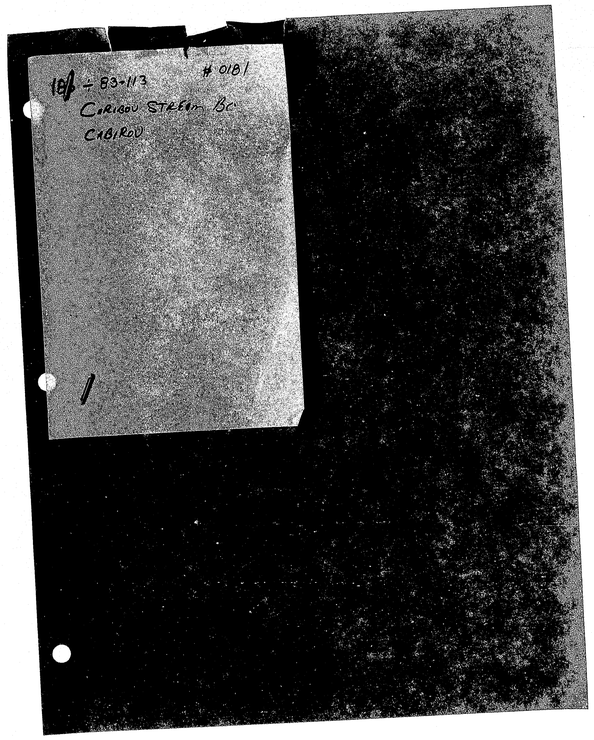
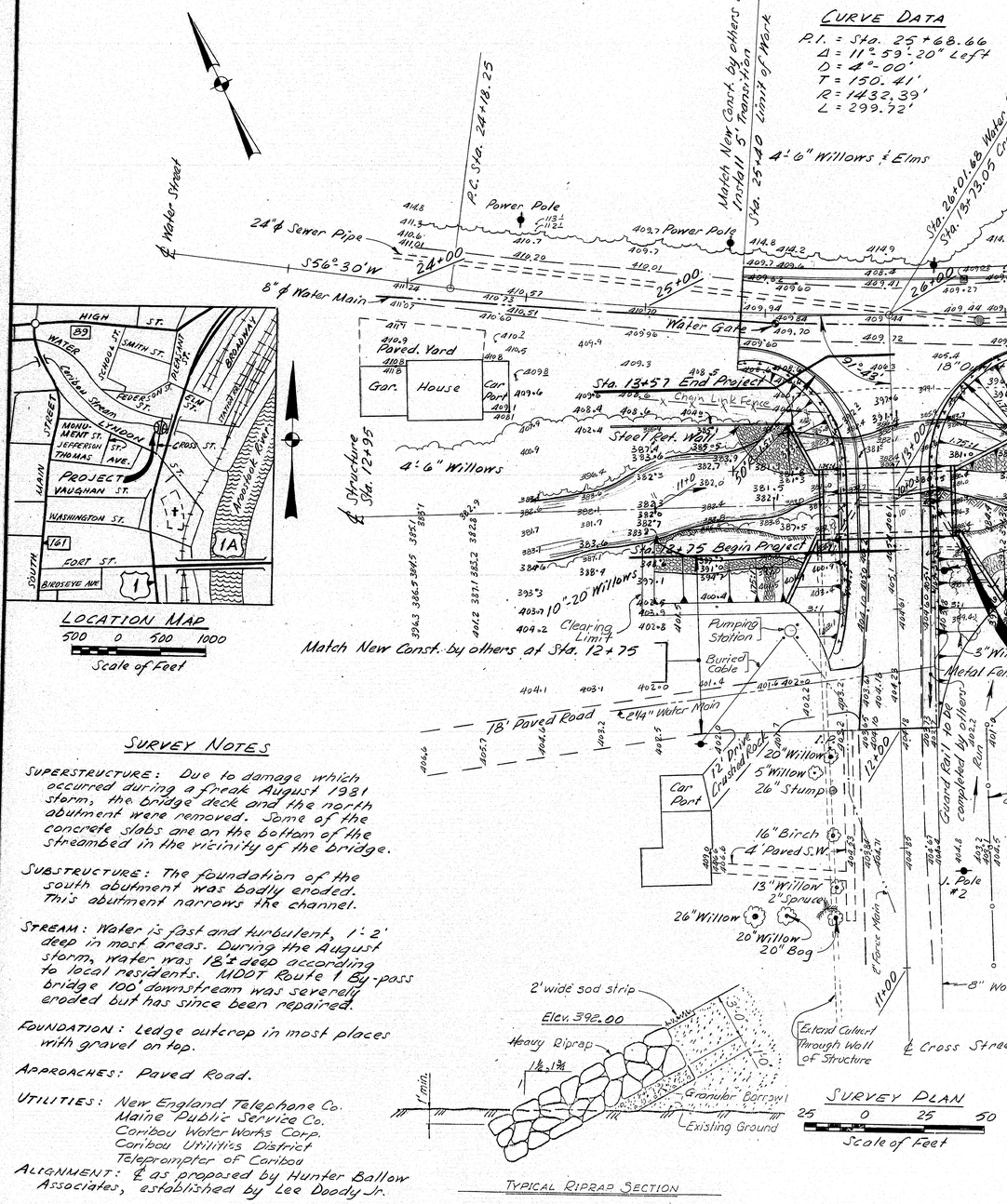

18/ - 83-113
CARIBOU STREAM BC
CARIBOU
#0181
1

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-000S(32)	1	32



LOCATION MAP

500 0 500 1000

Scale of Feet

SURVEY NOTES

SUPERSTRUCTURE: Due to damage which occurred during a freak August 1981 storm, the bridge deck and the north abutment were removed. Some of the concrete slabs are on the bottom of the streambed in the vicinity of the bridge.

SUBSTRUCTURE: The foundation of the south abutment was badly eroded. This abutment narrows the channel.

STREAM: Water is fast and turbulent, 1'-2' deep in most areas. During the August storm, water was 18'± deep according to local residents. MDOT Route 1 By-pass bridge 100' downstream was severely eroded but has since been repaired.

FOUNDATION: Ledge outcrop in most places with gravel on top.

APPROACHES: Paved Road.

UTILITIES: New England Telephone Co.
Maine Public Service Co.
Caribou Water Works Corp.
Caribou Utilities District
Teleprompter of Caribou

ALIGNMENT: ℄ as proposed by Hunter Ballow Associates, established by Lee Doody Jr.

PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN - DETAILED	MEB	10-82
	CHECKED	MEB	
	REVISIONS		
	FIELD CHANGES		

Surrey Traced: BMD 10-82

G 32

BROWNING 44-132 45710

SPECIFICATIONS

DESIGN: AASHTO Standard Specifications for Highway Bridges 1977 and interims thru 1982. (Load Factor Design)
CONTRACT: State of Maine, Dept. of Transportation, Standard Specifications, Highways and Bridges, Revision of June 1981.

DESIGN LOADING

LIVE LOAD: HS 25 STRESS CYCLES: 500,000

MATERIALS

CONCRETE	Class "A"
REINFORCING STEEL	ASTM A615 Grade 60
STEEL STRUCTURAL PLATE	AASHTO M 167

BASIC DESIGN STRESSES

CONCRETE: f'_c = 3000 psi
REINFORCING STEEL: f_y = 60,000 psi
STEEL STRUCTURAL PLATE: f_y = 33,000 psi

HYDROLOGIC DATA

DESIGN AREA	50.4 sq. miles
DESIGN DISCHARGE (Q50)	3600 c.f.s.
CHECK DISCHARGE (Q100)	4300 c.f.s.
HEADWATER ELEVATION (Q50)	394.6
HEADWATER ELEVATION (Q100)	396.0
DISCHARGE VELOCITY (Q50)	12.1 f.p.s.
DISCHARGE VELOCITY (Q100)	13.9 f.p.s.

TRAFFIC DATA

AADT 1982	1980
AADT 2002	2380
DHV	262
T	5
DESIGN SPEED	25 m.p.h.

INDEX

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ALTERNATE #2 - PLATE ARCH	11-15
CROSS SECTIONS	16-25
STANDARDS	26-31
RIGHT OF WAY	32

APPROVED:
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

Jan. 25, 1983 DATE — COMMISSIONER

Jan. 25, 1983 DATE — CHIEF ENGINEER

As Built MAS 4-1-85
Bridge #0181
Field Notebook # 9037

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CARIBOU STREAM BRIDGE

CARIBOU

GENERAL PLAN

SHEET 1 OF 32 AUGUSTA, MAINE March 1983

183-83

ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
	SCHEDULE A – COMMON ITEMS		
203.20	Common Excavation	380	C.Y.
203.21	Rock Excavation	40	C.Y.
206.081	Structural Earth Excavation – Abutments, Retaining Walls, etc.	1200	C.Y.
206.091	Structural Rock Excavation – Abutments, Retaining Walls, etc.	380	C.Y.
304.10	Aggregate Subbase Course – Gravel	580	C.Y.
403.07	Hot Bituminous Pavement, Grading B	120	Ton
403.08	Hot Bituminous Pavement, Grading C	100	Ton
511.071	Cofferdam – Southerly Wall	1	L.S.
511.072	Cofferdam – Northerly Wall	1	L.S.
512.08	French Drains	220	L.F.
514.06	Curing Box for Concrete Cylinders	1	Each
603.171	18 inch Corrugated Metal Pipe	4	L.F.
603.191	24 inch Corrugated Metal Pipe	6	L.F.
604.18	Adjusting Manholes and Catch Basins to Grade	1	Each
606.17	Guard Rail Type 3b – Single Rail	175	L.F.
606.22	Guard Rail Type 3b – over 15 foot radius	150	L.F.
606.265	Terminal End – Single Rail – Galvanized Steel	2	Each
606.35	Guard Rail Delineator Post	2	Each
606.36	Guard Rail, Removed and Reset	30	L.F.
609.31	Curb Type 3	275	L.F.
610.12	Portland Cement for Riprap Grout	4	BBL.
610.16	Heavy Riprap	200	C.Y.
610.18	Stone Ditch Protection	7	C.Y.
612.06	Bituminous Sealing – Black	30	S.Y.
615.07	Loam	25	C.Y.
616.08	Sodding	75	S.Y.
618.13	Seeding Method Number 1	5	Units
618.15	Temporary Seeding	4	LBS.
619.12	Mulch	15	Units
629.05	Hand Labor, Straight Time	10	M.H.
** 630.0607	Traffic Controllers	10	M.H.
631.10	Air Compressor (Including Operator)	10	Hr.
631.11	Air Tool (Including Operator)	10	Hr.
631.12	All Purpose Excavator (Including Operator)	10	Hr.
631.132	Small Bulldozer (Including Operator)	10	Hr.
631.14	Grader (Including Operator)	10	Hr.
631.15	Roller earth or base course (including operator)	10	Hr.
631.171	Truck – small (including operator)	10	Hr.
631.22	Front End Loader (including operator)	10	Hr.
637.08	Calcium Chloride	1	Ton

** Non-bid Item

JANUARY 1968

PROJECT DESIGN ENGINEER	BY	DATE
PLANS DESIGN – DETAILED	MES	3/83
CHECKED	MES	3/83
REVISIONS	AMV	1/85
FIELD CHANGES		

ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
639.19	Field Office Type B	1	Each
652.31	Type I Barricades	10	Each
652.34	Cones	10	Each
652.35	Construction Signs	400	S.F.
652.36	Maintenance of Traffic Control Devices	170	C.D.
652.38	Flagger	80	M.H.
656.50	Baled Hay, in place	10	Each
656.51	Sandbags, in place	10	Each
657.24	Seeding Pits	10	Units
659.10	Mobilization	1	L.S.
	SCHEDULE B – ALTERNATE #1		
203.24	Common Borrow	1540	C.Y.
203.25	Granular Borrow	1130	C.Y.
502.21	Structural Concrete, Abutments and Retaining Walls	263	C.Y.
502.28	Structural Concrete Rigid Frome Structures	270	C.Y.
502.56	Concrete Fill	280	C.Y.
503.12	Reinforcing Steel Fab. and Delivered	45,000	LBS.
503.13	Reinforcing Steel Placing	45,000	LBS.
	SCHEDULE C – ALTERNATE #2		
203.24	Common Borrow	1100	C.Y.
203.25	Granular Borrow	1550	C.Y.
502.21	Structural Concrete, Abutments and Retaining Walls	397	C.Y.
502.56	Concrete Fill	340	C.Y.
503.12	Reinforcing Steel Fab. and Delivered	21,100	LBS.
503.13	Reinforcing Steel Placing	21,100	LBS.
509.30	327 Inch Span, 185 Inch Rise Long Span Steel Structural Plate Arch	1	L.S.

Estimate of Lump Sum Quantities

GENERAL CONSTRUCTION NOTES

1. All utility facilities shall be adjusted by the respective utilities unless noted.
2. For easements, construction limits and right-of-way lines refer to Right-of-Way Map.
3. Place a 2' wide strip of sod on the side slopes along the top of the riprap.
4. The clearing limits as shown on the plans are approximate. The exact limits shall be established in the field by the Engineer. Payment for clearing shall be incidental to contract items.
5. Place loam, 2" deep, on slopes between Station 12+75 and Station 13+73.05 Cross Street and Station 25+40 and Station 27+00 Water Street.
6. Do not excavate for Aggregate Subbase Course where existing material is suitable as determined by the Engineer. Shaping and compacting of the existing subbase and layers of new subbase 6" or less thick, in areas where the Engineer directs the Contractor not to excavate to the subgrade line shown on the plans, will be paid for with appropriate equipment rental items.
7. One guardrail delineator post and one terminal end shall be installed at each guardrail end.
8. Sodded gutters shall be constructed, after paving and shoulder work is completed, where it is apparent that runoff will cause continual erosion.
9. Design and details are provided for both a Concrete Rigid Frame Structure and a Long Span Structural Plate Arch Structure. As provided in the Contract documents, the Contractor shall submit a bid for both alternates and the structure alternate to be constructed will be determined by the Department.

RIGID FRAME NOTES

1. The return ends of the southerly footing and wall of the Rigid Frame Barrel shall be placed up to the face of the structural rock excavation and wingwalls "L1" and "R1" begin thereon.
2. Wingwall "L2" and footing shall extend to the face of the existing Steel Binwall. The wingwall and footing shall be located to cover the damaged end of the binwall as directed by the Engineer.
3. Concrete in the wingwalls and all footings will be paid for under Item 502.21, Structural Concrete, Abutments and Retaining Walls. Concrete in the rigid frame barrel will be paid for under Item 502.28 Structural Concrete Rigid Frame Structures.
4. Concrete fill for the northerly footings shall be placed to Elevation 378.0. In the event ledge is below Elevation 365.0 at any section a footing design change may be required.
5. Concrete fill between the southerly footing of the Rigid Frame Barrel and the structural rock excavation, as specified on the design drawings, will be placed to Elevation 385.0. At the Contractor's option, the concrete fill may be Class A or Class B concrete placed in the dry. In either case payment will be made under Item 502.56 Concrete Fill.
6. Form a 1" V-groove at the front face of vertical contraction joints.
7. Reinforcing steel shall have 2" concrete cover unless otherwise indicated.
8. Place 4" diameter drains in the rigid frame barrel and wingwalls at 10' maximum spacing. Exact location to be determined in the field by the Engineer.
9. Cover the vertical contraction joints on the back with two layers of heavy roofing paper. Cover the contraction joints in the top slab in the same manner but without recessing the concrete. See BD127 for detail.
10. Cover expansion joints on the back with two layers of heavy roofing. See BD127 for detail.

PLATE ARCH NOTES

1. One 27'3" span, 15'5" rise Long Span Structural Plate Arch required. All plates shall be 0.188". The Plate Arch shall be either an Armco "Super-Span" or a Republic "Maxi-Span" at the Contractor's option. See Special Provision, Section 509.
2. The southerly footing shall be placed up to the structural rock excavation. Wingwall Parapets "L1" and "R1" shall be placed up to the face of the structural rock excavation and Wingwalls "L1" and "R1" begin thereon. All concrete, other than concrete fill and the concrete in the compaction wing or thrust beam, shall be paid for under Item 502.21, Structural Concrete, Abutments and Retaining Walls.
3. Guardrail posts within the limits of the structural plate structure shall be cut to length in the field, as required to clear the structure by a minimum of 6". Cut posts shall be imbedded 9" in a concrete base 2'0" square by 1'0" thick. The concrete mix shall be as approved by the Engineer. Any costs for cutting posts and constructing concrete bases will be considered incidental to guardrail items.
4. Wingwall "L2" and footing shall extend to the face of the existing Steel Binwall. The wingwall and footing shall be located to cover the damaged end of the binwall as directed by the Engineer.
5. Concrete fill for the north footings shall be placed to Elevation 378.0. In the event ledge is below Elevation 365.0 at any section a footing design change may be required.
6. Place 4" diameter drains in the footings and wingwalls at 10' maximum spacing. Exact location to be determined by the Engineer in the field.
7. Cover expansion joints on the back with two layers of heavy roofing. See BD127 for detail.
8. One unbalanced channel shall be furnished in proper lengths to make one unit 57'0" long for each plate arch footing and will extend approximately 6" beyond the ends of the 56'0" nominal length plate arch barrel.

GENERAL CONSTRUCTION NOTE

All embankment material, except as otherwise shown, placed below water elevation, shall be granular borrow meeting the requirements of Subsection 703.19, Material for Underwater Backfill.

NOTE: ALTERNATE #1 BUILT

F.H.W.A. REQ. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0005(58)	2	32

REVISED AS BUILT MAS 1-8-85

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CARIBOU STREAM BRIDGE
CARIBOU

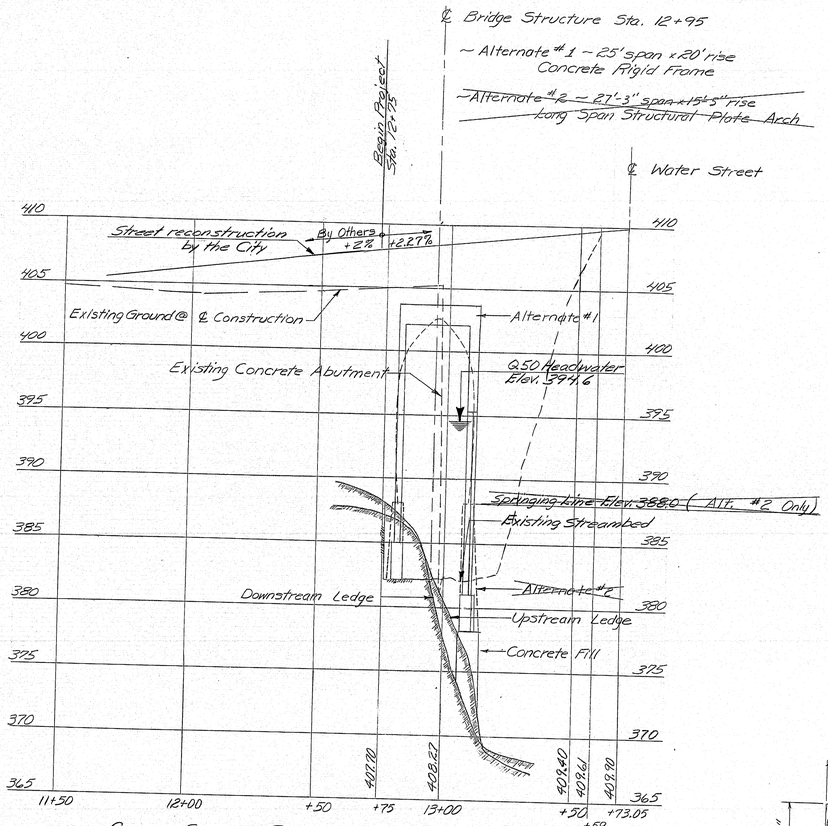
QUANTITIES & NOTES

SHEET 2 OF 32 AUGUSTA, MAINE March 1983

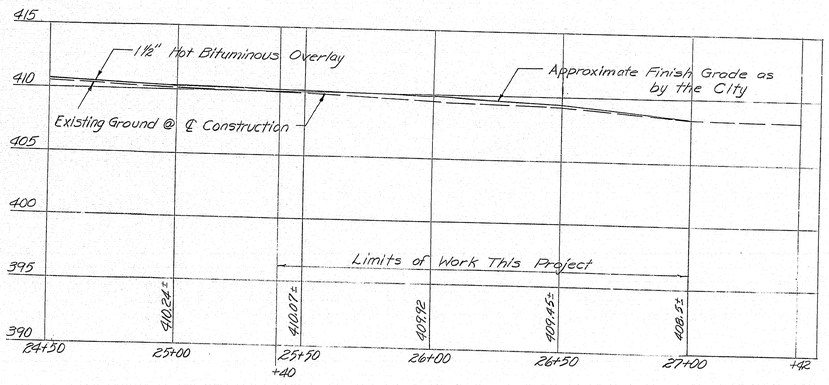
183-84

BD-1 1968

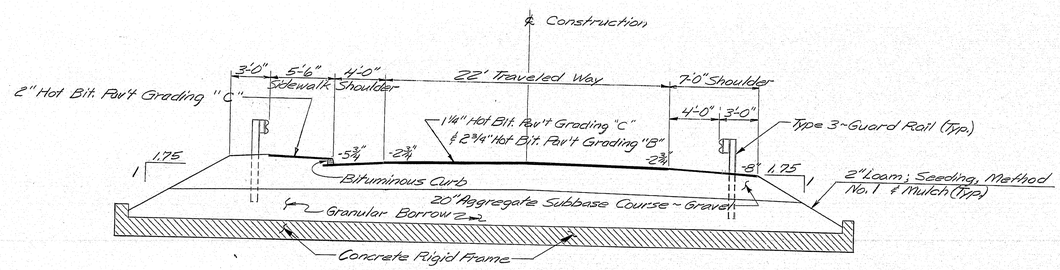
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-005(32)	3	32



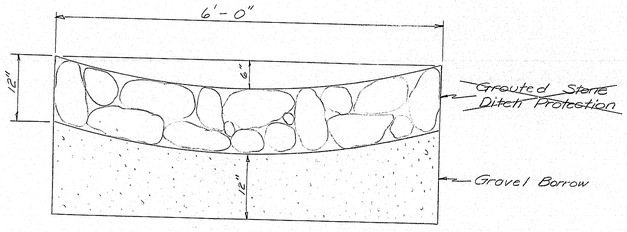
CROSS STREET PROFILE ALONG ℄ CONSTRUCTION



WATER STREET PROFILE ALONG ℄ CONSTRUCTION



SECTION AT PROPOSED BRIDGE
(ALTERNATE #1 SHOWN)



TYPICAL DOWNSPOUT DETAIL

PROJECT DESIGN ENGINEER	BY	DATE
DESIGN - DETAILED	MEB	7/82
CHECKED	LAW	2/83
REVISIONS		
FIELD CHANGES		

PLANS

Surveyed Plotted 12/81 EXP

BRUNING 44-132 45710

Revised As Built MAS 1-8-85
Survey Book # 9097 Bridge Code #0181

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CARIBOU STREAM BRIDGE

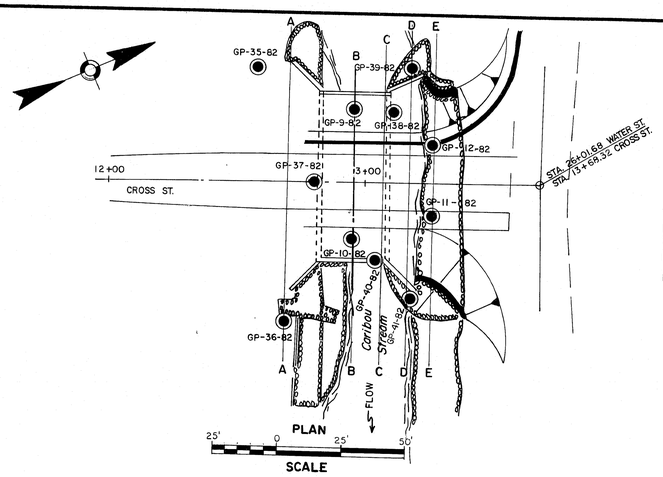
CARIBOU

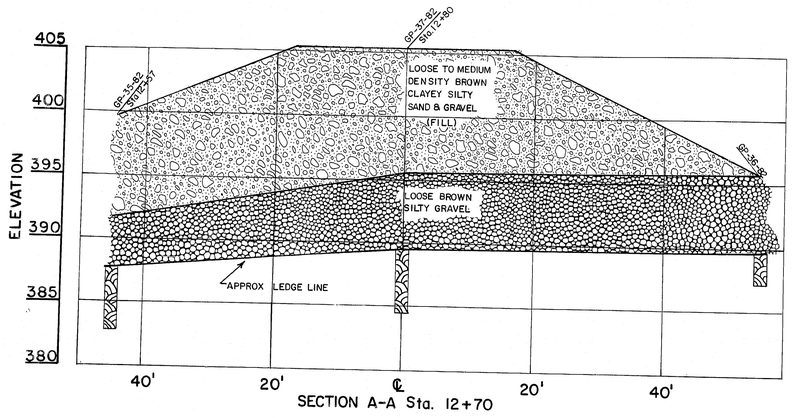
PROFILE

SHEET 3 OF 32 AUGUSTA, MAINE March 1983

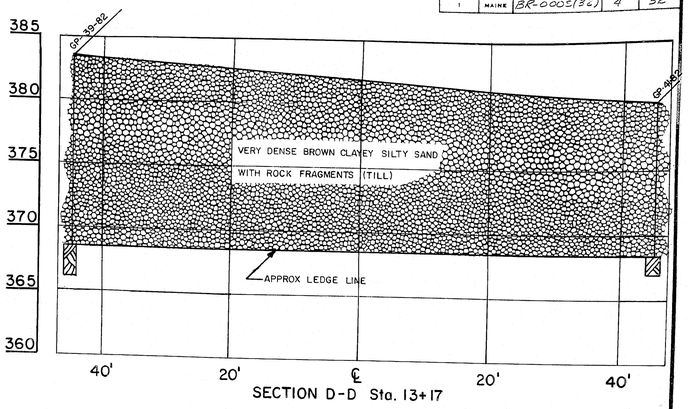
183-85

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	BR-0005(32)	4	32

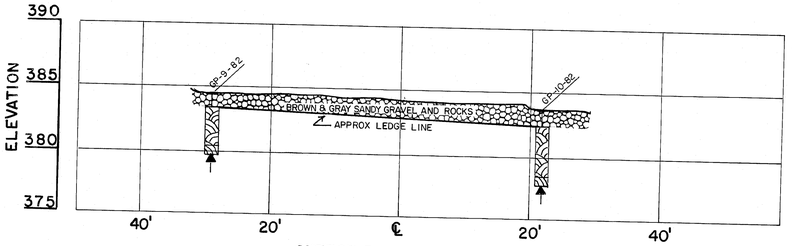




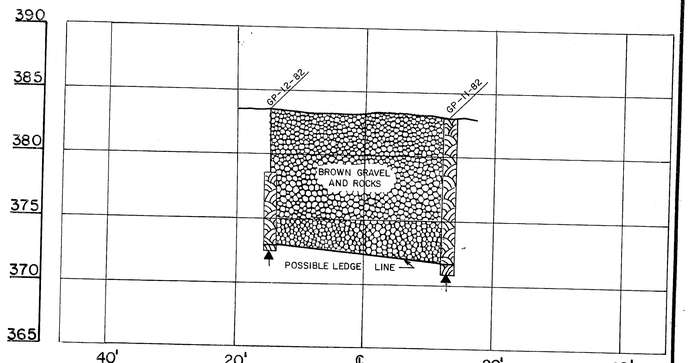
SECTION A-A Sta. 12+70



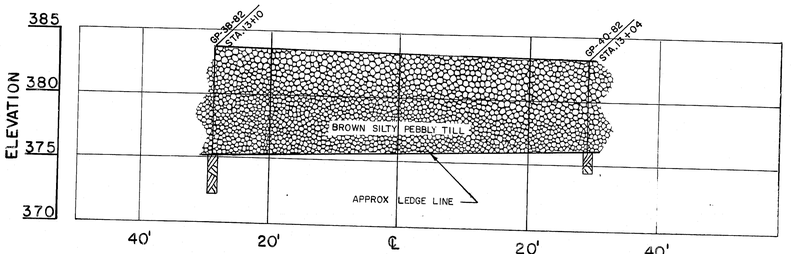
SECTION D-D Sta. 13+17



SECTION B-B Sta. 12+95

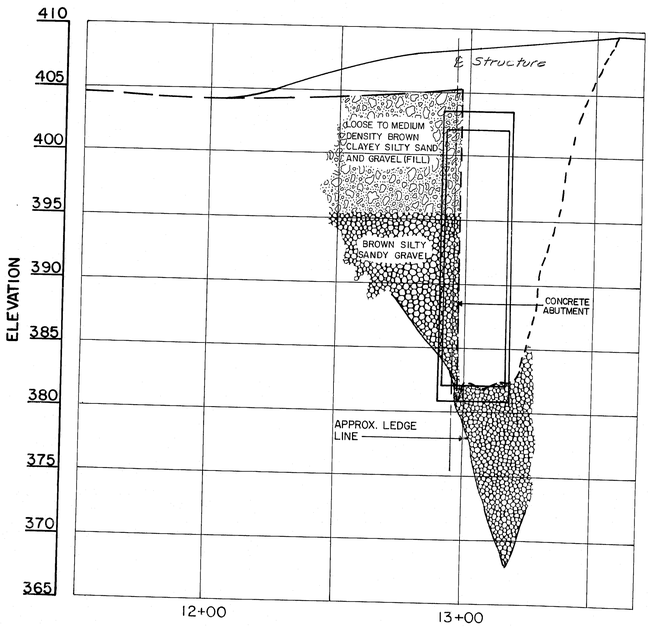


SECTION E-E Sta. 13+26



SECTION C-C Sta 13+07

TRANSVERSE SECTIONS
HORIZ. 10' 0 10' 20'
VERT. 5' 0 5' 10'
SCALE



PROFILE
HORIZ. 25' 0 25' 50'
VERT. 5' 0 5' 10'
SCALE

PROJECT DESIGN ENGINEER
PLANS
DESIGN - DETAILED
CHECKED
REVISIONS
FIELD CHANGES
BY
DATE

BRUNING 44-132 45710

As Built MWL 1-3-95

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CARIBOU STREAM BRIDGE
OVER
CARIBOU STREAM
IN THE TOWN OF
CARIBOU
AROOSTOOK COUNTY
FOUNDATION SURVEY
SHEET 4 OF 32 AUGUSTA, MAINE March 1983

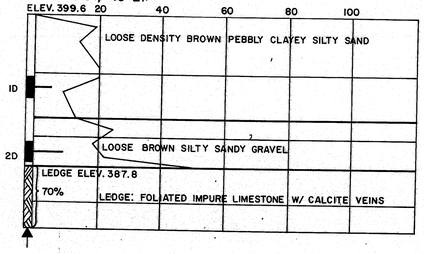
183-86

F.H.W.A. REQ. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0005(32)	5	32

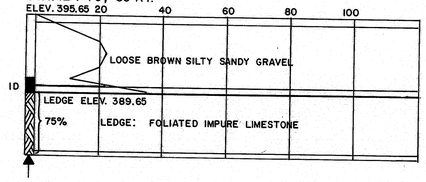
ELEVATION

405
400
395
390
385
380

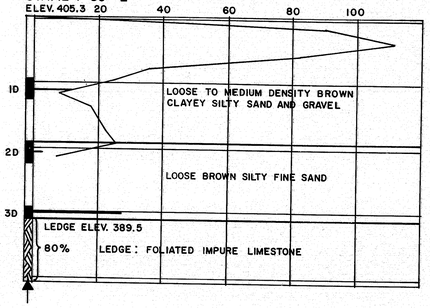
BORING GP-35-82
STA. 12+57, 45' LT.
ELEV. 399.6 20 40 60 80 100



BORING GP-36-82
STA. 12+70, 55'RT.
ELEV. 395.65 20 40 60 80 100

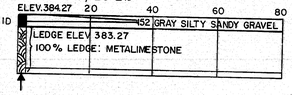


BORING GP-37-82
STA. 12 + 80 ℄
ELEV. 405.3 20 40 60 80 100

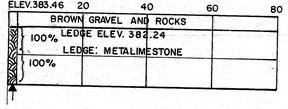


385
380
375
370

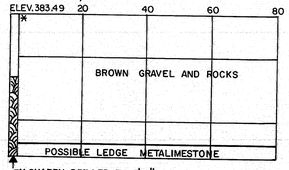
BORING GP-9-82
STA. 12+95, 29' LT.
ELEV. 384.27 20 40 60 80



BORING GP-10-82
STA. 12+95, 22' RT.
ELEV. 383.46 20 40 60 80

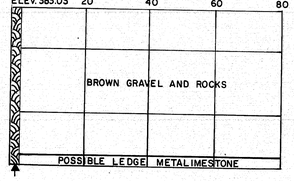


BORING GP-12-82
STA. 13+26, 15 LT.
ELEV. 383.49 20 40 60 80



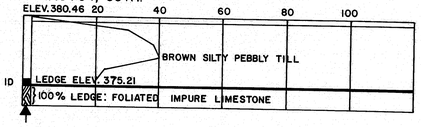
*QUARRY DRILLED TO 5'-0"

BORING GP-11-82
STA. 13+26, 13' RT.
ELEV. 383.03 20 40 60 80

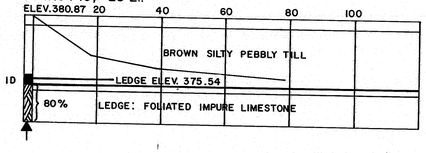


385
380
375
370
365

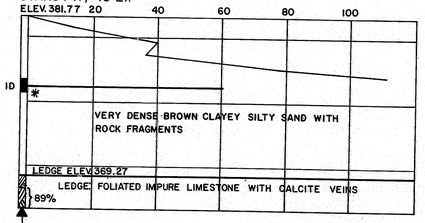
BORING GP-40-82
STA. 13+04, 30 RT.
ELEV. 380.46 20 40 60 80 100



BORING GP-38-82
STA. 13+10, 28' LT.
ELEV. 380.87 20 40 60 80 100

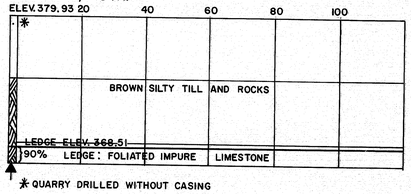


BORING GP-39-82
STA. 13+17, 45' LT.
ELEV. 381.77 20 40 60 80 100



*QUARRY DRILLED AHEAD

BORING GP-41-82
STA. 13+17, 45'RT.
ELEV. 379.93 20 40 60 80 100



*QUARRY DRILLED WITHOUT CASING

BORING NOTES

All samples and vanes are made ahead of casing

N — Number of blows required to drive extra heavy casing one foot with 400 ft. lbs. of energy per blow

Location of sample or sample attempt

1D — Number and type of dry sample
S & H Sampler #1290's

Number of blows required to drive spoon or tubing one foot with 350 ft lbs. of energy per blow

Bottom of boring (may not be bottom of soil strata)

71% Location cored by diamond bit and percent recovery of rock.

PROJECT DESIGN ENGINEER	BY	DATE
PLANS	DESIGN - DETAILED	
	CHECKED	
	REVISIONS	
	FIELD CHANGES	

BRUNING 44-132-45710

As Built MAS 1-8-85

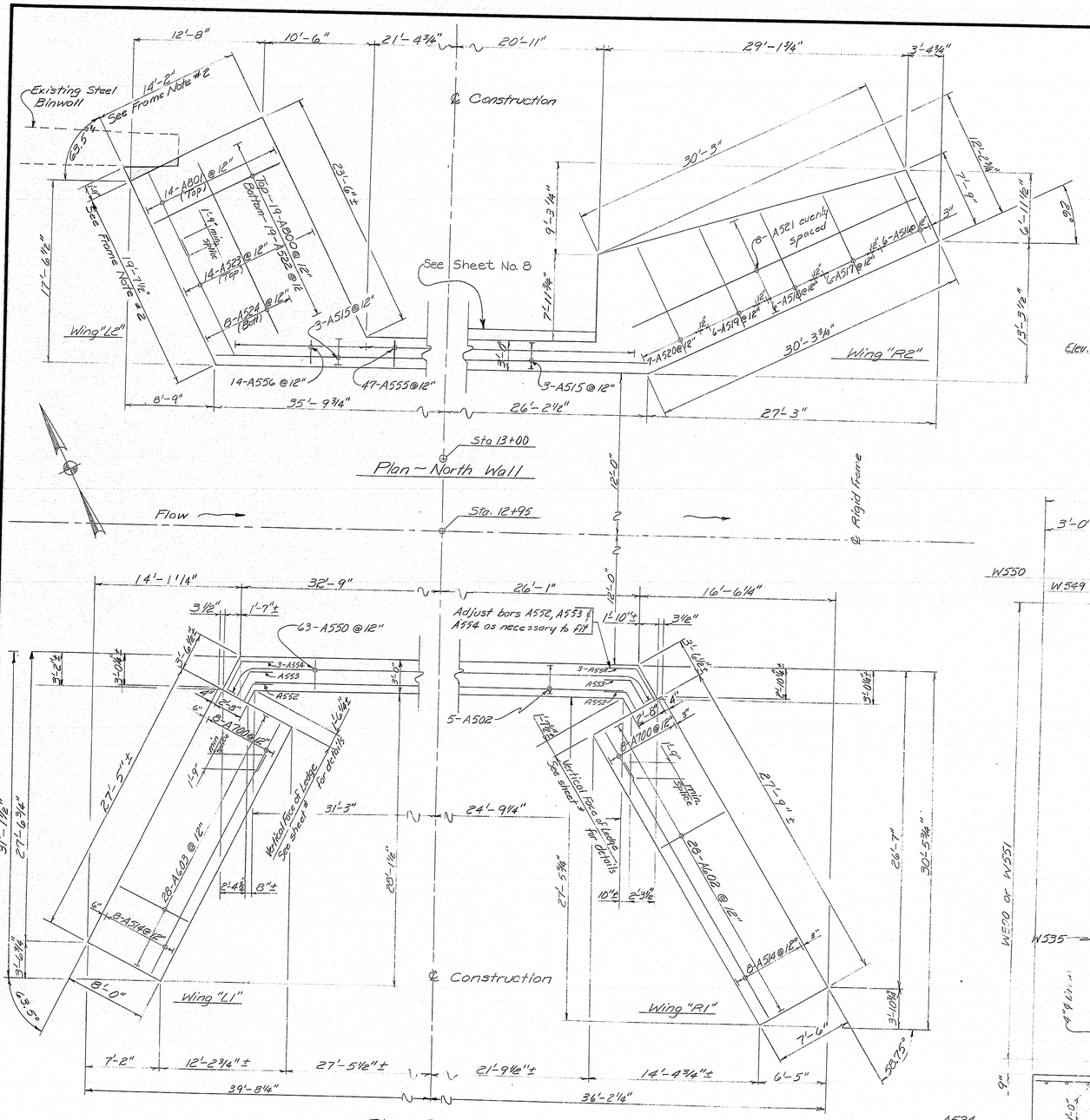
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

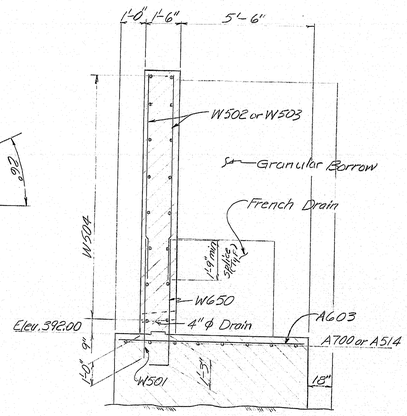
CARIBOU STREAM BRIDGE
OVER
CARIBOU STREAM
IN THE TOWN OF
CARIBOU
AROOSTOOK COUNTY

BORING DETAILS
SHEET 5 OF 32 AUGUSTA, MAINE March 1983

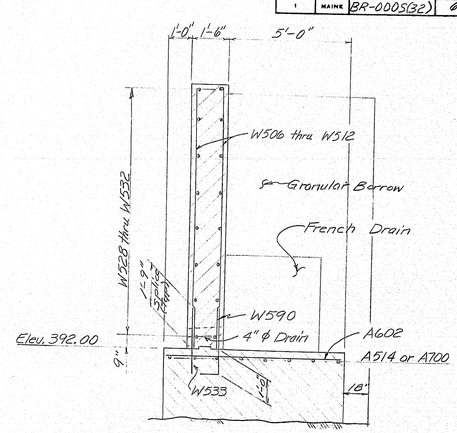
183-87

F.H.W.A. REQ. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0005(32)	6	32

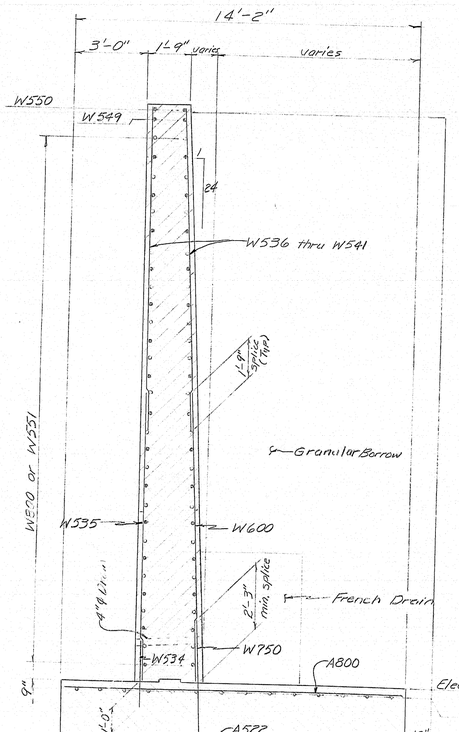




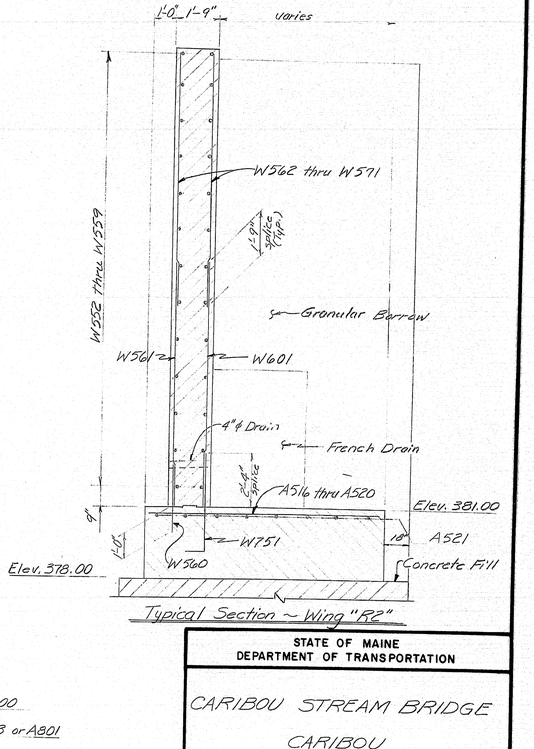
Typical Section ~ Wing "L1"



Typical Section ~ Wing "R1"



Typical Section ~ Wing "L2"



Typical Section ~ Wing "R2"

PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN DETAILED	MES	10/82
	CHECKED	LAW	BAS	11/83
	REVISIONS			
	FIELD CHANGES			

BRUNING 44-132 45710

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CARIBOU STREAM BRIDGE

CARIBOU

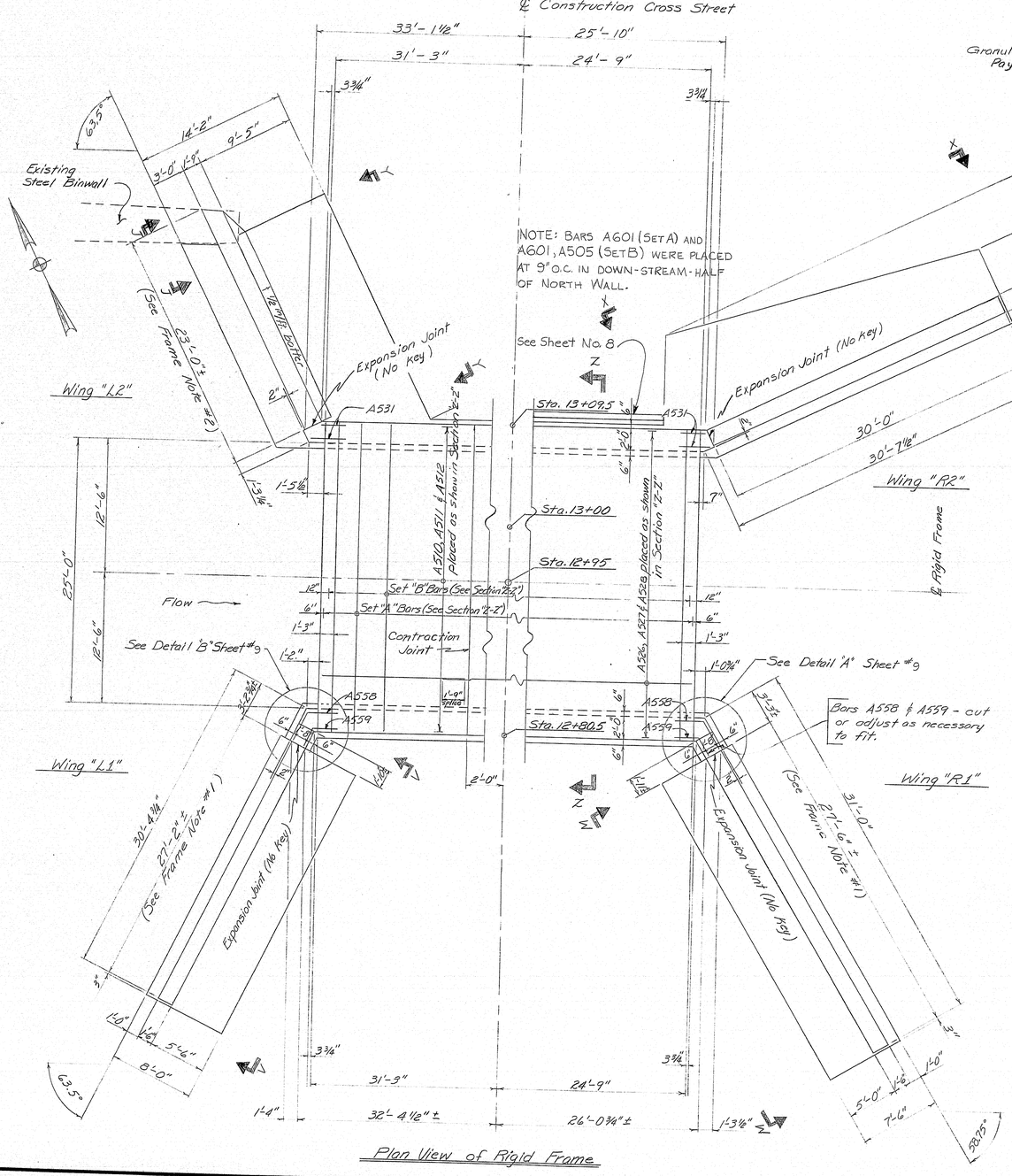
Rigid Frame Footings & Sections
ALTERNATE #1

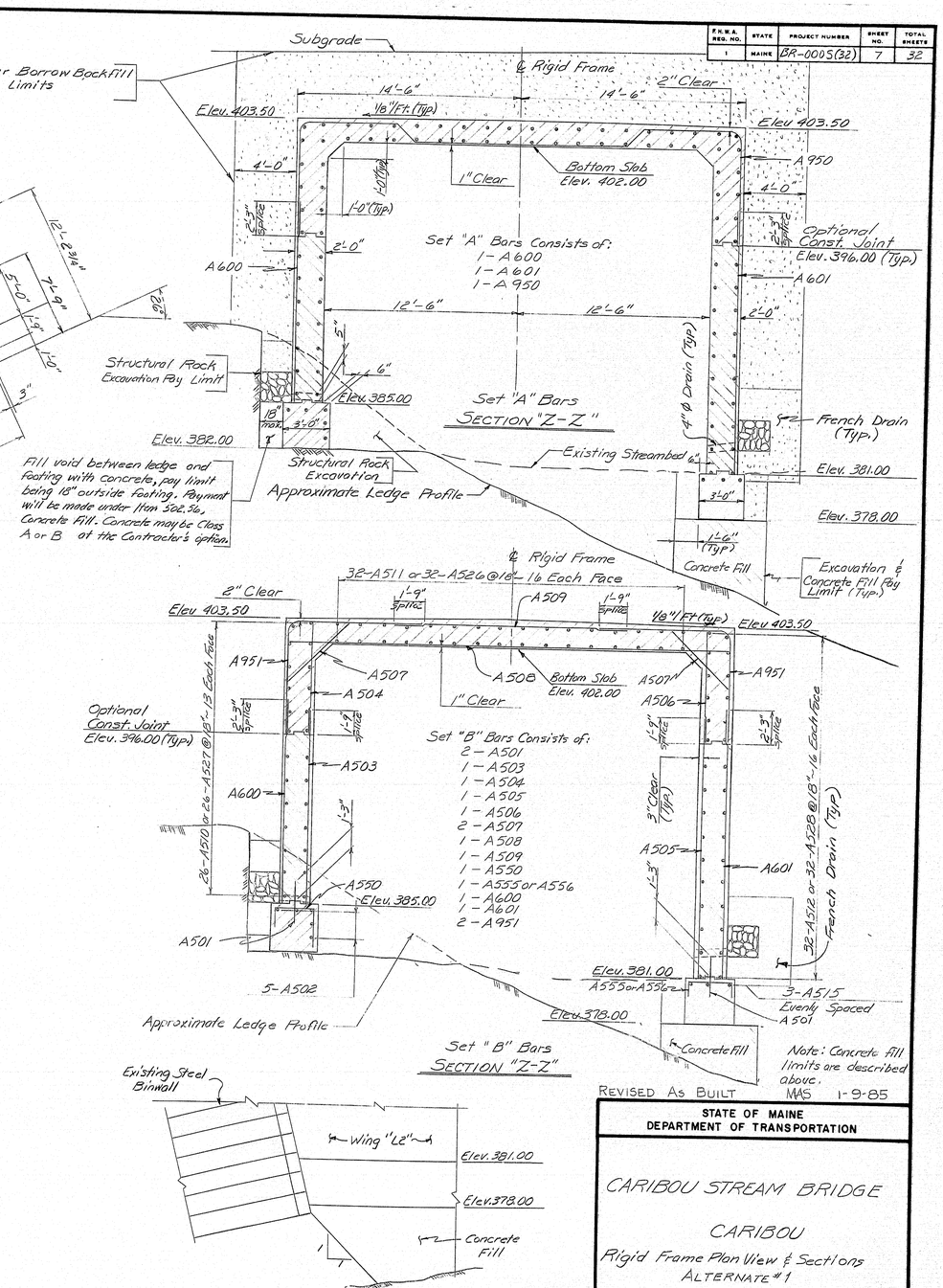
REVISED AS BUILT MAS 1-8-85

SHEET 6 OF 32 AUGUSTA, MAINE March 1983

183-88

F.H.W.A. REQ. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0005(32)	7	32





REVISED AS BUILT MAS 1-9-85

PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN - DETAILED	MEB	10/85
	CHECKED	LAW	BAS 3/87
	REVISIONS		
	FIELD CHANGES		

BRUNING 44-132 4970

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CARIBOU STREAM BRIDGE

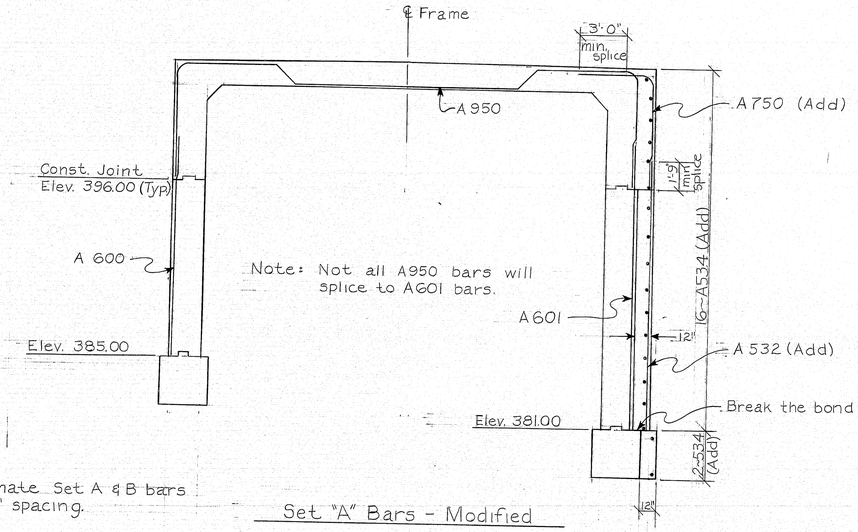
CARIBOU

Rigid Frame Plan View & Sections
ALTERNATE #1

183-89

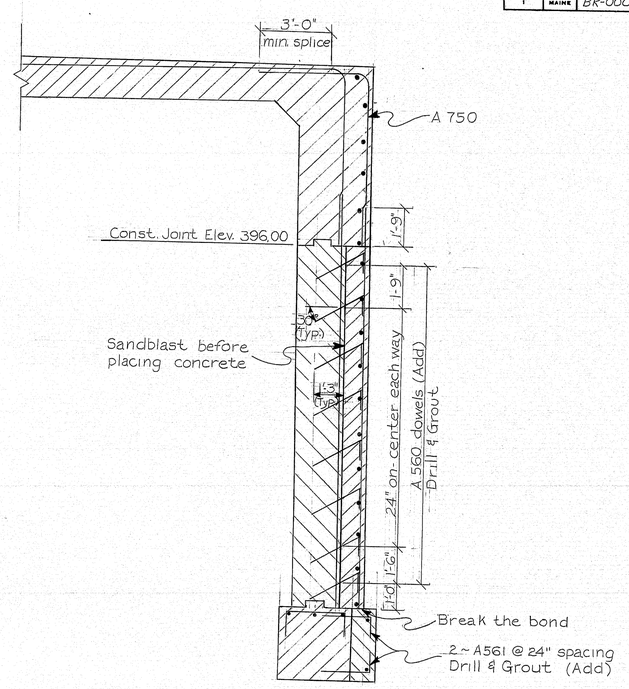
SHEET 7 OF 32 AUGUSTA, MAINE March 1988

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0005(32)	8	32

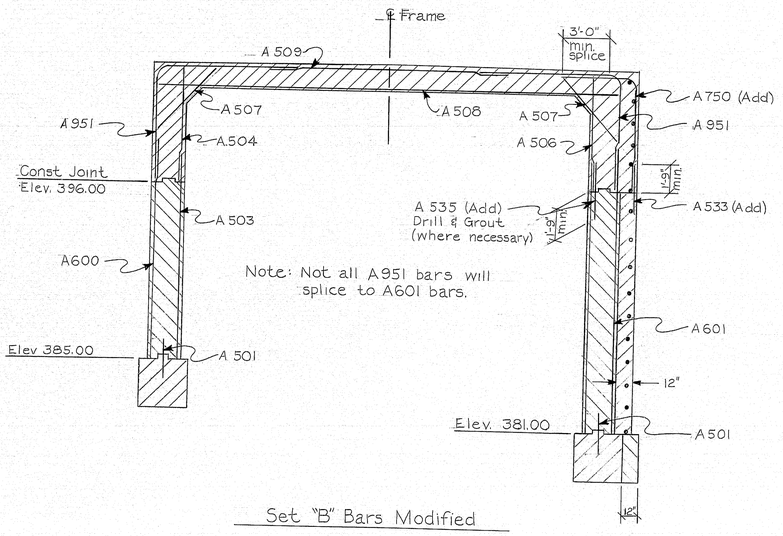


Note: Alternate Set A & B bars at 6" spacing.

Set "A" Bars - Modified



Attachment to Existing Wall Detail



Set "B" Bars Modified

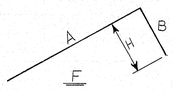
Reinforcing Steel ~ Additional

Straight Bars -

Mark	Nos.	Length	Location
A 532	27	16'-9"	North Wall
A 533	26	3'-0"	North Wall
A 534	18	26'-8"	North Wall
A 535	17	3'-6"	North Wall

Bent Bars -

Mark	Nos.	Length	Type	A	B	C	D	E	F	G	H	O	R
A 560	104	3'-2"	F	2-4"	10"						8 3/4"		
A 561	26	2'-10"	L	10"	2'-0"								
A 750	53	12'-2"	J	6'-10"	9½"	4'-6"							6"



PROJECT DESIGN ENGINEER	BY	DATE
PLANS DESIGN - DETAILED		
CHECKED		
REVISIONS		
FIELD CHANGES	MAS	1/8/85

JANUARY 1988

As Built MAS 1-8-85

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CARIBOU STREAM BRIDGE
CARIBOU

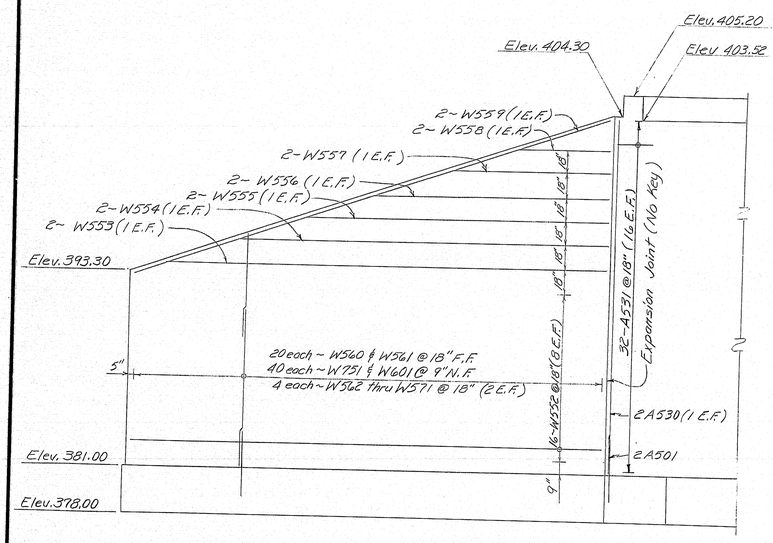
MODIFICATIONS TO DOWN-STREAM-HALF OF NORTH WALL

183-90

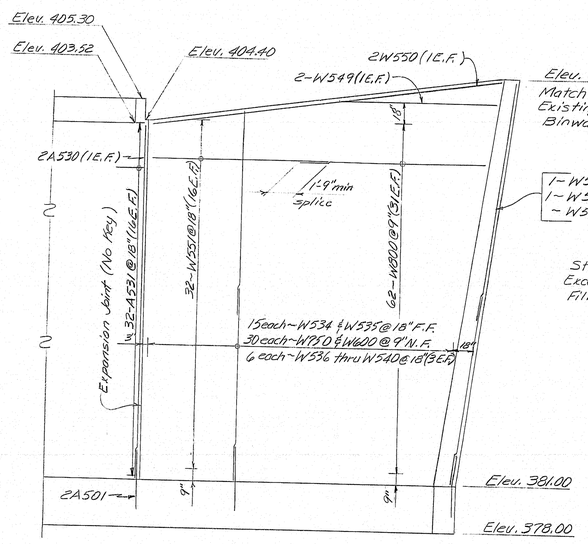
SHEET 8 OF 32 AUGUSTA, MAINE Jan. 1985

303-1 2000

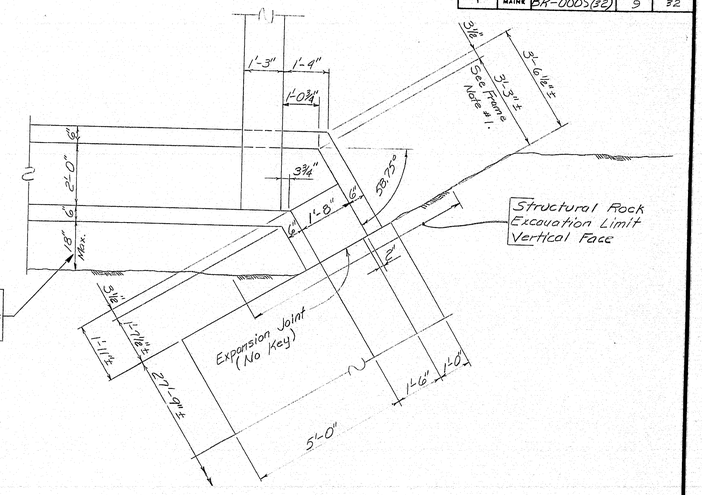
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0005(32)	9	32



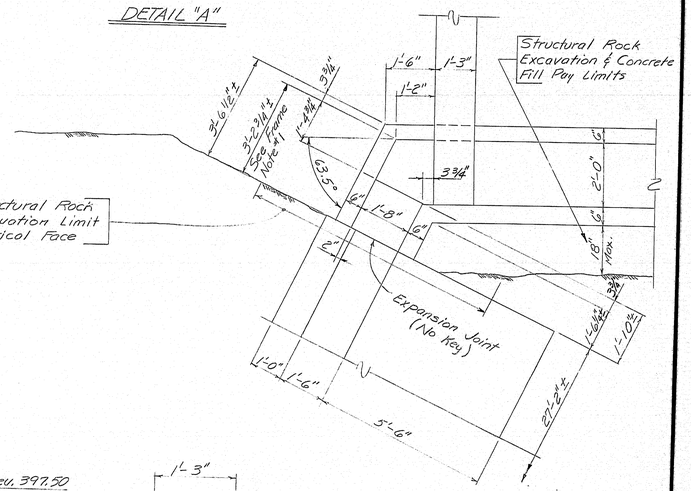
VIEW-"X-X"
Rear Elevation of Wing "R2"



VIEW-"Y-Y"
Rear Elevation of Wing "L2"

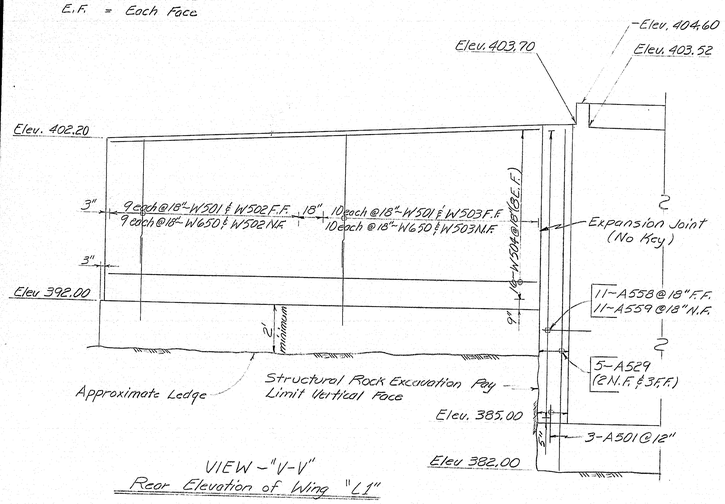


DETAIL "A"

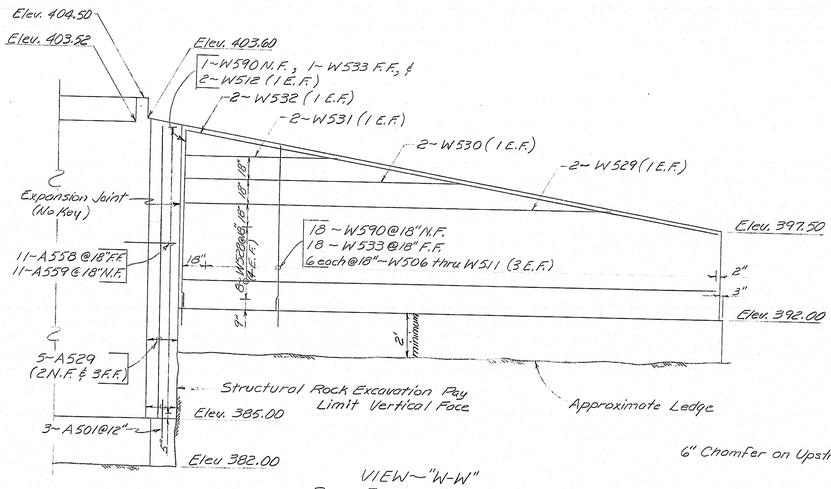


DETAIL "B"

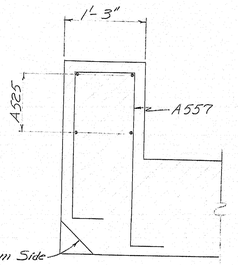
Legend
N.F. = Near Face
F.F. = For Face
E.F. = Each Face



VIEW-"V-V"
Rear Elevation of Wing "L1"



VIEW-"W-W"
Rear Elevation of Wing "R1"



HEADWALL DETAIL

As Built MAS 1-8-85

PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN - DETAILED	MES	10/82
	CHECKED	LAW	1/83
	REVISIONS	BAS	
	FIELD CHANGES		

BRUNING 44-132 45710

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CARIBOU STREAM BRIDGE

CARIBOU

RIGID FRAME ELEVATIONS & DETAILS
ALTERNATE #1

SHEET 9 OF 32 AUGUSTA, MAINE March 1983

183-91

REINFORCING STEEL SCHEDULE

STRAIGHT BARS

MARK	NO.	LENGTH	LOCATION
	Rigid Frame		
A501	120	2'-6"	Footing Dowel
A502	5	56'-1"	South Footing
A503	55	12'-9"	South Wall
A504	55	7'-4"	" "
A505	47	16'-9"	North Wall
A506	55	7'-4"	" "
A507	110	5'-2"	Top Wall Corners
A508	55	28'-8"	Slab
A509	55	15'-0"	"
A510	26	28'-11"	South Wall
A511	32	28'-11"	Slab
A512	32	28'-11"	North Wall
A514	16	24'-2"	Footings "L1" & "R1"
A515	6	31'-11"	North Wall Footing
A516	6	7'-6"	Footing Wing "R2"
A517	6	8'-4"	
A518	6	9'-3"	
A519	6	10'-2"	
A520	7	10'-11"	
A521	8	30'-0"	
A522	19	7'-0"	Footing Wing "L2"
A523	14	13'-9"	
A524	8	20'-0"	
A525	8	28'-8"	Headwall
A526	32	28'-6"	Slab
A527	26	28'-6"	South Wall
A528	32	28'-6"	North Wall
A529	10	18'-0"	South Wall Corners
A530	4	23'-0"	North Wall Corners
A531	64	3'-0"	" " "
A600	111	13'-3"	South Wall
A601	95	17'-3"	North Wall
A602	28	7'-0"	Footing Wing "R1"
A603	28	7'-6"	Footing Wing "L1"
A700	16	5'-0"	Footing Wings "L1" & "R1"
A800	19	13'-8"	Footing Wing "L2"
A801	14	9'-0"	" " "

MARK	NO.	LENGTH	LOCATION
	Wingwall "L1"		
W501	19	5'-0"	Footing Dowel
W502	18	8'-5"	Vertical
W503	20	9'-2"	"
W504	16	26'-10"	Horizontal
	Wingwall "R1"		
W506	6	5'-4"	Vertical
W507	6	6'-3"	
W508	6	7'-3"	
W509	6	8'-2"	
W510	6	9'-1"	
W511	6	10'-0"	
W512	2	10'-11"	
W528	8	27'-2"	Horizontal
W529	2	21'-2"	
W530	2	13'-11"	
W531	2	6'-8"	
W532	2	27'-9"	
W533	19	3'-8"	Footing Dowel
	Wingwall "L2"		
W534	16	2'-9"	Footing Dowel
W535	16	12'-3"	Vertical
W536	6	13'-1"	
W537	6	13'-7"	
W538	6	14'-1"	
W539	6	14'-7"	
W540	6	15'-1"	
W541	2	15'-4"	
W549	2	11'-0"	Horizontal
W550	2	21'-11"	
W551	32	10'-1"	
W600	30	12'-3"	Vertical
W300	62	14'-4"	Horizontal

MARK	NO.	LENGTH	LOCATION
	Wingwall "R2"		
W552	16	29'-8"	Horizontal
W553	2	28'-5"	
W554	2	24'-4"	
W555	2	20'-3"	
W556	2	16'-2"	
W557	2	12'-1"	
W558	2	8'-0"	
W559	2	31'-7"	
W560	20	2'-9"	Footing Dowel
W561	20	8'-0"	Vertical
W562	4	6'-6"	
W563	4	7'-7"	
W564	4	8'-8"	
W565	4	9'-10"	
W566	4	10'-11"	
W567	4	12'-0"	
W568	4	13'-1"	
W569	4	14'-2"	
W570	4	15'-4"	
W571	4	16'-5"	
W601	40	8'-0"	Vertical

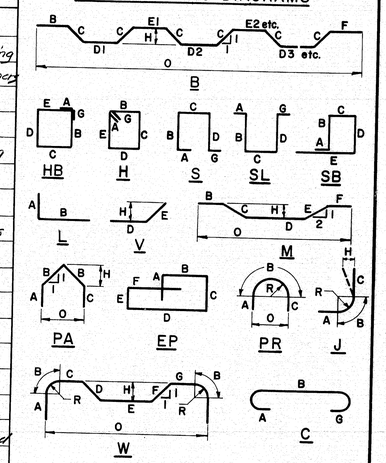
BENT BARS

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION
					Rigid Frame									
A550	65	6'-0"	S	—	1'-0"	2'-6"	2'-6"			—				
A552	2	3'-6"	V				1'-7"	1'-11"			1'-4"			South Wall Footing
A553	2	4'-9"	V				2'-4"	2'-5"			2'-0"			South Footing Corners
A554	6	6'-0"	V				3'-1"	2'-11"			2'-8"			
A555	47	4'-6"	S	—	1'-0"	2'-6"	1'-0"			—				North Wall Footing
A556	14	3'-6"	L	1'-0"	2'-6"									" " "
A557	40	6'-9"	S	0'-6"	2'-3"	0'-10"	2'-8"			0'-6"				Headwall
A558	22	5'-5"	V				2'-6"	2'-11"			2'-6"			South Wall Corners
A559	22	4'-0"	V				2'-0"	2'-0"			1'-9"			" " "
A950	56	43'-10"	W	6'-10"	0'-9½"	5'-8"	1'-9"	13'-8"	1'-9"	5'-9"		28'-8"	0'-6"	Slab
A951	110	15'-9"	J	6'-10"	0'-9½"	8'-1"					—		0'-6"	Slab
					Wingwalls									
W590	19	4'-5"	L	0'-9"	3'-8"									Wing "R1" Footing Dowel
W650	19	6'-0"	L	0'-9"	5'-3"									Wing "L1" Footing Dowel
W750	30	5'-9"	L	0'-9"	5'-0"									Wing "L2" Footing Dowel
W751	40	4'-10"	L	0'-9"	4'-1"									Wing "R2" Footing Dowel

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION

FHWA REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0005(32)	10	32

TYPE-BENDING DIAGRAMS



All dimensions are out to out of reinf. bar

Bending details and hooks shall conform to the recommendations of ACI Standard 315-65.

