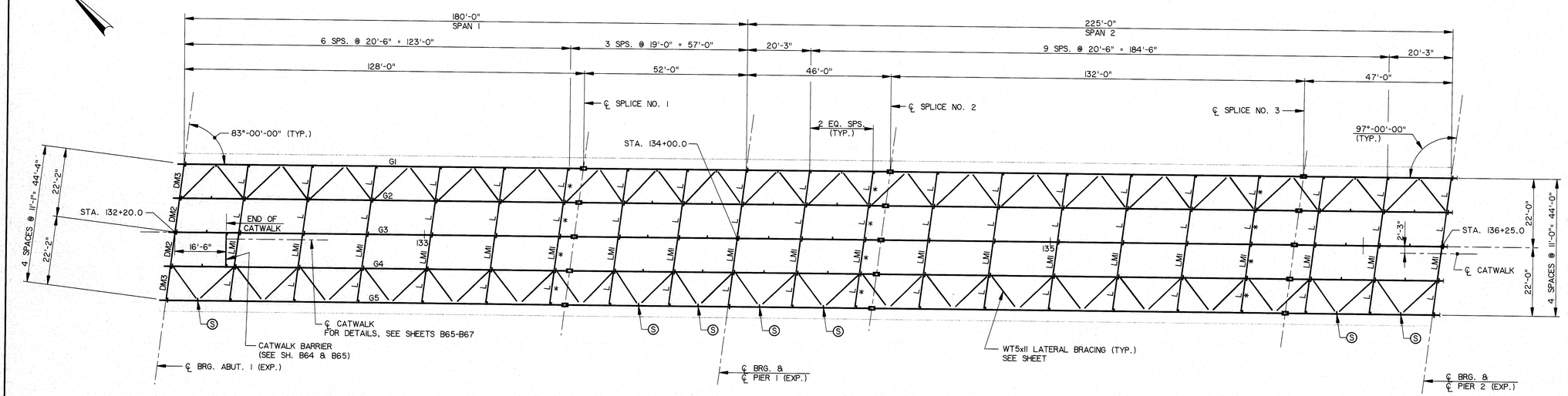
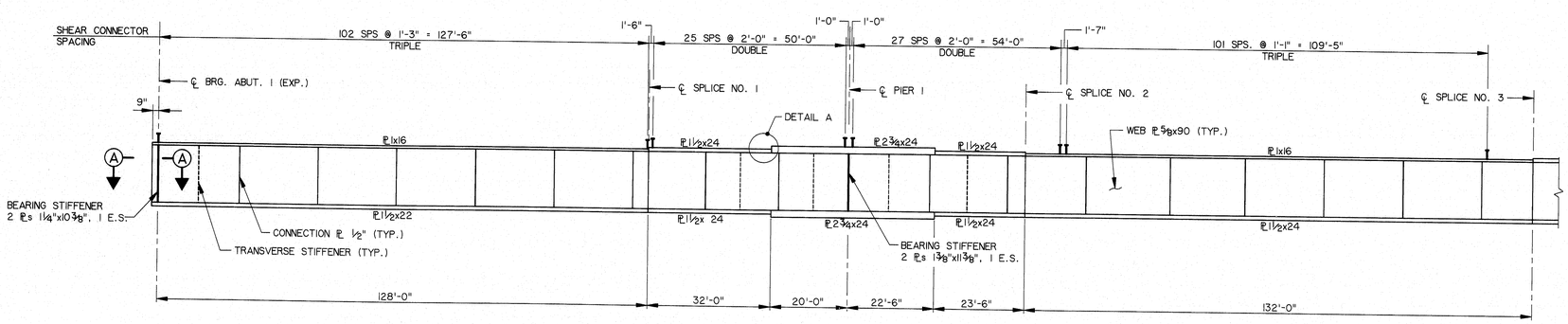
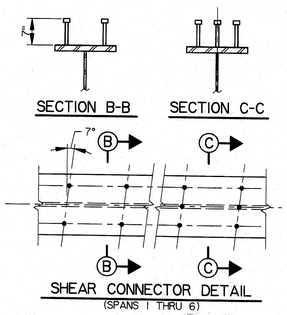
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
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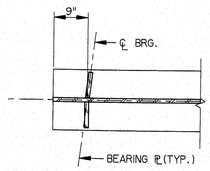


FRAMING PLAN

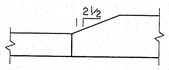




SHEAR CONNECTOR DETAIL
(SPANS 1 THRU 6)



SECTION A-A
NO SCALE



DETAIL A
NO SCALE

GIRDER ELEVATION

TRANSVERSE STIFFENERS (ONE SIDE ONLY)	
TYPE	SIZE
S	1/2"x6"

NOTES

1. FLANGE TO WEB FILLET WELDS FOR ALL FLANGE THICKNESSES SHALL BE 5/16" WELDS. FOR CONNECTION AND STIFFENER PLATE WELDING SEE SHEET B52.
2. THE NOTCH TOUGHNESS REQUIREMENTS OF SECTION 713.01 OF STANDARD SPECIFICATIONS SHALL APPLY TO THE WEB AND FLANGES OF THE MAIN GIRDER AND TO THE FIELD SPLICE PLATES.
3. ALL DIMENSIONS ARE HORIZONTAL.
4. FOR STRUCTURAL STEEL NOTES, SEE SHEET B52.
5. * - SEE NOTE 7, SHEET B52.

NO.	REVISION	BY	DATE

	BY	DATE
DESIGNED:	SM	9/94
DRAWN:	RJT	9/94
CHECKED:	DWR	9/94
IN CHARGE OF	CJM	

WATERMIN

As Built Copy 12/19/96

115-246
STEEL ALTERNATIVE

HNTB
ARCHITECTS ENGINEERS PLANNERS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

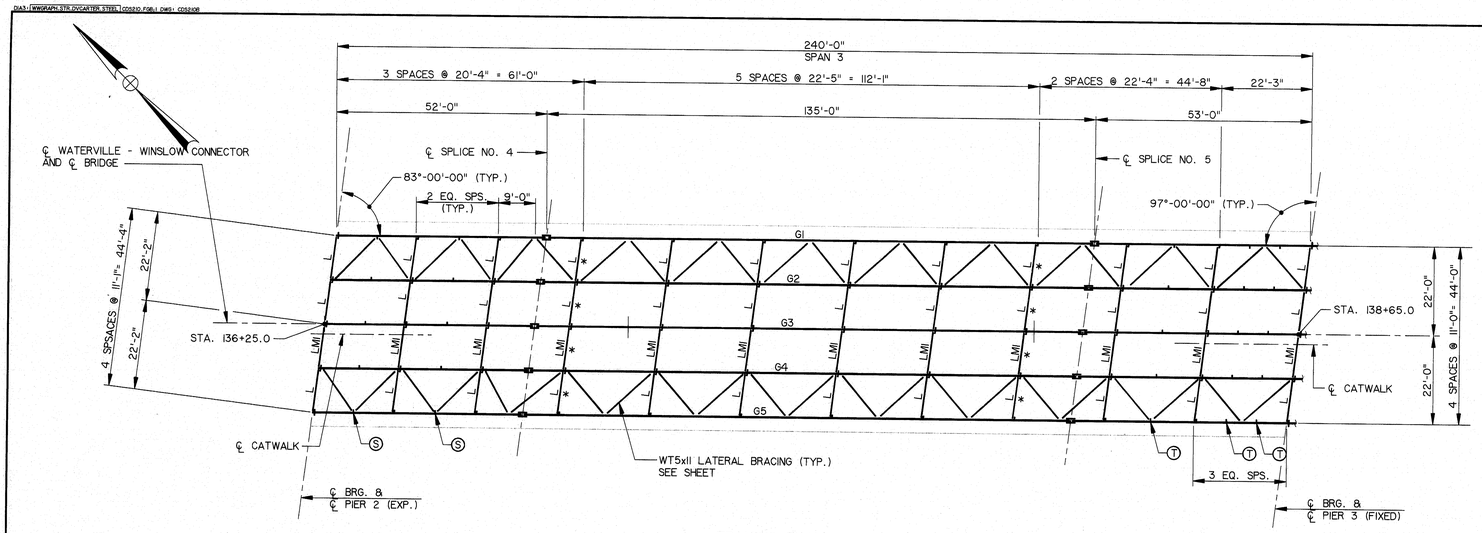
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

FRAMING PLAN I

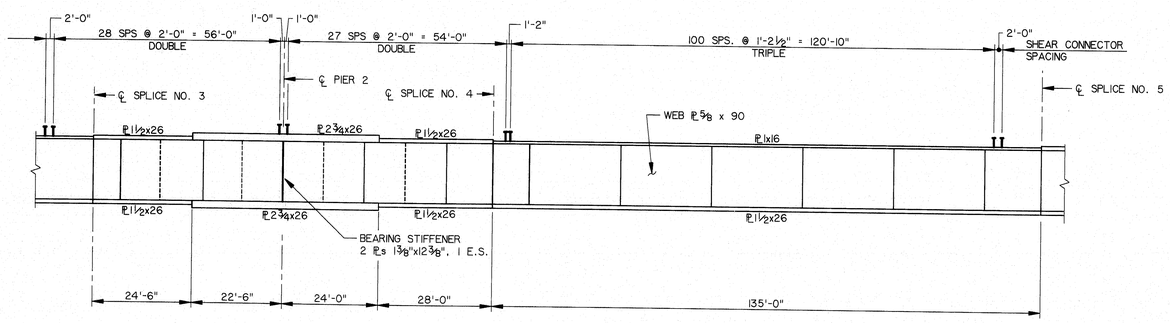
SHEET B51 OF B86 AUGUSTA, MAINE

DIA3:\WWGRAPH.STR\DOCARTER\STEEL\CO52ID_F06L1.DWG, CO52IDR

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	61	103

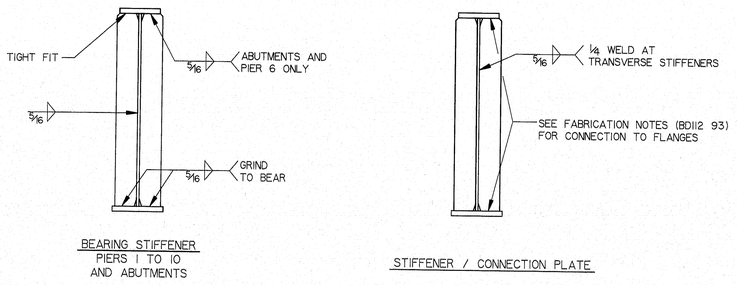


FRAMING PLAN



GIRDER ELEVATION

TRANSVERSE STIFFENERS (ONE SIDE ONLY)	
TYPE	SIZE
S	½"x6"
T	½"x7"



BEARING STIFFENER & CONNECTION PLATE DETAILS

STRUCTURAL STEEL NOTES

1. CAMBER ORDINATES, AS SHOWN ON SHEETS B60 & B61, ARE COMPUTED TO COMPENSATE FOR ALL DEAD LOAD DEFLECTIONS.
2. NO TRANSVERSE BUTT-WELD SPLICES WILL BE ALLOWED IN THE FLANGE PLATES OR WEB PLATES WITHIN 10 FEET OR 10 PERCENT OF THE SPAN LENGTH (WHICHEVER IS GREATER) FROM THE POINTS OF MAXIMUM NEGATIVE MOMENT OR MAXIMUM POSITIVE MOMENT. BUTT-WELD SPLICES IN FLANGES SHALL BE NOT BE LESS THAN THREE FEET FROM TRANSVERSE BUTT-WELDS IN THE WEB PLATES AND NO TRANSVERSE WEB OR FLANGE BUTT-WELDS SHALL BE LOCATED WITHIN THREE FEET OF OTHER TRANSVERSE WELDS (E.G. CONNECTION PLATES TO WEB WELDS) ON EITHER FLANGE OR WEB. NO TRANSVERSE BUTT-WELD SPLICES WILL BE ALLOWED IN AREAS OF STRESS REVERSAL.
3. SECTIONS OF FLANGE PLATES OR WEB PLATES BETWEEN TRANSVERSE SHOP SPLICES OR BETWEEN A TRANSVERSE SHOP SPLICE AND A FIELD SPLICE SHALL BE NOT LESS THAN 15 FEET IN LENGTH UNLESS OTHERWISE SHOWN ON THE PLANS.
4. BEARING STIFFENERS SHALL BE PLUMB AFTER ERECTION AND DEAD LOADING OF THE STRUCTURE. INTERMEDIATE WEB STIFFENERS MAY BE EITHER PLUMB OR NORMAL TO THE TOP FLANGE.
5. CROSS-FRAME CONNECTION PLATES MAY BE EITHER PLUMB OR NORMAL TO THE TOP FLANGE.
6. THE BEARING SETTING CHART INDICATES THE REQUIRED FINAL POSITION OF THE BEARINGS. IT IS ANTICIPATED THAT THE BEARINGS AT ABUTMENT 1, PIER 6 AND ABUTMENT 2 WILL MOVE AWAY FROM THE FIXED BEARINGS DUE TO THE PLACEMENT OF THE SUPERSTRUCTURE CONCRETE AS FOLLOWS:

	MOVEMENT Δ L
ABUTMENT 1	5/8"
PIER 6 (WEST)	5/8"
PIER 6 (EAST)	7/8"
ABUTMENT 2	7/16"

NO SEPARATE PAYMENT WILL BE MADE FOR RESETTING BEARINGS TO THE FINAL POSITION IF AN ADJUSTMENT IS REQUIRED.

7. AT LOCATIONS MARKED WITH AN ASTERISK (*) THE DESIGNATED DIAPHRAGMS SHALL BE CHANGED TO A TYPE D DIAPHRAGM AS REQUIRED TO ACCOMMODATE THE CONTRACTOR'S DECK PLACEMENT SEQUENCE. NO EXTRA COMPENSATION WILL BE ALLOWED FOR ANY DIAPHRAGMS SO SUBSTITUTED, AND ANY ADDITIONAL COSTS WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT ITEMS.
8. ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A709, GRADE 50W (UNPAINTED). ALL BOLTS SHALL CONFORM TO ASTM A325 - TYPE 3.
9. BEARING STIFFENERS NOT USED AS A CROSSFRAME CONNECTION PLATE SHALL BE KEPT NORMAL OR RADIAL TO GIRDER CENTERLINE, SEE SECTION A-A, SHEET B51.
10. GIRDERS IN SPANS 7 THRU 11 SHALL BE HORIZONTALLY CURVED TO RADII SHOWN. SEE NOTE A, SHEET B54.
11. TRANSVERSE STIFFENERS SHALL BE KEPT NORMAL OR RADIAL TO GIRDER CENTERLINE.

AS BUILT · CEM 11/9/16

115-247
STEEL ALTERNATIVE

NO.	REVISION	BY	DATE

	BY	DATE
DESIGNED:	SM	9/94
DRAWN:	RJT	9/94
CHECKED:	JFW	9/94
IN CHARGE OF	CJM	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

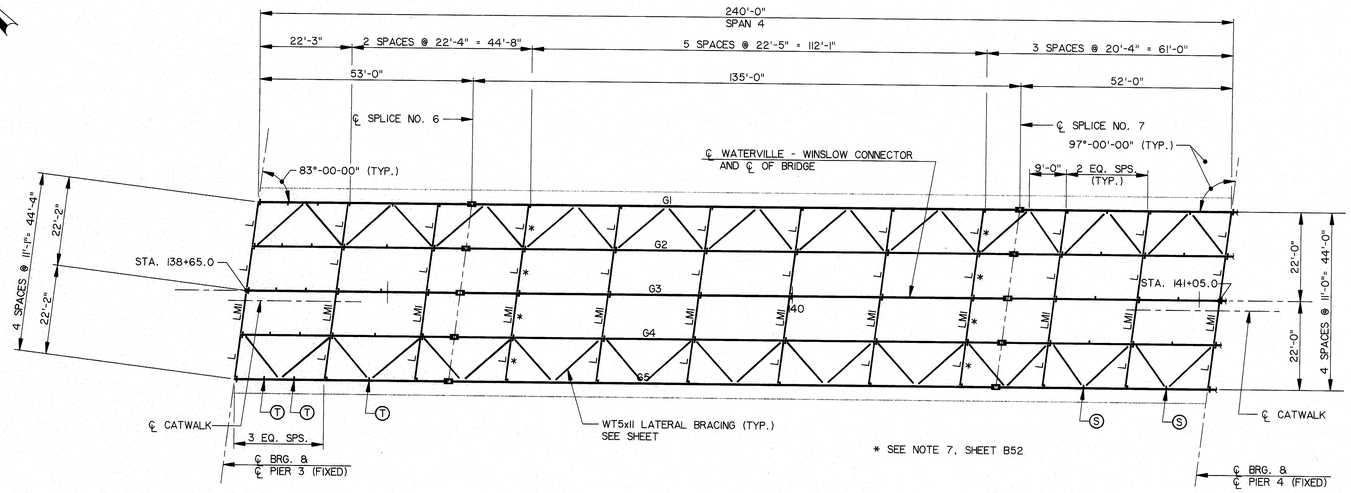
FRAMING PLAN II

HNTB ARCHITECTS ENGINEERS PLANNERS

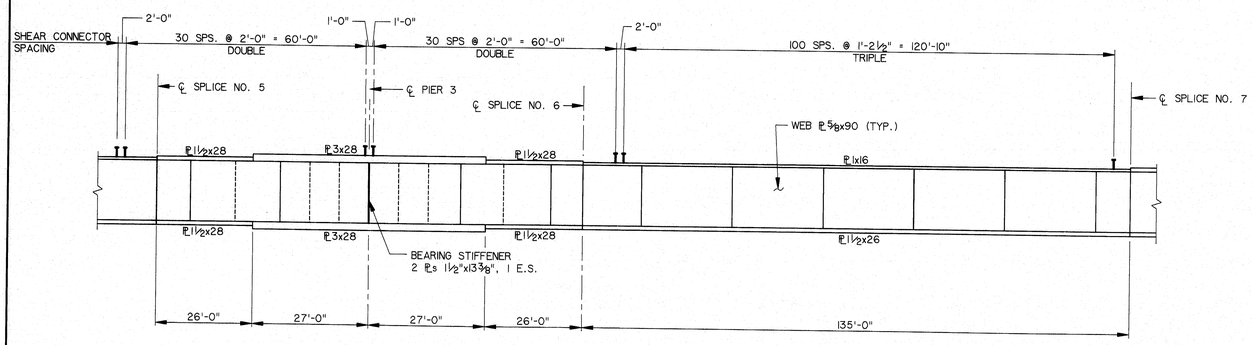
SHEET B52 OF B86 AUGUSTA, MAINE

DIA1:\WWRAMS\STR.DVCARTER.STEEL\DGB20.F08\1.DWG- 6/28/96

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	62	103

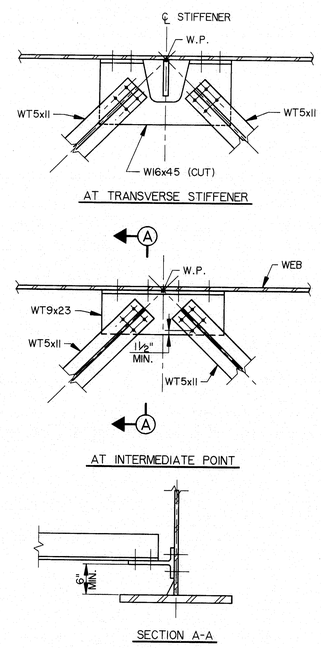


FRAMING PLAN



GIRDER ELEVATION

TRANSVERSE STIFFENERS (ONE SIDE ONLY)	
TYPE	SIZE
S	½"x6"
T	½"x7"



LATERAL BRACING DETAILS
SPANS 1 THRU 6

115-248
STEEL ALTERNATIVE

NO.	REVISION	BY	DATE

WATERWIN

	BY	DATE
DESIGNED:	SM	9/94
DRAWN:	RJT	9/94
CHECKED:	DWR	9/94
IN CHARGE OF	CJM	

HNTB
ARCHITECTS ENGINEERS PLANNERS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT

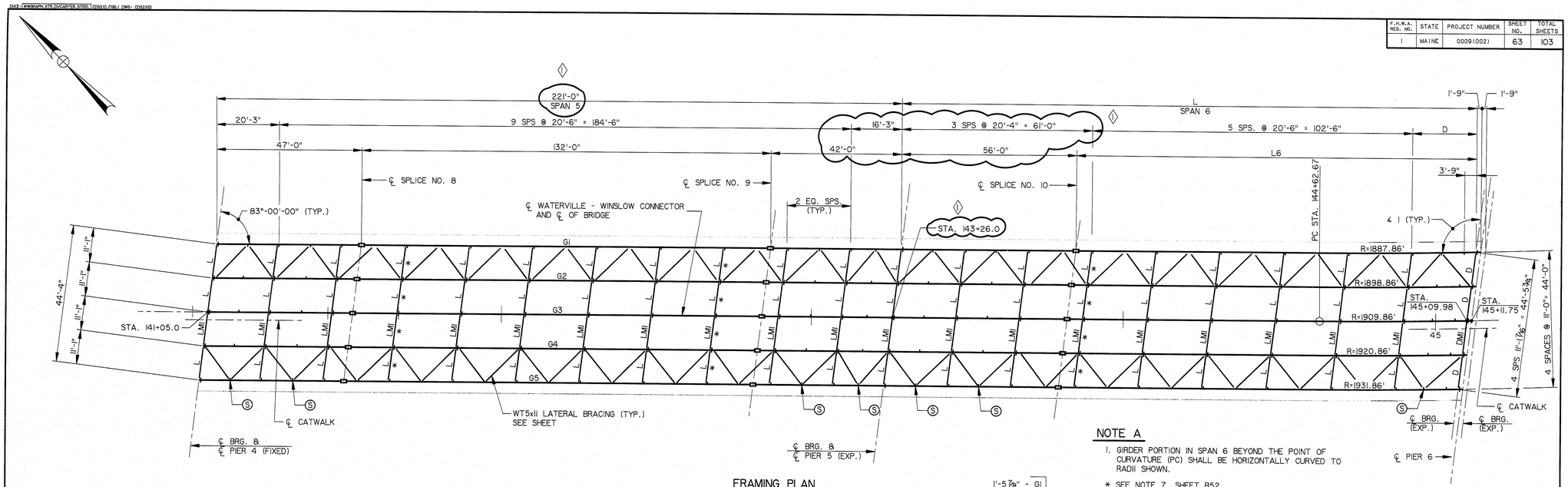
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

FRAMING PLAN III

SHEET B53 OF B86 AUGUSTA, MAINE

DIAG: //WKGRAPH-STR/DVCARTER STEEL CDS2/0_FIGI.DWG - CDS2/00

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	63	103

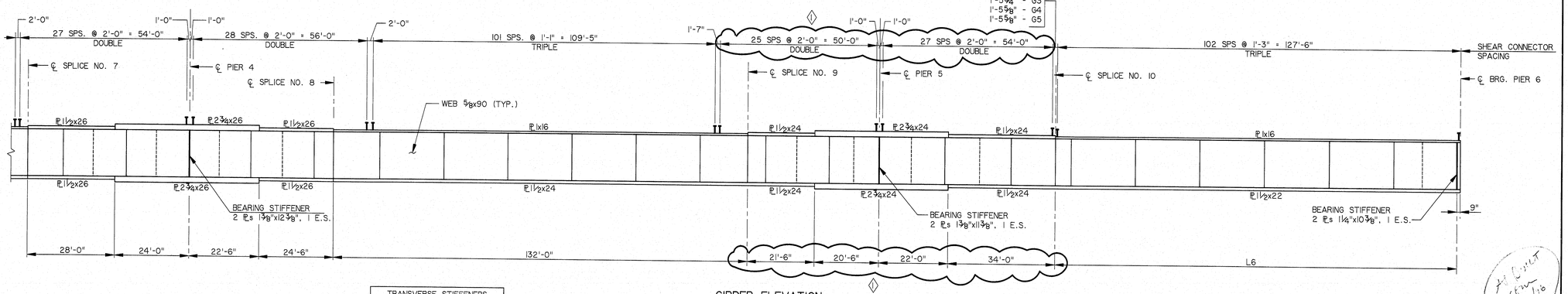


NOTE A

1. GIRDER PORTION IN SPAN 6 BEYOND THE POINT OF CURVATURE (PC) SHALL BE HORIZONTALLY CURVED TO RADII SHOWN.

* SEE NOTE 7, SHEET B52.

FRAMING PLAN



GIRDER ELEVATION

TRANSVERSE STIFFENERS (ONE SIDE ONLY)	
TYPE	SIZE
S	½"x6"

GIRDER - SPAN 6				
GIRDER	TANGENT + CURVE + TANGENT	L6	D	Δ 1
G1	133'-11 11/16" + 50'-0 1/4" = 183'-11 15/16"	127'-11 7/8"	20'-5 7/8"	98°-31'-05"
G2	135'-3 15/16" + 48'-8" = 183'-11 15/16"	127'-11 7/8"	20'-5 7/8"	98°-28'-06"
G3	136'-8" + 47'-3 13/16" = 183'-11 13/16"	127'-11 3/8"	20'-5 3/4"	98°-25'-09.1"
G4	138'-0 1/4" + 45'-11 7/8" = 183'-11 11/16"	127'-11 5/8"	20'-5 5/8"	98°-22'-14.3"
G5	139'-4 9/16" + 44'-7 1/8" = 183'-11 11/16"	127'-11 5/8"	20'-5 5/8"	98°-19'-21.5"

NO.	REVISION	BY	DATE
◊	PIER 5 RELOCATION	SM	10/95

	BY	DATE
DESIGNED:	SM	9/94
DRAWN:	RJT	9/94
CHECKED:	DWR	9/94
IN CHARGE OF	CJM	

WATERWIN

115-249
STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT

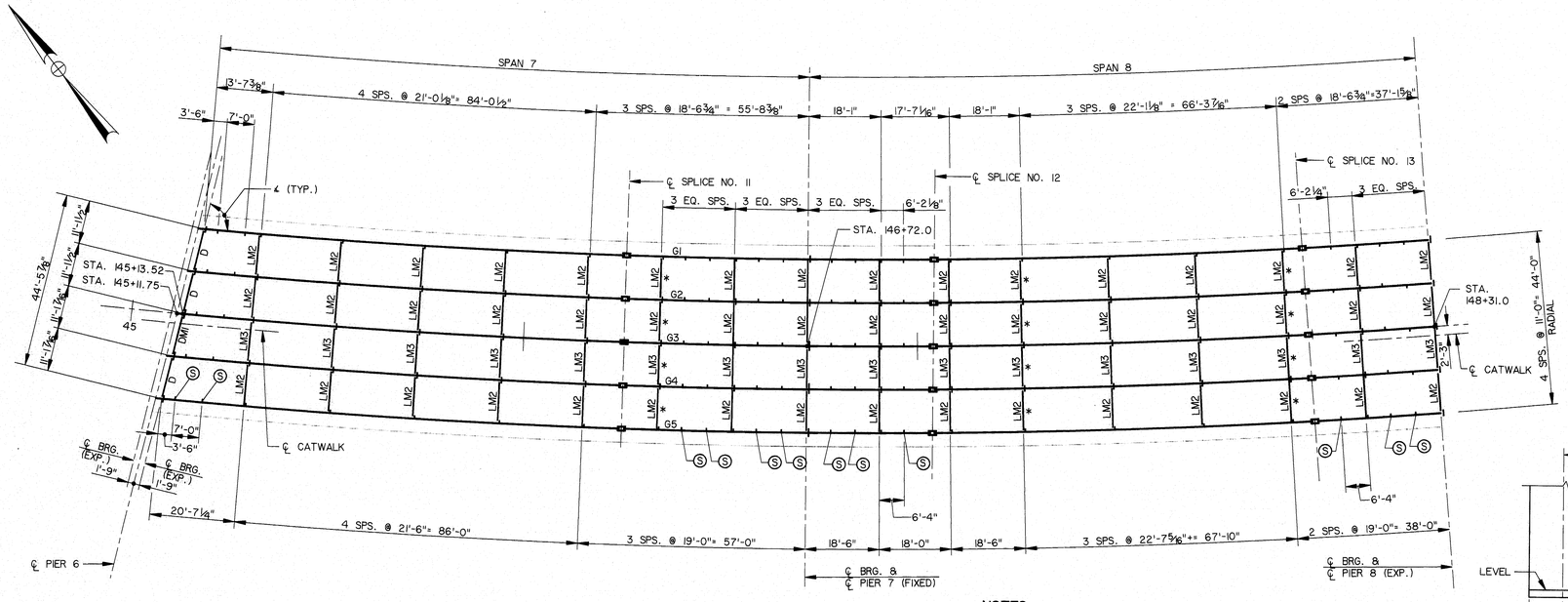
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

FRAMING PLAN IV

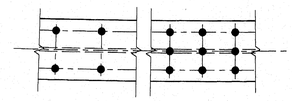
HNTB
ARCHITECTS ENGINEERS PLANNERS

SHEET B54 OF B86 AUGUSTA, MAINE

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
I	MAINE	0009(002)	64	103

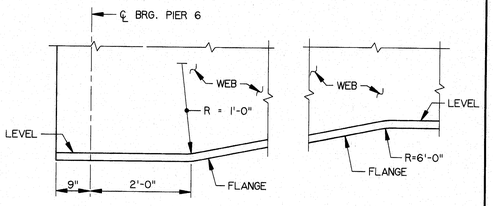


FRAMING PLAN



SHEAR CONNECTOR DETAIL
(SPANS 7-11)

GIRDER	R	∠
G1	1887.86'	81°-22'-28.3"
G2	1898.86'	81°-25'-29.6"
G3	1909.86'	81°-28'-28.7"
G4	1920.86'	81°-31'-25.7"
G5	1931.86'	81°-34'-20.7"

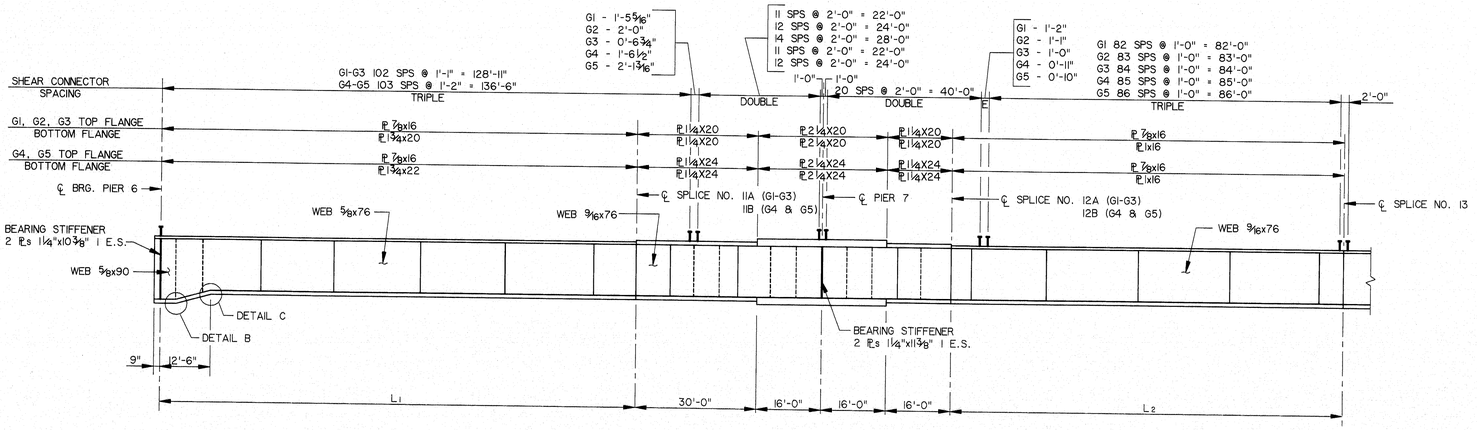


DETAIL B
NO SCALE

DETAIL C
NO SCALE

NOTES

1. FOR STRUCTURAL STEEL NOTES, SEE SHEET B52.
2. * SEE NOTE 7, SHEET B52.



GIRDER ELEVATION

GIRDER	DIMENSION				
	L_1	L_2	L_3	L_4	L_5
G1	107'-4 5/16"	93'-2 1/16"	83'-3 3/8"	74'-4 1/16"	86'-7 7/16"
G2	109'-11 1/16"	94'-0 5/16"	84'-1 1/16"	75'-2 1/4"	87'-3 3/4"
G3	112'-5 3/4"	95'-0"	85'-0"	76'-0"	88'-0"
G4	115'-0 1/2"	95'-11 1/16"	85'-10 5/16"	76'-9 3/4"	88'-8 1/4"
G5	117'-7 3/16"	96'-9 5/16"	86'-8 5/8"	77'-7 5/16"	89'-4 9/16"

GIRDER	SPAN				
	7	8	9	10	11
G1	153'-4 5/16"	157'-2 1/16"	147'-3 3/8"	138'-4 1/16"	118'-7 7/16"
G2	155'-11 1/16"	158'-0 5/16"	148'-1 1/16"	139'-2 1/4"	119'-3 3/4"
G3	158'-5 3/4"	159'-0"	149'-0"	140'-0"	120'-0"
G4	161'-0 1/2"	159'-11 1/16"	149'-10 5/16"	140'-9 3/4"	120'-8 1/4"
G5	163'-7 3/16"	160'-9 5/16"	150'-8 5/8"	141'-7 5/16"	121'-4 9/16"

TRANSVERSE STIFFENERS (ONE SIDE ONLY)	
TYPE	SIZE
S	1/2"x6"

NO.	REVISION	BY	DATE

	BY	DATE
DESIGNED:	SM	9/94
DRAWN:	RJT	9/94
CHECKED:	DWR	9/94
IN CHARGE OF	CJM	

115-250

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

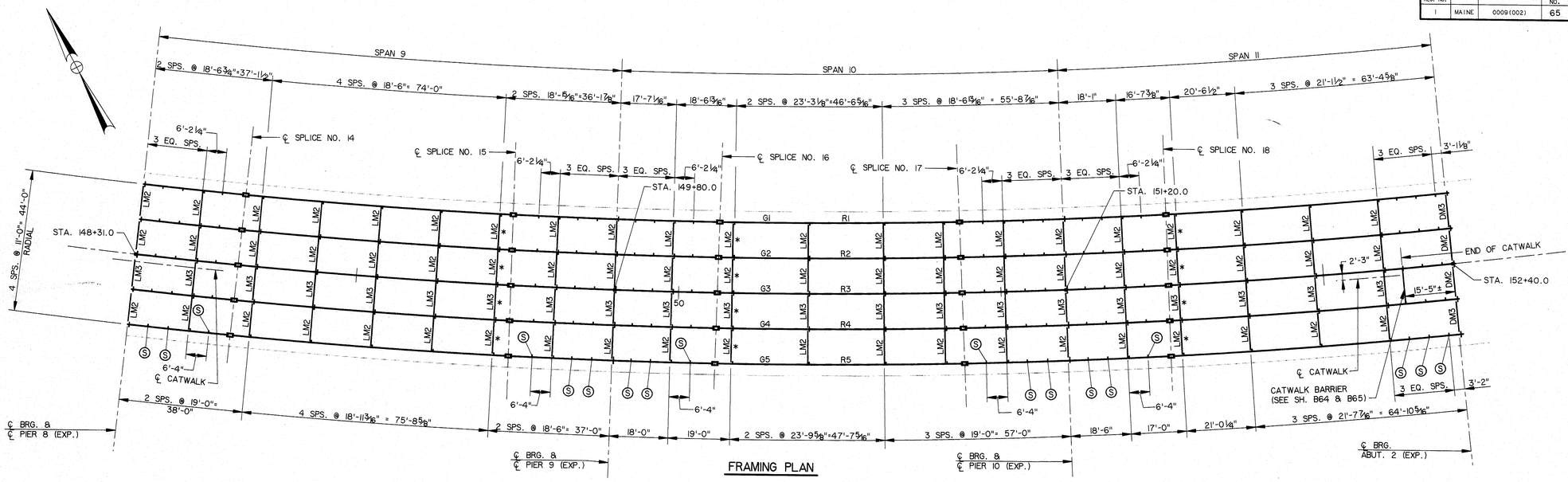
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

FRAMING PLAN V

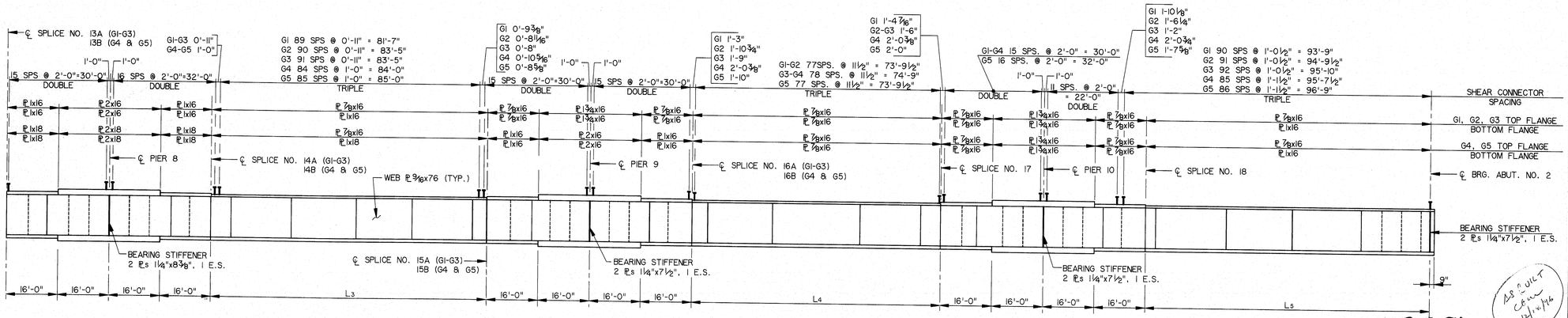
HNTB
ARCHITECTS ENGINEERS PLANNERS

SHEET B55 OF B86 AUGUSTA, MAINE

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	65	103



FRAMING PLAN



GIRDER ELEVATION

TRANSVERSE STIFFENERS (ONE SIDE ONLY)	
TYPE	SIZE
S	1/2x6

NO.	REVISION	BY	DATE

	BY	DATE
DESIGNED:	SM	9/94
DRAWN:	RJT	9/94
CHECKED:	DWR	9/94
IN CHARGE OF	CJM	

HNTB
ARCHITECTS ENGINEERS PLANNERS

115-251
STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

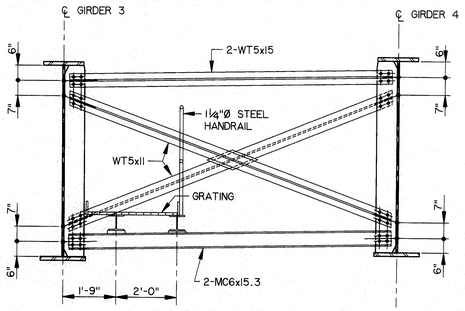
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

FRAMING PLAN VI

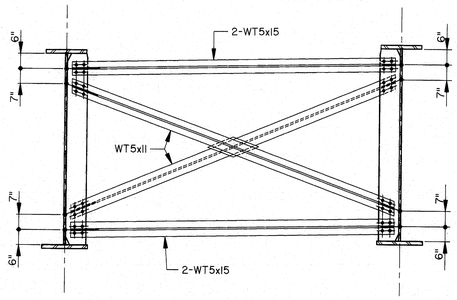
SHEET B56 OF B86 AUGUSTA, MAINE

DIA3:\WWGRAPH.STR.DVCARTER.STEEL\CDS23.FIRS.(DWG) - CDS23

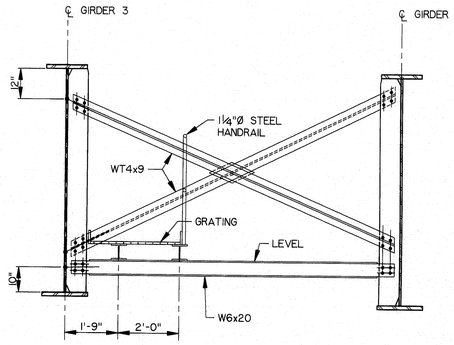
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	66	103



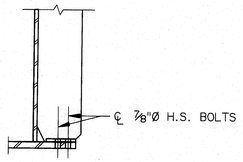
CROSSFRAME - TYPE LM3
(SPANS 7 - 11)



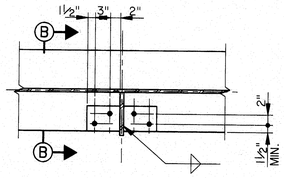
CROSSFRAME - TYPE LM2
(SPANS 7-11)



CROSSFRAME - TYPE LMI
(TYPE L, MODIFIED)

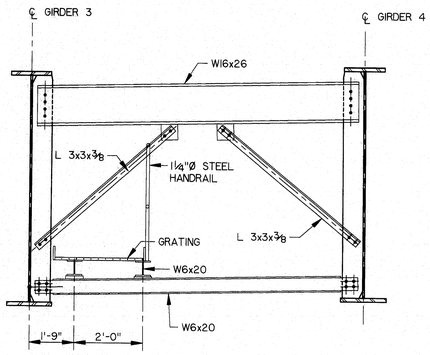


SECTION B-B

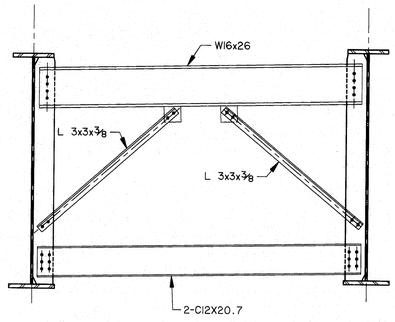


PLAN

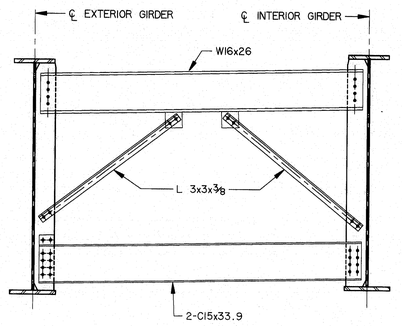
TENSION - FLANGE CONNECTION
(AT CROSSFRAMES)



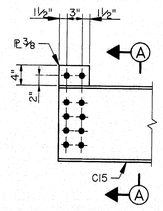
CROSSFRAME - TYPE DMI
(TYPE D, MODIFIED AT PIER 6)



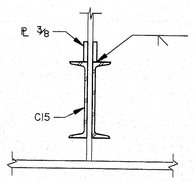
CROSSFRAME - TYPE DM2
(TYPE D, MODIFIED AT ABUTMENTS)



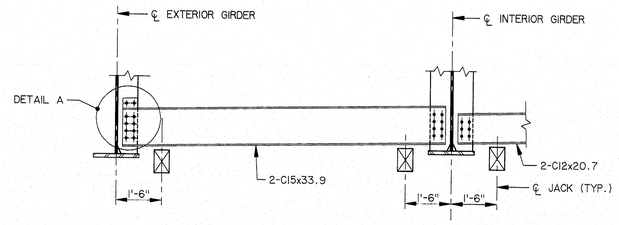
CROSSFRAME - TYPE DM3
(TYPE D, MODIFIED AT ABUTMENTS)



DETAIL A



SECTION A-A



BEARING MAINTENANCE DETAIL (LIFTING)
(AT ABUTMENTS ONLY)

NOTES

1. USE TENSION FLANGE CONNECTION, SHOWN ON THIS DRAWING FOR ALL CROSSFRAME CONNECTION PLATES IN SPANS 6-11, AND FOR ALL CONNECTION/STIFFENER PLATES WITH LATERAL BRACING.
2. FOR ADDITIONAL DETAILS REFER TO BRIDGE STANDARD DETAILS, BD 112-93.

115-252
STEEL ALTERNATIVE

As Built Comm 12/16/96

NO.	REVISION	BY	DATE
WATERLIN			

	BY	DATE
DESIGNED:	SM	9/94
DRAWN:	RJT	9/94
CHECKED:	DWR	9/94
IN CHARGE OF	CJM	

HNTB
ARCHITECTS ENGINEERS PLANNERS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

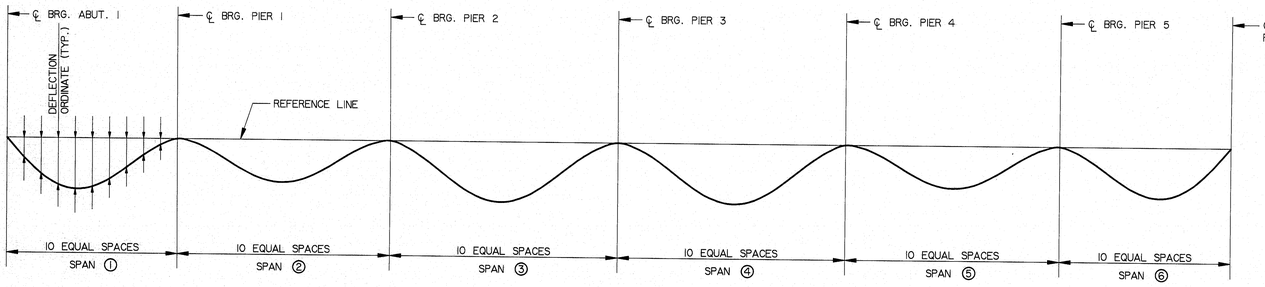
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

CROSSFRAME DETAILS

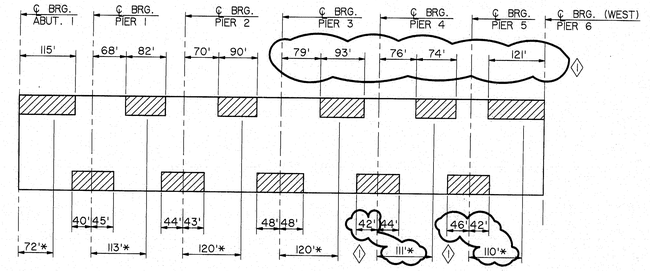
SHEET B57 OF B86 AUGUSTA, MAINE

DIA3:\WWWPATH.STR.DVCARTER.STEEL\009275.PSB:1 DWG: 0092754

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	67	103



DEAD LOAD DEFLECTION DIAGRAM
NO SCALE



GIRDER STRESS DIAGRAM
NO SCALE

▨ - AREAS OF GIRDER WHICH WILL ALWAYS BE IN COMPRESSION
ALL OTHER AREAS WILL BE IN TENSION OR HAVE STRESS REVERSALS

* - POINTS OF MAXIMUM POSITIVE MOMENT

DEAD LOAD DEFLECTION (Inches)

	SPAN 1										SPAN 2										SPAN 3									
GIRDERS G1, G5	℄ BRG. ABUT. 1	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	℄ BRG. PIER 1	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	℄ BRG. PIER 2	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
STEEL	0	3/8	1/16	7/8	5/16	7/8	3/4	1/2	1/4	1/16	0	1/16	3/16	7/16	5/8	11/16	5/8	7/16	3/16	0	0	1/8	3/16	3/4	1	1 1/16	5/16	5/8	5/16	1/16
OTHERS	0	1 5/16	2 7/16	3 3/16	3 1/2	3 5/16	2 11/16	1 7/8	1	5/16	0	1/4	5/16	1 7/8	2 9/16	2 13/16	2 1/2	1 3/8	7/8	3/16	0	9/16	1 11/16	2 5/16	3 7/8	4 1/8	3 11/16	2 5/8	1 3/8	3/8
TOTAL	0	1 11/16	3 1/8	4 1/16	4 7/16	4 3/16	3 7/16	2 3/8	1 1/4	3/8	0	5/16	1 1/8	2 5/16	3 3/16	3 1/2	3 1/8	2 3/16	1 1/16	3/16	0	1 1/16	2 1/8	3 1/16	4 7/8	5 3/16	4 5/8	3 1/4	1 11/16	7/16

DEAD LOAD DEFLECTION (Inches)

	SPAN 4										SPAN 5										SPAN 6									
GIRDERS G1, G5	℄ BRG. PIER 3	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	℄ BRG. PIER 4	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	℄ BRG. PIER 5	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	℄ BRG. PIER 6E
STEEL	0	1/16	5/16	5/8	5/16	5/16	7/8	1 1/16	7/16	1/8	0	0	1/8	1/4	7/16	7/16	7/16	1/4	1/8	0	0	1/8	5/16	9/16	3/4	5/16	5/16	7/8	1 1/16	3/8	0
OTHERS	0	7/16	1 1/2	2 3/16	3 7/8	4 1/2	4 1/4	3 1/4	1 7/8	1 1/16	0	1/16	9/16	1 7/16	2	2 5/16	2 1/16	1 7/16	9/16	1/16	0	1/2	1 3/8	2 3/8	3 3/8	4	4 1/4	3 5/16	2 5/16	1 9/16	0
TOTAL	0	1/2	1 5/16	3 1/16	4 5/16	5 7/16	5 1/8	3 5/16	2 5/16	3/16	0	1/16	1 1/16	1 11/16	2 7/16	3 3/16	2 1/2	1 11/16	1 1/16	1/16	0	5/8	1 11/16	2 5/16	4 1/8	4 5/16	5 3/16	4 3/8	3 5/8	1 5/16	0

DEAD LOAD DEFLECTION (Inches)

	SPAN 1										SPAN 2										SPAN 3									
GIRDERS G2,G3,G4	℄ BRG. ABUT. 1	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	℄ BRG. PIER 1	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	℄ BRG. PIER 2	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
STEEL	0	3/8	1 1/16	7/8	5/16	7/8	3/4	1/2	1/4	1/16	0	1/16	3/16	7/16	5/8	11/16	5/8	7/16	3/16	0	0	1/8	7/16	3/4	1	1 1/16	5/16	5/8	5/16	1/16
OTHERS	0	1 1/2	2 3/4	3 9/16	3 7/8	3 1/16	3 1/16	2 1/8	1 1/8	5/8	0	1/4	1 1/16	2 1/16	2 9/16	3 1/8	2 3/4	1 15/16	5/16	3/16	0	5/8	1 7/8	3 1/4	4 1/4	4 9/16	4 1/16	2 7/8	1 1/2	7/16
TOTAL	0	1 7/8	3 7/16	4 7/16	4 13/16	4 3/16	3 5/16	2 5/8	1 3/8	7/16	0	5/16	1 1/4	2 1/2	3 7/16	3 5/16	3 3/8	2 3/8	1 1/8	3/16	0	3/4	2 5/16	4	5 1/2	5 5/8	5	3 1/2	1 13/16	1/2

DEAD LOAD DEFLECTION (Inches)

	SPAN 4										SPAN 5										SPAN 6									
GIRDERS G2,G3,G4	℄ BRG. PIER 3	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	℄ BRG. PIER 4	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	℄ BRG. PIER 5	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	℄ BRG. PIER 6E
STEEL	0	1/8	3/8	1 1/16	1	1 1/8	1 1/16	1 3/16	7/16	3/16	0	0	1/8	5/16	7/16	1/2	1/2	5/16	1/8	0	0	1/8	3/8	5/8	7/8	1 1/16	1 1/16	1	3/4	7/16	0
OTHERS	0	7/16	1 9/16	3 1/16	4 1/4	4 3/4	4 1/2	3 1/2	2 1/16	3/4	0	1/16	5/8	1 1/2	2 3/16	2 7/16	2 1/8	1 1/2	5/8	1/16	0	9/16	1 7/16	2 5/8	3 1/16	4 3/8	4 5/8	4 3/16	3 3/16	1 11/16	0
TOTAL	0	9/16	1 15/16	3 3/4	5 1/4	5 7/8	5 9/16	4 5/16	2 1/2	15/16	0	1/16	3/4	1 13/16	2 5/8	2 5/16	2 5/8	1 13/16	3/4	1/16	0	1 1/16	1 13/16	3 1/4	4 9/16	5 7/16	5 1/16	5 3/16	3 5/16	2 1/8	0

DEFLECTION NOTE

STEEL INDICATES DEFLECTION CAUSED BY THE WEIGHT OF THE STEEL FRAMING
OTHERS INDICATE DEFLECTION CAUSED BY THE WEIGHT OF THE DECK SLAB, BARRIER, AND WEARING SURFACE.

NO.	REVISION	BY	DATE
◊	DEFL. DIVISIONS	JFW	10/95

	BY	DATE
DESIGNED:	JFW	9/94
DRAWN:	RJT	9/94
CHECKED:	DWR	9/94
IN CHARGE OF	CJM	

HNTB
ARCHITECTS ENGINEERS PLANNERS

115-253
STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

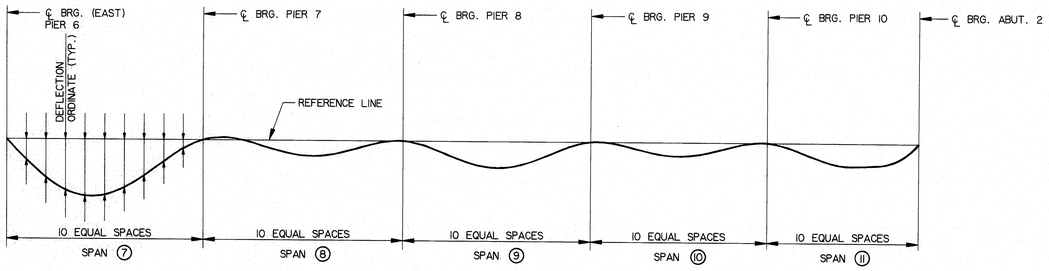
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

DEFLECTION DIAGRAM - I

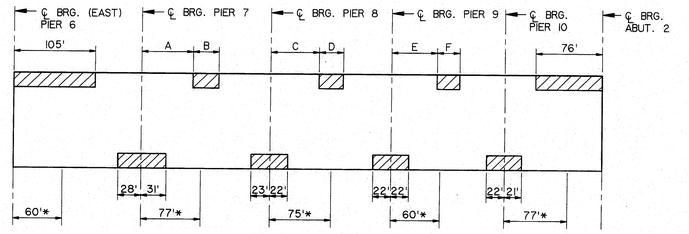
SHEET B58 OF 886 AUGUSTA, MAINE

DIA3: \\WKGPH-STA-SVC\MATER_STEEL\005275.F08_DWG\ - 005275

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
I	MAINE	0009(002)	68	103



DEAD LOAD DEFLECTION DIAGRAM
NO SCALE



GIRDER STRESS DIAGRAM
NO SCALE

▨ - AREAS OF GIRDER WHICH WILL ALWAYS BE IN COMPRESSION
ALL OTHER AREAS WILL BE IN TENSION OR HAVE STRESS REVERSALS

* - POINTS OF MAXIMUM POSITIVE MOMENT

DEAD LOAD DEFLECTION (Inches)

GIRDER		SPAN 7											SPAN 8										SPAN 9									
		℄ BRG. PIER 6W	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	℄ BRG. PIER 7	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	℄ BRG. PIER 8	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
G1	STEEL	0	5/16	9/16	3/4	13/16	15/16	1 1/16	1 1/2	5/16	1/8	0	-1/16	-1/16	0	1/16	1/8	1/8	1/16	1/16	0	0	1/16	1/8	1/4	5/16	5/16	1/4	1/8	1/16
	OTHERS	0	1 1/8	2 1/8	2 15/16	3 1/8	3 1/16	2 1/16	1 15/16	1 3/16	7/16	0	-1/16	3/16	5/8	1	1 3/16	1 1/8	7/8	1/2	1/8	0	3/16	5/8	1 1/8	1 1/2	1 5/8	1 1/2	1 3/16	1/16	1/4
	TOTAL	0	1 7/16	2 1/16	3 9/16	3 5/16	3 5/16	3 3/16	2 7/16	1 1/2	9/16	0	-1/8	1/8	5/8	1 1/16	1 5/16	1 1/4	15/16	9/16	1/8	0	1/4	3/4	1 3/8	1 3/16	1 5/16	1 3/16	1 7/16	5/16	5/16
G2	STEEL	0	5/16	5/8	13/16	15/16	7/8	13/16	5/8	3/8	3/16	0	-1/16	-1/8	-1/16	0	1/16	1/16	1/16	0	0	0	1/16	1/8	1/4	5/16	5/16	5/16	1/4	1/8	1/16
	OTHERS	0	1 5/16	2 7/16	3 3/16	3 9/16	3 1/2	3	2 1/4	1 3/8	1/2	0	-1/8	1/8	1/2	1 5/16	1 1/8	1 1/8	7/8	7/16	1/8	0	1/4	1 1/16	1 1/4	1 9/8	1 3/4	1 5/8	1 1/4	3/4	1/4
	TOTAL	0	1 5/8	3 1/16	4	4 1/2	4 3/8	3 3/16	2 7/8	1 3/4	1 1/16	0	-3/16	0	7/16	1 5/16	1 3/16	1 3/16	15/16	7/16	1/8	0	1/4	1 1/16	1 1/4	1 9/8	1 3/4	1 5/8	1 1/4	3/4	1/4
G3	STEEL	0	3/8	1 1/16	1 5/16	1	1	7/8	1 1/16	7/16	3/16	0	-1/8	-1/8	-1/16	-1/16	0	1/16	0	0	0	0	1/16	3/16	1/4	5/16	3/8	5/16	1/4	3/16	1/16
	OTHERS	0	1 7/16	2 1/16	3 1/2	3 5/16	3 7/8	3 3/8	2 1/2	1 1/2	5/8	0	-3/16	0	7/16	1 5/16	1 1/16	1 1/16	15/16	7/16	1/16	0	1/4	3/4	1 5/16	1 1/16	1 3/16	1 1/16	1 5/16	15/16	5/16
	TOTAL	0	1 13/16	3 3/8	4 7/16	4 5/16	4 7/8	4 1/4	3 3/16	1 15/16	1 3/16	0	-5/16	-1/8	3/8	3/4	1 1/16	1 1/8	1 3/16	7/16	1/16	0	5/16	1 5/16	1 13/16	2	2 3/16	2	1 13/16	1	3/8
G4	STEEL	0	7/16	3/4	1	1 1/8	1 1/8	1	3/4	1/2	3/16	0	-1/8	-3/16	-1/8	-1/16	-1/16	0	0	0	0	0	1/16	3/16	5/16	3/8	3/8	3/8	1/4	3/16	1/16
	OTHERS	0	1 9/16	2 1/8	3 1/16	4 1/4	4 3/16	3 5/8	2 1/16	1 9/8	5/8	0	-1/4	-1/8	5/16	1 1/16	1 5/16	1 5/16	3/4	3/8	1/16	0	1/4	3/4	1 5/16	1 3/4	1 7/8	1 3/4	1 3/8	1 5/16	5/16
	TOTAL	0	2	3 5/8	4 9/16	5 3/8	5 5/16	4 5/8	3 1/16	2 1/8	1 5/16	0	-3/8	-5/16	3/16	1 5/8	1 7/8	1 5/8	1 5/16	3/4	3/8	1/16	0	1/16	1 5/16	1 5/8	2 1/8	2 1/4	2 1/8	1 5/8	1	3/8
G5	STEEL	0	7/16	15/16	1 1/8	1 1/4	1 1/4	1 1/8	7/8	9/16	1/4	0	-1/8	-3/16	-3/16	-1/8	-1/16	-1/16	-1/16	-1/16	-1/16	0	1/16	3/16	5/16	3/8	7/16	3/8	5/16	3/16	1/16
	OTHERS	0	1 5/8	3 1/16	4 1/16	4 9/16	4 1/2	3 5/16	2 5/16	1 3/16	3/4	0	-5/16	-1/4	1/8	1/2	3/4	1 5/16	5/8	5/16	0	0	5/16	1 3/16	1 3/8	1 3/4	1 7/8	1 3/4	1 5/8	1 3/16	5/16
	TOTAL	0	2 1/16	3 7/8	5 3/16	5 13/16	5 3/4	5 1/16	3 13/16	2 3/8	1	0	-7/16	-7/16	-1/16	3/8	1 1/16	3/4	9/16	1/4	-1/16	0	3/8	1	1 11/16	2 1/8	2 5/16	2 1/8	1 11/16	1	3/8

DEAD LOAD DEFLECTION (Inches)

GIRDER		SPAN 10											SPAN 11									
		℄ BRG. PIER 9	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	℄ BRG. PIER 10	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	℄ BRG. ABUT. 2
G1	STEEL	0	0	1/16	1/16	1/8	1/8	1/8	1/16	1/16	0	0	1/16	1/16	3/16	1/4	1/4	1/4	1/4	3/16	1/8	0
	OTHERS	0	1/16	5/16	5/8	13/16	7/8	9/16	5/8	5/16	1/16	0	3/16	1/2	7/8	1 3/16	1 3/8	1 7/16	1 5/16	1	9/16	0
	TOTAL	0	1/16	3/8	1 1/16	1 5/16	1	1 1/16	1 1/16	3/8	1/16	0	1/4	9/16	1 1/16	1 7/16	1 5/8	1 11/16	1 9/16	1 3/16	1 1/16	0
G2	STEEL	0	0	0	1/16	1/8	1/8	1/8	1/16	1/16	0	0	1/16	1/8	3/16	1/4	1/4	1/4	1/4	3/16	1/8	0
	OTHERS	0	1/16	5/16	5/8	7/8	5/16	7/8	5/8	5/16	1/16	0	3/16	9/16	5/16	1 5/16	1 1/2	1 9/16	1 7/16	1 1/16	5/8	0
	TOTAL	0	1/16	5/16	1 1/16	1	1 1/16	1	1 1/16	3/8	1/16	0	1/4	1 1/16	1 1/8	1 9/16	1 3/4	1 13/16	1 11/16	1 1/4	3/4	0
G3	STEEL	0	0	0	1/16	1/8	1/8	1/8	1/16	0	0	0	1/16	1/8	3/16	1/4	5/16	5/16	1/4	3/16	1/8	0
	OTHERS	0	1/16	5/16	5/8	7/8	5/16	7/8	5/8	5/16	1/16	0	3/16	9/16	1	1 3/8	1 5/8	1 11/16	1 1/2	1 1/8	5/8	0
	TOTAL	0	1/16	5/16	1 1/16	1	1 1/16	1	1 1/16	5/16	1/16	0	1/4	1 1/16	1 3/16	1 5/8	1 5/8	2	1 3/4	1 5/16	3/4	0
G4	STEEL	0	0	0	1/16	1/8	1/8	1/8	1/16	0	0	0	1/16	1/8	3/16	1/4	5/16	5/16	1/4	3/16	1/8	0
	OTHERS	0	0	1/4	5/8	7/8	5/16	7/8	5/8	5/16	0	0	1/4	5/8	1 1/16	1 7/16	1 11/16	1 3/4	1 9/16	1 3/16	5/8	0
	TOTAL	0	0	1/4	1 1/16	1	1 1/16	1	1 1/16	5/16	0	0	5/16	3/4	1 1/4	1 11/16	2	2 1/16	1 15/16	1 3/8	5/16	0
G5	STEEL	0	0	0	1/16	1/16	1/8	1/8	1/16	0	0	0	1/16	1/8	3/16	1/4	5/16	5/16	5/16	1/4	1/8	0
	OTHERS	0	0	1/4	9/16	13/16	7/8	13/16	9/16	1/4	0	0	1/4	5/8	1 1/16	1 1/2	1 11/16	1 3/4	1 5/8	1 3/16	11/16	0
	TOTAL	0	0	1/4	5/8	5/16	1	5/16	5/8	1/4	0	0	5/16	3/4	1 1/4	1 3/4	2	2 1/16	1 15/16	1 7/16	13/16	0

STRESS DIAGRAM DIMENSIONS (FT)

GIRDER	A	B	C	D	E	F
G1	67	36	50	50	55	33
G2	67	38	48	55	52	38
G3	71	33	49	54	54	36
G4	76	26	51	51	56	32
G5	-	-	54	46	66	20

DEFLECTION NOTE:

SEE SHEET B58 FOR DEFLECTION NOTES.

