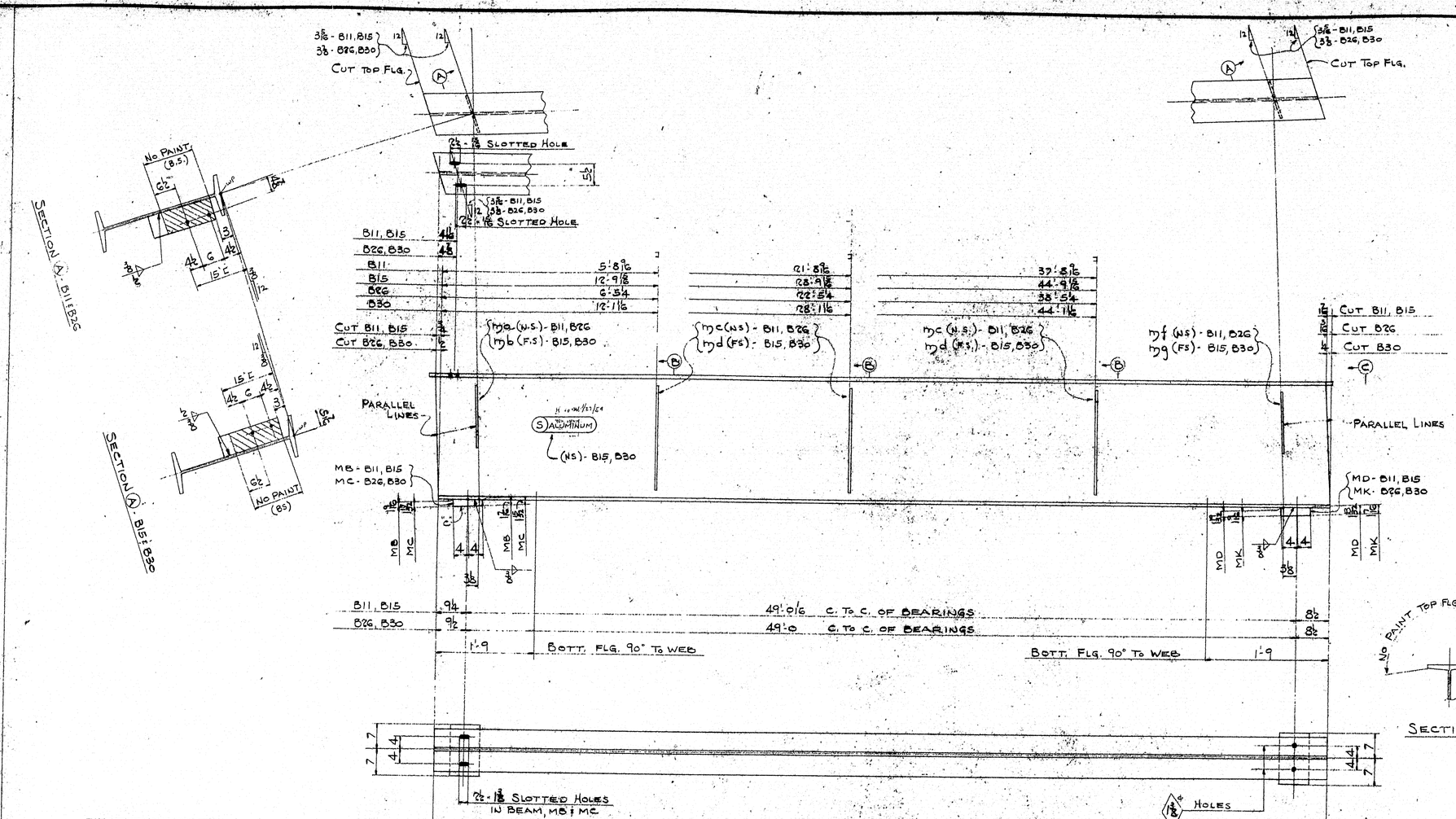
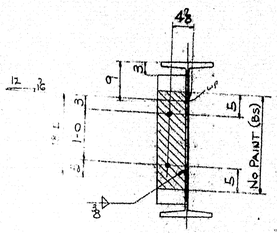
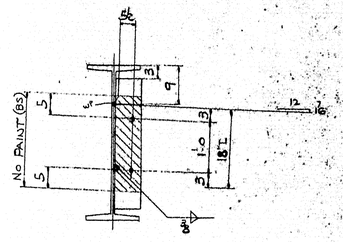
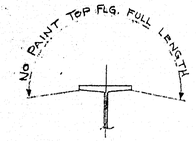
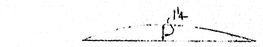
B.P.R. REQ. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(24)		











LONGITUDINAL DIMENSIONS ARE MEASURED PARALLEL TO CHORD LINE.

SURFACES MARKED "C" TO BE GIVEN ONE COAT OF A HOT MIXTURE OF WHITE LEAD AND TALLOW.

MARK	NO. REQ'D.	SPAN
B11	ONE	3
B15	ONE	3
B26	ONE	6
B30	ONE	6

B - 36 5/16 - 182 - 50'-5 13/16 (ORD. 51'-0 CUT 50'-9 1/16) 2/6
B - 36 5/16 - 182 - 50'-5 13/16 (ORD. 51'-0 CUT 50'-9 1/16) 2/6
B - 36 5/16 - 182 - 50'-6 (ORD. 51'-0 CUT 50'-10 1/16) 2/6
B - 36 5/16 - 182 - 50'-6 (ORD. 51'-0 CUT 50'-10 1/16) 2/6

2 - PL 8 x (1 7/16 - 1 7/16) (M28) x 1'-2 MB - B11 & B15
2 - PL 8 x (1 15/32 - 1 15/32) (M28) x 1'-2 MC - B26 & B30
2 - PL 8 x (1 13/32 - 1 13/32) (M15) x 1'-2 MD - B11 & B15
2 - PL 8 x (1 7/16 - 1 7/16) (M15) x 1'-2 MK - B26 & B30
} (ORD. & DET. ON SHEET #1 DO NOT DUPLICATE

2 - PL 6 1/2 x 1/2 x 1'-6 MA - B11 & B26
2 - PL 6 1/2 x 1/2 x 1'-6 MB - B15 & B30
2 - PL 6 1/2 x 1/2 x 2'-6 MC - B11 & B26
2 - PL 6 1/2 x 1/2 x 2'-6 MD - B15 & B30
} (ORD. 30 - 1/2 - 16'-6) 5/4
2 - PL 6 1/2 x 1/2 x 1'-6 MF - B11 & B26
2 - PL 6 1/2 x 1/2 x 1'-6 MG - B15 & B30
} (ORD. 18 - 1/2 - 16'-6) 5/6
1/2" F. WELD - 12'-0 (3'-0 EA. PC.)
3/8" F. WELD - 83'-0 (20'-9 EA. PC.)

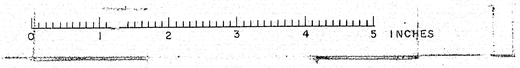
RIVETS —
OPEN HOLES 15/16" UNLESS NOTED
REAM
MILLING
PAINT ONE SHOP COAT AS PER SPECS, UNLESS NOTED.
WELDING AS PER SPECS.
SHOP CONTACT SURFACES NO PAINT

STRINGER DETAILS

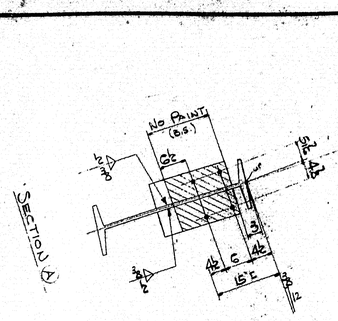
TEMP.	
SUPT.	
LAYOUT	
FITTER	
SHOP INSP.	
FD. WK.	
B. SMITH	
MCH.	
ERECT.	
O. INSP.	
WEIGHTS	

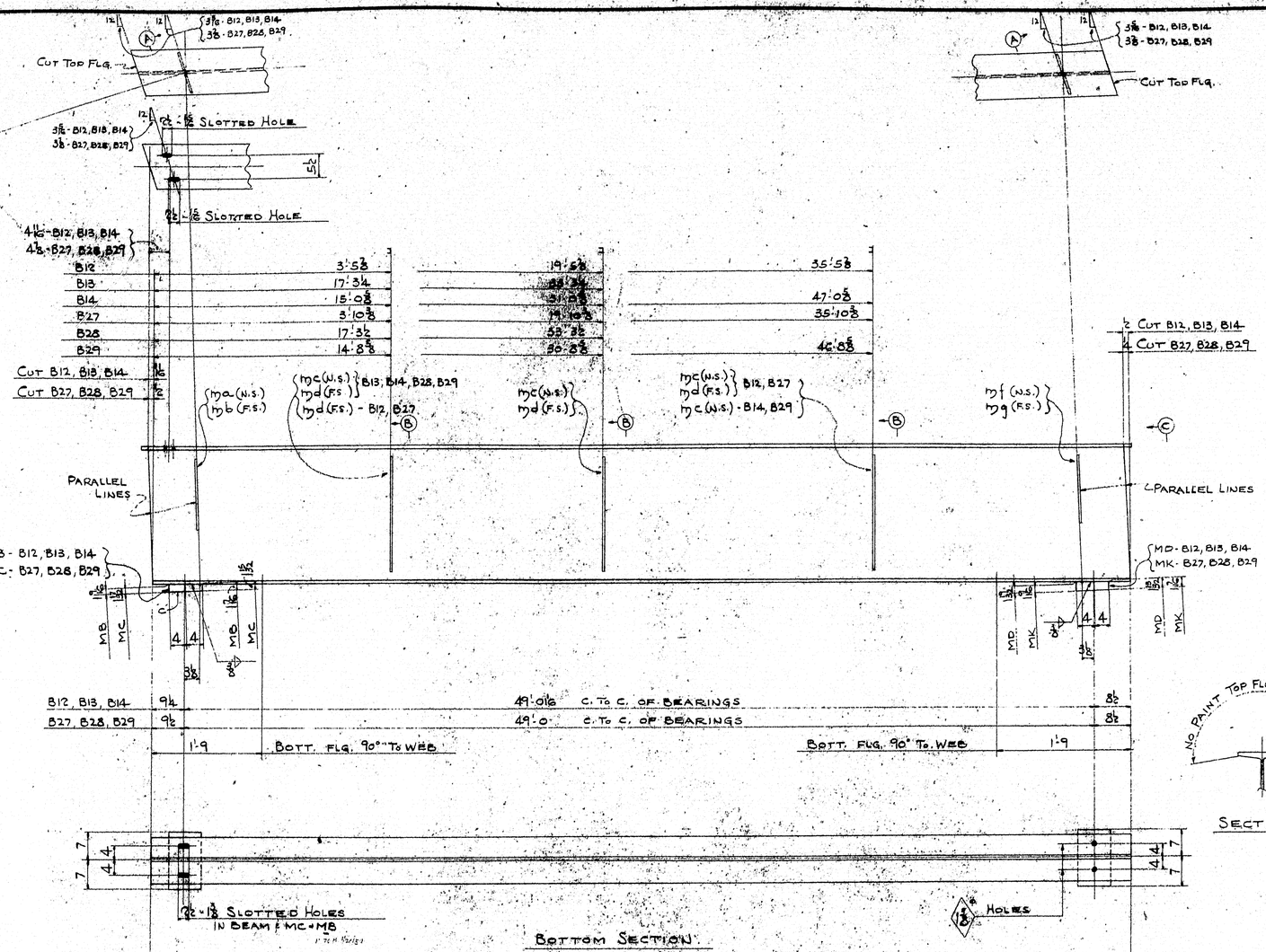
CUSTOMER: CALLAHAN BROS INC MECHANIC FALLS MAINE
STRUCTURE: INTERSTATE #95 BRIDGE OVER MAIN ST. WATERVILLE, MAINE
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
BETHLEHEM DRAFTING ROOM BETH. WORKS
IN CHARGE Hoover Sec. MADE BY B.T.
CHECKED BY 2. 12-21-58 TRACED BY
REVISED LAST ASSEM. MK.
SHOP NO. CONTRACT CP4433 SHEET 6

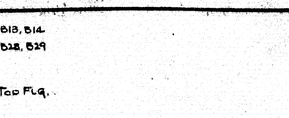
75:178 G

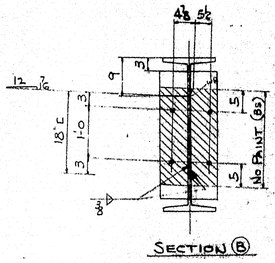


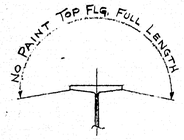
B.P.R. Req. No.	STATE	PROJECT NO.	SHEET NO.	SHEETS
1	MAINE	I-95-6(24)		











SECTION (C)

CAMBER DIAGRAM

LONGITUDINAL DIMENSIONS ARE MEASURED PARALLEL TO CHORD LINE.

MARK	NO. REQ'D.	SPAN
B12	ONE	3
B13	ONE	3
B14	ONE	3
B27	ONE	6
B28	ONE	6
B29	ONE	6

BOTTOM SECTION

B - 36½ - 194 - 50'-5⅛ (ORD. 51'-0 CUT 50'-9⅛) ¾
B - 36½ - 194 - 50'-5⅛ (ORD. 51'-0 CUT 50'-9⅛) ¾
B - 36½ - 194 - 50'-5⅛ (ORD. 51'-0 CUT 50'-9⅛) ¾
B - 36½ - 194 - 50'-6 (ORD. 51'-0 CUT 50'-10⅜) ¾
B - 36½ - 194 - 50'-6 (ORD. 51'-0 CUT 50'-10⅜) ¾
B - 36½ - 194 - 50'-6 (ORD. 51'-0 CUT 50'-10⅜) ¾

3 - PL - 8 x (11⅝ - 11⅜) (M25) - 1'-2 MB - B12, B13, B14
3 - PL - 8 x (13⅝ - 13¼) (M25) - 1'-2 MC - B27, B28, B29
3 - PL - 8 x (11⅝ - 11⅜) (M15) - 1'-2 MD - B12, B13, B14
3 - PL - 8 x (13⅝ - 13¼) (M15) - 1'-2 MK - B27, B28, B29
(ORD. & DET. ON SHEET #1 DO NOT DUPLICATE)

16 - PL - 6½ - ½ - 1'-6 ma
16 - PL - 6½ - ½ - 1'-6 mb
(ORD. 18'-½ - 16'-6) 5/16
14 - PL - 6½ - ½ - 2'-6 mc (2 - B13, B29; 2 - OTHERS)
14 - PL - 6½ - ½ - 2'-6 md (2 - B12, B27; 2 - OTHERS)
(ORD. 36'-½ - 16'-6) 5/16
6 - PL - 6½ - ½ - 1'-6 mf
6 - PL - 6½ - ½ - 1'-6 mg
(ORD. 18'-½ - 16'-6) 5/16
½ F. WELD - 36'-0 (2'-0 EA. PC.)
⅜ F. WELD - 192'-0 (25'-8 - B13, B28; 23'-8 - OTHERS)

STRINGER DETAILS

SURFACES MARKED 'C' TO BE GIVEN ONE COAT OF A HOT MIXTURE OF WHITE LEAD AND TALLOW.

RIVETS —
OPEN HOLES 13/16" UNLESS NOTED
REAM
MILLING
PAINT ONE SHOP COAT AS PER SPECS. UNLESS NOTED.
WELDING AS PER SPECS.
SHOP CONTACT SURFACES NO PAINT

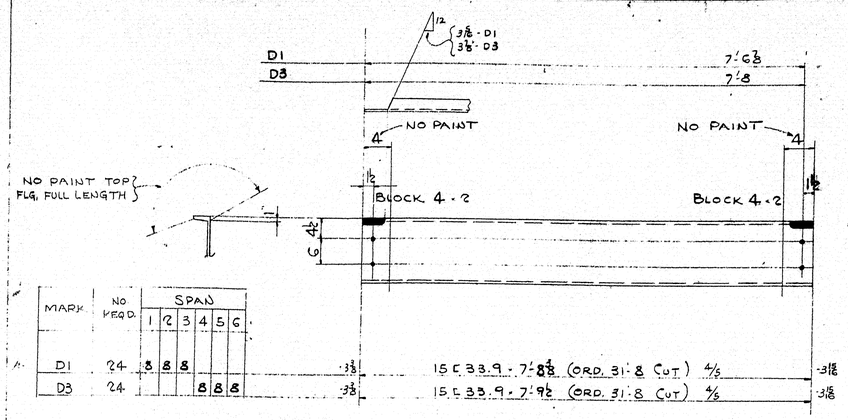
TEMP.
SUPT.
LAYOUT
FITTER
SHOP INSP.
FIL. WK.
B. SMITH
MCH.
ERECT.
O. INSP.
WEIGHTS

CUSTOMER: CALLAHAN BROS. INC. MECHANIC FALLS, MAINE.
STRUCTURE: INTERSTATE #96 BRIDGE OVER MAIN ST. - WATERVILLE, MAINE.

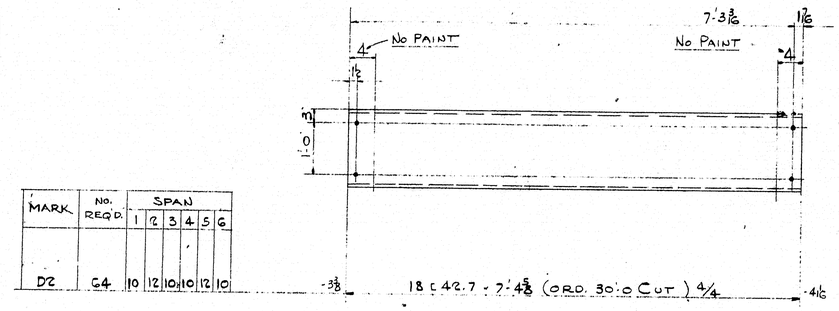
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
BETHLEHEM DRAFTING ROOM BETH WORKS
IN CHARGE HOOVER, S.E.C. MADE BY B.F.
CHECKED BY S. 12-22-58 TRACED BY
REVISED LAST ASSEM. MK.
SHOP NO. CONTRACT CP4433 SHEET 7

15-176 H

B.P.R. REG. No.	STATE	PROJECT No.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6 (24)		



MARK	NO REQ'D.	SPAN 1	2	3	4	5	6		
D1	24	8	8	8				-3 3/8	15 ℄ 33.9 - 7'-8 3/8 (ORD. 31.8 CUT) 4/5 -31 7/8
D3	24				8	8	8	-3 3/8	15 ℄ 33.9 - 7'-9 1/2 (ORD. 31.8 CUT) 4/5 -31 7/8



MARK	NO. REQ'D.	SPAN 1	2	3	4	5	6		
D2	24	10	12	10	10	12	10	-3 3/8	18 ℄ 42.7 - 7'-4 5/8 (ORD. 30.0 CUT) 4/4 -4 1/16

DIAPHRAGM DETAILS

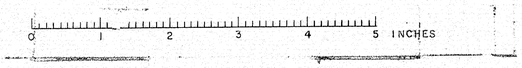
RIVETS —
OPEN HOLES 15/16
REAM
MILLING —
PAINT ONE SHOP COAT-AS PER SPECS, UNLESS NOTED
WELDING NONE
SHOP CONTACT SURFACES NO PAINT

TEMP.	
DEPT.	
LAYOUT	
FITTER	
SHOP INSP.	
FD. WK.	
B. SMITH	
MACH.	
ERECT.	
O. INSP.	
WEIGHTS	

CUSTOMER: CALLAHAN BROS. INC. MECHANIC FALLS, MAINE
STRUCTURE: INTERSTATE "95 BRIDGE OVER MAIN ST. WATERVILLE, MAINE

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
BETHLEHEM DRAFTING ROOM BETH. WORKS
IN CHARGE HOOVER, SEC. MADE BY B.T.
CHECKED BY S. 10-22-58. TRACED BY
REVISED LAST ASSEM. MK.
SHOP NO. CONTRACT CP4433 SHEET 8

75-178 I



B.P.R. PROJECT NO.	STATE	PROJECT NO.	SHEET NO.
	MAINE	I-95-6(24)7	

PLAN - (ALL DIMENSIONS GIVEN HORIZONTALLY)

EDI - ONE REQ'D. SPAN 1.

ONE - L8×6×$\frac{3}{8}$×34'-4$\frac{1}{2}$ - ma (CRD. 35'-0") 4/1
ONE - R 10 (WM) × 1'-0 × 32'-3$\frac{3}{4}$ - mb (CRD. 34'-9") 5/4
2 - PLS. 6 × 1 × 1'-4$\frac{3}{16}$ - md
ONE - PL 6 × 1'-9$\frac{1}{16}$ - mf
6 - BARS 2$\frac{1}{2}$ × $\frac{1}{2}$ × 12'-11$\frac{1}{2}$ - ha
2 - BARS 2$\frac{1}{2}$ × $\frac{1}{2}$ × 14'-8 - hb
5 - FILLS 6 × $\frac{1}{4}$ × 1'-3$\frac{7}{16}$ - mk
5 - FILLS 6 × $\frac{1}{2}$ × 1'-3$\frac{7}{16}$ - mm
23 BEV. FILLS 6 × $\frac{3}{16}$ TO $\frac{1}{2}$ × 1'-3$\frac{7}{16}$ - mp
2 - BEV. FILLS 6 × $\frac{7}{16}$ TO 1 × 1'-3$\frac{7}{16}$ - ms
2 - T.B. $\frac{3}{8}$" × 2'-3$\frac{3}{4}$ LG.
$\frac{3}{8}$" F. WELD × GB LG.
$\frac{3}{16}$" F. WELD × 39'-5 (INTERM.)
$\frac{3}{16}$" $L_{\frac{3}{16}}$ WELD × 4'-10 (INTERM.)
17 - BARS 5'-4 × $\frac{1}{2}$ × 2'-$\frac{9}{16}$ - mh
ONE - BAR 6 × 1'-2 $\frac{9}{16}$ - mg

EDI - ONE REQ'D. SPAN 2.

ONE - L ma 4/1
ONE - R mb 5/4
2 - PLS. md
ONE - PL mf
6 - BARS ha
2 - BARS hb
5 - FILLS mk
5 - FILLS mm
3 - BEV. FILL mp
ONE - BEV. FILL ms
ONE - BEV. FILL 6 × $\frac{7}{16}$ TO $\frac{1}{2}$ × 1'-3$\frac{7}{16}$ - mt
5 - T.B. $\frac{3}{8}$" × 3'-6
$\frac{3}{8}$" F. WELD × 39'-5 (INTERM.)
$\frac{3}{8}$" F. WELD × GB LG.
$\frac{3}{16}$" $L_{\frac{3}{16}}$ WELD × 4'-10 (INTERM.)
ONE - BAR - mg
17 - BARS - mh

EDIA - ONE REQ'D SPAN 3.

ONE - L6 × 6 × $\frac{3}{8}$ × 34'-4$\frac{1}{2}$ - mc 4/1
ONE - R mb 5/4
2 - PLS. md
ONE - PL mf
6 - BARS ha
2 - BARS hb
5 - FILLS mk
5 - FILLS mm
2 - BEV. FILLS 6 × $\frac{3}{16}$ TO 1 × 1'-3$\frac{7}{16}$ - my
3 - BEV. FILLS 6 × $\frac{1}{16}$ × 1$\frac{1}{8}$ × 1'-3$\frac{7}{16}$ - maa
5 - T.B. $\frac{3}{8}$" × 3'-6
$\frac{3}{8}$" F. WELD × GB LG.
$\frac{3}{16}$" F. WELD × 39'-5 (INTERM.)
$\frac{3}{16}$" $L_{\frac{3}{16}}$ WELD × 4'-10 (INTERM.)
ONE - BAR - mf
17 - BARS - mh

EDIA - ONE REQ'D SPAN 2.

ONE - L mc 4/1
ONE - R mb 5/4
2 - PLS. md
ONE - PL mf
6 - BARS ha
2 - BARS hb
5 - FILLS mk
5 - FILLS mm
2 - BEV. FILLS 6 × $\frac{3}{16}$ TO 1 × 1'-3$\frac{7}{16}$ - mah
ONE - BEV. FILL mak
2 - BEV. FILL 6 × $\frac{3}{16}$ TO 1$\frac{1}{16}$ × 1'-3$\frac{7}{16}$ - mab
5 - T.B. $\frac{3}{8}$" × 3'-6
$\frac{3}{8}$" F. WELD × GB LG.
$\frac{3}{16}$" F. WELD × 39'-5 (INTERM.)
$\frac{3}{16}$" $L_{\frac{3}{16}}$ WELD × 4'-10 (INTERM.)
ONE - BAR - mg
17 - BARS - mh

SHOP NOTE
PROVIDE STRAIGHT CAMBER ALONG EACH GIRDER (1/2 OF CAMBER TO BE ON EACH FLANGE) TO HOLD DAM IN PROPER ALIGNMENT.

RIVETS - NONE
OPEN HOLES - NOTED
REAM - NONE
MILLING - NONE
PAINT - 3 SHOP COATS, AS PER SPECS. UNLESS NOTED - SEE DESIGNS.
WELDING - AS PER SPECS.
SHOP CONTACT SURFACES - NO PAINT

MARK	a	b	c	d
mf	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{3}{8}$	1$\frac{1}{16}$
ms	$\frac{7}{16}$	$\frac{1}{2}$	1$\frac{3}{8}$	1
mt	$\frac{1}{2}$	$\frac{9}{16}$	1$\frac{3}{8}$	1$\frac{1}{16}$
maa	$\frac{3}{8}$	—	—	1
my	$\frac{3}{8}$	—	—	1$\frac{1}{16}$
mab	$\frac{1}{2}$	—	—	1$\frac{1}{16}$
mah	$\frac{9}{16}$	—	—	1$\frac{1}{16}$

SEE TABLE ABOVE FOR DIM.

TEMP.	CUSTOMER: CALLAHAN BROS. INC. MECHANIC FALLS, ME.
SUPT.	STRUCTURE: INTERSTATE #95 OVER KIDDER CREEK
LAYOUT	MAIN ST., WATERVILLE, MAINE
FITTER	BETHLEHEM STEEL COMPANY
SHOP INSP.	FABRICATED STEEL CONSTRUCTION
ENG. INSP.	BETHLEHEM DRAFTING ROOM: PLANT WORKS
R. SMITH	IN CHARGE HEGYES SEC. MADE BY G
MISC.	CHECKED BY ER 7/23/73 TRACED BY
CHIEF	REVISED: LAST ADDED ON
C. INSP.	CONTRACT CP443 SHOP NO.
WEIGHTS	

SHEET 75 OF 176 SHEETS

0 1 2 3 4 5 INCHES

P.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.
1	MAINE	I-95-6(46)	

PLAN - (ALL DIMENSIONS GIVEN HORIZONTALLY)

SECTION (F)

BEVELED FILLS
mp-ms-mt-my
SEE TABLE BELOW FOR DIMS.

MARK	a	b	c	d
mp	5/8	1/2	1	
ms	3/8	3/8	1/16	3/8
mt	3/8	1/2	3/8	1/16
my	1/2	5/8	1/2	1/16
maa	1/16	–	–	1/16
mab	5/8	–	–	3/8
mac	1/16	–	–	1/16
mad	1/2	–	–	1/2

VIEW (A)

VIEW (B)

SECTION (E)

SECTION (G)

PAINT SECTION

SHOP NOTE -
PROVIDE STIFF'R BOLTED ALONG EXP. DAM (5:10 LON CTRS) TO HOLD PAIR IN PROPER ALIGNMENT.

ED3 - ONE REQ'D. SPAN 4.

ONE - L G×6×3/4×34'-10 1/4 - ma (ORD. 35'-0) 7/16
ONE - L 10 (HIM) × 1 × 34'-8 1/16 - mb (ORD. 34'-9) 6/16
2 - BARS - 6 × 1 × 2'-5 - md
ONE - BAR - G × 1 × 9 3/16 - mf
6 - BARS - 2 1/2 × 1 × 1'-1 1/2 - ha
2 - BARS - 2 1/2 × 1 × 1'-1 1/2 - hb
5 - FILLS - G × 1/4 × 1'-3 1/16 - mk
5 - FILLS - G × 1/4 × 1'-2 7/16 - mm
4 - BEV. FILLS - G × 5/16 TO 1/4 × 1'-3 7/16 - mp
ONE - BEV. FILL - G × 1/4 TO 5/16 × 1'-3 7/16 - ms
5 - T.B. 3/8" × 2 3/4" LG.
3/8" F. WELD × 6 9'-6
3/8" F. WELD × 39'-5 (INTERM.)
3/8" WELD × 4'-10 (INTERM.)

17 - BARS - 5 1/2 × 3/4 × 5 1/2 - mh
ONE - BAR G × 1/4 × 9 1/16 - mg

ED4 - ONE REQ'D. SPAN 5.

ONE - L - ma
ONE - R - mb
2 - BARS - md
ONE - BAR - mf
6 - BARS - ha
10 - BARS - hb
5 - FILLS - mk
5 - FILLS - mm
ONE - BEV. FILL - mp
3 - BEV. FILLS - G × 5/16 TO 1/4 × 1'-3 7/16 - mt
ONE - BEV. FILL - G × 1/4 TO 1/2 × 1'-3 7/16 - my
5 - T.B. 7/8" × 3" LG.
3/8" F. WELD × 6 9'-6
3/8" F. WELD × 39'-5 (INTERM.)
3/8" WELD × 4'-10 (INTERM.)

17 - BARS - mh
ONE - BAR - mg

ED3A - ONE REQ'D. SPAN 5.

ONE - LG × 6 × 3/4 × 34'-10 1/4 - mc (ORD. 35'-0) 7/16
ONE - R - mb
2 - BARS - md
ONE - BAR - mf
6 - BARS - ha
2 - BARS - hb
5 - FILLS - mk
5 - FILLS - mm
3 - BEV. FILLS - G × 1/16 TO 1/4 × 1'-3 7/16 - maa
2 - BEV. FILLS - G × 5/16 TO 1/2 × 1'-3 7/16 - mab
17 - BARS - mh
5 - T.B. 7/8" × 3" LG.
1/2" F. WELD × 6 9'-6
1/2" F. WELD × 39'-5 (INTERM.)
1/2" WELD × 4'-10 (INTERM.)

ONE - BAR - mg

ED4A - ONE REQ'D. SPAN 6.

ONE - L - mc
ONE - R - mb
2 - BARS - md
ONE - BAR - mf
6 - BARS - ha
2 - BARS - hb
5 - FILLS - mk
5 - FILLS - mm
2 - BEV. FILL - mab
2 - BEV. FILL - G × 1/16 TO 1 1/16 × 1'-3 7/16 - mac
ONE - BEV. FILL - G × 1/2 TO 1 × 1'-3 7/16 - mad
ONE - BAR - mg
17 - BARS - mh
5 - T.B. 7/8" × 3" LG. T. SQ. H. & N.
1/2" F. WELD × 6 9'-6
1/2" F. WELD × 39'-5 (INTERM.)
1/2" WELD × 4'-10 (INTERM.)

TEMP.	
SUPT.	
LAYOUT	
FITTER	
SHOP INSP.	
FD. INSP.	
S. SMITH	
BOSS	
FOREMAN	
G. HOOVER	
WELDERS	

RIVETS - NONE.
OPEN HOLES - NOTED.
REAM - NONE.
MILLING - NONE.
PAINT - 3 SHOP COATS - AS PER SPEC'S. UNLESS NOTED - SEE SECTIONS.
WELDING - AS PER SPEC'S.
SHOP CONTACT SURFACES - NO PAINT.

SHOP NO:

CUSTOMER - CALLAHAN BROS. INC. MECHANIC FALLS, ME.
STRUCTURE: INTERSTATE #95 BRIDGE OVER MAIN ST. WATERVILLE, MAINE.

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
BETHLEHEM DRAFTING ROOM ... BETH. ... WORKS
IN CHARGE HOOVER-SEC. MADE BY S.
CHECKED ON F.R. 12/27/65 TRACED BY
REVISED ... LAST ASSIGN. NO.

CONTRACT CP 4433

75-178 K

0 1 2 3 4 5 INCHES

B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)123	1	32

STATE OF MAINE
STATE HIGHWAY COMMISSION

PLANS

WATERVILLE

KENNEBEC COUNTY

MAINE FEDERAL AID INTERSTATE #95

PROJECT NO. I-95-6(23)123 PART 2

TOTAL LENGTH 0.194 MILES

SCALES
- PLAN — 1 IN. = 50 FT.
- PROFILE — HOR 1 IN. = 50 FT.; VER 1 IN. = 5 FT.
- CROSS SECTIONS — 1 IN. = 10 FT.

INTERSTATE#95 BRIDGE OVER MESSALONSKEE STREAM
AND QUARRY ROAD RELOCATION

INDEX OF SHEETS

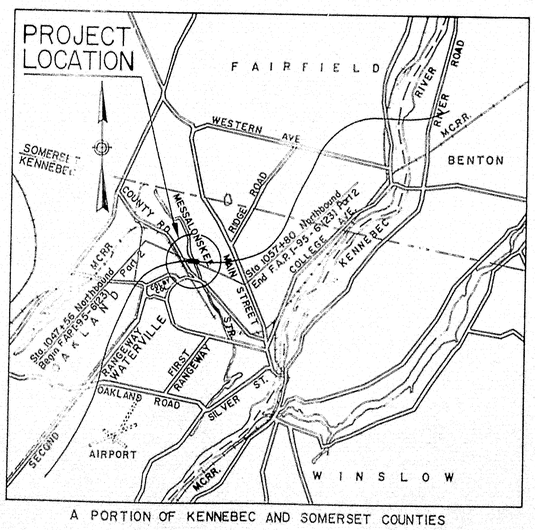
SHEET NO.		
1	TITLE SHEET	
2	TYPICAL SECTIONS	
3	QUANTITIES	
4	GENERAL PLAN	STA. 1036+00 to STA. 1052+00
5	PROFILE	STA. 1037+00 to STA. 1053+00
6	GENERAL PLAN	STA. 1051+00 to STA. 1067+00
7	PROFILE	STA. 1052+00 to STA. 1068+00
8-30	BRIDGE SHEETS	
31-32	CROSS SECTIONS	

CONVENTIONAL SIGNS

STATE OR NATIONAL LINE		SURVEY LINE	
COUNTY LINE		CULVERT	
TOWN LINE		DROP INLET	
UNFENCED PROPERTY		TROLLEY POLE	
FENCE		POWER POLE	
RIGHT OF WAY LINE		TEL. POLE	
TRAVELED WAY		MARSH	
RAILROAD		TREES	
RETAINING WALL		STONE WALL	

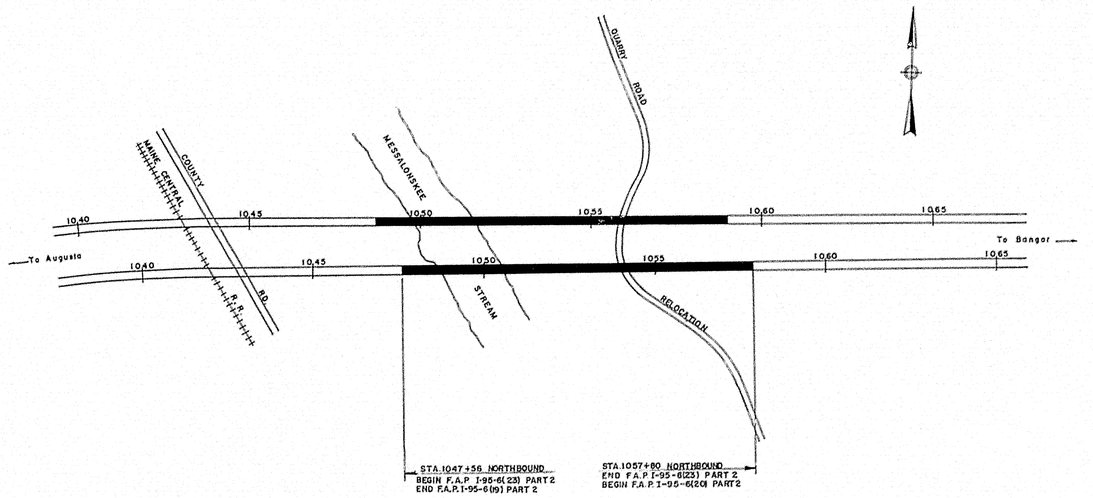
Interstate 95 shall be constructed to Top of Gravel Base only, within the Limits indicated on the Plans. Construction of Messalonskee Stream Bridge is included in this Contract.
Other Concurrent Contracts within the Limits of this Project are:
F.A.P. I-95-6(19) Part 2 and
F.A.P. I-95-6(20)

All work contemplated under this Contract to be Governed by and in conformity with the Standard Specifications, Highways and Bridges, Revision of Jan. 1956, except as modified on these Plans and by the Special Provisions.



A PORTION OF KENNEBEC AND SOMERSET COUNTIES

APPROX. SCALE IIN = I MILE



LAYOUT PLAN

SCALE 1" = 200'

AS-BUILT
1961

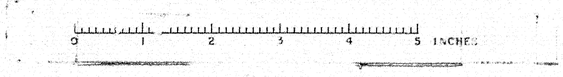
A.D.T.(1960)	=	7050
A.D.T.(1980)	=	9620
D.H.V.(1980)	=	1443
D.(1980)	=	65 %
T.(1980)	=	15 %
V.(M.P.H)	=	60

CONSULTING ENGINEERS
THE CLARKESON ENGINEERING COMPANY, INC.
BOSTON MASS.
CONSULTING ENGINEER — DATE Jan 16, 1959

APPROVED:
MAINE STATE HIGHWAY COMMISSION
David H. Stevens CHAIRMAN
Eugene P. Faubert
R. Leon Williams
Guy Cummings CHIEF ENGINEER

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
REGION 1
APPROVED:
DIVISION ENGINEER — DATE

78-166

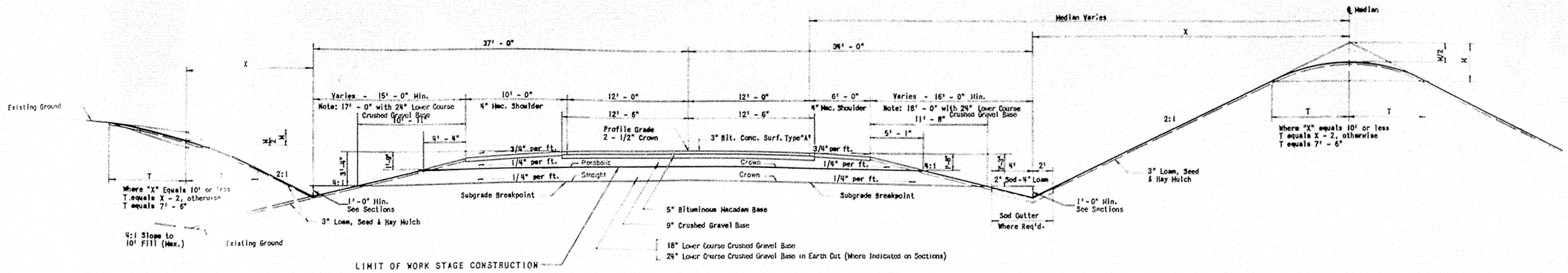


S. P. R. REG. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	2	32

WATERVILLE INTERSTATE

GRADING CONTRACT — STAGE CONSTRUCTION

INTERSTATE #95 TO BE CONSTRUCTED TO TOP OF LOWER COURSE CRUSHED GRAVEL BASE ONLY UNLESS OTHERWISE INDICATED



10' PAVED SHOULDER	CY/100 L.F.
4" Bituminous Macadam Surface	12.19
Crushed Gravel Base (to 4:1 Slope)	36.33
18" Lower Course Crushed Gravel Base	91.92
24" Lower Course Crushed Gravel Base	130.64

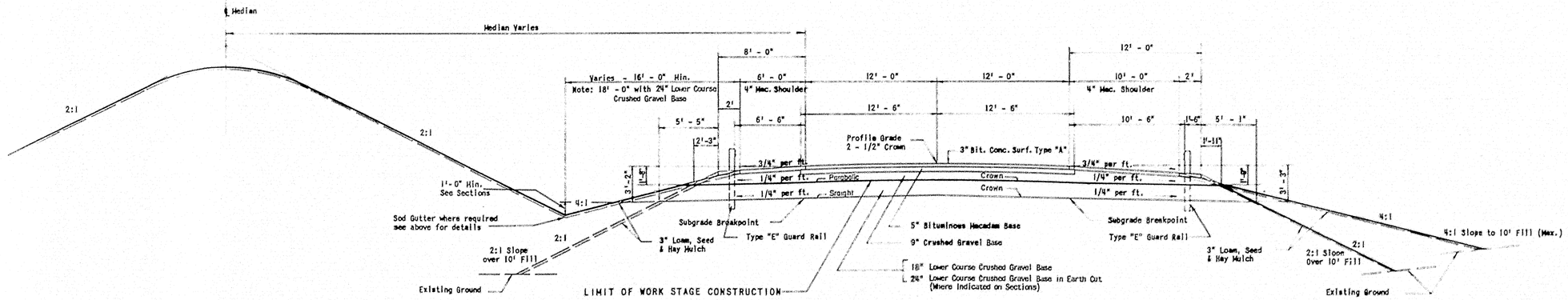
TYPICAL SECTION - NORMAL

Scale: 1" = 5'

SOUTHBOUND INTERSTATE

24' PAVEMENT	CY/100 L.F.
3" Bituminous Concrete Surface	22.22
5" Bituminous Macadam Base (25' Wide)	38.58
9" Crushed Gravel Base	66.67
18" Lower Course Crushed Gravel Base	136.42
24" Lower Course Crushed Gravel Base	180.87

8' PAVED SHOULDER	CY/100 L.F.
4" Bituminous Macadam Surface	7.25
Crushed Gravel Base (to 4:1 Slope)	27.46
18" Lower Course Crushed Gravel Base	73.74
24" Lower Course Crushed Gravel Base	106.40



8' PAVED SHOULDER	CY/100 L.F.
4" Bituminous Macadam Surface	9.72
Crushed Gravel Base (to 2:1 Slope)	29.23
18" Lower Course Crushed Gravel Base	62.80

TYPICAL SECTION - NORMAL

Scale: 1" = 5'

NORTHBOUND INTERSTATE

12' PAVED SHOULDER	CY/100 L.F.
4" Bituminous Macadam Surface	14.66
Crushed Gravel Base (to 2:1 Slope)	38.14
18" Lower Course Crushed Gravel Base	83.09

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

TYPICAL SECTIONS

THE CLARKESON ENGINEERING CO., INC.
CONSULTING ENGINEERS
BOSTON MASSACHUSETTS

78-167

0 1 2 3 4 5 INCHES

R.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	3	32

FINAL QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
201-5	Clearing	2.936	Acre
204-12	Structural Earth Excavation - Abutments & Retaining Walls	706	C.Y.
204-18	Structural Earth Excavation - Piers	6971	C.Y.
205-8	Common Borrow	6892	C.Y.
205-9	Granular Borrow	15,231	C.Y.
302-7	Gravel Base Course - In Place Measurement	1896	C.Y.
304-5	Overhaul - In Place Measure	5006	Yd. Mi.
304-6	Overhaul - Pit Measure	19756	Yd. Mi.
306-5	Stripping Pits	NONE	C.Y.
501-35	Portland Cement Concrete - Abutments & Retaining Walls	524.44	C.Y.
501-36	Portland Cement Concrete - Piers	1,134.31	C.Y.
501-41	Portland Cement Concrete - Roadway & Sidewalk Slabs on Steel Bridges	2162.53	C.Y.
501-47	Portland Cement	10,255	Bbls.
502-10.1	Structural Steel - Fabricated & Delivered	3,413,214	Lbs.
502-10.2	Structural Steel- Erection	3,413,214	Lbs.
504-5	Bronze or Copper - Alloy Bearing & Expansion Plates - Delivered	4366	Lbs.
504-6	Bronze or Copper - Alloy Bearing & Expansion Plates - Placing	4366	Lbs.
509-12	Reinforcing Steel - Delivered	1,192,685	Lbs.
509-13	Reinforcing Steel - Placing	1,192,685	Lbs.
512-10	Steel H-Beam Piles 42 Lbs./Foot	18,166.7	L.F.
512-11	Steel H-Beam Piles 53 Lbs./Foot	31,953.6	L.F.
512-12	Steel H-Beam Piles 73 Lbs./Foot	15,902.5	L.F.
512-13	Steel H-Beam Piles 89 Lbs./Foot	6,483.7	L.F.
516-5	Bridge Drainage	1	L.S.
518-5	Shear Connectors - Delivered & Placed	1	L.S.
804-6	French Drains	234	C.Y.
867-15	Aluminum Railing	4,190.1	L.F.
906-18	Fencing - Metal Posts	1028	L.F.
907-9	Plain Riprap	12,760	C.Y.
907-10	Hand Laid Riprap	1,335.6	C.Y.
908-0	Loam Borrow	1721	C.Y.
910-10	Seeding - Parkway Mixture	314.3	Units
912-6	Hay Mulch	19.28	Ton
915-6	Project Markers	NONE	Each
915-8	Right of Way Monuments	6	Each
[illegible]	SODDING FWOP	1506	S.Y.
[illegible]	REMIX SEAL FWOP	500	S.Y.
[illegible]	SPECIAL BACKFILL	1471	C.Y.
[illegible]	REMIX SEAL PIER	518	C.Y.
[illegible]	WELLPOINTS PIER 2	30,573.75	L.S.
[illegible]	ELECTRONIC TRAFFIC C[illegible]	1,964	S.Y.
[illegible]	LIGHT TOWER - CUTTER	2[illegible]	S.Y.
[illegible]	SHEETING, PIER 1	23,241.61	L.S.
[illegible]	PILE DRIVING PIER 1	5,256.00	L.S.
[illegible]	WELLPOINTS AB	15,269.99	L.S.

CLEARING

STATION TO STATION	SIDE	REMARKS
Northbound		
1050 + 15 to 1052 + 10	Lt.	
1050 + 80 to 1052 + 30	Rt.	
Southbound		
1051 + 50 to 1054 + 00	Lt.	
1052 + 00 to 1053 + 55	Rt.	

RIGHT-OF-WAY MONUMENTS

STATION	LEFT	RIGHT	NO.	REMARKS
Northbound				
1051 + 50		100.00'	1	
1053 + 50		100.00'	1	
1055+40		223'	1	
Southbound				
1052 + 00	100.00'		1	
1055 + 25	100.00'		1	
1048 + 50	150.00'		1	RESET

FENCING - METAL POSTS

STATION TO STATION	SIDE	LENGTH	REMARKS
Northbound			
1047+50 To 1049+36	Rt.	186	
Southbound			
1048+10 To 1049+10	Lt.	70	
Northbound 1057+50±	Rt.		
to Southbound 1057+07±	Lt.	772	

GRAVEL BASE COURSE

STATION TO STATION	DESCRIPTION
Northbound	
1046 + 25 to 1047 + 56	18" Crushed Gravel
1057 + 80 to 1059 + 50	*
Southbound	
1047 + 25 to 1048 + 66	*
1058 + 90 to 1060 + 50	*

SUMMARY OF CLASSIFIED EXCAVATION AND BORROW

Total Earth Embankment from Cross Sections	9,537 C.Y.
20% Granular Borrow	1,907 C.Y.
Common Borrow	7,630 C.Y.
Total Common Borrow 7630 + 70*	7,700 C.Y.
Total Granular Borrow 1907 + 03*	1,900 C.Y.

* Undetermined Origin

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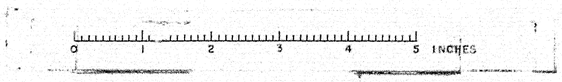

B. P. R. REG NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6 (23)	4	32

WATERVILLE INTERSTATE

MAINE CENTRAL R.R.

