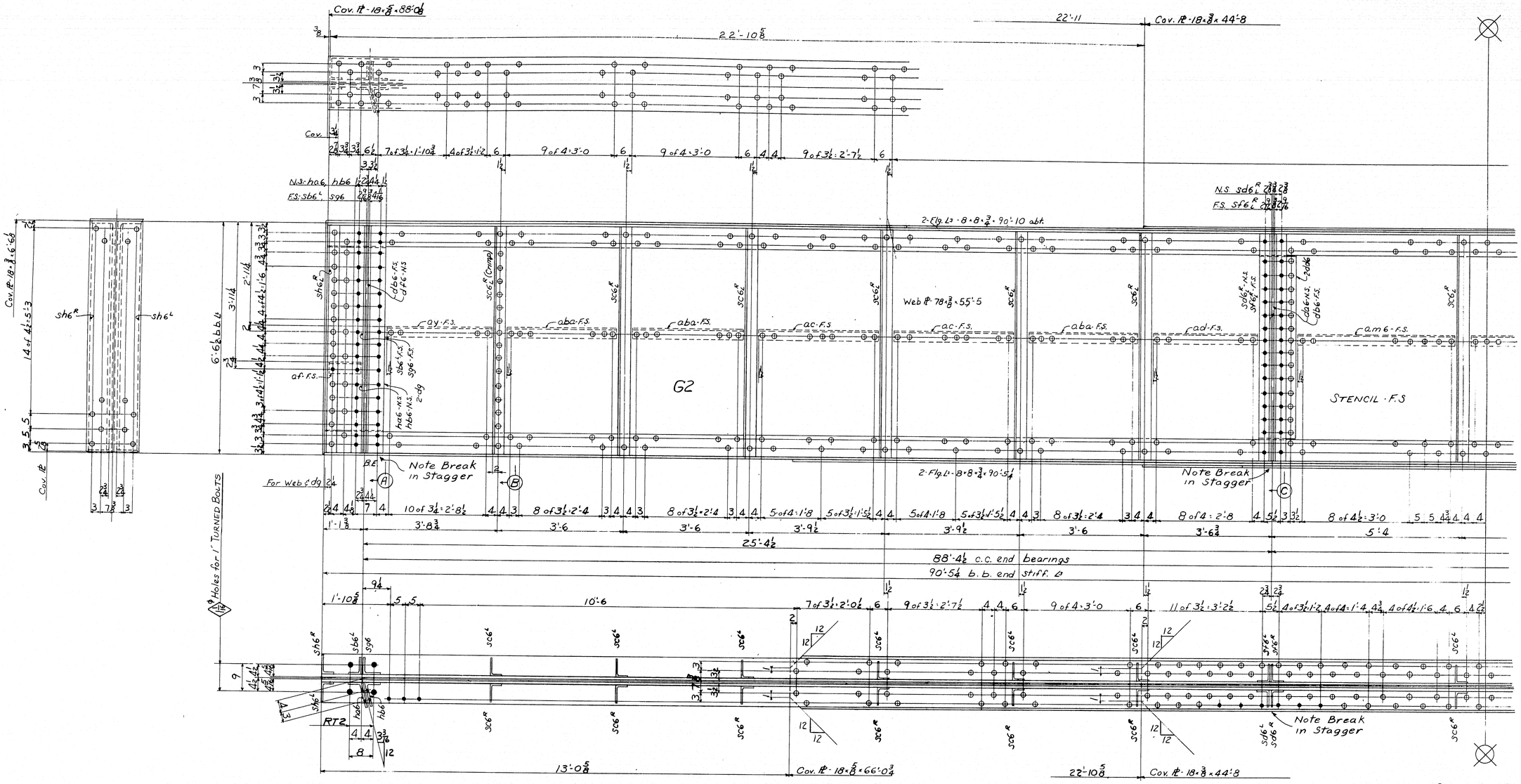
ORDER No. Q 2304
SHEET No. 6C

PAINT: YES
SHOP CONTACT SURFACES: No

Adv. Bill 1

57-158 WELD

0 1 2 3 4 5 INCHES



0 1 2 3 4 5 INCHES

STATE OF MAINE
RED BRIDGE OVER SWIFT RIVER
RUMFORD & MEXICO OXFORD COUNTY
GIRDER - G2

AMERICAN BRIDGE

UNITED STATES STEEL
DIXI 500 #10 PENCILITE

DRAWINGS MADE AT ELMIRA PLANT
WORK FABRICATED AT ELMIRA PLANT
IN CHARGE OF E.E.T.
DRAW. MADE BY A.R.B. DATE 6-13-58
DRAW. CHECKED BY GDW DATE 7-11-58

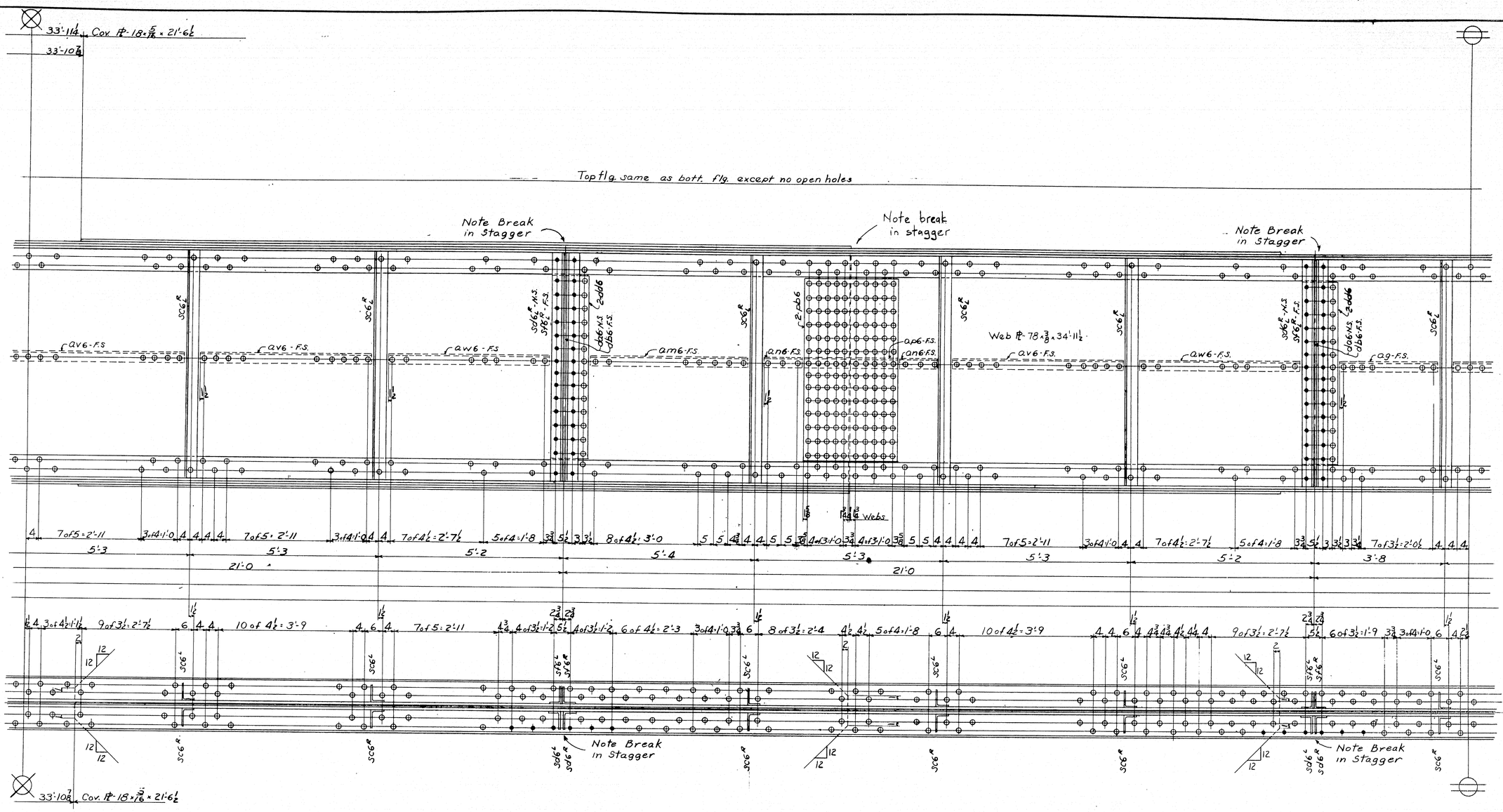
F	
E	
D	
C	
B	
X	
REVISIONS	

ORDER No. Q2304
SHEET No. 7AC

PAINT:
SHOP CONTACT SURFACES:

Mt. Bl.

57-159



STATE OF MAINE
RED BRIDGE OVER SWIFT RIVER
RUMFORD & MEXICO OXFORD COUNTY
GIRDER - G2

AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL COMPANY
DOSX 500 P-50 PENCILTEX

PAINT:
SHOP CONTACT SURFACES:

REVISIONS	
F	
E	
D	
C	
B	
X	

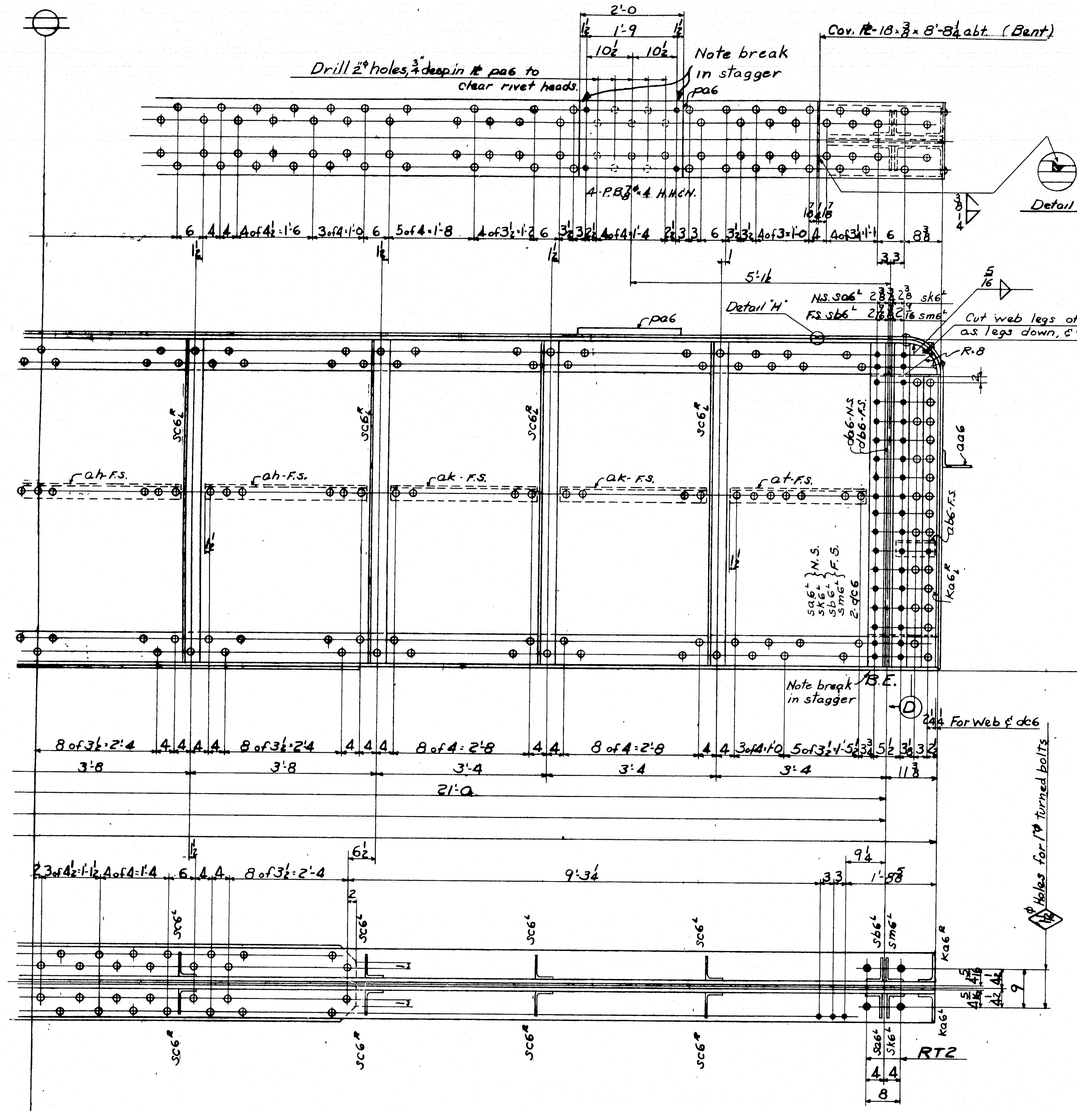
DRAWINGS MADE AT ELMIRA PLANT
WORK FABRICATED AT ELMIRA PLANT
IN CHARGE OF E.E.T.
DRAW. MADE BY A.R.B. DATE 6-17-52
DRAW. CHECKED BY GDW DATE 7-11-52

ORDER No. Q 2304
SHEET No. 7BC

Adv. Bill

57-160

0 1 2 3 4 5 INCHES



LINE	Total No. of Pcs. in the Order	MATERIAL No. of Pcs. in Shaft	SHAPE			LENGTH Feet	LENGTH Inches	ASSEM. BLING MARK	REMARKS	ORDERED	ITEM	CALCULATED WEIGHT FOR ONE SHIP PIECE
1												
2		2	GIRDERS - G2						80X19X	90-6		7191 lb
3	2		Web PL	78	3/8	55	5		STENCIL	55-5 3/8	2	9299 lbs
4	2		Web PL	78	3/8	34	11 1/2			35-0 3/4	4	
5	1		Flg L	8	3/4	90	10	abt.	Cut Bent	90-11	37	14103 lbs
6	4		Flg L	8	3/4	90	5 1/2			90-6	38	
7	2		Cov PL	18	5/8	88	9 1/4			88-1 1/4	10	5993 lbs
8	2		Cov PL	18	3/4	66	0 3/4			67-0	11	
9	4		Cov PL	18	3/4	44	8			45-0	15	2850 lbs
10	4		Cov PL	18	1/2	21	6 1/2			22-0	19	827 lbs
11	2		Cov PL	18	3/4	6	6 1/4			40-0	16	349 lbs
12	2		Cov PL	18	3/4	8	8 1/4	abt.	BENT			
13	2	L	4	4	7/16	6	5	sa6 L	FIN 1			
14	2	L	6	4	7/16	6	5	sm6 L	FIN 1			469 lbs
15	4	L	6	4	7/16	6	5	sb6 L	FIN 1			
16	2	L	6	4	7/16	6	5	sk6 L	FIN 1			
17	34	L	6	4	3/8	6	5	sc6 R	Crimp			
18	34	L						sc6 L				3718 lbs
19	6	L	6	4	3/8	6	5	sd6 R				
20	6	L						sd6 L				
21	6	L	6	4	3/8	6	5	se6 R				
22	6	L						se6 L				
23	2	L	6	6	7/16	6	5	aa6	FIN 1			110 lbs
24	2	PB	77		1/4	11	9 3/4 abt.	aa6	FIN end			218 lbs
25	2	PB	77		1/16	11	4 abt.	bb6	FIN end			
26	2	L	7	4	7/16	6	5	sh6 R				
27	2	L						sh6 L				386 lbs
28	2	L	7	4	7/16	5	9 1/2	ka6 R				
29	2	L						ka6 L				
30	8	Fills		6	3/4	2	5 3/8	da6				151 lbs
31	10	Fills		6	3/8	2	10 3/8	db6				112 lbs
32	2	Fills		7 1/2	1/4	2	5 3/8	df6				47 lbs
33	4	Fills		15 1/2	3/4	5	2	dc6				208 lbs
34	4	Fills		19	3/4	5	2	dg			S	500 lbs
35	12	Fills		12	3/4	5	2	dd6				446 lbs
36	4	PB		31	3/4	5	2	pb6				401 lbs
37	2	L	7	4	3/4	1	6	aa6				20 lbs
38	4	PB	7/8" ø x 2 1/2 H.H.C.H.								AS	2 lbs
39	2	L	4	4	3/4		9 1/4	ab6				17 lbs
40	2	L	4	4	3/4		11 1/4	af			S	
41	2	L	3 1/2	3 1/2	3/8	2	11 1/2	ay				
42	6	L	3 1/2	3 1/2	3/8	3	1	aba		55/60	49	
43	4	L	3 1/2	3 1/2	3/8	3	4 1/2	ac				
44	2	L	3 1/2	3 1/2	3/8	2	11	ad				655 lbs
45	4	L	3 1/2	3 1/2	3/8	4	5 3/4	am6				
46	6	L	3 1/2	3 1/2	3/8	4	10	av6				
47	4	L	3 1/2	3 1/2	3/8	4	6 1/2	aw6				
48	4	L	3 1/2	3 1/2	3/8	1	1	an6				
49	2	L	3 1/2	3 1/2	3/8	2	7	ap6				
50	2	L	3 1/2	3 1/2	3/8	2	9 3/4	aq				
51	4	L	3 1/2	3 1/2	3/8	3	3	ah		55/60	49	
52	4	L	3 1/2	3 1/2	3/8	2	11	ak				
53	2	L	3 1/2	3 1/2	3/8	2	8 1/2	at				
54	10A	S.B.	7/8" ø								AS	184 lbs
55	2	PL		18	1/2	2	0	pa6				
56	8	PB	7/8" ø x 4 H.H.C.H.								AS	4 lbs
57												
58												
59												
60												
61												
62												
63												
64												

1007 lbs
1671 lbs

NOTES:

Holes marked RT or SRT to be subpunched 1/4", and reamed to size with a metal template.
B.E. indicates bearing end of stiffeners.
Lifting weight to be plainly marked on girders.
Rivets - 7/8 ø
Holes - 15/16 ø unless noted.

STATE OF MAINE
RED BRIDGE OVER SWIFT RIVER
RUMFORD & MEXICO OXFORD COUNTY
GIRDER - G2

AMERICAN BRIDGE
DIVISION OF UNITED STATES STEEL COMPANY

DRW. 1403-51 PENCILTEX

REVISIONS	
F	
E	
D	
C	
B	
X	

DRAWINGS MADE AT ELMIRA PLANT
WORK FABRICATED AT ELMIRA PLANT
IN CHARGE OF E.E.T.
DRAW. MADE BY A.R.B. DATE 6-24-52
DRAW. CHECKED BY G.D.W. DATE 7-11-52
ORDER No. Q2304
SHEET No. 7C

PAINT: YES
SHOP CONTACT SURFACES: NO

Adv. Bill 2

57-161 WELD

0 1 2 3 4 5 INCHES

X-END

Z-END

TC1 TC2 TC3 B2 B3 B4 B5 B6 D7 D8 D9 D10 D11 U3 U5 U6 U7 U8 U9 U10 U11 U12 U13 U14 U15 U16 U17 U18 U19 U20 U21 U22 U23 U24 U25 U26 U27 U28 U29 U30 U31 U32 U33 U34 U35 U36 U37 U38 U39 U40 U41 U42 U43 U44 U45 U46 U47 U48 U49 U50 U51 U52 U53 U54 U55 U56 U57 U58 U59 U60 U61 U62 U63 U64 U65 U66 U67 U68 U69 U70 U71 U72 U73 U74 U75 U76 U77 U78 U79 U80 U81 U82 U83 U84 U85 U86 U87 U88 U89 U90 U91 U92 U93 U94 U95 U96 U97 U98 U99 U100 U101 U102 U103 U104 U105 U106 U107 U108 U109 U110 U111 U112 U113 U114 U115 U116 U117 U118 U119 U120 U121 U122 U123 U124 U125 U126 U127 U128 U129 U130 U131 U132 U133 U134 U135 U136 U137 U138 U139 U140 U141 U142 U143 U144 U145 U146 U147 U148 U149 U150 U151 U152 U153 U154 U155 U156 U157 U158 U159 U160 U161 U162 U163 U164 U165 U166 U167 U168 U169 U170 U171 U172 U173 U174 U175 U176 U177 U178 U179 U180 U181 U182 U183 U184 U185 U186 U187 U188 U189 U190 U191 U192 U193 U194 U195 U196 U197 U198 U199 U200 U201 U202 U203 U204 U205 U206 U207 U208 U209 U210 U211 U212 U213 U214 U215 U216 U217 U218 U219 U220 U221 U222 U223 U224 U225 U226 U227 U228 U229 U230 U231 U232 U233 U234 U235 U236 U237 U238 U239 U240 U241 U242 U243 U244 U245 U246 U247 U248 U249 U250 U251 U252 U253 U254 U255 U256 U257 U258 U259 U260 U261 U262 U263 U264 U265 U266 U267 U268 U269 U270 U271 U272 U273 U274 U275 U276 U277 U278 U279 U280 U281 U282 U283 U284 U285 U286 U287 U288 U289 U290 U291 U292 U293 U294 U295 U296 U297 U298 U299 U300 U301 U302 U303 U304 U305 U306 U307 U308 U309 U310 U311 U312 U313 U314 U315 U316 U317 U318 U319 U320 U321 U322 U323 U324 U325 U326 U327 U328 U329 U330 U331 U332 U333 U334 U335 U336 U337 U338 U339 U340 U341 U342 U343 U344 U345 U346 U347 U348 U349 U350 U351 U352 U353 U354 U355 U356 U357 U358 U359 U360 U361 U362 U363 U364 U365 U366 U367 U368 U369 U370 U371 U372 U373 U374 U375 U376 U377 U378 U379 U380 U381 U382 U383 U384 U385 U386 U387 U388 U389 U390 U391 U392 U393 U394 U395 U396 U397 U398 U399 U400 U401 U402 U403 U404 U405 U406 U407 U408 U409 U410 U411 U412 U413 U414 U415 U416 U417 U418 U419 U420 U421 U422 U423 U424 U425 U426 U427 U428 U429 U430 U431 U432 U433 U434 U435 U436 U437 U438 U439 U440 U441 U442 U443 U444 U445 U446 U447 U448 U449 U450 U451 U452 U453 U454 U455 U456 U457 U458 U459 U460 U461 U462 U463 U464 U465 U466 U467 U468 U469 U470 U471 U472 U473 U474 U475 U476 U477 U478 U479 U480 U481 U482 U483 U484 U485 U486 U487 U488 U489 U490 U491 U492 U493 U494 U495 U496 U497 U498 U499 U500 U501 U502 U503 U504 U505 U506 U507 U508 U509 U510 U511 U512 U513 U514 U515 U516 U517 U518 U519 U520 U521 U522 U523 U524 U525 U526 U527 U528 U529 U530 U531 U532 U533 U534 U535 U536 U537 U538 U539 U540 U541 U542 U543 U544 U545 U546 U547 U548 U549 U550 U551 U552 U553 U554 U555 U556 U557 U558 U559 U560 U561 U562 U563 U564 U565 U566 U567 U568 U569 U570 U571 U572 U573 U574 U575 U576 U577 U578 U579 U580 U581 U582 U583 U584 U585 U586 U587 U588 U589 U590 U591 U592 U593 U594 U595 U596 U597 U598 U599 U600 U601 U602 U603 U604 U605 U606 U607 U608 U609 U610 U611 U612 U613 U614 U615 U616 U617 U618 U619 U620 U621 U622 U623 U624 U625 U626 U627 U628 U629 U630 U631 U632 U633 U634 U635 U636 U637 U638 U639 U640 U641 U642 U643 U644 U645 U646 U647 U648 U649 U650 U651 U652 U653 U654 U655 U656 U657 U658 U659 U660 U661 U662 U663 U664 U665 U666 U667 U668 U669 U670 U671 U672 U673 U674 U675 U676 U677 U678 U679 U680 U681 U682 U683 U684 U685 U686 U687 U688 U689 U690 U691 U692 U693 U694 U695 U696 U697 U698 U699 U700 U701 U702 U703 U704 U705 U706 U707 U708 U709 U710 U711 U712 U713 U714 U715 U716 U717 U718 U719 U720 U721 U722 U723 U724 U725 U726 U727 U728 U729 U730 U731 U732 U733 U734 U735 U736 U737 U738 U739 U740 U741 U742 U743 U744 U745 U746 U747 U748 U749 U750 U751 U752 U753 U754 U755 U756 U757 U758 U759 U760 U761 U762 U763 U764 U765 U766 U767 U768 U769 U770 U771 U772 U773 U774 U775 U776 U777 U778 U779 U780 U781 U782 U783 U784 U785 U786 U787 U788 U789 U790 U791 U792 U793 U794 U795 U796 U797 U798 U799 U800 U801 U802 U803 U804 U805 U806 U807 U808 U809 U810 U811 U812 U813 U814 U815 U816 U817 U818 U819 U820 U821 U822 U823 U824 U825 U826 U827 U828 U829 U830 U831 U832 U833 U834 U835 U836 U837 U838 U839 U840 U841 U842 U843 U844 U845 U846 U847 U848 U849 U850 U851 U852 U853 U854 U855 U856 U857 U858 U859 U860 U861 U862 U863 U864 U865 U866 U867 U868 U869 U870 U871 U872 U873 U874 U875 U876 U877 U878 U879 U880 U881 U882 U883 U884 U885 U886 U887 U888 U889 U890 U891 U892 U893 U894 U895 U896 U897 U898 U899 U900 U901 U902 U903 U904 U905 U906 U907 U908 U909 U910 U911 U912 U913 U914 U915 U916 U917 U918 U919 U920 U921 U922 U923 U924 U925 U926 U927 U928 U929 U930 U931 U932 U933 U934 U935 U936 U937 U938 U939 U940 U941 U942 U943 U944 U945 U946 U947 U948 U949 U950 U951 U952 U953 U954 U955 U956 U957 U958 U959 U960 U961 U962 U963 U964 U965 U966 U967 U968 U969 U970 U971 U972 U973 U974 U975 U976 U977 U978 U979 U980 U981 U982 U983 U984 U985 U986 U987 U988 U989 U990 U991 U992 U993 U994 U995 U996 U997 U998 U999 U1000