Reinforcing Bar: A.S.T.M. A 615 Grade 60

GENERAL NOTES

1. First digit(s) following the letter of the Mark indicates size of reinf. bar.
   Mark (A 502) bar size - #5
   Mark (P 1001) bar size - #10
   Mark (S 609) bar size - #6
2. Letter of Marks A, P & S locates bars of Abutments, Piers, and Superstructure parts respectively.

REVISED AS BUILT MAS 1-9-85

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CARIBOU STREAM BRIDGE
CARIBOU

RIGID FRAME
ALTERNATE #1

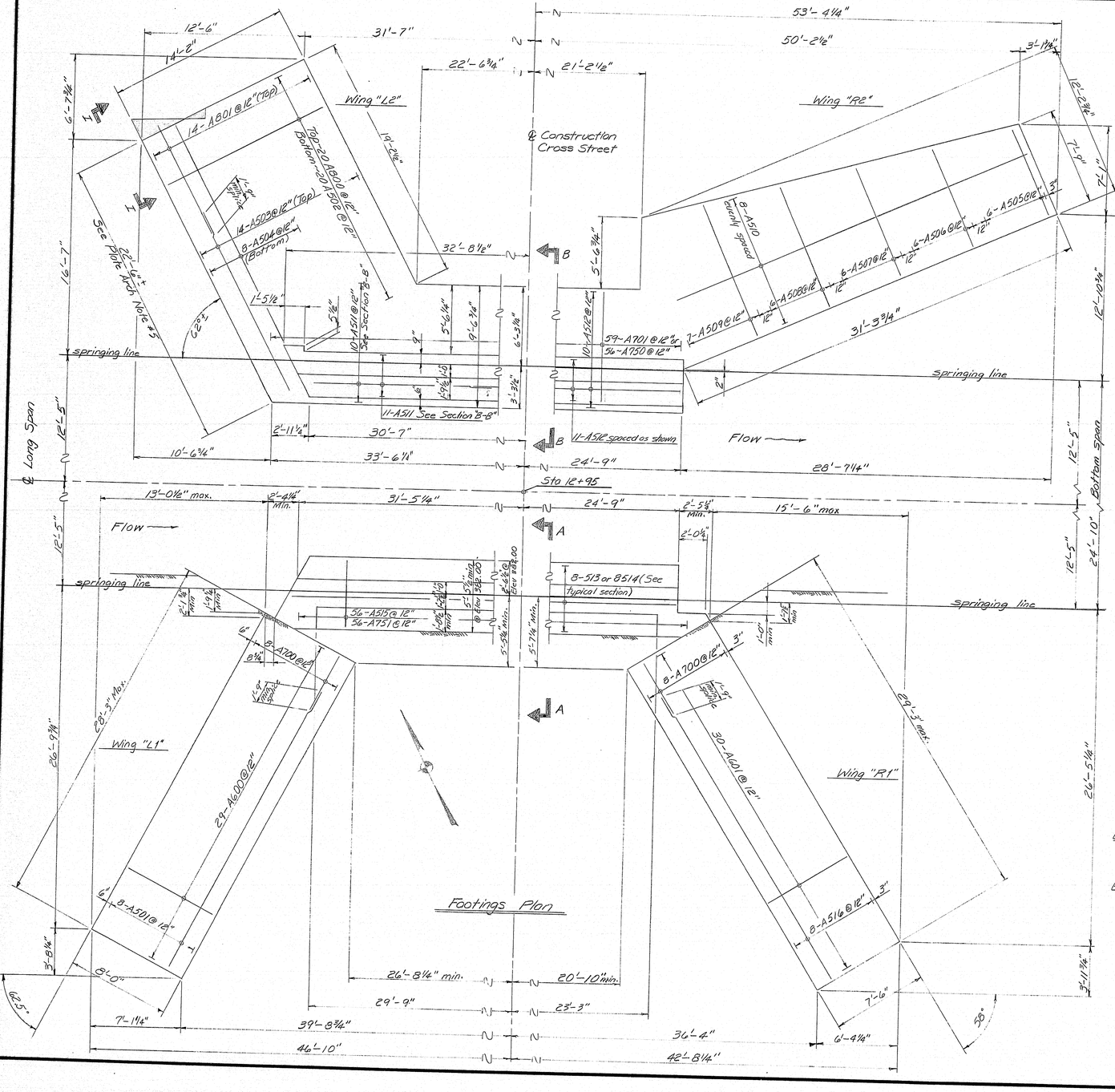
REINFORCING STEEL SCHEDULE

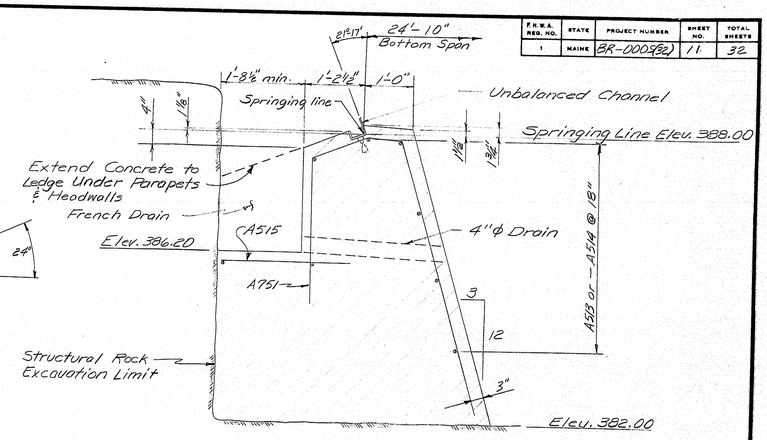
SHEET 10 OF 32 AUGUSTA, MAINE March 1983

PLANS	DESIGN - DETAIL	BY	DATE
	CHECKED	MEB	1/83
	REVISIONS	BAS	3/83
	FIELD CHANGES		

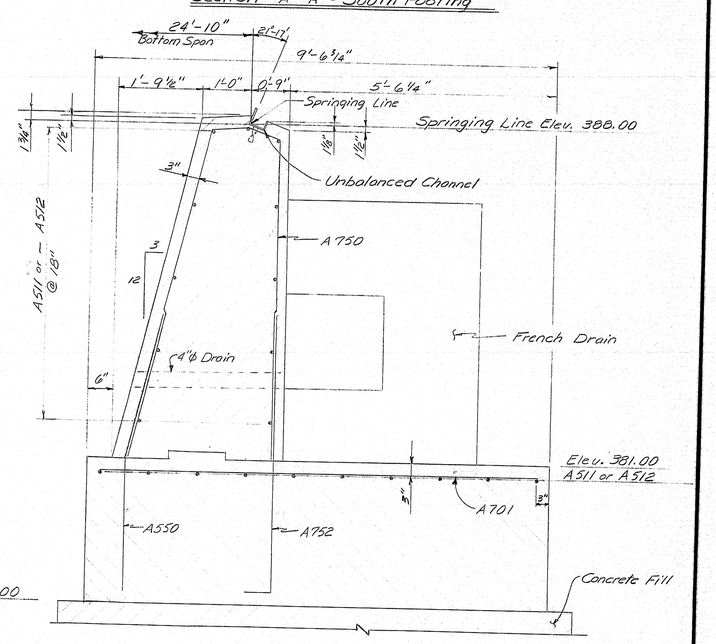
183-92

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0003(82)	11	32



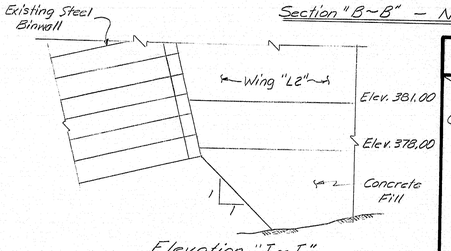


Section "A-A" - South Footing



Section "B-B" - North Footing

MAS 1-9-85
NOTE: ALTERNATE #1 BUILT



Elevation "I-I"

PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN - DETAILED	MEB	2/82
	CHECKED	LAH	BAS 2/82
	REVISIONS		
	FIELD CHANGES		

BRUNING 44-132 45710

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

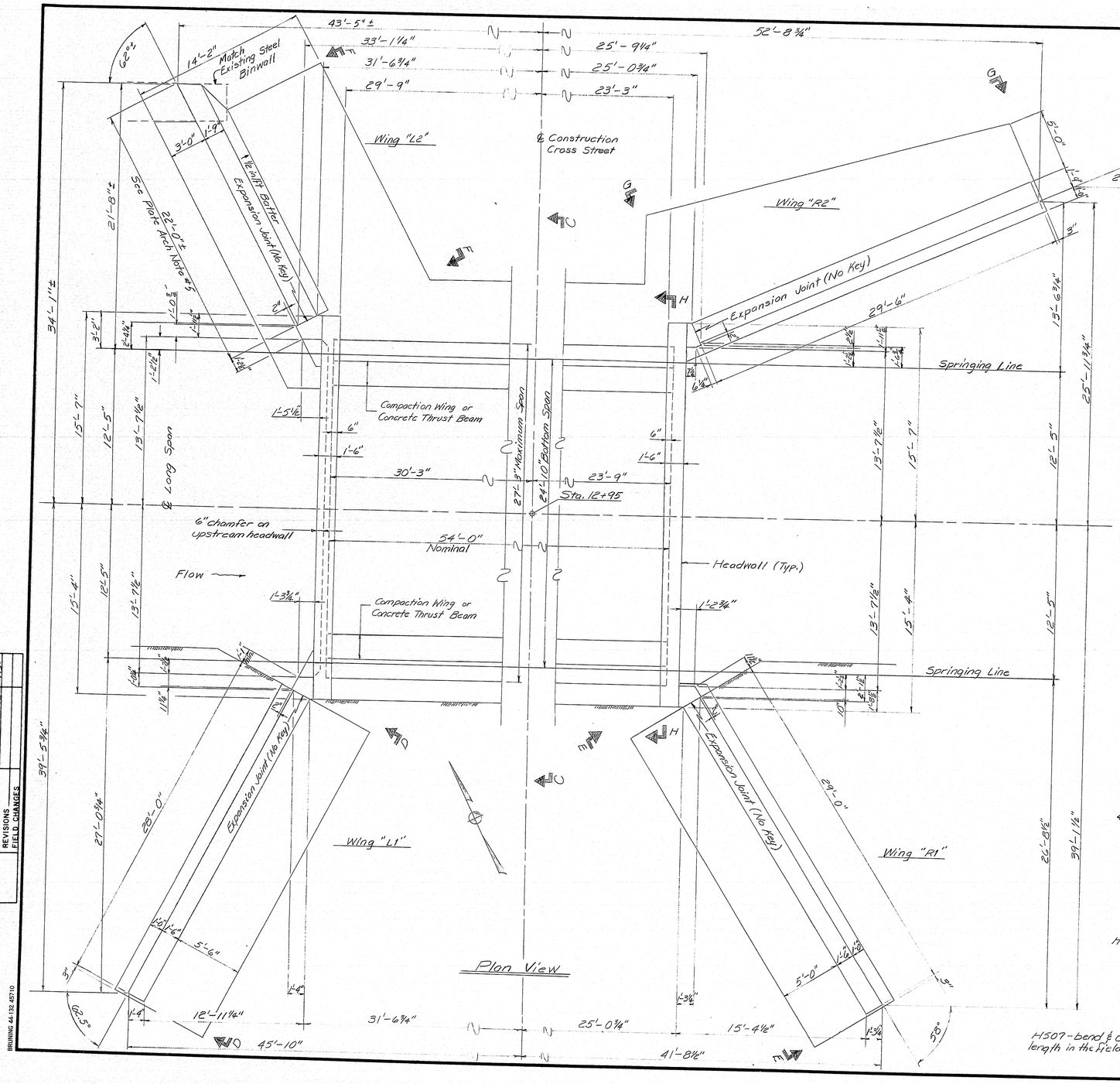
CARIBOU STREAM BRIDGE
CARIBOU

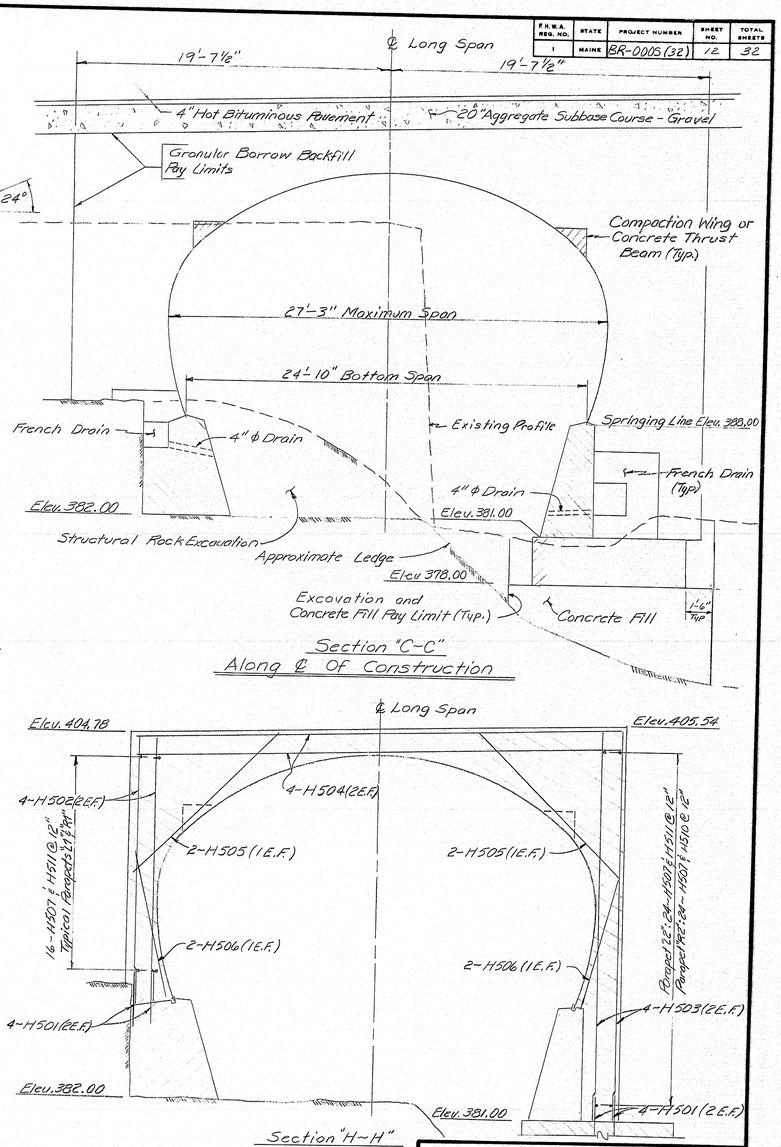
LONG SPAN FOOTING PLAN
ALTERNATE #2

SHEET 11 OF 32 AUGUSTA, MAINE March 1983

183-93

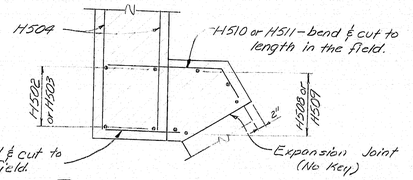
F.H.W.A. REQ. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0005(32)	12	32





Section "C-C"
Along ℄ Of Construction

Section "H-H"



Typical Parapet Detail

NOTE: ALTERNATE #1 BUILT MAS 1-9-85

PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN - DETAILED	MEB	10/22
	CHECKED	LAW	2/83
	REVISIONS	EAS	2/83
	FIELD CHANGES		

BRUNING 44-132 45710

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CARIBOU STREAM BRIDGE

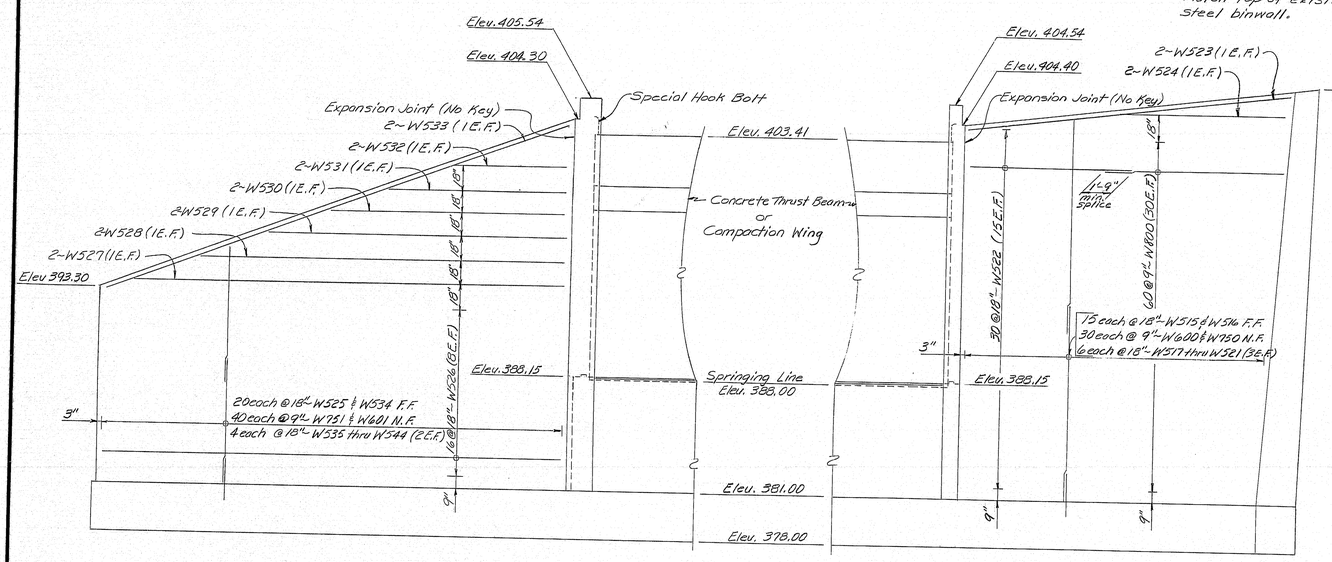
CARIBOU

LONG SPAN PLAN VIEW AND SECTIONS
ALTERNATE #2

SHEET 12 OF 32 AUGUSTA, MAINE March 1983

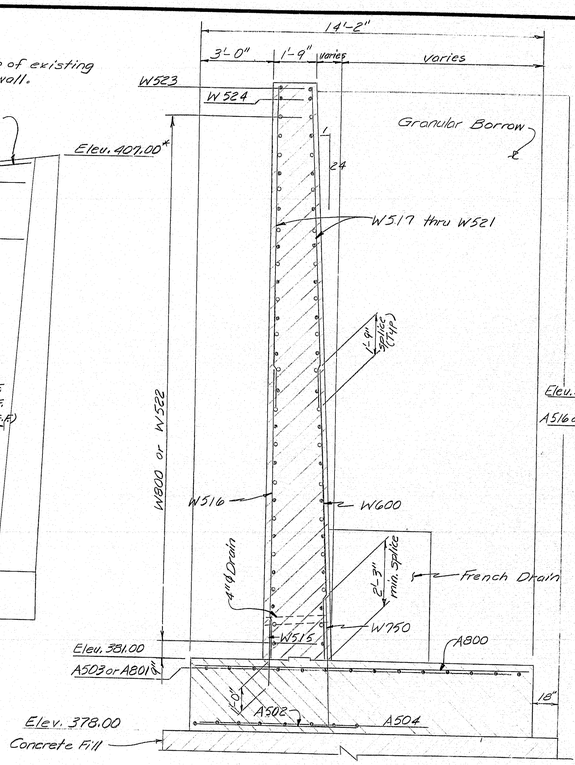
183-94

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0005(32)	13	32

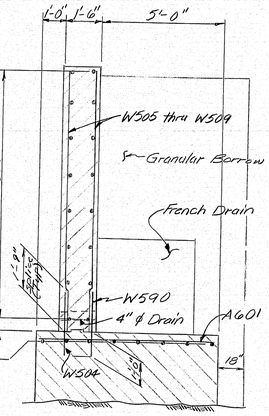


VIEW "G-G"
Rear Elevation of Wing "R2"

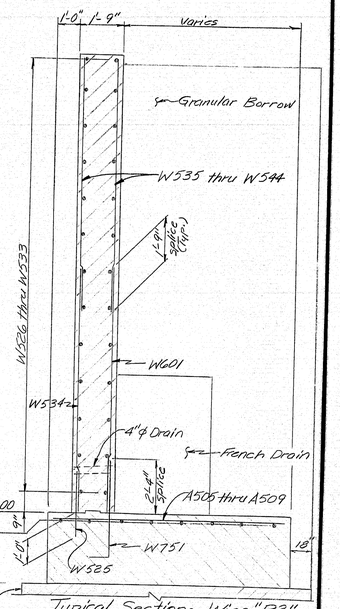
VIEW "F-F"
Rear Elevation of Wing "L2"



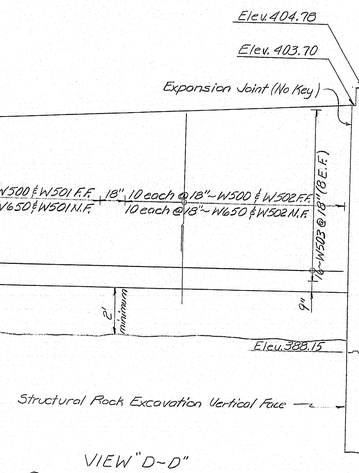
Typical Section - Wing "L2"



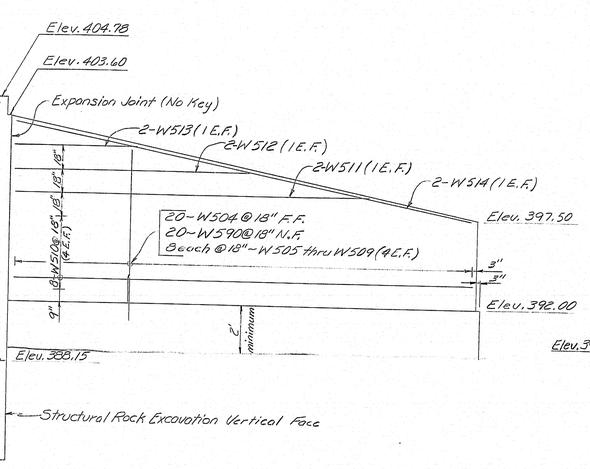
Typical Section - Wing "R1"



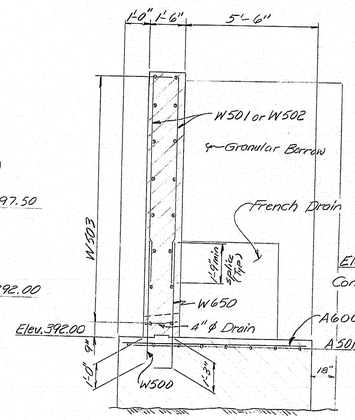
Typical Section - Wing "R2"



VIEW "D-D"
Rear Elevation Wing "L1"



VIEW "E-E"
Rear Elevation of Wing "R1"



Typical Section - Wing "L1"

MAS 1-9-85
NOTE: ALTERNATE #1 BUILT

PROJECT DESIGN ENGINEER	BY	DATE
PLANS — DESIGN - DETAILED	MEB, MAB	12/82
CHECKED	LAW, RJS	2/83
REVISIONS		
FIELD CHANGES		

DRAWING 44-132.4570

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

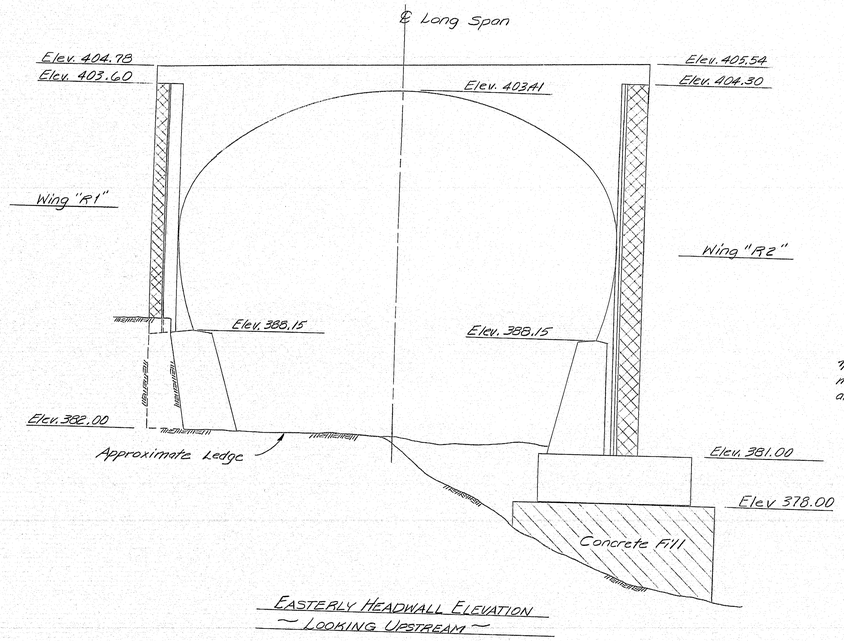
CARIBOU STREAM BRIDGE
CARIBOU

LONG SPAN ELEVATION & SECTIONS
ALTERNATE #2

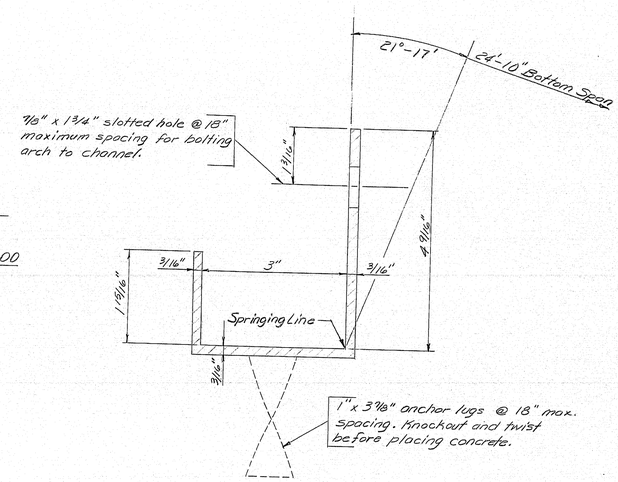
SHEET 13 OF 32 AUGUSTA, MAINE March 1983

183-95

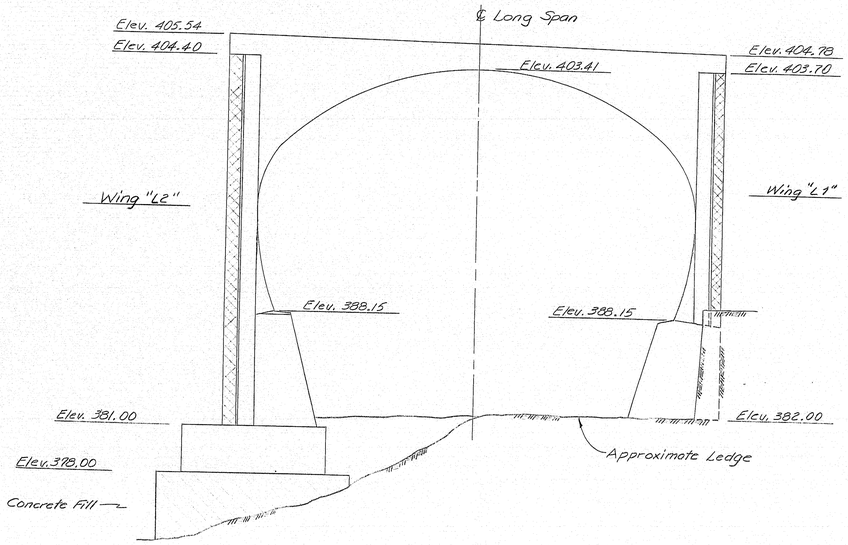
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0005(32)	14	32



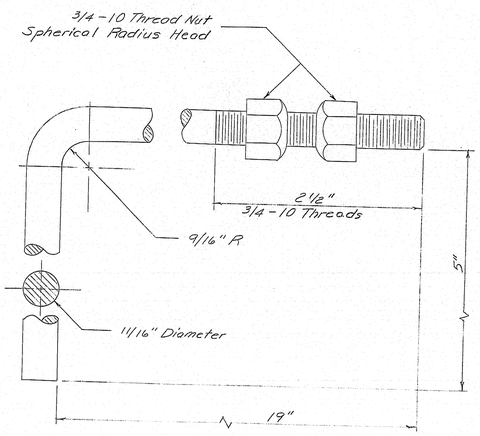
EASTERLY HEADWALL ELEVATION
~ LOOKING UPSTREAM ~



UNBALANCED CHANNEL
(Hot dipped galvanized after fabrication.)



WESTERLY HEADWALL ELEVATION
~ LOOKING DOWNSTREAM ~



SPECIAL HOOK BOLT DETAIL

HOOK BOLT NOTE

Special hook bolts will be installed about the perimeter of the Long Span Plate Arch throughout both headwalls at a maximum spacing of 18" with 2" minimum cover in the headwall.

Hook bolt material shall meet the current ASTM A-307. Threads shall be American Standard Coarse Thread Series, Class 2, Free Fit. Bolts shall be galvanized to meet current ASTM specification A-153. The galvanizing on the threaded portion shall not prevent turning the nut by hand.

Nuts shall be carbon steel hot dip galvanized to meet ASTM specification A-153. Nut threads shall be American Standard Coarse Thread series (1/64" maximum oversize), cleaned after galvanizing to provide a free running fit on the Class 2 bolt. Nuts shall be 1 1/4" across flats, 13/16" thick, curve crowned to approximately 1" radius.

PROJECT DESIGN ENGINEER	BY	DATE
DESIGN - DETAILED	MES	1/83
CHECKED	LAW	3/83
REVISIONS		
FIELD CHANGES		

PLANS

JANUARY 1988

NOTE: ALTERNATE #1 BUILT MAS 1-9-85

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CARIBOU STREAM BRIDGE
CARIBOU

LONG SPAN ELEVATIONS & DETAILS
ALTERNATE #2

SHEET 14 OF 32 AUGUSTA, MAINE March 1983

183-96

803-1 2000

REINFORCING STEEL SCHEDULE

STRAIGHT BARS

MARK	NO.	LENGTH	LOCATION
		Long Span Footings	
A501	8	24'-8"	Footing "L1"
A502	20	7'-0"	Footing "L2"
A503	14	16'-5"	↓
A504	14	20'-0"	↓
A505	6	7'-6"	Footing "R2"
A506	6	8'-4"	↓
A507	6	9'-3"	↓
A508	6	10'-1"	↓
A509	7	10'-11"	↓
A510	8	30'-0"	↓
A511	21	25'-0"	North Wall Footing
A512	21	33'-9"	" " "
A513	8	25'-0"	South Wall Footing
A514	8	33'-4"	↓
A515	56	2'-9"	↓
A516	8	25'-8"	Footing "R1"
A600	29	7'-6"	Footing "L1"
A601	30	7'-0"	Footing "R1"
A700	16	5'-0"	Footings "L1" & "R1"
A701	59	9'-2"	North Footing
A800	20	13'-10"	Footing "L2"
A801	14	9'-0"	" "

MARK	NO.	LENGTH	LOCATION
		Wingwall "L1"	
W500	19	5'-0"	Footing Dowel
W501	18	8'-5"	Vertical
W502	20	9'-2"	"
W503	16	27'-8"	Horizontal
		Wingwall "R1"	
W504	20	3'-8"	Footing Dowel
W505	8	5'-4"	Vertical
W506	8	6'-7"	↓
W507	8	7'-10"	↓
W508	8	9'-2"	↓
W509	8	10'-5"	↓
W510	8	28'-8"	Horizontal
W511	2	22'-9"	↓
W512	2	15'-7"	↓
W513	2	8'-5"	↓
W514	2	29'-1"	↓
		Wingwall "L2"	
W515	15	2'-9"	Footing Dowel
W516	15	12'-3"	Vertical
W517	6	13'-1"	↓
W518	6	13'-8"	↓
W519	6	14'-2"	↓
W520	6	14'-9"	↓
W521	6	15'-4"	↓
W522	30	9'-3"	Horizontal
W523	2	20'-10"	↓
W524	2	16'-5"	↓
W600	30	12'-3"	Vertical
W800	60	19'-0"	Horizontal

MARK	NO.	LENGTH	LOCATION
		Wingwall "R2"	
W525	20	2'-9"	Footing Dowel
W526	16	29'-2"	Horizontal
W527	2	27'-11"	↓
W528	2	23'-11"	↓
W529	2	19'-11"	↓
W530	2	15'-11"	↓
W531	2	11'-11"	↓
W532	2	7'-10"	↓
W533	2	31'-1"	↓
W534	20	8'-0"	Vertical
W535	4	6'-6"	↓
W536	4	7'-7"	↓
W537	4	8'-8"	↓
W538	4	9'-10"	↓
W539	4	10'-11"	↓
W540	4	12'-0"	↓
W541	4	13'-1"	↓
W542	4	14'-2"	↓
W543	4	15'-4"	↓
W544	4	16'-5"	↓
W601	40	8'-0"	Vertical
		Headwalls	
H501	16	2'-9"	Dowel
H502	8	16'-5"	Vertical
H503	8	24'-3"	"
H504	8	30'-5"	Horizontal
H505	8	12'-0"	Cornered
H506	8	8'-0"	"
H507	80	3'-6"	All Parapets
H508	10	15'-3"	Parapets "L1" & "R1"
H509	10	16'-0"	Parapets "L2" & "R2"
H510	24	2'-0"	Parapet "R2"
H511	56	5'-0"	Parapets "L1", "R1" & "L2"

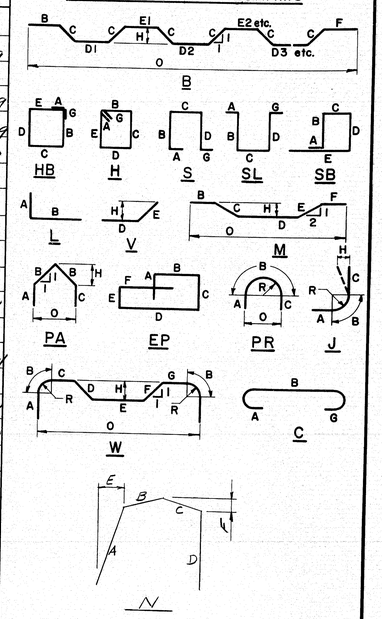
BENT BARS

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION
				Long Span Footings										
A550	56	5'-9"	V				2'-9"	3'-0"			0'-9"			North Wall Footing
A750	56	14'-10"	N	7'-0"	0'-9"	0'-7"	6'-6"	1'-9"	0'-3"					North Wall Footing
A751	56	12'-10"	N	5'-6"	0'-9"	1'-1"	5'-6"	1'-5"	0'-6"					South Wall Footing
A752	56	6'-5"	L	0'-9"	5'-8"									North Wall Footing
				Wingwalls										
W590	20	4'-5"	L	0'-9"	3'-8"									Wing "R1" Ftg. Dowel
W650	19	6'-0"	L	0'-9"	5'-3"									Wing "L1" Ftg. Dowel
W750	30	5'-9"	L	0'-9"	5'-0"									Wing "L2" Ftg. Dowel
W751	40	4'-10"	L	0'-9"	4'-1"									Wing "R2" Ftg. Dowel

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION

FHWA REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0005(32)	15	32

TYPE-BENDING DIAGRAMS



All dimensions are out to out of reinf. bar.

Bending details and hooks shall conform to the recommendations of ACI Standard 315-65.

Reinforcing Bar: ASTM A615 Grade 60

GENERAL NOTES

1. First digit(s) following the letter of the Mark indicates size of reinf. bar.
   Mark (A 502) bar size - #5
   Mark (P 1001) bar size - #10
   Mark (S 609) bar size - #6
2. Letter of Marks A, P & S locates bars of Abutments, Piers, and Superstructure parts respectively.

NOTE: ALTERNATE #1 BUILT MAS 1-9-85

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CARIBOU STREAM BRIDGE
CARIBOU

LONG SPAN STRUCTURAL PLATE ARCH
ALTERNATE #2

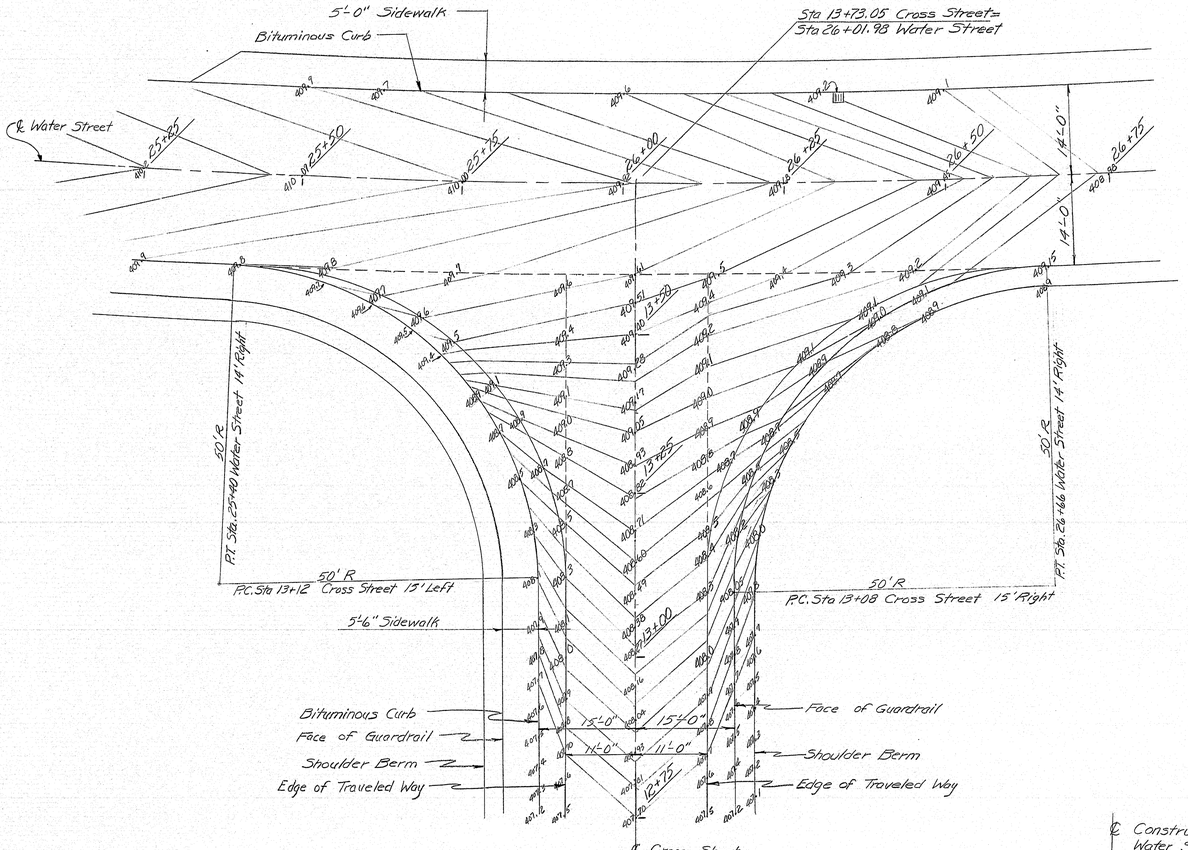
REINFORCING STEEL SCHEDULE

SHEET 15 OF 32 AUGUSTA, MAINE March 1985

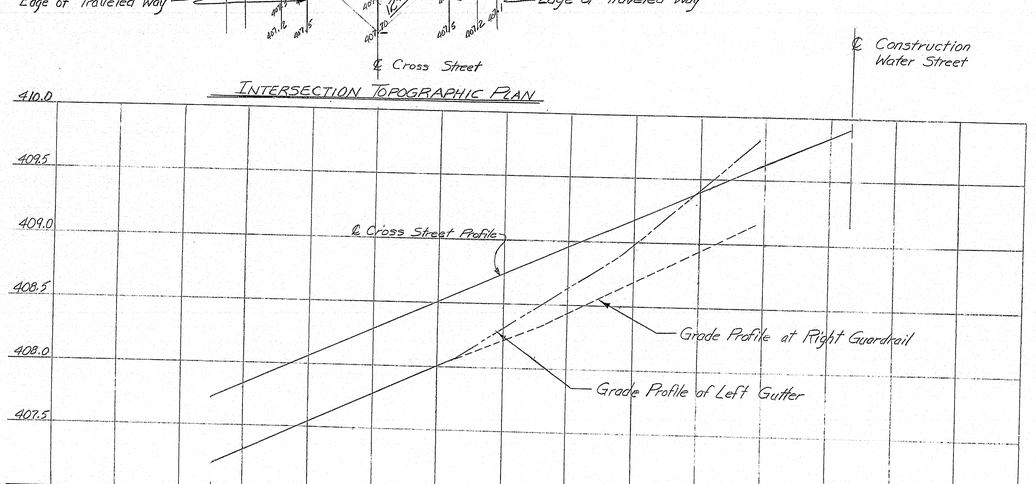
183-97

PLANS	DESIGN - DETAIL	CHECKED	REVISIONS	FIELD CHANGES
BY	MEB	MEB	BAS	
DATE	1/83		3/83	

F.H.W.A. REQ. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0005(32)	16	32



INTERSECTION TOPOGRAPHIC PLAN



INTERSECTION DRAINAGE PROFILE

PROJECT DESIGN ENGINEER	BY	DATE
DESIGN - DETAILED	MEB	MEB 2/82
CHECKED		
REVISIONS		
FIELD CHANGES		

PLANS

BRUNING 44-132 45710

AS BUILT MAS 1-8-85

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CARIBOU STREAM BRIDGE

CARIBOU

INTERSECTION PLAN

183-98

SHEET 16 OF 32 AUGUSTA, MAINE March 1983

F.A. RTE.	SEQ. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
	1	NAME	BR-0005(82)	17	32

183-69

REVISED AS BUILT MS 1-9-85 CROSS STREET

TYPICAL SECTION – CROSS STREET
Sta 12+75 to 13+62

GUARD RAIL NOTES

Install Terminal end section and delineator post @ Sta. 12+42 ± Rt. Water St.

Install 12.5 L.F. Type 3b guardrail on culvert 30' radius from Sta. 25+54 ± Rt. Water St. to Sta 25+42 ± Rt Water St.

Install 50 L.F. Type 3b guard rail circular 44.5' radius from Sta 13+12 ± L.T. Cross St to Sta 25+54 ± Rt Water St.

Install 62.5 L.F. Type 3b guard rail from Sta. 12+49 ± Lt to Sta. 13+12 ± Lt. Cross St.

Install 12.5 L.F. Type 3b guard rail circular 93' radius from Sta. 12+49 ± Lt to Sta. 12+49 ± Lt. Cross St.

Install Terminal end section and delineator post at Sta. 12+37 ± Lt. Cross St.

GUARD RAIL NOTES

Install 325 ± L.F. Type 3b guard rail from Sta. 26+66 ± Rt. Water St. to Sta. 27+05 ± Rt. Water St. Approx. end section and 2 Terminal end sections will be required. Sta. 27+30 ± Rt. to be directed by the Engineer.

Install 75.0 L.F. Type 3b guard rail from Sta. 12+38 ± Rt. to Sta. 12+08 ± Rt. Cross St.

Install 75.0 L.F. Type 3b guard rail collector 28' radius from Sta. 13+02 ± Rt. Cross St. to Sta. 12+48 ± Rt Water St.

ORIGINAL SURVEY		BY	DATE
	SURVEYED	G. FOWLER, MIE	11/81
	PLOTTED	MEB	1/82
NOTE BOOK	TSHR.-ALT.		
	AREAS		
NO.	AREAS CHECKED		

FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TSHR.-ALT.		
	AREAS		
NO.	AREAS CHECKED		

C:\,4AW 2-83

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0005(32)	18	32

FINAL SURVEY	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK	MATERIAL		
NO.	AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY	SURVEYED	BY G. Fongemie	DATE 11/81
	PLOTTED	MEB	3/82
NOTE BOOK	MATERIAL	MEB	3/82
NO.	AREAS		
	AREAS CHECKED		

CK LAND 2-83

Wing "RT"

Wing "LT"

13+10

12+47.7 (Ahead)

12+77 (Back)

12+90

183-100

AS BUILT MAS 1-9-85 CROSS STREET

F.A. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0003(62)	19	32

183-101

AS BUILT MAS 1-9-85 CROSS SHEET

13+20

Utility Pole #2

Guardrail Cross Sections See (Control Plan (typ.)

White Ash

Remove Trees

13+30

(Steel Retaining Wall Left)

13+38

(Top Existing Ripraps)

13+50

13+57

(Top of Bank)

13+73.05

(Profile of Water Stream)

ORIGINAL SURVEY		BY	DATE
SURVEYED	Ca. FOR GEMAP		11/81
PLOTTED			4/82
TEMPLATE			4/82
AREAS			
NOTE BOOK			
AREAS CHECKED			
NO.			

FINAL SURVEY		BY	DATE
SURVEYED			
PLOTTED			
TEMPLATE			
AREAS			
NOTE BOOK			
AREAS CHECKED			
NO.			

CK L.A.W. 8-83

183-102

REVISED AS BUILT MP 1.9-85 WATER STREET

F.H.W.A. REGS. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	NAME	BR-0005(28)	20	32

TYPICAL SECTION- Water Street Overlay

Typical with Sidewalk

Typical without Sidewalk

Existing edge of pavement

Existing edge of Pavement

Match existing

Milling varies

Loam, Mulch & Seed- Method #1 (Typ)

Type 3B Guardrail (Typ)

Bituminous Curb (Typ)

1½" Hot Bituminous Pavement Overlay Grading 'C'

4" Hot Bituminous Pavement Grading 'B'

2" Hot Bituminous Pavement

20" Aggregate Subbase Course-Gravel

10" Aggregate Subbase Course-Gravel

Existing Steel Sheetpile

Existing Steel Sheetpile

Existing Steel Sheetpile

Type 3B Guardrail Reverse Direction See Cross Street Sections

Site 25+40 limit of work- The project materials new Construction by others

25+00

25+50

25+62 (Back)

℄ Construction

14'-0"

14'-0"

ORIGINAL SURVEY
NOTE BOOK 9097
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

BY G. Eggemeier DATE 4/12

C.K. LAW 2-83

FINAL SURVEY
SURVEYED
PLOTTED
NOTE BOOK
TEMPLATE
AREAS
AREAS CHECKED

BY DATE

REVISED AS BUILT MS 1-9-85 WATER STREET

183-103

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED	C.J. FORBES	1982
NO.	TEMPLATE		
	AREAS CHECKED		

C.K. LAW 2-83

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS CHECKED		

P.W.M.A. RES. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0005(32)	21	32

Edge of Stream

Wing "A2"

Edge of Stream

Top Existing Ramp (Typical)

℄ Paddle Cross Street

End Reject
Sta. 13+52 Cross Street

Sta. 13+50
℄ Construction Cross Street

Edge of Stream

Wing "A2"

Edge of Stream

Match Existing Grade at the Top of Ramps

18" Culvert

Extend Culvert

6' Riprap Downspout

Edge of Stream

Sta. 27+00
Limit of Work Sta. 27+00
Match Existing Section

SMH

Catch Basin Left
Sta. 13+33
26.4 LT

Flyash Up

26.4 LT

22.6 RT

22.6 RT

22.6 RT

F. H. W. A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0005(32)	22	32

FINAL SURVEY
SURVEYED BY
PLOTTED DATE
TRACED BY
NOTE BOOK PAGE
AREAS CHECKED
NO.

ORIGINAL SURVEY
SURVEYED BY
PLOTTED DATE 9-82
TRACED BY JAZB
NOTE BOOK PAGE
AREAS CHECKED
NO.

Traced: DMD 10-82
Ck. LAW 2-83

E. Water Street

Concrete Fill

Boring GP-40-82
Sta. 9+20 30 Rt.
Ledge Elev. 375.2±

16'-6" Typical cut Section

* Do not excavate ledge where removal will be less than 1/2 C.Y. per linear foot of channel outside of the structure's barrel. Excavation of ledge in the channel will be paid for under Item 203.21, Rock Excavation.

9+71

Boring GP-39-82
Sta. 9+25 55 Lt.
Ledge Elev. 369.6±

1.25:1

Approximate Ledge Profile

9+50

Boring GP-41-82
Sta. 9+55 45 Lt.
Ledge Elev. 368.6±

Note: Backfill the streambank to match the existing channel with material excavated for the new bank facing.

9+25
Limit of Work
Match Existing Section

Top of Existing Riprap (Typical)

9+00

5'-0"
5'-0"

188-104

Caribou Stream Bridge, Caribou: Stream X-Sects.
AS BUILT MAS 1-9-85

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0005(32)	23	32

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK	TEMPLATE	
NO.	AREAS	
	AREAS CHECKED	

Traced: DMD 10-82
CC LAW 2-83

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED	MEB	5-82
NOTE BOOK	TEMPLATE	
NO.	AREAS	
	AREAS CHECKED	

Caribou Stream Bridge, Caribou: Stream X-Sects.
REVISED AS BUILT MAS 1-9-85

183-105

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0005(32)	24	32

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK		
AREAS CHECKED		
NO.		

Traced: DMD 10-82
CK'D AW 2-83

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK		
AREAS CHECKED		
NO.		

Steel Retaining Wall

Steel Retaining Wall

Steel Retaining Wall

Concrete Fill

Boring GP-32-82
Sta. 10+45 45 Lt.
Ledge Elev. 396.27

Boring GP-32-82
Sta. 10+35 45 Lt.
395 Ledge Elev. 389.8

Boring GP-32-82
Sta. 10+50 45 Lt.
Ledge Elev. 389.8

Concrete Fill

Approximate Ledge (Typical)

10+40 (Ahead)

10+40 (Back)

℄ Structure

10+35

10+50

1.25:1

1.25:1

2:1

163-106

5'-0"

Caribou Stream Bridge, Caribou: Stream X-Sects.
As BUILT MA 1-9-85

F.A.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0005(28)	25	32

Caribou Stream Bridge, Caribou: Stream X-Sects
AS BUILT NAD 1983-85

LOT-E01

Limit of Work
Match Existing Section - Left Side

℄ Structure

11+00

11+25

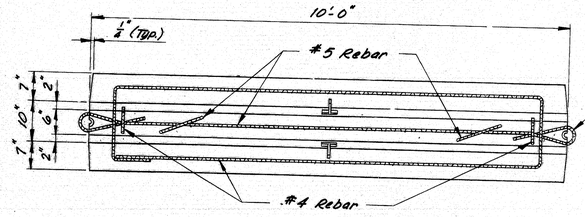
11+50

ORIGINAL SURVEY	SURVEYED		BY	DATE
	PLOTTED			
NOTE BOOK	TABULATE		MEB	9-82
	AREAS			
NO	AREAS CHECKED			

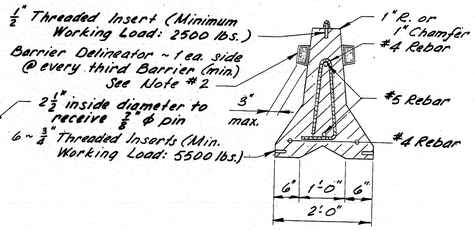
Traced: GMD 10-82
CK LAW 2-83

FINAL SURVEY	SURVEYED		BY	DATE
	PLOTTED			
NOTE BOOK	TABULATE			
	AREAS			
NO	AREAS CHECKED			

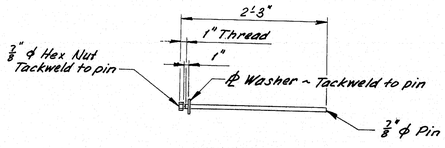
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0005(32)	26	32



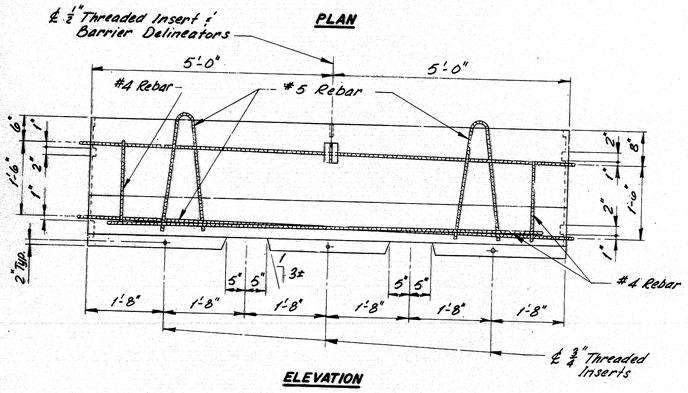
PLAN



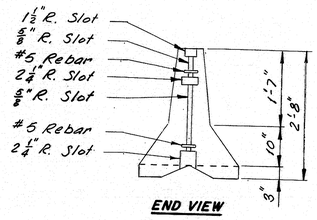
TYPICAL SECTION



CONNECTING PIN



ELEVATION

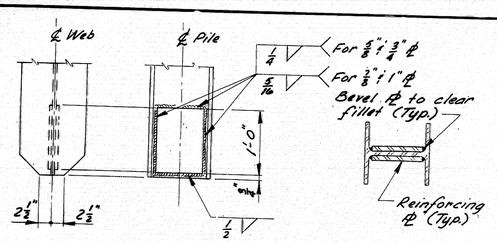


END VIEW

NOTES:

1. The reinforcing steel, end connections, lifting arrangement, and sizes and locations of hold-down inserts are advisory only. It shall be the Contractor's responsibility to provide adequate reinforcing, end connections, lifting points, and hold-down arrangements.
2. Barrier Delineators shall be bi-directional with a minimum effective reflex area of 8.0 square inches as approved by the Engineer. The Reflector shall preferably be of Methyl Methacrylate, and the Housing of Acrylonitrile Butadiene Styrene.

TEMPORARY CONCRETE BARRIER - TYPE 1

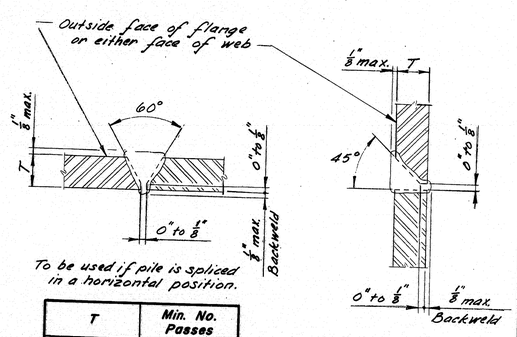


Pile Size	Reinf. ℄ Size
HP 10 x 42	8 3/4" x 5/8" x 1'-0"
HP 10 x 57	8 3/4" x 7/8" x 1'-0"
HP 12 x 53	10 3/4" x 5/8" x 1'-0"
HP 12 x 63	10 3/4" x 3/4" x 1'-0"
HP 12 x 74	10 3/4" x 7/8" x 1'-0"
HP 14 x 73	12 1/4" x 1/2" x 1'-0"
HP 14 x 89	12 1/4" x 1" x 1'-0"

NOTES:

1. Alternate Pointed Reinforced Pile Tips may be used if they have at least the cross-sectional area of the pile tip shown and are approved by the Engineer.
2. Plates may be shop or field welded.
3. Use Manual Shielded Metal-Arc Process and 6010, 6011, or 6012 electrodes, unless a different process has been approved by the Engineer.
4. Electrodes shall be dry when used, in accordance with the provisions of A.W.S. Spec. D1.1, as amended by AASHTO.

POINTED REINFORCED PILE TIP

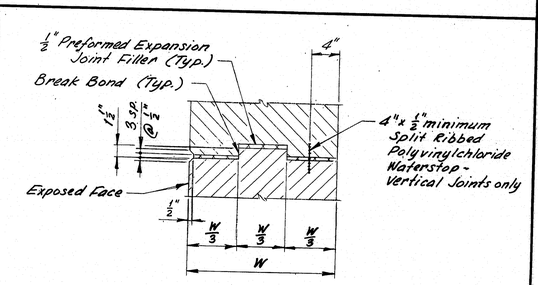


T	Min. No. Passes
7/16	3
1/2 > 7/8 > 5/8	4
11/16 > 13/16	5

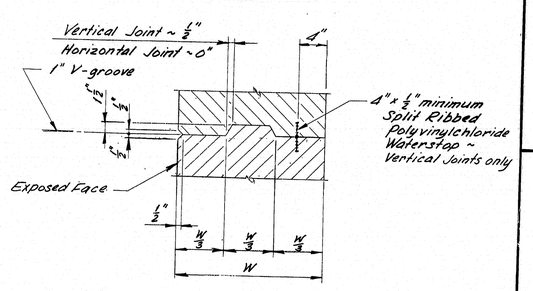
NOTES:

1. All cutting shall be done with the use of a mechanical guide.
2. Use Manual Shielded Metal-Arc Process and 6010, 6011, or 6012 electrodes, unless a different process has been approved by the Engineer.
3. Electrodes shall be dry when used, in accordance with the provisions of A.W.S. Spec. D1.1, as amended by AASHTO.
4. Gouge root before welding second side.

PILE SPLICE

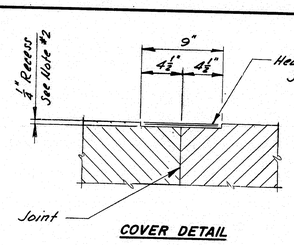


EXPANSION JOINT



CONSTRUCTION OR CONTRACTION JOINTS

CONCRETE JOINTS



COVER DETAIL

NOTES:

1. Where called for, cover horizontal and vertical construction, contraction, or expansion joints with two (2) 9" wide layers of heavy roofing felt. Coat the concrete and back of each layer as applied with plastic roofing cement.
2. Recess the covered area 1/4" unless otherwise indicated on Design Drawings.

CONCRETE JOINT COVER

PROJECT DESIGN ENGINEER	BY	DATE
PLANS	DESIGN - DETAILED	
	CHECKED -	
	REVISIONS -	
	FIELD CHANGES -	

BRUNING 44-132 45710

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

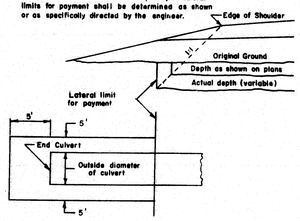
STANDARD DETAILS
(BD 127-81)

MISCELLANEOUS DETAILS
TEMP. CONC. BARRIER - TYPE 1
POINTED REINF. PILE TIP
PILE SPLICE - CONC. JOINTS
CONCRETE JOINT COVER

183-108

SHEET 26 OF 32 AUGUSTA, MAINE JUNE 1981

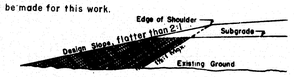
NOTE:
When muck is excavated to a depth greater or less than what is shown on the plans, the lateral limits for payment shall be determined as shown or as specifically directed by the engineer.



Excavation for pipe culverts in grubbing and muck areas. Pay Earth Excav. or Muck Excav. as designated.

MUCK EXCAVATION PAY LIMITS

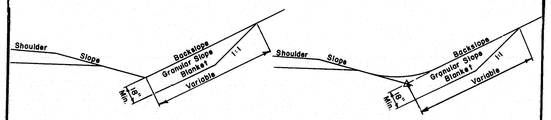
When directed by the engineer, waste material shall be used in this area, except that waste shall not be placed in fills designed with slopes of 2:1 or less. No additional payment will be made for this work.



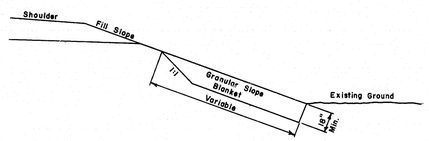
DISPOSAL OF WASTE MATERIALS
(Waste Storage Area)

MUCK EXCAVATION AND WASTE DISPOSAL
SPECIFICATION SECTION 203

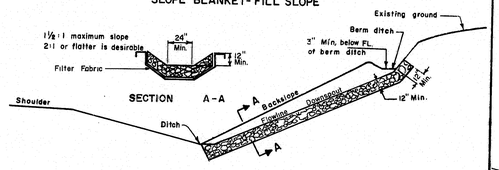
A



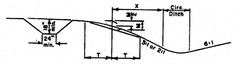
SLOPE BLANKET - BACKSLOPE



SLOPE BLANKET - FILL SLOPE



HAND LAID RIP RAP DOWNSPOUT



Construct berm ditch as shown on the plans or as directed by the engineer. Where a 2:1 slope is not practical, use a 1½:1 slope.

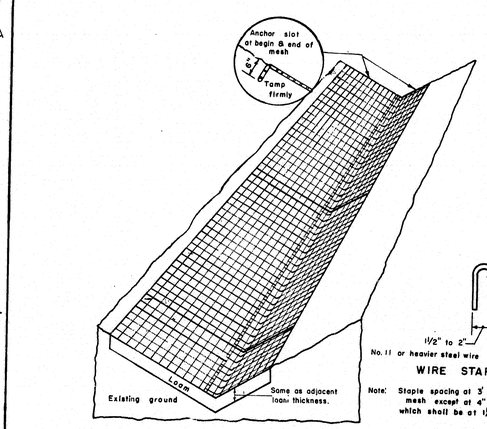
Where "X" = 5 or less, "T" = X, otherwise "T" = 5. To avoid property damage and to save shade trees, this formula may be modified by the engineer.

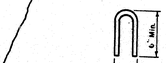
For all sections, depth of ditch depends on local conditions.

BERM DITCH
SPECIFICATION SECTIONS 203 & 616

DITCHES AND SLOPES

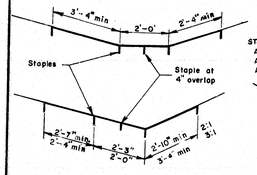
B

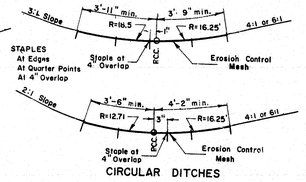




WIRE STAPLE

Note: Staple spacing at 3' ℄ along mesh except at 4" overlap which shall be at 1½' ℄.



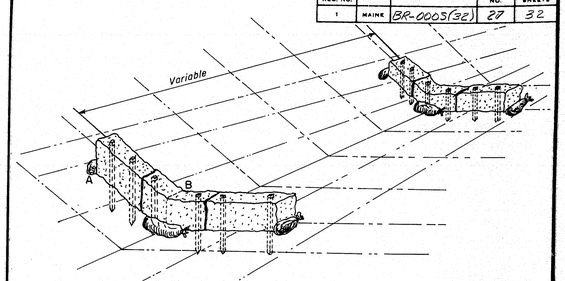


CIRCULAR DITCHES

EROSION CONTROL MESH
SPECIFICATION SECTION 617

C

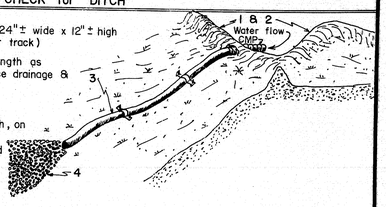
F.H.W.A. REQ. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0005(32)	27	32



Erosion check to be of bales of hay secured to the ground with 2-4' long grade stakes for each bale. Sand bag as required. Place sufficient bales to establish elevations at 'A' at least 6 inches above overflow at 'B'.

EROSION CHECK for DITCH

NOTES:
1. Temporary berms approx. 24"± wide x 12"± high (Compacted with wheel or track)
2. Crescent shaped berm, length as required to contain surface drainage & direct into end section.
3. Collapsible pipe or equal.
4. Discharge in drainage ditch, on stabilized area or on dumped stone as indicated by Engineer.



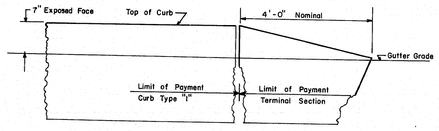
TEMPORARY BERM and SLOPE DRAIN

TEMPORARY EROSION CONTROL
SPECIFICATION SECTION 656

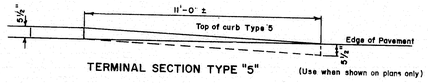
D

CURB TYPES 1 & 5 ON CURVES			
RADIUS OF CURVE	LENGTH	PAID FOR AS	STONE IS CUT OR CAST
0' To 60' Incl.	4' Min.	Circular	Arc To Fit Curve
Over 60' To 160'	4' To 6'	Straight	Straight Pieces
0' To 8' Incl.	2' Min.	Circular	To Fit Curve
Over 8' To 30' Incl.	12" Min. Chord	Circular	Straight Pieces, Radial Ends
Over 30' And Under 160'	2' To 3'	Straight	Straight Pieces
160' And Over	3' To 6'	Straight	Straight Pieces

TERMINAL CURB SECTION



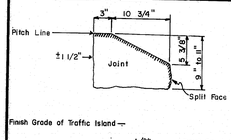
TERMINAL SECTION TYPE "1"



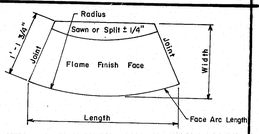
TERMINAL SECTION TYPE "5" (Use when shown on plans only)

SPECIFICATION SECTION 609

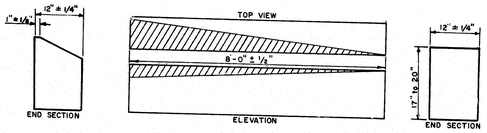
E



CURB TYPE "5"



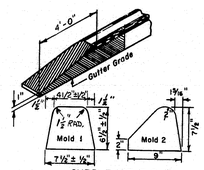
Approved Alternate Circular Curb
Type 5
2'-0" to 8'-0" Radius



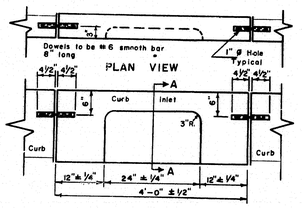
TRANSITION SECTION "C"
Curb type "5" to sloped type "1"

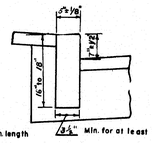
CURB TRANSITION
SPECIFICATION SECTION 609

F

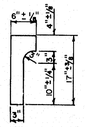


CURB TYPE 3 & 3A





VERTICAL CURB TYPE "1" & "2"

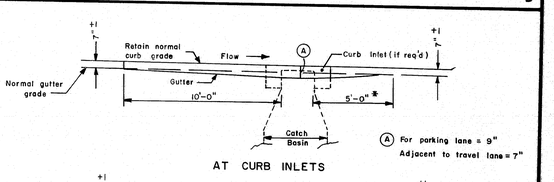


SECTION A-A

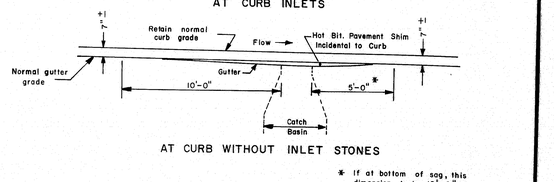
SPECIFICATION SECTION 609

CURB

G



AT CURB INLETS



AT CURB WITHOUT INLET STONES

* If at bottom of sag, this dimension to be 10'-0."

NOTE: Cascade grates shall be installed on gradient of the gutter. The grates shall be depressed 2" below the normal gutter grade unless this depression interferes with traffic. Parallel bar grates shall be installed on a level gradient. Dimensions are intended to be nominal.