NO.	REVISION	BY	DATE

	BY	DATE
DESIGNED:	JFW	9/94
DRAWN:	RJT	9/94
CHECKED:	DWR	9/94
IN CHARGE OF	CJM	

AS BUILT Copied 1-11-96

115-254

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT

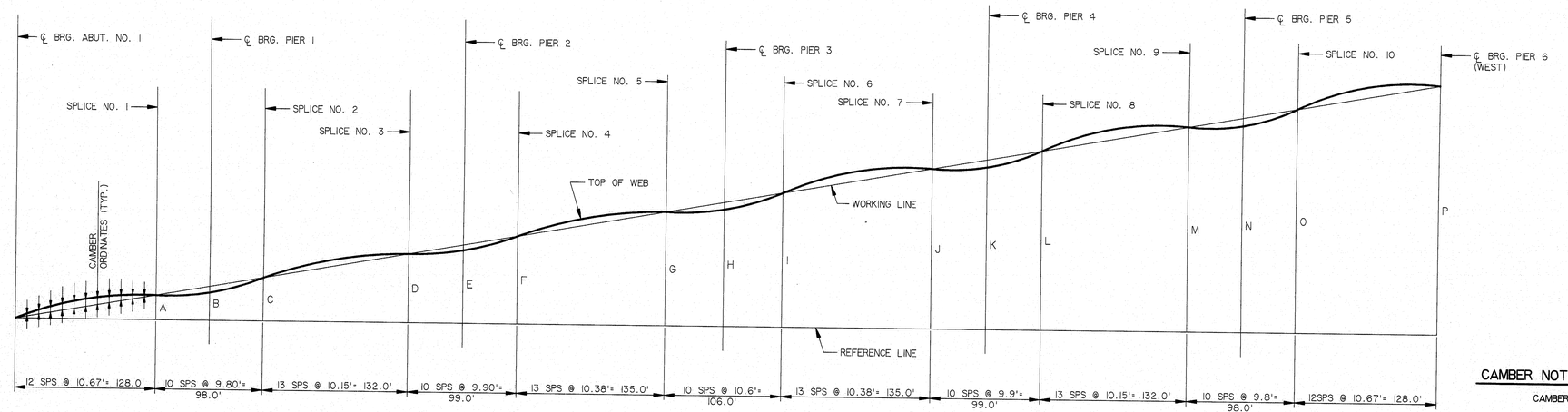
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

DEFLECTION DIAGRAM - II

HNTB
ARCHITECTS ENGINEERS PLANNERS

DA3:[WWORK]M.STR.DVCARTER_STEEL.CD002-FGN1.DWG; CD002

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	69	103



CAMBER DIAGRAM
NO SCALE

CAMBER NOTES

CAMBER ORDINATES SHOWN INCLUDES:

- TOTAL DEAD LOAD DEFLECTION
- RESIDUAL CAMBER (1/16th INCH PER 10 FEET))

NOTES

1. CAMBER ORDINATES - INCHES
   CAMBER LOCATION - FEET
2. NEGATIVE CAMBER INDICATES THAT TOP OF WEB IS BELOW THE WORKING LINE.

CAMBER ORDINATES

SEGMENT 1													SEGMENT 2											SEGMENT 3												
GIRDER	℄ BRG. ABUT. 1	10.67	21.33	32.00	42.67	53.33	64.00	74.67	85.33	96.00	106.67	117.33	℄ SPLICE 1	9.80	19.60	29.40	39.20	49.00	58.80	68.60	78.40	88.20	℄ SPLICE 2	10.15	20.31	30.46	40.62	50.77	60.92	70.08	81.23	91.38	101.54	111.69	121.85	℄ SPLICE 3
GI & G5	0	5/16"	13/16"	2 1/2"	3"	3 3/8"	3 1/2"	3 3/8"	3"	2 1/2"	1 13/16"	5/16"	0	-5/8"	-1 1/16"	-1 9/16"	-1 15/16"	-2 3/16"	-2 1/16"	-1 11/16"	-1 3/16"	-5/8"	0	5/8"	1 3/16"	1 11/16"	2 3/16"	2 3/8"	2 1/2"	2 1/2"	2 3/8"	2 3/16"	1 11/16"	1 3/16"	5/8"	0
G2-G4	0	5/16"	1 5/16"	2 3/4"	3 1/4"	3 3/4"	3 13/16"	3 3/4"	3 3/8"	2 3/4"	1 5/16"	5/16"	0	-5/8"	-1 3/16"	-1 11/16"	-2 1/16"	-2 1/4"	-2 3/16"	-1 13/16"	-1 5/16"	-3/4"	0	5/8"	1 5/16"	1 13/16"	2 1/4"	2 5/8"	2 3/4"	2 3/4"	2 5/8"	2 1/4"	1 13/16"	1 3/16"	5/8"	0

SEGMENT 4											SEGMENT 5											SEGMENT 6											
GIRDER	℄ SPLICE 3	9.90	19.80	29.70	39.60	49.50	59.40	69.30	79.20	89.10	℄ SPLICE 4	10.38	20.77	31.15	41.54	51.92	62.31	72.69	83.08	93.46	103.85	114.23	124.62	℄ SPLICE 5	10.60	21.20	31.80	42.40	53.00	63.60	74.20	84.80	95.40	℄ SPLICE 6
GI & G5	0	-3/8"	-1 3/16"	-1 11/16"	-2 3/16"	-2 1/4"	-2 1/16"	-1 11/16"	-1 1/16"	-5/8"	0	3/16"	1 9/16"	2 3/16"	2 5/8"	3"	3 1/4"	3 1/8"	3"	2 5/8"	2 1/16"	1 7/16"	3/4"	0	-3/4"	-1 5/16"	-1 15/16"	-2 3/8"	-2 1/2"	-2 3/8"	-1 15/16"	-1 7/16"	-3/4"	0
G2-G4	0	-3/4"	-1 5/16"	-1 13/16"	-2 1/4"	-2 3/8"	-2 3/16"	-1 11/16"	-1 3/16"	-5/8"	0	3/16"	1 11/16"	2 3/8"	2 7/8"	3 1/4"	3 1/2"	3 1/2"	3 1/4"	2 3/4"	2 1/4"	1 9/16"	13/16"	0	-13/16"	-1 7/16"	-2 1/16"	--2 1/2"	--2 3/4"	--2 1/2"	-2 1/16"	-1 9/16"	-1 3/16"	0

SEGMENT 7												SEGMENT 8											SEGMENT 9											
GIRDER	℄ SPLICE 6	10.38	20.77	31.15	41.54	51.92	62.31	72.69	83.08	93.46	103.85	114.23	124.62	℄ SPLICE 7	9.9	19.80	29.70	39.60	49.50	59.40	69.30	79.20	89.10	℄ SPLICE 8	10.15	20.31	30.46	40.62	50.77	62.92	70.08	81.23	91.38	101.54	111.69	121.85	℄ SPLICE 9
GI & G5	0	3/4"	1 7/16"	2 1/16"	2 5/8"	3"	3 1/8"	3 1/4"	3"	2 5/8"	2 3/16"	1 9/16"	1 5/16"	0	-5/8"	-1 1/16"	-1 11/16"	-2 1/16"	-2 1/4"	-2 3/16"	-2 1/16"	-1 3/16"	-3/4"	0	5/8"	1 3/16"	1 11/16"	2 3/16"	2 3/8"	2 1/2"	2 1/2"	2 3/8"	2 3/16"	1 11/16"	1 3/16"	5/8"	0
G2-G4	0	1 3/16"	1 9/16"	2 1/4"	2 3/4"	3 1/4"	3 1/2"	3 1/2"	3 1/4"	2 7/8"	2 3/8"	1 11/16"	1 3/16"	0	-5/8"	-1 3/16"	-1 11/16"	-2 1/16"	-2 1/4"	-2 3/16"	-2 1/16"	-1 5/16"	-3/4"	0	5/8"	1 3/16"	1 13/16"	2 1/4"	2 5/8"	2 3/4"	2 3/4"	2 5/8"	2 1/4"	1 13/16"	1 5/16"	5/8"	0

SEGMENT 10											SEGMENT 11												
GIRDER	℄ SPLICE 9	9.80	19.60	29.40	39.20	49.00	58.80	68.60	78.40	88.20	℄ SPLICE 10	16.67	21.33	32.00	42.67	53.33	64.00	74.67	85.33	96.00	106.67	117.33	℄ BRG. PIER 6
GI & G5	0	-5/8"	-1 3/16"	-1 11/16"	-2 1/16"	-2 3/16"	-1 15/16"	-1 9/16"	-1 1/16"	-5/8"	0	5/16"	1 3/16"	2 1/2"	3"	3 3/8"	3 1/2"	3 3/8"	3"	2 1/2"	1 13/16"	1 5/16"	0
G2-G4	0	-3/4"	-1 5/16"	-1 13/16"	-2 3/16"	-2 1/4"	-2 1/16"	-1 11/16"	-1 3/16"	-5/8"	0	5/16"	1 5/16"	2 3/4"	3 3/8"	3 3/4"	3 13/16"	3 3/4"	3 1/4"	2 3/4"	1 5/16"	1 5/16"	0

NO.	REVISION	BY	DATE

	BY	DATE
DESIGNED:	JFW	9/94
DRAWN:	RJT	9/94
CHECKED:	DWR	9/94
IN CHARGE OF	CJM	

AS BUILT CJM 11-21-96

115-255
STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

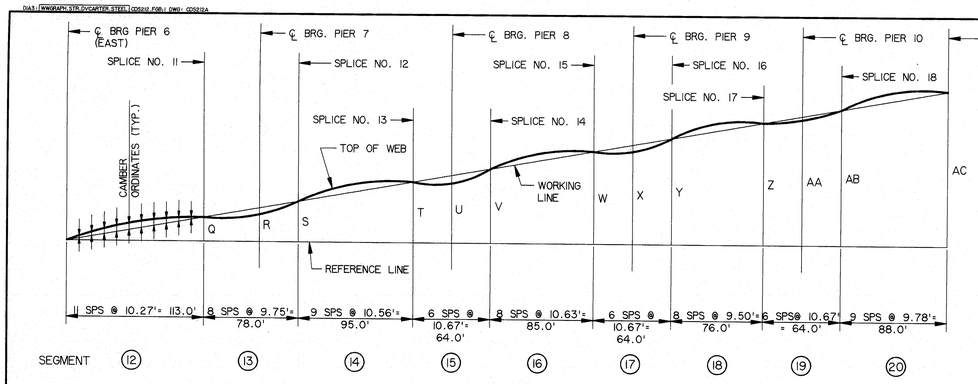
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

CAMBER DIAGRAM - I

HNTB
ARCHITECTS ENGINEERS PLANNERS

SHEET B60 OF B86 AUGUSTA, MAINE

DIAS / DWGPATH: STR DVCARTER STEEL CDS212 PUB.ll DWG: CDS212A



CAMBER DIAGRAM
NO SCALE

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	70	103

WEB PLATE LAYOUT
(DIMENSIONS IN FEET)

GIRDER	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
G2,G3,G4	2.04	2.52	3.31	5.15	5.67	6.66	8.51	9.03	10.00	11.92	12.39	13.19	15.04	15.54	16.51	18.06
G1 - G5	2.02	2.52	3.30	5.15	5.67	6.64	8.50	9.03	9.98	11.90	12.39	13.18	15.04	15.54	16.49	18.06

WEB PLATE LAYOUT
(DIMENSIONS IN FEET)

GIRDER	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC
G1	1.79	2.23	2.68	4.05	4.45	4.97	6.17	6.54	7.02	8.09	8.50	9.02	10.18
G2	1.81	2.23	2.67	4.04	4.45	4.98	6.17	6.54	7.02	8.09	8.50	9.03	10.18
G3	1.84	2.23	2.66	4.04	4.45	4.98	6.18	6.54	7.02	8.09	8.50	9.03	10.18
G4	1.85	2.23	2.65	4.03	4.45	4.99	6.18	6.54	7.01	8.09	8.50	9.03	10.18
G5	1.87	2.23	2.64	4.02	4.45	4.99	6.18	6.54	7.01	8.08	8.50	9.04	10.18

GIRDER	SEGMENT 12											SEGMENT 13								SEGMENT 14								
G1	℄ BRG. PIER 6	9.81	18.61	29.42	39.23	49.04	58.84	68.65	78.46	88.27	98.07	℄ SPLICE 11	9.75	19.50	29.25	39.00	48.75	58.50	68.25	℄ SPLICE 12	10.35	20.70	31.06	41.41	51.76	62.11	72.47	82.82	℄ SPLICE 13
	0	5/16	1 1/2	2 1/16	2 3/8	2 9/16	2 9/16	2 5/16	1 5/16	1 5/16	3/4	0	-1/2	-1 5/16	-1 1/16	-1 1/16	-5/8	-5/8	-1/4	0	5/16	5/8	7/8	1	1 5/16	3/4	9/16	1/4	0
G2	℄ BRG. PIER 6	10.04	20.08	30.12	40.16	50.20	60.24	70.28	80.32	90.36	100.40	℄ SPLICE 11	9.75	19.50	29.25	39.00	48.75	58.50	68.25	℄ SPLICE 12	10.45	20.91	31.36	41.81	52.27	62.72	73.17	83.63	℄ SPLICE 13
	0	5/16	1 1/16	2 5/16	2 3/4	2 5/16	2 7/8	2 5/8	2 3/16	1 9/16	1 3/16	0	-1/2	-7/8	-1 1/8	-1 1/8	-1	-1 1/16	-3/8	0	5/16	5/8	7/8	5/16	1/2	1/4	0		
G3	℄ BRG. PIER 6	10.27	20.55	30.82	41.09	51.36	61.64	71.91	82.18	92.45	102.73	℄ SPLICE 11	9.75	19.50	29.25	39.00	48.75	58.50	68.25	℄ SPLICE 12	10.56	21.11	31.67	42.22	52.78	63.33	73.89	84.44	℄ SPLICE 13
	0	5/16	1 1/16	2 7/16	2 5/16	3 1/4	3 1/4	3 1/16	2 9/16	1 7/8	1	0	-3/8	-3/4	-1	-1 3/16	-1 1/8	-5/16	-1/2	0	1/4	1/2	1 1/16	7/8	5/16	7/8	5/8	5/16	0
G4	℄ BRG. PIER 6	10.51	21.01	31.52	42.02	52.53	63.03	73.54	84.04	94.55	105.05	℄ SPLICE 11	9.75	19.50	29.25	39.00	48.75	58.50	68.25	℄ SPLICE 12	10.66	21.32	31.97	42.63	53.29	63.95	74.60	85.26	℄ SPLICE 13
	0	1	1 7/8	2 1/16	3 1/4	3 9/16	3 5/8	3 3/8	2 5/16	2 1/16	1 1/8	0	-3/8	-3/4	-1	-1 3/16	-1 1/8	-5/16	-1/2	0	3/16	7/16	5/8	5/16	7/8	5/16	5/8	5/16	0
G5	℄ BRG. PIER 6	10.74	21.48	31.98	42.49	52.99	63.50	74.00	84.51	95.01	105.52	℄ SPLICE 11	9.75	19.50	29.25	39.00	48.75	58.50	68.25	℄ SPLICE 12	10.75	21.50	32.25	43.00	53.75	64.50	75.25	86.00	℄ SPLICE 13
	0	1 1/16	2	2 7/8	3 1/2	3 13/16	3 7/8	3 5/8	3 1/16	2 1/4	1 3/16	0	-3/8	-3/4	-1	-1 3/16	-1 1/8	-5/16	-1/2	0	1/8	3/8	9/16	3/4	5/16	3/4	9/16	5/16	0

GIRDER	SEGMENT 15						SEGMENT 16							SEGMENT 17						
G1	℄ SPLICE 13	10.67	21.33	32.00	42.67	53.33	℄ SPLICE 14	10.41	20.82	31.23	41.64	52.05	62.46	72.87	℄ SPLICE 15	10.67	21.33	32.00	42.67	53.33	℄ SPLICE 16
	0	-5/16	-9/16	-1 1/16	-9/16	-3/8	0	3/8	3/4	5/16	1 1/16	5/16	3/4	3/8	0	-5/16	-9/16	-1 1/16	-9/16	-5/16	0
G2	℄ SPLICE 13	10.67	21.33	32.00	42.67	53.33	℄ SPLICE 14	10.52	21.04	31.55	42.07	52.59	63.11	73.62	℄ SPLICE 15	10.67	21.33	32.00	42.67	53.33	℄ SPLICE 16
	0	-3/8	-5/8	-1 1/16	-5/8	-3/8	0	7/16	1 3/16	1	1 1/8	1	3/4	7/16	0	-3/8	-5/8	-3/4	-5/8	-5/16	0
G3	℄ SPLICE 13	10.67	21.33	32.00	42.67	53.33	℄ SPLICE 14	10.63	21.25	31.88	42.50	53.13	63.75	74.38	℄ SPLICE 15	10.67	21.33	32.00	42.67	53.33	℄ SPLICE 16
	0	-3/8	-5/8	-1 1/16	-5/8	-3/8	0	7/16	1 3/16	1 1/16	1 3/16	1 1/16	1 3/16	7/16	0	-3/8	-5/8	-3/4	-5/8	-3/8	0
G4	℄ SPLICE 13	10.67	21.33	32.00	42.67	53.33	℄ SPLICE 14	10.73	21.47	32.20	43.93	53.66	64.40	75.13	℄ SPLICE 15	10.67	21.33	32.00	42.67	53.33	℄ SPLICE 16
	0	-3/8	-9/16	-1 1/16	-9/16	-5/16	0	7/16	7/8	1 1/8	1 3/16	1 1/8	7/8	7/16	0	-5/16	-9/16	-1 1/16	-9/16	-3/8	0
G5	℄ SPLICE 13	10.67	21.33	32.00	42.67	53.33	℄ SPLICE 14	10.83	21.66	32.49	43.32	54.15	64.98	75.81	℄ SPLICE 15	10.67	21.33	32.00	42.67	53.33	℄ SPLICE 16
	0	-5/16	-9/16	-5/8	-9/16	-5/16	0	1/2	7/8	1 1/8	1 1/4	1 1/8	7/8	1/2	0	-5/16	-9/16	-1 1/16	-5/8	-3/8	0

GIRDER	SEGMENT 18							SEGMENT 19							SEGMENT 20									
G1	℄ SPLICE 16	9.37	18.75	28.12	37.50	46.87	56.24	65.62	℄ SPLICE 17	10.67	21.33	32.00	42.67	53.33	℄ SPLICE 18	9.62	19.25	28.87	38.50	48.12	57.75	67.37	77.00	℄ BRG ABUT 2
	0	1/4	7/16	9/16	5/8	9/16	7/16	1/4	0	-5/16	-9/16	-1 1/16	-9/16	-5/16	0	7/16	13/16	1 1/16	1 3/16	1 3/16	1 1/16	13/16	7/16	0
G2	℄ SPLICE 16	9.40	18.80	28.20	37.60	46.99	56.39	65.79	℄ SPLICE 17	10.67	21.33	32.00	42.67	53.33	℄ SPLICE 18	9.70	19.40	29.10	38.80	48.51	58.21	69.91	77.61	℄ BRG ABUT 2
	0	1/4	7/16	5/8	5/8	5/8	7/16	1/4	0	-5/16	-9/16	-1 1/16	-5/8	-3/8	0	1/2	7/8	1 1/8	1 5/16	1 5/16	1 3/16	7/8	1/2	0
G3	℄ SPLICE 16	9.50	19.00	28.50	38.00	47.50	57.00	66.50	℄ SPLICE 17	10.67	21.33	32.00	42.67	53.33	℄ SPLICE 18	9.78	19.56	29.33	39.11	48.89	58.67	68.44	78.22	℄ BRG ABUT 2
	0	1/4	7/16	5/8	1 1/16	5/8	1/2	1/4	0	-3/8	-5/8	-3/4	-5/8	-5/16	0	1/2	5/16	1 1/4	1 3/8	1 3/8	1 3/16	5/16	1/2	0
G4	℄ SPLICE 16	9.60	19.20	28.80	38.41	48.01	57.61	67.21	℄ SPLICE 17	10.67	21.33	32.00	42.67	53.33	℄ SPLICE 18	9.85	19.71	29.56	39.42	49.27	59.13	68.98	78.84	℄ BRG ABUT 2
	0	1/4	7/16	5/8	1 1/16	5/8	1/2	1/4	0	-3/8	-5/8	-3/4	-5/8	-3/8	0	1/2	1	1 5/16	1 7/16	1 7/16	1 1/4	1 5/16	9/16	0
G5	℄ SPLICE 16	9.69	19.39	29.08	38.77	48.46	58.16	67.85	℄ SPLICE 17	10.67	21.33	32.00	42.67	53.33	℄ SPLICE 18	9.92	19.85	29.77	39.70	49.62	59.55	69.47	79.40	℄ BRG ABUT 2
	0	1/4	7/16	5/8	1 1/16	5/8	1/2	1/4	0	-3/8	-5/8	-3/4	-5/8	-5/16	0	1/2	1	1 5/16	1 1/2	1 1/2	1 5/16	1	9/16	0

CAMBER NOTES

CAMBER ORDINATES SHOWN INCLUDES:
- TOTAL DEAD LOAD DEFLECTION
- RESIDUAL CAMBER (1/16th INCH PER 10 FEET))

NOTES

1. CAMBER ORDINATES - INCHES
   CAMBER LOCATION - FEET
2. NEGATIVE CAMBER INDICATES THAT TOP OF WEB IS BELOW THE WORKING LINE.

NO.	REVISION	BY	DATE
WATERMIN			

	BY	DATE
DESIGNED:	SM	9/94
DRAWN:	RJT	9/94
CHECKED:	DWR	9/94
IN CHARGE OF	CJM	

As Public Hearing 12/15/94

115-256

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

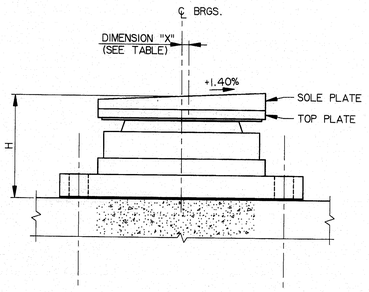
CAMBER DIAGRAM-II

HNTB
ARCHITECTS ENGINEERS PLANNERS

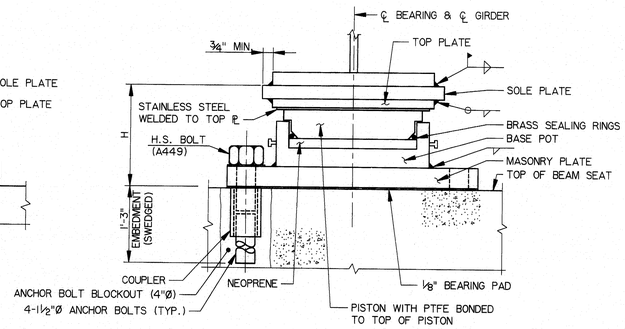
SHEET B61 OF B86 AUGUSTA, MAINE

DIA3 / WWPGMS STR EXCARTER STEEL C05215 F08U1 DWG1 C05215

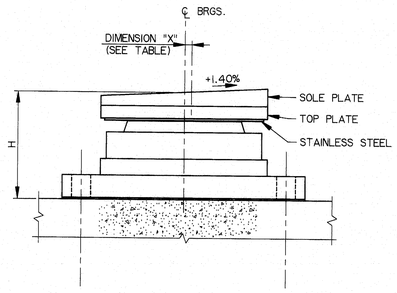
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	71	103



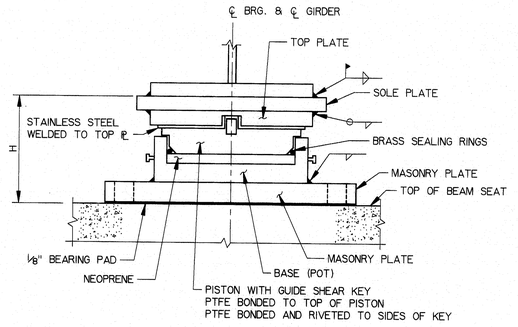
ELEVATION



SECTION

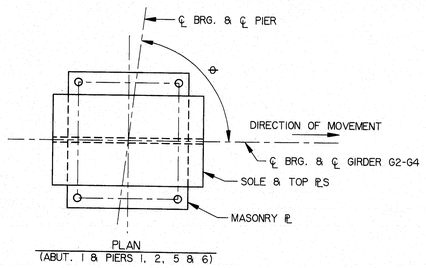


ELEVATION

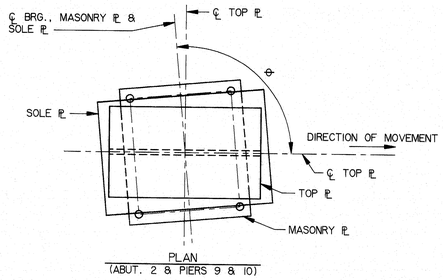


SECTION

NON GUIDED POT BEARING



PLAN
(ABUT. 1 & PIERS 1, 2, 5 & 6)



PLAN
(ABUT. 2 & PIERS 9 & 10)

GUIDED POT BEARING

GUIDED - LONGITUDINAL EXPANSION

EXPANSION BEARINGS

ABUT. / PIER	NON-GUIDED GIRDER	* DESIGN LOADS (KIPS) VERTICAL	* DESIGN LOADS (KIPS) HORIZONTAL	H (IN)	GUIDED GIRDER	* DESIGN LOADS (KIPS) VERTICAL	* DESIGN LOADS (KIPS) HORIZONTAL	ϴ	H (IN)	TOTAL LONGITUDINAL MOVEMENT -30°F TO 120°F	BEARING SETTING CORRECTIONS (Inches) DIMENSION "X" 0°F	15°F	30°F	45°F	60°F	75°F	90°F	100°F
ABUT. 1	1 & 5	280.6	0.0	6½	2 - 4	280.6	7.4	83°	8¼	8 5/16	2 1/16 →	1 3/16 →	⅞ →	0	← ⅞	← 1 3/16	← 2 1/16	← 3 5/16
PIER 1	1 & 5	838.0	0.0	8⅜	2 - 4	838.0	43.8	83°	12	6⅞	2 1/16 →	1 3/8 →	1 1/16 →	0	← 1 1/16	← 1 3/8	← 2 1/16	← 2½
PIER 2	1 & 5	864.5	0.0	8⅜	2 - 4	864.5	89.2	83°	12	4 3/16	1¼ →	1 3/16 →	7/16 →	0	← 7/16	← 1 3/16	← 1¼	← 1 3/16
PIER 3	-	-	-	-	1 & 5	918.1	66.5	-	12¼	-	-	-	-	-	-	-	-	-
PIER 4	-	-	-	-	1 & 5	864.5	65.7	-	12	-	-	-	-	-	-	-	-	-
PIER 5	1 & 5	838.0	0.0	8⅜	2 - 4	838.0	78.7	83°	12	4 1/16	1 3/16 →	1 3/16 →	3/8 →	0	← 3/8	← 1 3/16	← 1 3/16	← 1½
PIER 6 (W)	1 & 5	280.6	0.0	6½	2 - 4	280.6	36.9	81°-58'-42.9"	8¼	6⅛	1 5/16 →	1¼ →	5/8 →	0	← 5/8	← 1¼	← 1 5/16	← 2⅛
PIER 6 (E)	1 & 5	239.1	0.0	6½	2 - 4	286.3	15.8	79°-00'-16.6"	8¼	2 3/16	⅞ →	9/16 →	5/16 →	0	← 9/16	← 9/16	⅞ →	1 1/16
PIER 7	-	-	-	-	1 & 5	596.7	38.1	-	10½	-	-	-	-	-	-	-	-	-
PIER 8	-	-	-	-	1 & 5	483.9	34.1	-	10	-	-	-	-	-	-	-	-	-
PIER 9	1 & 5	491.4	0.0	7½	2 - 4	520.7	77.5	92°-14'-06.0"	10½	2 9/16	13/16 →	9/16 →	1/4 →	0	← 1/4	← 9/16	← 13/16	← 1
PIER 10	1 & 5	487.0	0.0	7½	2 - 4	502.6	47.8	94°-20'-06.0"	10½	4 5/16	1 5/16 →	⅞ →	7/16 →	0	← 7/16	← ⅞	← 1 5/16	← 1 5/8
ABUT. 2	1 & 5	198.6	0.0	6	2 - 4	198.6	23.5	96°-08'-06.0"	8	5 11/16	1 3/4 →	1 1/8 →	9/16 →	0	← 9/16	← 1 1/8	← 1 3/4	← 2 1/8

* SERVICE LOADS

WEST (DOWN STATION) — EAST (UP STATION)

BEARING DEVICE NOTES

1. FOR DESIGN, MATERIAL, FABRICATION, GENERAL CONSTRUCTION REQUIREMENTS, REFER TO THE SPECIAL PROVISIONS OF THE SPECIFICATIONS. ENTIRE BEARING ASSEMBLY EXCEPT FOR THE PTFE AND STAINLESS STEEL PLATE SHALL BE ZINC METALLIZED OR GALVANIZED.
2. DIMENSION "H" SHOWN IS AN ESTIMATE USED TO COMPUTE BRIDGE SEAT ELEVATIONS. DIMENSIONS AND SIZES OF PLATES NOT SHOWN ARE DEPENDENT UPON DESIGN LOADS, BEARING TYPE, CAPACITY AND THE MANUFACTURER. THE SHOP DRAWINGS, PREPARED BY THE MANUFACTURER SHALL PROVIDE ALL PERTINENT BEARING INFORMATION. THE FINAL BEAM SEAT ELEVATIONS WILL BE DETERMINED AFTER APPROVAL OF THE SHOP DRAWINGS.
3. MASONRY BASE PLATE SHALL BE PLACED ON 1/8 INCH PREFORMED FABRIC PAD, SEE SPECIFICATIONS.
4. ANCHOR BOLT SPACING SHALL BE COORDINATED WITH THE BEARING MANUFACTURER.
5. ANCHOR BOLTS SHALL BE GALVANIZED AASHTO DESIGNATION M270 (ASTM 709 GRADE 36).
6. BEARING INSTALLATION SHALL BE IN STRICT CONFORMANCE WITH SPECIAL PROVISIONS OF THE SPECIFICATIONS AND THE MANUFACTURER RECOMMENDATIONS.
7. PTFE INDICATES POLYTETRAFLUOROETHYLINE.
8. THE WELD (BETWEEN SOLE PLATE AND FLANGE) AND GALVANIZED AREAS DAMAGED IN THE WELDING PROCESS, SHALL BE PAINTED WITH ZINC RICH PAINT.
9. DESIGN TEMPERATURE RANGE SHALL BE 150°F (75°F RISE AND FALL).

115-257

AS BUILT (Apr 1996)

STEEL ALTERNATIVE

NO.	REVISION	BY	DATE

	BY	DATE
DESIGNED:	SM	9/94
DRAWN:	RJT	9/94
CHECKED:	DWR	9/94
IN CHARGE OF	CJM	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

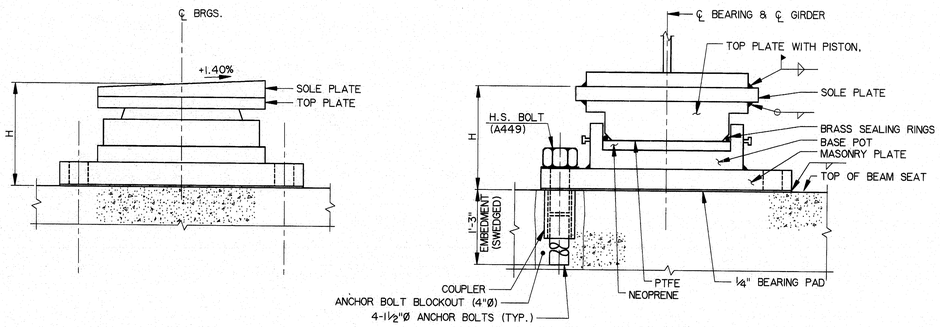
HNTB
ARCHITECTS ENGINEERS PLANNERS

BEARING DEVICES - I

SHEET 862 OF 886 AUGUSTA, MAINE

DIA3 / WWGRAPH.STR.DVCARTER.STEEL.C05234.F08J1.DWG/ C05234

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	72	103



ELEVATION

SECTION

FIXED POT BEARING

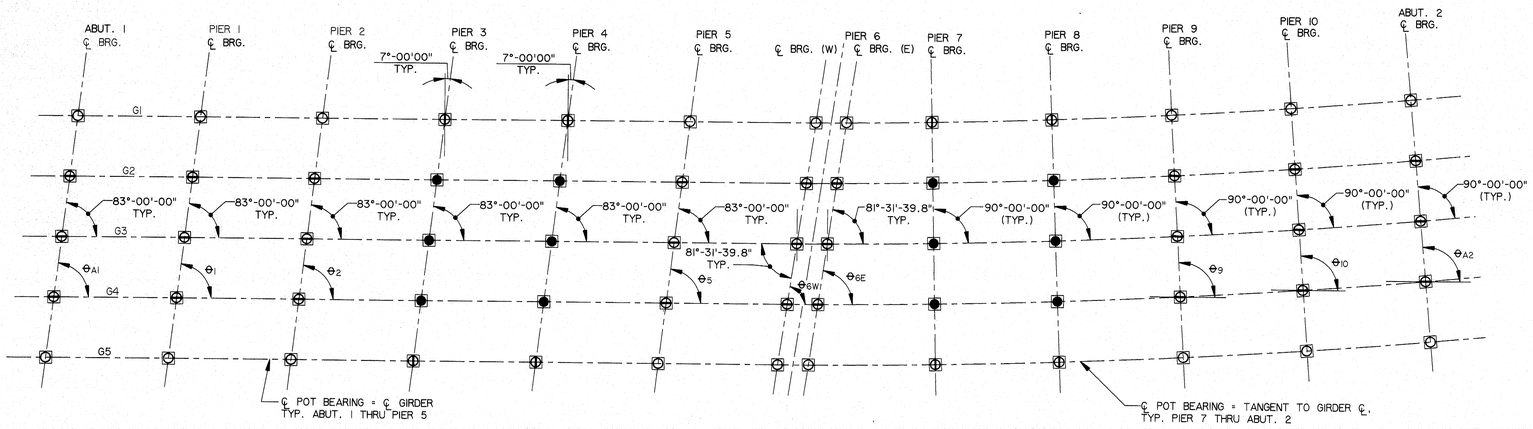
FIXED BEARING				
PIER	GIRDER	DESIGN LOADS PER GIRDER IN KIPS (SERVICE LOAD)		H (IN)
		VERTICAL	HORIZONTAL	
3	2 - 4	918.1	135.9	9½
4	2 - 4	864.5	154.1	9½
7	2 - 4	653.3	54.8	8½
8	2 - 4	542.4	48.1	8

FIXED BEARING NOTE

SOLE PLATE OF THE BEARING, PIER 4 AND PIER 7 SHOULD BE WELDED TO THE GIRDER AT APPROXIMATELY 45°F.

NOTE

ANCHOR BOLTS SHALL CONFORM TO ASTM A449



POT BEARING ALIGNMENT PLAN

LEGEND

- ● - FIXED
- ⊖ - GUIDED LONGITUDINAL EXPANSION
- ◐ - GUIDED TRANSVERSE EXPANSION
- ○ - NON - GUIDED EXPANSION
- ⊖ - TOP ℄ SETTING ANGLE (GUIDED LONGITUDINAL ONLY)

NO.	REVISION	BY	DATE

	BY	DATE
DESIGNED:	SM	9/94
DRAWN:	RJT	9/94
CHECKED:	DWR	9/94
IN CHARGE OF	CJM	

HNTB ARCHITECTS ENGINEERS PLANNERS

As Built Copy 12/8/40

115-258

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

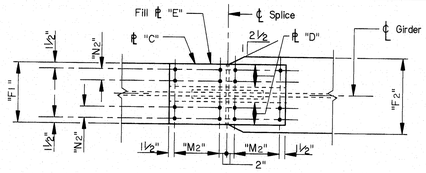
BEARING DEVICES - II

SHEET B63 OF B86 AUGUSTA, MAINE

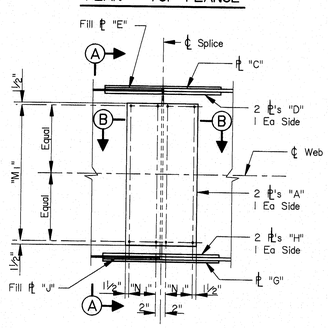
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F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	73	103

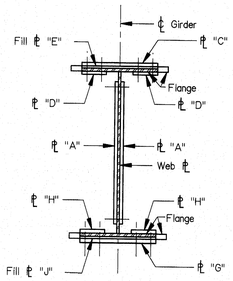
SPLICE NUMBER	WEB SPLICE			TOP FLANGE SPLICE							BOTTOM FLANGE SPLICE						
	SPLICE PLATE	BOLT SPACING		SPLICE PLATES			BOLT SPACING		FLANGE WIDTH		SPLICE PLATES			BOLT SPACING		FLANGE WIDTH	
	"A"	"M1"	"N1"	"C"	"D"	"E"(FILL ℄)	"M2"	"N2"	"F1"	"F2"	"G"	"H"	"J"(FILL P)L	"M3"	"N3"	"K1"	"K2"
1 & 10	½ x 19 x 7'-0"	27 SPS. @ 3" = 6'-9"	2 SPS. @ 3" = 6"	1¼ x 16 x 2'-1"	1¼ x 7 x 2'-1"	½ x 16 x 1'-0 3/8"	3 SPS. @ 3" = 9"	3"	16"	24"	1 x 22 x 2'-1"	1⅛ x 10 x 2'-1"	-	3 SPS. @ 3" = 9"	2 SPS. @ 3" = 6"	22"	24"
2 & 9	½ x 19 x 7'-0"	24 SPS. @ 3 3/8" = 6'-9"	2 SPS. @ 3" = 6"	1 1/16 x 16 x 2'-1"	¾ x 7 x 2'-1"	½ x 16 x 1'-0 3/8"	3 SPS. @ 3" = 9"	3"	16"	24"	5/8 x 24 x 2'-1"	1 1/16 x 11 x 2'-1"	-	3 SPS. @ 3" = 9"	2 SPS. @ 3" = 6"	24"	24"
3 & 8	½ x 19 x 7'-0"	27 SPS. @ 3" = 6'-9"	2 SPS. @ 3" = 6"	1⅛ x 16 x 2'-1"	1¼ x 7 x 2'-1"	½ x 16 x 1'-0 3/8"	3 SPS. @ 3" = 9"	3"	16"	26"	13/16 x 24 x 2'-7"	7/8 x 11 x 2'-7"	-	4 SPS. @ 3" = 1'-0"	2 SPS. @ 3" = 6"	24"	26"
4 & 7	½ x 19 x 7'-0"	27 SPS. @ 3" = 6'-9"	2 SPS. @ 3" = 6"	1⅛ x 16 x 2'-1"	1⅛ x 7 x 2'-1"	½ x 16 x 1'-0 3/8"	3 SPS. @ 3" = 9"	3"	16"	26"	¾ x 26 x 1'-7"	13/16 x 12 x 1'-7"	-	2 SPS. @ 3" = 6"	3 SPS. @ 3" = 9"	26"	26"
5 & 6	½ x 19 x 7'-0"	27 SPS. @ 3" = 6'-9"	2 SPS. @ 3" = 6"	1¼ x 16 x 2'-1"	1¼ x 7 x 2'-1"	½ x 16 x 1'-0 3/8"	3 SPS. @ 3" = 9"	3"	16"	28"	7/8 x 26 x 2'-1"	1 x 12 x 2'-1"	-	3 SPS. @ 3" = 9"	3 SPS. @ 3" = 9"	26"	28"
11A	½ x 19 x 5'-9½"	19 SPS @ 3½"= 5'-6½"	2 SPS. @ 3" = 6"	½ x 16 x 1'-7"	½ x 7 x 1'-7"	⅜ x 16 x 9 3/8"	2 SPS. @ 3" = 6"	3"	16"	20"	5/8 x 20 x 2'-1"	5/8 x 9 x 2'-1"	½ x 20 x 1'-0 3/8"	3 SPS. @ 3" = 9"	2 SPS. @ 3" = 6"	20"	20"
11B	½ x 19 x 5'-9½"	19 SPS @ 3½"= 5'-6½"	2 SPS. @ 3" = 6"	½ x 16 x 1'-7"	½ x 7 x 1'-7"	⅜ x 16 x 9 3/8"	2 SPS. @ 3" = 6"	3"	16"	24"	¾ x 22 x 2'-7"	13/16 x 10 x 2'-7"	½ x 22 x 1'-3 3/8"	4 SPS. @ 3" = 1'-0"	2 SPS. @ 3" = 6"	22"	24"
12A	½ x 19 x 5'-9"	22 SPS. @ 3" = 5'-6"	2 SPS. @ 3" = 6"	5/8 x 16 x 2'-1"	5/8 x 7 x 2'-1"	⅜ x 16 x 1'-0 3/8"	3 SPS. @ 3" = 9"	3"	16"	20"	½ x 16 x 2'-1"	½ x 7 x 2'-1"	¼ x 16 x 1'-0 3/8"	3 SPS. @ 3" = 9"	3"	16"	20"
12B	½ x 19 x 5'-9"	22 SPS. @ 3" = 5'-6"	2 SPS. @ 3" = 6"	5/8 x 16 x 2'-1"	5/8 x 7 x 2'-1"	⅜ x 16 x 1'-0 3/8"	3 SPS. @ 3" = 9"	3"	16"	24"	½ x 16 x 2'-1"	5/8 x 7 x 2'-1"	¼ x 16 x 1'-0 3/8"	3 SPS. @ 3" = 9"	3"	16"	24"
13A & 14A	½ x 19 x 5'-9½"	19 SPS @ 3½"= 5'-6½"	2 SPS. @ 3" = 6"	5/8 x 16 x 1'-7"	5/8 x 7 x 1'-7"	⅛ x 16 x 9 3/8"	2 SPS. @ 3" = 6"	3"	16"	16"	5/8 x 16 x 2'-1"	1 1/16 x 7 x 2'-1"	-	3 SPS. @ 3" = 9"	3"	16"	16"
13B	½ x 19 x 5'-9½"	19 SPS @ 3½"= 5'-6½"	2 SPS. @ 3" = 6"	5/8 x 16 x 1'-7"	5/8 x 7 x 1'-7"	⅛ x 16 x 9 3/8"	2 SPS. @ 3" = 6"	3"	16"	18"	5/8 x 16 x 2'-1"	1 1/16 x 7 x 2'-1"	-	3 SPS. @ 3" = 9"	3"	16"	18"
14B	½ x 19 x 5'-9½"	19 SPS @ 3½"= 5'-6½"	2 SPS. @ 3" = 6"	1 1/16 x 16 x 1'-7"	1 1/16 x 7 x 1'-7"	⅛ x 16 x 9 3/8"	2 SPS. @ 3" = 6"	3"	16"	18"	5/8 x 16 x 2'-1"	1 1/16 x 7 x 2'-1"	-	3 SPS. @ 3" = 9"	3"	18"	18"
15A & 18	½ x 19 x 5'-9½"	19 SPS @ 3½"= 5'-6½"	2 SPS. @ 3" = 6"	5/8 x 16 x 2'-1"	5/8 x 7 x 2'-1"	-	3 SPS. @ 3" = 9"	3"	16"	16"	5/8 x 16 x 2'-1"	5/8 x 7 x 2'-1"	⅛ x 16 x 1'-0 3/8"	3 SPS. @ 3" = 9"	3"	16"	16"
15B	½ x 19 x 5'-9½"	19 SPS @ 3½"= 5'-6½"	2 SPS. @ 3" = 6"	5/8 x 16 x 1'-7"	5/8 x 7 x 1'-7"	⅛ x 16 x 9 3/8"	2 SPS. @ 3" = 6"	3"	16"	16"	5/8 x 16 x 2'-1"	1 1/16 x 7 x 2'-1"	-	3 SPS. @ 3" = 9"	3"	16"	18"
16A & 17	½ x 19 x 5'-9½"	19 SPS @ 3½"= 5'-6½"	2 SPS. @ 3" = 6"	5/8 x 16 x 1'-7"	5/8 x 7 x 1'-7"	-	2 SPS. @ 3" = 6"	3"	16"	16"	5/8 x 16 x 2'-1"	5/8 x 7 x 1'-7"	-	2 SPS. @ 3" = 6"	3"	16"	16"
16B	½ x 19 x 5'-9½"	19 SPS @ 3½"= 5'-6½"	2 SPS. @ 3" = 6"	1 1/16 x 16 x 1'-7"	1 1/16 x 7 x 1'-7"	⅛ x 16 x 9 3/8"	2 SPS. @ 3" = 6"	3".	16"	16"	1 1/16 x 16 x 1'-7"	1 1/16 x 7 x 1'-7"	⅛ x 16 x 9 3/8"	2 SPS. @ 3" = 6"	3"	16"	16"



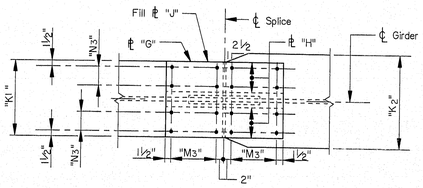
PLAN - TOP FLANGE



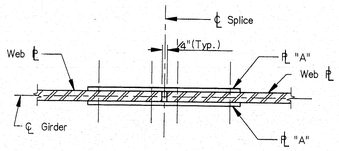
ELEVATION



SECTION A-A



PLAN - BOTTOM FLANGE



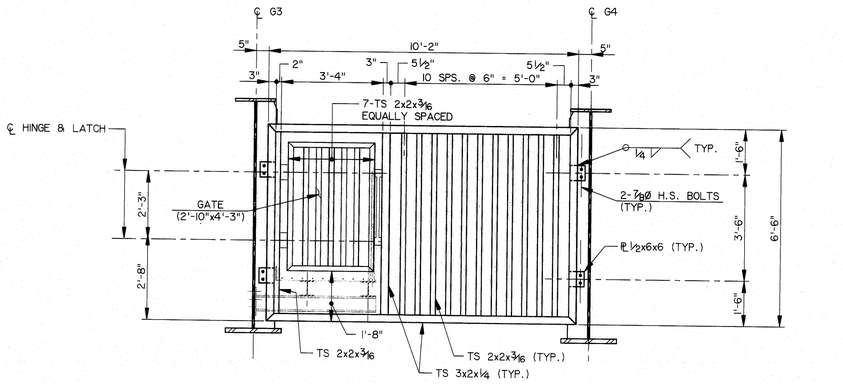
SECTION B-B

NOTES

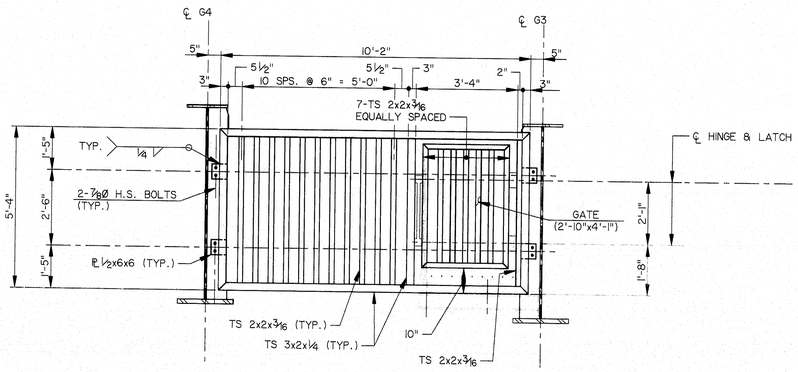
1. ALL FIELD CONNECTIONS ARE TO BE MADE WITH ⅞"Ø HIGH STRENGTH BOLTS (FRICTION), ASTM A325 TYPE 3.
2. ALL HOLES FOR ⅞"Ø BOLTS TO BE 15/16"Ø.
3. NUTS TO BE ON INSIDE FACE OF WEB SPLICE AT FASCIA GIRDERS.
4. NUTS TO BE UP ON ALL FLANGE SPLICES.

NO.	REVISION	BY	DATE

	BY	DATE
DESIGNED:	SM	9/94
DRAWN:	RJT	9/94
CHECKED:	DWR	9/94
IN CHARGE OF	GJM	



BARRIER AT WEST END



BARRIER AT EAST END

CATWALK BARRIER - DETAILS

½" = 1'-0"

CATWALK BARRIER NOTES

1. ALL STRUCTURAL TUBING SHALL CONFORM TO ASTM DESIGNATION A501.
2. THE CATWALK BARRIER SHALL BE SHOP WELDED AND HOT DIPPED GALVANIZED
3. THE HINGES SHALL BE BOLT-ON, HEAVEY DUTY, INDUSTRIAL TYPE, WITH A MINIMUM 90° SWING AND MUST CLEAR CATWALK RAILING WHEN OPEN.
4. THE LATCHES SHALL BE BOLT-ON, DOUBLE LATCHING, HEAVY DUTY, INDUSTRIAL TYPE. MUST BE LOCKABLE WITH PADLOCK AND WHEN LATCHED THE GATE SHALL BE VIRTUALLY VIBRATION FREE.
5. PAYMENT FOR CATWALK BARRIER (MATERIAL, FABRICATION AND INSTALLATION) SHALL BE INCLUDED IN THE STRUCTURAL STEEL ITEMS.

As Built (Rev-11-96)

115-259

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

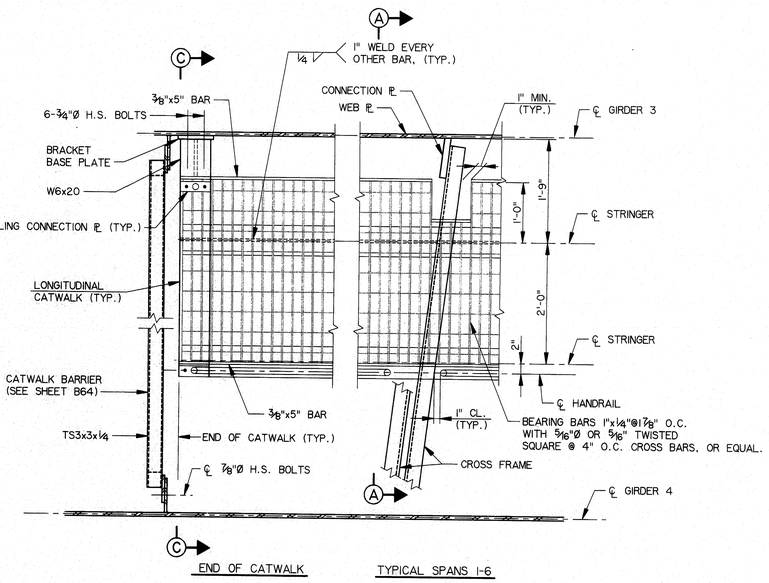
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

GIRDER SPLICE DETAILS

HNTB
ARCHITECTS ENGINEERS PLANNERS

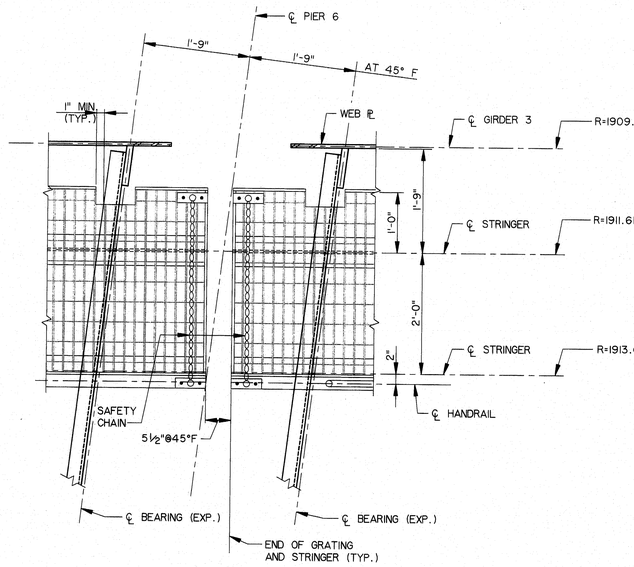
SHEET B64 OF B86 AUGUSTA, MAINE

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	74	103

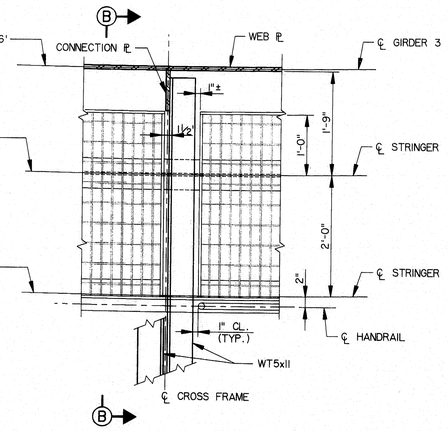


END OF CATWALK

TYPICAL SPANS 1-6

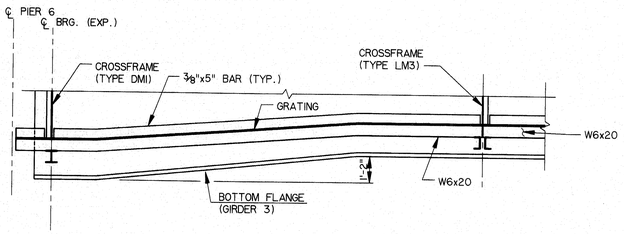


AT PIER 6

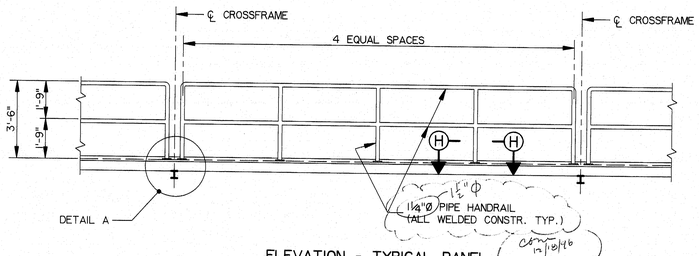


TYPICAL SPANS 7-11

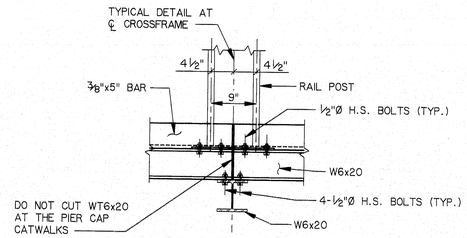
PLAN
1" = 1'-0"



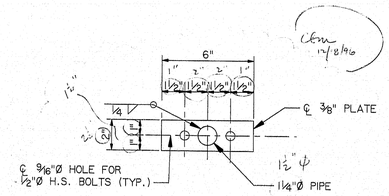
LONGITUDINAL SECTION
(AT GIRDER TRANSITION)



ELEVATION - TYPICAL PANEL
LONGITUDINAL CATWALK SHOWN
TRANSVERSE CATWALK SIMILAR



DETAIL A
(SECTION D-D)



SECTION H-H
(HANDRAIL POST CONNECTION DETAIL)

NOTES

1. FOR SECTION A-A, B-B & C-C SEE SH. B66
2. FOR TRANSVERSE CATWALK, SEE PIER DETAILS.

CATWALK NOTES

1. ALL CATWALK MATERIAL NOT ATTACHED TO THE PIERS SHALL CONFORM TO ASTM A709, GRADE 50W. ALL OTHER MATERIALS SHALL BE GALVANIZED ASTM A709, GRADE 36 STEEL UNLESS OTHERWISE NOTED.
2. TRANSVERSE CATWALK UNITS WILL BE FABRICATED FULL LENGTH AS SHOWN ON THE PLANS.
3. THE LONGITUDINAL CATWALK SHALL BE INSTALLED AS SHOWN IN FRAMING PLAN BETWEEN STEEL GIRDERS G3 & G4, WITH TRANSVERSE CATWALKS ALONG WEST SIDE OF EACH PIER CAP.
4. THE GRATING MAY BE ATTACHED BY ANOTHER METHOD SUBJECT TO APPROVAL BY THE ENGINEER.
5. BOLTS MAY BE USED IN LADDER CONNECTION SUBJECT TO APPROVAL BY THE ENGINEER.
6. PAYMENT FOR CATWALK (MATERIAL, FABRICATION AND ERECTION) SHALL BE INCLUDED IN THE STRUCTURAL STEEL ITEMS.