MESSALONSKEE STREAM

COUNTY ROAD

N-634 500 — E-632 250 — E-632 500 — E-632 750 — E-633 000 — E-633 250 — E-633 500

N-634 250 — N-634 000 — N-633 750 — N-633 500

SEE SHEET

Construction Survey
Southbound
P.I. Sta. 1038+68
Δ = 6°-[illegible]
Δc = [illegible]
Dc = [illegible]
Lc = 4[illegible]
Tc = 2[illegible]
Rc = 3[illegible]
Es = 7[illegible]
Δs = [illegible]
Ls = [illegible]
Xs = [illegible]
Ys = [illegible]
Ts = 26[illegible]
Full Super[illegible]
Sta. 999[illegible] to 1038+50

Construction Survey
Northbound
P.I. Sta. [illegible]8.93
Δ = 6[illegible]09"
Δc = 6[illegible]09"
Dc = [illegible]00"
Lc = 42[illegible]
Tc = 23[illegible]
Rc = 38[illegible]
Es = 7[illegible]
Δs = [illegible]00"
Ls = [illegible]
Xs = [illegible]
Ys = [illegible]
Ts = 26[illegible]
Full Super[illegible]
Sta. 997[illegible] to 1039+50

STA. 1042+75 SOUTHBOUND
LIMIT OF WORK
(By Others)

STA. 1044+20 SOUTHBOUND
LIMIT OF WORK
(By Others)

STA. 1047+00 SOUTHBOUND
LIMIT OF WORK

STA. 1050+50 SOUTHBOUND
LIMIT OF WORK
(By Others)

1042+96 to 1043+08 RI
20' x 2' Ditch of Hand Laid Riprap
Min. Depth 9"

C.S. 1041+64.64

S.T. 1041+64.64

C.S. 1039+64.64

S.T. 1043+16.22

C.S. 1041+16.22

R/W

100'

150'

Clearing Pay Line

Grade to Drain

Approx. Location of Temporary Railroad Grade Crossing

SOUTHBOUND INTERSTATE #95
N 88°-28'-52" E
3418.65'

NORTHBOUND INTERSTATE #95
N 88°-02'-01" E
3627.52'

STA. 1041+22 NORTHBOUND
END F.A.P. I-95-6(19) PART 1
(By Others)

280' x 2' Ditch of Hand Laid Riprap
Min. Depth 1'
1039+30 to 1042+05 RI

STA. 1041+70 NORTHBOUND
LIMIT OF WORK
(By Others)

STA. 1041+22 NORTHBOUND
BEGIN F.A.P. I-95-6(23) PART 1
(By Others)

STA. 1043+87 NORTHBOUND
END F.A.P. I-95-6(23) PART 1
(By Others)

STA. 1043+87 NORTHBOUND
BEGIN F.A.P. I-95-6(19) PART 2
(By Others)

STA. 1043+10 NORTHBOUND
LIMIT OF WORK
(By Others)

STA. 1046+00 NORTHBOUND
LIMIT OF WORK

STA. 1047+56 NORTHBOUND
END F.A.P. I-95-6(19) PART 2
(By Others)

STA. 1047+56 NORTHBOUND
BEGIN F.A.P. I-95-6(23) PART 2

STA. 1049+50 NORTHBOUND
LIMIT OF WORK
(By Others)

END FENCE

Existing Metal Posts

Fencing Both Sides

72" CMP

8" Pipe

0 1 2 3 4 5 INCHES

Photogrammetric Map by LOCKWOOD, KESSLER & BARTLETT, INC. Syosset, New York
Date of Photography 11-11-57

78-169

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I - 95-6(23)	5	32

WATERVILLE INTERSTATE

STA 1042+75 SOUTHBOUND
LIMIT OF WORK
(By Others)

STA 1043+10 NORTHBOUND
LIMIT OF WORK (By Others)

STA 1041+70 NORTHBOUND
LIMIT OF WORK
(By Others)

STA 1041+22 NORTHBOUND
END F.A.P. I-95-6(19) PART 1
(By Others)

STA. 1043+87 NORTHBOUND
BEGIN F.A.P. I-95-6(19) PART 2 (By Others)

STA. 1044+20 SOUTHBOUND
LIMIT OF WORK (By Others)

STA. 1047+56 NORTHBOUND
END F.A.P. I-95-6(19) PART 2
(By Others)

STA. 1047+56 NORTHBOUND
BEGIN F.A.P. I-95-6(23) PART 2

STA. 1050+50 SOUTHBOUND
LIMIT OF WORK
(By Others)

STA 1049+50 NORTHBOUND
LIMIT OF WORK
(By Others)

STA. 1041+22 NORTHBOUND
BEGIN F.A.P. I-95-6(23) PART 1
(By Others)

STA. 1043+87 SOUTHBOUND
END F.A.P. I-95-6(23) PART 1
(By Others)

V.C. = 1200'

V.C. = 1200'

Southbound H.L.S.D. = 850± d = 8.38' C = 42"

Northbound H.L.S.D. = 950± d = 7.74' C = 46"

Finished Grade Southbound
Finished Grade Northbound

Existing Ground Southbound
Existing Ground Northbound

2.16%

-2.09%

Construct to top of 18" Gravel Base only

Finished Grade Southbound
Finished Grade Northbound

Construct to top of 18" Gravel Base only

STA. 1047+00 SOUTHBOUND
LIMIT OF WORK

STA. 1046+00 NORTHBOUND
LIMIT OF WORK

P.V.I. Sta. 1052+50
152.09
Southbound

P.V.I. Sta. 1053+25
152.27
Northbound

Existing Ground Southbound
Existing Ground Northbound

Messalonskee Stream

	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053
Existing Grade																	
Finished Grade																	
Southbound	190.0 / 185.09	188.3 / 183.00	182.7 / 180.91	178.8 / 178.82	174.0 / 176.73	162.0 / 174.64	146.0 / 172.35	146.0 / 170.46	130.0 / 168.37	130.0 / 166.28	128.3 / 164.24	123.3 / 162.62	118.3 / 161.46	93.0 / 160.77	90.7 / 160.54	95.0 / 160.79	100.7 / 161.49
Northbound	191.4 / 182.05	185.0 / 179.89	178.6 / 177.73	165.0 / 175.57	153.0 / 173.41	144.0 / 171.25	140.0 / 169.09	131.1 / 166.93	127.9 / 164.77	109.2 / 162.73	104.2 / 161.11	107.9 / 159.92	85.6 / 159.15	92.2 / 158.82	95.5 / 158.96	108.2 / 159.45	119.- / 160.40

INTERSTATE #95 (WATERVILLE INTERSTATE)

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0 1 2 3 4 5 INCHES

B.P.R. REG. NO.	STATE	PROJECT NO	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	6	32

WATERVILLE INTERSTATE

N-634 500 E-633 000 N-634 250 E-633 250 N-633 750

Limit of Work Meet Existing Sta 44+50 By others

S.P. MAGNOLIA

46+34 36"x16'ACCMP Lt w/Metal Endwall 36"x28'RCP Roadway 36"x16'ACCMP Rt Pipe Connector Rt

LEWIS J. ROSENTHAL

Δ: 37°57'47" D: 28°38'52" T: 68.79' L: 132.52' E: 11.50' R: 200'

Remove Exist. 12"CMP

Fencing Metal Posts

16"Oak

Pt 45+78

Berm Elev. 135± Grade to Drain

Berm Elev. 150± Grade to Drain Remove Existing 36" Boiler Plate Pipe

Berm Elev. Varies 150± to 160±

Berm Elev. 160± Grade to Drain

46+34 Lt Quarry Rd to 1060+90 Lt SB 430'x2' Ditch (Sodded)

1060+90 To 1061+23 40'x2' Ditch of Hand Laid Riprap

CHARLES E. & MILORED VIGUE

1064+75 to 1069+00 430'± Top of Slope Ditch

1061+05 to 1062+50 175'x2' Ditch (Sodded)

1062+50 to 1063+00 50'x2' Ditch (Sodded)

1063+00 to 1064+75 175'x2' Ditch (Sodded)

1063+00 30"x20' ACCMP Lt w/Metal Endwall 30"x68 RCP Roadway 36"x20' ACCMP Rt Pipe Connector Rt

Line of Improvement

Sta 1055+00 Southbound Limit of Work

Δ: 22°05'12" D: 28°38'52" T: 39.04' L: 77.10' E: 3.77' R: 200'

Pt 42+54.15

Sta 1054+09.95 Northbound Interstate #95

Sta 50+00.00 Quarry Road Relocation

Sta 1055+79.62 Southbound Interstate #95

Sta 48+62.49 Quarry Road Relocation

N 88° 28' 52" E 341.85'

STA. 1061+00 SOUTHBOUND LIMIT OF WORK

1060+20 to 1061+75 100'x2' Ditch (Sodded)

1063+00 Rt SB to 1061+15 Lt NB 38'x2' Ditch of Hand Laid Riprap

1065+05 Rt SB to 1062+25 Lt NB 105'x2' Ditch (Sodded)

1061+75 to 1062+40 15'x2' Ditch (Sodded)

SOUTHBOUND INTERSTATE #95

46+34 Lt Quarry Rd to 1057+55 Lt NB 620'x2' Ditch (Sodded)

STA. 1060+00 NORTHBOUND LIMIT OF WORK

NORTHBOUND INTERSTATE #95

Sta 1053+50 Northbound Limit of Work

Δ: 5°18'20" D: 28°38'52" T: 18.59' L: 37.23' E: 1.72' R: 200'

Fencing - Metal Posts

5" Pine

3" Pine

52+10 Lt to 53+80 Lt 140'x2' Sodded Ditch

QUARRY ROAD 3.38%±SE

Line of Improvement

32' RELOCATION

Remove Exist. 12"CMP

Fencing - Metal Posts

53+89 Lt Quarry Rd to 1061+00 Rt NB 435'x2' Ditch (Sodded)

Δ: 35°31'30" D: 28°38'52" T: 64.07' L: 124.01' E: 10.01' R: 200'

53+09 36"x10'ACCMP Lt w/Metal Endwall 36"x24'RCP Roadway 36"x20'ACCMP Rt Pipe Connector Rt

Limit of Work Meet Existing Sta 55+50 By others

1057+80 Northbound Begin F.A.P. I-95-6(20) BY OTHERS

STA. 1057+80 NORTHBOUND END F.A.P. I-95-6(23) PART 2

1061+15 30"x10' ACCMP w/Metal Endwall 30"x72' RCP Roadway 30"x12' ACCMP Rt Hand Laid Riprap at Outlet

1061+15 to 1062+50 144'x2' Ditch (Sodded)

1061+00 to 1061+15 20'x2' Ditch of Hand Laid Riprap

R/W

ROLAND WARE

20" Water Main

EXISTING EASEMENT FOR KENNEBEC WATER DISTRICT

NOTE. SEE SHEET #7 FOR RELOCATION DETAIL OF K.W.D. 20" WATER MAIN

NESSALONSKEE STREAM

ROLAND WARE

SEE SHEET

SEE SHEET

0 1 2 3 4 5 INCHES

Photogrammetric Map by LOCKWOOD, KESSLER & BARTLETT, INC. Syosset, New York
Date of Photography 11-11-57

78-171

B.P.R. REC.NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	7	32

WATERVILLE INTERSTATE

STA. 1057+80 NORTHBOUND
END F.A.P. I-95-6(23) PART 2

Sta 1057+80 Northbound
Begin F.A.P. I-95-6(20)
By Others

STA. 1061+00 SOUTHBOUND
LIMIT OF WORK

STA. 1060+00 NORTHBOUND
LIMIT OF WORK

VC = 1200' Southbound
HLSD = 850'
d = 8.385°
C = 42"

VC = 1200' Northbound
HLSD = 950'
d = 7.74°
C = 46"

PVT Sta 1058+50
173.69
Southbound

PVT Sta 1057+25
163.27
Northbound

+3.50 %

+3.00 %

Finished Grade Northbound

Finished Grade Southbound

Grade to Drain
Berm Elev. 150±

Grade to Drain
Berm Elev 150±

Sta. 1055+50
Northbound
Limit of Work
By Others)

Grade to Drain
Berm Elev. 135±

Grade to Drain
Berm Elev 135±

Sta 1055+00
Southbound
Limit of Work
(By Others)

PVI Sta 1055+55
152.69
Southbound

Existing Ground Northbound

Existing Ground Southbound

Construct to Top of 18" Lower Course Crushed Gravel Base only

New 30" Culvert Northbound

18"-24" Lower Course Crushed Gravel Base Northbound

Finished Grade Southbound

Construct to Top of 24" Lower Course Crushed Gravel Base only Northbound

New 30" Culvert Southbound

Existing Ground Northbound

Existing Ground Southbound

18"-24" Lower Course Crushed Gravel Base Southbound

Finished Grade Northbound

Construct to Top of 24" Lower Course Crushed Gravel Base Only Southbound

Construct to Top of 18" Lower Course Crushed Gravel Base Only Northbound

24"-18" Lower Course Crushed Gravel Base Southbound

24"-18" Lower Course CrushedGravel Base Northbound

	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068
Existing Grade																
Finished Grade																
Southbound	160.79	100.7 / 161.49	122.0 / 164.29	122.0 / 166.40	120.5 / 168.96	123.4 / 172.00	132.0 / 175.44	128.0 / 176.94	144.7 / 182.44	162.9 / 185.34	171.6 / 189.44	186.0 / 192.54	193.9 / 196.44	206.2 / 199.94	213.3 / 202.44	220.7 / 206.94
Northbound	159.45	119.8 / 160.40	123.1 / 163.61	122.0 / 165.86	128.4 / 168.53	135.2 / 171.52	143.6 / 174.52	149.8 / 177.52	166.1 / 180.52	173.4 / 183.52	186.2 / 186.52	198.1 / 189.52	203.5 / 192.52	209.7 / 195.52	217.3 / 198.52	220.5 / 201.52

Sta. 1054+01.95 Northbound Interstate #95
Sta. 50+00.00 Quarry Rd. Relocation

Sta. 1055+79.62 Southbound Interstate #95
Sta 48+62.49 Quarry Rd. Relocation

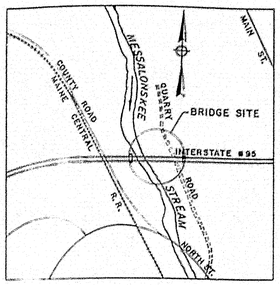
INTERSTATE #95 (WATERVILLE INTERSTATE)

78-172

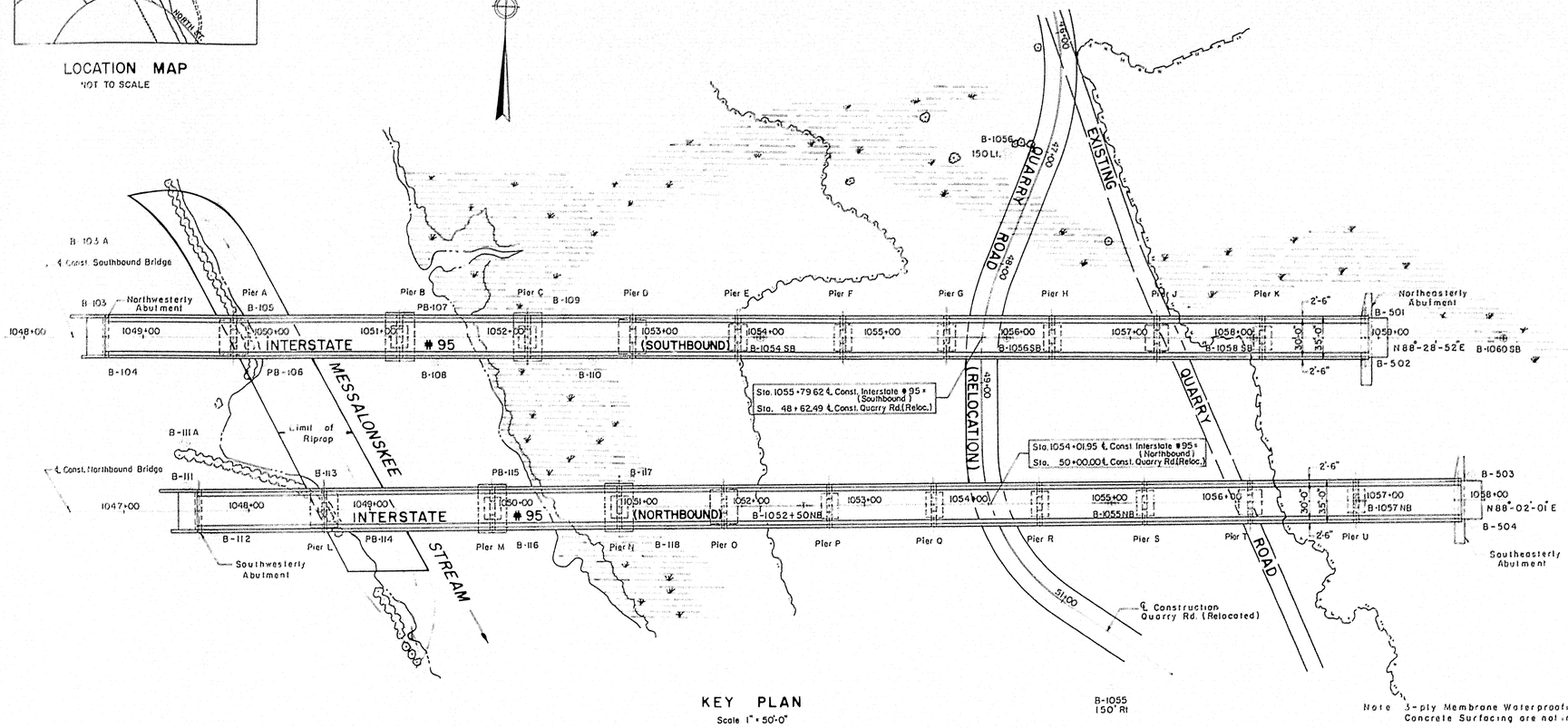
0 1 2 3 4 5 INCHES

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	8	32

WATERVILLE INTERSTATE



LOCATION MAP
NOT TO SCALE



KEY PLAN
Scale 1" = 50'-0"

GENERAL NOTES

FOUNDATION:

Foundations may be altered, if necessary, to suit conditions encountered in construction.

DESIGN:

In accordance with the Specifications of the American Association of State Highway Officials for H20-S16-44 loading (1957 Edition) and as modified for military requirements.

Design Stresses: Structural Steel f_s = 18,000 psi
Reinforcing Steel f_s = 18,000 psi
Concrete (n = 10) f_c = 1,200 psi

CONSTRUCTION:

State of Maine Standard Specifications to be followed except as noted in Special Provisions.

STRUCTURAL STEEL:

Wherever cover plates and /or shear connectors are welded to beams, beams and plates shall be Weldable Structural Steel A.S.T.M. Designation A 373

HYDRAULIC DATA:

Drainage Area 260 sq mi
Design Flood 1936
Estimated Discharge 9000 cfs
Velocity of Flow 6' /sec

BENCH MARK:

BM-47A Hinge nail (horiz.) inside of 5", one of cluster of 10 Ash trees (along river bank)
Sta. 1049+50 (N.B.) = 130' Rt.
Elevation 102.06 U.S.G.S. Datum

BM-47B Hinge nail in root of 4" White Birch.
Sta 1052+53 (S.B.) = 120' Lt.
Elevation 98.02 U.S.G.S. Datum.

BM-6 Spike & washer in N.E. root of 6" White Birch on north edge of Quarry Rd.
Sta 1057+39 (N.B.) 216' Rt.
Elevation 121.91 U.S.G.S. Datum.

DESIGN	CHECK H.	BRIDGE NO.
DRAWN E. K.	APPROVED W.E.H. - J.M.	SURVEY PLAT

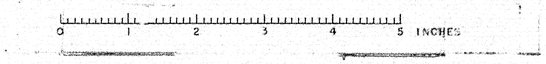
STATE HIGHWAY COMMISSION
INTERSTATE # 95
OVER
MESSALONSKEE STREAM
& QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
KEY PLAN

APPROVED BY Wm. A. Henderson DATE 2-17-59

THE CLARKESON ENGINEERING CO., INC.
CONSULTING ENGINEERS
BOSTON MASSACHUSETTS

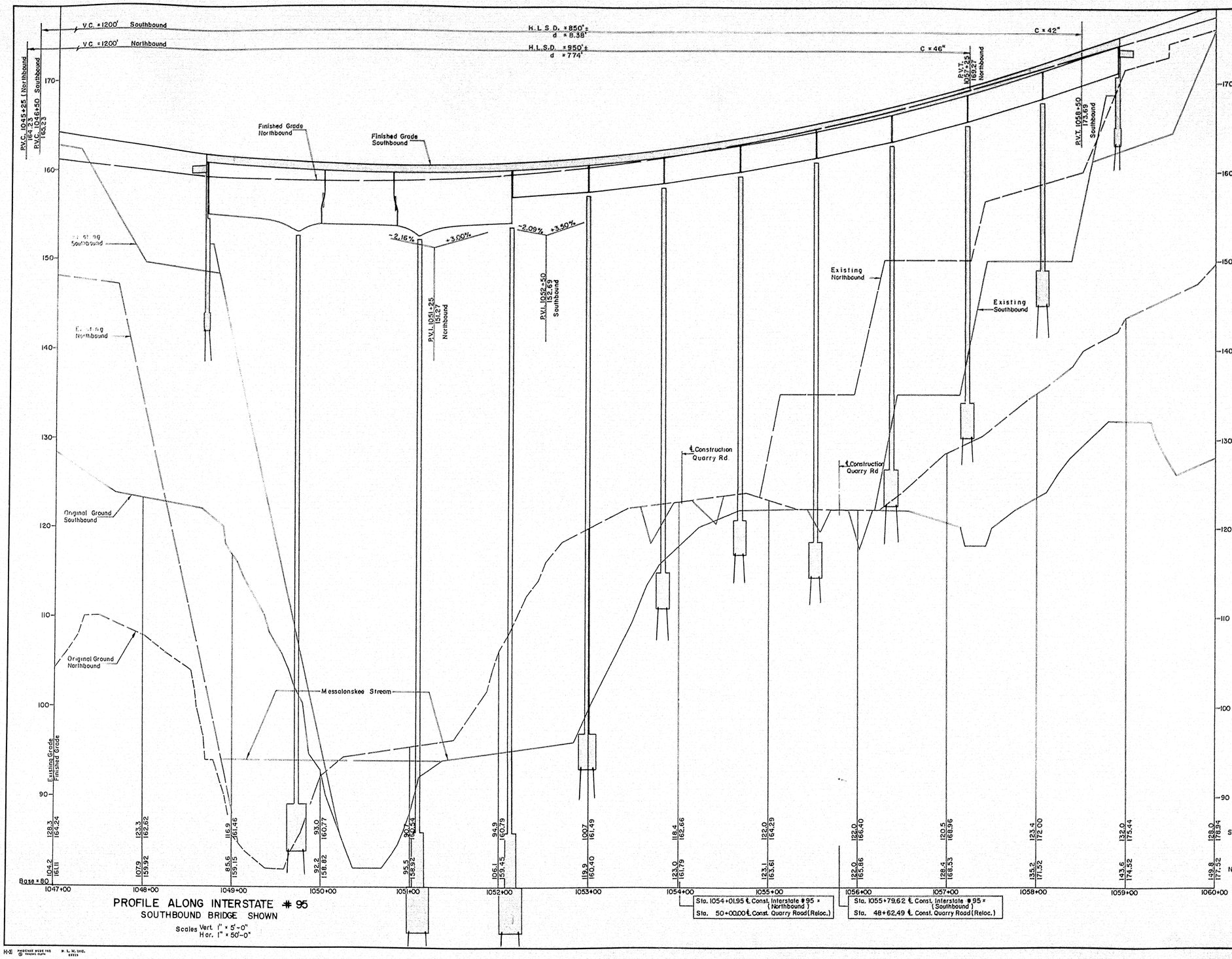
SHEET 1 OF 23 SHEETS AUGUSTA, MAINE

78-173



B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	9	32

WATERVILLE INTERSTATE



PROFILE ALONG INTERSTATE # 95
SOUTHBOUND BRIDGE SHOWN

Scales Vert. 1" = 5'-0"
Hor. 1" = 50'-0"

0 1 2 3 4 5 INCHES

THE CLARKESON ENGINEERING CO., INC.

DESIGN	CHECK H.P.	JOB NO.
DRAWN E.K.	APPROVED W.A.H.-C.J.M.	SHT. NO.

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM & QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

PROFILE

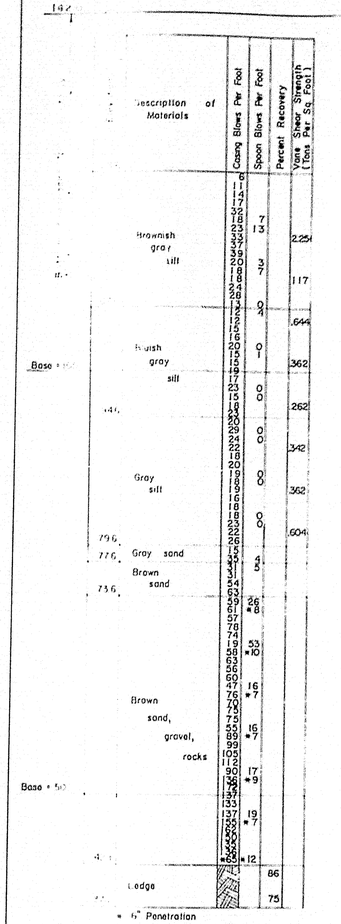
SHEET 2 OF 23 SHEETS AUGUSTA, MAINE

78-174

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	10	32

WATERVILLE INTERSTATE

B-103



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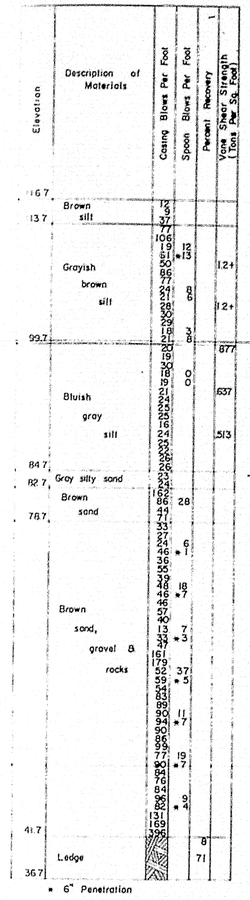

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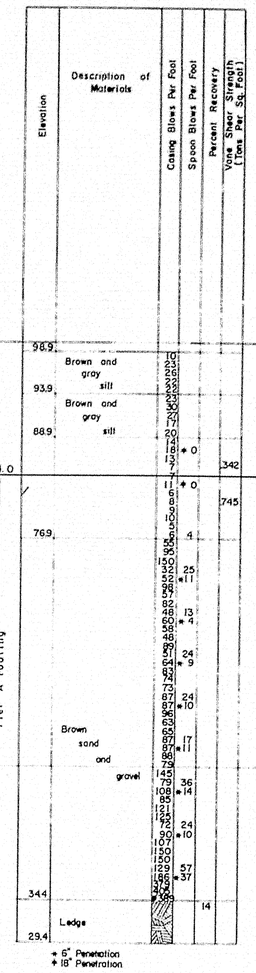

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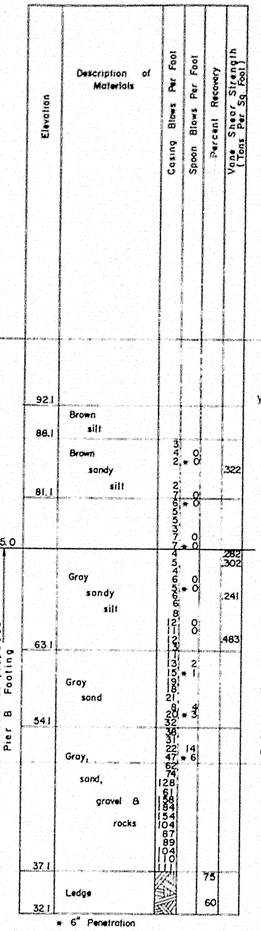

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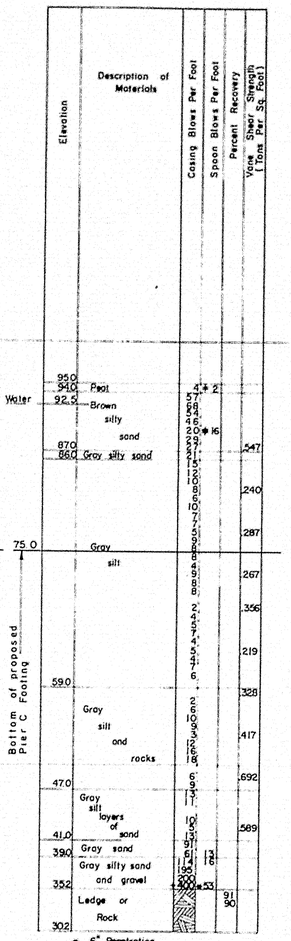

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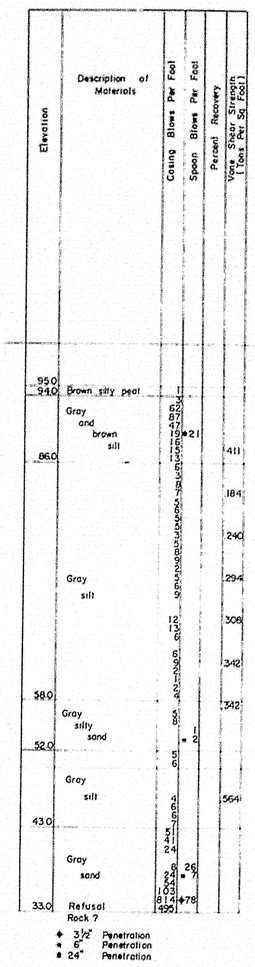

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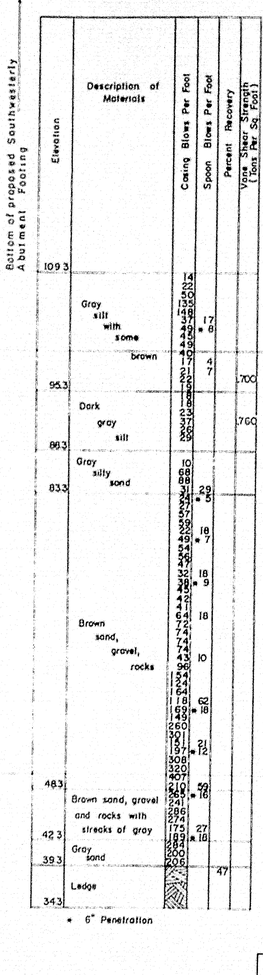

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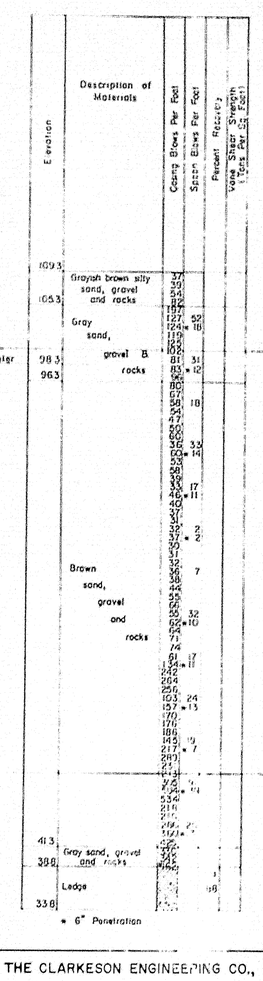
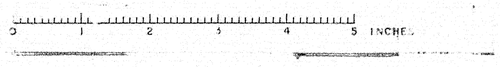


BORING LOG

Scale: ⅛" = 1'-0"

Notes:

1. Location of borings are shown on Key Plan thus ◉ B-103.
   Location of punchings are show on Key Plan thus ◉ PB-106
2. Borings are taken for purpose of design and show condition at boring points only, but do not necessarily show nature of materials to be encountered during construction.
3. Figures in boring columns indicate blows per foot on 2½" or 4" casing, sample tube, or 1⅜" spoon produced by a 310 # hammer with a fall of 16", 18", and 14" respectively.
4. Punchings made by a 1" rod and a 60 # hammer with an 18" drop.
5. Borings & Punchings were taken by the Maine State Highway Commision during the months of May, June, July and August 1958.



THE CLARKESON ENGINEERING CO., INC.

DESIGN	CHECKED	PURPOSE NO.
DRAWN E.K.	APPROVED WATERVILLE	SURVEY

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM
& QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

BORING LOG

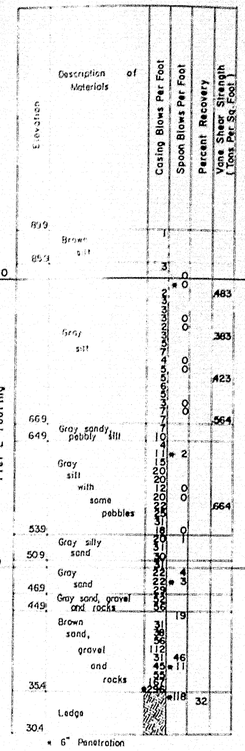
SHEET 3 OF 23 SHEETS AUGUSTA, MAINE

78-175

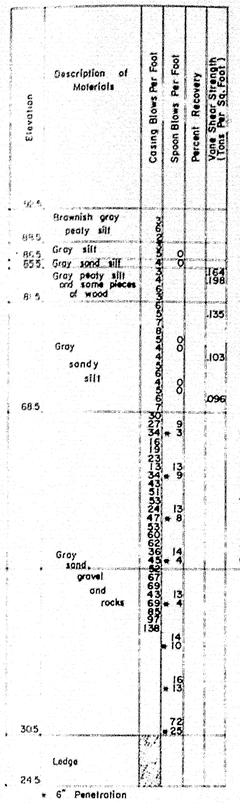
B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6 (23)	11	32

WATERVILLE INTERSTATE

B-113



B-116



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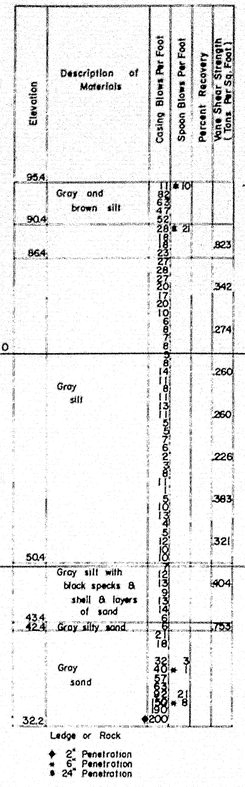

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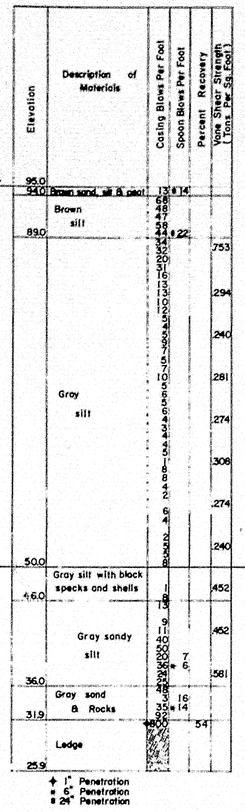


BORING LOG

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

Note: For borings notes see Sheet 3.

PB-106

Elev.	Depth in Feet	No. of Blows	Remarks
93.15			Ground Elev.
			Hand
	0 - 2	23	
	2 - 3	33	
	3 - 4	40	
	4 - 5	56	
	5 - 6	53	
	6 - 7	20	
	7 - 8	31	
	8 - 9	41	
	9 - 10	27	
	10 - 11	20	
	11 - 12	18	
	12 - 13	22	
	13 - 14	23	
	14 - 15	18	
	15 - 16	21	
	16 - 17	20	
	17 - 18	30	
	18 - 19	26	
	19 - 20	31	
	20 - 21	29	
	21 - 22	43	
	22 - 23	33	
	23 - 24	43	
	24 - 25	46	
	25 - 26	46	
	26 - 27	52	
	27 - 28	44	
	28 - 29	48	
	29 - 30	50	
	30 - 31	38	
	31 - 32	58	
	32 - 33	58	
	33 - 34	58	
	34 - 35	63	
	35 - 36	64	
	36 - 37	64	
	37 - 38	59	
	38 - 39	55	
	39 - 40	60	
	40 - 41	58	
	41 - 42	58	
	42 - 43	82	
	43 - 44	80	
	44 - 45	80	
	45 - 46	90	
	46 - 47	93	
	47 - 48	107	
	48 - 49	107	
	49 - 50	107	
	50 - 51	140	
	51 - 52	138	
	52 - 53	160	
	53 - 54	152	
	54 - 55	132	
	55 - 56	134	
	56 - 56.7	139	Refusal

PB-107

Elev.	Depth in Feet	No. of Blows	Remarks
93.55			Water Elev.
92.22			Stream Bed El.
	0 - 31		Pushed Rods
	31 - 32	48	
	32 - 33	43	
	33 - 34	41	
	34 - 35	44	
	35 - 36	45	
	36 - 37	50	
	37 - 38	46	
	38 - 39	49	
	39 - 40	55	
	40 - 41	51	
	41 - 42	75	
	42 - 43	72	
	43 - 44	63	
	44 - 45	64	
	45 - 46	61	
	46 - 47	74	
	47 - 48	54	
	48 - 49	61	
	49 - 50	66	
	50 - 51	140	
	51 - 52	64	
	52 - 53	68	
	53 - 54	61	
	54 - 55	64	
	55 - 56	80	
	56 - 57	73	
	57 - 58	292	
	58 - 58.4	226	Refusal

PB-114

Elev.	Depth in Feet	No. of Blows	Remarks
94.7			Ground Elev.
			Hand
	0 - 3		
	3 - 4	27	
	4 - 5	19	
	5 - 6	17	
	6 - 7	18	
	7 - 8	24	
	8 - 9	22	
	9 - 10	20	
	10 - 11	20	
	11 - 12	16	
	12 - 13	17	
	13 - 14	18	
	14 - 15	15	
	15 - 16	20	
	16 - 17	16	
	17 - 18	14	
	18 - 19	16	
	19 - 20	21	
	20 - 21	15	
	21 - 22	15	
	22 - 23	18	
	23 - 24	19	
	24 - 25	26	
	25 - 26	21	
	26 - 27	11	
	27 - 28	25	
	28 - 29	30	
	29 - 30	24	
	30 - 31	28	
	31 - 32	28	
	32 - 33	32	
	33 - 34	38	
	34 - 35	43	
	35 - 36	39	
	36 - 37	47	
	37 - 38	43	
	38 - 39	42	
	39 - 40	57	
	40 - 41	51	
	41 - 42	54	
	42 - 43	58	
	43 - 44	66	
	44 - 45	69	
	45 - 46	56	
	46 - 47	57	
	47 - 48	90	
	48 - 49	94	
	49 - 50	85	
	50 - 51	95	
	51 - 52	95	
	52 - 53	75	
	53 - 54	77	
	54 - 55	60	
	55 - 56	47	
	56 - 57	45	
	57 - 58	48	
	58 - 59	56	
	59 - 60	58	
	60 - 61	78	
	61 - 62	68	
	62 - 63	102	
	63 - 63.2	66	Refusal
36.9			Bedrock-Refusal

Note: Bubbling well developed when rods were pulled. Hydraulic head of about 1 ft.

PB-115

Elev.	Depth in Feet	No. of Blows	Remarks
93.55			Water Elev.
92.22			Stream Bed El.
	0 - 6		Pushed Rods
	6 - 7	19	
	7 - 8	19	
	8 - 9	17	
	9 - 10	17	
	10 - 11	18	
	11 - 12	26	
	12 - 13	20	
	13 - 14	16	
	14 - 15	16	
	15 - 16	16	
	16 - 17	21	
	17 - 18	15	
	18 - 19	17	
	19 - 20	15	
	20 - 21	11	
	21 - 22	11	
	22 - 23	19	
	23 - 24	13	
	24 - 25	23	
	25 - 26	12	
	26 - 27	24	
	27 - 28	23	
	28 - 29	28	
	29 - 30	33	
	30 - 31	30	
	31 - 32	43	
	32 - 33	40	
	33 - 34	47	
	34 - 35	57	
	35 - 36	57	
	36 - 37	62	
	37 - 38	60	
	38 - 39	58	
	39 - 40	56	
	40 - 41	58	
	41 - 42	74	
	42 - 43	81	
	43 - 44	73	
	44 - 45	77	
	45 - 46	96	
	46 - 47	99	
	47 - 48	90	
	48 - 49	94	
	49 - 50	85	
	50 - 51	94	
	51 - 52	95	
	52 - 53	79	
	53 - 54	77	
	54 - 55	60	
	55 - 56	47	
	56 - 57	45	
	57 - 58	48	
	58 - 59	56	
	59 - 60	58	
	60 - 61	78	
	61 - 62	68	
	62 - 63	102	
	63 - 63.2	66	Refusal

PUNCHING LOG

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

THE CLARKESON ENGINEERING CO., INC.

DESIGN	CHECK GB	BRIDGE NO.
DRAWN E.K.	APPROVED WAH-CJM	SURVEY PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM & QUARRY ROAD (RELOC.)

IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

BORING LOG

SHEET 4 OF 23 SHEETS AUGUSTA, MAINE

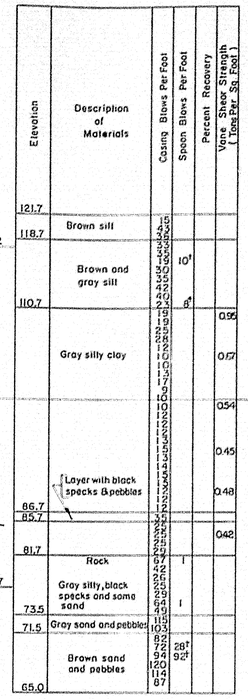
78-176

0 1 2 3 4 5 INCHES

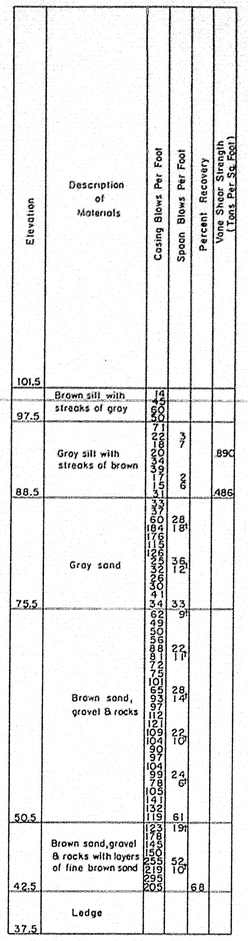
B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	12	32

WATERVILLE INTERSTATE

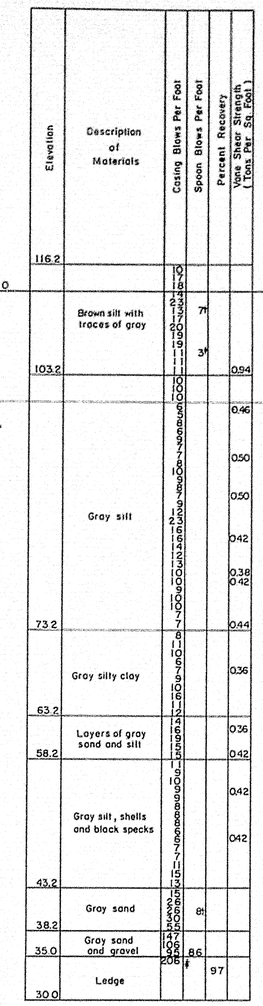
B-103 A



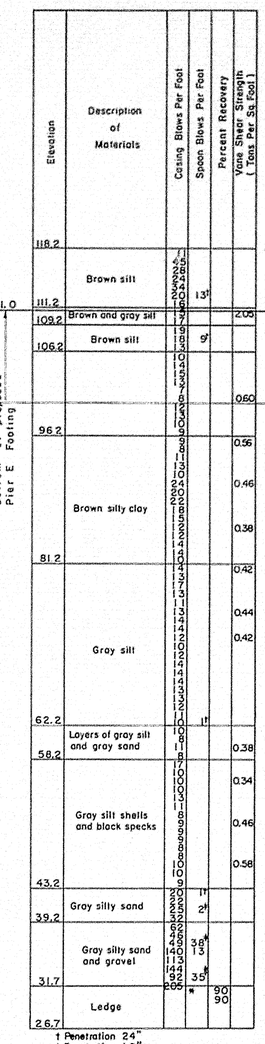
B-111 A



B-1052 + 50 NB



B-1054 SB



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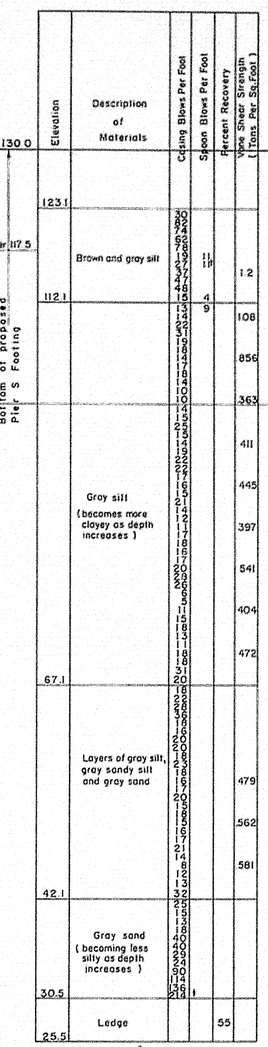

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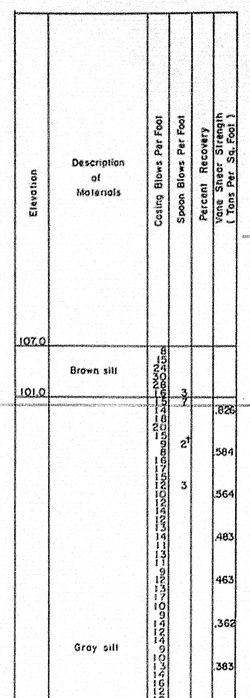
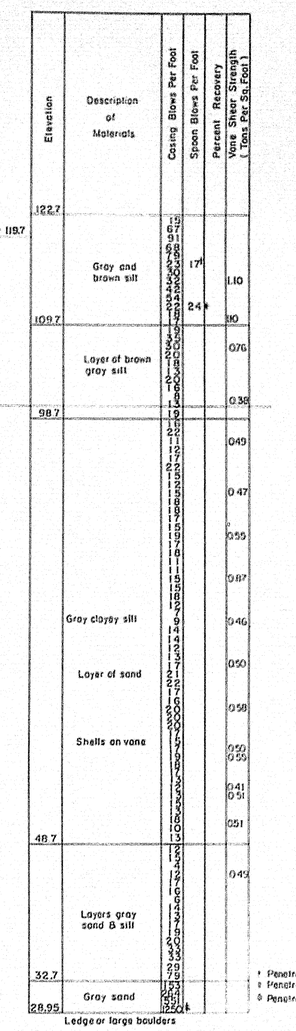


B-1056 SB



BORING LOG

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

For boring notes see sheet 3.

THE CLARKESON ENGINEERING CO., INC.

DESIGN	CHECK G B	BRIDGE NO.
DRAWN E.K.	APPROVED WAH-GJM	SURVEY

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM
& QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

BORING LOG

SHEET 5 OF 23 SHEETS AUGUSTA, MAINE

78-177

NOE PHOENIX BLVD 198 @ MARKET SQUARE R. L. N. INC. 03038

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	13	32

WATERVILLE INTERSTATE

B-1056 LT.

Elevation	Description of Materials	Casing Blows Per Foot	Spoon Blows Per Foot	Vane Shear Strength (Tons Per Sq. Foot)
112.9		7		
111.9	Brown silty sand	27		
		31		
	Mostly brown	33		
		26	14	
	Brown and gray silt	16		
		20		
		18		
		17		
		15		
		11		1.0*
98.9		13		
		12		
		6		
		5		
		6		.503
	Gray silt	7		
		7		.403
		7		
		8		
		9		.342
		10	60	
		9		.342
		7	60	
		8		
72.9		11		.342
		8		
		8		
		6		
		5		.342
		7		
		4		
		4		
	Gray clayey silt	3		.403
		5		
		4		
		2		.322
		5		
		4		
		3		.302
52.9		2		
	Gray silt, sand and rocks	8	21†	
47.9		14		
		11		
		5		
	Gray silt	9		1.0
39.9		10		
		22		
	Gray sand	24		
35.9		29		
		39		
		87	25	
32.5	Gray sand & gravel	151	28	
	Ledge	200/		

† Penetration 18"
‡ Penetration 24"
/ Penetration 5"

B-1057 NB

Bottom of proposed Pier U Footing

Elevation	Description of Materials	Casing Blows Per Foot	Spoon Blows Per Foot	Vane Shear Strength (Tons Per Sq. Foot)
145.0				
		54		
128.2		56		
	Brown silty sand	52		
123.2		50		
		34		
		37	5	
		67		
		61		
	Grayish brown sandy silt	33	35	
		28		.1062
		20		
		16		
112.2		14		
		18		.342
		12		
		11		
		9		.257
		8		
		7		
		10		
		9		.521
		9		
		8		
		14		
		17		.178
		6		
		13		
		14		
		7		.589
		7		
		10		
		11		
87.2		4		
		11		
		10		.726
		14		
	Gray grilly silt	34		
		32		.548
		20		
		11		
		22		
75.2		36		.342
		18		
		22		
		25		
		14		
		11		
		14		.822
		17		
		19		
		35		
		34		
		38		
		36		
		32		.993
		18		
		23		
		24		
	Gray sandy silt	28		
		54		
		42	22	
		36		
		45		
		67		
		83		
		97		
		32	16	
		34	18	.890
		40		
		68		
		59		
		37	33	
45.2		42	18	1.0†
		98		
		180		
41.6	Gray sand, gravel & rocks	288		
		132		

† Penetration 6"

B-1058 SB

Bottom of proposed Pier K Footing

Elevation	Description of Materials	Casing Blows Per Foot	Spoon Blows Per Foot	Percent Recovery	Vane Shear Strength (Tons Per Sq. Foot)
145.0					
124.4		6			
	Brown silt	30			
		67			
		90			
		75	20‡		
		24			
		33			
		22			1.0‡
115.4		32			
		55			
		23	16‡		
		17			1.0‡
		40			
		32			
		20			
		20			
		12			
		19			
		24			
		29			
		15			
		20			.631
		22			
99.4		25			
		18			
		14			
		16			
		17			.356
		17			
		21			
		22			
		19			.411
		18			
		23			
		23			
		27			.329
		13			
		16			
		16			
		12			.342
		11			
		11			
		19			
	Gray clayey silt	22			
		25			.363
		18			
		24			
		20			
		21			.411
		17			
		10			
		11			
		10			.397
		10			
		8			
		10			
		7			
64.4		9			
		12			
		12			
		10			
	Layers of sand & rocks and gray silt	15			.390
		16			
		15			
		10			.521
56.4		14			
		18			
	Gray sand	22			
		35			
		30			
51.7		120	#	35	
	Ledge or boulder	200	*		
47.2					

† Penetration 18"
‡ Penetration 24"
# Penetration 8"
* Penetration 2"

B-1060 SB

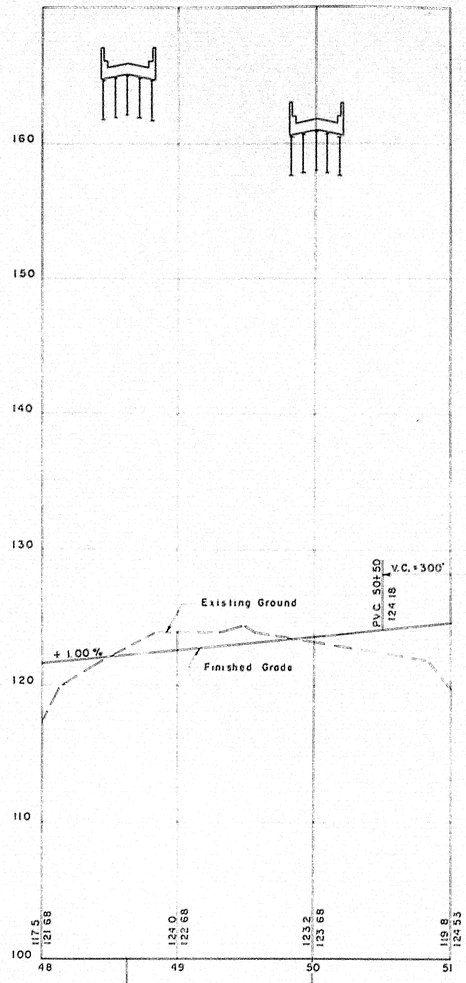
Elevation	Description of Materials	Casing Blows Per Foot	Spoon Blows Per Foot	Vane Shear Strength (Tons Per Sq. Foot)
127.8		5		
	Brown and gray silt	4		
119.8		4		.906
116.8	Brown sandy silt	5	61	
		64		
		130		
	Brown sand and gravel	50	53	
		58		
		100		
109.8		128		
		117		
	Gray sand and gravel	89		
		37		
		79	40	
106.3	Ledge	538†		

† Penetration 15"
* Penetration 6"

BORING LOG

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

For boring notes see sheet 3.



Sta. 48+62.49 Quarry Rd. Relocation
Sta. 1055+79.62 Southbound Interstate # 95

Sta 50+00.00 Quarry Rd. Relocation
Sta 1054+01.95 Northbound Interstate # 95

PROFILE ALONG QUARRY ROAD RELOCATION

Scale: 1" = 50'-0"

THE CLARKESON ENGINEERING CO., INC.

DESIGN | CHECK G.B.

DRAWN E.K. | APPROVED W.A.H. C.J.M.

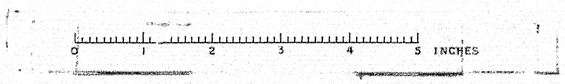
STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM & QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

BORING LOG

SHEET 6 OF 23 SHEETS AUGUSTA, MAINE

78-178



B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	14	32

WATERVILLE INTERSTATE

B-501

Bottom of proposed Northeasterly Abutment Footing — Elevation 163.5

Elevation	Description of Materials	Casing Blows Per Foot	Spoon Blows Per Foot	Percent Recovery	Vane Shear Strength (Tons Per Sq. Ft.)
	Brown Silt	3 12 25			
Water	Gray Silt with Brown Streaks	35 17 17 35 55 35 28 28 18	12 6 3 2		1.10 .624
		21 12 15 11 16 11 7 9 15 7 9 13	0 0 0 0 0 0 0 0 0 0 0 0		.302 .282 .362
74.0		26 50 20	0 0		1.10
67.5	Brown Sand & Gravel	61 116 96 72	10 15 50		
62.5	Ledge	28		97	

* Penetration 6"

B-502

Elevation	Description of Materials	Casing Blows Per Foot	Spoon Blows Per Foot	Percent Recovery	Vane Shear Strength (Tons Per Sq. Ft.)
132.7	Brown Silt	12 25			
127.7	Brown Silt with Gray Streak	20 22 29	18 14		
Water 123.2		13 9 6 5 7 5 7 10 7 5 7 11	0 0 0 0 0 0 0 0 0 0 0 0		.544 .624 .262 .262 .403 .564 .262
118.7	Gray Silt	7 7 10 7 7 16	0 0 0		.906 .363
55.7	Gray Silt with Layers of Sand	11 13 7 5 5 7 5 7 10 7 7 16	0 0 0 0 0 0 0 0 0 0 0 0		.926 .504 .342 .342 .362 .363 .383
76.7	Gray-Brown Sand	100			.110
75.0	Ledge			46	

* Penetration 6"

B-503

Bottom of proposed Southeasterly Abutment Footing — Elevation 159.0

Elevation	Description of Materials	Casing Blows Per Foot	Spoon Blows Per Foot	Percent Recovery	Vane Shear Strength (Tons Per Sq. Ft.)
134.7	Brown Silt	8 25 30			
Water 129.7	Gray Silt with Brown Streaks	14 22 33	5		.411
125.7	Gray Silt	22 11 12 16 13 6 7 7 10 7 12 11	2 0 0 0 0 0 0 0 0 0 0 0		.411 .443 .403
108.7	Gray Silt with Layers of Sand	7 7 7 10 7 16	0 0		.564 .906
99.7	Gray Silt with Layers of Sand and Sea Shells	11 13 7 5 5 7	0 0 0 0		.926 .504
89.7	Gray Silt with Layers of Sand	14 18 19 22	0 0 2		.564
83.7	Gray Silt with Pieces of Rock	23 26 29 31 29 22	5 3 * +		.363 .403
73.7	Gray Sand & Gravel	41 52 53 71	1 *		1.10
66.7	Ledge	76 100	60 19 *		.423
61.7				43	

* Penetration 6"
† Penetration 17"

B-504

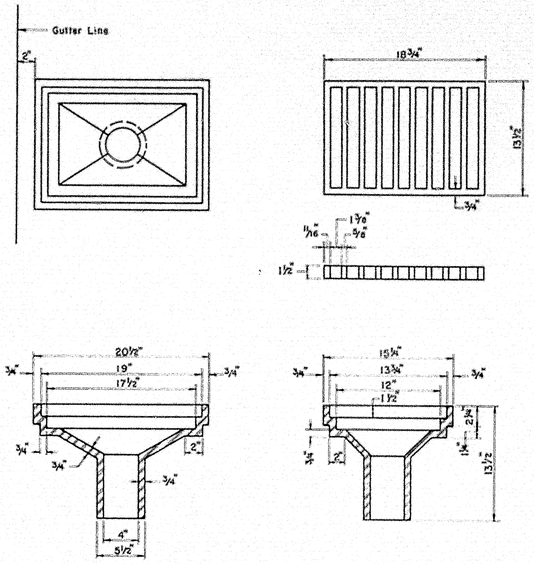
Elevation	Description of Materials	Casing Blows Per Foot	Spoon Blows Per Foot	Percent Recovery	Vane Shear Strength (Tons Per Sq. Ft.)
134.0	Brown Silt with Blue Streak	2 3 3 3 3 4 5 6 7 8	7 8		1.10
Water 122.5		9 10 11 12 13 14 15 16 17 18 19 20	C*		.866
120.0	Blue Sandy Silt	21 22 23 24 25 26 27 28 29 30 31 32	C*		.202 .282 .262 .242 .363 .403 .584 .564 .363 .403
114.0	Blue Silt	33 34 35 36 37 38 39 40 41 42 43 44	C*		
74.0	Gray Sandy Silt	45 46 47 48 49 50 51 52 53 54 55 56	C* C		.423
61.0	Gray Sand Gravel & Rocks	80 100			
58.0	Ledge			57	

* Penetration 6"

BORING LOG

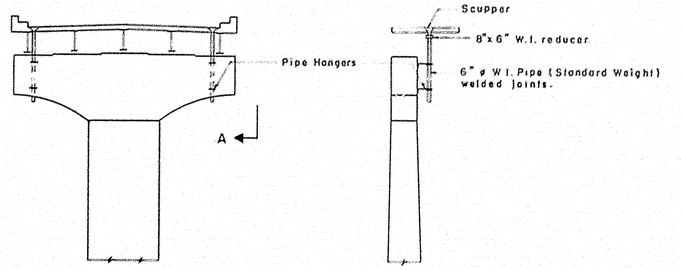
Scale 1/8" = 1'-0"

Notes:
1. Location of borings are shown on Key Plan thus ◉ B-501.
2. Borings are taken for purpose of design and show condition at boring points only, but do not necessarily show nature of materials to be encountered during construction.
3. Figures in boring columns indicate blows per foot on 2 1/2" or 4" casing, sample tube, or 1 3/8" spoon produced by a 304 # hammer with a fall of 16", 18" and 14" respectively.
4. Borings were taken by Maine Highway Commission during the month of November 1958.