GUTTER GRADE TRANSITION AT CATCH BASIN

H

REVISIONS Description	APPROVED Me. DOT	APPROVED FHWA
Original Plan	Nov. 1980	Sept. 10, 1981
Added Plate H	Mar. 1981	
Revised Plate A	Dec. 1981	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STANDARD DETAILS
CURB, DITCHES AND SLOPES
EROSION CONTROL
MUCK EXCAVATION AND
WASTE DISPOSAL

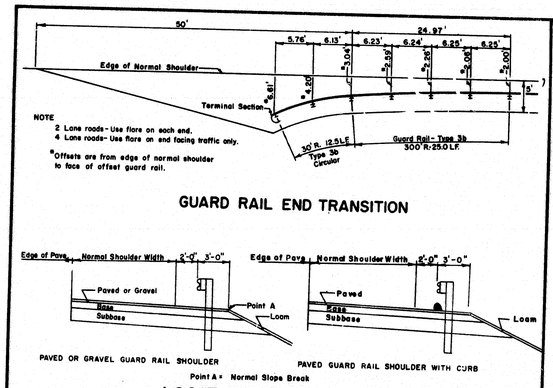
183-109 AUGUSTA, MAINE

4

JANUARY 1988

203-1 2000

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0005(32)	28	32



NOTE
2 Lane roads - Use flare on each end.
4 Lane roads - Use flare on end facing traffic only.

*Offsets are from edge of normal shoulder to face of offset guard rail.

GUARD RAIL END TRANSITION

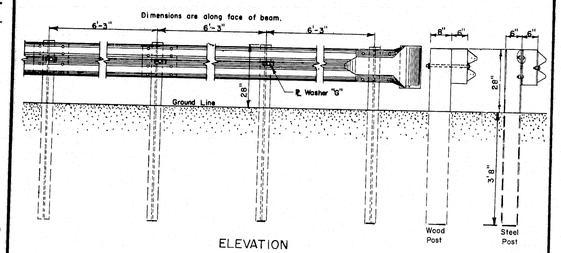
PAVED OR GRAVEL GUARD RAIL SHOULDER

PAVED GUARD RAIL SHOULDER WITH CURB

Point A = Normal Slope Break

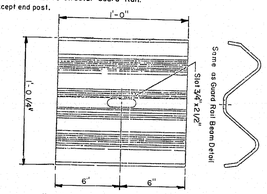
LOCATION OF GUARD RAIL

A



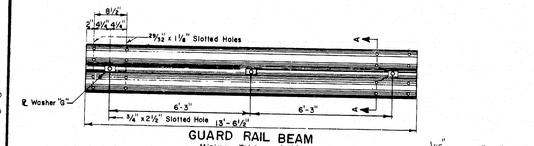
ELEVATION

1. Intermediate post spacing shall be 6'-3" unless otherwise shown.
2. Wood posts for Guard Rail shall be 6"x8" and offset blocks for type "3a" Guard Rail shall be 6"x6".
3. Steel posts and offset brackets for Guard Rail shall be W6X8.5 or W6x9.0.
4. Steel posts punched with holes in addition to those specified, to accomodate other types of Guard Rail, will be accepted subject to the approval of the engineer.
5. "W" Beam Back up Plates shall be placed behind rail elments at intermediate steel posts (non splice posts)
6. Beam Type Guard Rail set on radius of 150' or less shall be Circular Guard Rail.
7. Offset Bracket shall be installed on all posts, except end post.

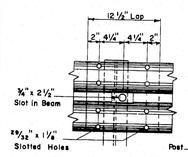


"W" Beam Backup Plate
RE-4-76
For use at steel post only See Note 5 above

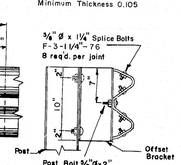
B



GUARD RAIL BEAM
Minimum Thickness 0.105

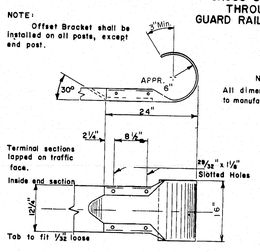


GUARD RAIL SPLICE AT POST



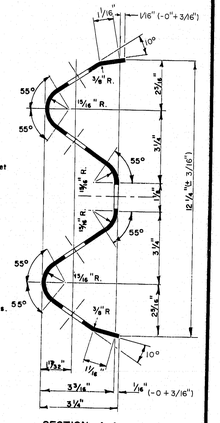
CROSS SECTION THROUGH GUARD RAIL SPLICE

NOTE:
Offset Bracket shall be installed on all posts, except end post.



GUARD RAIL - TERMINAL END SECTION
RE-6-79

NOTE
All dimensions subject to manufacturing tolerances.

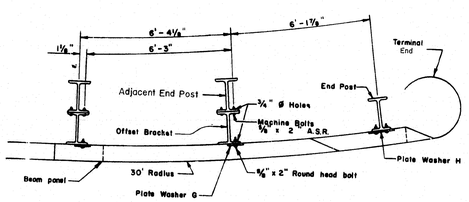


SECTION A-A

GUARD RAIL BEAM DETAIL
RE-3-73

C

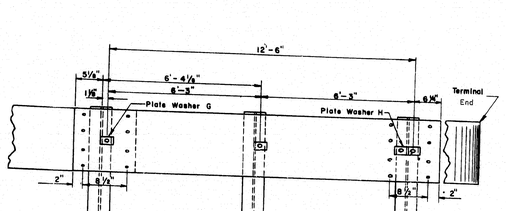
D



PLAN

To be used in all locations except on the end away from traffic on 4 lane divided.

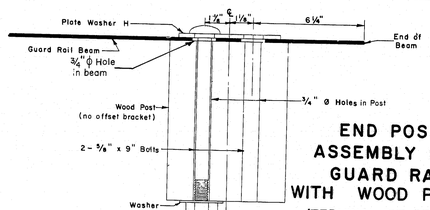
NOTE:
Offset Bracket shall be installed on all posts, except end post.



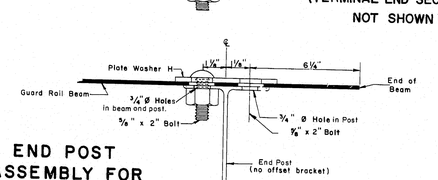
ELEVATION

END BEAM ASSEMBLY - SPACING OF POSTS GUARD RAIL TYPE 3

E

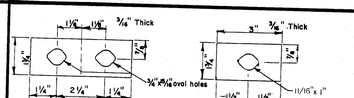


END POST ASSEMBLY FOR GUARD RAIL WITH WOOD POSTS
(TERMINAL END SECTION NOT SHOWN)



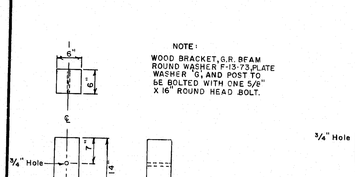
END POST ASSEMBLY FOR GUARD RAIL WITH STEEL POSTS
(TERMINAL END SECTION NOT SHOWN)

F



℄ Washer H

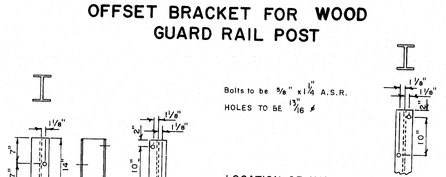
℄ Washer G F-12-73



WOOD BRACKET

LOCATION OF HOLE FOR ATTACHING BRACKET TO WOOD POST

OFFSET BRACKET FOR WOOD GUARD RAIL POST



BRACKET FOR POSTS

LOCATION OF HOLES FOR ATTACHING BRACKET TO STEEL POST

OFFSET BRACKET AND PLATE WASHERS FOR STEEL GUARD RAIL POST

G

NOTE: Identification letters and numbers on drawings refer to the standard detail drawings shown in "A Guide to Standardized Highway Barrier Rail Hardware" by AASHTO - AGC - ARTBA Joint Cooperative Committee.

H

REVISIONS Description	APPROVAL Me. DOT	APPROVAL FHWA
Original Plan	Nov. 1980	
Guard Rail Beam Det. B,C	Jan. 1981	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STANDARD DETAILS

TYPE 3 GUARD RAIL

183-110

SPECIFICATION SECTION 606

AUGUSTA, MAINE

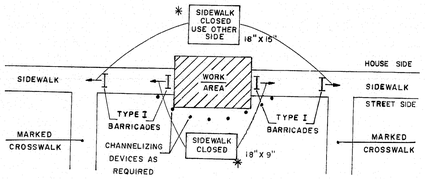
6

JANUARY 1980

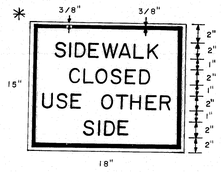
803-1 8000

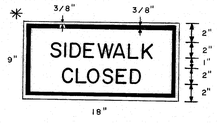
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0005(32)	29	32

* NON-REFLECTORIZED WHITE BACKGROUND, BLACK TEXT AND BORDER-2" SERIES 'C' UPPER CASE LETTERS



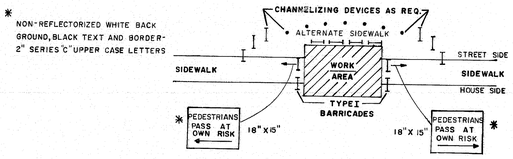
SIDEWALK CLOSURE
WITHOUT ALTERNATE SIDEWALK



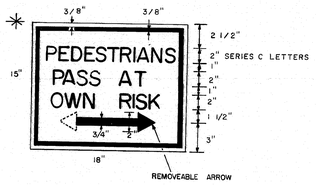


A

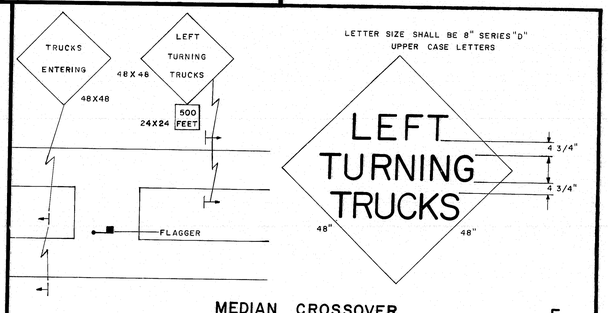
* NON-REFLECTORIZED WHITE BACKGROUND, BLACK TEXT AND BORDER-2" SERIES 'C' UPPER CASE LETTERS



SIDEWALK CLOSURE
WITH ALTERNATE SIDEWALK



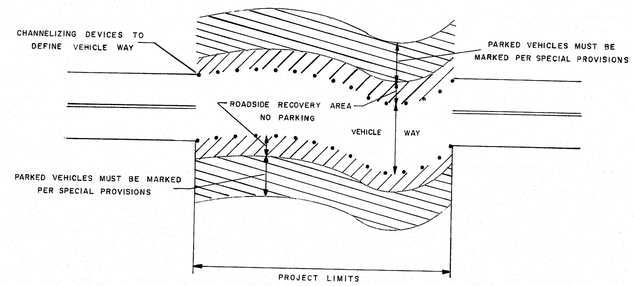
B



MEDIAN CROSSOVER

E

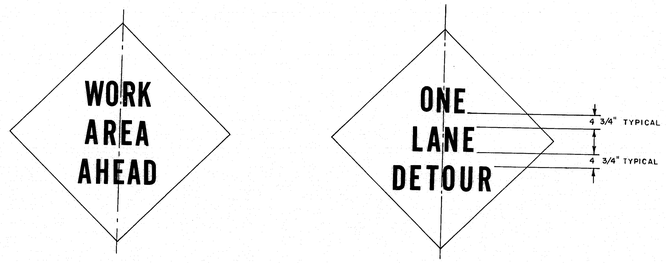
ALL DIMENSIONS AND OTHER REQUIREMENTS AS SPECIFIED IN THE SPECIAL PROVISIONS



ROADSIDE RECOVERY AREA

C

CONSTRUCTION WARNING SIGN DETAIL



1. Letter size shall be 8" Series 'D'.
2. Border dimensions and legend design shall conform to "Standard Highway Signs".

D

GENERAL NOTES

1. Distances shown for sign placement are nominal, exact locations shall be determined by the Engineer.
2. Grades on temporary roadways through the construction zone used by the public shall not exceed 10 percent.
3. Advisory speed consistant with prevailing conditions shall be as determined by the Engineer.
4. Use snaded signs when specified in the Special Provisions. ▨
5. The length of tapers shall be determined from the following formulae:

   If S is equal to or less than 40 MPH
   $L = (W \times S \times S) / 60$

   If S is equal to or greater than 45 MPH
   $L = WS$

   Where:

   L = taper length in feet
   S = operating speed in MPH
   W = width of roadway to be closed in feet

   Taper lengths shall be rounded to the nearest five feet.

   It may be required to extend lane closure tapers to provide a smooth transition where geometric alignment reduces sight distance.

6. The maximum longitudinal spacing of channelizing devices shall conform to the following:
   (a) 50 feet through work areas
   (b) A distance in tapers equal to the numerical value of the operating speed, i.e., 45 MPH - 45 feet
   (c) In all areas not covered above maximum spacing shall be as follows:

Radius of curve	Spacing
50' to 300'	25'
301' to 700'	50'
701' to 1000'	75'
over 1000	5 times the operating speed

   The maximum transverse spacing in tapers shall be determined from the the following formula:

   $D = (W \times S) / L$

   Where:

   D = transverse spacing in feet
   W = width of roadway to be closed in feet
   L = taper length in feet
   S = operating speed in MPH

7. BORDER DIMENSIONS AND LEGEND DESIGN SHALL CONFORM TO THE STANDARD HIGHWAY SIGNS BOOKLET.

PROJECT DESIGN ENGINEER	BY	DATE
PLANS — DESIGN - DETAILED		
CHECKED		
REVISIONS		
FIELD CHANGES		

REVISIONS		
3-4-80	GENERAL NOTES	
4/3/80 PF	A,B,C,GN	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC IN CONSTRUCTION ZONES

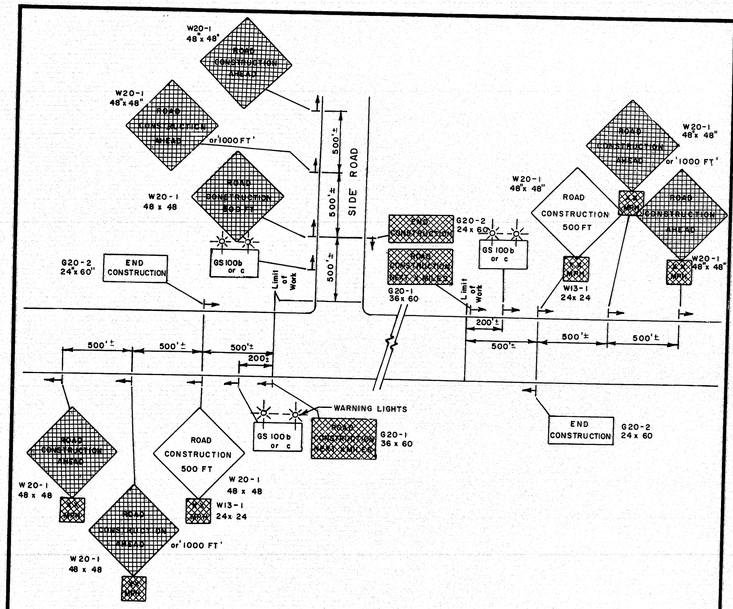
183-111

SHEET 1 OF 3 AUGUSTA, MAINE

JANUARY 1968

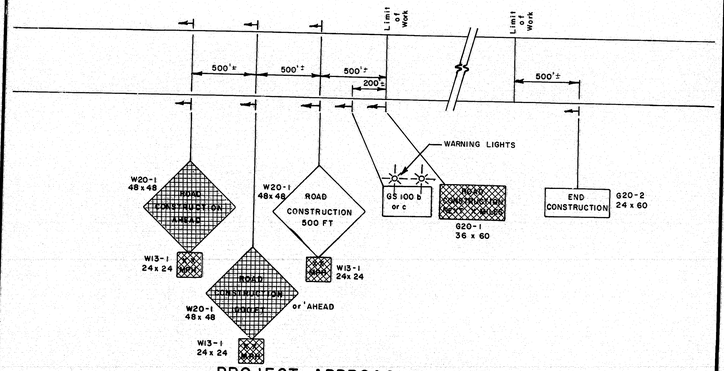
3834 3800

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0003(32)	30	32



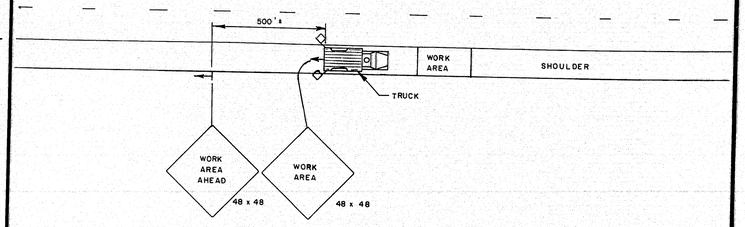
PROJECT APPROACH SIGNING
Two Way Traffic

A



PROJECT APPROACH SIGNING
Expressway

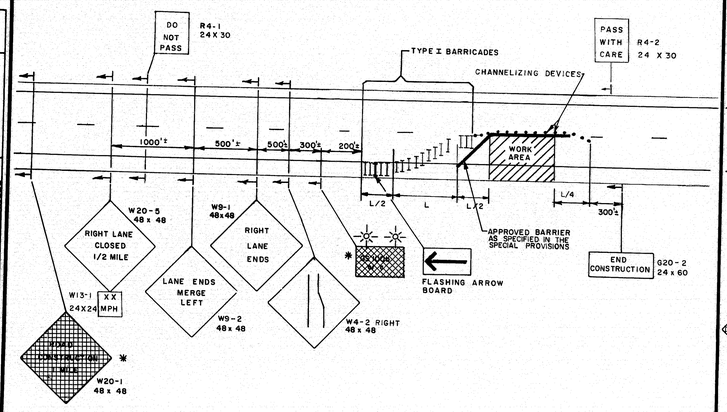
B



SHOULDER WORK - MOBILE

C

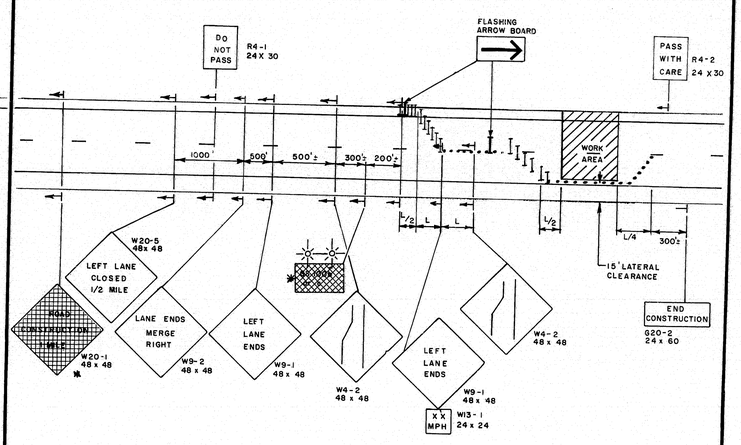
NOTE
* OMIT W20-1 AND GS-100 C OR B IF LANE CLOSURE SIGNING ARRAY IS WITHIN PROJECT LIMITS.
ALTER PAVEMENT MARKINGS AS REQUIRED. MAINTAIN 15 FT LATERAL CLEARANCE.
USE SIMILAR SIGNING FOR LEFT LANE CLOSURE.



EXPRESSWAY LANE CLOSURE

D

NOTE
W20-1 AND GS-100B OR C SHALL BE USED ONLY WHEN THE CLOSURE IS THE ACTUAL CONSTRUCTION PROJECT AND NOT A PART THEREOF.
ALTER PAVEMENT MARKINGS AS NECESSARY.
USE SIMILAR SIGNING FOR RIGHT LANE CLOSURE.



TWO LANE CLOSURE - UTILIZING RIGHT SHOULDER

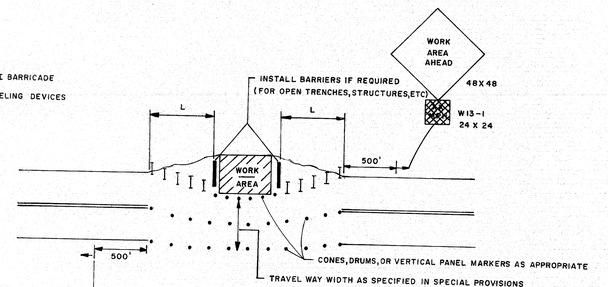
E

PROJECT DESIGN ENGINEER	BY	DATE
PLANS	DESIGN - DETAILED	
	CHECKED	
	REVISIONS	
	FIELD CHANGES	

JANUARY 1968

REVISIONS	
1-28-80	
3-4-80	PLATE "F"
4/3/80 PF	D,E

= TYPE I BARRICADE
* = CHANNELING DEVICES



TWO WAY TRAFFIC
MAINTAINED THROUGH WORK AREA

F

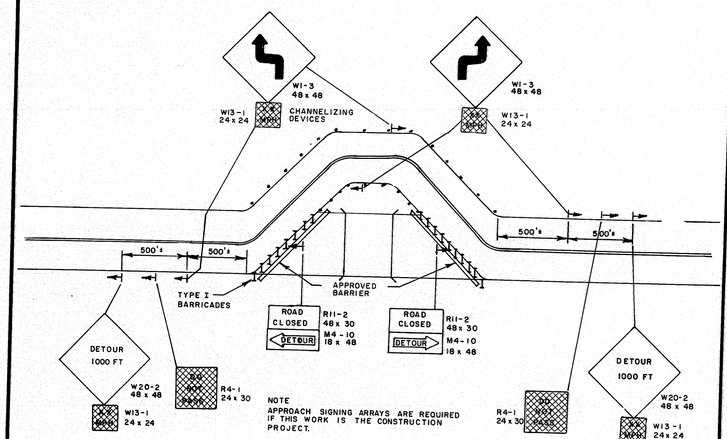
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

MAINTENANCE
OF
TRAFFIC
IN CONSTRUCTION ZONES

183-112

SHEET 2 OF 3 AUGUSTA, MAINE JULY, 1979

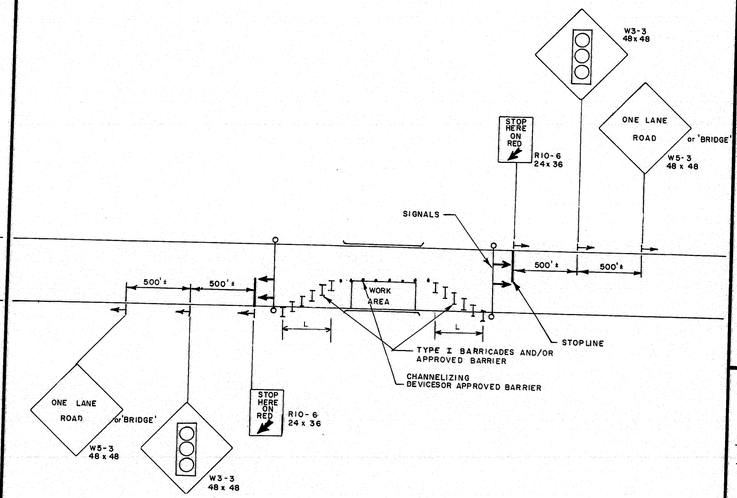
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-0005(32)	31	32



NOTE
APPROACH SIGNING ARRAYS ARE REQUIRED IF THIS WORK IS THE CONSTRUCTION PROJECT.

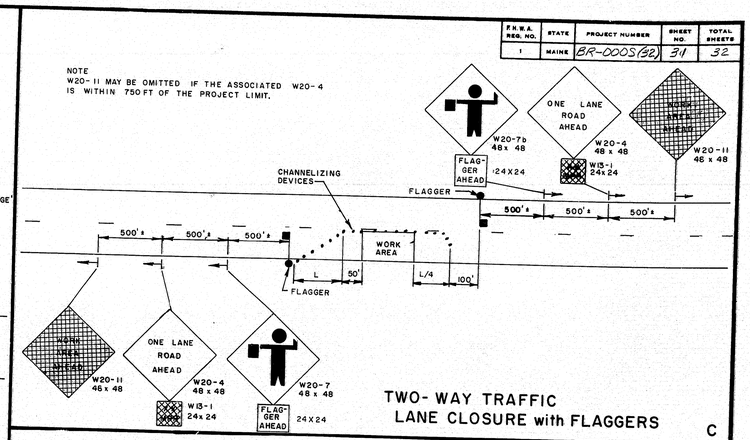
TWO WAY TWO LANE DETOUR

A



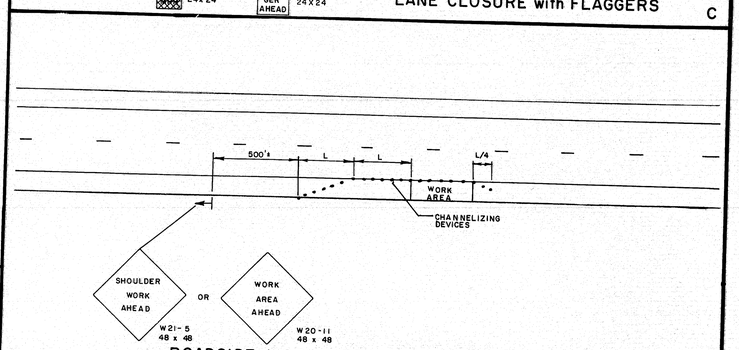
TWO WAY TRAFFIC
LANE CLOSURE
WITH TEMPORARY TRAFFIC SIGNALS

B



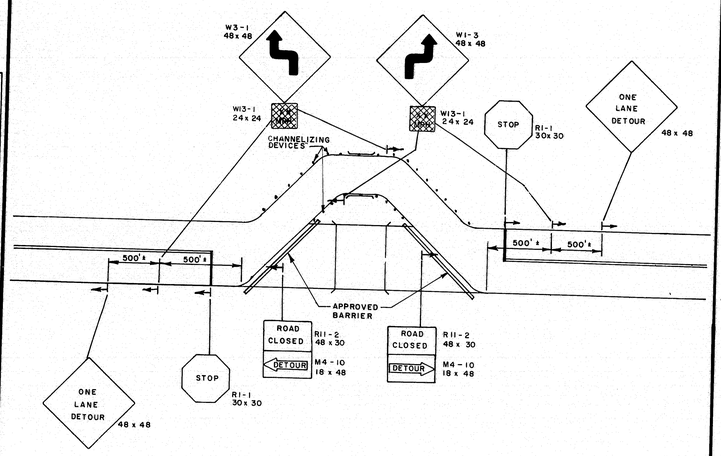
TWO- WAY TRAFFIC
LANE CLOSURE with FLAGGERS

C



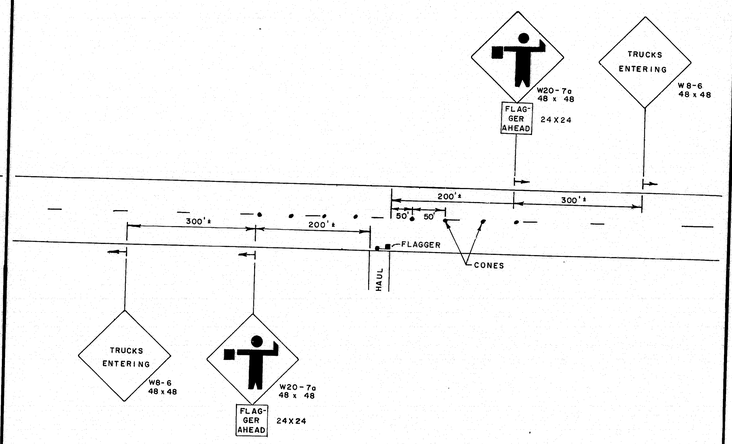
ROADSIDE WORK AREA SIGNING

D



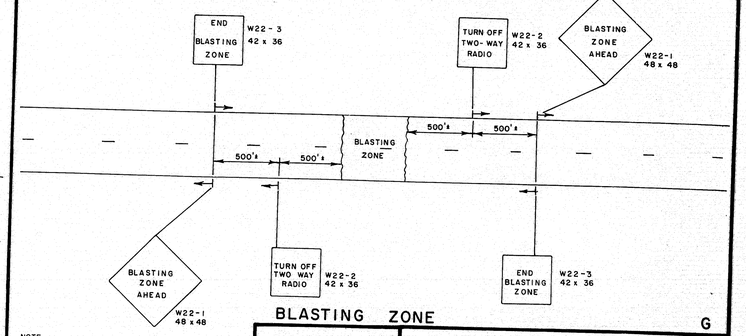
ONE WAY DETOUR

E



HAUL ROADS

F



BLASTING ZONE

G

NOTE
SIMILAR SIGN SEQUENCE SHALL BE ERECTED ON ALL SIDE ROADS WITHIN 1000FT OF THE BLASTING ZONE.

REVISIONS	
4/3/80 PF	B,C,D

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

MAINTENANCE
OF
TRAFFIC
IN CONSTRUCTION ZONES

183-113

SHEET 3 OF 3 AUGUSTA, MAINE JULY, 1979

PROJECT DESIGN ENGINEER	DESIGN - DETAILED	CHECKED	REVISIONS	FIELD CHANGES
PLANS				
DATE				
BY				

JANUARY 1968

REEL 305

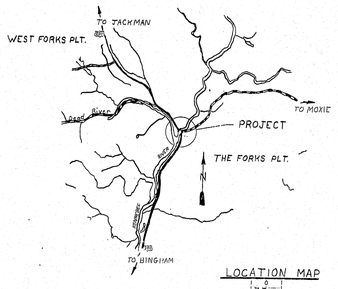
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-033-2(8)	1	48

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

PLANS

THE FORKS BRIDGE
OVER
THE KENNEBEC RIVER
IN THE PLANTATIONS OF
THE FORKS-WEST FORKS
SOMERSET COUNTY
PROJECT NO. BR-033-2(8)I
PROJECT LENGTH 0.195 MILES

Completed 1990



LOCATION MAP
SCALE OF MILES

SPECIFICATION

DESIGN: Load Factor Design per AASHTO Standard Specifications for Highway Bridges 1983 and Interim Specifications thru 1987.

CONTRACT: State of Maine, Department of Transportation, Standard Specifications, Highway and Bridges, Revision of July, 1988.

DESIGN LOADING

LIVE LOAD: HS25
STRESS CYCLES: 500,000

MATERIALS

CONCRETE:	Seals	Class S
	All Other	Class A
REINFORCING STEEL:	ASTM A615 Grade 60	
STRUCTURAL STEEL:	All Material (Except as otherwise noted)	ASTM A588 (Unpainted, except as noted.)
	High Strengh Bolts	ASTM A325, Type 3

BASIC DESIGN STRESSES

CONCRETE: f'c = 3,000 psi.
REINFORCING STEEL: fy = 60,000 psi.
STRUCTURAL STEEL: ASTM A588 Fy = 50,000 psi.
ASTM A325, Type 3 Fv = 25,000 psi.

HYDROLOGIC DATA

Drainage Area	= 1590 sq. miles
Design Discharge (Q50)	= 26,200 cfs
Check Discharge (Q100)	= 28,400 cfs
Headwater Elev. (Q50)	= 579.5
Headwater Elev. (Q100)	= 579.9
Discharge Velocity (Q50)	= 10.9 fps
Discharge Velocity (Q100)	= 11.7 fps
Flood of Record	= 30,300 cfs

INDEX OF SHEETS

SHEET	DESCRIPTION
1	TITLE
2	ESTIMATED QUANTITIES
3-5	SURVEY PLAN
6	PROFILE ROUTE 201
7	PROFILE MOXIE ROAD
8	GENERAL PLAN
9	TYPICAL APPROACH SECTIONS
10-13	CROSS SECTIONS ROUTE 201
14	CROSS SECTIONS MOXIE ROAD
15-18	RIPRAP SECTIONS
19	FOUNDATION SURVEY
20	FOOTINGS
21-22	STRUCTURAL STEEL
23	BLOCKING AND CAMBER
24	SUPERSTRUCTURE
25	SUPERSTRUCTURE SECTIONS
26	WALL SECTION & APPROACH SLABS
27	EXPANSION DEVICE
28	WINGS
29	STEEL BRIDGE RAILING
30-31	INSTRUMENT HOUSE AND DETAILS
32	REINFORCING STEEL SCHEDULE

HIGHWAY STANDARD DETAILS

33	(HD-1) CATCH BASINS AND MANHOLES
34	(HD-2) INLET GRATE UNIT
35	(HD-3) CULVERT PIPE DATA
36	(HD-4) EROSION CONTROL
37	(HD-5) UNDERDRAIN, DRIVEWAY DETAILS
38	(HD-6) TYPE 3 GUARDRAIL

BRIDGE STANDARD DETAILS

39	BD 113-85 DIAPHRAGMS & CROSSFRAMES
40	BD 126-81 MISCELLANEOUS DETAILS
41	BD 127-81 MISCELLANEOUS DETAILS
42	BD 201-88 CONCRETE END POST
43-45	MAINTENANCE OF TRAFFIC
46-48	RIGHT OF WAY MAP

missing

108-251

Plans of the existing bridge and a hydrologic report of the bridge site are available for the Contractor's reference at the Bridge Design Office in Augusta. The plans are reproductions of original drawings as prepared for the construction of the bridge and it is very unlikely that the plans will show any construction field changes or any alterations which may have been made to the bridge during its life span. The hydrologic report is based on the interpretation by the Department of information obtained for the subject site and no assurance is given that the information or the conclusions of the report will be representative of actual conditions at the time of construction.

TRAFFIC DATA

A.D.T.	1983 = 1760
A.D.T.	2003 = 2110
D.H.V.	295
T. (%)	20
D. (%)	60
V.	50

18 KIPS P2.0 = 318
P2.5 = 314

STATE OF MAINE — RICHARD A. FOLEMAN 1550 REGISTERED PROFESSIONAL ENGINEER

NOTE

All work contemplated under this contract to be governed by and in conformity with the STANDARD SPECIFICATIONS (revision of July, 1988) and supplementals thereto, except as modified on the plans and in the special provisions.

APPROVED:

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

[signature] COMMISSIONER — DATE 5-20-88

Richard A. Colesse CHIEF ENGINEER — 5-20-88

UNITED STATES
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
REGION 1

APPROVED:

DIVISION ADMINISTRATOR — DATE

BRUNING 44-132 83233

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-033-2(8)	2	47

ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
201.11	Clearing	1	Acre
202.0802	Removing Building Number 2	1	L.S.
202.0803	Removing Building Number 3	1	L.S.
202.19	Removing Existing Bridge	1	L.S.
203.20	Common Excavation	3,850	C.Y.
203.24	Common Borrow	4,100	C.Y.
203.26	Gravel Borrow	2,800	C.Y.
206.082	Str. Earth Excav.- Major Structures	1,300	C.Y.
301.09	Plant Mix Bituminous Base Course, Grading B	385	T
304.10	Aggregate Subbase Course-Gravel	3,800	C.Y.
403.07	Hot Bituminous Pavement, Grading B	490	T
403.08	Hot Bituminous Pavement, Grading C	545	T
403.101	Hot Bit. Pave., Grad. D (Swlks, Shims, Drive, Etc.)	25	T
403.121	Hot Bit. Pavement, Grading E (Shimming)	12	T
409.15	Bitumous Tack Coat, Applied	250	G
502.21	Structural Concrete, Abutments & Retaining Walls	685	C.Y.
502.22	Str. Conc. Abuts. & Ret. Walls (Placed under water)	506	C.Y.
502.26	Str. Conc. Rdwy. & Swlk Slabs on Steel Bridges	1	L.S.
506.31	Structural Concrete Approach Slabs	1	L.S.
502.4711	Silica Fume Additive	1	L.S.
503.14	Epoxy Coated Rein. Steel Fabricated & Delivered	119,400	LB
503.15	Epoxy Coated Reinforcing Steel Placing	119,400	LB
504.702	Structural Steel Fabricated & Delivered, Welded	1	L.S.
504.71	Structural Steel Erection	1	L.S.
505.08	Shear Connectors	1	L.S.
507.081	Steel Bridge Railing 2 Bar	316	L.F.
508.13	Membrane Waterproofing	1	L.S.
511.0701	Cofferdam - Wall #1	1	L.S.
511.0702	Cofferdam - Wall #2	1	L.S.
511.0703	Cofferdam - Wing L1	1	L.S.
511.0704	Cofferdam - Wing R1	1	L.S.
511.0705	Cofferdam - Wing L2	1	L.S.
511.0706	Cofferdam - Wing R2	1	L.S.
512.10	Prefabricated Composite Drain	155	L.F.
514.06	Curing Box for Concrete Cylinders	1	Ea.
515.21	Protective Coating for Concrete Surfaces	1	L.S.
520.22	Expansion Device - Compression Seal	2	Ea.
540.10	Bridge Instrumentation	1	L.S.
603.159	12 Inch Culvert Pipe Option III	33	L.F.
603.16	15 Inch Culvert Pipe Option I	36	L.F.
603.169	15 Inch Culvert Pipe Option III	62	L.F.
603.179	18 Inch Culvert Pipe Option III	424	L.F.
603.76	12 Inch Inlet Grate Unit	2	Ea.

PROJECT DESIGN ENGINEER	BY	DATE
DESIGN - DETAILED	MES	Dec. 87
CHECKED	MJG	11-88
REVISIONS		
FIELD CHANGES		

PLANS

JANUARY 1988

ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
604.092	Catch Basin Type B1-C	4	Ea.
604.15	Manhole	1	Ea.
605.09	6 Inch Underdrain Type B	487	L.F.
605.11	12 Inch Underdrain Type C	363	L.F.
606.151	Guard Rail Type 3aa - Single Rail	513	L.F.
606.201	Guard Rail Type 3aa - Over 15 Foot Radius	125	L.F.
606.256	Terminal Connector - Corrosion Resistant Steel	4	Ea.
606.266	Terminal End - Single Rail - Corrosion Resistant Steel	2	Ea.
606.35	Guard Rail Delineator Post	4	Ea.
606.776	Breakaway Cable Terminal - Corrosion Resistant Steel	2	Ea.
609.31	Curb Type 3	600	L.F.
610.16	Heavy Riprap	4,050	C.Y.
615.07	Loam	292	C.Y.
616.08	Sodding	160	S.Y.
618.14	Seeding Method Number 2	52	UN
618.15	Temporary Seeding	40	LB
619.12	Mulch	52	UN
625.143	4 Inch Pipe Sleeve	80	L.F.
627.61	9 Inch Solid White Pavement Marking Line	2900	L.F.
627.63	9 Inch Solid Yellow Pavement Marking Line	2400	L.F.
627.68	Temp. 9" Painted Pave. Marking Line, Yellow or White	7200	L.F.
637.07	Sprinkling	35	MG
637.08	Calcium Chloride	5	T
639.18	Field Office Type A	1	Ea.
639.21	Testing Facilities - Soils	1	L.S.
639.22	Testing Facilities - Bituminous Mixes	1	L.S.
639.23	Testing Facilities - Concrete	1	L.S.
652.31	Type I Barricade	16	Ea.
652.33	Drum	10	Ea.
652.34	Cone	30	Ea.
652.35	Construction Signs	720	S.F.
652.361	Maintenance Of Traffic Control Devices	1	L.S.
656.50	Baled Hay, In Place	24	Ea.
656.51	Sand Bag, In Place	24	Ea.
656.63	Temporary Silt Fence	400	L.F.
657.29	Seeding Pits	92	UN.
659.10	Mobilization	1	L.S.

Estimate of Lump Sum Quantities

502.26	Str. Conc. Rdwy. & Swlk Slabs on Steel Bridges	206	C.Y.
502.31	Structural Concrete Approach Slabs	61	C.Y.
502.4711	Silica Fume Additive	1645	LB
504.702	Structural Steel Fabricated & Delivered, Welded	442,000	LB
504.71	Structural Steel Erection	442,000	LB
505.08	Shear Connectors	1,370	Ea.

General Construction Notes

1. — All utility facilities shall be adjusted by the respective utility unless noted.
2. — For easements, construction limits and right-of-way lines refer to Right of Way Map.
3. — Place a 2' wide strip of sod on the slope along the top of the riprap.
4. — All embankment material except as otherwise shown placed below water shall be Gravel Borrow.
5. — The clearing limits shown on the plans are approximate. The actual clearing limits, for payment, will be established in the field by the Engineer.
6. — Do not excavate for Aggregate Subbase Course where the existing material is suitable as determined by the Engineer. Payment for shaping and compacting of the existing subbase and layers of new subbase 6" or less thick, in areas where the Engineer directs the Contractor not to excavate to the subgrade line shown on the plans, will be made in accordance with subsection 104.03, Extra Work.
7. — Stones which cannot be rolled or compacted into the surface of gravel shoulders shall be removed by hand raking. No seperate payment will be made for hand raking and the cost will be considered to be incidental to Item 304.10.
8. — Breakaway cable terminals shall be installed concurrent with the placement of beam guardrail, unless other approved temporary protection has been authorized.
9. — Sodded gutters shall be constructed, after paving and shoulder work is completed, where it is apparent that runoff will cause continual erosion.
10. — The existing bridge shall be removed to Elevation 576.00 on the south abutment (wall #1) and to Elevation 568.00 on the north abutment (Wall #2). Payment will be made under Item 202.19 Removal of Existing Bridge.
11. — All falsework, if used, that supports the vertical load of the structural steel during erection shall be removed prior to placement of the superstructure slab concrete. Removed in this instance, means removed so that the false work will not support the structural steel during superstructure slab concrete placement, accounting for anticipated deflections.
12. — False work required for lateral support of the structural steel shall be provided during erection and remain in place until the wall concrete has cured for a minimum of 5 days.
13. — Working drawings for erection procedures of the structural steel and falsework, as necessary, will be required in accordance with section 105.
14. — Before the superstructure slab concrete is placed, backfill behind the walls will be allowed to an elevation 2' above the distribution slabs or to the elevation of the riprap embankment in place in front of the walls.
15. — After the superstructure slab concrete is placed and cured for a minimum of 5 days, backfill shall be placed and compacted at a uniform rate for both walls. The maximum difference in elevation of the backfill between both walls at any time shall be not greater than one compacted layer.
16. — The Engineer will submit top of beam blocking elevations to the Bridge Design Office for verification of the assumed dead load deflections prior to establishing blocking depths for slab forms.
17. — All Reinforcing Steel shall be Epoxy Coated.

Sequence Of Construction

1. — All structural steel, legs, superstructure, diaphragms, etc., must be installed and all connections tightened prior to placement of any concrete.
2. — All wall concrete shall be cured for a minimum of 5 days prior to placement of any superstructure slab concrete.
3. — Superstructure slab concrete shall be placed in one continuous operation, starting from one end of the bridge and remain plastic for the entire span until the placement is complete.
4. — Variations to the above construction sequences will not be allowed unless approved by the Engineer.

Summary Of Excavation & Borrow

	Usable	Waste
Common Excavation		
Subbase & Grubbing	1,609 C.Y.	—
Channel	1,663 C.Y.	—
Existing South abut. approach	100 C.Y.	478 C.Y.
Riprap Excavation	2,617 C.Y.	—
Structural Excavation	1,300 C.Y.	—
Totals	*7,289 C.Y.	478 C.Y.

Common Borrow	
In place amount	9,767 C.Y.
*Minus Excavation X .85	- 6,195 C.Y.
Total Req. — Pit measure	3,572 C.Y. X 1.15
Estimated Quantity —	4,108 C.Y. or 4,100 C.Y.

108-252

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION 2

THE FORKS BRIDGE
OVER
THE KENNEBEC RIVER
IN THE PLANTATIONS OF
THE FORKS - WEST FORKS
SOMERSET COUNTY
Estimated Quantities

SHEET OF AUGUSTA, MAINE

1988

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-033-2(18)	3	48

NOTE: The discharge and stage elevation of the Kennebec River at the project site is controlled by the Harris Dam which is located approximately 12 miles upstream at Indian Pond. Water is released daily for power generation, usually at the same time each day. For the remainder of the day, a minimum flow is maintained. The average daily high water shown on the plans indicates the average daily release during the time of the survey. Also the average daily low water corresponds to the minimum average daily release during the time of the survey. The discharge and stage elevation will vary according to the daily release from the dam.

DRAINAGE

~ Manholes & Catch Basins
- Route 201
  - Sta. 121+37, 15' Left ~ Type B1-C
  - Sta. 121+93, 15' Right ~ Type B1-C
  - Sta. 122+32, 15' Right ~ Type B1-C
  - Sta. 123+67, 15' Left ~ Type B1-C
- Moxie Road
  - Sta. 10+85, 14' Left ~ Manhole

~ 12" Inlet Grate Unit
- Route 201
  - Sta. 122+15, 34' Right
  - Sta. 123+25, 26' Right

~ Underdrain Type "B"
- Route 201
  - Sta. 112+93 Lt. to Sta. 114+43 Lt. ~ 150 Lf.
  - Sta. 123+33.5 Rt. to Sta. 123+80 Rt. ~ 47 Lf.
  - Sta. 123+68.5 Lt. to Sta. 123+80 Lt. ~ 12 Lf.
- Moxie Road
  - Sta. 10+50 Lt. to Sta. 11+50 Lt. ~ 100 Lf.

~ 12" Underdrain Type "C"
- Route 201
  - Sta. 121+38.5 Lt. to Sta. 123+65.5 Lt. ~ 227 Lf.
  - Sta. 121+94.5 Rt. to Sta. 123+30.5 Rt. ~ 136 Lf.

~ 15" Culvert Pipe Option I
- Route 201
  - Sta. 116+60 Lt. ~ 36 Lf.

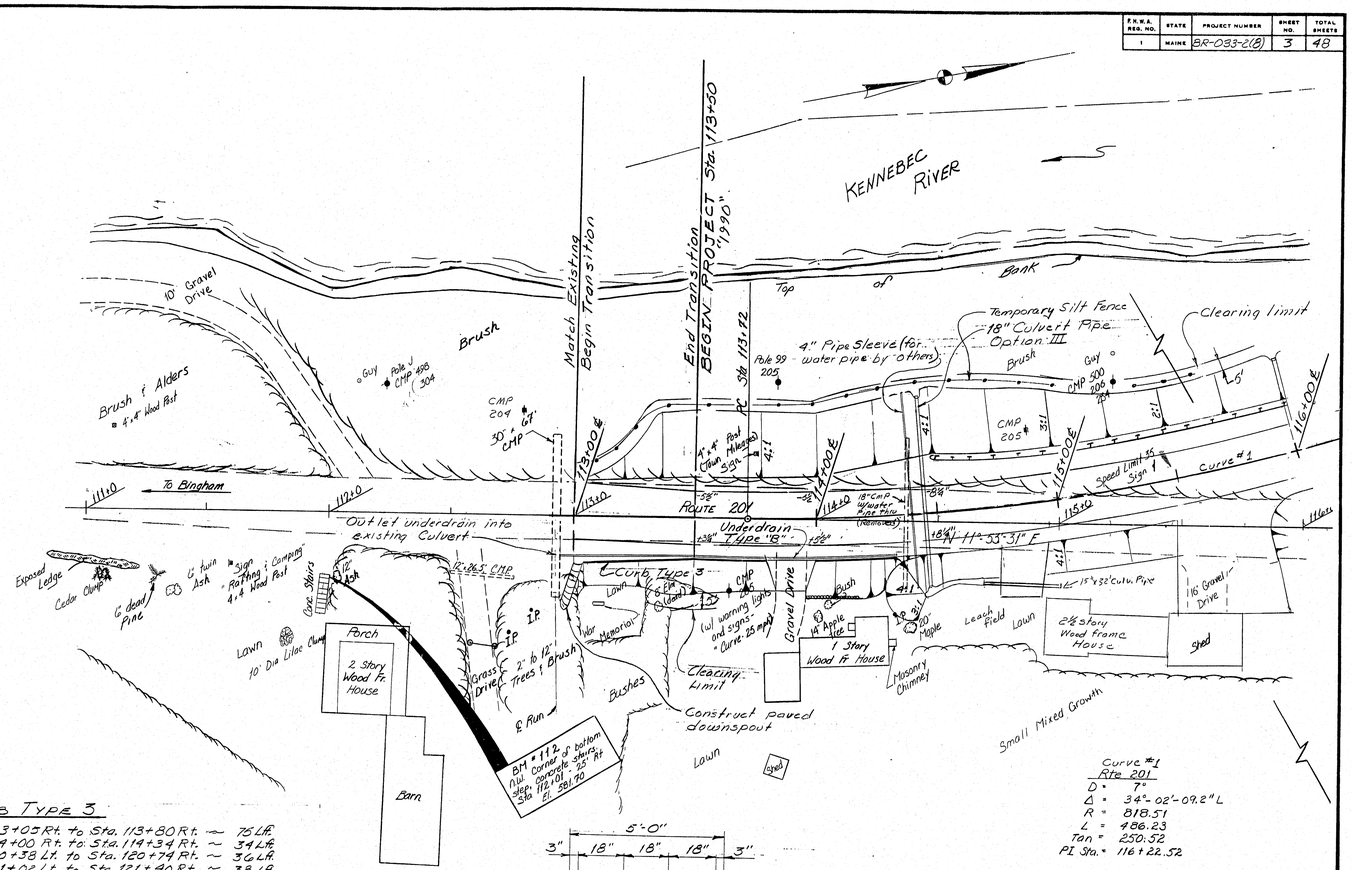
~ 12" Culvert Pipe Option III
- Route 201
  - Sta. 121+93 Rt. ~ 25 Lf.
  - Sta. 123+32 Rt. ~ 8 Lf.

~ 15" Culvert Pipe Option III
- Route 201
  - Sta. 121+37 Lt. to Sta. 121+93 Rt. ~ 62 Lf.
  - Sta. 119+75 Rt.

~ 18" Culvert Pipe Option III
- Route 201
  - Sta. 119+45 Lt. to Rt. ~ 76 Lf.
  - Sta. 116+00 Lt. to Rt. ~ 84 Lf.
  - Sta. 120+25 Lt. to Sta. 121+37 Lt. ~ 122 Lf.
- Moxie Road
  - Sta. 10+50, 119' Lt. to Sta. 10+85, 14' Lt. ~ 109 Lf.
  - Sta. 10+85, 19' Lt. to Sta. 11+00, 24' Rt. ~ 38 Lf.

Sheet 1 Plotted on 2-8 at 1:45

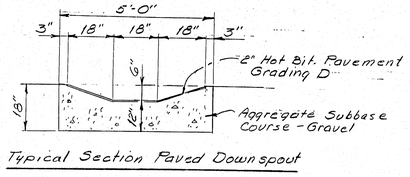
PROJECT DESIGN ENGINEER	BY	DATE
PLANS — DESIGN - DETAILED	MFCS	11-82
CHECKED	MGB	
REVISIONS		
FIELD CHANGES		



CURB TYPE 3

Sta. 113+03 Rt.	to Sta. 113+80 Rt.	~ 75 Lf.
Sta. 114+00 Rt.	to Sta. 114+34 Rt.	~ 34 Lf.
Sta. 120+38 Lt.	to Sta. 120+74 Rt.	~ 36 Lf.
Sta. 121+02 Lt.	to Sta. 121+40 Rt.	~ 38 Lf.
Sta. 121+60 Lt.	to Sta. 122+35 Lt.	~ 75 Lf.
Sta. 122+33 Lt.	to Sta. 123+70 Lt.	~ 115 Lf.
Sta. 120+31 Rt.	to Sta. 120+91 Rt.	~ 40 Lf.
Sta. 121+29 Rt.	to Sta. 121+71 Rt.	~ 42 Lf.
Sta. 121+91 Rt.	to Sta. 122+69 Rt.	~ 78 Lf.
Sta. 122+89 Rt.	to Sta. 123+35 Rt.	~ 46 Lf.
* Sta. 118+24 Lt.	to Sta. 118+34 Lt.	~ 10 Lf.
* Sta. 118+37 Rt.	to Sta. 118+47 Rt.	~ 10 Lf.

* Note: The curb at these locations shall be turned back under the guard rail as directed by the Engineer.



Typical Section Paved Downspout

Curve #1
Rte 201
D = 7°
Δ = 34°-02'-09.2" L
R = 818.51
L = 486.23
Tan = 250.52
PI Sta. = 116+22.52

108-2.53

M.D.O.T. Field Survey Book #10115 & #10116

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION 3

THE FORKS BRIDGE
OVER
THE KENNEBEC RIVER
IN THE PLANTATIONS OF
THE FORKS - WEST FORKS
SOMERSET COUNTY
SURVEY PLAN
"As Built 1970"

SHEET 1 OF 3 AUGUSTA, MAINE

JANUARY 1982

The Forks

F.A.H.S. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-033-2(8)	4	48

PROJECT DESIGN ENGINEER	BY	DATE
PLANS — DESIGN - DETAILED	MEB	6/82
CHECKED	MJR	11-82
REVISIONS		
FIELD CHANGES		

Survey Plotted at Plot Plan

Curve #1
Rte 201
D = 7°
Δ = 34°-02'-09.2" L
R = 818.51
L = 486.23
Tan = 250.52
PI Sta. = 116 + 22.52

Curve #3
Moxie Road
D = 12°
Δ = 19°-30' R
R = 477.41'
L = 162.50
Tan = 82.04
PI Sta. = 11+85

Curve #2
Rte 201
D = 2°-30'
Δ = 4°-44'-14.2" R
R = 2291.83
L = 189.49
Tan = 94.80
PI Sta. = 123+11.01

* Note: Grade area shown shaded to match adjacent parking area with ½"/ft. slope to river. Loam & seed method #2. See Moxie Rd. Cross Sections.

PLAN

Scale of Feet 25 0 25

TYPICAL RIPRAP SECTION

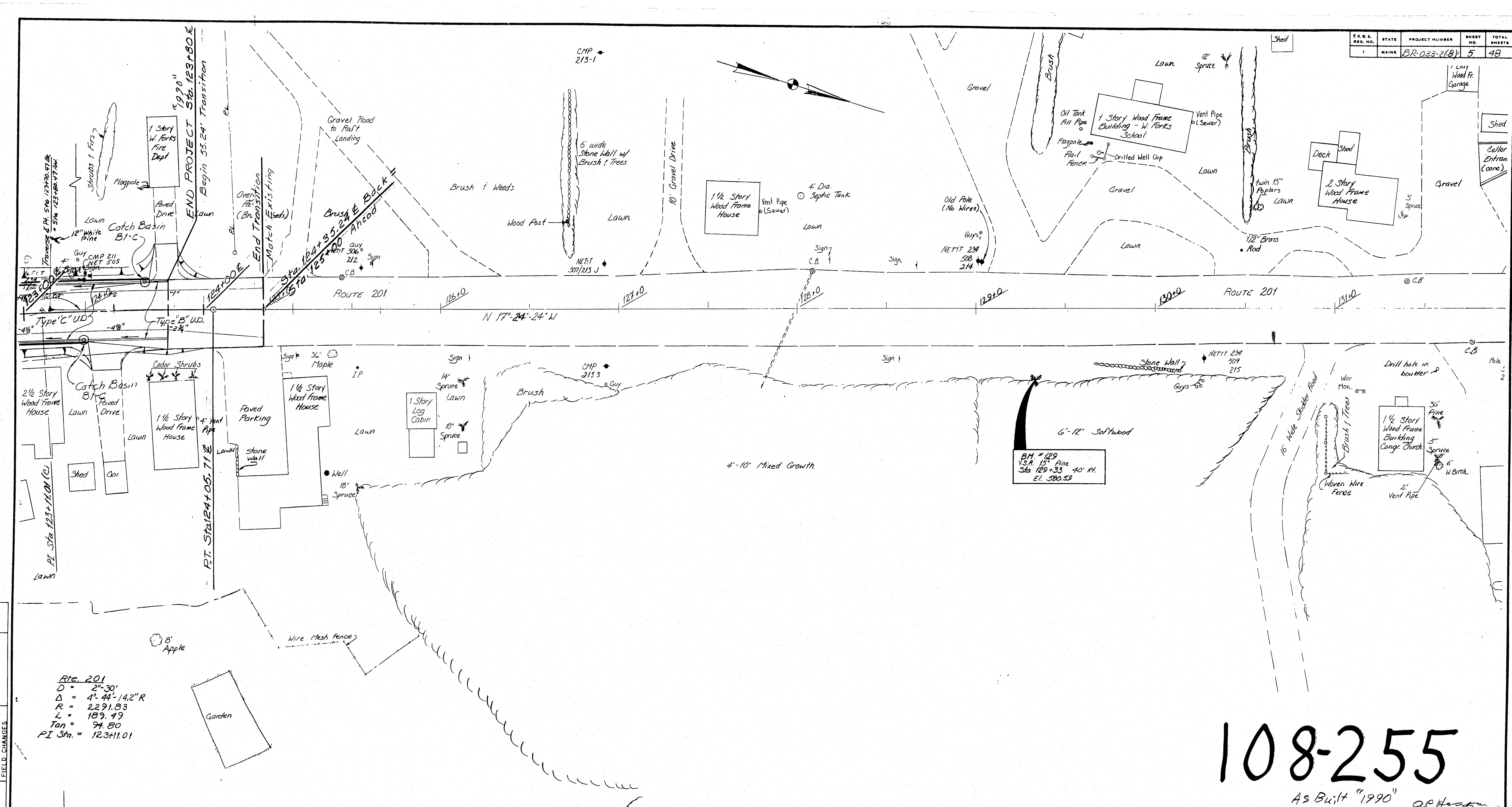
108-254

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION 4

THE FORKS BRIDGE
OVER
THE KENNEBEC RIVER
IN THE PLANTATIONS OF
THE FORKS - WEST FORKS
SOMERSET COUNTY
SURVEY PLAN
"AS Built" 1990 of Maine

SHEET 2 OF 3 AUGUSTA, MAINE

JANUARY 1988



F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-033-2(8)	5	48

PROJECT DESIGN ENGINEER	Survey Plotted By PL 2/85	
PLANS	BY	DATE
DESIGN-DETAILED	MEB	
CHECKED	NLB	11-88
REVISIONS		
FIELD CHANGES		

108-255

As Built "1990" ae Hagan

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION 5

THE FORKS BRIDGE
OVER
THE KENNEBEC RIVER
IN THE PLANTATIONS OF
THE FORKS - WEST FORKS
SOMERSET COUNTY
SURVEY PLAN

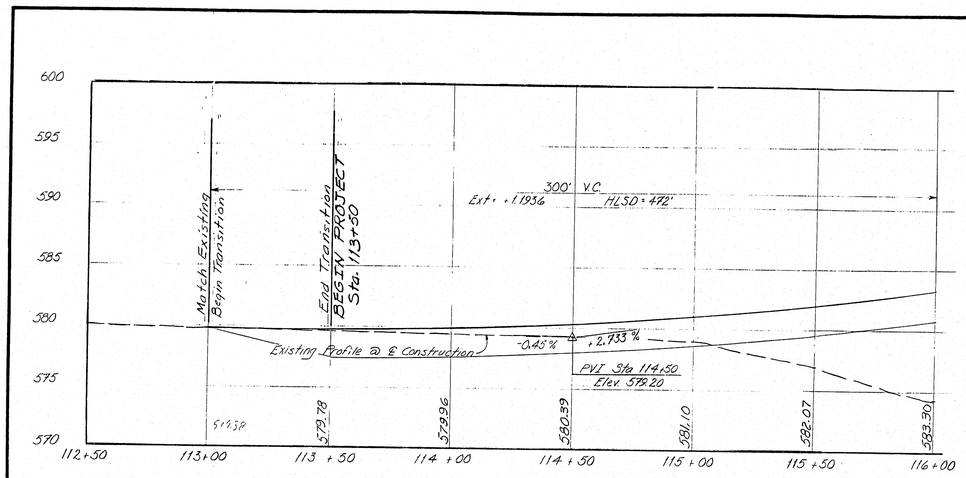
SHEET 3 OF 3 AUGUSTA, MAINE

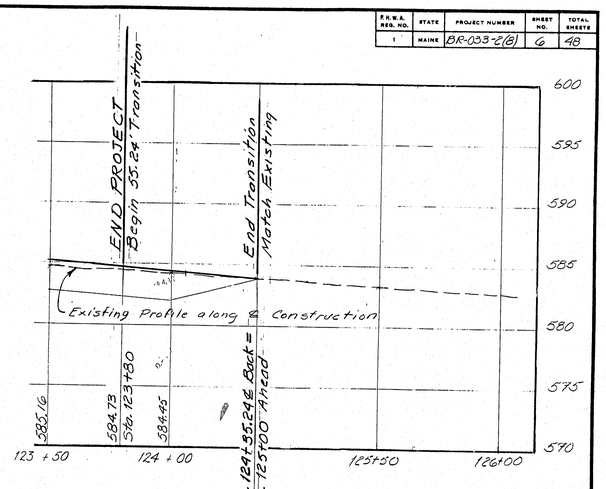
JANUARY 1969

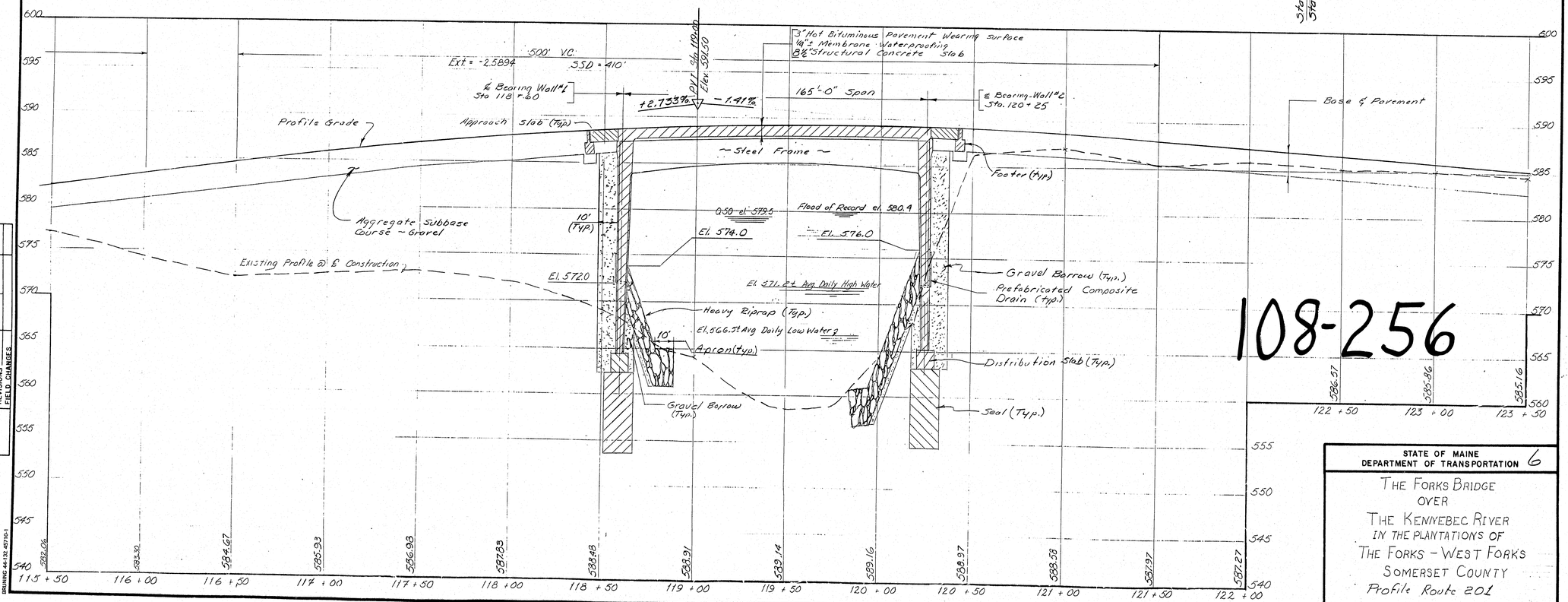
203-1 2000

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-033-2(8)	6	48

PROFILE
(U.S. ROUTE 201)







108-256

PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN - DETAILED	MRB	P.L.B. 11-90
	CHECKED	MLS	
	REVISIONS		
	FIELD CHANGES		

BRUNING 44-132 45710-1

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION 6

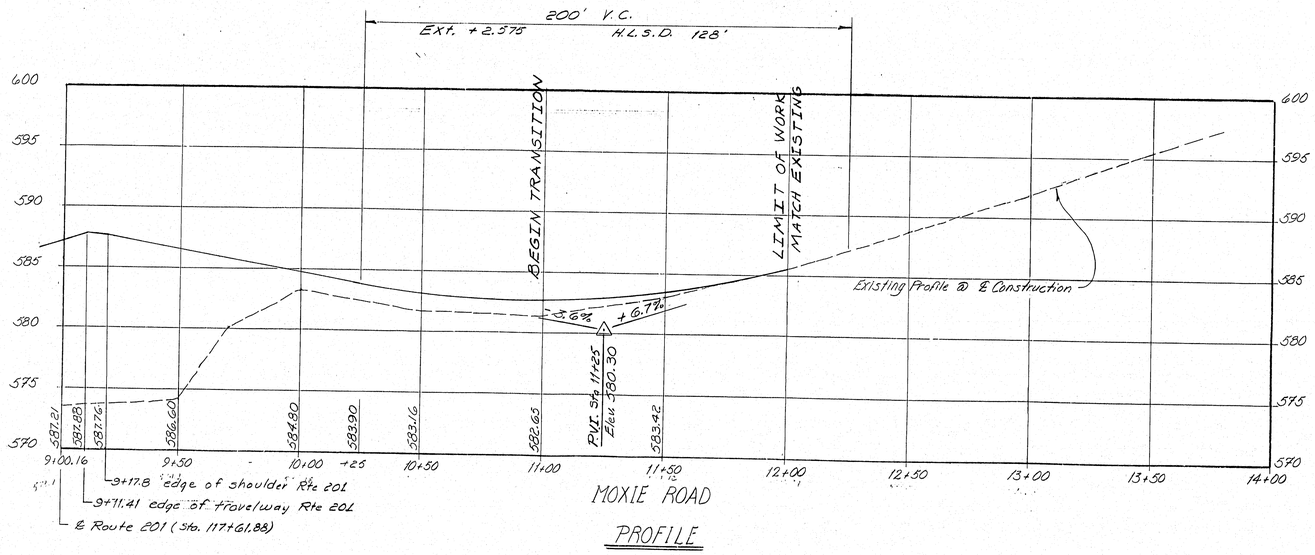
THE FORKS BRIDGE
OVER
THE KENNEBEC RIVER
IN THE PLANTATIONS OF
THE FORKS - WEST FORKS
SOMERSET COUNTY
Profile Route 201

SHEET OF AUGUSTA, MAINE

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-033-2(8)	7	48

PROJECT DESIGN ENGINEER	BY	DATE
PLANS — DESIGN - DETAILED	MEB	2/85
CHECKED	WLB	
REVISIONS		
FIELD CHANGES		

BRUNING 44-132-45710-1



MOXIE ROAD

PROFILE

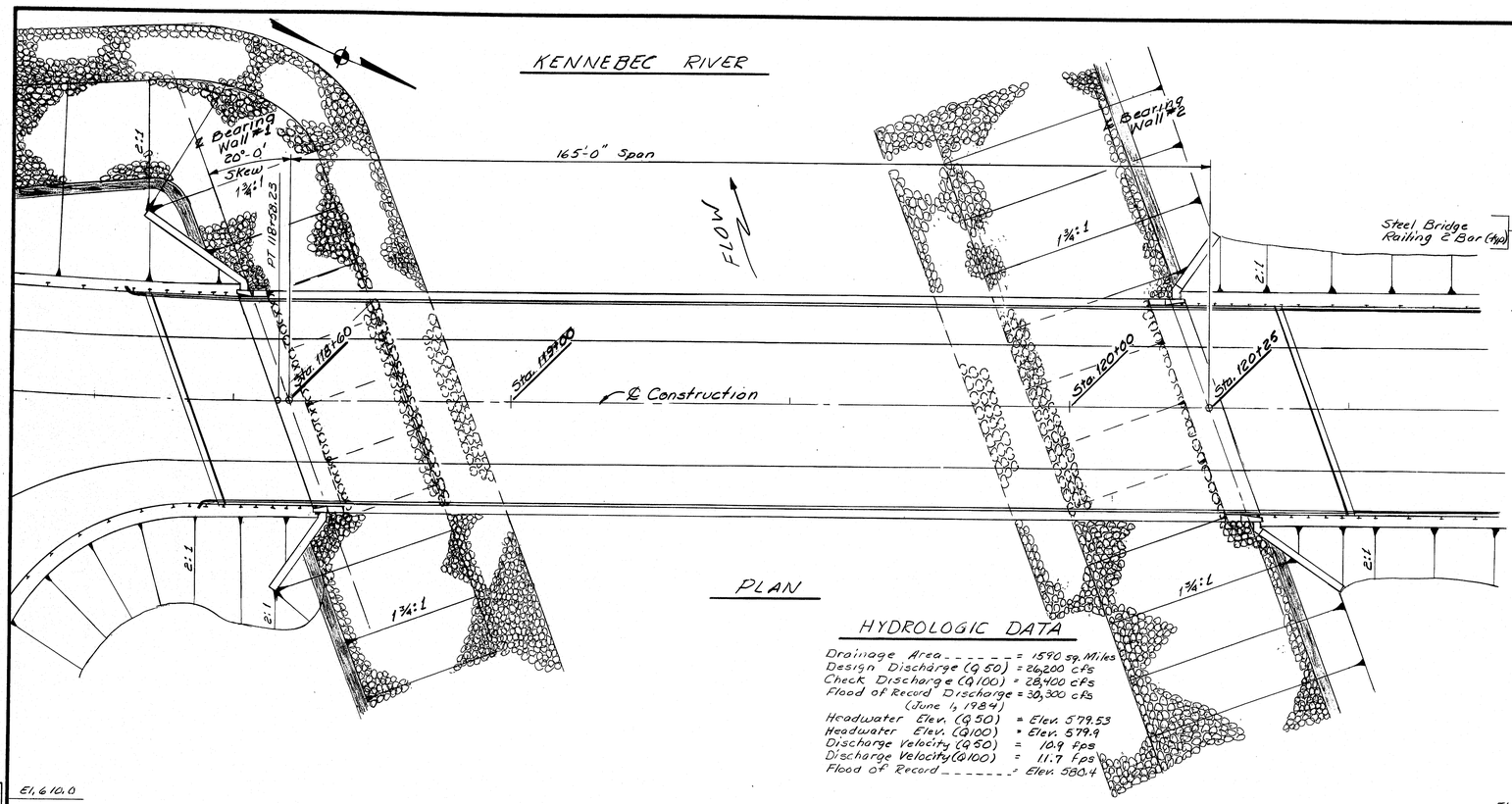
108-257

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION 7

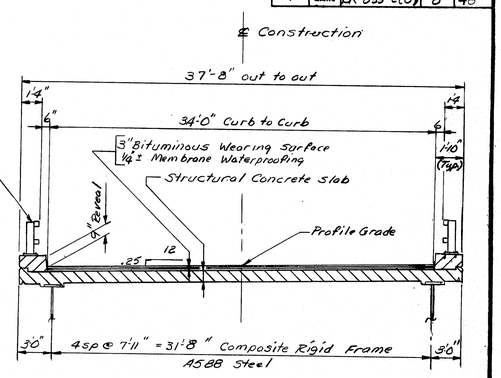
THE FORKS BRIDGE
over
THE KENNEBEC RIVER
IN THE PLANTATIONS OF
THE FORKS - WEST FORKS
Profile Moxie Road

SHEET OF AUGUSTA, MAINE

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-033-2(8)	8	48



PLAN



TYPICAL BRIDGE SECTION

HYDROLOGIC DATA

Drainage Area	= 1590 sq. Miles
Design Discharge (Q 50)	= 26,200 cfs
Check Discharge (Q100)	= 28,400 cfs
Flood of Record Discharge (June 1, 1984)	= 30,300 cfs
Headwater Elev. (Q 50)	= Elev. 579.53
Headwater Elev. (Q100)	= Elev. 579.9
Discharge Velocity (Q 50)	= 10.9 fps
Discharge Velocity (Q100)	= 11.7 fps
Flood of Record	= Elev. 580.4

SPECIFICATIONS

DESIGN: Load Factor Design per AASHTO Standard Specifications for Highway Bridges 1983 and interim Specifications 1984, 1985, 1986.