115-260
STEEL ALTERNATIVE

NO.	REVISION	BY	DATE

	BY	DATE
DESIGNED:	RJR	9/94
DRAWN:	RJT	9/94
CHECKED:	DWR	9/94
IN CHARGE OF	CJM	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

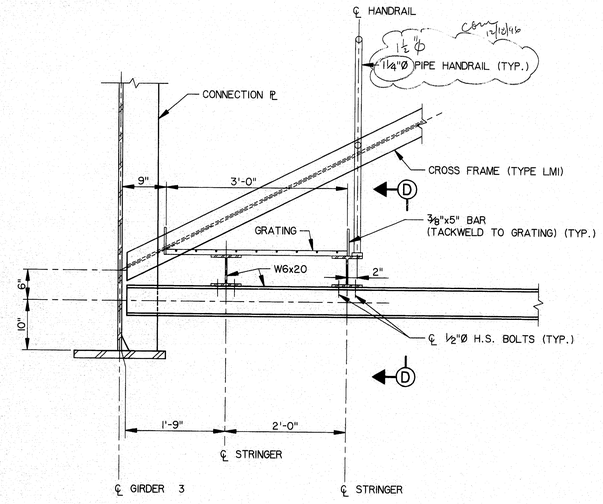
CATWALK DETAILS

HNTB
ARCHITECTS ENGINEERS PLANNERS

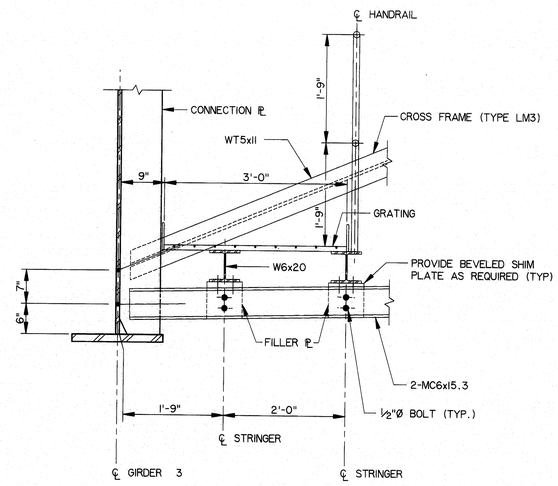
SHEET B65 OF B86 AUGUSTA, MAINE

DIA3 / BWGRAPH 3TH.DVCARTER STEEL CDS279.FGBLI DWG: CDS279

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	75	103

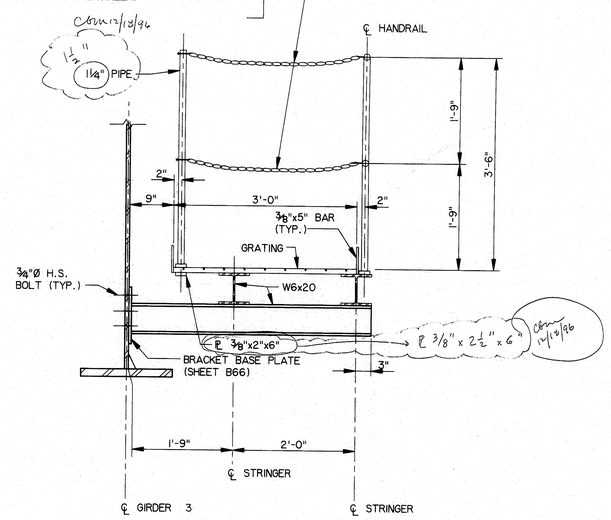


SECTION A-A
(SPANS 1-6)

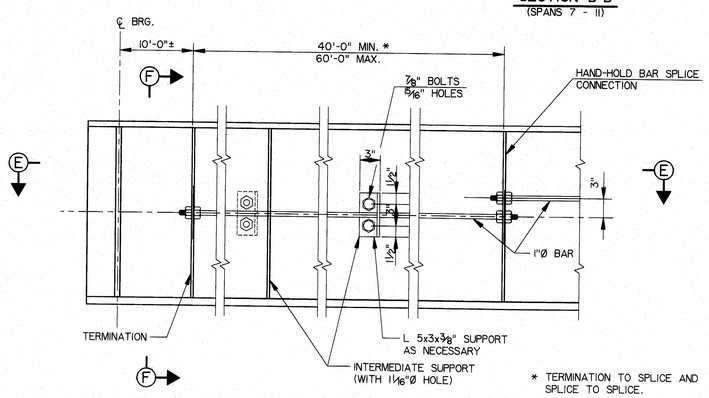


SECTION B-B
(SPANS 7 - 11)

INSTALL TWO SAFETY CHAINS, 4 GALVANIZED EYE BOLTS AND TWO SWIVEL EYE UTILITY SNAPS AT EACH SIDE OF THE OPEN JOINT AT PIER 6 AS APPROVED BY THE ENGINEER.

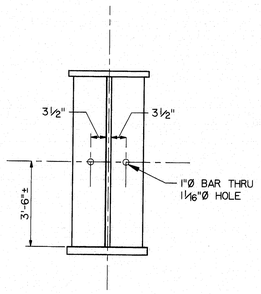


SECTION C-C

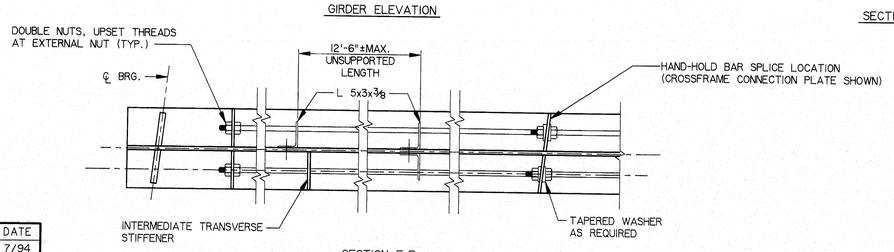


GIRDER ELEVATION

* TERMINATION TO SPLICE AND SPLICE TO SPLICE.



SECTION F-F



SECTION E-E

NOTE

1. FOR SECTION D-D, SEE DETAIL A, SHEET B65.

HAND - HOLD BAR NOTES

1. ALL STRUCTURAL STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709, GRADE 50W.
2. HANDHOLD BARS SHALL BE PLACED ON BOTH SIDES OF INTERIOR GIRDERS AND SHALL BE PLACED ON THE INSIDE OF EXTERIOR GIRDERS. HANDHOLD BARS WILL NOT BE REQUIRED IN THE BAY WHERE THE CATWALK IS LOCATED AT GIRDER 3 ONLY GIRDER 4 IN THAT BAY SHOULD HAVE A HANDHOLD BAR.
3. STIFFENERS AND CONNECTION PLATES AT TERMINATION AND SPLICE LOCATION SHALL BE ½" THICK, MINIMUM. ANGLE SUPPORTS SHALL BE USED AT INTERMEDIATE LOCATIONS ONLY. CONNECTION PLATES SHALL BE ADDED AT TERMINATION AND SPLICE POINTS WHEN STIFFENERS OR CONNECTION PLATES ARE NOT CALLED FOR ON THE PLANS.
4. NUTS SHALL CONFORM TO ASTM A563, HEAVY HEX GRADE C3-DH3.

115 STEEL ALTERNATIVE 261

HAND - HOLD BAR DETAILS

NO.	REVISION	BY	DATE

	BY	DATE
DESIGNED:	SM	7/94
DRAWN:	RJT	7/94
CHECKED:	DWR	7/94
IN CHARGE OF	CJM	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT

DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

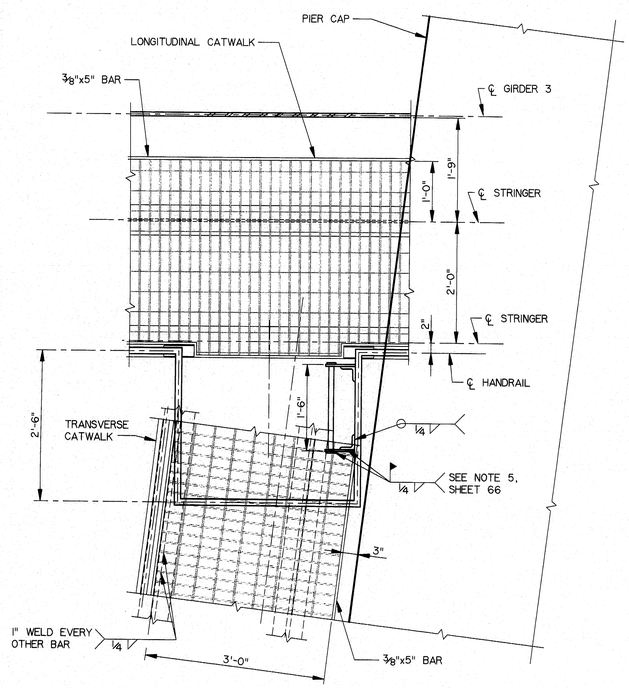
CATWALK DETAILS

HNTB
ARCHITECTS ENGINEERS PLANNERS

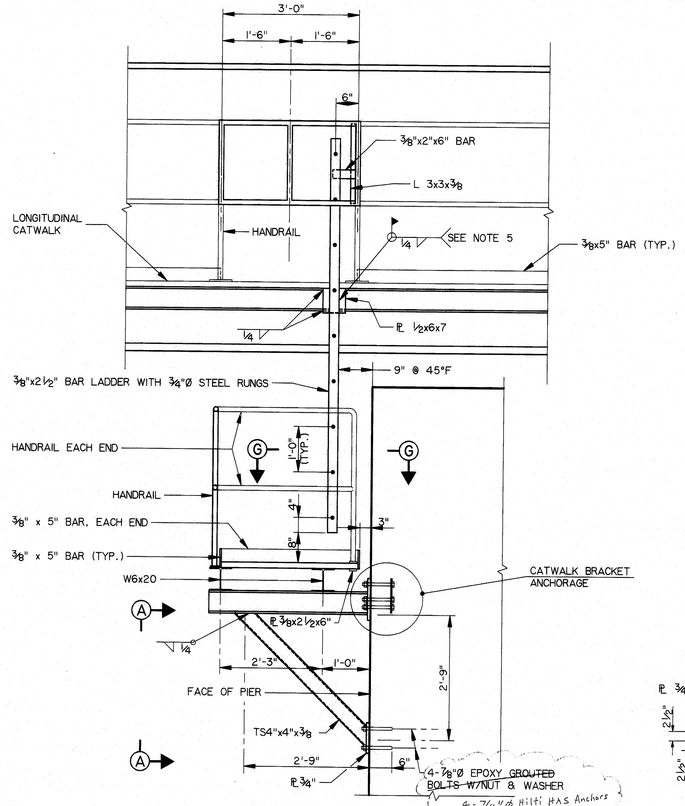
SHEET B66 OF B86 AUGUSTA, MAINE

DIA3 - \\WIGRAPLSTR.DVCARTER.STEEL\C05280.F08L.DWG - C05280

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	76	103

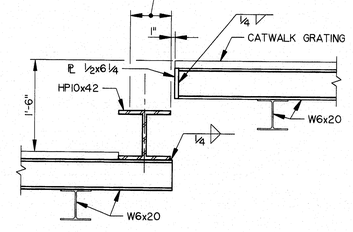


PLAN AT PIER LADDER

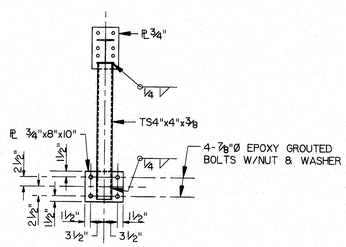


TYPICAL LADDER DETAIL

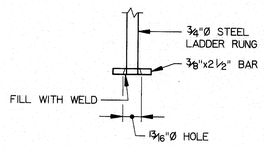
INSTALL 8" WIDE NON-SLIP ABRASIVE COATED FABRIC TO TOP OF STEPS. THE FABRIC SHALL BE APPROVED BY THE ENGINEER.



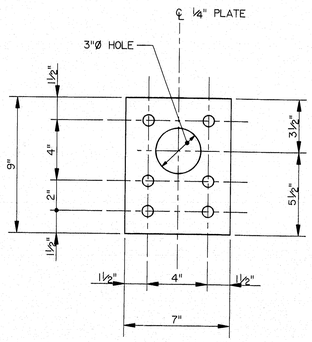
STEP DETAIL AT PIERS 7 THRU 10



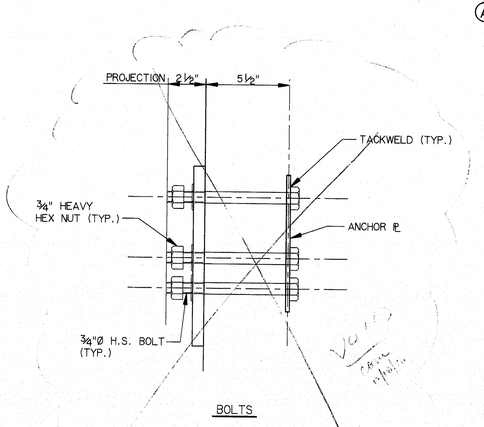
VIEW A-A



SECTION G-G

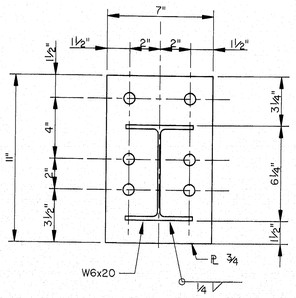


ANCHOR PLATE



BOLTS

CATWALK BRACKET ANCHORAGE
(AT PIERS)



BRACKET BASE PLATE

NOTE

1. FOR TRANSVERSE WALK ADDITIONAL DETAILS, SEE PIER DETAILS.
2. Hilti HVA Adhesive Anchor System with the HAS 34-958 (3/4" x 9-5/8" rod) anchor shall be used for the Catwalk Bracket Anchorage.

115-262
STEEL ALTERNATIVE

NO.	REVISION	BY	DATE

	BY	DATE
DESIGNED:	SM	8/94
DRAWN:	RJT	8/94
CHECKED:	DWR	8/94
IN CHARGE OF	CJM	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

CATWALK DETAILS

HNTB
ARCHITECTS ENGINEERS PLANNERS

SHEET B67 OF B86 AUGUSTA, MAINE

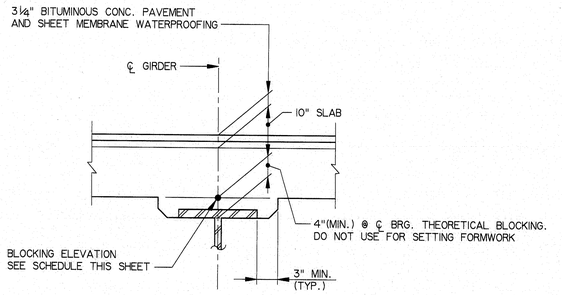
D:\5-1\WINGRAM STR.DVCARTER STEEL\CD9280 FIG1.1 DWG, CD9280

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	77	103

GIRDER 1	
DISTANCE	BLOCKING ELEVATION
℄ BRG. ABUT. 1	108.17
10	108.37
20	108.57
30	108.76
40	108.95
50	109.12
60	109.29
70	109.44
80	109.57
90	109.70
100	109.82
110	109.93
120	110.03
130	110.13
140	110.23
150	110.33
160	110.44
170	110.56
℄ BRG. PIER 1	110.69
10	110.83
20	110.98
30	111.14
40	111.31
50	111.48
60	111.66
70	111.83
80	112.00
90	112.16
100	112.32
110	112.46
120	112.60
130	112.73
140	112.85
150	112.96
160	113.07
170	113.17
180	113.28
190	113.39
200	113.50
210	113.63
220	113.77
℄ BRG. PIER 2	113.84
10	113.99
20	114.15
30	114.32
40	114.50
50	114.69
60	114.87
70	115.05
80	115.23
90	115.40
100	115.57
110	115.72
120	115.86
130	115.99
140	116.11
150	116.22
160	116.33
170	116.43
180	116.52
190	116.62
200	116.72
210	116.82
220	116.94
230	117.06

GIRDER 1	
DISTANCE	BLOCKING ELEVATION
℄ BRG. PIER 3	117.20
10	117.34
20	117.50
30	117.66
40	117.84
50	118.02
60	118.20
70	118.39
80	118.57
90	118.74
100	118.91
110	119.07
120	119.22
130	119.36
140	119.49
150	119.60
160	119.71
170	119.81
180	119.91
190	120.01
200	120.10
210	120.20
220	120.31
230	120.43
℄ BRG. PIER 4	120.56
10	120.70
20	120.84
30	120.99
40	121.15
50	121.32
60	121.49
70	121.66
80	121.83
90	121.99
100	122.14
110	122.29
120	122.42
130	122.55
140	122.67
150	122.79
160	122.90
170	123.01
180	123.12
190	123.23
200	123.36
210	123.50
220	123.64
℄ BRG. PIER 5	123.65
10	123.81
20	123.98
30	124.15
40	124.34
50	124.53
60	124.71
70	124.90
80	125.07
90	125.24
100	125.40
110	125.54
120	125.67
130	125.79
140	125.89
150	125.98
160	126.06
170	126.13
180	126.14
℄ BRG. PIER 6-W	126.15

GIRDER 1	
DISTANCE	BLOCKING ELEVATION
℄ BRG. PIER 6-E	126.18
10	126.34
20	126.48
30	126.62
40	126.76
50	126.87
60	126.98
70	127.07
80	127.15
90	127.26
100	127.36
110	127.46
120	127.57
130	127.66
140	127.77
150	127.88
℄ BRG. PIER 7	127.92
10	128.06
20	128.20
30	128.36
40	128.52
50	128.69
60	128.85
70	129.01
80	129.16
90	129.30
100	129.43
110	129.55
120	129.68
130	129.80
140	129.92
150	130.05
℄ BRG. PIER 8	130.15
10	130.30
20	130.46
30	130.63
40	130.80
50	130.96
60	131.12
70	131.28
80	131.42
90	131.55
100	131.67
110	131.79
120	131.90
130	132.02
140	132.14
℄ BRG. PIER 9	132.24
10	132.38
20	132.53
30	132.69
40	132.85
50	133.01
60	133.16
70	133.30
80	133.44
90	133.57
100	133.70
110	133.82
120	133.95
130	134.08
℄ BRG. PIER 10	134.20
10	134.35
20	134.51
30	134.68
40	134.84
50	135.01
60	135.16
70	135.31
80	135.44
90	135.57
100	135.68
110	135.79
℄ BRG. ABUT. 2	135.88



BLOCKING DETAIL
NO SCALE

ROADWAY SLAB NOTES

1. AFTER THE GIRDERS ARE ERECTED, BUT BEFORE FORMS ARE BUILT, ELEVATIONS ON THE TOP FLANGE OF GIRDERS ARE TO BE OBTAINED AT THE POINTS INDICATED IN THE TABLE. THE DIFFERENCE OF THESE ELEVATIONS AND THOSE SHOWN IN THE TABLE GIVES THE ACTUAL DISTANCE FROM THE TOP OF GIRDER TO THE BOTTOM OF THE SLAB.
2. ELEVATIONS SHOWN ARE FINISHED BOTTOM OF SLAB ELEVATIONS BASED ON PROFILE GRADES ADJUSTED FOR DEAD LOAD DEFLECTION LESS THE DEFLECTION DUE TO STEEL WEIGHT. FOR LOCATION OF POINTS SEE BLOCKING DETAIL THIS SHEET.

AS BUILT
12/13/96

115-263
STEEL ALTERNATIVE

					BY	DATE
				DESIGNED:	JFW	9/94
				DRAWN:	RJT	9/94
◊	ELEV. REVISIONS	JFW	10/95	CHECKED:	SM	9/94
NO.	REVISION	BY	DATE	IN CHARGE OF	CJM	

WATERWIN

HNTB
ARCHITECTS ENGINEERS PLANNERS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

BLOCKING ELEVATIONS - I

SHEET 868 OF 886 AUGUSTA, MAINE

DIAT: \\WIGRAPH\STR\DVCARTER\STEEL\D0929\F08\1 DWG: D0929

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	78	103

GIRDER 2	
DISTANCE	BLOCKING ELEVATION
℄ BRG. ABUT. 1	108.38
10	108.59
20	108.79
30	108.99
40	109.19
50	109.36
60	109.53
70	109.68
80	109.82
90	109.94
100	110.06
110	110.16
120	110.26
130	110.35
140	110.45
150	110.55
160	110.65
170	110.77
℄ BRG. PIER 1	110.90
10	111.04
20	111.19
30	111.35
40	111.53
50	111.70
60	111.88
70	112.06
80	112.23
90	112.39
100	112.55
110	112.70
120	112.83
130	112.96
140	113.07
150	113.18
160	113.29
170	113.39
180	113.49
190	113.60
200	113.72
210	113.84
220	113.98
℄ BRG. PIER 2	114.05
10	114.20
20	114.37
30	114.54
40	114.72
50	114.91
60	115.10
70	115.29
80	115.47
90	115.65
100	115.81
110	115.96
120	116.11
130	116.24
140	116.36
150	116.46
160	116.56
170	116.66
180	116.75
190	116.84
200	116.94
210	117.04
220	117.15
230	117.27

GIRDER 2	
DISTANCE	BLOCKING ELEVATION
℄ BRG. PIER 3	117.41
10	117.55
20	117.71
30	117.88
40	118.05
50	118.24
60	118.43
70	118.62
80	118.80
90	118.98
100	119.16
110	119.32
120	119.47
130	119.60
140	119.73
150	119.85
160	119.95
170	120.05
180	120.14
190	120.23
200	120.32
210	120.42
220	120.53
230	120.64
℄ BRG. PIER 4	120.77
10	120.91
20	121.05
30	121.20
40	121.37
50	121.54
60	121.71
70	121.88
80	122.05
90	122.21
100	122.36
110	122.51
120	122.65
130	122.77
140	122.89
150	123.00
160	123.11
170	123.22
180	123.33
190	123.45
200	123.57
210	123.71
220	123.85
℄ BRG. PIER 5	123.86
10	124.02
20	124.19
30	124.37
40	124.56
50	124.75
60	124.94
70	125.13
80	125.31
90	125.48
100	125.64
110	125.78
120	125.91
130	126.02
140	126.12
150	126.21
160	126.29
170	126.35
180	126.39
℄ BRG. PIER 6-W	126.40

GIRDER 2	
DISTANCE	BLOCKING ELEVATION
℄ BRG. PIER 6-E	126.44
10	126.63
20	126.81
30	126.98
40	127.14
50	127.29
60	127.43
70	127.54
80	127.65
90	127.75
100	127.86
110	127.96
120	128.05
130	128.14
140	128.24
150	128.35
℄ BRG. PIER 7	128.42
10	128.55
20	128.69
30	128.85
40	129.01
50	129.17
60	129.33
70	129.49
80	129.64
90	129.78
100	129.92
110	130.04
120	130.16
130	130.28
140	130.40
150	130.53
℄ BRG. PIER 8	130.64
10	130.80
20	130.96
30	131.13
40	131.30
50	131.46
60	131.62
70	131.77
80	131.92
90	132.05
100	132.17
110	132.28
120	132.39
130	132.51
140	132.63
℄ BRG. PIER 9	132.73
10	132.87
20	133.02
30	133.18
40	133.34
50	133.50
60	133.65
70	133.80
80	133.93
90	134.06
100	134.19
110	134.31
120	134.43
130	134.56
℄ BRG. PIER 10	134.69
10	134.85
20	135.01
30	135.18
40	135.34
50	135.51
60	135.66
70	135.81
80	135.94
90	136.05
100	136.18
110	136.28
℄ BRG. ABUT. 2	136.37

GIRDER 3	
DISTANCE	BLOCKING ELEVATION
℄ BRG. ABUT. 1	108.59
10	108.80
20	109.00
30	109.20
40	109.40
50	109.57
60	109.74
70	109.89
80	110.03
90	110.15
100	110.27
110	110.37
120	110.47
130	110.56
140	110.66
150	110.76
160	110.86
170	110.98
℄ BRG. PIER 1	111.11
10	111.25
20	111.40
30	111.56
40	111.74
50	111.91
60	112.09
70	112.27
80	112.44
90	112.60
100	112.76
110	112.91
120	113.04
130	113.17
140	113.29
150	113.39
160	113.50
170	113.60
180	113.70
190	113.81
200	113.93
210	114.05
220	114.19
℄ BRG. PIER 2	114.26
10	114.41
20	114.58
30	114.75
40	114.93
50	115.12
60	115.31
70	115.50
80	115.68
90	115.86
100	116.02
110	116.17
120	116.32
130	116.45
140	116.57
150	116.67
160	116.77
170	116.87
180	116.96
190	117.05
200	117.15
210	117.25
220	117.36
230	117.48

GIRDER 3	
DISTANCE	BLOCKING ELEVATION
℄ BRG. PIER 3	117.62
10	117.76
20	117.92
30	118.09
40	118.27
50	118.45
60	118.64
70	118.83
80	119.01
90	119.19
100	119.37
110	119.53
120	119.68
130	119.81
140	119.94
150	120.06
160	120.16
170	120.26
180	120.35
190	120.44
200	120.53
210	120.63
220	120.74
230	120.85
℄ BRG. PIER 4	120.98
10	121.12
20	121.26
30	121.41
40	121.58
50	121.75
60	121.92
70	122.09
80	122.26
90	122.42
100	122.57
110	122.72
120	122.86
130	122.98
140	123.10
150	123.21
160	123.32
170	123.43
180	123.54
190	123.66
200	123.78
210	123.92
220	124.06
℄ BRG. PIER 5	124.07
10	124.23
20	124.40
30	124.58
40	124.77
50	124.96
60	124.15
70	124.34
80	124.52
90	125.69
100	125.85
110	125.99
120	126.12
130	126.23
140	126.33
150	126.42
160	126.49
170	126.56
180	126.62
℄ BRG. PIER 6-W	126.65

GIRDER 3	
DISTANCE	BLOCKING ELEVATION
℄ BRG. PIER 6-E	126.69
10	126.91
20	127.12
30	127.33
40	127.52
50	127.70
60	127.86
70	128.00
80	128.13
90	128.25
100	128.35
110	128.45
120	128.54
130	128.63
140	128.72
150	128.82
℄ BRG. PIER 7	128.91
10	129.04
20	129.18
30	129.33
40	129.49
50	129.65
60	129.81
70	129.97
80	130.12
90	130.26
100	130.40
110	130.52
120	130.64
130	130.76
140	130.88
150	131.01
℄ BRG. PIER 8	131.14
10	131.29
20	131.45
30	131.62
40	131.79
50	131.96
60	132.12
70	132.27
80	132.41
90	132.54
100	132.66
110	132.77
120	132.88
130	132.99
140	133.11
℄ BRG. PIER 9	133.23
10	133.37
20	133.52
30	133.67
40	133.83
50	133.99
60	134.14
70	134.29
80	134.42
90	134.55
100	134.67
110	134.79
120	134.92
130	135.05

GIRDER 3	
DISTANCE	BLOCKING ELEVATION
℄ BRG. PIER 10	135.19
10	135.34
20	135.50
30	135.67
40	135.84
50	136.00
60	136.16
70	136.30
80	136.44
90	136.56
100	136.67
110	136.77
℄ BRG. ABUT. 2	136.87

NOTE

SEE SHEET B68 FOR NOTES

AS BUILT CONN 12/5/16

115-264

STEEL ALTERNATIVE

					BY	DATE
				DESIGNED:	JFW	9/94
				DRAWN:	RJT	9/94
◇1	ELEV. REVISIONS	JFW	10/95	CHECKED:	SM	9/94
NO.	REVISION	BY	DATE	IN CHARGE OF	CJM	

WATERWIN

HNTB ARCHITECTS · ENGINEERS · PLANNERS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

BLOCKING ELEVATIONS - II

SHEET B69 OF B86 AUGUSTA, MAINE

DA37:\WWGRAPH\STR.DVCARTER-STEEL\C05293.FOBJ.DWG- C05293

GIRDER 4	
DISTANCE	BLOCKING ELEVATION
℄ BRG. ABUT. 1	108.34
10	108.55
20	108.76
30	108.96
40	109.15
50	109.33
60	109.49
70	109.64
80	109.78
90	109.91
100	110.02
110	110.12
120	110.22
130	110.31
140	110.41
150	110.51
160	110.61
170	110.73
℄ BRG. PIER 1	110.86
10	111.00
20	111.15
30	111.32
40	111.49
50	111.66
60	111.84
70	112.02
80	112.19
90	112.35
100	112.51
110	112.66
120	112.79
130	112.92
140	113.04
150	113.15
160	113.25
170	113.35
180	113.46
190	113.56
200	113.68
210	113.80
220	113.94
℄ BRG. PIER 2	114.01
10	114.16
20	114.33
30	114.50
40	114.69
50	114.87
60	115.06
70	115.25
80	115.43
90	115.61
100	115.77
110	115.93
120	116.07
130	116.20
140	116.32
150	116.43
160	116.53
170	116.62
180	116.71
190	116.80
200	116.90
210	117.00
220	117.11
230	117.23

GIRDER 4	
DISTANCE	BLOCKING ELEVATION
℄ BRG. PIER 3	117.37
10	117.51
20	117.67
30	117.84
40	118.02
50	118.20
60	118.39
70	118.58
80	118.77
90	118.95
100	119.12
110	119.28
120	119.43
130	119.57
140	119.69
150	119.81
160	119.91
170	120.01
180	120.10
190	120.19
200	120.29
210	120.38
220	120.49
230	120.60
℄ BRG. PIER 4	120.73
10	120.87
20	121.01
30	121.17
40	121.33
50	121.50
60	121.67
70	121.84
80	122.01
90	122.17
100	122.32
110	122.47
120	122.61
130	122.73
140	122.85
150	122.97
160	123.08
170	123.18
180	123.29
190	123.41
200	123.54
210	123.70
220	123.86
℄ BRG. PIER 5	123.88
10	124.07
20	124.26
30	124.46
40	124.67
50	124.89
60	125.10
70	125.31
80	125.51
90	125.71
100	125.89
110	126.06
120	126.21
130	126.34
140	126.47
150	126.57
160	126.67
170	126.76
180	126.85
℄ BRG. PIER 6-W	126.88

GIRDER 4	
DISTANCE	BLOCKING ELEVATION
℄ BRG. PIER 6-E	126.94
10	127.19
20	127.43
30	127.66
40	127.88
50	128.09
60	128.28
70	128.45
80	128.61
90	128.74
100	128.85
110	128.94
120	129.02
130	129.11
140	129.20
150	129.29
160	129.40
℄ BRG. PIER 7	129.41
10	129.53
20	129.67
30	129.82
40	129.97
50	130.13
60	130.29
70	130.45
80	130.60
90	130.74
100	130.88
110	131.00
120	131.12
130	131.24
140	131.37
150	131.50
℄ BRG. PIER 8	131.63
10	131.79
20	131.95
30	132.12
40	132.29
50	132.45
60	132.61
70	132.76
80	132.90
90	133.03
100	133.15
110	133.26
120	133.37
130	133.48
140	133.60
℄ BRG. PIER 9	133.72
10	133.86
20	134.01
30	134.16
40	134.32
50	134.48
60	134.63
70	134.77
80	134.91
90	135.04
100	135.16
110	135.28
120	135.40
130	135.53
℄ BRG. PIER 10	135.68
10	135.83
20	136.00
30	136.17
40	136.34
50	136.50
60	136.66
70	136.80
80	136.93
90	137.05
100	137.16
110	137.26
℄ BRG. ABUT. 2	137.35

GIRDER 5	
DISTANCE	BLOCKING ELEVATION
℄ BRG. ABUT. 1	108.09
10	108.29
20	108.49
30	108.69
40	108.87
50	109.05
60	109.21
70	109.36
80	109.50
90	109.62
100	109.74
110	109.85
120	109.95
130	110.05
140	110.15
150	110.25
160	110.36
170	110.48
℄ BRG. PIER 1	110.61
10	110.75
20	110.90
30	111.07
40	111.23
50	111.41
60	111.58
70	111.75
80	111.92
90	112.09
100	112.24
110	112.39
120	112.52
130	112.65
140	112.77
150	112.88
160	112.99
170	113.10
180	113.20
190	113.31
200	113.43
210	113.55
220	113.69
℄ BRG. PIER 2	113.76
10	113.91
20	114.08
30	114.25
40	114.43
50	114.61
60	114.79
70	114.98
80	115.16
90	115.33
100	115.49
110	115.64
120	115.78
130	115.91
140	116.03
150	116.15
160	116.25
170	116.35
180	116.45
190	116.54
200	116.64
210	116.75
220	116.86
230	116.99

GIRDER 5	
DISTANCE	BLOCKING ELEVATION
℄ BRG. PIER 3	117.12
10	117.27
20	117.42
30	117.59
40	117.76
50	117.94
60	118.13
70	118.31
80	118.49
90	118.67
100	118.83
110	118.99
120	119.14
130	119.28
140	119.41
150	119.53
160	119.64
170	119.74
180	119.83
190	119.93
200	120.03
210	120.13
220	120.24
230	120.35
℄ BRG. PIER 4	120.48
10	120.62
20	120.76
30	120.92
40	121.08
50	121.25
60	121.42
70	121.59
80	121.75
90	121.91
100	122.07
110	122.21
120	122.35
130	122.48
140	122.60
150	122.71
160	122.82
170	122.93
180	123.04
190	123.16
200	123.30
210	123.47
220	123.64
℄ BRG. PIER 5	123.66
10	123.86
20	124.07
30	124.28
40	124.50
50	124.73
60	124.96
70	125.18
80	125.39
90	125.60
100	125.79
110	125.97
120	126.14
130	126.29
140	126.43
150	126.56
160	126.68
170	126.78
180	126.69
℄ BRG. PIER 6-W	126.93

GIRDER 5	
DISTANCE	BLOCKING ELEVATION
℄ BRG. PIER 6-E	127.00
10	127.26
20	127.52
30	127.77
40	128.02
50	128.24
60	128.34
70	128.52
80	128.69
90	128.97
100	129.08
110	129.17
120	129.25
130	129.34
140	129.42
150	129.51
160	129.61
℄ BRG. PIER 7	129.64
10	129.76
20	129.89
30	130.04
40	130.19
50	130.35
60	130.50
70	130.66
80	130.81
90	130.96
100	131.09
110	131.22
120	131.34
130	131.46
140	131.59
150	131.72
160	131.86
℄ BRG. PIER 8	131.87
10	132.02
20	132.18
30	132.35
40	132.52
50	132.69
60	132.84
70	132.99
80	133.13
90	133.26
100	133.38
110	133.49
120	133.60
130	133.71
140	133.82
150	133.95
℄ BRG. PIER 9	133.96
10	134.09
20	134.24
30	134.39
40	134.55
50	134.70
60	134.86
70	135.00
80	135.13
90	135.26
100	135.38
110	135.50
120	135.63
130	135.75
140	135.89

GIRDER 5	
DISTANCE	BLOCKING ELEVATION
℄ BRG. PIER 10	135.92
10	136.07
20	136.23
30	136.40
40	136.57
50	136.73
60	136.89
70	137.03
80	137.16
90	137.28
100	137.39
110	137.49
120	137.58
℄ BRG. ABUT. 2	137.60

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	79	103

NOTE

SEE SHEET B68 FOR NOTES

AS built Corr 12/3/96

115-265

STEEL ALTERNATIVE

				BY	DATE
			DESIGNED:	JFW	9/94
			DRAWN:	RJT	9/94
◇	ELEV. REVISIONS	JFW	10/95 CHECKED:	DWR	9/94
NO.	REVISION	BY	DATE IN CHARGE OF	CJM	

WATERMIN

HNTB
ARCHITECTS ENGINEERS PLANNERS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

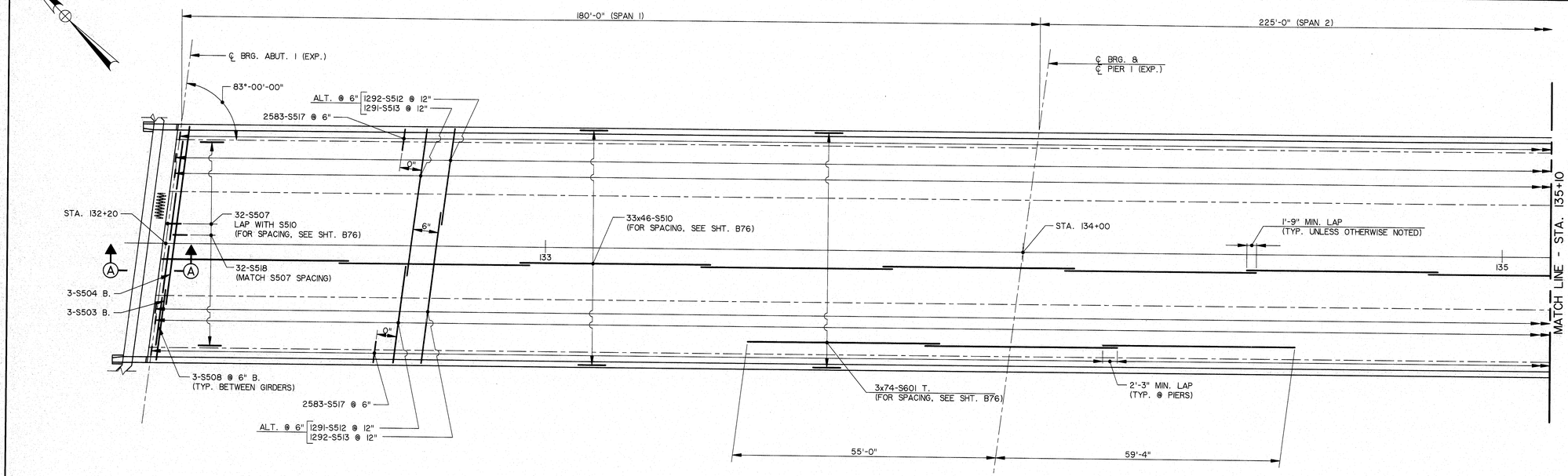
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

BLOCKING ELEVATIONS - III

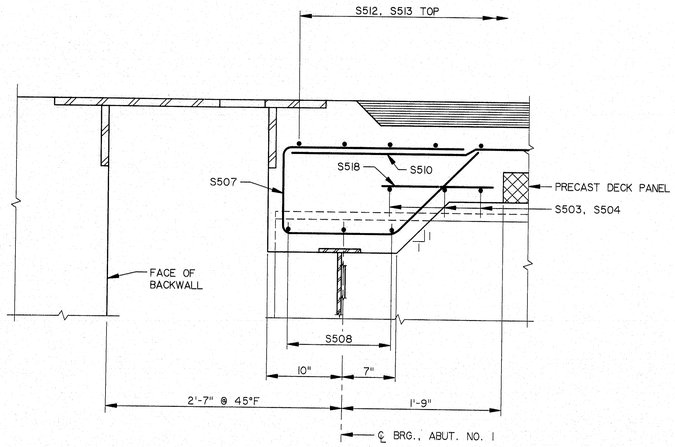
SHEET B70 OF B86 AUGUSTA, MAINE

DIA.: I:\WWGRAPH.STR.DVCARTER.STEEL.C05230.FSB.I DWG: C05230A

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
I	MAINE	0009(002)	80	103



PLAN



SECTION A-A

SUPERSTRUCTURE NOTES

1. FORM A 1" V-GROOVE ON THE FASCIAS AT THE HORIZONTAL JOINT BETWEEN THE BARRIER AND SLAB.
2. REINFORCING STEEL SHALL HAVE A MINIMUM COVER OF 2" UNLESS OTHERWISE INDICATED.
3. ADJUST REINFORCING STEEL TO FIT AROUND THE DRAINS IN A MANNER APPROVED BY THE ENGINEER. DO NOT CUT TRANSVERSE REINFORCING BARS.
4. THE SUPERSTRUCTURE SLAB CONCRETE SHALL BE PLACED IN SUCCESSIVE PLACEMENTS STARTING AT ABUTMENT 1 OR PIER 6 FOR THE RIVER SECTION AND AT PIER 6 OR ABUTMENT 2 FOR THE APPROACH SECTION. THE INITIAL PLACEMENT SHALL START AT A SIMPLY SUPPORTED END OF THE DECK SLAB AND SHALL TERMINATE AT THE COMPLETION OF A POSITIVE MOMENT SECTION. SUCCESSIVE PLACEMENTS SHALL PROCEED FROM THE END OF THE PREVIOUS PLACEMENT, TERMINATE AT THE COMPLETION OF A POSITIVE MOMENT SECTION, AND INCLUDE TWO OR MORE SPANS. THE PLACEMENT SEQUENCE OF THE SUPERSTRUCTURE SLAB CONCRETE SHALL BE APPROVED BY THE ENGINEER. CONCRETE IN PLACEMENT SHALL BE KEPT PLASTIC ONE COMPLETE SPAN BEHIND THE SPAN BEING PLACED. A MINIMUM OF FIVE DAYS SHALL ELAPSE BETWEEN SUCCESSIVE PARTIAL PLACEMENTS.
5. PROTECTIVE COATING FOR CONCRETE SURFACES SHALL BE APPLIED TO THE FOLLOWING AREAS:

   CONCRETE BARRIERS
   FASCIA DOWN TO THE DRIP NOTCH. (SEE NOTE 3, SHEET B24)
6. REFER TO STANDARD DETAILS BD522-93, PRECAST DECK PANEL. END DECK PANEL UNITS ADJACENT TO THE EXPANSION JOINTS AT THE ABUTMENTS AND PIER 6 SHALL CONFORM TO THE GEOMETRY AS SHOWN IN SECTIONS A-A, B-B AND C-C. PANEL UNIT GEOMETRY IN SPANS 7 THROUGH 11 AND A PORTION OF SPAN 6 SHALL CONFORM TO THE CURVED GIRDER GEOMETRY. THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS OF PRECAST DECK PANEL LAYOUT, GEOMETRY AND DETAILS.

NO.	REVISION	BY	DATE
◊	REINF. STEEL	TRG	3/96

	BY	DATE
DESIGNED:	RAL	9/94
DRAWN:	RJT	9/94
CHECKED:	JFW	9/94
IN CHARGE OF	CJM	

WATERMAN

ENTIRE SHEET REVISED ON 3/96 ◊

AS BUILT COMM 12/16/96

115-266

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

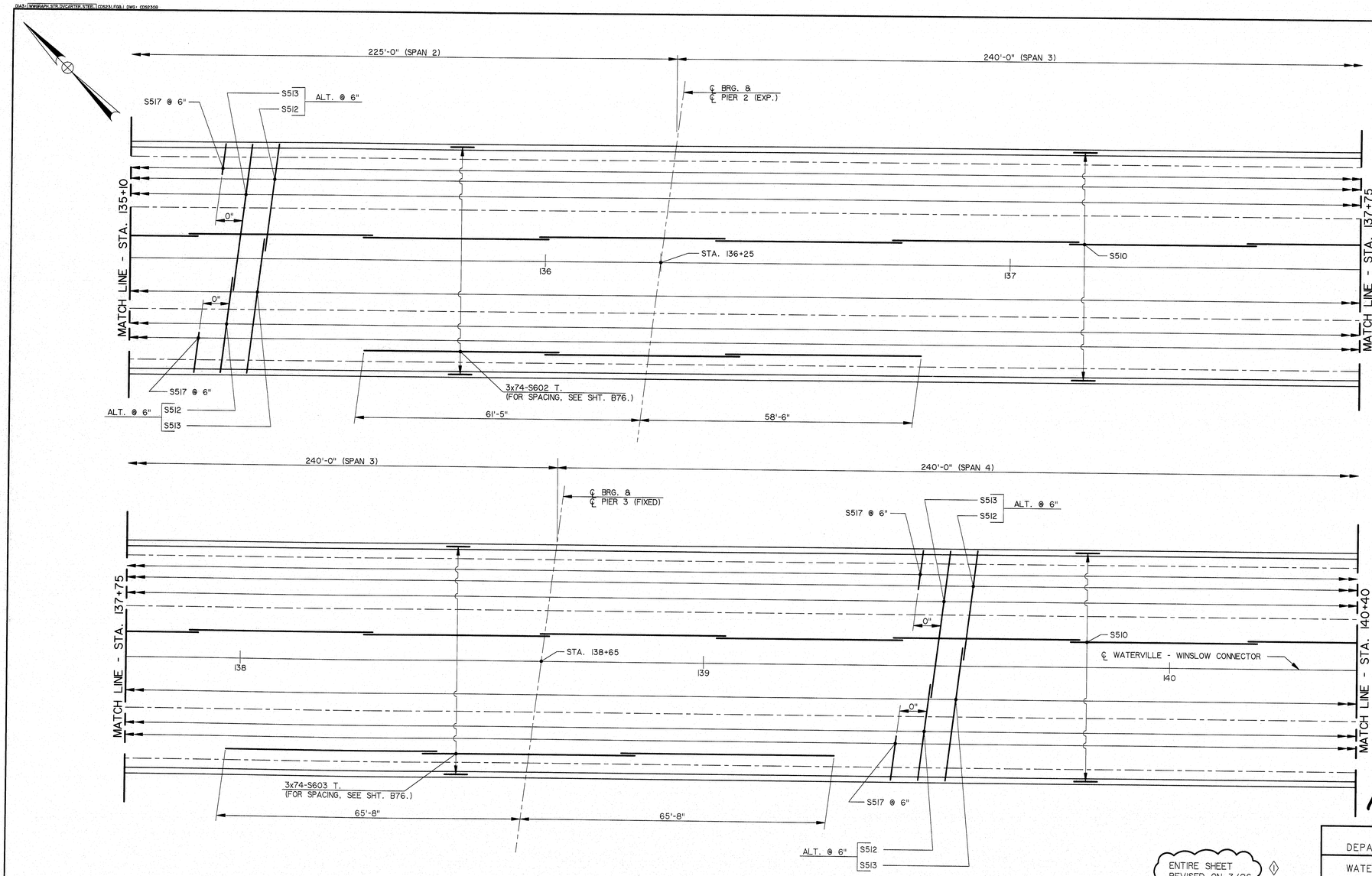
DECK PLAN I

HNTB ARCHITECTS ENGINEERS PLANNERS

SHEET B71 OF B86 AUGUSTA, MAINE

DAS-[WWGRAPH.STR.DVCARTER.STEEL]CDSEQU.PGBL; DWG: CDS2309

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	81	103



PLAN

NO.	REVISION	BY	DATE
◊	REINF. STEEL	TRG	3/96

	BY	DATE
DESIGNED:	RAL	9/94
DRAWN:	RJT	9/94
CHECKED:	JFW	9/94
IN CHARGE OF	CJM	

WATERVIN

ENTIRE SHEET REVISED ON 3/96 ◊

HNTB
ARCHITECTS ENGINEERS PLANNERS

As built CJM 1/14/97

115-267

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT

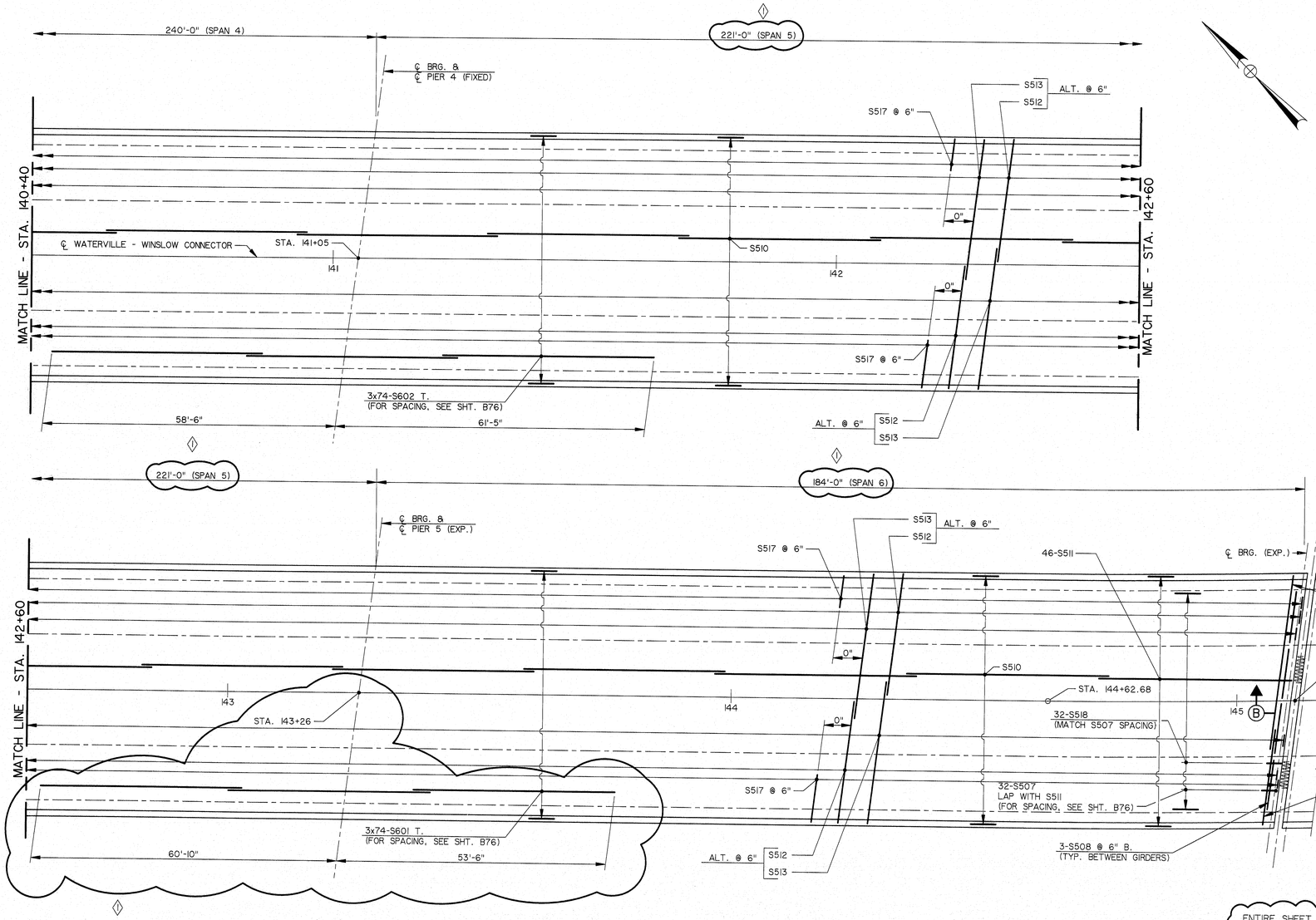
DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER

DECK PLAN - II

SHEET B72 OF B86 AUGUSTA, MAINE

DIA3 - WWGRAPH.STR.DVCARTER.STEEL (D5823.F08).I DWG - C05230C

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
I	MAINE	0009(002)	82	103



PLAN

NOTE

1. SEE SHEET B74 FOR SECTION B-B.

ENTIRE SHEET REVISED ON 3/96 ◇2

NO.	REVISION	BY	DATE
◇2	REINF. STEEL	TRG	3/96
◇1	PIER LOCATION	JFW	9/95

	BY	DATE
DESIGNED:	RAL	9/94
DRAWN:	RJT	9/94
CHECKED:	JFW	9/94
IN CHARGE OF	CJM	

WATERMIN

HNTB ARCHITECTS ENGINEERS PLANNERS

115-268

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

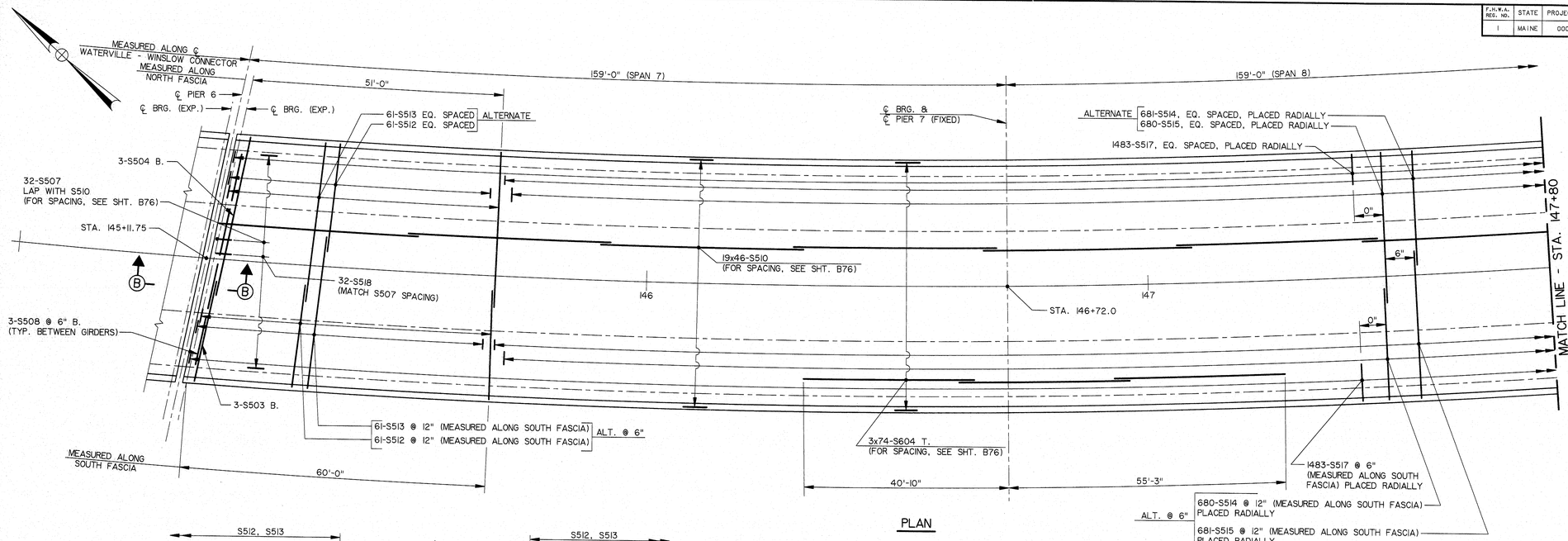
WATERVILLE - WINSLOW PROJECT

DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER

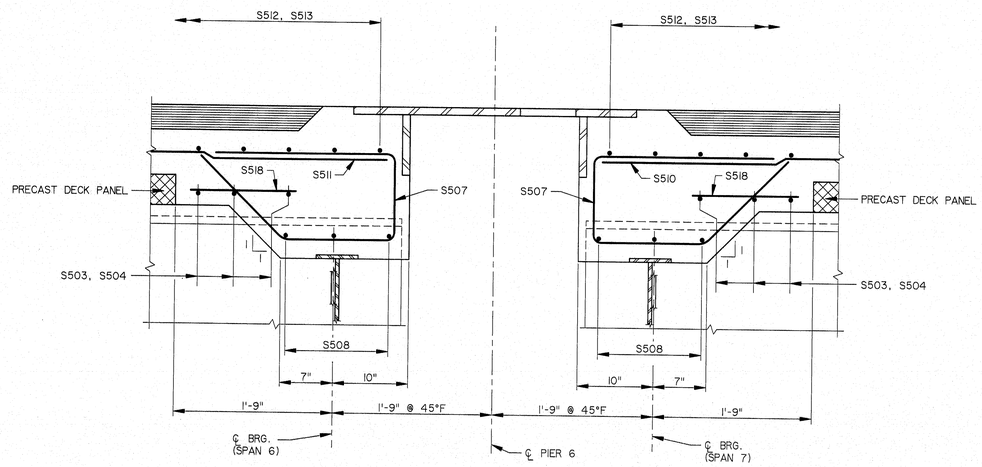
DECK PLAN - III

SHEET B73 OF B86 AUGUSTA, MAINE

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	83	103



PLAN



SECTION B-B

NO.	REVISION	BY	DATE
◊	REINF. STEEL	TRG	3/96

	BY	DATE
DESIGNED:	RAL	9/94
DRAWN:	RJT	9/94
CHECKED:	JFW	9/94
IN CHARGE OF	CJM	

ENTIRE SHEET REVISED ON 3/96 ◊

AS BUILT COPY 12/15/96

115-269

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

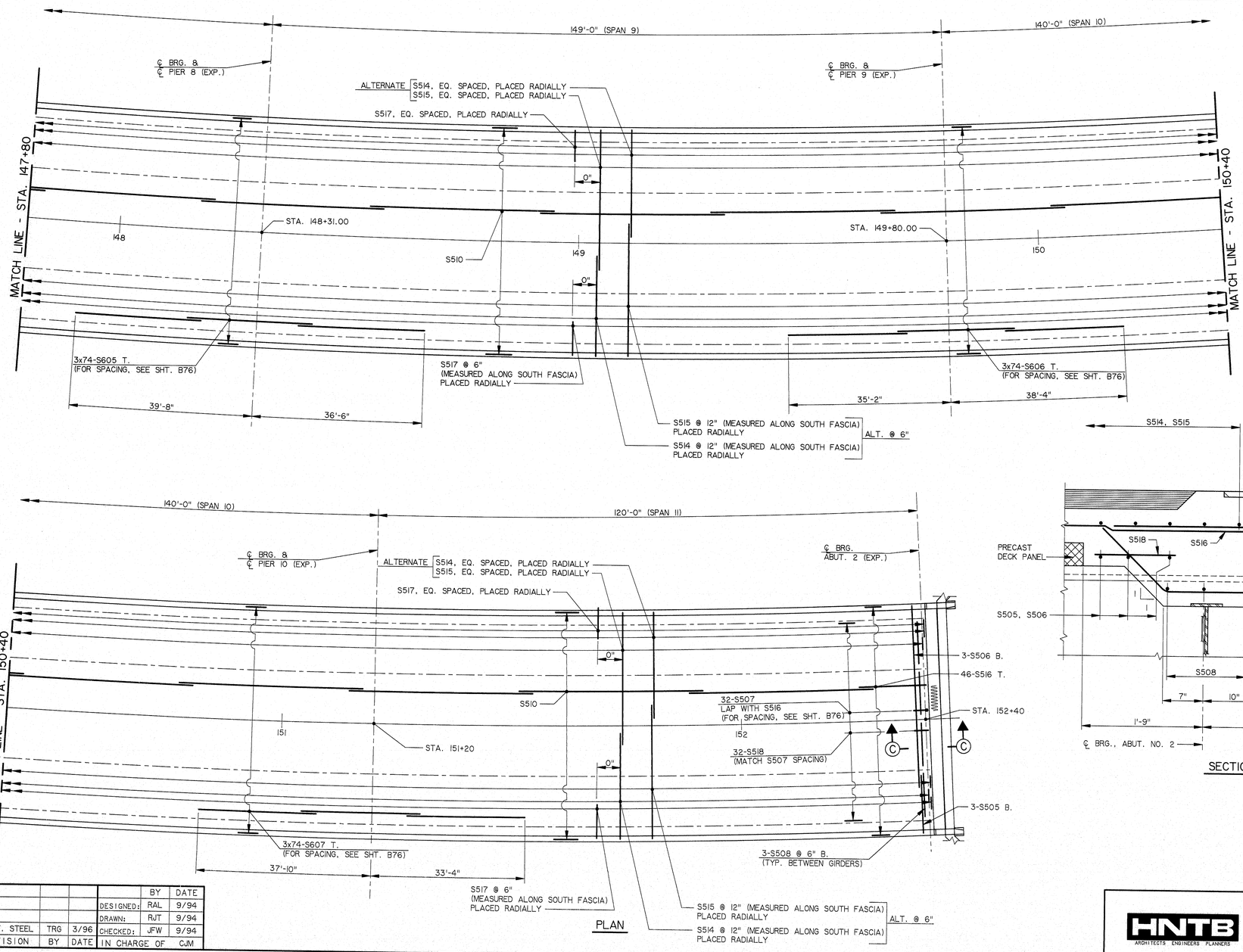
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