SCUPPER DETAILS

Scale: 1½" = 1'-0"



SECTION A-A

PIPE DETAILS AT PIERS

Scale: 3/32" = 1'-0"

Notes:
1. All joints to be welded.
2. For location of scuppers see sheets 8, 9 & 10.
3. The Contractor shall submit complete drawings of the piping system to the Engineer for approval.
4. Pipe hangers to be Standard 1 1/2" x 3/8" clamps and anchor straps. Anchor straps to be fastened to pier cap with 3/4" ø cinch bolts (6" into concrete), two bolts per strap.
5. Scupper pipes at piers to be carried 6" below pier cap. Scupper pipes in girder spans to be carried 6" below structural steel.

THE CLARKESON ENGINEERING CO. INC.

DESIGN	CHECK H.P.	BRIDGE NO.
DRAWN R.J.F.	APPROVED W.A.H-C.J.M.	SURVEY PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM
& QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
BORING LOG

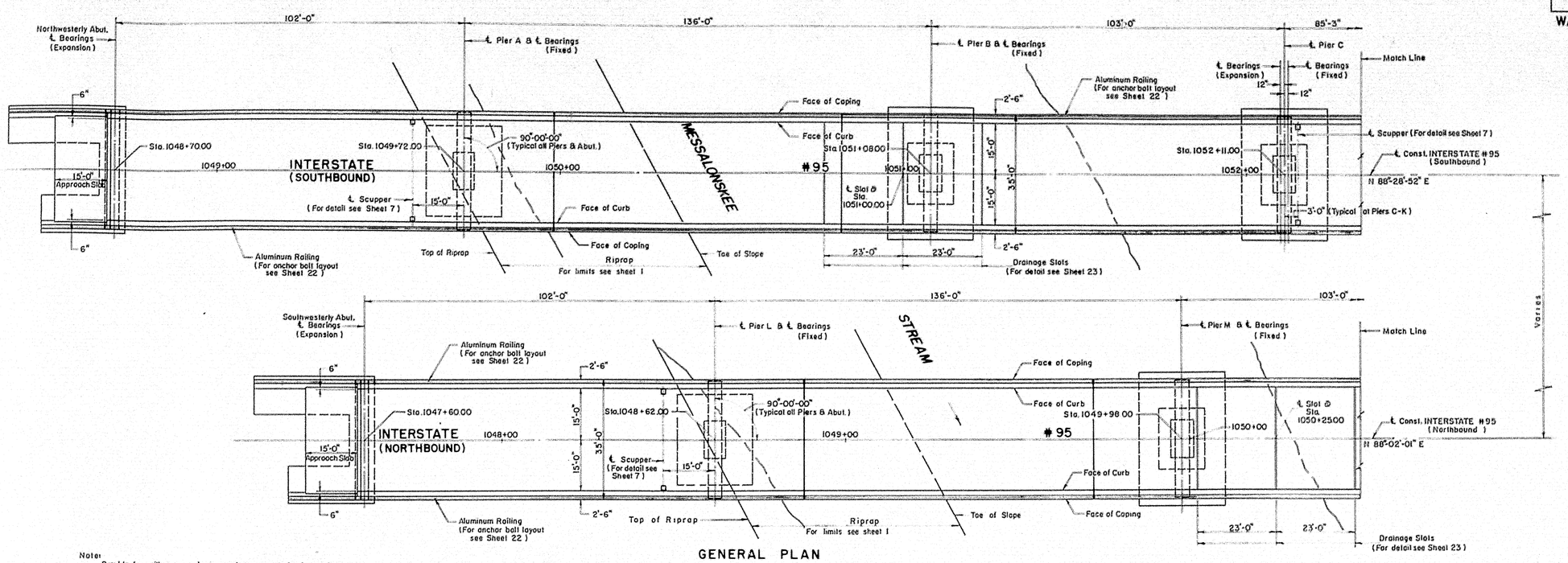
SHEET 7 OF 23 SHEETS — AUGUSTA, MAINE

78-179

0 1 2 3 4 5 INCHES

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6 (23)	18	32

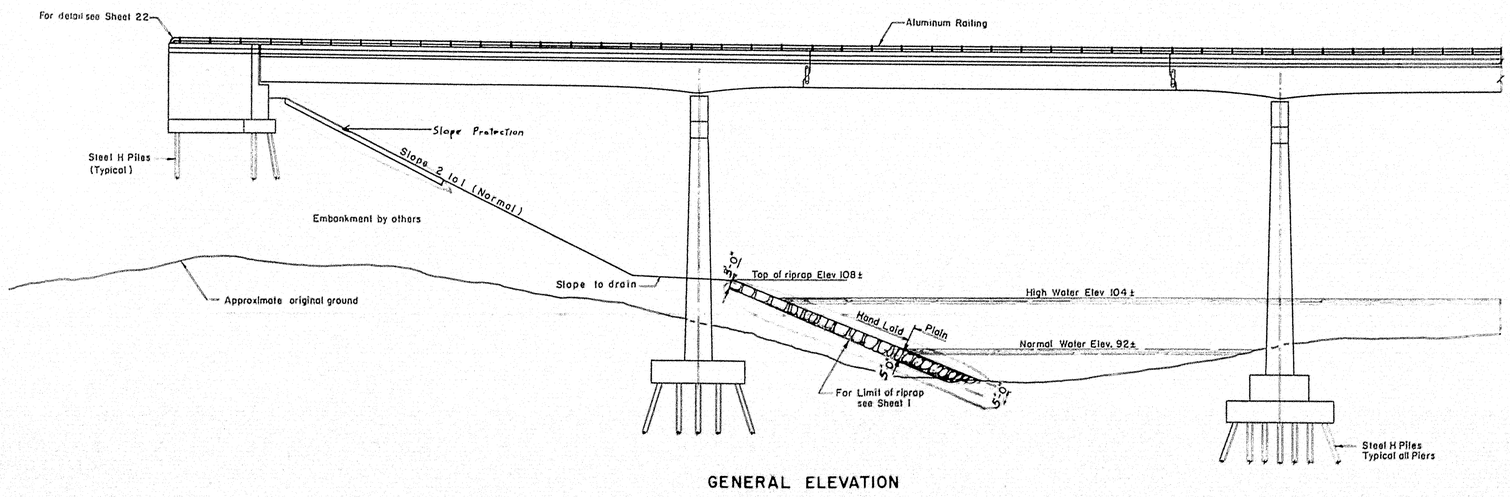
WATERVILLE INTERSTATE



Note:
Provide for railing expansion in panels over westerly abutments, Piers C to K, Piers N to U inclusive and over hinge locations.

GENERAL PLAN

Scale 1/16" = 1'-0"



GENERAL ELEVATION

Scale: 1/16" = 1'-0"

THE CLARKESON ENGINEERING CO., INC.

DESIGN G B.	CHECK J T & H P.	PROJECT ENGINEER
DRAWN E.K.	APPROVED W A H - C.J.M.	CHIEF ENGINEER

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM & QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

GENERAL PLAN & ELEVATION

SHEET 8 OF 23 SHEETS AUGUSTA, MAINE

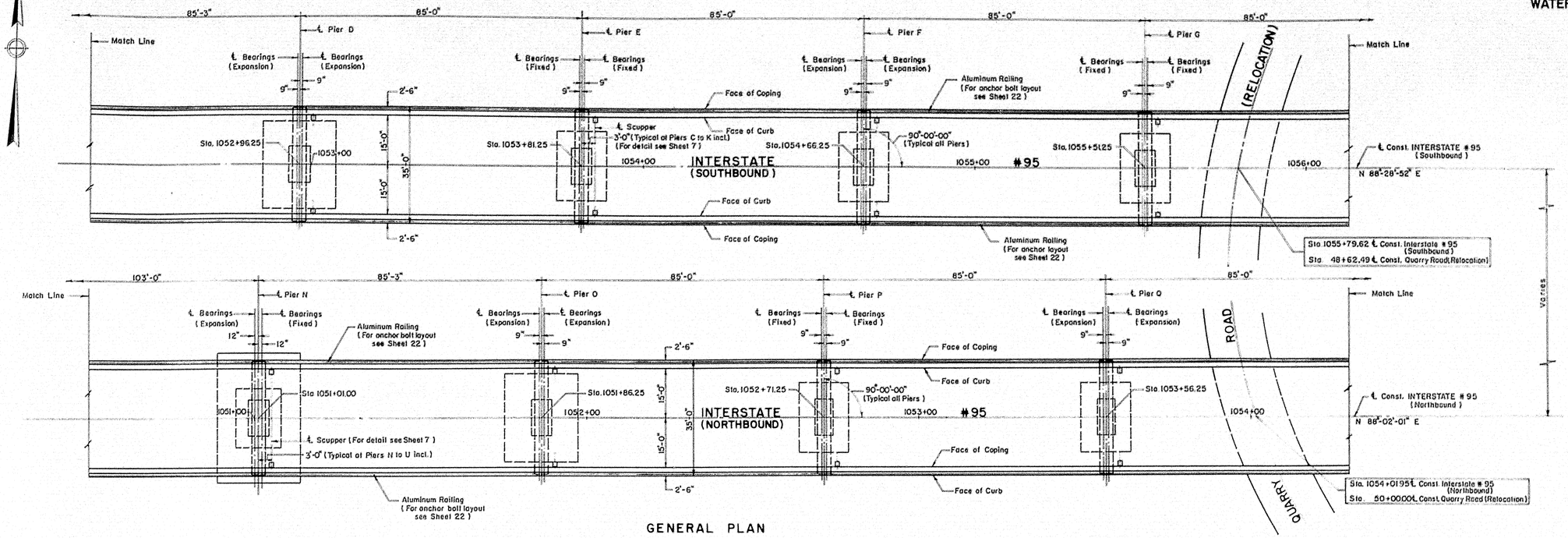
78-180

K-E PRINTED HERE IN U.S.A. W. & L.W. INC. 47810

0 1 2 3 4 5 INCHES

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6 (23)	16	32

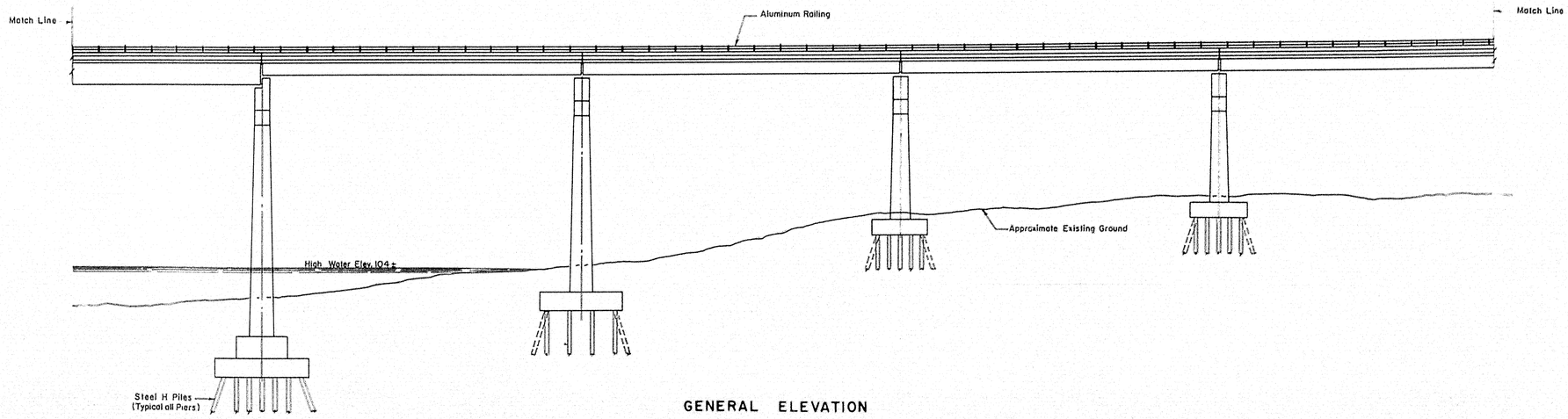
WATERVILLE INTERSTATE



GENERAL PLAN

Scale: 1/16" = 1'-0"

Note:
For railing expansion note see Sheet 8



GENERAL ELEVATION

Scale: 1/16" = 1'-0"

THE CLARKESON ENGINEERING CO., INC.

DESIGN G.B.	CHECK J.T.B.H.P.	DESIGN NO.
DRAWN E.K.	APPROVED W.A.H.S.M.	

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM & QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

GENERAL PLAN & ELEVATION

SHEET 9 OF 23 SHEETS AUGUSTA, MAINE

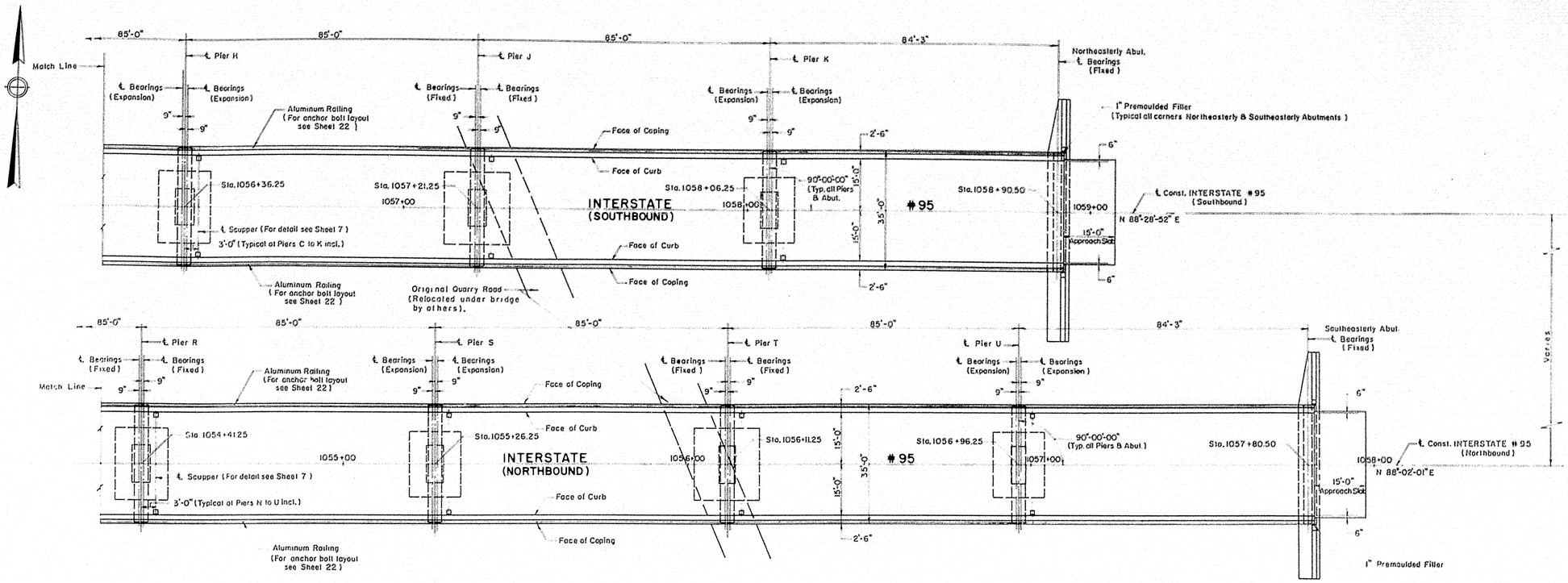
78-181

K-E PHOENIX MADE U.S.A. © H. L. M. INC. 1972

0 1 2 3 4 5 INCHES

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	17	32

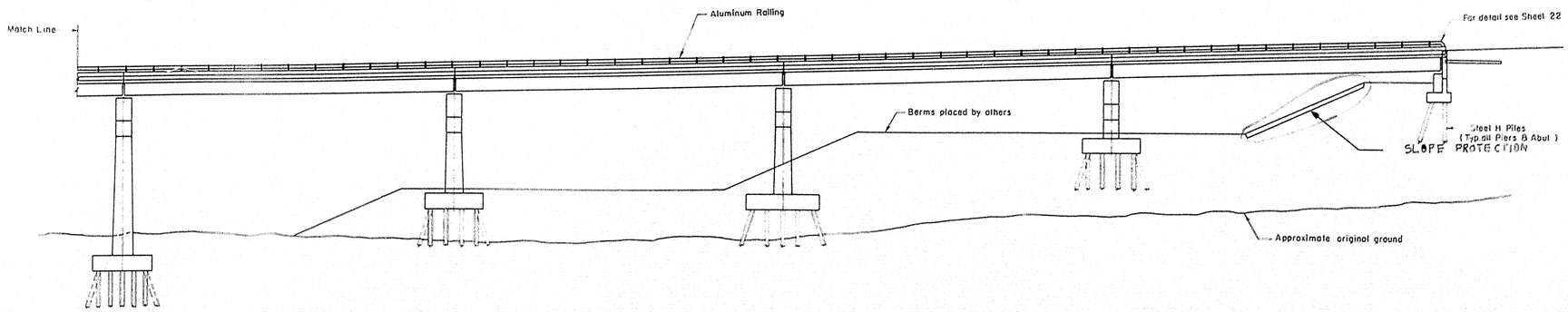
WATERVILLE INTERSTATE



GENERAL PLAN

Scale: 1/16" = 1'-0"

Note:
For railing expansion note see Sheet 8



GENERAL ELEVATION

Scale: 1/16" = 1'-0"

THE CLARKESON ENGINEERING CO., INC.			
DESIGN G.B.	CHECKED J.T.B.H.P.	BRIDGE ALIGNMENT SURVEY PLOT	
DRAWN E.K.	APPROVED W.A.H.-C.J.M.		

STATE HIGHWAY COMMISSION

INTERSTATE #95

OVER

MESSALONSKEE STREAM & QUARRY ROAD (RELOC.)

IN THE CITY OF

WATERVILLE

KENNEBEC COUNTY

GENERAL PLAN & ELEVATION

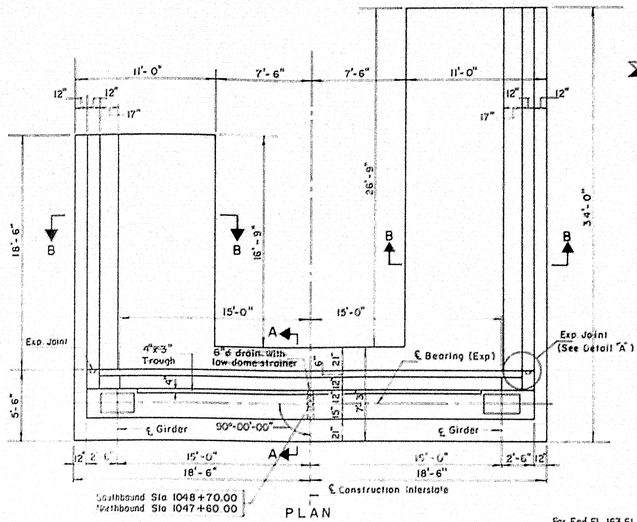
SHEET 10 OF 23 SHEETS AUGUSTA, MAINE

78-182

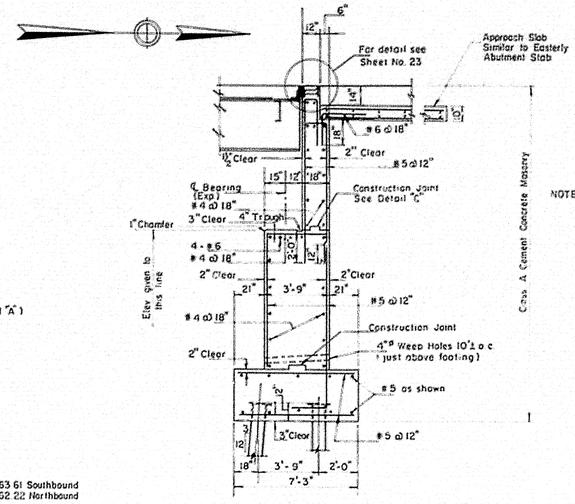
0 1 2 3 4 5 INCHES

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	18	32

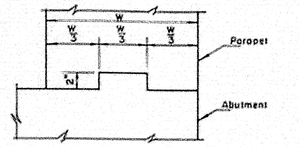
WATERVILLE INTERSTATE



PLAN

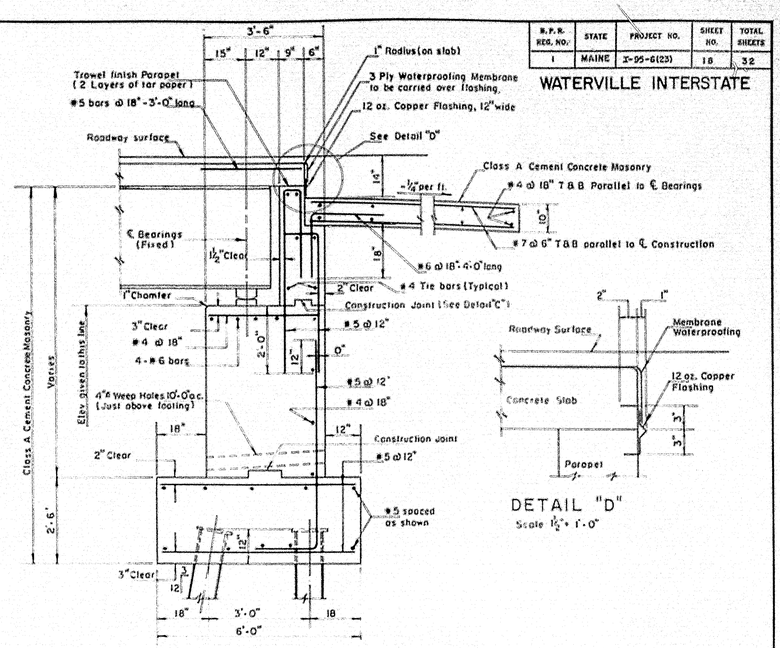


SECTION A-A



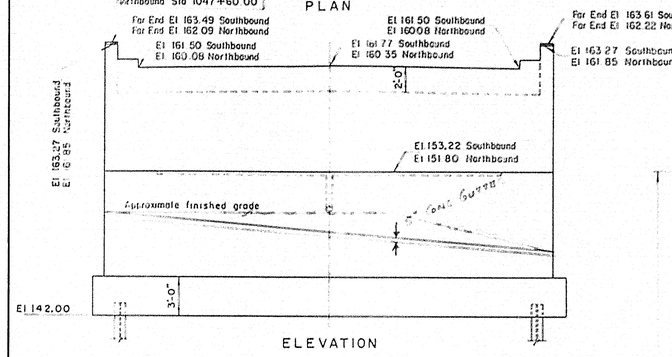
DETAIL "C"

NOTES
1. Concrete in backwall not to be placed until structural steel has been erected
2. Construction joint to be at or above bridge seat elevation
3. Provide French Drains behind abutments & wingwalls
4. Highway gravel base to be continued under approach slab to meet French Drains
5. Embankment under abutments to be constructed to elevation of bottom of footing before piles are driven
6. All piles to be driven to bedrock or practical refusal
7. All piles in the abutments to be 12BP53 steel piles Maximum pile load 37 tons
8. ↕ indicates pile battered 3 on 12 in direction of arrow
9. Cap all piles See detail Sheet 12
10. Approach Slab shall be paid for under Item 701-40 Portland Cement Concrete Roadway and Sidewalk Slabs on Steel Bridges
11. 3-ply Membrane Waterproofing and Bituminous Concrete Surfacing are not included in this Contract
12. Thoroughly coat sides & bottom of 4" drainage trough with bituminous damp-proofing

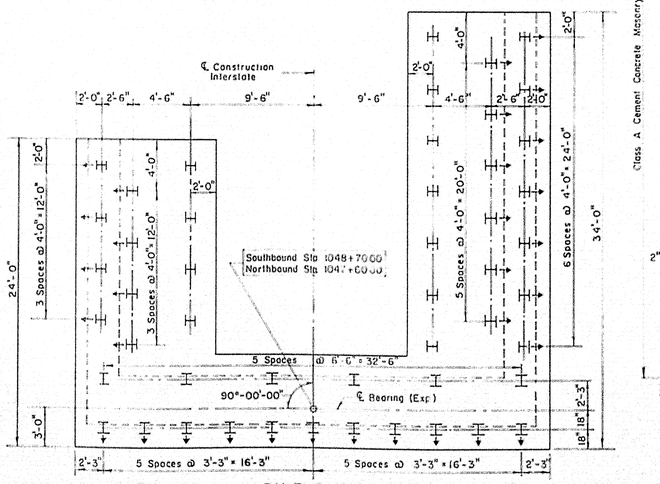


TYPICAL SECTION EASTERLY ABUTMENTS

DETAIL "D"



ELEVATION



PILE PLAN

49 piles required in each abutment

WESTERLY ABUTMENTS

Scale: 3/16" = 1'-0"

SECTION B-B

ELEVATION

WING REINFORCING LAYOUT (WESTERLY ABUTMENTS)

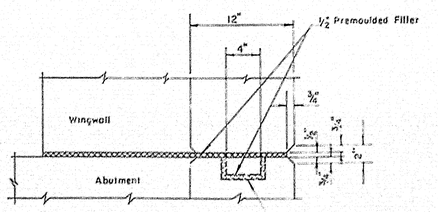
Scale: 3/8" = 1'-0"

ELEVATION

SECTION C-C

WING REINFORCING LAYOUT (EASTERLY ABUTMENTS)

Scale 3/8" = 1'-0"



DETAIL "A"

Scale: 1½" = 1'-0"

THE CLARKESON ENGINEERING CO., INC.			
DESIGN J T	CHECK J M	BRIDGE NO	
DRAWN D E S	APPROVED WAH & JM	SURVEY PLOT	

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM & QUARRY ROAD (RELOC.)

IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
ABUTMENTS

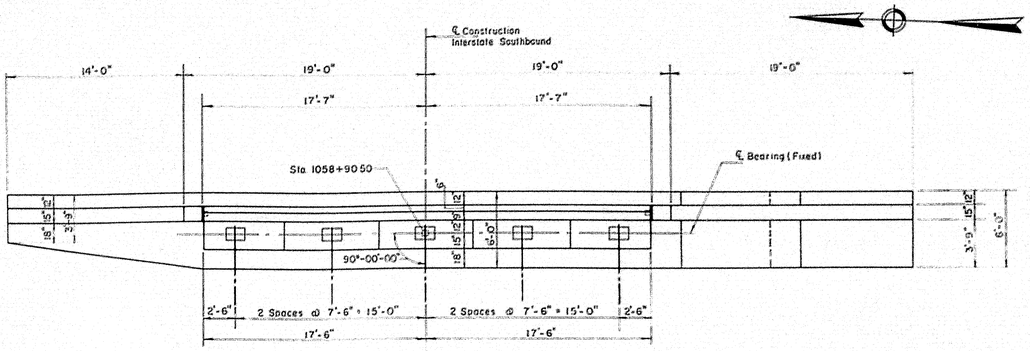
SHEET 11 OF 23 SHEETS — AUGUSTA, MAINE

78-183

0 1 2 3 4 5 INCHES

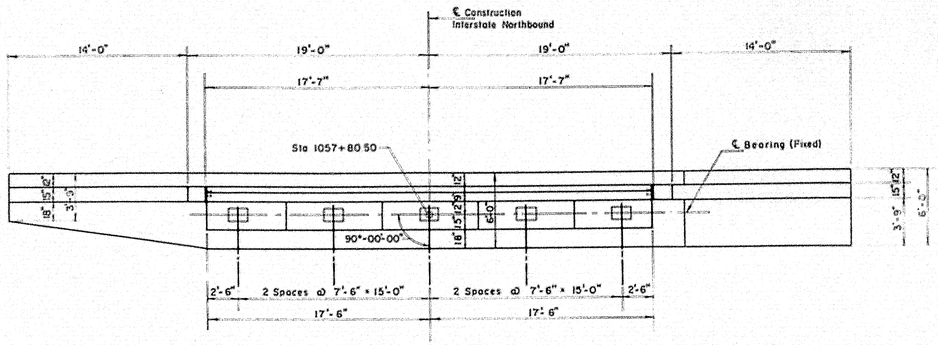
B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	19	32

WATERVILLE INTERSTATE



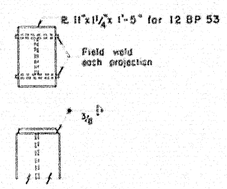
PLAN NORTHEASTERLY ABUTMENT

Scale: $\frac{3}{16}$" = 1'-0"



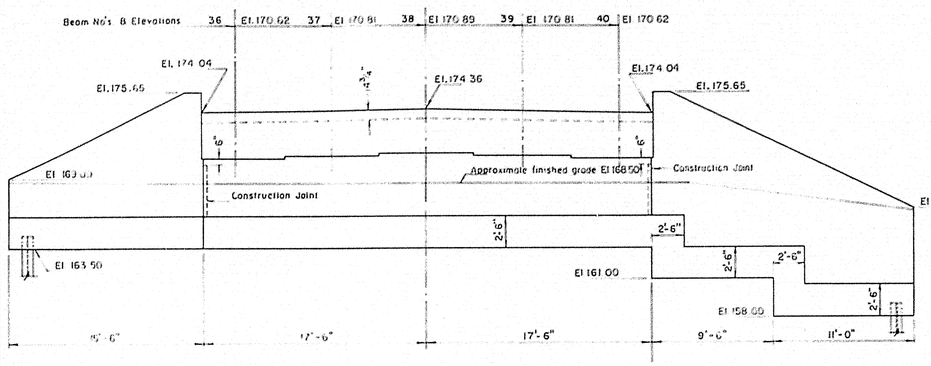
PLAN SOUTHEASTERLY ABUTMENT

Scale: $\frac{3}{16}$" = 1'-0"



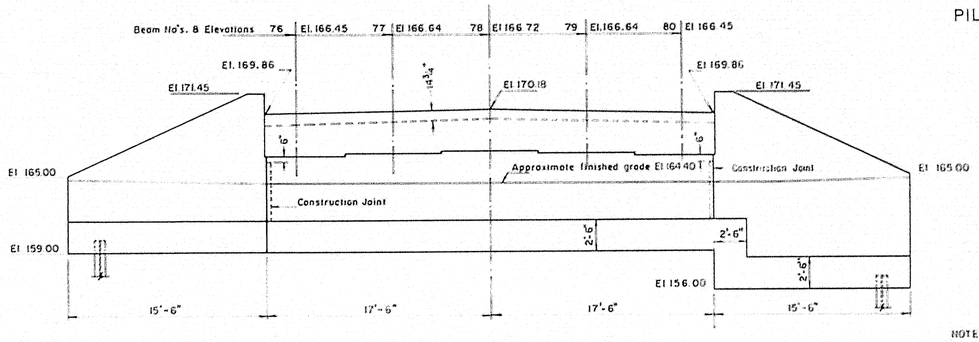
PILE CAP DETAIL

Scale ¾" = 1'-0"



ELEVATION NORTHEASTERLY ABUTMENT

Scale $\frac{3}{16}$" = 1'-0"

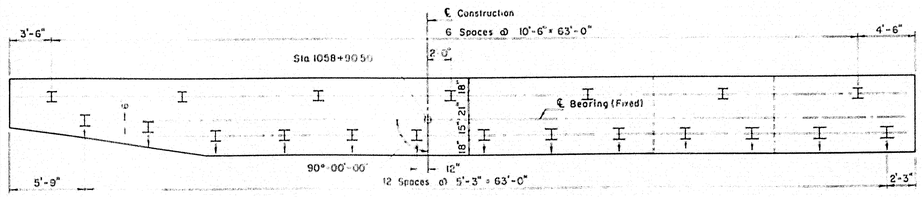


ELEVATION SOUTHEASTERLY ABUTMENT

Scale $\frac{3}{16}$" = 1'-0"

NOTES 1 For typical abutment section and wing section see Sheet 11

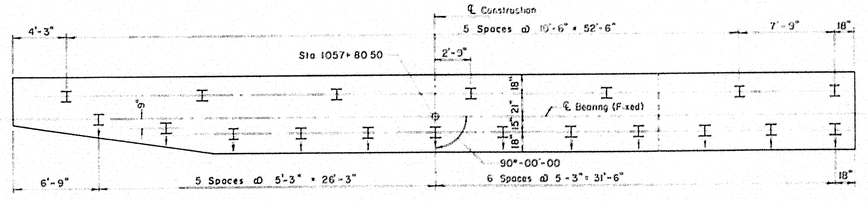
2 For general notes, sections and details see Sheet 11



20 piles required.

PILE PLAN NORTHEASTERLY ABUTMENT

Scale: $\frac{3}{16}$" = 1'-0"



19 piles required.

PILE PLAN SOUTHEASTERLY ABUTMENT

Scale: $\frac{3}{16}$" = 1'-0"

THE CLARKESON ENGINEERING CO., INC.

DESIGN	J.T.	CHECK J.T.M.	BRIDGE NO. SURVEY
DRAWN	D.E.S.	APPRD. DWN. & CJM.	PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM & QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
NORTHEASTERLY & SOUTHEASTERLY
ABUTMENTS

SHEET 12 OF 23 SHEETS AUGUSTA, MAINE

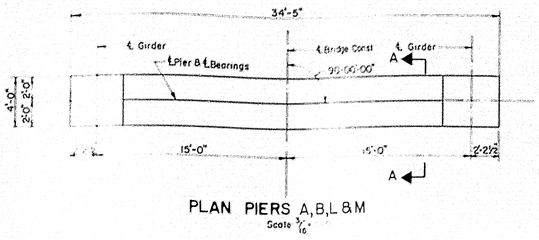
78-184

K-E PRODUCTS W. L. M. INC.

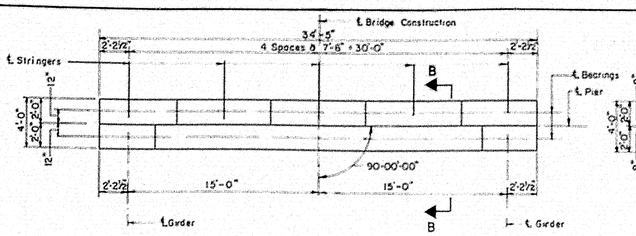
0 1 2 3 4 5 INCHES

B.P.R. REG. NO	STATE	PROJECT NO.	SHEET NO	TOTAL SHEETS
1	MAINE	I-95-6(23)	20	32

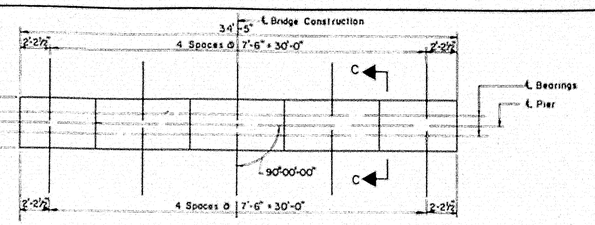
WATERVILLE INTERSTATE



PLAN PIERS A,B,L & M
Scale 3/16" = 1'-0"

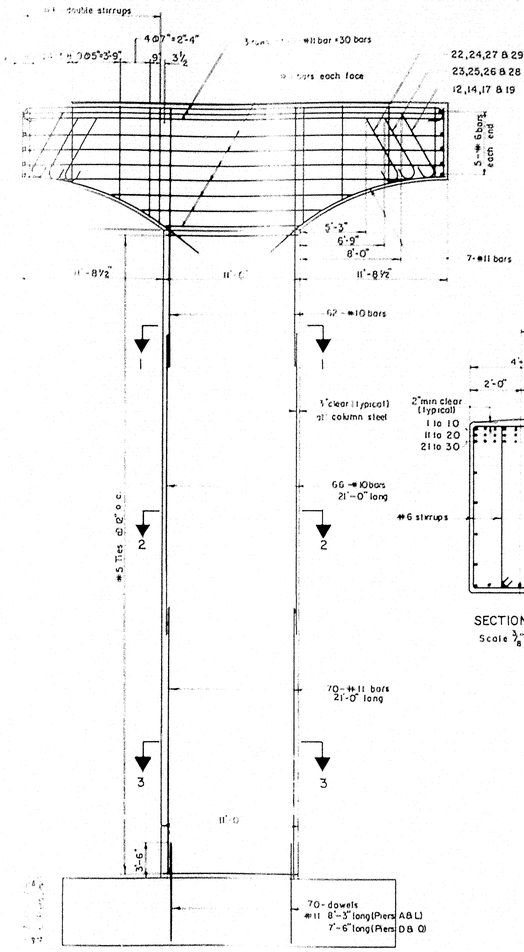


PLAN PIERS C & N
Scale 3/16" = 1'-0"



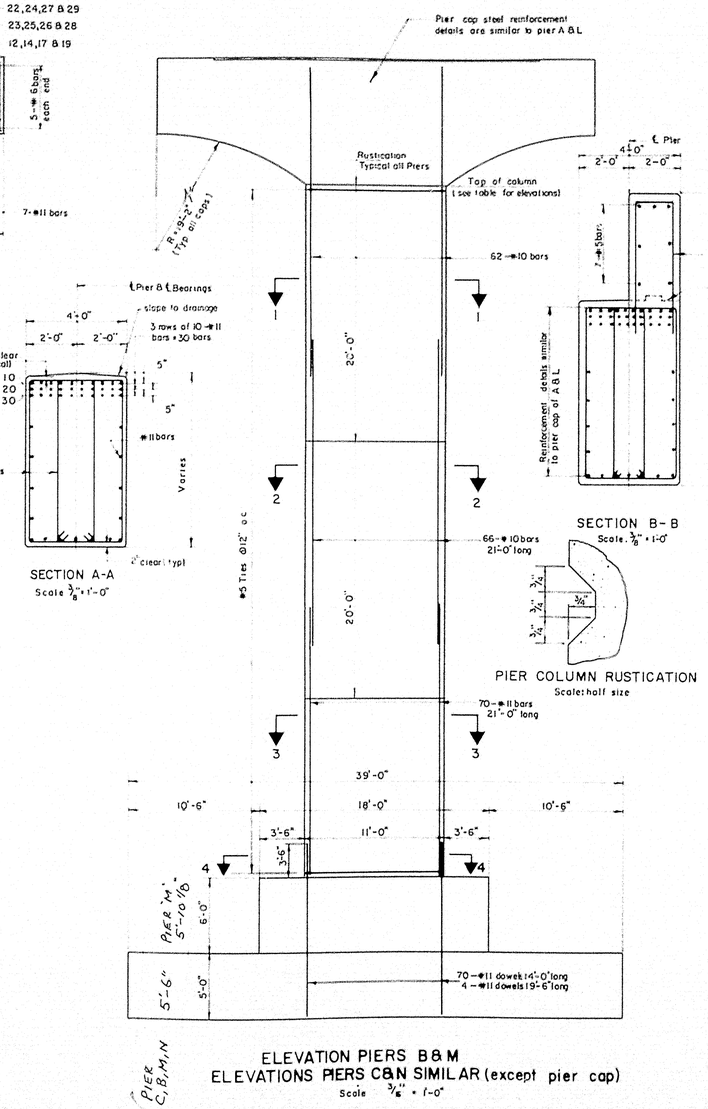
PLAN PIERS D thru K & O thru U
Scale 3/16" = 1'-0"

NORTHBOUND			SOUTHBOUND		
PIER	Elevation Top of Col	Elevation Bott of Fig	PIER	Elevation Top of Col.	Elevation Bott of Fig
L	138.67	94.00	A	140.20	94.00
M	138.11	83.50	B	139.63	83.00
N	140.38	75.40	C	142.28	75.65
O	144.82	93.00	D	146.92	91.00
P	145.59	113.00	E	147.95	111.00
Q	146.60	115.00	F	148.15	117.00
R	147.99	113.00	G	150.81	114.50
S	149.62	128.00	H	152.73	22.00
T	151.63	130.00	J	[illegible]	50.00
U	153.88	145.00	K	[illegible]	54.00



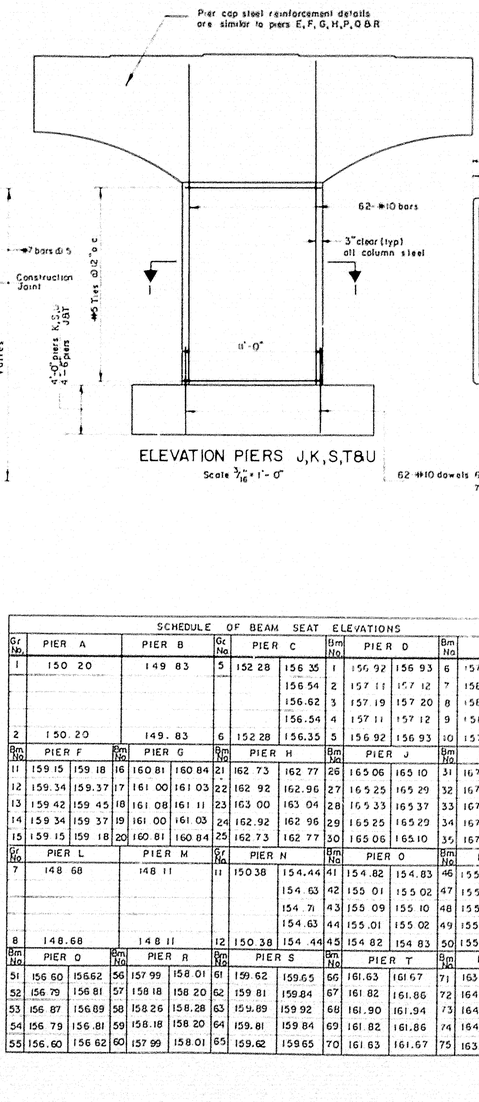
ELEVATION PIERS A&L
PIERS D&O SIMILAR (except cap reinforcement)
Scale: 3/16" = 1'-0"

Note For piers D and O cap reinforcement see elevation piers E, F, G etc.

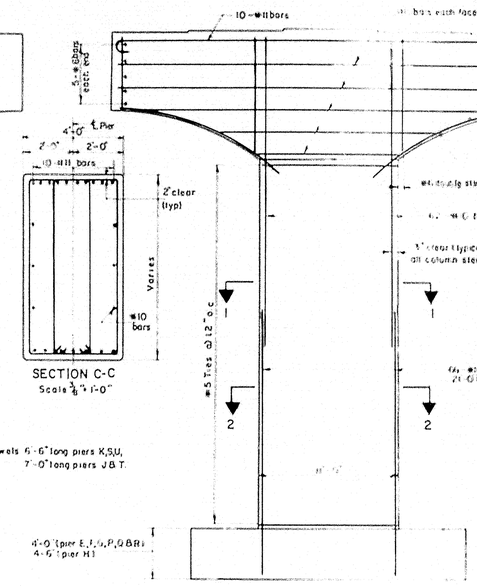


ELEVATION PIERS B & M
ELEVATIONS PIERS C & N SIMILAR (except pier cap)
Scale 3/16" = 1'-0"

PIER COLUMN RUSTICATION
Scale: half size



ELEVATION PIERS J, K, S, T & U
Scale 3/16" = 1'-0"



ELEVATION PIERS E, F, G, H, P, Q & R
Scale 3/16" = 1'-0"

SCHEDULE OF BEAM SEAT ELEVATIONS

Gr No.	PIER A		PIER B		Gr No.	PIER C		Bm No	PIER D		Bm No	PIER E		Bm No
1	150.20		149.83		5	152.28	156.35	1	156.92	156.93	6	157.90	157.92	11
							156.54	2	157.11	157.12	7	158.09	158.11	12
							156.62	3	157.19	157.20	8	158.17	158.19	13
							156.54	4	157.11	157.12	9	158.09	158.11	14
2	150.20		149.83		6	152.28	156.35	5	156.92	156.93	10	157.90	157.92	15
Bm No	PIER F		PIER G		Bm No	PIER H		Bm No	PIER J		Bm No	PIER K		Bm No
11	159.15	159.18	160.81	160.84	21	162.73	162.77	26	165.06	165.10	31	167.66	167.71	36
12	159.34	159.37	161.00	161.03	22	162.92	162.96	27	165.25	165.29	32	167.85	167.90	37
13	159.42	159.45	161.08	161.11	23	163.00	163.04	28	165.33	165.37	33	167.93	167.98	38
14	159.34	159.37	161.00	161.03	24	162.92	162.96	29	165.25	165.29	34	167.85	167.90	39
15	159.15	159.18	160.81	160.84	25	162.73	162.77	30	165.06	165.10	35	167.66	167.71	40
Gr No.	PIER L		PIER M		Gr No.	PIER N		Bm No	PIER O		Bm No	PIER P		Bm No
7	148.68		148.11		11	150.38	154.44	41	154.82	154.83	46	155.59	155.60	51
							154.63	42	155.01	155.02	47	155.78	155.79	52
							154.71	43	155.09	155.10	48	155.86	155.87	53
							154.63	44	155.01	155.02	49	155.78	155.79	54
8	148.68		148.11		12	150.38	154.44	45	154.82	154.83	50	155.59	155.60	55
Bm No	PIER Q		PIER R		Bm No	PIER S		Bm No	PIER T		Bm No	PIER U		Bm No
51	156.60	156.62	157.99	158.01	61	159.62	159.65	66	161.63	161.67	71	163.88	163.93	76
52	156.79	156.81	158.18	158.20	62	159.81	159.84	67	161.82	161.86	72	164.07	164.12	77
53	156.87	156.89	158.26	158.28	63	159.89	159.92	68	161.90	161.94	73	164.15	164.20	78
54	156.79	156.81	158.18	158.20	64	159.81	159.84	69	161.82	161.86	74	164.07	164.12	79
55	156.60	156.62	157.99	158.01	65	159.62	159.65	70	161.63	161.67	75	163.88	163.93	80

NOTES
1. For beam numbers at piers see [illegible] sheet 15
2. For footing sizes and pile [illegible] see sheet 16
3. For numbered sections see sheet 16
4. Lap for steel reinforcement [illegible] except as noted
5. Pier steel is symmetrical about [illegible] pier
6. Where necessary, construction joints in pier columns are to be located at rustication
7. All concrete in Piers [illegible]

THE CLARKESON ENGINEERING CO., INC.

DESIGN M.N.P | CHECK [illegible] | CHARGE NO. [illegible]
DRAWN E.K.-D.A.T | APPROVED W.A.S. G.M. | SHEET NO. P. GT

STATE HIGHWAY COMMISSION

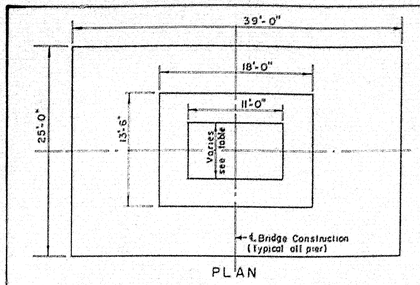
INTERSTATE #95
OVER
MESSALONSKEE STREAM
& QUARRY ROAD (RE.LOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
PIERS

SHEET 13 OF 23 SHEETS | AUGUSTA, MAINE

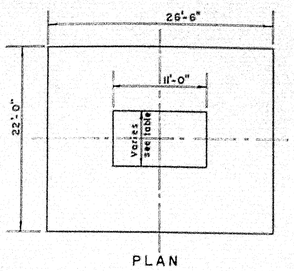
78-185

B.P.R. REG. NO	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	21	32

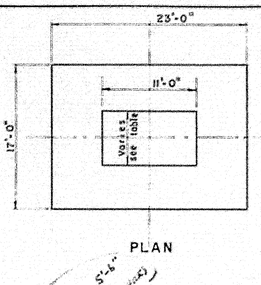
WATERVILLE INTERSTATE



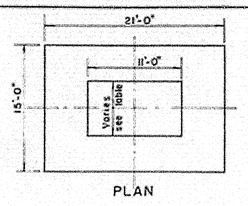
PLAN



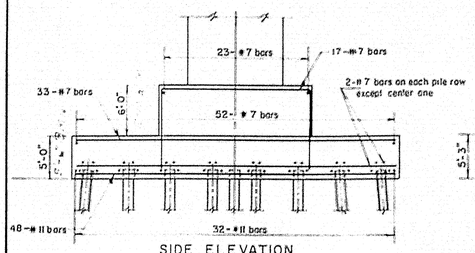
PLAN



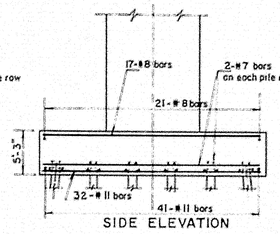
PLAN



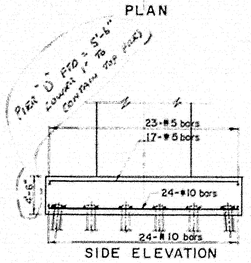
PLAN



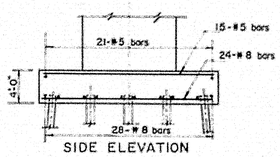
SIDE ELEVATION



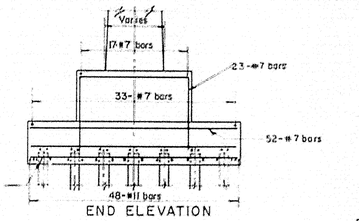
SIDE ELEVATION



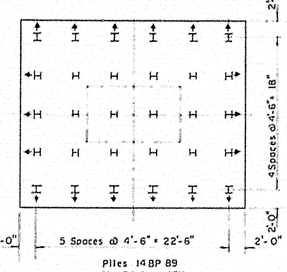
SIDE ELEVATION



SIDE ELEVATION



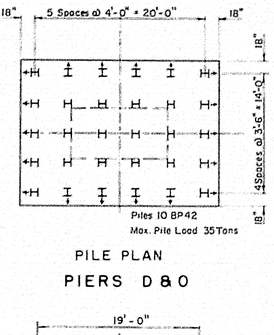
END ELEVATION



PILE PLAN

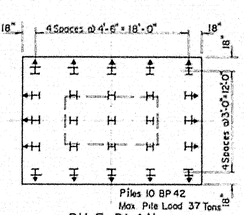
PIERS A & L

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



PILE PLAN

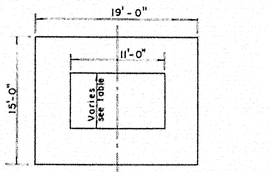
PIERS D & O



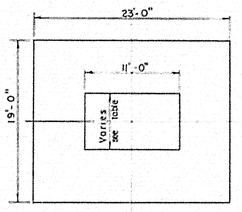
PILE PLAN

PIERS E, F, G, P, Q & R

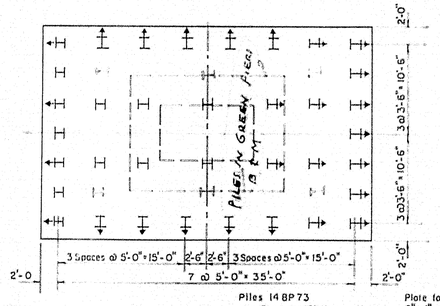
Scale: 1/8" = 1'-0"



PLAN



PLAN

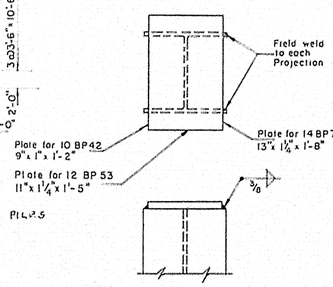


PILE PLAN

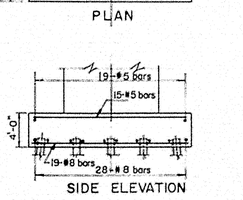
PIERS B, C, M & N

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

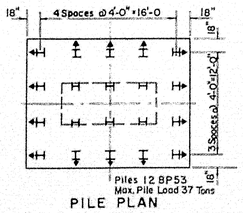
PIER N ADDITIONAL PILES
14 BP 89



PILE CAP DETAIL



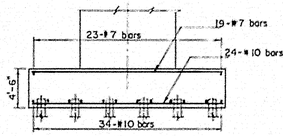
SIDE ELEVATION



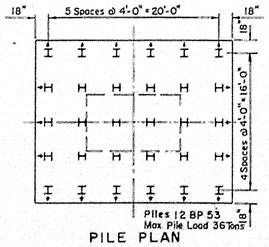
PILE PLAN

PIERS K, S & U

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



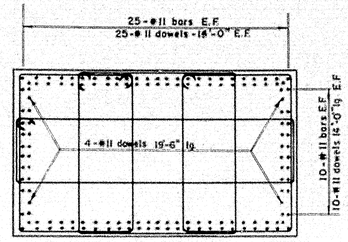
SIDE ELEVATION



PILE PLAN

PIERS H, J & T

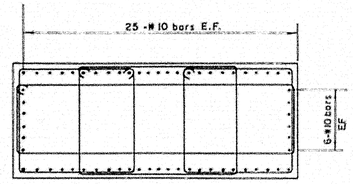
Scale: 1/8" = 1'-0"



SECTION 4-4

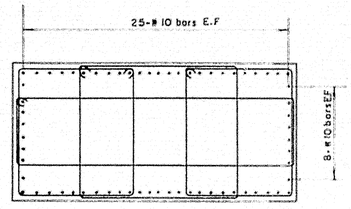
Scale 3/8" = 1'-0"

Note All column bars and dowels to be lapped as shown.