FP1 FP2 BC1 BC2 BC3 G1 G14 G14S G15 G16 G21 G21½ G24 G24S G32 G33 2B1 2B3 2B4 2F3 2JB1 2JB2 2JB3 4JB3 2W3 3W3 4W3 SP1 SP2 SP3 C10 C11 C12 C13 C14 C15 C16 C17 C18 C19 C20 C21 C22 C23 C24 C25 C26 C27 C28 C29 C30 C31 C32 C33 C34 C35 C36 C37 C38 C39 C40 C41 C42 C43 C44 C45 C46 C47 C48 C49 C50 C51 C52 C53 C54 C55 C56 C57 C58 C59 C60 C61 C62 C63 C64 C65 C66 C67 C68 C69 C70 C71 C72 C73 C74 C75 C76 C77 C78 C79 C80 C81 C82 C83 C84 C85 C86 C87 C88 C89 C90 C91 C92 C93 C94 C95 C96 C97 C98 C99 C100 C101 C102 C103 C104 C105 C106 C107 C108 C109 C110 C111 C112 C113 C114 C115 C116 C117 C118 C119 C120 C121 C122 C123 C124 C125 C126 C127 C128 C129 C130 C131 C132 C133 C134 C135 C136 C137 C138 C139 C140 C141 C142 C143 C144 C145 C146 C147 C148 C149 C150 C151 C152 C153 C154 C155 C156 C157 C158 C159 C160 C161 C162 C163 C164 C165 C166 C167 C168 C169 C170 C171 C172 C173 C174 C175 C176 C177 C178 C179 C180 C181 C182 C183 C184 C185 C186 C187 C188 C189 C190 C191 C192 C193 C194 C195 C196 C197 C198 C199 C200 C201 C202 C203 C204 C205 C206 C207 C208 C209 C210 C211 C212 C213 C214 C215 C216 C217 C218 C219 C220 C221 C222 C223 C224 C225 C226 C227 C228 C229 C230 C231 C232 C233 C234 C235 C236 C237 C238 C239 C240 C241 C242 C243 C244 C245 C246 C247 C248 C249 C250 C251 C252 C253 C254 C255 C256 C257 C258 C259 C260 C261 C262 C263 C264 C265 C266 C267 C268 C269 C270 C271 C272 C273 C274 C275 C276 C277 C278 C279 C280 C281 C282 C283 C284 C285 C286 C287 C288 C289 C290 C291 C292 C293 C294 C295 C296 C297 C298 C299 C300 C301 C302 C303 C304 C305 C306 C307 C308 C309 C310 C311 C312 C313 C314 C315 C316 C317 C318 C319 C320 C321 C322 C323 C324 C325 C326 C327 C328 C329 C330 C331 C332 C333 C334 C335 C336 C337 C338 C339 C340 C341 C342 C343 C344 C345 C346 C347 C348 C349 C350 C351 C352 C353 C354 C355 C356 C357 C358 C359 C360 C361 C362 C363 C364 C365 C366 C367 C368 C369 C370 C371 C372 C373 C374 C375 C376 C377 C378 C379 C380 C381 C382 C383 C384 C385 C386 C387 C388 C389 C390 C391 C392 C393 C394 C395 C396 C397 C398 C399 C400 C401 C402 C403 C404 C405 C406 C407 C408 C409 C410 C411 C412 C413 C414 C415 C416 C417 C418 C419 C420 C421 C422 C423 C424 C425 C426 C427 C428 C429 C430 C431 C432 C433 C434 C435 C436 C437 C438 C439 C440 C441 C442 C443 C444 C445 C446 C447 C448 C449 C450 C451 C452 C453 C454 C455 C456 C457 C458 C459 C460 C461 C462 C463 C464 C465 C466 C467 C468 C469 C470 C471 C472 C473 C474 C475 C476 C477 C478 C479 C480 C481 C482 C483 C484 C485 C486 C487 C488 C489 C490 C491 C492 C493 C494 C495 C496 C497 C498 C499 C500 C501 C502 C503 C504 C505 C506 C507 C508 C509 C510 C511 C512 C513 C514 C515 C516 C517 C518 C519 C520 C521 C522 C523 C524 C525 C526 C527 C528 C529 C530 C531 C532 C533 C534 C535 C536 C537 C538 C539 C540 C541 C542 C543 C544 C545 C546 C547 C548 C549 C550 C551 C552 C553 C554 C555 C556 C557 C558 C559 C560 C561 C562 C563 C564 C565 C566 C567 C568 C569 C570 C571 C572 C573 C574 C575 C576 C577 C578 C579 C580 C581 C582 C583 C584 C585 C586 C587 C588 C589 C590 C591 C592 C593 C594 C595 C596 C597 C598 C599 C600 C601 C602 C603 C604 C605 C606 C607 C608 C609 C610 C611 C612 C613 C614 C615 C616 C617 C618 C619 C620 C621 C622 C623 C624 C625 C626 C627 C628 C629 C630 C631 C632 C633 C634 C635 C636 C637 C638 C639 C640 C641 C642 C643 C644 C645 C646 C647 C648 C649 C650 C651 C652 C653 C654 C655 C656 C657 C658 C659 C660 C661 C662 C663 C664 C665 C666 C667 C668 C669 C670 C671 C672 C673 C674 C675 C676 C677 C678 C679 C680 C681 C682 C683 C684 C685 C686 C687 C688 C689 C690 C691 C692 C693 C694 C695 C696 C697 C698 C699 C700 C701 C702 C703 C704 C705 C706 C707 C708 C709 C710 C711 C712 C713 C714 C715 C716 C717 C718 C719 C720 C721 C722 C723 C724 C725 C726 C727 C728 C729 C730 C731 C732 C733 C734 C735 C736 C737 C738 C739 C740 C741 C742 C743 C744 C745 C746 C747 C748 C749 C750 C751 C752 C753 C754 C755 C756 C757 C758 C759 C760 C761 C762 C763 C764 C765 C766 C767 C768 C769 C770 C771 C772 C773 C774 C775 C776 C777 C778 C779 C780 C781 C782 C783 C784 C785 C786 C787 C788 C789 C790 C791 C792 C793 C794 C795 C796 C797 C798 C799 C800 C801 C802 C803 C804 C805 C806 C807 C808 C809 C810 C811 C812 C813 C814 C815 C816 C817 C818 C819 C820 C821 C822 C823 C824 C825 C826 C827 C828 C829 C830 C831 C832 C833 C834 C835 C836 C837 C838 C839 C840 C841 C842 C843 C844 C845 C846 C847 C848 C849 C850 C851 C852 C853 C854 C855 C856 C857 C858 C859 C860 C861 C862 C863 C864 C865 C866 C867 C868 C869 C870 C871 C872 C873 C874 C875 C876 C877 C878 C879 C880 C881 C882 C883 C884 C885 C886 C887 C888 C889 C890 C891 C892 C893 C894 C895 C896 C897 C898 C899 C900 C901 C902 C903 C904 C905 C906 C907 C908 C909 C910 C911 C912 C913 C914 C915 C916 C917 C918 C919 C920 C921 C922 C923 C924 C925 C926 C927 C928 C929 C930 C931 C932 C933 C934 C935 C936 C937 C938 C939 C940 C941 C942 C943 C944 C945 C946 C947 C948 C949 C950 C951 C952 C953 C954 C955 C956 C957 C958 C959 C960 C961 C962 C963 C964 C965 C966 C967 C968 C969 C970 C971 C972 C973 C974 C975 C976 C977 C978 C979 C980 C981 C982 C983 C984 C985 C986 C987 C988 C989 C990 C991 C992 C993 C994 C995 C996 C997 C998 C999 C1000

FP1 FP2 BC1 BC2 BC3 G1 G14 G14S G15 G16 G21 G21½ G24 G24S G32 G33 2B1 2B3 2B4 2F3 2JB1 2JB2 2JB3 4JB3 2W3 3W3 4W3 SP1 SP2 SP3

170'0" 12 Panels @ 14'2"

26'0"

-OUTSIDE ELEVATION OF TRUSS-

(Note. The fence for this bridge is J2495)

Half Plan of Bottom Bracing.

Half Plan of Top Bracing.

Portal Top C12

Portal Bottom C12

K10 C2 C-cty 2

D11 D12 D13 D14 D15 D16 D17 D18 D19 D20 D21 D22 D23 D24 D25 D26 D27 D28 D29 D30 D31 D32 D33 D34 D35 D36 D37 D38 D39 D40 D41 D42 D43 D44 D45 D46 D47 D48 D49 D50 D51 D52 D53 D54 D55 D56 D57 D58 D59 D60 D61 D62 D63 D64 D65 D66 D67 D68 D69 D70 D71 D72 D73 D74 D75 D76 D77 D78 D79 D80 D81 D82 D83 D84 D85 D86 D87 D88 D89 D90 D91 D92 D93 D94 D95 D96 D97 D98 D99 D100 D101 D102 D103 D104 D105 D106 D107 D108 D109 D110 D111 D112 D113 D114 D115 D116 D117 D118 D119 D120 D121 D122 D123 D124 D125 D126 D127 D128 D129 D130 D131 D132 D133 D134 D135 D136 D137 D138 D139 D140 D141 D142 D143 D144 D145 D146 D147 D148 D149 D150 D151 D152 D153 D154 D155 D156 D157 D158 D159 D160 D161 D162 D163 D164 D165 D166 D167 D168 D169 D170 D171 D172 D173 D174 D175 D176 D177 D178 D179 D180 D181 D182 D183 D184 D185 D186 D187 D188 D189 D190 D191 D192 D193 D194 D195 D196 D197 D198 D199 D200 D201 D202 D203 D204 D205 D206 D207 D208 D209 D210 D211 D212 D213 D214 D215 D216 D217 D218 D219 D220 D221 D222 D223 D224 D225 D226 D227 D228 D229 D230 D231 D232 D233 D234 D235 D236 D237 D238 D239 D240 D241 D242 D243 D244 D245 D246 D247 D248 D249 D250 D251 D252 D253 D254 D255 D256 D257 D258 D259 D260 D261 D262 D263 D264 D265 D266 D267 D268 D269 D270 D271 D272 D273 D274 D275 D276 D277 D278 D279 D280 D281 D282 D283 D284 D285 D286 D287 D288 D289 D290 D291 D292 D293 D294 D295 D296 D297 D298 D299 D300 D301 D302 D303 D304 D305 D306 D307 D308 D309 D310 D311 D312 D313 D314 D315 D316 D317 D318 D319 D320 D321 D322 D323 D324 D325 D326 D327 D328 D329 D330 D331 D332 D333 D334 D335 D336 D337 D338 D339 D340 D341 D342 D343 D344 D345 D346 D347 D348 D349 D350 D351 D352 D353 D354 D355 D356 D357 D358 D359 D360 D361 D362 D363 D364 D365 D366 D367 D368 D369 D370 D371 D372 D373 D374 D375 D376 D377 D378 D379 D380 D381 D382 D383 D384 D385 D386 D387 D388 D389 D390 D391 D392 D393 D394 D395 D396 D397 D398 D399 D400 D401 D402 D403 D404 D405 D406 D407 D408 D409 D410 D411 D412 D413 D414 D415 D416 D417 D418 D419 D420 D421 D422 D423 D424 D425 D426 D427 D428 D429 D430 D431 D432 D433 D434 D435 D436 D437 D438 D439 D440 D441 D442 D443 D444 D445 D446 D447 D448 D449 D450 D451 D452 D453 D454 D455 D456 D457 D458 D459 D460 D461 D462 D463 D464 D465 D466 D467 D468 D469 D470 D471 D472 D473 D474 D475 D476 D477 D478 D479 D480 D481 D482 D483 D484 D485 D486 D487 D488 D489 D490 D491 D492 D493 D494 D495 D496 D497 D498 D499 D500 D501 D502 D503 D504 D505 D506 D507 D508 D509 D510 D511 D512 D513 D514 D515 D516 D517 D518 D519 D520 D521 D522 D523 D524 D525 D526 D527 D528 D529 D530 D531 D532 D533 D534 D535 D536 D537 D538 D539 D540 D541 D542 D543 D544 D545 D546 D547 D548 D549 D550 D551 D552 D553 D554 D555 D556 D557 D558 D559 D560 D561 D562 D563 D564 D565 D566 D567 D568 D569 D570 D571 D572 D573 D574 D575 D576 D577 D578 D579 D580 D581 D582 D583 D584 D585 D586 D587 D588 D589 D590 D591 D592 D593 D594 D595 D596 D597 D598 D599 D600 D601 D602 D603 D604 D605 D606 D607 D608 D609 D610 D611 D612 D613 D614 D615 D616 D617 D618 D619 D620 D621 D622 D623 D624 D625 D626 D627 D628 D629 D630 D631 D632 D633 D634 D635 D636 D637 D638 D639 D640 D641 D642 D643 D644 D645 D646 D647 D648 D649 D650 D651 D652 D653 D654 D655 D656 D657 D658 D659 D660 D661 D662 D663 D664 D665 D666 D667 D668 D669 D670 D671 D672 D673 D674 D675 D676 D677 D678 D679 D680 D681 D682 D683 D684 D685 D686 D687 D688 D689 D690 D691 D692 D693 D694 D695 D696 D697 D698 D699 D700 D701 D702 D703 D704 D705 D706 D707 D708 D709 D710 D711 D712 D713 D714 D715 D716 D717 D718 D719 D720 D721 D722 D723 D724 D725 D726 D727 D728 D729 D730 D731 D732 D733 D734 D735 D736 D737 D738 D739 D740 D741 D742 D743 D744 D745 D746 D747 D748 D749 D750 D751 D752 D753 D754 D755 D756 D757 D758 D759 D760 D761 D762 D763 D764 D765 D766 D767 D768 D769 D770 D771 D772 D773 D774 D775 D776 D777 D778 D779 D780 D781 D782 D783 D784 D785 D786 D787 D788 D789 D790 D791 D792 D793 D794 D795 D796 D797 D798 D799 D800 D801 D802 D803 D804 D805 D806 D807 D808 D809 D810 D811 D812 D813 D814 D815 D816 D817 D818 D819 D820 D821 D822 D823 D824 D825 D826 D827 D828 D829 D830 D831 D832 D833 D834 D835 D836 D837 D838 D839 D840 D841 D842 D843 D844 D845 D846 D847 D848 D849 D850 D851 D852 D853 D854 D855 D856 D857 D858 D859 D860 D861 D862 D863 D864 D865 D866 D867 D868 D869 D870 D871 D872 D873 D874 D875 D876 D877 D878 D879 D880 D881 D882 D883 D884 D885 D886 D887 D888 D889 D890 D891 D892 D893 D894 D895 D896 D897 D898 D899 D900 D901 D902 D903 D904 D905 D906 D907 D908 D909 D910 D911 D912 D913 D914 D915 D916 D917 D918 D919 D920 D921 D922 D923 D924 D925 D926 D927 D928 D929 D930 D931 D932 D933 D934 D935 D936 D937 D938 D939 D940 D941 D942 D943 D944 D945 D946 D947 D948 D949 D950 D951 D952 D953 D954 D955 D956 D957 D958 D959 D960 D961 D962 D963 D964 D965 D966 D967 D968 D969 D970 D971 D972 D973 D974 D975 D976 D977 D978 D979 D980 D981 D982 D983 D984 D985 D986 D987 D988 D989 D990 D991 D992 D993 D994 D995 D996 D997 D998 D999 D1000

Arrangement of Shoe Pls and Rollers.

Dog Bolts 1¼"x1'4"

19'-6" c.to c.

18'0" clear

5'0"

3'6"

See detail of Floor

about 15'0" clear

½ End View.

½ Cross Section.

1'-3"

30d Nails

2" Spruce Plank on Sidewalk

4'-6 Wired Guard full length

2"x6" Blocks every 3 Feet

2"x6" Plank full length

6" Wire Spikes

3" Heavy laid at right angles to center line of Roadway

2" Spruce Plank laid diagonally

5 in each panel

Bolts ⅞" x 6"

Block 5"x2"

Plate Washer

⅞" Spike Bolt 1'-2" long (Bore holes before driving Spike Bolts)

Spiking Piece 3"x7"

℄ Truss

Hemlock planks laid with ¼ openings.

Oak or spruce " " " ½ "

SWIFT RIVER BRIDGE.

Between.

Rumford Falls & Mexico.

PROPOSED BY

BOSTON BRIDGE WORKS.

70. KILBY St. BOSTON.

NOTE-THIS-IS-AN-ERECTION-PLAN ONLY-AS-THE-DETAILS-ARE-NOT-CORRECT

Erection Diagram.

Drawn by Pfarr and Burnette
Traced by " "
Checked by Wentworth
Approved by F.

J.2488. Sh.2.

47-684

CASTING FOR FIXED END.

Make 2 ~ Mark Cstg #1.

Scale 1½"=1'0"

Inside of Truss Shown.

X End

~ SWIFT ~ RIVER ~ BRIDGE ~

~ Details of Truss ~

Rivets ¾" Open holes ⅞"

Scale 1"=1'-0"

April ~ 17 ~ 1902.

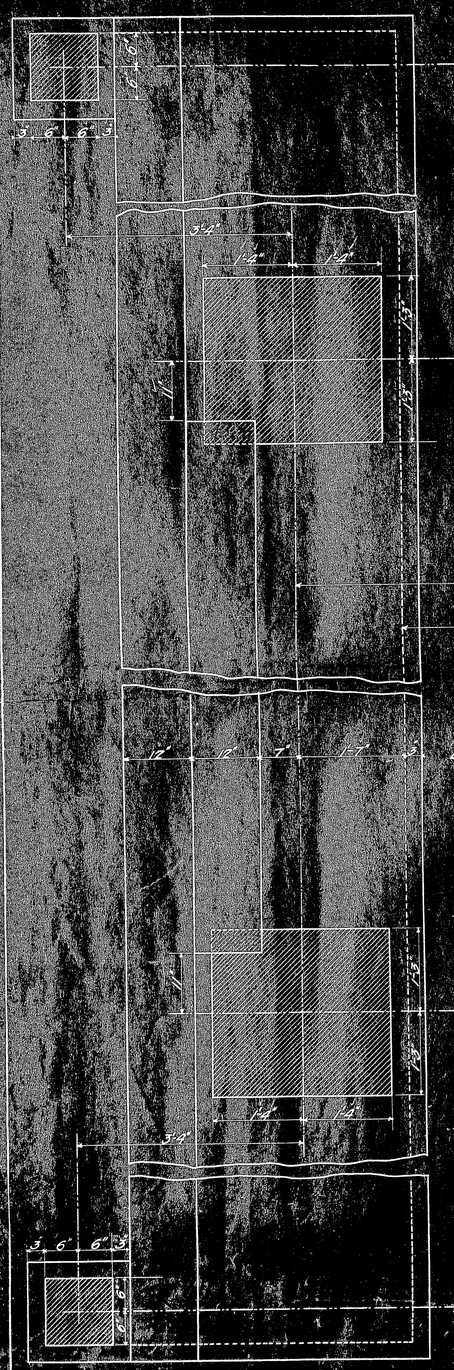
Drawn by Pm. W.

Traced by

Checked by McKeown &

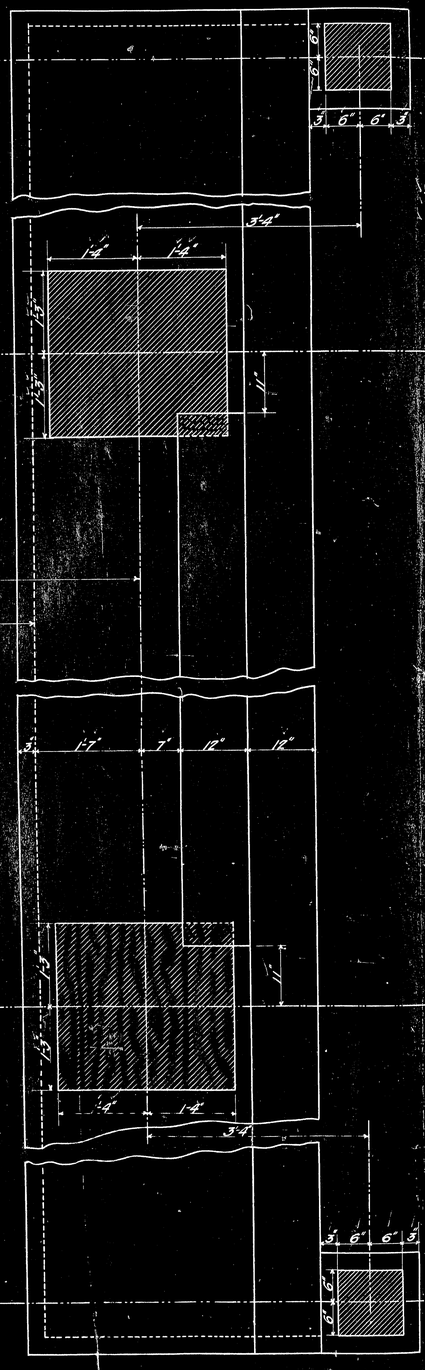
Approved by

J. 2488. Sh. 3.

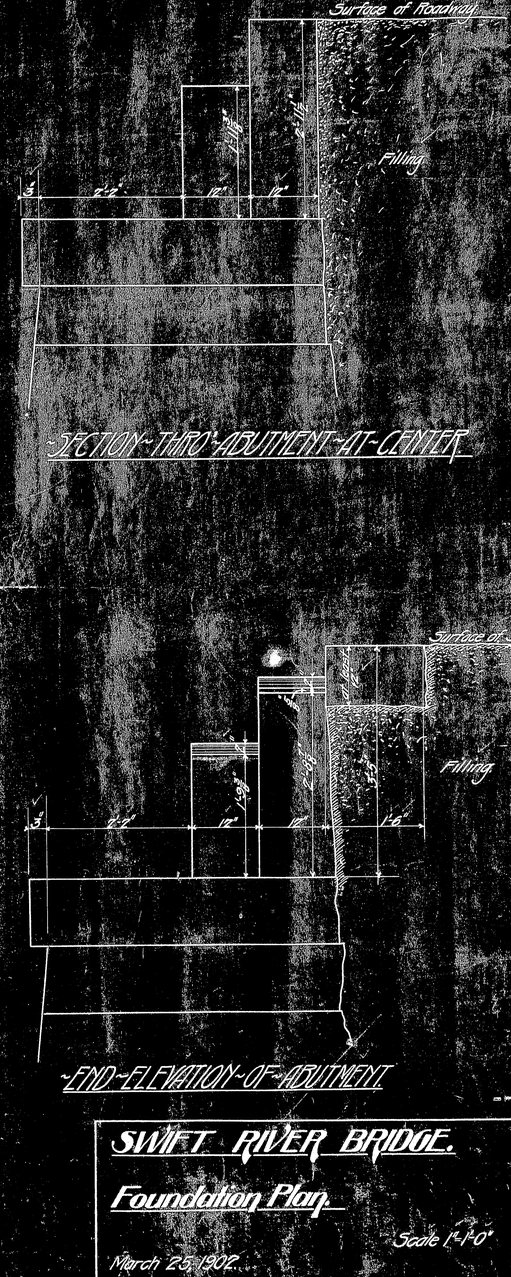


~PLAN~ OF ~ABUTMENTS~

Note. Shaded Surfaces denote location of Bridge Seats and Fence Posts and are to be dressed



~ELEVATION~OF~ABUTMENT~FROM~STREAM~



~SECTION~THRO'~ABUTMENT~AT~CENTER

~END~ELEVATION~OF~ABUTMENT.

SWIFT RIVER BRIDGE.

Foundation Plan.

Scale 1"=1'-0"

March 25. 1902.

Drawn by Burnette
Traced by
Checked by Chadwick & Hafer
Approved by Wood

J. 2488. Sh. I.

8-663

RUMFORD AND MEXICO UNION BRIDGE 1902

THE BOSTON BRIDGE WORKS INC.

BUILDERS

H. C. DUNTON, J. M. DOYEN,
Y. A. THURSTON, H. T. RICHARDS,
W. G. MORSE, S. A. REED,

BRIDGE COMMITTEE

CHAS. A. MIXER, ENGINEER

1902

Inside of Truss shown.

Make 2 Cast Iron Name Plates as shown - Mark Catg. "L"
All holes to be drilled for 7/8" rivets.

Notes -
All Rivets to be Steel
Minimum pitch 2 1/2"
Minimum lap 1 1/2"
All Metal 1/2" thick or over to have sheared edges planed and holes punched 7/8" and reamed

SWIFT RIVER BRIDGE

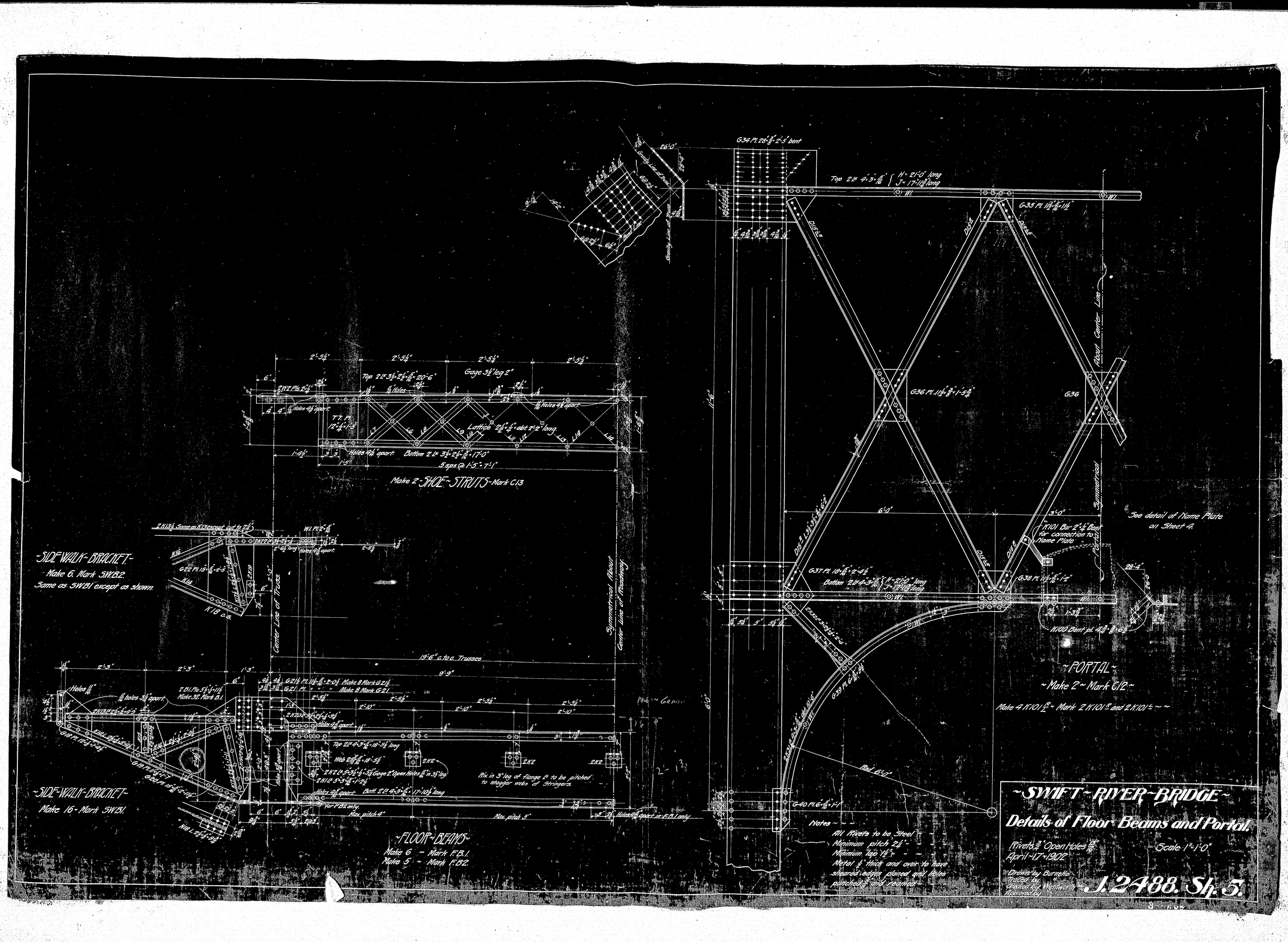
Details of Truss.

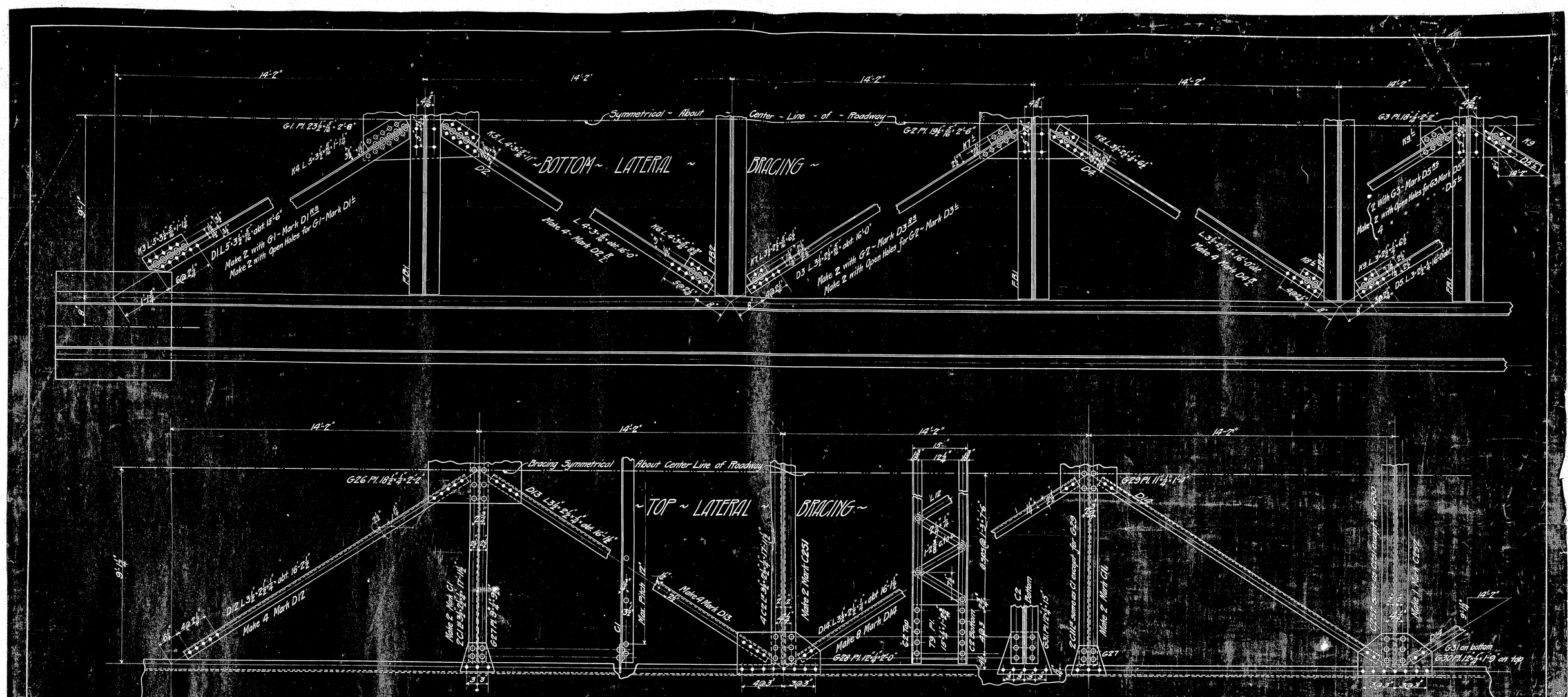
Rivets 7/8" Open holes 7/8" — Scale 1"=1'-0"

April 17, 1902

Drawn by Burnette
Traced by
Checked by Wentworth
Approved by

J. 2488. Sh. 4.


Make 2 -SHOE- STRUTS - Mark C13
Top 2 Ls 3½"x2½"x⅝" - 20'-6"
Gage 3½" leg 2"
Lattice 2½"x½" abt 2'-2" long.
Bottom 2 Ls 3½"x2½"x⅝" - 17'-0"
3 spcs @ 1'-5" = 7'-1"
-SIDE WALK- BRACKET -
Make 6. Mark SWB2.
Same as SWB1 except as shown.
-SIDE-WALK-BRACKET-
Make 16 - Mark SWB1.
19'-6" c to c Trusses
-FLOOR-BEAMS-
Make 6 - Mark F.B.1.
Make 5 - Mark F.B.2.
G34 Pl. 26"x⅜"x2'-5" bent
Top 2 Ls 4"x3"x⅝" { H = 21'-0" long / J = 17'-11½" long
G35 Pl. 11½"x⅜"x11½"
G36 Pl. 11½"x⅜"x1'-5½"
G36
About Center Line
Symmetrical about Center Line of Roadway
See detail of Name Plate on Sheet 4.
K101 Bar 2½"x⅝" Bent for connection to Name Plate
G37 Pl. 18⅛"x⅝"x2'-4½"
Bottom 2 Ls 4"x3"x⅝" { H = 21'-0" long / J = 17'-11½" long
G38 Pl. 11½"x⅝"x1'-2"
K100 Bent pl. 4⅜"x⅜"x6½"
-PORTAL-
- Make 2 - Mark C12 -
Make 4 K101 R = Mark 2 K101 R and 2 K101 L
G39 Pl. 6"x⅜"x4'-11"
G40 Pl. 6"x⅜"x1'-1"
Rod 6'-0"
Notes -
All Rivets to be Steel
Minimum pitch 2½"
Maximum Top ½"
Metal ⅜" thick and over to have sheared edges planed and holes punched ⅜" and reamed.
-SWIFT-RIVER-BRIDGE-
Details of Floor Beams and Portal.
Rivets ⅞" Open Holes ⅞"
Scale 1" = 1'-0"
April 17 1902
Drawn by Burnette
Traced by
Checked by Wentworth
Approved by
J. 2488. Sh. 5.