DECK PLAN - IV

SHEET B74 OF B86 AUGUSTA, MAINE

HNTB
ARCHITECTS ENGINEERS PLANNERS

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	84	103



ENTIRE SHEET REVISED ON 3/96 ◊

As Built CFW 12/20/96

115-270

NO.	REVISION	BY	DATE
◊	REINF. STEEL	TRG	3/96

	BY	DATE
DESIGNED:	RAL	9/94
DRAWN:	RJT	9/94
CHECKED:	JFW	9/94
IN CHARGE OF	CJM	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT

DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

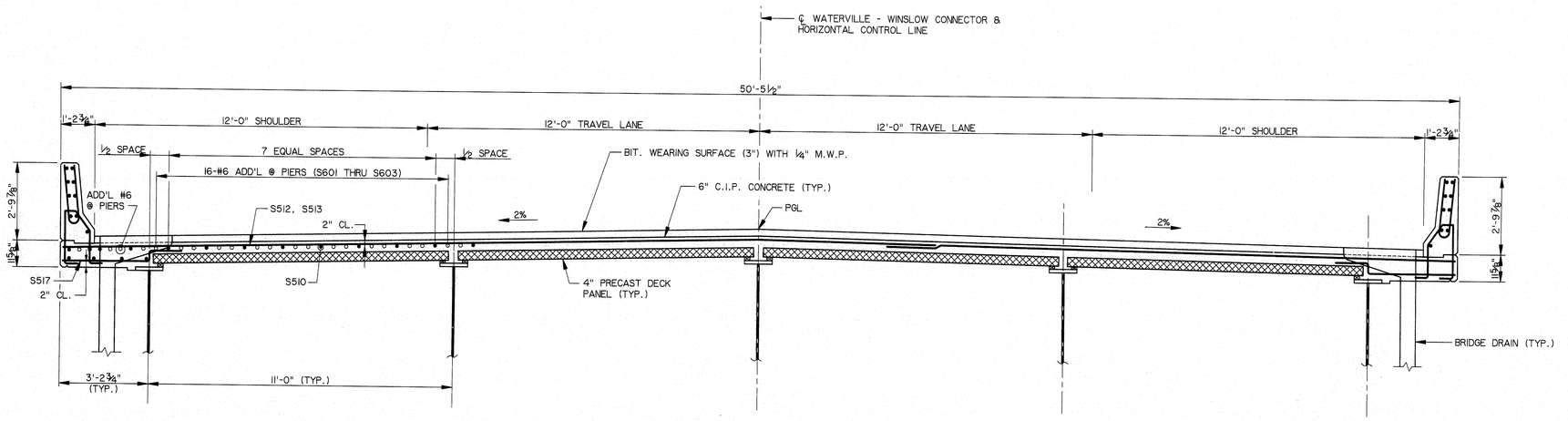
DECK PLAN - V

HNTB
ARCHITECTS ENGINEERS PLANNERS

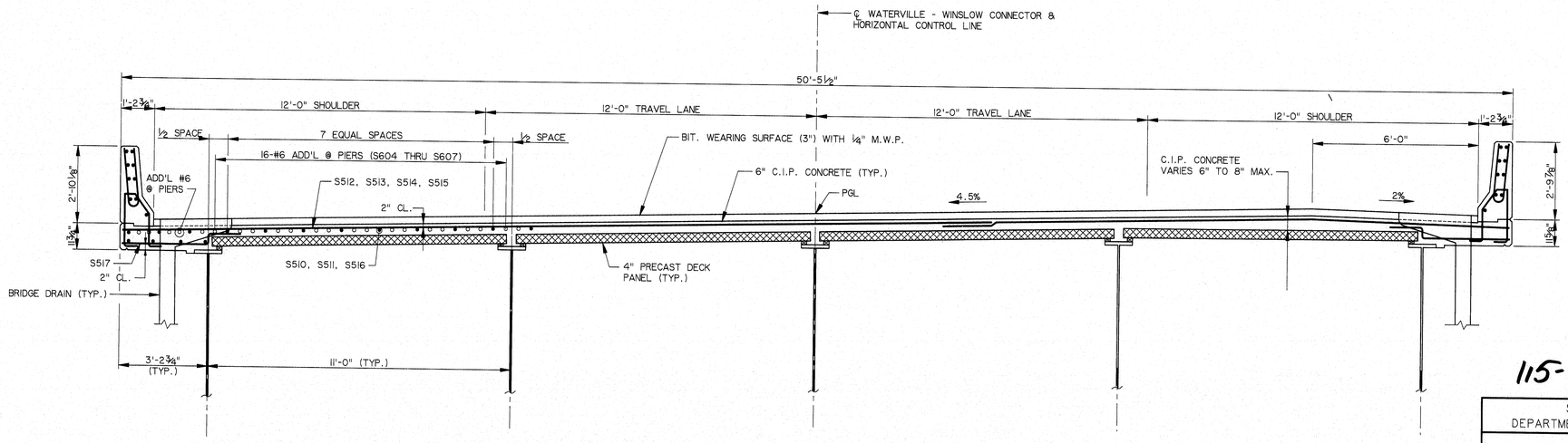
SHEET B75 OF B86 AUGUSTA, MAINE

DIA3 / BWGRAPH.STR.DVCARTER.STEEL.CDS2D5.F08LE DWG= CDS2D5

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	85	103



TYPICAL SECTION - CROWNED ROADWAY



TYPICAL SECTION - SUPERELEVATION

NO.	REVISION	BY	DATE
◊	REINF. STEEL	TRG	3/96

	BY	DATE
DESIGNED:	RAL	9/94
DRAWN:	RJT	9/94
CHECKED:	JFW	9/94
IN CHARGE OF	CJM	

WATERMIN

ENTIRE SHEET REVISED ON 3/96 ◊

115-271

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT

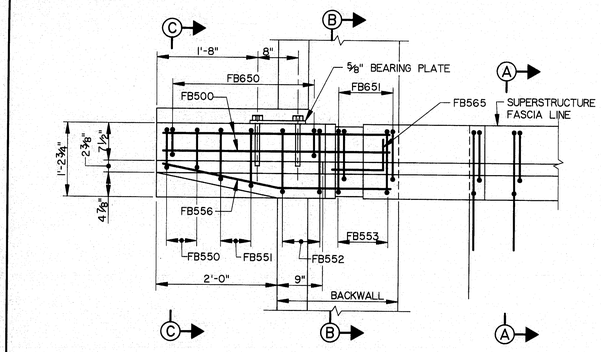
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

DECK SECTIONS

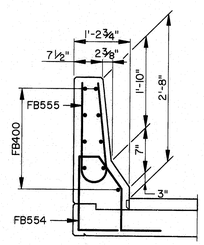
HNTB
ARCHITECTS ENGINEERS PLANNERS

SHEET B76 OF B86 AUGUSTA, MAINE

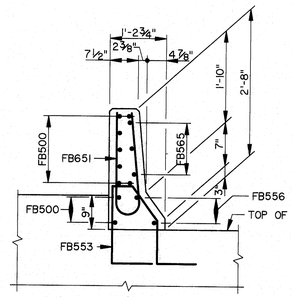
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
I	MAINE	0009(002)	86	103



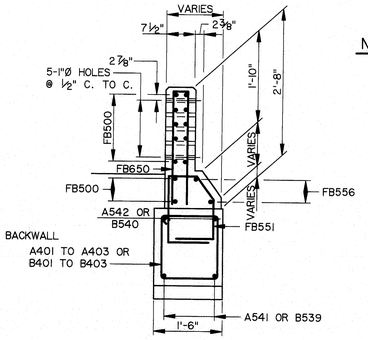
PLAN
FIXED BARRIER END



SECTION A-A



SECTION B-B



SECTION C-C

NOTES

1.) REINFORCING STEEL SHALL HAVE 1½" MINIMUM CONCRETE COVER.

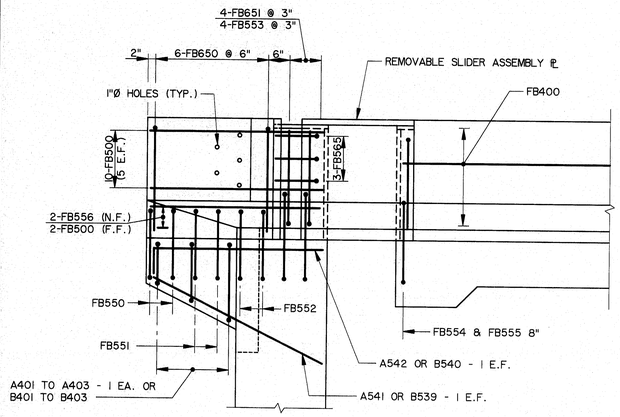
2.) AFTER INSTALLATION IS COMPLETE, UPSET THE THREAD ON THE ANCHOR BOLTS IN THREE PLACES AROUND EACH BOLT, AT THE JUNCTION OF THE NUT AND THE EXPOSED THREAD, WITH A CENTER PUNCH OR SIMILAR TOOL.

3.) ADDITIONAL HOLES IN THE MODIFIED THRIE BEAM PANELS MAY BE MADE BY DRILLING, PUNCHING OR ANY OTHER METHOD THAT PRODUCES A NEAT, CLEAN HOLE OF THE REQUIRED SIZE. BURNING OF HOLES WILL NOT BE ALLOWED.

4.) STANDARD BARRIER HARDWARE HAS BEEN USED TO DEVELOP THIS GUARD-RAIL TRANSITION. DESIGNATIONS PROVIDED IN PARENTHESIS RELATE TO STANDARD ELEMENTS DETAILED IN " A GUIDE TO STANDARDIZED BARRIER RAIL HARDWARE. " 1979. AASHTO-AGC-ARTBA JOINT COOPERATE COMMITTEE.

5.) 1"Ø HOLES IN CONCRETE WILL BE FORMED BY A METHOD APPROVED BY THE ENGINEER.

6.) MINIMUM SPLICE LENGTH FOR #4 BARS SHALL BE 1'-8"".

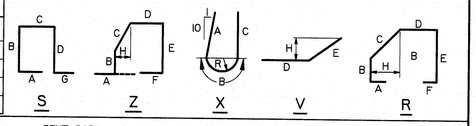


ELEVATION

REINFORCING STEEL SCHEDULE

STRAIGHT BARS

MARK	NO.	LENGTH	LOCATION
FB400	963	40'-0"	BARRIER
FB500	48	5'-5"	BARRIER END

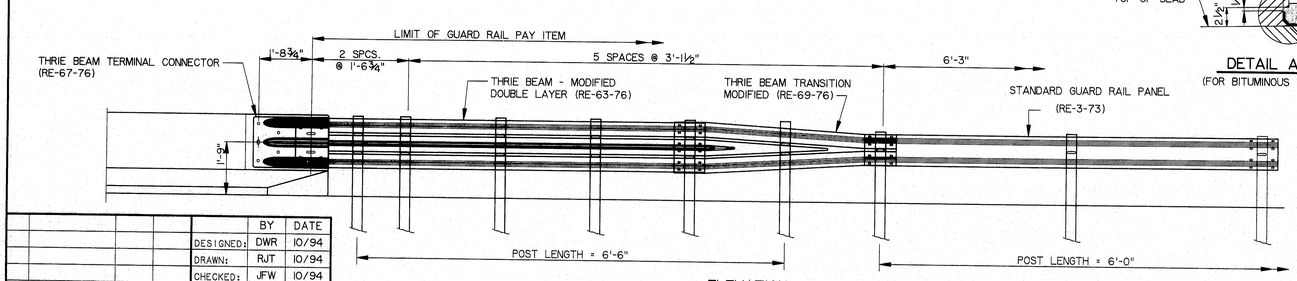


BENT BARS

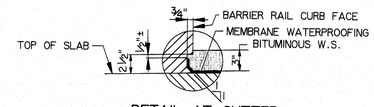
MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION
FB550	8	5'-3"	R	10"	1'-0"	6"	7"	1'-6"	10"		0"			BARRIER END
FB551	8	5'-3"	R	10"	1'-2"	4"	7"	1'-6"	10"		2"			BARRIER END
FB552	8	5'-4"	R	10"	1'-0"	7"	7"	1'-6"	10"		4"			BARRIER END
FB553	16	5'-4"	Z	10"	1'-0"	8½"	4½"	1'-7"	10"		5"			BARRIER END
FB554	6061	5'-6"	Z	10"	1'-0"	8½"	6½"	1'-7"	10"		5"			BARRIER
FB555	6061	4'-8"	X	1'-11"	10¼"	1'-11"							3¼"	BARRIER
FB556	8	3'-8"	V				1'-8"	2'-0"			5"			BARRIER END
FB565	12	1'-6"	S	6"	1'-0"									BARRIER END
FB650	24	4'-6"	S	0"	2'-1"	4½"	2'-1"			0"				BARRIER END
FB651	16	4'-7"	X	1'-11"	9½"	1'-11"							3¾"	BARRIER END

1.) ALL DIMENSIONS ARE OUT TO OUT OF REINFORCING BAR.

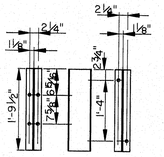
2.) BENDING DETAILS AND HOOKS SHALL CONFORM TO THE RECOMMENDATIONS OF THE CURRENT REVISION OF ACI STANDARD 318.



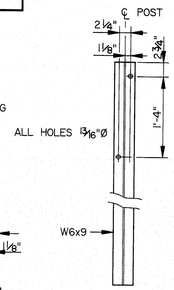
ELEVATION



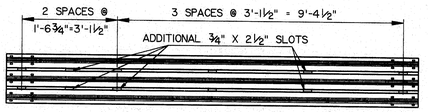
DETAIL AT GUTTER
(FOR BITUMINOUS WEARING SURFACE)



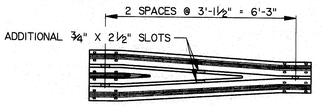
BRACKET



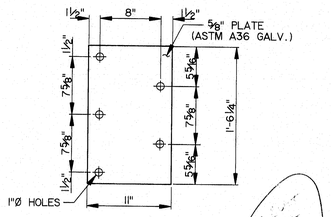
POST



MODIFIED THRIE BEAM PANEL



MODIFIED THRIE BEAM TRANSITION



BEARING PLATE

115-272
STEEL ALTERNATIVE

NO.	REVISION	BY	DATE

	BY	DATE
DESIGNED:	DWR	10/94
DRAWN:	RJT	10/94
CHECKED:	JFW	10/94
IN CHARGE OF	CJM	

HNTB
ARCHITECTS ENGINEERS PLANNERS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

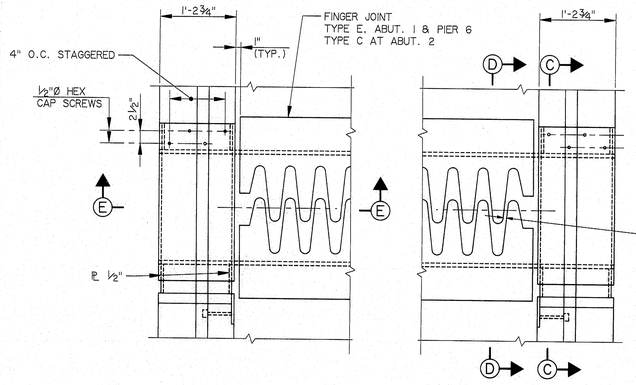
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

BARRIER DETAILS

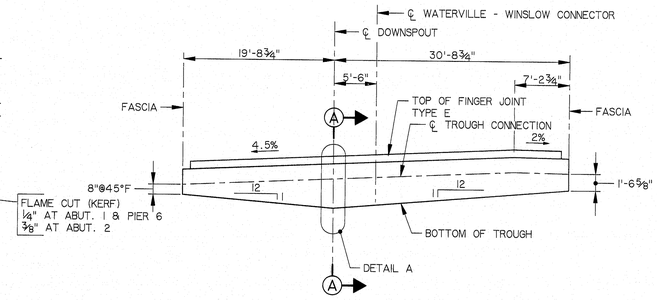
SHEET B77 OF B86 AUGUSTA, MAINE

DIA3 - \\WORKAPL\STR_SVC\CARTER_STEEL\CD0283_F001_DWG\ CD0283

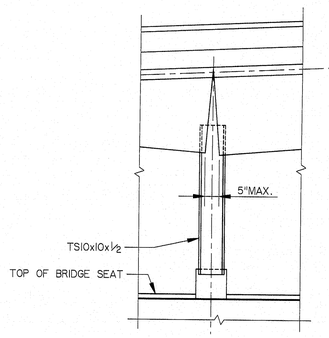
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
I	MAINE	0009(002)	87	103



PLAN



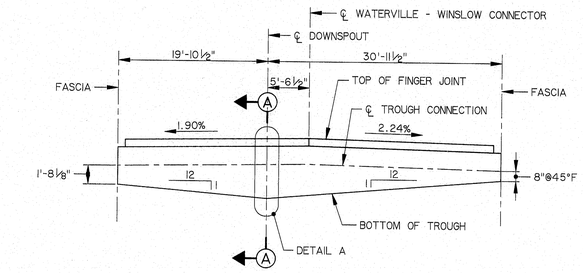
ABUTMENT 2 - JOINT LAYOUT
(LOOKING UPSTATION)



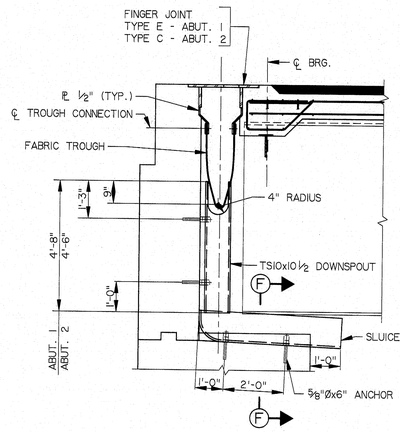
DETAIL A

NOTES

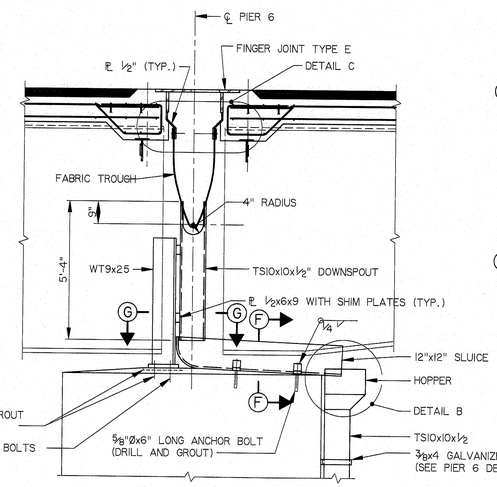
1. FOR ADDITIONAL DETAILS SEE STANDARD DETAILS BD 304-93.
2. ALL STRUCTURAL STEEL FOR BARRIER JOINT SHALL BE ASTM DESIGNATION A709, GRADE 36.
3. ENTIRE JOINT ASSEMBLY SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO DESIGNATION M111-91.
4. FOR SECTIONS C-C, D-D & E-E SEE SHEET B79.



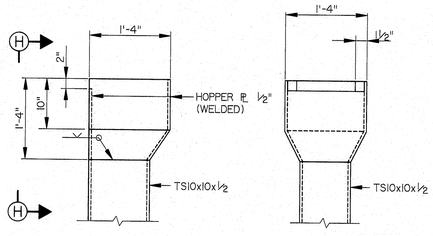
ABUTMENT 1 JOINT LAYOUT
(LOOKING UPSTATION)



SECTION A-A

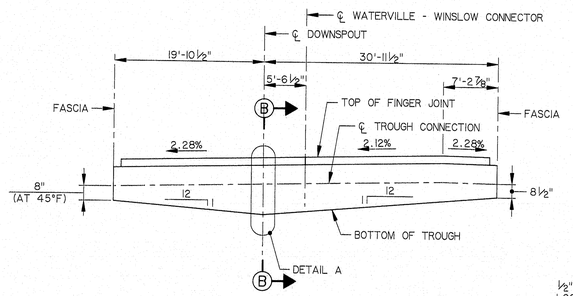


SECTION B-B

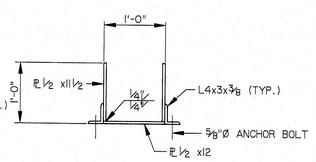


DETAIL B

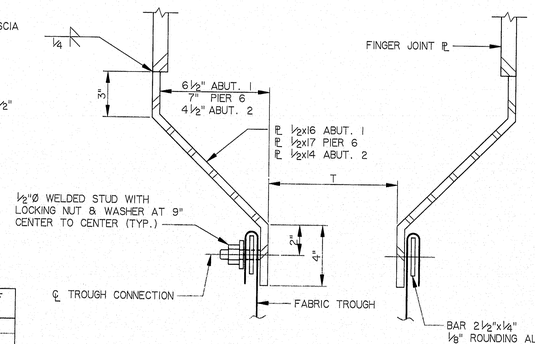
VIEW H-H



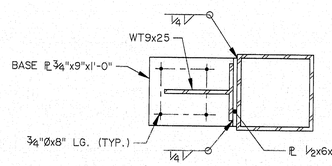
PIER 6 - JOINT LAYOUT
(LOOKING UPSTATION)



SECTION F-F



DETAIL C



SECTION G-G

	T @ 45°F (INCH)
ABUT. 1	8 1/2
PIER 6	8 1/2
ABUT. 2	7 1/2

NO.	REVISION	BY	DATE

	BY	DATE
DESIGNED:	SM	9/94
DRAWN:	RJT	9/94
CHECKED:	DWR	9/94
IN CHARGE OF	CJM	

115-273

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

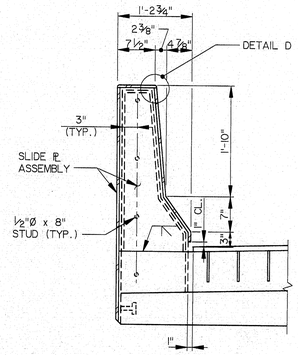
EXPANSION JOINT DETAILS

HNTB
ARCHITECTS ENGINEERS PLANNERS

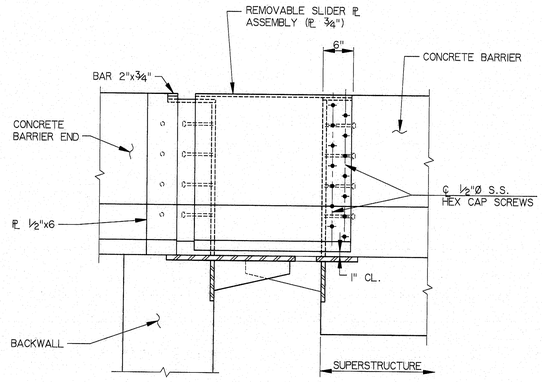
SHEET B78 OF B86 AUGUSTA, MAINE

DGN: [WWORK]ELSTR.DVCARTER_STEEL_CO6284_FGB.1 DWG: CO6284

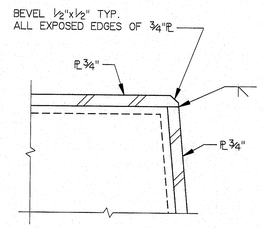
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	88	103



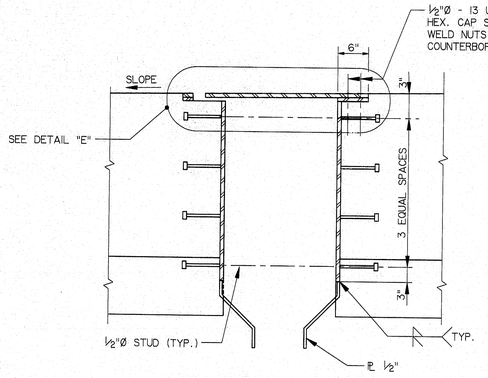
SECTION E-E



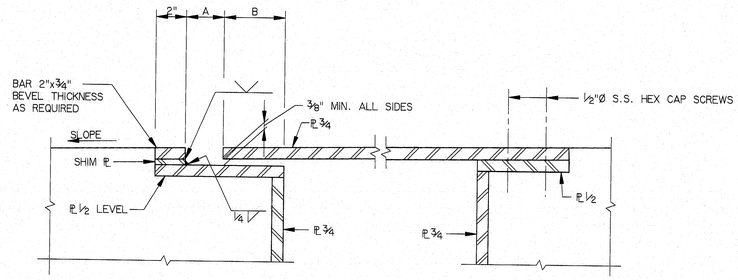
SECTION D-D



DETAIL D



SECTION C-C



DETAIL "E"

LOCATION	DIMENSION @ 45°F A (INCHES)	B (INCHES)
ABUT. #1	5 1/2"	5 1/2"
PIER #6	5 1/2"	5 1/2"
ABUT. #2	4"	4"

NOTE

FOR LOCATION OF SECTIONS, SEE SHEET 878.

NO.	REVISION	BY	DATE

	BY	DATE
DESIGNED:	SM	9/94
DRAWN:	RJT	9/94
CHECKED:	DWR	9/94
IN CHARGE OF	CJM	

WATERMTN

HNTB
ARCHITECTS ENGINEERS PLANNERS

115-274
STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

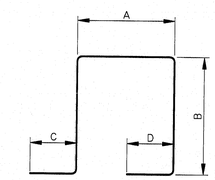
EXPANSION JOINT DETAILS

SHEET 879 OF 886 AUGUSTA, MAINE

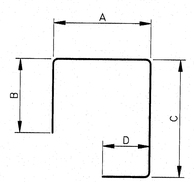
DIA3 / WWGRAPH STR.DVCARTER.STEEL (DS0236.F08) (DMG) - (DS0236)

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	R	REMARKS
					FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	
DECK SLAB - STRAIGHT BARS														
S503	5	9	15-3	STR										BOT.TRANS,@ ABUT.1 & PIER 6 @ END
S504	5	9	37-5	STR										BOT.TRANS,@ ABUT.1 & PIER 6 @ END
S505	5	3	15-1	STR										BOT. TRANS. @ ABUT.2
S506	5	3	37-1	STR										BOT. TRANS. @ ABUT.2
S508	5	48	10-6	STR										TRANS. BETWEEN GIRDERS
S509														DELETED
S510	5	2392	40-0	STR										TOP LONG.
S511	5	46	29-1	STR										TOP LONG @ PIER 6 WEST END
S512	5	2705	20-8	STR										SPANS 1 THRU 7, TOP, TRANS.
S513	5	2705	31-8	STR										SPANS 1 THRU 7, TOP, TRANS.
S514	5	1361	20-6	STR										SPANS 7 THRU 11, TOP, TRANS.
S515	5	1361	31-6	STR										SPANS 7 THRU 11. TOP. TRANS
S516	5	46	14-6	STR										TOP LONG @ ABUT. 2
S518	5	128	1-2	STR										LONG. ABUTS. 1&2, PIER 6 @ END
S601	6	444	40-2	STR										ADDL @ PIERS 1 & 5
S602	6	444	42-0	STR										ADDL @ PIERS 2 & 4
S603	6	222	45-10	STR										ADDL @ PIER 3
S604	6	222	34-1	STR										ADDL @ PIER 7
S605	6	222	27-5	STR										ADDL @ PIER 8
S606	6	222	26-6	STR										ADDL @ PIER 9
S607	6	222	25-9	STR										ADDL @ PIER 10
DECK SLAB - BENT BARS														
S501														DELETED
S502														DELETED
S507	5	128	5-6	115	2-0	1-0	1-2	1-4						LONG. @ ABUTS 1 & 2, PIER 6 @ END
S517	5	8132	4-10	103	3-2	0-6	0-6	1-2						BOT. TRANS. @ ENDS FASCIAS
APPROACH SLABS														
AS400	4	32	30 - 0	STR										APPROACH SLABS
AS401	4	16	18 - 0	STR										APPROACH SLAB AT ABUT. 2
AS402	4	16	18 - 4	STR										APPROACH SLAB AT ABUT. 1
AS600	6	95	15 - 2	STR										APPROACH SLAB AT ABUT. 2
AS601	6	95	15 - 3	STR										APPROACH SLAB AT ABUT. 1

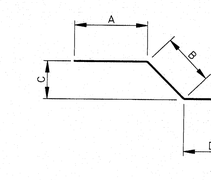
TYPE 100



TYPE 101

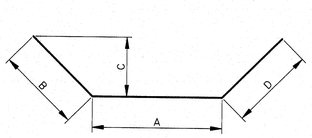


TYPE 102

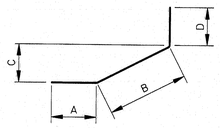


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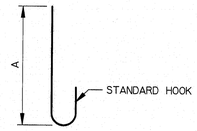
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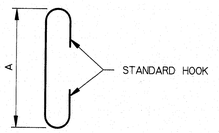
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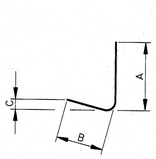
TYPE 108



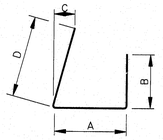
TYPE 110



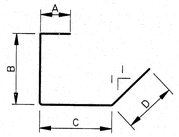
TYPE 111



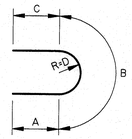
TYPE 114



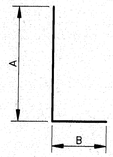
TYPE 115



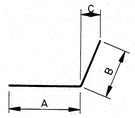
TYPE 117

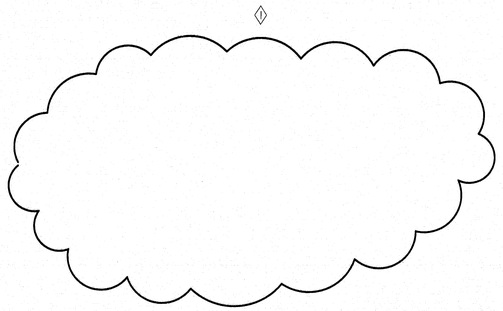


TYPE 118

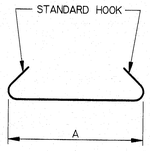


TYPE 119

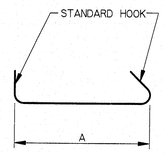




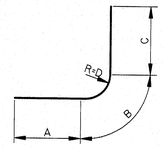
TYPE 126



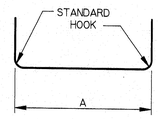
TYPE 127



TYPE 128



TYPE 129



F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	89	103

NO.	REVISION	BY	DATE
1	REINF. STEEL	TRG	3/96

	BY	DATE
DESIGNED:	RAL	9/94
DRAWN:	RJT	9/94
CHECKED:	DWR	9/94
IN CHARGE OF	CJM	

WATERMIN

115-275

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT

DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

REINFORCING SCHEDULE

HNTB
ARCHITECTS ENGINEERS PLANNERS

SHEET B80 OF B86 AUGUSTA, MAINE

DAS: \WWGRAPH.STR\DVCARTER_STEEL\CDS30L.FGB\L DWG: CDS30

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	R	REMARKS
					FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	
ABUTMENT NO. 1 - STRAIGHT BARS														
A501	5	40	27 - 9	STR										ABUT. LONG.-TOP & BOT. FTG
A502	5	20	20 - 6	STR										WING. LONG. - TOP & BOT. FTG.
A503	5	20	20 - 8	STR										WING. LONG. - TOP & BOT. FTG.
A504	5	53	8 - 6	STR										ABUT. TRANS. - TOP FOOTING
A506	5	57	6 - 8	STR										ABUT. BACKWALL - VERT.
A508	5	6	6 - 8	STR										ABUT. FOOTING - DOWELS
A510	5	62	4 - 3	STR										ABUT. FOOTING - DOWELS
A512	5	53	3 - 3	STR										ABUT. BACKWALL - VERT.
A513	5	53	9 - 5	STR										ABUT. BACKWALL - VERT.
A514	5	4	10 - 2	STR										ABUT. BACKWALL - VERT.
A516	5	11	10 - 2	STR										ABUT. BACKWALL - VERT.
A518	5	9	4 -10	STR										ABUT. BACKWALL - VERT.
A519	5	3	24 - 8	STR										ABUT. SEAT - HORIZ
A520	5	3	28 - 0	STR										ABUT. SEAT - HORIZ
A521	5	5	25 - 2	STR										ABUT. SEAT - HORIZ
A522	5	5	27 - 6	STR										ABUT. SEAT - HORIZ
A527	5	23	28 - 6	STR										ABUT. SEAT - HORIZ
A528	5	23	31 - 4	STR										ABUT. SEAT - HORIZ
A531	5	2	2 - 8	STR										ABUT. SEAT - HORIZ
A532	5	2	3 - 2	STR										ABUT. SEAT - HORIZ
A537	5	3	28 - 6	STR										ABUT. SEAT - HORIZ
A539	5	3	31 - 4	STR										ABUT. SEAT - HORIZ
A541	5	4	4 - 1	STR										END POST BRACKET
A543	5	30	3 -10	STR										WING. CONST. JOINT
A601	6	36	8 - 6	STR										WING. TRANS. - TOP FOOTING
A701	7	58	8 - 6	STR										ABUT. TRANS. - BOTTOM FOOTING
A702	7	34	8 - 6	STR										WING. TRANS. - BOTTOM FOOTING
A703	7	6	5 - 0	STR										ABUT. TRANS. - BOTTOM FOOTING
ABUTMENT NO. 1 - BENT BARS														
A401 TO	4	1 EA	VARIES	100	1 - 2	VARIES	0-6 1/2	MAX B: 1-7 (INC 0-5) MAX=6-7 (A401)						
A403								MIN B: 0-9 MIN=4-11 (A403)						END POST BRACKET
A505	5	61	8 -10	118	8 - 0	0 - 10								
A507	5	57	3 - 7	118	2 - 3	1 - 4								ABUT. FOOTING - DOWELS
A509	5	51	6 - 9	102	1 - 2	3 - 7	2 - 0							ABUT. BACKWALL - VERT.
A511	5	53	8 - 4	118	5 - 10	2 - 6								ABUT. BACKWALL - TOP
A515	5	2	5 - 0	101	1 - 8	1 - 8								ABUT. SEAT
A517	5	2	4 - 6	101	1 - 2	1 - 8								ABUT. BACKWALL - TOP
A523	5	4	6 - 4	104	1 - 8	4 - 8	4 - 7							ABUT. BACKWALL - TOP
A524	5	4	6 - 4	114	1 - 8		0 - 7	4 - 8						ABUT. SEAT - CORNER
A525	5	9	7 - 2	101	4 - 8	1 - 3								ABUT. SEAT - CORNER
A526	5	12	6 -11	101	3 - 11	1 - 6								ABUT. SEAT - PADS
A533	5	11	4 - 1	104	2 - 6	1 - 7	1-2 3/4							ABUT. SEAT - PADS
A534	5	11	4 - 1	104	2 - 6	1 - 7	1-1 7/8							ABUT. SEAT - CORNER
A535	5	15	5 - 2	104	2 - 6	2 - 8	2 - 1							ABUT. SEAT - CORNER
A536	5	15	5 - 2	104	2 - 6	2 - 8	1-11 1/2							ABUT. SEAT - CORNER
A538	5	6	5 -9	119	4 - 3	1 - 6	0 - 2							ABUT. SEAT - CORNER
A540	5	5	6 - 9	111	5 - 3	1 - 6	0 - 2							ABUT. SEAT - HORIZ
A542	5	4	4 - 4	118	3 - 8	0 - 8								ABUT. SEAT - HORIZ
														END POST BRACKET
WINGWALLS ABUTMENT NO. 1 - STRAIGHT BARS														
WA501	5	28	3 - 3	STR				MAX: 13 - 3 (WA502) INC = 0 - 4						WINGWALL FOOTING DOWELS
WA502 TO	5	1EA	VARIES	STR				MIN: 8 - 11 (WA515)						NE WING. STEM - VERT.
WA515														
WA517	5	38	12 - 8	STR										WING STEM - HORIZ.
WA518 TO	5	2EA	VARIES	STR				MAX: 12 - 0 (WA522) INC = 2 - 6						NE WING. STEM - HORIZ.
WA522								MIN: 2 - 0 (WA518)						
WA523 TO	5	1EA	VARIES	STR				MAX: 13 - 1 (WA536) INC = 0 - 3						NW WING. STEM - VERT.
WA536								MIN: 9 - 10 (WA523)						
WA537 TO	5	2EA	VARIES	STR				MAX: 11 - 6 (WA540) INC = 3 - 2						NW WING. STEM - HORIZ.
WA540								MIN: 2 - 0 (WA537)						
WA601 TO	6	1EA	VARIES	STR				MAX: 9 - 8 (WA601) INC= 0 - 4						NE WING. STEM - VERT.
WA614								MIN: 5 - 4 (WA614)						
WA615 TO	6	1EA	VARIES	STR				MAX: 9 - 6 (WA628) INC= 0 - 3						NW WING. STEM - VERT.
WA628								MIN: 6 - 3 (WA615)						
WINGWALLS ABUTMENT NO. 1 - BENT BARS														
WA541	5	4	13 - 2	103			0 - 8	0 - 3	12 - 6					NW-NE - TOP
WA801	5	28	9 -10	118	8 - 6	1 - 4								WINGWALL FOOTING DOWELS

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	R	REMARKS
					FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	
ABUTMENT NO. 2 - STRAIGHT BARS														
B501	5	36	27 - 9	STR										ABUT. LONG. - TOP & BOT. FTG.
B502	5	4	16 - 3	STR										WING. LONG. - BOTTOM FOOTING
B503	5	32	19 - 3	STR										WING. LONG. - TOP & BOT. FTG.
B504	5	53	8 - 0	STR										ABUT. TRANS. - TOP FOOTING
B506	5	57	5 - 7	STR										ABUT. BACKWALL - VERT.
B510	5	65	3 - 0	STR										ABUT. FOOTING DOWELS
B512	5	51	3 - 3	STR										ABUT. BACKWALL - VERT.
B513	5	51	8 - 4	STR										ABUT. BACKWALL - VERT.
B514	5	3	7 - 4	STR										ABUT. BACKWALL - VERT.
B515	5	8	9 -10	STR										ABUT. BACKWALL - VERT.
B518	5	4	7 -10	STR										ABUT. FOOTING DOWELS
B520	5	8	9 - 0	STR										ABUT. BACKWALL - VERT.
B521	5	3	6 - 3	STR										ABUT. BACKWALL - VERT.
B522	5	4	5 - 9	STR										ABUT. FTG. - DOWELS
B523	5	16	25 - 3	STR										ABUT. STEM - HORIZ.
B524	5	18	27 - 4	STR										ABUT. STEM - HORIZ.
B525	5	3	22 - 4	STR										ABUT. SEAT - HORIZ.
B526	5	4	29 - 6	STR										ABUT. BACKWALL - HORIZ.
B527	5	4	32 - 0	STR										ABUT. BACKWALL - HORIZ.
B529	5	12	29 - 6	STR										ABUT. - HORIZ.
B533	5	12	32 - 0	STR										ABUT. - HORIZ.
B538	5	2	4 - 3	STR										ABUT. BACKWALL - HORIZ.
B539	5	4	4 - 1	STR										END POST BRACKET
B541	5	31	3 -11	STR										WING. CONST. JOINT
B601	6	40	8 - 6	STR										WING. TRANS. - TOP FTG.
B701	7	58	8 - 0	STR										ABUT. TRANS. - BOT. FTG.
B702	7	42	8 - 6	STR										WING. TRANS. - BOT. FTG.
ABUTMENT NO. 2 - BENT BARS														
B401 TO	4	1 EA	VARIES	100	1 - 2	VARIES	0-6 1/2	MAX B: 1-7 (INC 0-5) MAX=6-7 (B401)						
B403								MIN B: 0-9 MIN=4-11 (B403)						END POST BRACKET
B505	5	61	10 -10	118	10 - 0	0 - 10								
B507	5	57	4 - 0	118	2 - 8	1 - 4								ABUT. FOOTING DOWELS
B508	5	51	7 -11	102	1 - 2	2 - 5	4 - 4							ABUT. BACKWALL - VERT.
B511	5	23	10 - 4	119	5 - 0	5 - 4	0 - 3							ABUT. BACKWALL - TOP
B516	5	2	5 - 0	101	1 - 8	1 - 8								ABUT. STEM. - VERT.
B517	5	2	4 - 6	101	1 - 2	1 - 8								ABUT. BACKWALL - TOP
B519	5	28	9 - 6	119	4 - 2	5 - 4	0 - 3							ABUT. BACKWALL - TOP
B528	5	11	6 - 8	118	4 - 8	2 - 0								ABUT. STEM - VERT.
B530	5	30	4 - 6	115			2 - 0	2 - 6						ABUT. SEAT - HORIZ.
B531	5	20	7 - 6	115			5 - 9	1 - 9						ABUT. BACKWALL - HORIZ.
B532	5	6	7 - 0	118	5 - 6	1 - 6								ABUT. BACKWALL - HORIZ.
B534	5	16	7 - 4	101	3 - 4	2 - 0								ABUT. - SEAT
B535	5	9	8 - 8	101	4 - 8	2 - 0								ABUT. - SEAT
B536	5	3	9 - 4	101	5 - 4	2 - 0								ABUT. - SEAT
B537	5	2	5 - 5	115			3 - 8	1 - 9						ABUT. BACKWALL - HORIZ.
B540	5	4	4 - 4	118	3 - 8	0 - 8								END POST BRACKET
WINGWALLS ABUTMENT NO. 2 - STRAIGHT BARS														
WB501	5	24	3 - 0	STR										WINGWALL DOWELS
WB502 TO	5	1EA	VARIES	STR				MAX: 10 - 4 (WB512) INC = 0 - 4						SE WING. STEM - VERT.
WB512								MIN: 7 - 0 (WB502)						
WB513	5	1	10 - 5	STR										SE WING. STEM - VERT.
WB514 TO	5	1EA	VARIES	STR				MAX: 13 - 4 (WB524) INC = 0 - 4						SE WING. STEM - VERT.
WB524								MIN: 10 - 0 (WB514)						
WB525	5	1	13 - 6	STR										SE WING. STEM - VERT.
WB526	5	42	11 - 8	STR										SE & SW WING STEM - HOR.
WB527 TO	5	2EA	VARIES	STR				MAX: 10 - 0 (WB529) INC = 3 - 0						SE WING. STEM - HOR.
WB529								MIN: 4 - 0 (WB527)						
WB531 TO	5	1EA	VARIES	STR				MAX: 12 - 2 (WB541) INC = 0 - 5						SW WING STEMS - VERT.
WB541								MIN: 8 - 0 (WB531)						
WB542	5	1	12 - 4	STR										SW WING STEM - VERT.
WB543 TO	5	1EA	VARIES	STR				MAX: 15 -1 (WB553) INC = 0 - 5						SW WING STEM - VERT.
WB553								MIN: 10 - 11 (WB543)						
WB554	5	1	15 - 3	STR										SW WING STEM - VERT.
WB555 TO	5	2EA	VARIES	STR				MAX: 10 - 3 (WB558) INC = 2 - 6						SW WING STEM - HOR.
WB558								MIN: 2 - 9 (WB555)						
WINGWALLS ABUTMENT NO. 2 - BENT BARS														
WB530	5	4	12 - 2	103			0 - 8	0 - 3	11 - 6					SE & SW WING STEMS - TOP
WB601	6	24	12 -11	118	11 - 11	1 - 0								WINGWALL - VERT.
WB701	7	24	8 - 7	118	7 - 5	1 - 2								WINGWALL - VERT.

NOTE:
1. FOR BENDING BARS DETAILS, SEE SHEET B80.

					BY	DATE
				DESIGNED:	DWR	9/94
				DRAWN:	RJT	9/94
1	BARS	DWR	9/95	CHECKED:	SM	9/94
NO.	REVISION	BY	DATE	IN CHARGE OF	CJM	

WATERVIN

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	90	103

115-276

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

REINFORCING SCHEDULE

SHEET B81 OF B86 AUGUSTA, MAINE

HNTB
ARCHITECTS ENGINEERS PLANNERS

DIA3:/WWGRAPH-STR/DVCARTER.STEEL/CD5302.PSBL1 DWG: CD5302

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	R	REMARKS
					FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	
PIER NO. 1 - STRAIGHT BARS														
1P620	6	10	44-0	STR										CAP - SIDE FACE
1P621	6	2	44-0	STR										CAP - SIDE FACE
1P622	6	2	38-6	STR										CAP - SIDE FACE
1P623	6	2	33-0	STR										CAP - SIDE FACE
1P624	6	2	27-6	STR										CAP - SIDE FACE
1P625	6	2	22-0	STR										CAP - SIDE FACE
1P650	6	54	4-0	STR										PEDESTAL/FOOTING DOWEL
1P651	6	54	8-8	STR										PEDESTAL - FACE
1P801	8	28	14-6	STR										FOOTING - SHORT WAY T.
1P802	8	16	26-6	STR										FOOTING - LONG WAY T.
1P826	8	20	17-0	STR										CAP
1P903	9	42	49-0	STR										SHAFT
1P904	9	42	40-0	STR										SHAFT
PIER NO. 1 - BENT BARS														
1P401	4	58	24-11	117	8 - 8	7 - 7	8 - 8	2 - 5						SHAFT - OUTSIDE TIE
1P402	4	116	11-3	108	10 - 9									SHAFT - LONGITUDINAL TIE
1P403	4	406	5-11	126	4 - 10									SHAFT - TRANSVERSE TIE
1P404	4	58	4-3	108	3 - 9									SHAFT - TRANSVERSE TIE
1P601	6	110	24-11	117	8 - 8	7 - 7	8 - 8	2 - 5						SHAFT - OUTSIDE TIE
1P602	6	220	11-8	108	10 - 9									SHAFT - LONGITUDINAL TIE
1P603	6	770	6-8	126	4 - 10									SHAFT - TRANSVERSE TIE
1P604	6	110	4-8	108	3 - 9									SHAFT - TRANSVERSE TIE
1P605	6	220	9-9	108	8 - 10									SHAFT - LONGITUDINAL TIE
1P606	6	110	5-0	110	3 - 2									SHAFT - TRANSVERSE TIE
1P607	6	110	6-4	110	4 - 6									SHAFT - TRANSVERSE TIE
1P627	6	8	9-8	101	5 - 4	2 - 2								CAP - BOTTOM FACE
1P628	6	12	12-9	117	2 - 2	8 - 5	2 - 2	2 - 8						CAP - END FACE
1P629	6	16	14-2	119	12 - 0	2 - 2	2 - 0							CAP - BOTTOM FACE
1P630	6	8	9-0	118	5 - 0	4 - 0								CAP - END FACE
1P631	6	8	9-0	119	5 - 0	4 - 0	1 - 7							CAP - END FACE
1P632	6	38	19-0	101	5 - 6	6 - 9								CAP - STIRRUPS
1P633	6	48	15-10	101	2 - 4	6 - 9								CAP - STIRRUPS
1P634	6	24	17-0	101	3 - 6	6 - 9								CAP - STIRRUPS
1P635	6	40	14-4	101	2 - 4	6 - 0								CAP - STIRRUPS
1P636	6	20	15-6	101	3 - 6	6 - 0								CAP - STIRRUPS
1P637	6	40	12-4	101	2 - 4	5 - 0								CAP - STIRRUPS
1P638	6	20	13-6	101	3 - 6	5 - 0								CAP - STIRRUPS
1P640	6	11	8-6	101	5 - 6	1 - 6								CAP - PAD
1P641	6	6	13-7	101	10 - 7	1 - 6								CAP - PAD
1P652	6	54	4-4	118	2 - 10	1 - 6								PEDESTAL - TOP
1P653 TO 1P661	6	2 EA	VARIES	117	MIN: (A=8-4, B=11-0, C=8-4, D=3-6) (1P653) INC(A=C=0-1, B=0-1 1/2, MAX: (A=9-0, B=12-1, C=9-0, D=3-10) (1P661) D=0-0 1/2)									PEDESTAL - OUTSIDE TIES
1P803	8	32	17-2	129	14 - 6									FOOTING - SHORT WAY B.
1P804	8	17	29-2	129	26 - 6									FOOTING - LONG WAY B.
1P901	9	42	9-4	118	7 - 9	1 - 7								SHAFT/FOOTING - DOWELS
1P902	9	42	18-4	118	16 - 9	1 - 7								SHAFT/FOOTING - DOWELS
1P1120	11	18	48-0	101	44 - 0	2 - 0								CAP - TOP
1P1121	11	12	52-0	101	48 - 0	2 - 0								CAP - TOP

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	R	REMARKS
					FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	
PIER NO. 2 - STRAIGHT BARS														
2P620	6	10	44-0	STR										CAP - SIDE FACE
2P621	6	2	44-0	STR										CAP - SIDE FACE
2P622	6	2	38-6	STR										CAP - SIDE FACE
2P623	6	2	33-0	STR										CAP - SIDE FACE
2P624	6	2	27-6	STR										CAP - SIDE FACE
2P625	6	2	22-0	STR										CAP - SIDE FACE
2P650	6	64	4-0	STR										PEDESTAL/FOOTING DOWEL
2P651	6	128	20-9	STR										PEDESTAL - FACE
2P801	8	39	17-6	STR										FOOTING - SHORT WAY TOP
2P802	8	19	37-6	STR										FOOTING - LONG WAY TOP
2P826	8	20	17-0	STR										CAP
2P903	9	42	37-10	STR										SHAFT - UPPER
2P904	9	42	43-1	STR										SHAFT - UPPER
2P1104	11	42	41-0	STR										SHAFT - LOWER
2P1105	11	42	43-3	STR										SHAFT - LOWER
PIER NO. 2 - BENT BARS														
2P401	4	110	24-11	117	8 - 8	7 - 7	8 - 8	2 - 5						SHAFT - OUTSIDE TIE
2P402	4	220	11-3	108	10 - 9									SHAFT - LONGITUDINAL TIE
2P403	4	770	5-11	126	4 - 10									SHAFT - TRANSVERSE TIE
2P404	4	110	4-3	108	3 - 9									SHAFT - TRANSVERSE TIE
2P601	6	150	24-11	117	8 - 8	7 - 7	8 - 8	2 - 5						SHAFT - OUTSIDE TIE
2P602	6	300	11-8	108	10 - 9									SHAFT - LONGITUDINAL TIE
2P603	6	1050	6-8	126	4 - 10									SHAFT - TRANSVERSE TIE
2P604	6	150	4-8	108	3 - 9									SHAFT - TRANSVERSE TIE
2P605	6	300	9-9	108	8 - 10									SHAFT - LONGITUDINAL TIE
2P606	6	150	5-0	110	3 - 2									SHAFT - TRANSVERSE TIE
2P607	6	150	6-4	110	4 - 6									SHAFT - TRANSVERSE TIE
2P627	6	8	9-8	101	5 - 4	2 - 2								CAP - BOTTOM FACE
2P628	6	12	12-9	117	2 - 2	8 - 5	2 - 2	2 - 8						CAP - END FACE
2P629	6	16	14-2	119	12 - 0	2 - 2	2 - 0							CAP - BOTTOM FACE
2P630	6	8	9-0	118	5 - 0	4 - 0								CAP - END FACE
2P631	6	8	9-0	119	5 - 0	4 - 0	1 - 7							CAP - END FACE
2P632	6	38	19-0	101	5 - 6	6 - 9								CAP - STIRRUPS
2P633	6	48	15-10	101	2 - 4	6 - 9								CAP - STIRRUPS
2P634	6	24	17-0	101	3 - 6	6 - 9								CAP - STIRRUPS
2P635	6	40	14-4	101	2 - 4	6 - 0								CAP - STIRRUPS
2P636	6	20	15-6	101	3 - 6	6 - 0								CAP - STIRRUPS
2P637	6	40	12-4	101	2 - 4	5 - 0								CAP - STIRRUPS
2P638	6	20	13-6	101	3 - 6	5 - 0								CAP - STIRRUPS
2P640	6	11	8-6	101	5 - 6	1 - 6								CAP - PAD
2P641	6	6	13-7	101	10 - 7	1 - 6								CAP - PAD
2P652	6	64	4-4	118	2 - 10	1 - 6								PEDESTAL - TOP
2P653 TO 2P691	6	2 EA	VARIES	117	MIN: (A=8-4, B=11-0, C=8-4, D=3-6) (2P653) INC(A=C=0-1, B=0-1 1/2, MAX: (A=11-6, B=16-0, C=11-6, D=5-1) (2P691) D=0-0 1/2)									PEDESTAL - OUTSIDE TIES
2P901	9	44	20-8	129	17 - 6									FOOTING - SHORT WAY BOT.
2P902	9	20	40-8	129	37 - 6									FOOTING - LONG WAY BOT.
2P1101	11	42	20-6	118	18 - 6	2 - 0								SHAFT/FOOTING - DOWELS
2P1102	11	42	13-0	118	11 - 0	2 - 0								SHAFT/FOOTING - DOWELS
2P1103	11	30	31-6	118	29 - 6	2 - 0								SHAFT/FOOTING - DOWELS
2P1120	11	18	48-0	101	44 - 0	2 - 0								CAP - TOP
2P1121	11	12	52-0	101	48 - 0	2 - 0								CAP - TOP

NOTE:

1. FOR BENDING BARS DETAILS, SEE SHEET B80.

NO.	REVISION	BY	DATE

	BY	DATE
DESIGNED:	DWR	9/94
DRAWN:	RJT	9/94
CHECKED:	SM	9/94
IN CHARGE OF	CJM	

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	91	103

As Built (Gen) 12/16/96

115-277

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

REINFORCING SCHEDULE

SHEET B82 OF B86 AUGUSTA, MAINE

HNTB
ARCHITECTS ENGINEERS PLANNERS

D:\3-J WW\GRAPH STR\DVCARTER\STEEL\D03300.FIG\1 DWG- D03300

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	R	REMARKS
					FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	
PIER NO. 3 - STRAIGHT BARS														
3P620	6	10	44-0	STR										CAP - SIDE FACE
3P621	6	2	44-0	STR										CAP - SIDE FACE
3P622	6	2	38-6	STR										CAP - SIDE FACE
3P623	6	2	33-0	STR										CAP - SIDE FACE
3P624	6	2	27-6	STR										CAP - SIDE FACE
3P625	6	2	22-0	STR										CAP - SIDE FACE
3P650	6	64	4-0	STR										PEDESTAL/FOOTING DOWEL
3P651	6	128	21-0	STR										PEDESTAL - FACE
3P801	8	39	19-6	STR										FOOTING - SHORT WAY TOP
3P802	8	21	37-6	STR										FOOTING - LONG WAY TOP
3P826	8	20	17-0	STR										CAP
3P901	9	42	41-3	STR										SHAFT - UPPER
3P902	9	42	46-6	STR										SHAFT - UPPER
3P1001	10	51	19-6	STR										FOOTING - SHORT WAY B.
3P1002	10	27	37-6	STR										FOOTING - LONG WAY B.
3P1101	11	54	6-8	STR										FOOTING/SEAL - DOWEL
3P1105	11	42	41-6	STR										SHAFT - LOWER
3P1106	11	42	43-9	STR										SHAFT - LOWER
PIER NO. 3 - BENT BARS														
3P401	4	116	24-11	117	8 - 8	7 - 7	8 - 8	2 - 5						SHAFT - OUTSIDE TIE
3P402	4	232	11-3	108	10 - 9									SHAFT - LONGITUDINAL TIE
3P403	4	812	5-11	126	4 - 10									SHAFT - TRANSVERSE TIE
3P404	4	116	4-3	108	3 - 9									SHAFT - TRANSVERSE TIE
3P601	6	150	24-11	117	8 - 8	7 - 7	8 - 8	2 - 5						SHAFT - OUTSIDE TIE
3P602	6	300	11-8	108	10 - 9									SHAFT - LONGITUDINAL TIE
3P603	6	1050	6-8	126	4 - 10									SHAFT - TRANSVERSE TIE
3P604	6	150	4-8	108	3 - 9									SHAFT - TRANSVERSE TIE
3P605	6	300	9-9	108	8 - 10									SHAFT - LONGITUDINAL TIE
3P606	6	150	5-0	110	3 - 2									SHAFT - TRANSVERSE TIE
3P607	6	150	6-4	110	4 - 6									SHAFT - TRANSVERSE TIE
3P627	6	8	9-8	101	5 - 4	2 - 2								CAP - BOTTOM FACE
3P628	6	12	12-9	117	2 - 2	8 - 5	2 - 2	2 - 8						CAP - END FACE
3P629	6	16	14-2	119	12 - 0	2 - 2	2 - 0							CAP - BOTTOM FACE
3P630	6	8	9-0	118	5 - 0	4 - 0								CAP - END FACE
3P631	6	8	9-0	119	5 - 0	4 - 0	1 - 7							CAP - END FACE
3P632	6	38	19-0	101	5 - 6	6 - 9								CAP - STIRRUPS
3P633	6	48	15-10	101	2 - 4	6 - 9								CAP - STIRRUPS
3P634	6	24	17-0	101	3 - 6	6 - 9								CAP - STIRRUPS
3P635	6	40	14-4	101	2 - 4	6 - 0								CAP - STIRRUPS
3P636	6	20	15-6	101	3 - 6	6 - 0								CAP - STIRRUPS
3P637	6	40	12-4	101	2 - 4	5 - 0								CAP - STIRRUPS
3P638	6	20	13-6	101	3 - 6	5 - 0								CAP - STIRRUPS
3P640	6	33	8-6	101	5 - 6	1 - 6								CAP - PAD
3P641	6	6	13-7	101	10 - 7	1 - 6								CAP - PAD
3P642	6	12	14-6	118	13 - 0	1 - 6								CAP - PAD
3P652	6	64	4-4	118	2 - 10	1 - 6								PEDESTAL - TOP
3P653 TO	6	2 EA	VARIES	117	MIN: (A=8-4, B=11-0, C=8-4, D=3-6) (3P653) INC(A=C=0-1, B=0-1 1/2									PEDESTAL - OUTSIDE TIES
3P691					MAX: (A=11-6, B=16-0, C=11-6, D=5-1) (3P691) D=0-0 1/2)									
3P1103	11	42	19-6	118	17 - 6	2 - 0								SHAFT/FOOTING - DOWELS
3P1104	11	42	12-0	118	10 - 0	2 - 0								SHAFT/FOOTING - DOWELS
3P1107	11	58	51-6	118	49 - 6	2 - 0								SHAFT/FOOTING
3P1120	11	18	48-0	101	44 - 0	2 - 0								CAP - TOP
3P1121	11	15	52-0	101	48 - 0	2 - 0								CAP - TOP