CONTRACT: State of Maine, Department of Transportation Standard Specifications, Highway and Bridges Revisions of January 1984.

MATERIALS

CONCRETE: _____ Seal Concrete Class S
All other Class A

REINFORCING STEEL: ASTM A615, Grade 60

STRUCTURAL STEEL: All Materials ASTM A588
(Except As Noted)
High Strength Bolts
ASTM A325, Type 3

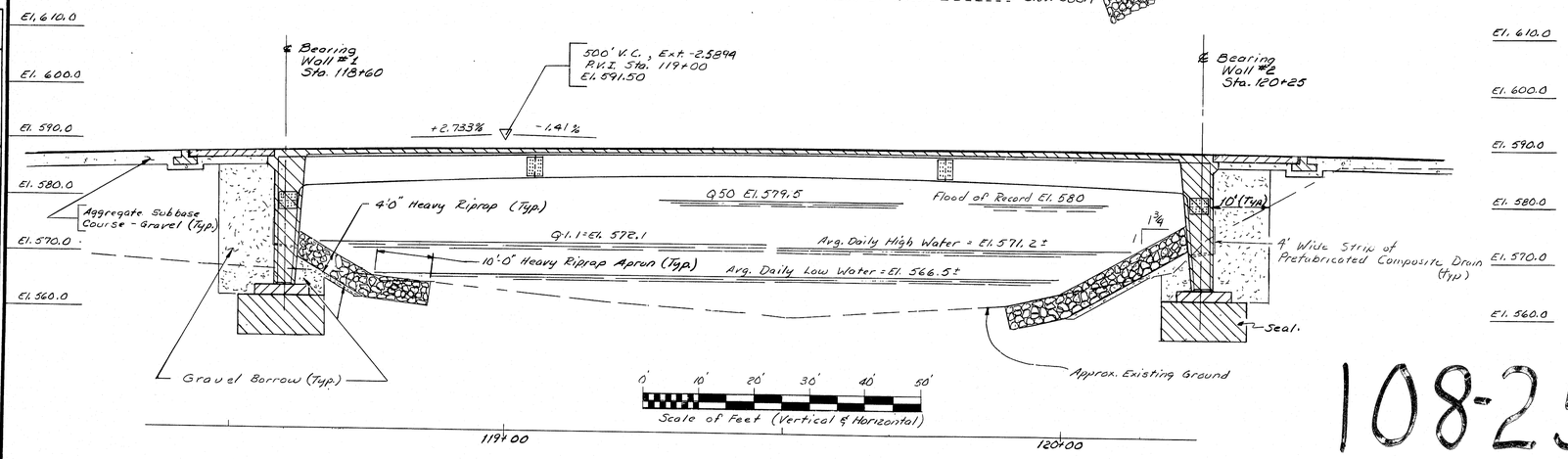
BASIC DESIGN STRESSES

CONCRETE: _____ f'c = 3000 psi

REINFORCING STEEL: _____ fy = 60,000 psi

STRUCTURAL STEEL:

ASTM A588	Fy	= 50,000 psi
ASTM A572	Fy	= 50,000 psi
ASTM A325	Fv	= 25,000 psi
ASTM A36	Fy	= 36,000 psi



ELEVATION ALONG ℄ CONSTRUCTION

PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN - DETAILED	MCS	10-85
	CHECKED	WLB	11-85
	REVISIONS		
	FIELD CHANGES	LAW	3-87

BRUNING 44-132 45710-1

108-258

Bridge # 2841

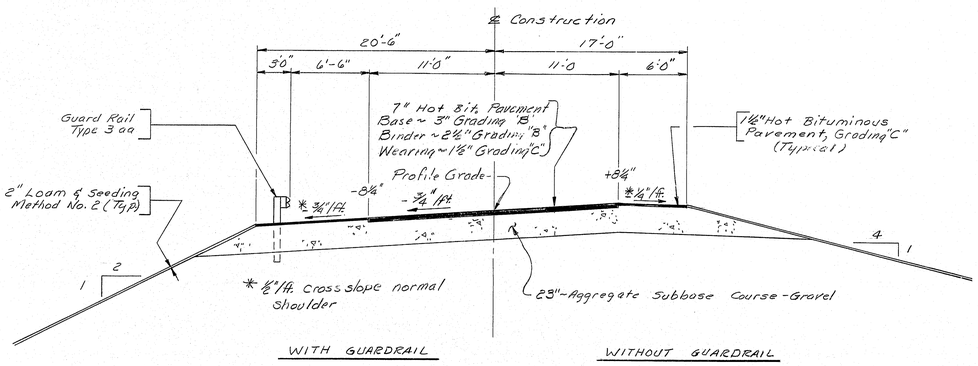
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION 8

THE FORKS BRIDGE OVER THE KENNEBEC RIVER IN THE PLANTATIONS OF THE FORKS - WEST FORKS SOMERSET COUNTY

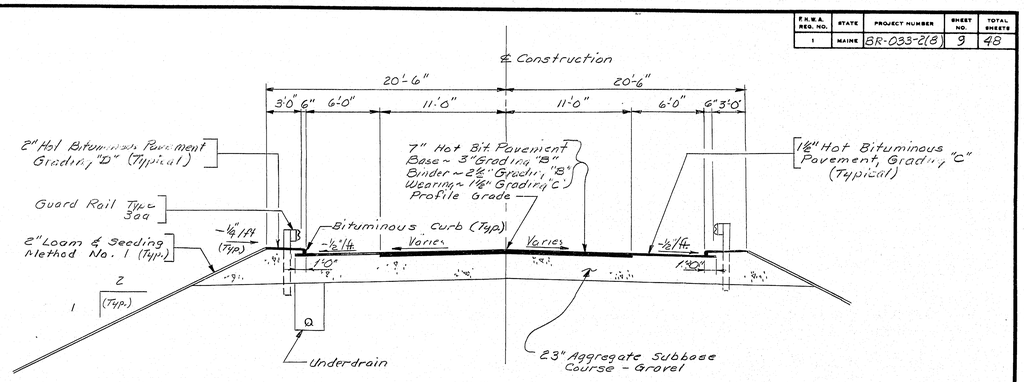
GENERAL PLAN

SHEET 1 OF 2 AUGUSTA, MAINE Nov 1985

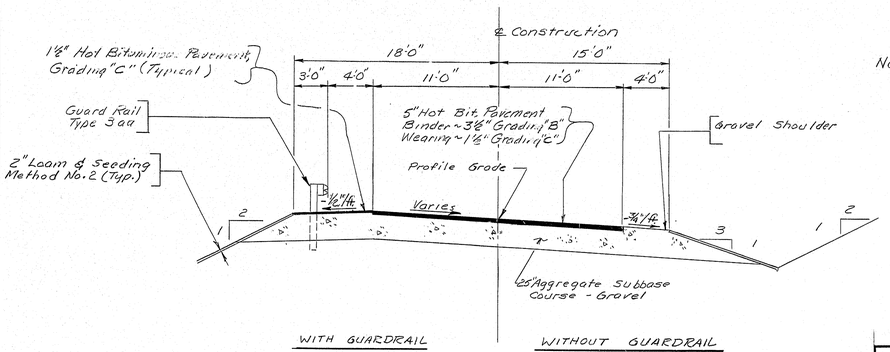
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-033-2(8)	9	48



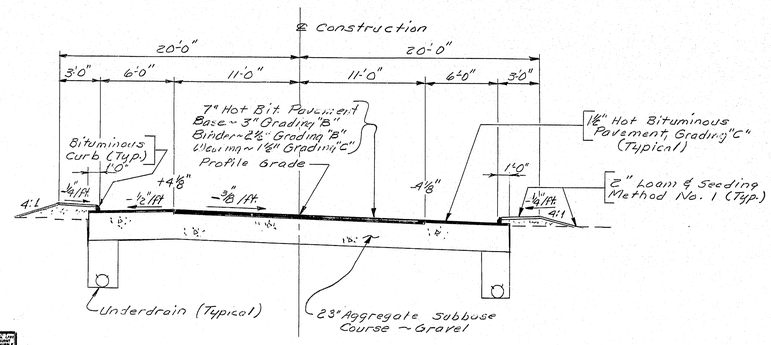
TYPICAL SUPERELEVATED SECTION SOUTHERLY OF BRIDGE ROUTE 201



TYPICAL GUARDRAIL SECTION NORTHERLY OF BRIDGE ROUTE 201



NOTE: All drives and entrances shall have 12" minimum depth of Aggregate Subbase Course-Gravel, Pavement for drives shall be ~ 2" Hot Bituminous Pavement, Grading D

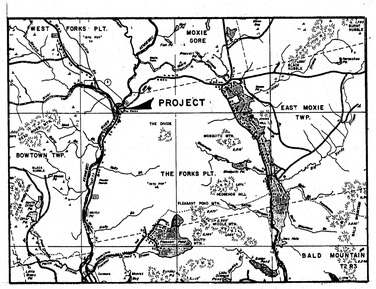


TYPICAL SECTION MOXIE ROAD

TYPICAL SUPERELEVATED CURBED SECTION NORTHERLY OF BRIDGE ROUTE 201

TRAFFIC DATA

	Route 201		Moxie Road	
AADT	1983 =	1760	AADT 1987 =	470
AADT	2003 =	2110	AADT 2007 =	660
DHV	=	295	DHV =	79
T%	=	20	T% =	22
D%	=	60	D% =	60
18 Kip P2.0	=	318	18 Kip P2.0 =	67
18 Kip P2.5	=	314		



LOCATION MAP

PROJECT DESIGN ENGINEER	BY	DATE
DESIGN - DETAILED	MEB	11-85
CHECKED	MHP	11-85
REVISIONS		
FIELD CHANGES		

PLANS

BRUNING 44-132-45710-1

108-259

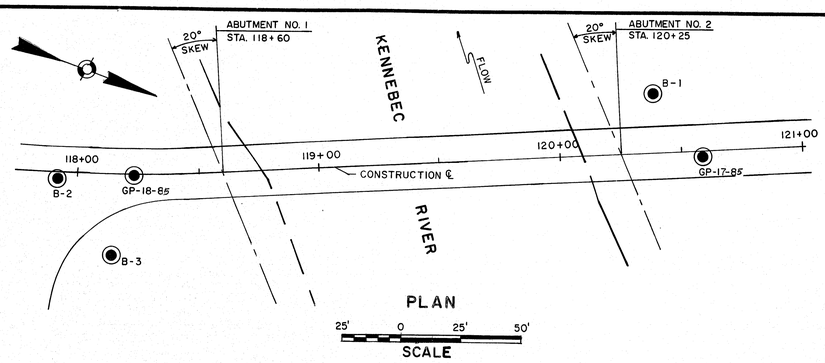
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

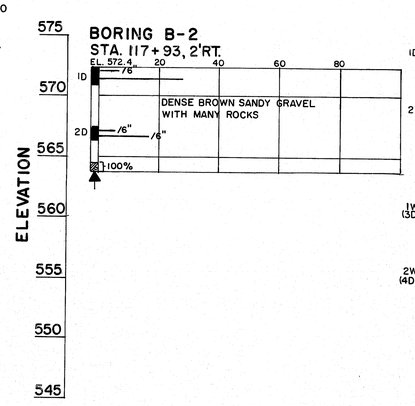
THE FORKS BRIDGE
OVER
THE KENNEBEC RIVER
IN THE PLANTATIONS OF
THE FORKS - WEST FORKS
SOMERSET COUNTY

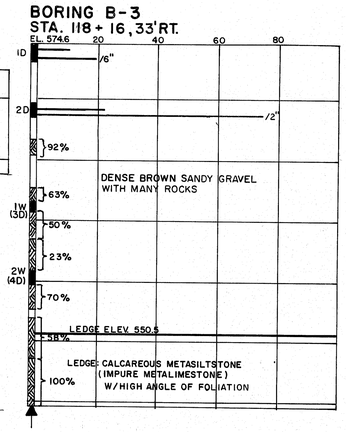
Typical Approach Sections

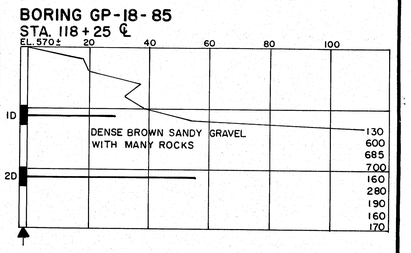
SHEET 2 OF 2 AUGUSTA, MAINE Nov. 1985

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-033-2(8)	19	48



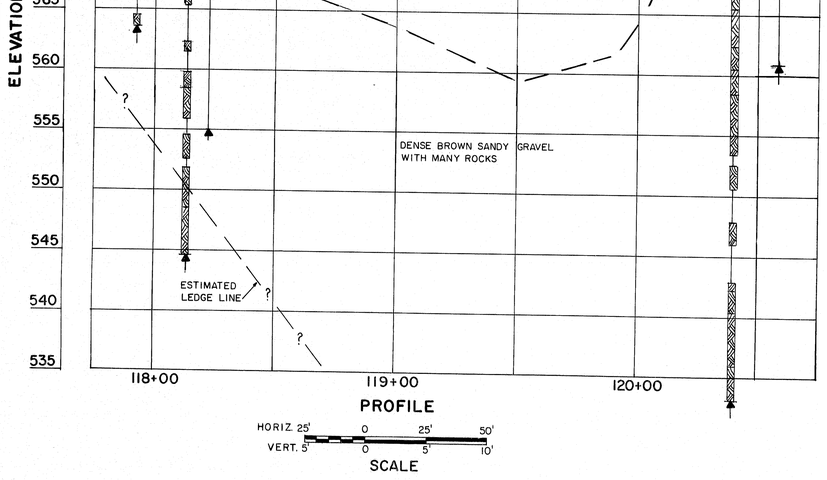


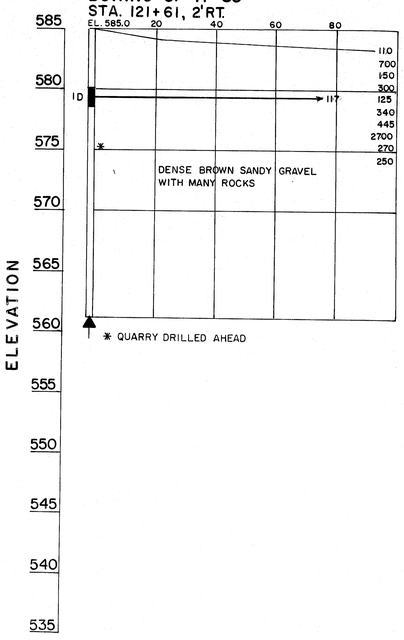


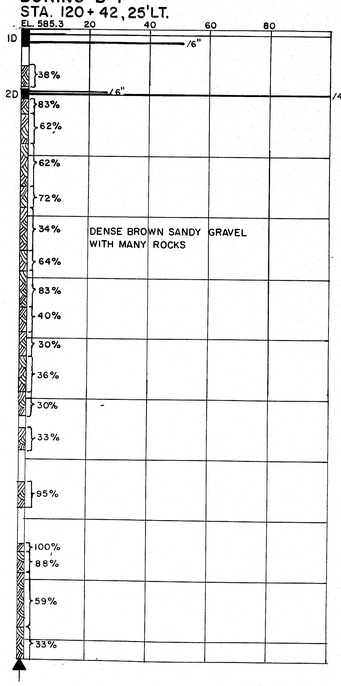


BORING NOTES

- All samples and vanes are made ahead of casing
- N — Number of blows required to drive extra heavy casing one foot with 400 ft. lbs. of energy per blow
- Location and type of dry sample
- 1D — S & H Sampler # 1290's
- 1W — Wash sample and number
- Number of blows required to drive spoon or tubing one foot with 350 ft. lbs. of energy per blow
- 71% — Locations cored by diamond bit and percent recovery of rock







PROJECT DESIGN ENGINEER	BY	DATE
PLANS — DESIGN - DETAILED		
CHECKED		
REVISIONS		
FIELD CHANGES		

BRUNING 44-132-457101

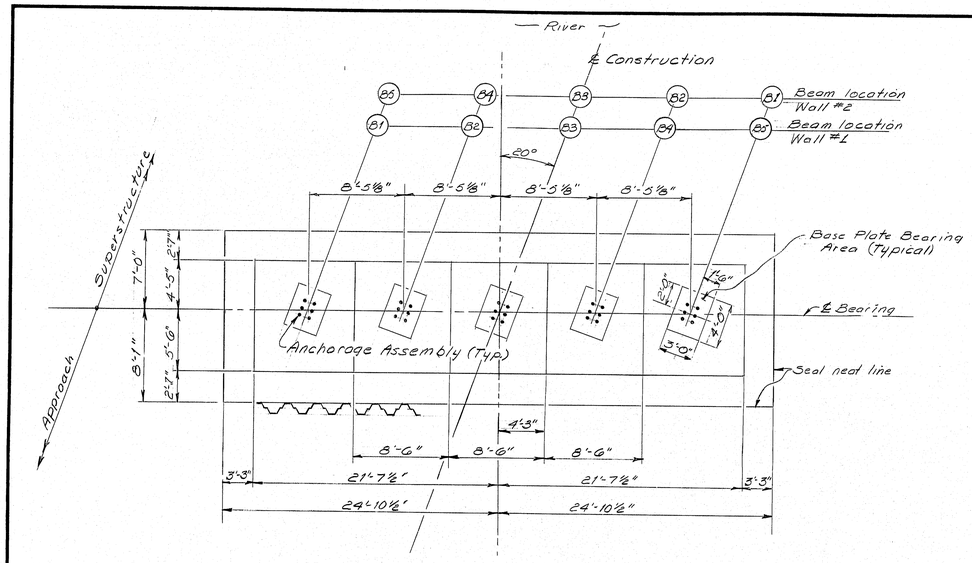
108-260

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION 19

THE FORKS BRIDGE
OVER
THE KENNEBEC RIVER
IN THE TOWNS OF
THE FORKS - WEST FORKS
SOMERSET COUNTY
FOUNDATION SURVEY

SHEET OF AUGUSTA, MAINE

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR033-2(8)	20	48

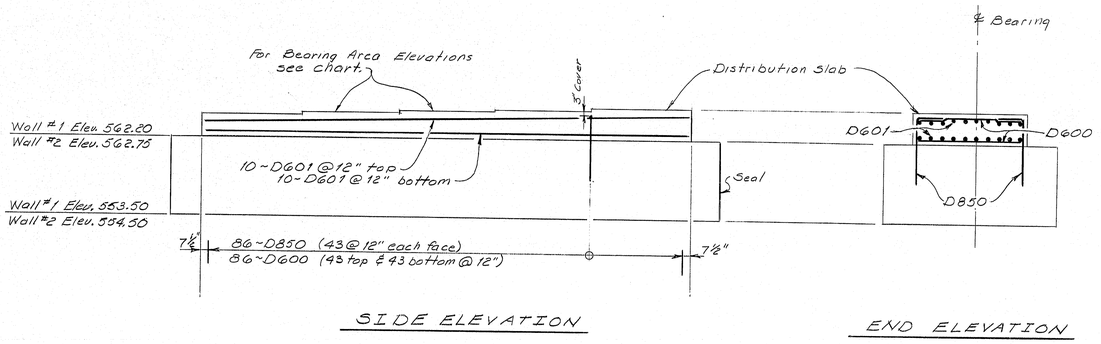


PLAN

Bridge Seat Elevation Chart Top of Distribution Slab					
	Beam #1	Beam #2	Beam #3	Beam #4	Beam #5
Wall #1	564.20	564.40	564.59	564.78	564.98
Wall #2	564.79	564.95	565.10	565.25	565.40

FOOTING NOTES:

1. ~ Reinforcing steel shall have 3" minimum cover.
2. ~ Seal concrete dimensions are predicated on the use of standard sheet pile section PDA 27, or equivalent steel sheet piling, using appropriate standard rolled corners. Pay limits for seal concrete shall be to the neat lines shown plus 5 inches all around.
3. ~ The depth of the seal is set for a water elevation of 574.00. If the water elevation at the time of construction is higher, the depth of the seal shall be adjusted.
4. ~ Any excavation required by the Contractor to install the cofferdams, shall be considered incidental to item 611.07, Cofferdam. The soils report is available which describes the sub surface soils investigation completed.
5. ~ The method of placing dowels in the seal shall be approved by the Engineer.
6. ~ Maximum calculated footing pressure = 7.2 Tons per square foot.
7. ~ The bearing area elevations on the distribution slabs shall be placed slightly higher (⅛"±) than the bridge seat elevations shown in the chart. Then the Base plate Bearing areas shall be bushed level to the bridge seat elevations. Shim plates will not be allowed.
8. ~ Before placing distribution slab concrete, the anchorage assemblies shall be installed and secured in place. See Structural Steel Details plan sheet.



SIDE ELEVATION

END ELEVATION

FOOTING DETAILS

PROJECT DESIGN ENGINEER	BY	DATE
DESIGN - DETAILED	MES	5/82
CHECKED	MES	11/82
REVISIONS		
FIELD CHANGES		

PLANS

BRUNING 44-132-45710-1

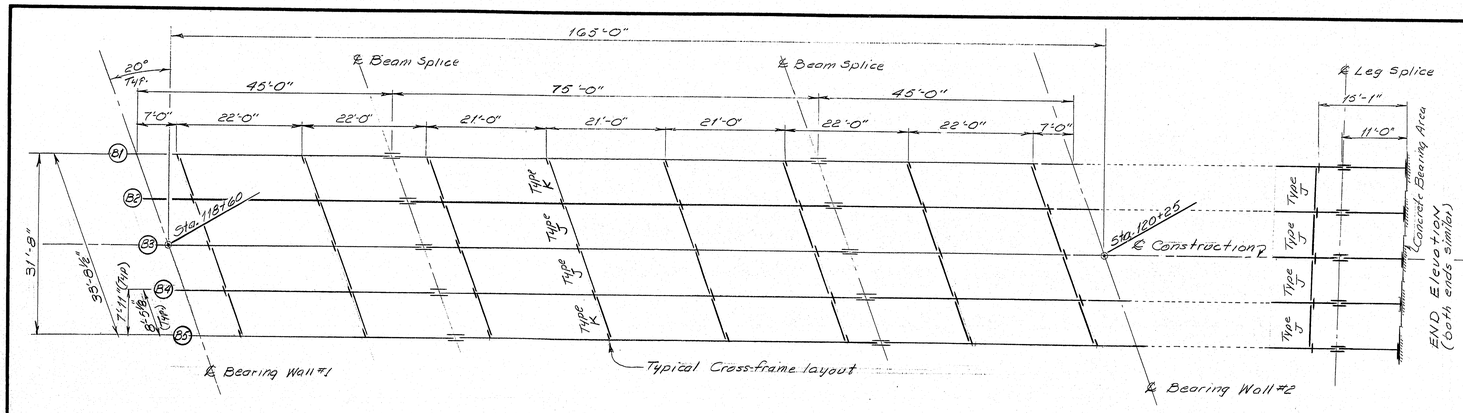
108-261

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION 20

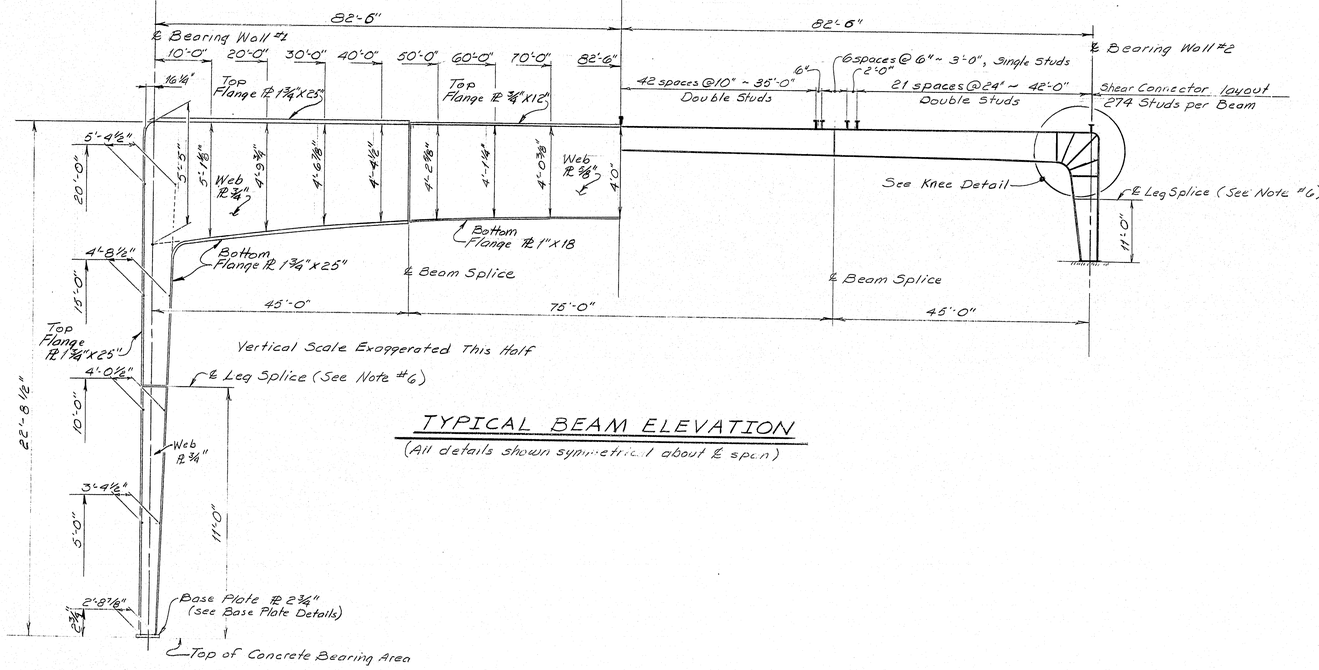
THE FORKS BRIDGE
OVER
THE KENNEBEC RIVER
IN THE PLANTATIONS OF
THE FORKS - WEST FORKS
SOMERSET COUNTY

Footings

SHEET OF AUGUSTA, MAINE



FRAMING PLAN



TYPICAL BEAM ELEVATION

(All details shown symmetrical about ℄ span)

PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN - DETAILED	MES	5/87
	CHECKED	V.A.Wilson	11-87
	REVISIONS	MES	12-88
	FIELD CHANGES	MJB	

Scale - 3/32"/ft - 3/8"

BRUNING 44-132-40710-1

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-033-2(13)	21	48

STRUCTURAL STEEL NOTES

1. ~ Camber ordinates, as shown, are computed to compensate for all dead load deflections and for the curvature of the finished grade profile.

2. ~ Transverse butt-weld splices will not 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 less than three feet from transverse butt-welds in the web plates and transverse web or flange butt-welds shall not be located within three feet of other transverse welds (e.g. connection plate to web weld) on either flange or web. Transverse butt-weld splices will not be allowed in areas of stress reversal.

3. ~ Sections of flange plate and web plate between transverse shop splices and between a shop splice and a field splice shall be not less than 20 feet in length unless otherwise shown on the plans.

4. ~ Cross-frame connection plates shall be either plumb or normal to the top flange.

5. ~ Shear connector studs shall be 6" long.

~~6. ~ The butt ends of flanges and web plates at the leg splice shall be milled to be in full contact bearing.~~

7. ~ MATERIALS: All Structural Steel, ASTM A588 (Except As Noted)
High Strength Bolts, ASTM A325, Type 3

8. ~ BASIC DESIGN STRESSES:
ASTM A588, F_y = 50,000 psi.
ASTM A325, F_v = 25,000 psi.

9. ~ Shear Connectors: 274 per beam x 5 beams = 1,370 ea..

10. ~ The structural steel legs of the rigid frame which are entirely encased in concrete shall be painted with two coats of shop paint, the first coat orange and the second coat maroon. The painting shall be done in accordance with the Standard Specifications including any field touch up that may be required. Payment for this shall be considered incidental to Item 509.70 Structural Steel, Fabricated and Delivered.

11.) ~ Prior to fabrication of the structural steel, and as soon as is possible, the Contractor shall submit to the Engineer one (1) 24" x 24" and one (1) 2" x 2" steel plate cut from a 5/8" plate which is to be incorporated into the structure for use by the Department in the instrumentation of the bridge.

⚠ 6.) ~ The butt ends of flanges and web plates at the leg splices shall be saw-cut and/or ground-to-bear to achieve 90 percent of full contact bearing.

108-262

Addendum No. 2

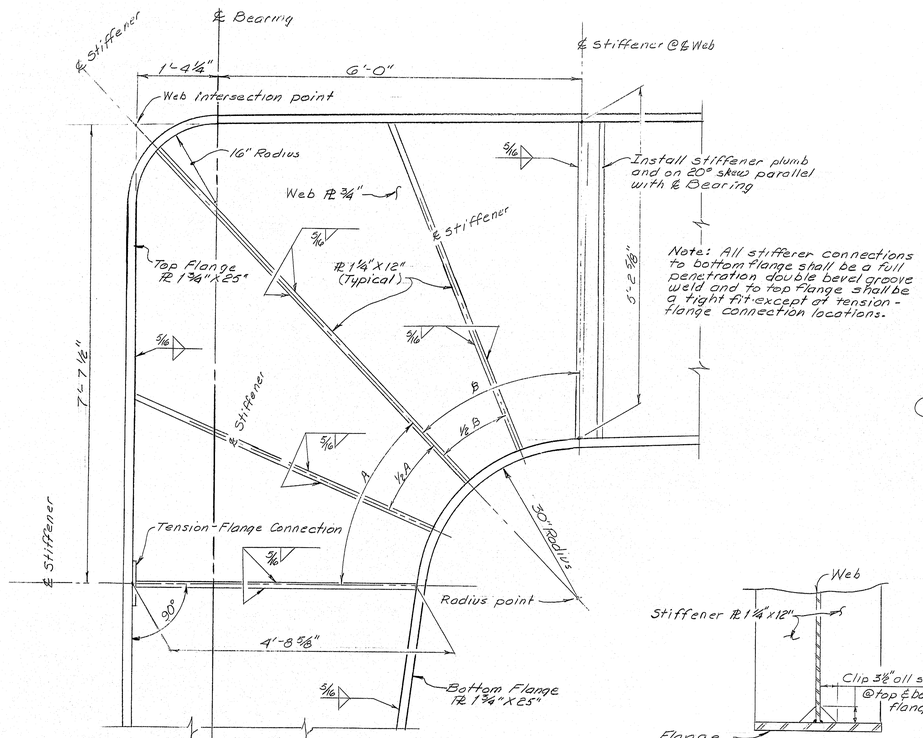
⚠ Revision dated 12-23-88

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION 21

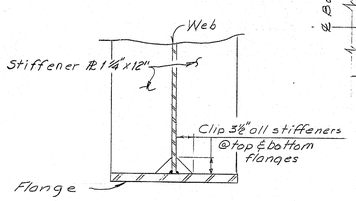
THE FORKS BRIDGE
OVER
THE KENNEBEC RIVER
IN THE PLANTATIONS OF
THE FORKS - WEST FORKS
SOMERSET COUNTY
STRUCTURAL STEEL

SHEET OF AUGUSTA, MAINE

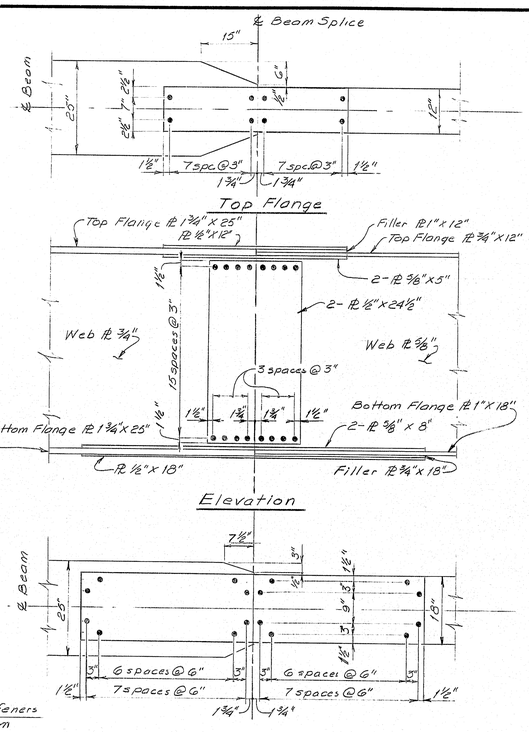
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	BR-0333(2(a))	22	48



KNEE DETAIL

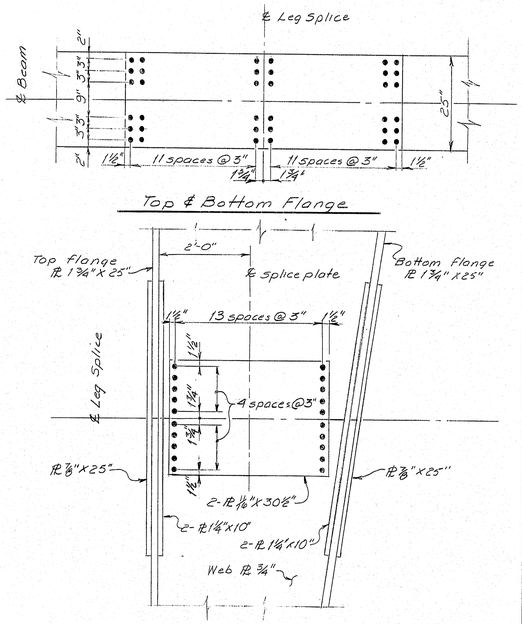


Stiffener Detail

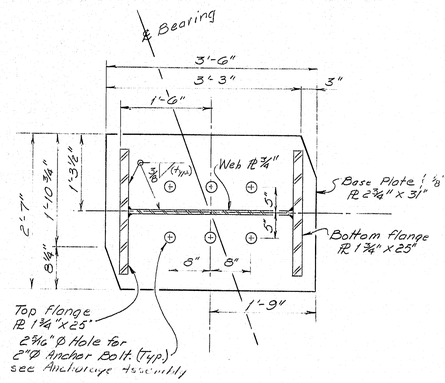


Bottom Flange

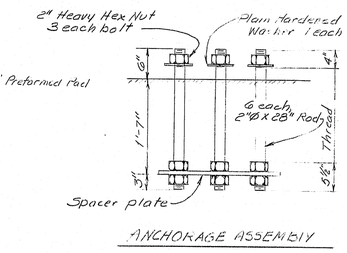
BEAM SPLICE DETAILS



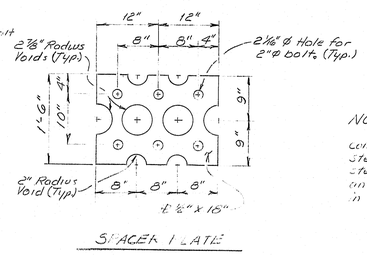
LEG SPLICE DETAILS



BASE PLATE DETAIL



ANCHORAGE ASSEMBLY



SPACER PLATE

NOTE - The anchor bolts, nuts & washers shall conform to the specifications of ASTM A572 Steel. The spacer plates may be ASTM A36 steel at the Contractor's option. The entire anchorage assembly shall be hot-dipped galvanized in accordance with ASTM A763 and A153.

PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN DETAILED	MEB	2/80
	CHECKED	MJB	11/82
	REVISIONS		
	FIELD CHANGES		

BRUNING 44-132 45710-1

108-263

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION 22

THE FORKS BRIDGE
OVER
THE KENNEBEC RIVER
IN THE PLANTATIONS OF
THE FORKS - WEST FORKS
SOMERSET COUNTY
STRUCTURAL STEEL DETAILS

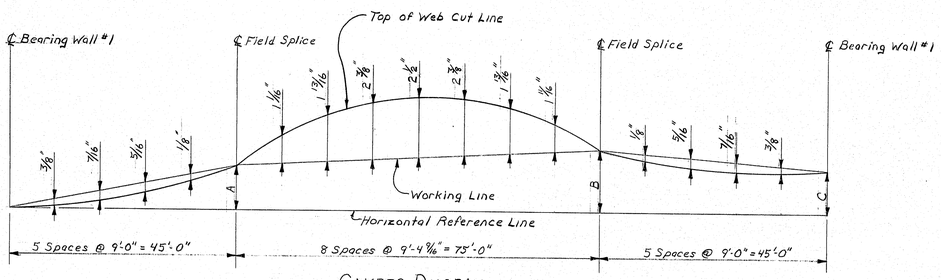
SHEET OF AUGUSTA, MAINE

F.H.W.A. REQ. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-033-2(8)	23	48

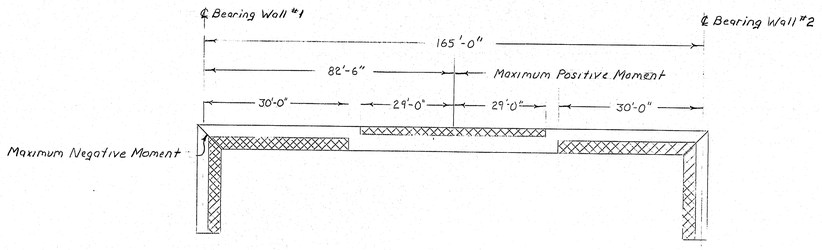
Beam No.	℄ Brg. Wall #1	Distance (Feet) from ℄ Wall #1 toward ℄ Wall #2															℄ Brg. Wall #2
		10'	20'	30'	40'	50'	60'	70'	80'	90'	100'	110'	120'	130'	140'	150'	160'	
1	587.22	587.32	587.44	587.58	587.71	587.84	587.95	588.03	588.09	588.12	588.12	588.09	588.04	587.98	587.92	587.86	587.82	587.81
2	587.41	587.51	587.63	587.76	587.90	588.02	588.13	588.21	588.26	588.29	588.29	588.26	588.21	588.15	588.08	588.02	587.97	587.96
3	587.61	587.70	587.82	587.95	588.08	588.20	588.31	588.38	588.44	588.46	588.46	588.43	588.38	588.31	588.24	588.18	588.13	588.12
4	587.80	587.89	588.01	588.14	588.27	588.38	588.48	588.56	588.61	588.63	588.63	588.59	588.54	588.47	588.40	588.33	588.28	588.27
5	587.99	588.08	588.20	588.32	588.45	588.56	588.66	588.74	588.78	588.80	588.79	588.76	588.70	588.63	588.56	588.49	588.44	588.42

BOTTOM OF SLAB ELEVATIONS

Note: For dimensions A, B, & C see dimension table

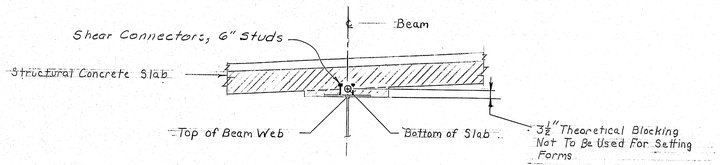


CAMBER DIAGRAM



BEAM STRESS DIAGRAM

Notes: Cross hatched areas are always in compression.
Other areas are in tension or have stress reversal.



BLOCKING DETAIL

Beam	A	B	C
1	7 1/8"	10 3/8"	7 1/16"
2	7"	10"	6 7/8"
3	6 7/8"	9 11/16"	6 5/8"
4	6 3/4"	9 3/8"	5 11/16"
5	6 5/8"	9"	5 3/8"

DIMENSION TABLE

Deflections	℄ Brgs. Wall #1	Distance Along Span (Symmetrical About 82.5') 11'	22'	33'	44'	55'	66'	77'
Steel Dead Load	0	0.0031	0.0104	0.0206	0.0321	0.0441	0.0538	0.0592
Fluid Dead Load	0	0.0091	0.0335	0.0687	0.1107	0.1557	0.1933	0.2146
Super Imp. Dead Load	0	0.0048	0.0175	0.0359	0.0557	0.0748	0.0896	0.0977
Total Camber	0	0.0169	0.0613	0.1247	0.1985	0.2745	0.3367	0.3716
Total Blocking	0	0.0134	0.0510	0.1043	0.1665	0.2304	0.2829	0.3129

Note: All Values In Feet

PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN - DETAILED	MEB	10/82
	CHECKED	WHP	11-82
	REVISIONS	MEB	
	FIELD CHANGES		

BRUNING 44-132 45710.1

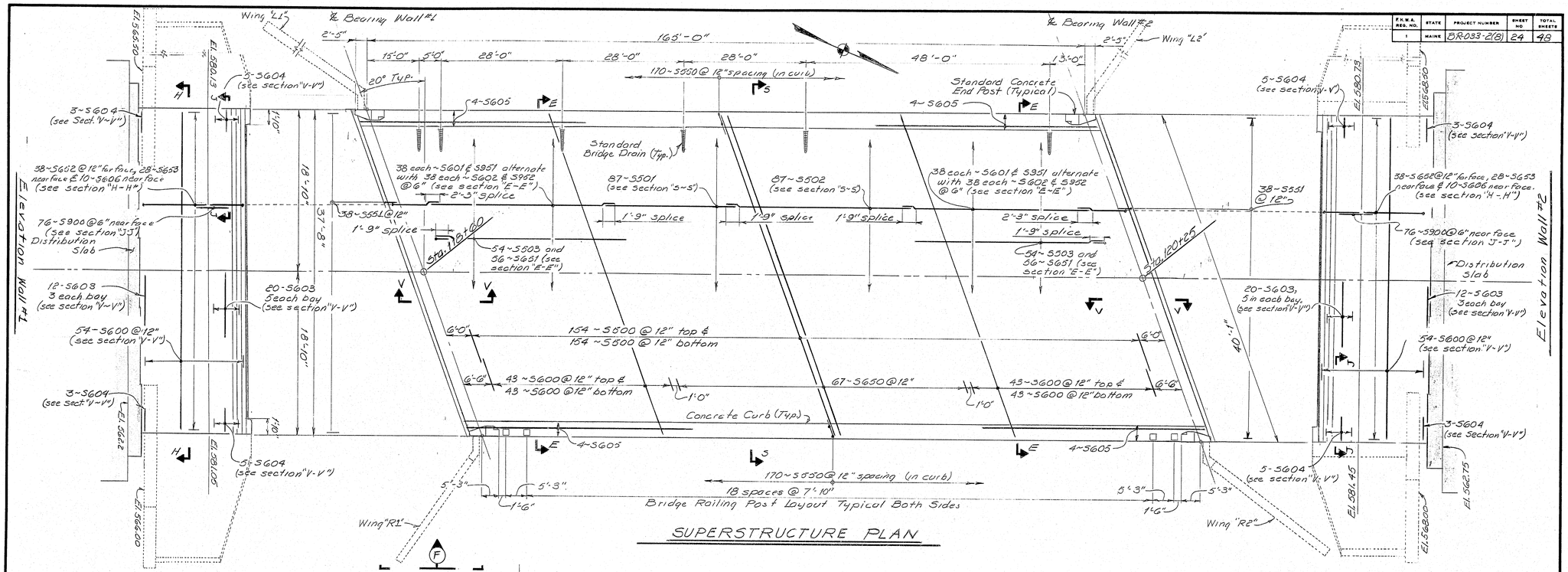
108-264

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION 23

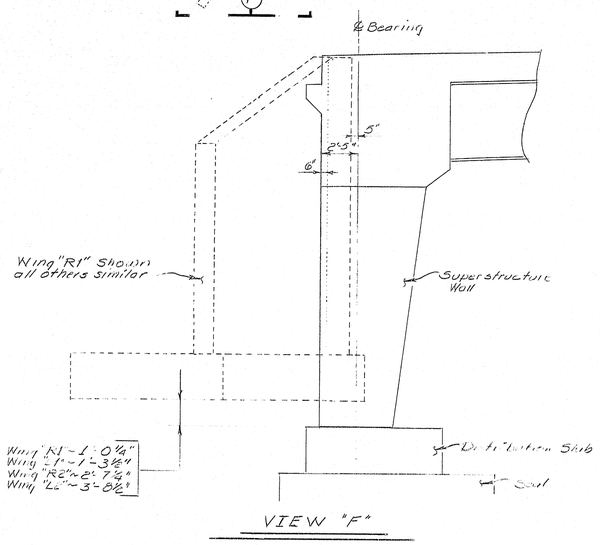
THE FORKS BRIDGE
OVER
THE KENNEBEC RIVER
IN THE PLANTATIONS OF
THE FORKS - WEST FORKS
SOMERSET COUNTY
BLOCKING & CAMBER

SHEET OF AUGUSTA, MAINE

F.H.W.A. REQ. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR033-2(8)	24	48



SUPERSTRUCTURE PLAN



VIEW "F"

SUPERSTRUCTURE NOTES

1. – Form a 1" V-groove on the fascia at the horizontal joint between the curb 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.
4. – The superstructure slab concrete shall be placed continuously and shall be kept plastic until the entire span has been placed.
5. – Protective coating for concrete surfaces shall be applied to the following areas:
   - all exposed surfaces of the concrete curb
   - Fascia down to the drip notch
   - All exposed surfaces of concrete end posts
6. – Place 3-4" diameter drains in each wall at 20 feet maximum spacing. The exact location to be determined by the Engineer in the field.
7. – The drip notch under the curb shall extend down the walls to the wall drip notch. See section "V-V".
8. – Silica Fume shall be added to the curb & end post concrete as specified under Section 502 of the Standard Specifications.

PROJECT DESIGN ENGINEER	BY	DATE
PLANS — DESIGN - DETAILED	MEB	7/87
CHECKED	MLR	11/87
REVISIONS		
FIELD CHANGES		

BRIDGE 44-132-4571(1)

108-265

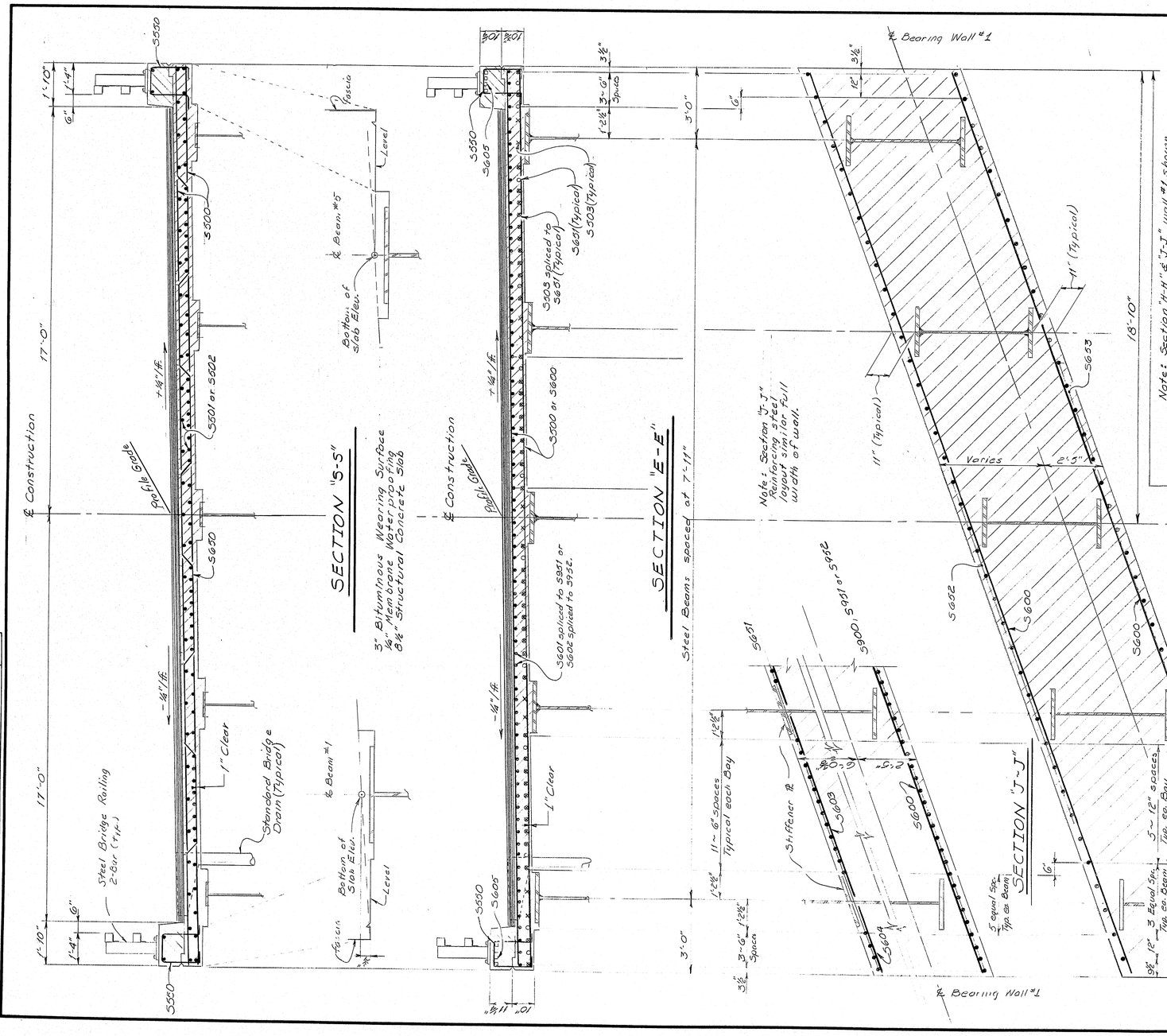
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION 24

THE FORKS BRIDGE
OVER
THE KENNEBEC RIVER
IN THE PLANTATIONS OF
THE FORKS - WEST FORKS
SOMERSET COUNTY

SUPERSTRUCTURE

SHEET OF AUGUSTA, MAINE

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR033-2(18)	25	98



SLAB OVERHANG & CURB DETAILS

PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN - DETAILED	MES	7/87
	CHECKED	MLB	11-88
	REVISIONS		
	FIELD CHANGES		

BRUNING 44-132-45710-1

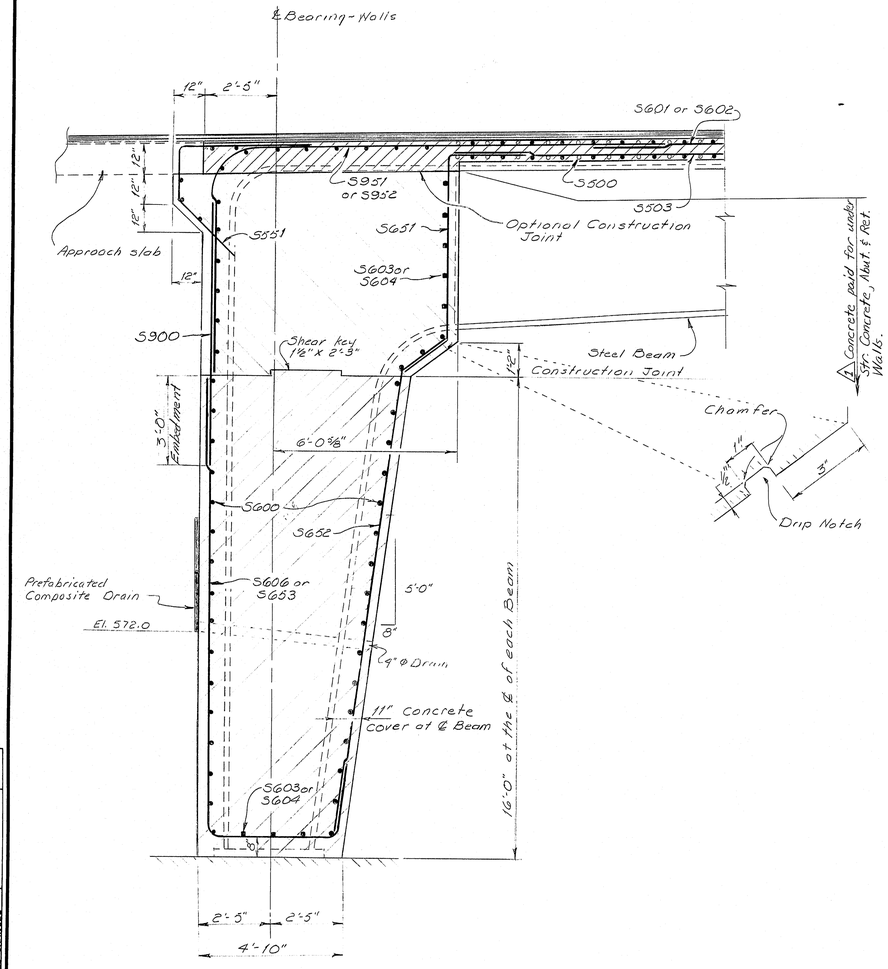
108-266

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION 25

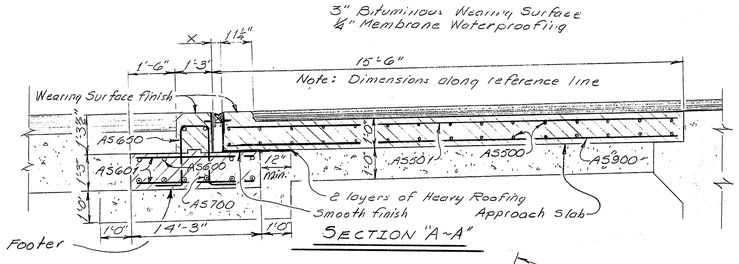
THE FORKS BRIDGE
OVER
THE KENNEBEC RIVER
IN THE PLANTATIONS OF
THE FORKS - WEST FORKS
SOMERSET COUNTY
SUPERSTRUCTURE SECTIONS

SHEET OF AUGUSTA, MAINE

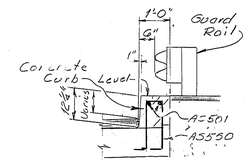
F.H.W.A. REQ. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BRO33-2(8)	26	48



SECTION "V-V"
(Parallel to ℄ Construction)

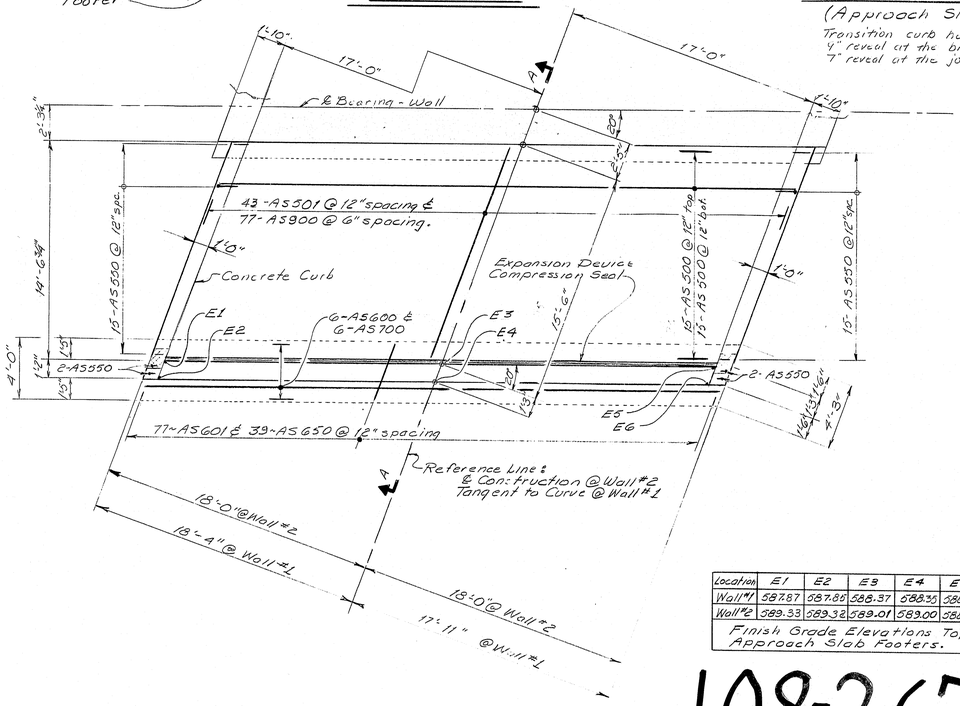


SECTION "A-A"



TYPICAL CURB SECTION
(Approach Slab)

Transition curb height from 4" reveal at the bridge to 7" reveal at the joint armor.



Location	E1	E2	E3	E4	E5	E6
Wall #1	587.87	587.85	588.37	588.35	588.86	588.84
Wall #2	589.33	589.32	589.01	589.00	588.68	588.68
Finish Grade Elevations Top of Approach Slab Footers.						

APPROACH SLAB & FOOTER DETAILS

NOTES:

1. ~ Payment for the Approach Slabs & Footings will be made under Item 502.310 Structural Concrete Approach Slab.
2. ~ Protective Coating for Concrete Surfaces shall be applied to all exposed surfaces of the concrete curb and approach slab fascia.
3. ~ Silica Fume shall not be added to the [illegible] concrete.

108-267

Addendum No. 2

Revision dated 12-23-88

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION 26

THE FORKS BRIDGE
OVER
THE KENNEBEC RIVER
IN THE PLANTATION OF
THE FORKS - WEST FORKS
SOMERSET COUNTY

Wall Section & Approach Slabs

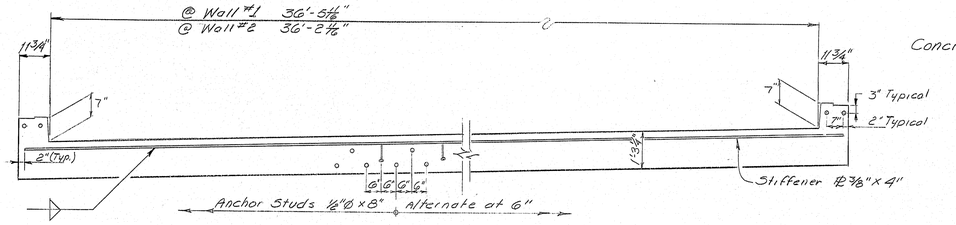
SHEET OF AUGUSTA, MAINE

PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN - DETAILED	MEB	7-87
	CHECKED	MJB	11-87
	REVISIONS	MJB	12-88
	FIELD CHANGES		

BRUNING 44-132-45710-1

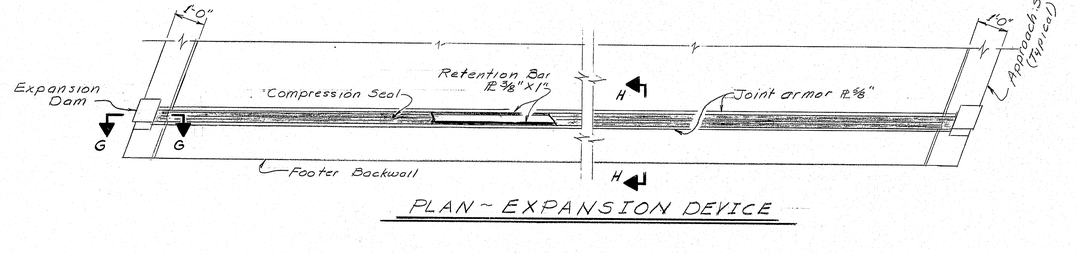
Scale 3/16"

F.H.W.A. REQ. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	BR-033-2(8)	27	48

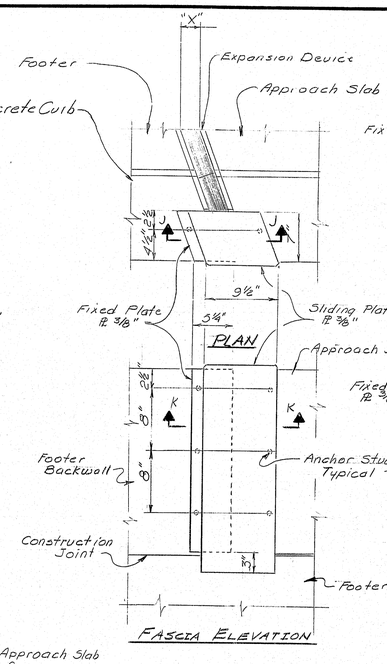


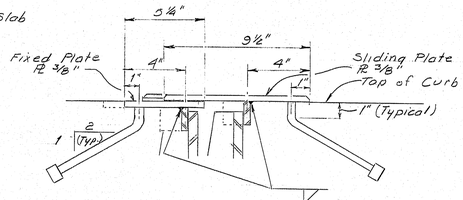
NOTE: Armor both sides of seal similar.

ELEVATION - JOINT ARMOR

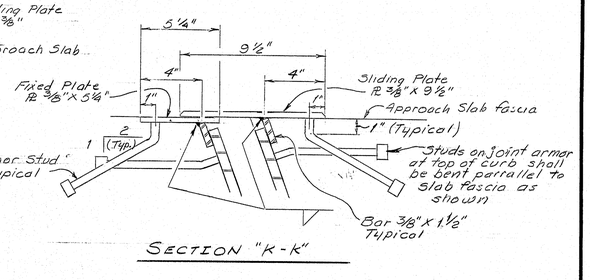


PLAN - EXPANSION DEVICE

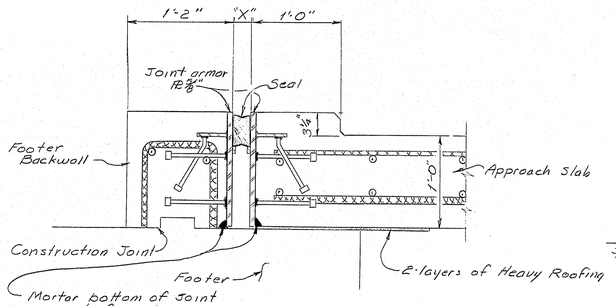




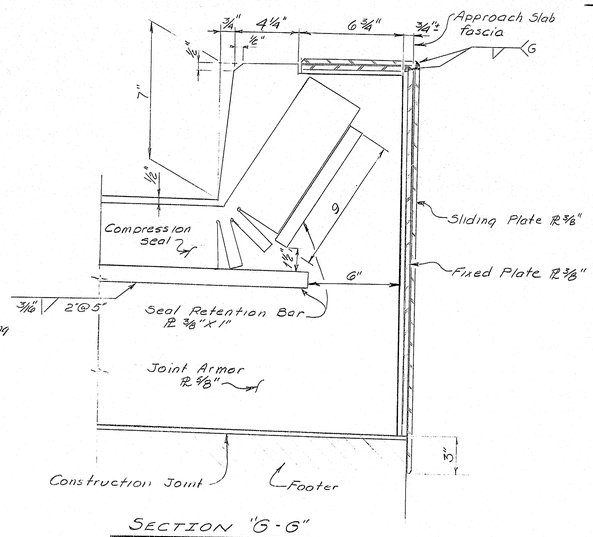
SECTION "J-J"



SECTION "K-K"



SECTION "H-H"

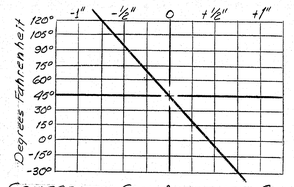


SECTION "G-G"

EXPANSION DAM - DETAILS

NOTES:

1. ~ Welding of anchor studs to reinforcing steel will be allowed to hold the unit in place as approved by the Engineer.
2. ~ The shop drawings shall show the setting for dimension "X" @ 95° Fahrenheit, determined as follows: (Nominal uncompressed seal width x 0.85) - ¾".
3. ~ The seals to be furnished shall have a minimum Movement Rating of 1½".
4. ~ The seal shall be approved by the Engineer prior to fabrication of the joint armor.
5. ~ The Compression Seal Adjustment Chart shows the adjustment necessary to adjust the joint opening shown on the shop detail drawings for temperatures other than 95°F. Adjustment is to be measured parallel to the centerline construction.
6. ~ Cut the compression seal as shown in section "G-G" as per the manufacturers recommendations.
7. ~ Structural steel for the joint armor and expansion dam shall be ASTM A36, and shall be hot dip galvanized after fabrication.