~BOTTOM~ LATERAL ~ BRACING ~
Symmetrical ~ About ~ Center ~ Line ~ of ~ Roadway
14'-2"
G1 Pl. 23½"x⅞"x 2'-8"
G2 Pl. 19½"x⅞"x 2'-6"
G3 Pl. 18½"x½"x 2'-2"
K14 L. 5'-3½"x5/16"x 1'-1¼"
K13 L. 5'-3½"x5/16"x 1'-1¼"
K18 L. 4'-3½"x5/16"x 11"
K17 L. 3½"x2½"x½" 6¼"
K19 L. 3½"x2½"x½" 6¼"
D1L 5'-3½"x5/16"x abt. 15'-6"
Make 2 with G1~ Mark D1
Make 2 with Open Holes for G1~ Mark D1L
D2
L. 4'-3½"x5/16" abt. 16'-0"
Make 4~ Mark D2L
K16 L. 4'-3½"x5/16" 9 @ 4"=3'-0"
D3 L. 3½"x2½"x5/16" abt. 16'-0"
Make 2 with G2~ Mark D3
Make 2 with Open Holes for G2~ Mark D3L
D4
L. 3½"x2½"x½" 16'-0" abt.
Make 4 Mark D4L
K15 L. 3½"x2½"x½" 6¼"
Make { 2 With G3~ Mark D5
2 " " " ~ D5L
4 " " " ~ D5L
D5 L. 3½"x2½"x½" 16'-0" abt.
F.B.1
F.B.2
Gage 4½"
Gage 4"
Gage 2½"
Gage 1¾"
Gage 1½"
Gage 1¼"
Gage ⅞"
Gage ¾"
Gage ⅝"
Gage ½"
Gage ⅜"
Gage ¼"
4@4"
4@3"
3@3"
3@4"
3@2"
6@2"
10@2"
8"
9"
12"
14"
15"
18"
19"
24"
48"
1'-0"
1'-1"
1'-2"
1'-3"
1'-4"
1'-5"
1'-6"
1'-7"
1'-8"
1'-9"
2'-0"
2'-2"
2'-6"
2'-8"
3'-0"
3'-3"
3'-4"
3'-5"
3'-6"
3'-7"
3'-8"
3'-9"
4'-0"
4'-1"
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4'-6"
4'-7"
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4'-9"
5'-0"
5'-1"
5'-2"
5'-3"
5'-4"
5'-5"
5'-6"
5'-7"
5'-8"
5'-9"
6'-0"
6'-1"
6'-2"
6'-3"
6'-4"
6'-5"
6'-6"
6'-7"
6'-8"
6'-9"
7'-0"
7'-1"
7'-2"

~OUTSIDE~VIEW~OF~FENCE~

SWIFT RIVER FENCE. (for J.2488.)

Details

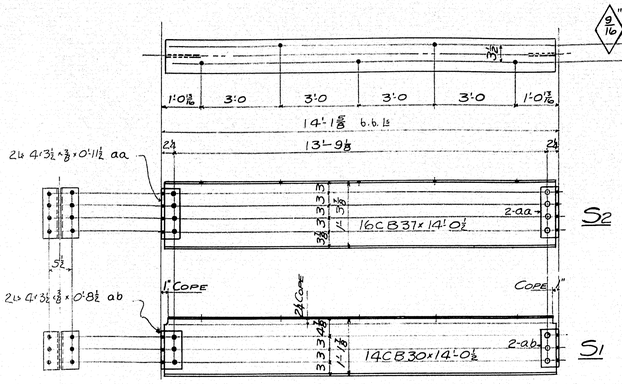
Scale 1"-1'-0"

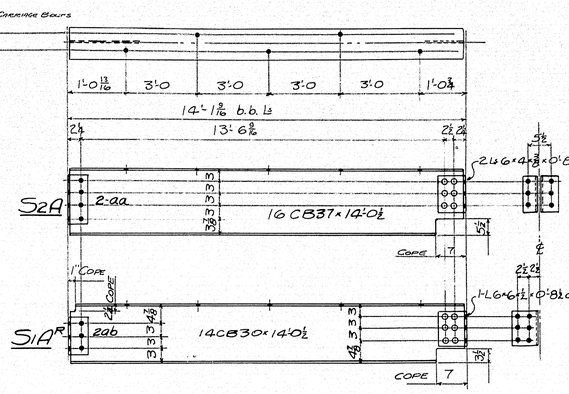
April-16-1902

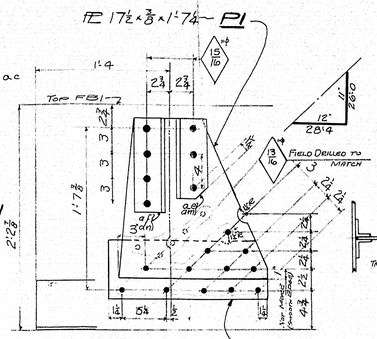
Drawn by
Traced by
Checked by
Approved by

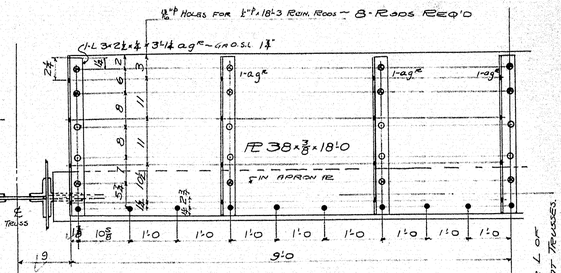
J.2495. Sh. 1.

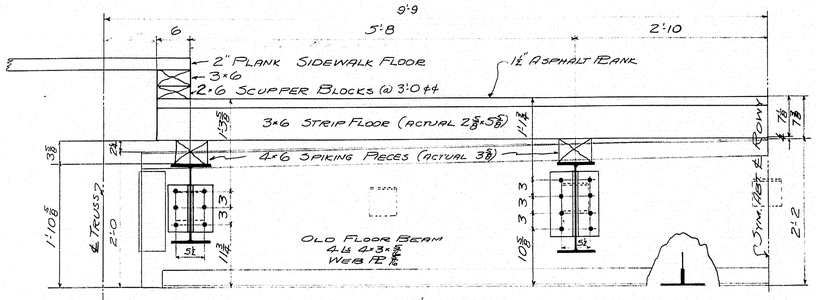
23-116

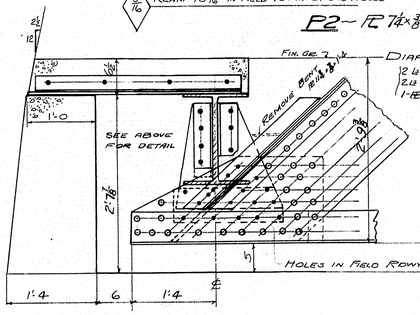


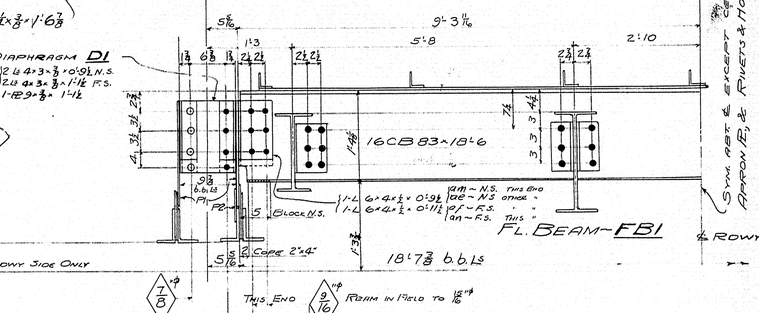


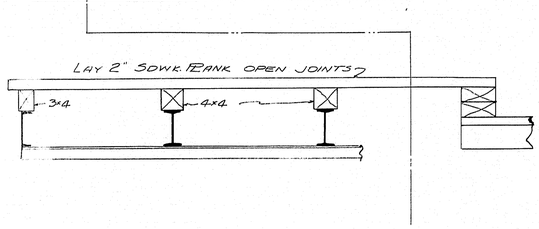


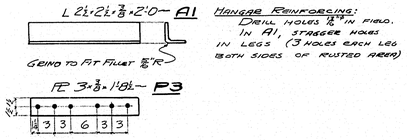




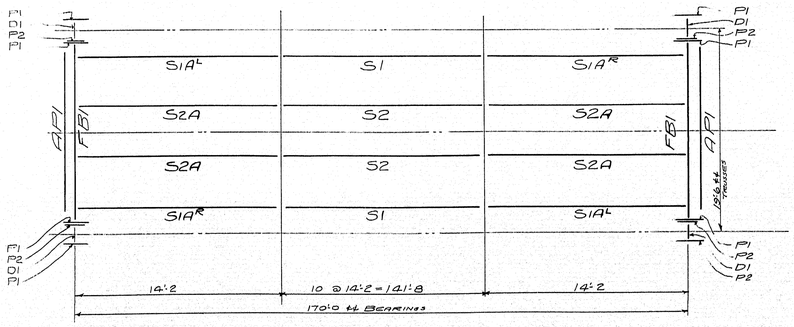








HANGAR REINFORCING:
DRILL HOLES ½" ϕ IN FIELD. IN A1, STAGGER HOLES IN LEGS. (3 HOLES EACH LEG BOTH SIDES OF RIVETED AREA)



STRUCT. STEEL REQ'D			RIVET LIST		
No	MARK	DESC.	No	DIA.	LENGTH
6	A1	HANGAR REINF.	70	⅞" ϕ	2½
2	AP1	APRON RODS	37	"	2½
2	FB1	END FLOOR BEAM	116	"	2⅜
4	D1	END DIAPHRAGM	500	"	2½
8	P1	GUSSET PLATE	25	"	3⅝
4	P2	GUSSET SPLICE PL	45	"	2⅜
3	P3	HANGAR REINF.	100	"	3
20	S1	INTERIOR OUTSIDE STRG	20	"	3½
20	S2	" INSIDE "	32	"	3⅝
2	S1A^R	END OUTSIDE "	15	⅞" ϕ	2½
2	S1A^L	" " "	42	"	2½
4	S2A	" INSIDE "	25	"	2⅝
			25	"	3⅜

RIVETS: ⅞" ϕ } UNLESS NOTED
HOLES: ¹³⁄₁₆" ϕ }
SHOP PAINT: MAINE STATE HIGHWAY COMMISSION SPECIFICATIONS (SURFACES TO BE RIVETED IN CONTACT EITHER IN SHOP OR FIELD SHALL NOT BE PAINTED)
DESIGN DATA: H15 LOADING (16,000#/□" D.L. LL. & I.)
ERECTION STRESSES NOT TO EXCEED 24,000#/□"

TOWN NO. 09-36
BRIDGE NO. 2707

MAINE HIGHWAY COMMISSION
BRIDGE DIVISION

RED BRIDGE
OVER
SWIFT RIVER
BETWEEN THE TOWNS OF
RUMFORD & MEXICO
OXFORD COUNTY

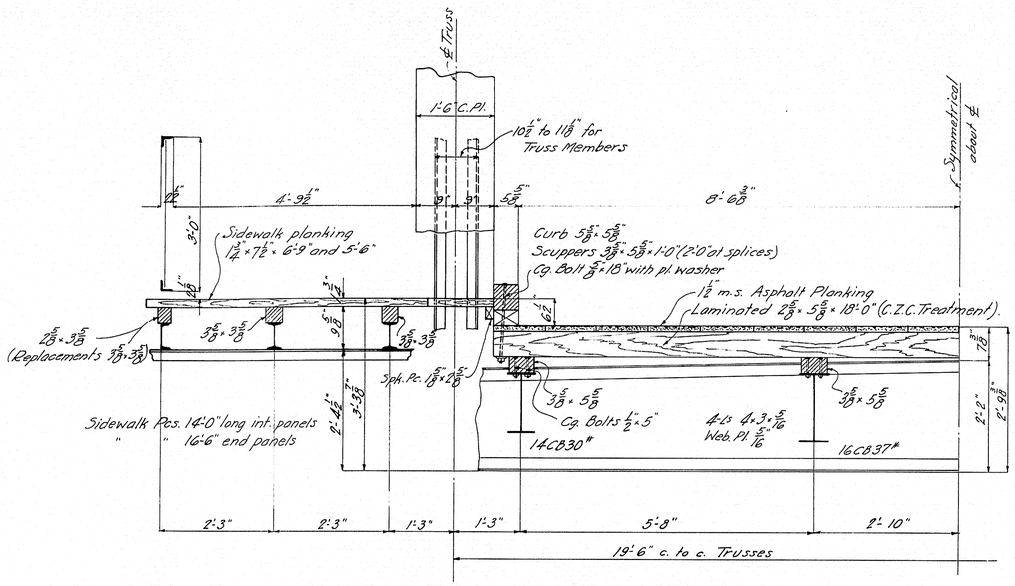
FLOOR PLAN

SHEET 1 OF 1 AUGUSTA, ME. JAN. 19, 1932

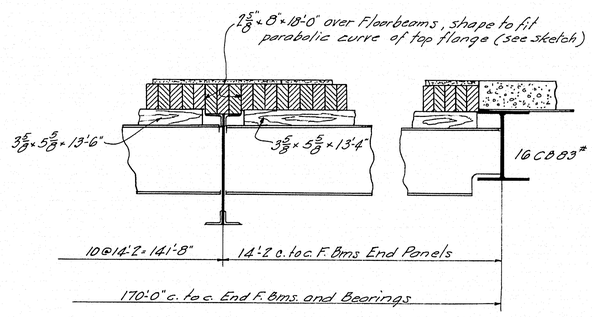
15-196

EB
REV. 1-21-32

0 1 2 3 4 5 INCHES



HALF TRANSVERSE SECTION



PART LONGITUDINAL SECTION

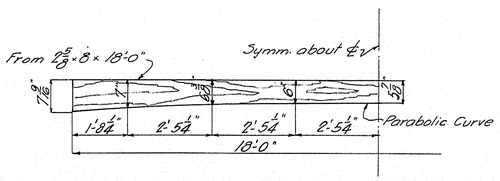
NOTES

Seven panels of laminated flooring on Mexico end to be renewed, replacing untreated portion placed in 1932; also some spiking pieces, not treated. All sidewalk planking and curbs to be renewed. New lumber is Red Spruce, pressure treated with Chromated Zinc Chloride. Five panels on Rumford end and most of the spiking pieces of Hard Pine, Creosoted were placed in 1932 and are in good condition.

Details shown here differ in some respects from 1932 plans.

Horizontal nails for laminated floor to be 60d No. 4 gauge. For Asphalt Planking use Barbed Car Nails, Oval Head, 16d Heavy, six nails to each piece of planking 12" wide by 24" long.

Before laying Asphalt Planking, swab deck with Hot Asphalt, 140° to 160°.



LAMINATED FLOOR PIECES OVER FLOORBEAM

Rw.

Town 09-36
Bridge 2707

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

RED BRIDGE OVER SWIFT RIVER

BETWEEN THE TOWNS OF

RUMFORD AND MEXICO

OXFORD COUNTY

REFLOORING DETAILS

SHEET 1 OF 1 — AUGUSTA, MAINE, JANUARY 3, 1941

40-185

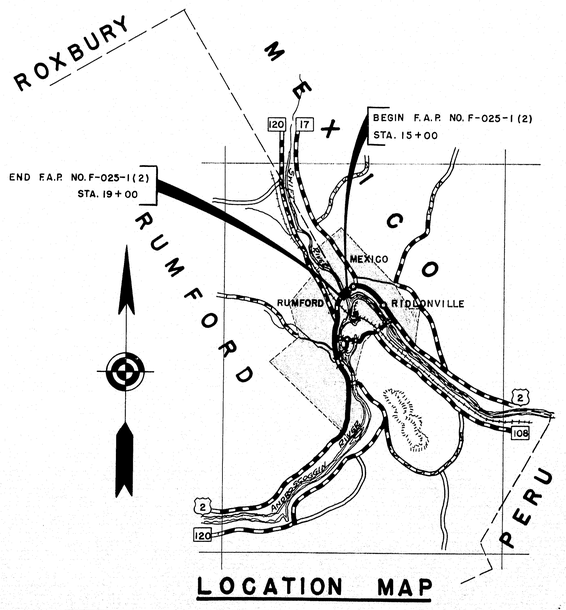
0 1 2 3 4 5 INCHES

F-025-1(2) 1 19

STATE OF MAINE
STATE HIGHWAY COMMISSION

RED BRIDGE
OVER
SWIFT RIVER
BETWEEN THE TOWNS OF
RUMFORD AND MEXICO
OXFORD COUNTY

FEDERAL AID PROJECT NO. F-025-1(2)
LENGTH OF PROJECT .076 MILE



LOCATION MAP

INDEX OF SHEETS

1	TITLE
2-3	STANDARDS
4	SURVEY
5	FOUNDATION DATA
6	TYPICAL APPROACH SECTIONS
7	CROSS SECTIONS
8	APPROACH DETAILS
9	GENERAL PLAN & ELEVATION
10	ABUTMENT NO. 1
11	ABUTMENT NO. 2
12	PIER
13-14	SUPERSTURCTURE
15-16-17-18	STRUCTURAL STEEL
19	LIGHTING DETAIL & REINFORCING STEEL

CONCRETE CLASSIFICATION

CLASS A ROADWAY & SIDEWALK SLABS
CLASS B ABUTS., PIERS, RET. WALLS & STAIRS

LOADING H20-44

fs = 18,000
fc = 1200
n = 10

APPROVED:
MAINE STATE HIGHWAY COMMISSION

CHAIRMAN
Harlup D. Welch
Hasen B. Emery
Lucius D. Barrows
CHIEF ENGINEER

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
RECOMMENDED FOR APPROVAL:

DISTRICT ENGINEER — DATE

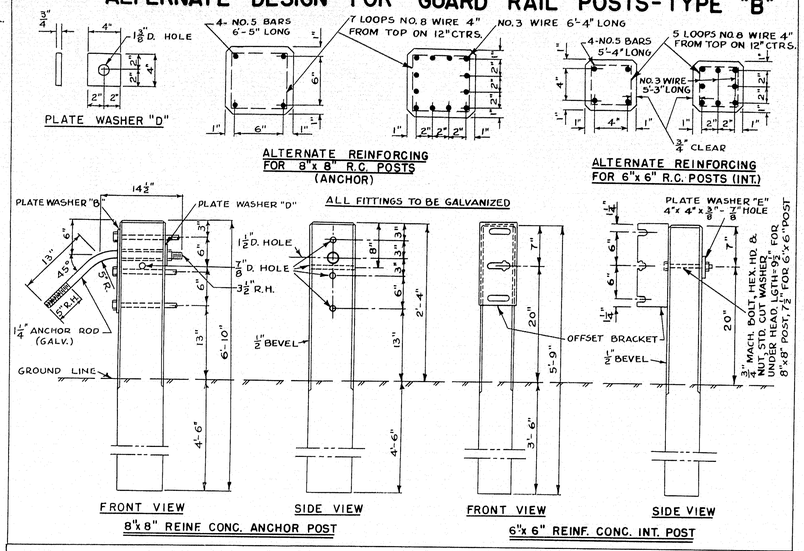
APPROVED:

DIVISION ENGINEER — DATE

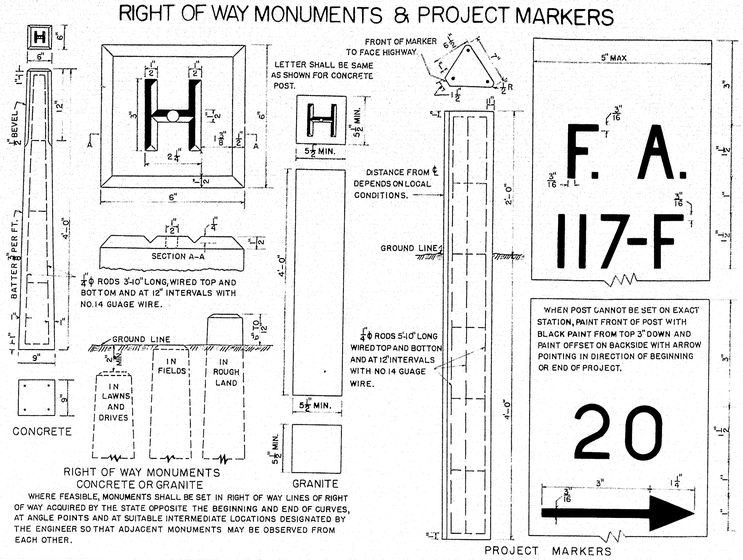
0 1 2 3 4 5 INCHES

55-57

ALTERNATE DESIGN FOR GUARD RAIL POSTS-TYPE "B"

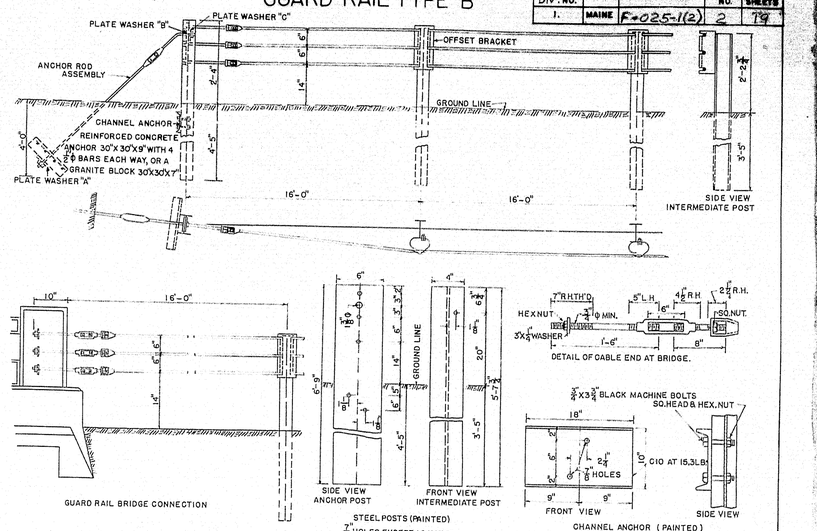


RIGHT OF WAY MONUMENTS & PROJECT MARKERS

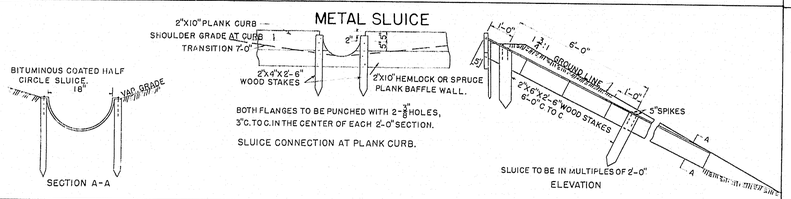


GUARD RAIL TYPE "B"

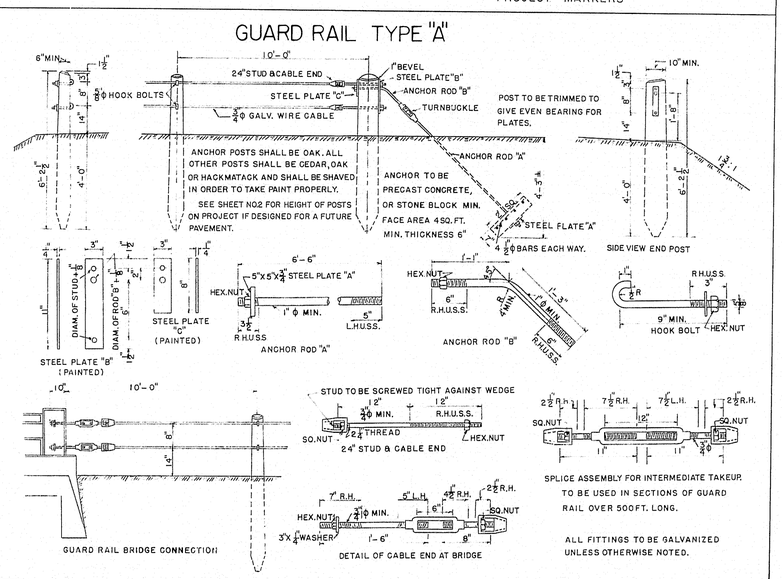
FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
1.	MAINE	F-025-1(2)	2	79



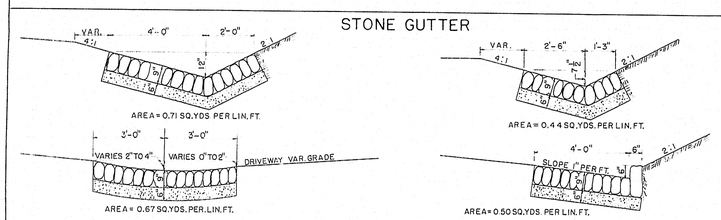
METAL SLUICE



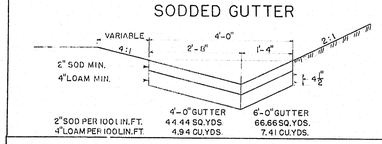
GUARD RAIL TYPE "A"



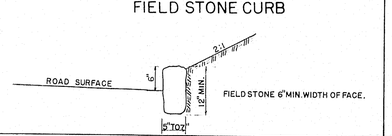
STONE GUTTER



SODDED GUTTER

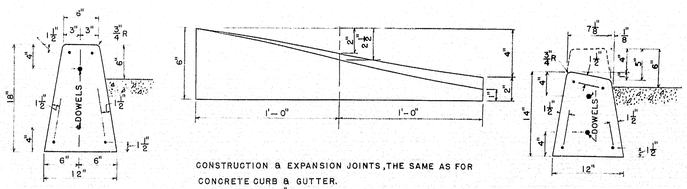


FIELD STONE CURB

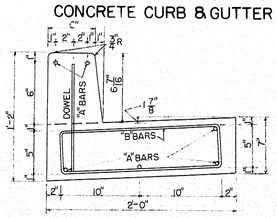


CONCRETE CURB

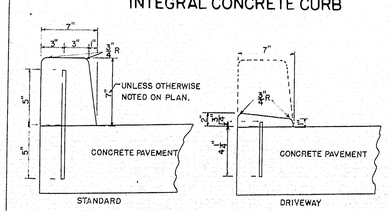
TRANSITION FOR DRIVEWAY APPROACH FOR 6" CURB



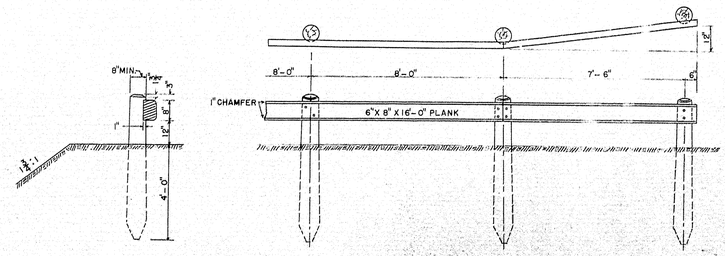
CONCRETE CURB & GUTTER



INTEGRAL CONCRETE CURB



WOOD GUARD RAIL



55-58

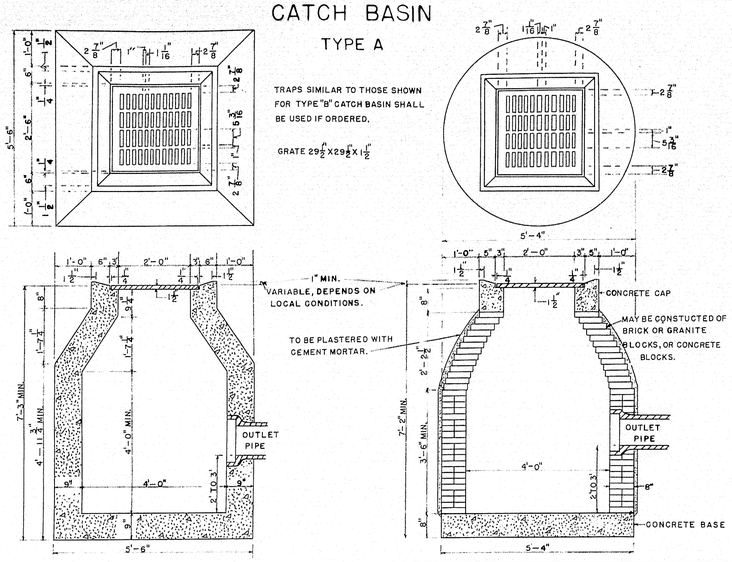
0 1 2 3 4 5 INCHES

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
1.	MAINE	F-V-25-1(2)	3	10

CATCH BASIN
TYPE A

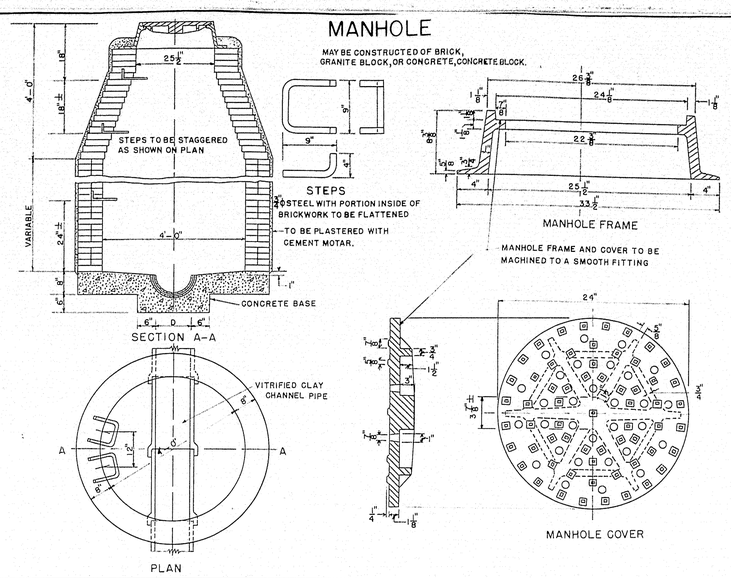
TRAPS SIMILAR TO THOSE SHOWN FOR TYPE "B" CATCH BASIN SHALL BE USED IF ORDERED.