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	R	REMARKS
					FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	
PIER NO. 4 - STRAIGHT BARS														
4P620	6	10	44-0	STR										CAP - SIDE FACE
4P621	6	2	44-0	STR										CAP - SIDE FACE
4P622	6	2	38-6	STR										CAP - SIDE FACE
4P623	6	2	33-0	STR										CAP - SIDE FACE
4P624	6	2	27-6	STR										CAP - SIDE FACE
4P625	6	2	22-0	STR										CAP - SIDE FACE
4P650	6	62	4-0	STR										PEDESTAL/FOOTING DOWEL
4P651	6	124	17-9	STR										PEDESTAL - FACE
4P801	8	37	19-6	STR										FOOTING - SHORT WAY TOP
4P802	8	21	35-6	STR										FOOTING - LONG WAY TOP
4P826	8	20	17-0	STR										CAP
4P901	9	42	45-2	STR										SHAFT - UPPER
4P902	9	42	50-5	STR										SHAFT - UPPER
4P1001	10	48	19-6	STR										FOOTING - SHORT WAY B.
4P1002	10	27	35-6	STR										FOOTING - LONG WAY B.
4P1101	11	52	6-8	STR										FOOTING/SEAL - DOWEL
4P1105	11	42	35-0	STR										SHAFT - LOWER
4P1106	11	42	37-3	STR										SHAFT - LOWER
PIER NO. 4 - BENT BARS														
4P401	4	110	24-11	117	8 - 8	7 - 7	8 - 8	2 - 5						SHAFT - OUTSIDE TIE
4P402	4	220	11-3	108	10 - 9									SHAFT - LONGITUDINAL TIE
4P403	4	770	5-11	126	4 - 10									SHAFT - TRANSVERSE TIE
4P404	4	110	4-3	108	3 - 9									SHAFT - TRANSVERSE TIE
4P601	6	150	24-11	117	8 - 8	7 - 7	8 - 8	2 - 5						SHAFT - OUTSIDE TIE
4P602	6	300	11-8	108	10 - 9									SHAFT - LONGITUDINAL TIE
4P603	6	1050	6-8	126	4 - 10									SHAFT - TRANSVERSE TIE
4P604	6	150	4-8	108	3 - 9									SHAFT - TRANSVERSE TIE
4P605	6	300	9-9	108	8 - 10									SHAFT - LONGITUDINAL TIE
4P606	6	150	5-0	110	3 - 2									SHAFT - TRANSVERSE TIE
4P607	6	150	6-4	110	4 - 6									SHAFT - TRANSVERSE TIE
4P627	6	8	9-8	101	5 - 4	2 - 2								CAP - BOTTOM FACE
4P628	6	12	12-9	117	2 - 2	8 - 5	2 - 2	2 - 8						CAP - END FACE
4P629	6	16	14-2	119	12 - 0	2 - 2	2 - 0							CAP - BOTTOM FACE
4P630	6	8	9-0	118	5 - 0	4 - 0								CAP - END FACE
4P631	6	8	9-0	119	5 - 0	4 - 0	1 - 7							CAP - END FACE
4P632	6	38	19-0	101	5 - 6	6 - 9								CAP - STIRRUPS
4P633	6	48	15-10	101	2 - 4	6 - 9								CAP - STIRRUPS
4P634	6	24	17-0	101	3 - 6	6 - 9								CAP - STIRRUPS
4P635	6	40	14-4	101	2 - 4	6 - 0								CAP - STIRRUPS
4P636	6	20	15-6	101	3 - 6	6 - 0								CAP - STIRRUPS
4P637	6	40	12-4	101	2 - 4	5 - 0								CAP - STIRRUPS
4P638	6	20	13-6	101	3 - 6	5 - 0								CAP - STIRRUPS
4P640	6	33	8-6	101	5 - 6	1 - 6								CAP - PAD
4P641	6	6	13-7	101	10 - 7	1 - 6								CAP - PAD
4P642	6	12	14-6	118	13 - 0	1 - 6								CAP - PAD
4P652	6	62	4-4	118	2 - 10	1 - 6								PEDESTAL - TOP
4P653 TO	6	2 EA	VARIES	117	MIN: (A=8-4, B=11-0, C=8-4, D=3-6) (4P653) INC(A=C=0-1, B=0-1 1/2									PEDESTAL - OUTSIDE TIES
4P685					MAX: (A=11-0, B=15-2, C=11-0, D=4-10) (4P685) D=0-0 1/2)									
4P1103	11	42	19-6	118	17 - 6	2 - 0								SHAFT/FOOTING - DOWELS
4P1104	11	42	12-0	118	10 - 0	2 - 0								SHAFT/FOOTING - DOWELS
4P1107	11	58	45-0	118	43 - 0	2 - 0								SHAFT/FOOTING
4P1120	11	18	48-0	101	44 - 0	2 - 0								CAP - TOP
4P1121	11	12	52-0	101	48 - 0	2 - 0								CAP - TOP

NOTE:

1. FOR BENDING BARS DETAILS, SEE SHEET B80.

NO.	REVISION	BY	DATE

	BY	DATE
DESIGNED:	DWR	9/94
DRAWN:	RJT	9/94
CHECKED:	SM	9/94
IN CHARGE OF	CJM	

WATERWIN

HNTB
ARCHITECTS ENGINEERS PLANNERS

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	92	103

AS BUILT CORR 12/18/96

115-278

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

REINFORCING SCHEDULE

SHEET B83 OF B86 AUGUSTA, MAINE

D:\83 / WWGRAPH-STR.OVCARTER.STEEL / 005303.F08.1 DWG= 005303

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
I	MAINE	0009(002)	93	103

MARK	SIZE	NO.	LENGTH	TYPE	A FT IN	B FT IN	C FT IN	D FT IN	E FT IN	F FT IN	G FT IN	H FT IN	R FT IN	REMARKS
PIER NO. 5 - STRAIGHT BARS														
5P620	6	10	44-0	STR										CAP - SIDE FACE
5P621	6	2	44-0	STR										CAP - SIDE FACE
5P622	6	2	38-6	STR										CAP - SIDE FACE
5P623	6	2	33-0	STR										CAP - SIDE FACE
5P624	6	2	27-6	STR										CAP - SIDE FACE
5P625	6	2	22-0	STR										CAP - SIDE FACE
5P650	6	64	4-0	STR										PEDESTAL/FOOTING DOWEL
5P651	6	128	20-9	STR										PEDESTAL - FACE
5P801	8	37	17-6	STR										FOOTING - SHORT WAY TOP
5P802	8	19	35-6	STR										FOOTING - LONG WAY TOP
5P826	8	20	17-0	STR										CAP
5P901	9	37	17-6	STR										FOOTING - SHORT WAY BOT.
5P902	9	19	35-6	STR										FOOTING - LONG WAY BOT.
5P903	9	42	47-9	STR										SHAFT - UPPER
5P904	9	42	53-0	STR										SHAFT - UPPER
5P1101	11	50	6-8	STR										FOOTING/SEAL - DOWEL
5P1104	11	42	41-0	STR										SHAFT - LOWER
5P1105	11	42	43-3	STR										SHAFT - LOWER
PIER NO. 5 - BENT BARS														
5P401	4	128	24-11	117	8 - 8	7 - 7	8 - 8	2 - 5						SHAFT - OUTSIDE TIE
5P402	4	256	11-3	108	10 - 9									SHAFT - LONGITUDINAL TIE
5P403	4	896	5-11	126	4 - 10									SHAFT - TRANSVERSE TIE
5P404	4	128	4-3	108	3 - 9									SHAFT - TRANSVERSE TIE
5P601	6	150	24-11	117	8 - 8	7 - 7	8 - 8	2 - 5						SHAFT - OUTSIDE TIE
5P602	6	300	11-8	108	10 - 9									SHAFT - LONGITUDINAL TIE
5P603	6	1050	6-8	126	4 - 10									SHAFT - TRANSVERSE TIE
5P604	6	150	4-8	108	3 - 9									SHAFT - TRANSVERSE TIE
5P605	6	300	9-9	108	8 - 10									SHAFT - LONGITUDINAL TIE
5P606	6	150	5-0	110	3 - 2									SHAFT - TRANSVERSE TIE
5P607	6	150	6-4	110	4 - 6									SHAFT - TRANSVERSE TIE
5P627	6	8	9-8	101	5 - 4	2 - 2								CAP - BOTTOM FACE
5P628	6	12	12-9	117	2 - 2	8 - 5	2 - 2	2 - 8						CAP - END FACE
5P629	6	16	14-2	119	12 - 0	2 - 2	2 - 0							CAP - BOTTOM FACE
5P630	6	8	9-0	118	5 - 0	4 - 0								CAP - END FACE
5P631	6	8	9-0	119	5 - 0	4 - 0	1 - 7							CAP - END FACE
5P632	6	38	19-0	101	5 - 6	6 - 9								CAP - STIRRUPS
5P633	6	48	15-10	101	2 - 4	6 - 9								CAP - STIRRUPS
5P634	6	24	17-0	101	3 - 6	6 - 9								CAP - STIRRUPS
5P635	6	40	14-4	101	2 - 4	6 - 0								CAP - STIRRUPS
5P636	6	20	15-6	101	3 - 6	6 - 0								CAP - STIRRUPS
5P637	6	40	12-4	101	2 - 4	5 - 0								CAP - STIRRUPS
5P638	6	20	13-6	101	3 - 6	5 - 0								CAP - STIRRUPS
5P640	6	11	8-6	101	5 - 6	1 - 6								CAP - PAD
5P641	6	6	13-7	101	10 - 7	1 - 6								CAP - PAD
5P652	6	64	4-4	118	2 - 10	1 - 6								PEDESTAL - TOP
5P653 TO 5P691	6	2 EA	VARIES	117	MIN: (A=8-4, B=11-0, C=8-4, D=3-6) (5P653) INC(A=C=0-1, B=0-1 1/2 MAX: (A=11-6, B=16-0, C=11-6, D=5-1) (5P691) D=0-0 1/2)									PEDESTAL - OUTSIDE TIES
5P1102	11	42	12-0	118	10 - 0	2 - 0								SHAFT/FOOTING - DOWELS
5P1103	11	30	30-6	118	28 - 6	2 - 0								SHAFT/FOOTING - DOWELS
5P1106	11	42	19-6	118	17 - 6	2 - 0								SHAFT/FOOTING - DOWELS
5P1120	11	18	48-0	101	44 - 0	2 - 0								CAP - TOP
5P1121	11	12	52-0	101	48 - 0	2 - 0								CAP - TOP

MARK	SIZE	NO.	LENGTH	TYPE	A FT IN	B FT IN	C FT IN	D FT IN	E FT IN	F FT IN	G FT IN	H FT IN	R FT IN	REMARKS
PIER NO. 6 - STRAIGHT BARS														
6P620	6	10	44-0	STR										CAP - SIDE FACE
6P621	6	2	44-0	STR										CAP - SIDE FACE
6P622	6	2	37-9	STR										CAP - SIDE FACE
6P623	6	2	31-6	STR										CAP - SIDE FACE
6P624	6	2	26-9	STR										CAP - SIDE FACE
6P625	6	2	22-0	STR										CAP - SIDE FACE
6P650	6	54	4-0	STR										PEDESTAL/FOOTING DOWEL
6P651	6	54	11-8	STR										PEDESTAL - FACE
6P801	8	29	14-6	STR										FOOTING - SHORT WAY TOP
6P802	8	16	27-6	STR										FOOTING - LONG WAY TOP
6P826	8	20	17-0	STR										CAP
6P904	9	42	21-6	STR										SHAFT - LOWER
6P905	9	42	56-1	STR										SHAFT - UPPER
6P906	9	42	50-10	STR										SHAFT - UPPER
PIER NO. 6 - BENT BARS														
6P401	4	72	24-11	117	8 - 8	7 - 7	8 - 8	2 - 5						SHAFT - OUTSIDE TIE
6P402	4	144	11-3	108	10 - 9									SHAFT - LONGITUDINAL TIE
6P403	4	504	5-11	126	4 - 10									SHAFT - TRANSVERSE TIE
6P404	4	72	4-3	108	3 - 9									SHAFT - TRANSVERSE TIE
6P601	6	168	24-11	117	8 - 8	7 - 7	8 - 8	2 - 5						SHAFT - OUTSIDE TIE
6P602	6	336	11-8	108	10 - 9									SHAFT - LONGITUDINAL TIE
6P603	6	1176	6-8	126	4 - 10									SHAFT - TRANSVERSE TIE
6P604	6	168	4-8	108	3 - 9									SHAFT - TRANSVERSE TIE
6P605	6	336	9-9	108	8 - 10									SHAFT - LONGITUDINAL TIE
6P606	6	168	5-0	110	3 - 2									SHAFT - TRANSVERSE TIE
6P607	6	168	6-4	110	4 - 6									SHAFT - TRANSVERSE TIE
6P627	6	4	12-2	101	7 - 10	2 - 2								CAP - BOTTOM FACE
6P628	6	28	9-2	128	2 - 6	4 - 2	2 - 6	2 - 8						CAP - END FACE
6P629	6	20	9-2	119	7 - 0	2 - 2	2 - 0							CAP - BOTTOM FACE
6P630	6	12	10-0	118	5 - 0	5 - 0								CAP - END FACE
6P631	6	12	14-0	119	10 - 0	4 - 0	1 - 7							CAP - END FACE
6P632	6	19	27-6	101	8 - 0	9 - 9								CAP - STIRRUPS
6P633	6	46	8-8	105	2 - 6	2 - 2	1 - 3	4 - 0						CAP - STIRRUPS
6P634	6	4	8-4	105	2 - 6	1 - 2	0 - 8	4 - 8						CAP - STIRRUPS
6P635	6	72	17-0	101	5 - 4	5 - 10								CAP - STIRRUPS
6P636	6	48	15-6	101	5 - 4	5 - 1								CAP - STIRRUPS
6P640	6	24	11-0	101	8 - 0	1 - 6								CAP - PAD
6P641	6	24	8-7	101	5 - 7	1 - 6								CAP - PAD
6P642	6	16	4-2	118	2 - 8	1 - 6								CAP - PAD
6P643	6	2	10-0	101	7-0	1 - 6								CAP - PAD
6P644	6	2	8-9	101	5-9	1 - 6								CAP - PAD
6P652	6	54	4-4	118	2 - 10	1 - 6								PEDESTAL - TOP
6P653 TO 6P664	6	2 EA	VARIES	117	MIN: (A=8-4, B=11-0, C=8-4, D=3-6) (6P653) INC(A=C=0-1, B=0-1 1/2, MAX: (A=9-3, B=12-5, C=9-3, D=3-11 1/2) (6P664) D=0-0 1/2)									PEDESTAL - OUTSIDE TIES
6P803	8	17	30-2	129	27 - 6									FOOTING - LONG WAY BOT.
6P901	9	27	17-8	129	14 - 6									FOOTING - SHORT WAY BOT.
6P902	9	42	9-4	118	7-9	1 - 7								SHAFT/FOOTING - DOWELS
6P903	9	42	21-4	118	19 - 9	1 - 7								SHAFT/FOOTING - DOWELS
6P1120	11	12	48-0	101	44 - 0	2 - 0								CAP - TOP
6P1121	11	10	52-0	101	48 - 0	2 - 0								CAP - TOP

NOTE:

1. FOR BENDING BARS DETAILS, SEE SHEET B80.

NO.	REVISION	BY	DATE

	BY	DATE
DESIGNED:	DWR	9/94
DRAWN:	RJT	9/94
CHECKED:	SM	9/94
IN CHARGE OF	CJM	

HNTB
ARCHITECTS ENGINEERS PLANNERS

AS BUILT 11/3/96

115-279

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

REINFORCING SCHEDULE

SHEET B84 OF B86 AUGUSTA, MAINE

D:\3-WWORK\STR\DVCARTER\STEEL\C05304_F08L1_D93-_C05304

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	R	REMARKS
					FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	
PIER NO. 7 - STRAIGHT BARS														
7P620	6	10	44-0	STR										CAP - SIDE FACE
7P621	6	2	44-0	STR										CAP - SIDE FACE
7P622	6	2	38-6	STR										CAP - SIDE FACE
7P623	6	2	33-0	STR										CAP - SIDE FACE
7P624	6	2	27-6	STR										CAP - SIDE FACE
7P625	6	2	22-0	STR										CAP - SIDE FACE
7P650	6	56	4-0	STR										PEDESTAL/FOOTING DOWEL
7P651	6	56	14-10	STR										PEDESTAL - FACE
7P801	8	34	20-6	STR										FOOTING - SHORT WAY TOP
7P802	8	22	32-6	STR										FOOTING - LONG WAY TOP
7P826	8	20	17-0	STR										CAP
7P902	9	42	58-3	STR										SHAFT - UPPER
7P903	9	42	53-0	STR										SHAFT - UPPER
7P1105	11	42	24-6	STR										SHAFT - LOWER
PIER NO. 7 - BENT BARS														
7P401	4	92	24-11	117	8 - 8	7 - 7	8 - 8	2 - 5						SHAFT - OUTSIDE TIE
7P402	4	184	11-3	108	10 - 9									SHAFT - LONGITUDINAL TIE
7P403	4	644	5-11	126	4 - 10									SHAFT - TRANSVERSE TIE
7P404	4	92	4-3	108	3 - 9									SHAFT - TRANSVERSE TIE
7P601	6	150	24-11	117	8 - 8	7 - 7	8 - 8	2 - 5						SHAFT - OUTSIDE TIE
7P602	6	300	11-8	108	10 - 9									SHAFT - LONGITUDINAL TIE
7P603	6	1050	6-8	126	4 - 10									SHAFT - TRANSVERSE TIE
7P604	6	150	4-8	108	3 - 9									SHAFT - TRANSVERSE TIE
7P605	6	300	9-9	108	8 - 10									SHAFT - LONGITUDINAL TIE
7P606	6	150	5-0	110	3 - 2									SHAFT - TRANSVERSE TIE
7P607	6	150	6-4	110	4 - 6									SHAFT - TRANSVERSE TIE
7P627	6	8	9-8	101	5 - 4	2 - 2								CAP - BOTTOM FACE
7P628	6	12	12-9	117	2 - 2	8 - 5	2 - 2	2 - 8						CAP - END FACE
7P629	6	16	14-2	119	12 - 0	2 - 2	2 - 0							CAP - BOTTOM FACE
7P630	6	8	10-0	118	5 - 0	5 - 0								CAP - END FACE
7P631	6	8	9-0	119	5 - 0	4 - 0	1 - 7							CAP - END FACE
7P632	6	38	20-0	101	5 - 6	7 - 3								CAP - STIRRUPS
7P633	6	48	16-10	101	2 - 4	7 - 3								CAP - STIRRUPS
7P634	6	24	18-0	101	3 - 6	7 - 3								CAP - STIRRUPS
7P635	6	40	15-4	101	2 - 4	6 - 6								CAP - STIRRUPS
7P636	6	20	16-6	101	3 - 6	6 - 6								CAP - STIRRUPS
7P637	6	40	13-4	101	2 - 4	5 - 6								CAP - STIRRUPS
7P638	6	20	14-6	101	3 - 6	5 - 6								CAP - STIRRUPS
7P640	6	39	8-6	101	5 - 6	1 - 6								CAP - PAD
7P642	6	12	14-6	118	13 - 0	1 - 6								CAP - PAD
7P643	6	1	7-3	101	4 - 3	1 - 6								CAP - PAD
7P644	6	1	6-0	101	3 - 0	1 - 6								CAP - PAD
7P645	6	6	17-6	118	16 - 0	1 - 6								CAP - PAD
7P652	6	56	4-4	118	2 - 10	1 - 6								PEDESTAL - TOP
7P653 TO	6	2 EA	VARIES	117	MIN: (A=8-4, B=11-0, C=8-4, D=3-6) (7P653) INC(A=C=0-1, B=0-1 1/2									PEDESTAL - OUTSIDE TIES
7P667					MAX: (A=9-6, B=12-10, C=9-6, D=4-1) (7P667) D=0-0 1/2)									
7P901	9	23	35-8	129	32 - 6									FOOTING - LONG WAY BOT.
7P1001	10	44	24-2	129	20 - 6									FOOTING - SHORT WAY BOT.
7P1102	11	30	28-0	118	26 - 0	2 - 0								SHAFT/FOOTING - DOWELS
7P1103	11	42	25-9	118	23 - 9	2 - 0								SHAFT/FOOTING - DOWELS
7P1104	11	42	13-0	118	11 - 0	2 - 0								SHAFT/FOOTING - DOWELS
7P1120	11	14	48-0	101	44 - 0	2 - 0								CAP - TOP
7P1121	11	10	52-0	101	48 - 0	2 - 0								CAP - TOP

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	R	REMARKS
					FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	
PIER NO. 8 - STRAIGHT BARS														
8P620	6	10	44-0	STR										CAP - SIDE FACE
8P621	6	2	44-0	STR										CAP - SIDE FACE
8P622	6	2	38-6	STR										CAP - SIDE FACE
8P623	6	2	33-0	STR										CAP - SIDE FACE
8P624	6	2	27-6	STR										CAP - SIDE FACE
8P625	6	2	22-0	STR										CAP - SIDE FACE
8P650	6	56	4-0	STR										PEDESTAL/FOOTING DOWEL
8P651	6	56	14-10	STR										PEDESTAL - FACE
8P801	8	34	20-6	STR										FOOTING - SHORT WAY TOP
8P802	8	22	32-6	STR										FOOTING - LONG WAY TOP
8P826	8	20	17-0	STR										CAP
8P902	9	42	25-6	STR										SHAFT - UPPER
8P903	9	42	56-0	STR										SHAFT - UPPER
8P904	9	42	40-0	STR										SHAFT - UPPER
8P1105	11	42	24-6	STR										SHAFT - LOWER
PIER NO. 8 - BENT BARS														
8P401	4	98	24-11	117	8 - 8	7 - 7	8 - 8	2 - 5						SHAFT - OUTSIDE TIE
8P402	4	196	11-3	108	10 - 9									SHAFT - LONGITUDINAL TIE
8P403	4	686	5-11	126	4 - 10									SHAFT - TRANSVERSE TIE
8P404	4	98	4-3	108	3 - 9									SHAFT - TRANSVERSE TIE
8P601	6	150	24-11	117	8 - 8	7 - 7	8 - 8	2 - 5						SHAFT - OUTSIDE TIE
8P602	6	300	11-8	108	10 - 9									SHAFT - LONGITUDINAL TIE
8P603	6	1050	6-8	126	4 - 10									SHAFT - TRANSVERSE TIE
8P604	6	150	4-8	108	3 - 9									SHAFT - TRANSVERSE TIE
8P605	6	300	9-9	108	8 - 10									SHAFT - LONGITUDINAL TIE
8P606	6	150	5-0	110	3 - 2									SHAFT - TRANSVERSE TIE
8P607	6	150	6-4	110	4 - 6									SHAFT - TRANSVERSE TIE
8P627	6	8	9-8	101	5 - 4	2 - 2								CAP - BOTTOM FACE
8P628	6	12	12-9	117	2 - 2	8 - 5	2 - 2	2 - 8						CAP - END FACE
8P629	6	16	14-2	119	12 - 0	2 - 2	2 - 0							CAP - BOTTOM FACE
8P630	6	8	10-0	118	5 - 0	5 - 0								CAP - END FACE
8P631	6	8	9-0	119	5 - 0	4 - 0	1 - 7							CAP - END FACE
8P632	6	38	20-0	101	5 - 6	7 - 3								CAP - STIRRUPS
8P633	6	48	16-10	101	2 - 4	7 - 3								CAP - STIRRUPS
8P634	6	24	18-0	101	3 - 6	7 - 3								CAP - STIRRUPS
8P635	6	40	15-4	101	2 - 4	6 - 6								CAP - STIRRUPS
8P636	6	20	16-6	101	3 - 6	6 - 6								CAP - STIRRUPS
8P637	6	40	13-4	101	2 - 4	5 - 6								CAP - STIRRUPS
8P638	6	20	14-6	101	3 - 6	5 - 6								CAP - STIRRUPS
8P640	6	39	8-6	101	5 - 6	1 - 6								CAP - PAD
8P642	6	12	14-6	118	13 - 0	1 - 6								CAP - PAD
8P643	6	1	7-3	101	4 - 3	1 - 6								CAP - PAD
8P644	6	1	6-0	101	3 - 0	1 - 6								CAP - PAD
8P645	6	6	17-6	118	16 - 0	1 - 6								CAP - PAD
8P652	6	56	4-4	118	2 - 10	1 - 6								PEDESTAL - TOP
8P653 TO	6	2 EA	VARIES	117	MIN: (A=8-4, B=11-0, C=8-4, D=3-6) (8P653) INC(A=C=0-1, B=0-1 1/2									PEDESTAL - OUTSIDE TIES
8P667					MAX: (A=9-6, B=12-10, C=9-6, D=4-1) (8P667) D=0-0 1/2)									
8P901	9	23	35-8	129	32 - 6									FOOTING - LONG WAY BOT.
8P1001	10	44	24-2	129	20 - 6									FOOTING - SHORT WAY BOT.
8P1102	11	30	28-0	118	26 - 0	2 - 0								SHAFT/FOOTING - DOWELS
8P1103	11	42	25-9	118	23 - 9	2 - 0								SHAFT/FOOTING - DOWELS
8P1104	11	42	13-0	118	11 - 0	2 - 0								SHAFT/FOOTING - DOWELS
8P1120	11	12	48-0	101	44 - 0	2 - 0								CAP - TOP
8P1121	11	8	52-0	101	48 - 0	2 - 0								CAP - TOP

NO.	REVISION	BY	DATE

	BY	DATE
DESIGNED:	DWR	9/94
DRAWN:	RJT	9/94
CHECKED:	SM	9/94
IN CHARGE OF	CJM	

NOTE:

1. FOR BENDING BARS DETAILS, SEE SHEET B80.

HNTB
ARCHITECTS ENGINEERS PLANNERS

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	94	103

115-280

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

REINFORCING SCHEDULE

SHEET B85 OF B86 AUGUSTA, MAINE

DAS | BWSRAPLSTR_DVCARTER_STEEL_C05306_FGN.I DWG - C05306

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
I	MAINE	0009(002)	95	103

MARK	SIZE	NO.	LENGTH	TYPE	A FT IN	B FT IN	C FT IN	D FT IN	E FT IN	F FT IN	G FT IN	H FT IN	R FT IN	REMARKS
PIER NO. 9 - STRAIGHT BARS														
9P620	6	10	44-0	STR										CAP - SIDE FACE
9P621	6	2	44-0	STR										CAP - SIDE FACE
9P622	6	2	38-6	STR										CAP - SIDE FACE
9P623	6	2	33-0	STR										CAP - SIDE FACE
9P624	6	2	27-6	STR										CAP - SIDE FACE
9P625	6	2	22-0	STR										CAP - SIDE FACE
9P801	8	24	14-6	STR										FOOTING - SHORT WAY TOP
9P802	8	16	22-6	STR										FOOTING - LONG WAY TOP
9P826	8	20	17-0	STR										CAP
9P904	9	42	48-0	STR										SHAFT - UPPER
9P905	9	42	42-9	STR										SHAFT - UPPER
PIER NO. 9 - BENT BARS														
9P401	4	56	24-11	117	8 - 8	7 - 7	8 - 8	2 - 5						SHAFT - OUTSIDE TIE
9P402	4	112	11-3	108	10 - 9									SHAFT - LONGITUDINAL TIE
9P403	4	392	5-11	126	4 - 10									SHAFT - TRANSVERSE TIE
9P404	4	56	4-3	108	3 - 9									SHAFT - TRANSVERSE TIE
9P601	6	110	24-11	117	8 - 8	7 - 7	8 - 8	2 - 5						SHAFT - OUTSIDE TIE
9P602	6	220	11-8	108	10 - 9									SHAFT - LONGITUDINAL TIE
9P603	6	770	6-8	126	4 - 10									SHAFT - TRANSVERSE TIE
9P604	6	110	4-8	108	3 - 9									SHAFT - TRANSVERSE TIE
9P605	6	220	9-9	108	8 - 10									SHAFT - LONGITUDINAL TIE
9P606	6	110	5-0	110	3 - 2									SHAFT - TRANSVERSE TIE
9P607	6	110	6-4	110	4 - 6									SHAFT - TRANSVERSE TIE
9P627	6	8	9-8	101	5 - 4	2 - 2								CAP - BOTTOM FACE
9P628	6	12	12-9	117	2 - 2	8 - 5	2 - 2	2 - 8						CAP - END FACE
9P629	6	16	14-2	119	12 - 0	2 - 2	2 - 0							CAP - BOTTOM FACE
9P630	6	8	10-0	118	5 - 0	5 - 0								CAP - END FACE
9P631	6	8	9-0	119	5 - 0	4 - 0	1 - 7							CAP - END FACE
9P632	6	38	20-0	101	5 - 6	7 - 3								CAP - STIRRUPS
9P633	6	48	16-10	101	2 - 4	7 - 3								CAP - STIRRUPS
9P634	6	24	18-0	101	3 - 6	7 - 3								CAP - STIRRUPS
9P635	6	40	15-4	101	2 - 4	6 - 6								CAP - STIRRUPS
9P636	6	20	16-6	101	3 - 6	6 - 6								CAP - STIRRUPS
9P637	6	40	13-4	101	2 - 4	5 - 6								CAP - STIRRUPS
9P638	6	20	14-6	101	3 - 6	5 - 6								CAP - STIRRUPS
9P640	6	39	8-6	101	5 - 6	1 - 6								CAP - PAD
9P642	6	18	14-6	118	13 - 0	1 - 6								CAP - PAD
9P643	6	1	7-3	101	4 - 3	1 - 6								CAP - PAD
9P644	6	1	6-0	101	3 - 0	1 - 6								CAP - PAD
9P645	6	6	7-6	118	6 - 0	1 - 6								CAP - PAD
9P803	8	17	25-2	129	22 - 6									FOOTING - LONG WAY BOT.
9P901	9	30	17-8	129	14 - 6									FOOTING - SHORT WAY BOT.
9P902	9	42	9-4	118	7 - 9	1 - 7								FOOTING/SHAFT DOWEL
9P903	9	42	14-7	118	13 - 0	1 - 7								FOOTING/SHAFT DOWEL
9P1120	11	12	48-0	101	44 - 0	2 - 0								CAP - TOP
9P1121	11	8	52-0	101	48 - 0	2 - 0								CAP - TOP

MARK	SIZE	NO.	LENGTH	TYPE	A FT IN	B FT IN	C FT IN	D FT IN	E FT IN	F FT IN	G FT IN	H FT IN	R FT IN	REMARKS
PIER NO. 10 - STRAIGHT BARS														
10P620	6	10	44-0	STR										CAP - SIDE FACE
10P621	6	2	44-0	STR										CAP - SIDE FACE
10P622	6	2	38-6	STR										CAP - SIDE FACE
10P623	6	2	33-0	STR										CAP - SIDE FACE
10P624	6	2	27-6	STR										CAP - SIDE FACE
10P625	6	2	22-0	STR										CAP - SIDE FACE
10P801	8	24	14-6	STR										FOOTING - SHORT WAY TOP
10P802	8	16	22-6	STR										FOOTING - LONG WAY TOP
10P826	8	20	17-0	STR										CAP
10P904	9	42	35-8	STR										SHAFT - UPPER
10P905	9	42	30-5	STR										SHAFT - UPPER
PIER NO. 10 - BENT BARS														
10P401	4	58	24-11	117	8 - 8	7 - 7	8 - 8	2 - 5						SHAFT - OUTSIDE TIE
10P402	4	116	11-3	108	10 - 9									SHAFT - LONGITUDINAL TIE
10P403	4	406	5-11	126	4 - 10									SHAFT - TRANSVERSE TIE
10P404	4	58	4-3	108	3 - 9									SHAFT - TRANSVERSE TIE
10P601	6	46	24-11	117	8 - 8	7 - 7	8 - 8	2 - 5						SHAFT - OUTSIDE TIE
10P602	6	92	11-8	108	10 - 9									SHAFT - LONGITUDINAL TIE
10P603	6	322	6-8	126	4 - 10									SHAFT - TRANSVERSE TIE
10P604	6	46	4-8	108	3 - 9									SHAFT - TRANSVERSE TIE
10P605	6	92	9-9	108	8 - 10									SHAFT - LONGITUDINAL TIE
10P606	6	46	5-0	110	3 - 2									SHAFT - TRANSVERSE TIE
10P607	6	46	6-4	110	4 - 6									SHAFT - TRANSVERSE TIE
10P627	6	8	9-8	101	5 - 4	2 - 2								CAP - BOTTOM FACE
10P628	6	12	12-9	117	2 - 2	8 - 5	2 - 2	2 - 8						CAP - END FACE
10P629	6	16	14-2	119	12 - 0	2 - 2	2 - 0							CAP - BOTTOM FACE
10P630	6	8	10-0	118	5 - 0	5 - 0								CAP - END FACE
10P631	6	8	9-0	119	5 - 0	4 - 0	1 - 7							CAP - END FACE
10P632	6	38	20-0	101	5 - 6	7 - 3								CAP - STIRRUPS
10P633	6	48	16-10	101	2 - 4	7 - 3								CAP - STIRRUPS
10P634	6	24	18-0	101	3 - 6	7 - 3								CAP - STIRRUPS
10P635	6	40	15-4	101	2 - 4	6 - 6								CAP - STIRRUPS
10P636	6	20	16-6	101	3 - 6	6 - 6								CAP - STIRRUPS
10P637	6	40	13-4	101	2 - 4	5 - 6								CAP - STIRRUPS
10P638	6	20	14-6	101	3 - 6	5 - 6								CAP - STIRRUPS
10P640	6	39	8-6	101	5 - 6	1 - 6								CAP - PAD
10P642	6	18	14-6	118	13 - 0	1 - 6								CAP - PAD
10P643	6	1	7-3	101	4 - 3	1 - 6								CAP - PAD
10P644	6	1	6-0	101	3 - 0	1 - 6								CAP - PAD
10P645	6	6	7-6	118	6 - 0	1 - 6								CAP - PAD
10P803	8	17	25-2	129	22 - 6									FOOTING - LONG WAY BOT.
10P901	9	30	17-8	129	14 - 6									FOOTING - SHORT WAY BOT.
10P902	9	42	9-4	118	7 - 9	1 - 7								FOOTING/SHAFT DOWEL
10P903	9	42	14-7	118	13 - 0	1 - 7								FOOTING/SHAFT DOWEL
10P1120	11	12	48-0	101	44 - 0	2 - 0								CAP - TOP
10P1121	11	8	52-0	101	48 - 0	2 - 0								CAP - TOP

NOTE:

1. FOR BENDING BARS DETAILS, SEE SHEET B80.

NO.	REVISION	BY	DATE

	BY	DATE
DESIGNED:	DWR	9/94
DRAWN:	RJT	9/94
CHECKED:	SM	9/94
IN CHARGE OF	CJM	

HNTB
ARCHITECTS ENGINEERS PLANNERS

115-281

AS BUILT CORR. 11/2/94

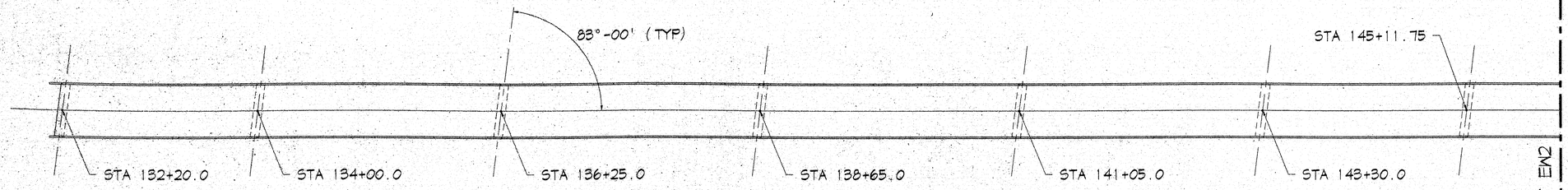
STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

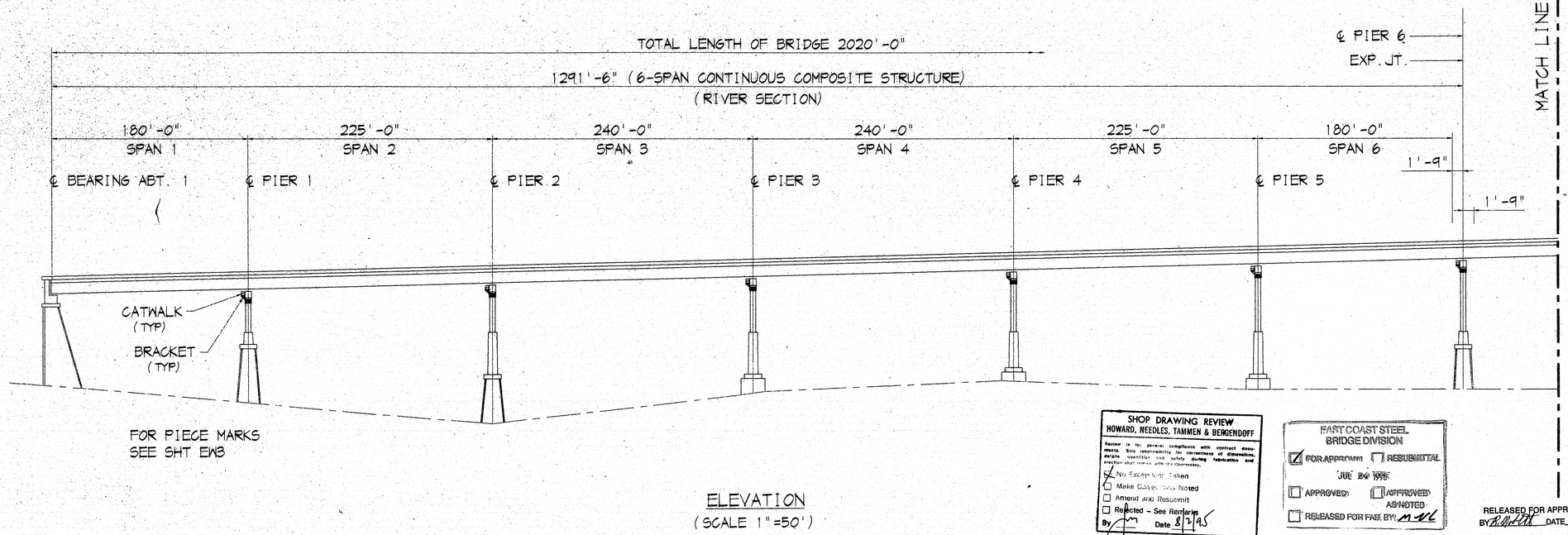
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

REINFORCING SCHEDULE

SHEET B86 OF B86 AUGUSTA, MAINE



PLAN
(SCALE 1"=50')



FOR PIECE MARKS
SEE SHT EW3

ELEVATION
(SCALE 1"=50')

NOTES:
WORK THIS SHTS WITH EW2 & EW3
FOR CATWALK LOCATION & ELEVATIONS
SEE SHT EW3
FOR CATWALK DETAILS SEE SHTS
60-1 THRU 60-3

SHOP DRAWING REVIEW
HOWARD, NEEDLES, TAMMEN & BERGENDOFF
Review is for general compliance with contract documents. Has responsibility for correctness of dimensions, details, quantities, and safety during fabrication and erection which remain with the Contractor.
☑ No Exceptions Taken
☐ Make Corrections Noted
☐ Amend and Resubmit
☐ Rejected – See Remarks
By [illegible] Date 8/2/95

EAST COAST STEEL
BRIDGE DIVISION
☑ FOR APPROVAL ☐ RESUBMITTAL
JUL 26 1995
☐ APPROVED ☐ APPROVED AS NOTED
☐ RELEASED FOR FAB. BY: MAC

RELEASED FOR APPROVAL
BY [illegible] DATE 7-27-95

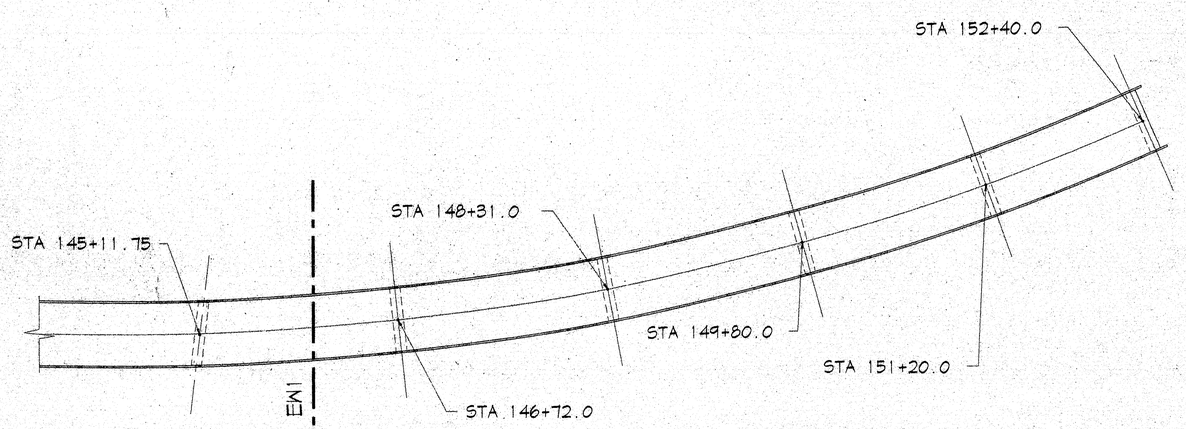
# & Date	Description
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EAST COAST STEEL INC.
Corporate Headquarters
RR 1 Box 560 Route 31
Greenfield, New Hampshire
03047
603-547-3316

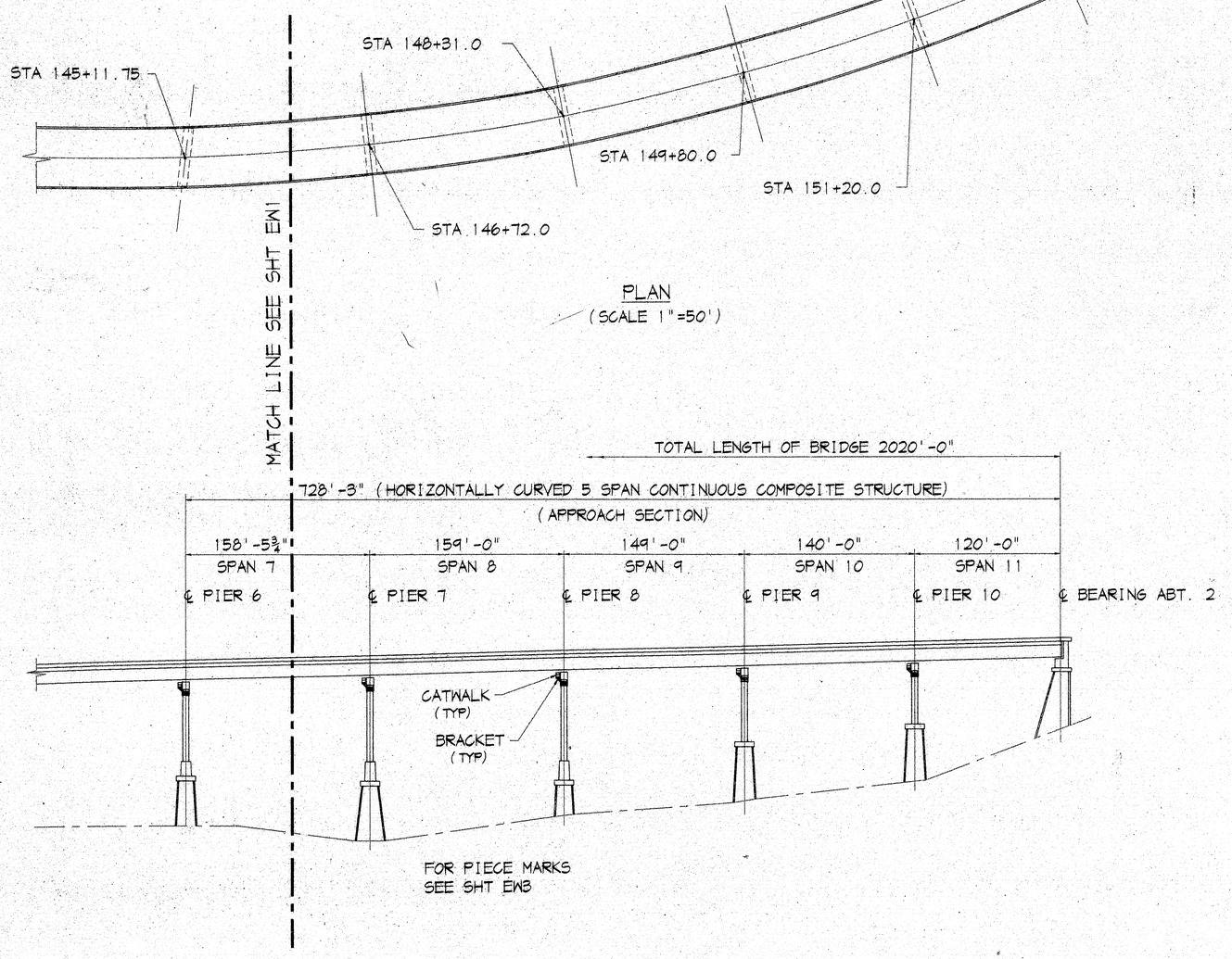
EAST COAST STEEL INC.
Bridge Division
1 Wallace Ave
South Portland Maine
04106
207-773-1862

Qty.	Date:	Issued To:	For:
		123-106	

Project:	DONALD V. CARTER BRIDGE KENNEBEC RIVER
Location:	WATERVILLE/WINSLOW PROJECT DPB-0009(002)
Architect:	HNTB MAINE DEPARTMENT OF TRANSPORTATION
Customer:	CIANBRO CORPORATION
Drawing Title:	CATWALK AND HANDRAIL ASSEMBLY
Drawn By: DAVE 7/18/95	Job Number: 95-05-1215
Checked By: RC 7/95	Sheet Number: EW1



PLAN
(SCALE 1"=50')



ELEVATION
(SCALE 1"=50')

SHOP DRAWING REVIEW
HOWARD, NEEDLES, TAMMEN & BERGENDOFF

Review is for general compliance with contract documents. Bhe responsibility for correctness of dimensions, details quantities, the safety during fabrication and erection shall rest with the Contractor.

- [x] No Exceptions Taken
- [ ] Make Corrections Noted
- [ ] Amend and Resubmit
- [ ] Rejected – See Remarks

By [illegible] Date 8/2/95

EAST COAST STEEL
BRIDGE DIVISION

- [x] FOR APPROVAL
- [ ] RESUBMITTAL

OCT 24 1995

- [ ] APPROVED
- [ ] APPROVED AS NOTED
- [ ] RELEASED FOR FAB. BY: MAC

NOTES:
WORK THIS SHTS WITH EW1 & EW3
FOR CATWALK LOCATION & ELEVATIONS
SEE SHT EW3
FOR CATWALK DETAILS SEE SHTS
60-1 THRU 60-3

RELEASED FOR APPROVAL
BY R. Mott DATE 7-27-95

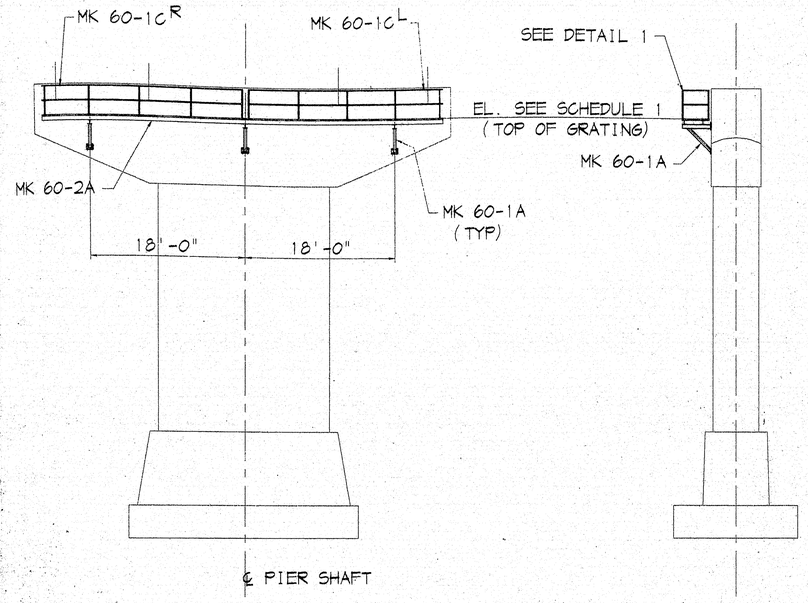
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Qty.	Date:	Issued To:	For:
		123-107	

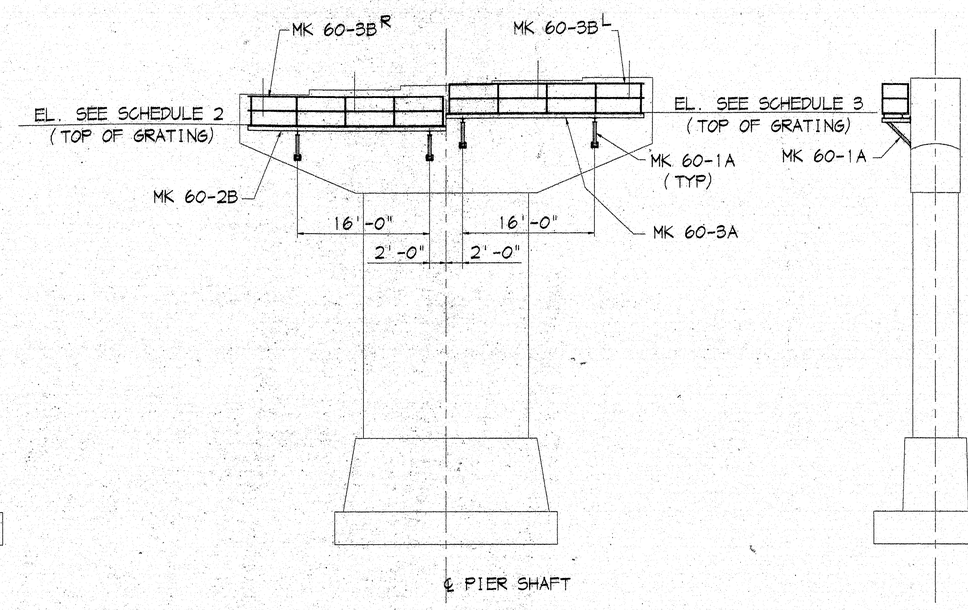
EAST COAST STEEL INC.
Corporate Headquarters
RR 1 Box 560 Route 31
Greenfield, New Hampshire
03047
603-547-3316

EAST COAST STEEL INC.
Bridge Division
1 Wallace Ave
South Portland Maine
04106
207-773-1862

Project:	DONALD V. CARTER BRIDGE KENNEBEC RIVER
Location:	WATERVILLE/WINSLOW PROJECT DPB-0009(002)
Architect:	HNTB MAINE DEPARTMENT OF TRANSPORTATION
Customer:	CIANBRO CORPORATION
Drawing Title:	CATWALK AND HANDRAIL ASSEMBLY
Drawn By: DAVE 7/18/95	Job Number: 95-05-1215
Checked By: RC 7/95	Sheet Number: EW2



ELEVATION (PIER 1-6)
(LOOKING UPSTATION)

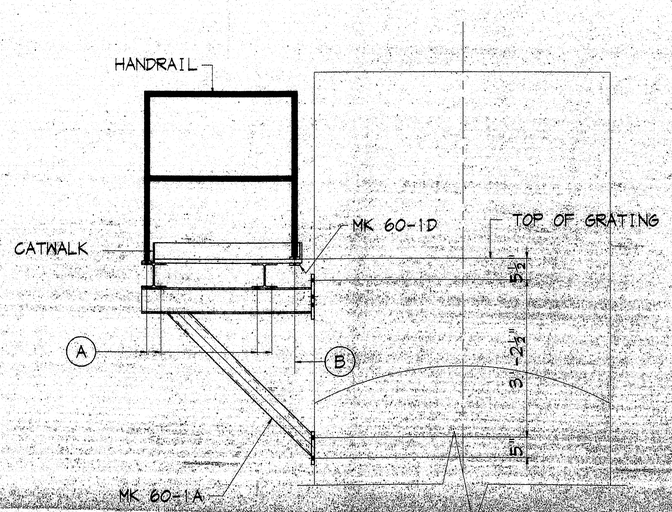


ELEVATION (PIER 7-10)
(LOOKING UPSTATION)

SIDE ELEVATION

SIDE ELEVATION

SCHEDULE 1	
PIER 1	98.32'
PIER 2	101.47'
PIER 3	104.52'
PIER 4	107.92'
PIER 5	111.41'
PIER 6	114.15'



DETAIL 1

SCHEDULE 2	
PIER 7	116.70'
PIER 8	118.98'
PIER 9	121.30'
PIER 10	123.26'

SCHEDULE 3	
PIER 7	118.20'
PIER 8	120.48'
PIER 9	122.80'
PIER 10	124.76'

FIELD BOLTS

(A) 472-½"Φ(A325) BOLT x1½ W/HHN&HW

(B) 40-½"Φ(A325) BOLT x2½ W/HHN&HW

SHOP DRAWING REVIEW
HOWARD, NEEDLES, TAMMEN, & BERGENDOFF
Review is for general compliance with contract documents. Sole responsibility for correctness of dimensions, details, quantities and fabrication and erection shall remain with the Contractor.
☐ No Exceptions Taken
☒ Make Corrections Noted
☐ Amend and Resubmit
☐ Rejected – See Remarks
By DMR Date 11-14-95

See Sheet 60-2

EAST COAST STEEL BRIDGE DIVISION
☑ FOR APPROVAL ☐ RESUBMITTAL
NOV 8 1995
☐ APPROVED ☐ APPROVED AS NOTED
☐ RELEASED FOR FAB. BY: ANL

NOTES:
WORK THIS SHT WITH SHTS EW1 & EW3
FOR CATWALK DETAILS SEE SHTS 60-1 THRU 60-3

RELEASED FOR APPROVAL
BY RJT DATE 11-6-95

# & Date	Description
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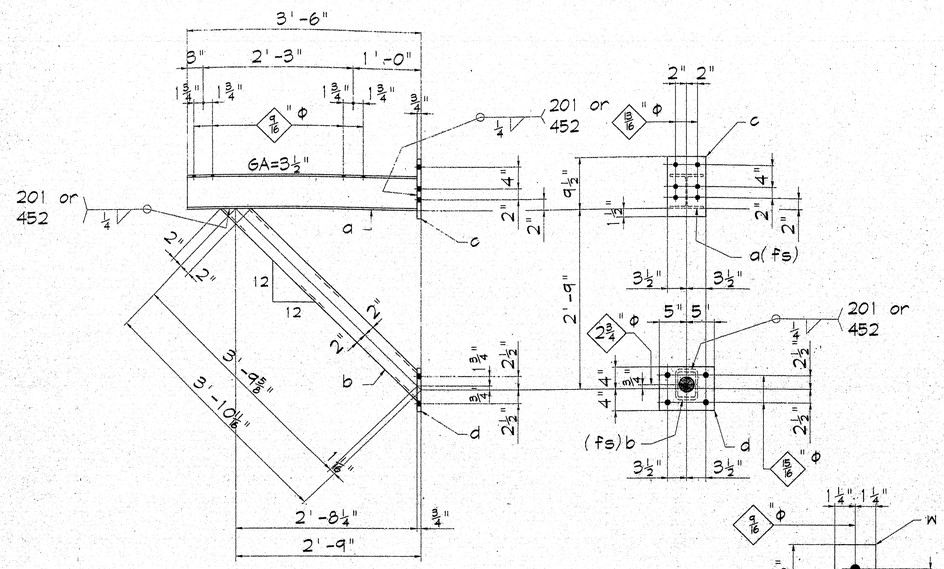
EAST COAST STEEL INC.
Corporate Headquarters
RR 1 Box 560 Route 31
Greenfield, New Hampshire
03047
603-547-3319

EAST COAST STEEL INC.
Bridge Division
1 Wallace Ave
South Portland Maine
04106
207-773-1862

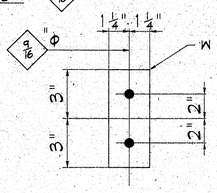
123-108

Qty.	Date:	Issued To:	For:

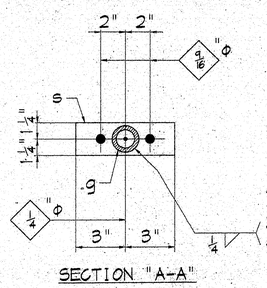
Project: DONALD V. CARTER BRIDGE KENNEBEC RIVER
Location: WATERVILLE/WINSLOW PROJECT DPB-0009(002)
Architect: HNTB MAINE DEPARTMENT OF TRANSPORTATION
Customer: CIANBRO CORPORATION
Drawing Title: CATWALK AND HANDRAIL ASSEMBLY
Drawn By: DAVE 7/20/95 Job Number: 95-05-121.5 Sheet Number: EW3
Checked By: RC