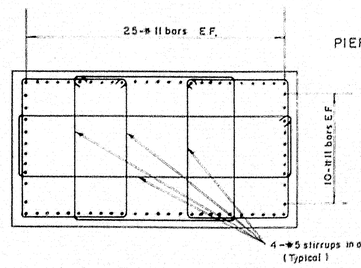
SECTION 1-1

Scale 3/8" = 1'-0"



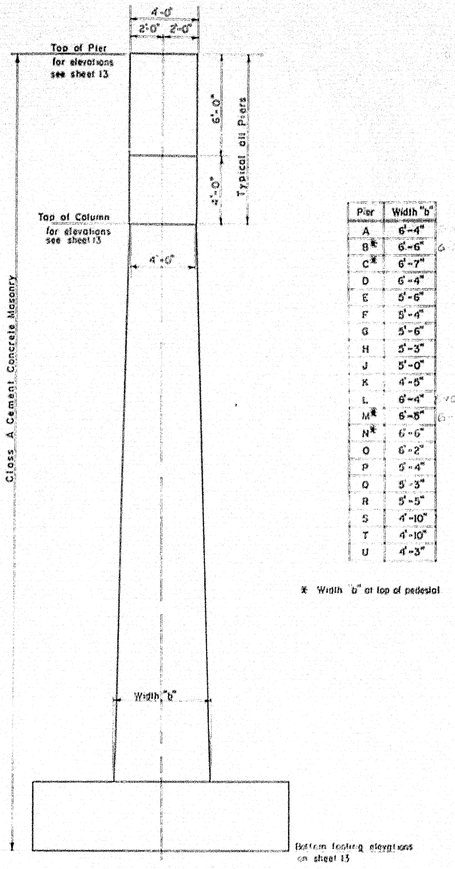
SECTION 2-2

Scale 3/8" = 1'-0"



SECTION 3-3

Scale 3/8" = 1'-0"



TYPICAL PIER END ELEVATION

PIERS D to R & O to U Incl., A & L

PIERS B, C, M, N Similar except for pedestal footing

Pier	Width "b"
A	6'-4"
B*	6'-6"
C*	6'-7"
D	6'-4"
E	5'-6"
F	5'-4"
G	5'-6"
H	5'-3"
J	5'-0"
K	4'-8"
L	6'-4"
M*	6'-8"
N*	6'-6"
O	6'-2"
P	5'-4"
Q	5'-3"
R	5'-5"
S	4'-10"
T	4'-10"
U	4'-3"

* Width "b" at top of pedestal

Notes
1. Concrete cover to steel reinforcement in footing 3" clear.
2. Cap all piles.
3. Pile embedment - 12" for all footings.
4. All piles to be driven to bedrock or practical refusal (see "Special Provisions")
5. → Indicates pile battered 3:12, in direction of arrow.
6. For numbered section see sheet 13

THE CLARKESON ENGINEERING CO., INC.

DESIGN	M.H.P.	CHECK	M.H.	BRIDGE NO.
DRAWN	D.E.S.	APPROVED	M.H.B.S.J.M.	SURVEY PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM
& QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
PIER FOOTINGS

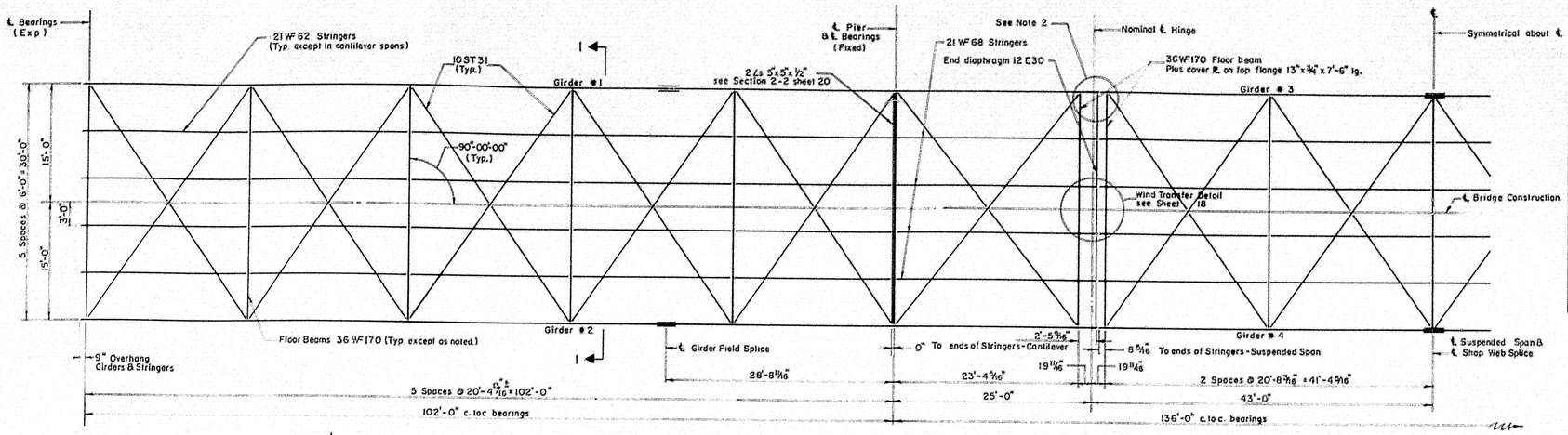
SHEET 14 OF 23 SHEETS AUGUSTA, MAINE

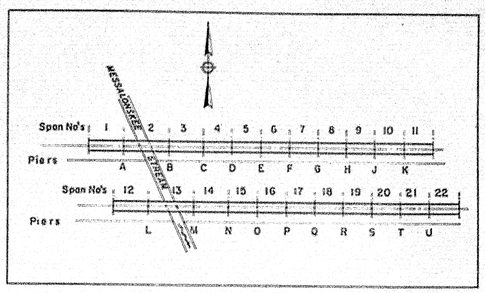
78-186

0 1 2 3 4 5 INCHES

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	22	32

WATERVILLE INTERSTATE

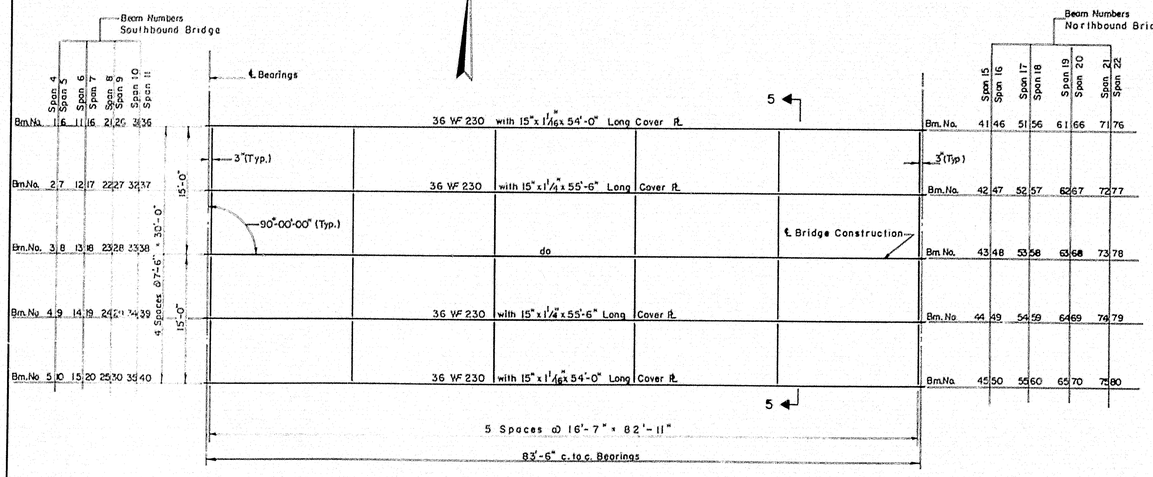




KEY PLAN
No Scale

FRAMING PLAN
SPANS 1,2,3,12,13, & 14

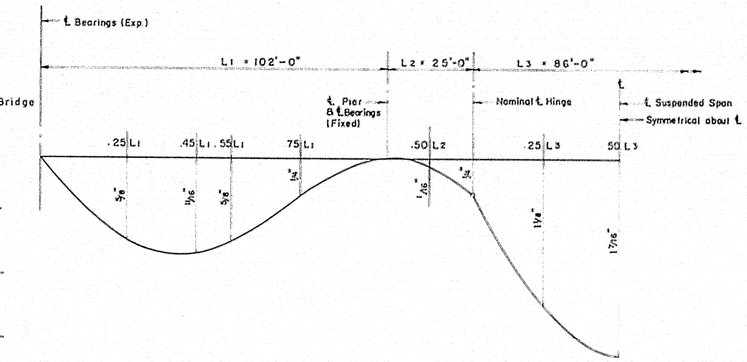
Scale: 1/8" = 1'-0"



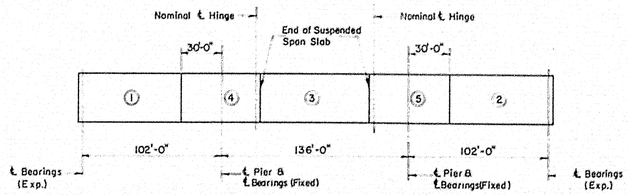
FRAMING PLAN
SPANS 4 TO 11 & 15 TO 22

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

Notes. 1. All intermediate diaphragms to be 18 C 42.7, for detail see sheet 22.
2. All end diaphragms to be 12 C 12.0 ; for details see sheet 22.
3. For cover plate and shear connector details see sheet 22.
4. Beams and cover plates are A 373 steel.



TOTAL DEAD LOAD DEFLECTION DIAGRAM
(GIRDER SPANS)



Note: All of sections 1 & 2 to be poured before any of section 3. All of section 3 to be poured before any of sections 4 & 5.

DECK POURING SEQUENCE
(GIRDER SPANS)

Notes 1 All rivets are to be 7/8" ø. Holes are to be 15/16 ø.
2 For overall dimensions of girder in vicinity of hinge see Hinge Detail sheet 18
3 For Sections 1-1 & 5-5 see sheet 16.
4 Girders are to be cambered to the extent that the bridge deck under full dead load will follow as nearly as practicable the design profile.
5 For scupper location see sheet 8; for scupper details see sheet 7.
6 For lateral bracing details see sheet 20.
7 High tensile strength bolts may be used in place of rivets for field connections

THE CLARKESON F. GREENING CO., INC.

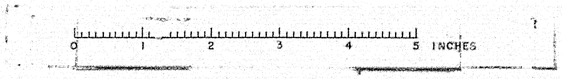
DESIGN R.F.B.G.B.	CHECKED W.H.C.J.M.O.T.	BRIDGE NO.
DRAWN E.K.	APPROVED W.H.C.J.M.	SURVEY PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM
& QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
FRAMING PLAN

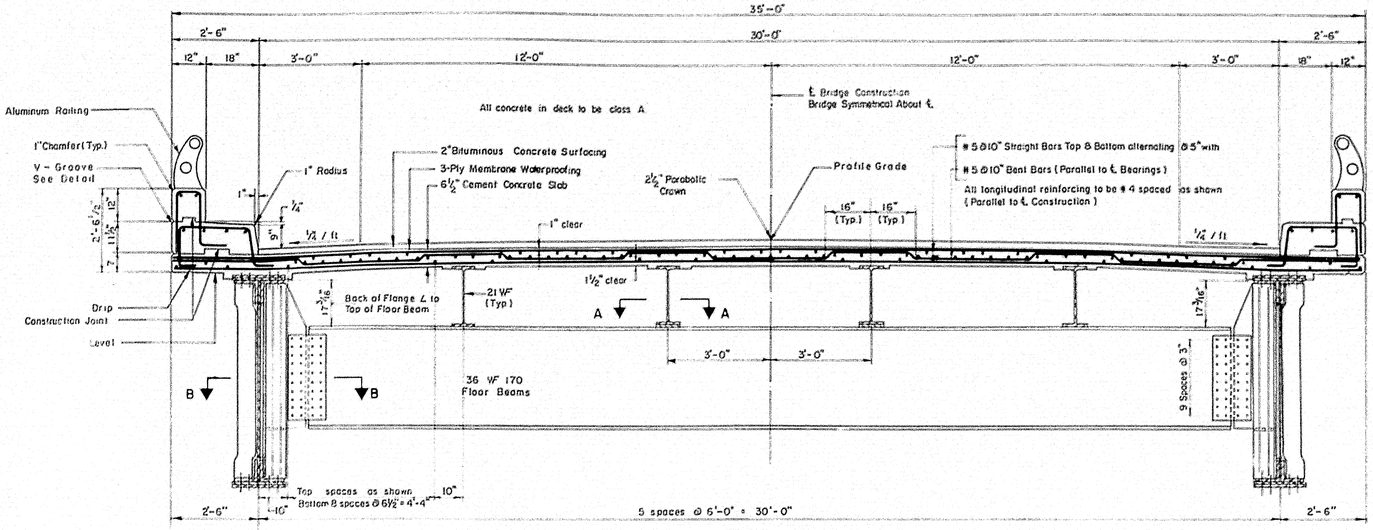
SHEET 15 OF 23 SHEETS AUGUSTA, MAINE

78-187



B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	23	32

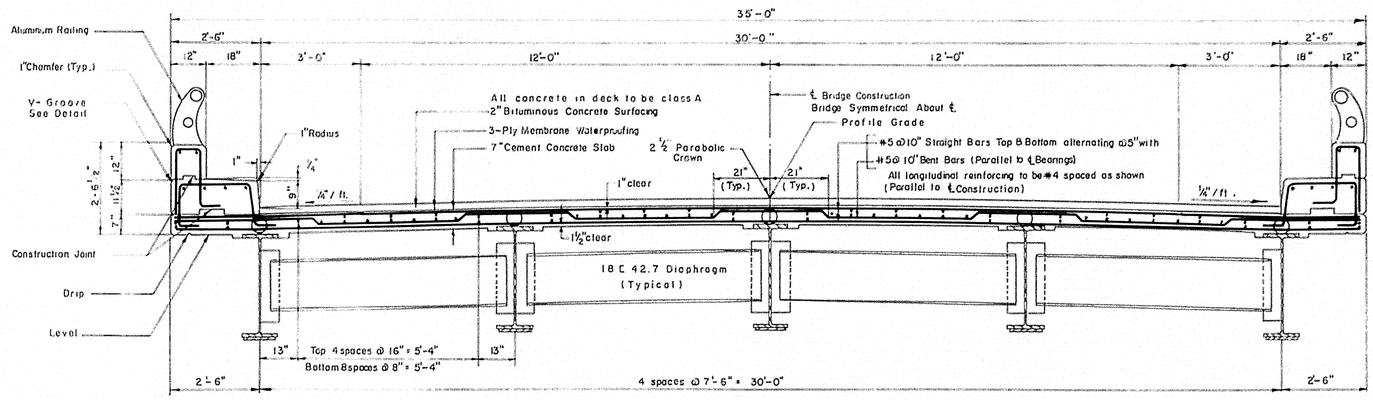
WATERVILLE INTERSTATE



SECTION I - I

BRIDGE CROSS SECTION (GIRDER SPANS)

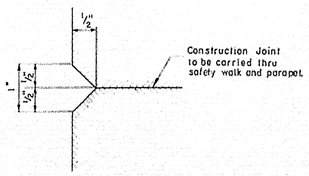
Scale ½" = 1'-0"



SECTION 5 - 5

TYPICAL BRIDGE CROSS SECTION (STRINGER SPANS)

Scale: ½" = 1'-0"



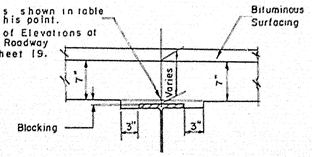
V-GROOVE DETAIL

Not to scale

Notes: 1 Bituminous Concrete Surfacing and 3 - Ply Membrane Waterproofing are not in this contract.

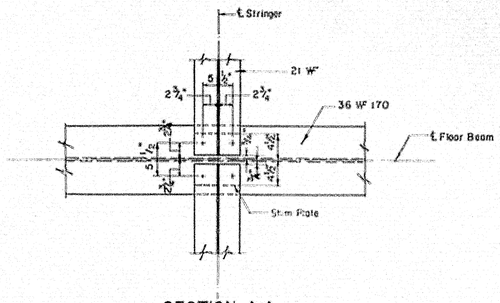
2. Parapets and safety walks to have transverse construction joints 20'± on centers. Joints are not to be located under railing post. Contact surfaces of joints to be painted with a bituminous material. Exposed surfaces are to be chamfered ½". Reinforcing steel to be carried thru joints.

3. All deck slab concrete in each stringer span shall be placed in one continuous operation.



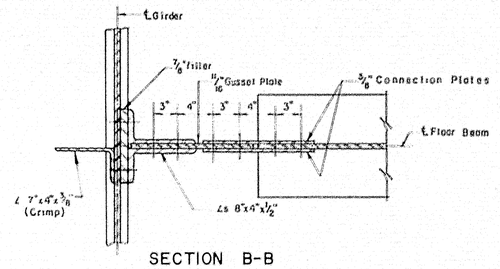
STRINGER HAUNCH DETAIL (STRINGER SPANS)

Scale: 1" = 1'-0"



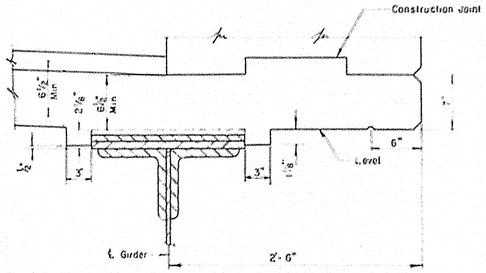
SECTION A-A

Scale 1" = 1'-0"



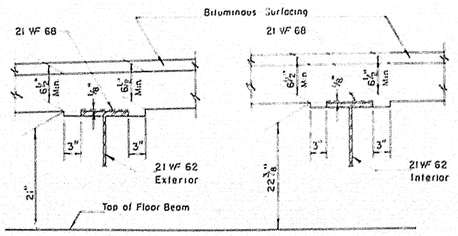
SECTION B-B

Scale 1½" = 1'-0"



GIRDER HAUNCH DETAIL

Scale 1½" = 1'-0"



STRINGER HAUNCH DETAIL (GIRDER SPANS)

Scale: 1" = 1'-0"

THE CLARKESON ENGINEERING CO., INC.

DESIGN	R.F.B.G.B.	CHECK	J.M.B.T.	BRIDGE NO.
DRAWN	D.A.T.	APPROVED	W.A.H.-C.M.	SURVEY

STATE HIGHWAY COMMISSION

INTERSTATE #95

OVER

MESSALONSKEE STREAM & QUARRY ROAD (RELOC.)

IN THE CITY OF

WATERVILLE

KENNEBEC COUNTY

TYPICAL BRIDGE CROSS SECTIONS

SHEET 16 OF 23 SHEETS AUGUSTA, MAINE

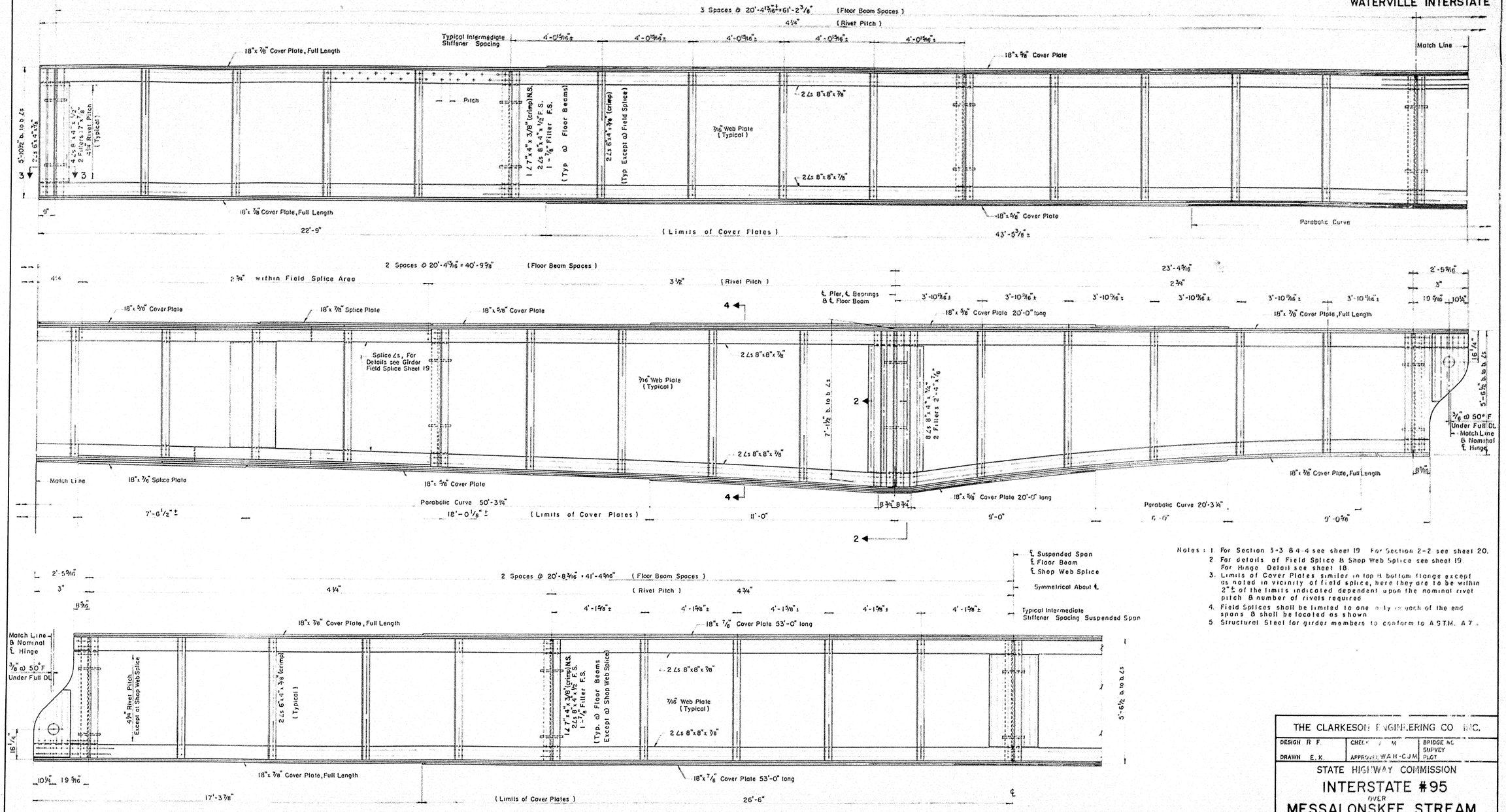
78-188

K+E PHOENIX PLACE 143 © PHOENIX PLACE 1970 R. L. M. INC. 42616

0 1 2 3 4 5 INCHES

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6 (23)	24	32

WATERVILLE INTERSTATE



Pitch

TYPICAL RIVET ARRANGEMENT EXCEPT AT FIELD SPLICES

GIRDER ELEVATION

Scale: 1/2" = 1'-0"

Notes:
1. For Section 3-3 & 4-4 see sheet 19. For Section 2-2 see sheet 20.
2. For details of Field Splice & Shop Web Splice see sheet 19. For Hinge Detail see sheet 18.
3. Limits of Cover Plates similar on top & bottom flange except as noted in vicinity of field splice, here they are to be within 2"± of the limits indicated dependent upon the nominal rivet pitch & number of rivets required.
4. Field Splices shall be limited to one only at each of the end spans & shall be located as shown.
5. Structural Steel for girder members to conform to A.S.T.M. A 7.

THE CLARKESON ENGINEERING CO. INC.

DESIGN R. F.	CHECKED W. M.	BRIDGE NO.
DRAWN E. K.	APPROVED W.A.H.-C.J.M.	SURVEY PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM
& QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

GIRDER ELEVATION

SHEET 17 OF 23 SHEETS AUGUSTA, MAINE

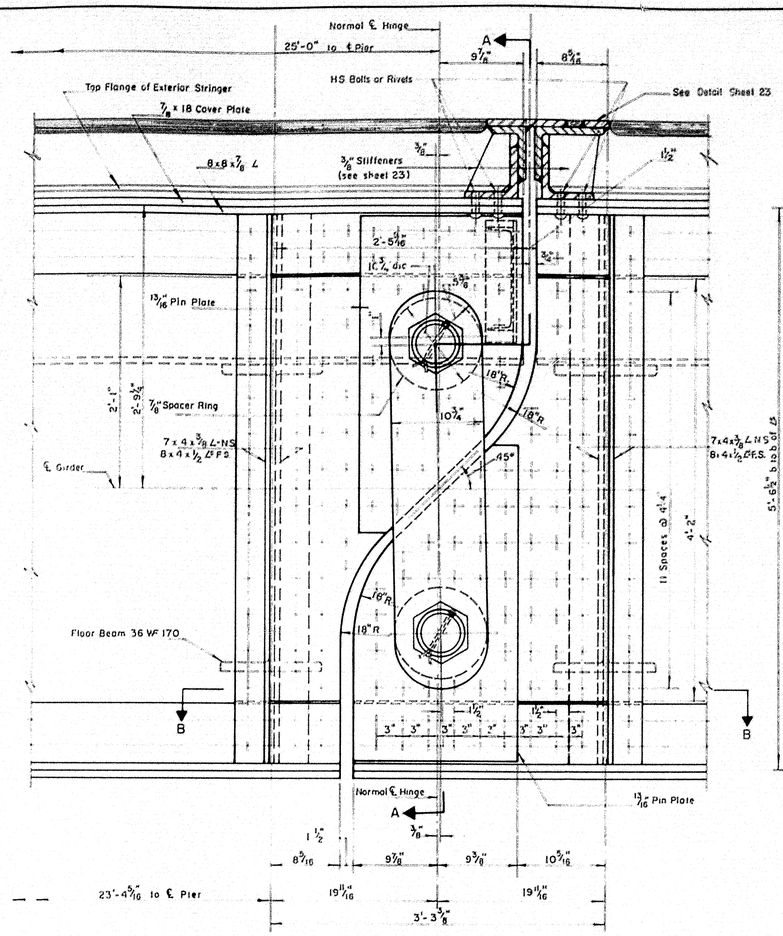
78-189

K+E PHOENIX MAINE 366 © KEUFFEL & ESSER CO. MADE IN U.S.A.

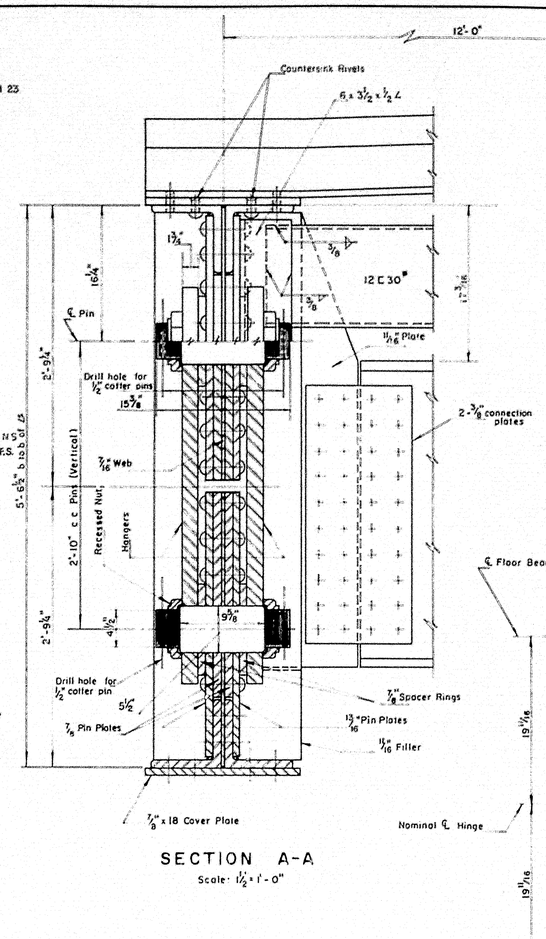
0 1 2 3 4 5 INCHES

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6 (23)	25	32

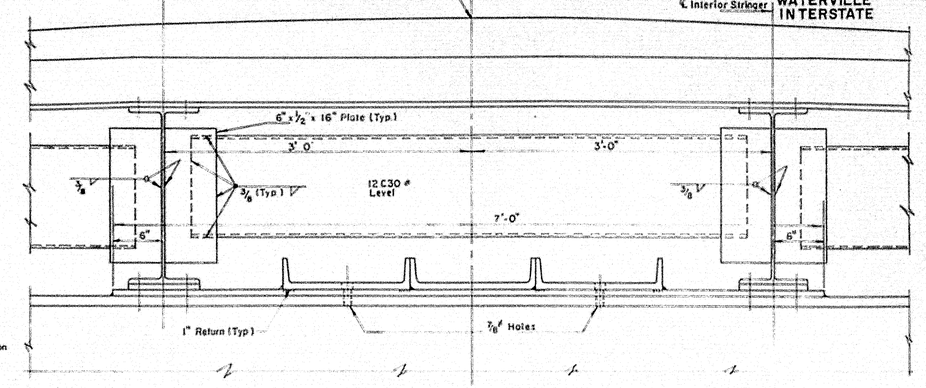
WATERVILLE
INTERSTATE

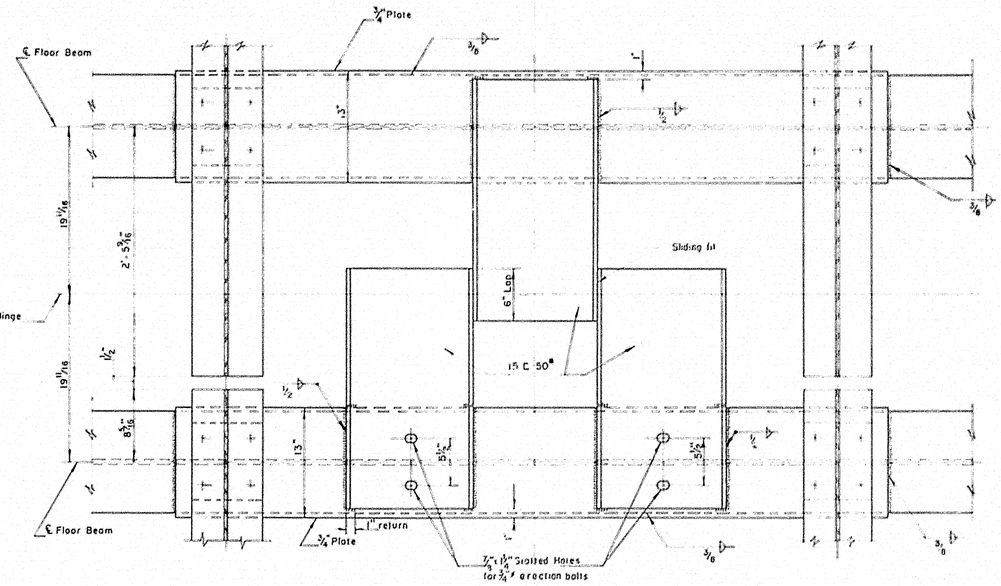


HINGE DETAIL
Scale: 1½" = 1'-0"

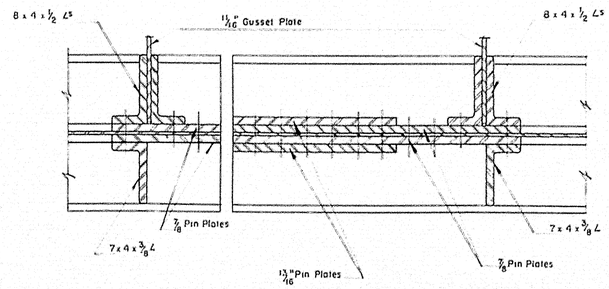


SECTION A-A
Scale: 1½" = 1'-0"





WIND TRANSFER DETAIL
Scale 1½" = 1'-0"



SECTION B-B
Scale: 1½" = 1'-0"

Notes: 1. Horizontal dimensions shown in Hinge Detail are @ 50°F under Full Dead Load.
2. At each Hinge 4 of 13/16" Pin Plates are identical & 4 of ⅞" Pin Plates are identical.
3. After the erection of all structural steel 2 of 15 C50#, at each end of suspended span, to be held parallel & bearing evenly against 15 C 50# at end of cantilevers in this position they are to be welded to 13" x ¾" cover plate as shown.
4. The pin shall conform to A.S.T.M. Designation A108, any grade from 1016 to 1025 inclusive.

THE CLARKESON ENGINEERING CO., INC.

DESIGN R F	CHECK J M	BRIDGE NO.
DRAWN D E S	APPROVED W.H.C. J.M.	SURVEY PLOT

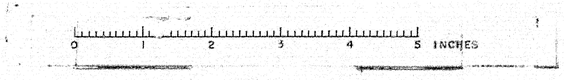
STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM & QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
HINGE AND WIND TRANSFER DETAILS

SHEET 16 OF 23 SHEETS — AUGUSTA, MAINE

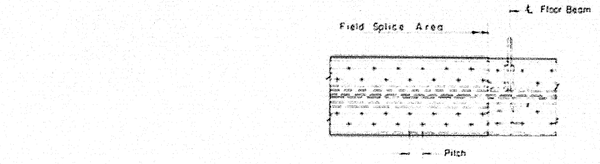
78-190

K-E PROVENCE BLVD. ITS © PRINTED IN U.S.A. INC. 49532

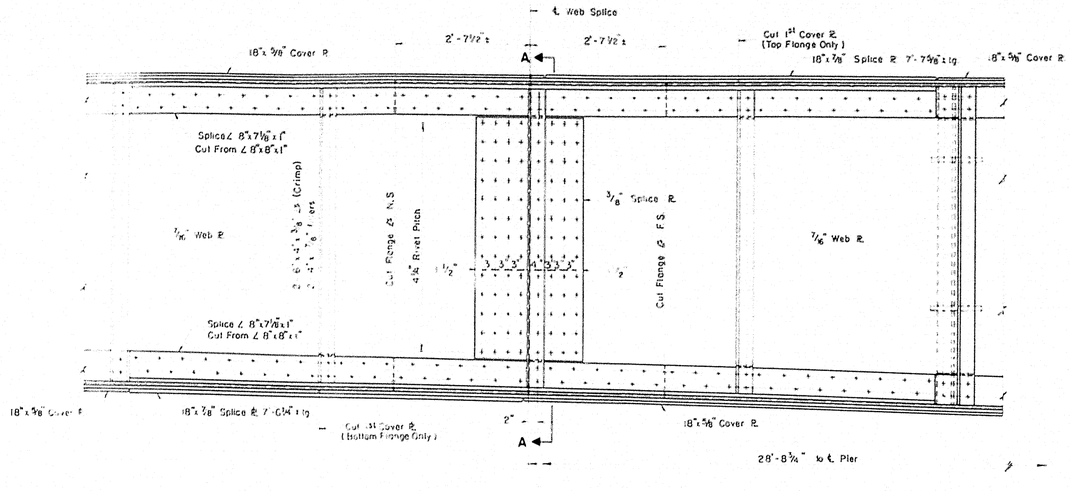


B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	26	32

WATERVILLE INTERSTATE

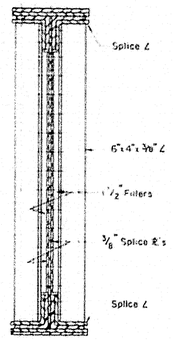


RIVET ARRANGEMENT



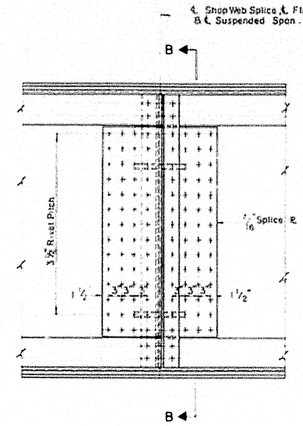
FIELD SPLICE DETAIL

Scale: ¾" = 1'-0"



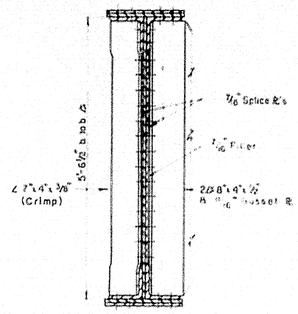
SECTION A-A

Scale ¾" = 1'-0"



SHOP WEB SPLICE DETAIL

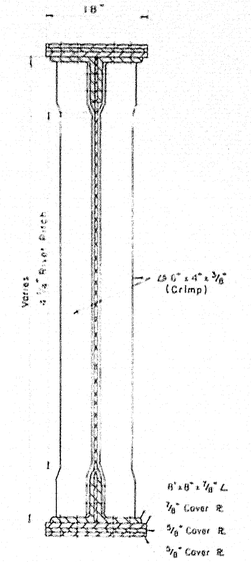
Scale ¾" = 1'-0"



SECTION B-B

Scale ¾" = 1'-0"

Note For location of sections 3-3 & 4-4 see sheet 17



SECTION 4-4

TYPICAL GIRDER SECTION

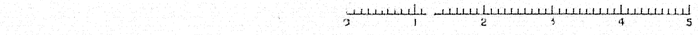
Scale 1" = 1'-0"

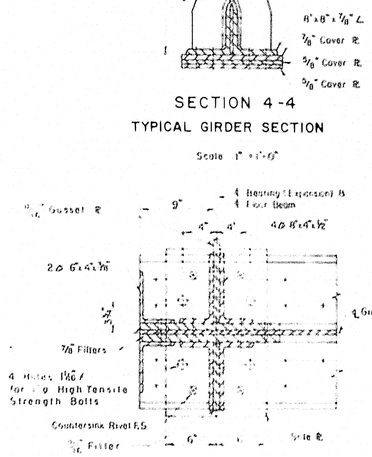
ELEVATION OF BOTTOM OF ROADWAY SLAB									
SOUTHBOUND BRIDGE					NORTHBOUND BRIDGE				
STATION	15'-0" LT. & RT.	9'-0" LT. & RT.	3'-0" LT. & RT.		STATION	15'-0" LT. & RT.	9'-0" LT. & RT.	3'-0" LT. & RT.	
1048+70.00	162.26	162.91	161.02		1047+49.00	159.34	159.58	159.06	
1048+60.32	162.17	162.82	160.93		1047+39.32	159.24	159.48	159.02	
1048+50.00	162.56	162.74	160.84		1047+29.00	159.15	159.38	158.98	
1048+40.64	162.96	162.65	160.75		1047+20.64	159.05	159.46	158.94	
1048+10.96	163.41	162.56	160.66		1046+90.96	158.95	159.11	158.91	
1047+81.61	163.32	162.47	160.57		1046+81.61	158.85	159.00	158.91	
1047+31.21	163.23	162.38	160.48		1046+31.21	158.75	158.90	158.91	
1047+41.41	163.14	162.29	160.40		1046+31.41	158.65	158.81	158.91	
1047+51.61	163.06	162.21	160.31		1046+41.61	158.56	158.71	158.92	
1047+61.81	162.98	162.13	160.24		1046+51.81	158.47	158.62	158.92	
1047+72.00	162.91	162.07	160.17		1046+62.00	158.39	158.55	158.93	
1047+82.18	162.85	162.00	160.11		1046+72.18	158.32	158.47	158.93	
1047+96.37	162.76	161.90	160.04		1046+86.37	158.25	158.40	158.91	
1048+08.04	162.79	161.95	160.05		1046+98.04	158.24	158.39	158.90	
1048+28.58	162.77	161.93	160.03		1047+18.58	158.21	158.36	158.89	
1048+39.32	162.75	161.91	160.01		1047+29.32	158.17	158.32	158.88	
1048+49.66	162.73	161.89	159.99		1047+39.66	158.14	158.29	158.87	
1048+90.00	162.71	161.86	159.97		1047+80.00	158.10	158.25	158.85	
1049+00.34	162.68	161.83	159.94		1047+90.34	158.05	158.20	158.81	
1049+08.68	162.64	161.79	159.90		1047+98.68	158.02	158.15	158.76	
1049+71.02	162.60	161.76	159.86		1048+61.02	157.95	158.10	158.70	
1049+81.36	162.56	161.72	159.82		1048+71.36	157.89	158.05	158.65	
1049+91.81	162.56	161.71	159.82		1048+81.64	157.88	158.04	158.64	
1050+02.32	162.54	161.70	159.80		1048+92.32	157.88	158.00	158.60	
1050+08.00	162.54	161.70	159.80		1048+98.00	157.82	157.96	158.00	
1051+18.20	162.55	161.70	159.81		1049+08.20	157.82	157.97	158.07	
1051+28.40	162.57	161.72	159.83		1049+18.40	157.82	157.97	158.08	
1051+38.60	162.60	161.75	159.86		1049+28.60	157.83	157.98	158.09	
1051+48.80	162.63	161.78	159.85		1049+38.80	157.84	158.00	158.10	
1051+59.00	162.66	161.82	159.92		1049+49.00	157.86	158.01	158.11	
1051+69.20	162.70	161.85	159.96		1049+59.20	157.87	158.02	158.13	
1051+79.40	162.73	161.88	160.00		1049+69.40	157.88	158.04	158.14	
1051+89.60	162.76	161.92	160.02		1049+79.60	157.90	158.05	158.15	
1051+99.80	162.79	161.95	160.05		1049+89.80	157.90	158.06	158.16	
1052+10.00	162.83	161.98	160.08		1050+00.00	157.92	158.07	158.16	

ELEVATION OF BOTTOM OF ROADWAY SLAB																					
Brg No.	℄ Bearings*	¼ Point	½ Point	¾ Point	℄ Bearings	Brg No.	℄ Bearings*	¼ Point	½ Point	¾ Point	℄ Bearings	Brg No.	℄ Bearings*	¼ Point	½ Point	¾ Point	℄ Bearings	Brg No.	℄ Bearings*	¼ Point	½ Point	¾ Point	℄ Bearing
21	166.74	166.01	166.19	166.31	166.42	41	157.86	158.05	158.19	158.29	158.36	61	161.48	161.94	162.37	162.70	163.10
22	166.81	166.21	166.39	166.51	166.59	42	158.07	158.25	158.36	158.46	158.49	62	161.65	162.13	162.57	162.95	163.29
23	166.89	166.29	166.47	166.59	166.67	43	158.15	158.33	158.47	158.54	158.57	63	161.73	162.21	162.65	163.03	163.37
24	166.96	166.36	166.54	166.66	166.74	44	158.27	158.45	158.58	158.68	158.71	64	161.85	162.33	162.77	163.15	163.49
25	167.04	166.44	166.61	166.73	166.81	45	158.36	158.54	158.67	158.77	158.80	65	161.96	162.44	162.87	163.26	163.60
26	167.12	166.51	166.68	166.80	166.88	46	158.51	158.66	158.77	158.92	159.03	66	163.13	163.68	164.20	164.66	165.08
27	167.20	166.59	166.76	166.88	166.96	47	158.56	158.75	158.96	159.11	159.22	67	163.32	163.88	164.40	164.85	165.26
28	167.28	166.66	166.83	166.95	167.03	48	158.58	158.83	159.05	159.20	159.30	68	163.40	163.96	164.48	164.93	165.33
29	167.36	166.74	166.91	167.03	167.11	49	158.56	158.75	158.96	159.11	159.22	69	163.32	163.88	164.40	164.85	165.26
30	167.44	166.81	166.98	167.10	167.18	50	158.31	158.56	158.77	158.92	159.03	70	163.13	163.68	164.20	164.66	165.08
31	167.52	166.89	167.06	167.18	167.26	51	159.05	159.37	159.66	159.89	160.08	71	165.11	165.74	166.33	166.87	167.36
32	167.60	166.96	167.13	167.25	167.33	52	159.24	159.57	159.86	160.08	160.27	72	165.30	165.94	166.53	167.08	167.58
33	167.68	167.04	167.21	167.33	167.41	53	159.32	159.65	159.94	160.16	160.35	73	165.38	166.02	166.61	167.14	167.63
34	167.76	167.12	167.29	167.41	167.49	54	159.24	159.57	159.86	160.08	160.27	74	165.30	165.94	166.53	167.06	167.55
35	167.84	167.19	167.36	167.48	167.56	55	159.05	159.37	159.66	159.89	160.08	75	165.11	165.74	166.33	166.87	167.36
36	167.92	167.27	167.44	167.56	167.64	56	160.10	160.50	160.86	161.17	161.43	76	167.90	168.69	168.74	169.34	169.85
37	168.00	167.34	167.51	167.63	167.71	57	160.29	160.69	161.06	161.36	161.62	77	167.59	168.29	168.84	169.53	170.14
38	168.08	167.42	167.59	167.71	167.79	58	160.37	160.78	161.14	161.44	161.70	78	167.68	168.37	169.02	169.61	170.19
39	168.16	167.49	167.66	167.78	167.86	59	160.29	160.69	161.06	161.36	161.62	79	167.59	168.29	168.84	169.53	170.14
40	168.24	167.57	167.74	167.86	167.94	60	160.10	160.50	160.86	161.17	161.43	80	167.40	168.09	168.74	169.34	169.85

* Low station end of beam.

Note. After the structural steel is erected and before forms are built or concrete is placed, elevations on the top flange of the beams are to be obtained at the points indicated in the table. The difference between these elevations and those shown in the table give the actual blocking distance from top of beam to bottom of slab. See Haunch Detail sheet 16.





SECTION 3-3

Scale 1" = 1'-0"

THE CLARKESON [illegible] CO., INC

DESIGN R.F.	CHECKED [illegible]	QUANTITY [illegible]
DRAWN E.K.	APPROVED [illegible]	

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM
& QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

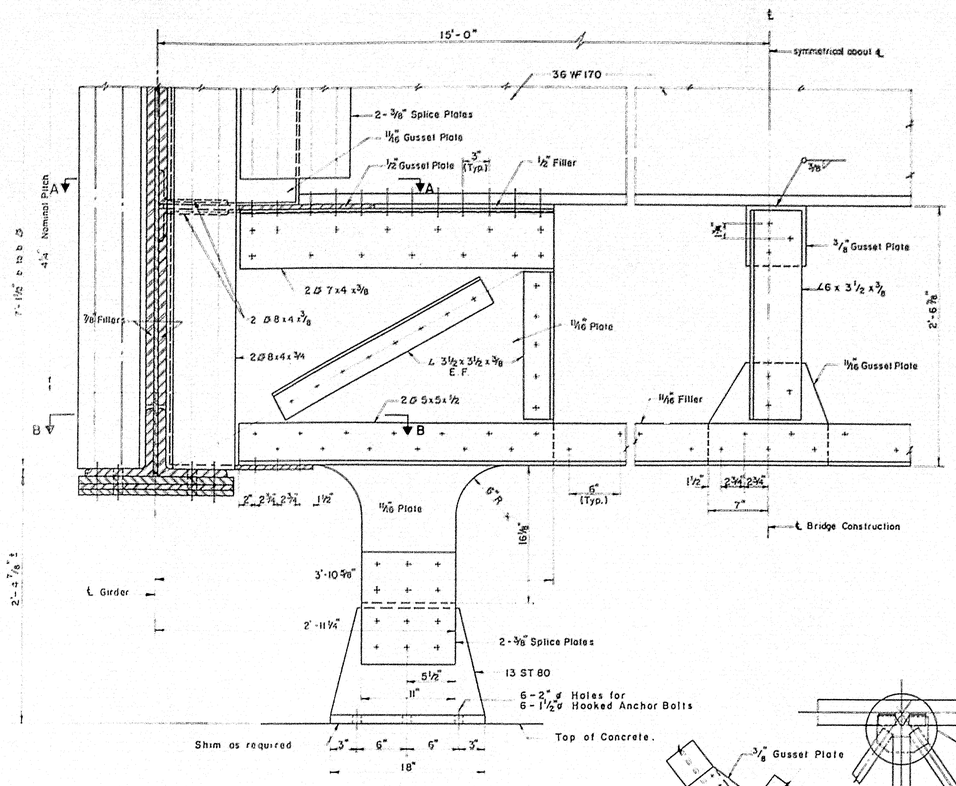
SPLICE DETAILS & SECTIONS

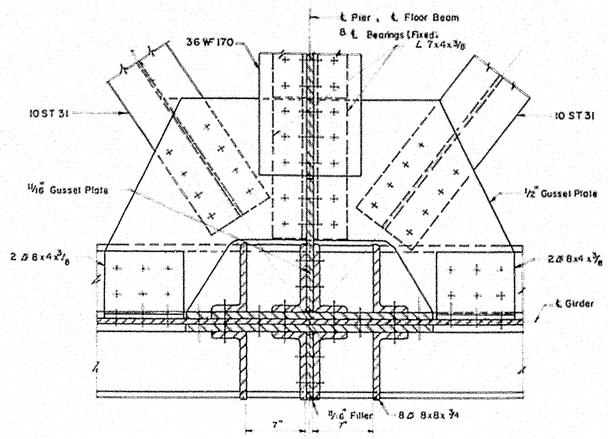
SHEET 19 OF 23 SHEETS AUGUSTA, MAINE

78-191

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	27	32

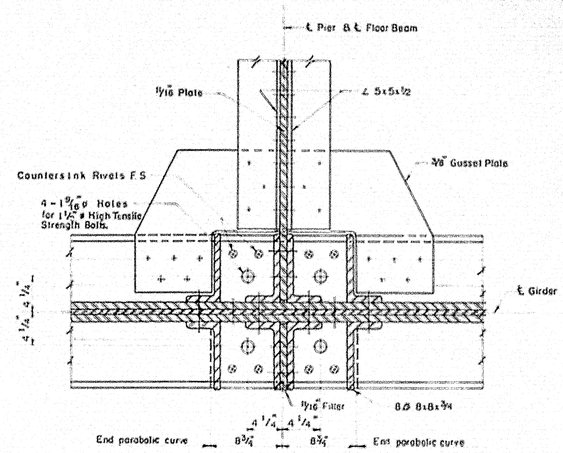
WATERVILLE INTERSTATE





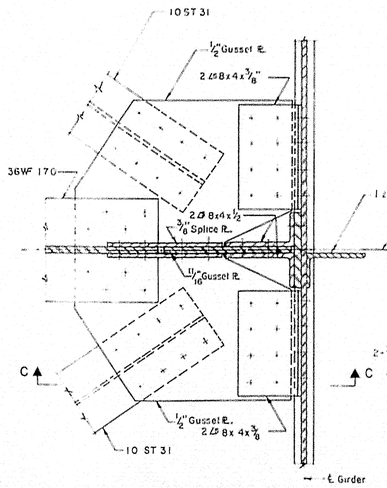
SECTION A-A

Scale: 1 1/2" = 1'-0"



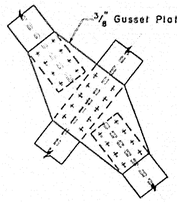
SECTION B-B

Scale: 1 1/2" = 1'-0"



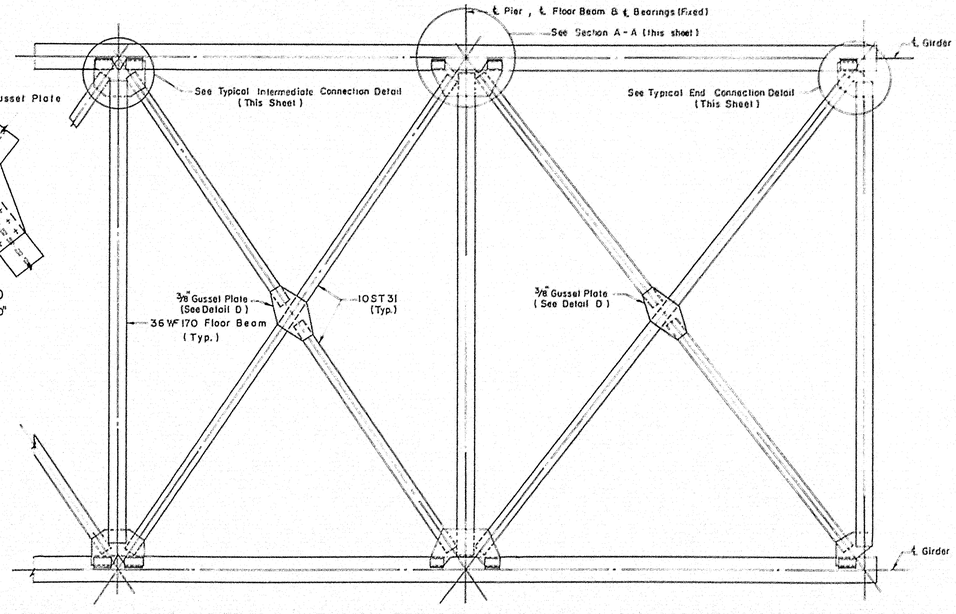
SECTION 2-2

Scale: 1 1/2" = 1'-0"



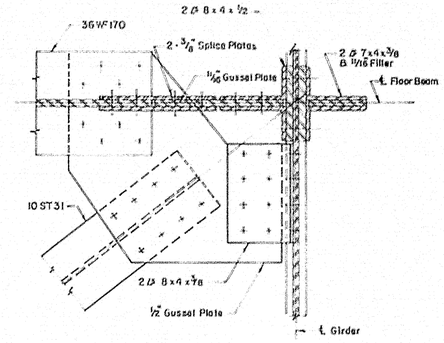
DETAIL D

Scale: 3/4" = 1'-0"



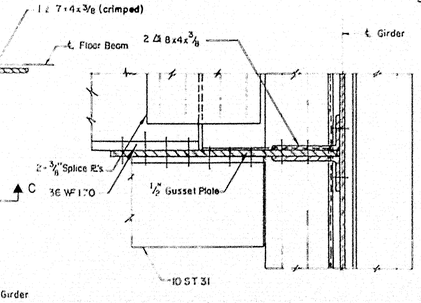
ARRANGEMENT BOTTOM LATERAL BRACING

Scale: 1/4" = 1'-0"



TYPICAL END CONNECTION DETAIL
BOTTOM LATERAL BRACING

Scale 1 1/2" = 1'-0"



SECTION C-C

Scale: 1 1/2" = 1'-0"

TYPICAL INTERMEDIATE CONNECTION DETAIL
BOTTOM LATERAL BRACING

Scale: 1 1/2" = 1'-0"

THE CLARKESON ENGINEERING CO. INC.