COMPRESSION SEAL ADJUSTMENT CHART

108-268

PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN - DETAILED	M.E.B.	1-Aug
	CHECKED	M.L.B.	11-82
	REVISIONS		
	FIELD CHANGES		

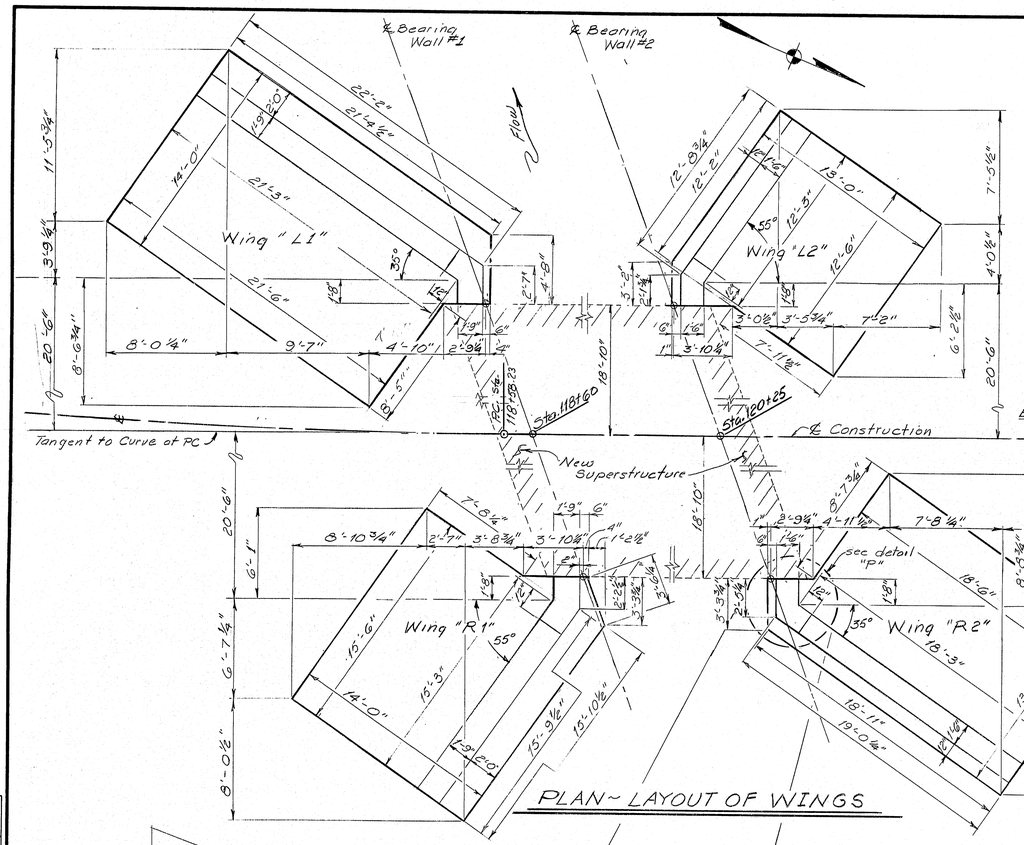
BRIMING 44 132 45710-1

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION 27

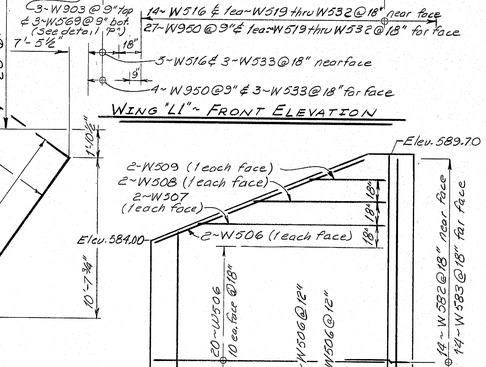
THE FORKS BRIDGE
OVER
THE KENNEBEC RIVER
IN THE PLANTATIONS OF
THE FORKS - WEST FORKS
SOMERSET COUNTY
Expansion Device

SHEET OF AUGUSTA, MAINE

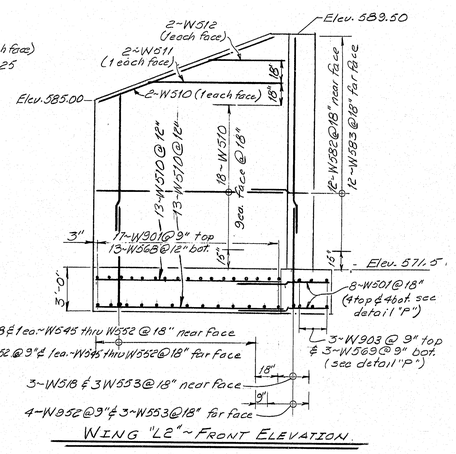
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR 083-2(18)	28	48



PLAN ~ LAYOUT OF WINGS

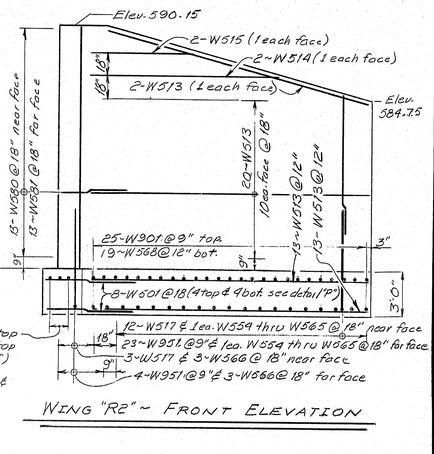


WING "L1" ~ FRONT ELEVATION

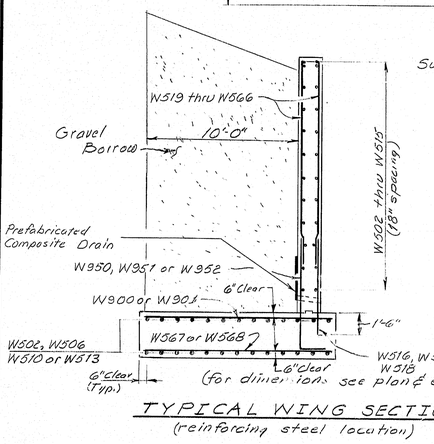


WING "L2" ~ FRONT ELEVATION

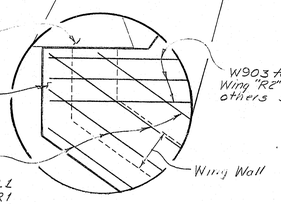
WING "R1" ~ FRONT ELEVATION



WING "R2" ~ FRONT ELEVATION



TYPICAL WING SECTION
(reinforcing steel location)



DETAIL "P"
(footing reinforcing)

WING NOTES

1. ~ Reinforcing steel shall have 2 inches cover unless otherwise indicated.
2. ~ Break bond at the joint between the wing and the superstructure by a method approved by the Engineer.
3. ~ Install standard Concrete Joint Cover to the back side of the joints between the wing walls and the superstructure. Do not recess.
4. ~ All reinforcing steel splices shall be a minimum of 1'-9" unless otherwise indicated.

108-269

PROJECT DESIGN ENGINEER	BY	DATE
PLANS — DESIGN - DETAILED	MES	9/87
CHECKED	MJB	11-87
REVISIONS		
FIELD CHANGES		

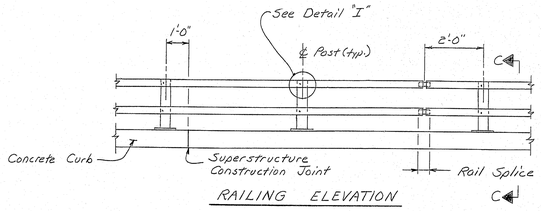
BRUNING 44-132-45710-1

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION 28

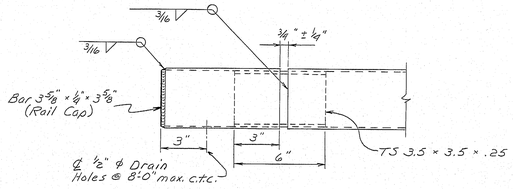
THE FORKS BRIDGE
OVER
THE KENNEBEC RIVER
IN THE PLANTATIONS OF
THE FORKS - WEST FORKS
SOMERSET COUNTY
WINGS

SHEET OF AUGUSTA, MAINE

3"=1'



RAILING ELEVATION



RAIL SPLICE DETAIL

F.H.W.A. REQ. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	BR-033-2(8)	29	48

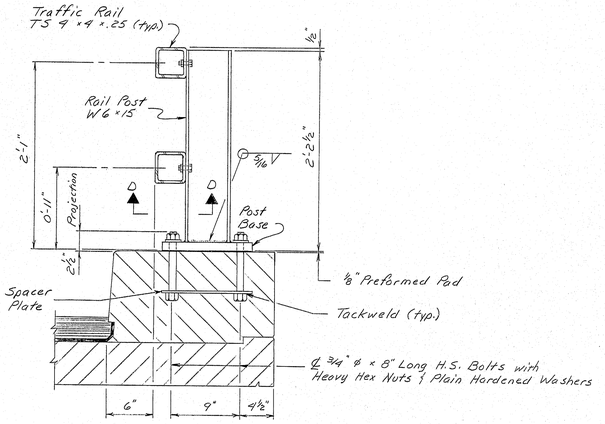
1) Fabrication shall conform to the applicable provisions of Section 509 - Structural Steel of the Standard Specifications, Highways and Bridges, Revision of January 1984.

2) All exposed cut or sheared edges shall be rounded and free of burrs. All exposed welds shall be ground smooth.

3) Lengths of rail shall be attached to a minimum of four rail posts, wherever possible, and in any case never less than two. Rail posts are to be set normal to grade.

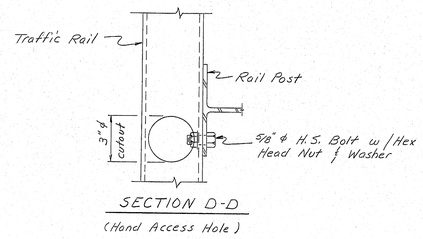
4) The materials for the Steel Bridge Railing shall be hot-dipped galvanized in accordance with Special Provision Section 507 and shall conform to the following requirements:

Bolts, Nuts & Washers — ASTM A325 Type 1 ____ Fv = 25,000 psi
Spacer Plates ____ ASTM A36 ____ Fy = 36,000 psi
All Other ____ ASTM A572 — Fy = 50,000 psi

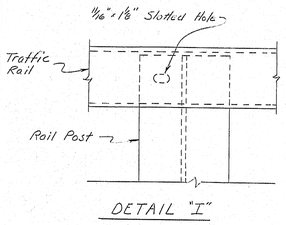


SECTION C-C

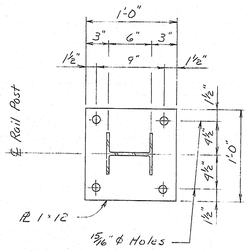
1/2"=1'



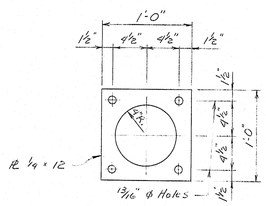
SECTION D-D
(Hand Access Hole)



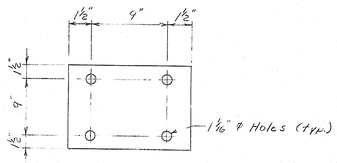
DETAIL "I"



POST BASE



SPACER PLATE



PREFORMED PAD

PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN - DETAILED	NJS	SRL 8-88
	CHECKED		
	REVISIONS		
	FIELD CHANGES		

BRUNING 44-132-45710-1

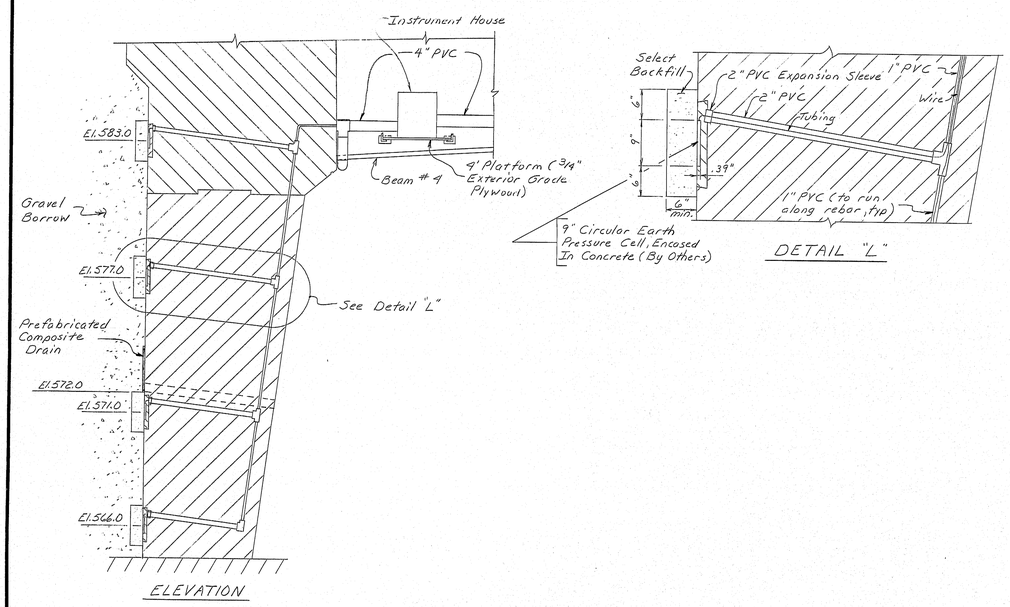
108-270

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION 29

THE FORKS BRIDGE
OVER
THE KENNEBEC RIVER
IN THE PLANTATIONS OF
THE FORKS - WEST FORKS
SOMERSET COUNTY
STEEL BRIDGE RAILING

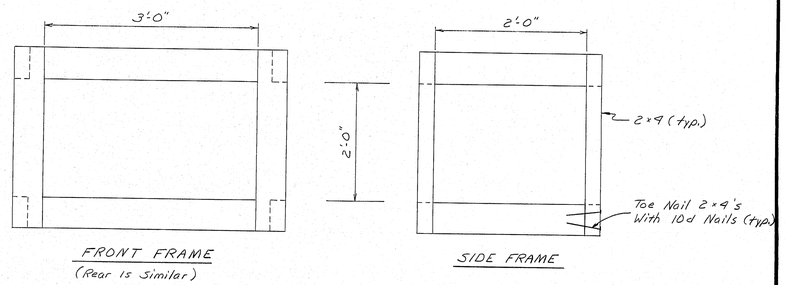
SHEET OF AUGUSTA, MAINE

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-033-2(3)	30	48



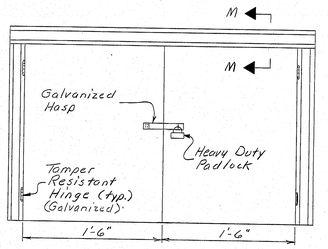
ELEVATION

DETAIL "L"

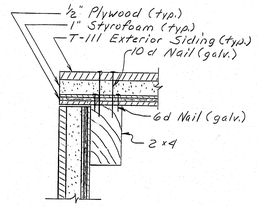


FRONT FRAME
(Rear is Similar)

SIDE FRAME

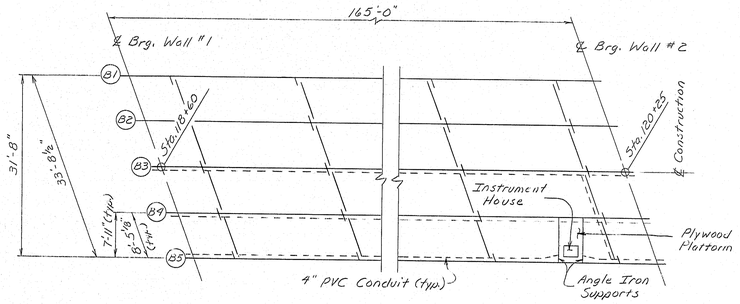


FRONT EXTERIOR

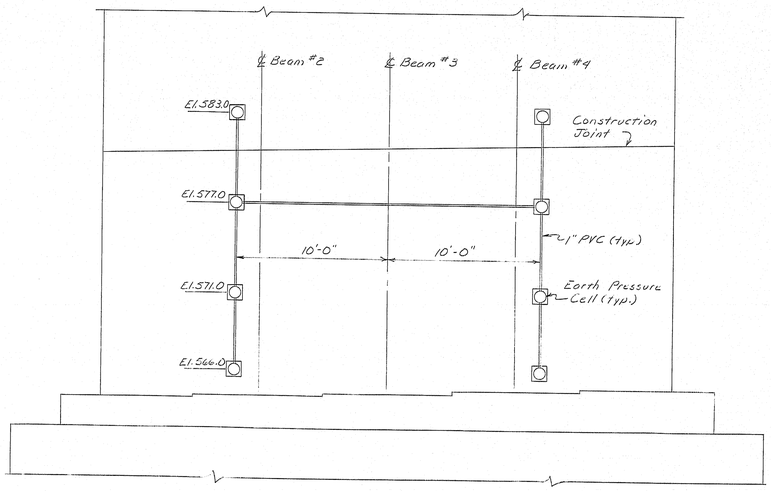


SECTION M-M

1) Attach ½" Interior Plywood to 2×9 with 6d Galv. nails.
2) Fasten 1" Styrofoam to ½" Interior Plywood with staples or an approved contact cement.
3) Nail T-111 Exterior Siding to 2×9 with 10d Galv. nails.



FRAMING PLAN



WALL NO. 1 ELEVATION VIEW
(Wall No. 2 Similar)

108-271

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION 30

THE FORKS BRIDGE
OVER
THE KENNEBEC RIVER
IN THE PLANTATIONS OF
THE FORKS - WEST FORKS
SOMERSET COUNTY
INSTRUMENT HOUSE & DETAILS

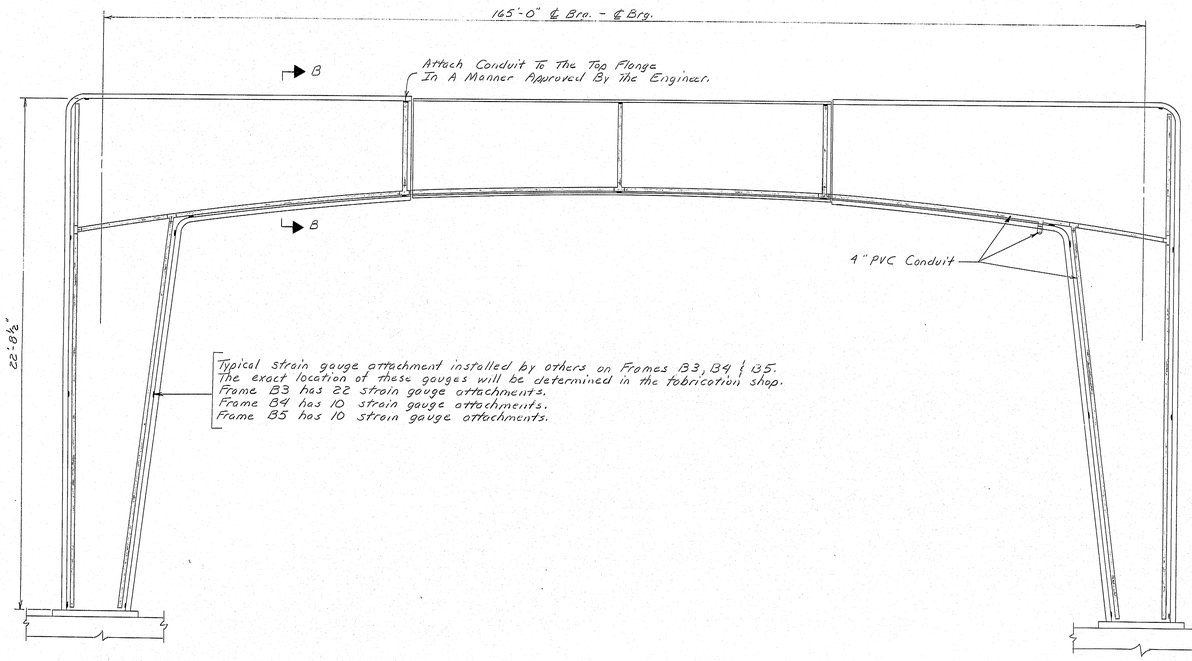
SHEET OF AUGUSTA, MAINE

PROJECT DESIGN ENGINEER	BY	DATE
DESIGN - DETAILED	NJA	3-82
CHECKED		6-83
PLANS REVISIONS		
FIELD CHANGES		

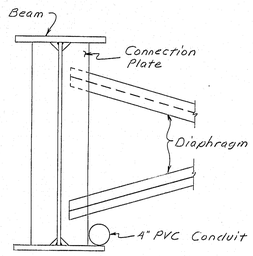
3/32" = 1'

BRUNING 44-132 45710-1

F.H.W.A. REQ. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-033-2(8)	31	48



Note: The Contractor shall attach the 4" PVC Conduit to the flanges every 10 feet in a manner approved by the Engineer.



SECTION B-B

INSTRUMENTATION NOTES

1.) The instrument house shall be constructed of structural grade pressure-treated wood, with an internal 2"×4" frame and ½ inch plywood interior, a 1 inch styrofoam insulation barrier and an exterior siding of T-111. All exterior joints and seams shall be caulked or sealed to resist moisture penetration.

2.) All conduits shall be Schedule 40 PVC meeting the requirements specified in Subsection 715.03 of the Standard Specifications and shall be approved for the intended use by the National Electrical Code and labeled with the Underwriters Laboratories listing.

3.) The select backfill around each earth pressure cell shall meet the requirements of Subsection 703.05 except that 100 % by weight shall pass the ¾ inch sieve. Payment for this backfill shall be made under Item 203.26, Gravel Borrow.

PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN - DETAILED	MLA	10-88
	CHECKED	SRL	
	REVISIONS		
	FIELD CHANGES		

3/4"=1'

BRUNING 44-132-45710-1

108-272

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION 31

THE FORKS BRIDGE
OVER
THE KENNEBEC RIVER
IN THE PLANTATIONS OF
THE FORKS - WEST FORKS
SOMERSET COUNTY
INSTRUMENT HOUSE & DETAILS

SHEET OF AUGUSTA, MAINE

REINFORCING STEEL SCHEDULE

STRAIGHT BARS

MARK	NO.	LENGTH	LOCATION
Superstructure Footing			
D600	172	9'-5"	Distribution Slab
D601	40	42'-9"	" "
Superstructure			
S500	308	39'-8"	Transverse
S501	87	30'-0"	Longitudinal
S502	87	42'-0"	Longitudinal
S503	108	44'-0"	Longitudinal
S600	280	39'-8"	Transverse
S601	76	42'-6"	Longitudinal
S602	76	39'-2"	Longitudinal
S603	64	8'-0"	Between Beams
S604	32	2'-9"	Outside Beams
S605	16	51'-9"	Curb
S606	20	15'-0"	Wall Vertical
S900	152	8'-9"	Wall Vertical
Approach Slab			
AS500	60	38'-0"	Slab
AS501	86	14'-10"	Slab
AS600	12	38'-0"	Footer
AS601	154	3'-11"	Footer
AS700	12	38'-0"	Footer
AS900	154	14'-10"	Slab
End Post			
EP900	24	2'-0"	End Post
EP905	24	1'-10"	" "

MARK	NO.	LENGTH	LOCATION
WINGS			
W501	32	6'-0"	all wing footings
W502	50	21'-0"	Wing "L1" Horz.
W503	2	17'-6"	" " "
W504	2	12'-0"	" " "
W505	2	6'-6"	" " "
W506	50	15'-2"	Wing "R1" Horz.
W507	2	12'-0"	" " "
W508	2	8'-3"	" " "
W509	2	4'-6"	" " "
W510	46	12'-2"	Wing "L2" Horz.
W511	2	8'-5"	" " "
W512	2	4'-8"	" " "
W513	48	18'-2"	Wing "R2" Horz.
W514	2	12'-3"	" " "
W515	2	7'-6"	" " "
W516	17	9'-6"	Wing "L1" Hg. Vert.
W517	28	9'-0"	"R1" & "R2" Hg. Vert.
W518	11	7'-6"	Wing "L2" Hg. Vert.
W519	2	8'-4"	Wing "L1" Vertical
W520	"	8'-8"	" " "
W521	"	9'-1"	" " "
W522	"	9'-5"	" " "
W523	"	9'-11"	" " "
W524	"	10'-4"	" " "
W525	"	10'-9"	" " "
W526	"	11'-2"	" " "
W527	"	11'-7"	" " "
W528	"	12'-0"	" " "
W529	"	12'-5"	" " "
W530	"	12'-10"	" " "
W531	"	13'-3"	" " "
W532	"	13'-8"	" " "
W533	6	14'-0"	" " "
W534	2	9'-4"	Wing "R1" Vertical
W535	"	9'-11"	" " "
W536	"	10'-6"	" " "
W537	"	11'-1"	" " "
W538	"	11'-8"	" " "
W539	"	12'-3"	" " "
W540	"	12'-10"	" " "
W541	"	13'-5"	" " "
W542	"	14'-0"	" " "
W543	"	14'-7"	" " "
W544	6	14'-11"	" " "

MARK	NO.	LENGTH	LOCATION
W545	2	9'-0"	Wing "L2" Vertical
W546	"	9'-7"	" " "
W547	"	10'-2"	" " "
W548	"	10'-9"	" " "
W549	"	11'-4"	" " "
W550	"	11'-11"	" " "
W551	"	12'-6"	" " "
W552	"	13'-1"	" " "
W553	6"	13'-6"	" " "
W554	2	8'-0"	Wing "R2" Vertical
W555	"	8'-5"	" " "
W556	"	8'-11"	" " "
W557	"	9'-4"	" " "
W558	"	9'-10"	" " "
W559	"	10'-3"	" " "
W560	"	10'-9"	" " "
W561	"	11'-2"	" " "
W562	"	11'-8"	" " "
W563	"	12'-1"	" " "
W564	"	12'-7"	" " "
W5645	"	13'-1"	" " "
W566	6	13'-4"	" " "
W567	38	13'-8"	"L1" & "R1" footing
W568	32	12'-8"	"L2" & "R2" footing
W569	12	8'-0"	all wing footings
W900	50	13'-8"	"L1" & "R1" footing
W901	42	12'-8"	"L2" & "R2" footing
W903	12	8'-0"	all wing footings

NOTE: All Reinforcing Steel Shall be Epoxy Coated.

BENT BARS

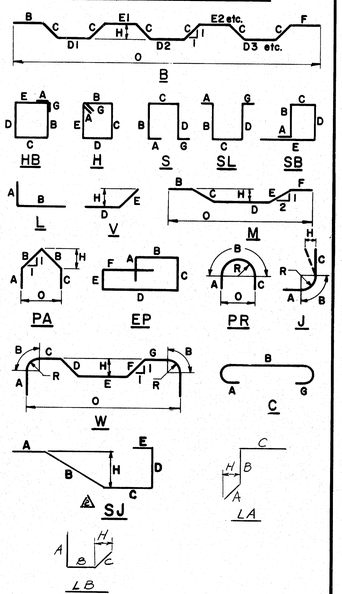
MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION
Superstructure Footing														
D850	172	6'-10"	L	1'-4"	5'-6"									Distribution Slab
Superstructure														
S550	340	5'-3"	S	6"	1'-5"	1'-5"	1'-5"			6"				Curb
S551	76	9'-6"	LB	5'-0"	1'-8"	2'-10"					2'-0"			End of Slab
S660	67	41'-2"	B		4'-9½"	7¾" x8	3'-11" x4	3'-7" x3	4'-9½"		5⅛"	39'-8"		Transverse
S651	112	10'-3"	LA	1'-9"	6'-0"	2'-6"					1'-6"			Wall
S652	76	17'-6"	V				15'-9"	1'-9"			1'-6"			Wall
S653	56	21'-9"	LB	15'-0"	4'-3"	2'-6"					4"			Wall
S951	76	18'-0"	J	6'-2"	2'-1"	9'-9"							16"	Top of Wall
S952	76	22'-6"	J	6'-2"	2'-1"	14'-3"							16"	Top of Wall
Approach Slab														
AS550	68	4'-10"	S	6"	1'-7"	8"	1'-7"			6"				Curb
AS650	78	6'-9"	SL	1'-0"	1'-11"	11"	1'-11"			1'-0"				Footer
End Post														
EP901	16	4'-11"	S	0	2'-0"	0'-11"	2'-0"			0				End Post
EP902	8	4'-6"	S	0	2'-0"	0'-6"	2'-0"			0				End Post
EP500	16	7'-10"	S	0	5'-6"	0'-7"	1'-9"			0				End Post
EP501	16	6'-8"	SJ	0	3'-1"	2'-7"	1'-0"			0	0'-8"			End Post
EP502	16	4'-7"	S	0	1'-10"	0'-11"	1'-10"			0				End Post
EP503	8	4'-2"	S	0	1'-10"	0'-6"	1'-10"			0				End Post
WINGS														
W580	27	4'-8"	V				2'-1"	2'-7"			2'-1⅛"			Wing "L1" & "R2"
W581	27	3'-7"	V				1'-7"	2'-0"			1'-7¾"			" " "
W582	26	4'-3"	V				1'-10"	2'-5"			1'-9¾"			Wing R1" & "L2"
W583	26	3'-7"	V				1'-7"	2'-0"			1'-1¾"			" " "
W950	31	12'-1"	L	1'-7"	10'-6"									Wing "L1" footing
W951	50	11'-7"	L	1'-7"	10'-0"									"R1" & "L2" footing
W956	19	10'-1"	L	1'-7"	8'-6"									Wing L2" footing

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION

108-273

FHWA REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-033-2(6)	32	48

TYPE-BENDING DIAGRAMS



All dimensions are out to out of reinf. bar.
Bending details and hooks shall conform to the recommendations of the current revision of ACI Standard 318. ⚠
Reinforcing Bar: ASTM A615 Grade 60

GENERAL NOTES

1. First digit(s) following the letter of the Mark indicates size of reinf. bar.
   Mark (A502) bar size - #5
   Mark (P1001) bar size - #10
   Mark (S603) bar size - #6
2. Each truss bar, Type B, may be replaced by two (2) straight bars (one top & one bottom) of the same bar size as the truss bar. Payment in either case shall be based on truss bars as scheduled on plans.

REVISIONS	DATE
⚠ New Bent Bar Type SJ	9-26-88
⚠ Revised ACI Standard	5-12-83

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION 32

THE FORKS BRIDGE
OVER
THE KENNEBEC RIVER
IN THE PLANTATIONS OF
THE FORKS - WEST FORKS
SOMERSET COUNTY

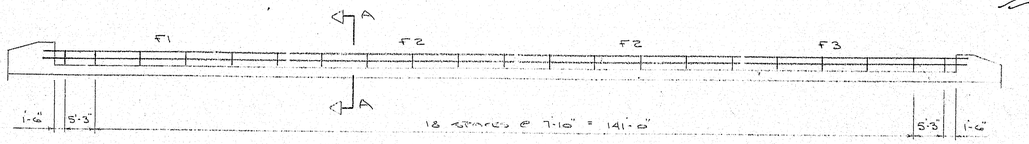
SHEET OF AUGUSTA, MAINE

PLANS — DETAIL / CHECKED / REVISIONS / FIELD CHANGES

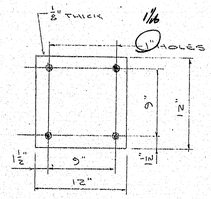
DATE	BY
10-87	LAD/VAT
11-87	MLG

45

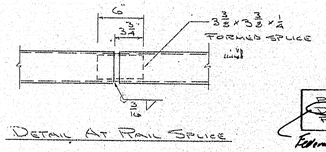
SHIP LOOSE	
168	3/4 x 8 GALV BOLT (A325 STL)
168	3/4-10 GALV HEAVY HEX NUT (A325 STL)
168	3/4" GALV WASHER (HARDENED STEEL)
42	ANCHOR PLATE
42	RAIL POST
84	5/8 x 1 1/2 GALV BOLT (A325 STL)
84	5/8-11 GALV HEX NUT (A 325 STL)
84	5/8" GALV. WASHER (HARDENED STEEL)
46	POST PAD



INBOARD ELEVATION
TYP. BOTH SIDES

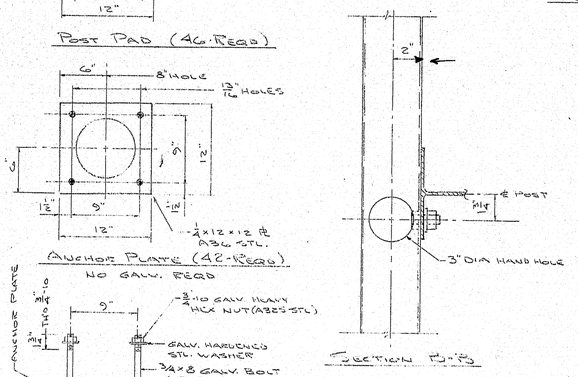


POST PAD (46 REQD)



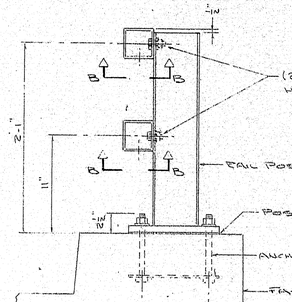
DETAIL AT RAIL SPLICE

Posts & Rails shall receive ~~Dark Bronze~~ "Color-Galv" finish per Job Specs.
Federal Specification No. ??



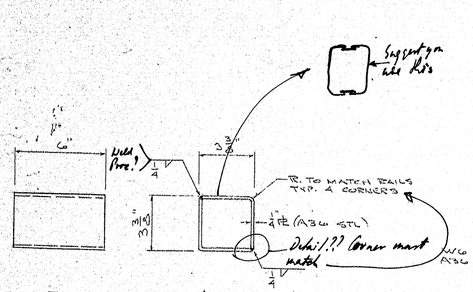
ANCHOR PLATE (42 REQD)
NO GALV. REQD

SECTION E-E

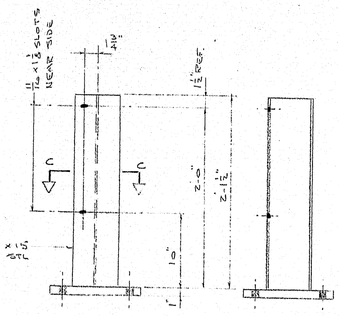


SECTION A-A

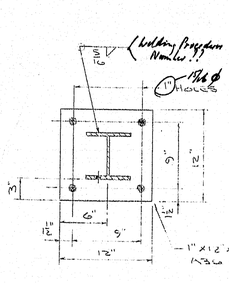
ANCHOR BOLT ASSY (42 REQD)



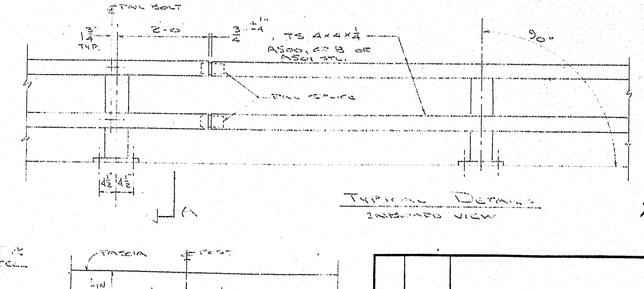
RAIL SPLICE (12 REQD)



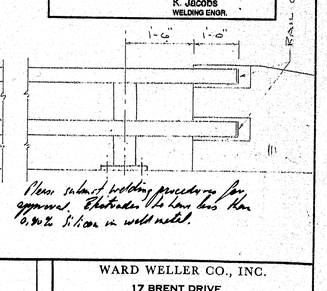
RAIL POST (42 REQD)



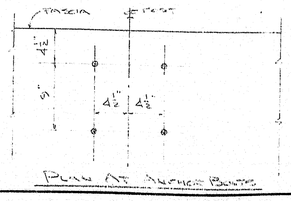
SECTION C-C



TYPICAL DETAILS
INBOARD VIEW



Have submit welding procedure for approval. Electrodes to have less than 0.40% Silicon in weld metal.



PLAN AT ANCHOR POINTS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
☐ Approved ☒ Returned for Corrections
MAR 2 0 1989
☐ Approved as noted ☐ Rejected
K. Jacobs
WELDING ENGR.

106-219

ISSUE	DATE	DESCRIPTION	BY
1	1-26-89	FOR APPROVAL	TE

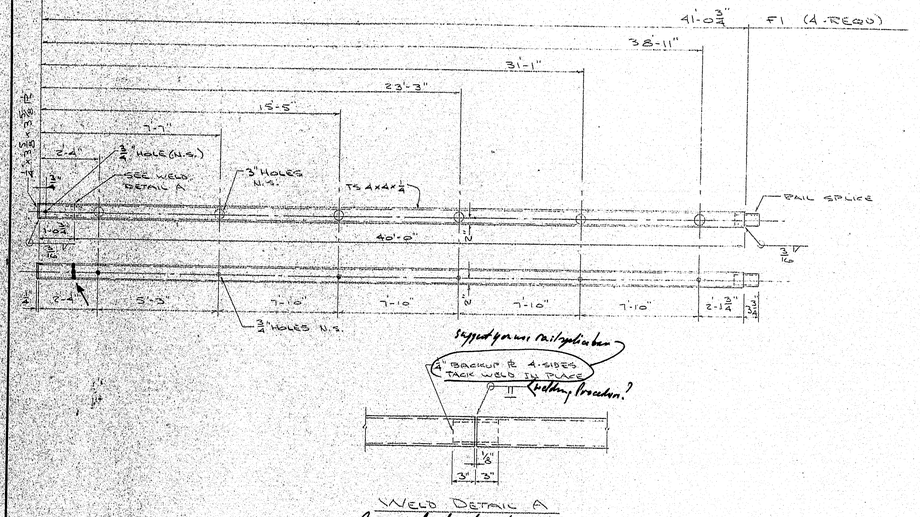
CH: TE DR: LH SCALE: WW"89107

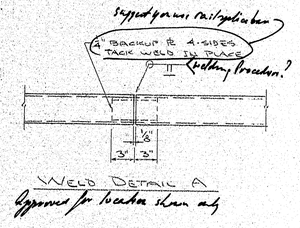
WARD WELLER CO., INC.
17 BRENT DRIVE
HUDSON, MASS.

MAINE DEPT. OF TRANSPORTATION
THE FORKS - WEST FORKS
FORKS Bridge
Project No. ??
TWO BAR STEEL RAILING
FOR: A & V CONST. CO.

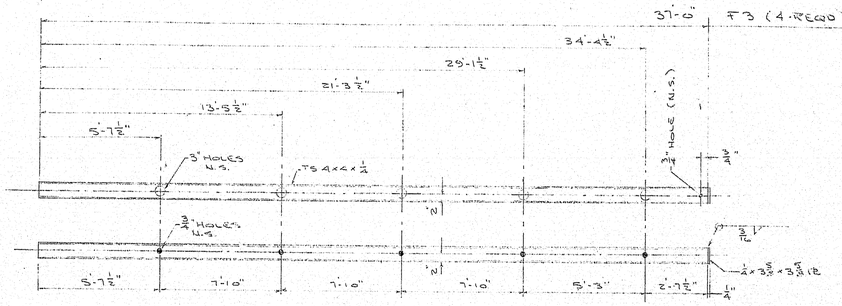
BR-2215

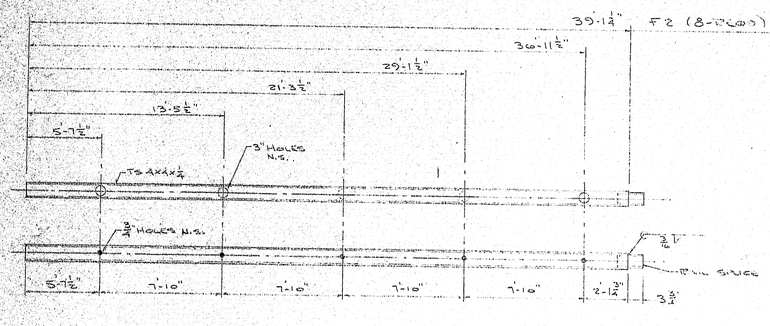
SHEET 1 OF 2





WELD DETAIL A
Approved for location shown only





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
☐ Approved ☒ Returned for Corrections
MAR 20 1989
☐ Approved as noted ☐ Rejected
K. Jacobs
WELDING ENGR.

106-220

ISSUE	DATE	DESCRIPTION	BY	DR: LH	SCALE:
1	1-26-89	Rail Attachment	D	CH:	WW 89107

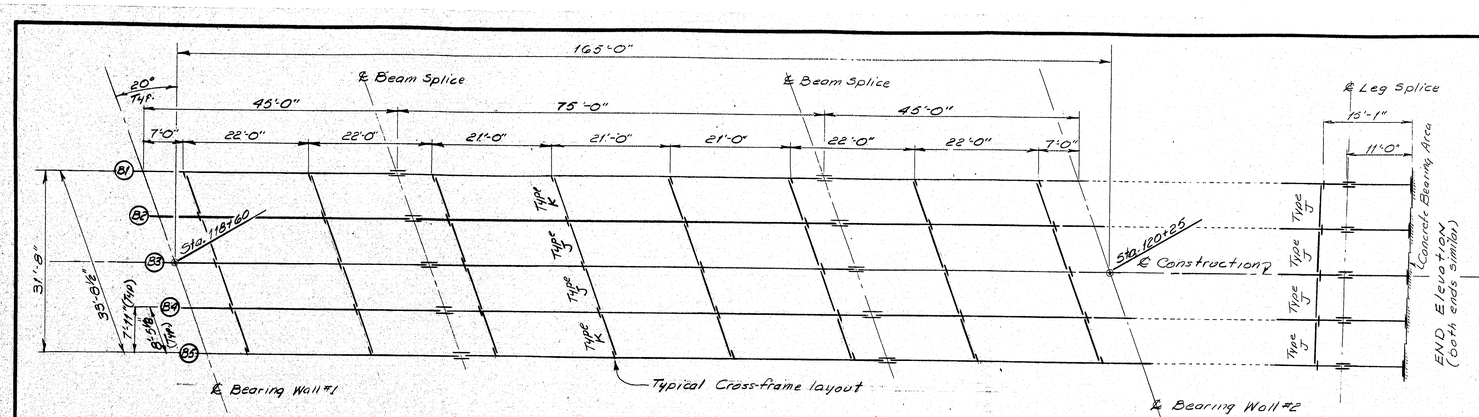
WARD WELLER CO., INC.
17 BRENT DRIVE
HUDSON, MASS.

MAINE DEPT OF TRANSPORTATION
THE FORKS - WEST FORKS
Legal No. 7575 BRIDGE
TWO BAR TUBULAR RAILING
FOR: A&V CONST. CO.

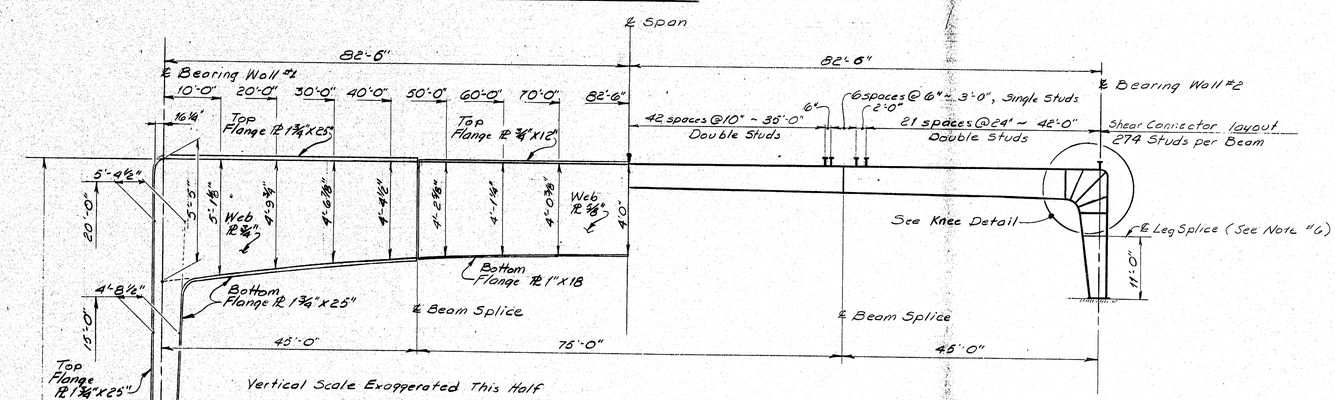
BR-2215

SHEET 2 OF 2

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-033-2(2)	21	48



FRAMING PLAN



TYPICAL BEAM ELEVATION

(All details shown symmetrical about ℄ span)

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

PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN - DETAILED	MEB, K.A.Wilson	5/87
	CHECKED	TLD	11-87
	REVISIONS	MLB	12-88
	FIELD CHANGES		

BRUNING 44-132-45710-1

STRUCTURAL STEEL NOTES

1.~ Camber ordinates, as shown, are computed to compensate for all dead load deflections and for the curvature of the finished grade profile.

2.~ Transverse butt-weld splices will not 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 less than three feet from transverse butt-welds in the web plates and transverse web or flange butt-welds shall not be located within three feet of other transverse welds (e.g. connection plate to web weld) on either flange or web. Transverse butt-weld splices will not be allowed in areas of stress reversal.

3.~ Sections of flange plate and web plate between transverse shop splices and between a shop splice and a field splice shall be not less than 20 feet in length unless otherwise shown on the plans.

4.~ Cross-frame connection plates shall be either plumb or normal to the top flange.

5.~ Shear connector studs shall be 6" long.

~~6.~ The butt ends of flanges and web plates at the leg splice shall be milled to be in full contact bearing.~~

7.~ MATERIALS: All Structural Steel ASTM A588 (Except As Noted)
High Strength Bolts ASTM A325, Type 3

8.~ BASIC DESIGN STRESSES:
ASTM A588, F_y = 50,000 psi.
ASTM A325, F_v = 25,000 psi.

9.~ Shear Connectors: 274 per beam x 5 beams = 1,370 ea..

10.~ The structural steel legs of the rigid frame which are entirely encased in concrete shall be painted with two coats of shop paint, the first coat orange and the second coat maroon. The painting shall be done in accordance with the Standard Specifications including any field touch up that may be required. Payment for this shall be considered incidental to Item 509.70 Structural Steel, Fabricated and Delivered.

11.)~ Prior to fabrication of the structural steel, and as soon as is possible, the Contractor shall submit to the Engineer one (1) 24" x 24" and one (1) 2" x 2" steel plate cut from a 5/8" plate which is to be incorporated into the structure for use by the Department in the instrumentation of the bridge.

6.)~ The butt ends of flanges and web plates at the leg splices shall be saw-cut and/or ground-to-bear to achieve 90 percent of full contact bearing.

Addendum No 2

Revision dated 12-23-88

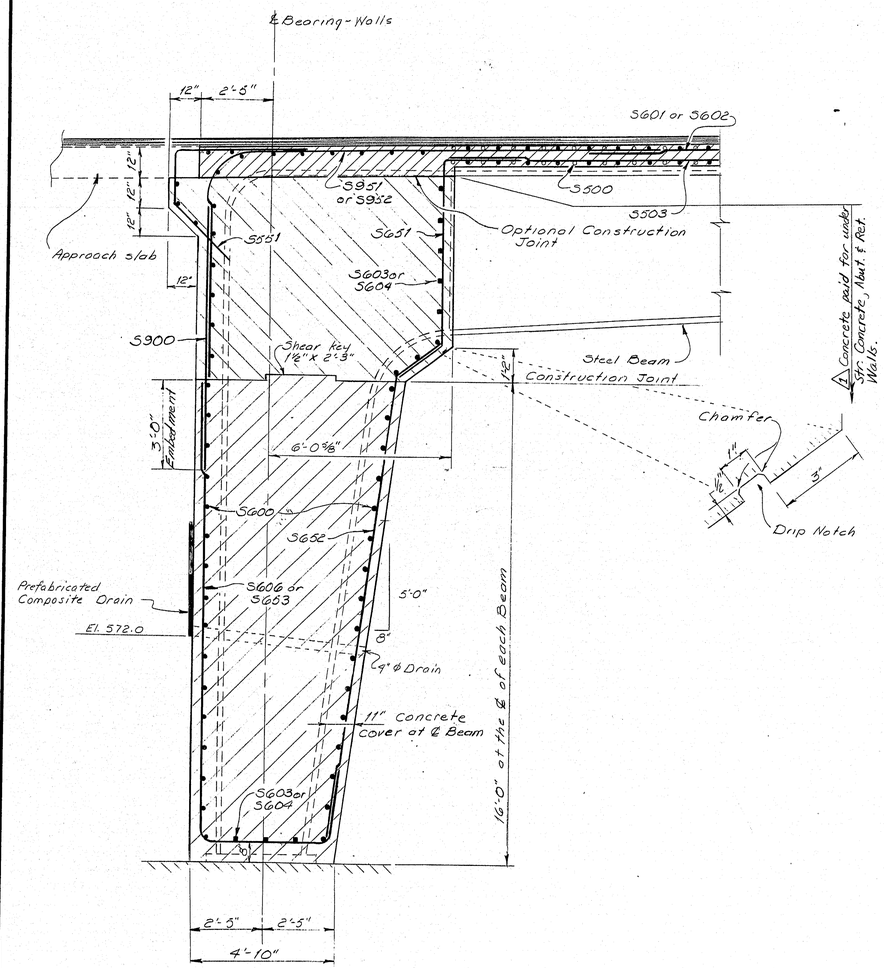
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

THE FORKS BRIDGE
OVER
THE KENNEBEC RIVER
IN THE PLANTATIONS OF
THE FORKS - WEST FORKS
SOMERSET COUNTY
STRUCTURAL STEEL

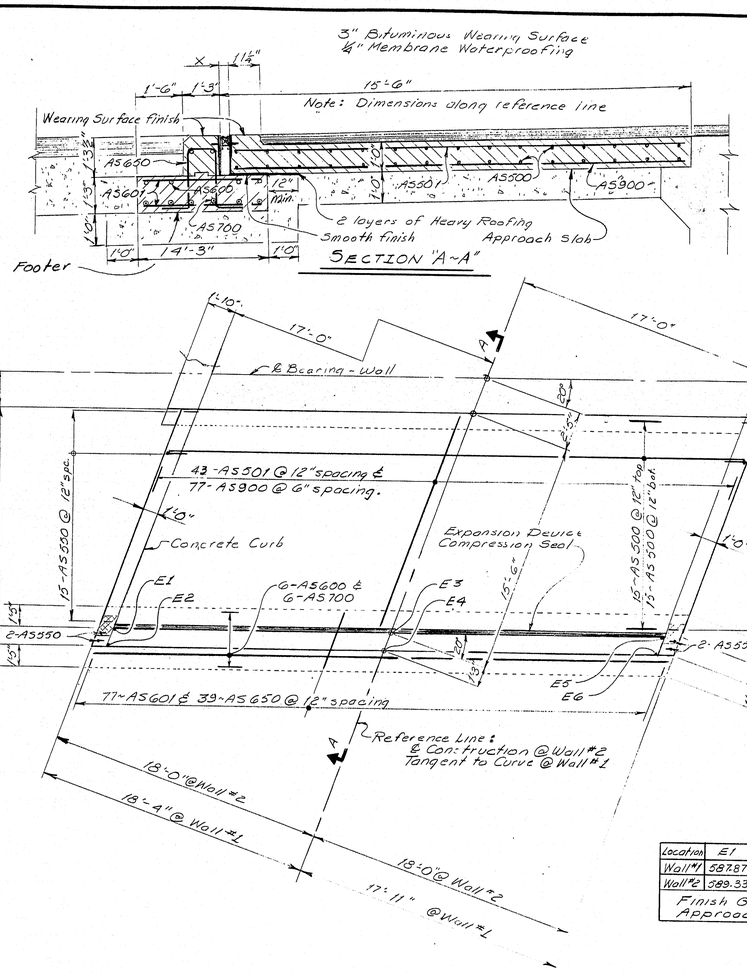
SHEET OF AUGUSTA, MAINE

106-221

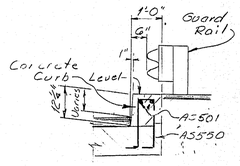
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	BR033-2(8)	26	48



SECTION "V-V"
(Parallel to ℄ Construction)



SECTION "A-A"



TYPICAL CURB SECTION
(Approach Slab)

Transition curb height from 4" reveal at the bridge to 7" reveal at the joint armor.

Location	E1	E2	E3	E4	E5	E6
Wall #1	587.87	587.85	588.37	588.35	588.86	588.84
Wall #2	589.33	589.32	589.01	589.00	588.68	588.68

Finish Grade Elevations Top of Approach Slab Footers.

APPROACH SLAB & FOOTER DETAILS

NOTES:

1. ~ Payment for the Approach Slabs & Footers will be made under Item 502.310 Structural Concrete Approach Slabs.
2. ~ Protective Coating for Concrete Surfaces shall be applied to all exposed surfaces of the concrete curb and approach slab fascia.
3. ~ Silica Fume shall not be added to the approach slab curbs.

106-222

PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN - DETAILED	MEB	7/87
	CHECKED	MLB	11-88
	REVISIONS	MLB	12-88
	FIELD CHANGES		

BRUNING 44-132-45710-1

Addendum No. 2

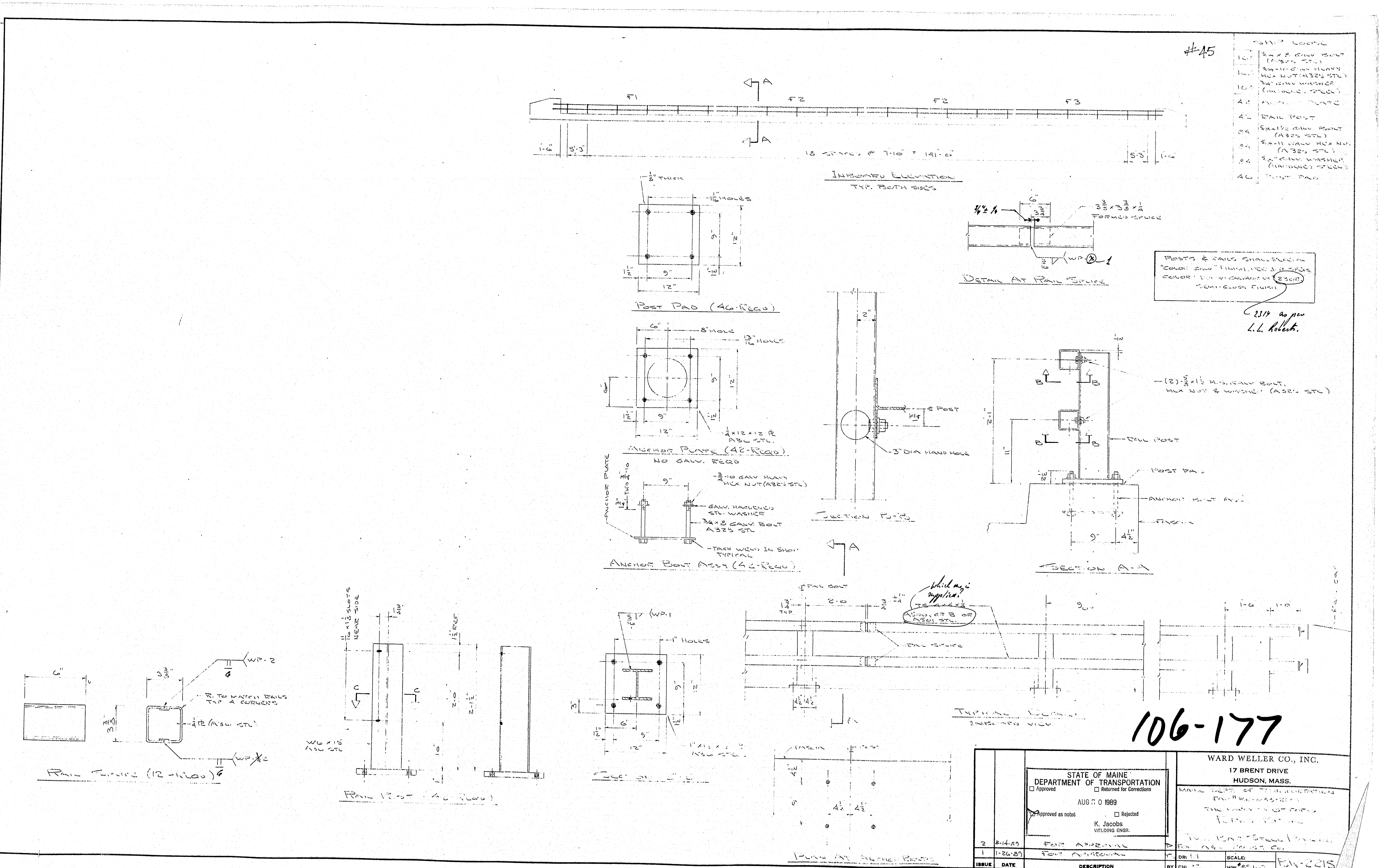
⚠1 Revision dated 12-23-88

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

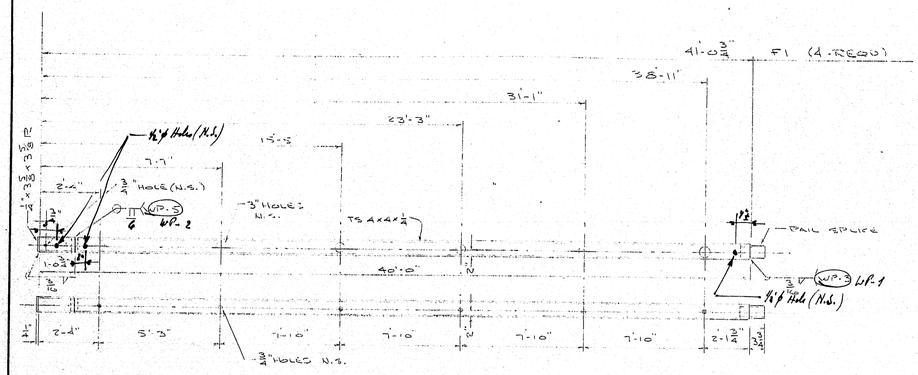
THE FORKS BRIDGE
OVER
THE KENNEBEC RIVER
IN THE PLANTATIONS OF
THE FORKS - WEST FORKS
SOMERSET COUNTY

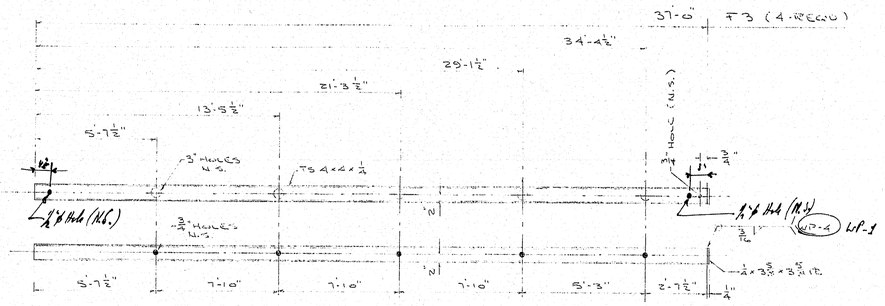
Wall Section & Approach Slabs

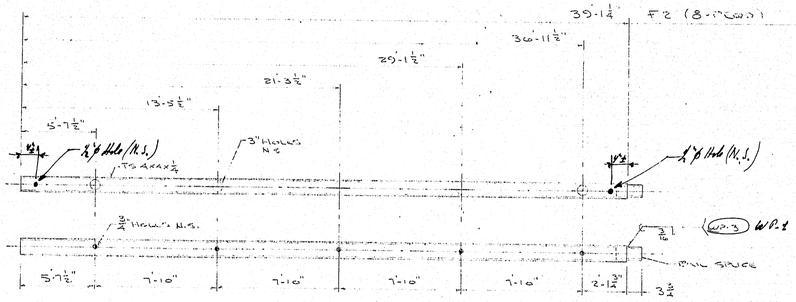
SHEET OF AUGUSTA, MAINE



#45
SHIP LOOSE
3/4 x 8 GALV BOLT (A325 STL)
3/4-10 GALV HEAVY HEX NUT (A325 STL)
3/4" GALV WASHER (HARDENED STEEL)
ANCHOR PLATE
RAIL POST
5/8 x 1 1/2 GALV BOLT (A325 STL)
5/8-11 GALV HEX NUT (A325 STL)
5/8" GALV WASHER (HARDENED STEEL)
POST PAD
F1
F2
F3
18 SPACES @ 7-10" = 141'-0"
INBOARD ELEVATION
TYP. BOTH SIDES
1/8" THICK
1 1/16" HOLES
POST PAD (46-REQD)
8" HOLE
13/16" HOLES
1/4 x 12 x 12 PL A36 STL.
ANCHOR PLATE (42-REQD)
NO GALV. REQD
ANCHOR PLATE
3/4-10 GALV HEAVY HEX NUT (A325 STL)
GALV. HARDENED STL. WASHER
3/4 x 8 GALV. BOLT A325 STL
TACK WELD IN SHOP TYPICAL
ANCHOR BOLT ASSY (42-REQD)
3 3/8 x 3 3/8 x 1/4 FORMED SPLICE
DETAIL AT RAIL SPLICE
POSTS & RAILS SHALL RECEIVE "COLOR GALV" FINISH, PER D.O.T. SPECS. COLOR: 2308, SEMI-GLOSS FINISH
2314 as per L.L. Roberts.
℄ POST
3" DIA HAND HOLE
SECTION B-B
(2)-5/8 x 1 1/2 H.S. GALV BOLT, HEX NUT & WASHER (A325 STL)
RAIL POST
POST PAD
ANCHOR BOLT ASSY
FASCIA
SECTION A-A
R. TO MATCH RAILS TYP. 4 CORNERS
1/4 PL (A36 STL)
RAIL SPLICE (12-REQD)
11/16 x 1 3/8 SLOTS NEAR SIDE
W6 x 15 A36 STL
RAIL POST (46-REQD)
1" HOLES
1" x 12 x 12 PL A36 STL
SECTION C-C
℄ RAIL BOLT
which one is supplied?
TS 4 x 4 x 1/4
A500, GR B or A501 STL.
RAIL SPLICE
TYPICAL DETAIL
INBOARD VIEW
PLAN AT ANCHOR BOLTS
106-177
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
☐ Approved ☐ Returned for Corrections
AUG 30 1989
☒ Approved as noted ☐ Rejected
K. Jacobs
WELDING ENGR.
WARD WELLER CO., INC.
17 BRENT DRIVE
HUDSON, MASS.
2 | 8-14-89 | FOR APPROVAL
1 | 1-26-89 | FOR APPROVAL
ISSUE | DATE | DESCRIPTION | BY
DR:
CH:
SCALE:
WW# 85107
EW-2215







106 - 178

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
☐ Approved ☐ Returned for Corrections
AUG 0 1989
☒ Approved as noted ☐ Rejected
K. Jacobs
WELDING ENGR.

ISSUE	DATE	DESCRIPTION	BY
2	8-14-89	FOR APPROVAL	
1	4-24-89	FOR APPROVAL	

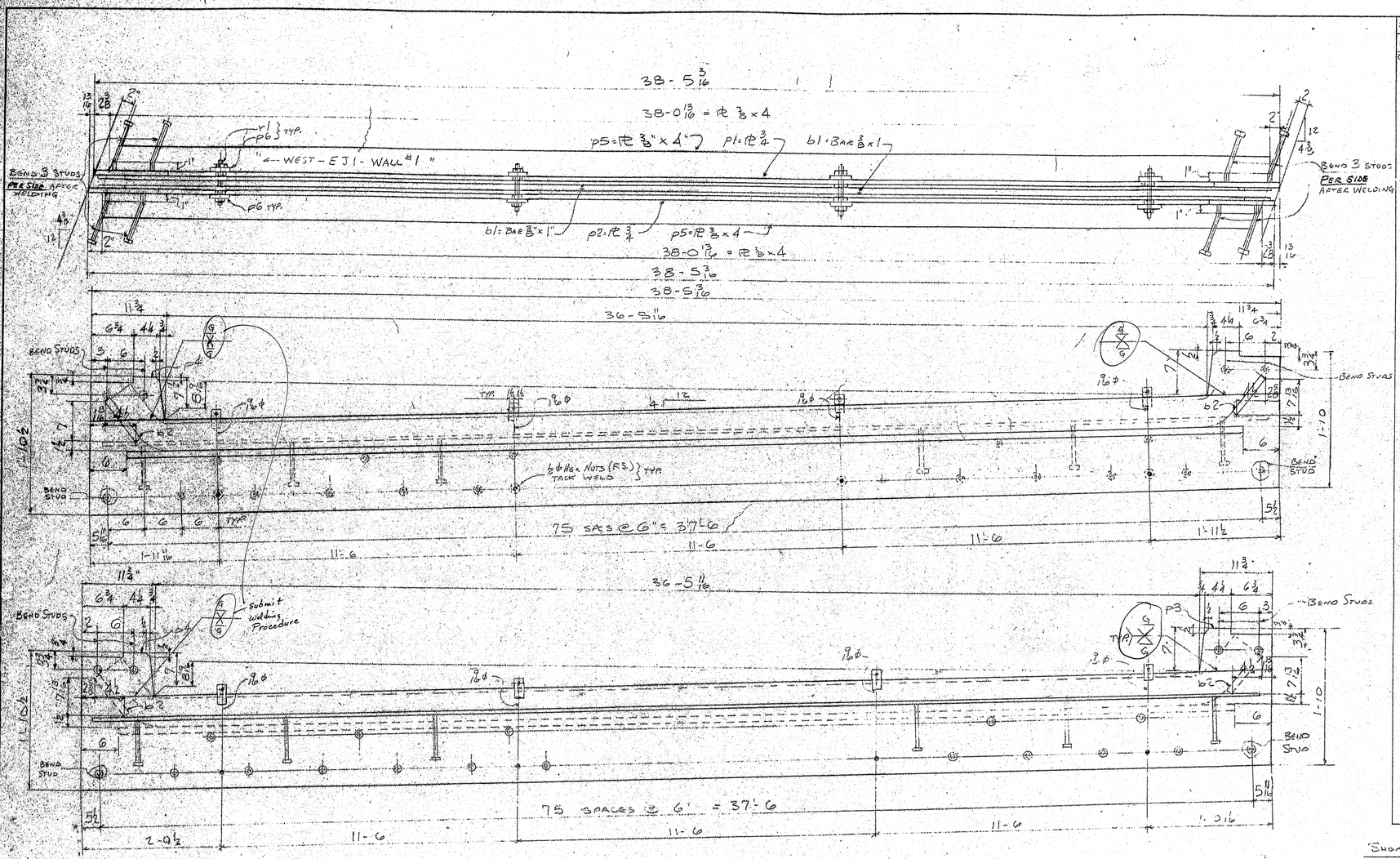
WARD WELLER CO., INC.
17 BRENT DRIVE
HUDSON, MASS.

MAINE DEPT OF TRANSPORTATION
FAO # BE-033-F(3),
THE FORKS - NEW FORKS
TOMPS BRIDGE
TWO BAR STEEL RAILING
FOR: A&V CONST. CO.

DR: JM | SCALE:
CH: | WW 85107

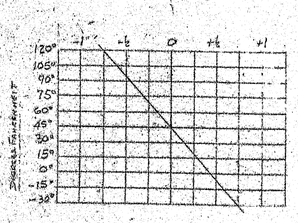
BR-2215

SHEET 2 OF 2

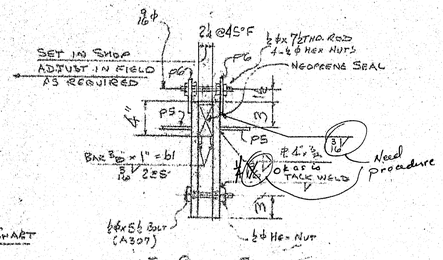


SHIPPER		BILL OF MATERIAL							
NO	MARK	NO	MARK	SIZE	LENGTH	REMARKS	ITEM	WEIGHT
ONE	EJ1			EXPANSION JOINT ASSEMBLY				
		1	P1	PL 3/4 x 15 1/4	38 5 1/16			
		1	P2	do	38 5 1/16	#45		
		2	P3	PL 3/4 x 7	0 11 3/4			
		2	P4	PL 3/4 x 7 1/4	0 11 3/4			
		2	P5	PL 3/8 x 4	38 0 13/16			
		3	b1	BAR 3/8 x 1	37 5 1/4			
		4	b2	do	0 9			
		156		1/2 ø STUDS	0 8	BEND 3 OF 5 STUDS AS SHOWN		
		1	S1	3 1/2 x 3 1/2	38 0	NEOPRENE COMP. SEAL		
				# WA 350	MFG BY	WATSON-BOWMAN ACME		
		8	P6	PL 1/2 x 3	0 5			
		4	r1	1/2 ø THDED ROD	0 7 1/2	(ALL THREAD)		
		16		1/2 ø HEX NUTS				
		4		1/2 ø A307	5 1/2			
		4		1/2 HEX NUTS				

PREFIX ALL PIECE MARKS "1" FOR THIS SHEET.

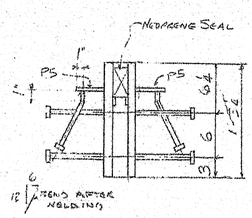


COMPRESSION SEAL ADJUSTMENT CHART

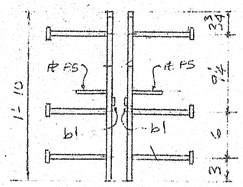


TYP ROADWAY SECTION
(STUDS NOT SHOWN)

ONE EXP. JT "EJ-1 - WALL #1"



END ANCHOR DETAIL
(ALL STUDS = 1/2" ø x 8")



TYP CURB SECTION
(ALL STUDS = 1/2" x 8")

106-179

SHOP NOTES:

(1) AFTER GALVANIZING, EXPANSION JOINT TO BE SHIPPED ASSEMBLED. TO INCLUDE SEAL.

(2) THE GALVANIZING ON THE METAL SURFACES IN DIRECT CONTACT WITH THE NEOPRENE SEAL SHALL BE ROUGHENED TO A DULL GRAY APPEARANCE SO AS TO PROVIDE A HIGH STRENGTH BOND BETWEEN THE SEAL AND METAL SURFACES.