GRATE 29½"X29½"X1½"

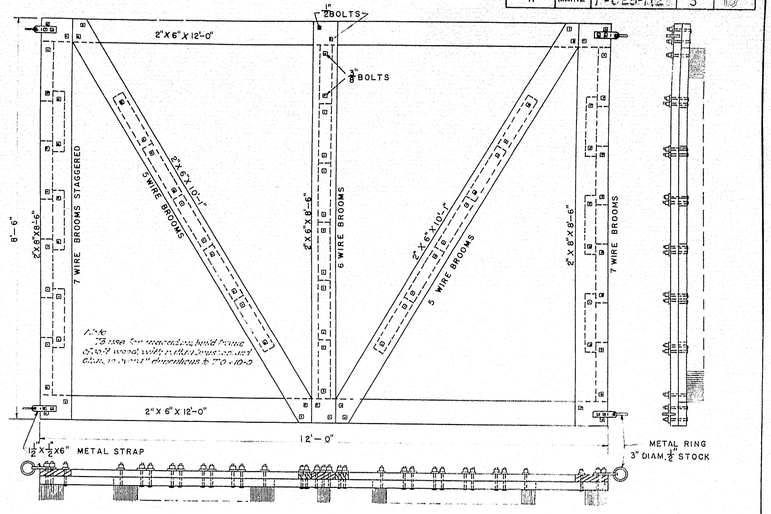


MANHOLE

MAY BE CONSTRUCTED OF BRICK, GRANITE BLOCK, OR CONCRETE, CONCRETE BLOCK.



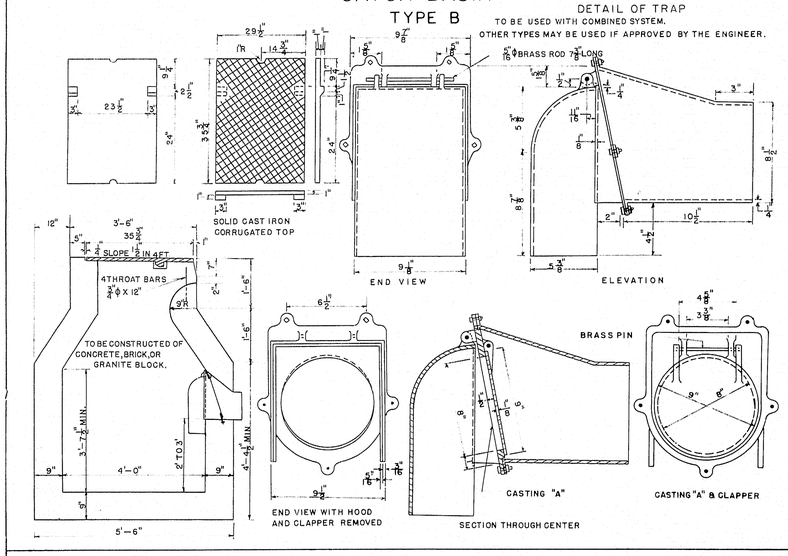
BROOM DRAG



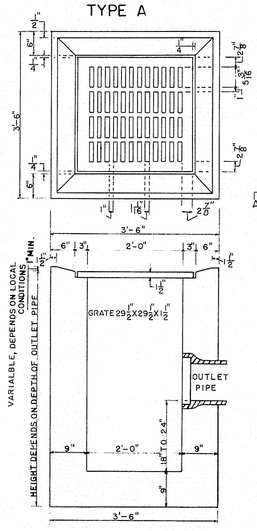
CATCH BASIN
TYPE B

DETAIL OF TRAP

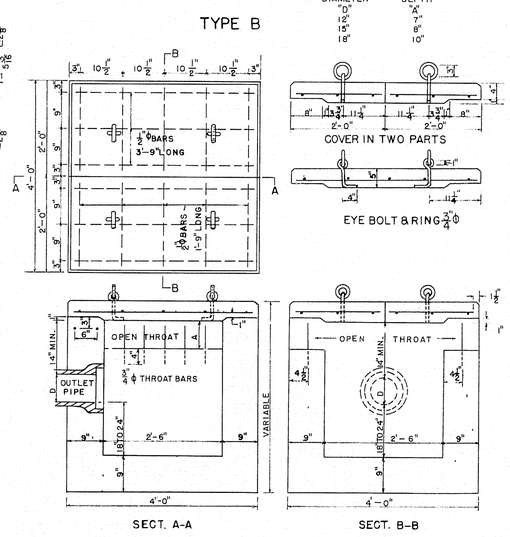
TO BE USED WITH COMBINED SYSTEM. OTHER TYPES MAY BE USED IF APPROVED BY THE ENGINEER.



DROP INLET
TYPE A

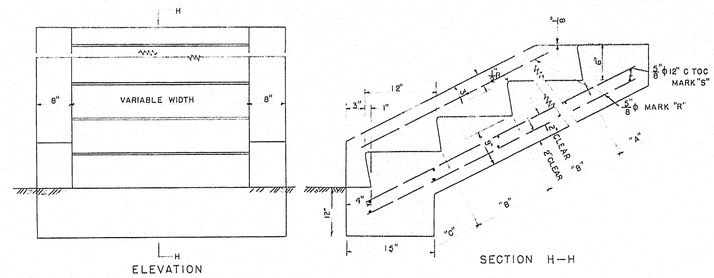


TYPE B



DIAMETER "D"	DEPTH "A"
12"	7"
15"	8"
18"	10"

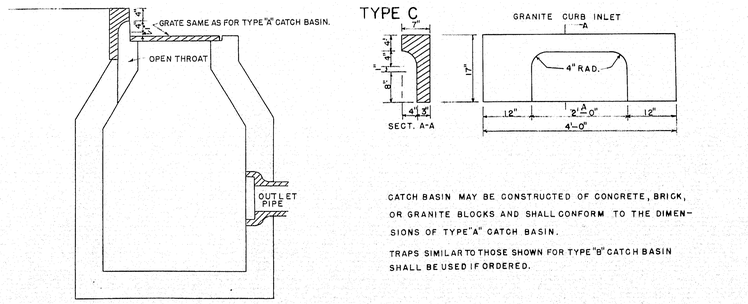
CONCRETE STEPS



CONCRETE CLASS "A"		
SECTION	STEPS PER FT. OF WIDTH	PARAPET EACH WALL
"A" HEADER	.032 CU. YDS.	.022 CU.YDS.
"B" EA. INTER. ST.	.040 CU.YDS.	.040 CU.YDS.
"C" FOOTER	.071 CU.YDS.	.065 CU.YDS.

REINFORCING STEEL			
MARK	SIZE	NUMBER	LENGTH (EACH)
R	⅝ø 1.043 LBS. PER FT.	3 EACH PARAPET 2 EACH FT. OF WIDTH	8" FOR "A" 13" FOR EACH "B" 16" FOR "C"
S	⅝ø 1.043 LBS. PER FT.	2 FOR "A" 2 FOR EACH "B" 2 FOR "C"	6" EACH PARAPET 12" PER FT. OF WIDTH

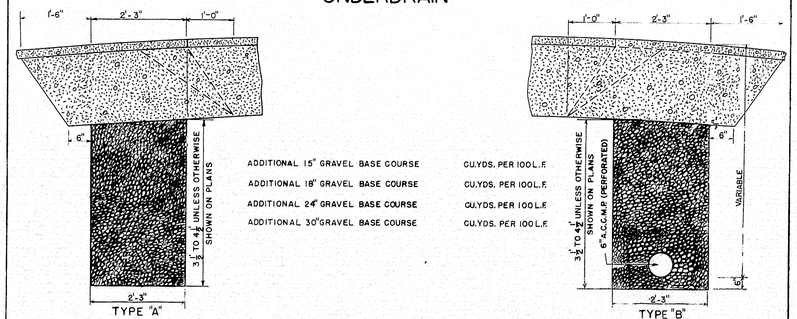
CATCH BASIN
TYPE C



CATCH BASIN MAY BE CONSTRUCTED OF CONCRETE, BRICK, OR GRANITE BLOCKS AND SHALL CONFORM TO THE DIMENSIONS OF TYPE "A" CATCH BASIN.

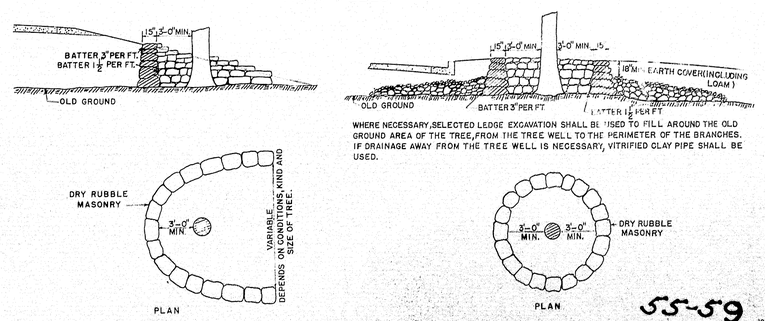
TRAPS SIMILAR TO THOSE SHOWN FOR TYPE "B" CATCH BASIN SHALL BE USED IF ORDERED.

UNDERDRAIN



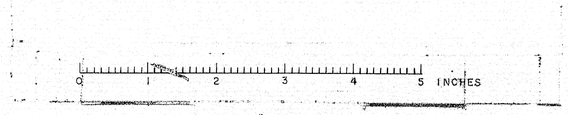
ADDITIONAL 15" GRAVEL BASE COURSE	CU.YDS. PER 100 L.F.
ADDITIONAL 18" GRAVEL BASE COURSE	CU.YDS. PER 100 L.F.
ADDITIONAL 24" GRAVEL BASE COURSE	CU.YDS. PER 100 L.F.
ADDITIONAL 30" GRAVEL BASE COURSE	CU.YDS. PER 100 L.F.

TREE WELLS

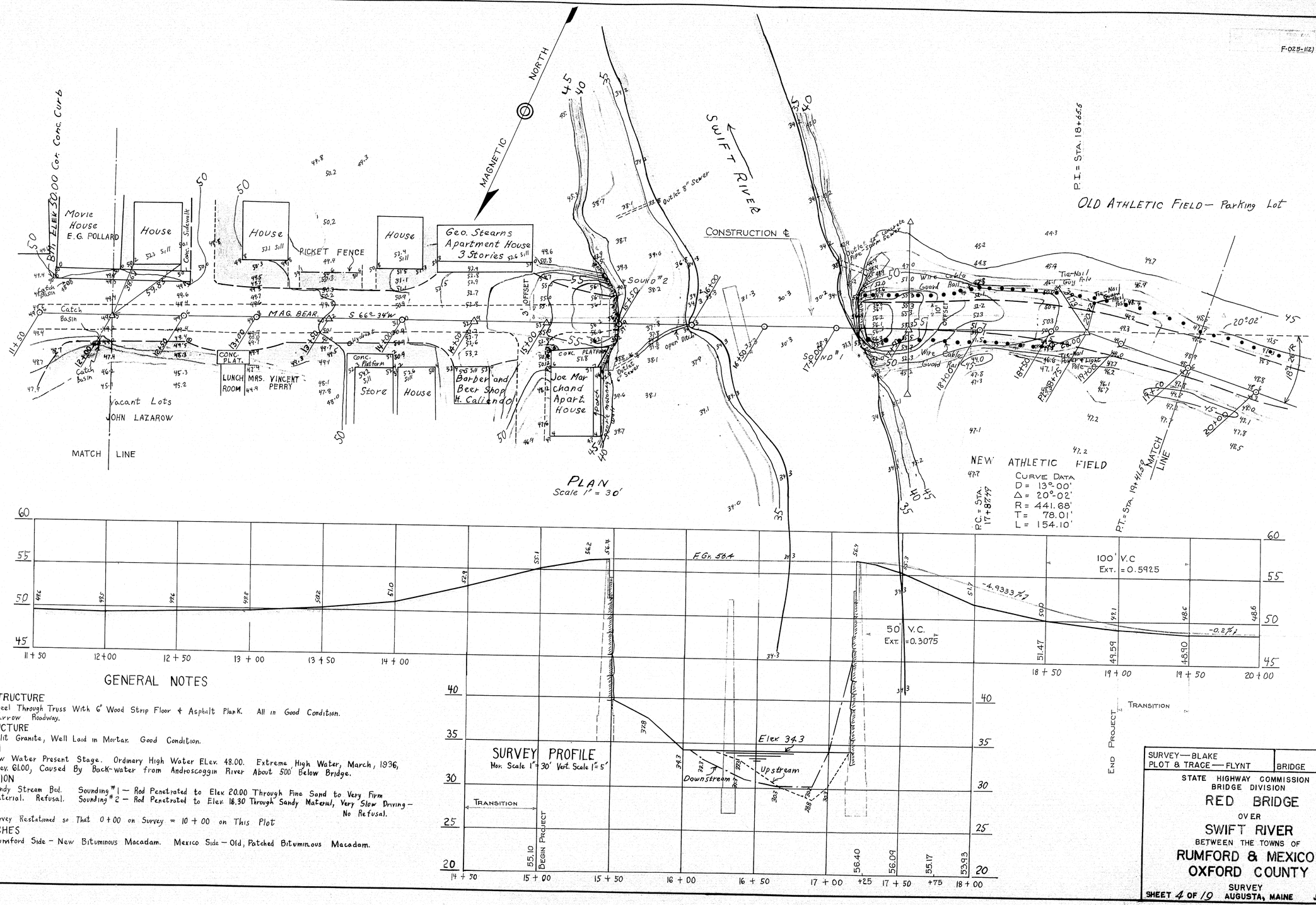


WHERE NECESSARY, SELECTED LEDGE EXCAVATION SHALL BE USED TO FILL AROUND THE OLD GROUND AREA OF THE TREE, FROM THE TREE WELL TO THE PERIMETER OF THE BRANCHES. IF DRAINAGE AWAY FROM THE TREE WELL IS NECESSARY, VITRIFIED CLAY PIPE SHALL BE USED.

55-59



F-022-1(12) 4 19



GENERAL NOTES

SUPERSTRUCTURE
Steel Through Truss With 6" Wood Strip Floor & Asphalt Plank. All in Good Condition. Narrow Roadway.

SUBSTRUCTURE
Split Granite, Well Laid in Mortar. Good Condition.

STREAM
Low Water Present Stage. Ordinary High Water ELev. 48.00. Extreme High Water, March, 1936, ELev. 61.00, Caused By Back-water from Androscoggin River About 500' Below Bridge.

FOUNDATION
Sandy Stream Bed. Material. Refusal. Sounding #1 — Rod Penetrated to Elev. 20.00 Through Fine Sand to Very Firm Sounding #2 — Rod Penetrated to Elev. 18.30 Through Sandy Material, Very Slow Driving — No Refusal.

STATIONS
Survey Restationed so That 0+00 on Survey = 10+00 on This Plot

APPROACHES
Rumford Side — New Bituminous Macadam. Mexico Side — Old, Patched Bituminous Macadam.

SURVEY — BLAKE
PLOT & TRACE — FLYNT
BRIDGE

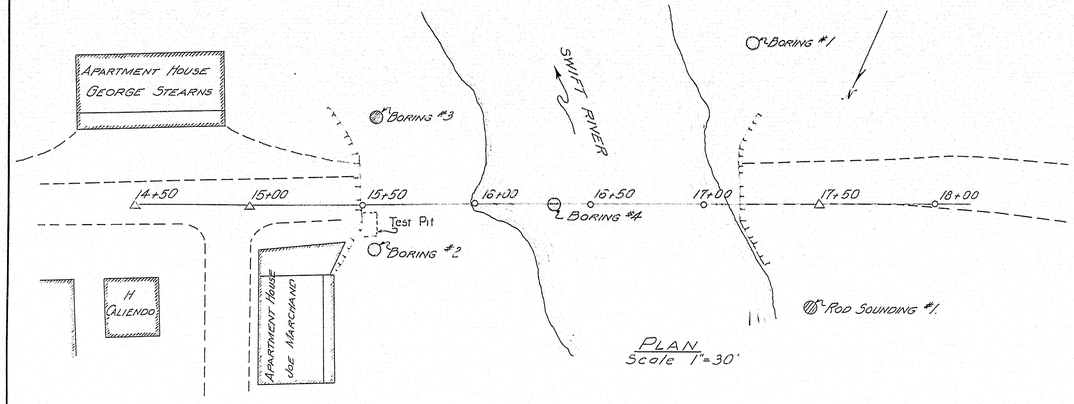
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

RED BRIDGE
OVER
SWIFT RIVER
BETWEEN THE TOWNS OF
RUMFORD & MEXICO
OXFORD COUNTY

SURVEY
SHEET 4 OF 10 AUGUSTA, MAINE JAN 1950

55-60

B.P.R. STY. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MAINE	F-025-1(2)	5	19



PLAN
Scale 1"=30'

Boring #1

Sta. 17+21 11'L

El. +45.0'

	16		
	8		
	8		
	8		
12 (I)	8 s	9.0'	Loose clean brown fine silty sand
	6		
	8		
El. +36.0'	10		
P	20		
40 (2)	20 s		
	32		
	30		
	28		
	38		
P	28 s		
50 (M)	36		
	38		
	40	17.0'	Loose brown sand with gravel layers. Compactness increases with depth.
	34		
78 (3)	40 s		
	60		
	54		
	62		
	58		
88 (4)	56 s		
El. +19.0'	104		
	238		
	350	2.5'	Compact coarse & medium gray sand with scattered gravel.
	212		
	200		
	210		
(w)	120 w		
	300		

El. +11.5' R

Boring #2

Sta. 15+55 20'R

El. +38.7'

	90		
	50	4.0'	Brown silt & fine sand.
	14		
El. +34.7'	8		
P	32		
50 (M)	20 s		
	30		
	84		
	54		
	28		
18 (I)	12 s		
	32		
	44		
	60		
	56	21.0'	Loose brown coarse sand & layers of gravel.
18 (M)	32 s		
	46		
	46		
	50		
	50		
	76		
52 (N)	74 s		
	58		
	60		
	80		
El. +13.7' P	64		
12 (2)	60 s		
	40		
	50	4.0'	Uniform very fine sand & silt.
El. +9.7'	58		
	110	2.5'	Uniform medium sand. Slightly silty.
150 (3)	160 s		
	100		
El. +1.7'	90%		
	66%		
	90%	8.0'	Mica schist with granite intrusions near bottom.
	75%		

El. -0.6'

Boring #3

Sta. 15+55 39'L

El. +39.4'

	66		
	12		
	10	6.0'	Loose fine silty sand containing scattered gravel.
	5		
	6		
60 (I)	14 s		
El. +33.4'	44		
	50		
	30		
	36		
50 (M)	24 s		
	30		
	50		
	38		
	36	12.0'	Loose sand & gravel layers. Some organic refuse at top of stratum.
24 (M)	36 s		
	54		
	58		
	72		
	66		
22 (N)	56 s		
	50		
El. +16.4'	54		
	44		
	46		
34 (w)	34 w		
	52		
	64	9.5'	Brown silt & coarse sand with some gravel.
	54		
	110		
140 (2)	110 s		
El. +6.9'	184		
	120		
	80%		
	100%	3.5'	Very hard fine grained granite (top), mica schist (bottom).

El. +3.4'

Boring #4

Sta. 16+35 ℄

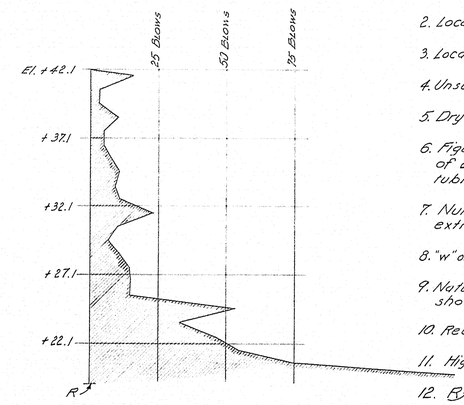
El. +33.8'

	14		
	14		
	16	5.0'	Loose brown silt sand & scattered gravel
	16		
El. +28.8'	10		
116 (I)	24 s		
	28		
	30		
	30	20'	Loose coarse sand & gravel layers.
	48		
22 (M)	34 s		
El. +21.8'	48		
	86		
	108		
	120		
38 (M)	54 s	6.0'	Firm sand & gravel layers.
	98		
El. +15.8'	116		
	194		
	150	3.0'	Silty sand & gravel. Compact.
172 (2)	140 s		
El. +12.8'	320		Very compact gray sand.
El. +10.8'	650	2.0'	
	45%	2.0'	Very hard fine grained granite.

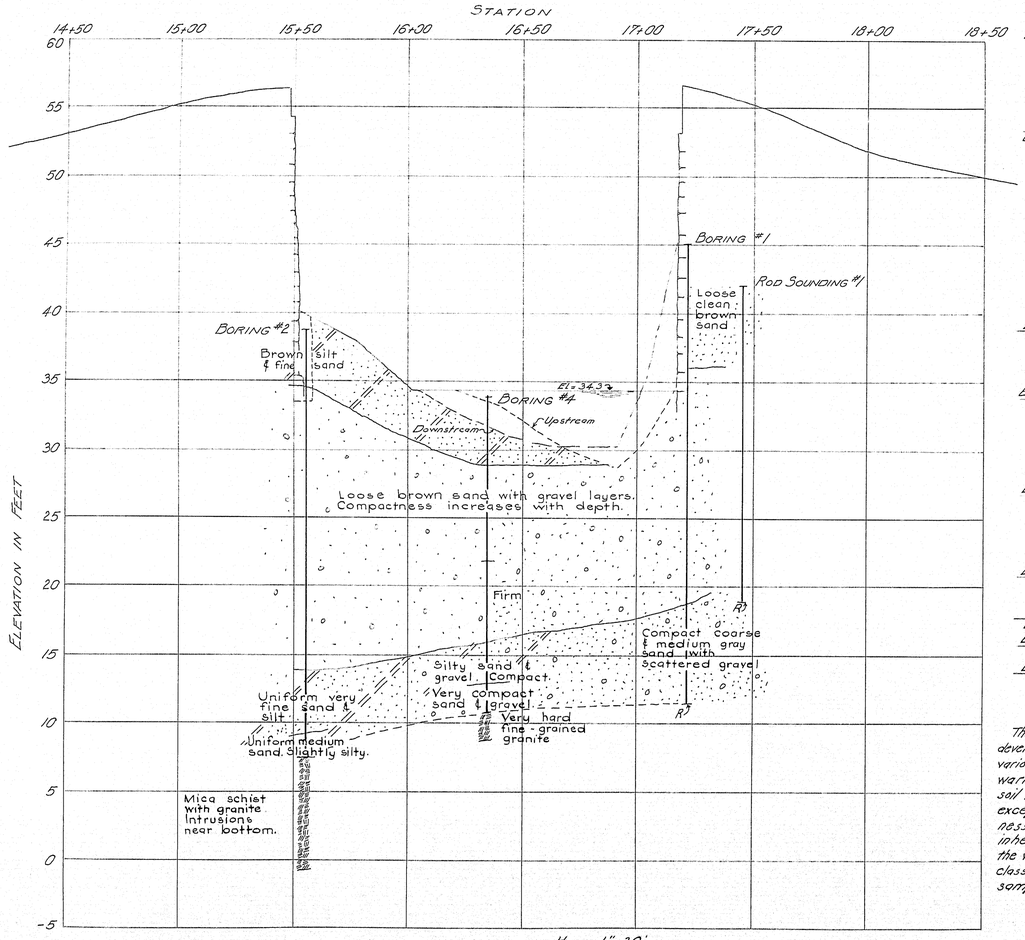
El. +8.8'

Rod Sounding #1

Sta. 17+46 45' R



Notes.
1. 18 lb. hammer
2. 16" drop
3. 1" ø solid rods
4. R denotes refusal of rods
5. Scales:
   H 1"= 25 Blows
   V 1"= 5'



PROFILE Scales Hor. 1"=30'
Vert. 1"= 5'

~ NOTE ~

The soil stratification illustrated on this drawing has been developed by interpretation of and interpolating between, the various soil borings. It is, therefore, speculative, and no warranty is implied with respect to the continuity of soil layers, or to the elevations of the soil boundaries except at actual boring locations. Depths and thicknesses of the latter are subject to the inaccuracies inherent in the drilling methods. The descriptions of the various soil layers are based upon the drillers field classification and upon the engineer's inspection of samples and interpretation of the drillers record.

Notes:
1. Scale 1"=5'
2. Location & designation of Dry Samples indicated thus: (I)
3. Location & designation of Wash Samples indicated thus: (w)
4. Unsuccessful attempts to secure sample indicated thus: (M)
5. Dry Samples taken in S & H sampler #1290s.
6. Figures to left of sample markers indicate number of 6" drops of 275 lb. hammer required to drive sampling spoon or seamless tubing one foot.
7. Number of 18" drops of 275 lb. hammer required to drive 2½" extra heavy casing one foot indicated thus: 39
8. "w" or "s" indicates hole was washed or sampled ahead of casing.
9. Natural water contents given as percent of dry weight, are shown to left of sample marker.
10. Recovery of rock core by size E diamond bit indicated thus: 11%
11. Highly "Pervious" material indicated thus P
12. R denotes refusal of casing or rods.