DESIGN R F	CHECK J F M	BRIDGE NO SURVEY PLOT
DRAWN E. K.	APPROVE WAH - CJM	

STATE HIGHWAY COMMISSION

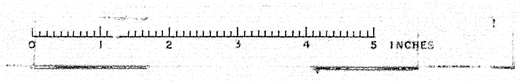
INTERSTATE #95
OVER
MESSALONSKEE STREAM & QUARRY ROAD (RELOC.)

IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

BRACING & CONNECTION DETAILS

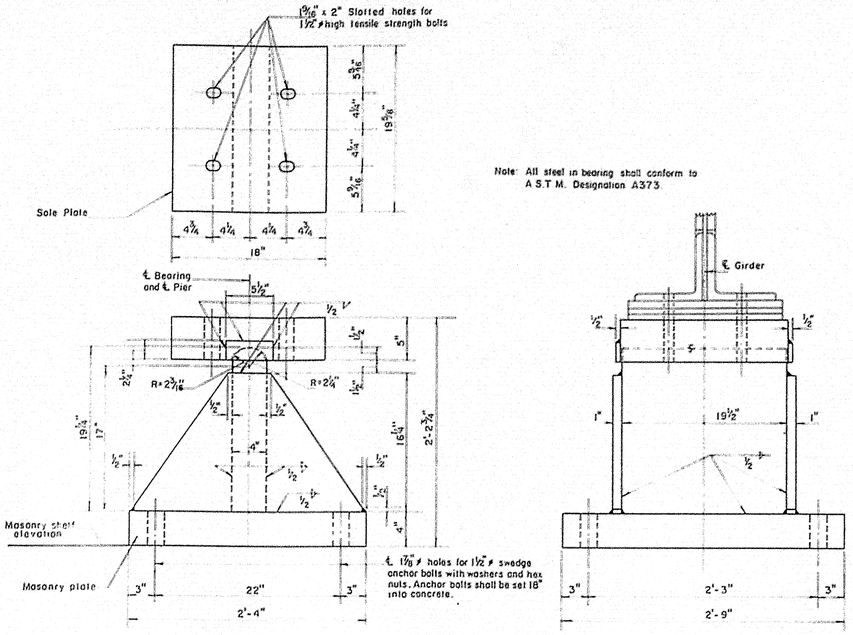
SHEET 20 OF 23 SHEETS — AUGUSTA, MAINE

78-192



B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
	MAINE	I-95-6 (23)	28	32

WATERVILLE INTERSTATE

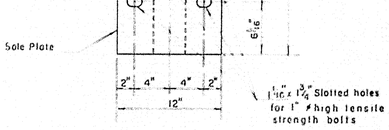


Note: All steel in bearing shall conform to A.S.T.M. Designation A373.

℄ 1⅞" ϕ holes for 1½" ϕ swedge anchor bolts with washers and hex nuts. Anchor bolts shall be set 18" into concrete.

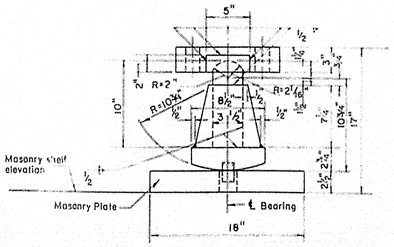
GIRDER FIXED BEARING

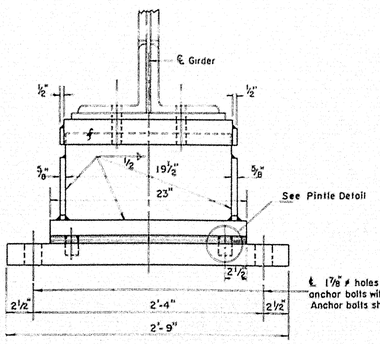
Scale: 1½" = 1'-0"



1¼" x 1¾" Slotted holes for 1" ϕ high tensile strength bolts

Note: All steel in rocker shall conform to A.S.T.M. Designation A373

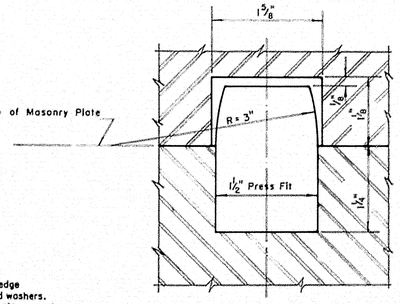




℄ 1⅞" ϕ holes for 1½" ϕ swedge anchor bolts with hex nuts and washers. Anchor bolts shall be set 18" into concrete.

GIRDER EXPANSION BEARING

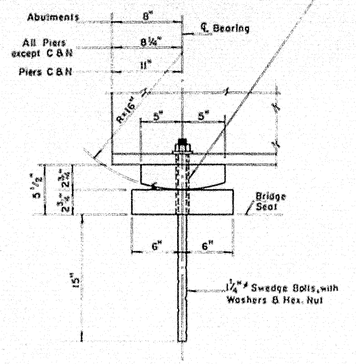
Scale: 1½" = 1'-0"

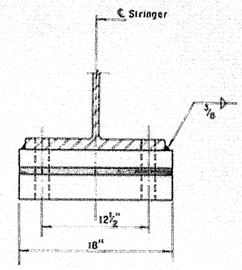


PINTLE DETAIL

Scale: Full Size

Fixed Bearings: Holes in Sole R., Masonry R., & Flange to be 1⅝" ϕ



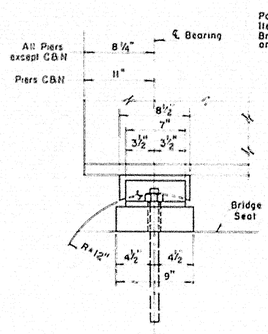


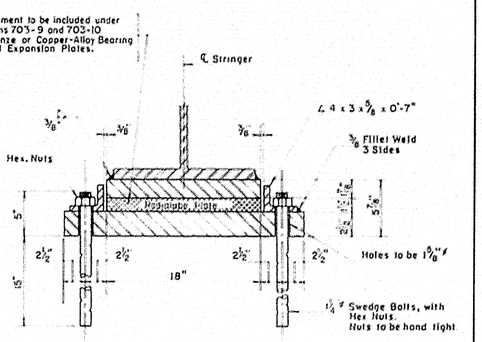
Note: All anchor bolts to be centered true before bearing plates are set in position.

STRINGER SPAN FIXED BEARING DETAIL

Scale: 1½" = 1'-0"

Payment to be included under Items 703-9 and 703-10 Bronze or Copper-Alloy Bearing and Expansion Plates.





STRINGER SPAN EXPANSION BEARING DETAIL

Scale 1½" = 1'-0"

THE CLARKESON ENGINEERING CO., INC.

DESIGN R.F.	CHECK J.I.M.	BRIDGE NO.
DRAWN D.E.S.	APPROVED W.A.S. J.M.	SURVEY
		PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95 OVER MESSALONSKEE STREAM & QUARRY ROAD (RELOC.)

IN THE CITY OF

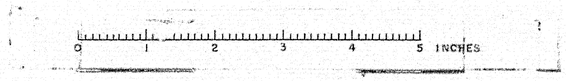
WATERVILLE

KENNEBEC COUNTY

BEARING DETAILS

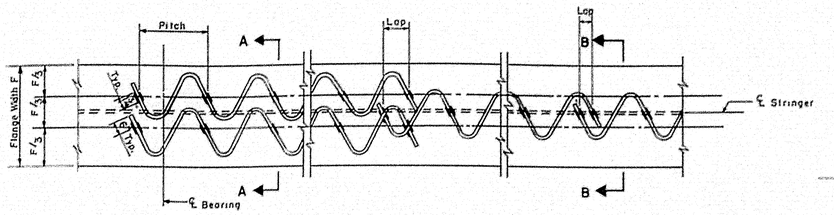
SHEET 21 OF 23 SHEETS AUGUSTA, MAINE

78-193

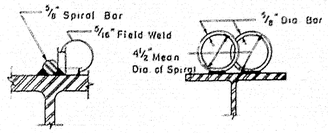


B.P.R. DIV. NO.	STATE	PROJECT NO	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	29	32

WATERVILLE INTERSTATE

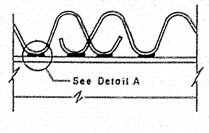


PLAN

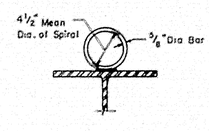


DETAIL A

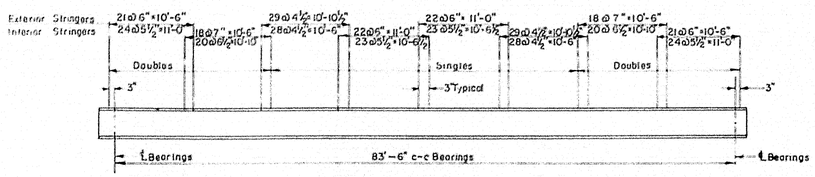
SECTION A-A



ELEVATION



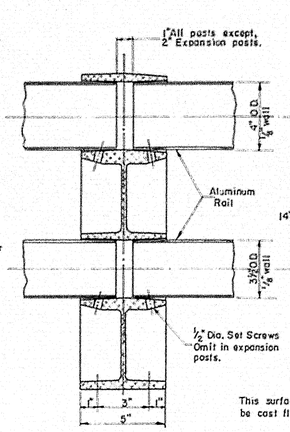
SECTION B-B



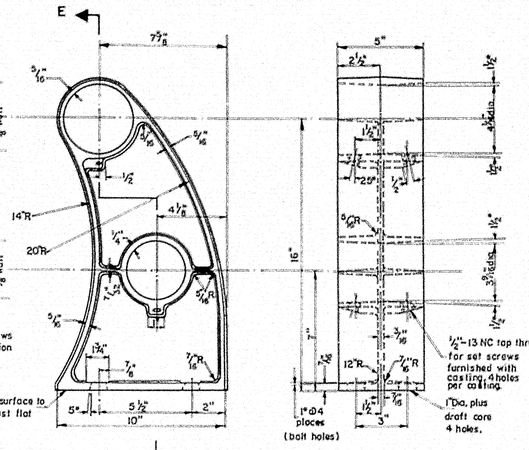
TYPICAL SPIRAL SHEAR CONNECTORS

(DETAILS & LAYOUT)

NOT TO SCALE

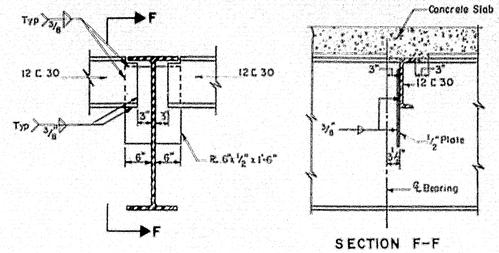


SECTION E-E



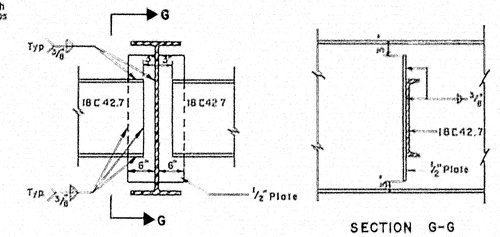
ALUMINUM RAIL DETAIL

Scale: 3"=1'-0"



SECTION F-F

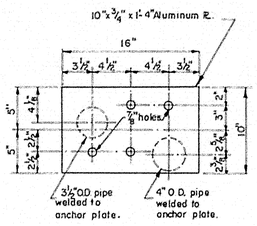
WELDED END DIAPHRAGM CONNECTION

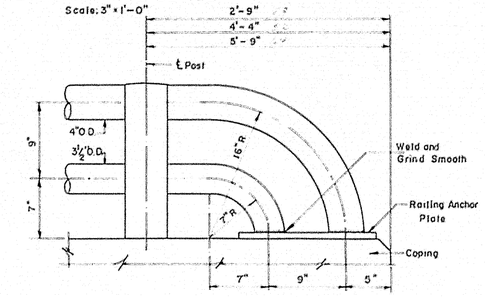


SECTION G-G

WELDED DIAPHRAGM CONNECTION

SCALE: ¾"=1'-0"





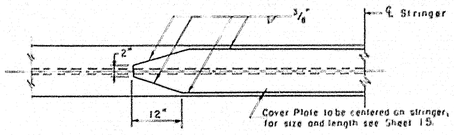
END RAILING DETAIL

Scale: ½"=1'-0"

Notes: 1. Any variation in railing dimensions shall be submitted for approval.

2 All anchor bolts, nuts and washers to be aluminum alloy.

3 All anchor bolts to be ¾"ø bolts set 11" into concrete.



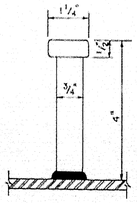
SECTION C-C

PLAN

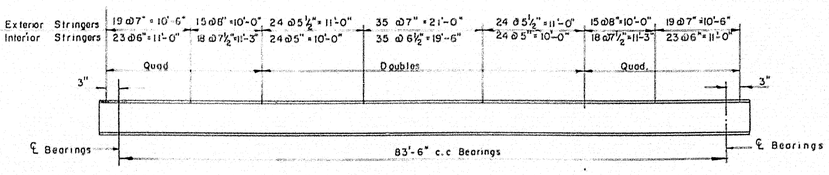
SECTION D-D

COVER PLATE DETAIL

NOT TO SCALE



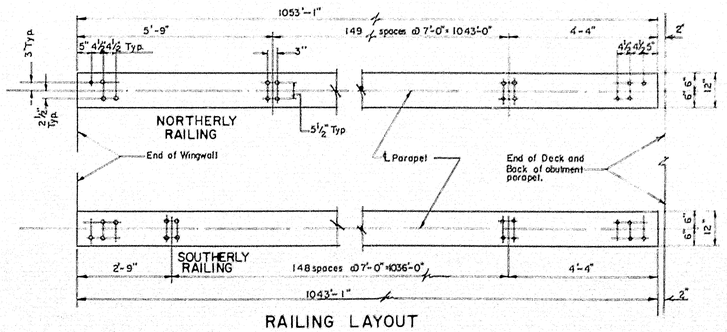
DETAIL B



TYPICAL STUD SHEAR CONNECTORS

(DETAILS & LAYOUT)

NOT TO SCALE



RAILING LAYOUT

Scale: ½"=1'-0"

THE CLARKESON ENGINEERING CO., INC.

DESIGN G.B.	CHECK J.T.S.H.P.	BRIDGE NO. SURVEY
DRAWN R.J.F.	APPROVED WAH-CJM	PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95

OVER

MESSALONSKEE STREAM & QUARRY ROAD (RELOC.)

IN THE CITY OF

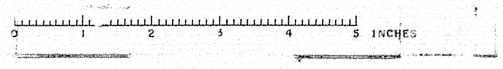
WATERVILLE

KENNEBEC COUNTY

SUPERSTRUCTURE DETAILS

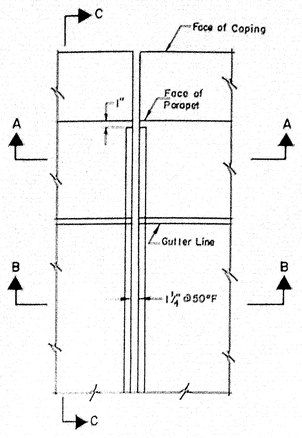
SHEET 22 OF 23 SHEETS AUGUSTA, MAINE

78-194

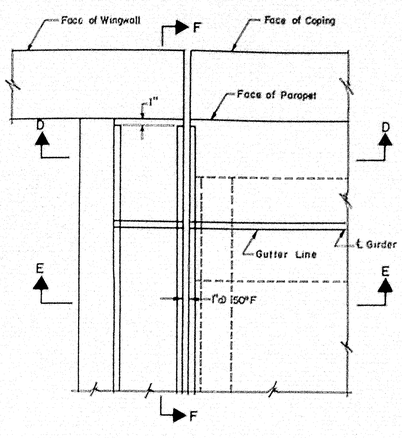


B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6 (23)	30	32

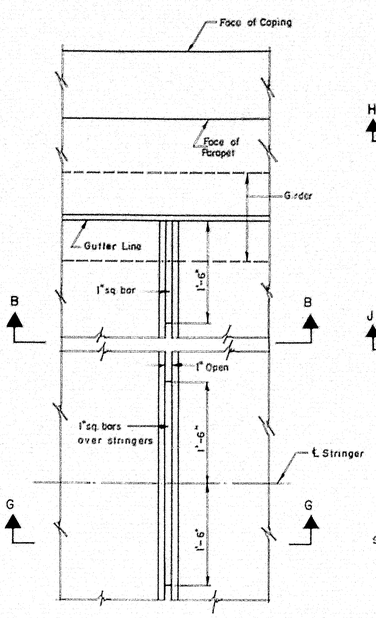
WATERVILLE INTERSTATE



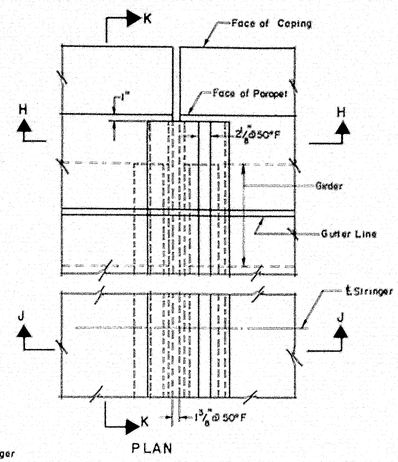
PLAN



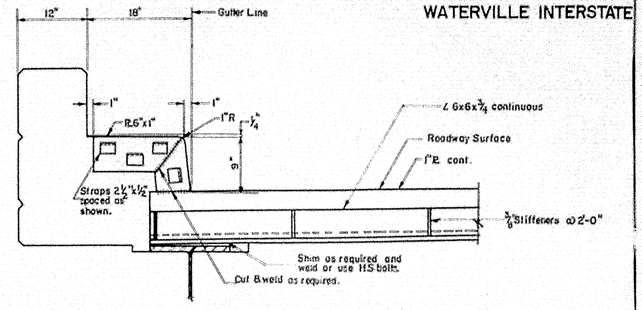
PLAN



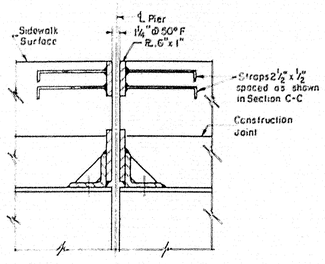
PLAN



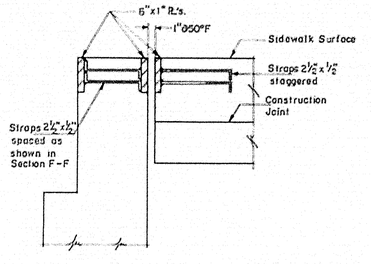
PLAN



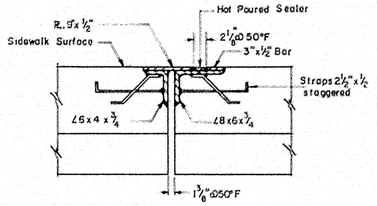
SECTION C-C
Scale 1"=1'-0"



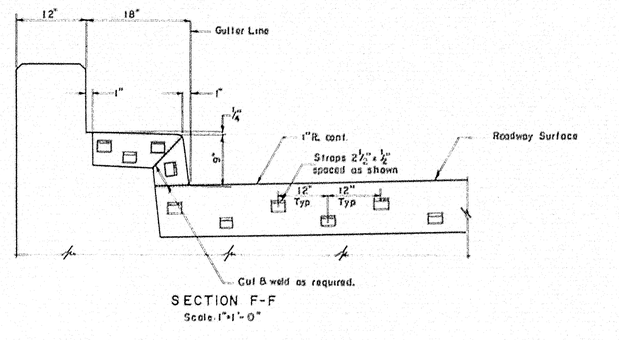
SECTION A-A



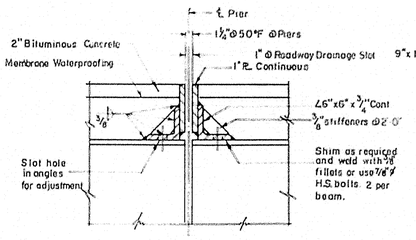
SECTION D-D



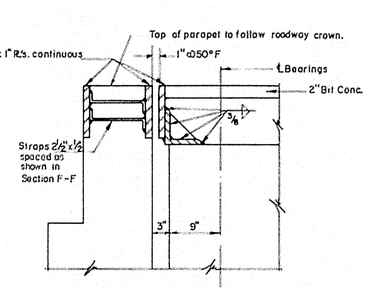
SECTION H-H



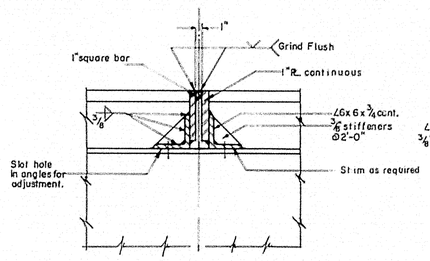
SECTION F-F
Scale 1"=1'-0"



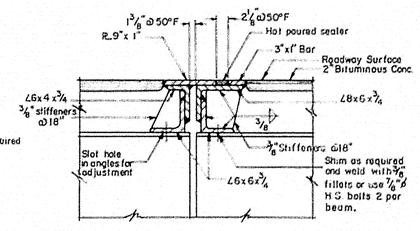
SECTION B-B



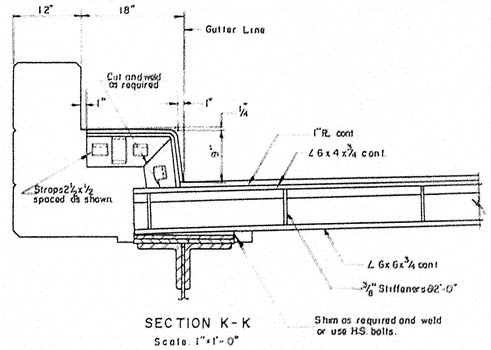
SECTION E-E



SECTION G-G



SECTION J-J



SECTION K-K
Scale 1"=1'-0"

ROADWAY JOINT AT PIERS
Scale 1" = 1'-0"

ROADWAY JOINT AT WESTERLY ABUTMENT
Scale 1" = 1'-0"

ROADWAY DRAINAGE SLOT
Scale 1" = 1'-0"

Note: At drainage slots only 6x6x¾ angles are to be fastened to stringers and girders with ⅞" H.S. bolts.

ROADWAY JOINT AT HINGE
Scale 1" = 1'-0"

Notes: 1. 2" Bituminous Concrete Surfacing and Membrane Waterproofing are not in this contract.
2. All welds to be ⅜" fillets except as noted
3 Shop assemble Roadway Joint at Hinge. Fabricate to follow crown of roadway. Provide shipping device to maintain spacing and alignment. Do not paint sliding contact surfaces; rub with graphite. Same requirements for joint at safety walks.

THE CLARKESON ENGINEERING CO., INC.

DESIGN	CHECK H.P.	S.H.C. NO.
DRAWN D.A.T.	APPROVED WAH - C.J.M.	DATE

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM & QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
ROADWAY JOINTS

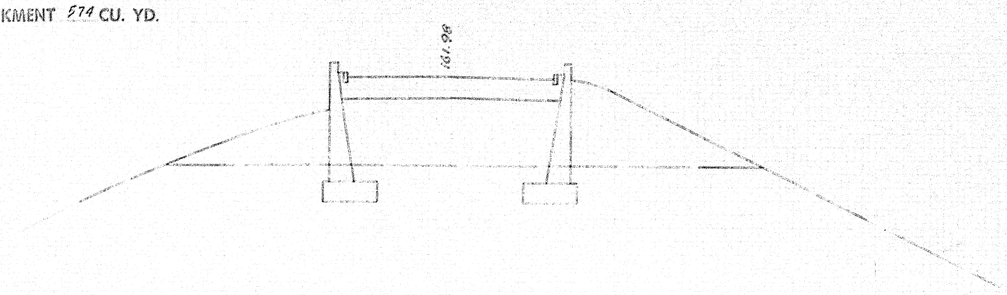
SHEET 23 OF 23 SHEETS — AUGUSTA, MAINE

78-195

0 1 2 3 4 5 INCHES

Southbound
℄

EMBANKMENT 574 CU. YD.

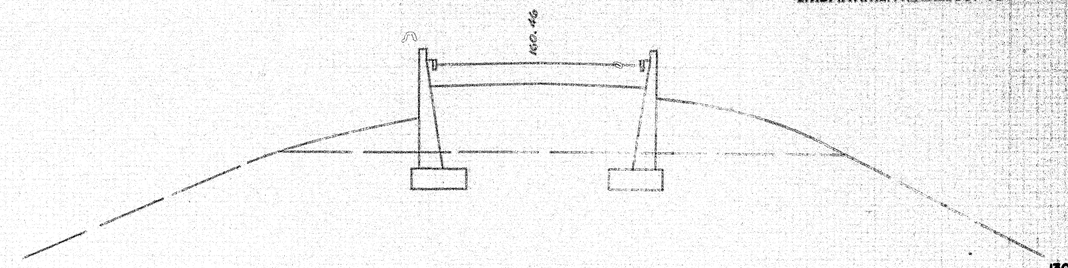


130

1048+50

Northbound
℄

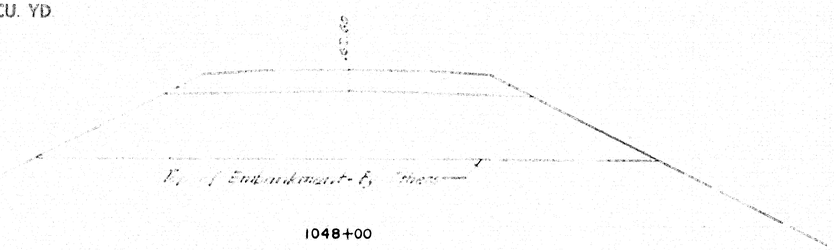
EMBANKMENT 200 CU. YD.



1047+50

130

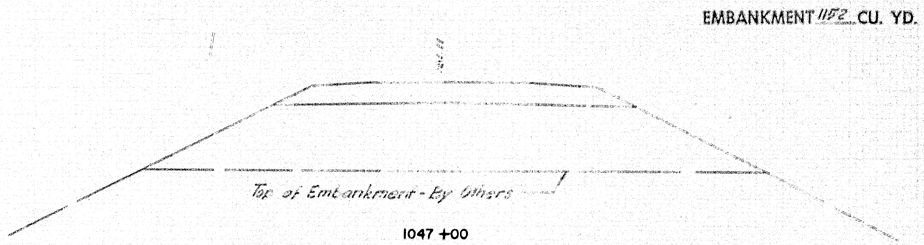
EMBANKMENT 1365 CU. YD.



140

1048+00

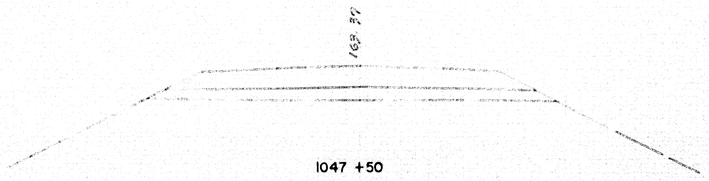
EMBANKMENT 1182 CU. YD.



1047+00

140

EMBANKMENT 739 CU. YD.



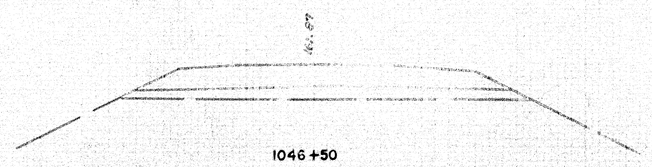
150

1047+50

EMBANKMENT 46 CU. YD.

STA. 1047+00 SOUTHBOUND
LIMIT OF WORK
℄

EMBANKMENT 741 CU. YD.



1046+50

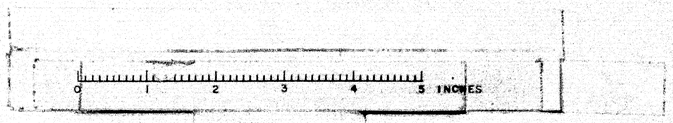
150

STA. 1047+56 NORTHBOUND
BEGIN F.A.P. I-95-6(23) PART 2

STA. 1046+00 NORTHBOUND
LIMIT OF WORK
℄

EMBANKMENT 44 CU. YD.

78-196



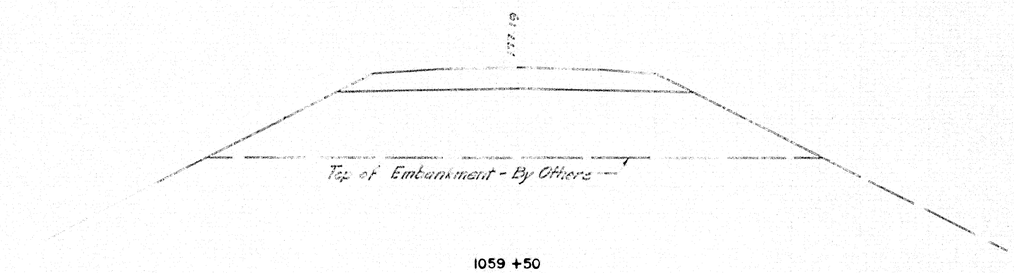
INTERSTATE 95 - WATERVILLE

B. P. R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	28	28

Southbound
℄

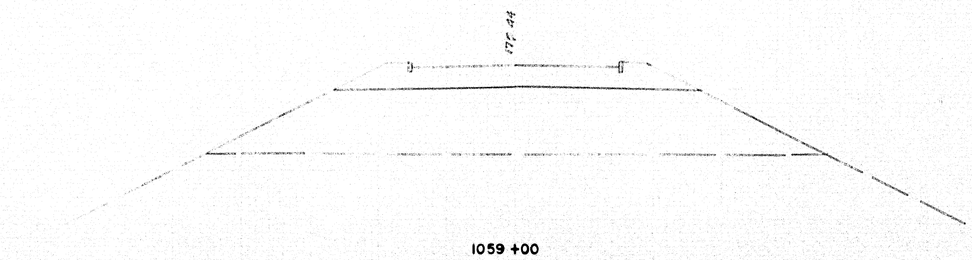
STA. 1061 +00 SOUTHBOUND
LIMIT OF WORK

EMBANKMENT 450 CU. YD.



1059 +50

EMBANKMENT 1287 CU. YD.



1059 +00

EMBANKMENT 255 CU. YD.

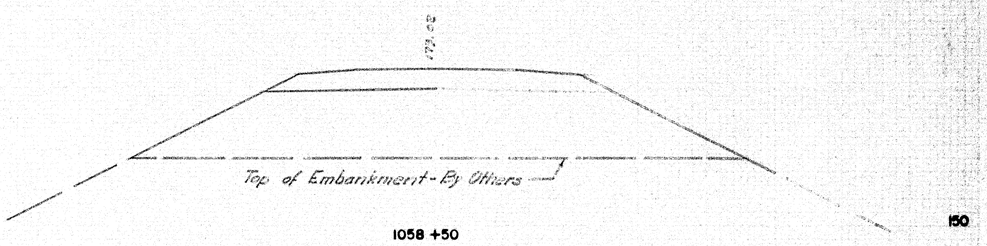
℄

Northbound
℄

STA. 1060 +00 NORTHBOUND
LIMIT OF WORK

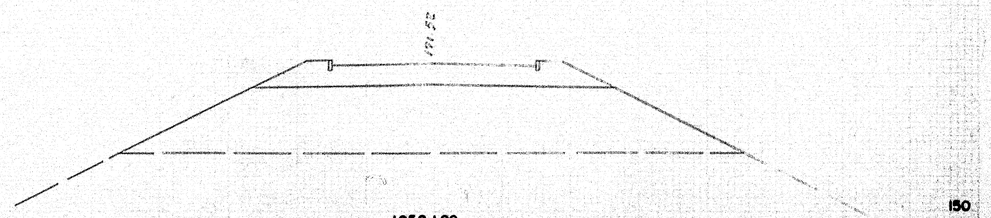
STA. 1057 +80 NORTHBOUND
END F.A.P. I-95-6(23) PART 2

EMBANKMENT 652 CU. YD.



1058 +50

EMBANKMENT 1310 CU. YD.

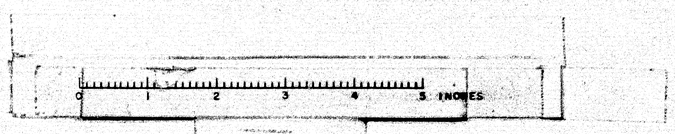


1058 +00

EMBANKMENT 526 CU. YD.

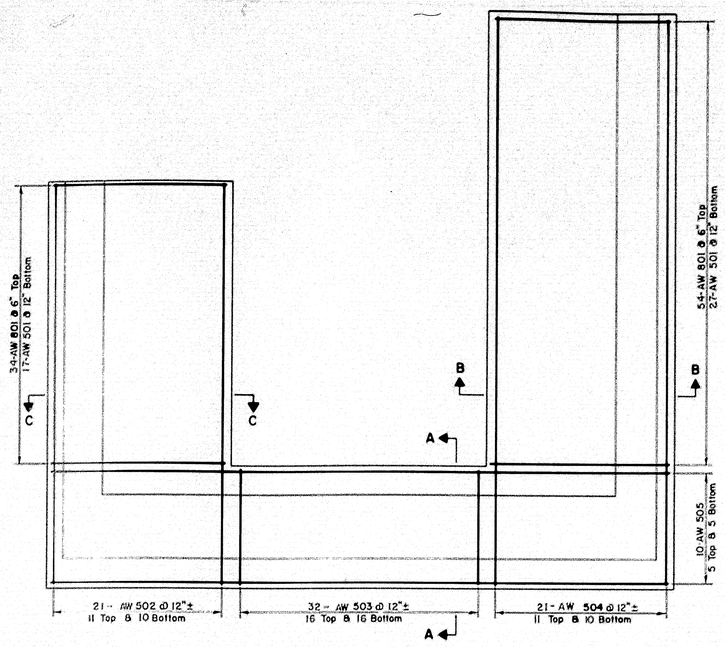
℄

70-197



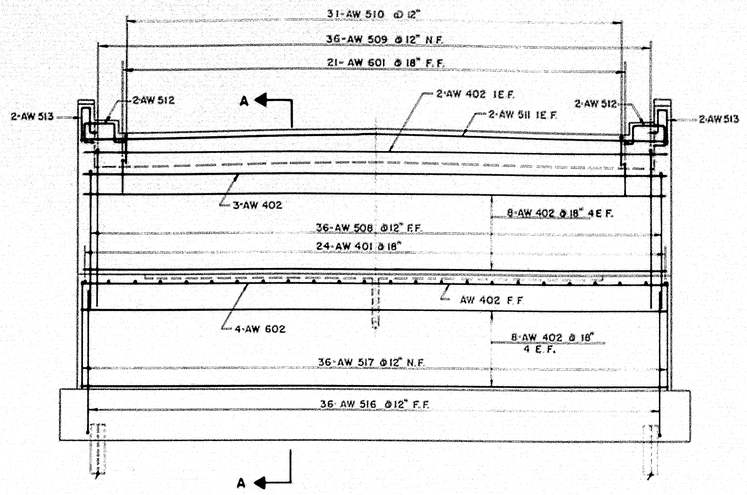
B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)		

WATERVILLE INTERSTATE



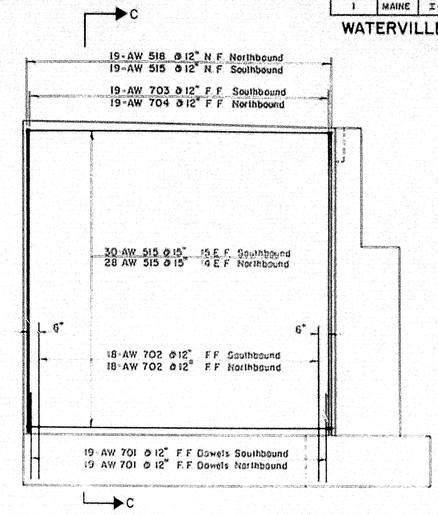
FOOTING REINFORCEMENT WESTERLY ABUTMENTS

Scale: 1/4" = 1'-0"



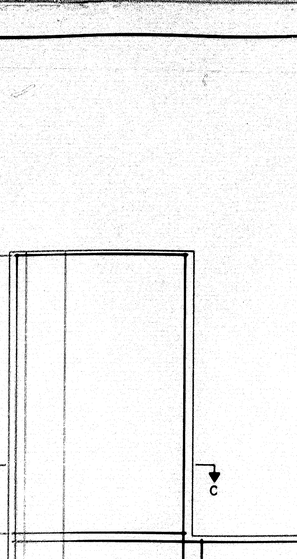
ELEVATION WESTERLY ABUTMENT (NORTHBOUND)

Scale: 1/4" = 1'-0"



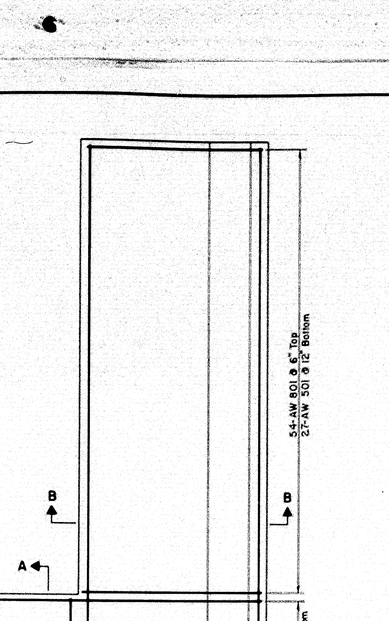
SOUTHERLY WALL REINFORCEMENT

Scale: 1/4" = 1'-0"



SECTION A-A

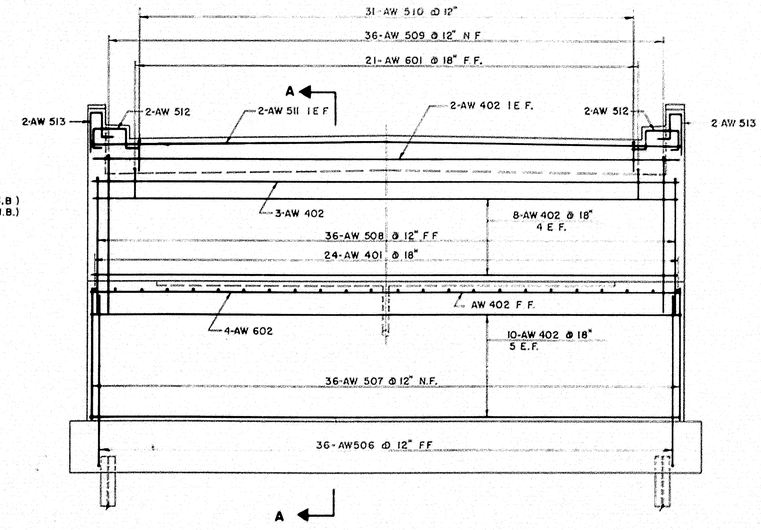
Scale: 3/8" = 1'-0"



SECTION B-B

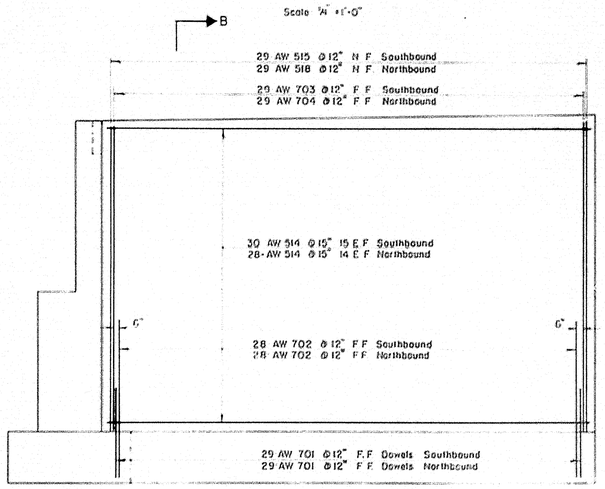
SECTION C-C SIMILAR EXCEPT AS NOTED

Scale 3/8" = 1'-0"



ELEVATION WESTERLY ABUTMENT (SOUTHBOUND)

Scale: 1/4" = 1'-0"



NORTHERLY WALL REINFORCEMENT

Scale: 1/4" = 1'-0"

THE CLARKESON ENG[illegible] CO., INC.

DESIGN H.L.	CHECK H[illegible]
DRAWN E.K.	APPROVED WAH & JM

STATE HIGHWAY [illegible]SION

INTERSTATE #95
OVER
MESSALONSKEE STREAM & QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

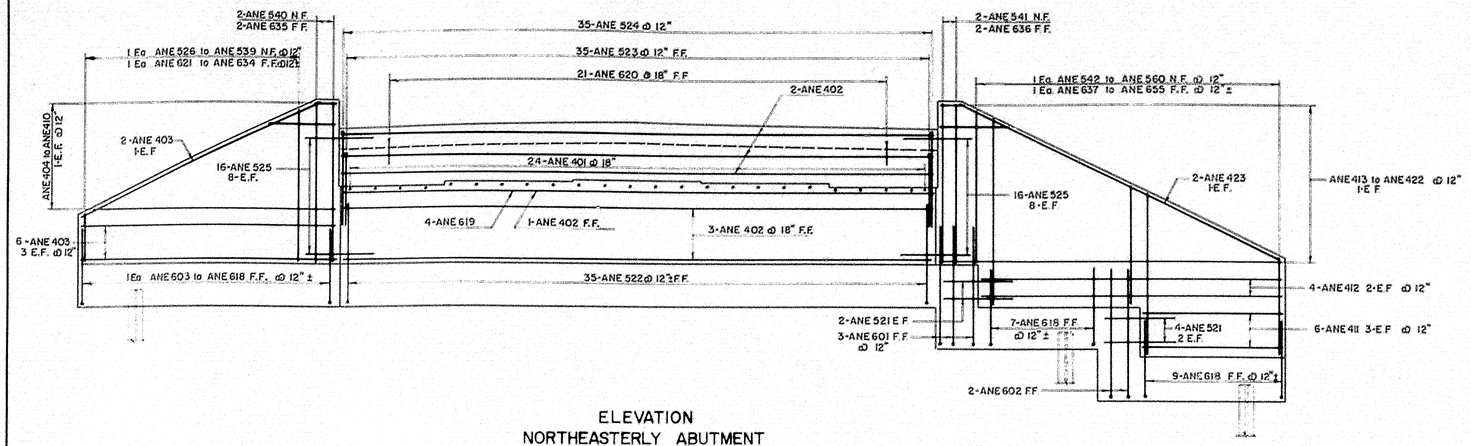
ABUTMENT REINFORCEMENT

SHEET 1 OF 13 SHEETS AUGUSTA, MAINE

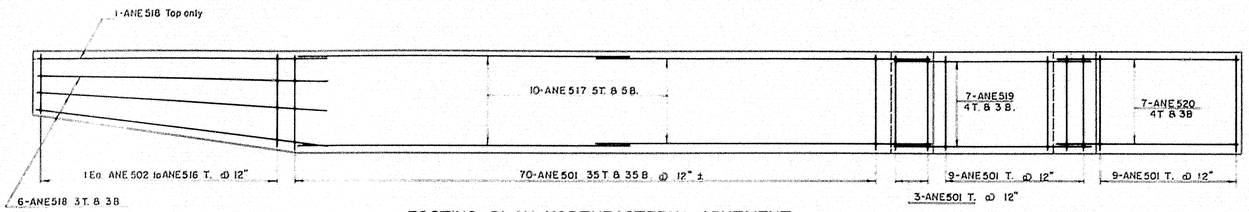
78-198

N.P.P. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6 (23)		

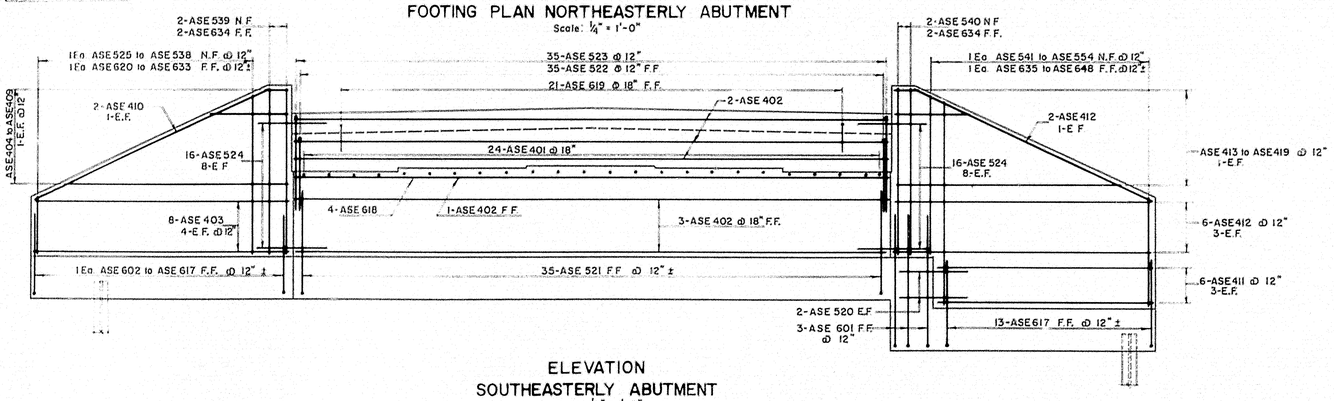
WATERVILLE INTERSTATE



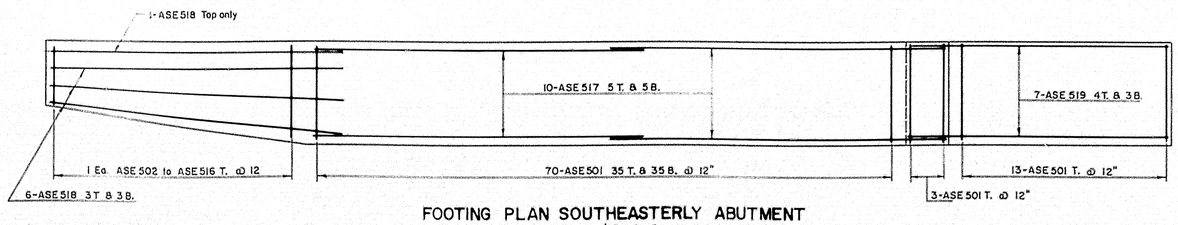
ELEVATION
NORTHEASTERLY ABUTMENT
Scale: ¼" = 1'-0"



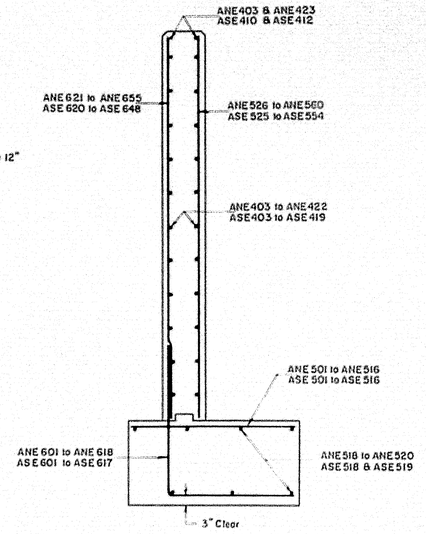
FOOTING PLAN NORTHEASTERLY ABUTMENT
Scale: ¼" = 1'-0"



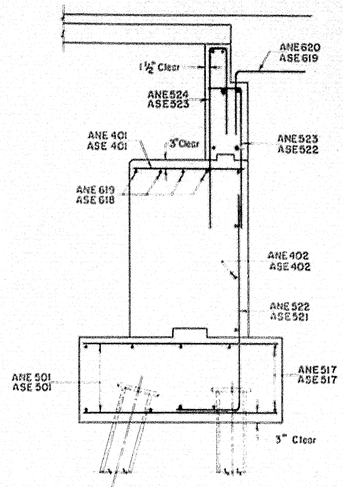
ELEVATION
SOUTHEASTERLY ABUTMENT
Scale: ¼" = 1'-0"



FOOTING PLAN SOUTHEASTERLY ABUTMENT
Scale: ¼" = 1'-0"



TYPICAL WINGWALL SECTION
Scale ½" = 1'-0"



TYPICAL ABUTMENT SECTION
Scale ½" = 1'-0"

Note: Reinforcing cover to be 2" unless otherwise noted.

THE CLARKESON ENGINEERING CO., INC.

DESIGN H.L. & H.P.	CHECK [illegible]	SURVEY NO.
DRAWN S.A.L.	APPROVED [illegible]	SURVEY

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM
& QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
ABUTMENT REINFORCEMENT

SHEET 2 OF 13 SHEETS AUGUSTA, MAINE

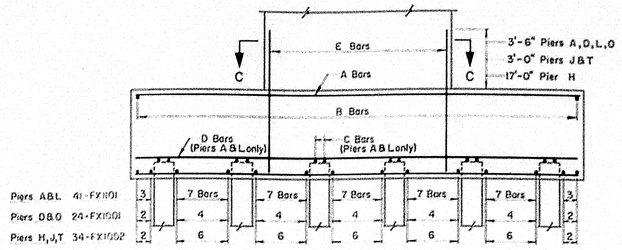
78-199

K+E FLORENCE MASS. 183 @ YOUNG PRINTS 44196

0 1 2 3 4 5 INCHES

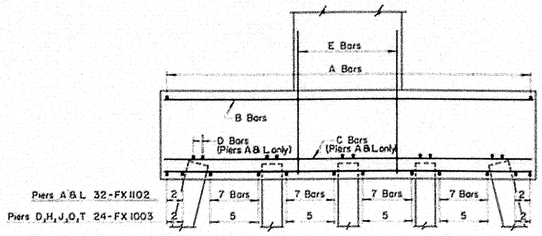
B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)		

WATERVILLE INTERSTATE



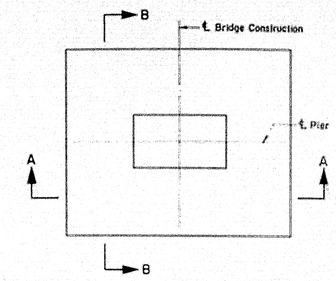
SECTION A-A PIERS A,D,H,J,L,O & T

Scale 1/4" = 1'-0"



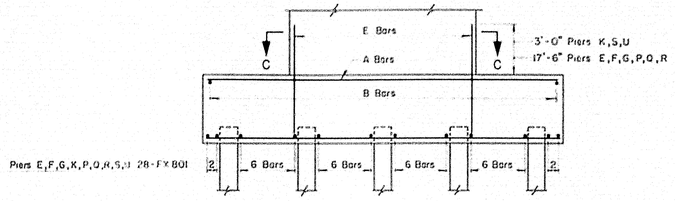
SECTION B-B PIERS A,D,H,J,L,O & T

Scale 1/4" = 1'-0"



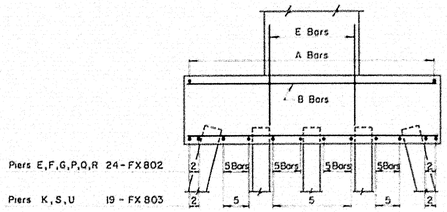
FOOTING PLAN

Scale 1/8" = 1'-0"



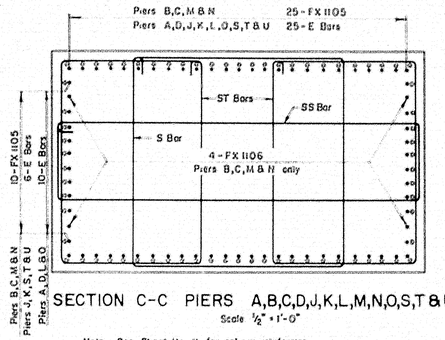
SECTION A-A PIERS E,F,G,K,P,Q,R,S & U

Scale 1/4" = 1'-0"



SECTION B-B PIERS E,F,G,K,P,Q,R,S & U

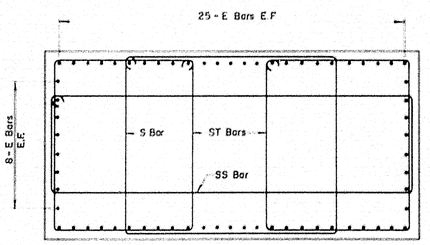
Scale 1/4" = 1'-0"



SECTION C-C PIERS A,B,C,D,J,K,L,M,N,O,S,T & U

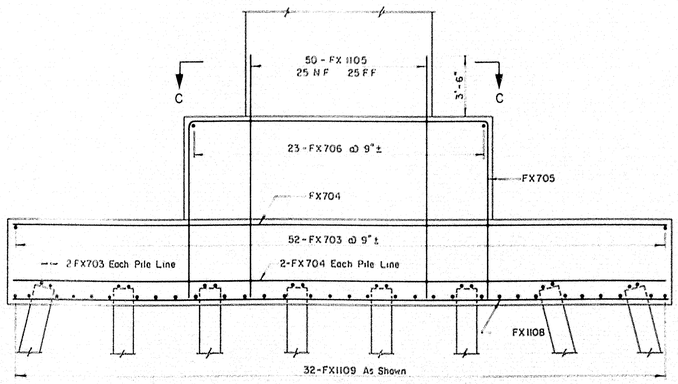
Scale 1/2" = 1'-0"

Note See Sheet No 11 for column reinforcing



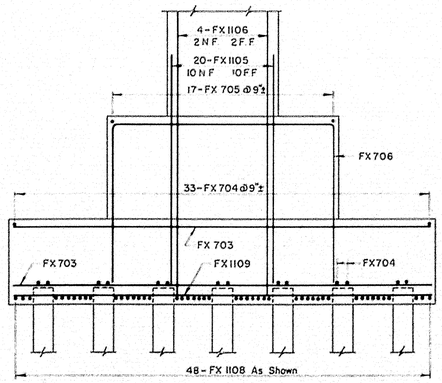
SECTION C-C PIERS E,F,G,H,P,Q & R

Scale 1/2" = 1'-0"



SECTION A-A PIERS B,C,M & N

Scale 1/4" = 1'-0"



SECTION B-B PIERS B,C,M & N

Scale 1/4" = 1'-0"

FOOTING BAR SCHEDULE

PIER	A Bars	B Bars	C Bars	D Bars	E Bars
A,L	17-FX804	21-FX805	6x2-FX707	5x2-FX708	70-FX1103
D,O	17-FX501	23-FX502	——	——	70-FX1104
H	19-FH701	23-FH702	——	——	66-FH1006
J,T	19-FX701	23-FX702	——	——	62-FX1005
E,F,G,P,Q,R	15-FX503	21-FX504	——	——	66-FX1006
K,S,U	15-FX505	19-FX504	——	——	62-FX1004

Notes

1. In bar number, letter "X" to be replaced by Pier letter. Ex. FA, FB etc.
2. Cover in footing and pedestals to be 3".
3. Cover for vertical bars in columns to be 3".
4. See Sheet No. 11 for bar lists.