REVNO	DATE	REVISION

EXPANSION JOINT #1 FOR WALL #1

THE FORKS BRIDGE OVER THE KENNEBEC RIVER
THE FORKS - WEST FORKS PLANTATION, MAINE

PROJ. NO. BR-033-2(8)

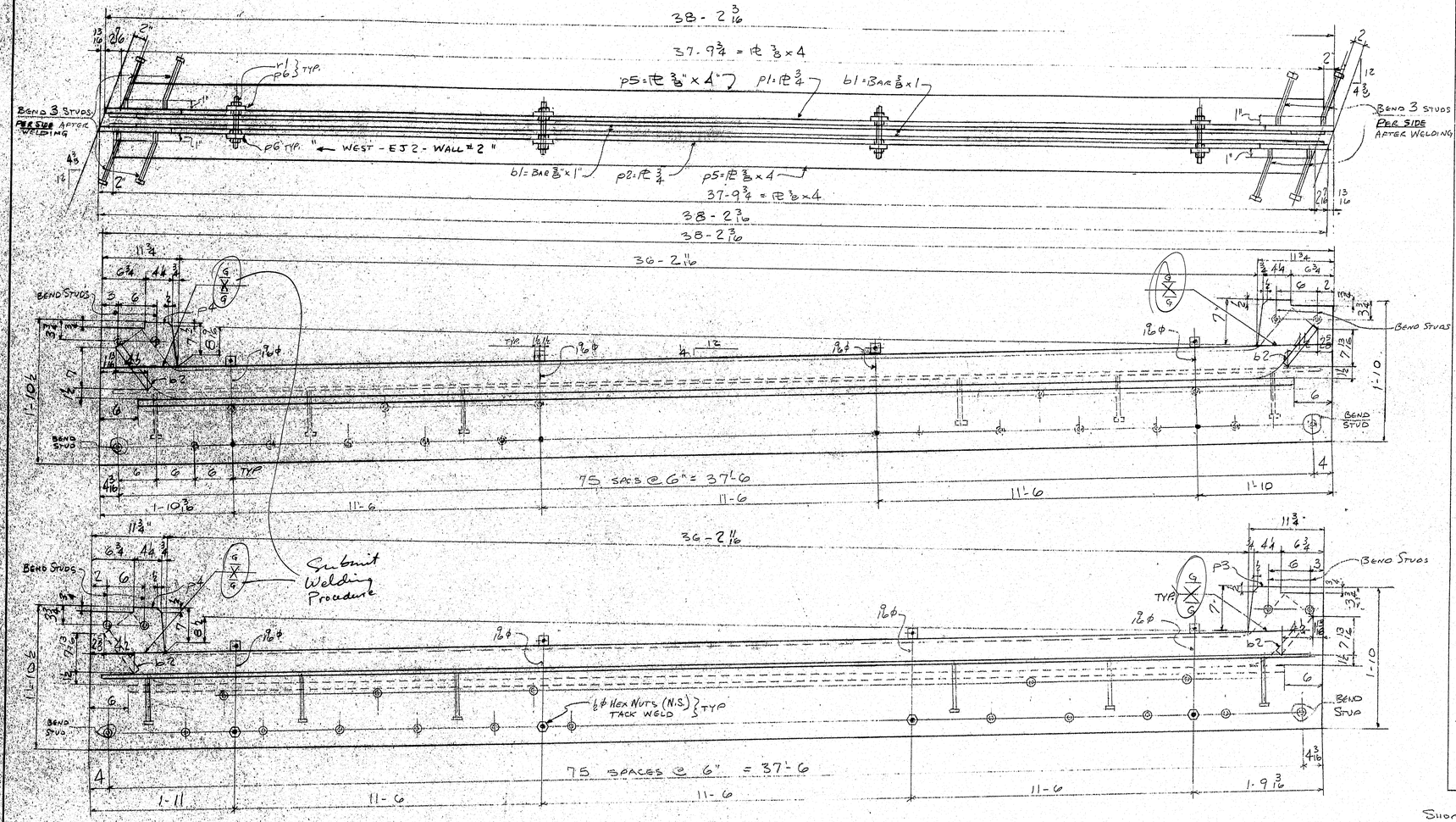
SHOP NOTES

HOLES A. NOTED UNLESS NOTED
BOLTS F 1/1307 UNLESS NOTED
PAINT HOT DIP GALVANIZE
WELDS TO BE MADE USING ELECTRODES
MATERIAL TO BE A 36 UNLESS NOTED

PRECISE FABRICATING CORPORATION
3 FARM LANE
GEORGETOWN, MA 01833

MAINE DEPT. OF TRANS. / REED ST. ROAD

DRAWN BY	CHECKED BY	APP.	SHOP	DIST.	CONTRACT NO.	SHEET NO.
EAI 2-APRIL-87	FBC 13-JULY-87				2472	1



SHIPPER NO.	SHIPPER MARK	NO	MARK	SIZE	LENGTH	REMARKS	ITEM	WEIGHT
				BILL OF MATERIAL				
ONE	EJ 2			EXPANSION JOINT ASSEMBLY				
		1	P1	PL 3/4 x 15 1/4	38	2 1/16		
		1	P2	do	38	2 1/16		
		2	P3	PL 3/4 x 7	0	11 3/4		
		2	P4	PL 3/4 x 7 1/4	0	11 3/4		
		2	P5	PL 3/8 x 4	37	9 3/4		
		2	b1	BAR 3/8 x 1	37	2 1/4		
		4	b2	do	0	9		
		156		1/2 ϕ STUDS	0	8	BEND SOME STUDS - AS SHOWN	
		1	S1	3 1/2 x 3 1/4	38	0	NEOPRENE COMPA SEAL	
				#WA 3500	MFD BY		WATSON-BOWMAN ACME	
		8	P6	PL 1/2 x 3	0	5		
		4	r1	1/2 ϕ THDED	0	7 1/2	(ALL THREAD)	
		16		1/2 ϕ HEX NUTS				
		4		1/2 ϕ A 307		5 1/2		
		4		1/2 HEX NUTS				

PREFIX ALL PIECE MARKS "2" FOR THIS SHEET

SHOP NOTES:

1. AFTER GALVANIZING, EXPANSION JOINT TO BE SHIPPED ASSEMBLED. TO INCLUDE SEAL.
2. THE GALVANIZING ON THE METAL SURFACE IN DIRECT CONTACT WITH THE NEOPRENE SEAL SHALL BE ROUGHENED TO A DULL GRAY APPEARANCE SO AS TO PROVIDE A HIGH STRENGTH BOND BETWEEN THE SEAL AND METAL SURFACE.

106-180

SHOP NOTES

HOLES	AS NOTED UNLESS NOTED
BOLTS	1/2" ϕ A307 UNLESS NOTED
PAINT	HOT DIP GALVANIZE
WELDS TO BE MADE USING	E70 XX ELECTRODES
MATERIAL TO BE	A 36 UNLESS NOTED

REVNO	DATE	REVISION

EXPANSION JOINT # 2 FOR WALL # 2

THE FORKS BRIDGE OVER THE KENNEBEC RIVER THE FORKS - WEST FORKS PLANTATIONS. MAINE

PROJ. NO. BR-033-2(8)

PRECISE FABRICATING CORPORATION
3 FARM LANE
GEORGETOWN, MA 01833

MAINE DEPT. OF TRANS. / REED & REED

DRAWN BY	CHECKED BY	APP.	SHOP	DIST.	CONTRACT NO.	SHEET NO.
CAI 3-APRIL-89	KAC 18-JULY-89				2472	2

9

SHIPPER		BILL OF MATERIAL					
NO	MARK	NO	MARK	SIZE	LENGTH	REMARKS	IT
2N6	3AE	1	pae	PL 3/8 x 9 1/2	2 1		
		1	pb	PL 3/8 x 7	1 0		
		1	b1	BAR 3/8 x 1 1/2	1 10		
		1	b2	BAR 3/8 x 1 1/2	5 13/16		
		4		1/2 ø STUD	8		
2N6	3AW	1	paw	PL 3/8 x 9 1/2	2 1 1/2		
		1	pb				
		1	b1				
		1	b2				
		4		1/2 ø STUDS			
2	3B	2	pc	PL 3/8 x 5 1/4	1 9 3/8		
		2	pd	PL 3/8 x 4 5/8	8		
		2	b3	BAR 3/8 x 1 1/2	1 9 3/8		
		2	b4	BAR 3/8 x 1 1/2	5 7/16		
		3		1/2 ø STUDS	8		
2N6	3CE	1	pce				
		1	pb				
		1	b1				
		1	b2				
		4		1/2 ø STUDS			
2N6	3CW	1	paw				
		1	pb				
		1	b1				
		1	b2				
		4		1/2 ø STUDS			
2	3D	2	pc				
		2	pd				
		2	b3				
		2	b4				
		8		1/2 ø STUDS			

MAKE ONE - MARK "3DE"
MAKE ONE - MARK "3DW"

MAKE ONE - MARK "3CE"
MAKE ONE - MARK "3CW"

MAKE ONE MARK "3BE"
MAKE ONE MARK "3BW"

MAKE ONE - MARK "3AE"
MAKE ONE - MARK "3AW"

DETAIL "A"

Submit Welding Procedure

Procedure No. (Typ)

1/2 ø x 8" STUDS BEND AFTER WELDING

1/2 ø x 8 STUDS (TYP.) BEND AFTER WELDING

GRIND AFTER WELDING

BEVEL EDGE 3 SIDES

BEVEL EDGES

KEY PLAN

SHOP NOTES

HOLES N.S.F. UNLESS NOTED
BOLTS A325 UNLESS NOTED
PAINT SEE SPECIFICATIONS
WELDS TO BE MADE USING E70 XX ELECTRODES
MATERIAL TO BE A572 GR 50 UNLESS NOTED

less than 0.4% Silica Suprevisors submittal note

Shop Notes: Prefix All Piece Marks "2" For This Sheet.

106-181

REV NO	DATE	REVISION

Fascia Plates

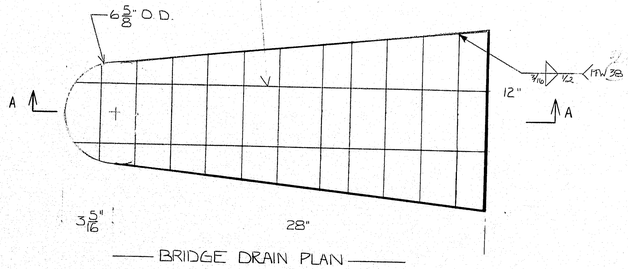
The Trails Bridge over the Kennebec River
The Towns of Wiscasset & Pittston Maine
Proj. No: BR-233-2(3)

PRECISE FABRICATING CORPORATION
3 FARM LANE
GEORGETOWN, MA 01833

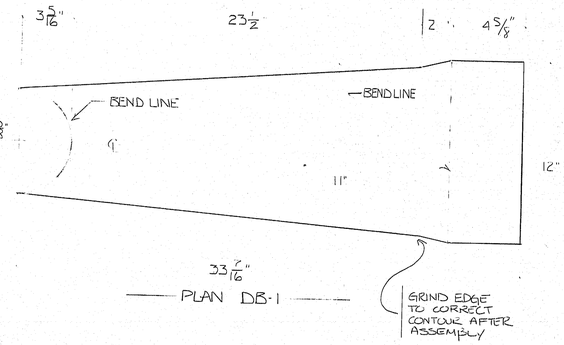
Marine Precast Panels 1 Bed & 2 Bed

DRAWN BY	CHECKED BY	APP	SHOP	DIST.	CONTRACT NO.	SHEET NO.
RAE					2472	3
As Applicable						

HEAVY DUTY GRATING MADE OF 1½ x 5/16 BARS SPACED 2 7/8" o.c. WITH 5/16 CROSSBARS SPACED 4" O.C.
GR-1

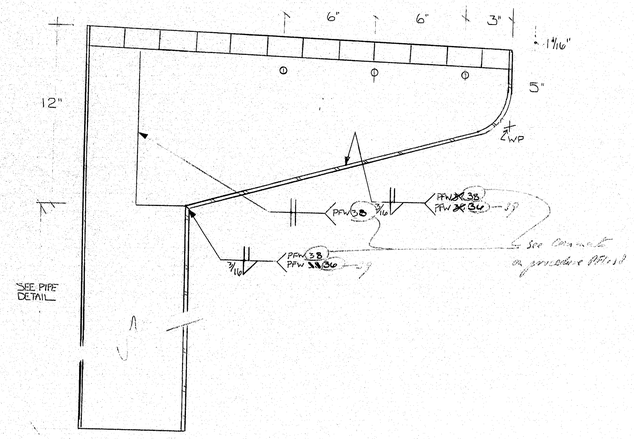


BRIDGE DRAIN PLAN

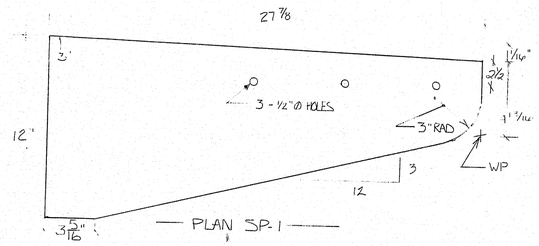


PLAN DB-1

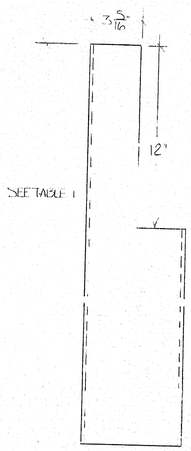
GRIND EDGE TO CORRECT CONTOUR AFTER ASSEMBLY



SECTION A-A



PLAN SP-1

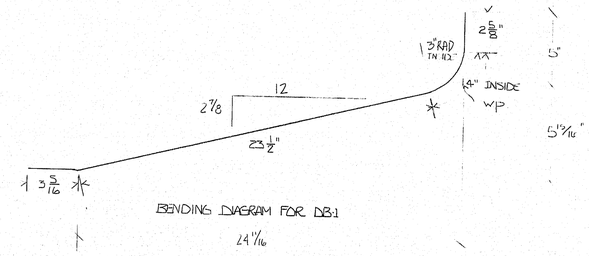


SEE TABLE 1

ELEVATION P1-P6

TABLE 1 - PIPE DRAIN LENGTH			
MARK	LOC.	LENGTH	MARK
BDR-1	+15	6'6"	P1
BDR-2	+20	6'4"	P2
BDR-3	+48	5'9"	P3
BDR-4	+76	5'6"	P4
BDR-5	+104	5'7"	P5
BDR-6	+132	6'7"	P6
LOCATION MARKS ARE READING LEFT TO RIGHT ON STATE DRAWING 24 OF 48 FORKS BRIDGE PLANS			

NOTES
1) ALL MATERIAL A36 UNLESS NOTED - PIPE A53 GR. B
2) ALL WELDS TO MEET AWS D1.1-81



BENDING DIAGRAM FOR DB-1

24 1/16"

BILL OF MATERIALS

MARK	NO	MARK	SHAPE	LENGTH	REMARKS
BDR 1-6					
	1 EACH	P1-P6	6" SCHED 40 PIPE	TABLE 1	COPE AS SHOWN
	6	GR-1	1½ x 12 (SEE DRAWING)	31 5/16"	GRATING - SEE NOTE
	12	SP-1	PL ¼" x 12"	28 ½"	CUT AS SHOWN
	6	DB-1	PL ¼" x 12"	33 3/16	CUT AS SHOWN
	6	A-1	3x3x 5/16 ANGLE	12"	SHAPE ONE END TO FIT PIPE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
☐ Approved ☐ Returned for Corrections
JUN - 0 1989
☒ Approved as noted ☐ Rejected
K. Jacobs
WELDING ENGR.

106-182

FORKS BRIDGE BR-033-2(8)		
R. OLSEN 3/31/89	P.F.W. INC NEWPORT MAINE 04953	SCALE AS NOTED DWG:
BRIDGE DRAIN DETAILS		1 OF 1

SPECIFICATIONS

CONSTRUCTION: STANDARD SPECIFICATONS - HIGHWAYS AND BRIDGES
STATE OF MAINE DEPARTMENT OF TRANSPORTATION. (JULY, 1988)

MATERIAL

ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM DESIGNATION A588.
EXCEPT ANCHOR BOLTS SHALL BE A572 AND ANCHOR SPACER PLATE A36.

ALL HIGH STRENGTH BOLTS SHALL BE ASTM A325 (TYPE 3)
ALL NUTS FOR A325 TYPE 3 BOLTS TO BE ASTM A563 GRADE C3.

FABRICATION NOTES

HEAT NUMBERS TO BE PRESERVED AND VISIBLE TO THE INSPECTOR

V - INDICATES CHARPY V-NOTCH TESTED..

IDENTIFICATION MARKS SHALL BE STENCILLED OR PAINTED ON MAIN LOAD CARRYING MEMBERS. NO DIE STAMPING SHALL BE USED. MARKS ON UNPAINTED STEEL SHALL BE STENCILLED.

LONGITUDINAL EDGES OF FLANGE & SPLICE PLATES THAT ARE FLAME CUT SHALL HAVE THEIR CORNERS ROUNDED TO 1/16 RADIUS

ALL WELDS SHALL HAVE THE SAME ATMOSPHERIC CORROSION RESISTANCE & COLORING AS ASTM A588 STEEL.

THE BUTT ENDS OF FLANGE & WEB PLATES AT THE LEG SPLICES & AT THE BEARINGS DENOTED ON THE DRAWINGS AS SAW CUT AND/OR GRIND TO BEAR SHALL ACHIEVE 90 PERCENT FULL CONTACT BEARING.

BOLT HOLES FOR FIELD SPLICES & IN 1¼ THICK PLATES SHALL BE DRILLED FROM THE SOLID. BOLT HOLES IN WTs & ⅜ THICK CONNECTION PLATES SHALL BE PUNCHED FULL SIZE.

SHOP PAINTING

SURFACE PREP - SSPC-SP6 COMMERCIAL BLAST CLEANING

SHOP PRIMER - PER STATE OF MAINE DOT SPECS. SECTION 708, AREAS DESIGNATED AS SUCH SHALL BE PAINTED WITH BASIC LEAD-SILICO CHROMATE.
FIRST SHOP COAT TO BE ORANGE
SECOND SHOP COAT TO BE MAROON

THERE SHALL BE NO PAINT WITHIN 3 INCHES OF OPEN HOLES IN FRICTION TYPE CONNECTIONS.
(THIS INCLUDES FIELD SPLICE AND CROSSFRAME CONNECTIONS).

ERECTION NOTES

⅞" HEAVY HEAD HIGH STRENGTH BOLTS (A325 TYPE 3) WITH ONE (1) HS WASHER ARE SUPPLIED FOR THIS PROJECT.
TIGHTEN BOLTS AS PER MAINE DoT SPEC 504.2

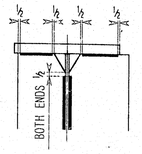
FIELD WELDS NOT BY CAROLINA STEEL CORPORATION.
FIELD DRILLING OF HOLES FOR DRAINS ARE NOT BY CSC.
FIELD ATTACHNMENT OF STUDS, INSTRUMENT HOUSING & DRAINS BRACKETS ARE NOT BY CSC.

FOR FIELD ERECTION, GIRDERS SHALL BE FULLY PINNED & BOLTED & SPLICE ELEVATIONS CHECKED BEFORE BOLTS ARE TIGHTENED. ALL SHIPPING BOLTS & WASHERS ARE ASTM A325 TYPE 3..

BRIDGE INSTRUMENTATION

STRAIN GAGES SHALL BE INSTALLED IN CAROLINA STEEL CORP. SHOP BY OTHERS. REFER TO DESIGN DRAWING SHEET 31 of 48 AND SPECIAL PROVISIONS SECTION 540.
CSC TO PROVIDE PROTECTION FOR STRAIN GAGES DURING SHIPMENT TO JOB SITE.

ONE ASTM A588 PLATE 5/8X2X0'-2 AND ONE PL 5/8X24X2'-0 HAS PREVIOUSLY BEEN SHIPPED TO THE CONTRACTOR THROUGH PRECISE FABRICATING CORP.



WELD TERMINATION DETAIL

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
☒ Approved ☐ Returned for Corrections
MAY 23 1989
☐ Approved as noted ☐ Rejected
K. Jacobs
ASSO ENGR.

PROJ NO. BR-033-2(8)
PLANTATIONS OF THE FORKS - WEST FORKS
SOMERSET COUNTY

106-183

FABRICATED BY
HOLES SHOP FASTENERS
SHOP PAINT
SHOP INSPECTION
GENERAL NOTES

DATE	NO.	BY
	R1	

REVISIONS

OFFICE COPY (2)
RECEIVED MAY 22 1989
CHECKED B. [illegible]
REVIEWED BY [illegible]

ORDER NO. 89-8881150
DETAILS OF GENERAL NOTES
PROJECT THE FORKS BRIDGE OVER THE KENNEBEC RIVER
LOCATION SOMERSET COUNTY, MAINE
CUSTOMER REED & REED, INC.
CAROLINA STEEL GORPORATION
MADE BY HARRISON
CHECKED BY FEW
SQUAD LEADER Ben
DATE 3-30-89
SHEET HN1

SPECIFICATIONS

CONSTRUCTION: STANDARD SPECIFICATONS - HIGHWAYS AND BRIDGES
STATE OF MAINE DEPARTMENT OF TRANSPORTATION. (JULY, 1988)

MATERIAL

ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM DESIGNATION A588.
EXCEPT ANCHOR BOLTS SHALL BE A572 AND ANCHOR SPACER PLATE A36.

ALL HIGH STRENGTH BOLTS SHALL BE ASTM A325 (TYPE 3)
ALL NUTS FOR A325 TYPE 3 BOLTS TO BE ASTM A563 GRADE C3.

FABRICATION NOTES

HEAT NUMBERS TO BE PRESERVED AND VISIBLE TO THE INSPECTOR

V - INDICATES CHARPY V-NOTCH TESTED.

IDENTIFICATION MARKS SHALL BE STENCILLED OR PAINTED ON MAIN LOAD CARRYING MEMBERS. NO DIE STAMPING SHALL BE USED. MARKS ON UNPAINTED STEEL SHALL BE STENCILLED.

LONGITUDINAL EDGES OF FLANGE & SPLICE PLATES THAT ARE FLAME CUT SHALL HAVE THEIR CORNERS ROUNDED TO 1/8 RADIUS

ALL WELDS SHALL HAVE THE SAME ATMOSPHERIC CORROSION RESISTANCE & COLORING AS ASTM A588 STEEL.

THE BUTT ENDS OF FLANGE & WEB PLATES AT THE LEG SPLICES & AT THE BEARINGS DENOTED ON THE DRAWINGS AS SAW CUT AND/OR GRIND TO BEAR SHALL ACHIEVE 90 PERCENT FULL CONTACT BEARING.

BOLT HOLES FOR FIELD SPLICES & IN 1¼ THICK PLATES SHALL BE DRILLED FROM THE SOLID. BOLT HOLES IN WTs & ⅜ THICK CONNECTION PLATES SHALL BE PUNCHED FULL SIZE.

SHOP PAINTING

SURFACE PREP - SSPC-SP6 COMMERCIAL BLAST CLEANING

SHOP PRIMER - PER STATE OF MAINE DOT SPECS. SECTION 708, AREAS DESIGNATED AS SUCH SHALL BE PAINTED WITH BASIC LEAD-SILICO CHROMATE.
FIRST SHOP COAT TO BE ORANGE
SECOND SHOP COAT TO BE MAROON

THERE SHALL BE NO PAINT WITHIN 3 INCHES OF OPEN HOLES IN FRICTION TYPE CONNECTIONS.
(THIS INCLUDES FIELD SPLICE AND CROSSFRAME CONNECTIONS).

ERECTION NOTES

⅞" HEAVY HEAD HIGH STRENGTH BOLTS (A325 TYPE 3) WITH ONE (1) HS WASHER ARE SUPPLIED FOR THIS PROJECT.
TIGHTEN BOLTS AS PER MAINE DoT SPEC 504.2

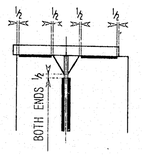
FIELD WELDS NOT BY CAROLINA STEEL CORPORATION.
FIELD DRILLING OF HOLES FOR DRAINS ARE NOT BY CSC.
FIELD ATTACHNMENT OF STUDS, INSTRUMENT HOUSING & DRAINS BRACKETS ARE NOT BY CSC.

FOR FIELD ERECTION, GIRDERS SHALL BE FULLY PINNED & BOLTED & SPLICE ELEVATIONS CHECKED BEFORE BOLTS ARE TIGHTENED. ALL SHIPPING BOLTS & WASHERS ARE ASTM A325 TYPE 3.

BRIDGE INSTRUMENTATION

STRAIN GAGES SHALL BE INSTALLED IN CAROLINA STEEL CORP. SHOP BY OTHERS. REFER TO DESIGN DRAWING SHEET 31 of 48 AND SPECIAL PROVISIONS SECTION S40.
CSC TO PROVIDE PROTECTION FOR STRAIN GAGES DURING SHIPMENT TO JOB SITE.

ONE ASTM A588 PLATE ⅝X2X0'-2 AND ONE PL ⅝X24X2'-0 HAS PREVIOUSLY BEEN SHIPPED TO THE CONTRACTOR THROUGH PRECISE FABRICATING CORP.



WELD TERMINATION DETAIL

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
☒ Approved ☐ Returned for Corrections
MAY 03 1989
☐ Approved as noted ☐ Rejected
K. Jacobs
NO CHGR.

PROJ NO. BR-033-2(8)
PLANTATIONS OF THE FORKS - WEST FORKS
SOMERSET COUNTY

FABRICATED BY
HOLES SHOP FASTENERS
SHOP PAINT
SHOP INSPECTION
GENERAL NOTES

REVISIONS		
DATE	NO.	BY
	R1	

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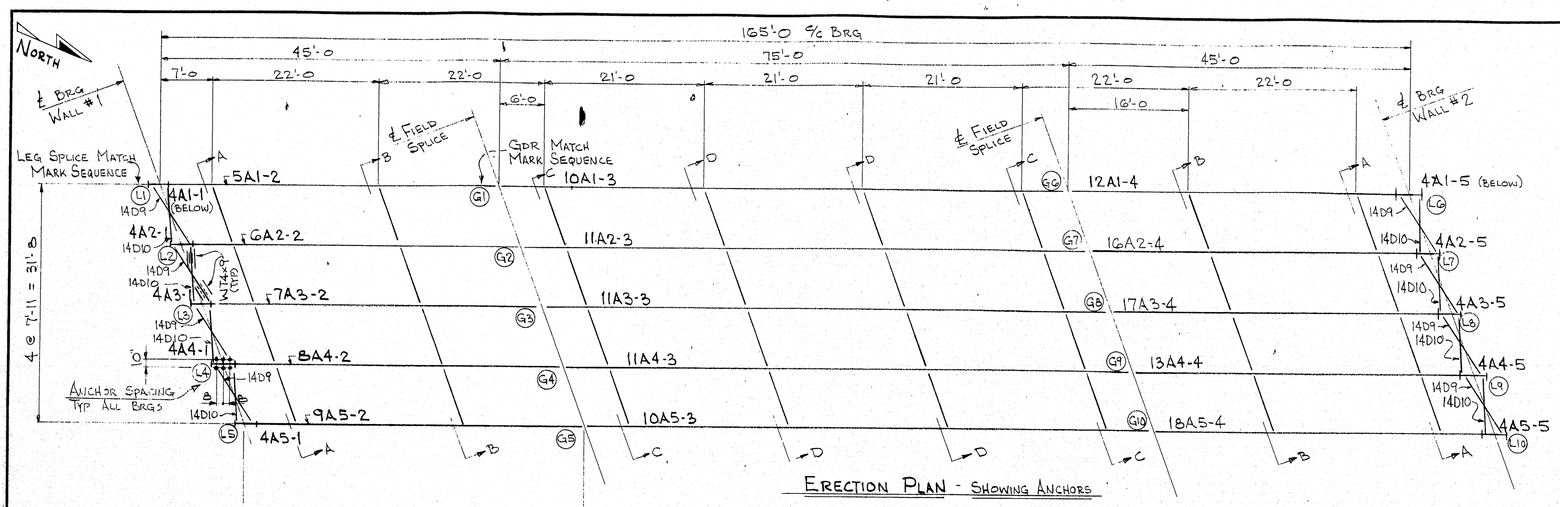
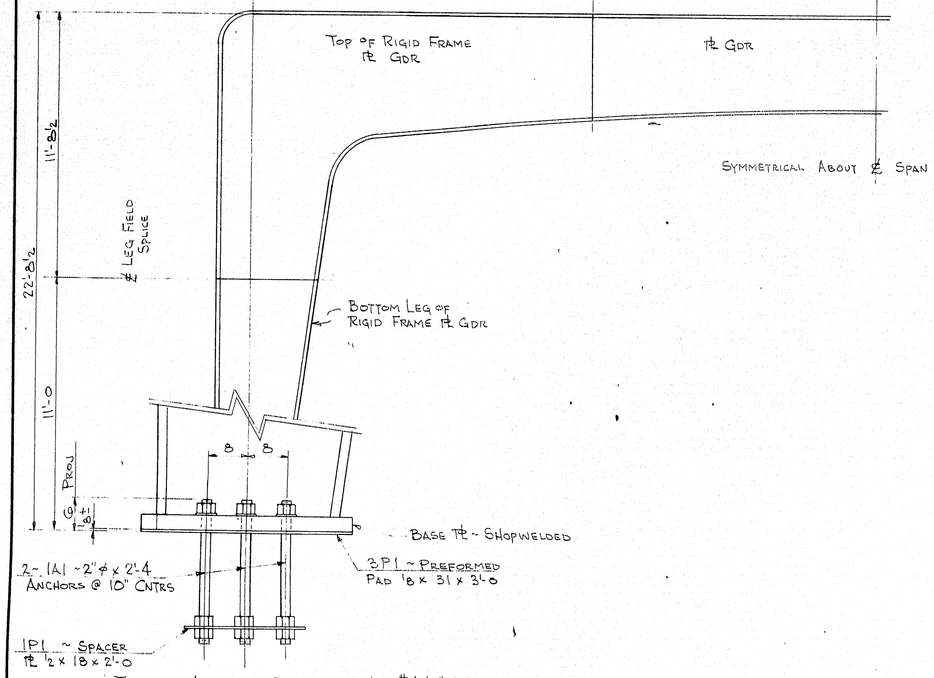
ORDER NO. 89-8881H50
DETAILS OF GENERAL NOTES
PROJECT THE FORKS BRIDGE OVER THE KENNEBEC RIVER
LOCATION SOMERSET COUNTY, MAINE
CUSTOMER REED & REED, INC.
CAROLINA STEEL GORPORATION
MADE BY HARRISON
CHECKED BY F.E.W.
SQUAD LEADER Bon
DATE 3-30-89
SHEET HN1

106-183



ERECTION PLAN - SHOWING ANCHORS



TYPICAL ANCHOR DETAIL - WALL #1 & #2

SEE SHT HF1 FOR "FIELD ASSEMBLY FOR ANCHORS"

SEE SHEET HN1 FOR FABRICATION NOTES.

SEE SHTS HE2 THRU HE6 FOR GRADE DIAGRAMS.

SEE SHT HE7 FOR CAMBER DIAGRAM & CROSSFRAME SECTIONS. AA THRU DD.

EXPANSION DAMS TO BE DETAILED, FABRICATED & DELIVERED BY PRECISE FABRICATING CORP.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
☒ Approved ☐ Returned for Corrections
MAY 03 1989
☐ Approved as noted ☐ Rejected
K Jacobs
ENG ENGR.

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PROJ # BR-033-2(8)
BRIDGE # 2841
PLANTATIONS OF
THE FORKS - WEST FORKS

FABRICATED BY
HOLES SHOP FASTENERS
SHOP PAINT
FIELD CONNECTIONS
GENERAL NOTES

DATE	NO.	BY	REVISIONS
	R1		

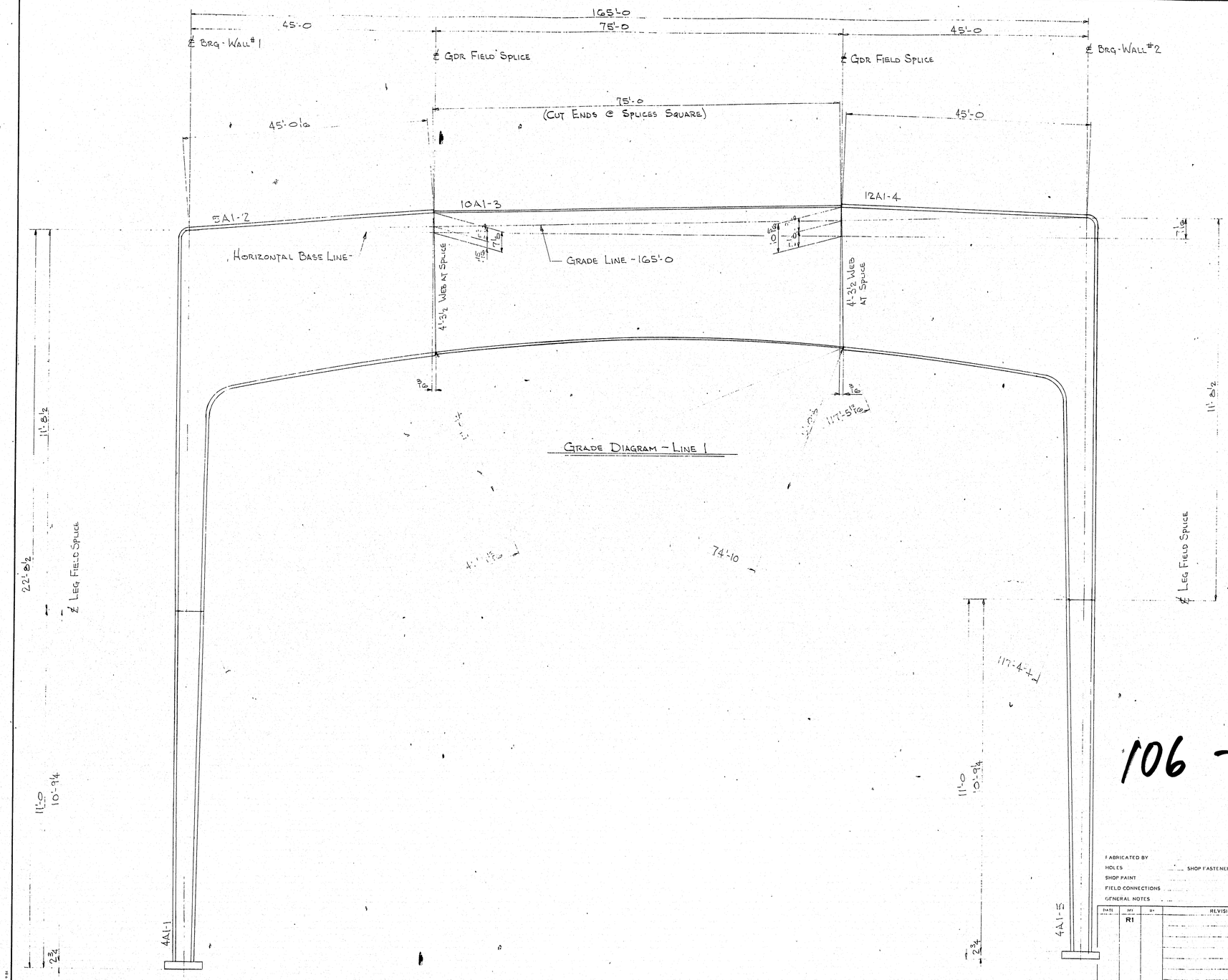
Field Use
Approval

NOTICE TO ERECTOR

NO CREDIT WILL BE ALLOWED, BACK-CHARGE ACCEPTED OR LIABILITY ASSUMED BY CAROLINA STEEL TO ANYONE FOR WORK PERFORMED IN REPLACING OR CORRECTING MATERIALS OR WORKMANSHIP FOR THE MATERIALS SHOWN ON THIS DRAWING UNLESS THESE DIFFICULTIES HAVE BEEN BROUGHT TO THE ATTENTION OF **CAROLINA STEEL CORPORATION** AND PROPER CORRECTIVE WORK HAS BEEN EXPRESSLY AUTHORIZED BY **CAROLINA STEEL CORPORATION.**

ORDER NO. 89-8881450
DETAILS OF ERECTION PLAN
PROJECT THE FORKS BRIDGE OVER THE KENNEBEC RIVER
LOCATION SOMERSET COUNTY, MAINE
CUSTOMER REED & REED, INC
CAROLINA STEEL CORPORATION
MADE BY HARRISON
CHECKED BY F.EIN
SQUAD LEADER
DATE 3-30-89
SHT# HE1 OF

106-184



GRADE DIAGRAM - LINE 1

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
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K. Jacobs
ENGR.

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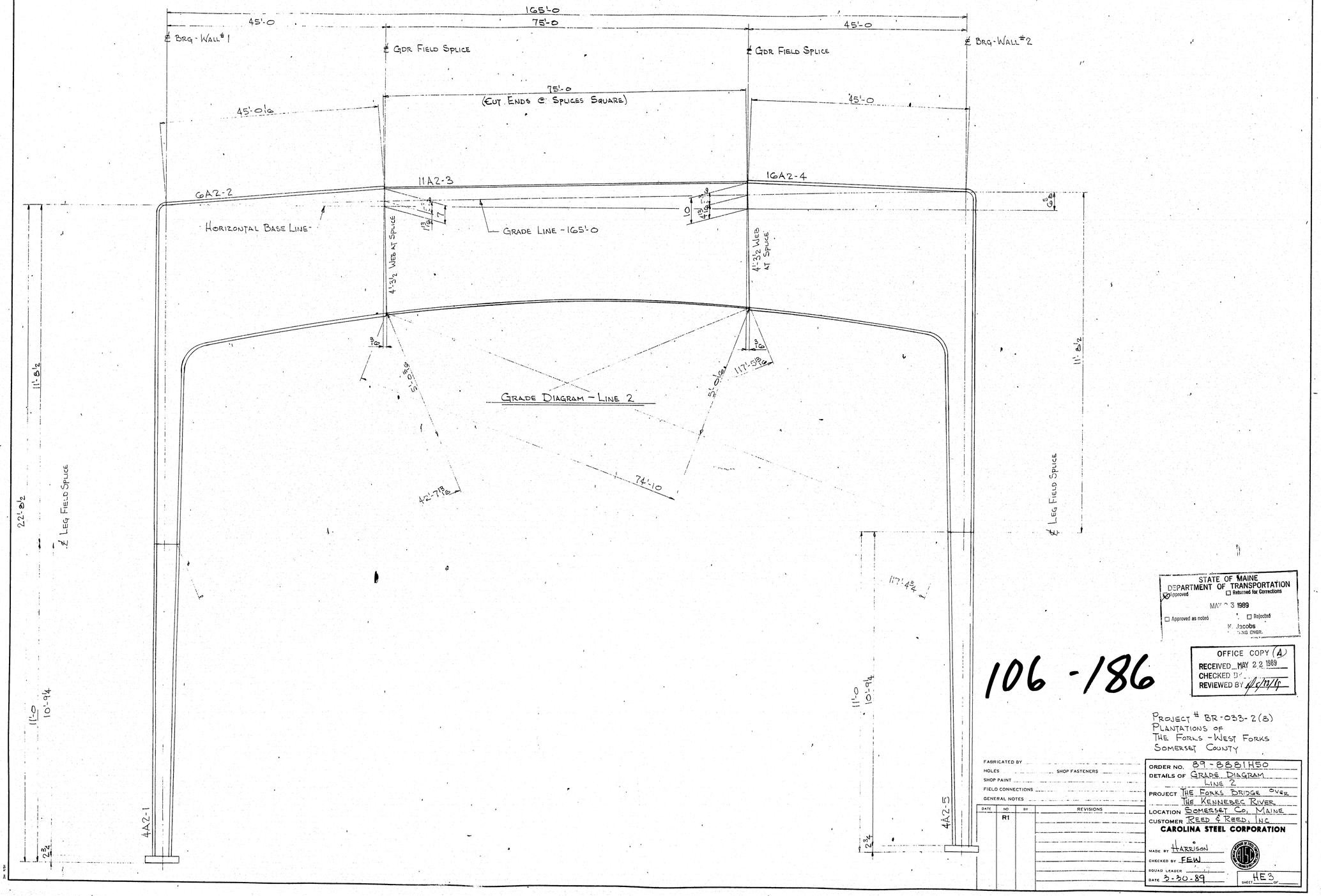
PROJECT # BR-033-2(8)
PLANTATIONS OF
THE FORKS - WEST FORKS
SOMERSET COUNTY

FABRICATED BY
HOLES ____ SHOP FASTENERS
SHOP PAINT
FIELD CONNECTIONS
GENERAL NOTES

DATE	MK	BY	REVISIONS
	R1		

ORDER NO. 89-8881H50
DETAILS OF GRADE DIAGRAM LINE 1
PROJECT THE FORKS BRIDGE OVER THE KENNEBEC RIVER
LOCATION SOMERSET CO. MAINE
CUSTOMER REED & REED, INC
CAROLINA STEEL CORPORATION
MADE BY HARRISON
CHECKED BY FEW
SQUAD LEADER
DATE 3-30-89
SHEET HE2



STATE OF MAINE
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K. Jacobs
ENG ENGR.

106 - 186

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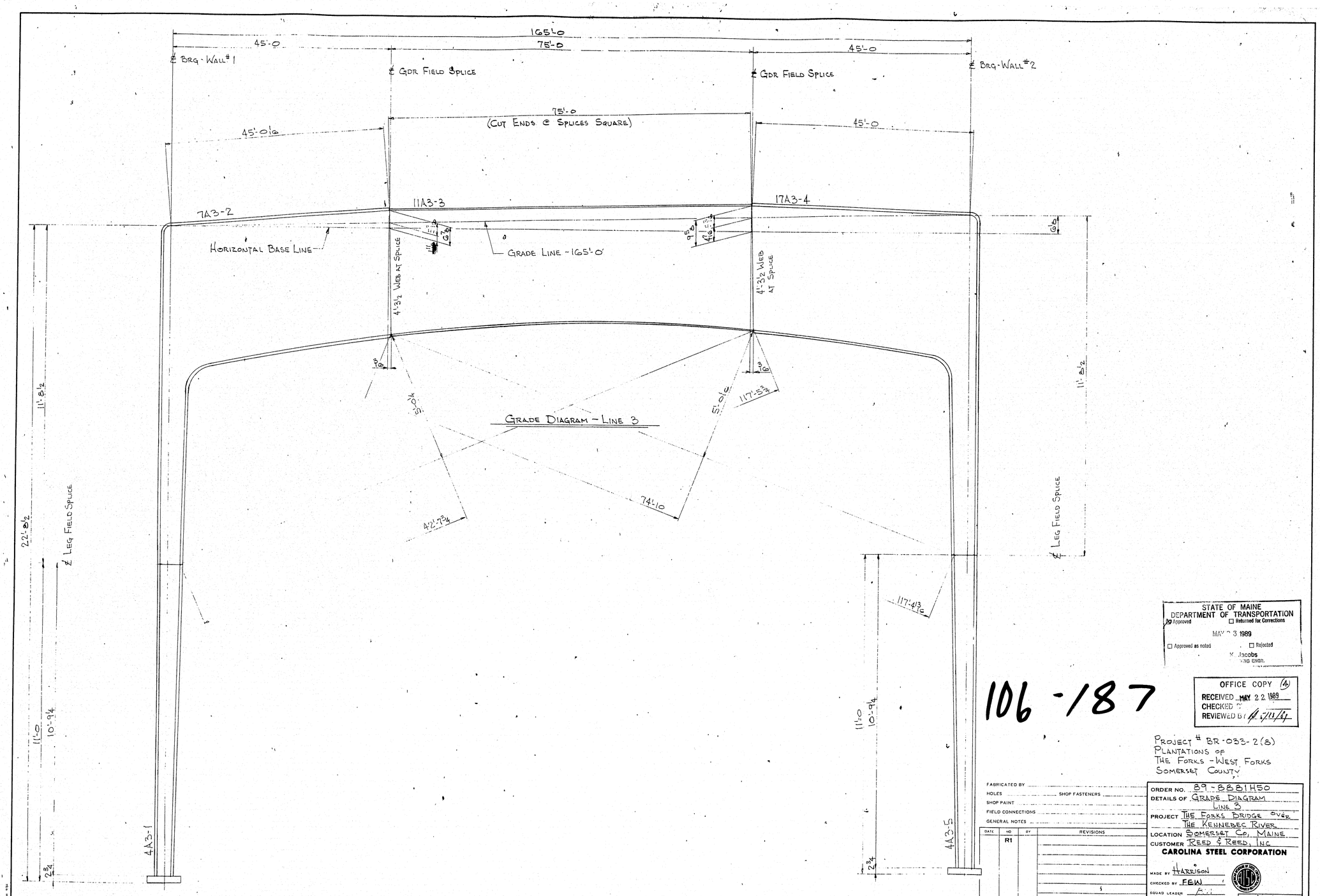
PROJECT # BR-033-2(8)
PLANTATIONS OF
THE FORKS - WEST FORKS
SOMERSET COUNTY

FABRICATED BY
HOLES SHOP FASTENERS
SHOP PAINT
FIELD CONNECTIONS
GENERAL NOTES

DATE	NO	BY	REVISIONS
	R1		

ORDER NO. 89-8881H50
DETAILS OF GRADE DIAGRAM LINE 2
PROJECT THE FORKS BRIDGE OVER THE KENNEBEC RIVER
LOCATION SOMERSET CO., MAINE
CUSTOMER REED & REED, INC
CAROLINA STEEL CORPORATION
MADE BY HARRISON
CHECKED BY FEW
SQUAD LEADER
DATE 3-30-89
SHEET HE3 OF



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
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MAY 3 1989
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M. Jacobs
ING ENGR.

106-187

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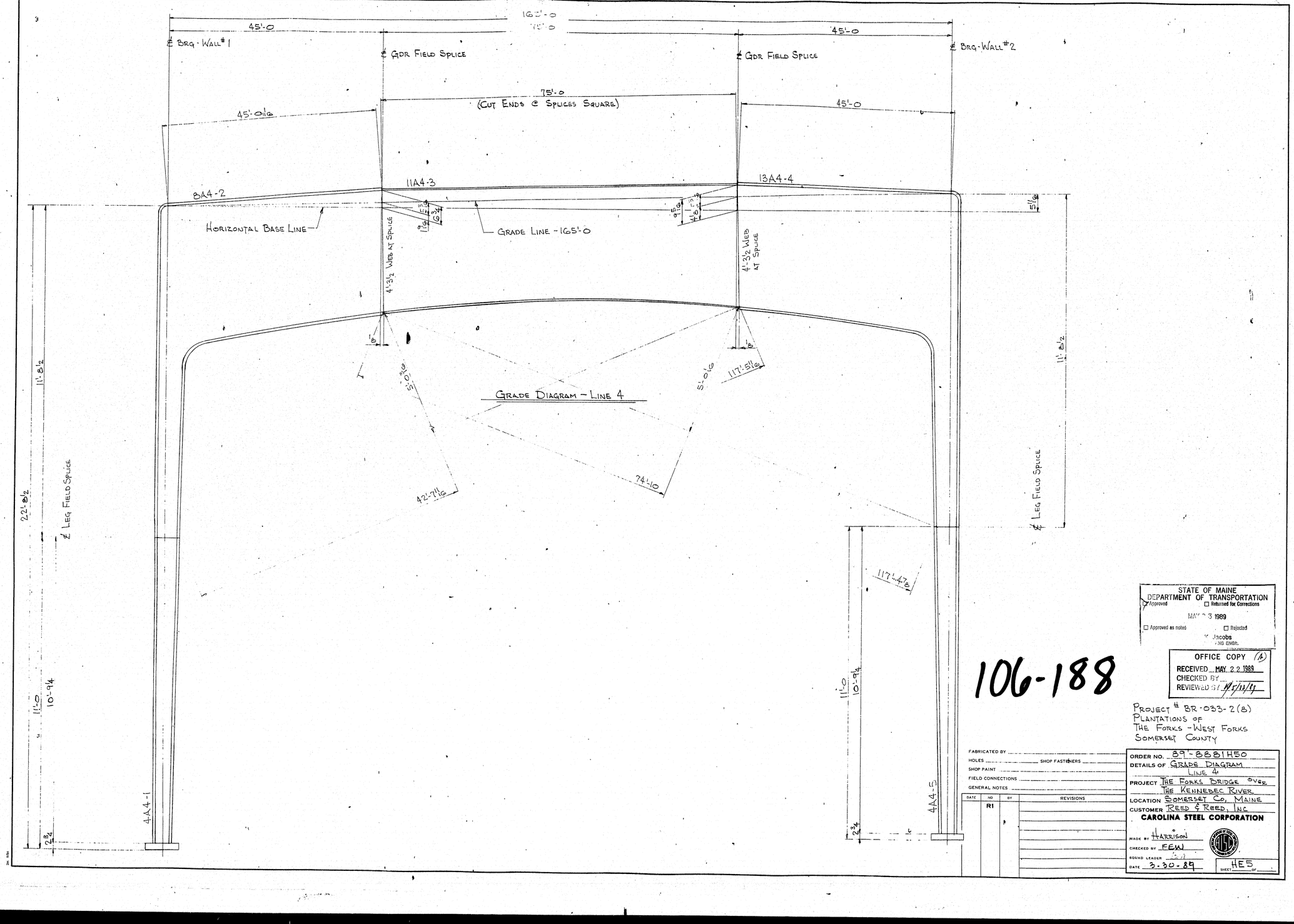
Project # BR-033-2(8)
Plantations of
The Forks - West Forks
Somerset County

FABRICATED BY
HOLES SHOP FASTENERS
SHOP PAINT
FIELD CONNECTIONS
GENERAL NOTES

DATE	NO	BY	REVISIONS
	R1		

ORDER NO. 89-8881H50
DETAILS OF Grade Diagram Line 3
PROJECT The Forks Bridge over The Kennebec River
LOCATION Somerset Co, Maine.
CUSTOMER Reed & Reed, Inc
CAROLINA STEEL CORPORATION
MADE BY Harrison
CHECKED BY FEW
SQUAD LEADER
DATE 3-30-89
SHEET HE4 OF



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
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MAY 23 1989
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Jacobs
ENG. ENGR.

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REVIEWED BY 5/23/89

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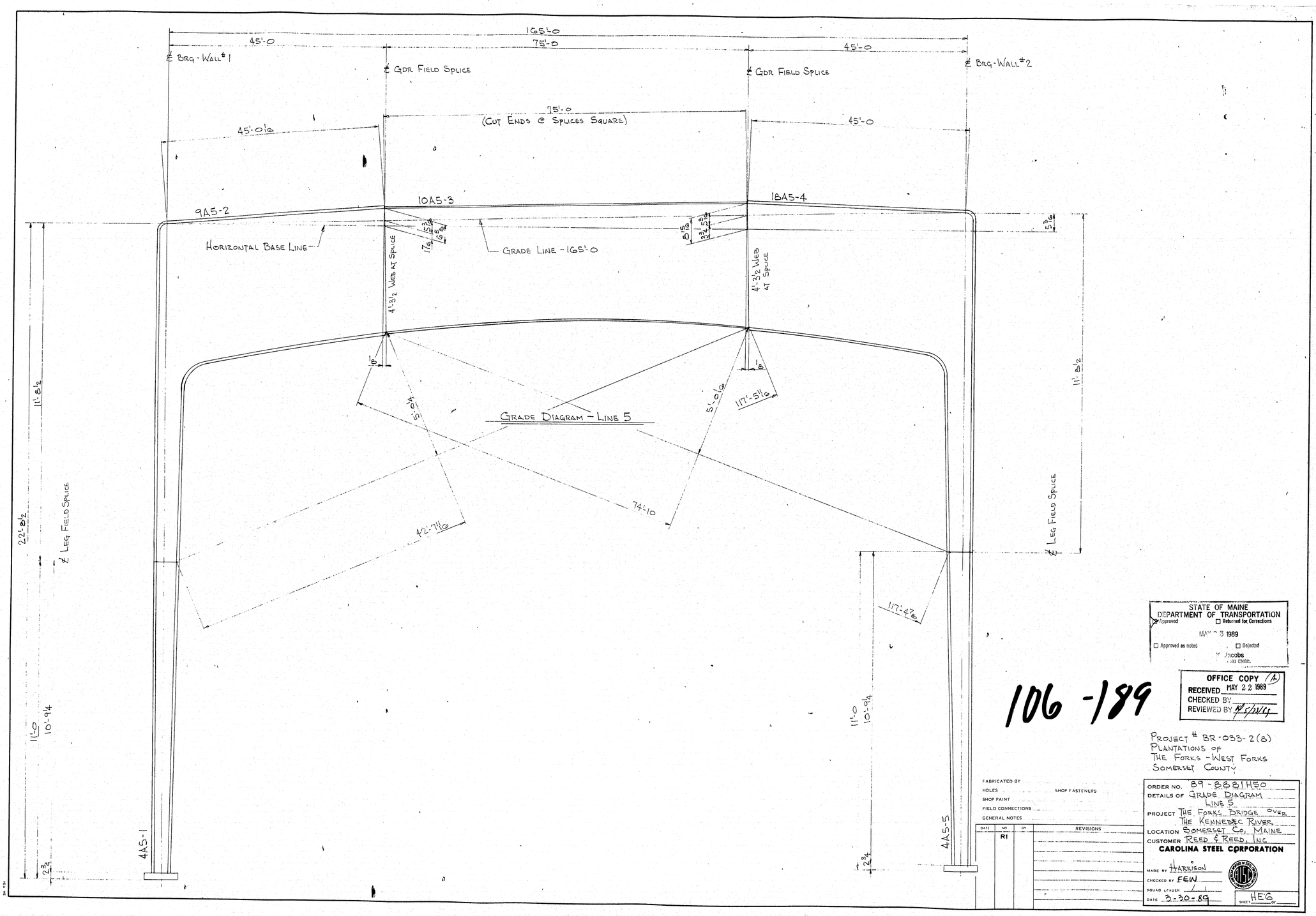
Project # BR-033-2(8)
Plantations of
The Forks - West Forks
Somerset County

FABRICATED BY
HOLES SHOP FASTENERS
SHOP PAINT
FIELD CONNECTIONS
GENERAL NOTES

DATE	NO	BY	REVISIONS
	R1		

ORDER NO. 89-8881H50
DETAILS OF Grade Diagram Line 4
PROJECT The Forks Bridge over The Kennebec River
LOCATION Somerset Co, Maine
CUSTOMER Reed & Reed, Inc
CAROLINA STEEL CORPORATION
MADE BY Harrison
CHECKED BY FEW
SQUAD LEADER
DATE 3-30-89
SHEET HE5 OF



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
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MAY 23 1989
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M. Jacobs
Bridge Engr.

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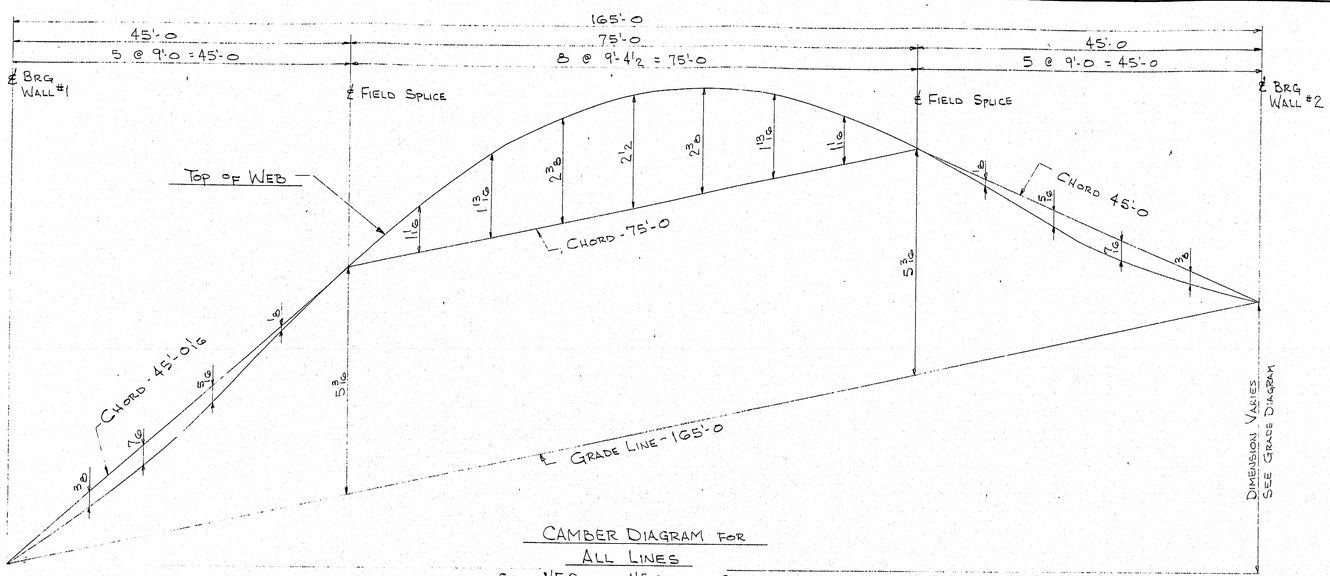
106-189

Project # BR-033-2(8)
Plantations of
The Forks - West Forks
Somerset County

FABRICATED BY
HOLES SHOP FASTENERS
SHOP PAINT
FIELD CONNECTIONS
GENERAL NOTES

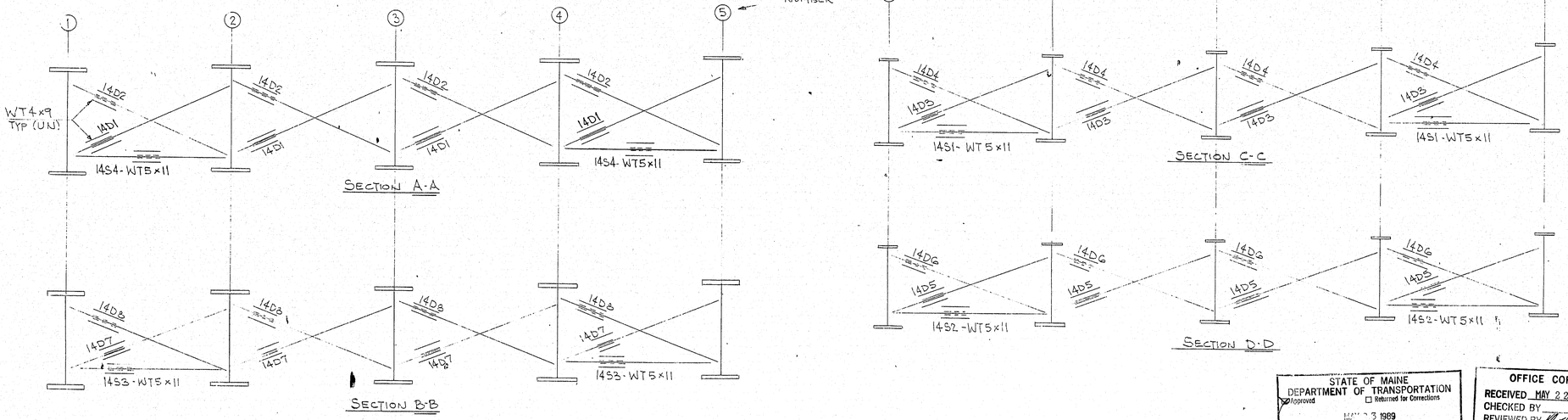
DATE	NO.	BY	REVISIONS
	R1		

ORDER NO. 89-8881H50
DETAILS OF Grade Diagram Line 5
PROJECT The Forks Bridge over The Kennebec River
LOCATION Somerset Co., Maine
CUSTOMER Reed & Reed, Inc.
CAROLINA STEEL CORPORATION
MADE BY Harrison
CHECKED BY FEW
SQUAD LEADER
DATE 3-30-89
SHEET HE'G OF



CAMBER DIAGRAM FOR ALL LINES

SEE HE2 THRU HE6 FOR GRADE DIAGRAMS



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
☒ Approved ☐ Returned for Corrections
MAY 3 1989
☐ Approved as noted ☐ Rejected
Jacobs

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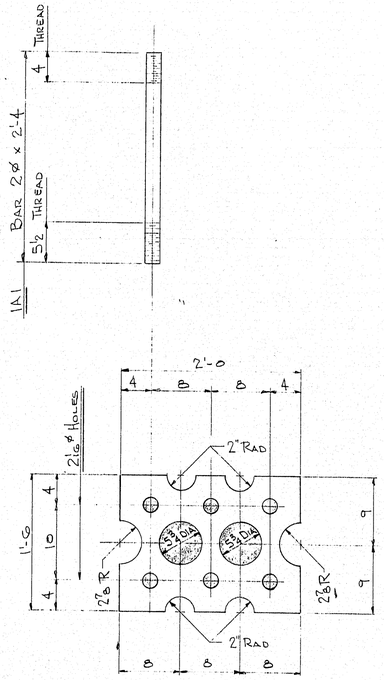
Proj # BR-033-2(8)
PLANTATIONS OF
THE FORKS - WEST FORKS
SOMERSET COUNTY

FABRICATED BY
HOLES SHOP FASTENERS
SHOP PAINT
FIELD CONNECTIONS
GENERAL NOTES

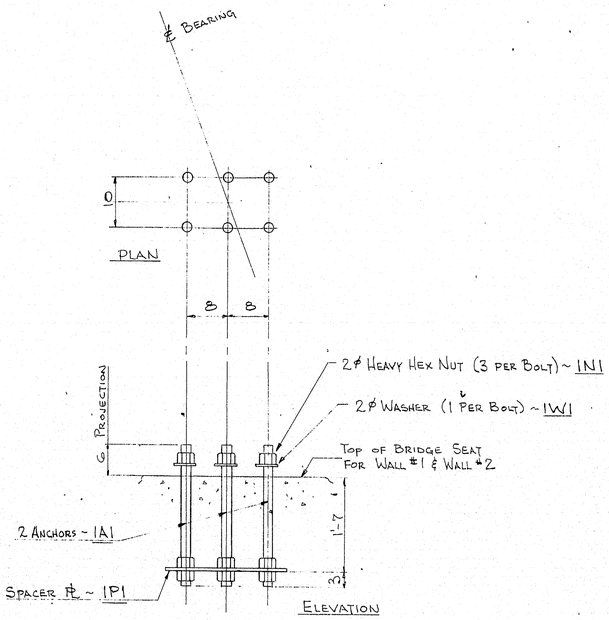
DATE	NO	BY	REVISIONS
	R1		

ORDER NO. 89-8881H50
DETAILS OF CAMBER DIAGRAM & CROSSFRAME SECTIONS
PROJECT THE FORKS BRIDGE OVER THE KENNEBEC RIVER
LOCATION SOMERSET CO, MAINE
CUSTOMER REED & REED, INC.
CAROLINA STEEL CORPORATION
MADE BY HARRISON
CHECKED BY FEW
SQUAD LEADER
DATE 3-30-89
SHEET HE7 OF

106-190



1P1 - SPACER PL ½ x 18 x 2'-0



FIELD ASSEMBLY FOR ANCHORS

SHOP BILL

LINE NO.	SHIPPING LIST NO PCS.	SHIPPING LIST MARK	PCS REQ'D	DESCRIPTION CODE	DESCRIPTION SYMBOL	DESCRIPTION SECTION DIM'S	LENGTH FEET	LENGTH INS.	ASSEMBLY MARK	REMARKS	MTRL SPEC.	MATERIAL APPLICATION P.O. NO.	MATERIAL APPLICATION LINE ITEM	MATERIAL APPLICATION NO. PCS.	MATERIAL APPLICATION LENGTH
6	60	1A1	60	CF	BAR	2 RD	2	4		THREAD	C101B	SOC			
11	10	1P1	10		PL	½ x 18	2	0			A36	SOC			
16	60	1W1	60	F	HWASH	2				GV	A325	BA 2762	1		
18	180	1N1	180	X	HNUT	2 HEX			#403	GV	A325	4	2		
60															
61										HOT DIP GALVANIZE:					
62										① ANCHOR BOLT TO ASTM A153					
63										② SPACER PL TO ASTM A123					
64										Approved, subject to testing by					
65										Univ. of Maine at Orono.					
73										DOMESTIC STEEL					

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
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DATE MAY 3 1989
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BY Jacobs
for CHIEF ENGR.

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PROJ # BR-033-2(8)
PLANTATIONS OF
THE FORKS - WEST FORKS
SOMERSET COUNTY

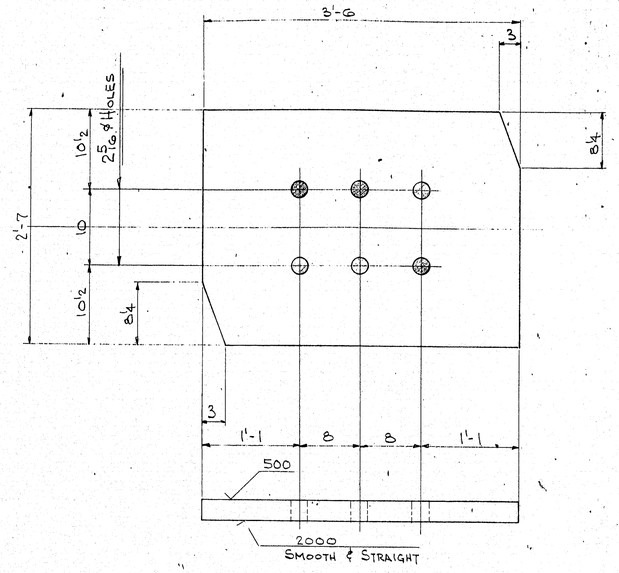
FABRICATED BY GREENSBORO
HOLES NOTED SHOP FASTENERS
SHOP PAINT SEE GALV. NOTE ABOVE
SHOP INSPECTION
GENERAL NOTES

DATE	NO	BY	REVISIONS
	R1		

ORDER NO. 89-8881H52
DETAILS OF ANCHOR ASSEMBLY
PROJECT THE FORKS BRIDGE OVER THE KENNEBEC RIVER
LOCATION SOMERSET Co, MAINE
CUSTOMER REED & REED, INC
CAROLINA STEEL CORPORATION
MADE BY HARRISON
CHECKED BY EEW
SQUAD LEADER
DATE 3-30-89
SHEET HF1 OF

106 - 191

BM #487



SA - BASE PL 2¾ x 31 x 3'-6

TO BE SHOPWELDED TO PL GDR LEGS AFTER FAB.
SEE SHT HF4.

106-192

SHOP BILL

LINE NO	SHIPPING LIST NO PCS	SHIPPING LIST MARK	PCS REQ'D	DESCRIPTION CODE	DESCRIPTION SYMBOL	DESCRIPTION SECTION DIM'S	LENGTH* FEET	LENGTH* INS.	ASSEM. SEQ. MARK	REMARKS	MTRL SPEC.	MATERIAL APPLICATION P.O. NO.	MATERIAL APPLICATION LINE ITEM	MATERIAL APPLICATION NO. PCS.	MATERIAL APPLICATION LENGTH
1															1
10			10	PL		3 X 31	3	6	SA	FIN TO 2¾	A588	647405	1		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
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MAY 3 1989
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for CHIEF ENGR

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PROJ # BR-033-2(8)
PLANTATIONS OF
THE FORKS - WEST FORKS
SOMERSET COUNTY

DOMESTIC STEEL

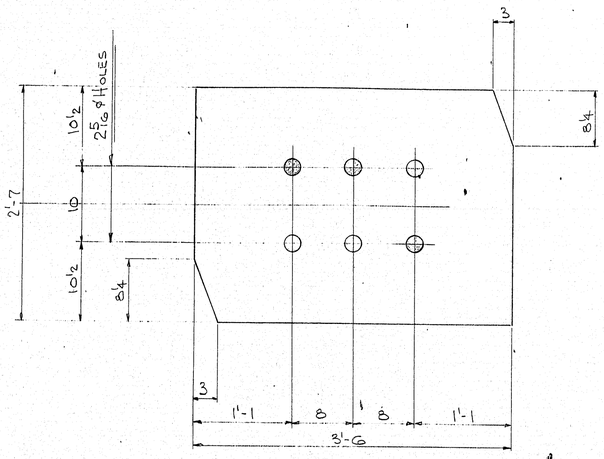
FABRICATED BY COLFAX
HOLES NOTED SHOP FASTENERS
SHOP PAINT NONE
SHOP INSPECTION
GENERAL NOTES

DATE	NO	BY	REVISIONS
	R1		

ORDER NO. 89-8881H52
DETAILS OF BASE PLATE
PROJECT THE FORKS BRIDGE OVER THE KENNEBEC RIVER
LOCATION SOMERSET Co; MAINE
CUSTOMER REED & REED, INC.

CAROLINA STEEL CORPORATION

MADE BY HARRISON
CHECKED BY BEW
SQUAD LEADER BM
DATE 3-30-89
SHEET HF2 OF



3P1 - PREFORMED PAD 1⅛ x 31 x 3'-6
TO MEET STATE OF MAINE
DEPT. OF TRANSPORTATION
STANDARD SPECIFICATIONS - 1988
REQUIREMENTS OF SECTION 713.03

106 -193

SHOP BILL

LINE NO.	SHIPPING LIST NO PCS.	SHIPPING LIST MARK	PCS. REQ'D	DESCRIPTION CODE	DESCRIPTION SYMBOL	DESCRIPTION SECTION DIM'S	LENGTH FEET	LENGTH INS.	ASSEM. MLY MARK	REMARKS	MTRL. SPEC.	MATERIAL APPLICATION P.O. NO.	MATERIAL APPLICATION LINE ITEM	MATERIAL APPLICATION NO. PCS.	MATERIAL APPLICATION LENGTH
10	10	3P1	10	X	PAD	1⅛ x 31,	3	6		80#	AS TO HS SHORE A DUROMETER	00-1157	1		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
☐ Approved ☐ Returned for Corrections
MAY 3 1989
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JACOBS
ENG ENGR.