TRACED FROM REPORT OF H. GRAY, SOILS ENGINEER — HAMILTON
CHECK — BRIDGE

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

RED BRIDGE
OVER
SWIFT RIVER
BETWEEN THE TOWNS OF
RUMFORD & MEXICO
OXFORD COUNTY

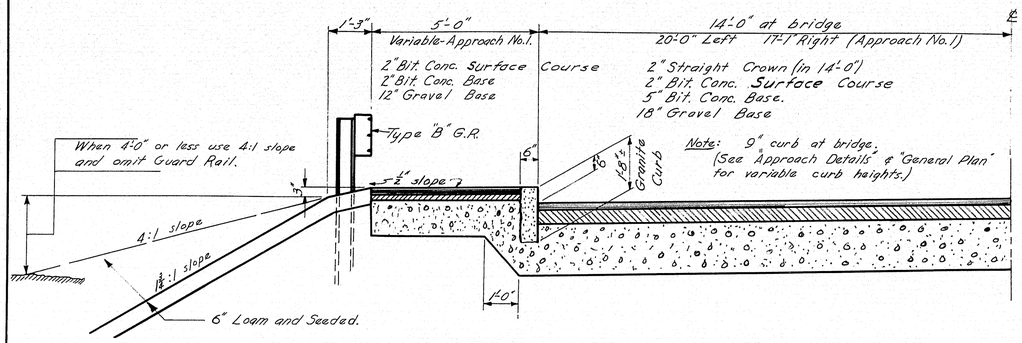
FOUNDATION DATA

SHEET 5 OF 19 AUGUSTA, MAINE NOV. 1951

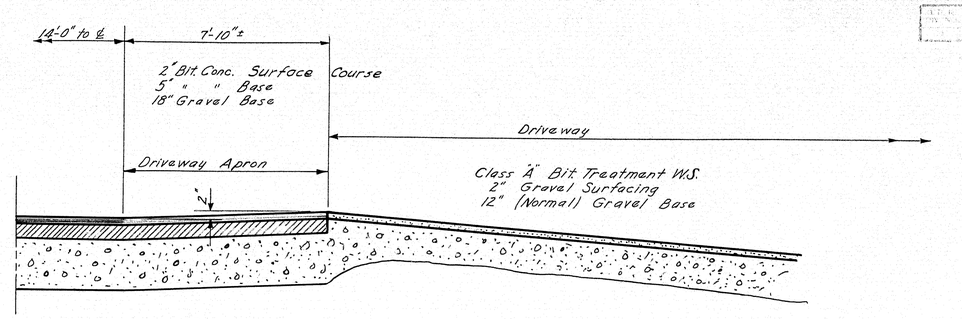
55-61

0 1 2 3 4 5 INCHES

F-025-1(2) 6 19



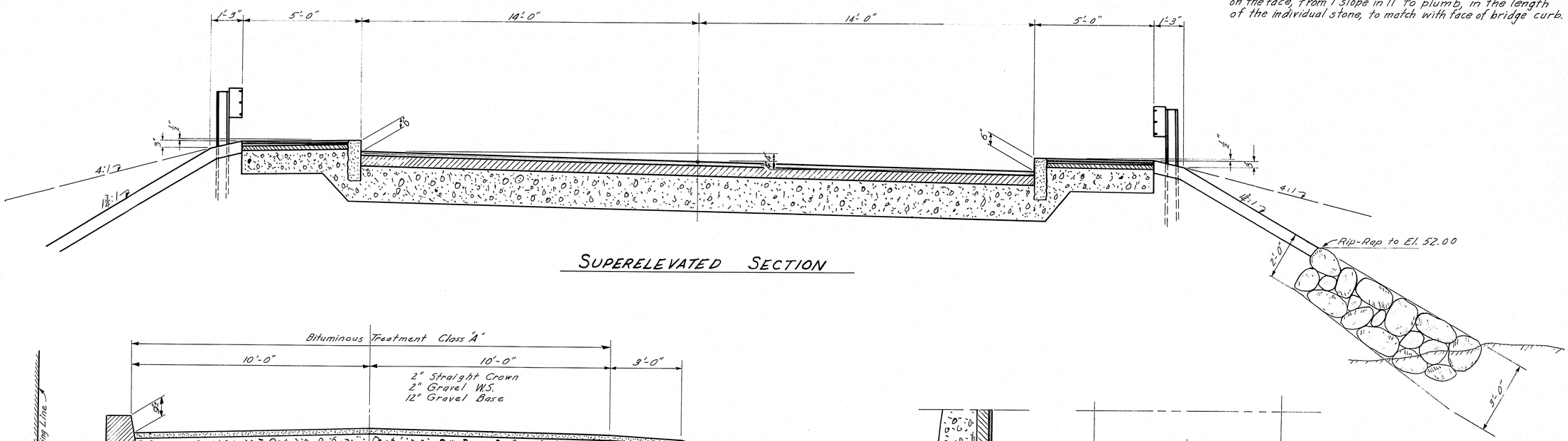
TYPICAL HALF SECTION



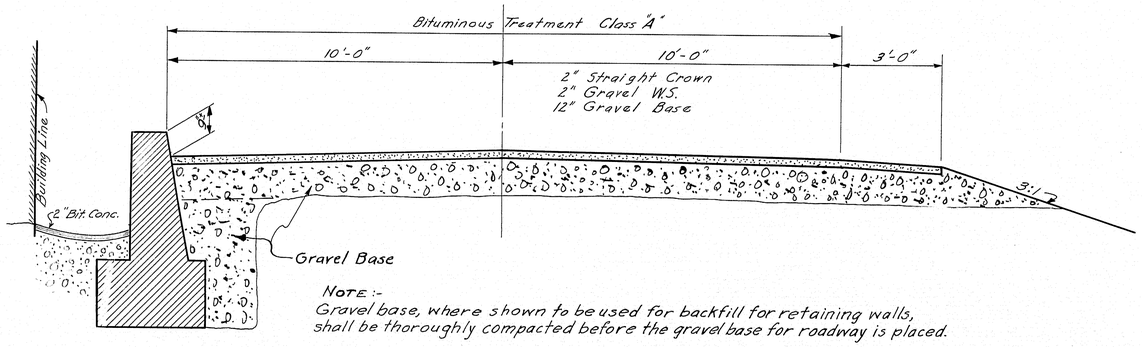
DRIVEWAY ENTRANCE AT STA. 14+87.5 (RT.)

NOTE

The section of granite curb adjacent to bridge, at each of the four corners, to be beveled vertically on the face, from 1" slope in 11" to plumb, in the length of the individual stone, to match with face of bridge curb.

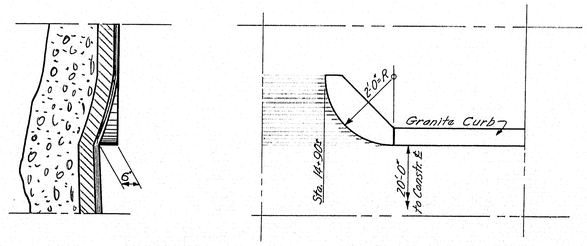


SUPERELEVATED SECTION



NOTE:-
Gravel base, where shown to be used for backfill for retaining walls, shall be thoroughly compacted before the gravel base for roadway is placed.

TYPICAL DRIVEWAY SECTION STA. 14+87.5 RIGHT



ENTRANCE AT STA. 14+90± LEFT

Revision in designation of surfacing Apr. 21, 1952.

DESIGN—HAMILTON
TRACE — MAZEIKO
CHECK — [illegible]
BRIDGE

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

RED BRIDGE
OVER
SWIFT RIVER
BETWEEN THE TOWNS OF
RUMFORD & MEXICO
OXFORD COUNTY

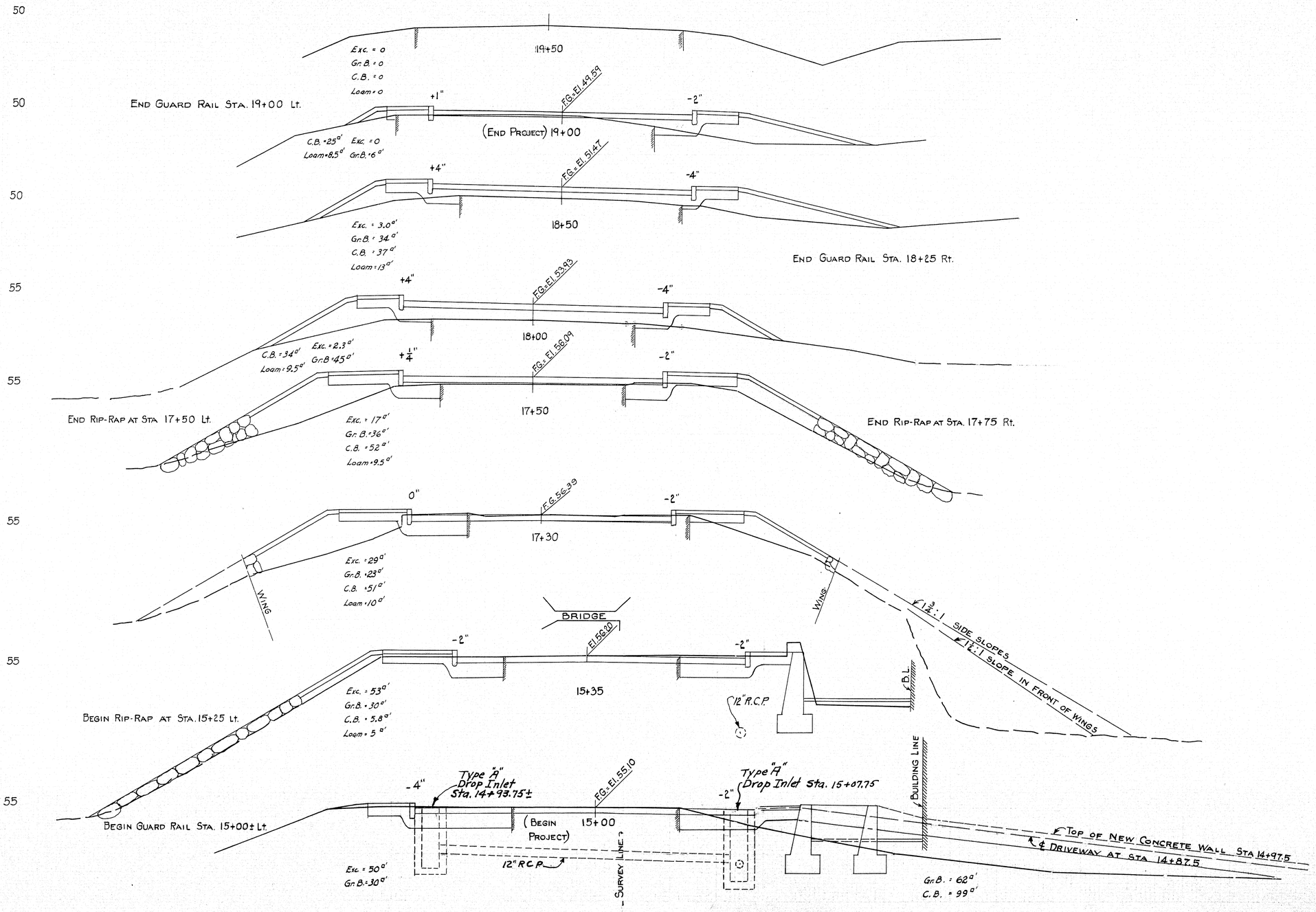
TYPICAL APPROACH SECTIONS

SHEET 6 OF 19 AUGUSTA, MAINE NOV. 1951

55-62

0 1 2 3 4 5 INCHES

F-025-1(2) 7 19



NOTE: DO NOT EXCAVATE FOR GRAVEL BASE WHERE EXISTING MATERIAL IS SUITABLE.

DESIGN — HAMILTON
CHECK — [illegible]
BRIDGE

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

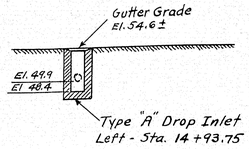
RED BRIDGE
OVER
SWIFT RIVER
BETWEEN THE TOWNS OF
RUMFORD & MEXICO
OXFORD COUNTY

CROSS SECTIONS

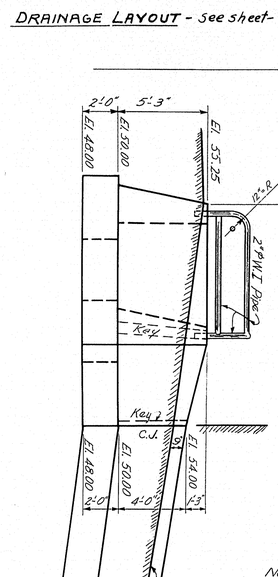
SHEET 7 OF 19 AUGUSTA, MAINE NOV. 1951

55-63

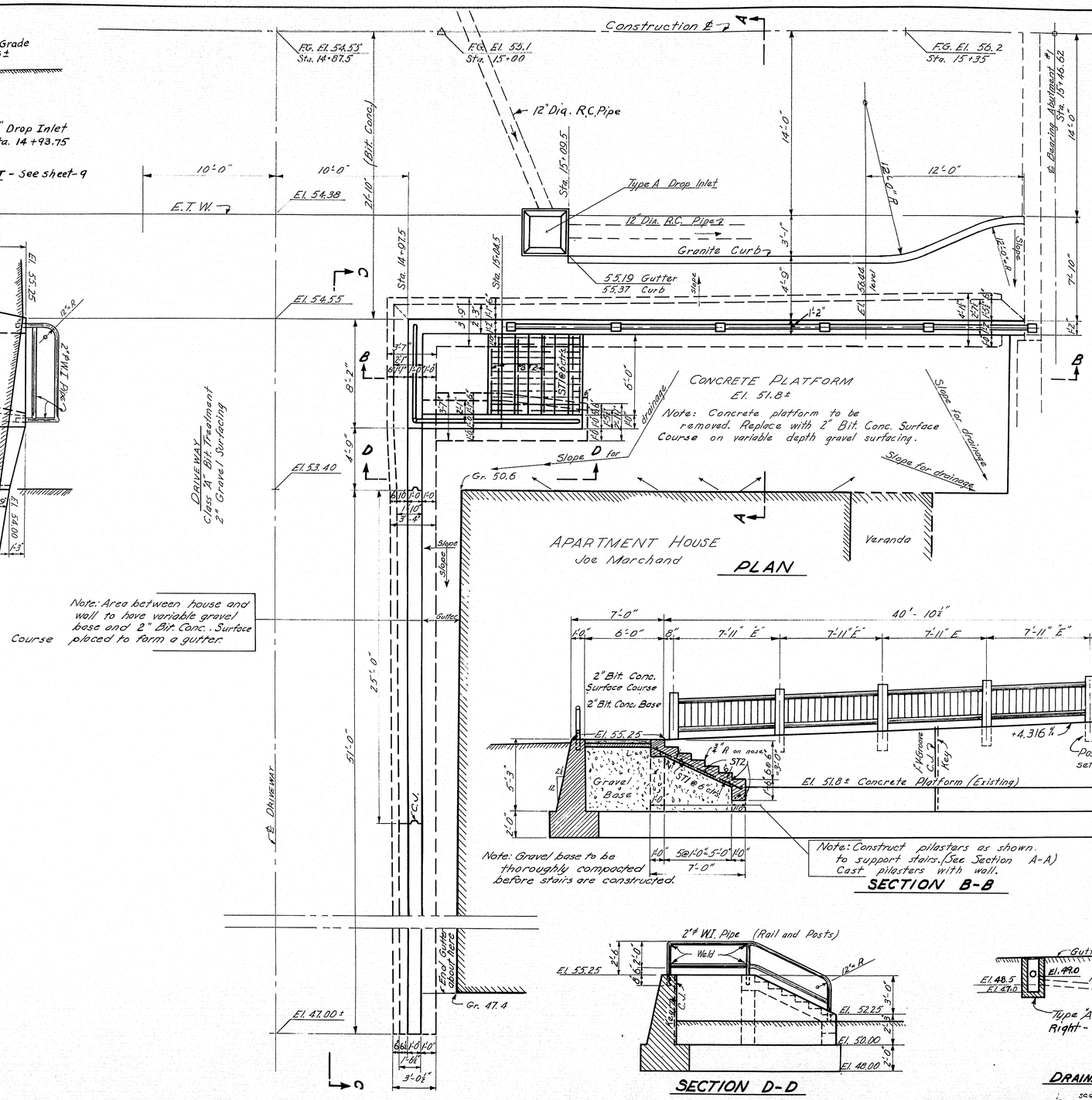
F.025-1(2) 8 19



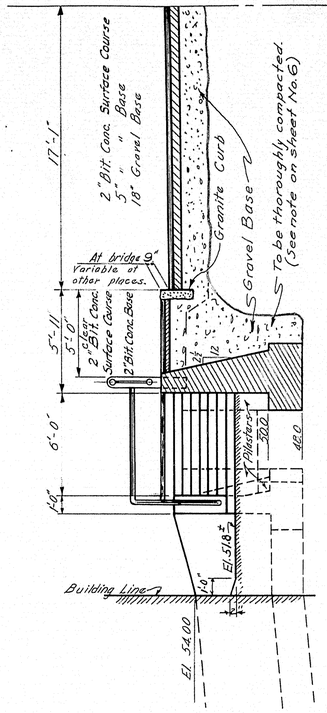
DRAINAGE LAYOUT - See sheet-9



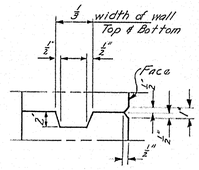
SECTION C-C



Note: Area between house and wall to have variable gravel base and 2" Bit. Conc. Surface Course placed to form a gutter.



SECTION A-A

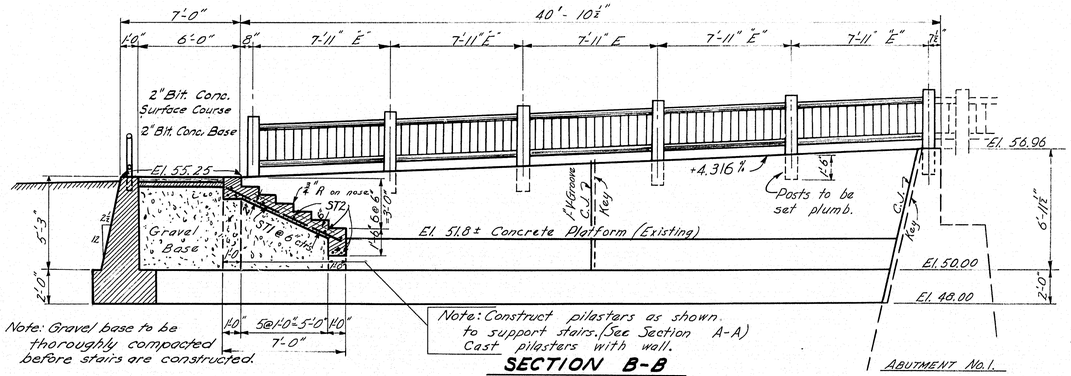


KEY DETAIL

TYPICAL
FOR ALL CONSTR. JOINTS

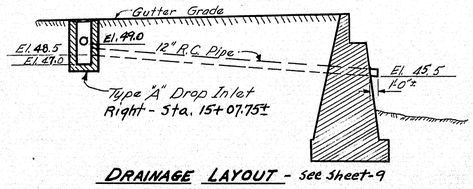
Note: Construct 1-V-Groove on all exposed faces of walls. See sheet #10 for note on covering construction joints on the back with heavy roofing.

Note: Stairs -
The treads of the stairs shall have "sidewalk finish" and all other exposed surfaces shall have a rubbed mortar finish.
The concrete in the stairs shall conform to the specifications for and be paid for as "Concrete in Abutments and Retaining Walls."



SECTION B-B

SECTION D-D



DRAINAGE LAYOUT - See Sheet-9

scale: 1"=10'

Revision in designation of surfacing Apr. 21, 1952.

DESIGN - HAMILTON
TRACE - MAZEIKO
CHECK -

BRIDGE

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

RED BRIDGE
OVER
SWIFT RIVER
BETWEEN THE TOWNS OF
RUMFORD & MEXICO
OXFORD COUNTY

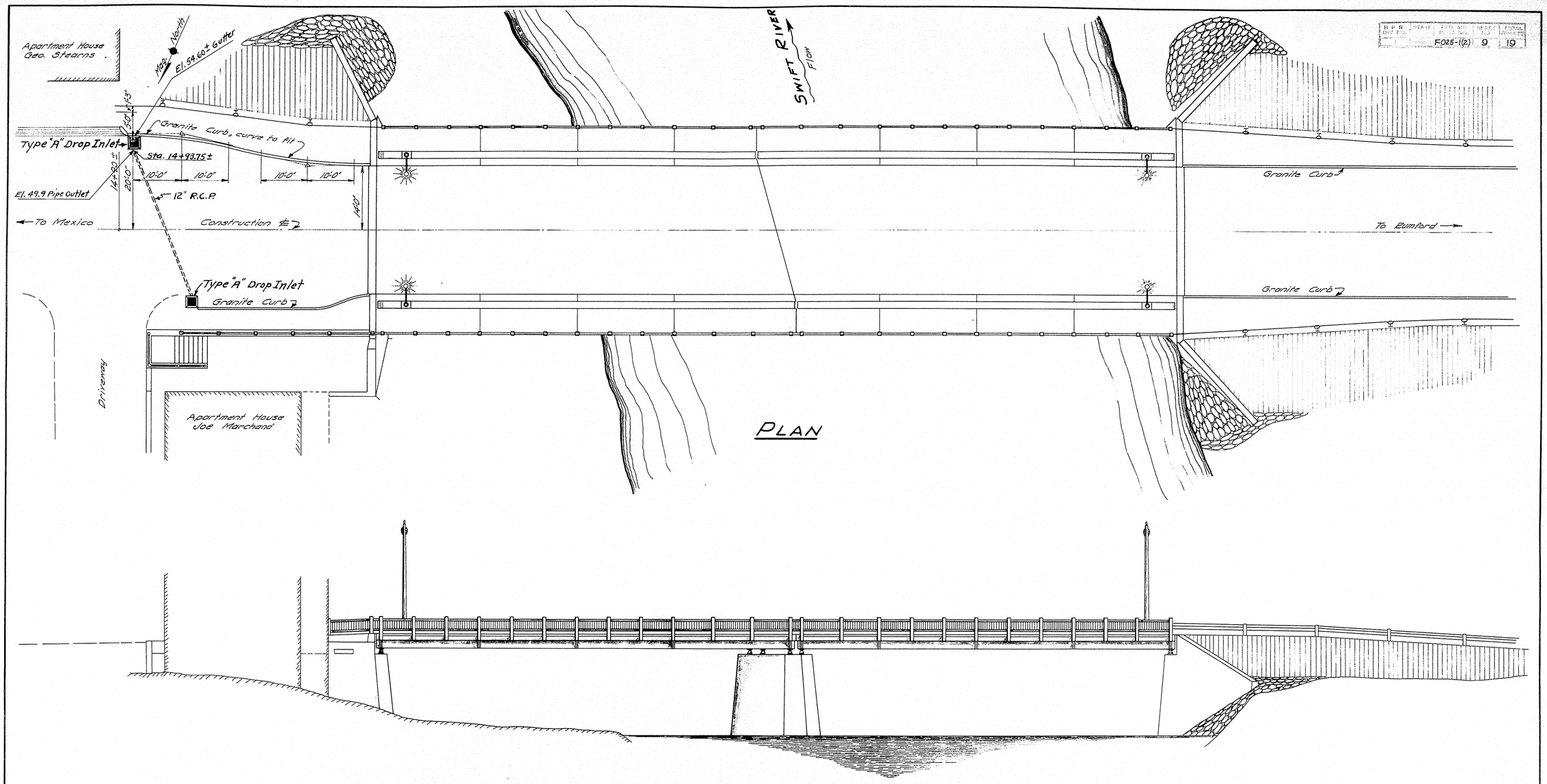
APPROACH DETAILS

SHEET 8 OF 19 AUGUSTA, MAINE NOV. 1951

55-64

0 1 2 3 4 5 INCHES

B.P.R.	STATE	FED. AID PROJ.	SHEET NO.	TOTAL SHEETS
DIV. 1		F-025-1(2)	9	19



DESIGN – HAMILTON
TRACE – CLARK

BRIDGE

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

RED BRIDGE
OVER
SWIFT RIVER
BETWEEN THE TOWNS OF
RUMFORD & MEXICO
OXFORD COUNTY

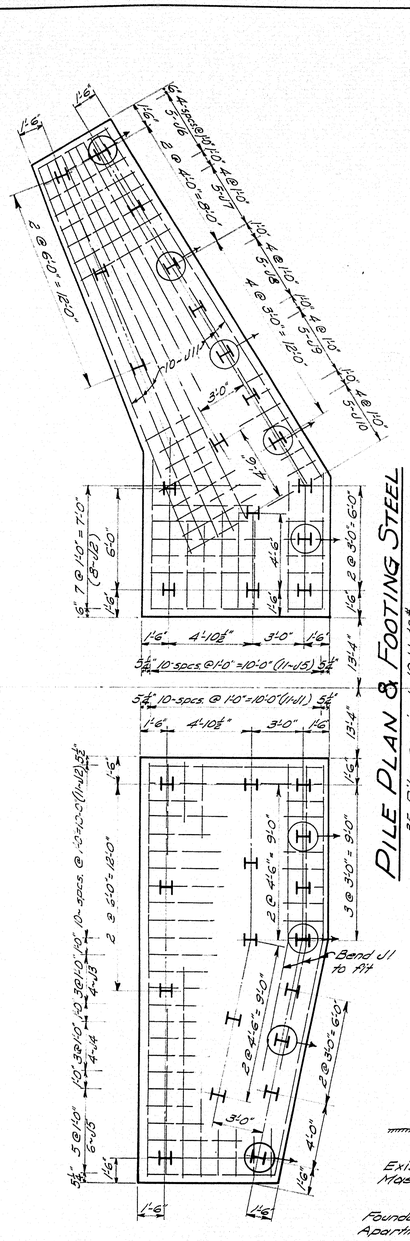
GENERAL PLAN & ELEVATION

SHEET 9 OF 19 AUGUSTA, MAINE OCT. 1951

55-65

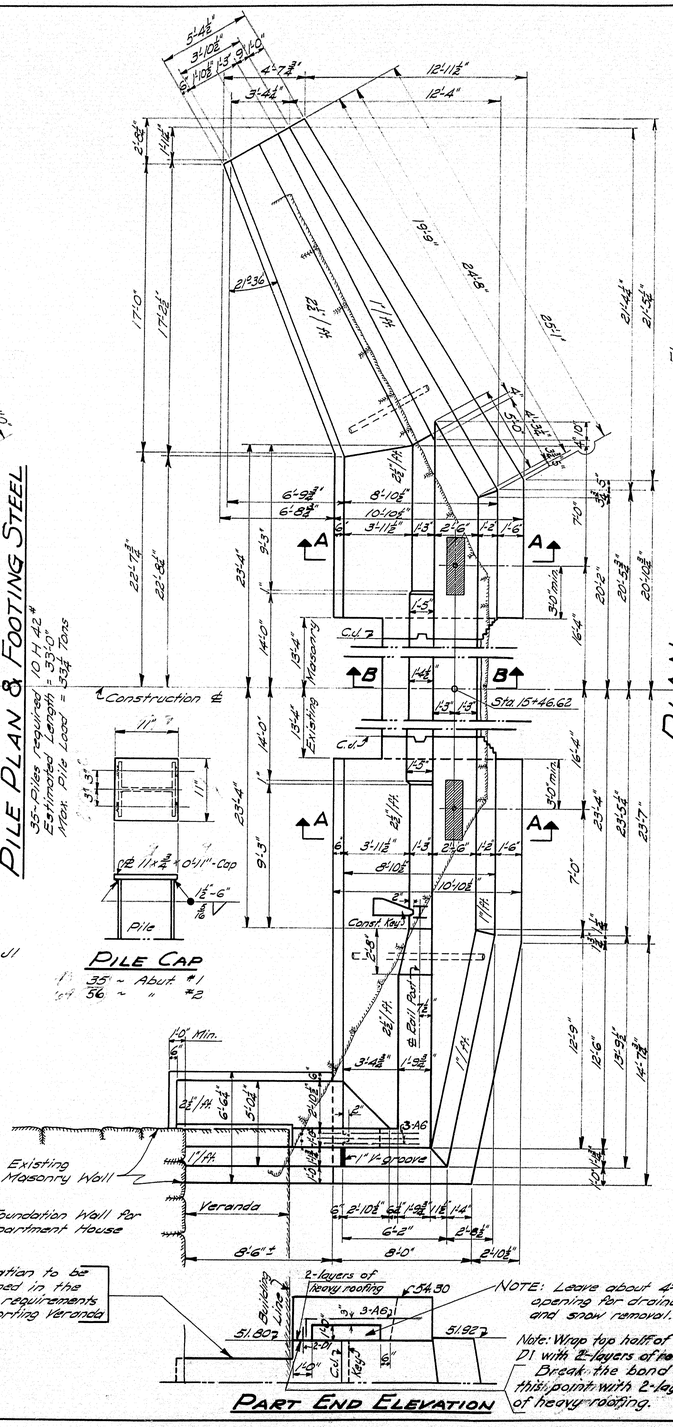
0 1 2 3 4 5 INCHES

F-025-(12) 10 19



PILE PLAN & FOOTING STEEL

35-Piles required 10 H 42#
Estimated Length = 33'-0"
Max. Pile Load = 35¾ Tons



PILE CAP

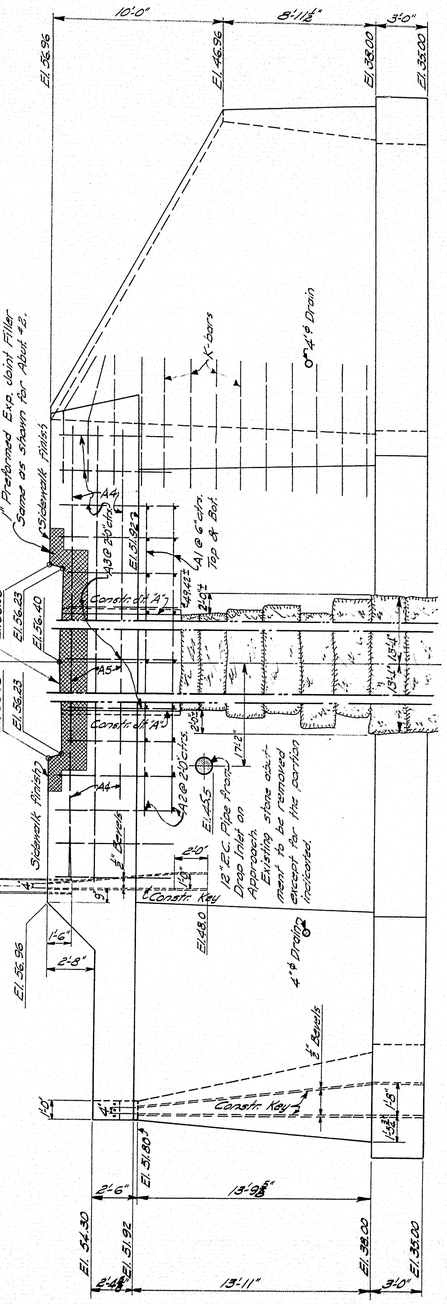
35' ~ Abut. #1
56' ~ " #2

NOTE
Batter all Piles shown in circle two inches per foot in direction shown by arrow.