THE CLARKESON ENG[illegible] INC.

DESIGN C.J.M. CHECK H.P.

DRAWN A.L. APPROVED WA[illegible]

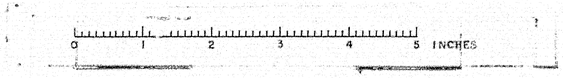
STATE HIGHWAY [illegible]

INTERSTATE #95
OVER
MESSALONSKEE STREAM & QUARRY ROAD (RELOC.)

IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
PIER FOOTINGS

SHEET 3 OF 13 SHEETS AUGUSTA, MAINE

78-200

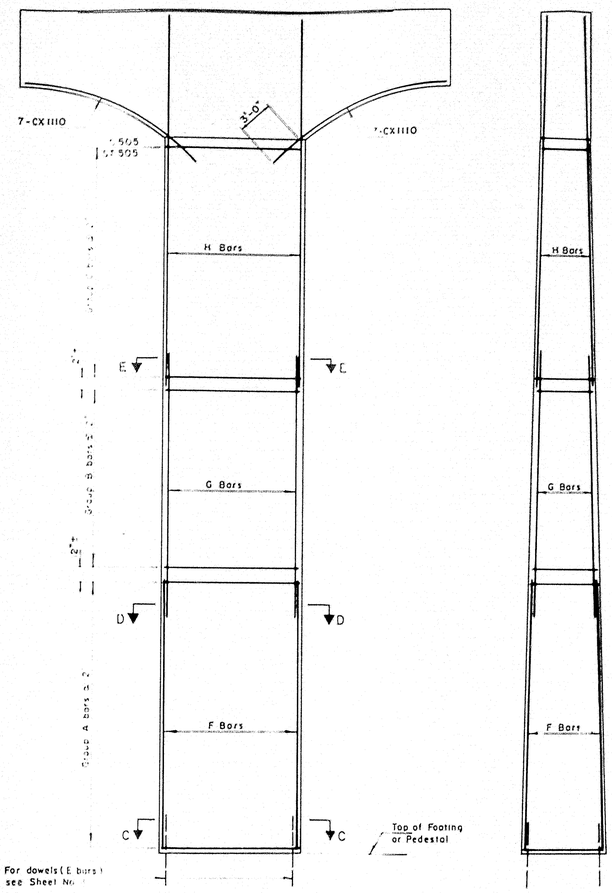


B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)		

WATERVILLE INTERSTATE

PIER COLUMN REINFORCEMENT

PIER	F Bars	G Bars	H Bars	Group A Bars	Group B Bars	Group C Bars
A	70-CA1107	66-CA1006	62-CA1007	1 Each S534 to S544 2Each ST534 to ST544 21-SS501	1 Each S514 to S528 2Each ST514 to ST528 15-SS500	1 Each S505 to S518 2 Each ST505 to ST518 14 - SS501
B	70-CB1107	66-CB1006	62-CB1008	1 Each S537 to S557 2 Each ST537 to ST557 21- SS501	1 Each S518 to S532 2 Each ST518 to ST532 15-SS500	1 Each S505 to S521 2 Each ST505 to ST521 17 - SS501
C	70-CC1107	66-CC1006	62-CC1013	1 Each S539 to S559 2 Each ST539 to ST559 21 - SS501	1 Each S519 to S533 2 Each ST519 to ST533 15- SS 500	1 Each S505 to S523 2 Each ST505 to ST523 19 - SS501
D	70-CD1107	66 CD1006	62-CD1007	1 Each S533 to S553 2 ST533 to ST553 21 - SS501	1Each S513 to S527 2 ST513 to ST527 15-SS500	1 Each S505 to S517 2 ST505 to ST517 13 - SS501
E	62 CE1010	——	——	1 Each S519 to S535 2 ST519 to ST535 17 - SS501	1 Each S500 to S513 2 ST500 to ST513 14 - SS500	——
F	62-CF1009	——	——	1 Each S516 to S532 2 ST516 to ST532 17 - SS501	1 Each S500 to S509 2 ST500 to ST509 10-SS500	——
G	62-CG1010	——	——	1 Each S519 to S535 2 ST519 to ST535 17 - SS501	1 Each S500 to S513 2 ST500 to ST513 14 - SS500	——
H	62-CH1012	——	——	1 Each S514 to S530 2 ST514 to ST530 17 - SS501	1 Each S500 to S507 2 ST500 to ST507 8 - SS500	——
J	62-CJ1013	——	——	1 Each S505 to S524 2 ST505 to ST524 20-SS501	——	——
K	62-CK1002	——	——	1 Each S505 to S512 2 ST505 to ST512 8 - SS501	——	——
L	70-CL1107	66-CL1006	62-CL1009	1 Each S532 to S552 2 ST532 to ST552 21-SS501	1 Each S513 to S527 2 ST513 to ST527 15 - SS500	1 Each S505 to S516 2 ST505 to ST516 12 - SS501
M	70-CM1107	66-CM1006	62-CM1011	1 Each S535 to S555 2 ST535 to ST555 21 - SS501	1 Each S516 to S530 2 ST516 to ST530 15- SS500	1 Each S505 to S519 2 ST505 to ST519 15 - SS501
N	70-CN1107	66-CN1006	62-CN1010	1 Each S537 to S557 2 ST537 to ST557 21 - SS501	1 Each S518 to S532 2 ST518 to ST532 15 - SS500	1 Each S505 to S521 2 ST505 to ST521 17 - SS501
O	70-CO1107	66-CO1006	62-CO1006	1 Each S530 to S550 2 ST530 to ST550 21 - SS501	1 Each S511 to S525 2 ST511 to ST525 15 - SS500	1 Each S505 to S514 2 ST505 to ST514 10 - SS501
P	62-CP1009	—	——	1 Each S516 to S532 2 ST516 to ST532 17 - SS501	1 Each S500 to S509 2 ST500 to ST509 10 - SS500	——
Q	62-CQ1009	—	——	1 Each S515 to S531 2 ST515 to ST531 17 - SS501	1 Each S500 to S508 2 ST500 to ST508 9 - SS500	——
R	62-CR1011	——	——	1 Each S518 to S534 2 ST518 to ST534 17 - SS501	1 Each S500 to S512 2 ST500 to ST512 13 - SS500	——
S	62-CS1008	—	——	1 Each S505 to S521 2 ST505 to ST521 17 - SS501	——	——
T	62-CT1008	—-	—	1 Each S505 to S521 2 ST505 to ST521 17 - SS501	——	——
U	62-CU1014	—	——	1 Each S505 to S508 2 ST505 to ST508 4 - SS501	——	——

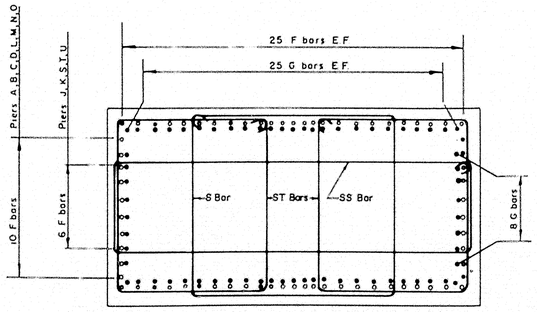


PIERS A, B, C, D, J, K, L, M, N, O, S, T, U

Scale $\frac{3}{16}$" = 1'-0"

Notes: For Section C-C, see Sheet No. 3

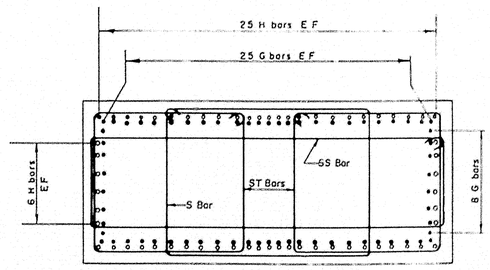
... for main reinforcing to be 3"



Note: 1-S bar, 1-SS bar, and 2-ST bars to be placed in one layer. Layers to be at 12" ± o.c.

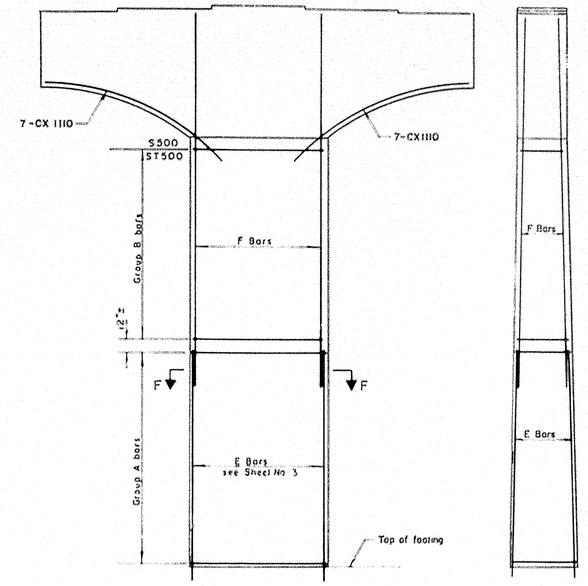
SECTION D-D

Scale: $\frac{1}{2}$" = 1'-0"



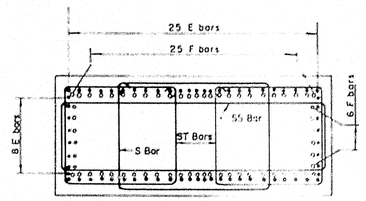
SECTION E-E

Scale: $\frac{1}{2}$" = 1'-0"



PIERS E, F, G, H, P, Q, R

Scale $\frac{3}{16}$" = 1'-0"



SECTION F-F

Scale $\frac{3}{8}$" = 1'-0"

THE CLARKESON ENGINEERING CO., INC.

DESIGN C J M	CHECK	DRAWING NO.
DRAWN D E S	APPROVED W.	SURVEY

STATE HIGHWAY COMMISSION

INTERSTATE #95

MESSALONSKEE STREAM & QUARRY ROAD (RELOC.)

IN THE CITY OF

WATERVILLE

KENNEBEC COUNTY

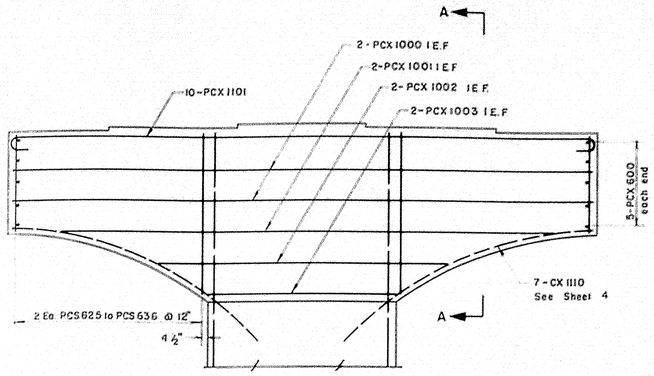
PIER CAP REINFORCEMENT

SHEET 4 OF 13 SHEETS AUGUSTA, MAINE

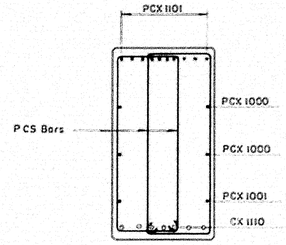
78-201

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)		

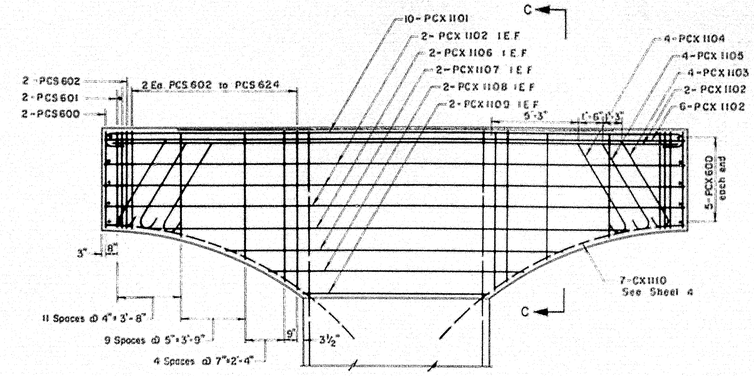
WATERVILLE INTERSTATE



CAP REINFORCEMENT
PIERS D,E,F,G,H,J,K,O,P,Q,R,S,T & U
Scale ¼" = 1'-0"



SECTION A-A
Scale ⅜" = 1'-0"



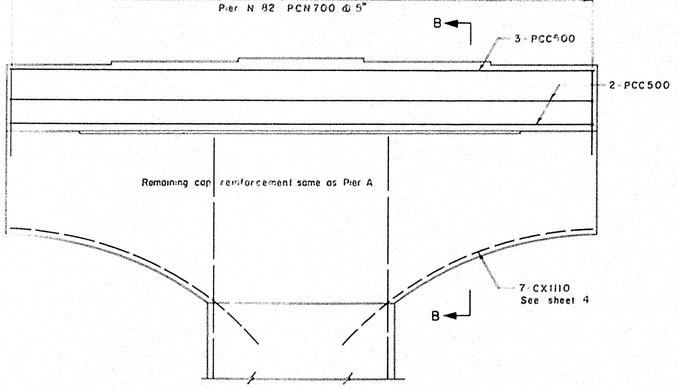
CAP REINFORCEMENT
PIERS A,B,L & M
Scale ¼" = 1'-0"

Notes

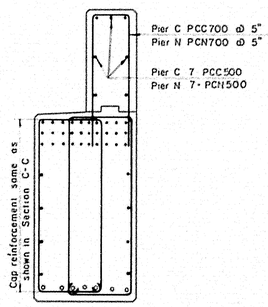
1 For main reinforcement, "X" in bar number to be replaced by pier letter Ex PCA, PCB, etc

2 For column bars, see Sheet No 4

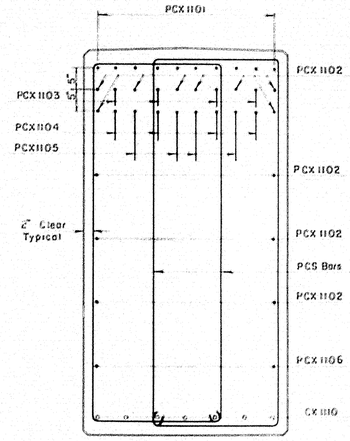
3 Reinforcing steel symmetrical about ℄ Pier



CAP REINFORCEMENT
PIERS C & N
Scale ¼" = 1'-0"



SECTION B-B
Scale ⅜" = 1'-0"



SECTION C-C
Scale ¾" = 1'-0"

THE CLARKESON ENGIN... INC.

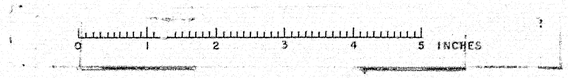
DESIGN C J M	CHECK H P
DRAWN A L	APPROVED WAH C JM

STATE HIGHWAY C...

INTERSTATE #95
OVER
MESSALONSKEE STREAM
& QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
PIER CAP REINFORCEMENT

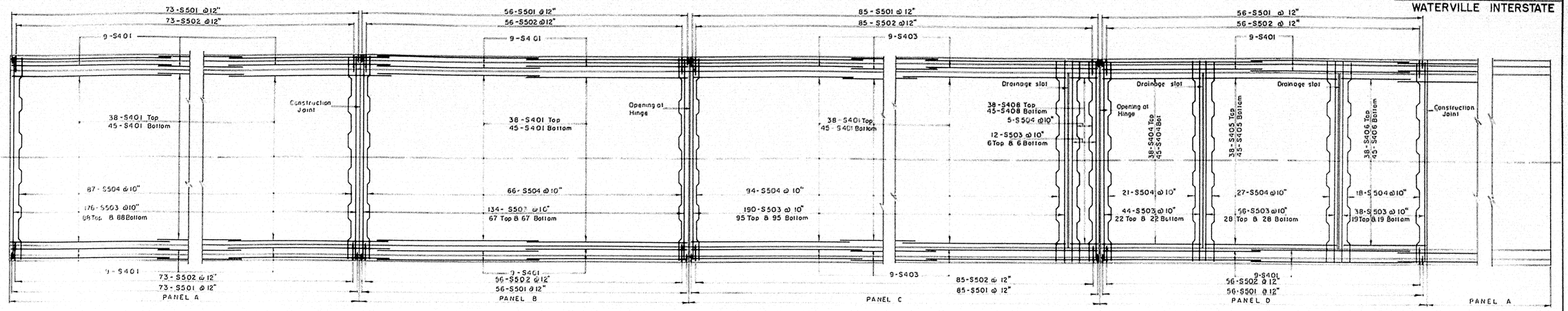
SHEET 5 OF 13 SHEETS AUGUSTA, MAINE

78-202



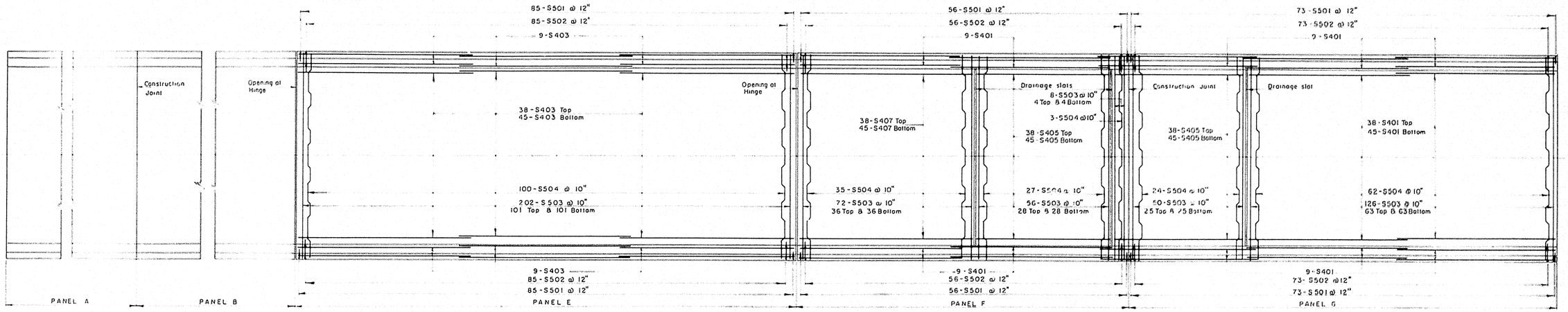
B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)		

WATERVILLE INTERSTATE



GIRDER SPANS 1, 2, & 3

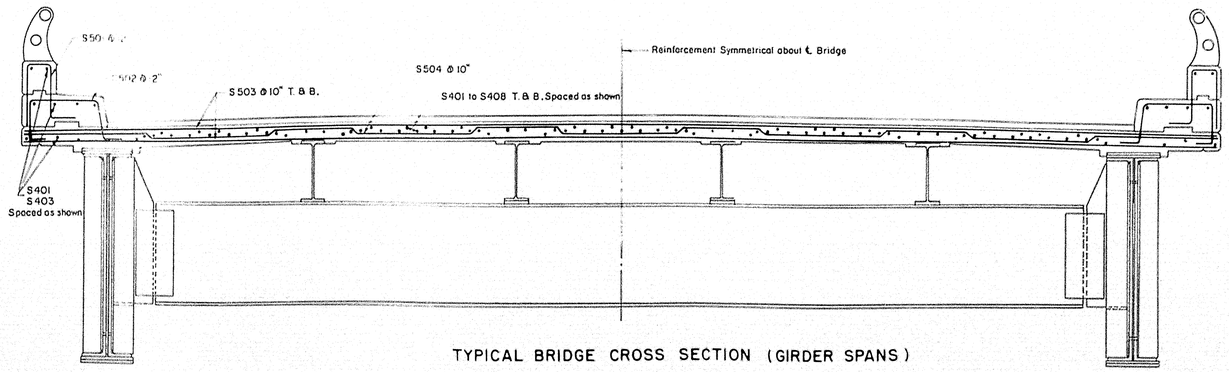
Scale 1/8" = 1'-0"



GIRDER SPANS 12, 13, & 14

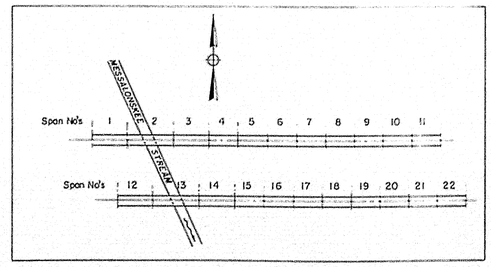
Scale 1/8" = 1'-0"

Notes 1 Longitudinal bars lapped 2'-0"±
2 Field cut bars to clear scuppers



TYPICAL BRIDGE CROSS SECTION (GIRDER SPANS)

Scale. 1/2" = 1'-0"



KEY PLAN

No Scale

THE CLARKESON ENGINEERING CO., INC.

DESIGN H L	CHECK H P	BRIDGE NO. SURVEY
DRAWN D A T	APPROVED W. A. C.	LINE PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM
& QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
DECK SLAB REINFORCEMENT

SHEET 6 OF 13 SHEETS AUGUSTA, MAINE

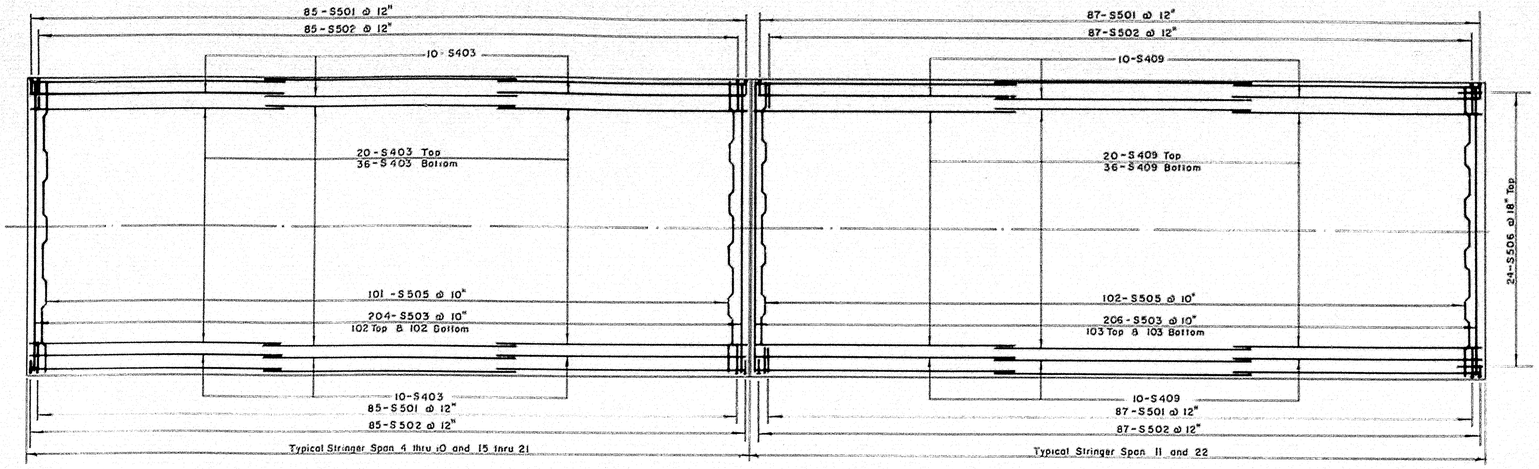
78-203

K-E PHOENIX BLVD. 188 © 1966 KEUFFEL & ESSER 44740

0 1 2 3 4 5 INCHES

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)		

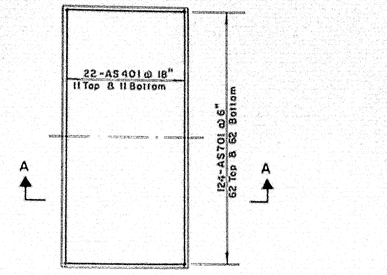
WATERVILLE INTERSTATE



STRINGER SPANS

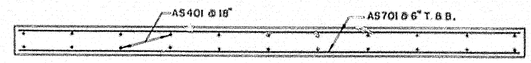
Scale $\frac{1}{8}$" = 1'-0"

Notes: 1. Longitudinal bars lapped 2'-0"±
2 Field cut bars to clear scuppers.



PLAN

Scale $\frac{1}{8}$" = 1'-0"

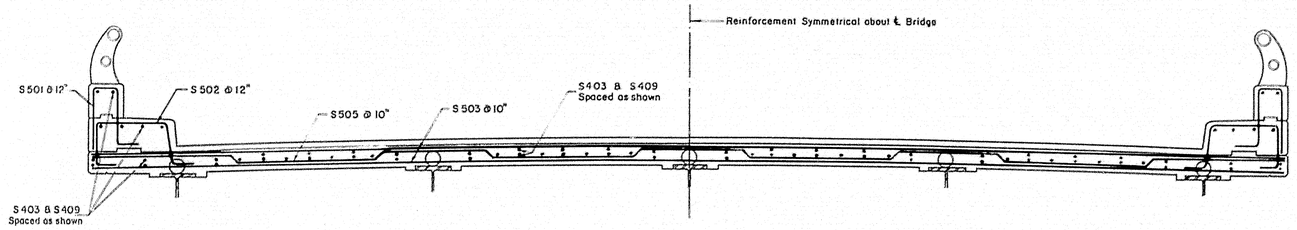


SECTION A-A

TYPICAL APPROACH SLAB REINFORCEMENT

Scale $\frac{1}{2}$" = 1'-0"

Note. 4 approach slabs required.



TYPICAL BRIDGE CROSS SECTION (STRINGER SPANS)

Scale $\frac{1}{2}$" = 1'-0"

PLAN

TYPICAL SCUPPER REINFORCEMENT

Scale $\frac{1}{2}$" = 1'-0"

THE CLARKESON ENGI[illegible] INC.

DESIGN H L	CHECK H.P
DRAWN D.E.S.	APPROVED W.A.H.-C.J.M.

STATE HIGHWAY [illegible]

INTERSTATE #95
OVER
MESSALONSKEE STREAM
& QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

DECK & APPROACH SLAB REINFORCEMENT

SHEET 7 OF 13 SHEETS AUGUSTA, MAINE

78-204

Item	No. Pieces	Size	Length	Mark	Type	A	B	C	D	E	F	G	H	J	K	R	O
1				WESTERLY ABUTMENT (SOUTHBOUND)													
2			FOOTING														
3																	
4	44	5	10'-8"	AW501	Str												
5	21	1	23'-8"	AW502	1												
6	32		6'-11"	AW503													
7	21		33'-8"	AW504	1												
8	10	1	36'-8"	AW505	Str												
9	36	5	12'-0"	AW506	20		2'-0"	10'-0"									
10																	
11	48	7	5'-3"	AW701	Str												
12	46	7	9'-3"	AW702	Str												
13																	
14	88	8	10'-8"	AW801	Str												
15																	
16																	
17																	
18			ABUTMENT STEM														
19																	
20	24	4	3'-5"	AW401	Str												
21	24	4	34'-8"	AW402	Str												
22																	
23	36	5	8'-0"	AW507	Str												
24	36	1	9'-5"	AW508	20		1'-2"	8'-3"									
25	36	1	12'-8"	AW509	17		9'-6"	0'-8"	2'-6"								
26	31		4'-6"	AW510	17		2'-0"	0'-6"	2'-0"								
27	2		34'-8"	AW511	Str												
28	4	1	5'-11"	AW512	S5	0'-9"	1'-2"	2'-1"	1'-2"			0'-9"					
29	4	5	6'-2"	AW513	S5		2'-9"	0'-8"	2'-0"			0'-9"					
30																	
31	21	6	4'-0"	AW601	17		2'-0"	2'-0"									
32	4	6	34'-8"	AW602	Str												
33																	
34																	
35																	
36			WINGWALLS														
37																	
38	30	5	28'-2"	AW514	Str												
39	78	5	18'-2"	AW515	Str												
40																	
41	48	7	8'-2"	AW703	Str												
42																	
43																	
44																	
45				WESTERLY ABUTMENT (NORTHBOUND)													
46																	
47			FOOTING														
48																	
49	44	5	10'-8"	AW501	Str												
50	21	1	23'-8"	AW502	1												
51	32		6'-11"	AW503													
52	21		33'-8"	AW504	1												
53	10	1	36'-8"	AW505	Str												
54	36	5	10'-7"	AW516	20		2'-0"	8'-7"									
55																	
56	48	7	5'-3"	AW703	Str												
57	46	7	9'-3"	AW702	Str												
58																	
59	88	8	10'-8"	AW801	Str												
60																	
61																	
62																	
63			ABUTMENT STEM														
64																	
65	24	4	3'-5"	AW401	Str												
66	22	4	34'-8"	AW402	Str												
67																	
68	36	5	9'-5"	AW508	20		1'-2"	8'-3"									
69	36	1	12'-8"	AW509	17		9'-6"	0'-8"	2'-6"								
70	31		4'-6"	AW510	17		2'-0"	0'-6"	2'-0"								
71	2		34'-8"	AW511	Str												
72	4		5'-11"	AW512	S5	0'-9"	1'-2"	2'-1"	1'-2"			0'-9"					
73	4	1	6'-2"	AW513	S5		2'-9"	0'-8"	2'-0"			0'-9"					
74	36	5	6'-7"	AW517	Str												
75																	
76	21	6	4'-0"	AW601	17		2'-0"	2'-0"									
77	4	6	34'-8"	AW602	Str												
78																	
79																	
80																	
81																	
82																	
83			WINGWALLS														
84																	
85	28	5	28'-2"	AW514	Str												
86	28	5	18'-2"	AW515	Str												
87	48	5	16'-8"	AW518	Str												
88																	
89	48	7	16'-8"	AW704	Str												
90																	
91																	
92																	
93			DECK														
94																	
95	1,854	4	27'-4"	S401	Str												
96	3,549	1	25'-3"	S403	1												
97	83		17'-3"	S404													
98	249		22'-4"	S405													
99	83		12'-0"	S406													
100	83		29'-2"	S407													
101	83	1	4'-9"	S408	1												
102	456	4	29'-9"	S409	Str												
103																	
104	4,100	5	4'-7"	S501	S5		1'-9"	0'-8"	1'-5"			0'-9"					
105	4,100	1	5'-11"	S502	S5	0'-9"	1'-2"	2'-1"	1'-2"			0'-9"					
106	4,918		34'-8"	S503	Str												
107	809		35'-11"	S504	15		3'-4"	0'-5 1/2"	3'-4"	2'-0"						34'-8	
108	1,618		36'-0"	S505	15		3'-8 1/2"	0'-6 1/2"	4'-0"	2'-9"						34'-8	
109	48	1	3'-0"	S506	Str												
110	432	5	6'-0"	S507	Str												
111																	
112																	
113																	
114			APPROACH SLABS														
115																	
116	88	4	30'-8"	AS401	Str												
117																	
118	496	7	14'-8"	AS701	Str												
119																	
120																	
121																	
122																	
123																	
124																	
125																	
126																	
127																	
128																	
129																	
130																	
131																	
132																	
133																	
134																	
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152																	
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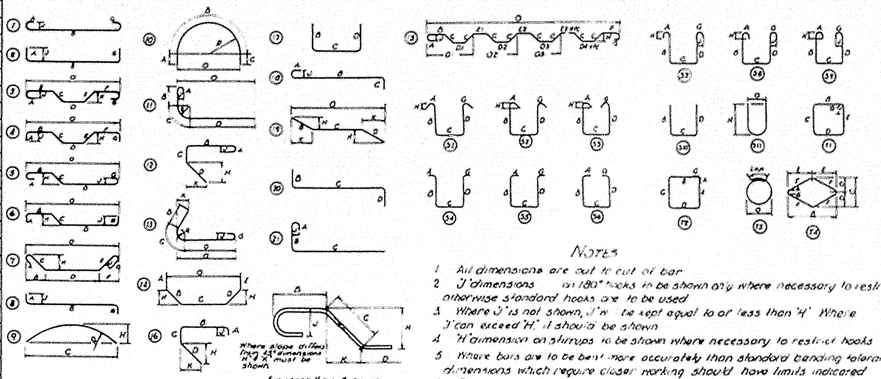
156																	
157																	
158																	
159																	
160																	
161																	
162																	

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)		

WATERVILLE INTERSTATE

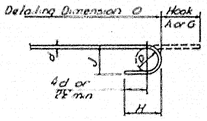
TYPICAL BAR BENDS



NOTES

1. All dimensions are out to out of bar.
2. 'J' dimensions on 180° hooks to be shown only where necessary to restrict hook size, otherwise standard hooks are to be used.
3. Where 'J' is not shown, 'J' to be kept equal to or less than 'H'. Where 'J' can exceed 'H', 'J' should be shown. (J ≤ H)
4. 'H' dimension on stirrups to be shown where necessary to restrict hooks.
5. Where bars are to be bent more accurately than standard bending tolerances bending dimensions which require closer working should have limits indicated.
6. Figures in circles show types.
7. No allowance for bend curvature is to be made except for standard hook & hoop in excess of same.

Item	No. Pieces	Size	Length	Mark	Type	A	B	C	D	E	F	G	H	J	K	R	O
163																	
164																	
165																	
166																	
167																	
168																	
169																	
170																	
171																	
172																	
173																	
174																	
175																	
176																	
177																	
178																	
179																	
180																	
181																	
182																	
183																	
184																	
185																	
186																	
187																	
188																	
189																	
190																	



STANDARD HOOK DETAIL

BAR SIZES

Equivalent Size	Present (Numbers)
1/4" ø	#2
3/8" ø	#3
2/4" ø	#4
5/8" ø	#5
3/4" ø	#6
7/8" ø	#7
1" ø	#8
1 1/10" ø	#9
1 3/8" ø	#10
1 6/8" ø	#11

8 Bar reinforcement metal shall conform to the requirements of the Standard Specifications for new Billet-Steel Concrete Reinforcement Bars (Intermediate Grade) Serial Designation AASHO M31-48 or its latest revision. All bars shall be deformed to conform with A.S.T.M. Specifications A 305-49.

WESTERLY ABUTMENT (SOUTHBOUND)
Footing... 6695 #
Stem ... 2343 #
Wings ... 4136 #
13,174 #

WESTERLY ABUTMENT (NORTHBOUND)
Footing. 6641 #
Stem 2243 #
Wings 3819 #
12,703 #

DECK 436,118 #

APPROACH SLABS 16,675 #

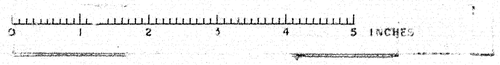
THE CLARKESON ENGINEERING CO., INC.

DESIGN H.L.	CHECK H.P.	BRIDGE NO.
DRAWN F.E.T.	APPROVED WATERVILLE	SURVEY PLAN

STATE HIGHWAY COMMISSION
INTERSTATE #95
OVER
MESSALONSKEE STREAM
& QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
REINFORCEMENT SCHEDULE

SHEET 8 OF 13 SHEETS AUGUSTA, MAINE

78-205



Item	No. Pieces	Size	Length	Mark	Type	A	B	C	D	E	F	G	H	J	K	R	O
			NORTHEASTERLY ABUTMENT														
1																	
2			FOOTING														
3																	
4	91	5	5'-8"	ANE 501	Str												
5	1		3'-5"	ANE 502													
6	1		3'-7"	ANE 503													
7	1		3'-8"	ANE 504													
8	1		3'-10"	ANE 505													
9	1		4'-0"	ANE 506													
10	1		4'-2"	ANE 507													
11	1		4'-4"	ANE 508													
12	1		4'-5"	ANE 509													
13	1		4'-7"	ANE 510													
14	1		4'-9"	ANE 511													
15	1		4'-11"	ANE 512													
16	1		5'-1"	ANE 513													
17	1		5'-2"	ANE 514													
18	1		5'-4"	ANE 515													
19	1		5'-6"	ANE 516													
20	20		19'-6"	ANE 517													
21	7		17'-0"	ANE 518													
22	7		11'-6"	ANE 519													
23	7		10'-6"	ANE 520													
24	8		4'-0"	ANE 521	Str												
25	35	5	8'-6"	ANE 522	20		2'-0"	6'-0"									
26																	
27	3	6	11'-6"	ANE 601	20		4'-6"	7'-0"									
28																	
29	2	6	12'-0"	ANE 602	20		4'-6"	7'-6"									
30	1		6'-9"	ANE 603			2'-3"	4'-6"									
31	1		6'-11"	ANE 604			2'-5"										
32	1		7'-0"	ANE 605			2'-6"										
33	1		7'-2"	ANE 606			2'-8"										
34	1		7'-4"	ANE 607			2'-10"										
35	1		7'-6"	ANE 608			3'-0"										
36	1		7'-8"	ANE 609			3'-2"										
37	1		7'-10"	ANE 610			3'-4"										
38	1		7'-11"	ANE 611			3'-5"										
39	1		8'-1"	ANE 612			3'-7"										
40	1		8'-3"	ANE 613			3'-9"										
41	1		8'-5"	ANE 614			3'-11"										
42	1		8'-6"	ANE 615			4'-0"										
43	1		8'-8"	ANE 616			4'-2"										
44	1		8'-10"	ANE 617			4'-4"										
45	17	6	9'-0"	ANE 618	20		4'-4"	4'-6"									
46																	
47																	
48			STEM														
49																	
50	24	4	3'-2"	ANE 401	Str												
51	10	4	34'-8"	ANE 402	Str												
52																	
53	35	5	4'-11"	ANE 523	20		0'-11"	4'-0"									
54	35	5	8'-5"	ANE 524	17		5'-4"	0'-6"	2'-7"								
55	32	5	4'-0"	ANE 525	Str												
56																	
57	4	6	34'-8"	ANE 619	Str												
58	21	6	4'-0"	ANE 620	17		2'-0"	2'-0"									
59																	
60																	
61																	
62			NORTHERLY WING														
63																	
64	8	4	15'-3"	ANE 403	Str												
65	2		14'-6"	ANE 404													
66	2		12'-5"	ANE 405													
67	2		10'-4"	ANE 406													
68	2		8'-2"	ANE 407													
69	2		6'-0"	ANE 408													
70	2		3'-10"	ANE 409													
71	2	4	1'-4"	ANE 410	Str												
72																	
73	1	5	2'-11"	ANE 526	Str												
74	1		3'-5"	ANE 527													
75	1		3'-11"	ANE 528													
76	1		4'-4"	ANE 529													
77	1		4'-10"	ANE 530													
78	1		5'-4"	ANE 531													
79	1		5'-9"	ANE 532													
80	1	5	6'-3"	ANE 533	Str.												
81																	

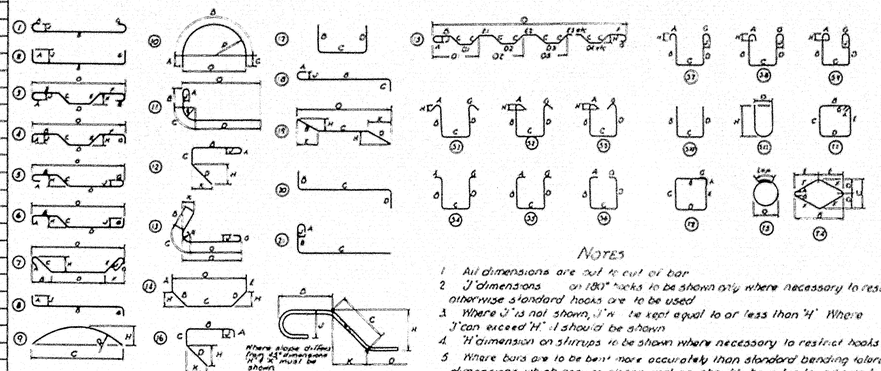
Item	No. Pieces	Size	Length	Mark	Type	A	B	C	D	E	F	G	H	J	K	R	O
82																	
83	1	5	6'-8"	ANE 534	Str												
84	1		7'-2"	ANE 535													
85	1		7'-8"	ANE 536													
86	1		8'-2"	ANE 537													
87	1		8'-8"	ANE 538													
88	1		9'-1"	ANE 539													
89	2	5	9'-5"	ANE 540	Str												
90																	
91	1	6	2'-11"	ANE 621	Str												
92	1		3'-5"	ANE 622													
93	1		3'-11"	ANE 623													
94	1		4'-4"	ANE 624													
95	1		4'-10"	ANE 625													
96	1		5'-4"	ANE 626													
97	1		5'-9"	ANE 627													
98	1		6'-3"	ANE 628													
99	1		6'-8"	ANE 629													
100	1		7'-2"	ANE 630													
101	1		7'-8"	ANE 631													
102	1		8'-2"	ANE 632													
103	1		8'-8"	ANE 633													
104	1		9'-1"	ANE 634													
105	2	6	9'-5"	ANE 635	Str												
106																	
107																	
108			SOUTHERLY WING														
109																	
110	6	4	8'-3"	ANE 411	Str												
111	4		17'-9"	ANE 412													
112	2		20'-2"	ANE 413													
113	2		18'-2"	ANE 414													
114	2		16'-1"	ANE 415													
115	2		14'-0"	ANE 416													
116	2		11'-10"	ANE 417													
117	2		9'-9"	ANE 418													
118	2		7'-8"	ANE 419													
119	2		5'-8"	ANE 420													
120	2		3'-5"	ANE 421													
121	2		1'-5"	ANE 422													
122	2	4	20'-8"	ANE 423	Str												
123																	
124	2	5	9'-5"	ANE 541	Str												
125	1		9'-1"	ANE 542													
126	1		11'-0"	ANE 543													
127	1		10'-7"	ANE 544													
128	1		10'-1"	ANE 545													
129	1		9'-8"	ANE 546													
130	1		9'-2"	ANE 547													
131	1		8'-8"	ANE 548													
132	1		8'-2"	ANE 549													
133	1		7'-8"	ANE 550													
134	1		7'-2"	ANE 551													
135	1		9'-9"	ANE 552													
136	1		9'-3"	ANE 553													
137	1		8'-9"	ANE 554													
138	1		8'-3"	ANE 555													
139	1		7'-9"	ANE 556													
140	1		7'-4"	ANE 557													
140	1		6'-10"	ANE 558													
141	1		6'-4"	ANE 559													
142	1	5	5'-10"	ANE 560	Str.												
143																	
144	2	6	9'-5"	ANE 636	Str												
145	1		9'-1"	ANE 637													
146	1		11'-0"	ANE 638													
147	1		10'-7"	ANE 639													
148	1		10'-1"	ANE 640													
149	1		9'-8"	ANE 641													
150	1		9'-2"	ANE 642													
151	1		8'-8"	ANE 643													
152	1		8'-2"	ANE 644													
153	1		7'-8"	ANE 645													
154	1		7'-2"	ANE 646													
155	1		9'-9"	ANE 647													
156	1		9'-3"	ANE 648													
157	1		8'-9"	ANE 649													
158	1		8'-3"	ANE 650													
159	1		7'-9"	ANE 651													
160	1		7'-4"	ANE 652													
161	1	6	6'-10"	ANE 653	Str												
162																	

Item	No. Pieces	Size	Length	Mark	Type	A	B	C	D	E	F	G	H	J	K	R	O
163																	
164	1	6	6'-4"	ANE 654	Str												
165	1	6	5'-10"	ANE 655	Str												
166																	
167																	
168																	
169																	
170																	
171																	
172																	
173																	
174																	
175																	
176																	
177																	
178																	
179																	
180																	
181																	
182																	
183																	
184																	
185																	
186																	
187																	
188																	
189																	
190																	

B. P. R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)		

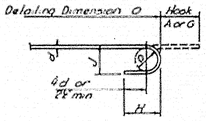
WATERVILLE INTERSTATE

TYPICAL BAR BENDS



NOTES

1. All dimensions are out to out of bar.
2. 'J' dimensions on 180° hooks to be shown only where necessary to restrict hook size, otherwise standard hooks are to be used.
3. Where 'J' is not shown, 'J' is to be kept equal to or less than 'H'. Where 'J' can exceed 'H', 'J' should be shown.
4. 'H' dimension on stirrups to be shown where necessary to restrict hooks.
5. Where bars are to be bent more accurately than standard bending tolerances, bending dimensions which require closer working should have limits indicated.
6. Figures in circles show types.
7. No allowance for bend curvature is to be made except for standard hook if radii in excess of same.



STANDARD HOOK DETAIL

BAR SIZES

Equivalent Size	Present (Numbers)
¼" ø	#2
⅜" ø	#3
½" ø	#4
⅝" ø	#5
¾" ø	#6
⅞" ø	#7
1" ø	#8
1 1/8" ø	#9
1 1/4" ø	#10
1 3/8" ø	#11

8 Bar reinforcement metal shall conform to the requirements of the Standard Specifications for new Billet-Steel Concrete Reinforcement Bars (Intermediate Grade) Serial Designation A.A.S.H.O. M31-48 or its latest revision. All bars shall be deformed to conform with A.S.T.M. Specifications A 305-49.

NORTHEASTERLY ABUTMENT

Footing	2115 #
Stem	1236 #
Wings	1130 #
Total	4481 #

THE CLARKESON ENGINEERING CO., INC.

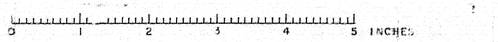
DESIGN H P	CHECK C J M	BRIDGE NO. SURVEY
DRAWN S A L	APPROVED W A H C J M	PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM
& QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
REINFORCEMENT SCHEDULE

SHEET 9 OF 13 SHEETS AUGUSTA, MAINE

78-206



B.P.R. REG NO	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6 (23)		

WATERVILLE INTERSTATE

SOUTHEASTERLY ABUTMENT

Item	No Pieces	Size	Length	Mark	Type	A	B	C	D	E	F	G	H	J	K	R	O
1																	
2			FOOTING														
3																	
4	86	5	5'-8"	ASE-501	Str.												
5	1	〃	3'-5"	ASE-502	〃												
6	1		3'-7"	ASE-503													
7	1		3'-8"	ASE-504													
8	1		3'-10"	ASE-505													
9	1		4'-0"	ASE-506													
10	1		4'-2"	ASE-507													
11	1		4'-4"	ASE-508													
12	1		4'-5"	ASE-509													
13	1		4'-7"	ASE-510													
14	1		4'-9"	ASE-511													
15	1		4'-11"	ASE-512													
16	1		5'-1"	ASE-513													
17	1		5'-2"	ASE-514													
18	1		5'-4"	ASE-515													
19	1		5'-6"	ASE-516													
20	20		19'-6	ASE-517													
21	7		17'-0"	ASE-518													
22	7		15'-0"	ASE-519	〃												
23	4		4'-0"	ASE-520	Str.												
24	35	5	8'-4"	ASE-521	20		2'-0"	6'-4"									
25																	
26	3	6	12'-0"	ASE-601	20		4'-6"	7'-6"									
27																	
28	1	6	6'-9"	ASE-602	20		2'-3"	4'-6"									
29	1	〃	6'-11"	ASE-603	〃		2'-5"	〃									
30	1		7'-0	ASE-604			2'-6"										
31	1		7'-2"	ASE-605			2'-8"										
32	1		7'-4"	ASE-606			2'-10"										
33	1		7'-6"	ASE-607			3'-0										
34	1		7'-8"	ASE-608			3'-2"										
35	1		7'-10"	ASE-609			3'-4"										
36	1		7'-11"	ASE-610			3'-5"										
37	1		8'-1"	ASE-611			3'-7"										
38	1		8'-3"	ASE-612			3'-9"										
39	1		8'-5"	ASE-613			3'-11"										
40	1		8'-6"	ASE-614			4'-0"										
41	1		8'-8"	ASE-615			4'-2"										
42	1		8'-10"	ASE-616	〃		4'-4"	〃									
43	14	6	9'-0"	ASE-617	20		4'-6"	4'-6"									
44																	
45																	
46			STEM														
47																	
48	24	4	3'-2"	ASE-701	Str.												
49	10	4	34'-8"	ASE-702	Str.												
50																	
51	35	5	4'-11"	ASE-722	20		0'-11"	4'-0"									
52	35	5	8'-5"	ASE-723	〃		5'-4"	0'-6"	2'-7"								
53	32	5	4'-0"	ASE-724	Str.												
54																	
55	4	6	34'-8"	ASE-618	〃												
56	21	6	4'-0"	ASE-619	〃		2'-0"	2'-0"									
57																	
58																	
59																	
60			NORTHERLY WING														
61																	
62	8	4	15'-2"	ASE-403	Str.												
63	2	〃	13'-0"	ASE-404	〃												
64	2		10'-10"	ASE-405													
65	2		8'-9"	ASE-406													
66	2		6'-7"	ASE-407													
67	2		4'-4"	ASE-408													
68	2	〃	1'-3"	ASE-409	〃												
69	2	4	15'-1"	ASE-410	Str.												
70																	
71	1	5	3'-4"	ASE-525	Str.												
72	1	〃	3'-10"	ASE-526	〃												
73	1		4'-3"	ASE-527													
74	1		4'-9"	ASE-528													
75	1		5'-2"	ASE-529													
76	1		5'-8"	ASE-530													
77	1		6'-1"	ASE-531													
78	1		6'-7"	ASE-532													
79	1	〃	7'-1"	ASE-533	〃												
80	1	5	7'-6"	ASE-534	Str.												
81																	

Item	No Pieces	Size	Length	Mark	Type	A	B	C	D	E	F	G	H	J	K	R	O
82																	
83	1	5	7'-11"	ASE-535	Str.												
84	1	〃	8'-5"	ASE-536	〃												
85	1		8'-10"	ASE-537													
86	1	〃	9'-4"	ASE-538	〃												
87	2	5	9'-8"	ASE-539	Str.												
88																	
89	1	6	3'-4"	ASE-620	Str.												
90	1	〃	3'-10"	ASE-621	〃												
91	1		4'-3"	ASE-622													
92	1		4'-9"	ASE-623													
93	1		5'-2"	ASE-624													
94	1		5'-8"	ASE-625													
95	1		6'-1"	ASE-626													
96	1		6'-7"	ASE-627													
97	1		7'-1"	ASE-628													
98	1		7'-6"	ASE-629													
99	1		7'-11"	ASE-630													
100	1		8'-5"	ASE-631													
101	1		8'-10"	ASE-632													
102	1	〃	9'-4"	ASE-633	〃												
103	2	6	9'-8"	ASE-634	Str.												
104																	
105																	
106																	
107			SOUTHERLY WING														
108																	
109	6	4	12'-9"	ASE-411	Str.												
110	8	〃	15'-2"	ASE-412	〃												
111	2		14'-10"	ASE-413													
112	2		12'-9"	ASE-414													
113	2		10'-7"	ASE-415													
114	2		8'-5"	ASE-416													
115	2		6'-3"	ASE-417													
116	2	〃	4'-0"	ASE-418	〃												
117	2	4	1'-3"	ASE-419	Str.												
118																	
119	2	5	9'-9"	ASE-540	Str.												
120	1	〃	9'-4"	ASE-541	〃												
121	1		11'-11"	ASE-542													
122	1		11'-5"	ASE-543													
123	1		10'-11"	ASE-544													
124	1		10'-6"	ASE-545													
125	1		10'-0"	ASE-546													
126	1		9'-6"	ASE-547													
127	1		9'-1"	ASE-548													
128	1		8'-7"	ASE-549													
129	1		8'-1"	ASE-550													
130	1		7'-8"	ASE-551													
131	1		7'-2"	ASE-552													
132	1	〃	6'-9"	ASE-553	〃												
133	1	5	6'-3"	ASE-554	Str.												
134																	
135	2	6	9'-9"	ASE 634	Str.												
136	1	〃	9'-4"	ASE-635	〃												
137	1		11'-11"	ASE-636													
138	1		11'-5"	ASE-637													
139	1		10'-11"	ASE-638													
140	1		10'-6"	ASE-639													
140	1		10'-0"	ASE-640													
141	1		9'-6"	ASE-641													
142	1		9'-1"	ASE-642													
143	1		8'-7"	ASE-643													
144	1		8'-1"	ASE-644													
145	1		7'-8"	ASE-645													
146	1		7'-2"	ASE-646													
147	1	〃	6'-9"	ASE-647	〃												
148	1	6	6'-3"	ASE-648	Str.												
149																	
150																	
151																	
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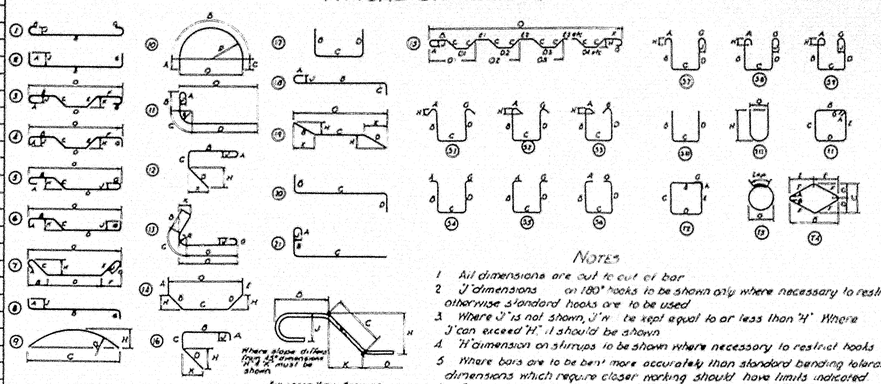
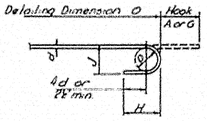
TYPICAL BAR BENDS



NOTES

1. All dimensions are out to out of bar.
2. 'J' dimensions on 180° hooks to be shown only where necessary to restrict hook size, otherwise standard hooks are to be used.
3. Where 'J' is not shown, 'J' is to be kept equal to or less than 'H'. Where 'J' can exceed 'H', J should be shown.
4. 'H' dimension on stirrups to be shown where necessary to restrict hooks.
5. Where bars are to be bent more accurately than standard bending tolerances, bending dimensions which require closer working should have limits indicated.
6. Figures in circles show types.
7. No allowance for bend curvature is to be made except for standard hook & radii in excess of same.