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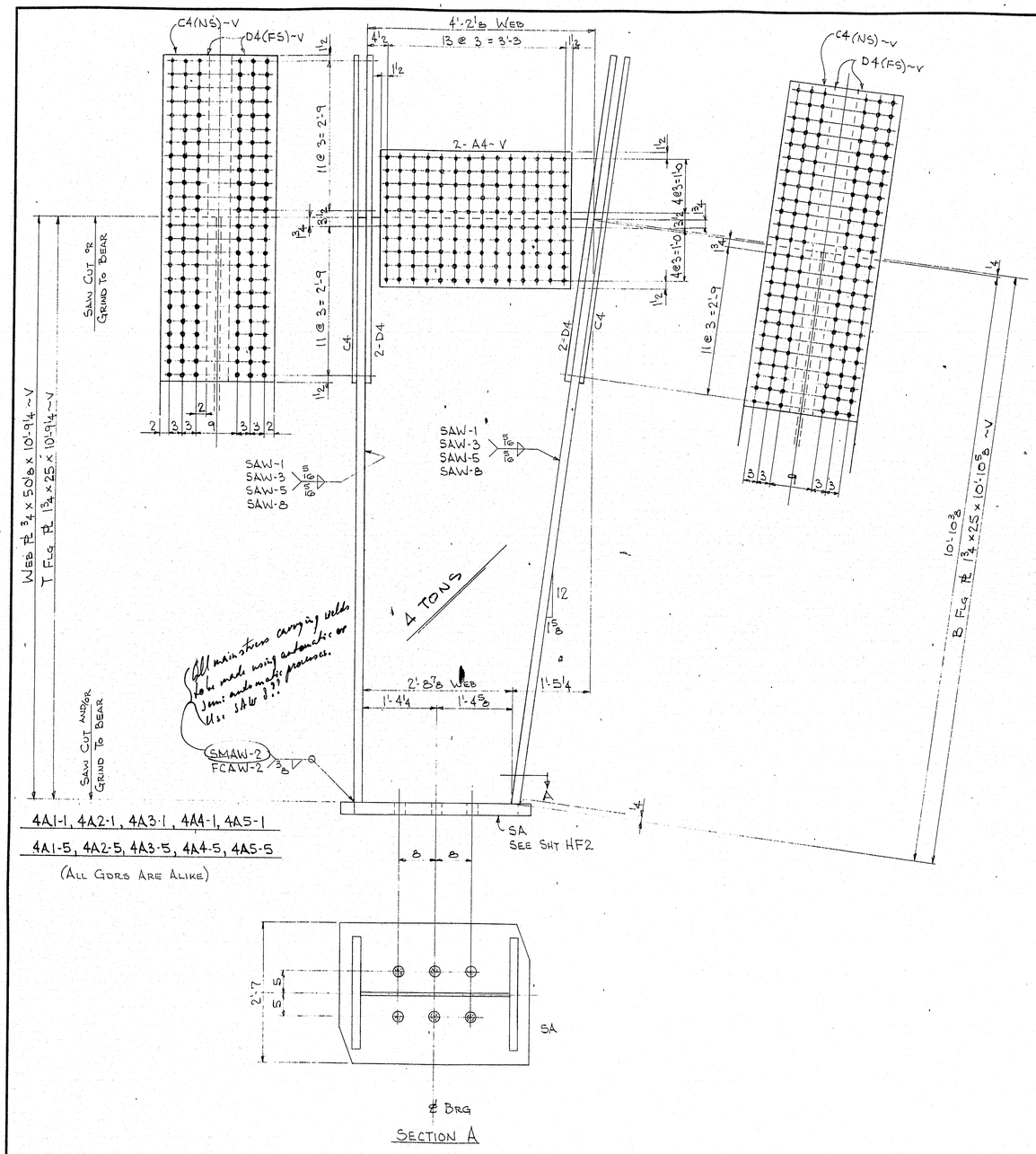
PROJ # BR-033-2(8)
PLANTATIONS OF
THE FORKS - WEST FORKS
SOMERSET COUNTY

FABRICATED BY ABINGDON
HOLES NOTED SHOP FASTENERS
SHOP PAINT NONE
SHOP INSPECTION
GENERAL NOTES

DATE	NO	BY	REVISIONS
	R1		

ORDER NO. 89-8881H52
DETAILS OF PREFORMED BRG PAD
PROJECT THE FORKS BRIDGE OVER THE KENNEBEC RIVER
LOCATION SOMERSET CO, MAINE
CUSTOMER REED & REED, INC
CAROLINA STEEL CORPORATION
MADE BY HARRISON
CHECKED BY FEW
SQUAD LEADER DEA
DATE 3-30-89
SHEET HF3 OF

BM 9/87



106-194

SHOP BILL

LINE ITEM	SHIPPING LIST NO PCS	SHIPPING LIST MARK	PCS REQ'D	DESCRIPTION CODE	DESCRIPTION SYMBOL	DESCRIPTION SECTION DIM'S	LENGTH FEET	LENGTH INS.	ASSEM. SLT MARK	REMARKS	MTRL. SPEC.	MATERIAL APPLICATION P.O. NO.	MATERIAL APPLICATION LINE ITEM	MATERIAL APPLICATION NO. PCS.	MATERIAL APPLICATION LENGTH
1															
2															
3	1	4A1-1				PL GIRDER									
4	1	4A2-1													
5	1	4A3-1													
6	1	4A4-1													
7	1	4A5-1													
8	1	4A1-5													
9	1	4A2-5													
10	1	4A3-5													
11	1	4A4-5													
12	1	4A5-5													
13			10		PL	¾ x 50⅛	10	9¼	WA	FAB SEE -V	A588	6471-05	10		
14			10		PL	1¾ x 25	10	9¼	TFA	-V			3		
15			8		PL	1¾ x 25	10	10⅛	BFA	-V			3		
16			20		PL	1/16 x 30½	3	6	A4	V			12		
17			12		PL	⅞ x 25	6	0½	C4	V			7		
18			24		PL	1¼ x 10	6	0½	D4	V			4		
19			2		PL	1¾ x 25	10	10⅛	BFA	FAB SEE -V	A588		1		
20			10			SOLE PL			SA	SEE HF2					
21			20	F	HSBT	⅞		3		SHIPPING	A307	A325 ??			
22			80	F	HSBT	⅞		5							
23															
24			8		PL				C4	V	A588	6471-05	8		
25			16		PL				D4	V			5		
26															
27															
28															
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60															
61															
62															
63	SEE SHT HN1 FOR FABRICATION NOTES														
64															
65	DOMESTIC STEEL														
66															
67															
68															
69															
70															
71															
72															
73															

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
☐ Approved ☐ Returned for Corrections
MAY 5 1989
☑ Approved as noted ☐ Rejected
Jacobs
Engineer

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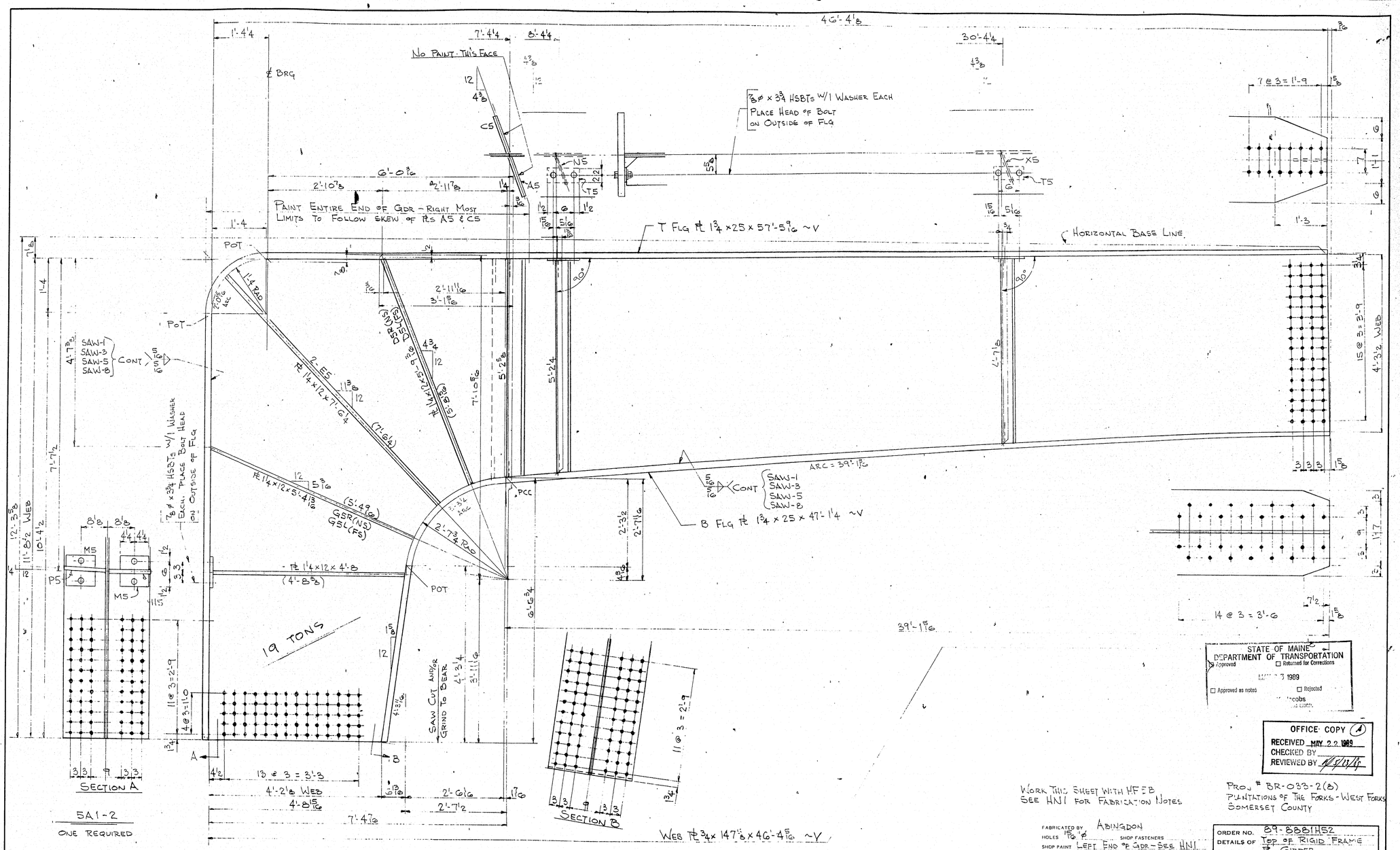
REVIEWED BY: 5/23/89

PROJ. # BR-0373-2(8)
PLANTATIONS OF
THE FORKS - WEST FORKS
SOMERSET COUNTY

FABRICATED BY ABINGDON
HOLES 16 & 9 SHOP FASTENERS
SHOP PAINT BASIC LEAD SILICO-CHROMATE
SHOP INSPECTION
GENERAL NOTES

DATE	NO	BY	REVISIONS
	R1		

ORDER NO. 89-8881HS2
DETAILS OF PLATE GIRDERS - LEGS OF RIGID FRAME
PROJECT THE FORKS BRIDGE OVER THE KENNEBEC RIVER
LOCATION SOMERSET CO., MAINE
CUSTOMER REED & REED, INC.
CAROLINA STEEL CORPORATION
MADE BY Harrison
CHECKED BY FEW
SQUAD LEADER Bill
DATE 3-20-89
SHEET HF4 OF



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DEPARTMENT OF TRANSPORTATION
☐ Approved ☐ Returned for Corrections
MAY 3 1989
☐ Approved as notes ☐ Rejected
Jacobs

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REVIEWED BY

Work This Sheet With HF5B
See HN1 for Fabrication Notes

Proj # BR-033-2(8)
Plantations of The Forks - West Forks
Somerset County

FABRICATED BY Abingdon
HOLES 15/16" ø SHOP FASTENERS
SHOP PAINT Left End of Gdr - See HN1
FIELD CONNECTIONS
GENERAL NOTES

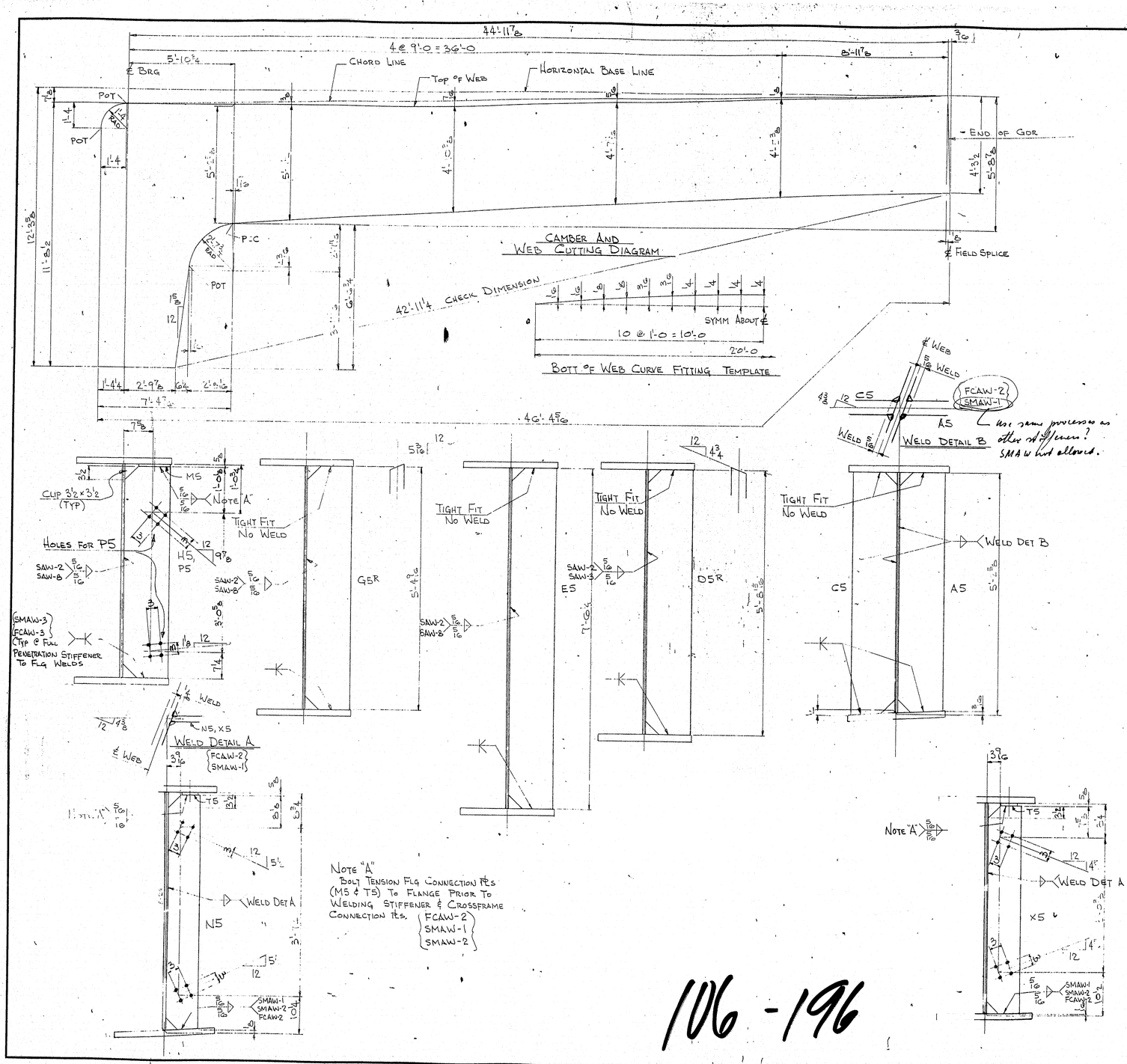
DATE	NO.	BY	REVISIONS
	R1		

ORDER NO. 89-8881H52
DETAILS OF Top of Rigid Frame
Pt. Girder
PROJECT The Forks Bridge over
The Kennebec River
LOCATION Somerset Co., Maine
CUSTOMER Reed & Reed, Inc

CAROLINA STEEL CORPORATION

MADE BY Harrison
CHECKED BY FEW
SQUAD LEADER
DATE 3-30-89
SHEET HF5A

106-195



SHOP BILL

ITEM	SHIPPING LIST NO. PCS.	SHIPPING LIST MARK	PCS. REQ'D	DESCRIPTION CODE	DESCRIPTION SYMBOL	DESCRIPTION SECTION DIM'S	LENGTH FEET	LENGTH INS.	ASSEM. SEQ. MARK	REMARKS	MTRL. SPEC.	MATERIAL APPLICATION P.O. NO.	MATERIAL APPLICATION LINE ITEM	MATERIAL APPLICATION NO. PCS.	MATERIAL APPLICATION LENGTH
1															
2															
3															
4															
5	1	SA1-2				PLATE GIRDER									
6			1	PL		¾ × 147⅝	46	4⅞	WA	ICUTS 2-V	A588	G471-US	9		
7			1	PL		1¾ × 25	57	5/16	TFA	ROLL-V		G471-US	1		
8			1	PL		1¾ × 25	47	1¼	BFA	ROLL-V		"	2		
9			1	PL		1¼ × 12	5	2⅞	A5	BEV-1-E		G472-US	2		
10			1	PL		1¼ × 12	5	2⅞	C5				2		
11			2	PL		1¼ × 12	5	1⅜	D5RL				1		
12			2	PL		1¼ × 12	5	4⅜	G5RL				2		
13			2	PL		1¼ × 12	7	6¼	E5				4		
14			1	PL		1¼ × 12	4	8	H5				3		
15			2	PL		⅝ × 8½		9	M5			SOC			
16			2	PL		⅝ × 4		9	T5			SOC			
17			1	PL		⅜ × 8½	5	15⅝	N5	TEMP		G472-US	5		
18			1	PL		⅜ × 8½	4	6½	X5			"	5		
19			1	PL		1¼ × 12	4	8	P5	BEV-1-E		"	3		
20															
21															
22															
23			6	F	HSBT ⅞		3¾			TYPE 3	A325	BA22601	7		
24			3	F	HWASH. ⅞					TYPE 3	A325	"	8		
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67	WORK THIS SHEET WITH HF5A														
68	SEE HN1 FOR FABRICATION NOTES														
69															
70															
71															
72															
73	DOMESTIC STEEL														

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
☐ Approved ☐ Returned for Corrections
MAY 3 1989
☒ Approved as noted ☐ Rejected
by [illegible]

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REVIEWED BY 5/19/89

PROJ # BR-033-2(8)
PLANTATIONS OF THE FORKS - WEST FORKS
SOMERSET COUNTY

FABRICATED BY ABINGDON
HOLES ⅞" ℄ SHOP FASTENERS
SHOP PAINT SEE NOTES - SHT HN1
SHOP INSPECTION
GENERAL NOTES

DATE	NO	BY	REVISIONS
	R1		

ORDER NO. 89-8881H52
DETAILS OF PLATE GIRDER
PROJECT THE FORKS BRIDGE OVER THE KENNEBEC RIVER
LOCATION SOMERSET CO, MAINE
CUSTOMER REED & REED, INC.
CAROLINA STEEL CORPORATION
MADE BY HARRISON
CHECKED BY FEW
SQUAD LEADER BMM
DATE 3-20-89
SHEET HF5B

46'-4 1/8

1'-4 1/4 | 7'-4 1/4 | 8'-4 1/4 | 30'-4 1/4

℄ BRG

No. Paint This Face

12 | 4 3/8 | 5/16 | 15/16

C5

T5

L6

N5

2 2

A5

6'-0 3/16 | 2'-10 7/8 | 2'-11 7/8

1 1/4

1 1/2 | 6 | 1 1/2

Paint Entire End of GDR - Right Most Limits to Follow Skew of Pcs A5 & C5

7/8 ø x 3 3/4 HSBTs W/1 Washer Each Place Head of Bolt on Outside of Flg

5/16 | 5/16

EG

T5

D6

T5

T Flg Pl 1 3/4 x 25 x 57'-5 9/16 ~V

℄ Horizontal Base Line

7 @ 3 = 1'-9

6 | 7 | 1'-1 | 6

1'-3

1'-4

PoT

7

1'-4

4'-7 3/8

(SAW-1 SAW-3 SAW-5 SAW-8) Cont 5/16 | 5/16

11'-8 1/2 Web

10'-4 1/2

7'-7 1/2

Pl 1/4 x 12 x 7'-6 1/4 (7'-6 1/8)

Pl 1/4 x 12 x 5'-4 1/8 (5'-4 7/8)

GSR(NS) GSL(FS)

Pl 1/4 x 12 x 4'-8 (4'-8 5/8)

POT

PCC

11.4 Rad

20°8" Arc

2'-11 1/16 | 3'-1 5/16

(SAW-1 SAW-3 SAW-5 SAW-8) Cont 5/16 | 5/16

Pl 1/4 x 12 x 5'-9 5/16 (5'-9 1/16)

4 3/4 | 12

11 3/8 | 12

12 | 5 3/16

3/4 Arc

2'-7 3/4 R20

5'-2 5/8

5'-2 1/4

7'-10 5/16

2'-3 1/2

2'-7 11/16

4'-8 7/8

6'-6 3/4

39'-1 5/16

B Flg Pl 1 3/4 x 25 x 47'-1 1/4 ~V

ARC = 39'-1 5/16

(SAW-1 SAW-3 SAW-5 SAW-8) Cont 5/16 | 5/16

7/8 ø x 2 3/4 HSBTs W/1 Washer Each Place Head of Bolt on Outside of Flg

P5

M5

M5

8'-8 | 8'-8 | 4 4 | 4 4

1 1/2 | 6 | 3 3 | 1 1/2

11 @ 3 = 11'-0

14 @ 3 = 11'-0

1 3/4

4'-2 1/8 Web

4'-8 15/16

13 @ 3 = 3'-3

4'-6

7'-4 7/16

SECTION A

6A2-2

ONE REQUIRED

19 TONS

Saw Cut and/or Grind To Bear

4'-3 3/4

3'-1 11/16

4'-3 15/16

15/16 | 12

B

2'-6 5/8 | 1 7/8 | 2'-7 1/2

SECTION B

11 @ 3 = 2'-9

3 3 9 3 3

Web Pl 3/4 x 147" x 46'-4 5/16 ~V

15 @ 3 = 3'-9

4'-3 1/2 Web

3 3 3 15/8

14 @ 3 = 3'-6

7 1/2 | 15/8

3 | 6 | 17 | 3 | 3

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
☐ Approved ☐ Returned for Corrections
☐ Approved as noted ☐ Rejected
Jacobs

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Work This Sheet With HFGB
See HN1 For Fabrication Notes

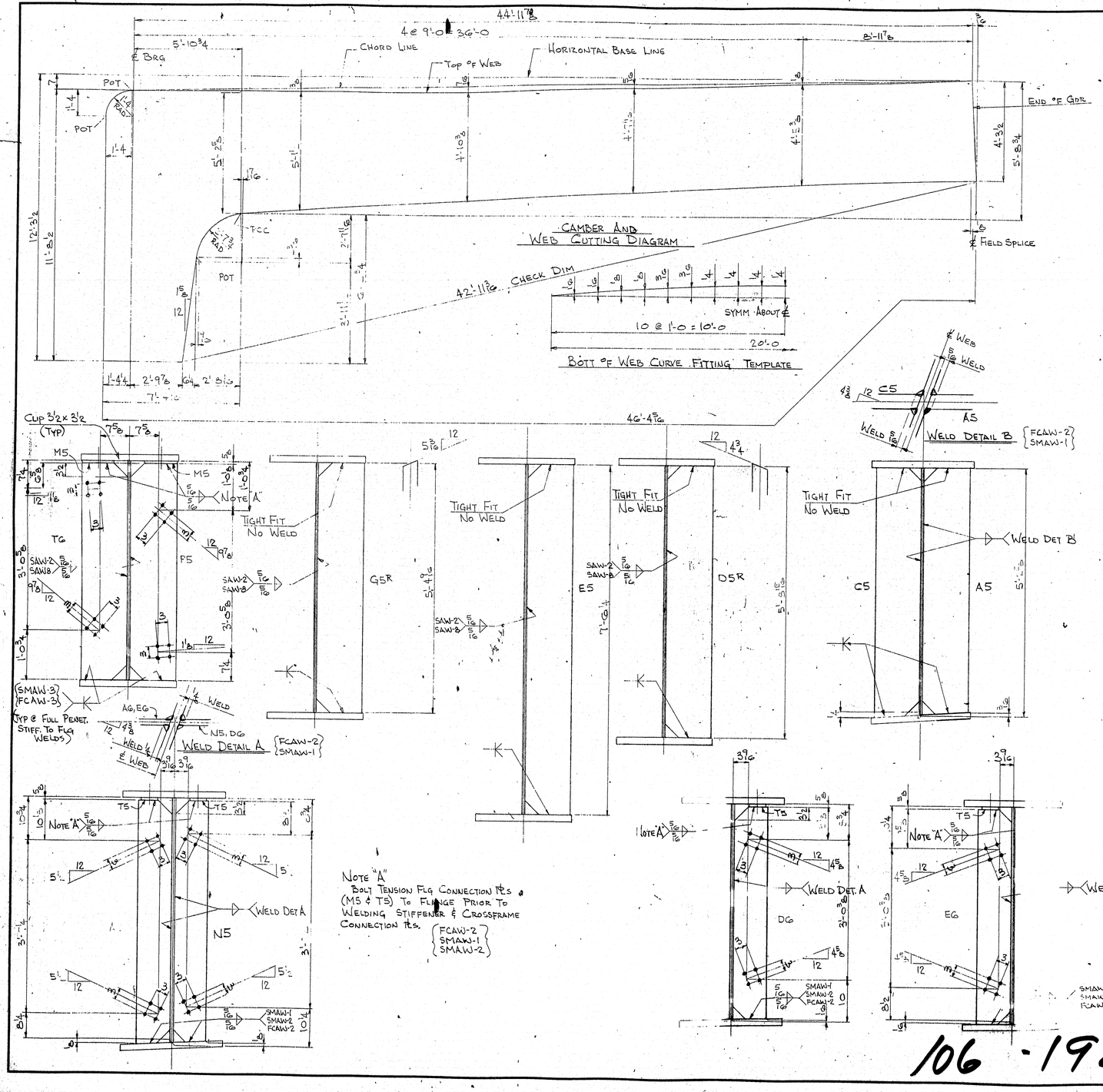
Proj # BR-033-2(8)
Plantations of The Forks - West Forks
Somerset County

FABRICATED BY Abingdon
HOLES 15/16 SHOP FASTENERS
SHOP PAINT Left End of GDR - See HN1
FIELD CONNECTIONS
GENERAL NOTES

DATE	No.	BY	REVISIONS
	R1		

ORDER NO. 89-8881H52
DETAILS OF Top of Rigid Frame Pl Girder
PROJECT The Forks Bridge over The Kennebec River
LOCATION Somerset Co., Maine
CUSTOMER Reed & Reed, Inc
CAROLINA STEEL CORPORATION
MADE BY Harrison
CHECKED BY FEW
SQUAD LEADER
DATE 3-30-89
SHEET HFGA

106-197



SHOP BILL

SHIPPING LIST NO.	SHIPPING LIST PCS.	MARK	PCS. REQ'D	DESCRIPTION CODE	DESCRIPTION SYMBOL	DESCRIPTION SECTION DIM'S	LENGTH FEET	LENGTH INS.	ASSEMBLY MARK	REMARKS	MTRL. SPEC.	MATERIAL APPLICATION P.O. NO.	MATERIAL APPLICATION LINE ITEM	MATERIAL APPLICATION NO. PCS.	MATERIAL APPLICATION LENGTH
1															
2															
3															
4															
5	1	GA2-2				PLATE GIRDER									
6			1		PL	¾ x 147½	46	4⅝	WA	1 CUT 2-V	A588	G471-US	9		
7			1		PL	¾ x 25	57	5/16	TFA	ROLL-V		G471-US	1		
8			1		PL	¾ x 25	47	1/4	BFA	ROLL-V			2		
9			1		PL	¼ x 12	5	5/16	A5	BEV-1-E		6472-US	2		
10			1		PL	¼ x 12	5	5/16	C5				2		
11			2		PL	¼ x 12	5	13/16	D5RL				1		
12			2		PL	¼ x 12	5	4⅞	G5RL				2		
13			2		PL	¼ x 12	7	5/16	E5				4		
14			1		PL	¼ x 12	4	8	P5				3		
15			2		PL	⅝ x 8½		9	M5			SOC			
16			4		PL	⅝ x 4		9	T5			SOC			
17			1		PL	⅜ x 8½	5	15/16	N5	TEMP		6472-US	5		
18			1		PL	⅜ x 8½	5	1¾	AG				5		
19			1		PL	⅜ x 8½	4	6½	DG				5		
20			1		PL	⅜ x 8½	4	6½	EG				5		
21			1		PL	¼ x 12	4	8	TG	BEV-1-E			5		
22															
23			12	F	HSBT	⅞		¾		TYPE 3	A325	BA2261	7		
24			12	F	HWASH	⅞				TYPE 3	A325		8		

FOR CHANGES SEE K #58

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REVIEW

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
☐ Approved ☐ Returned for Corrections
MAY 3 1989
☒ Approved as noted ☐ Rejected
for CHIEF ENGINEER

WORK THIS SHEET WITH HFGA
SEE HN1 FOR FABRICATION NOTES

PROJ.# BR-033-2(8)
PLANTATIONS OF THE FORKS - WEST FORKS
SOMERSET COUNTY

DOMESTIC STEEL
FABRICATED BY ABINGDON
HOLES 15/16" ø SHOP FASTENERS
SHOP PAINT SEE NOTES - SHT HN1
SHOP INSPECTION
GENERAL NOTES

DATE	NO	BY	REVISIONS
	R1		

ORDER NO. 89-8881 H52
DETAILS OF PLATE GIRDER
PROJECT THE FORKS BRIDGE OVER THE KENNEBEC RIVER
LOCATION SOMERSET CO, MAINE
CUSTOMER REED & REED, INC
CAROLINA STEEL CORPORATION
MADE BY HARRISON
CHECKED BY FEW
SQUAD LEADER Ben
DATE 3-30-89
SHEET HFGB

106-198

APR 26 1989

46'-4 1/8

1'-4 1/4 | 7'-4 1/4 | 8'-4 1/4 | 30'-4 1/4

℄ BRG

NO PAINT THIS FACE

PAINT ENTIRE END OF GDR - RIGHT MOST LIMITS TO FOLLOW SKEW OF PLS A5 & C5

7/8ø x 3 3/4 HSBTs W/1 WASHER EACH PLACE HEAD OF BOLT ON OUTSIDE OF FLG

T FLG PL 1 3/4 x 25 x 57'-5 9/16 ~V

℄ HORIZONTAL BASE LINE

B FLG PL 1 3/4 x 25 x 47'-1 1/4 ~V

ARC = 39'-1 5/16

CONT (SAW-1, SAW-3, SAW-5, SAW-8)

POT

PCC

2-ES PL 1 1/4 x 12 x 71'-6 1/4

DSR(NS) DSL(FS) PL 1 1/4 x 12 x 51'-9 3/16

GSR(NS) GSL(FS) PL 1 1/4 x 12 x 5'-4 13/16

PL 1 1/4 x 12 x 4'-8

7/8ø x 2 3/4 HSBTs W/1 WASHER EACH PLACE HEAD OF BOLT ON OUTSIDE OF FLG

1 1/4 RAD

2'-7 3/4 RAD

2'-7 3/4 ARC

SAW CUT AND/OR GRIND TO BEAR

19 TONS

7 @ 3 = 1'-9

1'-3

15 @ 3 = 2'-9

4'-3 1/2 WEB

14 @ 3 = 3'-6

11 @ 3 = 2'-9

13 @ 3 = 3'-3

4'-2 1/8 WEB

4'-8 15/16

7'-4 7/8

39'-1 5/16

W 36 x 147 7/8 x 46'-4 5/16 ~V

SECTION A

SECTION B

7A3-2
ONE REQUIRED

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
☒ Approved ☐ Returned for Corrections
MAY 5 1989
☐ Approved as noted ☐ Rejected
M. Jacobs
ENG ENGR.

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SEE HN1 FOR FABRICATION NOTES

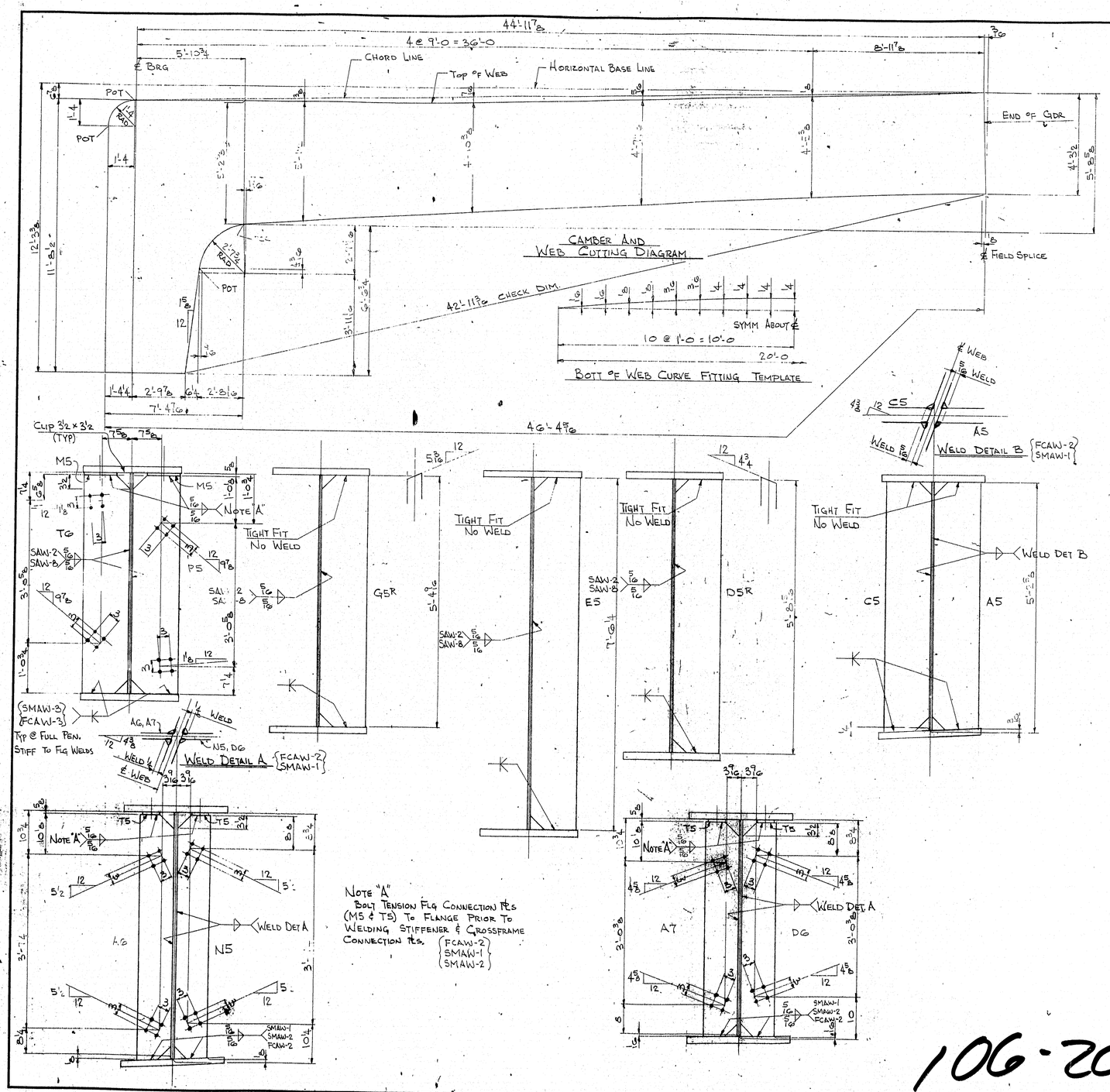
PROJ # BR-033-2(8)
PUNTATIONS OF THE FORKS - WEST FORKS
SOMERSET COUNTY

FABRICATED BY ABINGDON
HOLES FSF SHOP FASTENERS
SHOP PAINT LEFT END OF GDR - SEE HN1
FIELD CONNECTIONS
GENERAL NOTES

DATE	NO	BY	REVISIONS
	R1		

ORDER NO. 89-8881H52
DETAILS OF Top of Rigid Frame ℄ Girder
PROJECT The Forks Bridge over The Kennebec River
LOCATION Somerset Co., Maine
CUSTOMER Reed & Reed, Inc
CAROLINA STEEL CORPORATION
MADE BY Harrison
CHECKED BY FEW
SQUAD LEADER Jim
DATE 3-30-89
SHEET HF7A

106-199



106-200

SHOP BILL

ITEM	SHIPPING LIST NO. PCS.	SHIPPING LIST MARK	PCS. REQ'D	DESCRIPTION CODE	DESCRIPTION SYMBOL	DESCRIPTION SECTION DIM'S	LENGTH FEET	LENGTH INS.	ASSEM. SLV MARK	REMARKS	MTRL. SPEC.	MATERIAL APPLICATION P.O. NO.	MATERIAL APPLICATION LINE ITEM	MATERIAL APPLICATION NO. PCS.	MATERIAL APPLICATION /LENGTH
5	1	7A3-2				PLATE GIRDER									
6			1		PL	3/4 x 147 5/8	46	4 5/16	WA	ICUN 2-V	A588	6471-US	9		
7			1		PL	1 3/4 x 25	57	4 5/16	TFA	ROLL-V		6471-US	1		
8			1		PL	1 3/4 x 25	47	1/4	BFA	ROLL-V		"	2		
9			1		PL	1/4 x 12	5	2 3/8	A5	BEV-1-E		6472-US	2		
10			1		PL	1/4 x 12	5	2 7/8	C5				2		
11			2		PL	1/4 x 12	5	9 7/8	D5RL				1		
12			2		PL	1/4 x 12	5	4 13/16	G5RL				2		
13			2		PL	1/4 x 12	7	6 1/2	E5				4		
14			1		PL	1/4 x 12	4	8	T5				3		
15			2		PL	5/8 x 8 1/2		9	M5			SOC			
16			4		PL	5/8 x 4		9	T5			SOC			
17			1		PL	3/8 x 8 1/2	5	1 5/8	N5	TEMP		6472-US	5		
18			1		PL	3/8 x 8 1/2	5	1 3/4	A6				5		
19			1		PL	3/8 x 8 1/2	4	6 1/2	D6				5		
20			1		PL	5/8 x 8 1/2	4	6 13/16	A7				5		
21			1		PL	1/4 x 12	4	8	T6	BEV-1-E			3		
23			12	F	HSBT	7/8		2 3/4		TYPE 3	A325	BA22G	7		
24			12	F	HWASH	7/8				TYPE 3	A325	"	8		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
☐ Approved ☐ Returned for Corrections
MAY 3 1989
☒ Approved as noted ☐ Rejected
Jacobs
for Chief Engineer

For Comments See SHEET HF5B

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WORK THIS SHEET WITH HF7A
SEE HN1 FOR FABRICATION NOTES

DOMESTIC STEEL

Proj.# BR-033-2(8)
PLANTATIONS OF THE FORKS - WEST FORKS
SOMERSET COUNTY

FABRICATED BY ABINGDON
HOLES 15/16 ℄ SHOP FASTENERS
SHOP PAINT SEE NOTES - SHT HN1
SHOP INSPECTION
GENERAL NOTES

DATE	NO	BY	REVISIONS
	R1		

ORDER NO. 89-8881H52
DETAILS OF PLATE GIRDER
PROJECT THE FORKS BRIDGE OVER THE KENNEBEC RIVER
LOCATION SOMERSET CO., MAINE
CUSTOMER REED & REED, INC.
CAROLINA STEEL CORPORATION
MADE BY HARRISON
CHECKED BY FEW
SQUAD LEADER BM
DATE 3-30-89
SHEET HF7B

46'-4 1/8

1'-4 1/4 ℄ BRG

7'-4 1/4

8'-4 1/4

30'-4 1/4

NO PAINT - THIS FACE

7/8ø x 3 3/4 HSBTS W/1 WASHER EACH PLACE HEAD OF BOLT ON OUTSIDE OF FLG

PAINT ENTIRE END OF GDR - RIGHT MOST LIMITS TO FOLLOW SKEW OF ℄S A5 & C5

6'-0 3/16

2'-10 7/8

2'-11 7/8

1'-4

POT

T FLG ℄ 1 3/4 x 25 x 57'-5 9/16 ~V

HORIZONTAL BASE LINE

7 @ 3 = 1'-9

1'-3

SAW-1
SAW-3
SAW-5
SAW-8
CONT

2 ES ℄ 1'-4 x 12 x 7'-6 1/4 (7'-6 1/4)

DSR(NS)
GSL(FS)

℄ 1'-4 x 12 x 5'-4 13/16 (5'-4 9/16)

℄ 1'-4 x 12 x 4'-8 (4'-8 5/8)

2'-11 11/16

3'-1 5/16

2'-7 3/4 RAD

2'-3 3/4 ARC

ARC = 39'-1 1/4

B FLG ℄ 1 3/4 x 25 x 47'-1 3/16 ~V

PCC

PT

PT

M5

P5

T6

19 TONS

SAW CUT AND/OR GRIND TO BEAR

13 @ 3 = 3'-3

4'-2 1/8 WEB

4'-8 15/16

7'-4 7/8

2'-6 1/16

2'-7 1/2

39'-1 1/4

WEB ℄ 3/4 x 147 1/4 x 46'-4 1/4 ~V

15 @ 3 = 2'-9

4'-3 1/2 WEB

14 @ 3 = 3'-6

11 @ 3 = 2'-9

4 @ 3 = 1'-0

SECTION A

SECTION B

8A4-2
ONE REQUIRED

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
☒ Approved ☐ Returned for Corrections
MAY 3 1989
☐ Approved as noted ☐ Rejected
Jacobs
Chief Engr.

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SEE HN1 FOR FABRICATION NOTES

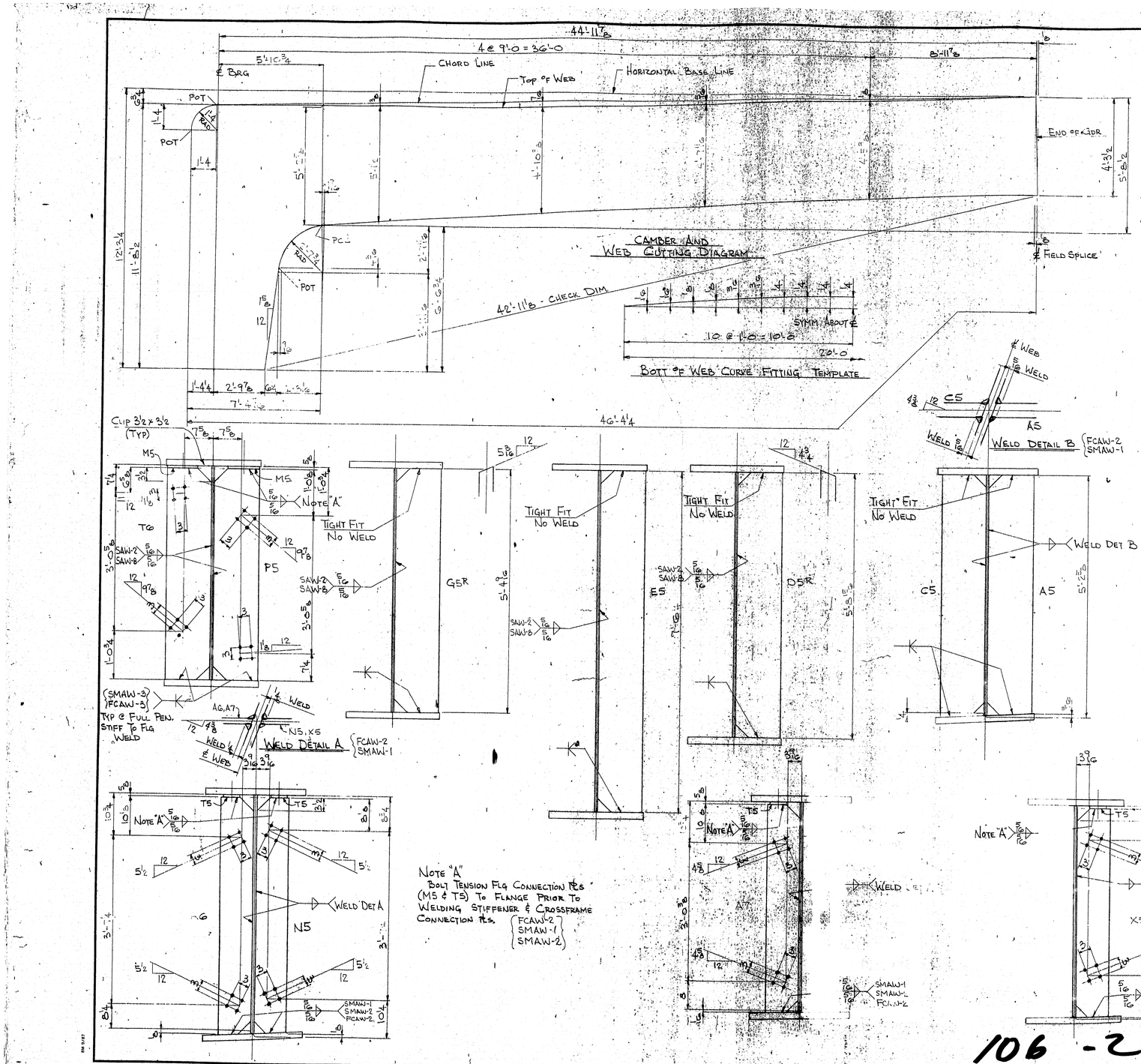
PROJ # BR-033-2(8)
PLANTATIONS OF THE FORKS - WEST FORKS
SOMERSET COUNTY

FABRICATED BY ABINGDON
HOLES 15/16" ø SHOP FASTENERS
SHOP PAINT LEFT END OF GDR - SEE HN1
FIELD CONNECTIONS
GENERAL NOTES

DATE	NO	BY	REVISIONS
	R1		

ORDER NO. 89-8881H52
DETAILS OF TOP OF RIGID FRAME ℄ GIRDER
PROJECT THE FORKS BRIDGE OVER THE KENNEBEC RIVER
LOCATION SOMERSET CO., MAINE
CUSTOMER REED & REED, INC
CAROLINA STEEL CORPORATION
MADE BY HARRISON
CHECKED BY FEW
SQUAD LEADER Bill
DATE 3-30-89
SHEET HF8A

106-201



106 - 202

SHOP BILL

LINE NO	SHIPPING LIST PCS.	SHIPPING LIST MARK	PCS. REQ'D	DESCRIPTION CODE	DESCRIPTION SYMBOL	DESCRIPTION SECTION DIM'S	LENGTH FEET	LENGTH INS.	ASSEMBLY MARK	REMARKS	MTRL. SPEC.	MATERIAL APPLICATION P.O. NO.	MATERIAL APPLICATION LINE ITEM	MATERIAL APPLICATION NO. PCS.	MATERIAL APPLICATION LENGTH
1															
2															
3															
4															
5	1	BAA4-2				PLATE GIRDER									
6			1		PL	¾ x 147¼	40	4¼	WA	ICUS2-V	A588	6471-US	9		
7			1		PL	¾ x 25	57	5⅛	TFA	ROLL-V		6471-US	1		
8			1		PL	1¾ x 25	47	1⅛	BFA	ROLL-V		↓	2		
9			1		PL	1¼ x 12	5	⅛	A5	DEV-I-E		6472-US	2		
10			1		PL	1¼ x 12	5	⅛	C5			↓	2		
11			2		PL	1¼ x 12	5	4⅛	D5RL				1		
12			2		PL	1¼ x 12	5	4⅛	G5RL				2		
13			2		PL	1¼ x 12	7	6¼	E5				4		
14			1		PL	1¼ x 12	4	⅛	P5			↓	3		
15			2		PL	⅝ x 8½	9		M5			soc			
16			4		PL	⅝ x 4	9		T5			soc			
17			1		PL	⅜ x 8½	5	⅛	N5	TEMP		6472-US	5		
18			1		PL	⅜ x 8½	5	¼	AG				5		
19			1		PL	⅜ x 8½	4	6½	X5				5		
20			1		PL	⅜ x 8½	4	6⅛	A7				5		
21			1		PL	1¼ x 12	4	⅛	TG	DEV-I-E		↓	3		
22															
23			12	F	HSBT	⅞		¾		TYPE 3	A325	BA22261	7		
24			12	F	HWASH	⅞				TYPE 3	A325	↓	8		
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26															
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For Comments see HF&B

WORK THIS SHEET WITH HF&B
SEE HN1 FOR FABRICATION NOTES

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
☐ Approved ☐ Returned for Corrections
1989
☒ Approved as noted ☐ Rejected
Jacobs
TITLE ENGR.

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PROJ # BR-033-2(8)
PLANTATIONS OF THE FORKS - WEST FORKS
SOMERSET COUNTY

DOMESTIC STEEL
FABRICATED BY ABINGDON
HOLES ⅞" ø SHOP FASTENERS
SHOP PAINT SEE NOTES - SHT HN1
SHOP INSPECTION
GENERAL NOTES

DATE	NO	BY	REVISIONS
	R1		

ORDER NO. 89-8881H52
DETAILS OF PLATE GIRDER
PROJECT THE FORKS BRIDGE OVER THE KENNEBEC RIVER
LOCATION SOMERSET CO, MAINE
CUSTOMER REED & REED, INC
CAROLINA STEEL CORPORATION
MADE BY HARRISON
CHECKED BY EEW
SQUAD LEADER Ben
DATE 3-30-89
SHEET HF&B

46'-4⅛

1'-4¼ | 7'-4¼ | 8'-4¼

NO PAINT THIS FACE

℄ BRG

12 | 4⅜ | 5/16 | 15/16

C5 | T5 | 2.2

⅞ø x 3¾ HSBTs W/1 WASHER EACH
PLACE HEAD OF BOLT
ON OUTSIDE OF FLG

5⅛

6'-0 3/16 | 2'-10⅞ | 2'-11⅞ | 1/4 | A5 | 3/16

PAINT ENTIRE END OF GDR - RIGHT MOST
LIMITS TO FOLLOW SKEW OF PLS A5 & C5

1'-4 | POT | 3/4

T FLG PL 1¾ x 25 x 57'-5 9/16 ~V

HORIZONTAL BASE LINE

30'-4¼ | 12 | 4⅜ | 5/16 | 15/16 | EG | T5 | 11/16

7 @ 3 = 1'-9 | 1⅛

6⅝ | 1'-4 | 4'-7⅜ | 7'-7½ | 12'-3⅛ | 11'-8½ WEB | 10'-4½

(SAW-1 SAW-3 SAW-5 SAW-8) CONT 1/4 10in 16in

POT | 2.25" R | 1'-4 R

2'-11 11/16 | 3'-9 5/16

DGR(NS) DSL(FS) 6 @ 2'-5 7/16 = 14'-7½ PL 14 x 12 x 5'-2 5/16

4¾ | 12

2-ES PL 14 x 12 x 7'-6" 11½ 12 (7'-6¼)

PL 14 x 12 x 5'-2" 12 5⅜ (5'-4⅞) GSR(NS) GSL(FS)

7'-10 5/8 | 5'-2⅝ | 5'-2¼

7⅝ ø x 3¾ HSBTs W/1 WASHER EACH PLACE HEAD OF BOLT ON OUTSIDE OF FLG

8'-0 | 8'-0 | 4¼ | 4¼ | M5 | H5 | M5 | T6 | 1½ | 6 | 3.3

PL 1¼ x 12 x 4'-8 (4'-8 5/8) 4 12

POT

2'-7¾ R | 7.24 ARC

PCC

2'-3½ | 2'-7 11/16

6'-6¾

ARC = 39'-1¼

5/16 CONT (SAW-1 SAW-3 SAW-5 SAW-8)

B FLG PL 1¾ x 25 x 47'-1 3/16 ~V

19 TONS

15/16 | 12 | 11 @ 3 = 2'-9 | 4'-2 15/16

SAW CUT AND/OR GRIND TO BEAR | 4'-2¼ | 3'-11 5/16

39'-1¼

11 @ 3 = 2'-9

A | B

4½ | 13 @ 3 = 3'-3 | 4'-2⅛ WEB | 4'-8 15/16 | 1 3/16 | 2'-6 1/16 | 1/16 | 2'-7½ | 7'-4 7/8

3 | 3 | 9 | 3 | 3 SECTION A

3 | 3 | 9 | 3 | 3 SECTION B

1¾

15 @ 3 = 2'-9 | 4'-3½ WEB

3 | 3 | 3 | 15/16

7½ | 5/8 | H @ 3 = 3'-6 | 1/8

9A5-2
ONE REQUIRED

WEB PL ¾ x 147⅛ x 46'-4¼ ~V

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
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WORK THIS SHEET WITH SFPB
SEE HN1 FOR FABRICATION NOTES

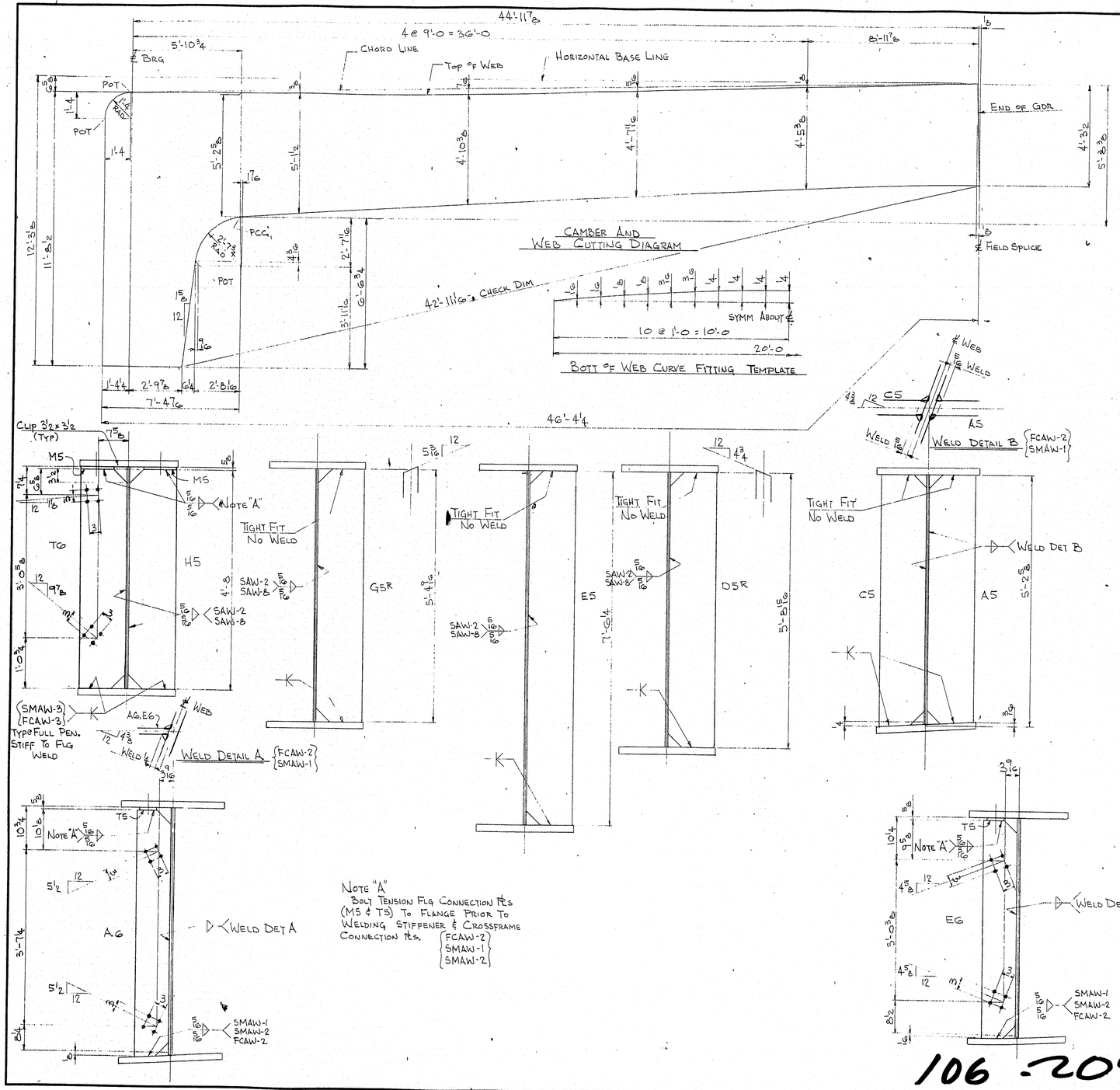
PROJ. # BR-032-2(8)
PLANTATIONS OF THE FORKS - WEST FORKS
SOMERSET COUNTY

FABRICATED BY ABINGDON
HOLES ⅞ø SHOP FASTENERS
SHOP PAINT LEFT END OF GDR - SEE HN1
FIELD CONNECTIONS
GENERAL NOTES

DATE	NO.	BY	REVISIONS
	R1		

ORDER NO. 89-8881H52
DETAILS OF TOP OF RIGID FRAME PL GIRDER
PROJECT THE FORKS BRIDGE OVER THE KENNEBEC RIVER
LOCATION SOMERSET CO., MAINE
CUSTOMER REED & REED, INC
CAROLINA STEEL CORPORATION
MADE BY HARRISON
CHECKED BY FEW
SQUAD LEADER BM
DATE 3-30-89
SHEET 4F9A

106-203



NOTE "A"
BOLT TENSION FLG CONNECTION PLS (M5 & T5) TO FLANGE PRIOR TO WELDING STIFFENER & CROSSFRAME CONNECTION PLS. {FCAW-2 SMAW-1 SMAW-2}

106-204

SHOP BILL

LINE	SHIPPING LIST NO PCS.	SHIPPING LIST MARK	PCS REQ'D	DESCRIPTION CODE	DESCRIPTION SYMBOL	DESCRIPTION SECTION DIM'S	LENGTH FEET	LENGTH INS.	ASSEMBLY MARK	REMARKS	MTRL. SPEC.	MATERIAL APPLICATION P.O. NO.	MATERIAL APPLICATION LINE ITEM	MATERIAL APPLICATION NO. PCS.	MATERIAL APPLICATION LENGTH
5	1	9A5-2				PLATE GIRDER									
6			1	PL	¾	x 147⅛	46	4¼	WA	ICUTS 2~V	A588	6471-US	9		
7			1	PL	¾	x 25	57	5⅝	TFA	ROLL~V		647-US	1		
8			1	PL	¾	x 25	47	1⅜	BFA	ROLL~V		↓	2		
9			1	PL	¼	x 12	5	2⅜	A5	BEV-1-E		6472-US	2		
10			1	PL	¼	x 12	5	2⅜	C5				2		
11			2	PL	¼	x 12	5	9⅜	D5RL				1		
12			2	PL	¼	x 12	5	4⅛	G5RL				2		
13			2	PL	¼	x 12	7	6¼	E5				4		
14			1	PL	¼	x 12	4	⅜	H5				3		
15			2	PL	⅝	x 8½		9	M5			SOC			
16			2	PL	⅜	x 4		9	T5			SOC			
17			1	PL	⅜	x 8½	5	1¾	A6	TEMP		6472-US	5		
18			1	PL	⅜	x 8½	4	6⅝	E6			↓	5		
19			1	PL	¼	x 12	4	⅜	T6	BEV-1-E		↓	3		
20															
21															
22															
23			8	F	HSBT	7⅛		3¾		TYPE 3	A325	BA2261	7		
24			8	F	HWASH	7⅛				TYPE 3	A325	↓	8		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
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Comments
NO EXCEPTIONS

For Comments see K HF5B

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SEE HN1 FOR FABRICATION NOTES

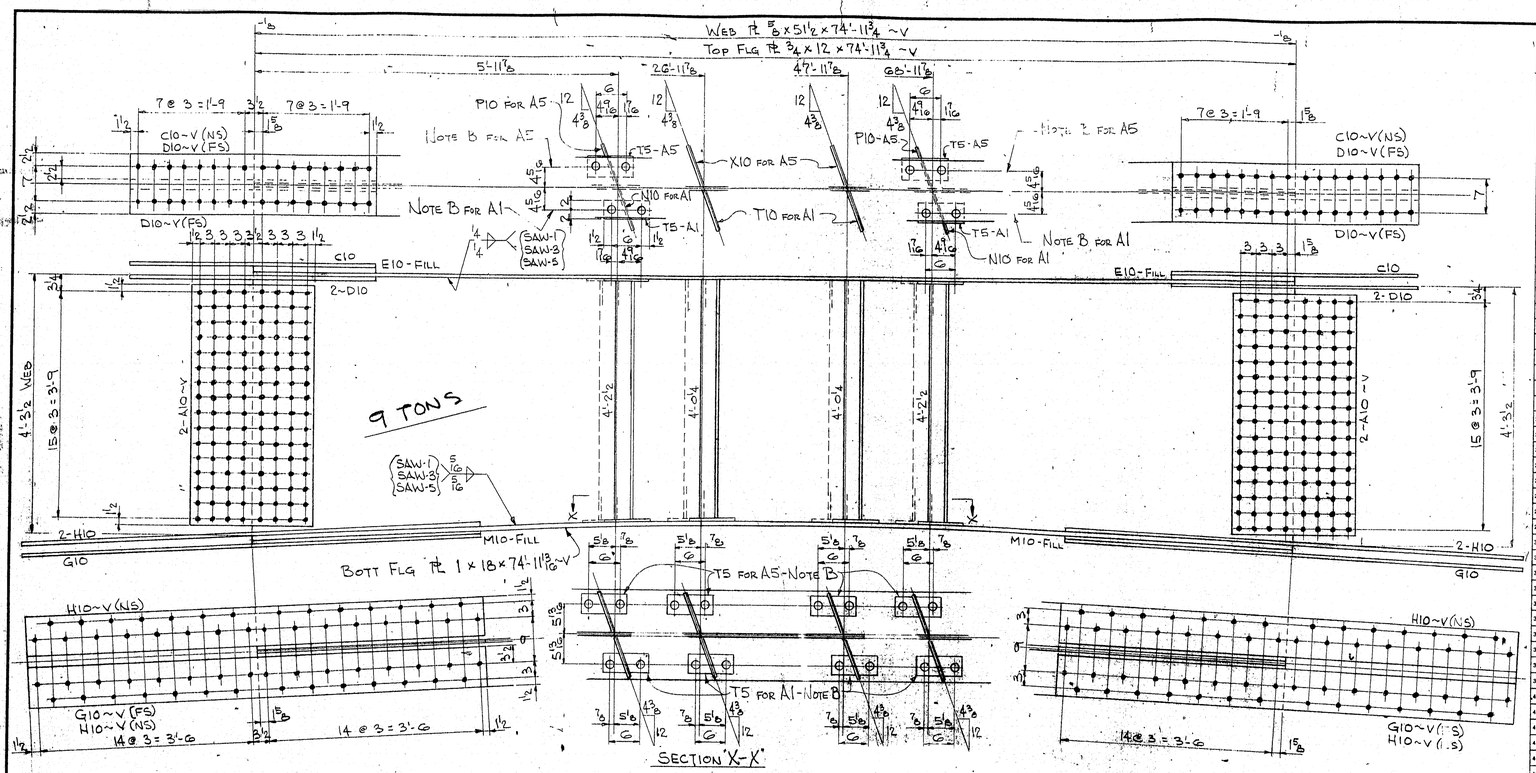
Domestic Steel

Proj # BR-033-2(8)
Plantations of The Forks - West Forks
Somerset County

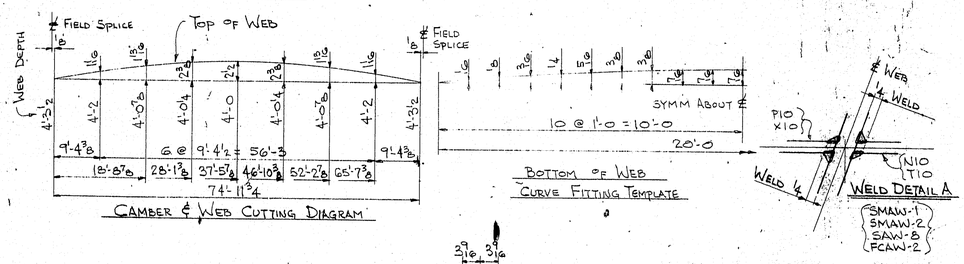
FABRICATED BY Abingdon
HOLES 15/16" ϕ SHOP FASTENERS
SHOP PAINT See Notes - SHT HN1
SHOP INSPECTION
GENERAL NOTES

DATE	NO	BY	REVISIONS
	R1		

ORDER NO. 89-8881H52
DETAILS OF Plate Girder
PROJECT The Forks Bridge over The Kennebec River
LOCATION Somerset Co., Maine
CUSTOMER Reed & Reed, Inc
CAROLINA STEEL CORPORATION
MADE BY Harrison
CHECKED BY FEW
SQUAD LEADER Bill
DATE 3-30-89
SHEET HF9B OF



10A1-3, 10A5-3

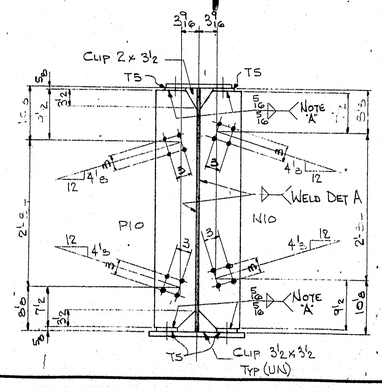


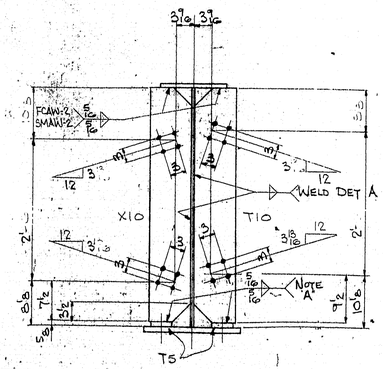
CAMBER & WEB CUTTING DIAGRAM

BOTTOM OF WEB
CURVE FITTING TEMPLATE

NOTE "A"
BOLT TENSION FLANGE CONNECTION PLS (TS) TO FLG PRIOR TO WELDING CROSSFRAME CONNECTION PLS. {FCAW-2 SMAW-2}

NOTE "B"
- 7/8ø x 2 3/4 HSBTs @ Top Flg
- 7/8ø x 3 HSBTs @ Bott Flg
- Place Bolt Heads on Outside of Flg.
- 1 Washer Required per Bolt.