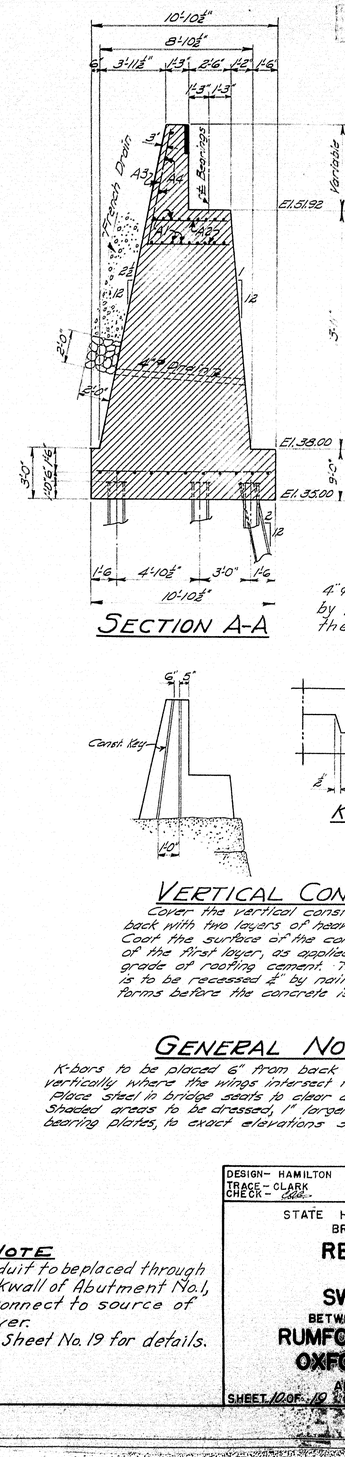
NOTE: Elevation to be determined in the field by requirements for supporting Veranda

NOTE: Leave about 4'-0" x 1'-0" opening for drainage and snow removal.

Note: Wrap top half of dowels D1 with 2-layers of roofing. Break the bond at this point with 2-layers of heavy roofing.



NOTE
For details of placing "Sidewalk Expansion Plates" in backwalls of abutments, see sheet No. 18.



4" ϕ Drains to be located by the Engineer in the field. 2-Required.

VERTICAL CONST. JT. "A"

Cover the vertical construction joints on the back with two layers of heavy roofing 10" wide. Coat the surface of the concrete and the face of the first layer, as applied, with a suitable grade of roofing cement. The area to be covered is to be recessed ¼" by nailing thin strips to the forms before the concrete is placed.

GENERAL NOTES

K-bars to be placed 6" from back form at 1'-6" centers vertically where the wings intersect the breast wall. Place steel in bridge seats to clear anchor bolts. Shaded areas to be dressed, 1" larger all around than bearing plates, to exact elevations shown.

NOTE
Conduit to be placed through backwall of Abutment No. 1, to connect to source of power.
See Sheet No. 19 for details.

DESIGN- HAMILTON
TRACE- CLARK
CHECK- Engel.

BRIDGE

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

RED BRIDGE
OVER
SWIFT RIVER
BETWEEN THE TOWNS OF
RUMFORD & MEXICO
OXFORD COUNTY

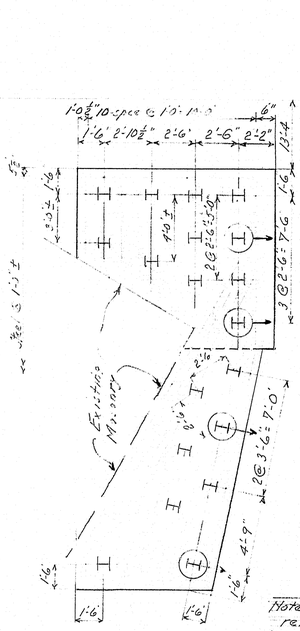
ABUTMENT NO. 1

SHEET 20 OF 19 SHEETS AUGUSTA, MAINE OCT. 1951

55-66

0 1 2 3 4 5 INCHES

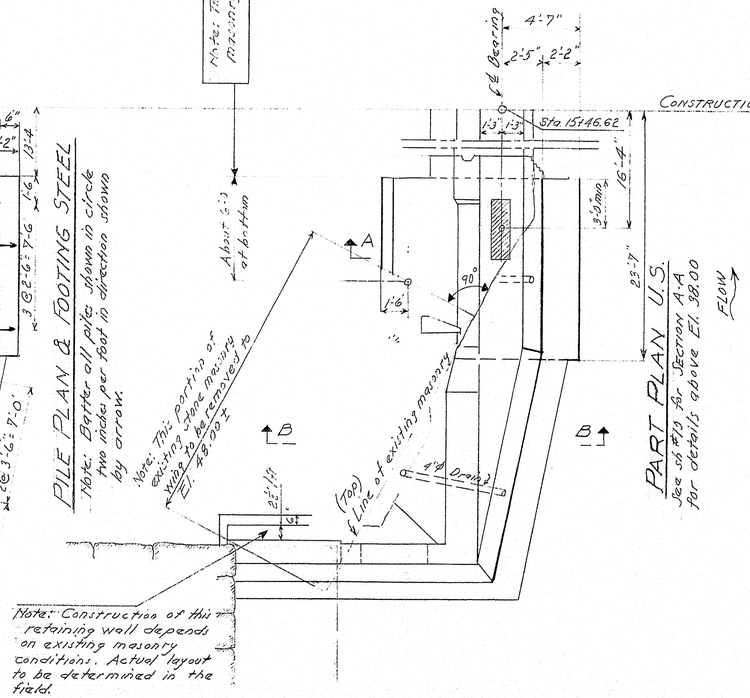
Note: This portion of existing masonry to be removed.



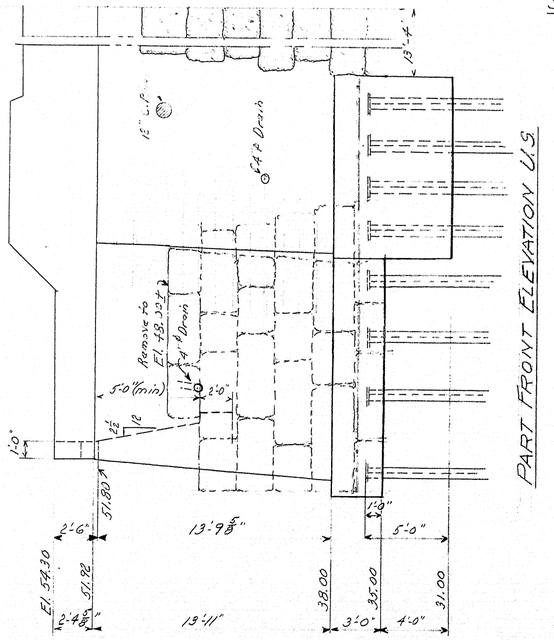
PILE PLAN & FOOTING STEEL

Note: Batter all piles shown in circle two inches per foot in direction shown by arrow.

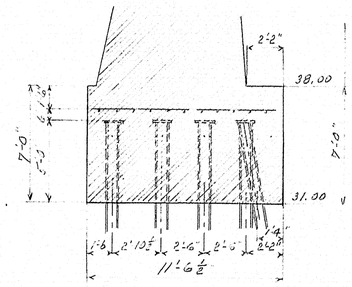
Note: Reinforcing steel for footing to be cut or bent as required to form a mat of steel over the tops of the piles.
Any steel remaining to be used as shown in Section B-B.



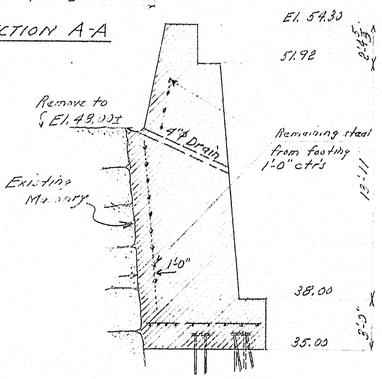
PART PLAN U.S.
See Sh. #13 for Section A-A for details above El. 38.00



PART FRONT ELEVATION U.S.



SECTION A-A



SECTION B-B

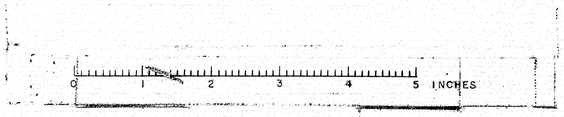
NOTE

Work this sheet with Sh. No. 10. All dimensions not shown on this sheet to be as shown on Sh. No. 10.

DESIGN - Hamilton
CHECKED - GHH

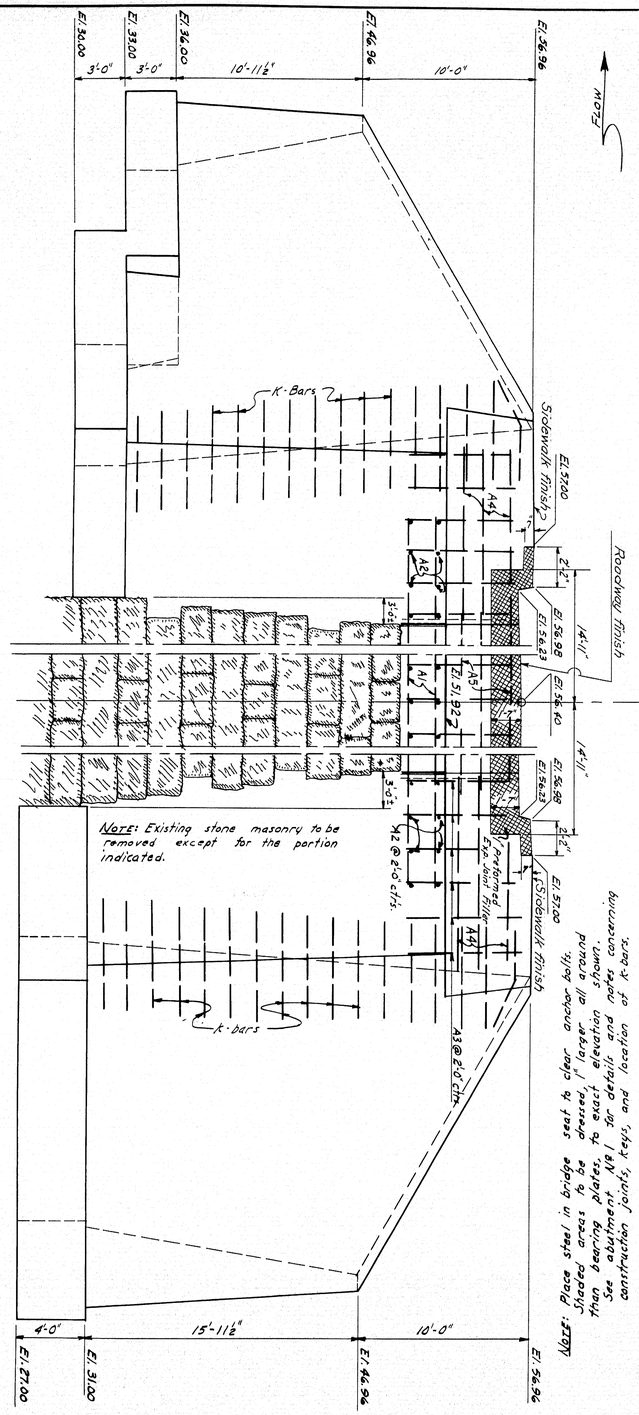
STATE HIGHWAY COMMISION
BRIDGE DIVISION
RED BRIDGE
OVER
SWIFT RIVER
BETWEEN THE TOWNS OF
RUMFORD & MEXICO
OXFORD COUNTY
REVISED - U.S. PORTION ABUT. No. 1.
SHEET 10 of 19 AUGUSTA, MAINE JULY 1952

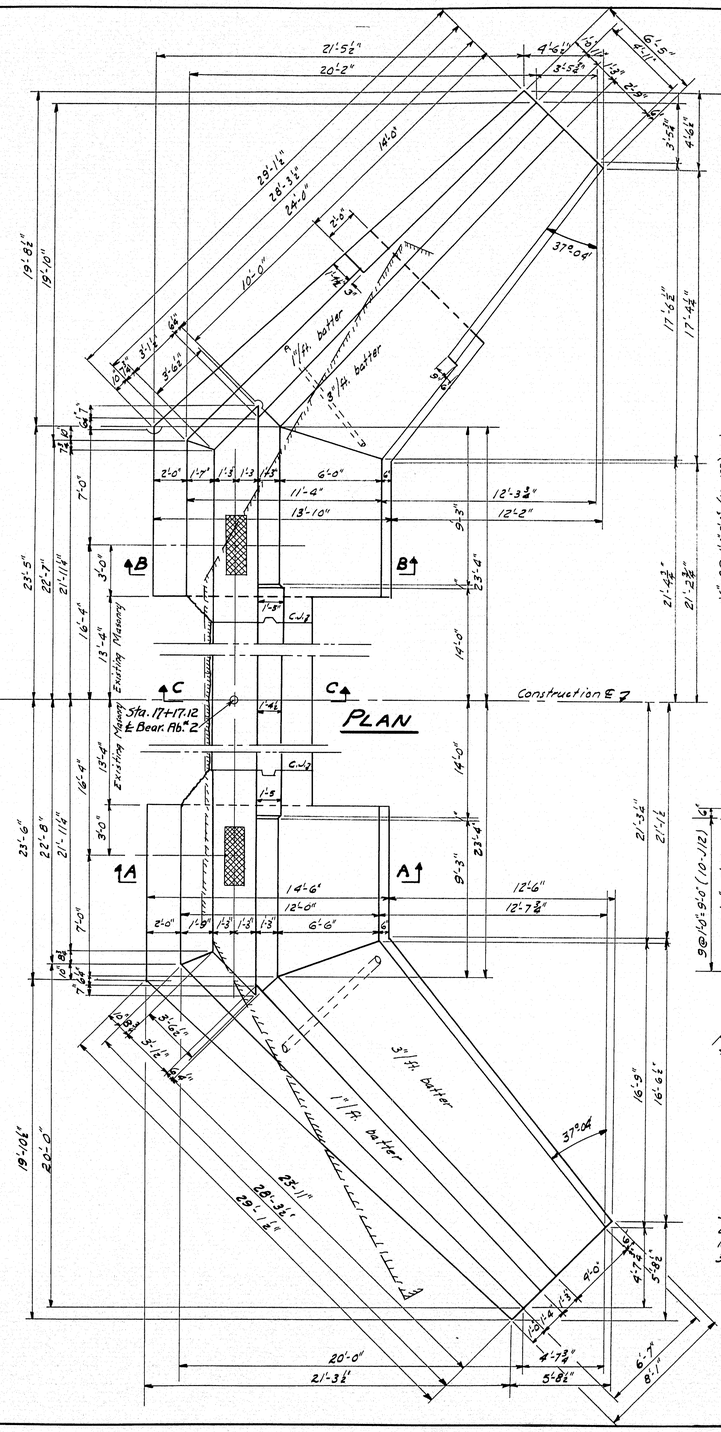
55-67



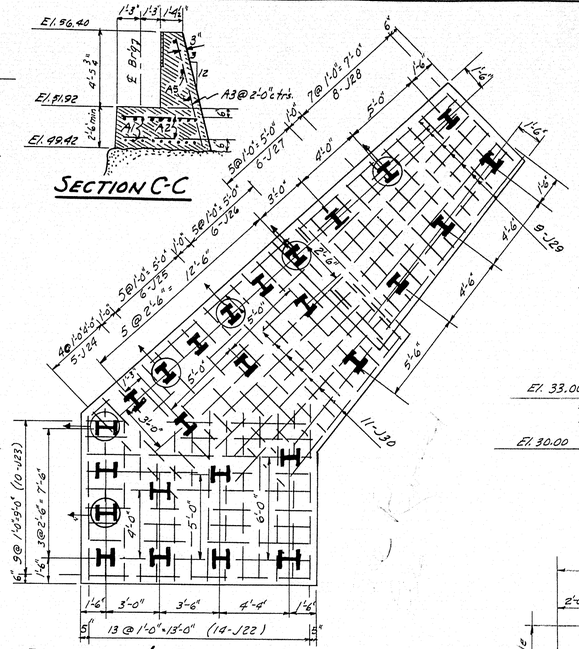
P.P.R. LIN. NO.	STATE PROJ. NO.	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
		BRIDGE F-025-1(6)	11	19

FRONT ELEVATION



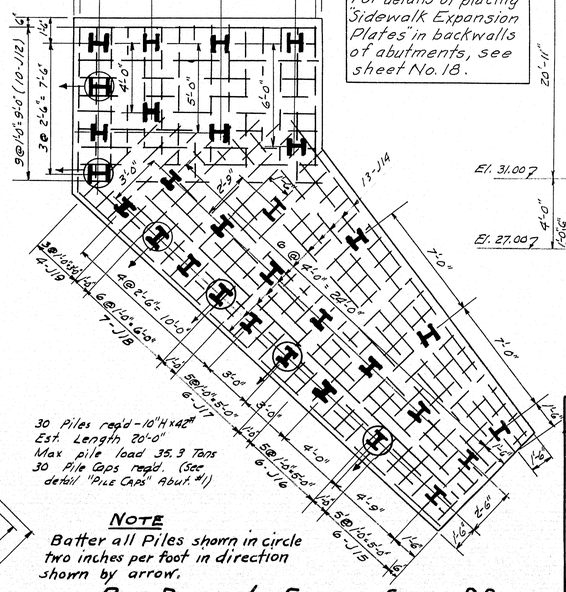


Note: Place steel in bridge seat to clear anchor bolts. Shaded areas to be dressed to exact elevation shown. Top bearing plates, to exact elevation shown. See abutment No.1 for details and notes concerning construction joints, keys, and location of K-bars.



PILE PLAN & FOOTING STEEL U.S.

26 Piles req'd. 10"H x 42# Est. length 23'-0"
26 Pile Caps req'd (see detail "Pile Caps" Abut N°1.)

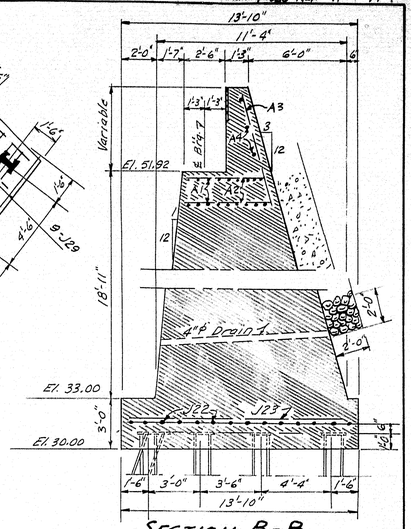


30 Piles req'd - 10"H x 42#
Est. Length 20'-0"
Max pile load 35.3 Tons
30 Pile Caps req'd. (See detail "PILE CAPS" Abut. #1)

NOTE
Batter all Piles shown in circle two inches per foot in direction shown by arrow.

PILE PLAN & FOOTING STEEL D.S.

NOTE
For details of placing "Sidewalk Expansion Plates" in backwalls of abutments, see sheet No. 18.



SECTION B-B

SECTION A-A

4" ø Drains to be located by the Engineer in the field. 2 Req'd.

DESIGN - HAMILTON
TRACE - ELLIS
CHECK - CAC

BRIDGE -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

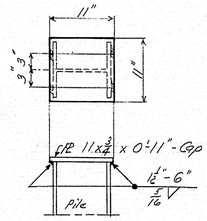
RED BRIDGE
OVER
SWIFT RIVER
BETWEEN THE TOWNS OF
RUMFORD & MEXICO
OXFORD COUNTY

ABUTMENT NO. 2

SHEET 11 OF 19 AUGUSTA, MAINE DEC. 1951

55-68

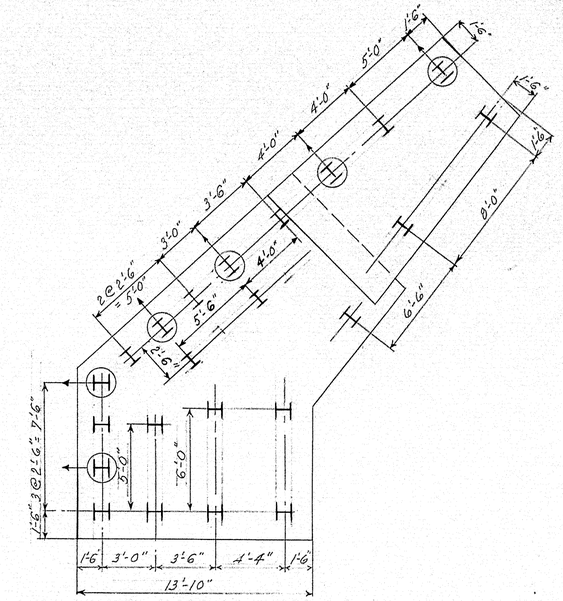
0 1 2 3 4 5 INCHES



PILE CAP

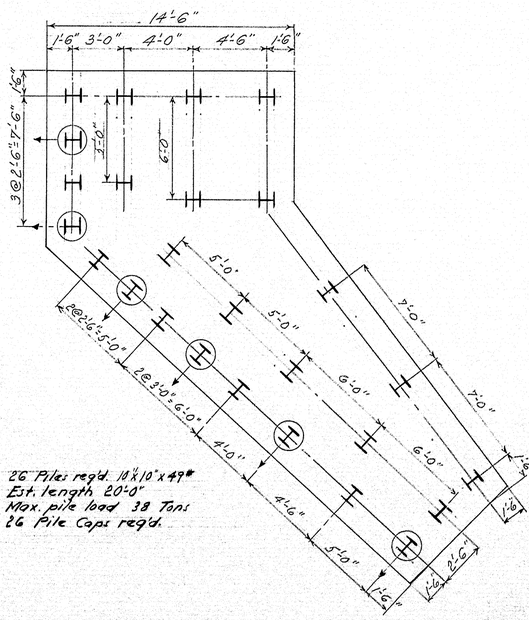
49 reqd Abut. #2.

Note: Batter all piles shown in circle two inches per foot in direction shown by arrow.



PILE PLAN - D.S.

23 Piles reqd. 10"x10"x42# Est. length 23'-0"
23 Pile Caps reqd.



26 Piles reqd. 10"x10"x42#
Est. length 20'-0"
Max. pile load 38 Tons
26 Pile Caps reqd.

PILE PLAN - U.S.

Work this sheet with sheet 11.

DESIGN - Hamilton | BRIDGE

CHECKED - [illegible]

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

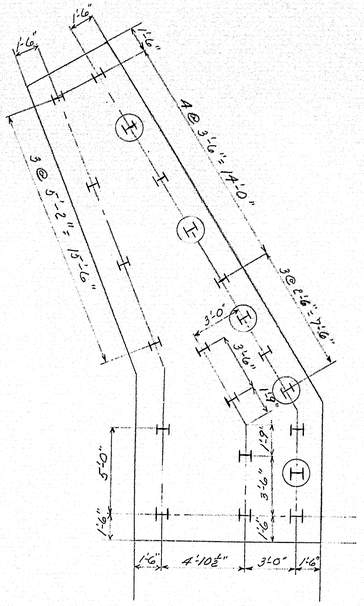
RED BRIDGE
OVER
SWIFT RIVER
BETWEEN THE TOWNS OF
RUMFORD & MEXICO
OXFORD COUNTY

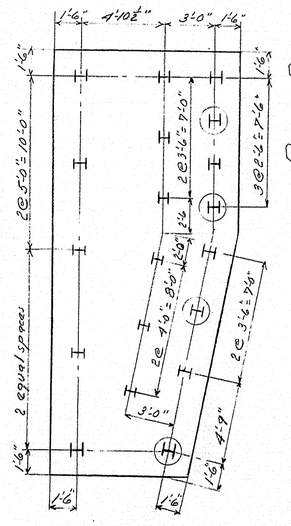
REVISED - PILE PLAN - ABUT. #2.

SHEET 11a of 19 Augusta, Maine, August 32

55-69

B. P. R. DIV. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	F-023(01)E		19

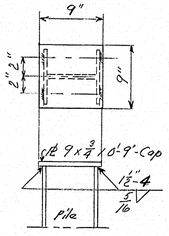




PILE PLAN & FOOTING STEEL

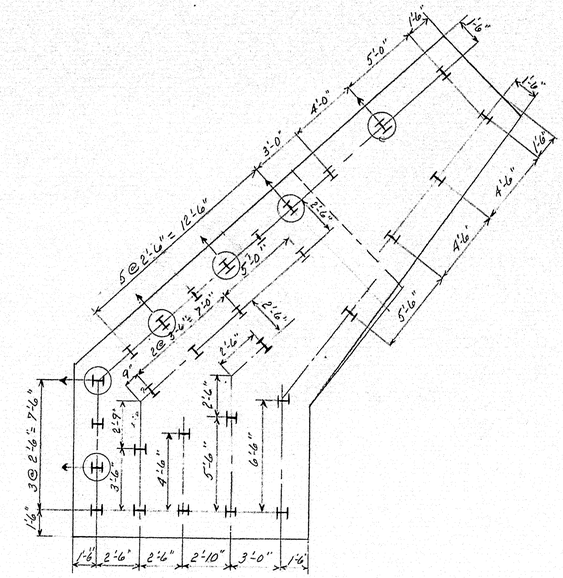
40-Piles required 8 H 36#
Est. Length = 23'-0"
Max. pile Load = 27 Tons

ABUTMENT #1



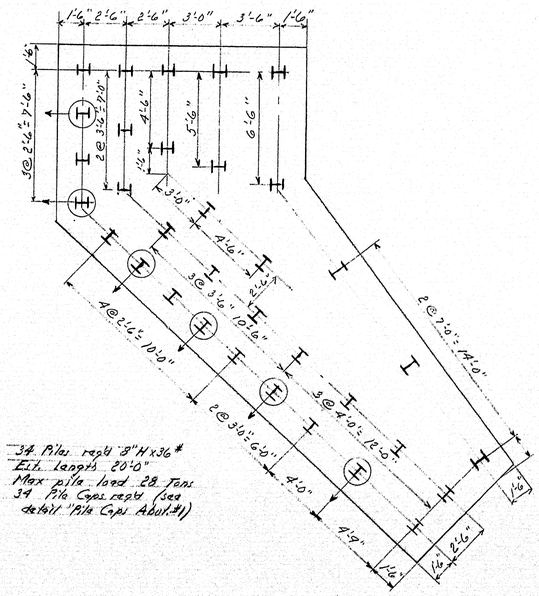
PILE CAP

40 ~ ABUT #1
64 ~ " #2



PILE PLAN & FOOTING STEEL U.S.