STANDARD HOOK DETAIL

BAR SIZES

Equivalent Size	Present (Numbers)
½" ø	# 2
⅝" ø	# 3
¾" ø	# 4
⅞" ø	# 5
1" ø	# 6
1⅛" ø	# 7
1¼" ø	# 8
1⅜" ø	# 9
1⅝" ø	# 10
1¾" ø	# 11

6 Bar reinforcement metal shall conform to the requirements of the Standard Specifications for new Billet-Steel Concrete Reinforcement Bars (Intermediate Grade) Serial Designation A.A.S.H.O. M31-48 or its latest revision. All bars shall be deformed to conform with A.S.T.M. Specifications A 305-49.

SOUTHEASTERLY ABUTMENT

Footing	1954 #
Stem	1236 #
Wings	1019 #
Total	4209 #

THE CLARKESON ENGINEERING CO., INC.

DESIGN H.P.	CHECK C.J.M.	BRIDGE NO.
DRAWN F.E.T.	APPROVED W.A.N. C.J.M.	SURVEY PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95

OVER

MESSALONSKEE STREAM & QUARRY ROAD (RELOC)

IN THE CITY OF

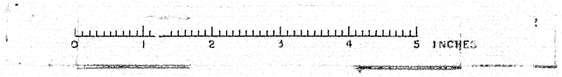
WATERVILLE

KENNEBEC COUNTY

REINFORCEMENT SCHEDULE

SHEET 10 OF 13 SHEETS AUGUSTA, MAINE

78-207



Item	No Pieces	Size	Length	Mark	Type	A	B	C	D	E	F	G	H	J	K	R	O
	PIER A FOOTING																
1	(PIER L FOOTING SIMILAR)																
2	41	11	21'-6"	FA 1101	Str												
3	32	11	26'-0"	FA 1102	Str												
4	70	11	6'-3"	FA 1103	Str												
5																	
6	17	8	26'-0"	FA 804	Str												
7	21	8	21'-6"	FA 805	Str												
8																	
9	12	7	21'-6"	FA 707	Str												
10	10	7	26'-0"	FA 708	Str												
11																	
12																	
13	PIER B FOOTING																
14	(PIER C,M,N FOOTING SIMILAR)																
15	70	11	14'-0"	FB 1105	Str												
16	4	11	19'-6"	FB 1106	Str												
17	32	11	24'-6"	FB 1109	Str												
18	48	11	38'-6"	FB 1108	Str												
19																	
20	68	7	24'-6"	FB 705	Str												
21	47	7	38'-6"	FB 704	Str												
22	17	7	38'-6"	FB 705	7		10'-6"	17'-6"	10'-6"								
23	23	7	33'-10"	FB 706	7		10'-5"	13'-0"	10'-5"								
24																	
25																	
26	PIER D FOOTING																
27	(PIER O FOOTING SIMILAR)																
28	70	11	7'-6"	FD 1104	Str												
29																	
30	24	10	16'-6"	FD 1003	Str												
31	24	10	22'-6"	FD 1004	Str												
32																	
33	17	5	22'-6"	FD 505	Str												
34	23	5	16'-6"	FD 502	Str												
35																	
36																	
37	PIER E FOOTING																
38	(PIER F,G,P,Q,R FOOTING SIMILAR)																
39	66	10	21'-0"	FE 1006	Str												
40																	
41	28	8	14'-6"	FE 803	Str												
42	24	8	20'-6"	FE 802	Str												
43																	
44	15	5	20'-6"	FE 505	Str												
45	21	5	14'-6"	FE 504	Str												
46																	
47																	
48	PIER H FOOTING																
49	34	10	18'-6"	FH 1002	Str												
50	24	10	22'-6"	FH 1003	Str												
51	66	10	21'-0"	FH 1006	Str												
52																	
53	19	7	22'-6"	FH 705	Str												
54	23	7	18'-6"	FH 704	Str												
55																	
56																	
57	PIER J FOOTING																
58	(PIER T FOOTING SIMILAR)																
59	34	10	18'-6"	FJ 1002	Str												
60	24	10	22'-6"	FJ 1003	Str												
61	62	10	7'-0"	FJ 1004	Str												
62																	
63	19	7	22'-6"	FJ 705	Str												
64	23	7	18'-6"	FJ 704	Str												
65																	
66																	
67	PIER K FOOTING																
68	(PIER S,U FOOTING SIMILAR)																
69	62	10	6'-6"	FK 1004	Str												
70																	
71	28	8	14'-6"	FK 803	Str												
72	19	8	18'-6"	FK 803	Str												
73																	
74	15	5	18'-6"	FK 505	Str												
75	19	5	14'-6"	FK 504	Str												
76																	
77																	
78																	
79																	
80																	
81																	

Item	No Pieces	Size	Length	Mark	Type	A	B	C	D	E	F	G	H	J	K	R	O
82		VERTICAL COLUMN STEEL															
83																	
84		PIER A															
85	70	11	21'-0"	CA 1107	Str												
86	14	11	16'-0"	CA 1110	9		15'-6"						1'-6"			19'-5"	
87	66	10	21'-0"	CA 1006	Str												
88	62	10	24'-0"	CA 1007	Str												
89																	
90		PIER B															
91	70	11	21'-0"	CB 1107	Str												
92	14	11	16'-0"	CB 1110	9		15'-6"						1'-6"			19'-5"	
93	66	10	21'-0"	CB 1006	Str												
94	62	10	27'-0"	CB 1008	Str												
95																	
96		PIER C															
97	70	11	21'-0"	CC 1107	Str												
98	14	11	16'-0"	CC 1110	9		15'-6"						1'-6"			19'-5"	
99	66	10	21'-0"	CC 1006	Str												
100	62	10	30'-0"	CC 1013	Str												
101																	
102		PIER D															
103	70	11	21'-0"	CD 1107	Str												
104	14	11	16'-0"	CD 1110	9		15'-6"						1'-6"			19'-5"	
105	66	10	21'-0"	CD 1006	Str												
106	62	10	24'-0"	CD 1007	Str												
107																	
108		PIER E															
109	14	11	16'-0"	CE 1110	9		15'-6"						1'-6"			19'-5"	
110	62	10	28'-0"	CE 1010	Str												
111																	
112		PIER F															
113	14	11	16'-0"	CF 1110	9		15'-6"						1'-6"			19'-5"	
114	62	10	23'-0	CF 1009	Str												
115																	
116		PIER G															
117	14	11	16'-0"	CG 1110	9		15'-6"						1'-6"			19'-5"	
118	62	10	28'-0"	CG 1010	Str												
119																	
120		PIER H															
121	14	11	16'-0"	CH 1110	9		15'-6"						1'-6"			19'-5"	
122	62	10	22'-0"	CH 1012	Str												
123																	
124		PIER J															
125	14	11	16'-0"	CJ 1110	9		15'-6"						1'-6"			19'-5"	
126	62	10	30'-0"	CJ 1013	Str												
127																	
128		PIER K															
129	14	11	16'-0"	CK 1110	9		15'-6"						1'-6"			19'-5"	
130	62	10	18'-6"	CK 1002	Str												
131																	
132		PIER L															
133	70	11	21'-0"	CL 1107	Str												
134	14	11	16'-0"	CL 1110	9		15'-6"						1'-6"			19'-5"	
135	66	10	21'-0"	CL 1006	Str												
136	62	10	23'-0"	CL 1009	Str												
137																	
138		PIER M															
139	70	11	21'-0"	CM 1107	Str												
140	14	11	16'-0"	CM 1110	9		15'-6"						1'-6"			19'-5"	
140	66	10	21'-0"	CM 1006	Str												
141	62	10	26'-0"	CM 1011	Str												
142																	
143		PIER N															
144	70	11	21'-0"	CN 1107	Str												
145	14	11	16'-0"	CN 1110	9		15'-6"						1'-6"			19'-5"	
146	66	10	21'-0"	CN 1006	Str												
147	62	10	28'-0"	CN 1010	Str												
148																	
149		PIER O															
150	70	11	21'-0"	CO 1107	Str												
151	14	11	16'-0"	CO 1110	9		15'-6"						1'-6"			19'-5"	
152	128	10	21'-0"	CO 1006	Str												
153																	
154		PIER P															
155	14	11	16'-0"	CP 1110	9		15'-6"						1'-6"			19'-5"	
156	62	10	23'-0"	CP 1009	Str												
157																	
158		PIER Q															
159	14	11	16'-0"	CQ 1110	9		15'-6"						1'-6"			19'-5"	
160	62	10	23'-0"	CQ 1009	Str												
161																	
162																	

Item	No Pieces	Size	Length	Mark	Type	A	B	C	D	E	F	G	H	J	K	R	O
163		PIER R															
164	14	11	16'-0"	CR 1110	9			15'-6"									
165	62	10	26'-0"	CR 1011	Str												
166																	
167		PIER S															
168	14	11	16'-0"	CS 1110	9			15'-6"									
169	62	10	27'-0"	CS 1008	Str												
170																	
171		PIER T															
172	14	11	16'-0"	CT 1110	9			15'-6"									
173	62	10	27'-0"	CT 1008	Str												
174																	
175		PIER U															
176	14	11	16'-0"	CU 1110	9			15'-6"									
177	62	10	14'-9"	CU 1014	Str												
178																	
179																	
180																	
181																	
182																	
183																	
184																	

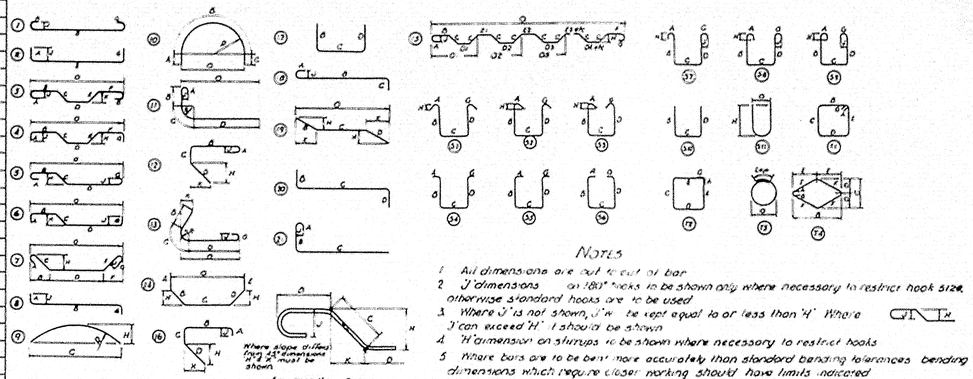
PIER	FOOTING	STEM	CAP	TOTAL
A	15,615	25,903	10,915	52,453
B	29,620	27,030	10,915	67,565
C	29,620	28,027	13,510	71,157
D	7,610	25,825	4,499	37,934
E	8,998	11,391	4,499	24,888
F	8,998	9,697	4,499	23,194
G	8,998	11,391	4,499	24,888
H	12,733	9,252	4,499	26,484
J	8,638	10,943	4,499	24,080
K	4,332	6,809	4,499	15,640
L	15,615	25,464	10,915	51,994
M	29,620	26,561	10,915	67,096
N	29,620	27,297	13,510	70,427
O	7,610	24,735	4,499	36,844
P	8,998	9,697	4,499	23,194
Q	8,998	9,608	4,499	23,105
R	8,998	10,765	4,499	24,262
S	4,332	9,873	4,499	18,704
T	8,638	9,873	4,499	23,010
U	4,332	5,463	4,499	14,294

Total ..... 721,213#

B.P.R. REG. NO.	STATE	PROJECT NO	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)		

WATERVILLE INTERSTATE

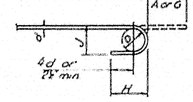
TYPICAL BAR BENDS



NOTES

1. All dimensions are out to out of bar.
2. 'J' dimensions on 180° hooks to be shown only where necessary to restrict hook size, otherwise standard hooks are to be used.
3. Where 'J' is not shown, 'J' is to be kept equal to or less than '4' Where 'J' can exceed 'H' it should be shown.
4. 'H' dimension on stirrups to be shown where necessary to restrict hooks.
5. Where bars are to be bent more accurately than standard bending tolerances bending dimensions which require closer working should have limits indicated.
6. Figures in circles show types.
7. No allowance for bend curvature is to be made except for standard hook & radii in excess of same.

Detailing Dimension O — Hook A or G



STANDARD HOOK DETAIL

BAR SIZES

Equivalent Size	Present Number(s)
¼" ø	#2
⅜" ø	#3
½" ø	#4
⅝" ø	#5
¾" ø	#6
⅞" ø	#7
1" ø	#8
1⅛" ø	#9
1¼" ø	#10
1⅜" ø	#11

8. Bar reinforcement metal shall conform to the requirements of the Standard Specifications for new Billet-Steel Concrete Reinforcement Bars (Intermediate Grade) Serial Designation AASHO M31-48 or its latest revision. All bars shall be deformed to conform with A.S.T.M. Specifications A305-49.

THE CLARKESON ENGINEERING CO., INC.

DESIGN C.J.M.	CHECK H.P.	BRIDGE ID SHEET
DRAWN A.L.	APPROVED WA HAC JM	PLOT

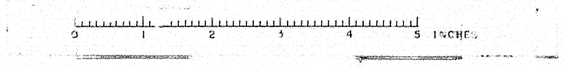
STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM
& QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

REINFORCEMENT SCHEDULE

SHEET 11 OF 13 SHEETS — AUGUSTA, MAINE

78-208



Item	No Pieces	Size	Length	Mark	Type	A	B	C	D	E	F	G	H	J	K	R	O
1	14	5	16'-0"	ST500	T-1	0'-5"	3'-5½"	4'-1½"	3'-5½"	4'-1½"		0'-5"					
2	14	↓	16'-1"	ST501	↓	↓	3'-6"	↓	3'-6"	↓		↓					
3	14		16'-2"	ST502			3'-6½"		3'-6½"								
4	14		16'-3"	ST503			3'-7"		3'-7"								
5	14		16'-4"	ST504			3'-7½"		3'-7½"								
6	40		16'-5"	ST505			3'-8"		3'-8"								
7	40		16'-6"	ST506			3'-8½"		3'-8½"								
8	40		16'-7"	ST507			3'-9"		3'-9"								
9	38		16'-8"	ST508			3'-9½"		3'-9½"								
10	34		16'-9"	ST509			3'-10"		3'-10"								
11	30		16'-10"	ST510			3'-10½"		3'-10½"								
12	32		17'-0"	ST511			3'-11½"		3'-11½"								
13	30		17'-1"	ST512			4'-0"		4'-0"								
14	32		17'-2"	ST513			4'-0½"		4'-0½"								
15	32		17'-3"	ST514			4'-1"		4'-1"								
16	32		17'-4"	ST515			4'-1½"		4'-1½"								
17	36		17'-5"	ST516			4'-2"		4'-2"								
18	36		17'-6"	ST517			4'-2½"		4'-2½"								
19	40		17'-7"	ST518			4'-3"		4'-3"								
20	44		17'-9"	ST519			4'-4"		4'-4"								
21	42		17'-10"	ST520			4'-4½"		4'-4½"								
22	42		17'-11"	ST521			4'-5"		4'-5"								
23	34		18'-0"	ST522			4'-5½"		4'-5½"								
24	34		18'-1"	ST523			4'-6"		4'-6"								
25	32		18'-2"	ST524			4'-6½"		4'-6½"								
26	30		18'-3"	ST525			4'-7"		4'-7"								
27	28		18'-4"	ST526			4'-7½"		4'-7½"								
28	28		18'-6"	ST527			4'-8½"		4'-8½"								
29	24		18'-7"	ST528			4'-9"		4'-9"								
30	22		18'-8"	ST529			4'-9½"		4'-9½"								
31	24		18'-9"	ST530			4'-10"		4'-10"								
32	20		18'-10"	ST531			4'-10½"		4'-10½"								
33	20		18'-11"	ST532			4'-11"		4'-11"								
34	4		19'-0"	ST533			4'-11½"		4'-11½"								
35	14		19'-1"	ST534			5'-0"		5'-0"								
36	14		19'-3"	ST535			5'-1"		5'-1"								
37	10		19'-4"	ST536			5'-1½"		5'-1½"								
38	14		19'-5"	ST537			5'-2"		5'-2"								
39	14		19'-6"	ST538			5'-2½"		5'-2½"								
40	16		19'-7"	ST539			5'-3"		5'-3"								
41	16		19'-8"	ST540			5'-3½"		5'-3½"								
42	16		19'-9"	ST541			5'-4"		5'-4"								
43	16		19'-10"	ST542			5'-4½"		5'-4½"								
44	16		20'-0"	ST543			5'-5½"		5'-5½"								
45	16		20'-1"	ST544			5'-6"		5'-6"								
46	16		20'-2"	ST545			5'-6½"		5'-6½"								
47	16		20'-3"	ST546			5'-7"		5'-7"								
48	16		20'-4"	ST547			5'-7½"		5'-7½"								
49	16		20'-5"	ST548			5'-8"		5'-8"								
50	16		20'-6"	ST549			5'-8½"		5'-8½"								
51	16		20'-7"	ST550			5'-9"		5'-9"								
52	14		20'-9"	ST551			5'-10"		5'-10"								
53	14		20'-10"	ST552			5'-10½"		5'-10½"								
54	12		20'-11"	ST553			5'-11"		5'-11"								
55	10		21'-0"	ST554			5'-11½"		5'-11½"								
56	8		21'-1"	ST555			6'-0"		6'-0"								
57	6		21'-2"	ST556			6'-0½"		6'-0½"								
58	6		21'-3"	ST557			6'-1"		6'-1"								
59	2	↓	21'-4"	ST558	↓	↓	6'-1½"	↓	6'-1½"	↓		↓					
60	2	5	21'-5"	ST559	T-1	0'-5"	6'-2"	4'-1½"	6'-2"	4'-1½"		0'-5"					
61																	
62																	
63																	
64	198	5	27'-0"	S5560	T-1	0'-5"	10'-5"	2'-8"	10'-5"	2'-8"		0'-5"					
65	470	5	27'-4"	S5561	T-1	0'-5"	10'-7"	2'-8"	10'-7"	2'-8"		0'-5"					
66																	
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80																	
81																	

Item	No Pieces	Size	Length	Mark	Type	A	B	C	D	E	F	G	H	J	K	R	O
82																	
83	7	5	20'-4"	S500	T-1	0'-5"	3'-5½"	6'-3½"	3'-5½"	6'-3½"		0'-5"					
84	7	↓	20'-5"	S501	↓	↓	3'-6"	↓	3'-6"	↓		↓					
85	7		20'-6"	S502			3'-6½"		5'-6½"								
86	7		20'-7"	S503			3'-7"		3'-7"								
87	7		20'-8"	S504			3'-7½"		3'-7½"								
88	20		20'-9"	S505			3'-8"		3'-8"								
89	20		20'-10"	S506			3'-8½"		3'-8½"								
90	20		20'-11"	S507			3'-9"		3'-9"								
91	19		21'-0"	S508			3'-9½"		3'-9½"								
92	17		21'-1"	S509			3'-10"		3'-10"								
93	15		21'-2"	S510			3'-10½"		3'-10½"								
94	16		21'-4"	S511			3'-11½"		3'-11½"								
95	15		21'-5"	S512			4'-0"		4'-0"								
96	16		21'-6"	S513			4'-0½"		4'-0½"								
97	16		21'-7"	S514			4'-1"		4'-1"								
98	16		21'-8"	S515			4'-1½"		4'-1½"								
99	19		21'-9"	S516			4'-2"		4'-2"								
100	18		21'-10"	S517			4'-2½"		4'-2½"								
101	20		21'-11"	S518			4'-3"		4'-3"								
102	22		22'-1"	S519			4'-4"		4'-4"								
103	21		22'-2"	S520			4'-4½"		4'-4½"								
104	21		22'-3"	S521			4'-5"		4'-5"								
105	17		22'-4"	S522			4'-5½"		4'-5½"								
106	17		22'-5"	S523			4'-6"		4'-6"								
107	16		22'-6"	S524			4'-6½"		4'-6½"								
108	15		22'-7"	S525			4'-7"		4'-7"								
109	14		22'-8"	S526			4'-7½"		4'-7½"								
110	14		22'-10"	S527			4'-8½"		4'-8½"								
111	12		22'-11"	S528			4'-9"		4'-9"								
112	11		23'-0"	S529			4'-9½"		4'-9½"								
113	12		23'-1"	S530			4'-10"		4'-10"								
114	10		23'-2"	S531			4'-10½"		4'-10½"								
115	10		23'-3"	S532			4'-11"		4'-11"								
116	7		23'-4"	S533			4'-11½"		4'-11½"								
117	7		23'-5"	S534			5'-0"		5'-0"								
118	7		23'-7"	S535			5'-1"		5'-1"								
119	5		23'-8"	S536			5'-1½"		5'-1½"								
120	7		23'-9"	S537			5'-2"		5'-2"								
121	7		23'-10"	S538			5'-2½"		5'-2½"								
122	8		23'-11"	S539			5'-3"		5'-3"								
123	8		24'-0"	S540			5'-3½"		5'-3½"								
124	8		24'-1"	S541			5'-4"		5'-4"								
125	8		24'-2"	S542			5'-4½"		5'-4½"								
126	8		24'-4"	S543			5'-5½"		5'-5½"								
127	8		24'-5"	S544			5'-6"		5'-6"								
128	8		24'-6"	S545			5'-6½"		5'-6½"								
129	8		24'-7"	S546			5'-7"		5'-7"								
130	8		24'-8"	S547			5'-7½"		5'-7½"								
131	8		24'-9"	S548			5'-8"		5'-8"								
132	8		24'-10"	S549			5'-8½"		5'-8½"								
133	8		24'-11"	S550			5'-9"		5'-9"								
134	7		25'-1"	S551			5'-10"		5'-10"								
135	7		25'-2"	S552			5'-10½"		5'-10½"								
136	6		25'-3"	S553			5'-11"		5'-11"								
137	5		25'-4"	S554			5'-11½"		5'-11½"								
138	4		25'-5"	S555			6'-0"		6'-0"								
139	3		25'-6"	S556			6'-0½"		6'-0½"								
140	3		25'-7"	S557			6'-1"		6'-1"								
140	1	↓	25'-8"	S558	↓	↓	6'-1½"	↓	6'-1½"	↓		↓					
141	1	5	25'-9"	S559	T-1	0'-5"	6'-2"	6'-3½"	6'-2"	6'-3½"		0'-5"					
142																	
143																	
144																	
145																	
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162																	

Item	No Pieces	Size	Length	Mark	Type	A	B	C	D	E	F	G	H	J	K	R	O
163																	
164																	
165																	
166																	
167																	
168																	
169																	
170																	
171																	
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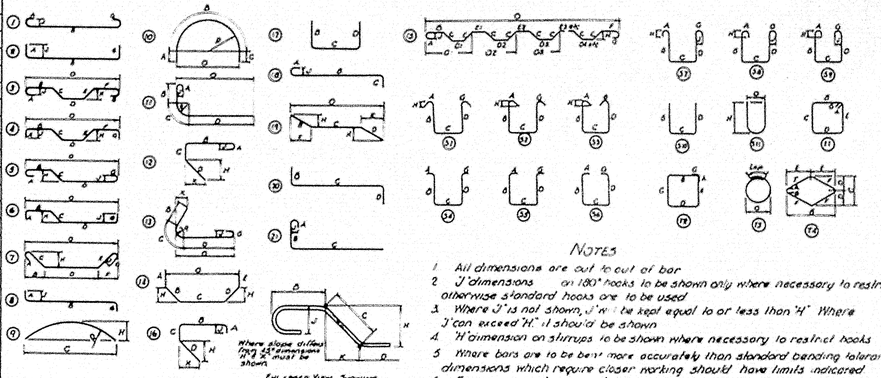
189																	
190																	

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)		

WATERVILLE INTERSTATE

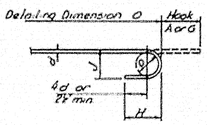
TYPICAL BAR BENDS



ENLARGED VIEW SHOWING BAR BENDING DETAILS

NOTES

1. All dimensions are out to out of bar.
2. 'J' dimensions on 180° hooks to be shown only where necessary to restrict hook size, otherwise standard hooks are to be used.
3. Where 'J' is not shown, 'J' is to be kept equal to or less than 'H'. Where 'J' can exceed 'H', J should be shown.
4. 'H' dimension on stirrups to be shown where necessary to restrict hooks.
5. Where bars are to be bent more accurately than standard bending tolerances, bending dimensions which require closer working should have limits indicated.
6. Figures in circles show types.
7. No allowance for bend curvature is to be made except for standard hook & radii in excess of same.



STANDARD HOOK DETAIL

BAR SIZES

Equivalent Size	Present (Numbers)
¼" ø	#2
⅜" ø	#3
½" ø	#4
⅝" ø	#5
¾" ø	#6
⅞" ø	#7
1" ø	#8
1⅛" ø	#9
1¼" ø	#10
1⅜" ø	#11

6 Bar reinforcement metal shall conform to the requirements of the Standard Specifications for new Billet-Steel Concrete Reinforcement Bars (Intermediate Grade) Serial Designation AASHO M31-48 or its latest revision.
All bars shall be deformed to conform with A.S.T.M. Specifications A305-49.

THE CLARKESON ENGINEERING CO., INC.

DESIGN C.J.M.	CHECK H.P.	BRIDGE NO.
DRAWN F.E.T.	APPROVED W.A.H. & C.J.M.	SURVEY PLOT

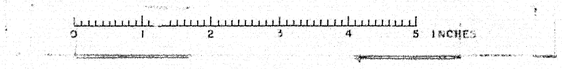
STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM & QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

PIER COLUMN TIES

SHEET 12 OF 13 SHEETS AUGUSTA, MAINE

78-209



Item	No. Pieces	Size	Length	Mark	Type	A	B	C	D	E	F	G	H	J	K	R	O
	PIER A CAP STEEL																
1	(PIERS B, L, M, SIMILAR)																
2	10	11	37'-2"	PCA1101	1	1'-7"	34'-0"					1'-7"		1'-2"			34'-0"
3	14	1	34'-0"	PCA1102	Str												
4	4		41'-0"	PCA1102	22	1'-7"	2'-6"	5'-5"	27'-0"	5'-5"	2'-6"	1'-7"	5'-1½"	1'-2"			31'-6½"
5	4		38'-2"	PCA1104	22	1'-7"	2'-6"	5'-3"	24'-6"	5'-3"	2'-6"	1'-7"	5'-0"	1'-2"			29'-0½"
6	4		35'-2"	PCA1105	22	1'-7"	2'-6"	5'-3"	21'-6"	5'-3"	2'-6"	1'-7"	5'-0"	1'-2"			26'-0½"
7	2		29'-2"	PCA1106	Str												
8	2		19'-8"	PCA1107	Str												
9	2	1	14'-9"	PCA1108	Str												
10	2	11	11'-0"	PCA1109	Str												
11																	
12	16	6	3'-8"	PCA600	Str												
13																	
14	4	6	17'-3"	PCS600	T1	0'-5½"	2'-6½"	5'-7½"	2'-6½"	5'-7½"		0'-5½"					
15	8	1	17'-4"	PCS601	1	1	1	5'-8"	1	5'-8"		1					
16	8		17'-5"	PCS602				5'-8½"		5'-8½"							
17	4		17'-6"	PCS603				5'-9"		5'-9"							
18	1		17'-7"	PCS604				5'-9½"		5'-9½"							
19			17'-8"	PCS605				5'-10"		5'-10"							
20			17'-10"	PCS606				5'-11"		5'-11"							
21			17'-11"	PCS607				5'-11½"		5'-11½"							
22			18'-0"	PCS608				6'-0"		6'-0"							
23			18'-2"	PCS609				6'-1"		6'-1"							
24			18'-4"	PCS610				6'-2"		6'-2"							
25			18'-6"	PCS611				6'-3"		6'-3"							
26			18'-10"	PCS612				6'-5"		6'-5"							
27			19'-0"	PCS613				6'-6"		6'-6"							
28			19'-4"	PCS614				6'-8"		6'-8"							
29			9'-8"	PCS615				6'-10"		6'-10"							
30			19'-11"	PCS616				6'-11½"		6'-11½"							
31			20'-3"	PCS617				7'-1½"		7'-1½"							
32			20'-8"	PCS618				7'-4"		7'-4"							
33			21'-0"	PCS619				7'-6"		7'-6"							
34			21'-7"	PCS620				7'-9½"		7'-9½"							
35			22'-2"	PCS621				8'-1"		8'-1"							
36			22'-10"	PCS622				8'-5"		8'-5"							
37	1	1	23'-7"	PCS623	1	1	1	8'-9½"	1	8'-9½"		1					
38	4	6	24'-7"	PCS624	T1	0'-5½"	2'-6½"	9'-3½"	2'-6½"	9'-3½"		0'-5½"					
39																	
40																	
41	PIER C CAP STEEL																
42	(PIER N SIMILAR)																
43	Similar to Pier A except with following additions																
44																	
45	82	7	14'-0"	PCC 700	Str		6'-7"	8'-8"	6'-2"								
46																	
47	7	5	34'-0"	PCC 500	Str.												
48																	
49																	
50	PIER E CAP STEEL																
51	(PIERS D, F, G, H, J, K, O, P, Q, R, S, T, U SIMILAR)																
52	10	11	37'-2"	PCE1101	1	1'-7"	34'-0"					1'-2"					34'-0"
53																	
54	4	10	34'-0"	PCE1000	Str												
55	2	10	29'-2"	PCE1001	Str												
56	2	10	17'-6"	PCE1002	Str												
57	2	10	12'-0"	PCE1003	Str												
58																	
59	4	6	17'-4"	PCS625	T1	0'-5½"	2'-6½"	5'-8"	2'-6½"	5'-8"		0'-5½"					
60	1	1	17'-5"	PCS626	1	1	1	5'-8½"	1	5'-8½"		1					
61			17'-8"	PCS627				5'-10"		5'-10"							
62			17'-11"	PCS628				5'-11½"		5'-11½"							
63			18'-4"	PCS629				6'-2"		6'-2"							
64			18'-10"	PCS630				6'-5"		6'-5"							
65			19'-6"	PCS631				6'-9"		6'-9"							
66			20'-4"	PCS632				7'-2"		7'-2"							
67			21'-2"	PCS633				7'-7"		7'-7"							
68			22'-2"	PCS634				8'-1"		8'-1"							
69	1	1	23'-4"	PCS635	1	1	1	8'-8"	1	8'-8"		1					
70	4	6	24'-10"	PCS636	T1	0'-5½"	2'-6½"	9'-5"	2'-6½"	9'-5"		0'-5½"					
71																	
72																	
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81																	

Item	No Pieces	Size	Length	Mark	Type	A	B	C	D	E	F	G	H	J	K	R	O
82																	
83																	
84																	
85																	
86																	
87																	
88																	
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Item	No Pieces	Size	Length	Mark	Type	A	B	C	D	E	F	G	H	J	K	R	O
163																	
164																	
165																	
166																	
167																	
168																	
169																	
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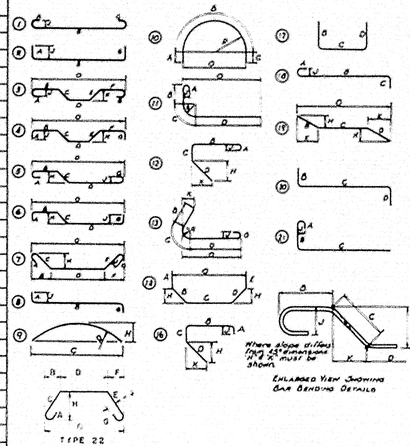
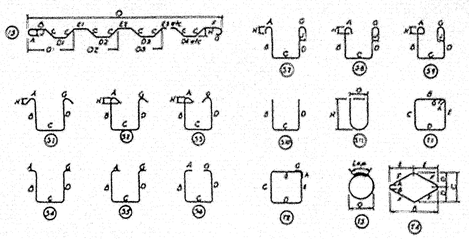
190																	

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)		

WATERVILLE INTERSTATE

TYPICAL BAR BENDS





NOTES

1. All dimensions are out to out of bar.
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5. Where bars are to be bent more accurately than standard bending tolerances, bending dimensions which require closer working should have limits indicated.
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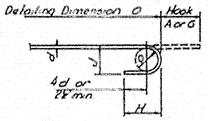


STANDARD HOOK DETAIL

BAR SIZES

Equivalent Size	Present (Numbers)
¼" ϕ	#2
⅜" ϕ	#3
½" ϕ	#4
⅝" ϕ	#5
¾" ϕ	#6
⅞" ϕ	#7
1" ϕ	#8
1" □	#9
1⅛" □	#10
1½" □	#11

6 Bar reinforcement metal shall conform to the requirements of the Standard Specifications for new Billet-Steel Concrete Reinforcement Bars (Intermediate Grade) Serial Designation AASHO M31-48 or its latest revision. All bars shall be deformed to conform with A.S.T.M. Specifications A305-49.

THE CLARKESON ENGINEERING CO., INC.

DESIGN C.J.M.	CHECK H.P.	BRIDGE NO.
DRAWN F.E.T.	APPROVED WAH - C.J.M.	SURVEY PLOT

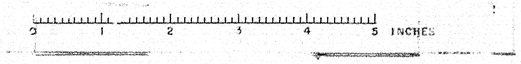
STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM & QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

CAP STEEL

SHEET 13 OF 13 SHEETS AUGUSTA, MAINE

78-210



BILL OF MATERIAL — DWG. NO. 960-510A

SHIP MARK	NO.	MARK	SHAPE	LENGTH		WT.	WT. DED.	REMARKS
Shim A	5		PL 7 x 1/16	0	7			
do B	5		PL 7 x 1/8	0	7			
do C	20		PL 7 x 1/16	0	7			
S66	1		36 WF 230	84	11 15/16		14 #	A-373
S67	1		Do	84	11 15/16		14 #	A-373
S68	1		Do	84	11 15/16		14 #	A-373
S69	1		Do	84	11 15/16		14 #	A-373
S70	1		Do	84	11 15/16		14 #	A-373
Field	96		5/8 ϕ Bolts	0	2			
	2	CP1	PL 15 x 1 1/16	54	0		90 #	A-373
	3	CP2	PL 15 x 1 1/4	55	6		166 #	A-373
	8	P1	PL 6 x 1/2	7	6			
	8	P2	Do	7	6			
	8	P3	Do	7	6			
	8	P4	Do	7	6			
	4	P5	Do	1	6			
	4	P6	Do	1	6			
	4	P7	Do	1	6			
	4	P8	Do	1	6			
	2		12 C 30	6	11 1/2		12 #	
	2		Do	6	11 1/2		12 #	
	2		Do	6	11 5/16		12 #	
	2		Do	6	11 5/16		12 #	
	8		18 E 42.7	6	11 5/16			
	8		Do	6	11 5/16			
	1		PL 8 x 1	8	2 5/16			
	1		Do	8	2 5/16			
	2		Do	7	6			
	1		PL 6 x 1	1	4		1 #	
	1		Do	1	4		1 #	
	1	G1	L 6 x 6 x 3/4	8	2 5/16			
	1	G2	Do	8	2 5/16			
	2	G3	Do	7	6			
	18	P9	PL 2 1/2 x 3/8	0	7			
	1	P10	PL 6 x 1	0	4 5/16		5 #	
	1	P11	Do	0	4 5/16		5 #	
	6	B1	FB 2 1/2 x 1/2	1	2			
		Shop	3/16 fillet weld	843			.239 # / ft.	

Detailed on 9-60-510 CP 3 & 4

Detailed on 9-60-510

Detailed on 9-60-512

Detailed on 9-60-513

No camber in beams req'd. any natural camber to be placed up.

SHOP CONNECTIONS: Welded
FIELD CONNECTIONS: Welded - 5/8" ϕ Temporary Erection bolts.
HOLES:
PAINT: Per State of Maine Specs. and as noted

STEINGER DETAILS SPAN 20

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

INTERSTATE # 95 OVER MESSALONSKEE STREAM WATERVILLE, MAINE.

CUSTOMER CIANCHETTE BROTHERS.
DESIGNER THE CLARKESON ENGR Co.

ORDER NO. VERBAL | DWG. NO. 9-60-510A

DRAWN	4-28-59	FGill	
REVISION			
REVISION			
REVISION			

APPROVED 5-22-59

77-136 D

BILL OF MATERIAL — DWG. NO. 960-511A

SHIP MARK	NO.	MARK	SHAPE	LENGTH		WT.	WT. DED.	REMARKS
Shim A	5		PL 7 x 1/16	0	7			
do B	5		PL 7 x 1/8	0	7			
do C	10		PL 7 x 1/16	0	7			
S76	1		36 WF 230	84	11 15/16		21 #	A-373
S77	1		Do	84	11 15/16		21 #	A-373
S78	1		Do	84	11 15/16		21 #	A-373
S79	1		Do	84	11 15/16		21 #	A-373
S80	1		Do	84	11 15/16		21 #	A-373
Field	96		5/8 ϕ Bolts	0	2			
	2	CP1	PL 15 x 1 1/16	54	0		90 #	A-373
	3	CP2	PL 15 x 1 1/4	55	6		166 #	A-373
	8	P1	PL 6 x 1/2	7	6			
	8	P2	Do	7	6			
	8	P3	Do	7	6			
	8	P4	Do	7	6			
	4	P5	Do	1	6			
	4	P6	Do	1	6			
	4	P7	Do	1	6			
	4	P8	Do	1	6			
D1	2		12 C 30	6	11 1/2		12 #	
D2	2		Do	6	11 1/2		12 #	
D3	2		Do	6	11 5/16		12 #	
D4	2		Do	6	11 5/16		12 #	
D5	8		18 E 42.7	6	11 5/16			
D6	8		Do	6	11 5/16			
PB1	1		PL 8 x 1	8	2 5/16			
PB2	1		Do	8	2 5/16			
PB3	2		Do	7	6			
S01	1		PL 6 x 1	1	4		5 #	
S02	1		Do	1	4		5 #	
	1	G1	L 6 x 6 x 3/4	8	2 5/16			
	1	G2	Do	8	2 5/16			
	2	G3	Do	7	6			
	18	P9	PL 2 1/2 x 3/8	0	7			
	1	P10	PL 6 x 1	0	4 5/16		5 #	
	1	P11	Do	0	4 5/16		5 #	
	6	B1	FB 2 1/2 x 1/2	1	2			
		Shop	3/16 fillet weld	843			.239 # / ft.	

Detailed on 9-60-511

Detailed on 9-60-512

Detailed on 9-60-513

No camber in beams req'd. any natural camber to be placed up.

SHOP CONNECTIONS: Welded
FIELD CONNECTIONS: Welded - 5/8" ϕ Temporary Erection bolts.
HOLES:
PAINT: Per State of Maine Specs. and as noted

STEINGER DETAILS SPAN 22

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

INTERSTATE # 95 OVER MESSALONSKEE STREAM WATERVILLE, MAINE.

CUSTOMER CIANCHETTE BROTHERS.
DESIGNER THE CLARKESON ENGR Co.

ORDER NO. VERBAL | DWG. NO. 9-60-511A

DRAWN	4-28-59	FGill	
REVISION			
REVISION			
REVISION			

APPROVED 5-22-59

77-136 C

BILL OF MATERIAL — DWG. NO. 960-516B

SHIP MARK	NO.	MARK	SHAPE	LENGTH		WT.	WT. DED.	REMARKS
Shim A	10		PL 7 x 1/16	0	7			
do B	10		PL 7 x 1/8	0	7			
do C	20		PL 7 x 1/16	0	7			
S71	1		36 WF 230	84	11 15/16		18 #	A-373
S72	1		Do	84	11 15/16		18 #	A-373
S73	1		Do	84	11 15/16		18 #	A-373
S74	1		Do	84	11 15/16		18 #	A-373
S75	1		Do	84	11 15/16		18 #	A-373
Field	96		5/8 ϕ Bolts	0	2			
	2	CP1	PL 15 x 1 1/16	54	0		90 #	A-373
	3	CP2	PL 15 x 1 1/4	55	6		166 #	A-373
	8	P1	PL 6 x 1/2	7	6			
	8	P2	Do	7	6			
	8	P3	Do	7	6			
	8	P4	Do	7	6			
	4	P5	Do	1	6			
	4	P6	Do	1	6			
	4	P7	Do	1	6			
	4	P8	Do	1	6			
D1	2		12 C 30	6	11 1/2		12 #	
D2	2		Do	6	11 1/2		12 #	
D3	2		Do	6	11 5/16		12 #	
D4	2		Do	6	11 5/16		12 #	
D5	8		18 E 42.7	6	11 5/16			
D6	8		Do	6	11 5/16			
PB1	2		PL 8 x 1	8	2 5/16			
PB2	2		Do	5	2 5/16			
PB3	4		Do	7	6			
S01	2		PL 6 x 1	1	4		1 #	
S02	2		Do	1	4		1 #	
	2	G1	L 6 x 6 x 3/4	8	2 5/16			
	2	G2	Do	5	2 5/16			
	4	G3	Do	7	6			
	36	P9	PL 2 1/2 x 3/8	0	7			
	2	P10	PL 6 x 1	0	4 5/16		5 #	
	2	P11	Do	0	4 5/16		5 #	
	12	B1	FB 2 1/2 x 1/2	1	2			
		Shop	3/16 fillet weld	909			.239 # / ft.	

Detailed on 9-60-510 & 511

Detailed on 9-60-512

Detailed on 9-60-513

No camber in beams req'd. any natural camber to be placed up.

SHOP CONNECTIONS: Welded
FIELD CONNECTIONS: Welded - 5/8" ϕ Temporary Erection bolts.
HOLES:
PAINT: Per State of Maine Specs. and as noted

STEINGER DETAILS SPAN 21

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

INTERSTATE # 95 OVER MESSALONSKEE STREAM WATERVILLE, MAINE.

CUSTOMER CIANCHETTE BROTHERS.
DESIGNER THE CLARKESON ENGR Co.

ORDER NO. VERBAL | DWG. NO. 9-60-510B

DRAWN	4-28-59	FGill	
REVISION			
REVISION			
REVISION			

APPROVED 5-22-59

77-136 B

BILL OF MATERIAL — DWG. NO. 960-514A

SHIP MARK	NO.	MARK	SHAPE	LENGTH		WT.	WT. DED.	REMARKS.
Shim A	10		PL 7 x 1/16	0	7			
do B	10		PL 7 x 1/8	0	7			
do C	20		PL 7 x 1/16	0	7			
S1	1		36 WF 230	55	1 1/16		5 #	A-373
S2	1		Do	55	1 1/16		5 #	A-373
S3	1		Do	55	1 1/16		5 #	A-373
S4	1		Do	55	1 1/16		5 #	A-373
S5	1		Do	55	1 1/16		5 #	A-373
Field	96		5/8 ϕ Bolts	0	2			
	2	CP1	PL 15 x 1 1/16	54	0		90 #	A-373
	3	CP2	PL 15 x 1 1/4	55	6		166 #	A-373
	8	P1	PL 6 x 1/2	2	6			
	8	P2	Do	2	6			
	8	P3	Do	2	6			
	8	P4	Do	2	6			
	4	P5	Do	1	6			
	4	P6	Do	1	6			
	4	P7	Do	1	6			
	4	P8	Do	1	6			
D1	2		12 C 30	6	11 1/2		12 #	
D2	2		Do	6	11 1/2		12 #	
D3	2		Do	6	11 5/16		12 #	
D4	2		Do	6	11 5/16		12 #	
D5	8		18 E 42.7	6	11 5/16			
D6	8		Do	6	11 5/16			
PB1	2		PL 8 x 1	8	2 5/16			
PB2	2		Do	5	2 5/16			
PB3	4		Do	7	6			
S01	2		PL 6 x 1	1	4		1 #	
S02	2		Do	1	4		1 #	
	2	G1	L 6 x 6 x 3/4	8	2 5/16			
	2	G2	Do	5	2 5/16			
	4	G3	Do	7	6			
	36	P9	PL 2 1/2 x 3/8	0	7			
	2	P10	PL 6 x 1	0	4 5/16		5 #	
	2	P11	Do	0	4 5/16		5 #	
	12	B1	FB 2 1/2 x 1/2	1	2			
		Shop	3/16 fillet weld	909			.239 # / ft.	

Detailed on 9-60-510 & 511

Detailed on 9-60-512

Detailed on 9-60-513

No camber in beams req'd. any natural camber to be placed up.

SHOP CONNECTIONS: Welded
FIELD CONNECTIONS: Welded - 5/8" ϕ Temporary Erection bolts.
HOLES:
PAINT: Per State of Maine Specs. and as noted

STEINGER DETAILS SPAN 23

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

INTERSTATE # 95 OVER MESSALONSKEE STREAM WATERVILLE, MAINE.

CUSTOMER CIANCHETTE BROTHERS.
DESIGNER THE CLARKESON ENGR Co.

ORDER NO. VERBAL | DWG. NO. 9-60-514A

DRAWN	4-28-59	FGill	
REVISION			
REVISION			
REVISION			

77-136 A

SHIP MARK	NO.	MARK	SHAPE	LENGTH	WT.	WT. DED.	REMARKS
[illegible]	[illegible]		[illegible] 7 x 1/4	[illegible] 7			
[illegible]	[illegible]		[illegible] 7 x 1/8	[illegible] 7			
[illegible]	[illegible]		[illegible] 7 x 1/16	[illegible] 7			
S.51	1		36 WF 230	85 0 1/8		21 #	A-373
S.52	1		Do	85 0 1/8		21 #	A-373
S.53	1		Do	85 0 1/8		21 #	A-373
S.54	1		Do	85 0 1/8		21 #	A-373
S.55	1		Do	85 0 1/8		21 #	A-373
Field	96		5/8" ø Bolts	0 2			
	2	C.P.1	PL 15 x 1 1/16	54 0		90 #	A-373
	3	C.P.2	PL 15 x 1 1/4	55 6		166 #	A-373
	5	P.1	PL 6 x 1/2	2 6			
	8	P.2	Do	2 6			
	8	P.3	Do	2 6			
	8	P.4	Do	2 6			
	4	P.5	Do	1 6			
	4	P.6	Do	1 6			
	4	P.7	Do	1 6			
	4	P.8	Do	1 6			
[illegible]	2		[illegible] 12 C 30	6 11 1/2		12 #	
[illegible]	2		[illegible]	6 11 1/2		12 #	
[illegible]	2		[illegible]	6 11 3/16		12 #	
[illegible]	2		[illegible]	6 11 3/16		12 #	
[illegible]	8		[illegible]	6 11 3/16			
[illegible]	8		[illegible]	6 11 3/16			
[illegible]	2		[illegible]	8 2 1/16			
[illegible]	2		[illegible]	8 2 1/16			
[illegible]	4		[illegible]	7 6			
[illegible]	2		[illegible]	1 4		9 #	
[illegible]	2		[illegible]	1 4		9 #	
[illegible]	[illegible]	[illegible]	[illegible] 3/8	8 2 1/16			
[illegible]	[illegible]	[illegible]	[illegible]	8 2 1/16			
[illegible]	[illegible]	[illegible]	[illegible]	7 6			
[illegible]	[illegible]	[illegible]	[illegible] 1/2	0 7			
[illegible]	[illegible]	[illegible]	PL 6 x 1	0 9 1/16		10 #	
[illegible]	[illegible]	[illegible]	Do	0 9 1/16		10 #	
[illegible]	[illegible]	[illegible]	FB 2 1/2 x [illegible]	[illegible] 2			
[illegible]	[illegible]	[illegible]	5/16 Fillet	[illegible]			

Detailed 9-60-58

Detailed 9-60-53

Detailed on 9-60-513

No camber in beams req'd any natural camber to be placed up.

SHOP CONNECTIONS: Welded
FIELD CONNECTIONS: Welded - 5/8" ø Temporary Erection bolts.
HOLES:
PAINT: Per State of Maine Specs. and as noted.

STEINGER DETAILS SPAN 10

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

INTERSTATE # 95 OVER MESSALONSKEE STREAM WATERVILLE, MAINE

CUSTOMER Cianchette Brothers
DESIGNER The Clarkeson Engr Co.

ORDER NO. [illegible] DWG. NO. 9-60-57B

APPROVED 5-22-59

DRAWN		
REVISION		
REVISION		
REVISION		

77-136 H

SHIP MARK	NO.	MARK	SHAPE	LENGTH	WT.	WT. DED.	REMARKS
Shim A	10		PL 7 x 1/4	0 7			
do B	10		PL 7 x 1/8	0 7			
do C	20		PL 7 x 1/16	0 7			
S.51	1		36 WF 230	84 10 5/16		9 #	A-373
S.52	1		Do	84 10 5/16		9 #	A-373
S.53	1		Do	84 10 5/16		9 #	A-373
S.54	1		Do	84 10 5/16		9 #	A-373
S.55	1		Do	84 10 5/16		9 #	A-373
Field	96		5/8" ø Bolts	0 2			
	2	C.P.1	PL 15 x 1 1/16	54 0		90 #	A-373
	3	C.P.2	PL 15 x 1 1/4	55 6		166 #	A-373
	5	P.1	PL 6 x 1/2	2 6			
	8	P.2	Do	2 6			
	8	P.3	Do	2 6			
	8	P.4	Do	2 6			
	4	P.5	Do	1 6			
	4	P.6	Do	1 6			
	4	P.7	Do	1 6			
	4	P.8	Do	1 6			
D.1	2		12 C 30	6 11 1/2		12 #	
D.2	2		Do	6 11 1/2		12 #	
D.3	2		Do	6 11 3/16		12 #	
D.4	2		Do	6 11 3/16		12 #	
D.5	8		15 C 45.7	6 11 3/16			
D.6	8		Do	6 11 3/16			
F.U.1	2		PL 8 x 1	8 2 1/16			
F.U.2	2		Do	8 2 1/16			
F.U.3	4		Do	7 6			
S.J.1	2		PL 6 x 1	1 4		9 #	
S.J.2	2		Do	1 4		9 #	
	2	a1	L 6 x 6 x 6 3/4	8 2 1/16			
	2	a2	Do	8 2 1/16			
	4	a3	Do	7 6			
	36	p.a	PL 2 1/2 x 3/8	0 7			
	2	p.b	PL 6 x 1	0 9 1/16		10 #	
	2	p.c	Do	0 9 1/16		10 #	
	12	b.1	FB 2 1/2 x 1/2	1 2			
	Shop		3/8 Fillet weld	929		239 #/ft	

Detailed 9-60-58

Detailed 9-60-53

Detailed on 9-60-513

No camber in beams req'd any natural camber to be placed up.