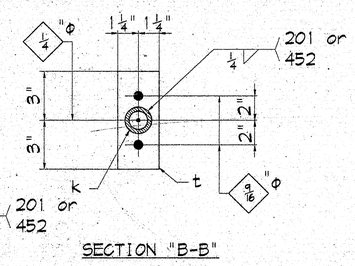
34 - SUPPORTS MK 60-1A



20 - PLATES MK 60-1D

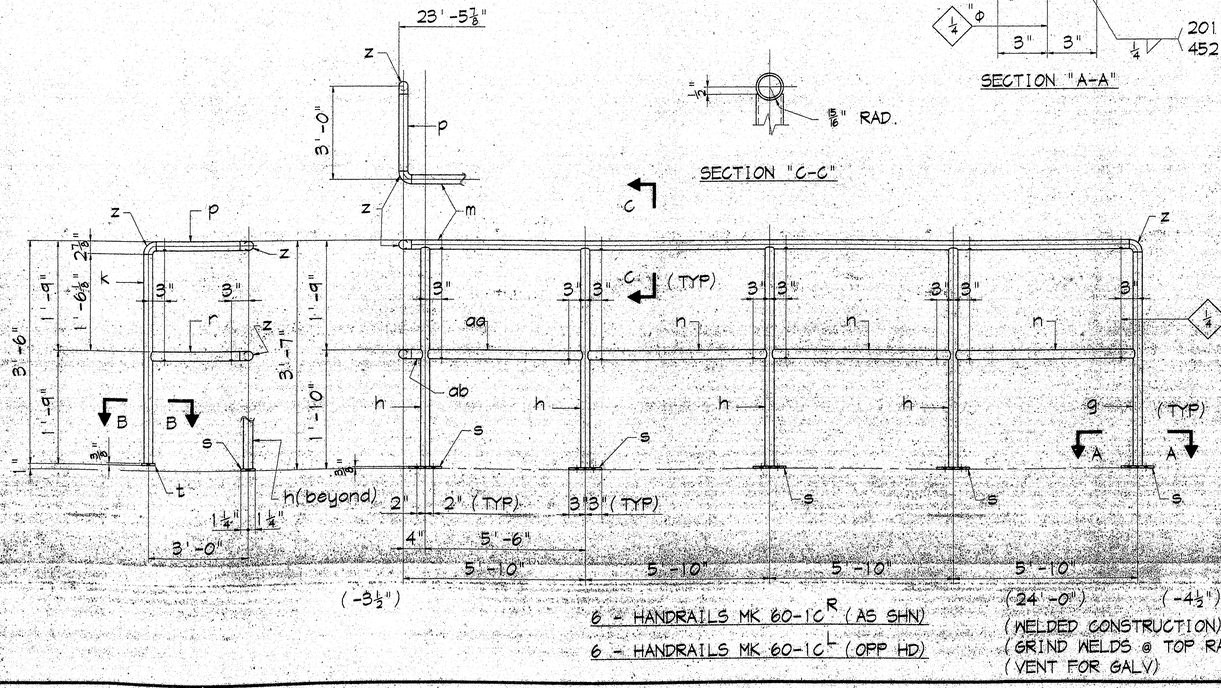


SECTION "A-A"



SECTION "B-B"

SECTION "C-C"



6 - HANDRAILS MK 60-1C^{R} (AS SHN)

6 - HANDRAILS MK 60-1C^{L} (OPP HD)

(WELDED CONSTRUCTION) - (PROCEEDURE 201-C)
(GRIND WELDS @ TOP RAIL SMOOTH)
(VENT FOR GALV)

BILL OF MATERIAL

Seq No.	Seq Quan	Adv mill #	Piece Mark	Minor Mark	Qty. Total	Qty. Unit	Description	Length		Remarks	Steel Grade	Weight Unit	Weight Total
			60-1A		34		SUPPORTS			GALV			
				a	34	1	W6x20	3	5¼	S2E A709	A36		
				b	34	1	TS4x4x$\frac{3}{8}$	4	1⅝	B2E A500	GRB		
				c	34	1	PL$\frac{3}{8}$x7	0	11	A709	A36		
				d	34	1	PL$\frac{3}{8}$x8	0	10	A709	A36		
			60-1C^{R}		6		HANDRAILS			GALV			
			60-1C^{L}		6		HANDRAILS			GALV			
				g	12	1	PIPE 1½"	3	3$\frac{3}{4}$		A53		
				h	48	4		3	5$\frac{3}{16}$				
				k	12	1		3	2$\frac{3}{4}$				
				m	12	1		23	0⅛				
				n	36	3		5	9				
				p	12	1	do	2	8⅛		do		
				r	12	1	PIPE 1½"	2	9$\frac{5}{16}$		A53		
				s	60	5	PL$\frac{3}{8}$x2½	0	6	A709	A36		
				t	12	1	PL$\frac{3}{8}$x2½	0	6	A709	A36		
				z	48	4	PIPE 1½" 90°	1"R ELL		WAGNER			
				aa	12	1	PIPE 1½"	5	5		A53		
				ab	12	1	PIPE 1½"	0	1$\frac{9}{16}$		A53		
			60-1D		20		PLATES			GALV			
				w	20	1	PL$\frac{3}{8}$x2½	0	6	A709	A36		

NOTES:
MAT'L: NTD
HOLES: NTD
FINISH: GALV
REF: EW1 THRU EW8

EAST COAST STEEL
BRIDGE DIVISION
☑ FOR APPROVAL ☐ RESUBMITTAL
NOV 8 1995
☐ APPROVED ☐ APPROVED AS NOTED
☐ RELEASED FOR FAB. BY: AWL

RELEASED FOR APPROVAL
BY RM DATE 11-6-95

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⚠	
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# & Date	Description

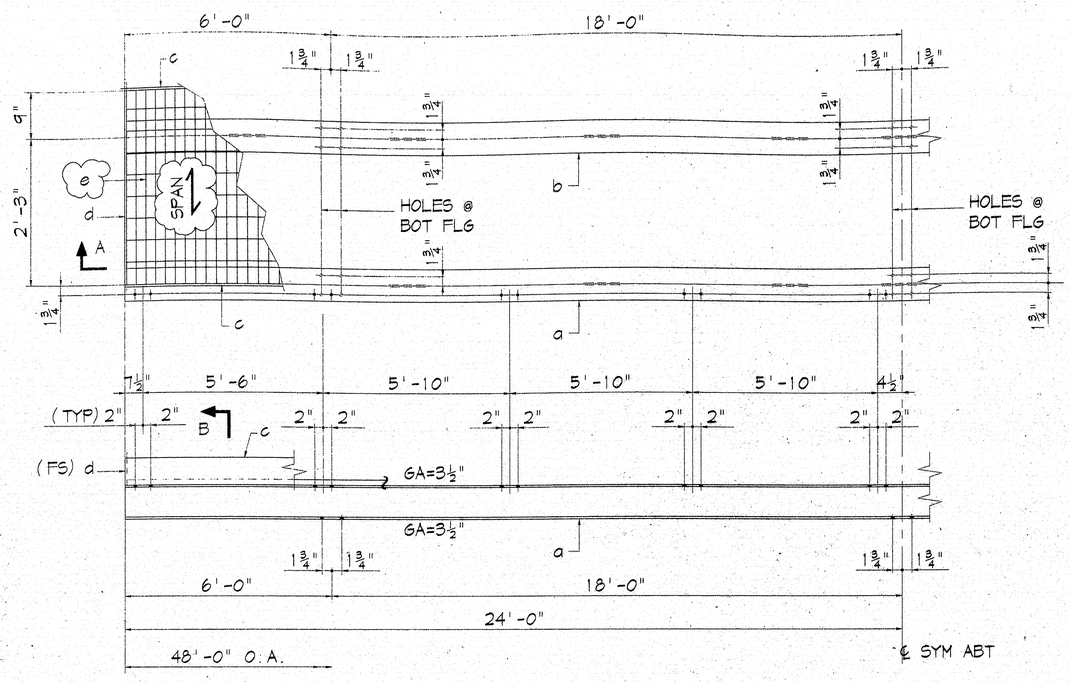
EAST COAST STEEL INC.
Corporate Headquarters
RR 1 Box 560 Route 31
Greenfield, New Hampshire
03047
603-547-3316

ECS

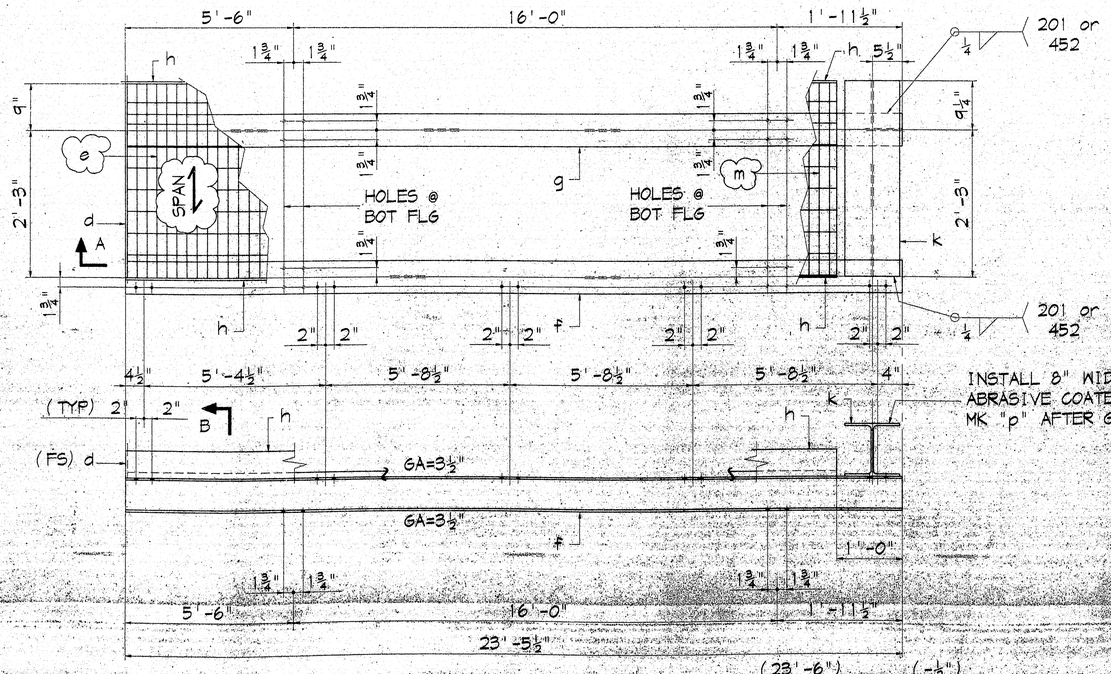
EAST COAST STEEL INC.
Bridge Division
1 Wallace Ave
South Portland Maine
04106
207-773-1862

Qty.	Date:	Issued To:	For:
		123-128	

Project:	DONALD V. CARTER BRIDGE KENNEBEC RIVER
Location:	WATERVILLE/WINSLOW PROJECT DPD-0009(002)
Architect:	HNTB MAINE DEPARTMENT OF TRANSFORTATION
Customer:	CIANBRO CORPORATION
Drawing Title:	CATWALK SUPPORTS AND HANDRAILS
Drawn By: DAVE 7/20/95	Job Number: 95-05-1215
Checked By: RC	Sheet Number: 60-1

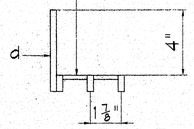


6 - CATWALKS MK 60-2A



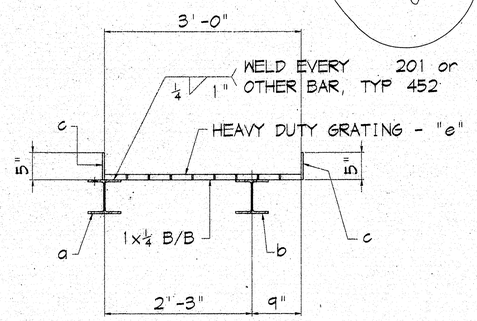
4 - CATWALKS MK 60-2B

HEAVY DUTY GRATING
1x¼ B/B @ 1⅞ C/C
W/ CROSSBARS ⅝"Φ OR ⅝"
TWISTED @ 4"C/C "e" OR "m"



SECTION "A"

W10x49
per Columbus
Request
OK



SECTION "B"

INSTALL 8" WIDE NON-SLIP ABRASIVE COATED FABRIC. MK "p" AFTER GALVANIZING

BILL OF MATERIAL

Seq No.	Seq Quan	Adv mill #	Piece Mark	Minor Mark	Qty. Total	Qty. Unit	Description	Length		Remarks	Steel Grade	Weight Unit	Weight Total
			60-2A		6		CATWALKS			GALV			
				a	6	1	W6x20	48	0	A709	A36		
				b	6	1	W6x20	48	0	A709	A36		
				c	12	2	PL⅜x5	48	0	A709	A36		
				d	12	2	PL⅜x5	3	0	A709	A36		
	SEE SECT A			e	96	16	GRAT'G'x35⅞	3	0	A709	A36		
			60-2B		4		CATWALKS			GALV			
				f	4	1	W6x20	23	5½	A709	A36		
				g	4	1	W6x20	23	5½	A709	A36		
				h	8	2	PL⅜x5	22	5½	A709	A36		
				d	4	1	PL⅜x5	3	0	A709	A36		
	SEE SECT A			e	28	7	GRAT'G'x35⅞	3	0	A709	A36		
				k	4	1	HP10x42	3	0½	A709	A36		
	SEE SECT A			m	4	1	GRAT'G'x17⅞	3	0	A709	A36		
				p	4	1	8" WIDE NON-SLIP ABRASIVE COATED FABRIC x 3'-0½						

NOTES:
MAT'L: NTD
HOLES: 9/16"Φ UN.
FINISH: GALV
REF: EW1 THRU EW3

EAST COAST STEEL BRIDGE DIVISION
☑ FOR APPROVAL ☐ RESUBMITTAL
NOV 8 1995
☐ APPROVED ☐ APPROVED AS NOTED
☐ RELEASED FOR FAB. BY:

RELEASED FOR APPROVAL
BY KT DATE 11-6-95

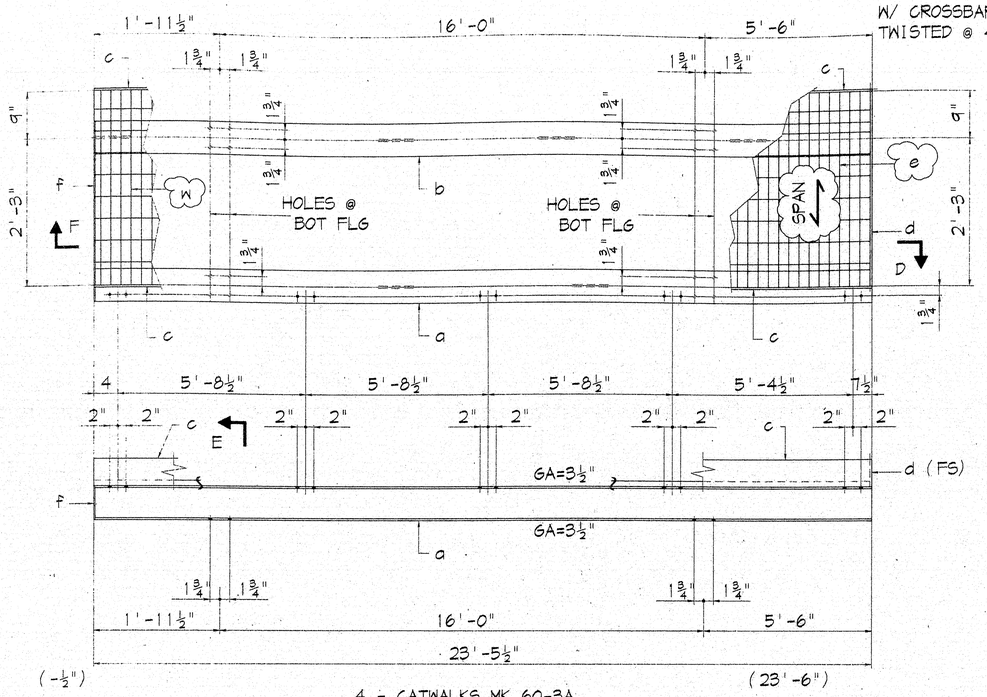
# & Date	Description
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EAST COAST STEEL INC.
Corporate Headquarters
RR 1 Box 560 Route 31
Greenfield, New Hampshire
03047
603-547-3316

EAST COAST STEEL INC.
Bridge Division
1 Wallace Ave
South Portland Maine
04106
207-773-1862

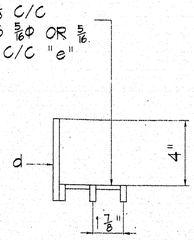
Qty.	Date:	Issued To:	For:
			123-129

Project: DONALD V. CARTER BRIDGE KENNEBEC RIVER
Location: WATERVILLE/WINSLOW PROJECT: DPB-0009(002)
Architect: HNTB MAINE DEPARTMENT OF TRANSPORTATION
Customer: CIANBRO CORPORATION
Drawing Title: CATWALK AND HANDRAILS
Drawn By: DAVE 7/20/95
Checked By: RC
Job Number: 95-05-1215
Sheet Number: 60-2

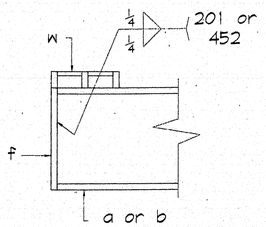


4 - CATWALKS MK 60-3A

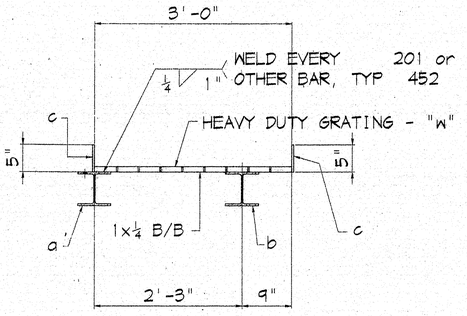
HEAVY DUTY GRATING
1x¼ B/B @ 1⅞ C/C
W/ CROSSBARS 5/16Φ OR 5/16 TWISTED @ 4"C/C "e"



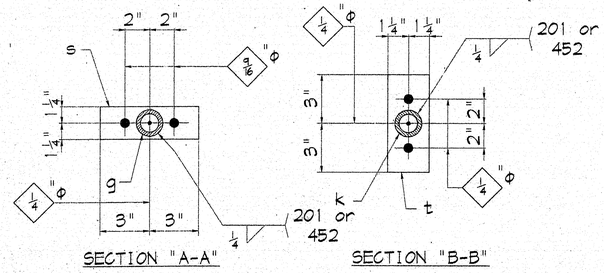
SECTION "D"



SECTION "F"

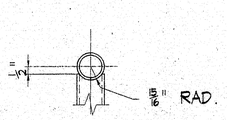


SECTION "E"

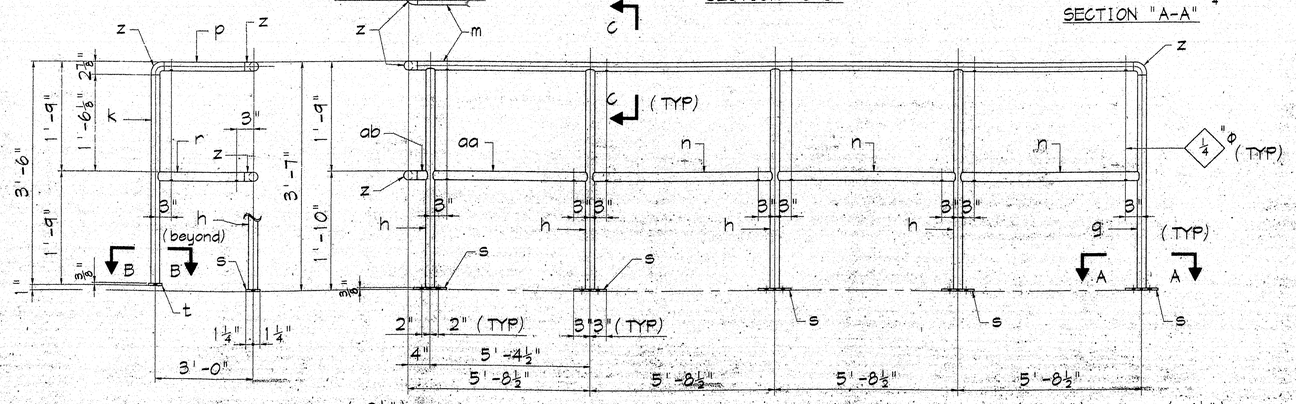


SECTION "A-A"

SECTION "B-B"



SECTION "C-C"



4 - HANDRAILS MK 60-3B^{R} (AS SHN)

4 - HANDRAILS MK 60-3B^{L} (OPP HD)

(WELDED CONSTRUCTION) - (PROCEDURE 201-C)
(GRIND WELDS @ TOP RAIL SMOOTH)
(VENT FOR GALV)

BILL OF MATERIAL

Seq No.	Seq Quan	Adv mill #	Piece Mark	Minor Mark	Qty. Total	Qty. Unit	Description	Length		Remarks	Steel Grade	Weight Unit	Weight Total
			60-3A		4		CATWALKS			GALV			
				a	4	1	M6x20	23	5¼	A709	A36		
				b	4	1	M6x20	23	5¼	A709	A36		
				c	8	2	PL⅜x5	22	5½	A709	A36		
				d	4	1	PL⅜x5	3	0	A709	A36		
				e	28	7	GRAT'G 6x35⅞	3	0	A709	A36		
				f	4	1	PL½x6¼	3	3	A709	A36		
				w	4	1	GRAT'G 6x28⅜	3	0	A709	A36		
			60-3B^{R}		4		HANDRAILS						
			60-3B^{L}		4		HANDRAILS						
				g	8	1	PIPE 1½"	3	3⅜		A53		
				h	32	4		3	5⅜		A53		
				k	8	1		3	2¾		A53		
				m	8	1		22	6⅛		A53		
				n	24	3		5	7½		A53		
				p	8	1	do	2	8⅛		A53		
				r	8	1	PIPE 1½"	2	9⅞		A53		
				s	40	5	PL⅜x2½	0	6	A709	A36		
				t	8	1	PL⅜x2½	0	6	A709	A36		
				z	32	4	PIPE 1½"90° 1"R ELL			MAGNER			
				aa	8	1	PIPE 1½"	5	3½		A53		
				ab	8	1	PIPE 1½"	0	1⅜		A53		
							FIELD BOLTS						
					472		½"Φ BOLT	0	1½	GALV	A325		
					40		½"Φ BOLT	0	2½	GALV	A325		
					512		½"Φ HHN			GALV	A563		
					512		½"Φ HW			GALV	F436		

NOTES:
MAT'L: NTD
HOLES: 9/16"Φ UN
FINISH: GALV
REF: EW1 THRU EW8

EAST COAST STEEL
BRIDGE DIVISION
☑ FOR APPROVAL ☐ RESUBMITTAL
NOV 8 1995
☐ APPROVED ☐ APPROVED AS NOTED
☐ RELEASED FOR FAB. BY:

RELEASED FOR APPROVAL
BY: RM DATE 11-6-95

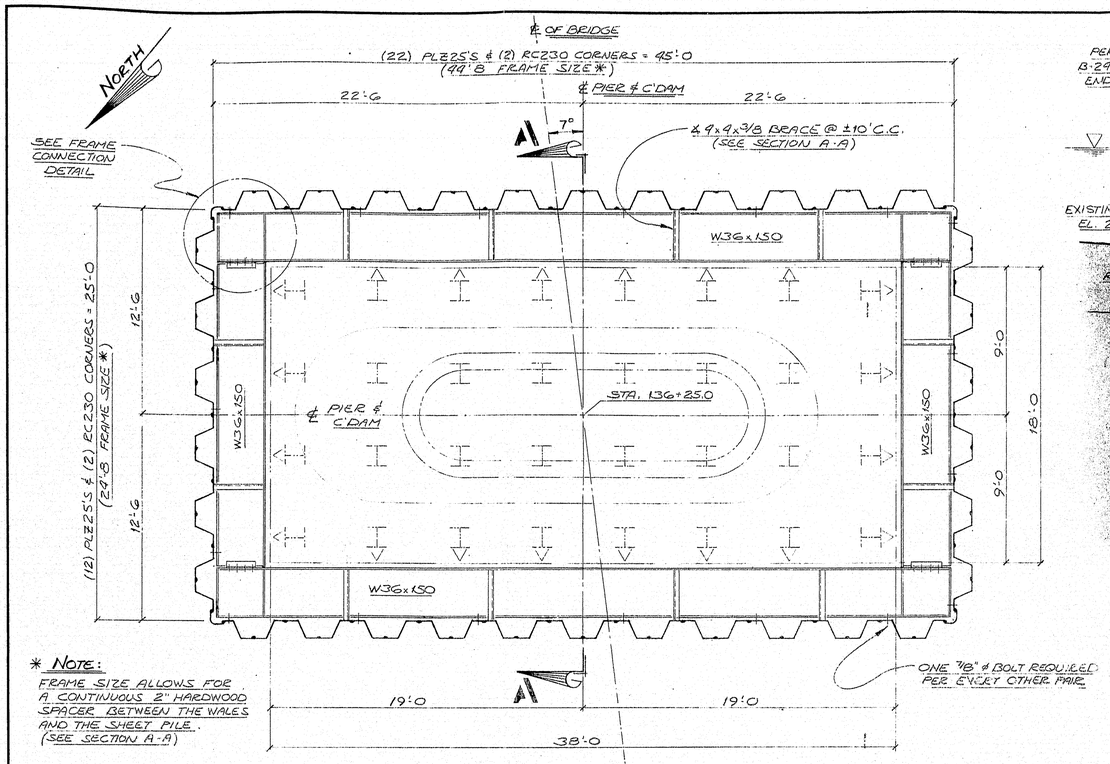
# & Date	Description
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EAST COAST STEEL INC.
Corporate Headquarters
RR 1 Box 560 Route 31
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03047
603-547-3316

EAST COAST STEEL INC.
Bridge Division
1 Wallace Ave
South Portland Maine
04106
207-773-1862

Qty.	Date:	Issued To:	For:
		123-130	

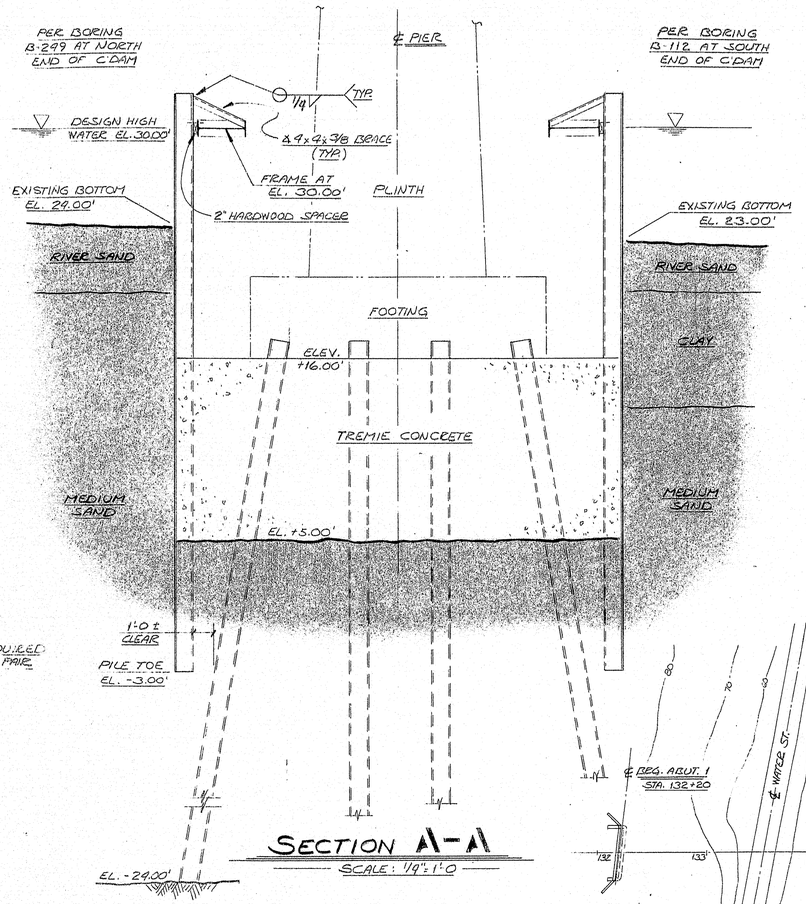
Project: DONALD V. CARTER BRIDGE KENNEBEC RIVER
Location: WATERVILLE/WINSLOW PROJECT DPB-0009(002)
Architect: HNTB MAINE DEPARTMENT OF TRANSPORTATION
Customer: GIANDRO CORPORATION
Drawing Title: CATWALK AND HANDRAILS
Drawn By: DAVE 7/20/95 Job Number: 95-05-1215 Sheet Number: 60-3
Checked By: RC



PLAN VIEW OF PIER 2 COFFERDAM

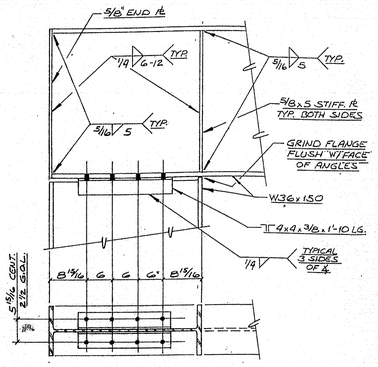
SCALE: 1/9" 1'-0

*** NOTE:**
FRAME SIZE ALLOWS FOR A CONTINUOUS 2" HARDWOOD SPACER BETWEEN THE WALES AND THE SHEET PILE. (SEE SECTION A-9)



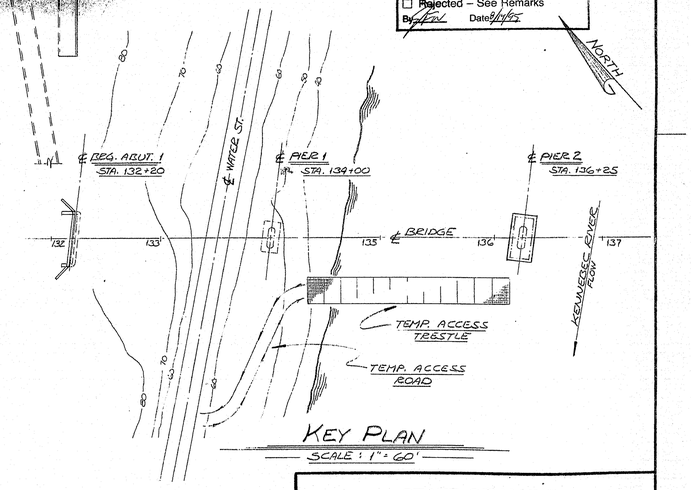
SECTION A-A

SCALE: 1/9" 1'-0



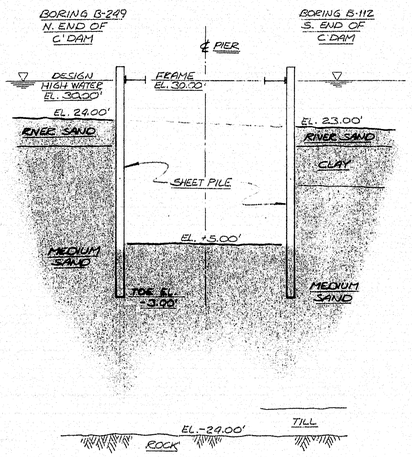
FRAME CONNECTION

SCALE: 3/4" 1'-0



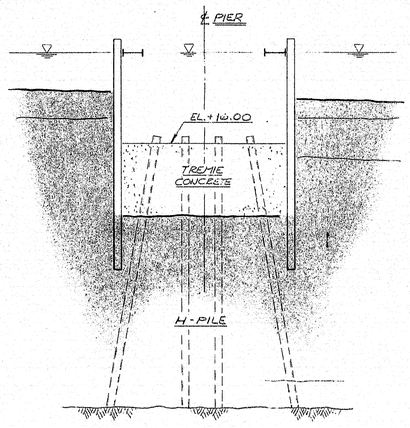
KEY PLAN

SCALE: 1" 60'



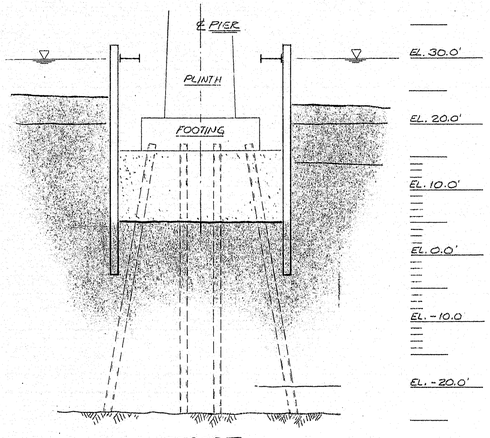
STAGE I

1) SET FRAME WITH SPUD PILES (NOT SHOWN).
2) SET AND DRIVE SHEET PILE.
3) EXCAVATE TO BOTTOM OF TREMIE.



STAGE II

4) DRIVE H-PILE.
5) PLACE TREMIE CONCRETE.



STAGE II

6) DEWATER COFFERDAM.
7) CONSTRUCT FOOTING AND PLINTH.
8) FLOOD COFFERDAM.
9) REMOVE COFFERDAM.

CONSTRUCTION SEQUENCE FOR PIER 2 COFFERDAM

SCALE: 1" 10'

GENERAL NOTES

1) ALL SHEET PILE SHALL BE PLZ25'S.
2) ALL STRUCTURAL STEEL SHALL BE ASTM A36.
3) ALL WELDING ELECTRODES SHALL BE E70XX.
4) ALL BOLTS SHALL BE 7/8" ø ASTM A325.

SHOP DRAWING REVIEW
HOWARD, NEEDLES, TAMMEN, & BERGENDOFF

Review is for general compliance with contract documents. Sole responsibility for correctness of dimensions, details, quantities and safety during fabrication and erection shall remain with the Contractor.

- [X] No Exceptions Taken
- [ ] Make Corrections Noted
- [ ] Amend and Resubmit
- [ ] Rejected – See Remarks

By: [illegible] Date: 8/1/95

ALAN D. TISYAK REGISTERED PROFESSIONAL ENGINEER 6724 STATE OF MAINE

Alan J. Tisyak, P.E.
July 31, 1995

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
PROJECT NUMBRER DPB-0009(002)
PIN 000566.4

123-28

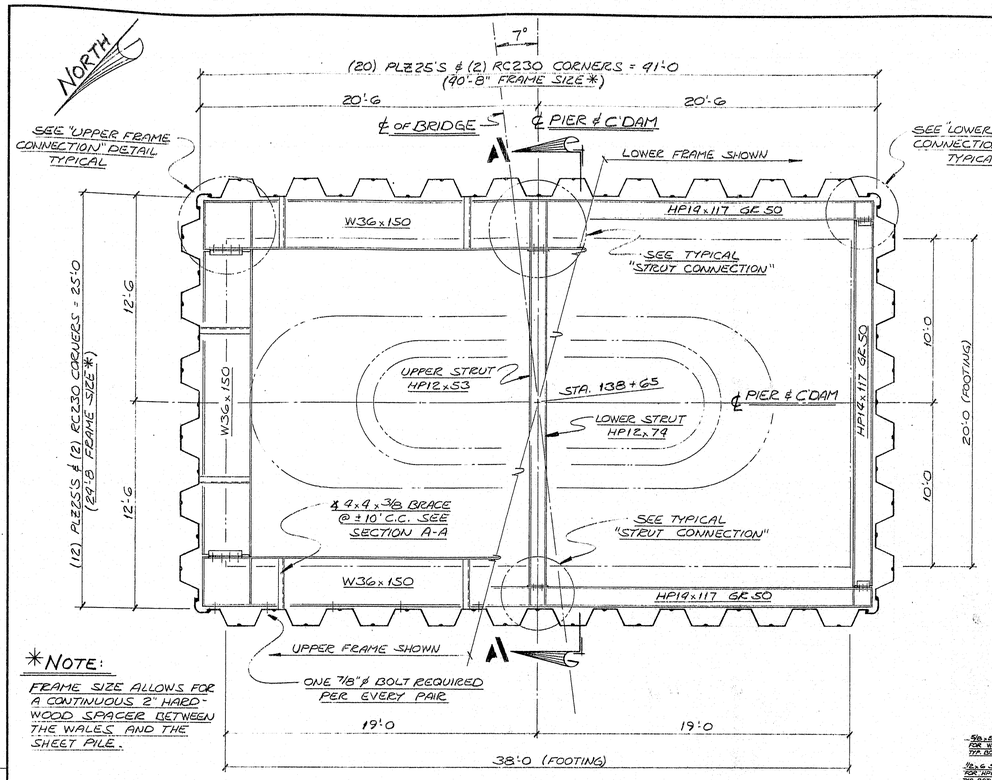
REV.	DATE	BY	DESCRIPTION
0	7-31-95	JH/AF	ISSUED FOR APPROVAL

WORK: DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER
WATERVILLE-WINSLOW BRIDGE
KENNEBEC CO. — MAINE
DRAWING
PIER 2 COFFERDAM

SCALE: NOTED	CIANBRO CORPORATION PITTSFIELD MAINE
DATE: 7-31-95	
DRAWN: JH/AJT	
CHECK: AF	

SHEET 1 OF 1
JOB 105026

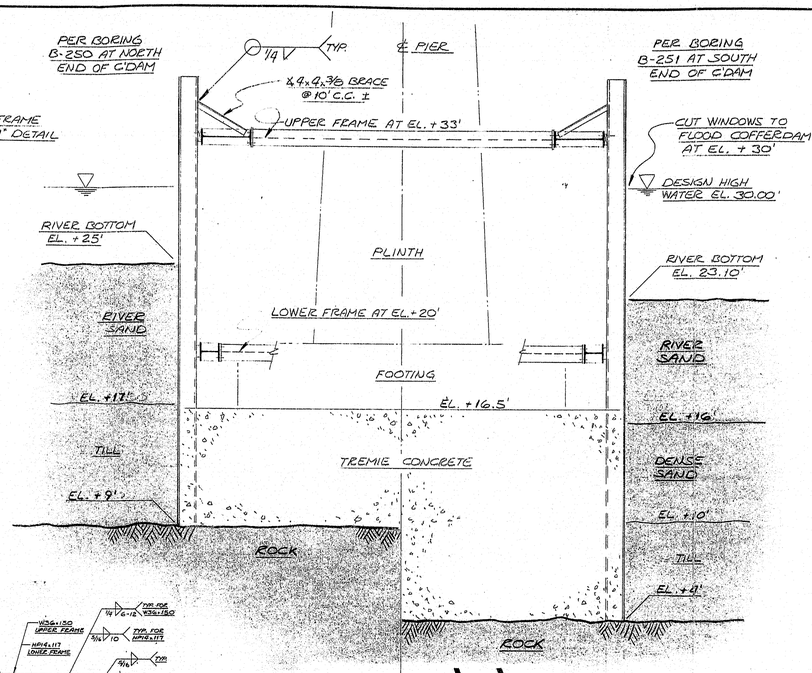
B03403



PLAN VIEW OF PIER 3 COFFERDAM

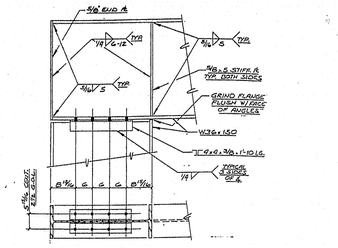
SCALE: 1/4" = 1'-0

*NOTE:
FRAME SIZE ALLOWS FOR A CONTINUOUS 2" HARDWOOD SPACER BETWEEN THE WALES AND THE SHEET PILE.



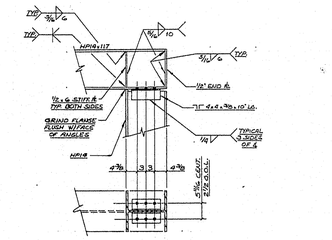
SECTION A-A

SCALE: 1/4" = 1'-0



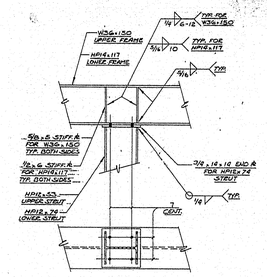
UPPER FRAME CONNECTION

SCALE: 1/2" = 1'-0



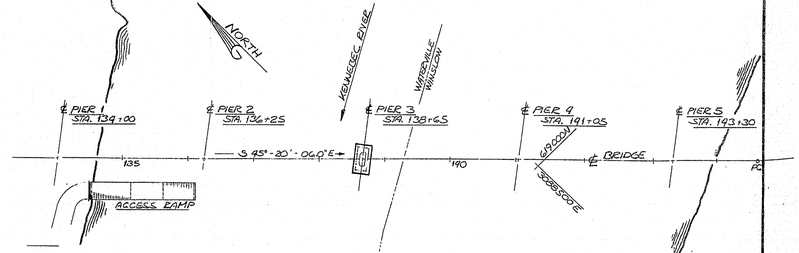
LOWER FRAME CONNECTION

SCALE: 1/2" = 1'-0



STRUT CONNECTION

SCALE: 1/2" = 1'-0

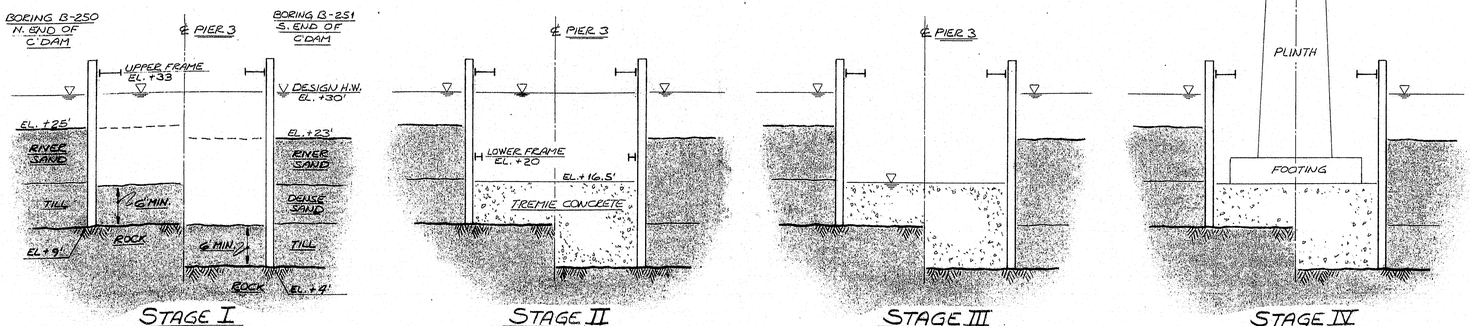


KEY PLAN

SCALE: 1" = 100'

GENERAL NOTES

1) ALL SHEET PILE SHALL BE PLZ25.
2) ALL STRUCTURAL STEEL SHALL BE ASTM A36 OR A588 U.N.O.
3) ALL WELDING ELECTRODES SHALL BE E70XX.
4) ALL BOLTS SHALL BE 7/8" ϕ ASTM A325



STAGE I

1) SET FRAME WITH SPUD PILES (NOT SHOWN)
2) SET AND DRIVE SHEET PILE
3) PARTIAL EXCAVATION (6' TOE MIN.)

STAGE II

4) INSTALL LOWER FRAME
5) FINISH EXCAVATION IN WET
6) PLACE TREMIE CONCRETE TO EL. +16.5'

STAGE III

7) DEWATER COFFERDAM
8) REMOVE LOWER FRAME
9) REMOVE CENTER STRUT FROM UPPER FRAME

STAGE IV

10) CONSTRUCT FOOTING AND PLINTH
11) FLOOD COFFERDAM
12) REMOVE SHEET PILE AND UPPER FRAME

CONSTRUCTION SEQUENCE FOR PIER 3 COFFERDAM

SCALE: 1" = 10'

SHOP DRAWING REVIEW
HOWARD, NEEDLES, TAMMEN, & BERGENDOFF
Review is for general compliance with contract documents. Bidder responsibility for correctness of dimensions, details, quantities and safety during fabrication and erection shall remain with the Contractor.
☒ No Exceptions Taken
☐ Make Corrections Noted
☐ Amend and Resubmit
☐ Rejected – See Remarks
By: [illegible] Date: 9/14/95

PIER 3, ITEM 511.072

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
PROJECT NUMBER DPB-0009(002)
PIN 000566.4

123-31

REV.	DATE	BY	DESCRIPTION
0	9-14-95	DH/AP	ISSUED FOR APPROVAL

WORK DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER
WATERVILLE - WINSLOW BRIDGE
KENNEBEC CO. MAINE

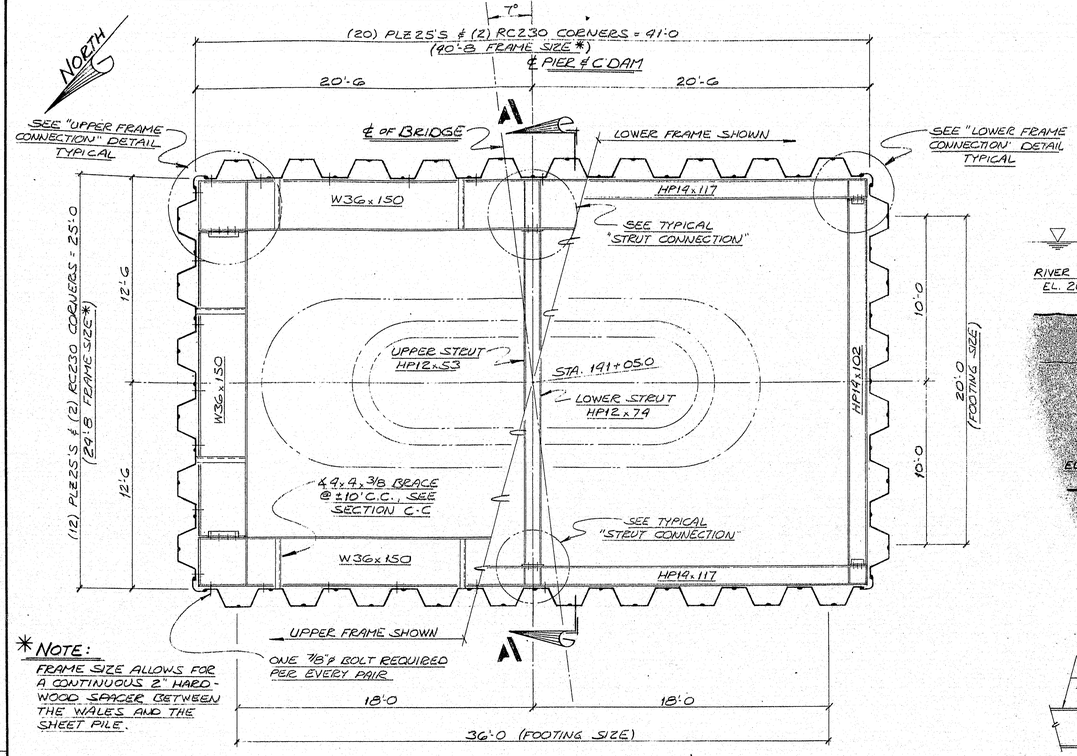
DRAWING PIER 3 COFFERDAM PLAN AND DETAILS

SCALE: NOTED
DATE: 9-14-95
DRAWN: DH/AP
CHECK: AP

CIANBRO CORPORATION
PITTSFIELD, MAINE

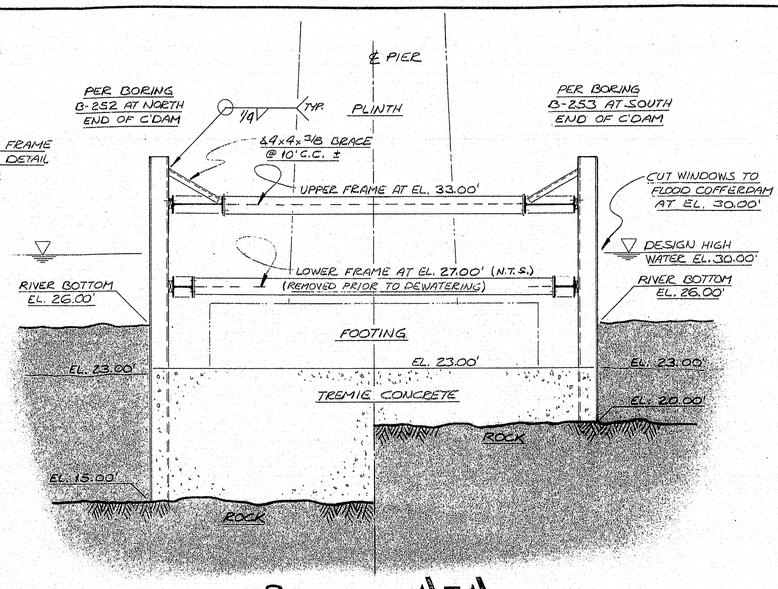
SHEET 1 OF 1
JOB 105026

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
DESIGN SECTION
REGISTERED PROFESSIONAL ENGINEER
SEPT. 14, 1995

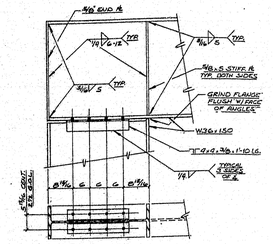


*NOTE:
FRAME SIZE ALLOWS FOR A CONTINUOUS 2" HARD-WOOD SPACER BETWEEN THE WALES AND THE SHEET PILE.

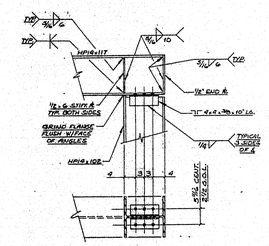
PLAN VIEW OF PIER 4 COFFERDAM
SCALE: 1/4"=1'-0



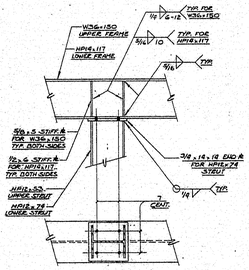
SECTION A-A
SCALE: 1/4"=1'-0



UPPER FRAME CONNECTION
SCALE: 1/2"=1'-0

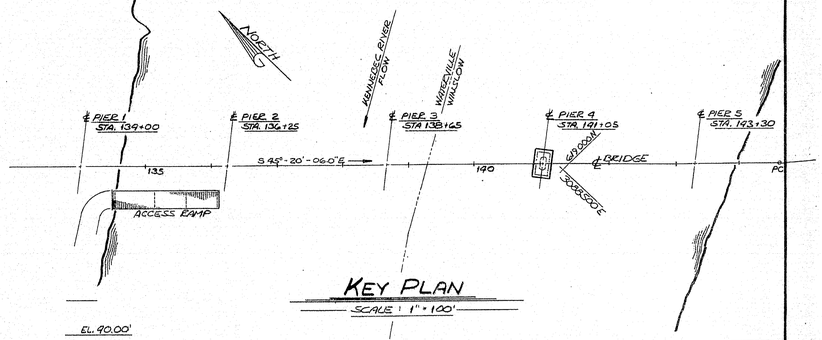


LOWER FRAME CONNECTION
SCALE: 1/2"=1'-0

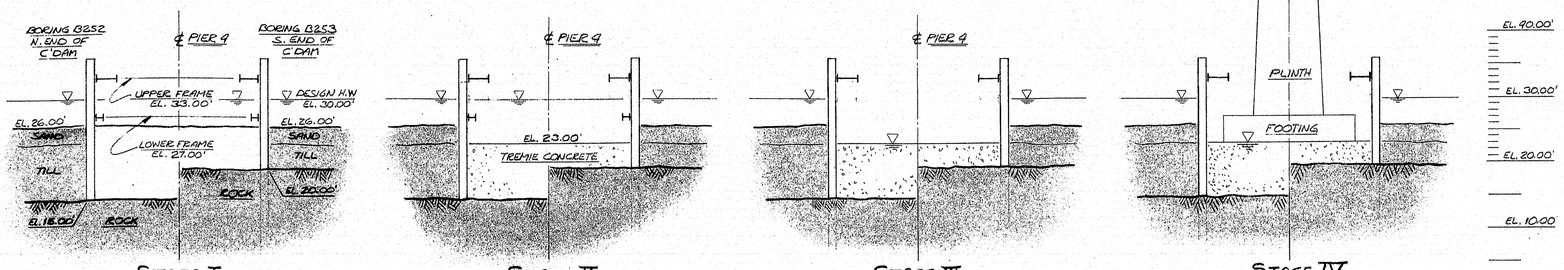


STRUT CONNECTION
SCALE: 1/2"=1'-0

GENERAL NOTES
1) ALL SHEET PILE SHALL BE PLZ25.
2) ALL STRUCTURAL STEEL SHALL BE ASTM A36 or A588.
3) ALL WELDING ELECTRODES SHALL BE E70XX.
4) ALL BOLTS SHALL BE 7/8" ø ASTM A325.



KEY PLAN
SCALE: 1" = 100'



STAGE I
1) SET FRAMES WITH SPUD PILES (NOT SHOWN)
2) SET AND DRIVE SHEET PILE

STAGE II
3) EXCAVATE TO ROCK (VERIFY FINAL TREMIE THICKNESS)
4) PLACE TREMIE CONCRETE TO EL. +23.00'

STAGE III
5) DEWATER
6) REMOVE LOWER FRAME AND STRUT IN UPPER FRAME

STAGE IV
7) CONSTRUCT FOOTING
8) CONSTRUCT PLINTH
9) FLOOD COFFERDAM
10) REMOVE COFFERDAM

CONSTRUCTION SEQUENCE FOR PIER 4 COFFERDAM
SCALE: 1"=10'

SHOP DRAWING REVIEW
HOWARD, NEEDLES, TAMMEN, & BERGENDOFF
Review of this submittal is for compliance with contract documents. Contractor is responsible for correctness of dimensions, design of fabrication and safety during fabrication and erection of the work. Contractor.
☑ No Exceptions Taken
☐ Make Corrections Noted
☐ Amend and Resubmit
☐ Rejected – See Remarks
By DWR Date 9-7-95

PIER 4, ITEM 511.073

ALAN G. FISHER 5721 REGISTERED PROFESSIONAL ENGINEER
ALAN G. FISHER
AUGUST 21, 1995

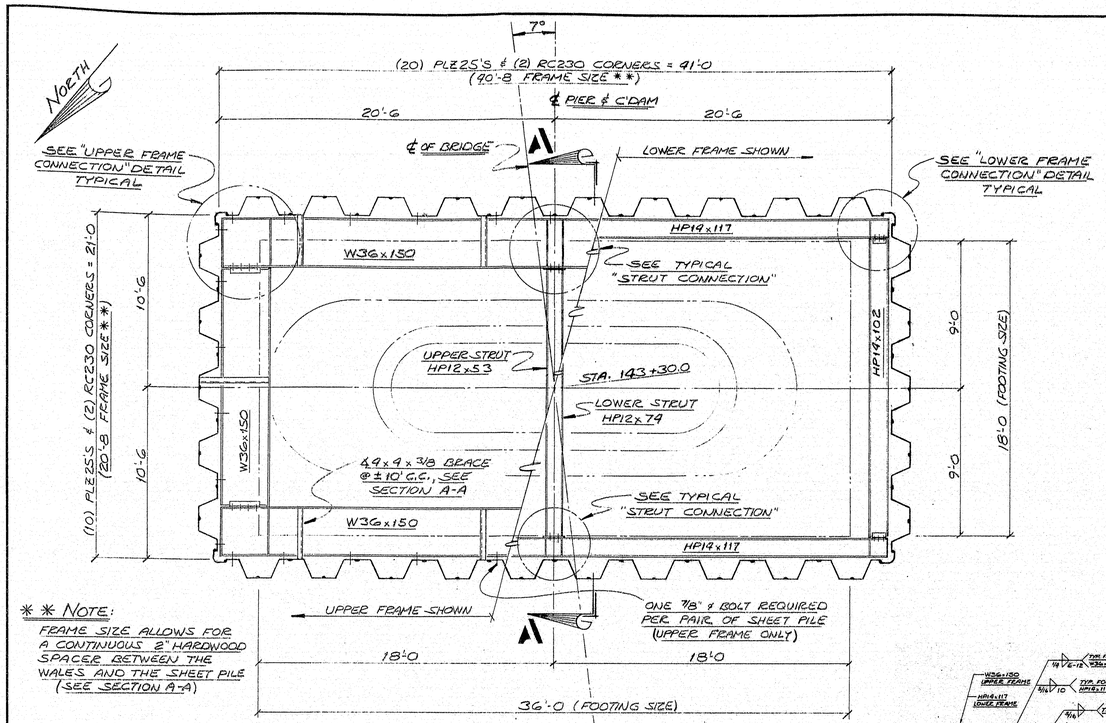
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
PROJECT NUMBRER DPB-0009(002)
PIN 000566.

123-32

REV.	DATE	BY	DESCRIPTION
0	8-21-95	AF	ISSUED FOR APPROVAL

WORK DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER
WATERVILLE - WINSLOW BRIDGE
KENNEBEC CO. MAINE
DRAWING PIER 4 COFFERDAM PLAN AND DETAILS
SCALE: NOTED
DATE: 8-21-95
DRAWN: DJM
CHECK: AF
CIANBRO CORPORATION PITTSFIELD MAINE
SHEET 1 OF 1
JOB 105026

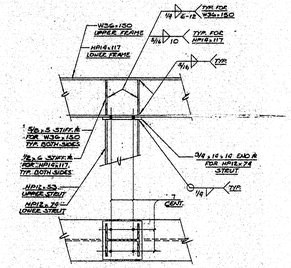
POST 8/25/95



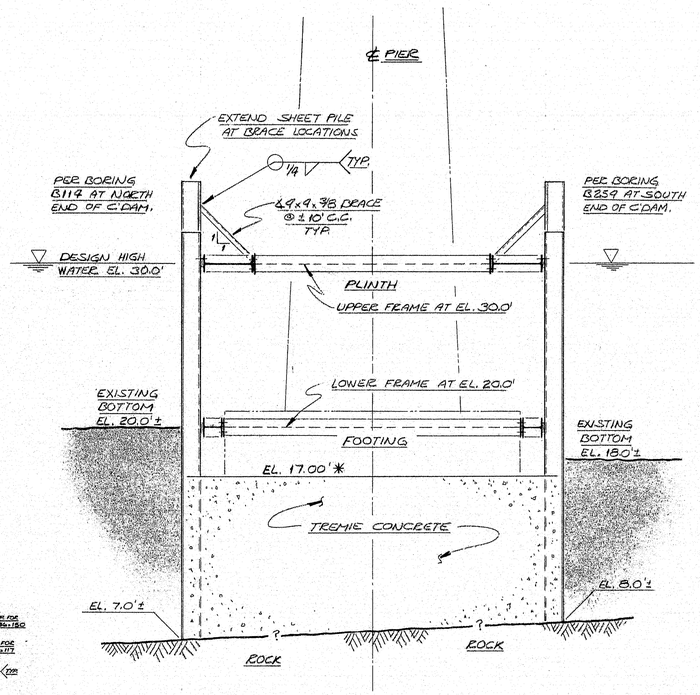
PLAN VIEW OF PIER 5 COFFERDAM
SCALE: 1/9" = 1'-0

GENERAL NOTES

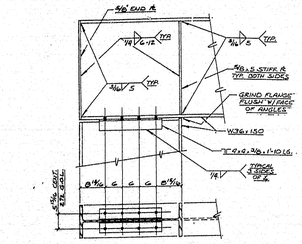
1) ALL SHEET PILE SHALL BE PLZ25.
2) ALL STRUCTURAL STEEL SHALL BE ASTM A36 or A588.
3) ALL WELDING ELECTRODES SHALL BE E70XX.
4) ALL BOLTS SHALL BE 7/8" ø ASTM A325.
* 5) FINAL TOP OF TREMIE ELEVATION WILL BE DETERMINED AFTER ACTUAL ROCK ELEVATION ARE CONFIRMED.