30 Piles req'd 8"H x 36# Est. length 23'-0"
30 Pile Caps req'd (see detail "Pile Caps" Abut. No. 1.)



34 Piles req'd 8"H x 36#
Est. Length 20'-0"
Max pile load 28 Tons
34 Pile Caps req'd (see detail "Pile Caps Abut #1)

ABUTMENT #2

Dont except D.S. Abut 1 Wing

DESIGN: Stamellr
CHECKED: [illegible]

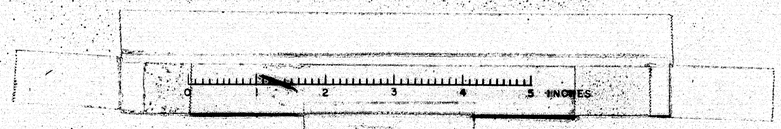
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

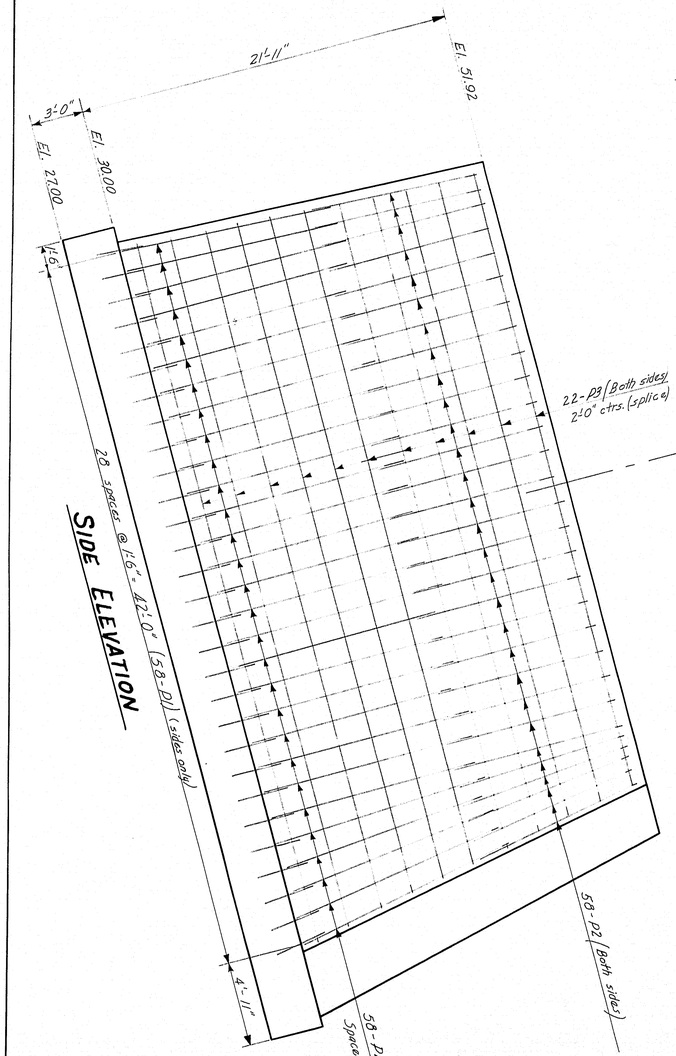
RED BRIDGE
OVER
SWIFT RIVER
BETWEEN THE TOWNS OF
RUMFORD & MEXICO
OXFORD COUNTY

REVISED PILE PLAN

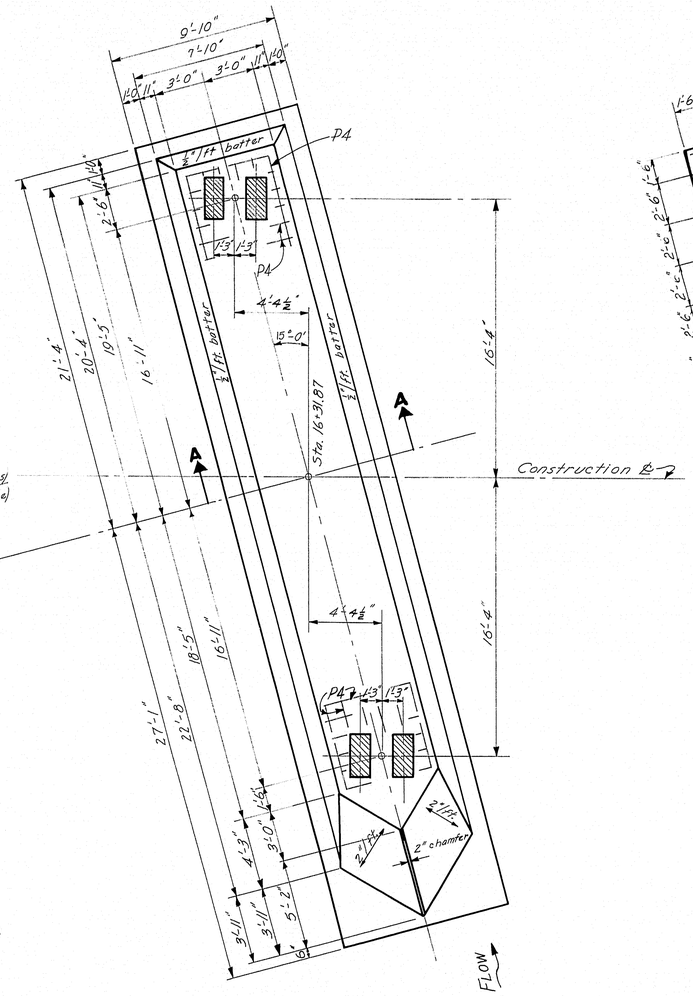
SHEET 11 & 19 AUGUSTA, MAINE JUNE 1952

55-70



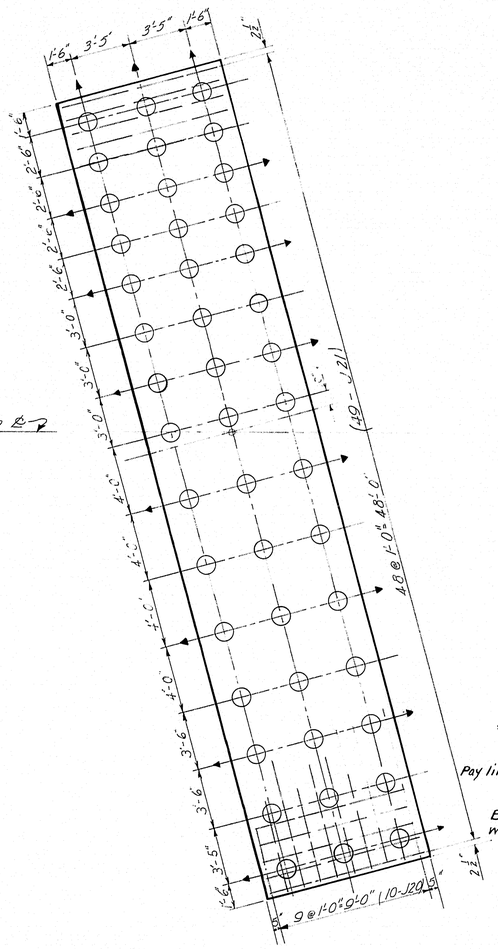


SIDE ELEVATION



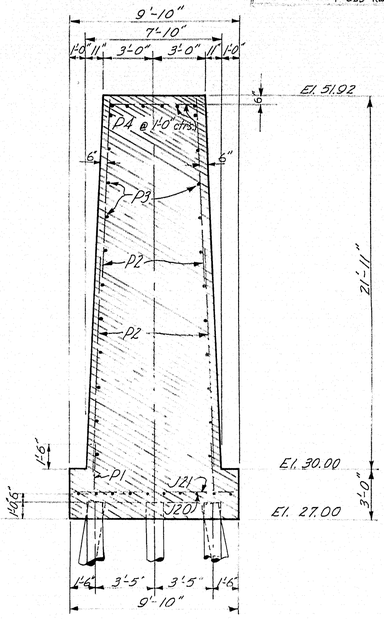
PLAN

Note: Shaded areas to be dressed, 1" larger all around than bearing plate, to exact elevations shown.

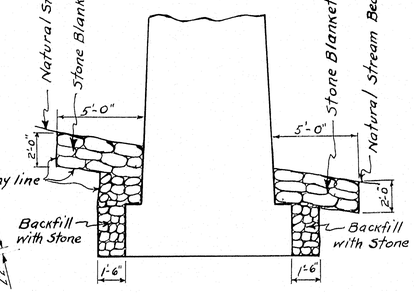


PILE PLAN

Piles-45 required, round wooden untreated.
Estimated length 20'-0"
Piles shown thus in plan, o→, to be battered ¼" per foot in direction indicated by arrow.
Design pile load-20 tons.
Piles shall be driven into the compact material overlying the ledge to support the design load. Piles may be jetted part of the distance if necessary.



SECTION A-A



STONE BLANKET AND STONE BACKFILL
All around Pier

DESIGN – HAMILTON
TRACE – MAZEIKO
CHECK –

BRIDGE

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

RED BRIDGE
OVER
SWIFT RIVER
BETWEEN THE TOWNS OF
RUMFORD & MEXICO
OXFORD COUNTY

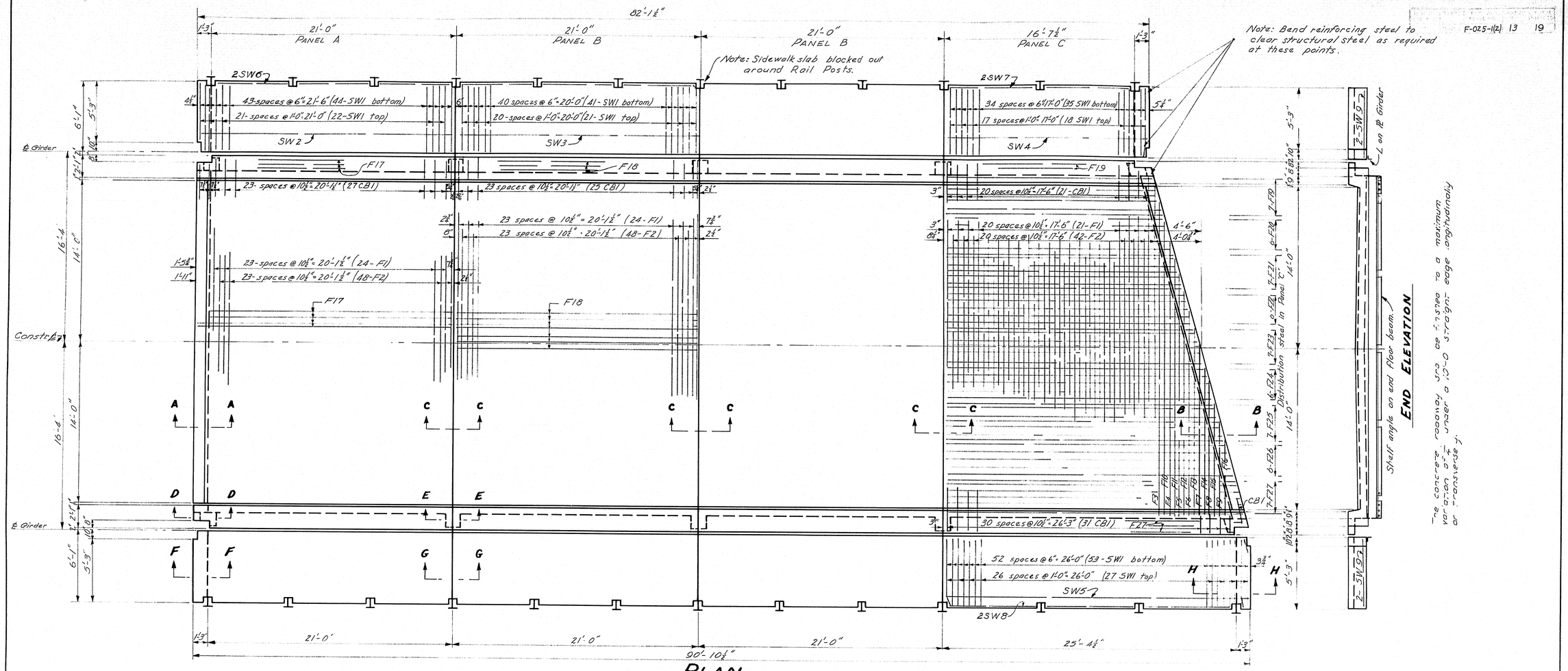
PIER

SHEET 12 OF 19 AUGUSTA, MAINE OCT. 1951

55-71

0 1 2 3 4 5 INCHES

F-025-1(2) 13 19



- NOTES -

See Sheet "14 for Sections AA to H-H

DESIGN – HAMILTON
TRACE – NAZEIKO
CHECK – [illegible]

BRIDGE

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

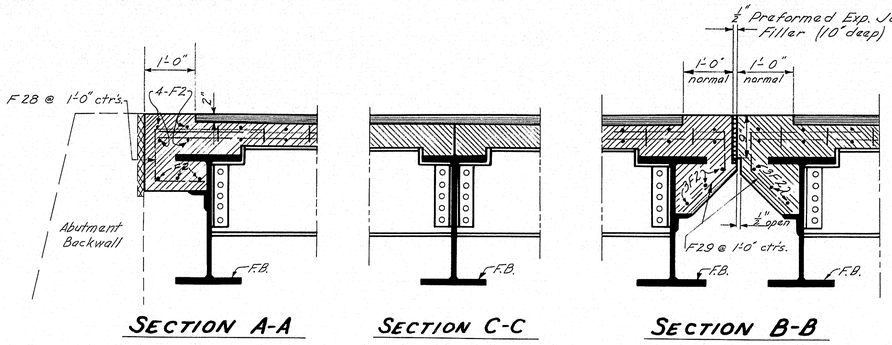
RED BRIDGE
OVER
SWIFT RIVER
BETWEEN THE TOWNS OF
RUMFORD & MEXICO
OXFORD COUNTY

SUPERSTRUCTURE

SHEET 13 OF 19 AUGUSTA, MAINE OCT. 1951

55-72

F-025-1(2) 14 19

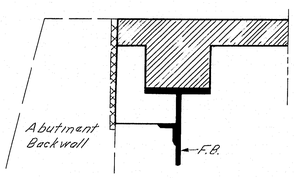


SECTION A-A

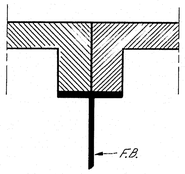
SECTION C-C

SECTION B-B

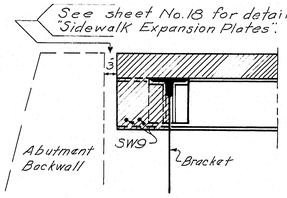
Note: 1" cover for reinforcing steel.



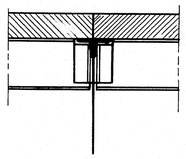
SECTION D-D



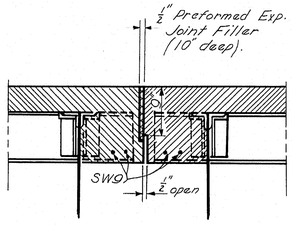
SECTION E-E



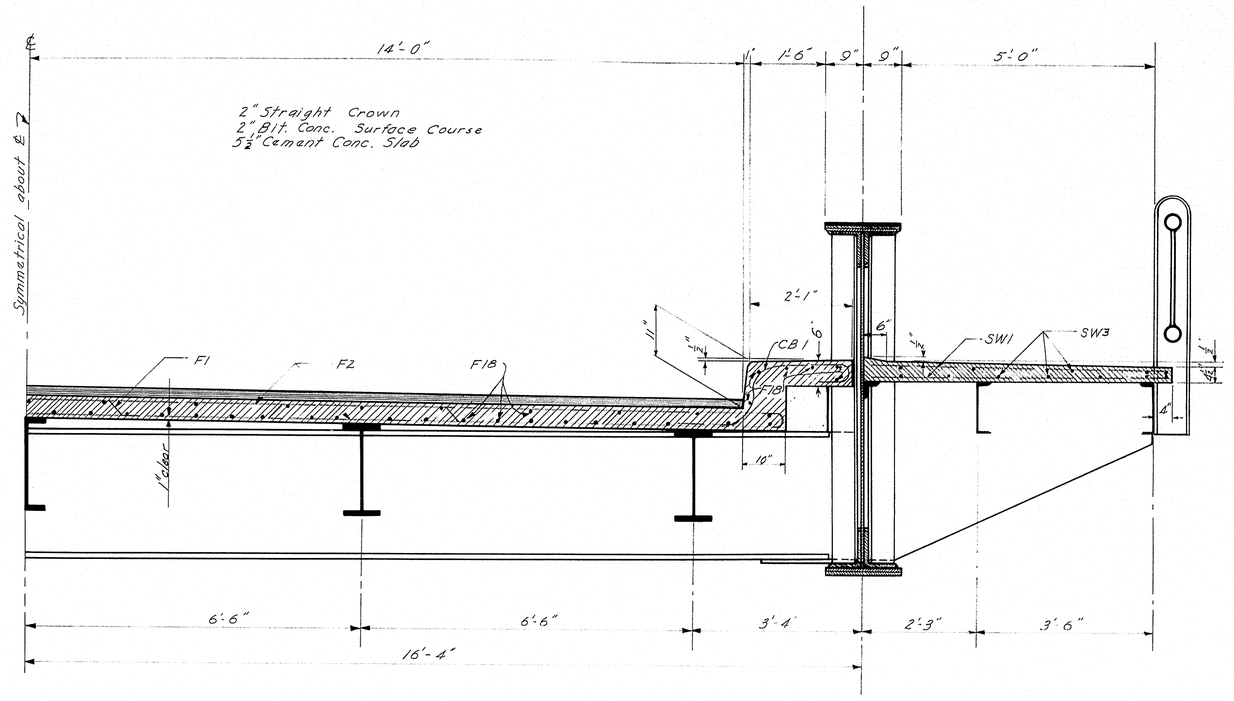
SECTION F-F



SECTION G-G

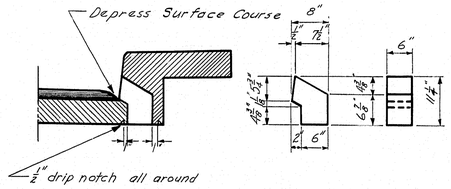


SECTION H-H



HALF TRANSVERSE SECTION

PANEL B



DRAIN DETAILS

Drain forms #24 gage galvanized iron
16 - required
1 at about center of each panel in both curbs.

Revision in designation of surfacing Apr. 21, 1952.

DESIGN — HAMILTON
TRACE — MAZEIKO
CHECK — [illegible]

BRIDGE

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

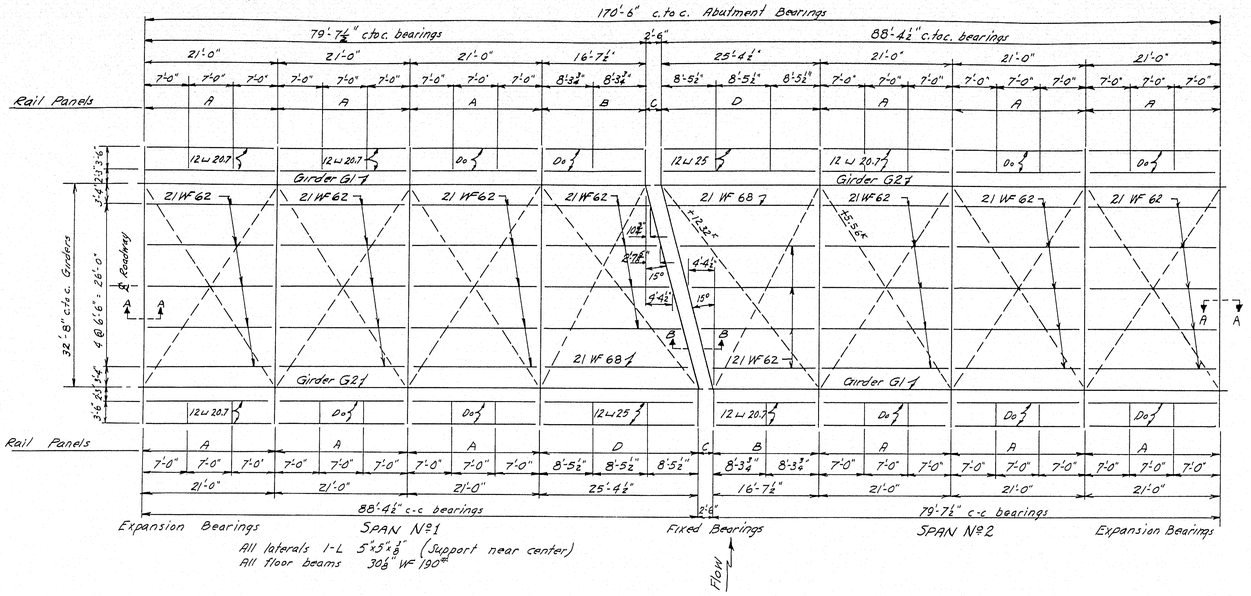
RED BRIDGE
OVER
SWIFT RIVER
BETWEEN THE TOWNS OF
RUMFORD & MEXICO
OXFORD COUNTY

SUPERSTRUCTURE

SHEET 14 OF 19 AUGUSTA, MAINE OCT. 1951

55-73

0 1 2 3 4 5 INCHES



EROSION DIAGRAM

DESIGN DATA

GIRDER G1

Max. Girder Moment = 3780 ᴵᴷ
Gross I = 127275 in⁴
Net I = 102125 in⁴

Make up of Girder 78½" b-b of Ls
- Web = 78"x⅜"
- 4-Ls - 6"x6"x⅝"
- 2 PLs - 18"x½"
- 2 PLs - 18"x⅞"

Dead Load Deflection = ¾"
Camber Girder = ¾"

GIRDER G2

Max. Girder Moment = 4463 ᴵᴷ
Gross I = 152918 in⁴
Net I = 123275 in⁴

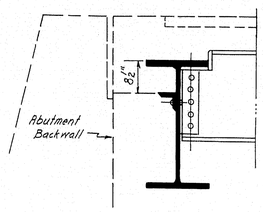
Make up of Girder - Web = 78"x⅜"
78½" b-b of Ls: 4-Ls - 8"x8"x½"
2 PLs - 18"x⅜"
2 PLs - 18"x⅝"
2 PLs - 18"x⅝"

Dead load deflection = 1"
Camber Girder = 1"

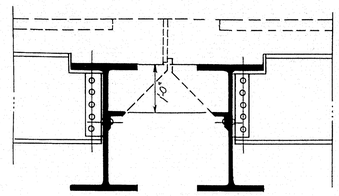
SPECIFICATIONS

State of Maine, State Highway Commission
Bridge Division, Specifications for Steel
Highway Bridges Nov. 1945

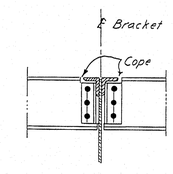
Loading - H20-44
Rivets - ⅞" ϕ
Open holes - 1⅛" ϕ