SHOP CONNECTIONS: Welded
FIELD CONNECTIONS: Welded - 5/8" ø Temporary Erection bolts.
HOLES:
PAINT: Per State of Maine Specs. and as noted.

STEINGER DETAILS SPAN 17

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

INTERSTATE # 95 OVER MESSALONSKEE STREAM WATERVILLE, MAINE.

CUSTOMER Cianchette Brothers.
DESIGNER The Clarkeson Engr. Co.

ORDER NO. Verbal DWG. NO. 9-60-58B

APPROVED 5-22-59

DRAWN	4-28-59	F.G.H.
REVISION		
REVISION		
REVISION		

77-136 G

SHIP MARK	NO.	MARK	SHAPE	LENGTH	WT.	WT. DED.	REMARKS
Shim A	5		PL 7 x 1/4	0 7			
do B	5		PL 7 x 1/8	0 7			
do C	10		PL 7 x 1/16	0 7			
S.36	1		36 WF 230	85 0 1/8		25 #	A-373
S.37	1		Do	85 0 1/8		25 #	A-373
S.38	1		Do	85 0 1/8		25 #	A-373
S.39	1		Do	85 0 1/8		25 #	A-373
S.40	1		Do	85 0 1/8		25 #	A-373
Field	96		5/8" ø Bolts	0 2			
	2	C.P.1	PL 15 x 1 1/16	54 0		90 #	A-373
	3	C.P.2	PL 15 x 1 1/4	55 6		166 #	A-373
	8	P.1	PL 6 x 1/2	2 6			
	8	P.2	Do	2 6			
	8	P.3	Do	2 6			
	8	P.4	Do	2 6			
	4	P.5	Do	1 6			
	4	P.6	Do	1 6			
	4	P.7	Do	1 6			
	4	P.8	Do	1 6			
D.1	2		12 C 30	6 11 1/2		12 #	
D.2	2		Do	6 11 1/2		12 #	
D.3	2		Do	6 11 3/16		12 #	
D.4	2		Do	6 11 3/16		12 #	
D.5	8		12 C 45.7	6 11 3/16			
D.6	8		Do	6 11 3/16			
F.U.1	1		PL 8 x 1	8 2 1/16			
F.U.2	1		Do	8 2 1/16			
F.U.3	2		Do	7 6			
S.J.1	1		PL 6 x 1	1 4		5 #	
S.J.2	1		Do	1 4		5 #	
	1	a1	L 6 x 6 x 6 3/4	8 2 1/16			
	1	a2	Do	8 2 1/16			
	2	a3	Do	7 6			
	18	p.a	PL 2 1/2 x 3/8	0 7			
	1	p.b	PL 6 x 1	0 9 1/16		5 #	
	1	p.c	Do	0 9 1/16		5 #	
	6	b.1	FB 2 1/2 x 1/2	1 2			
	Shop		3/8 Fillet weld	843		239 #/ft	

Detailed 9-60-58

Detailed 9-60-53

Detailed on 9-60-513

No camber in beams req'd any natural camber to be placed up.

SHOP CONNECTIONS: Welded
FIELD CONNECTIONS: Welded - 5/8" ø Temporary Erection bolts.
HOLES:
PAINT: Per State of Maine Specs. and as noted.

STEINGER DETAILS SPAN 11

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

INTERSTATE # 95 OVER MESSALONSKEE STREAM WATERVILLE, MAINE.

CUSTOMER Cianchette Brothers.
DESIGNER The Clarkeson Engr. Co.

ORDER NO. Verbal DWG. NO. 9-60-58A

APPROVED 5-22-59

DRAWN	4-28-59	F.G.H.
REVISION		
REVISION		
REVISION		

77-136 F

SHIP MARK	NO.	MARK	SHAPE	LENGTH	WT.	WT. DED.	REMARKS
[illegible]	[illegible]		[illegible]	[illegible]			
[illegible]	[illegible]		[illegible]	[illegible]			
[illegible]	[illegible]		[illegible]	[illegible]			
S.36	1		36 WF 230	[illegible]		[illegible] #	A-373
S.37	1		Do	[illegible]		[illegible] #	A-373
S.38	1		Do	[illegible]		[illegible] #	A-373
S.39	1		Do	[illegible]		[illegible] #	A-373
S.40	1		Do	[illegible]		11 #	A-373
Field	96		5/8" ø Bolts	[illegible]			
	2	C.P.1	PL 15 x 1 1/16	54 0		90 #	A-373
	3	C.P.2	PL 15 x 1 1/4	55 6		166 #	A-373
	5	P.1	PL 6 x 1/2	2 6			
	8	P.2	Do	2 6			
	8	P.3	Do	2 6			
	5	P.4	Do	2 6			
	4	P.5	Do	1 6			
	4	P.6	Do	1 6			
	4	P.7	Do	1 6			
	4	P.8	Do	1 6			
[illegible]	2		[illegible] 12 C 30	6 11 1/2		12 #	
[illegible]	2		[illegible]	6 11 1/2		12 #	
[illegible]	2		[illegible]	6 11 3/16		12 #	
[illegible]	2		[illegible]	6 11 3/16		12 #	
[illegible]	2		[illegible] 15 C 45.7	6 11 3/16			
[illegible]	[illegible]		[illegible]	6 11 3/16			
[illegible]	[illegible]		[illegible]	[illegible]

BILL OF MATERIAL — DWG. NO. 960-55B

SHIP MARK	NO.	MARK	SHAPE	LENGTH	WT.	WT. DED.	REMARKS
Shim A	16		PL 7 x 1/4	0 7			
do B	16		PL 7 x 1/8	0 7			
do C	20		PL 7 x 1/16	0 7			
S16	1		36 WF 230	84 11½		14#	A 373
S17	1		Do	84 11½		14#	A 373
S18	1		Do	84 11½		14#	A 373
S19	1		Do	84 11½		14#	A 373
S20	1		Do	84 11½		14#	A 373
Field	96		3/8" ø Bolts	0 2			
	2	C1	PL 15 x 1 1/16	54 0		90#	A-373
	3	C2	PL 15 x 1 1/4	55 6		166#	A-373
	5	P1	PL 6 x 1/2	2 6			
	8	P2	Do	2 6			
	8	P3	Do	2 6			
	8	P4	Do	2 6			
	4	P5	Do	1 6			
	4	P6	Do	1 6			
	4	P7	Do	1 6			
	4	P8	Do	1 6			
	2		12 C 30	6 11½		12#	
	2		Do	6 11½		12#	
	2		L	6 11 5/16		12#	
	2		L	6 11 5/16		12#	
	2		L 4" x 3" x 7/16	6 11 5/16		12#	
	8		Do	6 11 5/16			
	2		PL 8 x 1	8 2 5/16			
	2		Do	8 2 5/16			
	4		Do	7 6			
	2		PL 6 x 1	1 4		9#	
	2		Do	1 4		9#	
	2	A1	L 6 x 6 x 3/4	8 2 5/16			
	2	A2	Do	8 2 5/16			
	4	A3	Do	7 6			
	36	P9	PL 22 1/2 x 3/16	0 7			
	2	P6	PL 6 x 1	0 9 9/16		10#	
	2	P5	Do	0 9 9/16		10#	
	12	B1	FB 2 1/2 x 1/2	1 2			
		Shop	3/8 Fillet weld	929		.239 #/ft	

No camber in beams req'd any natural camber to be placed up.

SHOP CONNECTIONS: Welded
FIELD CONNECTIONS: Welded & 7/8" ø Temporary Erection Bolts.
HOLES:
PAINT: Per State of Maine Specs. and as noted

STEINGER DETAILS SPAN 7

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

INTERSTATE # 95 OVER MESSALONSKEE STREAM WATERVILLE, MAINE.

CUSTOMER CIANCHETTE BROTHERS
DESIGNER THE CLARKESON ENGR CO

ORDER NO. VERBAL | DWG. NO. 9-60-56B

DRAWN | REVISION | REVISION | REVISION

APPROVED 5-22-59

77-136 L

BILL OF MATERIAL — DWG. NO. 960-56A

SHIP MARK	NO.	MARK	SHAPE	LENGTH	WT.	WT. DED.	REMARKS
Shim A	10		PL 7 x 1/4	0 7			
do B	16		PL 7 x 1/8	0 7			
do C	20		PL 7 x 1/16	0 7			
S21	1		36 WF 230	84 11½		14#	A-373
S22	1		Do	84 11½		14#	A-373
S23	1		Do	84 11½		14#	A-373
S24	1		Do	84 11½		14#	A-373
S25	1		Do	84 11½		14#	A-373
Field	96		5/8" ø Bolts	0 2			
	2	C1	PL 15 x 1 1/16	54 0		90#	A-373
	3	C2	PL 15 x 1 1/4	55 6		166#	A-373
	8	P1	PL 6 x 1/2	2 6			
	8	P2	Do	2 6			
	8	P3	Do	2 6			
	8	P4	Do	2 6			
	4	P5	Do	1 6			
	4	P6	Do	1 6			
	4	P7	Do	1 6			
	4	P8	Do	1 6			
	2		12 C 30	6 11½		12#	
	2		Do	6 11½		12#	
	2		L	6 11 5/16		12#	
	2		L	6 11 5/16		12#	
	2		L 4" x 3" x 7/16	6 11 5/16			
	8		Do	6 11 5/16			
	2		PL 8 x 1	8 2 5/16			
	2		Do	8 2 5/16			
	4		Do	7 6		9#	
	2		PL 6 x 1	1 4		9#	
	2	A1	L 6 x 6 x 3/4	8 2 5/16			
	2	A2	Do	8 2 5/16			
	4	A3	Do	7 6			
	36	P9	PL 22 1/2 x 3/16	0 7			
	2	P6	PL 6 x 1	0 9 9/16		10#	
	2	P5	Do	0 9 9/16		10#	
	12	B1	FB 2 1/2 x 1/2	1 2			
		Shop	3/8 Fillet weld	929		.239 #/ft	

No camber in beams req'd any natural camber to be placed up.

SHOP CONNECTIONS: Welded
FIELD CONNECTIONS: Welded & 7/8" ø Temporary Erection Bolts.
HOLES:
PAINT: Per State of Maine Specs. and as noted

STEINGER DETAILS SPAN 8

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

INTERSTATE # 95 OVER MESSALONSKEE STREAM WATERVILLE, MAINE.

CUSTOMER CIANCHETTE BROTHERS
DESIGNER THE CLARKESON ENGR CO

ORDER NO. VERBAL | DWG. NO. 9-60-56A

DRAWN | REVISION | REVISION | REVISION

APPROVED 5-22-59

77-136 K

BILL OF MATERIAL — DWG. NO. 960-56B

SHIP MARK	NO.	MARK	SHAPE	LENGTH	WT.	WT. DED.	REMARKS
Shim A	16		PL 7 x 1/4	0 7			
do B	10		PL 7 x 1/8	0 7			
do C	20		PL 7 x 1/16	0 7			
S61	1		36 WF 230	84 11½		14#	A 373
S62	1		Do	84 11½		14#	A 373
S63	1		Do	84 11½		14#	A 373
S64	1		Do	84 11½		14#	A 373
S65	1		Do	84 11½		14#	A 373
Field	96		3/8" ø Bolts	0 2			
	2	C1	PL 15 x 1 1/16	54 0		90#	A-373
	3	C2	PL 15 x 1 1/4	55 6		166#	A-373
	5	P1	PL 6 x 1/2	2 6			
	8	P2	Do	2 6			
	8	P3	Do	2 6			
	8	P4	Do	2 6			
	4	P5	Do	1 6			
	4	P6	Do	1 6			
	4	P7	Do	1 6			
	4	P8	Do	1 6			
	2		12 C 30	6 11½		12#	
	2		Do	6 11½		12#	
	2		L	6 11 5/16		12#	
	2		L	6 11 5/16		12#	
	2		L 4" x 3" x 7/16	6 11 5/16			
	8		Do	6 11 5/16			
	2		PL 8 x 1	8 2 5/16			
	2		Do	8 2 5/16			
	4		Do	7 6			
	2		PL 6 x 1	1 4		9#	
	2		Do	1 4		9#	
	2	A1	L 6 x 6 x 3/4	8 2 5/16			
	2	A2	Do	8 2 5/16			
	4	A3	Do	7 6			
	36	P9	PL 22 1/2 x 3/16	0 7			
	2	P6	PL 6 x 1	0 9 9/16		10#	
	2	P5	Do	0 9 9/16		10#	
	12	B1	FB 2 1/2 x 1/2	1 2			
		Shop	3/8 Fillet weld	929		.239 #/ft	

No camber in beams req'd any natural camber to be placed up.

SHOP CONNECTIONS: Welded
FIELD CONNECTIONS: Welded & 7/8" ø Temporary Erection Bolts.
HOLES:
PAINT: Per State of Maine Specs. and as noted

STEINGER DETAILS SPAN 9

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

INTERSTATE # 95 OVER MESSALONSKEE STREAM WATERVILLE, MAINE.

CUSTOMER CIANCHETTE BROTHERS
DESIGNER THE CLARKESON ENGR Co.

ORDER NO. VERBAL | DWG. NO. 9-60-56B

DRAWN | REVISION | REVISION | REVISION

APPROVED 5-22-59

77-136 J

BILL OF MATERIAL — DWG. NO. 960-

SHIP MARK	NO.	MARK	SHAPE	LENGTH	WT.	WT. DED.	REMARKS
S26	1		36 WF 230				A-373
S27	1		Do				A-373
S28	1		Do				A-373
S29	1		Do				A-373
S30	1		Do				A-373
Field	96		3/8" ø Bolts				
	2	C1	PL 15 x 1 1/16	54 0		90#	A-373
	3	C2	PL 15 x 1 1/4	55 6		166#	A-373
	5	P1	PL 6 x 1/2	2 6			
	8	P2	Do	2 6			
	8	P3	Do	2 6			
	8	P4	Do	2 6			
	4	P5	Do	1 6			
	4	P6	Do	1 6			
	4	P7	Do	1 6			
	4	P8	Do	1 6			
	2		12 C 30	6 11½		12#	
	2		Do	6 11½		12#	
	2		L	6 11 5/16		12#	
	2		L	6 11 5/16		12#	
	2		L 4" x 3" x 7/16	6 11 5/16			
	8		Do	6 11 5/16			
	2		PL 8 x 1	8 2 5/16			
	2		Do	8 2 5/16			
	4		Do	7 6			
	2		PL 6 x 1	1 4			
	2		Do	1 4			
	2	A1	L 6 x 6 x 3/4	8 2 5/16			
	2	A2	Do	8 2 5/16			
	4	A3	Do	7 6			
	36	P9	PL 22 1/2 x 3/16	0 7			
	2	P6	PL 6 x 1	0 9 9/16			
	2	P5	Do	0 9 9/16			
	12	B1	FB 2 1/2 x 1/2	1 2			
		Shop	3/8 Fillet weld	929		.239 #/ft	

No camber in beams req'd any natural camber to be placed up.

SHOP CONNECTIONS: Welded
FIELD CONNECTIONS: Welded & 7/8" ø Temporary Erection Bolts.
HOLES:
PAINT: Per State of Maine Specs. and as noted

STEINGER DETAILS SPAN

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

INTERSTATE # 95 OVER MESSALONSKEE STREAM WATERVILLE, MAINE.

CUSTOMER CIANCHETTE BROTHERS
DESIGNER THE CLARKESON ENGR Co.

ORDER NO. | DWG. NO. 9-60-

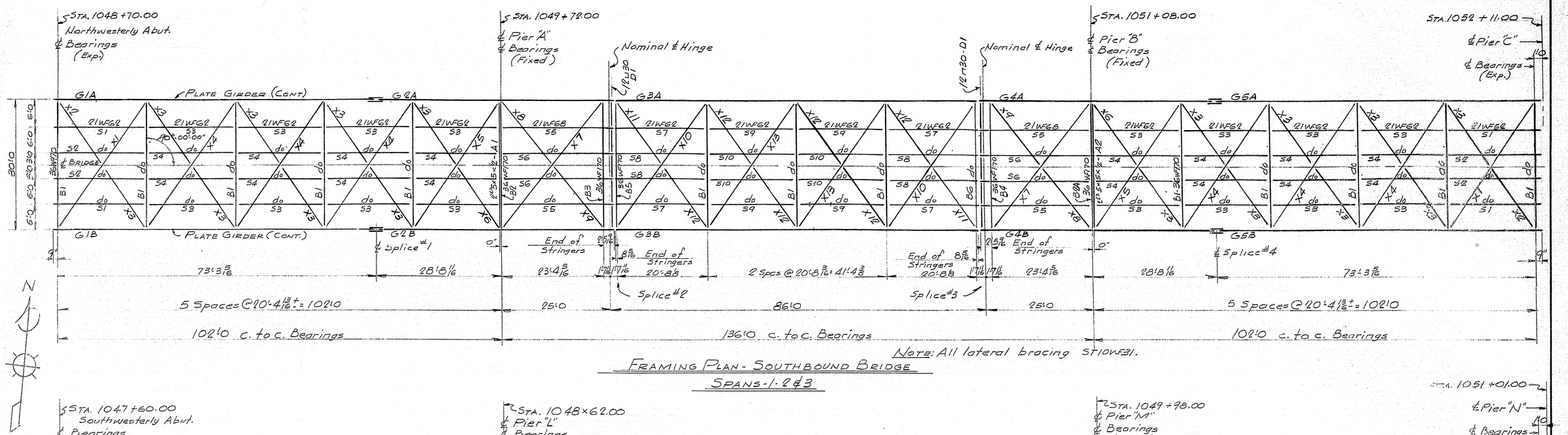
DRAWN | REVISION | REVISION | REVISION

77-136 I

0 1 2 3 4 5 INCHES

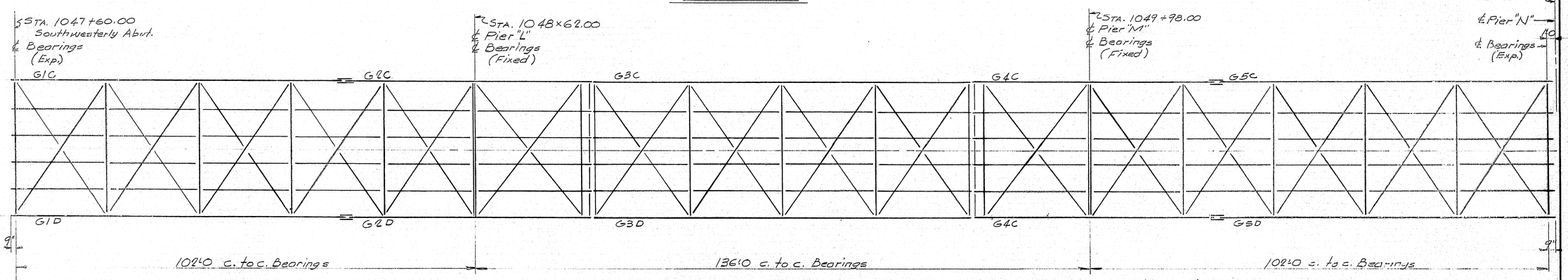
SHIP — BILL OF MATERIAL — DWG. NO. 960-S4B

MARK	NO.	MARK	SHAPE	LENGTH	WT.	WT. DED.	REMARKS
Shim A	10		PL 7 x 1/4	0 7	-		
do B	10		PL 7 x 1/8	0 7			
do C	20		PL 7 x 1/16	0 7			
S41	1		36 WF 230	84 10 15/16		5#	A-373
S42	1		Do	84 10 15/16		5#	A-373
S43	1		Do	84 10 15/16		5#	A-373
S44	1		Do	84 10 15/16		5#	A-373
S45	1		Do	84 10 15/16		5#	A-373
[illegible]	[illegible]		[illegible]	[illegible]		



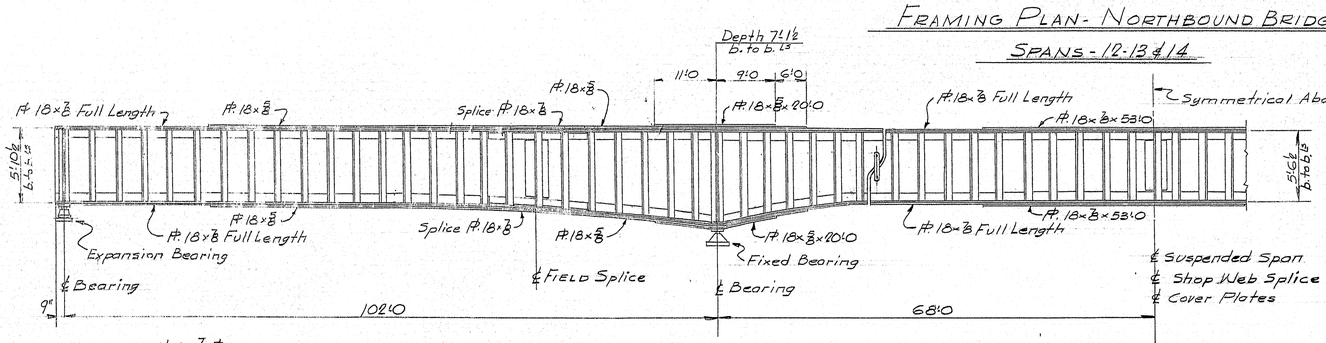
NOTE: All lateral bracing S10WF31.

FRAMING PLAN - SOUTHBOUND BRIDGE
SPANS - 1 - 2 & 3

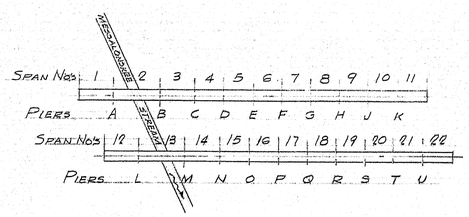


NOTE: For dimensions & size of materials not shown see Framing Plan - Southbound Bridge.

FRAMING PLAN - NORTHBOUND BRIDGE
SPANS - 12-13 & 14



GIRDER ELEVATION



KEY PLAN

APPROXIMATE WEIGHTS TO BE MARKED ON GIRDERS
G1 & G5 - 22 TONS
G2 & G4 - 17 TONS
G3 - 25 TONS

NOTES:
SHOP CONN: ⅞" ℄ RIVETS
FIELD CONN: ⅞" ℄ H.S. BOLTS
PAINT: PER STATE OF MAINE SPECIFICATIONS

DRAWN	4.4.59	J.P.F.
REVISION	9.24.59	J.P.F.
REVISION		
REVISION		

FRAMING PLANS - SPANS 1-2 & 3, 12-13 & 14

Bancroft & Martin Rollings Mills Company
South Portland 7, Maine

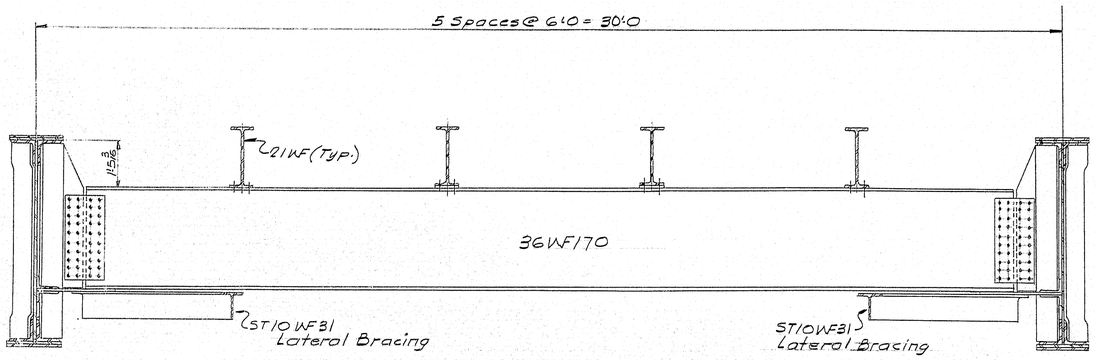
INTERSTATE #95 - OVER MESSALONSKEE STREAM
WATERVILLE, MAINE

CUSTOMER CIANCHETTE BROS.
DESIGNER THE CLARKESON ENGR. CO.
ORDER NO. VERBAL
DWG. NO. 9-60-E1

APP'D 4-30-59

77-136

PRINTED BY DALLENBACH CO., BOSTON, MASS., PLORDER NO. S-3712



SECTION "1-1"

NOTES:

See Dwg. 9-60-E1

SECTIONS & DETAILS

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

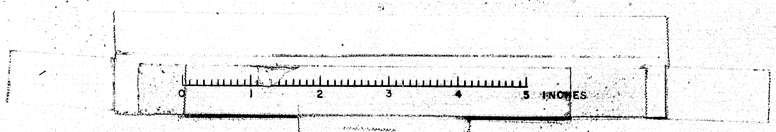
INTERSTATE #95 - OVER
MESSALONSKEE STREAM
WATERVILLE, MAINE

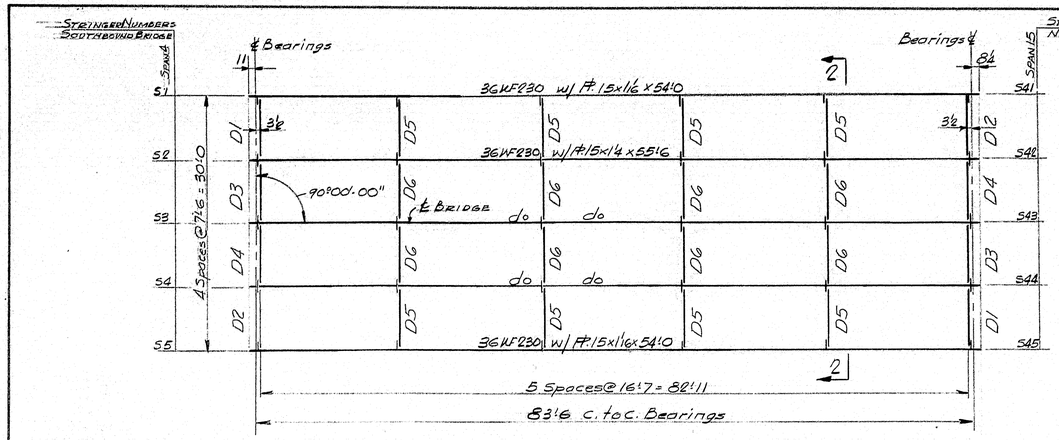
CUSTOMER Cianchette Bros.
DESIGNER The Clarkeson Engr. Co.

DRAWN	4-6-59	J.P.F.
REVISION		
REVISION		
REVISION		

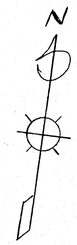
ORDER NO. Verbal | DWG. NO. 9-60-E2

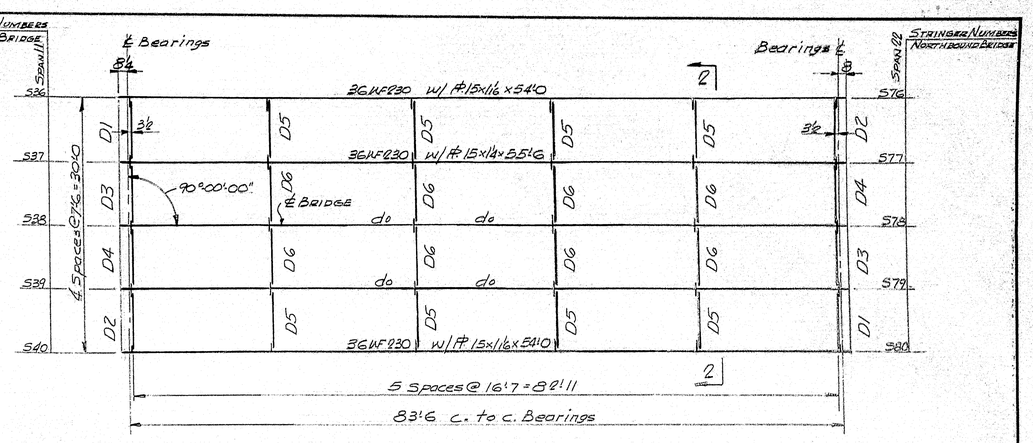
77-137



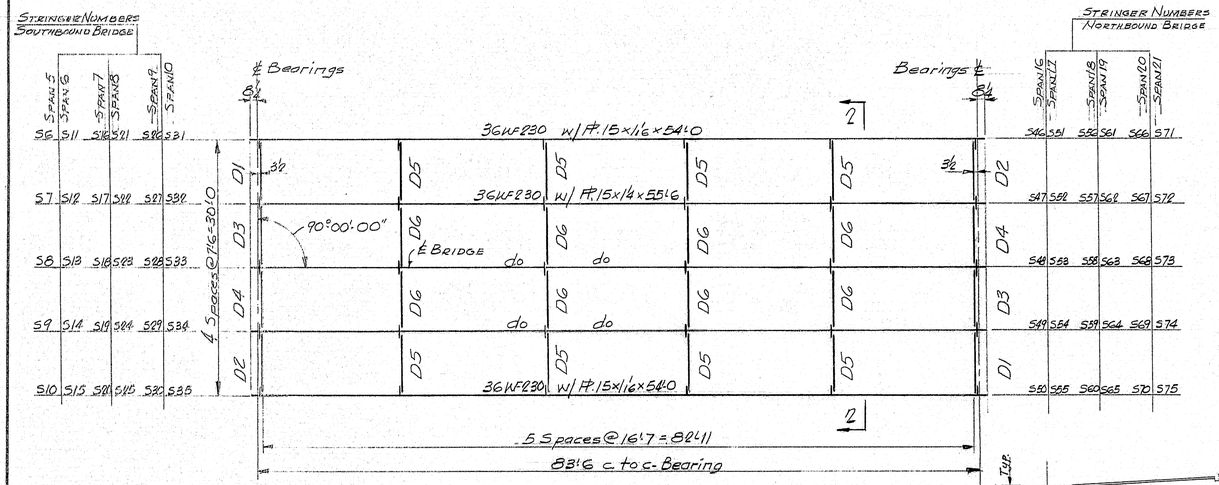


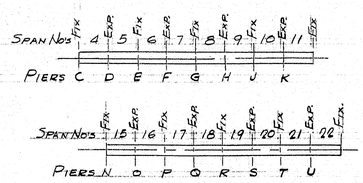
FRAMING PLAN
SPANS 4 & 15

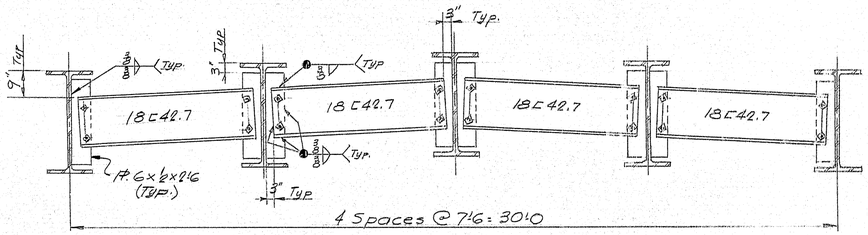




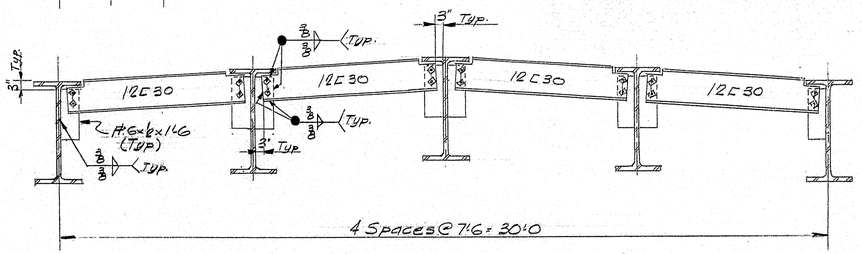
FRAMING PLAN
SPANS 11 & 22



FRAMING PLAN
SPANS 5 TO 10 & 16 TO 21 (INC.)

PLAN - BEARING LOCATIONS



SECTION "Q-Q"
AT INTERMEDIATE DIAPHRAGMS



SECTION
AT END DIAPHRAGMS

NOTE:
No Camber required for stringers, any natural Camber to be placed up.

NOTES:
SHOP CONN: Welded
FIELD CONN: Welded - ⅝" Temp. Erection Bolts.
PAINT: Per State of Maine Specifications.
Beams & Cover Plates are to be A.S.T.M. Designation A 373

APPROVED 6-22-59

FRAMING PLANS - SPANS 4 TO 11 & 15 TO 22

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

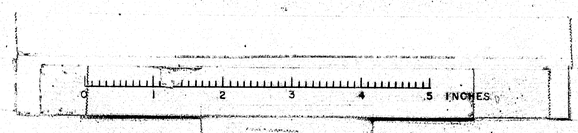
INTERSTATE #95 - OVER MESSALONSKEE STREAM
WATERVILLE, MAINE

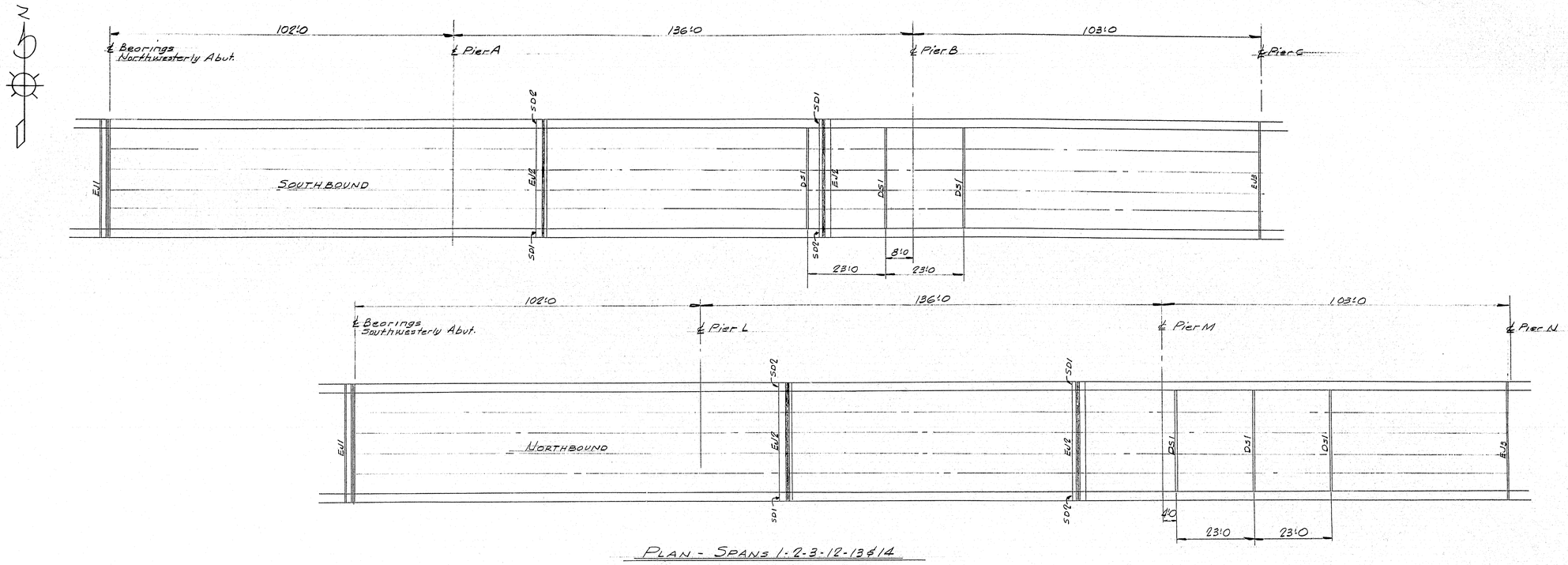
CUSTOMER Cianchette Bros.
DESIGNER The Clarkeson Engr. Co.

DRAWN	4-6-59	JPH
REVISION		
REVISION		
REVISION		

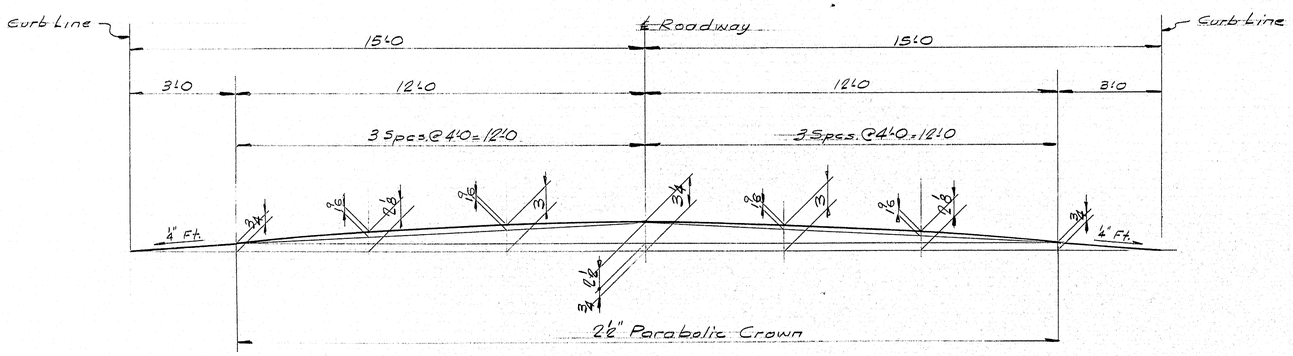
ORDER NO. Verbal
DWG. NO. 9-60-53

77-138





PLAN - SPANS 1-2-3-12-13 & 14



CROWN DETAIL

SHOP CONN: Welded
FIELD CONN: Welded

LOCATION PLAN: EXPANSION DAMS. SPANS 1-2-3-12-13 & 14

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

INTERSTATE #95 - OVER MESSALONSKEE STREAM WATERVILLE, MAINE

CUSTOMER CIANCHETTE BROS.
DESIGNER THE CLARKESON ENGR. CO.

ORDER NO. VERBAL | DWG. NO. 9-60-E4

APP. 2-1-60

DRAWN	1-22-60	J.P.F.
REVISION		
REVISION		
REVISION		

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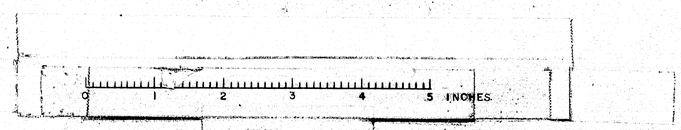
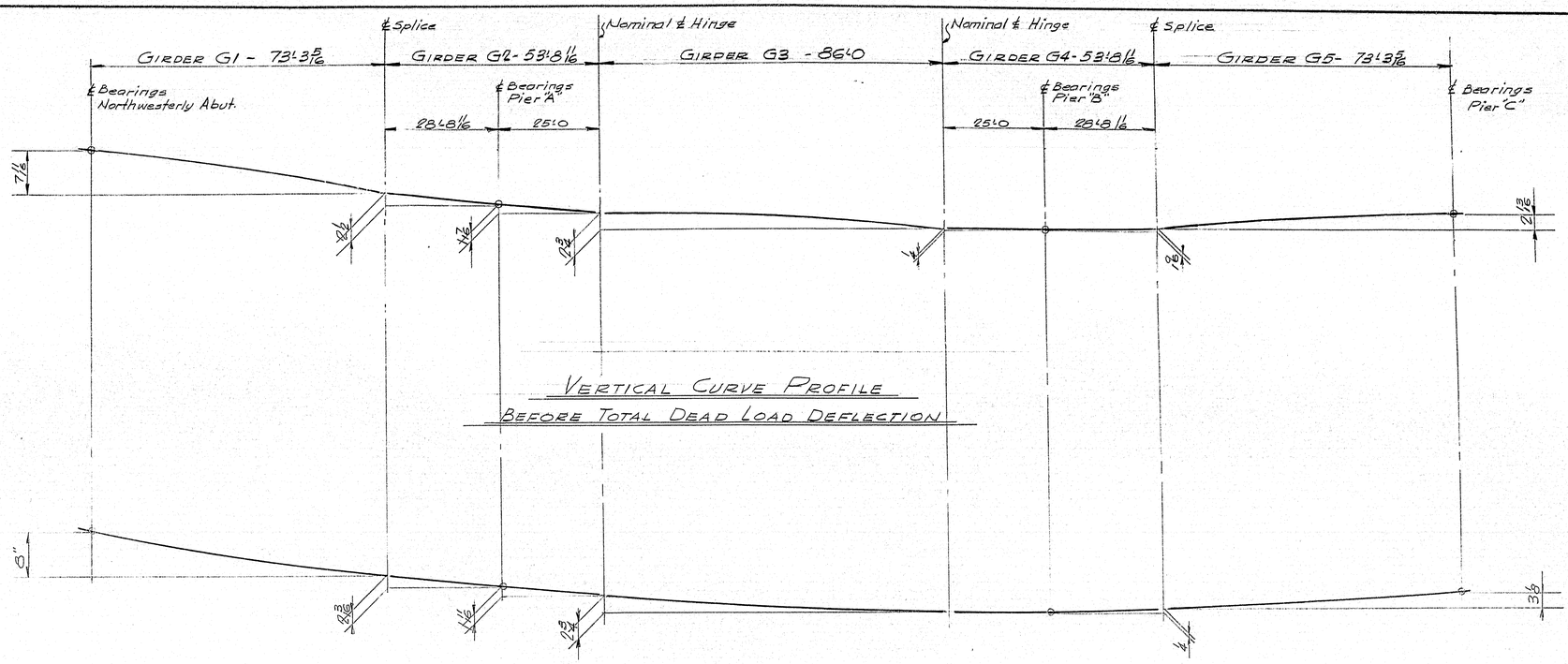
77-139

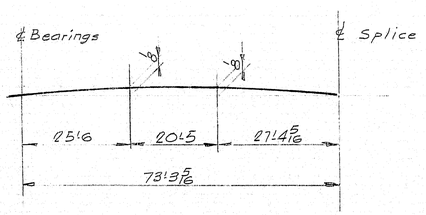
MODERN BLUE PRINT CO.



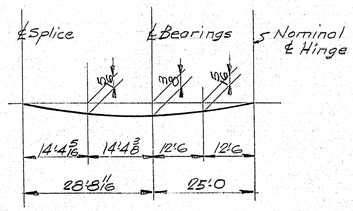


VERTICAL CURVE PROFILE
BEFORE TOTAL DEAD LOAD DEFLECTION

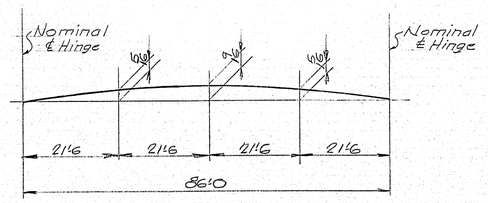
VERTICAL CURVE PROFILE
AFTER TOTAL DEAD LOAD DEFLECTION



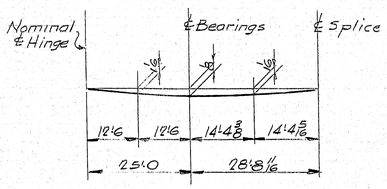
CAMBER - G1 GIRDERS



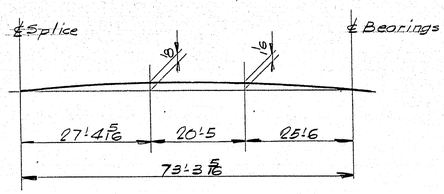
CAMBER - G2 GIRDERS



CAMBER - G3 GIRDERS



CAMBER - G4 GIRDERS



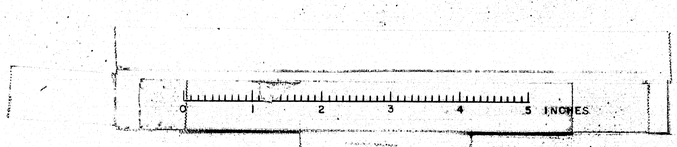
CAMBER - G5 GIRDERS

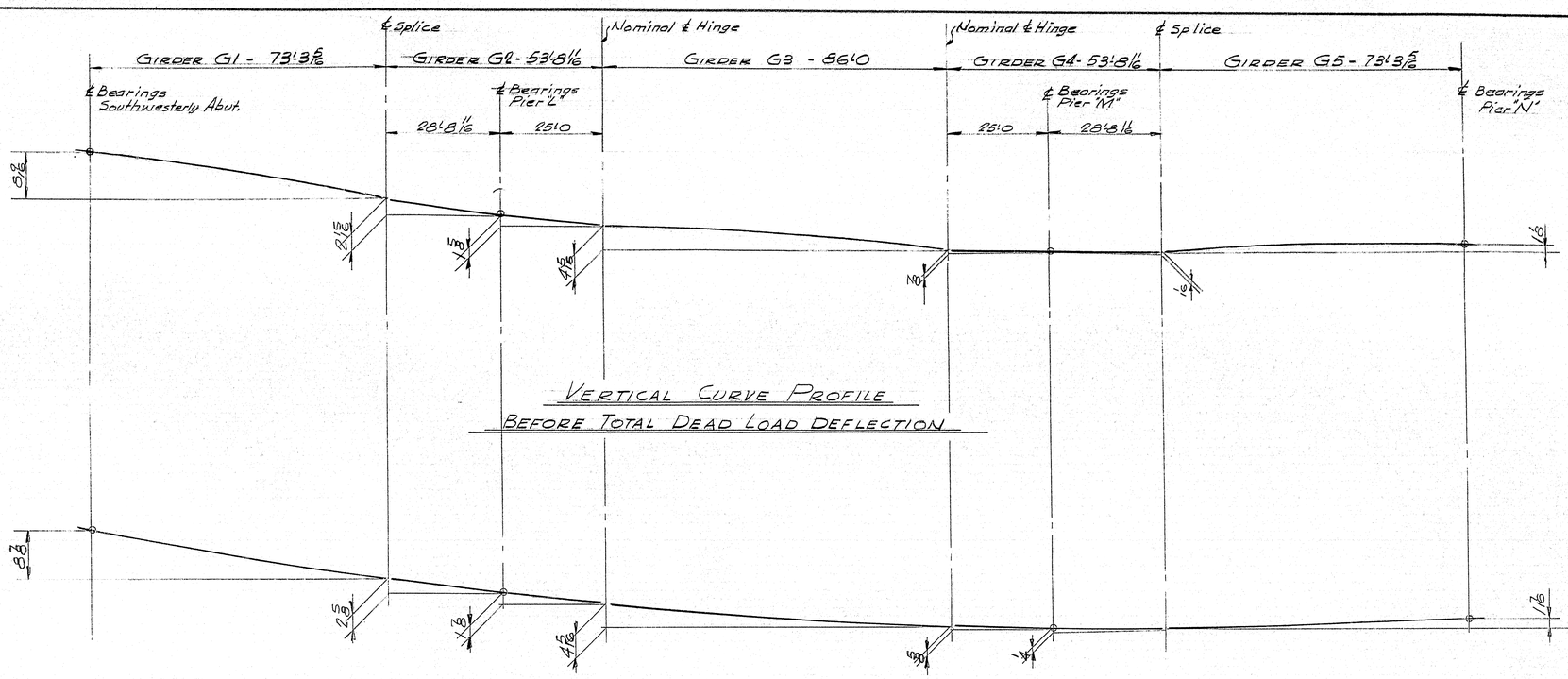
NOTES:
All vertical dimensions given to back of Top chord angles.

	SOUTHBOUND BRIDGE
	PROFILE & CAMBER DIAGRAMS
	Bancroft & Martin Rollings Mills Company South Portland 7, Maine
APP. 4-30-59	INTERSTATE #95 - OVER MESSALONSKEE STREAM WATERVILLE, MAINE
	CUSTOMER CIANCHETTE BROS
	DESIGNER THE CLARKESON ENGR. CO.
	ORDER NO. VERBAL / DWG. NO. 9-60-D1

DRAWN	4-3-59	J.P.F.
REVISION		
REVISION		
REVISION		

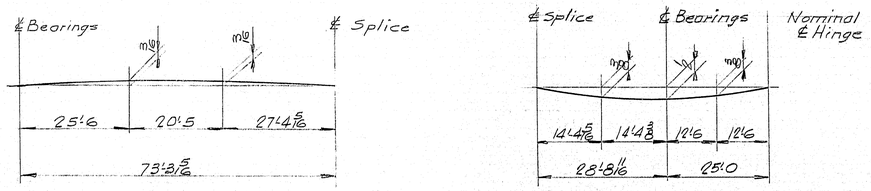
77-140





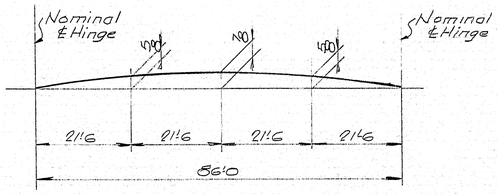
VERTICAL CURVE PROFILE
BEFORE TOTAL DEAD LOAD DEFLECTION

VERTICAL CURVE PROFILE
AFTER TOTAL DEAD LOAD DEFLECTION

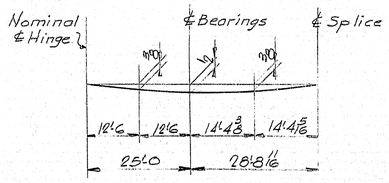


CAMBER - G1 GIRDERS

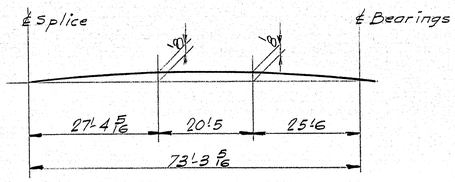
CAMBER - G2 GIRDERS



CAMBER - G3 GIRDERS



CAMBER - G4 GIRDERS



CAMBER - G5 GIRDERS

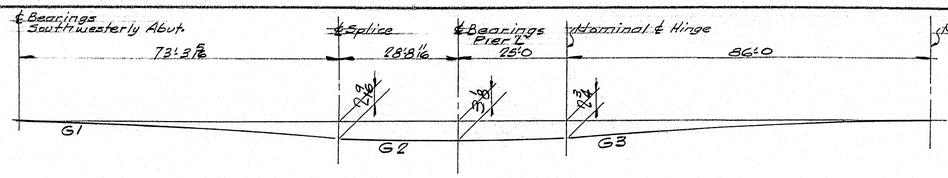
NOTES:
All vertical dimensions given to back of Top chord angles.

NORTHBOUND BRIDGE	
PROFILE & CAMBER DIAGRAMS	
Bancroft & Martin Rolling Mills Company, South Portland 7, Maine	
INTERSTATE #95 - OVER MESSALONSKEE STREAM, WATERVILLE, MAINE	
CUSTOMER Gianchette Bros.	
DESIGNER The Clarkeson Engr. Co.	
ORDER NO. Verbal	DWG. NO. 9-60-D2

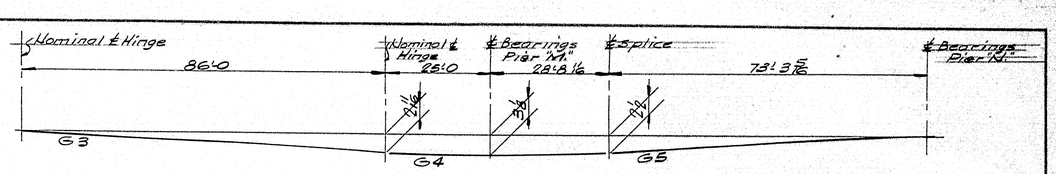
DRAWN	4-9-59	J.P.F.
REVISION		
REVISION		
REVISION		

APP'D 4-30-59

77-141

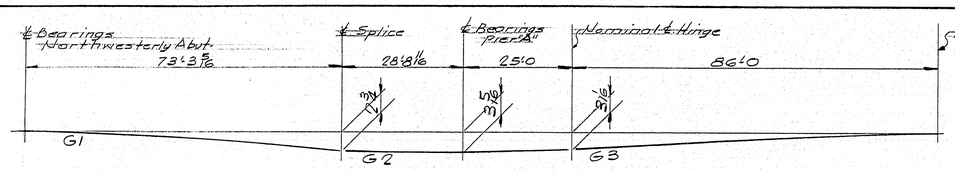


#1 LAYDOWN

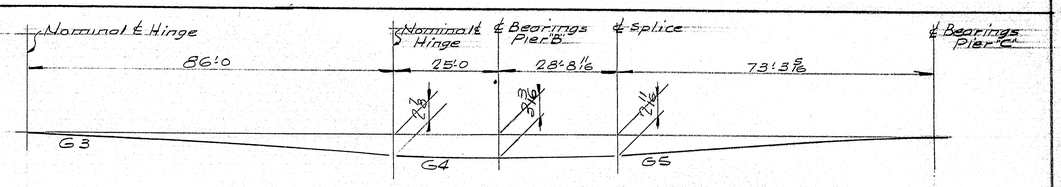


#2 LAYDOWN

NORTHBOUND BRIDGE



#1 LAYDOWN



#2 LAYDOWN

SOUTHBOUND BRIDGE

NOTE
All vertical dimensions given to back of Top chord angles.

LAY DOWN DIAGRAMS

Bancroft & Martin Rollings Mills Company
South Portland 7, Maine

INTERSTATE #95 OVER MESSALONSKEE STREAM
WATERVILLE, MAINE

DRAWN	1-11-60	J.P.F.	
REVISION			
REVISION			
REVISION			

CUSTOMER CIANCHETTE BROS.
DESIGNER THE CLARKESON ENGR. CO.
ORDER NO. VERBAL
DWG. NO. 9-60-D3

MODERN BLUE PRINT CO.

77-142