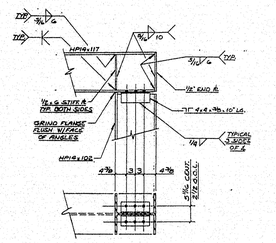
STRUT CONNECTION
SCALE: 1/2" = 1'-0



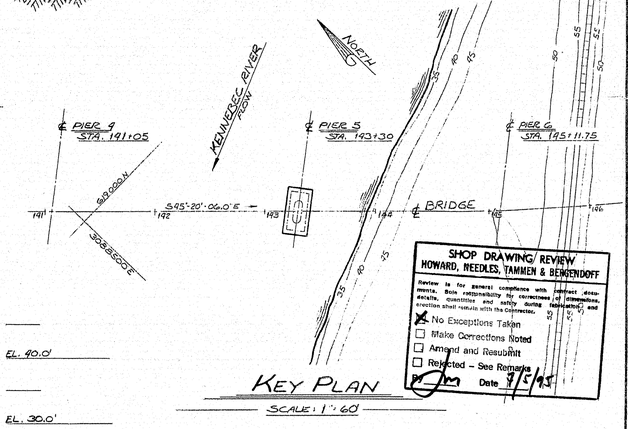
SECTION A-A
SCALE: 1/9" = 1'-0



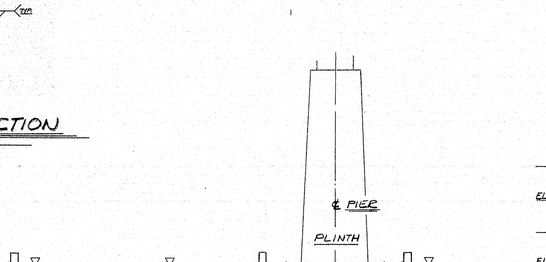
UPPER FRAME CONNECTION
SCALE: 1/2" = 1'-0



LOWER FRAME CONNECTION
SCALE: 1/2" = 1'-0



KEY PLAN
SCALE: 1" = 60'



STAGE I
1) SET FRAMES WITH SPUD PILES (NOT SHOWN)
2) SET AND DRIVE SHEET PILE

STAGE II
3) EXCAVATE TO ROCK
4) PLACE TREMIE CONCRETE TO EL. +17.0'

STAGE III
5) DEWATER
6) REMOVE LOWER FRAME

STAGE IV
7) CONSTRUCT FOOTING
8) CONSTRUCT PLINTH
9) FLOOD COFFERDAM
10) REMOVE COFFERDAM

CONSTRUCTION SEQUENCE FOR PIER 5 COFFERDAM
SCALE: 1" = 10'

PIER 5, ITEM 511.074

ALAN R. FISHER 5774 REGISTERED PROFESSIONAL ENGINEER STATE OF MAINE
JUNE 22, 1995

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
PROJECT NUMBRER DPB-0009(002)
PIN 000566.4

123-33

REV.	DATE	BY	DESCRIPTION
0	6-22-95	JH/AF	ISSUED FOR APPROVAL

WORK DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER
WATERVILLE-WINSLOW BRIDGE
KENNEBEC CO. — MAINE

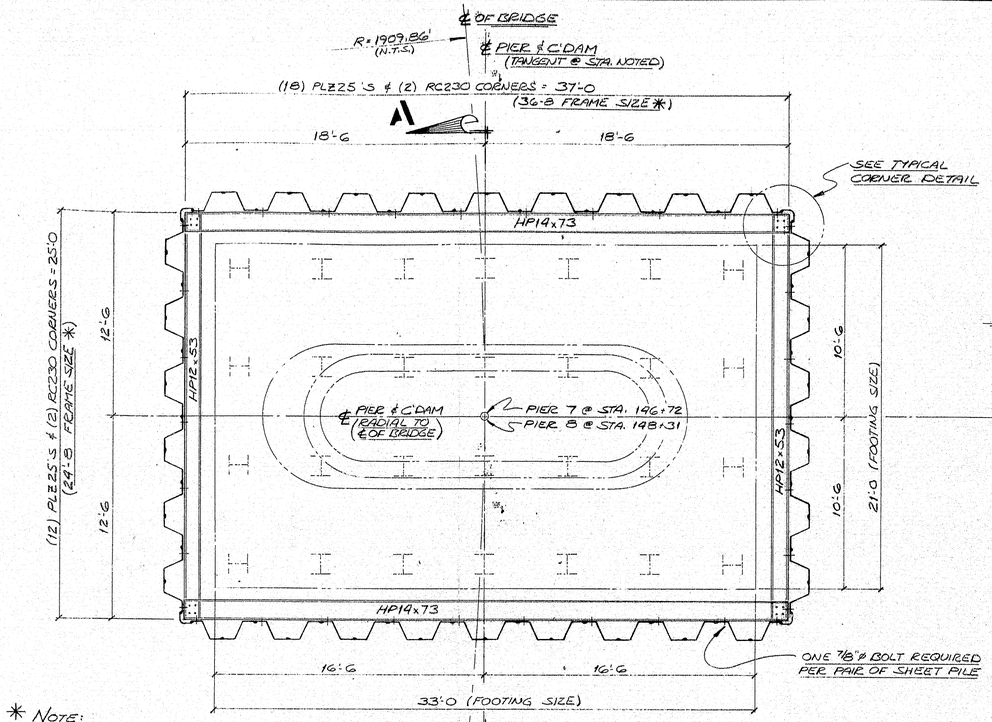
DRAWING PIER 5 COFFERDAM PLAN AND DETAILS

SCALE: NOTED
DATE: 6-22-95
DRAWN: JHART
CHECK: AF

CIANBRO CORPORATION PITTSFIELD, MAINE

SHEET 1 OF 1
JOB 105026

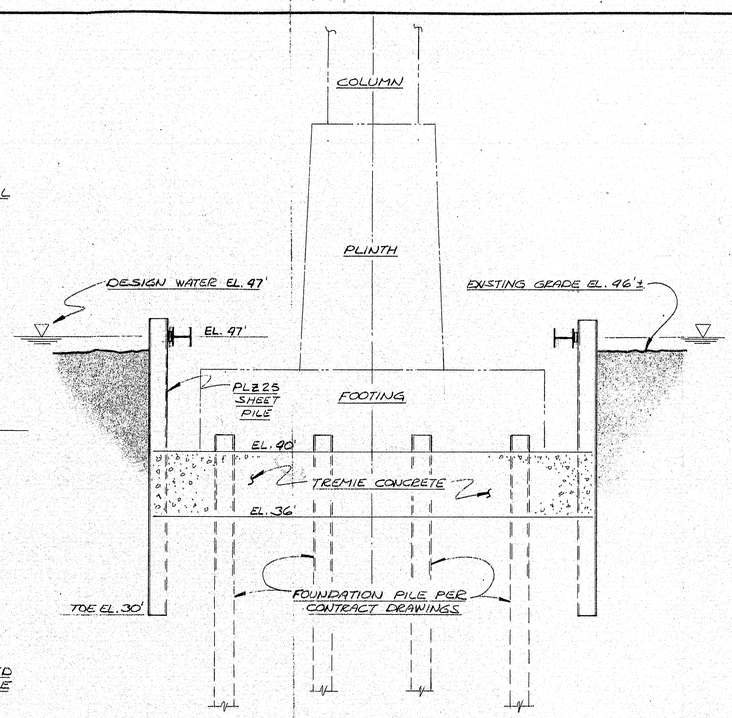
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POF



✳ NOTE:
FRAME SIZE ALLOWS FOR A CONTINUOUS 2" HARDWOOD SPACER BETWEEN THE WALES AND THE SHEET PILE. (SEE SECTION A-A)

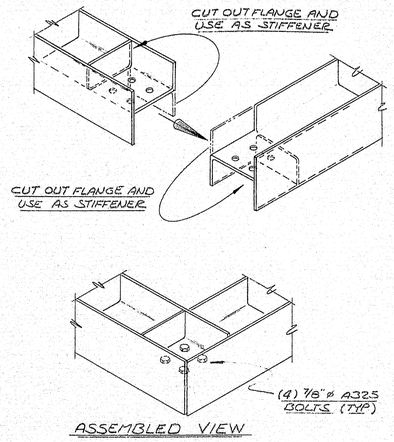
PLAN VIEW OF PIER 7 & 8 COFFERDAM

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

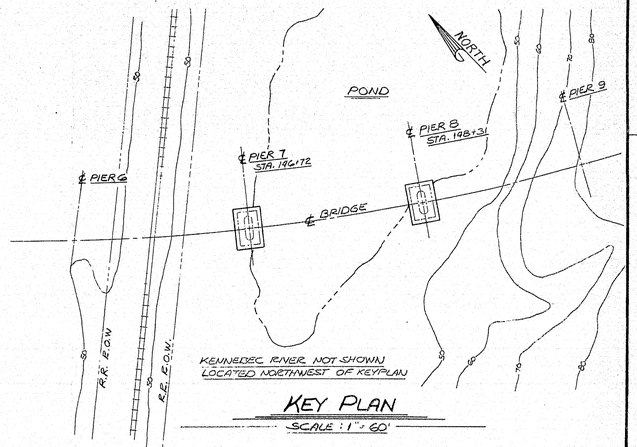


SECTION A-A

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



TYPICAL CORNER DETAIL

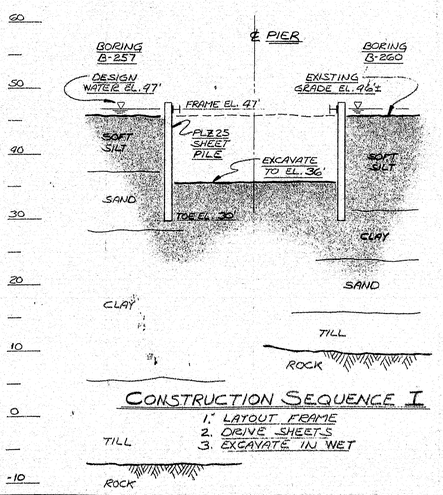


KEY PLAN

SCALE: 1" = 60'

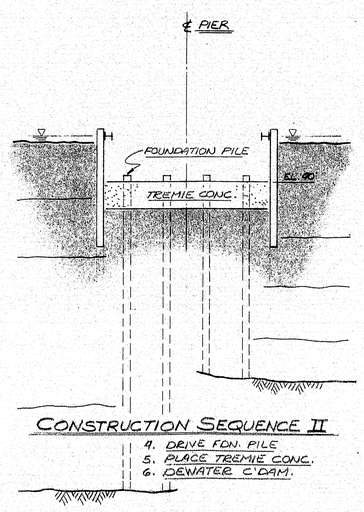
NOTE:

1. ALL SHEET PILE SHALL BE PLZ25.
2. ALL STRUCTURAL STEEL SHALL BE ASTM A36 OR ASTM A588.
3. ALL WELDING ELECTRODES SHALL BE E70XX.
4. ALL BOLTS SHALL BE 7/8" ø ASTM A325.



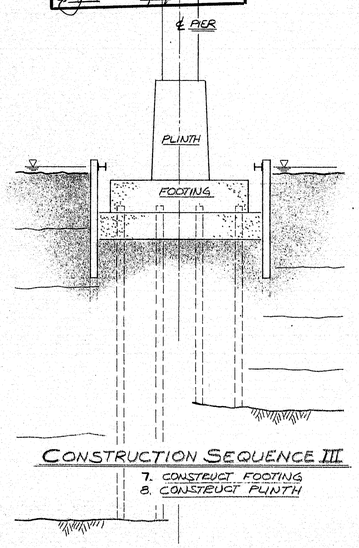
CONSTRUCTION SEQUENCE I

1. LAYOUT FRAME
2. DRIVE SHEETS
3. EXCAVATE IN WET



CONSTRUCTION SEQUENCE II

4. DRIVE FDN. PILE
5. PLACE TREMIE CONC.
6. DEWATER C'DAM.



CONSTRUCTION SEQUENCE III

7. CONSTRUCT FOOTING
8. CONSTRUCT PLINTH

SHOP DRAWING REVIEW
HOWARD, NEEDLES, TAMMEN & BERGENDOFF

Review is for general compliance with contract documents. Sole responsibility for correctness of dimensions, details, materials, and safety during fabrication and erection [illegible] remains with Contractor.

☒ No Exceptions Taken
☐ Make Corrections Noted
☐ Amend and Resubmit
☐ Rejected – See Remarks
By [illegible] Date 6/20/95

PIER 7, ITEM 511.075
PIER 8, ITEM 511.076

ALAN D. FISHER 6711 REGISTERED PROFESSIONAL ENGINEER STATE OF MAINE
JUNE 5, 1995

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
PROJECT NUMBER DPB-0009(002)
PIN 000566.4

123-34

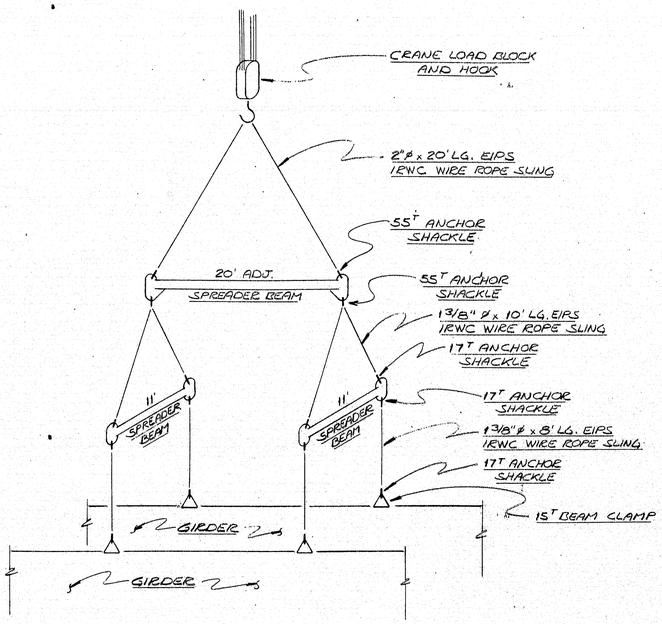
REV.	DATE	BY	DESCRIPTION
0	6-5-95	DTH / AF	ISSUED FOR APPROVAL

WORK DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER
WATERVILLE-WINSLOW BRIDGE
KENNEBEC CO. MAINE
DRAWING PIER 7&8 COFFERDAMS PLAN AND DETAILS

SCALE: NOTED
DATE: 6-5-95
DRAWN: DTH
CHECK: AF

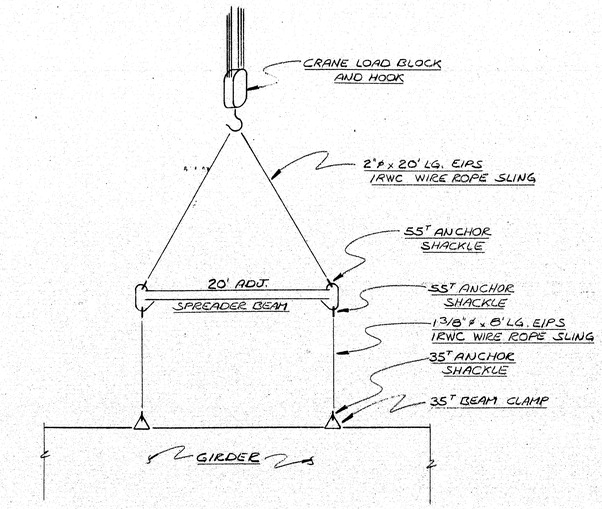
CIANBRO CORPORATION PITTSFIELD, MAINE

SHEET 1 OF 1
JOB 105026



RIGGING SETUP #1

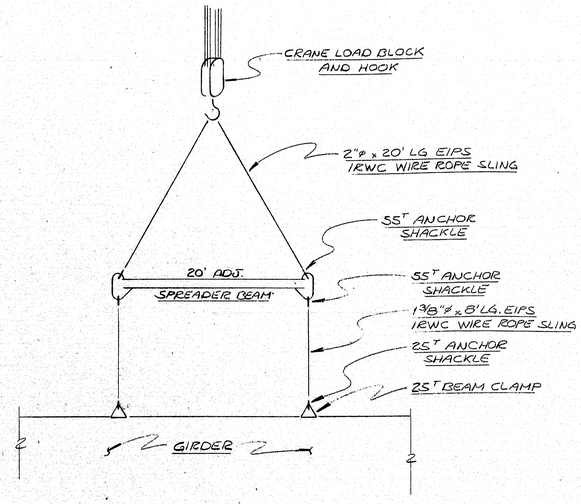
TOTAL RIGGING WEIGHT_____5100 LBS.
RIGGING CAPACITY_____112,000 LBS.
APPROX. RIGGING HEIGHT_____92 FT.



RIGGING SETUP #3-35

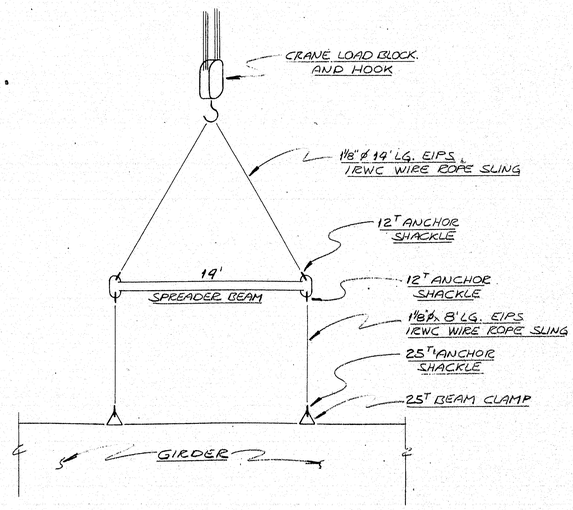
TOTAL RIGGING WEIGHT_____4000 LBS.
RIGGING CAPACITY_____71,000 LBS.
APPROX. RIGGING HEIGHT_____33 FT.

(SPANS 1-6)



RIGGING SETUP #3-25

TOTAL RIGGING WEIGHT_____3500 LBS.
RIGGING CAPACITY_____71,500 LBS.
APPROX RIGGING HEIGHT_____32 FT.



RIGGING SETUP #2

TOTAL RIGGING WEIGHT_____1900 LBS.
RIGGING CAPACITY_____40,700 LBS.
APPROX. RIGGING HEIGHT_____26 FT.

NOTE:
ALL SLINGS ARE 6x19 OR 6x37 CLASSIFICATION EXTRA IMPROVED PLOW STEEL (EIPS) INDEPENDENT WIRE ROPE CORE (IWRC) WITH MECHANICAL SPLICED EYES.

SHOP DRAWING REVIEW
HOWARD, NEEDLES, TAMMEN, & BERGENDOFF
Review is for general compliance with contract documents. Sole responsibility for correctness of dimensions, details, quantities and safety during fabrication and erection shall remain with this Contractor.
☒ No Exceptions Taken
☐ Make Corrections Noted
☐ Amend and Resubmit
☐ Rejected – See Remarks
By DLR Date 12-11-95

STATE OF MAINE JOSEPH P. FOLEY, JR. 6912 REGISTERED PROFESSIONAL ENGINEER
Joseph P. Foley Jr. 9/29/95

SEE GENERAL NOTES ON SHEET #2

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
PROJECT NUMBRER DPB-0009(002)
PIN 000566.4

123-35

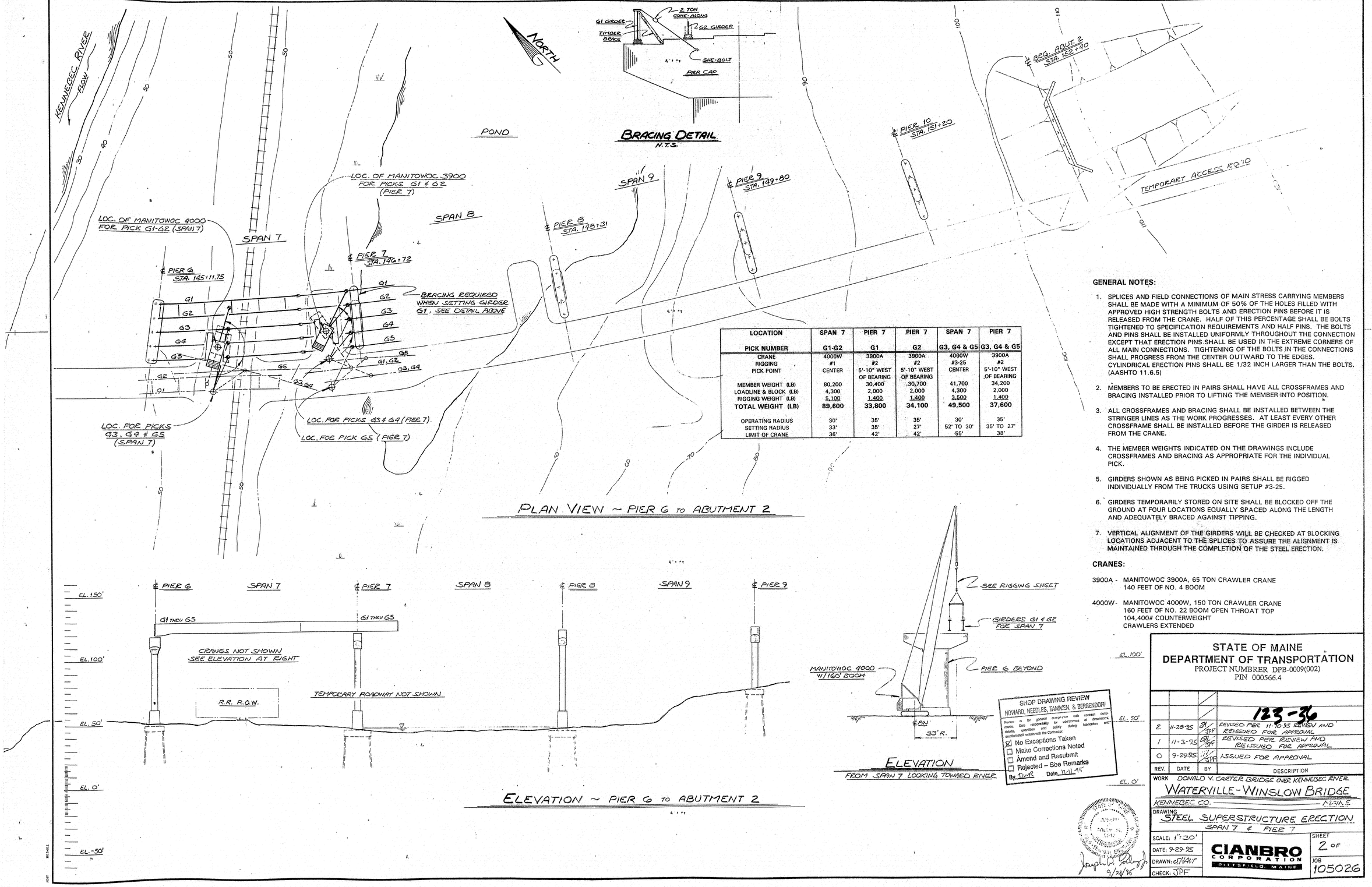
REV.	DATE	BY	DESCRIPTION
2	11-28-95	SM JPF	REVISED PER 11-10-95 REVIEW AND RESISSUED FOR APPROVAL
1	11-3-95	SM JPF	REVISED PER REVIEW AND RESSUED FOR APPROVAL
0	9-29-95	SM JPF	ISSUED FOR APPROVAL

WORK DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER
WATERVILLE-WINSLOW BRIDGE
KENNEBEC CO. ——— MAINE
DRAWING STEEL SUPERSTRUCTURE ERECTION RIGGING

SCALE: ~
DATE: 9-29-95
DRAWN: CTHAUT
CHECK: JPF

CIANBRO CORPORATION PITTSFIELD MAINE

SHEET 1 OF
JOB 105026



LOCATION	SPAN 7	PIER 7	PIER 7	SPAN 7	PIER 7
PICK NUMBER	G1-G2	G1	G2	G3, G4 & G5	G3, G4 & G5
CRANE	4000W	3900A	3900A	4000W	3900A
RIGGING	#1	#2	#2	#3-25	#2
PICK POINT	CENTER	5'-10" WEST OF BEARING	5'-10" WEST OF BEARING	CENTER	5'-10" WEST OF BEARING
MEMBER WEIGHT (LB)	80,200	30,400	30,700	41,700	34,200
LOADLINE & BLOCK (LB)	4,300	2,000	2,000	4,300	2,000
RIGGING WEIGHT (LB)	5,100	1,400	1,400	3,500	1,400
TOTAL WEIGHT (LB)	**89,600**	**33,800**	**34,100**	**49,500**	**37,600**
OPERATING RADIUS	30'	35'	35'	30'	35'
SETTING RADIUS	33'	35'	27'	52' TO 30'	35' TO 27'
LIMIT OF CRANE	36'	42'	42'	55'	38'

GENERAL NOTES:

1. SPLICES AND FIELD CONNECTIONS OF MAIN STRESS CARRYING MEMBERS SHALL BE MADE WITH A MINIMUM OF 50% OF THE HOLES FILLED WITH APPROVED HIGH STRENGTH BOLTS AND ERECTION PINS BEFORE IT IS RELEASED FROM THE CRANE. HALF OF THIS PERCENTAGE SHALL BE BOLTS TIGHTENED TO SPECIFICATION REQUIREMENTS AND HALF PINS. THE BOLTS AND PINS SHALL BE INSTALLED UNIFORMLY THROUGHOUT THE CONNECTION EXCEPT THAT ERECTION PINS SHALL BE USED IN THE EXTREME CORNERS OF ALL MAIN CONNECTIONS. TIGHTENING OF THE BOLTS IN THE CONNECTIONS SHALL PROGRESS FROM THE CENTER OUTWARD TO THE EDGES. CYLINDRICAL ERECTION PINS SHALL BE 1/32 INCH LARGER THAN THE BOLTS. (AASHTO 11.6.5)
2. MEMBERS TO BE ERECTED IN PAIRS SHALL HAVE ALL CROSSFRAMES AND BRACING INSTALLED PRIOR TO LIFTING THE MEMBER INTO POSITION.
3. ALL CROSSFRAMES AND BRACING SHALL BE INSTALLED BETWEEN THE STRINGER LINES AS THE WORK PROGRESSES. AT LEAST EVERY OTHER CROSSFRAME SHALL BE INSTALLED BEFORE THE GIRDER IS RELEASED FROM THE CRANE.
4. THE MEMBER WEIGHTS INDICATED ON THE DRAWINGS INCLUDE CROSSFRAMES AND BRACING AS APPROPRIATE FOR THE INDIVIDUAL PICK.
5. GIRDERS SHOWN AS BEING PICKED IN PAIRS SHALL BE RIGGED INDIVIDUALLY FROM THE TRUCKS USING SETUP #3-25.
6. GIRDERS TEMPORARILY STORED ON SITE SHALL BE BLOCKED OFF THE GROUND AT FOUR LOCATIONS EQUALLY SPACED ALONG THE LENGTH AND ADEQUATELY BRACED AGAINST TIPPING.
7. VERTICAL ALIGNMENT OF THE GIRDERS WILL BE CHECKED AT BLOCKING LOCATIONS ADJACENT TO THE SPLICES TO ASSURE THE ALIGNMENT IS MAINTAINED THROUGH THE COMPLETION OF THE STEEL ERECTION.

CRANES:

3900A - MANITOWOC 3900A, 65 TON CRAWLER CRANE
140 FEET OF NO. 4 BOOM

4000W- MANITOWOC 4000W, 150 TON CRAWLER CRANE
160 FEET OF NO. 22 BOOM OPEN THROAT TOP
104,400# COUNTERWEIGHT
CRAWLERS EXTENDED

SHOP DRAWING REVIEW
HOWARD, NEEDLES, TAMMEN, & BERGENDOFF
Review is for general compliance with contract documents. Data responsibility for corrections of dimensions, details, quantities and safety during fabrication and erection shall remain with the Contractor.
☒ No Exceptions Taken
☐ Make Corrections Noted
☐ Amend and Resubmit
☐ Rejected – See Remarks
By: DWR Date: 12-11-95

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
PROJECT NUMBER DPB-0009(002)
PIN 000566.4

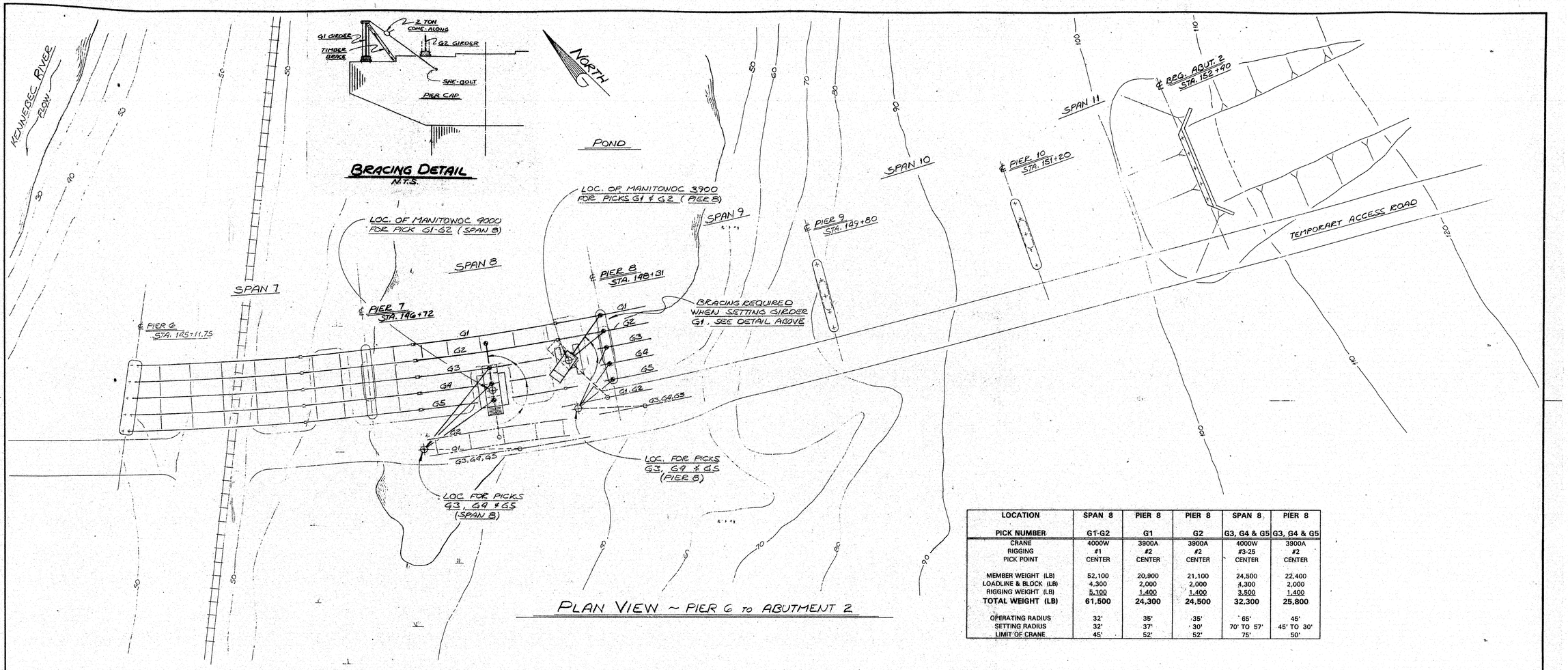
123-36

REV.	DATE	BY	DESCRIPTION
2	11-28-95	DH / JPF	REVISED PER 11-9-95 REVIEW AND REISSUED FOR APPROVAL
1	11-3-95	DH / JPF	REVISED PER REVIEW AND REISSUED FOR APPROVAL
0	9-29-95	JPF	ISSUED FOR APPROVAL

WORK DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER
WATERVILLE-WINSLOW BRIDGE
KENNEBEC CO. — MAIN. S
DRAWING STEEL SUPERSTRUCTURE ERECTION
SPAN 7 & PIER 7
SCALE: 1"=30'
DATE: 9-29-95
DRAWN: CHART
CHECK: JPF
CIANBRO CORPORATION PITTSFIELD, MAINE
SHEET 2 OF
JOB 105026

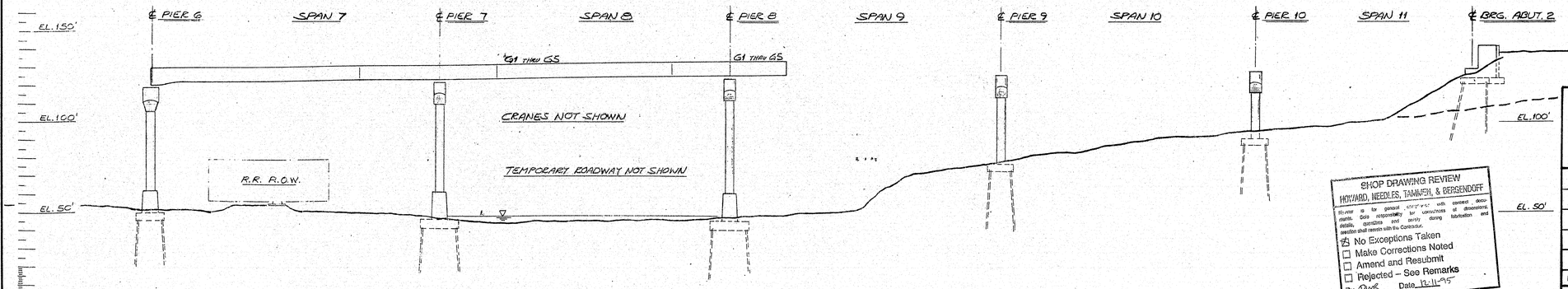
STATE OF MAINE — JOSEPH P. FALLON — 5716 — REGISTERED PROFESSIONAL ENGINEER
9/29/95

BRACING DETAIL
N.T.S.



PLAN VIEW ~ PIER 6 TO ABUTMENT 2

LOCATION	SPAN 8	PIER 8	PIER 8	SPAN 8	PIER 8
PICK NUMBER	G1-G2	G1	G2	G3, G4 & G5	G3, G4 & G5
CRANE	4000W	3900A	3900A	4000W	3900A
RIGGING	#1	#2	#2	#3-25	#2
PICK POINT	CENTER	CENTER	CENTER	CENTER	CENTER
MEMBER WEIGHT (LB)	52,100	20,900	21,100	24,500	22,400
LOADLINE & BLOCK (LB)	4,300	2,000	2,000	4,300	2,000
RIGGING WEIGHT (LB)	5,100	1,400	1,400	3,500	1,400
TOTAL WEIGHT (LB)	61,500	24,300	24,500	32,300	25,800
OPERATING RADIUS	32'	35'	35'	65'	45'
SETTING RADIUS	32'	37'	30'	70' TO 57'	45' TO 30'
LIMIT OF CRANE	45'	52'	52'	75'	50'



ELEVATION ~ PIER 6 TO ABUTMENT 2

SHOP DRAWING REVIEW
HOWARD, NEEDLES, TAMMEN, & BERGENDOFF
We have reviewed this shop drawing for general conformance with contract documents. We assume no responsibility for correctness of dimensions, details, quantities and safety during fabrication and erection shall remain with the Contractor.
☒ No Exceptions Taken
☐ Make Corrections Noted
☐ Amend and Resubmit
☐ Rejected – See Remarks
By DWK Date 12-11-95

STATE OF MAINE
JOSEPH P. FOLEY, JR. 6812
REGISTERED PROFESSIONAL ENGINEER
9/29/95

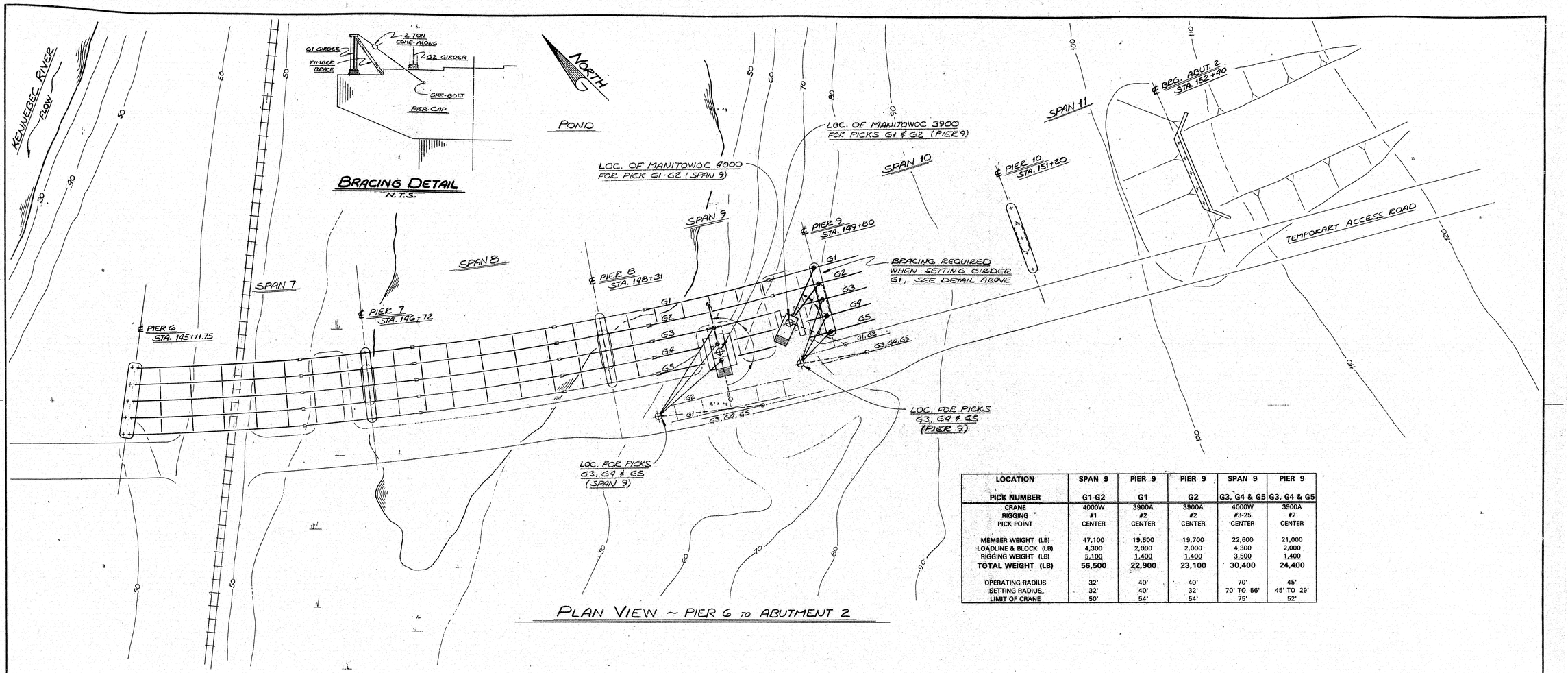
SEE GENERAL NOTES ON SHEET #2

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
PROJECT NUMBRER DPB-0009(002)
PIN 000566.4

123-37

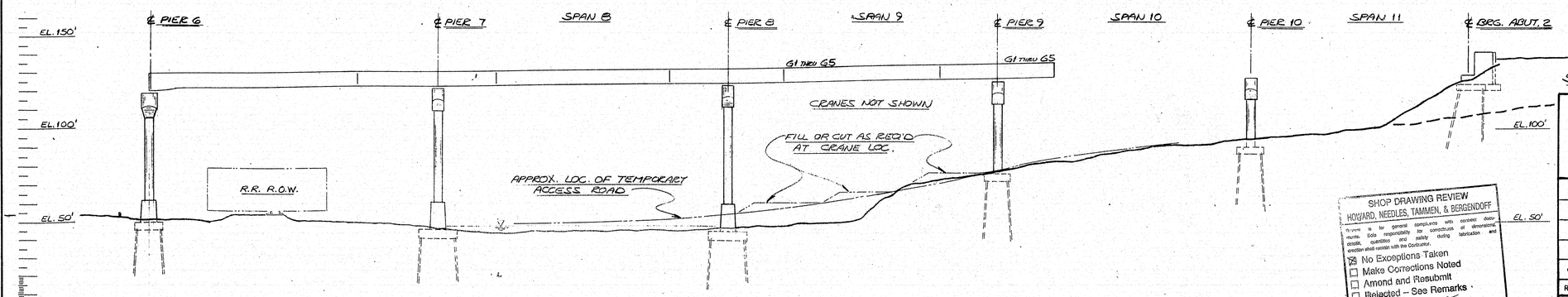
REV.	DATE	BY	DESCRIPTION
1	11-3-95	DJW/JPF	REVISED PER REVIEW AND REISSUED FOR APPROVAL
0	9-29-95	DJW/JPF	ISSUED FOR APPROVAL

WORK DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER.
WATERVILLE-WINSLOW BRIDGE
KENNEBEC CO. MAINE
DRAWING STEEL SUPERSTRUCTURE ERECTION
SPAN 8 ℄ PIER 8
SCALE: 1"=30'
DATE: 9-29-95
DRAWN: CHART
CHECK: JPF
CIANBRO CORPORATION PITTSFIELD MAINE
SHEET 3 OF
JOB 105026



PLAN VIEW ~ PIER 6 TO ABUTMENT 2

LOCATION	SPAN 9	PIER 9	PIER 9	SPAN 9	PIER 9
PICK NUMBER	G1-G2	G1	G2	G3, G4 & G5	G3, G4 & G5
CRANE	4000W	3900A	3900A	4000W	3900A
RIGGING	#1	#2	#2	#3-25	#2
PICK POINT	CENTER	CENTER	CENTER	CENTER	CENTER
MEMBER WEIGHT (LB)	47,100	19,500	19,700	22,600	21,000
LOADLINE & BLOCK (LB)	4,300	2,000	2,000	4,300	2,000
RIGGING WEIGHT (LB)	5,100	1,400	1,400	3,500	1,400
TOTAL WEIGHT (LB)	56,500	22,900	23,100	30,400	24,400
OPERATING RADIUS	32'	40'	40'	70'	45'
SETTING RADIUS,	32'	40'	32'	70' TO 56'	45' TO 29'
LIMIT OF CRANE	50'	54'	54'	75'	52'



ELEVATION ~ PIER 6 TO ABUTMENT 2

SEE GENERAL NOTES ON SHEET Nº 2

SHOP DRAWING REVIEW
HOWARD, NEEDLES, TAMMEN, & BERGENDOFF
Review is for general compliance with contract documents. Data responsibility for correctness of dimensions, details, quantities and safety during fabrication and erection shall remain with the Contractor.
☒ No Exceptions Taken
☐ Make Corrections Noted
☐ Amend and Resubmit
☐ Rejected – See Remarks
By Dwk Date 12-11-95

STATE OF MAINE
JOSEPH P. FOLEY, JR. 8912
REGISTERED PROFESSIONAL ENGINEER
Joseph P. Foley Jr. 9/29/95

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
PROJECT NUMBER DPB-0009(002)
PIN 000566.4

123-38

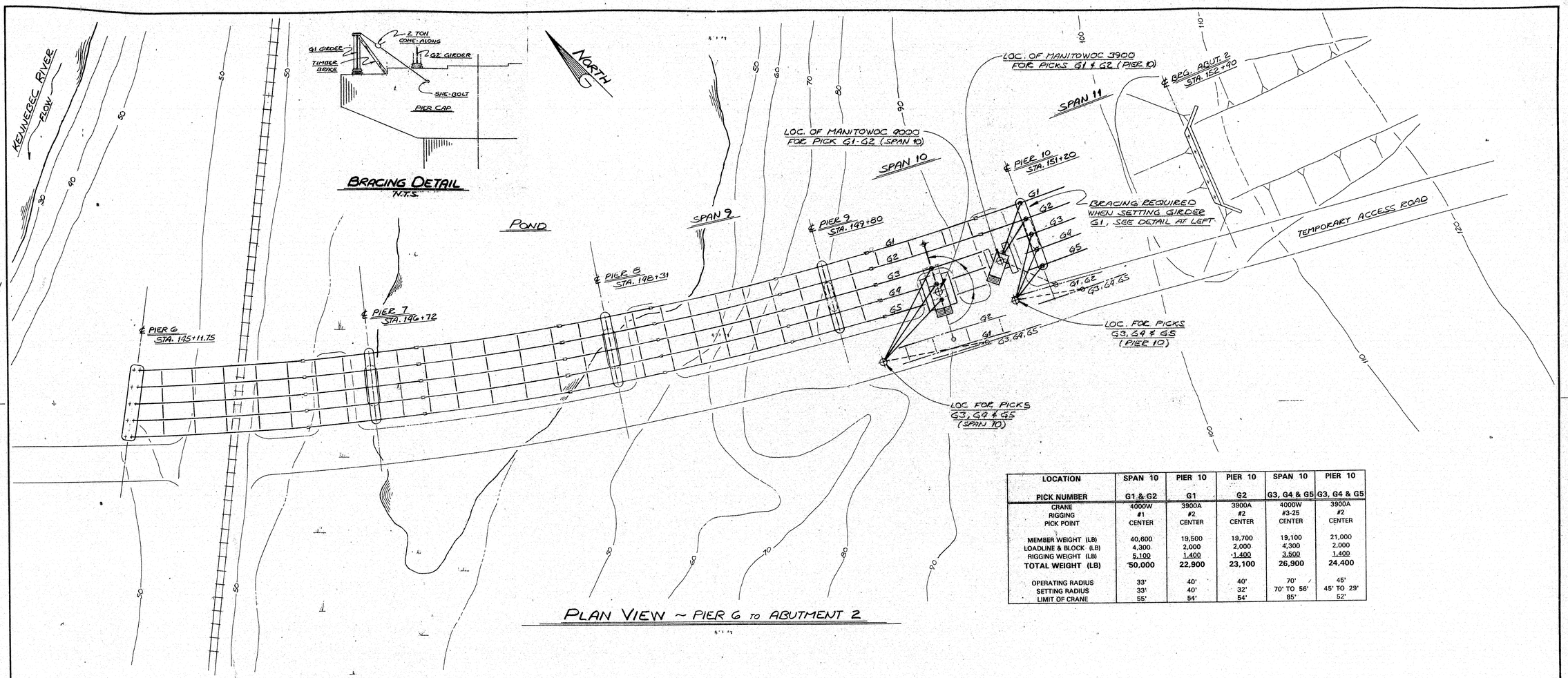
REV.	DATE	BY	DESCRIPTION
1	11-3-95	JPF	REVISED PER REVIEW AND REISSUED FOR APPROVAL
0	9-29-95	JPF	ISSUED FOR APPROVAL

WORK DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER.
WATERVILLE-WINSLOW BRIDGE
KENNEBEC CO. — MAINE
DRAWING STEEL SUPERSTRUCTURE ERECTION
SPAN 9 & PIER 9

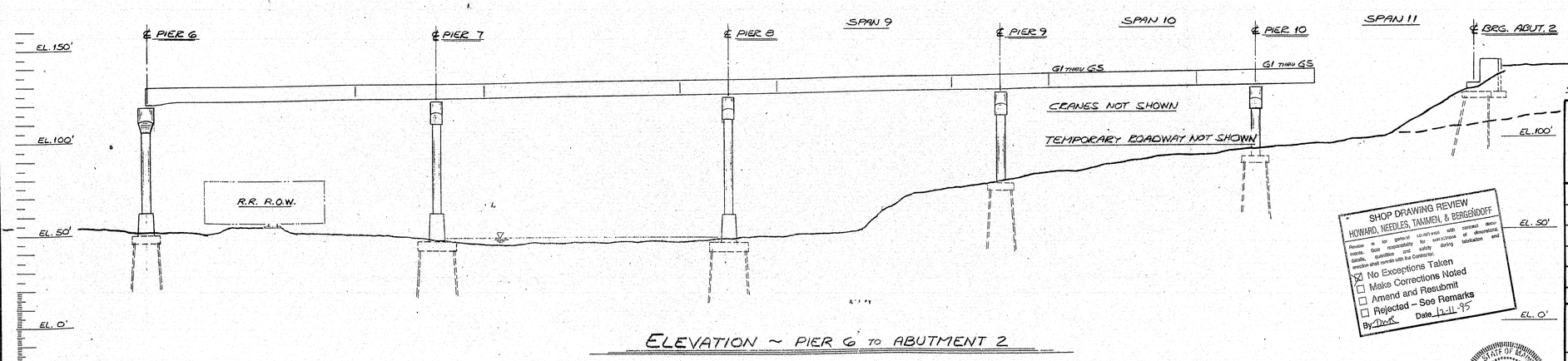
SCALE: 1"=30'
DATE: 9-29-95
DRAWN: cTHAIT
CHECK: JPF

CIANBRO CORPORATION PITTSFIELD MAINE

SHEET 4 OF
JOB 105026



PLAN VIEW ~ PIER 6 TO ABUTMENT 2



ELEVATION ~ PIER 6 TO ABUTMENT 2

LOCATION	SPAN 10	PIER 10	PIER 10	SPAN 10	PIER 10
PICK NUMBER	G1 & G2	G1	G2	G3, G4 & G5	G3, G4 & G5
CRANE	4000W	3900A	3900A	4000W	3900A
RIGGING	#1	#2	#2	#3-25	#2
PICK POINT	CENTER	CENTER	CENTER	CENTER	CENTER
MEMBER WEIGHT (LB)	40,600	19,500	19,700	19,100	21,000
LOADLINE & BLOCK (LB)	4,300	2,000	2,000	4,300	2,000
RIGGING WEIGHT (LB)	5,100	1,400	1,400	3,500	1,400
TOTAL WEIGHT (LB)	**50,000**	**22,900**	**23,100**	**26,900**	**24,400**
OPERATING RADIUS	33'	40'	40'	70'	45'
SETTING RADIUS	33'	40'	32'	70' TO 56'	45' TO 29'
LIMIT OF CRANE	55'	54'	54'	85'	52'

SEE GENERAL NOTES ON SHEET # 2

SHOP DRAWING REVIEW
HOWARD, NEEDLES, TAMMEN, & BERGENDOFF
Review is for general co-ordination with contract docs. only. Size, fabrication, details, quantities and safety during fabrication and erection shall remain with the Contractor.
☒ No Exceptions Taken
☐ Make Corrections Noted
☐ Amend and Resubmit
☐ Rejected – See Remarks
By: DWK Date: 12-11-95

STATE OF MAINE
JOSEPH P. FOLEY, JR.
3975
REGISTERED PROFESSIONAL ENGINEER
9/29/95

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
PROJECT NUMBRER DPB-0009(002)
PIN 000566.4

123-39

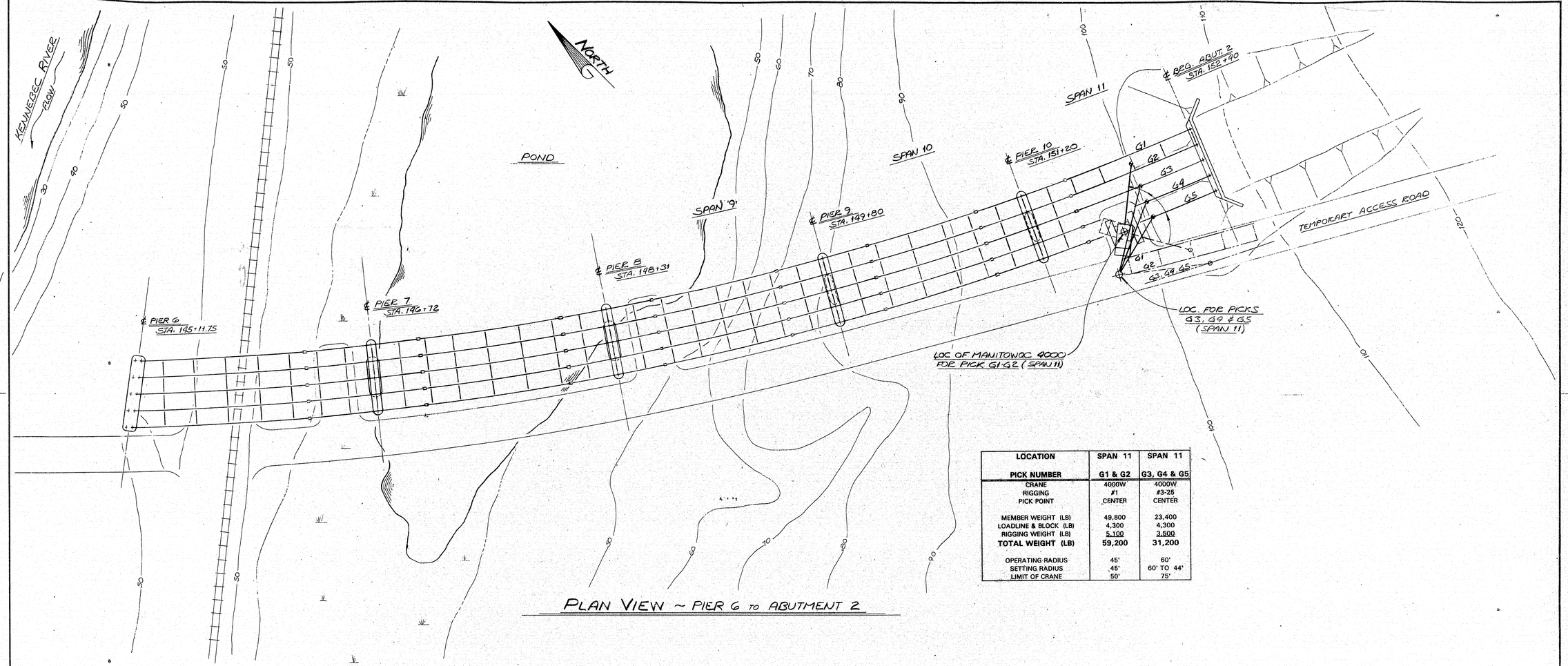
REV.	DATE	BY	DESCRIPTION
1	11-3-95	DH JPF	REVISED PER REVIEW AND REISSUED FOR APPROVAL
0	9-29-95	DH JPF	ISSUED FOR APPROVAL

WORK DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER
WATERVILLE-WINSLOW BRIDGE
KENNEBEC CO. MAINE
DRAWING STEEL SUPERSTRUCTURE ERECTION SPAN 10 & PIER 10

SCALE: 1"=30'
DATE: 9-29-95
DRAWN: DTHAUT
CHECK: JPF

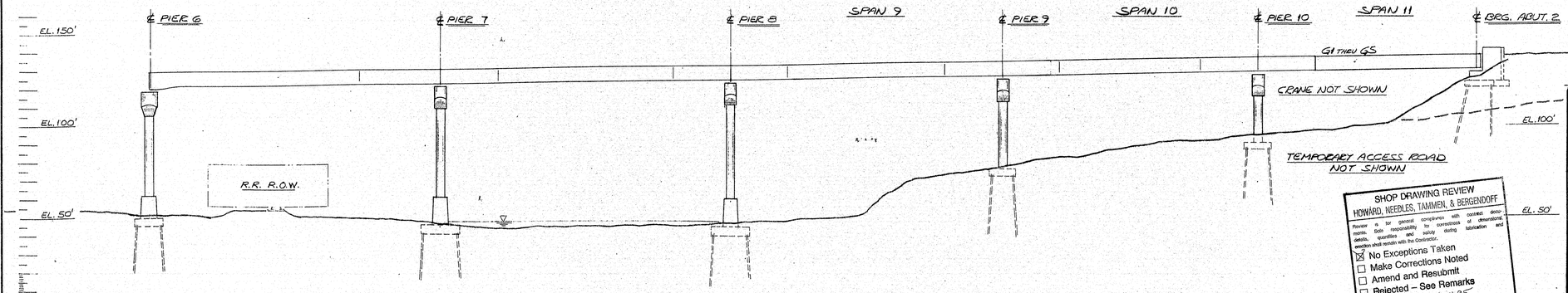
CIANBRO CORPORATION PITTSFIELD MAINE

SHEET 5 OF
JOB 105026



LOCATION	SPAN 11	SPAN 11
PICK NUMBER	G1 & G2	G3, G4 & G5
CRANE	4000W	4000W
RIGGING	#1	#3-25
PICK POINT	CENTER	CENTER
MEMBER WEIGHT (LB)	49,800	23,400
LOADLINE & BLOCK (LB)	4,300	4,300
RIGGING WEIGHT (LB)	5,100	3,500
TOTAL WEIGHT (LB)	**59,200**	**31,200**
OPERATING RADIUS	45'	60'
SETTING RADIUS	45'	60' TO 44'
LIMIT OF CRANE	50'	75'

PLAN VIEW ~ PIER 6 TO ABUTMENT 2



ELEVATION ~ PIER 6 TO ABUTMENT 2

SHOP DRAWING REVIEW
HOWARD, NEEBLES, TAMMEN, & BERGENDOFF
Review is for general compliance with contract documents. Sole responsibility for correctness of dimensions, details, quantities and safety during fabrication and erection shall remain with the Contractor.
☒ No Exceptions Taken
☐ Make Corrections Noted
☐ Amend and Resubmit
☐ Rejected – See Remarks
By Dave Date 12-11-95

STATE OF MAINE
JOSEPH P. FOLEY, JR.
7812
REGISTERED PROFESSIONAL ENGINEER
9/29/95

SEE GENERAL NOTES ON SHEET Nº 2.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
PROJECT NUMBRER DPB-0009(002)
PIN 000566.4

123-40

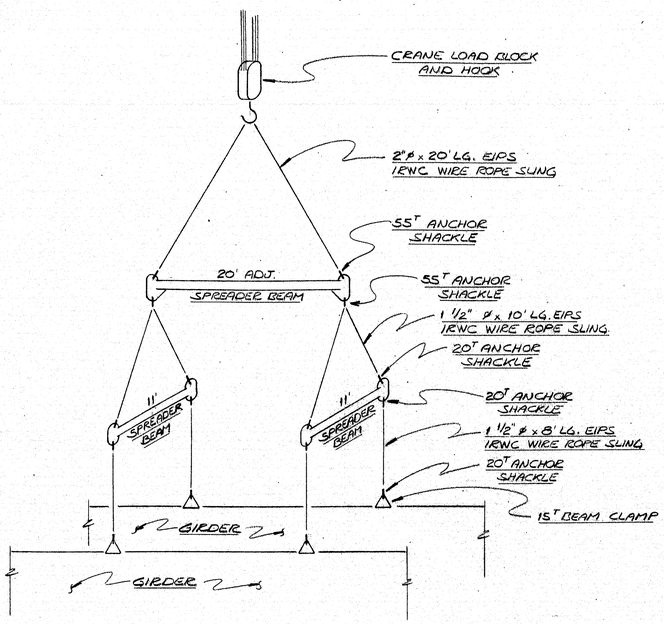
REV.	DATE	BY	DESCRIPTION
1	11-3-95	DJ/JPF	REVISED PER REVIEW AND REISSUED FOR APPROVAL
0	9-29-95	DJ/JPF	ISSUED FOR APPROVAL

WORK DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER
WATERVILLE-WINSLOW BRIDGE
KENNEBEC CO. MAINE
DRAWING STEEL SUPERSTRUCTURE ERECTION SPAN 11

SCALE: 1"=30'
DATE: 9-29-95
DRAWN: CTHAUT
CHECK: JPF

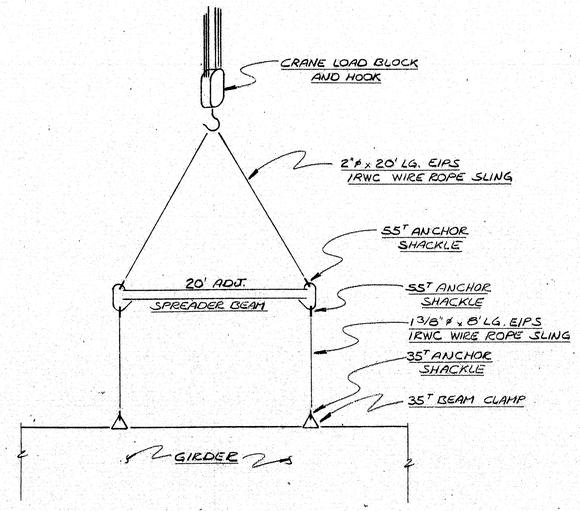
CIANBRO CORPORATION PITTSFIELD MAINE

SHEET 6 OF
JOB 105026



RIGGING SETUP #1

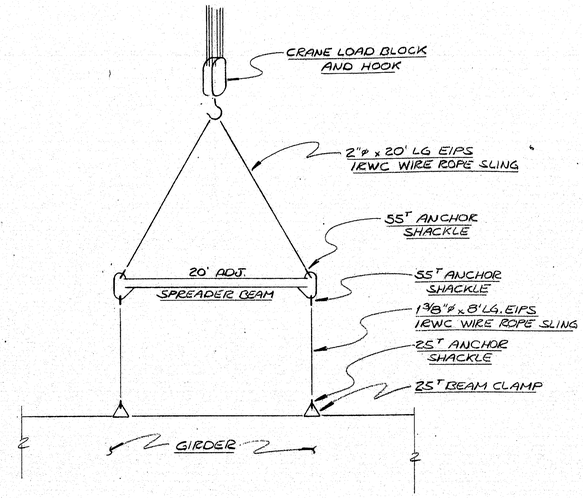
TOTAL RIGGING WEIGHT_____5100 LBS.
RIGGING CAPACITY_____120,000 LBS.
APPROX. RIGGING HEIGHT._____92 FT.