106-205

SHOP BILL

ITEM NO.	SHIPPING LIST NO.	SHIPPING LIST PCS.	SHIPPING LIST MARK	PCS. REQ'D	DESCRIPTION CODE	DESCRIPTION SYMBOL	DESCRIPTION SECTION DIM'S	LENGTH FEET	LENGTH INS.	ASSEM. BLD MARK	REMARKS	MTRL. SPEC.	MATERIAL APPLICATION P.O. NO.	MATERIAL APPLICATION LINE ITEM	MATERIAL APPLICATION NO. PCS.	MATERIAL APPLICATION LENGTH
4	1		10A1-3				PLATE GIRDER									
5	1		10A5-3				PLATE GIRDER									
6				1		PL	5/8 x 51 1/2	74	11 3/4	WA	V	A588	G471-US	13		
7				2		PL	3/4 x 12	74	11 3/4	TFA	V			11		
8				2		PL	1 x 18	74	11 3/8	BFA	V			6		
9				8		PL	1/2 x 24 1/2	4	0	A10	V			16		
10				4		PL	1/2 x 12	4	0 1/2	C10	V			15		
11				4		PL	1/2 x 18	7	6 1/2	G10	V			15		
12				8		PL	5/8 x 5	4	0 1/2	D10	V	A588	SOC			
13				8		PL	5/8 x 8	7	6 1/2	H10	V		SOC			
14				4		PL	1 x 12	2	0 3/8	E10			SOC			
15				4		PL	3/4 x 18	3	9 3/8	M10			SOC			
16				2		PL	3/8 x 8 1/4	4	1/4	N10	BEV-1-EDGE		G472-US	5		
17				2		PL	3/8 x 8 1/4	4	1/4	P10				5		
18				2		PL	3/8 x 8 1/4	3	11 5/8	T10				5		
19				2		PL	3/8 x 8 1/4	3	11 5/8	X10				5		
20																
21				1		PL	5/8 x 51 1/2	74	11 3/4	WA	V	A588	G471-US	14		
22																
23																
24				12		PL	5/8 x 4		9	T5		A588	SOC			
25																
26				8	F	HSBT	7/8		2 3/4		TYPE 3	A325	BA22601	5		
27				16	F	HSBT	7/8		3					6		
28				8	F	HSBT	7/8		3		SHIPPING BOLT	A325				
29				32	F	HSBT	7/8		4 1/4							
30				24	F	HWASH	7/8				TYPE 3 SHIPPING	A325	BA22601	8		
31				40	F	HWASH	7/8									

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PROJ.# BR-033-208(1)
PLANTATIONS OF THE FORKS-WEST FORKS
SOMERSET COUNTY

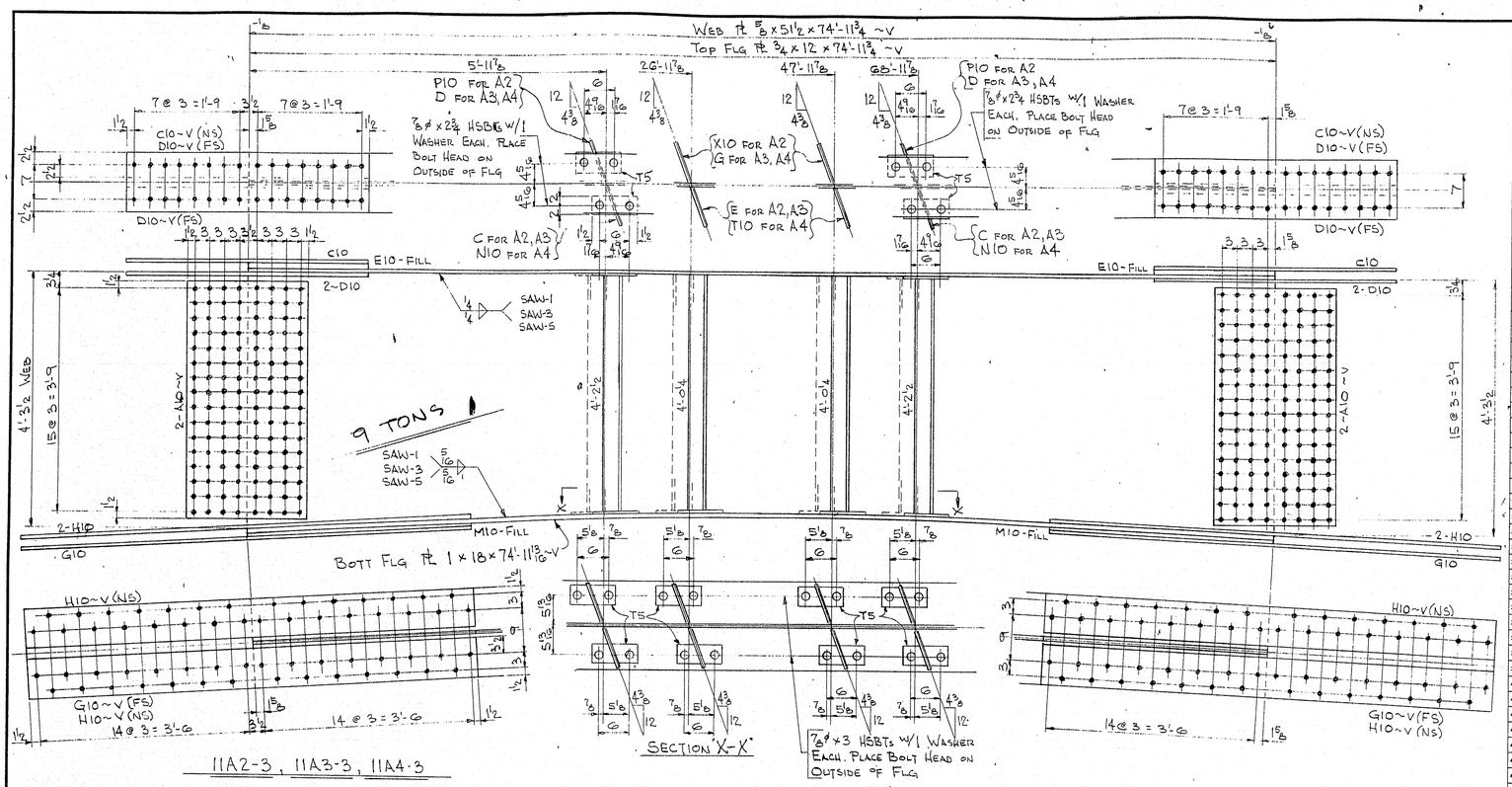
DOMESTIC STEEL

FABRICATED BY ABINGDON
HOLES 13/16" SHOP FASTENERS
SHOP PAINT NONE
SHOP INSPECTION
GENERAL NOTES

DATE	NO	BY	REVISIONS
	R1		

ORDER NO. 89-8881H52
DETAILS OF PLATE GIRDERS
PROJECT THE FORKS BRIDGE OVER THE KENNEBEC RIVER
LOCATION SOMERSET CO, MAINE
CUSTOMER REED & REED, INC
CAROLINA STEEL CORPORATION
MADE BY Harrison
CHECKED BY FEW
SQUAD LEADER Ben
DATE 3-30-89
SHEET HF10

APR 28 1989



SHOP BILL

LINE NO	SHIPPING LIST NO. PCS	SHIPPING LIST MARK	PCS REQ'D	DESCRIPTION CODE	DESCRIPTION SYMBOL	DESCRIPTION SECTION DIM'S	LENGTH FEET	LENGTH INS	ASSEMBLY MARK	REMARKS	MTRL. SPEC.	MATERIAL APPLICATION P.O. NO.	MATERIAL APPLICATION LINE ITEM	MATERIAL APPLICATION NO. PCS.	MATERIAL APPLICATION LENGTH
1															
2															
3	1	11A2-3				PLATE GIRDER									
4	1	11A3-3				PLATE GIRDER									
5	1	11A4-3				PLATE GIRDER									
6		3		PL		5/8 x 51 1/2	74	11 3/4	WA	V	A588	6471-05	13		
7		3		PL		3/4 x 12	74	11 3/4	TFA	V			11		
8		3		PL		1 x 18	74	11 13/16	BFA	V			GT		
9		12		PL		1/2 x 24 1/2	4	0	A10	V			16		
10		6		PL		1/2 x 12	4	0 1/2	C10	V			15		
11		6		PL		1/2 x 18	7	6 1/2	G10	V			15		
12		12		PL		5/8 x 5	4	0 1/2	N10	V		SOC			
13		12		PL		5/8 x 8	7	6 1/2	H10	V		SOC			
14		6		PL		1 x 12	7	0 5/8	E10			SOC			
15		6		PL		3/4 x 18	3	9 5/8	M10			SOC			
16		2		PL		3/8 x 8 1/4	4	1/4	N10	BEV 1-EDGE		6472-05	5		
17		2		PL		3/8 x 8 1/4	4	1/4	P10				5		
18		4		PL		3/8 x 8 1/4	4	1/4	C				5		
19		4		PL		3/8 x 8 1/4	4	1/4	D				5		
20		2		PL		3/8 x 8 1/4	3	11 5/8	T10				5		
21		2		PL		3/8 x 8 1/4	3	11 5/8	X10				5		
22		4		PL		3/8 x 8 1/4	3	11 5/8	E				5		
23		4		PL		3/8 x 8 1/4	3	11 5/8	G				5		
24		36		PL		5/8 x 4		9	T5			SOC			
25															
26		24	F	HSBT		7/8		2 3/4		TYPE 3	A325	BA2261	5		
27		48	F	HSBT		7/8		3					6		
28		12	F	HSBT		7/8		3		SHIPPING BOLT					
29		48	F	HSBT		7/8		N/A							
30		72	F	HWASH		7/8				TYPE 3	A325	BA 2261	8		
31		60	F	HWASH		7/8				SHIPPING					
32															
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68	SEE HN1 FOR FABRICATION NOTES														
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71															
72															
73	DOMESTIC STEEL														

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Comments

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PROJ # BR-033-2(8)
PLANTATIONS OF THE FORKS-WEST FORKS
SOMERSET COUNTY

FABRICATED BY ABINGDON
HOLES PUNCH'D SHOP FASTENERS
SHOP PAINT NONE
SHOP INSPECTION
GENERAL NOTES

DATE	NO	BY	REVISIONS
	R1		

ORDER NO. 89-8881H52
DETAILS OF PLATE GIRDERS
PROJECT THE FORKS BRIDGE OVER THE KENNEBEC RIVER
LOCATION SOMERSET CO, MAINE
CUSTOMER REED & REED, INC
CAROLINA STEEL CORPORATION
MADE BY HARRISON
CHECKED BY FEW
SQUAD LEADER Ban
DATE 3-30-89
SHEET HF11 OF

WEB PL 3/4 x 143 3/4 x 46'-4 1/8 ~ V

15'-11 7/8

37'-11 7/8

38'-11 7/8

44'-11 7/32

1'-4 1/4 ℄ BRG

PAINT ENTIRE END OF GIRDER
LEFT MOST LIMITS TO FOLLOW SKEW OF PL'S A12 & C12

7/8" x 3 3/4 HSBT, W/1 WASHER EACH. PLACE BOLT HEAD ON OUTSIDE OF FLG

TOP FLG PL 1 3/4 x 25 x 57'-5 7/8 ~ V

HORIZONTAL BASE LINE

NO PAINT THIS FACE

18 TONS

BOTT FLG PL 1 3/4 x 25 x 47'-0 9/16 ~ V

ARC: 39'-0 13/16

39'-0 13/16

POT

PCC

21-7 3/4 RAD

SAW CUT AND/OR GRIND TO BEAR

PL 1 1/4 x 12 x 4'-8

(2'-8 5/8)

PL 1 1/4 x 12 x 51'-0 3/4

PL 1 1/4 x 12 x 71'-6 7/8

PL 1 1/4 x 12 x 51'-0 3/4

4'-3 1/2 WEB
15 @ 3 = 3'-9

7 @ 3 = 1'-9

1'-1

1'-3

1'-7

14 @ 3 = 3'-6

11 @ 3 = 2'-9

4'-7 1/8

5'-2 5/8

5'-2 5/8

5'-2 5/8

7'-10 3/8

2'-3 9/16

3'-10 3/8

4'-2 3/4

3'-6 7/16

3'-1 7/16

2'-10 15/16

3'-1 1/4

3'-1 5/16

1'-4

1'-4 21/32

4'-7 3/4

4'-3 3/4 WEB

11'-8 1/2 WEB

11'-11 3/4

7'-7 1/2

10'-4 7/8

8 1/8 8 1/8

4 4 4

3 @ 3 = 3'-3

4'-2 1/8 WEB

4'-3 5/8

7'-4 3/8

SECT A

SECT B

12A1-4
ONE REQUIRED

WORK THIS SHEET WITH SHT HF12B
SEE SHT HN1 FOR FABRICATION NOTES

106-207

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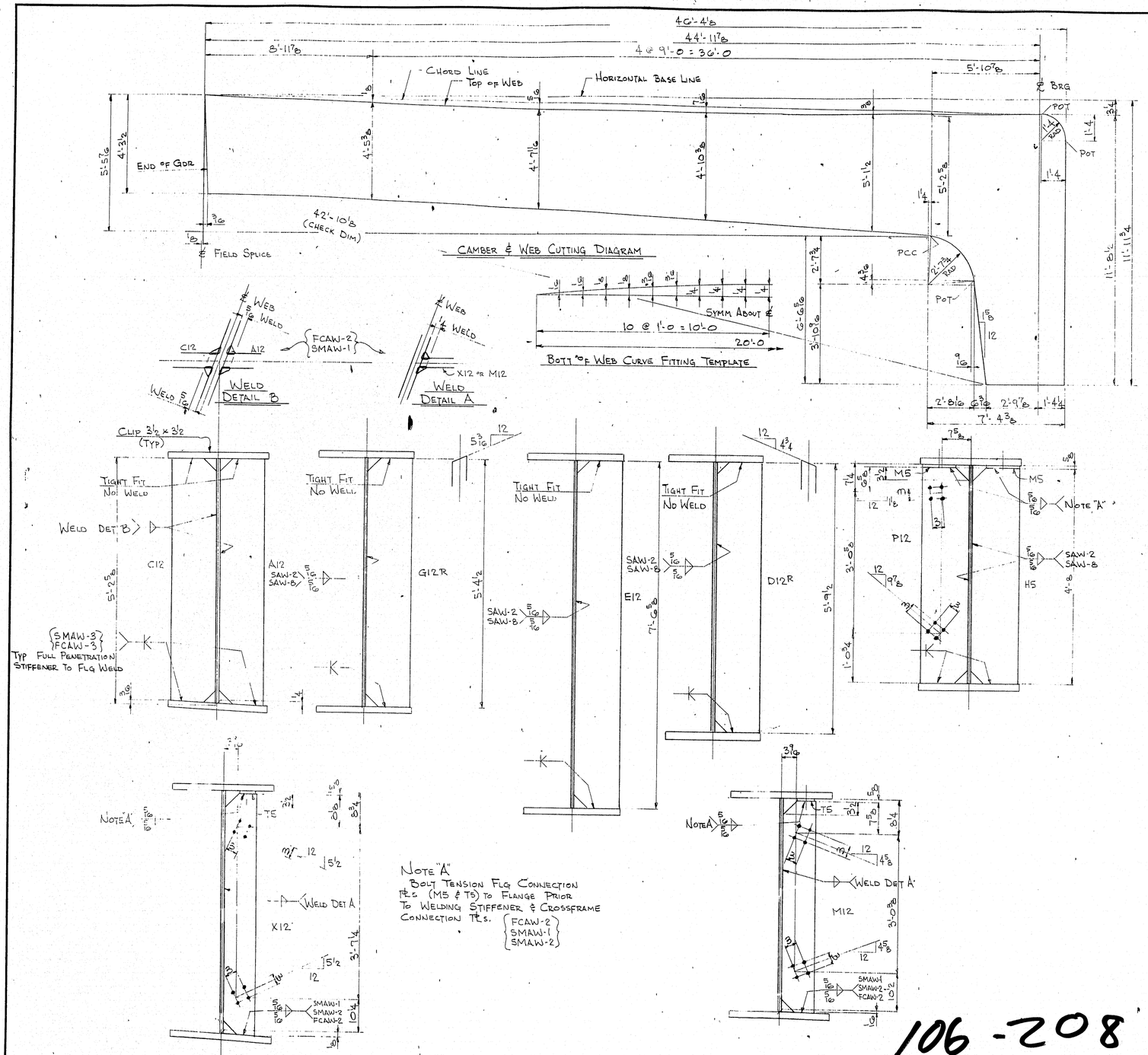
PROJ # BR-033-2(8)
PLANTATION OF THE FORKS-WEST FORKS
SOMERSET COUNTY

ORDER NO. 89-8881HS2
DETAILS OF TOP OF RIGID FRAME PL GIRDER
PROJECT THE FORKS BRIDGE OVER THE KENNEBEC RIVER
LOCATION SOMERSET CO, MAINE
CUSTOMER REED & REED, INC

FABRICATED BY ABINGDON
HOLES 15/16" ø SHOP FASTENERS
SHOP PAINT RIGHT END OF GIR - SEE HN1
FIELD CONNECTIONS
GENERAL NOTES

CAROLINA STEEL CORPORATION
MADE BY HARRISON
CHECKED BY F.E.W.
SQUAD LEADER
DATE 3-30-89
SHEET HF12A



106-208

SHOP BILL

LINE NO	SHIPPING LIST NO	PCS	MARK	PCS REQ'D	DESCRIPTION CODE	SYMBOL	SECTION DIM'S	LENGTH FEET	LENGTH INS.	ASSEMBLY MARK	REMARKS	MTRL SPEC.	MATERIAL APPLICATION P.O. NO.	LINE ITEM	NO PCS	LENGTH
1																
2																
3																
4																
5																
6	1	12A1.4					PLATE GIRDER									
7				1		PL	¾ x 143¾	46	4⅛	WA	V	A588	6471-US	9		
8				1		PL	1¾ x 25	57	5⅛	TFA	ROLL~V			1		
9				1		PL	1¾ x 25	47	01⅝	BFA	ROLL~V			1		
10				1		PL	1¼ x 12	4	8	H5	BEV-1-E		6472-US	3		
11				2		PL	1¼ x 12	7	6⅝	E12				4		
12				2		PL	1¼ x 12	5	9¾	D12RL				1		
13				2		PL	1¼ x 12	5	4¾	G12RL				2		
14				1		PL	1¼ x 12	5	2⅝	A12				6		
15				1		PL	1¼ x 12	5	2⅝	C12				7		
16				1		PL	⅜ x 8½	5	1¾	X12	TEMP			5		
17				1		PL	⅜ x 8½	4	6⅝	M12				5		
18				1		PL	1¼ x 12	4	8	P12	BEV-1-E			3		
19																
20																
21																
22				2		PL	⅝ x 8½		9	M5			SOC			
23				2		PL	⅝ x 4		9	T5			SOC			
24																
25				8	F	H5DT	⅞		3¾		TYPE 3	A325	BA223G1	7		
26				8	F	HWASH	⅞				↓	↓	↓	8		
27																
28																
29																
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Prog # BR-033-2(8)
Plantations of The Forks - West Forks
Somerset County

Domestic Steel

FABRICATED BY ABINGDON
HOLES 1⅛ ℄ SHOP FASTENERS
SHOP PAINT SEE NOTES ON SHT HN1
SHOP INSPECTION
GENERAL NOTES

DATE	NO	BY	REVISIONS
	R1		

ORDER NO. 89-8881H52
DETAILS OF PLATE GIRDER
PROJECT THE FORKS BRIDGE OVER THE KENNEBEC RIVER
LOCATION SOMERSET COUNTY, MAINE
CUSTOMER REED & REED, INC.
CAROLINA STEEL CORPORATION
MADE BY HARRISON
CHECKED BY FEW
SQUAD LEADER
DATE 3-30-89
SHEET HF12B

WEB PL 3/4 x 144 1/8 x 46'-4 1/8 ~ V

7/8" x 3 3/4 HSBTs W/1 WASHER EACH. PLACE BOLT HEAD ON OUTSIDE OF FLG

PAINT ENTIRE END OF GIRDER
LEFT MOST LIMITS TO FOLLOW SKEW OF PL= A12 & C12

NO PAINT THIS FACE

TOP FLG PL 1 3/4 x 25 x 57'-5 7/8 ~ V

HORIZONTAL BASE LINE

BOTT FLG PL 1 3/4 x 25 x 47'-0 5/8 ~ V

ARC = 39'-0 7/8

39'-0 7/8

18 TONS

13A4-4
ONE REQUIRED

SECT B

SECT A

SAW CUT AND/OR GRIND TO BEAR

PL 1 1/4 x 12 x 51'-9 3/4

PL 1 1/4 x 12 x 7'-10 5/8

PL 1 1/4 x 12 x 4'-8

PL 1 1/4 x 12 x 5'-4 3/4

PCC

POT

2'-7 3/4 RAD

1'-4 RAD

1'-4 BRG

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
Approved ☐ Returned for Corrections
1989
☐ Approved as noted ☐ Rejected
Records

FABRICATED BY ABINGTON
HOLES 15/16 ø SHOP FASTENERS
SHOP PAINT RIGHT END OF GIR - SEE HN1
FIELD CONNECTIONS
GENERAL NOTES

WORK THIS SHEET WITH SHT HF13B
SEE SHT HN1 FOR FABRICATION NOTES

106-209

DATE	NO	BY	REVISIONS
	R1		

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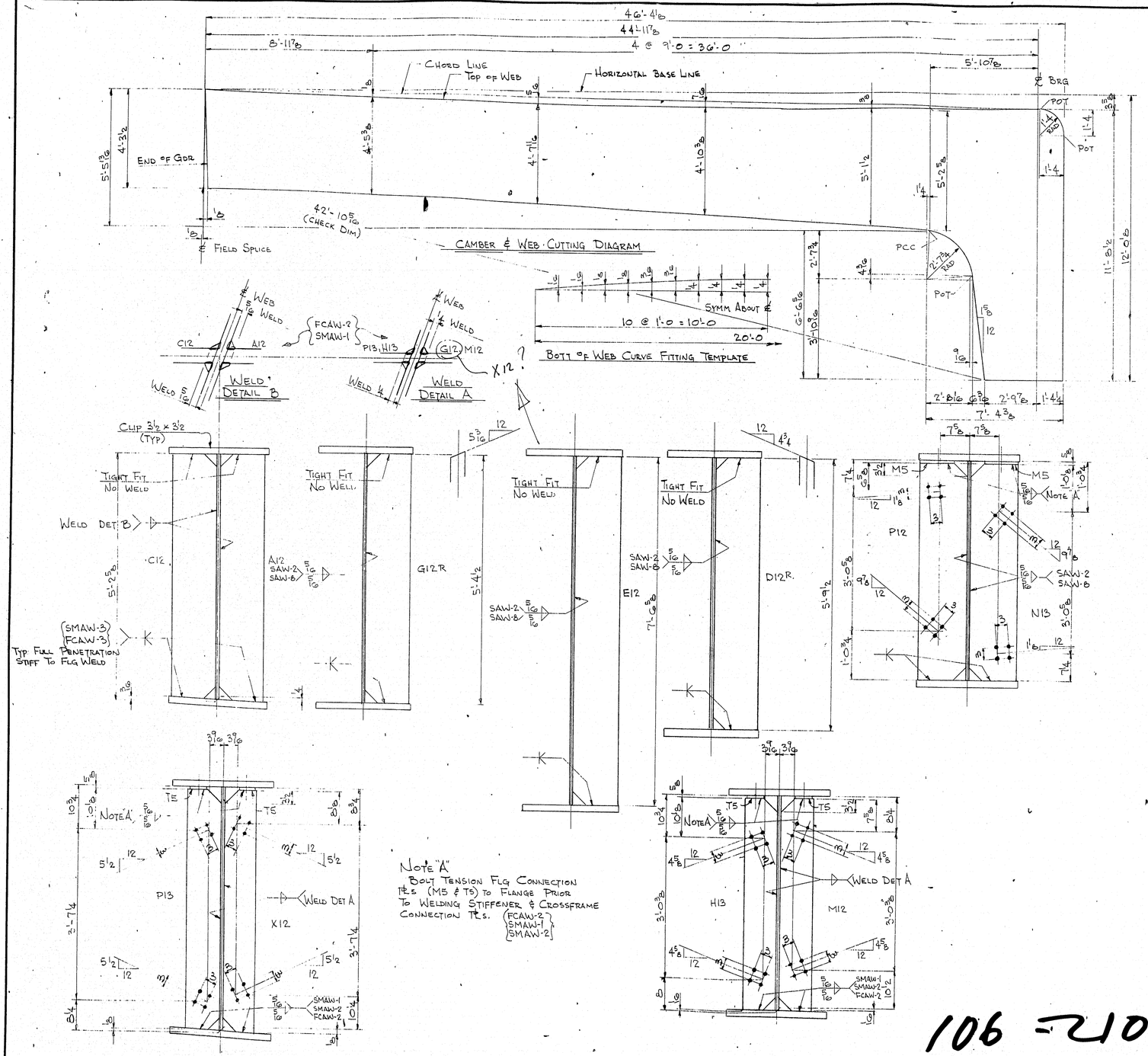
PROJ # BR-023-2(8)
PLANTATION OF THE FORKS-WEST FORKS
SOMERSET COUNTY

ORDER NO. 89-8881H52
DETAILS OF TOP OF RIGID FRAME PL GIRDER
PROJECT THE FORKS BRIDGE OVER THE KENNEBEC RIVER
LOCATION SOMERSET CO, MAINE
CUSTOMER REED & REED, INC

CAROLINA STEEL CORPORATION

MADE BY HARRISON
CHECKED BY F.E.W.
SQUAD LEADER
DATE 5-30-89

SHEET HF13A



106-210

SHOP BILL

LINE ITEM	SHIPPING LIST NO. PCS.	SHIPPING LIST MARK	PCS. REQ'D	DESCRIPTION CODE	DESCRIPTION SYMBOL	DESCRIPTION SECTION DIM S	LENGTH FEET	LENGTH INS.	ASSEMBLY MARK	REMARKS	MTRL. SPEC.	MATERIAL APPLICATION P.O. NO.	MATERIAL APPLICATION LINE ITEM	MATERIAL APPLICATION NO. PCS.	MATERIAL APPLICATION LENGTH
6	1	13A4-4				PLATE GIRDER									
7			1		PL	3/4 x 144 1/2	46	4 1/8	WA	V	A588	G471-US	9		
8			1		PL	1 3/4 x 25	57	5 1/8	TFA	ROLL-V			1		
9			1		PL	1 3/4 x 25	47	0 3/8	BFA	ROLL-V			1		
10			1		PL	1/4 x 12	4	8	P12	BEV-1-E		G472-US	3		
11			2		PL	1/4 x 12	7	6 5/8	E12				4		
12			2		PL	1/4 x 12	5	9 3/4	D12RL				1		
13			2		PL	1/4 x 12	5	4 3/4	G12RL				2		
14			1		PL	1/4 x 12	5	2 7/8	A12				2		
15			1		PL	1/4 x 12	5	2 5/8	C12				8		
16			1		PL	3/8 x 8 1/2	5	3/4	X12	TEMP			5		
17			1		PL	3/8 x 8 1/2	5	1 5/8	P13				5		
18			1		PL	3/8 x 8 1/2	4	6 1/16	M12				5		
19			1		PL	3/8 x 8 1/2	4	6 1/2	H13				5		
20			1		PL	1/4 x 12	4	8	N13	BEV-1-E		G472-US	3		
21															
22			2		PL	5/8 x 8 1/2		9	M5			SOC			
23			4		PL	5/8 x 4		9	T5			SOC			
24															
25			12	F	HSBT	7/8		3 3/4		Type 3	A325	BA7261	7		
26			12	F	HWASH	7/8							8		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
☐ Approved ☐ Returned for Corrections
1989
☒ Approved as noted ☐ Rejected
cobs

For additional Comments See SHEET

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REVIEWED BY

WORK THIS SHEET WITH SHT HF13A
SEE HN1 FOR FABRICATION NOTES

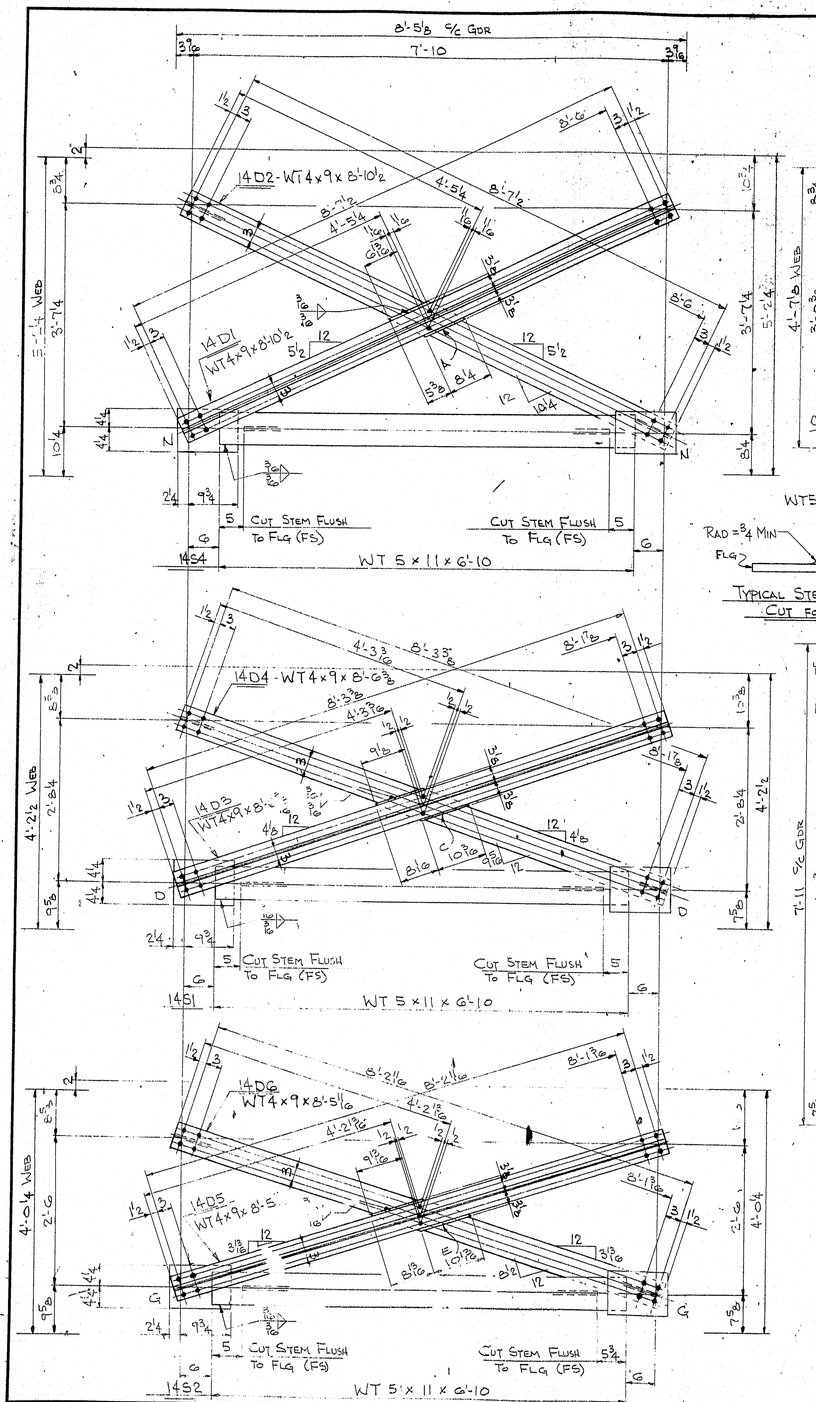
Proj # BR-033-2(8)
Plantations of The Forks -- West Forks
Somerset County

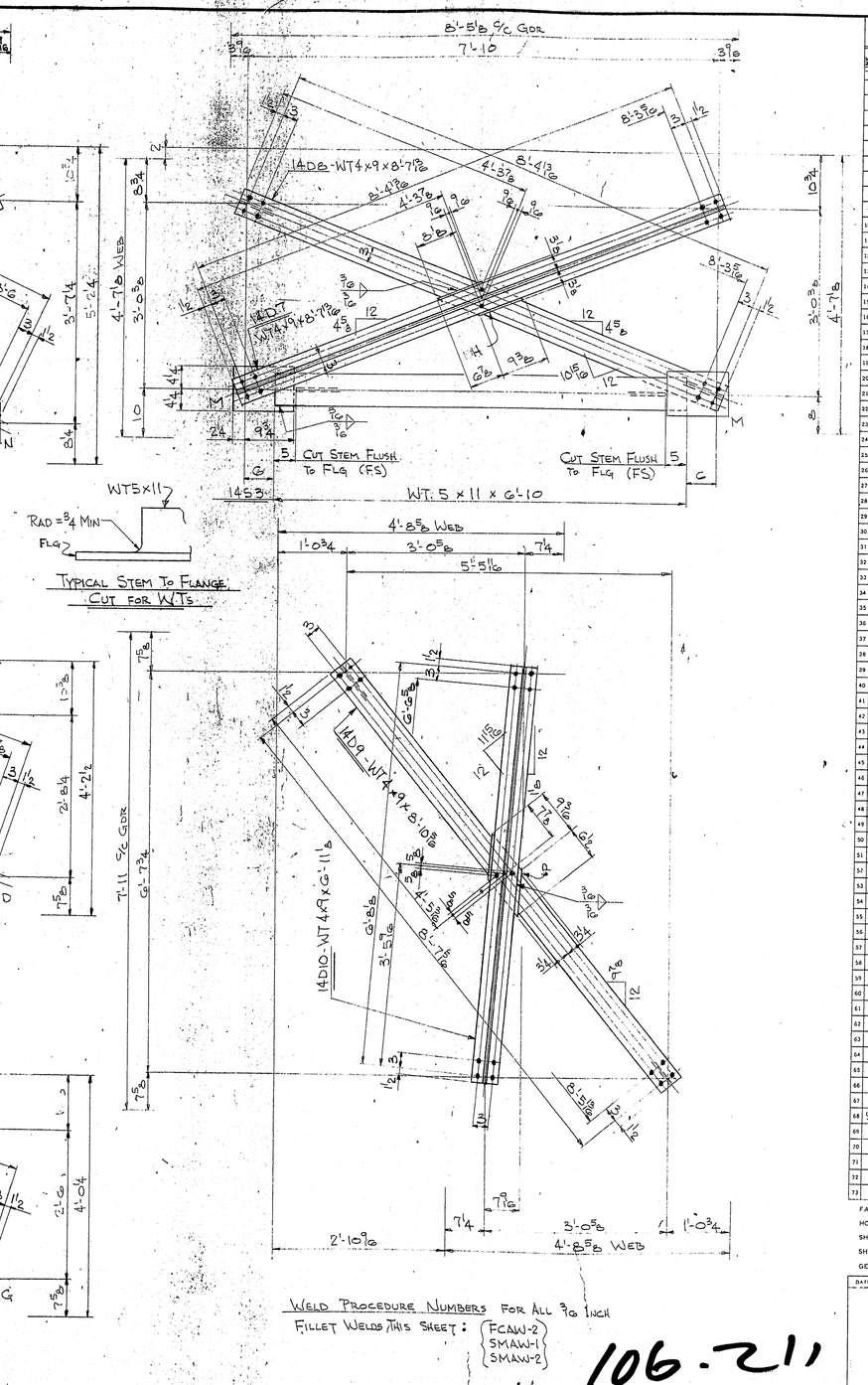
Domestic Steel

FABRICATED BY ARNGDON
HOLES 13/16" ø SHOP FASTENERS
SHOP PAINT SEE NOTES ON SHT HN1
SHOP INSPECTION
GENERAL NOTES

DATE	NO.	BY	REVISIONS
	R1		

ORDER NO. 89-8881H52
DETAILS OF PLATE GIRDER
PROJECT THE FORKS BRIDGE OVER THE KENNEBEC RIVER
LOCATION SOMERSET COUNTY, MAINE
CUSTOMER REED & REED, INC
CAROLINA STEEL CORPORATION
MADE BY HARRISON
CHECKED BY FEW
SQUAD LEADER
DATE 3-30-89
SHEET HF13B





TYPICAL STEM TO FLANGE CUT FOR WTs

WELD PROCEDURE NUMBERS FOR ALL ⅜ INCH FILLET WELDS THIS SHEET: FCAW-2, SMAW-1, SMAW-2

106-211

SHOP BILL

LINE	SHIPPING LIST NO. PCS.	SHIPPING LIST MARK	PCS. REQ'D	DESCRIPTION CODE	DESCRIPTION SYMBOL	DESCRIPTION SECTION DIM'S	LENGTH FEET	LENGTH INS.	ASSEMBLY MARK	REMARKS	MTRL. SPEC.	MATERIAL APPLICATION P.O. NO.	LINE ITEM	NO. PCS.	LENGTH
1															
2															
3															
4	2	14D1	2		WT	4 x 9	8	10½			A588	G539BE	2		
5			2		PL	⅜ x 6¼	1	5⅜	A	TEMP		SOC			
6															
7	2	14D2	2		WT	4 x 9	8	10½				G539BE	2		
8															
9	4	14S4	4		WT	5 x 11	6	10							
10			8		PL	⅜ x 8½	1	0	N			SOC			
11															
12															
13															
14															
15	2	14D3	2		WT	4 x 9	8	6⅜				G539BE	3		
16			2		PL	⅜ x 6¼	1	6¼	C	TEMP		SOC			
17															
18		14D4	2		WT	4 x 9	8	6⅜				G539BE	3		
19															
20	4	14S1	4		WT	5 x 11	6	10				G539BE	1		
21			8		PL	⅜ x 8½	1	0	D			SOC			
22															
23															
24															
25	2	14D5	2		WT	4 x 9	8	5¹⁵⁄₁₆				G539BE	3		
26			2		PL	⅜ x 6¼	1	7⅝	E	TEMP		SOC			
27		14D6			WT	4 x 9	8	5¹⁵⁄₁₆				G539BE	3		
28															
29	4	14S2	4		WT	5 x 11	6	10							
30			8		PL	⅜ x 8½	1	0	G			SOC			
31															
32															
33															
34															
35															
36															
37	8	14D7	8		WT	4 x 9	8	7¹⁵⁄₁₆				G539BE	3		
38			8		PL	⅜ x 6½	1	4¼	H	TEMP		SOC			
39															
40	8	14D8	8		WT	4 x 9	8	7¹⁵⁄₁₆				G539BE	3		
41															
42	4	14S3	4		WT	5 x 11	6	10							
43			8		PL	⅜ x 8½	1	0	M			SOC			
44															
45															
46															
47	8	14D9	8		WT	4 x 9	8	10⅝							
48															
49	8	14D10	8		WT	4 x 9	6	11⅛							
50			8		PL	1¼ x 6½	1	3¹¹⁄₁₆	P	TEMP					
51															
52															
53															
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66															
67															
68	SEE HN1 FOR FABRICATION NOTES														
69															
70															
71															
72															
73	DOMESTIC STEEL														

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
☐ Approved ☐ Returned for Corrections
1989
☐ Approved as noted ☐ Rejected
BY: _____ DDS

OFFICE COPY (B)
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PROJ # BR-033-2(8)
PLANTATIONS OF THE FORKS - WEST FORKS
SOMERSET COUNTY

FABRICATED BY ABINGDON
HOLES ⅞ " ø SHOP FASTENERS
SHOP PAINT NONE
SHOP INSPECTION
GENERAL NOTES

DATE	NO	BY	REVISIONS
	R1		

ORDER NO. 89-8881H52
DETAILS OF CROSSFRAMES TYPE J & K
PROJECT THE FORKS BRIDGE OVER THE KENNEBIC RIVER
LOCATION SOMERSET CO. MAINE
CUSTOMER REED & REED, INC

CAROLINA STEEL CORPORATION

MADE BY HARRISON
CHECKED BY FEW
SQUAD LEADER
DATE 3-30-89
SHEET #F11

MACH. BOLTS	H.S. BOLTS	DIA.	GRIP	LENGTH	MEMBERS SUPPORTED	CONNECTED TO
	1400	7/8	2 1/8	3 1/2	RIGID FRAME LEG SPLICE - WEB	
	2880		3 7/8	5 1/4	- FLANGES	
	1280		1 3/4	3	PLATE GIRDER SPLICE - WEB	
	320		2 7/8	4 1/4	- TOP FLG	
	600		2 7/8	4 1/4	- BOTTOM FLG	
	384		1/16	2	CROSSFRAME - WT4x9	PL GDR
	128		1/16	2 1/2		PL GDR W/BOTT STRUT
	64		1"	2 1/4		WT4x9 @ CENTER
					FIELD BOLT DRIVING LIST	
	128	7/8	1 9/16	3	CF IN LEG - WT4x9	PL GDR
	16	"	1 7/8	3 1/4	"	WT4x9 @ CNTR

212-901

SHOP BILL

LINE ITEM	SHIPPING LIST NO PCS	SHIPPING LIST MARK	PCS REQ'D	DESCRIPTION CODE	DESCRIPTION SYMBOL	DESCRIPTION SECTION DIM'S	LENGTH FEET	LENGTH INS	ASSEMBLY MARK	REMARKS	MTRL SPEC.	MATERIAL APPLICATION P.O. NO.	MATERIAL APPLICATION LINE ITEM	MATERIAL APPLICATION NO. PCS.	MATERIAL APPLICATION LENGTH
1															
2															
3															
4															
5	425	15FP5	425	F	HSBT	7/8		2		TYPE 3	A325	BL2465	1		
6	65	15FP6	65	F	HSBT	7/8		2 1/4					2		
7	100	15FP7	100	F	HSBT	7/8		2 1/2					3		
8	1300	15FP8	1300	F	HSBT	7/8		3					4		
9	1425	15FP9	1425	F	HSBT	7/8		3 1/2					5		
10	940	15FP10	940	F	HSBT	7/8		4 1/4					6		
11	2920	15FP11	2920	F	HSBT	7/8		5 1/4					7		
12	7175	15FP12	7175	F	HWASH	7/8							8		
13															
14	30	15FP14	30	F	HSBT	7/8		2 1/2		TYPE 3	A325				
15	130	15FP15	130	F	HSBT	7/8		3							
16	20	15FP16	20	F	HSBT	7/8		3 1/4							
17	150	15FP17	150	F	HWASH	7/8									
18															
19															
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25															
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27															
28															
29															
30															
31															
32	HEX NUTS FOR A325 (TYPE 3) HIGH STRENGTH BOLTS														
33	SHALL BE ASTM A563 GRADE C3.														
34															
35															
36															
37															
38															
39															
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71															
72															
73	DOMESTIC STEEL														

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
☒ Approved ☐ Returned for Corrections
1989
☐ Approved as noted ☐ Rejected
CODS
Col. Chief

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REVIEWED BY 11/5/13/89

PROJ # BR-033-2(8)
PLANTATIONS OF THE FORKS - WEST FORKS
SOMERSET COUNTY

FABRICATED BY ABINGDON
HOLES SHOP FASTENERS
SHOP PAINT NONE
SHOP INSPECTION
GENERAL NOTES

DATE	NO	BY	REVISIONS
	R1		

ORDER NO. 89-8881H52
DETAILS OF FIELD BOLTS
PROJECT THE FORKS BRIDGE OVER THE KENNEBEC RIVER
LOCATION SOMERSET COUNTY, MAINE
CUSTOMER REED & REED, INC

CAROLINA STEEL CORPORATION

MADE BY HARRISON
CHECKED BY FEW
SQUAD LEADER
DATE 5-30-89

SHEET HF15 OF

SSA 7/85

WEB PL 3/4 x 143 7/8 x 46'-4 1/8 ~ V

18 TONS

TOP FLG PL 1 3/4 x 25 x 57'-5 7/8 ~ V

BOTT FLG PL 1 3/4 x 25 x 47'-0 9/16 ~ V

HORIZONTAL BASE LINE

7/8" ø x 3 3/4 HSBTC W/1 WASHER EACH. PLACE BOLT HEAD ON OUTSIDE OF FLG

PAINT ENTIRE END OF GIRDER. LEFT MOST LIMITS TO FOLLOW SKEW OF PLS A12 & C12

NO PAINT THIS FACE

SAW CUT AND/OR GRIND TO BEAR

PL 1/4 x 12 x 5'-9 3/4

PL 1/4 x 12 x 7'-10 5/8

PL 1/4 x 12 x 5'-4 3/4

PL 1/4 x 12 x 4'-8 5/8

PL 1/4 x 12 x 5'-4 3/4

PCC

POT

ARC = 39'-0 13/16

39'-0 13/16

14 @ 3 = 3'-6

11 @ 3 = 2'-9

13 @ 3 = 3'-3

16A2-4
ONE REQUIRED

SECT B

SECT A

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
☒ Approved ☐ Returned for Corrections
MAY 5 1989
☐ Approved as noted ☐ Rejected
Jacobs
ENGR.

Work this sheet with sht HF1GB
See sht HN1 for Fabrication Notes

106-213

Proj # BR-033-2(8)
Plantations of The Forks-West Forks
Somerset County

FABRICATED BY ABINGDON
HOLES 15/16 ø SHOP FASTENERS
SHOP PAINT RIGHT END OF GDR - SEE HN1
FIELD CONNECTIONS
GENERAL NOTES

DATE	NO.	BY	REVISIONS
	R1		

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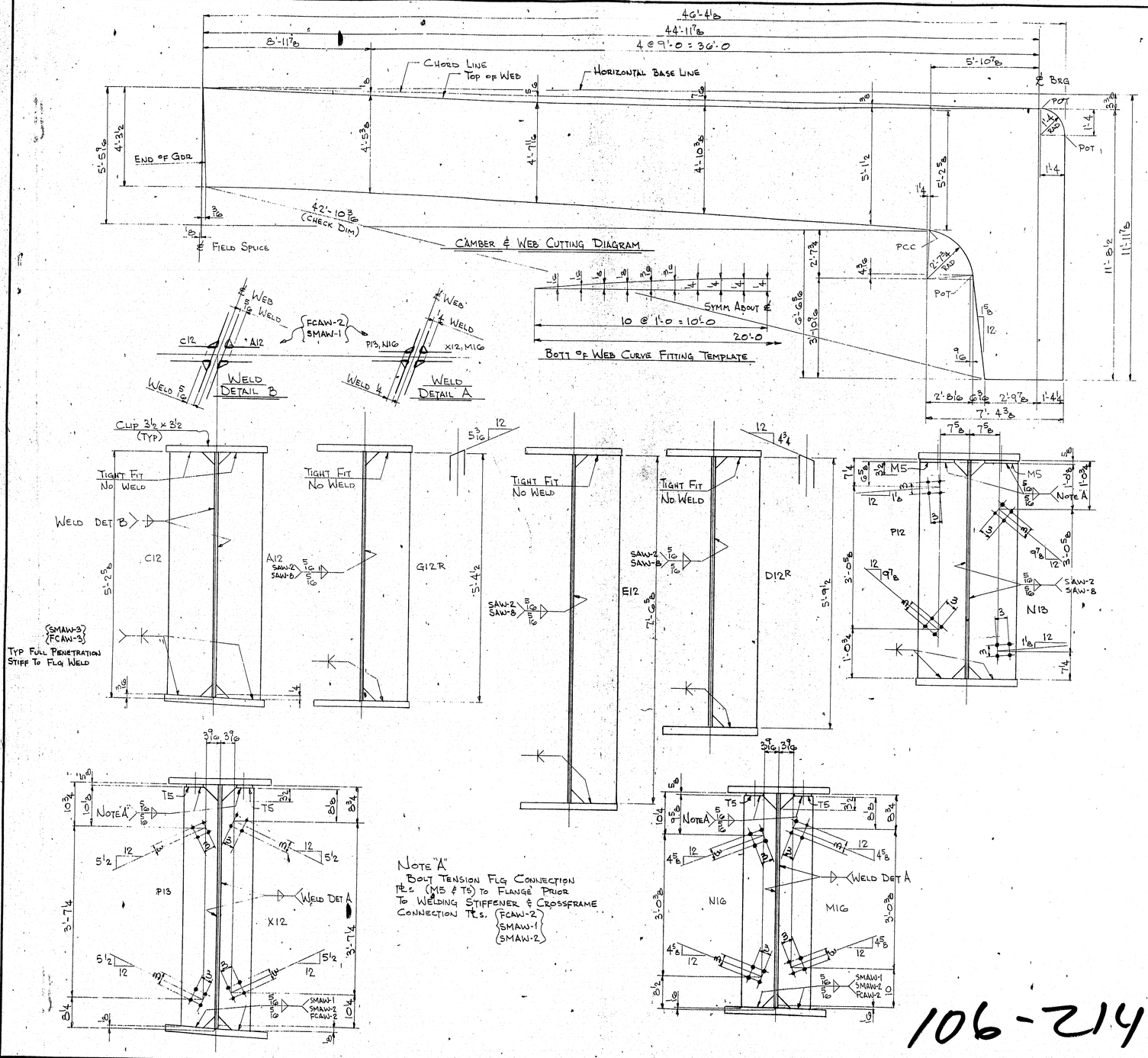
ORDER NO. 89-8881.1152
DETAILS OF Top of Rigid Frame Pt. Girder
PROJECT The Forks Bridge over The Kennebec River
LOCATION Somerset Co., Maine
CUSTOMER Reed & Reed, Inc
CAROLINA STEEL CORPORATION
MADE BY HARRISON
CHECKED BY FEW
SQUAD LEADER
DATE 3-30-89
SHEET HF1GA



106-214

SHOP BILL

ITEM NO	SHIPPING LIST NO PCS	SHIPPING LIST MARK	PCS. REQ'D	DESCRIPTION CODE	DESCRIPTION SYMBOL	DESCRIPTION SECTION DIM'S	LENGTH FEET	LENGTH INS.	ASSEM. PLT MARK	REMARKS	MTRL SPEC.	MATERIAL APPLICATION P.O. NO.	MAT'L ITEM	NO PCS.	LENGTH
6	1	16A2-4				PLATE GIRDER									
7			1		PL	¾ x 143⅞	46	4⅛	WA	V	A588 B	G471-US	9		
8			1		PL	1¾ x 25	57	5⅛	TFA	ROLL-V		↓	1		
9			1		PL	1¾ x 25	47	0⅞	BFA	ROLL-V			1		
10			1		PL	¼ x 12	4	8	P12	BEV-1-E		G472-US	3		
11			2		PL	¼ x 12	7	6⅝	E12				4		
12			2		PL	¼ x 12	5	9¾	D12RL.				1		
13			2		PL	¼ x 12	5	4¾	G12RL				2		
14			1		PL	¼ x 12	5	7⅝	A12				2		
15			1		PL	¼ x 12	5	2⅝	C12				2		
16			1		PL	⅜ x 8½	5	1¾	X12	TEMP			5		
17			1		PL	⅜ x 8½	5	1⅝	P13				5		
18			1		PL	⅜ x 8½	4	6⅜	M16				5		
19			1		PL	⅜ x 8½	4	6½	N16				5		
20			1		PL	¼ x 12	4	8	N13	BEV-1-E		G472-US	3		
21															
22			2		PL	⅜ x 8½		9	M5			SOC			
23			4		PL	⅜ x 4		9	T5			SOC			
24															
25			12	F	HSBT	⅞		3¾		TYPE 3	A325	BA22661	7		
26			12	F	HWASH	⅞				↓	↓	↓	8		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
☐ Approved ☐ Returned for Corrections
JUN 1 1989
☒ Approved as noted ☐ Rejected
comments attached

For comments see W HF5B

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CHECKED BY
REVIEWED BY 5/22/89

WORK THIS SHEET WITH SHT HF1GA
SEE HN1 FOR FABRICATION NOTES

PROJ # BR-033-2(8)
PLANTATIONS OF THE FORKS - WEST FORKS
SOMERSET COUNTY

DOMESTIC STEEL

FABRICATED BY ABINGDON
HOLES ⅞ ø SHOP FASTENERS
SHOP PAINT SEE NOTES ON SHT HN1
SHOP INSPECTION
GENERAL NOTES

DATE	NO	BY	REVISIONS
	R1		

ORDER NO. 89-8881H52
DETAILS OF PLATE GIRDER
PROJECT THE FORKS BRIDGE OVER THE KENNEBEC RIVER
LOCATION SOMERSET COUNTY, MAINE
CUSTOMER REED & REED, INC

CAROLINA STEEL CORPORATION

MADE BY HARRISON
CHECKED BY FEW
SQUAD LEADER BW
DATE 3-30-89
SHEET HF1GB

MAY 24 1989

WEB PL 3/4 × 144 × AG 41'-6 ~ V

TOP FLG PL 1 3/4 × 25 × 57'-5 7/8 ~ V

BOTT FLG PL 1 3/4 × 25 × 47'-0 9/16 ~ V

7/8" × 3 3/4 HSBTS W/1 WASHER EACH. PLACE BOLT HEAD ON OUTSIDE OF FLG

PAINT ENTIRE END OF GIRDER LEFT MOST LIMITS TO FOLLOW SKEW OF PLS A12 & C12

NO PAINT THIS FACE

HORIZONTAL BASE LINE

SAW-1 / SAW-3 / SAW-5 / SAW-8

18 TONS

17A3-4
ONE REQUIRED

SECT A

SECT B

SECT D

PL 1/4 × 12 × 5'-9 3/4

PL 1/4 × 12 × 7'-6 5/8

PL 1/4 × 12 × 5'-4 3/4

PL 1/4 × 12 × 4'-8

SAW CUT AND/OR GRIND TO BEAR

7/8" × 3 3/4 HSBTS W/1 WASHER EACH FACE BOLT HEAD ON OUTSIDE OF FLG

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
Approved ☐ Returned for Corrections
1989
☐ Approved as noted ☐ Rejected
Comments:

WORK THIS SHEET WITH SHT HF17B
SEE SHT HN1 FOR FABRICATION NOTES

106-215

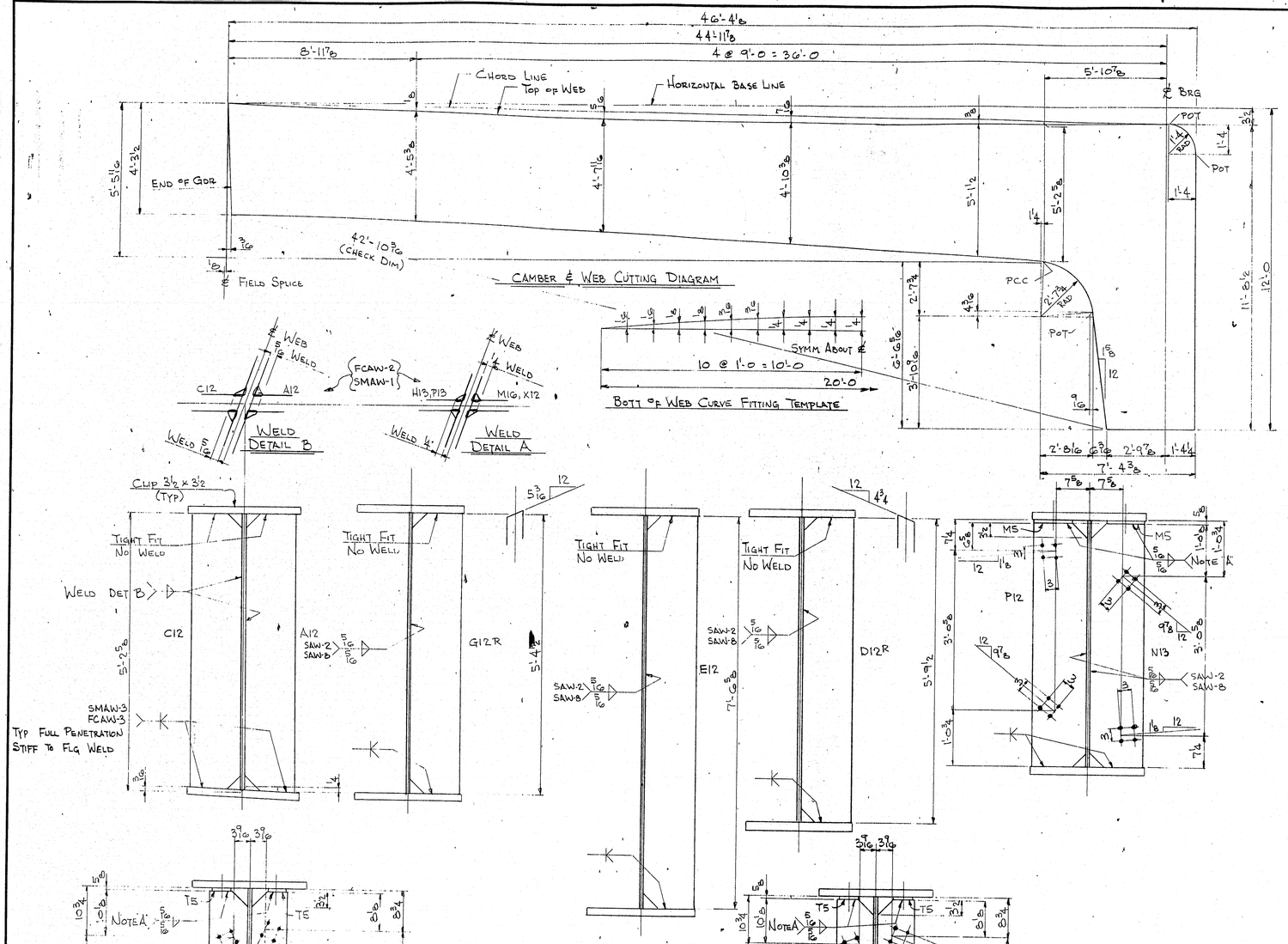
PROJ # BR-033-2(8)
PLANTATIONS OF THE FORKS-WEST FORKS
SOMERSET COUNTY

FABRICATED BY ABINGDON
HOLES 15/16 Ø SHOP FASTENERS
SHOP PAINT RIGHT END OF GDR - SEE HN1
FIELD CONNECTIONS
GENERAL NOTES

DATE	NO	BY	REVISIONS
	R1		

OFFICE COPY (A)
RECEIVED MAY 22 1989
CHECKED
REVIEWED

ORDER NO. 89-8881H52
DETAILS OF TOP OF RIGID FRAME & GIRDER
PROJECT THE FORKS BRIDGE OVER THE KENNEBEC RIVER
LOCATION SOMERSET CO, MAINE
CUSTOMER REED & REED, INC.
CAROLINA STEEL CORPORATION
MADE BY HARRISON
CHECKED BY FEW
SQUAD LEADER
DATE 2-20-89
SHEET HF17A1



106-216

SHOP BILL

LINE ITEM	SHIPPING LIST NO PCS.	SHIPPING LIST MARK	PCS REQ'D	DESCRIPTION CODE	DESCRIPTION SYMBOL	DESCRIPTION SECTION DIM'S	LENGTH FEET	LENGTH INS.	ASSEMBLY MARK	REMARKS	MTRL SPEC.	MATERIAL APPLICATION P.O. NO.	MATERIAL APPLICATION LINE ITEM	MATERIAL APPLICATION NO. PCS.	MATERIAL APPLICATION LENGTH
6	1	17A3-4				PLATE GIRDER									
7			1		PL	3/4 x 144	46	4 1/8	WA	V	A588	G471-US	9		
8			1		PL	1 3/4 x 25	57	5/8	TFA	ROLL-V			1		
9			1		PL	1 3/4 x 25	47	0 1/16	BFA	ROLL-V			1		
10			1		PL	1/4 x 12	4	8	P12	BEV-1-E		6472-U3	3		
11			2		PL	1/4 x 12	7	6 3/8	E12				4		
12			2		PL	1/4 x 12	5	9 3/4	D12RL				1		
13			2		PL	1/4 x 12	5	4 3/4	G12RL				2		
14			1		PL	1/4 x 12	5	7 5/8	A12				2		
15			1		PL	1/4 x 12	5	2 3/4	C12				2		
16			1		PL	3/8 x 8 1/2	5	1 3/4	X12	TEMP			5		
17			1		PL	3/8 x 8 1/2	5	1 5/8	P13				5		
18			1		PL	3/8 x 8 1/2	4	6 1/16	M16				5		
19			1		PL	3/8 x 8 1/2	4	6 1/2	H13				5		
20			1		PL	1/4 x 12	4	8	N13	BEV-1-E		6472-US	3		
21															
22			2		PL	5/8 x 8 1/2		9	M5			SOC			
23			4		PL	5/8 x 4		9	T5			SOC			
24															
25			12	F	HSBT	7/8		3 3/4		TYPE 3	A325	BA2261	7		
26			12	F	HWASH	7/8							8		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
☐ Approved ☐ Returned for Corrections
1989
☒ Approved as noted ☐ Rejected
Jobs
NO OBJ.

For Comments See Sh. HFSB

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WORK THIS SHEET WITH SHT HF17A
SEE HN1 FOR FABRICATION NOTES

Proj # BR-033-2(6)
PLANTATIONS OF THE FORKS - WEST FORKS
SOMERSET COUNTY

DOMESTIC STEEL
FABRICATED BY ABINGDON
HOLES 1 Pc "ϕ SHOP FASTENERS
SHOP PAINT SEE NOTES ON SHT HN1
SHOP INSPECTION
GENERAL NOTES

DATE	NO	BY	REVISIONS
	R1		

ORDER NO. 89-8881H52
DETAILS OF PLATE GIRDER
PROJECT THE FORKS BRIDGE OVER THE KENNEBEC RIVER
LOCATION SOMERSET COUNTY, MAINE
CUSTOMER REED & REED, INC.
CAROLINA STEEL CORPORATION
MADE BY HARRISON
CHECKED BY FEW
SQUAD LEADER BWJ
DATE 3-30-89
SHEET HF17B

WEB PL 3/4 x 144 1/4 x 46'-4 1/8 ~ V

15'-11 7/8

1'-7/8

1 5/8 | 7@3=1'-9

7/8" x 3 3/4 HSBTs W/1 WASHER EACH. PLACE BOLT HEAD ON OUTSIDE OF FLG

N16

T5

TOP FLG PL 1 3/4 x 25 x 57'-5 7/8 ~ V

CONT (SAW-1, SAW-3, SAW-5, SAW-8)

HORIZONTAL BASE LINE

37'-11 7/8 | 38'-11 7/8 | 44'-11 7/8 | 1'-4 1/4 ℄ BRG

PAINT ENTIRE END OF GIRDER LEFT MOST LIMITS TO FOLLOW SKEW OF PLs A12 & C12

C12

P13

A12

3'-1 7/8 | 2'-10 15/16

NO PAINT THIS FACE

POT

2'-1 1/4 RAD

1'-4 RAD

1'-4

4'-3 1/2 WEB

15@3=3'-9

18 TONS

90°

5'-2 5/8 | 5'-7 1/4 | 5'-2 5/8

7'-10 5/8

D12R(FS) PL 1/4 x 12 x 5'-9 3/4 (5'-9 1/2)

2-E12- PL 1/4 x 12 x 7'-6 5/8 (7'-6 5/8)

G12L(NS) G12R(FS) PL 1/4 x 12 x 5'-4 3/4 (5'-4 1/2)

PL 1/4 x 12 x 4'-8 (4'-8 5/8)

3'-8 9/16 RAD

2'-7 3/4 RAD

PCC

POT

7/8" x 3 3/4 HSBTs W/1 WASHER EACH PLACE BOLT HEAD ON OUTSIDE OF FLG

H5 | M5 | N13

4'-7 3/4

7'-7 1/2

10'-4 1/2

11'-8 1/2 WEB

12'-0 1/4

BOTT FLG PL 1 3/4 x 25 x 47'-0 5/8 ~ V

ARC = 39'-0 7/8

39'-0 7/8

1 3/4 | 3@3 | 7 1/2 | 14@3=3'-6

18A5-4
ONE REQUIRED

11@3=2'-9

SECT B

℄ SAW CUT AND/OR GRIND TO BEAR

13@3=3'-3 | 4 1/2

2'-6 1/4 | 2'-7 1/2

G 3/4 | 4'-2 1/8 WEB | 4'-8 7/8 | 7'-4 3/8

11@3=2'-9

SECT A

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
☐ Approved ☐ Returned for Corrections
1989
☐ Approved as noted ☐ Rejected
Jacobs
Bridge Engr.

FABRICATED BY ABINGDON
HOLES 15/16 SHOP FASTENERS
SHOP PAINT RIGHT END OF GDR - SEE HN1
FIELD CONNECTIONS
GENERAL NOTES

DATE	NO	BY	REVISIONS
	R1		

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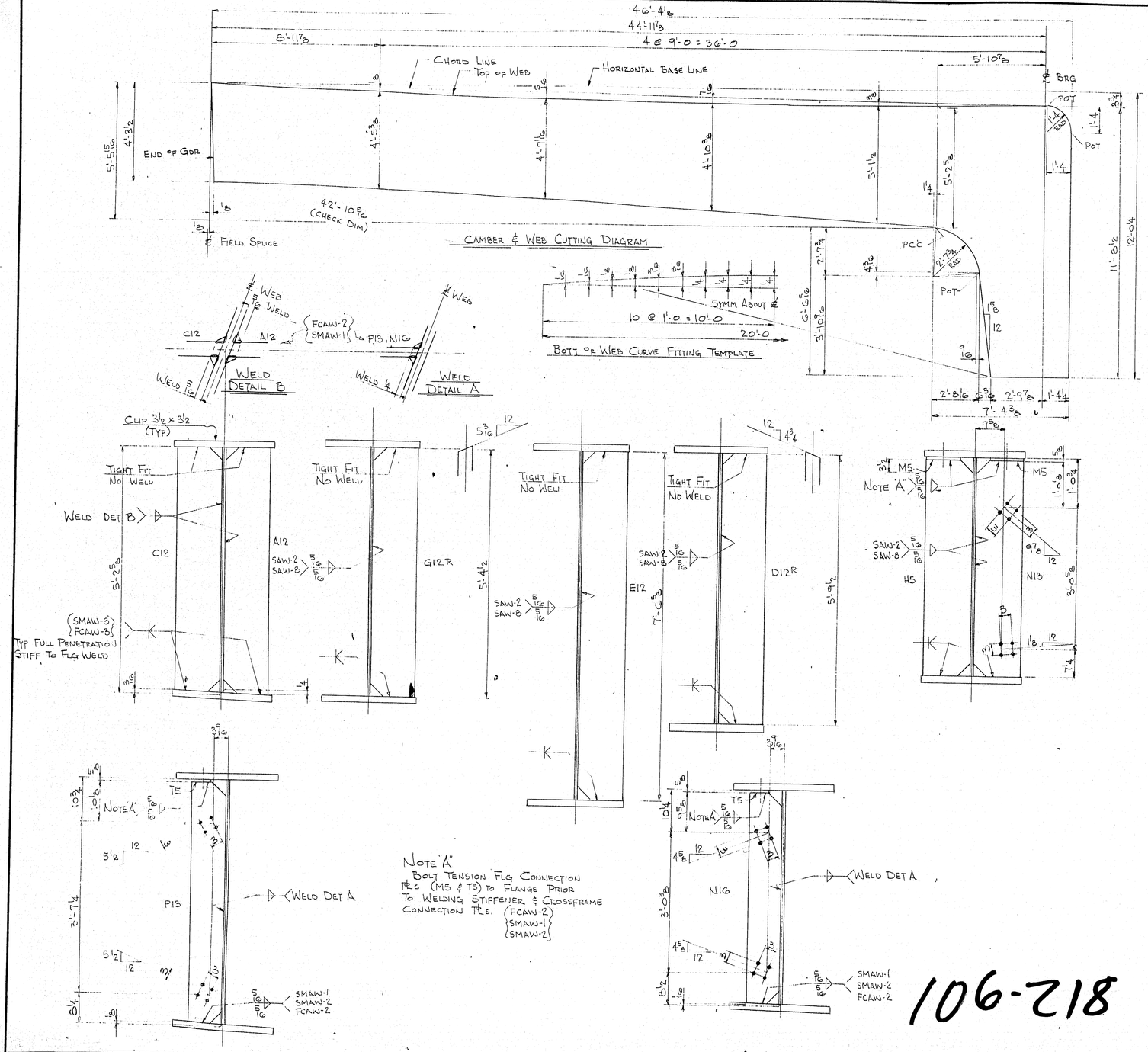
PROJ # BR-033-2(8)
PLANTATIONS OF THE FORKS - WEST FORKS
SOMERSET COUNTY

ORDER NO. 89-888 | HS2
DETAILS OF TOP OF RIGID FRAME PL GIRDER
PROJECT THE FORKS BRIDGE OVER THE KENNEBEC RIVER
LOCATION SOMERSET CO, MAINE
CUSTOMER REED & REED, INC
CAROLINA STEEL CORPORATION
MADE BY HARRISON
CHECKED BY FEW
SQUAD LEADER
DATE 3-30-89
SHEET HF18A

WORK THIS SHEET WITH SHT HF18B
SEE SHT HN1 FOR FABRICATION NOTES

106-217



106-218

SHOP BILL

ITEM	SHIPPING LIST NO PCS	SHIPPING LIST MARK	PCS REQ'D	DESCRIPTION CODE	DESCRIPTION SYMBOL	DESCRIPTION SECTION DIM'S	LENGTH FEET	LENGTH INS.	ASSEMBLY MARK	REMARKS	MTRL SPEC.	MATERIAL APPLICATION P.O. NO.	MATERIAL APPLICATION LINE ITEM	MATERIAL APPLICATION NO. PCS.	MATERIAL APPLICATION LENGTH
6	1	18A5-4				PLATE GIRDER									
7			1		PL	¾ x 144 4	46	4⅛	WA		A588	G471-US	9		
8			1		PL	1¾ x 25	57	5⅞	TFA	ROLL-V			1		
9			1		PL	1¾ x 25	47	10⅝	BFA	ROLL-V			1		
10			1		PL	1¼ x 12	4	⅛	WS	BEV-1-E		6472-US	3		
11			2		PL	1¼ x 12	7	6⅝	E12				4		
12			2		PL	1¼ x 12	5	9¾	D12RL				1		
13			2		PL	1¼ x 12	5	4¾	G12RL				2		
14			1		PL	1¼ x 12	5	2⅛	A12				6		
15			1		PL	1¼ x 12	5	2⅝	C12				2		
16			1		PL	⅜ x 8½	5	1⅝	P13	TEMP			15		
17			1		PL	⅜ x 8½	4	6½	N16				5		
18			1		PL	1¼ x 12	4	⅛	N13	BEV-1-E		6472-US	3		
22			2		PL	⅝ x 8½	9		M5			SOC			
23			2		PL	⅝ x 4	9		T5			SOC			
25			⅛	F	HSBT	⅞	3¾			TYPE 3	A325	BA2261	7		
26			⅛	F	HWASH	⅞				↓	↓	↓	8		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
☐ Approved ☐ Returned for Corrections
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cobs
NO OBJECTION

For Comments See SHT HF18B

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SEE HN1 FOR FABRICATION NOTES

Proj # BR-033-2(6)
PLANTATIONS OF THE FORKS - WEST FORKS
SOMERSET COUNTY

DOMESTIC STEEL
FABRICATED BY ABINGDON
HOLES 1Ø x ⅞ SHOP FASTENERS
SHOP PAINT SEE NOTES ON SHT. HN1
SHOP INSPECTION
GENERAL NOTES

DATE	NO	BY	REVISIONS
	R1		

ORDER NO. 89-8881H52
DETAILS OF PLATE GIRDER
PROJECT THE FORKS BRIDGE OVER THE KENNEBEC RIVER
LOCATION SOMERSET COUNTY, MAINE
CUSTOMER REED & REED, INC
CAROLINA STEEL CORPORATION
MADE BY HARRISON
CHECKED BY F.E.W.
SQUAD LEADER Ben
DATE 3-30-89
SHEET HF18B