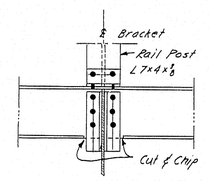
SECTION A-A



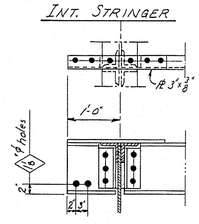
SECTION B-B



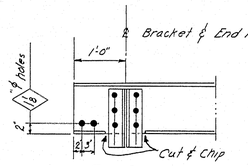
INT. STRINGER



EXT. STRINGER

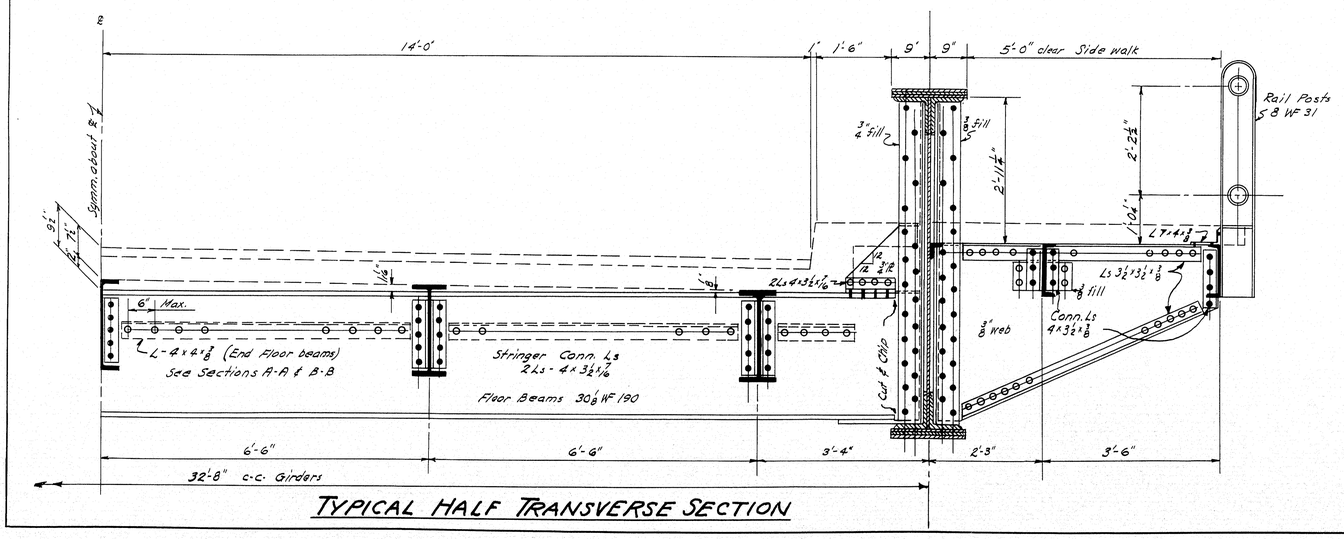


INT. STRINGER END BRACKETS

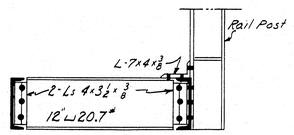


EXT. STRINGER END BRACKETS

TYPICAL CONNECTIONS FOR SIDEWALK STRINGERS



TYPICAL HALF TRANSVERSE SECTION



INTERMEDIATE DIAPHRAGM

DESIGN- HAMILTON
TRACE- ELLIS
CHECK -

BRIDGE

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

RED BRIDGE
OVER
SWIFT RIVER
BETWEEN THE TOWNS OF
RUMFORD & MEXICO
OXFORD COUNTY

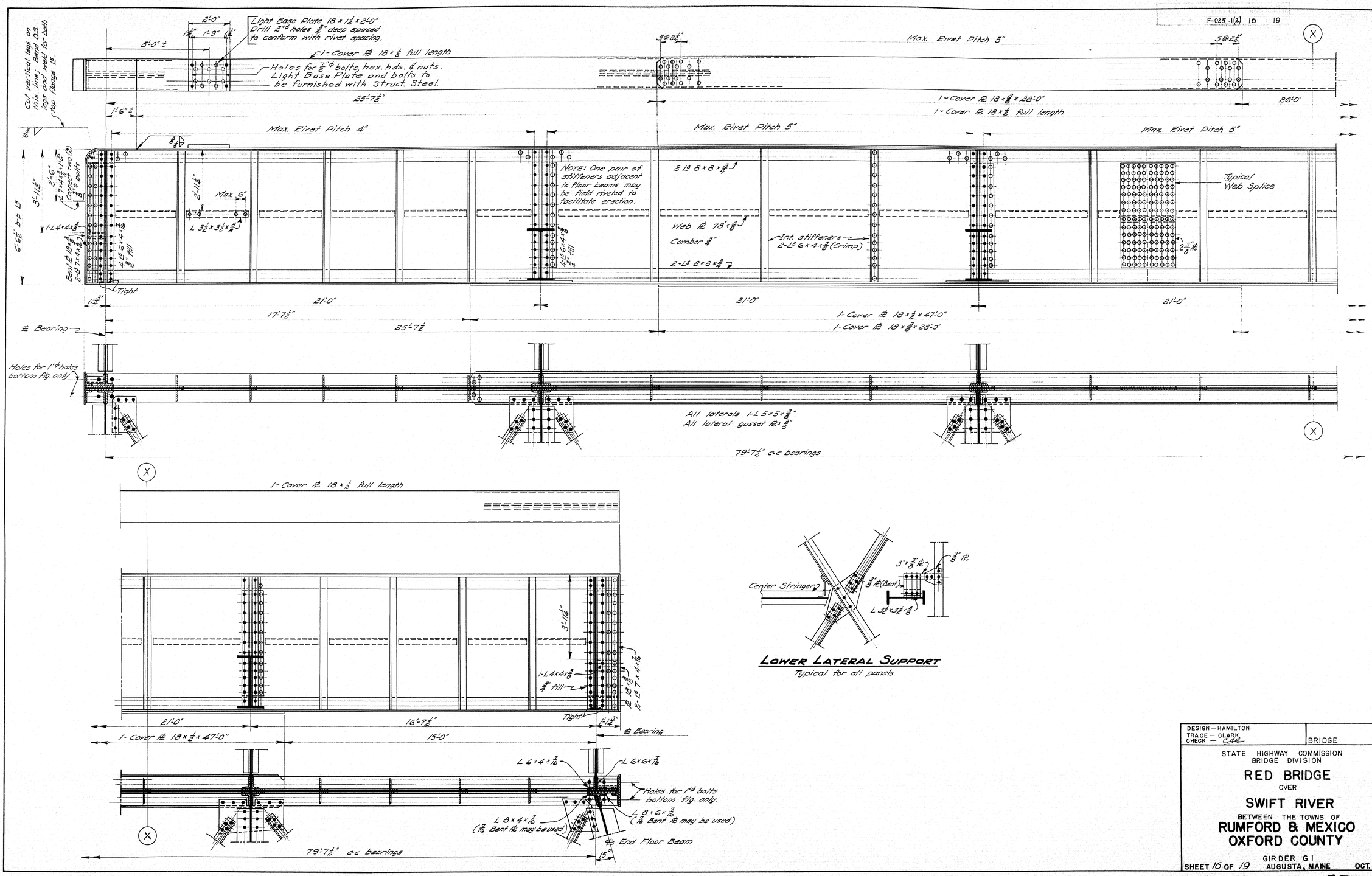
ERECTION DIAGRAM

SHEET 15 OF 19 AUGUSTA, MAINE OCT. 1951

55-74

0 1 2 3 4 5 INCHES

F-025-1(2) 16 19



LOWER LATERAL SUPPORT
Typical for all panels

DESIGN – HAMILTON	
TRACE – CLARK	
CHECK –	BRIDGE

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

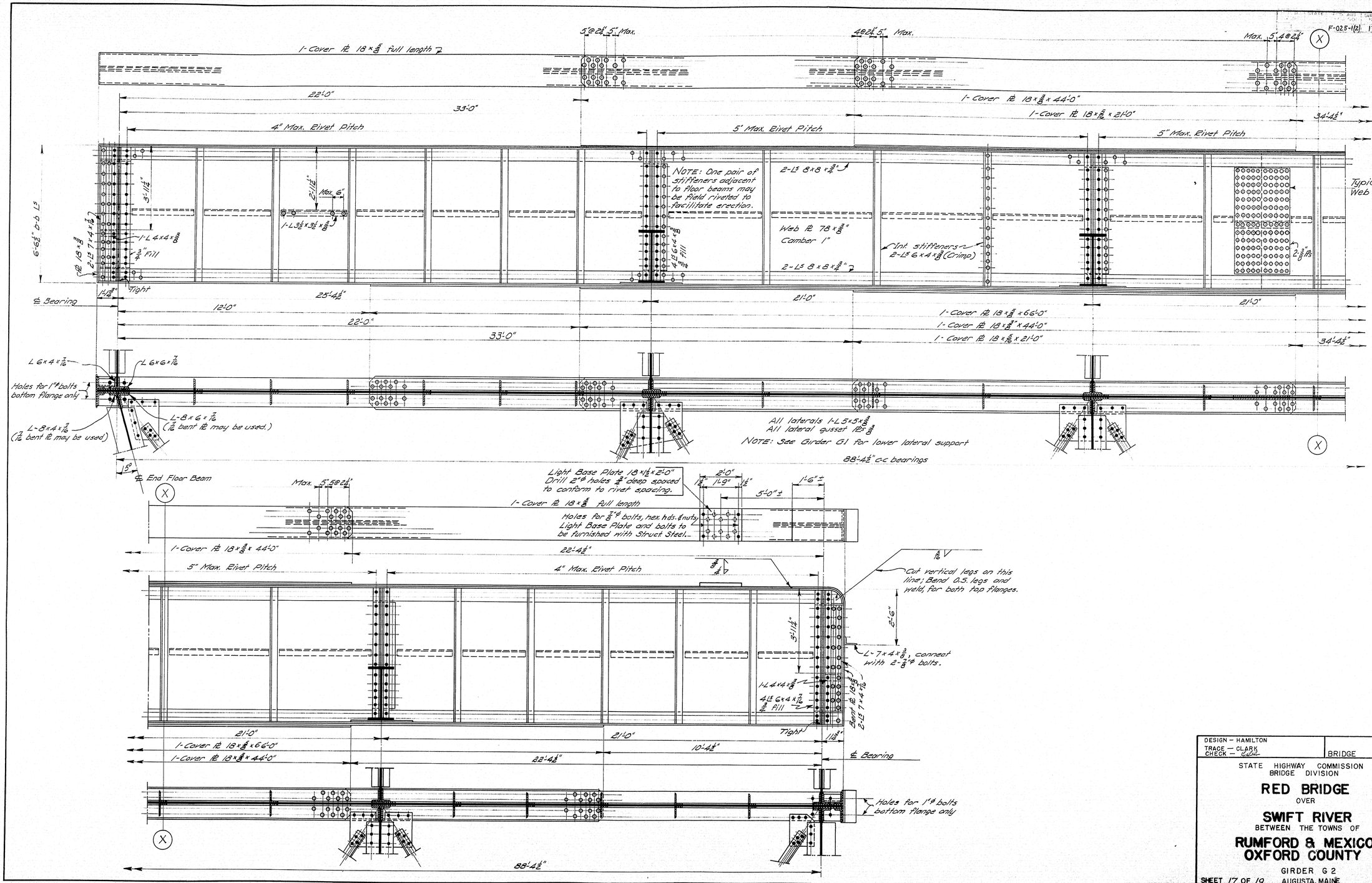
RED BRIDGE
OVER
SWIFT RIVER
BETWEEN THE TOWNS OF
RUMFORD & MEXICO
OXFORD COUNTY

GIRDER G1
SHEET 16 OF 19 AUGUSTA, MAINE OCT. 1951

55-75

0 1 2 3 4 5 INCHES

STATE PROJ. NO. | SHEET NO. | SHEETS
F-025-1(2) | 17 | 19



DESIGN – HAMILTON
TRACE – CLARK
CHECK – [illegible]
BRIDGE

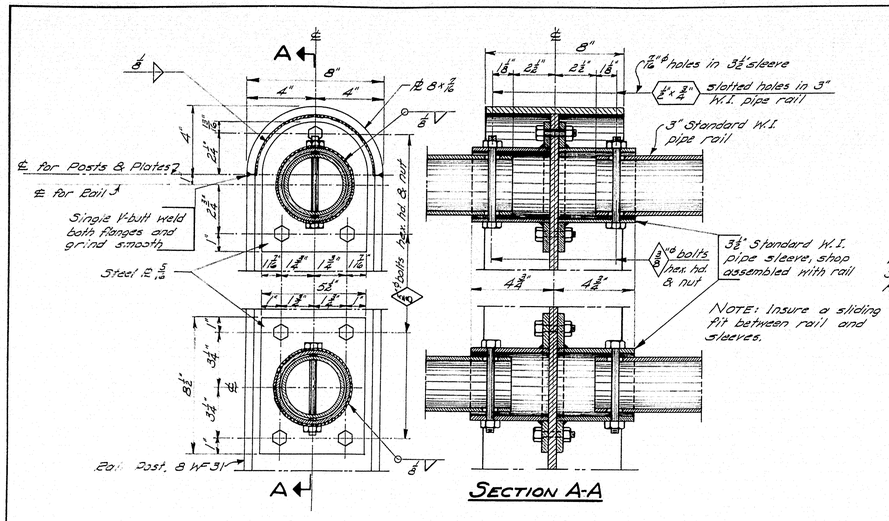
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

RED BRIDGE
OVER
SWIFT RIVER
BETWEEN THE TOWNS OF
RUMFORD & MEXICO
OXFORD COUNTY

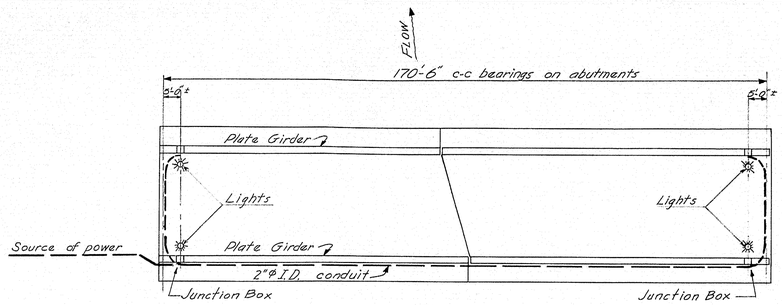
GIRDER G 2

SHEET 17 OF 19 AUGUSTA, MAINE OCT. 1951

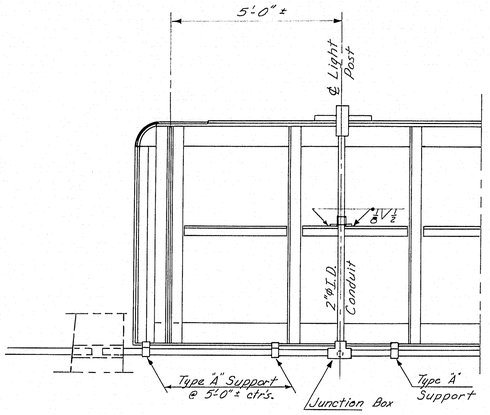
55-76

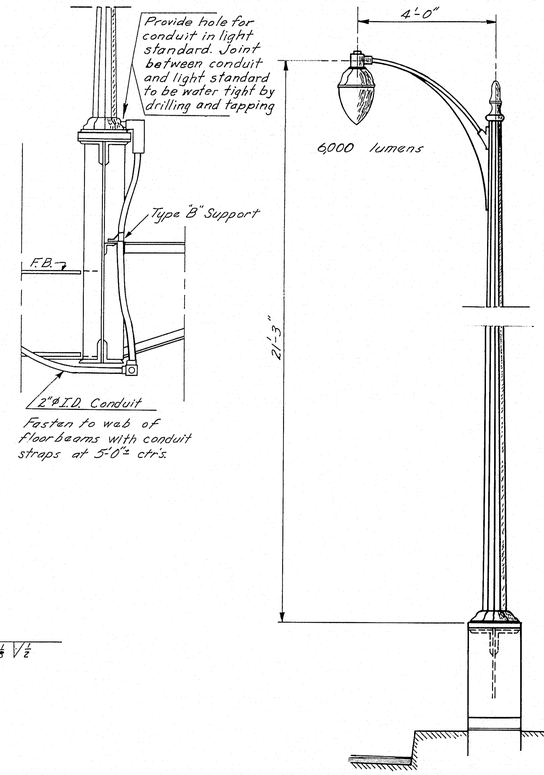

℄ for Posts & Plates
℄ for Rail
Single V-butt weld both flanges and grind smooth
Steel ℄ 5/16
Bolts for Rail & nut
End Post, 8 WF 31
4" 4"
8"
4 spaces @ 6" = 2'-0"
2'-2 1/2"
1'-4 1/2"
1'-5 1/2"
5 1/2"
8'-2"
3'-4"
1'-4"
1'-8"
1'-8 1/2"
1'-4 1/2"
1'-5 1/2"
1'-8"
1'-4"
1'-8"
1'-5 1/2"
1'-8

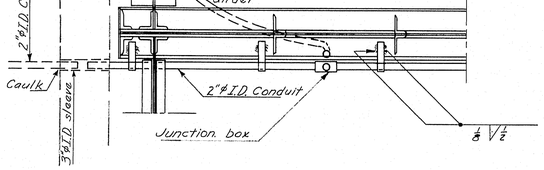
DIV. NO. | STATE PROJ. NO. | SHEET NO. | TOTAL SHEETS
F-025-1(12) | 19 | 19



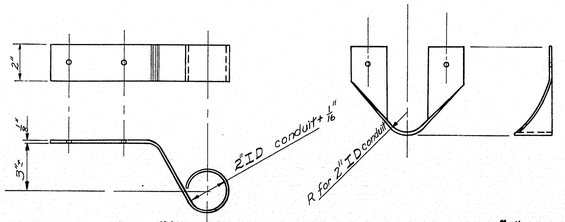
PLAN







NOTE :-
Provide holes for drainage in conduit, at low points.



SUGGESTED TYPE "A" SUPPORTS

SUGGESTED TYPE "B" SUPPORTS

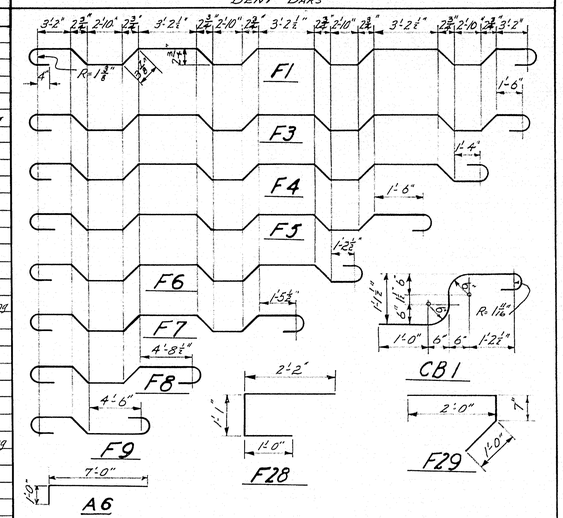
— STEEL SCHEDULE —

STRAIGHT BARS

Mark	Bar Size	No.	Length	Location
F2	#5	392	20'-4"	Roadway slab (all panels)
F10	▲	4	25'-11"	" " panel 'C'
F11		4	22'-7"	" " "
F12		4	19'-4"	" " "
F13		4	16'-1"	" " "
F14		4	12'-10"	" " "
F15		4	9'-7"	" " "
F16	▼	4	6'-4"	" " "
F17	#4	142	22'-0"	" " panel 'A'
F18	▲	284	20'-9"	" " " 'B'
F19		26	18'-0"	" " " 'C'
F20		12	19'-2"	" " " "
F21		14	20'-0"	" " " "
F22		12	21'-0"	" " " "
F23		14	21'-9"	" " " "
F24		12	22'-6"	" " " "
F25		14	23'-6"	" " " "
F26		12	24'-3"	" " " "
F27	▼	26	25'-3"	" " " "
SW1	#4	1032	5'-10"	Sidewalk slab (all panels)
SW2	▲	40	21'-9"	" " panel 'A'
SW3		80	20'-9"	" " " 'B'
SW4		20	17'-8"	" " " 'C'
SW5		20	26'-5"	" " " 'C'
SW6		72	6'-2"	" " " 'A' & 'B'
SW7		8	7'-5"	" " " 'C'
SW8	▼	8	7'-7"	" " " 'C'
SW9	#6	16	5'-11"	" diaphragms
ST1	#4	12	7'-3"	Stairs
ST2	#4	9	5'-9"	"
K	#6	46	8'-0"	Abut. #1 & #2
D1	#6	2	1'-6"	Abut. #1 (End wall U.S.)

Mark	Bar Size	No.	Length	Location
A1	#6	36	38'-0"	Abut. #1 & #2
A2	#4	76	4'-9"	" " "
A3	#6	46	6'-6"	" " "
A4	#4	12	10'-0"	" " "
A5	#4	6	26'-0"	" " "
J1	#6	11	24'-0"	Abut. #1 Footing
J2	▲	19	10'-3	" "
J3		1	9'-6"	" "
J4		4	8'-6"	" "
J5		6	7'-6"	" "
J6		5	5'-0"	" "
J7		5	5'-6"	" "
J8		5	6'-6"	" "
J9		5	7'-6"	" "
J10		5	8'-6"	" "
J11		10	25'-0"	" "
J12		10	14'-0"	Abut. #2 Footing
J13		15	10'-0"	" "
J14		13	28'-6"	" "
J15		6	7'-6"	" "
J16		6	8'-6"	" "
J17		6	9'-6"	" "
J18		7	10'-6"	" "
J19	▼	4	7'-0"	" "
J20	#6	20	25'-0"	Pier Footing
J21	#6	49	0'-6"	" "
P1	#5	58	3'-0"	Pier
P2	#5	116	11'-6"	"
P3	#4	44	22'-0"	"
P4	#6	24	5'-0"	"
J22	#6	14	10'-0"	Abut. #2 Footing D.S.
J23	"	10	13'-2"	" " " "
J24	"	5	7'-0"	" " " "
J25	"	6	10'-0"	" " " "
J26	"	6	8'-6"	" " " "
J27	"	6	7'-0"	" " " "
J28	"	8	6'-0"	" " " "
J29	"	9	13'-6"	" " " "
J30	"	11	16'-0"	" " " "

BENT BARS



Note: Dimensions to ℄ of bars.

Mark	Bar Size	No.	Length	Location
F1	#5	186	31'-3"	Floor slab - all panels
F3	▲	2	29'-7"	" " panel 'C'
F4		2	26'-3"	" " "
F5		2	22'-11"	" " "
F6		2	19'-5"	" " "
F7		2	16'-2"	" " "
F8		2	12'-9"	" " "
F9	▼	2	9'-4"	" " "
CB1	#5	412	4'-10"	Roadway curb - all panels
F28	#5	60	1'-3"	Roadway diaphragm at abutments
F29	#5	60	3'-7"	" " " pier
A6	#6	3	8'-0"	Abutment #1 - End wall - U.S.

Note: All reinforcing steel bars shall conform to A.S.T.M. Specifications A 305-49

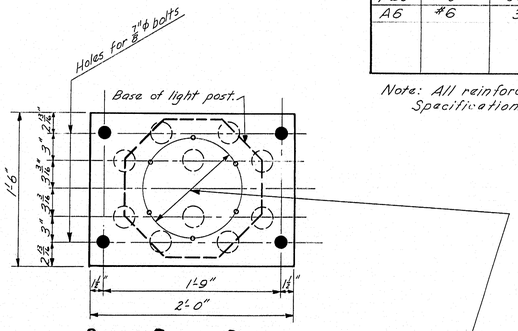
NOTE:
Under the contract item, "Lighting System", the following shall be included:- Furnish and install conduit, junction boxes, conduit supports and straps, a temporary wire within the conduit for installing the permanent wire, light standards, light brackets and bolts for fastening light standards to base plates.

All conduit not encased in concrete or underground shall be of metal.

The furnishing and installing of the conduit from bridge to source of power, the entire permanent wiring, and the luminaires shall not be a part of this contract.

TYPICAL LIGHT AND POST DETAIL

Note: Union Metal No. 6400-Y64, single light, Octaflute standard, or approved equal. 4- required.



BASE PLATE DETAIL

PL 18 x 1¼ x 2'-0" 4-req'd.
To be furnished with PL Girder

Note: Location and size of holes for stud bolts for fastening light post to base plate shall conform to type of light post accepted.

Holes for stud bolts to be drilled and tapped in the field. Payment for drilling and tapping shall be included in the lump sum contract price for Lighting.

DESIGN — HAMILTON
TRACE — MAZEIKO
CHECK —

BRIDGE

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

RED BRIDGE
OVER
SWIFT RIVER
BETWEEN THE TOWNS OF
RUMFORD & MEXICO
OXFORD COUNTY

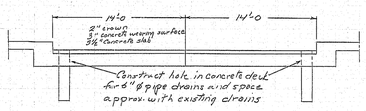
LIGHTING DETAIL & REINFORCING STEEL

SHEET 19 OF 19 AUGUSTA, MAINE OCT. 1951

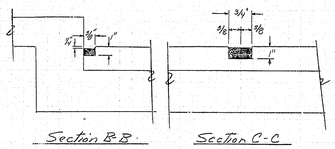
55-78

0 1 2 3 4 5 INCHES

PRELIM.) BY JE Morse DATE 2-9-73 PROJ. NO. 2707 FILE NO. ____ OF ____
FINAL) CHK. BY EN Belcher DATE 2-28-73 LOCATION Rumford-Mexico SH. NO. 6 OF 12
ITEM NO. ____ SUBJECT Red Bridge Wearing Surface



Section A-A



Section B-B Section C-C

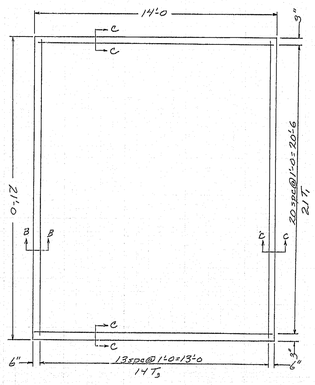
Note:
Sandblast joints before placing joint sealer.
Place masking tape in bottom of joint to break bond.
Round edges of joint to ½" radius.

132:120

STATE OF MAINE — DEPARTMENT OF TRANSPORTATION

PRELIM.) BY JE Morse DATE 2-9-73 PROJ. NO. 2707 FILE NO. ____ OF ____
FINAL) CHK. BY EN Belcher DATE 2-28-73 LOCATION Rumford-Mexico SH. NO. 3 OF 12
ITEM NO. ____ SUBJECT Red Bridge Wearing Surface

Panel B (8 required)

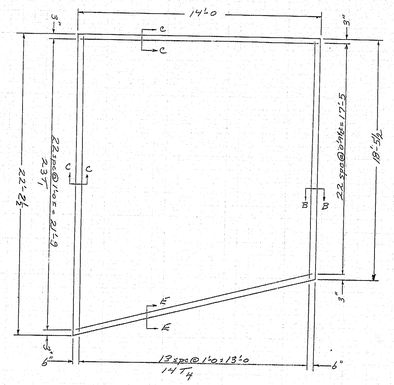


132:120

STATE OF MAINE — DEPARTMENT OF TRANSPORTATION

PRELIM.) BY JE Morse DATE 2-9-73 PROJ. NO. 2707 FILE NO. ____ OF ____
FINAL) CHK. BY EN Belcher DATE 2-28-73 LOCATION Rumford-Mexico SH. NO. 4 OF 12
ITEM NO. ____ SUBJECT Red Bridge Wearing Surface

Panel C (2 required)

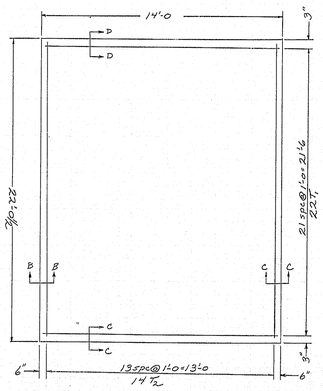


132:120

STATE OF MAINE — DEPARTMENT OF TRANSPORTATION

PRELIM.) BY JE Morse DATE 2-9-73 PROJ. NO. 2707 FILE NO. ____ OF ____
FINAL) CHK. BY EN Belcher DATE 2-28-73 LOCATION Rumford-Mexico SH. NO. 2 OF 12
ITEM NO. ____ SUBJECT Red Bridge Wearing Surface

Panel A (4 required)



132:120

STATE OF MAINE — DEPARTMENT OF TRANSPORTATION

PRELIM.) BY JE Morse DATE 2-9-73 PROJ. NO. 2707 FILE NO. ____ OF ____
FINAL) CHK. BY EN Belcher DATE 2-28-73 LOCATION Rumford-Mexico SH. NO. 1 OF 12
ITEM NO. ____ SUBJECT Red Bridge Wearing Surface
Revised 3/20/73
Sht. 7-12

4 copies sent to J. Flint 3/21/73

Panel Layout

Not to Scale

132:120

STATE OF MAINE — DEPARTMENT OF TRANSPORTATION

PRELIM.) BY D.Grandlienard DATE 2-28-73 PROJ. NO. 2707 FILE NO. ___ OF ___
FINAL) CHK. BY J.E.Morse DATE 3-7-73 LOCATION Rumford-Mexico SH. NO. 10 OF 12
ITEM NO. ___ SUBJECT Red Bridge - Wearing Surface

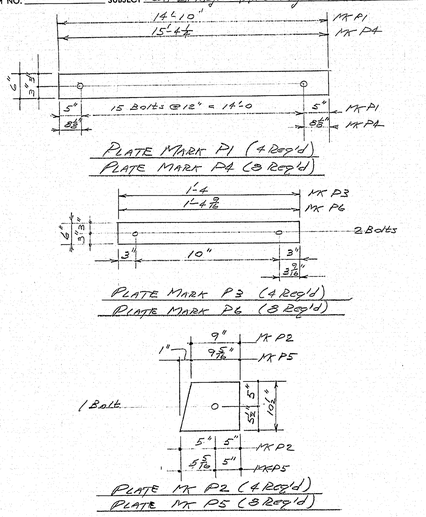


PLATE MARK P1 (4 Req'd)
PLATE MARK P4 (8 Req'd)

PLATE MARK P3 (4 Req'd)
PLATE MARK P6 (8 Req'd)

PLATE MK P2 (4 Req'd)
PLATE MK P5 (8 Req'd)

Note:
All plates ½" thick. Weld machine bolts per detail Sht. 8.

MAINE STATE HIGHWAY COMMISSION 132:121

PRELIM.) BY J.E.Morse DATE 2-9-73 PROJ. NO. 2707 FILE NO. ___ OF ___
FINAL) CHK. BY E.N.Belcher DATE 2-28-73 LOCATION Rumford-Mexico SH. NO. 11 OF 12
ITEM NO. ___ SUBJECT Red Bridge Wearing Surface

Bill of material

Size	Length	Number	Remarks
½" x 6"	15'-4½"	4	Mark P1
" x 10"	0'-10⅝	4	" P2
" x 6"	1'-4	4	" P3
" x 6"	14'-10	8	" P4
" x 10⅝"	0'-10⅝	4	" P5
½" x 6"	1'-4 3/16	4	" P6
½" ⌀	6"	216	Machine bolts
½" x 1"	1'-0	93	Keepers
1" Mink	34'-0	2	Expansion material for Abuts - 1" movement
* ½" Mink	35'-0	1	Expansion material for Pier - ½" movement
6" ⌀	3'-10	16	Pipe drains

See details Slt. 10

Reinforcing Steel Schedule

Mark	Size	Length	Number	Remarks
T1	#3	13'-8	356	All Panels Transverse
T2		21'-8	56	Panel A Longitudinal
T3		20'-8	112	Panel B Longitudinal
T4		18'-5 7/8" Incl. 2 1/2" Hooks	# 14 per cl 2	Panel C Longitudinal
T5		22'-6 7/8" Incl. 2 1/2" Hooks	* # 14 per cl 2	Panel D Longitudinal

* T4	** T5
2 of each	2 of each
18'-3	22'-0
18'-6	22'-3
18'-9	22'-6
19'-1	22'-10
19'-4	23'-1
19'-7	23'-4
19'-10	23'-7
20'-2	23'-11
20'-5	24'-2
20'-8	24'-5
20'-11	24'-8
21'-3	25'-0
21'-6	25'-3
21'-9	25'-6

* Joint skewed 15° fr. dm normal to ℄ roadway.

STATE OF MAINE — DEPARTMENT OF TRANSPORTATION 132:121

PRELIM.) BY J.E.Morse DATE 2-9-73 PROJ. NO. 2707 FILE NO. ___ OF ___
FINAL) CHK. BY E.N.Belcher DATE 2-28-73 LOCATION Rumford-Mexico SH. NO. 12 OF 12
ITEM NO. ___ SUBJECT Red Bridge Wearing Surface

Concrete Quantities

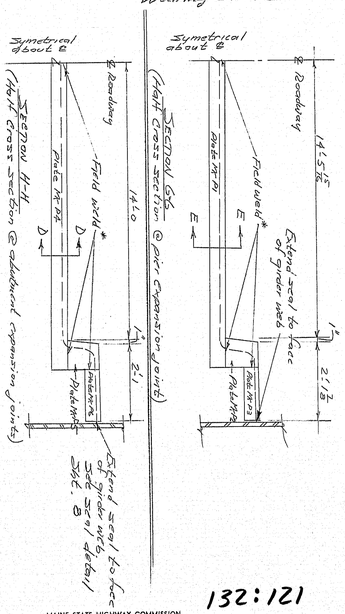
Total length - 172'-8
width - 28'-0
Thickness = 0'-3
New wearing surface
172'-8 x 28'-0 x 0'-3 = 1208.67 cu.ft
Abut #1+2
2(28'-0 x 1'-9 x 0'-10) = 58.32 cu.ft
2(28'-0 x 0'-8 x 0'-10) = 31.11 cu.ft.
Pier #1
2(28'-0 x 1'-10 x 0'-10) = 85.51 cu. ft
Total 1383.61 cu.ft = 51.24 cu.yds

Joint Sealant Quantities

Total length - 2(172'-8) + 6(28'-0) = 513'-4
Area of section = ¾"x¾" = .5625 sq. in.
513'-4 x .5625 sq.in. x 12"/ft = 3465.00 sq.in.
3465.00 sq.in. / 231 sq.in/gal = 15 gals

STATE OF MAINE — DEPARTMENT OF TRANSPORTATION 132:121

PRELIM.) BY D.Grandlienard DATE 2-2 6-73 PROJ. NO. 2707 FILE NO. ___ OF ___
FINAL) CHK. BY J.E.Morse DATE 2-28-73 LOCATION Rumford-Mexico SH. NO. 9 OF 12
ITEM NO. ___ SUBJECT Red Bridge Wearing Surface

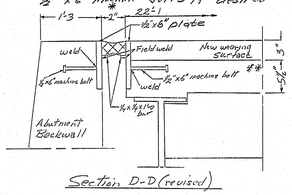


Note: Extend seal as shown @ proper depth to accomodate seal & weld. Grind Plate as required to give smooth transition for seal when * Weld is ground flush.

MAINE STATE HIGHWAY COMMISSION 132:121

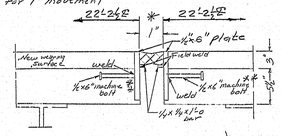
PRELIM.) BY J.E.Morse DATE 2-8-73 PROJ. NO. 2707 FILE NO. ___ OF ___
FINAL) CHK. BY E.N.Belcher DATE 2-28-73 LOCATION Rumford-Mexico SH. NO. 8 OF 12
ITEM NO. ___ SUBJECT Red Bridge Wearing Surface

* Groove dimension may vary - dependant upon requirements of seal manufacturer.
** Equivalent anchor studs may be used in place of ½" x 6" machine bolts if desired



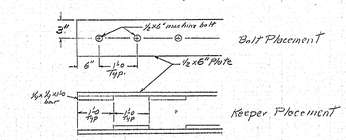
Section D-D (revised)

Note:
Use standard preformed expansion joint material for 1" movement



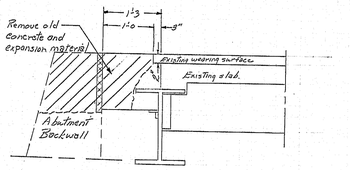
Section E-E (revised)

Note:
Use standard preformed expansion joint material for ½" movement.

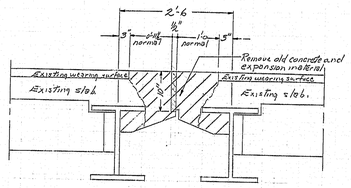


STATE OF MAINE — DEPARTMENT OF TRANSPORTATION 132:121

PRELIM.) BY J.E.Morse DATE 2-8-73 PROJ. NO. 2707 FILE NO. ___ OF ___
FINAL) CHK. BY E.N.Belcher DATE 2-28-73 LOCATION Rumford-Mexico SH. NO. 7 OF 12
ITEM NO. ___ SUBJECT Red Bridge Wearing Surface



Section D-D (existing)



Section E-E (existing)

STATE OF MAINE — DEPARTMENT OF TRANSPORTATION 132:121