RIGGING SETUP #3-35

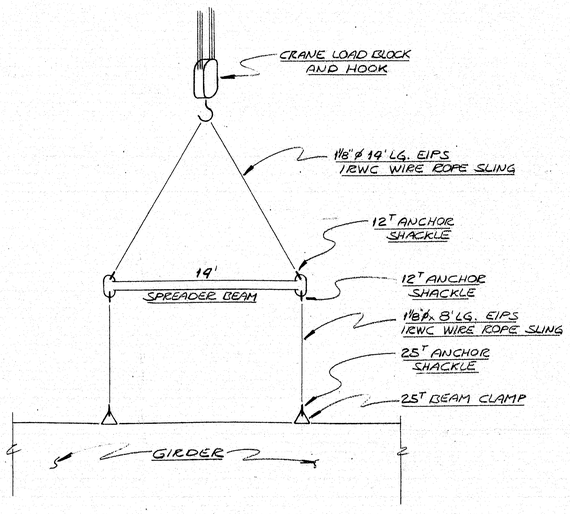
TOTAL RIGGING WEIGHT_____4000 LBS.
RIGGING CAPACITY_____71,000 LBS.
APPROX. RIGGING HEIGHT_____33 FT.

(SPANS 1-6)



RIGGING SETUP #3-25

TOTAL RIGGING WEIGHT_____3500 LBS.
RIGGING CAPACITY_____71,500 LBS.
APPROX RIGGING HEIGHT_____32 FT.



RIGGING SETUP #2

TOTAL RIGGING WEIGHT_____1900 LBS.
RIGGING CAPACITY_____40,700 LBS.
APPROX. RIGGING HEIGHT_____26 FT.

NOTE:
ALL SLINGS ARE 6x16 OR 6x37 CLASSIFICATION EXTRA IMPROVED PLOW STEEL (EIPS) INDEPENDENT WIRE ROPE CORE (IWRC) WITH MECHANICAL SPLICED EYES.

RELEASED FOR APPROVAL
BY RM DATE 10-05-96

SEE GENERAL NOTES ON SHEET #2

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
PROJECT NUMBER DPB-0009(002)
PIN 000566.4

123-41

REV.	DATE	BY	DESCRIPTION
4	6-3-96	SM/JPF	ISSUED FOR CONSTRUCTION
3	9-29-95	SM/JPF	RIGGING SETUP #1 REVISED
2	11-28-95	SM/JPF	REVISED PER 11-10-95 REVIEW AND REISSUED FOR APPROVAL
1	11-3-95	SM/JPF	REVISED PER REVIEW AND REISSUED FOR APPROVAL
0	9-29-95	SM/JPF	ISSUED FOR APPROVAL

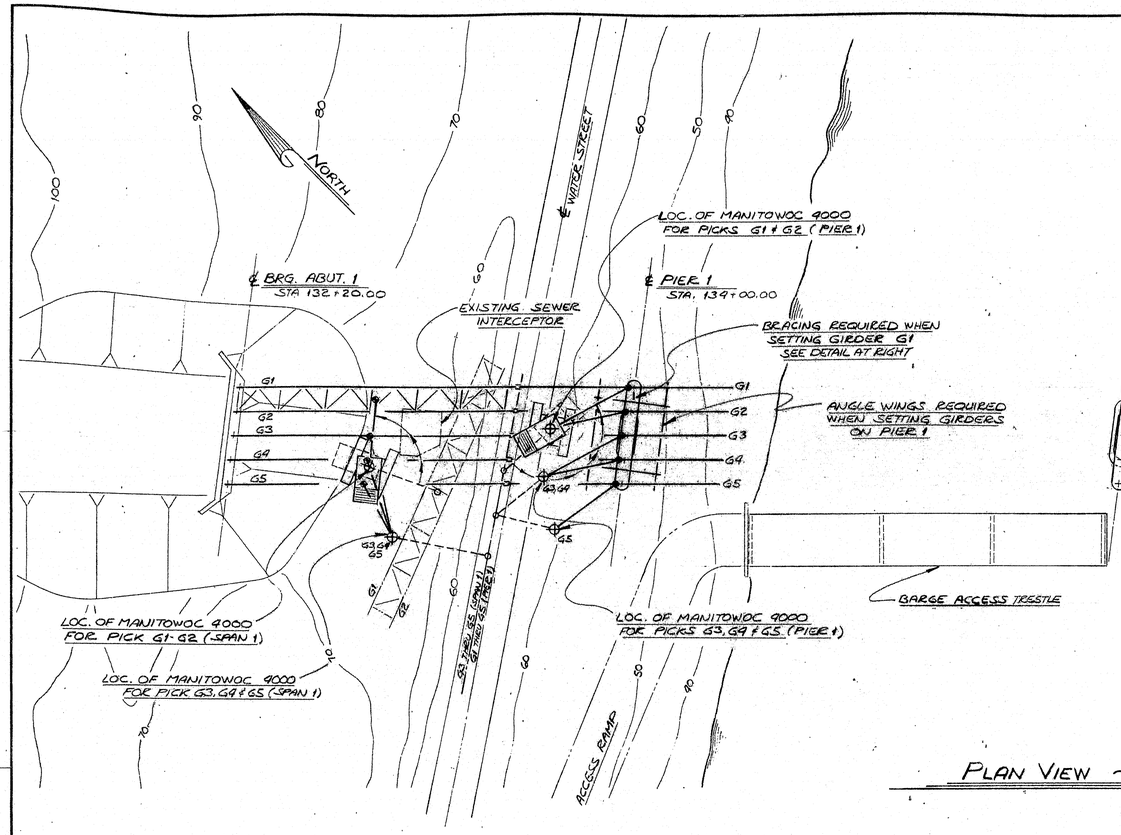
WORK DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER
WATERVILLE-WINSLOW BRIDGE
KENNEBEC CO. MAINE
DRAWING STEEL SUPERSTRUCTURE ERECTION RIGGING

STATE OF MAINE JOSEPH P. FOLEY JR. 0912 REGISTERED PROFESSIONAL ENGINEER
9/25/96

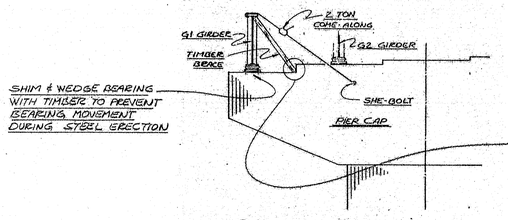
SCALE: ~
DATE: 9-29-95
DRAWN: CTRAUT
CHECK: JPF

CIANBRO CORPORATION

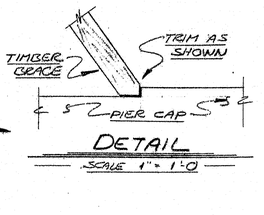
SHEET 1 OF 13
JOB 105026



PLAN VIEW ~ ABUTMENT 1 TO PIER 3



BRACING DETAIL
N.T.S.



DETAIL
SCALE 1" = 1'-0"

KENNEBEC RIVER FLOW

℄ PIER 2
STA. 136+25.00

℄ PIER 3
STA. 138+65.00

℄ PIER 4
STA. 141+05.00

LOCATION	PIER 1	PIER 1	SPAN 1	PIER 1	SPAN 1
PICK NUMBER	G1	G2	G1-G2	G3, G4 & G5	G3, G4 & G5
CRANE	4000W	4000W	4000W	4000W	4000W
RIGGING	#3-35	#3-35	#1	#3-35	#3-35
PICK POINT	2'-2" WEST OF BEARING	2'-2" WEST OF BEARING	CENTER	2'-2" WEST OF BEARING	CENTER
MEMBER WEIGHT (LB)	54,300	55,300	105,900	55,300	51,400
LOADLINE & BLOCK (LB)	4,300	4,300	4,300	4,300	4,300
RIGGING WEIGHT (LB)	4,000	4,000	5,100	4,000	4,000
TOTAL WEIGHT (LB)	**62,600**	**63,600**	**115,300**	**63,600**	**59,700**
OPERATING RADIUS	28'	28'	32'	28'	45'
SETTING RADIUS	40'	35'	32'	40', 35', 35'	47', 37', 28'
LIMIT OF CRANE	45'	45'	32'	45'	50'

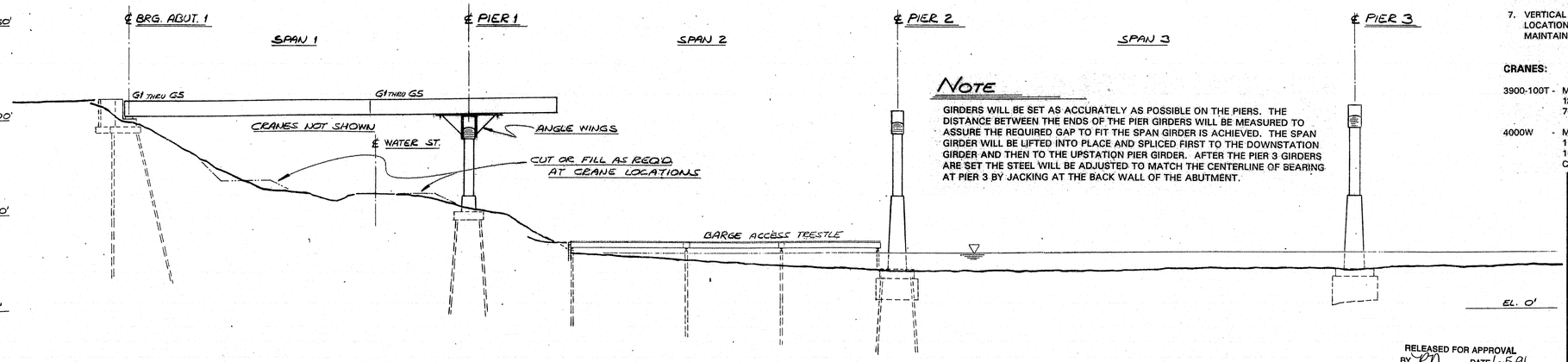
GENERAL NOTES: (APPLICABLE TO SHEETS 7 THROUGH 13)

1. SPLICES AND FIELD CONNECTIONS OF MAIN STRESS CARRYING MEMBERS SHALL BE MADE WITH A MINIMUM OF 50% OF THE HOLES FILLED WITH APPROVED HIGH STRENGTH BOLTS AND ERECTION PINS BEFORE IT IS RELEASED FROM THE CRANE. HALF OF THIS PERCENTAGE SHALL BE BOLTS TIGHTENED TO SPECIFICATION REQUIREMENTS AND HALF PINS. THE BOLTS AND PINS SHALL BE INSTALLED UNIFORMLY THROUGHOUT THE CONNECTION EXCEPT THAT ERECTION PINS SHALL BE USED IN THE EXTREME CORNERS OF ALL MAIN CONNECTIONS. TIGHTENING OF THE BOLTS IN THE CONNECTIONS SHALL PROGRESS FROM THE CENTER OUTWARD TO THE EDGES. CYLINDRICAL ERECTION PINS SHALL BE 1/32 INCH LARGER THAN THE BOLTS. (AASHTO 11.6.5)
2. MEMBERS TO BE ERECTED IN PAIRS SHALL HAVE ALL CROSSFRAMES AND BRACING INSTALLED PRIOR TO LIFTING THE MEMBER INTO POSITION.
3. ALL CROSSFRAMES AND BRACING SHALL BE INSTALLED BETWEEN THE STRINGER LINES AS THE WORK PROGRESSES. AT LEAST EVERY OTHER CROSSFRAME SHALL BE INSTALLED BEFORE THE GIRDER IS RELEASED FROM THE CRANE.
4. THE MEMBER WEIGHTS INDICATED ON THE DRAWINGS INCLUDE CROSSFRAMES AND BRACING AS APPROPRIATE FOR THE INDIVIDUAL PICK.
5. GIRDERS SHOWN AS BEING PICKED IN PAIRS SHALL BE RIGGED INDIVIDUALLY FROM THE TRUCKS USING SETUP #3-25. PIER 2, 3 & 4 GIRDERS MUST BE HANDLED INDIVIDUALLY USING RIGGING SETUP #3-35.
6. GIRDERS TEMPORARILY STORED ON SITE SHALL BE BLOCKED OFF THE GROUND AT FOUR LOCATIONS EQUALLY SPACED ALONG THE LENGTH AND ADEQUATELY BRACED AGAINST TIPPING.
7. VERTICAL ALIGNMENT OF THE GIRDERS WILL BE CHECKED AT BLOCKING LOCATIONS ADJACENT TO THE SPLICES TO ASSURE THE ALIGNMENT IS MAINTAINED THROUGH THE COMPLETION OF THE STEEL ERECTION.

CRANES:

3900-100T - MANITOWOC 3900, 100 TON CRAWLER CRANE
120 FEET OF NO. 8 BOOM OPEN THROAT TOP
74,000# COUNTERWEIGHT

4000W - MANITOWOC 4000W, 150 TON CRAWLER CRANE
160 FEET OF NO. 22 BOOM OPEN THROAT TOP
104,400# COUNTERWEIGHT
CRAWLERS EXTENDED



ELEVATION ~ ABUTMENT 1 TO PIER 3

NOTE

GIRDERS WILL BE SET AS ACCURATELY AS POSSIBLE ON THE PIERS. THE DISTANCE BETWEEN THE ENDS OF THE PIER GIRDERS WILL BE MEASURED TO ASSURE THE REQUIRED GAP TO FIT THE SPAN GIRDER IS ACHIEVED. THE SPAN GIRDER WILL BE LIFTED INTO PLACE AND SPLICED FIRST TO THE DOWNSTATION GIRDER AND THEN TO THE UPSTATION PIER GIRDER. AFTER THE PIER 3 GIRDERS ARE SET THE STEEL WILL BE ADJUSTED TO MATCH THE CENTERLINE OF BEARING AT PIER 3 BY JACKING AT THE BACK WALL OF THE ABUTMENT.

RELEASED FOR APPROVAL
BY RA DATE 6-5-96



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
PROJECT NUMBRER DPB-0009(002)
PIN 000566.4

123-42

REV.	DATE	BY	DESCRIPTION
2	6-3-96	CH/JSF	ISSUED FOR CONSTRUCTION
1	4-22-96	CH/JSF	REVISED PER 4-1-96 REVIEW
0	3-15-96	CH/JSF	ISSUED FOR APPROVAL

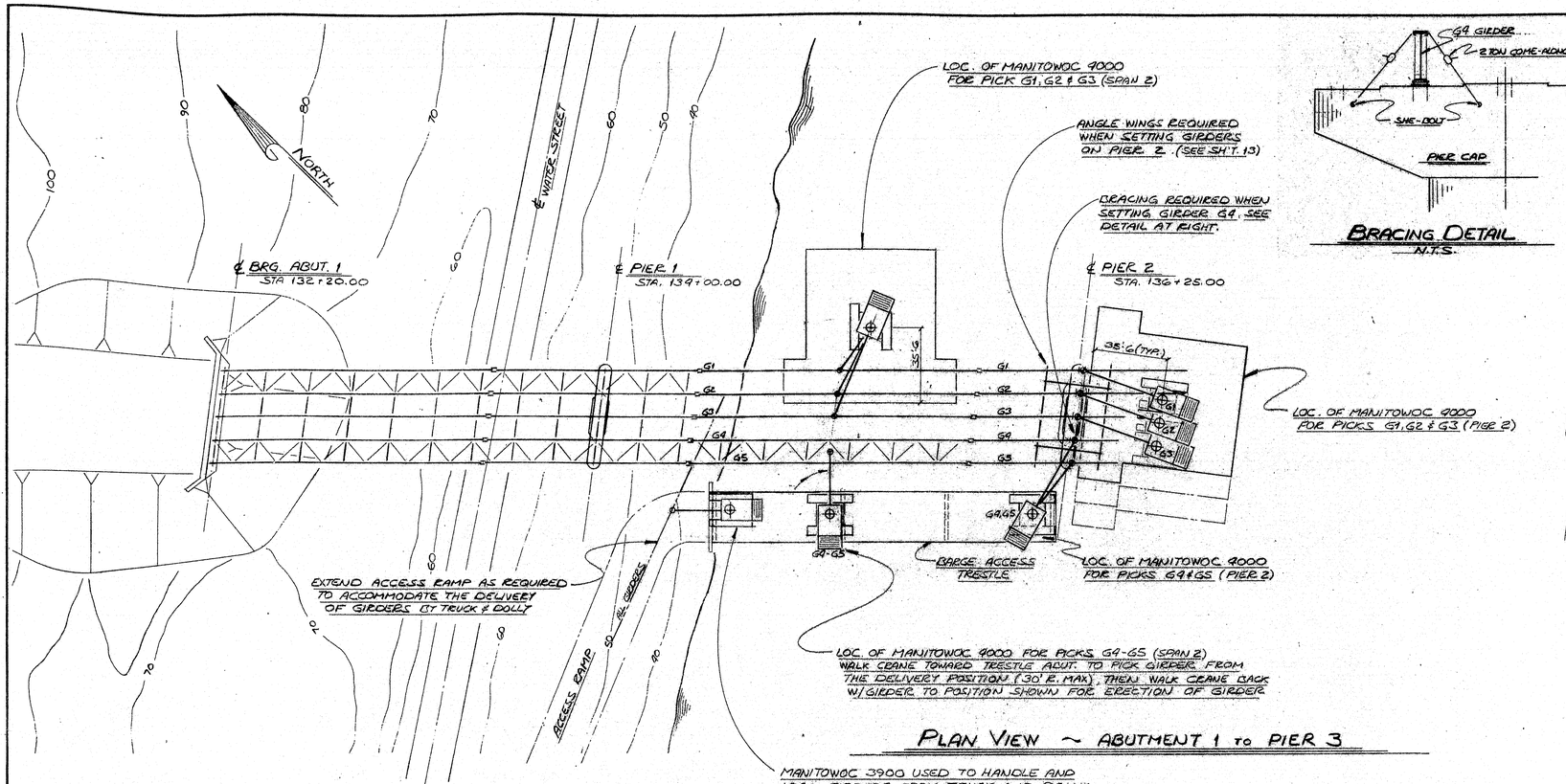
WORK DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER
WATERVILLE - WINSLOW BRIDGE
KENNEBEC CO. MAINE
DRAWING
STEEL SUPERSTRUCTURE ERECTION
SPAN 1 & PIER 1

SCALE: 1"=30'
DATE: 3-15-96
DRAWN: CH/AVT
CHECK: JSF

CIANBRO CORPORATION
PITTSFIELD, MAINE

SHEET 7 OF 13
JOB 105026

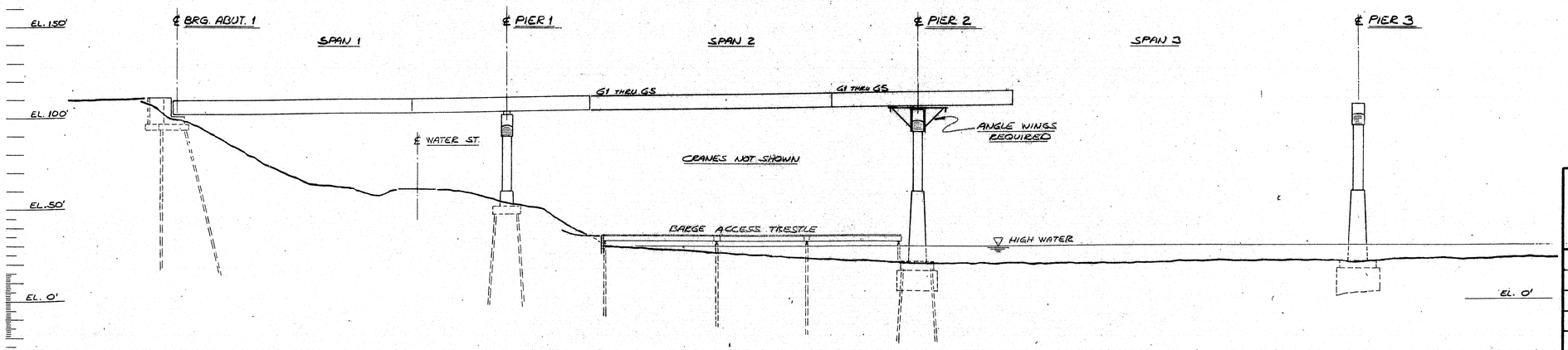
JS01 RFS4S1



PLAN VIEW ~ ABUTMENT 1 TO PIER 3

BRACING DETAIL
N.T.S.

LOCATION	PIER 2	PIER 2	SPAN 2	PIER 2	SPAN 2
PICK NUMBER	G4	G5	G4-G5	G3, G2 & G1	G3, G2 & G1
CRANE	4000W	4000W	4000W	4000W	4000W
RIGGING	#3-35	#3-35	#1	#3-35	#3-35
PICK POINT	2'-1" EAST OF BEARING	2'-1" EAST OF BEARING	CENTER	2'-1" EAST OF BEARING	CENTER
MEMBER WEIGHT (LB)	59,500	58,500	110,500	59,500	53,900
LOADLINE & BLOCK (LB)	4,300	4,300	4,300	4,300	4,300
RIGGING WEIGHT (LB)	4,000	4,000	5,100	4,000	4,000
TOTAL WEIGHT (LB)	67,800	66,800	119,900	67,800	62,200
OPERATING RADIUS	35'	35'	28'	26', 30', 34'	33', 28', 23'
SETTING RADIUS	30'	41'	30'	40'	45', 35', 25'
LIMIT OF CRANE	45'	45'	30'	45'	45'



ELEVATION ~ ABUTMENT 1 TO PIER 3

RELEASED FOR APPROVAL
BY KD DATE 6-5-96

SEE GENERAL NOTES ON SHEET Nº 7

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
PROJECT NUMBER DPB-0009(002)
PIN 000566.4

123-43

REV.	DATE	BY	DESCRIPTION
2	6-3-96	GH/JSH	ISSUED FOR CONSTRUCTION
1	4-22-96	GH/JSH	REVISED PER 9-1-96 REVIEW
0	3-15-96	GH/JSH	ISSUED FOR APPROVAL

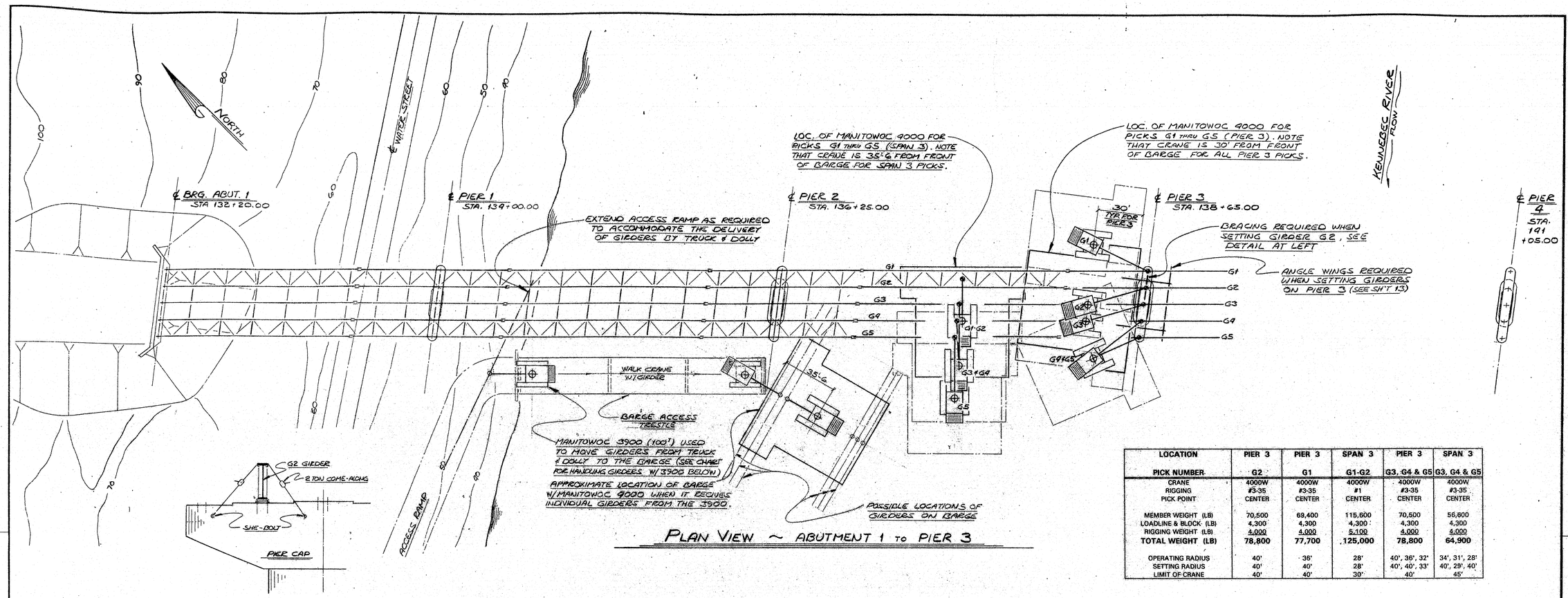
WORK DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER
WATERVILLE - WINSLOW BRIDGE
KENNEBEC CO. MAINE
DRAWING STEEL SUPERSTRUCTURE ERECTION SPAN 2 & PIER 2

SCALE: 1"=30'
DATE: 3-15-96
DRAWN: GHaut
CHECK: JSH

CIANBRO CORPORATION

SHEET 8 OF 13
JOB 105026

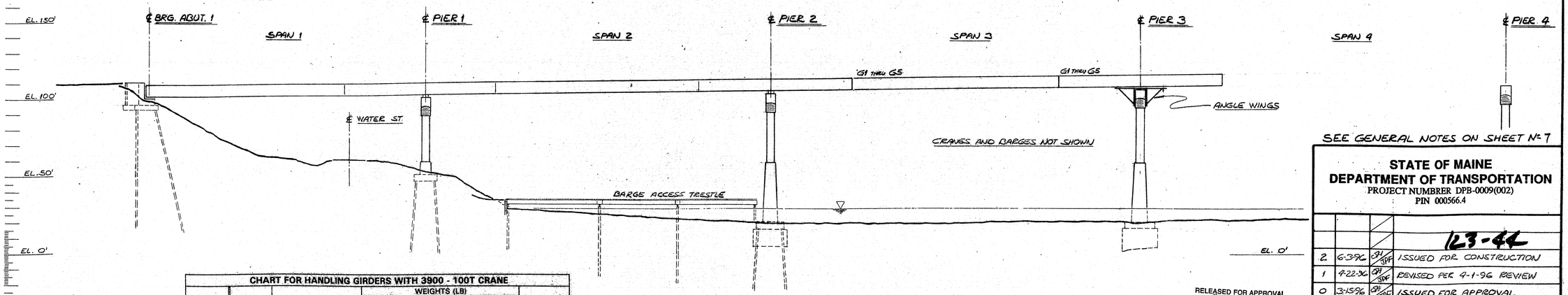
STATE OF MAINE — JOSEPH P. HOULE JR. 5912 — REGISTERED PROFESSIONAL ENGINEER
3/15/96



PLAN VIEW ~ ABUTMENT 1 TO PIER 3

LOCATION	PIER 3	PIER 3	SPAN 3	PIER 3	SPAN 3
PICK NUMBER	G2	G1	G1-G2	G3, G4 & G5	G3, G4 & G5
CRANE	4000W	4000W	4000W	4000W	4000W
RIGGING	#3-35	#3-35	#1	#3-35	#3-35
PICK POINT	CENTER	CENTER	CENTER	CENTER	CENTER
MEMBER WEIGHT (LB)	70,500	69,400	115,600	70,500	56,600
LOADLINE & BLOCK (LB)	4,300	4,300	4,300	4,300	4,300
RIGGING WEIGHT (LB)	4,000	4,000	5,100	4,000	4,000
TOTAL WEIGHT (LB)	78,800	77,700	125,000	78,800	64,900
OPERATING RADIUS	40'	36'	28'	40', 36', 32'	34', 31', 28'
SETTING RADIUS	40'	40'	28'	40', 40', 33'	40', 29', 40'
LIMIT OF CRANE	40'	40'	30'	40'	45'

BRACING DETAIL
N.T.S.



ELEVATION ~ ABUTMENT 1 TO PIER 3

CHART FOR HANDLING GIRDERS WITH 3900 - 100T CRANE

GIRDER	RIGGING	PICK POINT	WEIGHTS (LB) MEMBER	LOADLINE & BLOCK	RIGGING	TOTAL	MAXIMUM RADIUS (FT)
SPAN 1	#3-25	CENTER	51,400	2,300	3,500	57,200	36'
PIER 1	#3-25	2'-2" WEST OF BEARING	55,300	2,300	3,500	61,100	34'
SPAN 2	#3-25	CENTER	53,900	2,300	3,500	59,700	34'
PIER 2	#3-35	2'-1" EAST OF BEARING	59,500	2,300	4,000	65,800	32'
SPAN 3	#3-25	CENTER	56,600	2,300	3,500	62,400	32'
PIER 3	#3-35	CENTER	70,500	2,300	4,000	76,800	28'
SPAN 4	#3-25	CENTER	56,600	2,300	3,500	62,400	32'
PIER 4	#3-35	2'-1" WEST OF BEARING	59,500	2,300	4,000	65,800	32'
SPAN 5	#3-25	CENTER	53,900	2,300	3,500	59,700	34'
PIER 5	#3-25	5'-10" EAST OF BEARING	55,500	2,300	3,500	61,300	34'

RELEASED FOR APPROVAL
BY _____ DATE 6-5-96

JOSEPH F. FOLEY JR. 6812 REGISTERED PROFESSIONAL ENGINEER STATE OF MAINE
3/15/96

SEE GENERAL NOTES ON SHEET Nº 7

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
PROJECT NUMBER DPB-0009(002)
PIN 000566.4

123-44

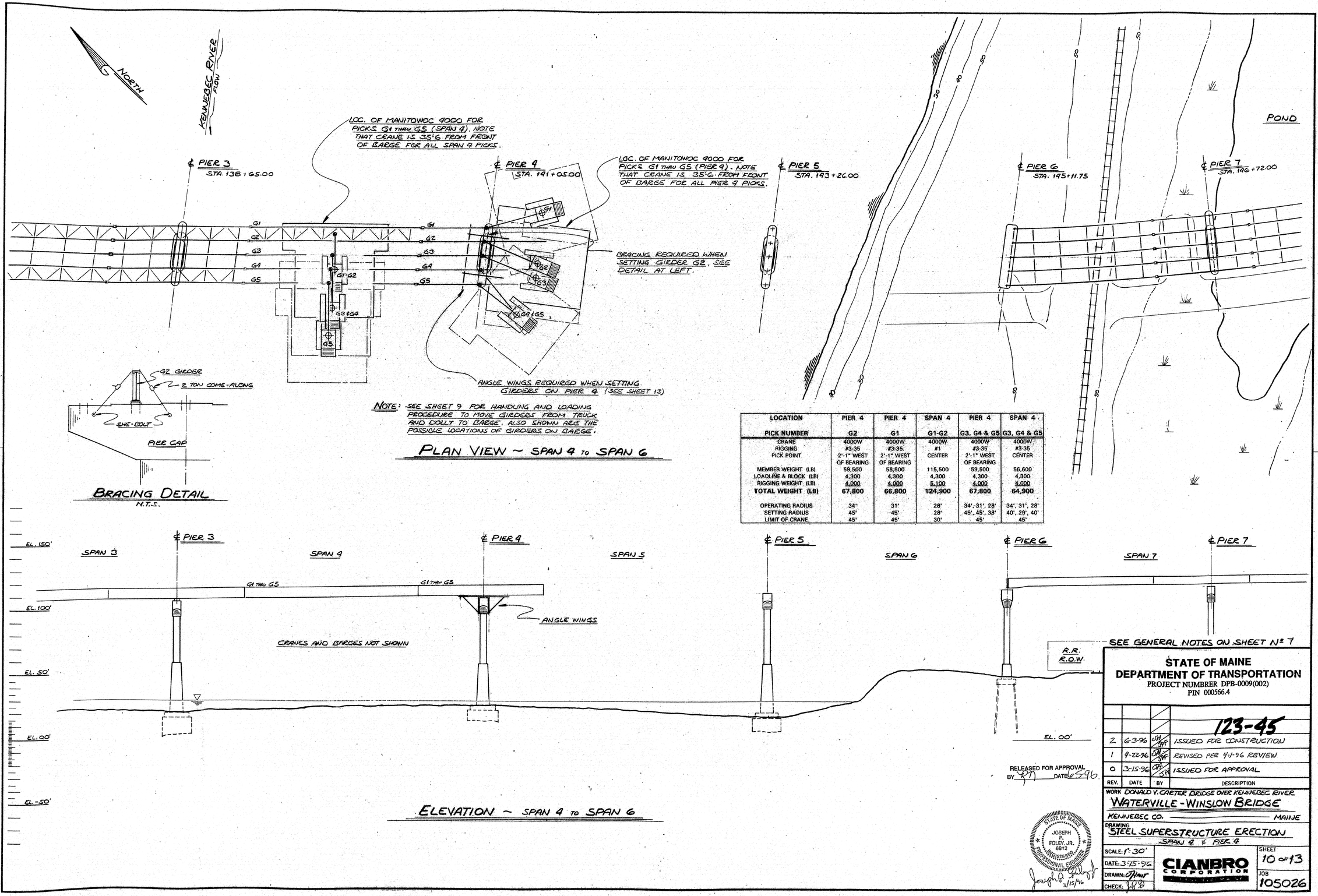
REV.	DATE	BY	DESCRIPTION
2	6-3-96	SH JDF	ISSUED FOR CONSTRUCTION
1	4-22-96	SH JDF	REVISED PER 4-1-96 REVIEW
0	3-15-96	SH JDF	ISSUED FOR APPROVAL

WORK DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER
WATERVILLE - WINSLOW BRIDGE
KENNEBEC CO. MAINE
DRAWING STEEL SUPERSTRUCTURE ERECTION SPAN 3 & PIER 3

SCALE: 1"=30'
DATE: 3-15-96
DRAWN: SHAUT
CHECK: JDF

CIANBRO CORPORATION

SHEET 9 OF 13
JOB 105026



LOCATION	PIER 4	PIER 4	SPAN 4	PIER 4	SPAN 4
PICK NUMBER	G2	G1	G1-G2	G3, G4 & G5	G3, G4 & G5
CRANE	4000W	4000W	4000W	4000W	4000W
RIGGING	#3-35	#3-35	#1	#3-35	#3-35
PICK POINT	2'-1" WEST OF BEARING	2'-1" WEST OF BEARING	CENTER	2'-1" WEST OF BEARING	CENTER
MEMBER WEIGHT (LB)	59,500	58,500	115,500	59,500	56,600
LOADLINE & BLOCK (LB)	4,300	4,300	4,300	4,300	4,300
RIGGING WEIGHT (LB)	4,000	4,000	5,100	4,000	4,000
TOTAL WEIGHT (LB)	**67,800**	**66,800**	**124,900**	**67,800**	**64,900**
OPERATING RADIUS	34'	31'	28'	34', 31', 28'	34', 31', 28'
SETTING RADIUS	45'	45'	28'	45', 45', 38'	40', 29', 40'
LIMIT OF CRANE	45'	45'	30'	45'	45'

SEE GENERAL NOTES ON SHEET Nº 7

RELEASED FOR APPROVAL
BY _____ DATE 6-5-96

STATE OF MAINE
JOSEPH P. FOLEY, JR. 6812 REGISTERED PROFESSIONAL ENGINEER
Joseph P. Foley Jr. 3/15/96

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
PROJECT NUMBRER DPB-0009(002)
PIN 000566.4

123-45

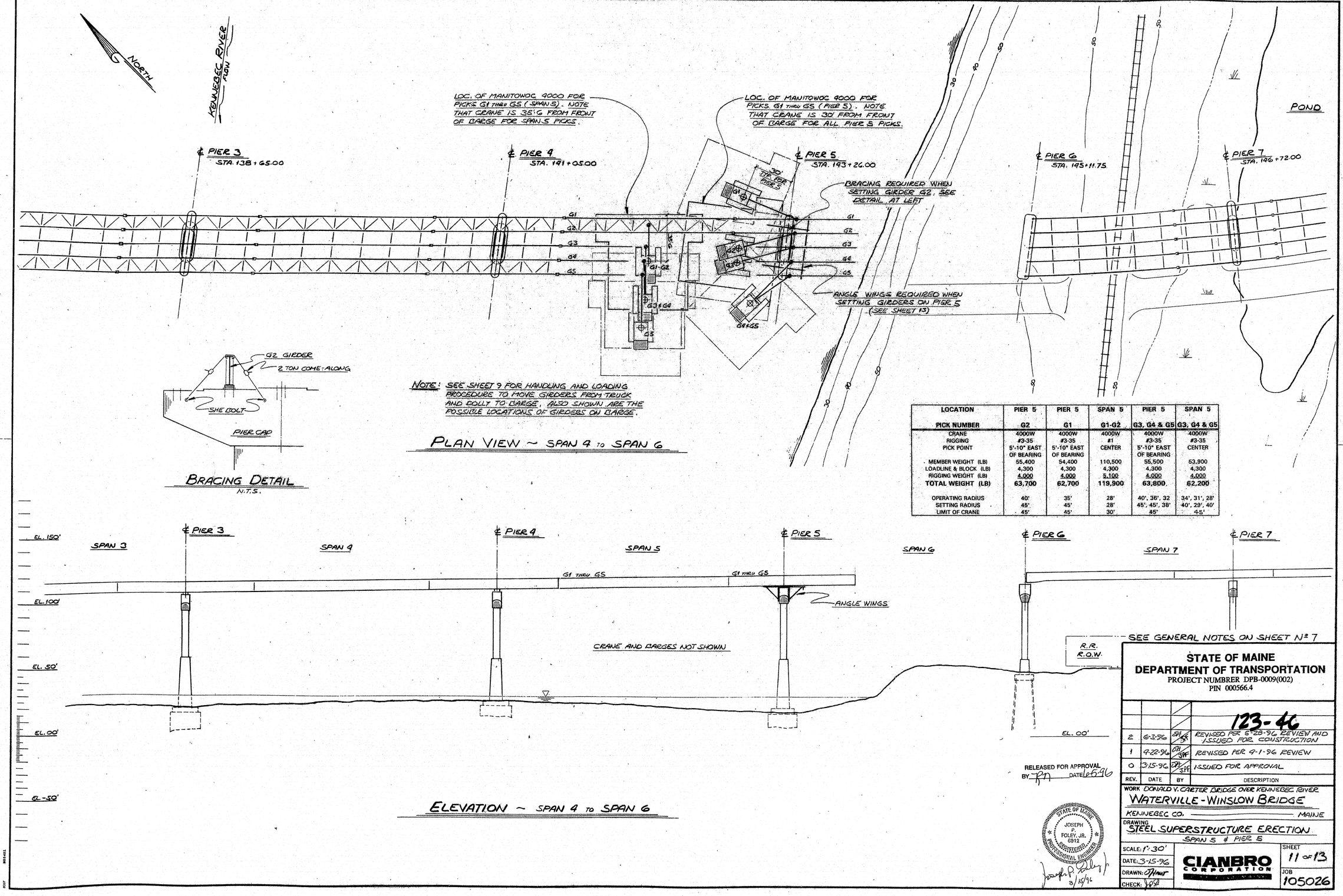
REV.	DATE	BY	DESCRIPTION
2	6-3-96	SM JPF	ISSUED FOR CONSTRUCTION
1	9-22-96	SM JPF	REVISED PER 4-1-96 REVIEW
0	3-15-96	SM JPF	ISSUED FOR APPROVAL

WORK DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER
WATERVILLE - WINSLOW BRIDGE
KENNEBEC CO. MAINE
DRAWING STEEL SUPERSTRUCTURE ERECTION
SPAN 4 ℄ PIER 4

SCALE: 1"=30'
DATE: 3-15-96
DRAWN: JPH
CHECK: JPF

CIANBRO CORPORATION

SHEET 10 of 13
JOB 105026



LOCATION	PIER 5	PIER 5	SPAN 5	PIER 5	SPAN 5
PICK NUMBER	G2	G1	G1-G2	G3, G4 & G5	G3, G4 & G5
CRANE	4000W	4000W	4000W	4000W	4000W
RIGGING	#3-35	#3-35	#1	#3-35	#3-35
PICK POINT	5'-10" EAST OF BEARING	5'-10" EAST OF BEARING	CENTER	5'-10" EAST OF BEARING	CENTER
MEMBER WEIGHT (LB)	55,400	54,400	110,500	55,500	53,900
LOADLINE & BLOCK (LB)	4,300	4,300	4,300	4,300	4,300
RIGGING WEIGHT (LB)	4,000	4,000	5,100	4,000	4,000
TOTAL WEIGHT (LB)	63,700	62,700	119,900	63,800	62,200
OPERATING RADIUS	40'	35'	28'	40', 36', 32	34', 31', 28'
SETTING RADIUS	45'	45'	28'	45', 45', 38'	40', 29', 40'
LIMIT OF CRANE	45'	45'	30'	45'	45'

SEE GENERAL NOTES ON SHEET Nº 7

RELEASED FOR APPROVAL
BY RA DATE 6-5-96

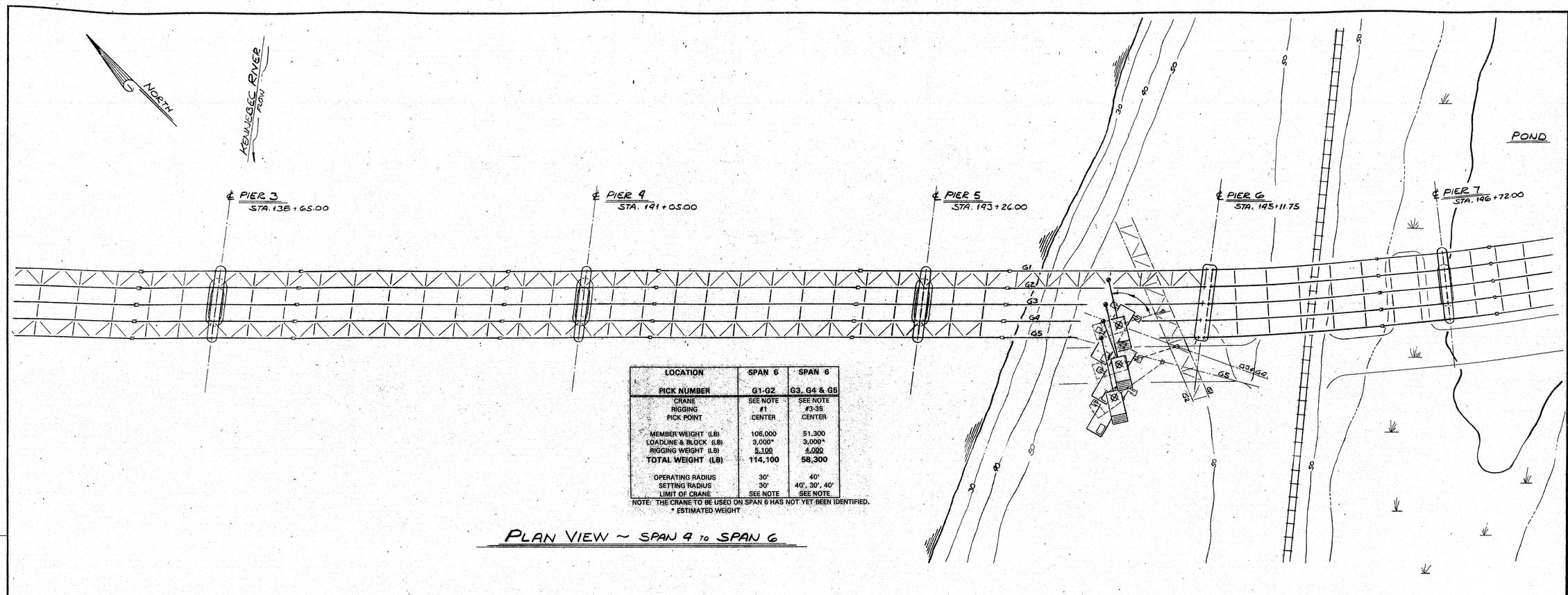
JOSEPH P. FOLEY, JR. 6912 REGISTERED PROFESSIONAL ENGINEER STATE OF MAINE
Joseph P. Foley Jr. 3/15/96

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
PROJECT NUMBRER DPB-0009(002)
PIN 000566.4

123-46

REV.	DATE	BY	DESCRIPTION
2	6-3-96	DH/SK	REVISED PER 5-28-96 REVIEW AND ISSUED FOR CONSTRUCTION
1	4-22-96	DH/JPF	REVISED PER 4-1-96 REVIEW
0	3-15-96	DH/JPF	ISSUED FOR APPROVAL

WORK DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER
WATERVILLE - WINSLOW BRIDGE
KENNEBEC CO. — MAINE
DRAWING STEEL SUPERSTRUCTURE ERECTION
SPAN 5 & PIER 5
SCALE: 1":30'
DATE: 3-15-96
DRAWN: DH
CHECK: JPF
CIANBRO CORPORATION
SHEET 11 of 13
JOB 105026



LOCATION	SPAN 6	SPAN 6
PICK NUMBER	G1-G2	G3, G4 & G5
CRANE	SEE NOTE	SEE NOTE
RIGGING	#1	#3-35
PICK POINT	CENTER	CENTER
MEMBER WEIGHT (LB)	106,000	51,300
LOADLINE & BLOCK (LB)	3,000*	3,000*
RIGGING WEIGHT (LB)	5,100	4,000
TOTAL WEIGHT (LB)	114,100	58,300
OPERATING RADIUS	30'	40'
SETTING RADIUS	30'	40', 30', 40'
LIMIT OF CRANE	SEE NOTE	SEE NOTE

NOTE: THE CRANE TO BE USED ON SPAN 6 HAS NOT YET BEEN IDENTIFIED.
* ESTIMATED WEIGHT

PLAN VIEW ~ SPAN 4 TO SPAN 6

ELEVATION ~ SPAN 4 TO SPAN 6

SEE GENERAL NOTES ON SHEET Nº 7

RELEASED FOR APPROVAL
BY _____ DATE 6-5-96

STATE OF MAINE
JOSEPH P. FOLEY JR. 6012 REGISTERED PROFESSIONAL ENGINEER
Joseph P. Foley 3/15/96

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
PROJECT NUMBRER DPB-0009(002)
PIN 000566.4

123-47

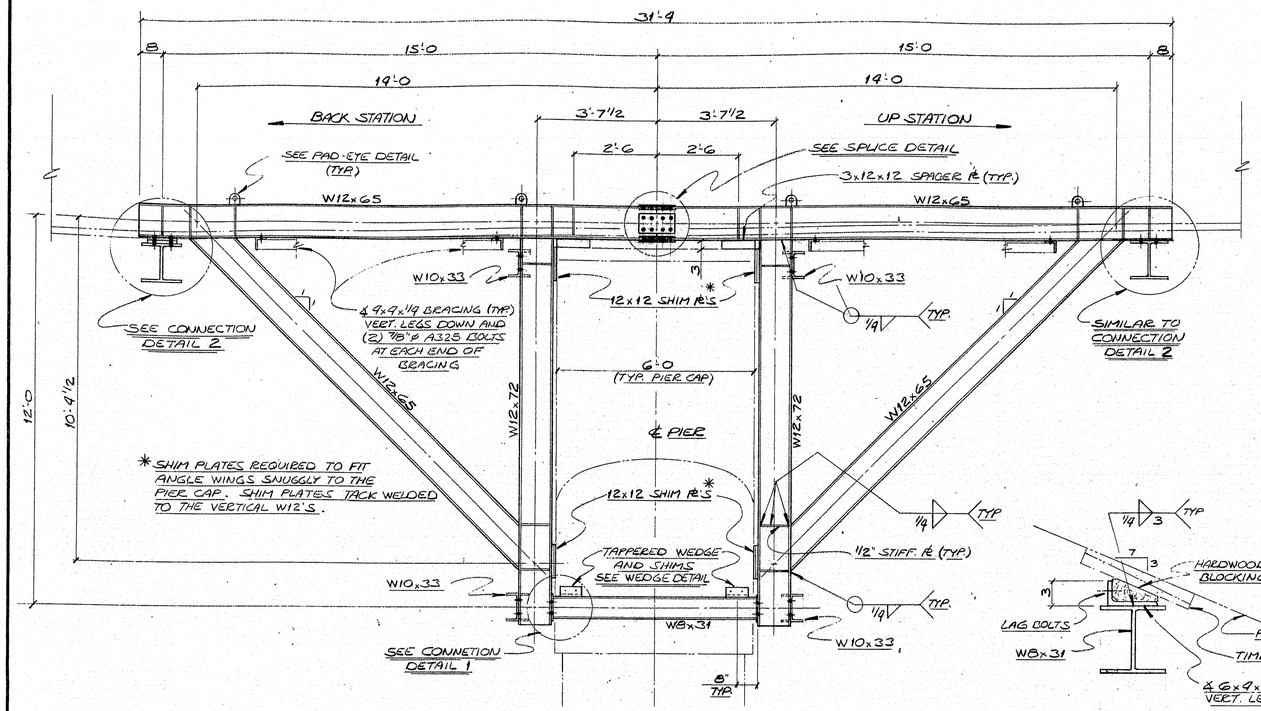
REV.	DATE	BY	DESCRIPTION
2	6-3-96	GH JPF	ISSUED FOR CONSTRUCTION
1	4-22-96	GH JPF	REVISED PER 4-1-96 REVIEW
0	3-15-96	GH JPF	ISSUED FOR APPROVAL

WORK DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER
WATERVILLE - WINSLOW BRIDGE
KENNEBEC CO. MAINE
DRAWING STEEL SUPERSTRUCTURE ERECTION SPAN 6

SCALE: 1"=30'
DATE: 3-15-96
DRAWN: JHunt
CHECK: JPF

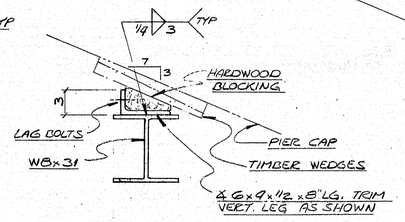
CIANBRO CORPORATION

SHEET 12 of 13
JOB 105026



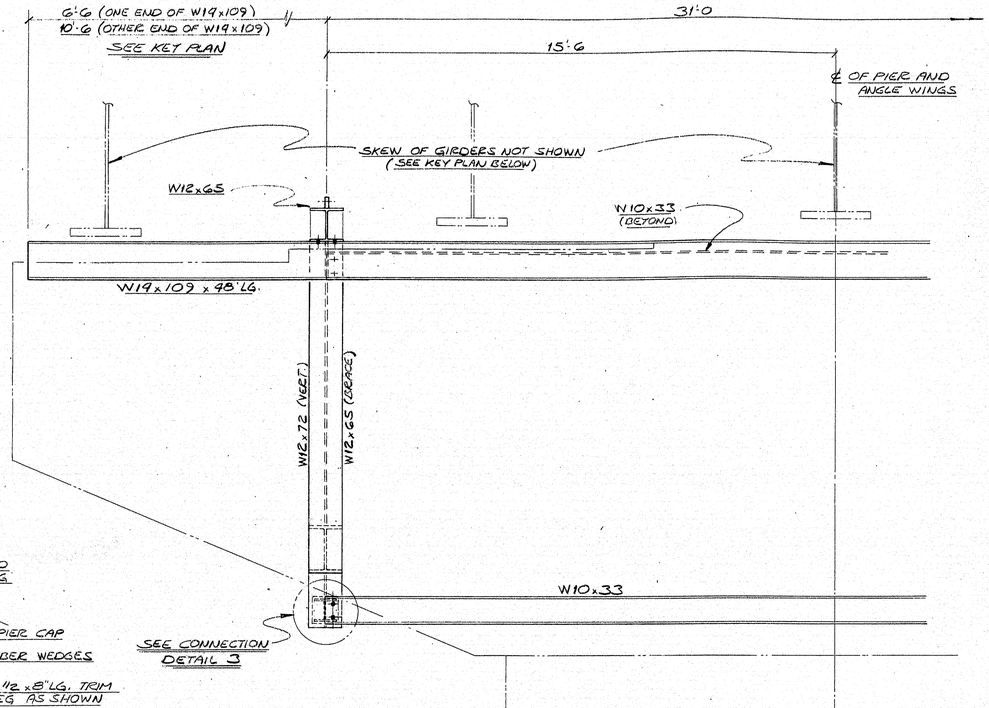
VIEW A-A (FROM KEY PLAN)

SCALE: 1/2" = 1'-0



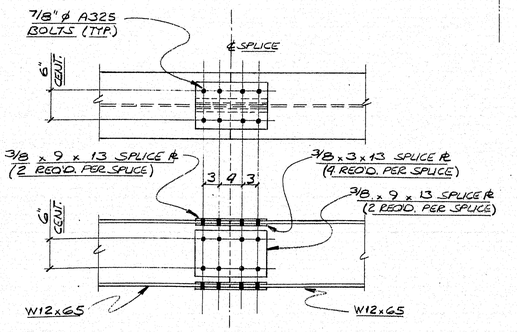
WEDGE DETAIL

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



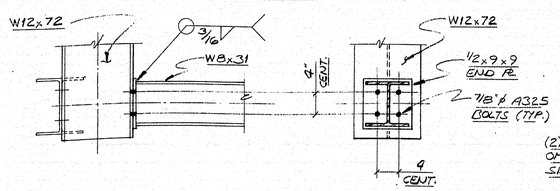
VIEW B-B (FROM KEY PLAN)

SCALE: 1/2" = 1'-0



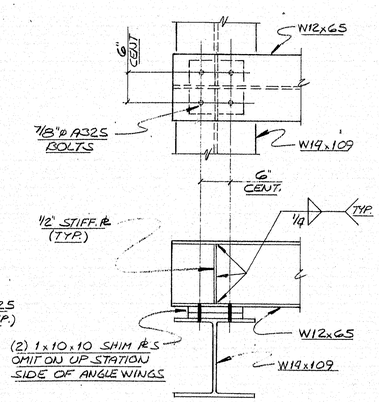
SPLICE DETAIL

SCALE: 1" = 1'-0



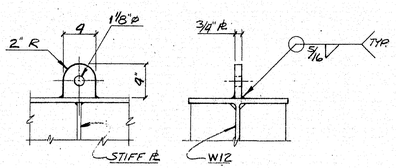
CONNECTION DETAIL 1

SCALE: 1" = 1'-0



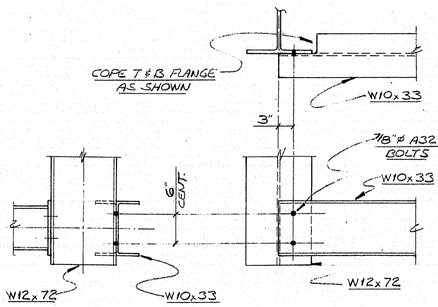
CONNECTION DETAIL 2

SCALE: 1" = 1'-0



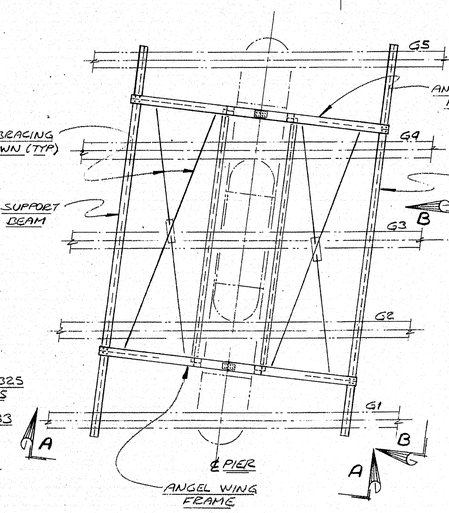
PAD-EYE DETAIL

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



CONNECTION DETAIL 3

SCALE: 1" = 1'-0



KEY PLAN

SCALE: 1/8" = 1'-0

MATERIALS

STRUCTURAL STEEL: ASTM A36
BOLTS: 7/8"ø ASTM A325
WELDING ELECTRODES: E70XX

SEE GENERAL NOTES ON SHEET Nº 7

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
PROJECT NUMBER DPB-0009(002)
PIN 000566.4

123-48

REV	DATE	BY	DESCRIPTION
2	4-29-96	DJH/JBW	APPROVED FOR CONSTRUCTION
1	4-22-96	DJH/JBW	REVISED PER 9-1-96 REVIEW
0	3-15-96	DJH/JBW	ISSUED FOR APPROVAL

DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER
WATERVILLE - WINSLOW BRIDGE
KENNEBEC CO. ——— MAINE
STEEL SUPERSTRUCTURE ERECTION
ANGEL WING PIER BRACKETS

SCALE: 1/2" = 1'-0 UNO
DATE: 3-15-96
DRAWN: DJHAUT
CHECK: JBW

CIANBRO

SHEET 13 OF 13
JOB 105026

STATE OF MAINE — JOSEPH B. WILLEY — 3/15/96